



NORD/LB Markets Strategy & Floor Research

Marketing communication (see disclaimer on the last pages)

NORD/LB ISSUER GUIDE COVERED BONDS 2022

List of Editors

Covered Bonds/Banks

Melanie Kiene, CIIA melanie.kiene@nordlb.de

NORD/LB: Markets Strategy & Floor Research **Covered Bonds/Banks**

Dr Frederik Kunze frederik.kunze@nordlb.de

NORD/LB: Covered Bond Research Covered Bonds/Banks Stefan Rahaus stefan.rahaus@nordlb.de

Bloomberg: RESP NRDR <GO>

Agenda

Intr	oduction	
	Foreword	10
	Overview of issuers	12
Aus	tralia	
	Australia and New Zealand Banking Group	18
	Bank of Queensland	20
	Commonwealth Bank of Australia	22
	Macquarie Group	24
	National Australia Bank	26
	Westpac Banking Corporation	28
Aus	tria	
	BAWAG Group	31
	Bausparkasse Wüstenrot	34
	Erste Group Bank	36
	HYPO NOE – Mortgage	39
	HYPO Oberösterreich	41
	Hypo Tirol Bank	43
	Hypo Vorarlberg Bank	45
	Kommunalkredit Austria	47
	Oberbank	49
	RLB Niederösterreich-Wien	51
	RLB Oberösterreich	54
	RLB Steiermark	56
	RLB Tirol	58
	RLB Vorarlberg Waren- und Revisionsverband	60
	Raiffeisen Bank International	62
	Raiffeisenverband Salzburg	64
	UniCredit Bank Austria	66
	Volksbank Wien	68
Belg	gium	
	Argenta Spaarbank	71
	Belfius Bank	73

BNP Paribas Fortis	76
ING Belgium	78
KBC Bank	80
Canada	
Bank of Montreal	83
Bank of Nova Scotia	85
Canadian Imperial Bank of Commerce	87
Desjardins Group	89
Equitable Bank	91
HSBC Bank Canada	93
National Bank of Canada	95
Royal Bank of Canada	97
Toronto-Dominion Bank	99
Czechia	
Komerční Banka	102
UniCredit Bank Czech Republic and Slovakia	104
Denmark	
Danish Ship Finance	107
Danske Bank	109
Jyske Bank	111
Estonia	
LHV Pank	114
Luminor Bank	116
Finland	
Aktia Bank	119
Ålandsbanken	121
Danske	123
Nordea Bank	125
Oma Säästöpankki	127
OP Financial Group	129
POP Mortgage Bank	131
Sp Mortgage Bank/Savings Bank Group	133
Suomen Hypoteekkiyhdistys	135

France	
AXA Bank Belgium/AXA Bank Europe SCF	138
AXA Banque/AXA Home Loan SFH	140
Banque Fédérative du Crédit Mutuel	142
BNP Paribas	144
Caisse de Refinancement de l'Habitat	146
Caisse Française de Financement Local	148
Compagnie de Financement Foncier	150
Crédit Agricole Group	152
Crédit Mutuel Arkéa	155
Groupe BPCE	158
HSBC Continental Europe	160
La Banque Postale	162
My Money Bank	164
Société Générale	166
Germany	
Aareal Bank	170
Bausparkasse Schwäbisch Hall	172
Bayerische Landesbank	174
Berlin Hyp	177
Commerzbank	179
DekaBank Deutsche Girozentrale	181
Deutsche Apotheker- und Ärztebank	184
Deutsche Bank	186
Deutsche Kreditbank	189
Deutsche Pfandbriefbank	192
DZ HYP	195
Hamburg Commercial Bank	198
Hamburger Sparkasse	201
ING-DiBa	203
Kreissparkasse Köln	205
Landesbank Baden-Württemberg	207
Landesbank Berlin	210
Landesbank Hessen-Thüringen	212

	Landesbank Saar	215
	Münchener Hypothekenbank	217
	NATIXIS Pfandbriefbank	219
	Norddeutsche Landesbank	221
	Oldenburgische Landesbank	224
	Santander Consumer Bank	226
	Sparkasse Hannover	228
	Sparkasse KölnBonn	231
	Sparkasse Pforzheim Calw	233
	Stadtsparkasse München	235
	UniCredit Bank	237
	Wüstenrot Bausparkasse	240
Gree	ce	
	Alpha Services and Holdings	243
Irela	nd	
	Allied Irish Banks	246
	Bank of Ireland Group	248
Icela	nd	
	Arion Banki	251
	Íslandsbanki	253
Italy		
	Banca Carige	256
	Banca Monte dei Paschi di Siena	258
	Banca Popolare di Sondrio	260
	Banco BPM	262
	Banco Desio	264
	BPER Banca	266
	Crédit Agricole Italia	268
	Credito Emiliano	270
	lccrea Banca	272
	Intesa Sanpaolo	274
	Mediobanca	277
	UniCredit	279
	Volksbank Südtirol	282

Japan	
Sumitomo Mitsui Financial Group	285
Sumitomo Mitsui Trust	287
Luxembourg	
NORD/LB Luxembourg CBB – Public Sector	291
Netherlands	
ABN AMRO	294
Achmea Bank	296
AEGON Bank	299
de Volksbank	302
ING Groep	304
NIBC Bank	306
NN Bank	309
Rabobank	311
Van Lanschot Kempen	313
New Zealand	
ANZ Bank New Zealand	317
ASB Bank	319
Bank of New Zealand	321
Westpac New Zealand	323
Norway	
DNB Bank	326
Eika Boligkreditt	328
SpareBank 1 Boligkreditt	330
SpareBank 1 SR-Bank	332
Sparebanken Møre	334
Sparebanken Sør	336
Sparebanken Vest	338
Poland	
mBank	341
PKO Bank Polski	343
Portugal	
Banco BPI	346
Banco Santander Totta	348

Caixa Económica Montepio Geral	350
Singapore	
DBS Group Holdings	353
ОСВС	355
United Overseas Bank	357
Slovakia	
Prima Banka	360
Slovenská sporiteľňa	362
Tatra banka	364
Všeobecná úverová banka	366
Korea	
KB Financial Group	369
Hana Financial Group	371
Korea Housing Finance Corporation	373
Spain	
ABANCA Corporación Bancaria, S.A.	383
Banco de Sabadell	385
Banco Santander	387
Bankinter	389
BBVA	391
CaixaBank	393
Grupo Cooperativo Cajamar	395
Eurocaja Rural	397
Caja Rural de Navarra	399
Deutsche Bank S.A.E.	401
Ibercaja Banco	403
Kutxabank	405
Unicaja Banco	407
Sweden	
LF Bank	410
SBAB	412
SEB	414
Svenska Handelsbanken	416
Swedbank	419

United Kingdom

Clydesdale Bank	422
Coventry Building Society	424
Leeds Building Society	426
Lloyds Banking Group	428
National Westminster Bank	430
Nationwide Building Society	432
Santander UK Group Holding	434
Skipton Building Society	436
Yorkshire Building Society	438
Regulatory	
Risk weights of covered bonds	440
Basis of the liquidity coverage ratio	448
LCR management: Eligible assets	456
Covered bonds within the framework of LCR management	459
Comparison table of covered bond legislation	469
Central bank-eligibility of covered bonds	479
Repayment structures on the covered bond market	483
Appendix	
Bloomberg ticker	495
Rating scale mapping and rating modifiers	499
Decsription of financial ratios	500
Database	502
Contacts at NORD/LB	504

Introduction Foreword

Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Tenth edition of the NORD/LB Issuer Guide Covered Bonds

The NORD/LB Issuer Guide Covered Bonds, which is published on a yearly basis, is part of a series of products from the NORD/LB Markets Strategy & Floor Research team covering individual issuers and market segments in the global bond market. Following on from the first issue in 2013, this edition is now the tenth publication in this format, which has consistently provided an extensive overview of the covered bond market. The focus of the Issuer Guide Covered Bonds is on issuers of covered bonds and their respective cover pools. The following publication lists all banks that have at least one outstanding publicly placed EUR benchmark (equal to or greater than EUR 500m) and/or EUR sub-benchmark (equal to or greater than EUR 500m) with a fixed coupon as at the end of October 2022. With 216 cover pools operated by a total of 181 banks from 27 separate jurisdictions overall, this year we are again confident of offering you a comprehensive overview of the global covered bond market with this present publication.

Covered bond market in 2022: COVID-19 crisis and geopolitics leave their mark...

As was previously the case in 2020 and 2021, the international covered bond markets were again shaped by the impacts, or perhaps after effects would be more accurate, of the global COVID-19 pandemic. In this context, the impact of COVID-19 and the resulting consequences for the international capital and financial markets as well as real economic activity have already demonstrated the role of covered bonds as a crisis-proof product. The high level of geopolitical uncertainty, primarily triggered by the Russian war of aggression against Ukraine, provided issuers and investors with an additional incentive to focus on this asset class in 2022. However, in our view, this only serves to increase the importance of a systematic examination of the relevant issuers and their cover pools.

... in addition to the monetary policy turning point

The monetary policy course set by the European Central Bank (ECB) is vital for the submarkets of EUR benchmarks and EUR sub-benchmarks that form part of our coverage in particular. The ECB has already reacted to inflationary pressures, heralded the start of the interest rate turnaround, and with the retrospective adjustment of the TLTRO III conditions, also addressed its package of unorthodox monetary policy instruments. The pressure was already mounting on the ECB to change monetary policy course right at the start of 2022, and this situation was also reflected in the covered bond markets. The increasing expectations with regard to sustained price rises and the corresponding reaction of the ECB not least had an impact on the selected terms to maturity on the covered bond primary market. The geopolitical crisis unleashed following the Russian invasion of Ukraine was ultimately accompanied by a monetary policy turning point. Despite all the associated challenges, the continuing withdrawal of the Eurosystem from the secondary and primary markets of the covered bond segment is also bringing the necessary normalisation tendencies to an end with regard to market players. After all, the ECB's declining presence on the markets must also be evaluated in the context of the return of real money investors. For some investors, the new interest rate and yield environment in 2022 merely served to very clearly highlight the undeniable attractiveness of the asset class of covered bonds.

European minimum standards for covered bonds and continued development of the submarket for sustainable covered bonds

A significant milestone and welcome further development to the European covered bond market both came along on 08 July 2022. On this date, revised covered bond legislation formally took effect in countries relevant to the European Economic Area (EEA) and can be regarded as the starting gun for the new "European Covered Bond" and "European Covered Bond (Premium)" covered bond labels. Much more important than this epithet, however, is the array of minimum standards – including those with a view to dealing with liquidity risks or in relation to reporting requirements. Fundamentally, the sub-market for sustainable covered bonds also remains on a growth trajectory. Accordingly, the number of issuers with green, social or sustainable frameworks is on the rise, while the proportion of ESG bonds in the iBoxx EUR Covered benchmark index also increased significantly in 2022.

NORD/LB publications on covered bonds to supplement this Issuer Guide

To complement the Issuer Guide, which aims to provide as comprehensive a market overview as possible, our publication spectrum also looks at specific market developments and fundamental changes in framework conditions across the covered bond market as a whole. These regular publications, analyses and commentaries can be found in the usual manner on our website (www.nordlb.com/nordlb/floor-research) and on the NORD/LB Research portal at Bloomberg (RESP NRDR <GO>). Should any of our readers not yet have access to these platforms, then please contact your account manager or alternatively get in touch via email at: markets@nordlb.de.

Printed version of the NORD/LB Issuer Guide Covered Bonds will be dictated by actual demand

This year, the Issuer Guide Covered Bonds will again be exclusively available in PDF format. This is a decision that we have taken with sustainability aspects in mind. However, even a sustainable approach calls for some leeway: should any of our readers prefer the Issuer Guide in printed format for their work, then we will gladly supply a printed version. Please get in touch with your account manager to provide a delivery address and indicate the number of copies required. Alternatively, our readers can also contact markets@nordlb.de.

NORD/LB Issuer Guide Covered Bonds 2022: content aspects

In this latest edition of the NORD/LB Issuer Guide Covered Bonds, as in previous years, our focus is on providing a holistic overview of issuers and cover pools. In addition, you will also find a description of the classification of covered bonds in terms of the CRR and LCR management in the chapter covering regulatory matters. With the completion of the implementation phase for the adjustments to European covered bond legislation, the Issuer Guide Covered Bonds 2022 includes a revised legal overview in a tabular comparison with the regulatory chapters. We consider this to be important not only because the European harmonisation project has by no means levelled off all legal differences in national covered bond legislation, but also because the proportion of covered bonds from jurisdictions that do not fall under the Directive is also steadily increasing in importance in the EUR benchmark and EUR sub-benchmark segments. Following this logic, we again address the central bank eligibility of covered bonds in the current Issuer Guide. We hope that you enjoy reading the latest instalment of the NORD/LB Issuer Guide Covered Bonds and are certain that this publication will continue to provide added value to you in your day-to-day work. We would be happy to assist with any queries you may have and are additionally open to suggestions for future editions.

Introduction Overview of issuers

Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Australia	Туре	Cover Pool (EURm)	Outst. Volume (EURm)	OC (%)	(S)BMK	LCR level / Risk weight	Maturity Type	Covered Bond rating (Fitch / Moody's / S&P / DBRS)
Australia & New Zealand Banking Group	М	11,831	6,501	82.0	ВМК	2A / 20%	SB	AAA / Aaa / - / -
Bank of Queensland	M	3,145	2,252	39.6	BMK	2A / 20%	CPT	AAA / Aaa / - / -
Commonwealth Bank of Australia Macquarie Bank Ltd	M M	21,060 1,859	17,697	19.0 -	BMK BMK	2A / 20% 2A / 20%	HB & SB SB	AAA / Aaa / - / - - / Aaa / - / -
National Australia Bank Ltd	M	18,508	13,841	33.7	BMK	2A / 20%	HB & SB	AAA / Aaa / - / -
Westpac Banking Corp	М	25,830	21,133	22.2	BMK	2A / 20%	SB	AAA / Aaa / - / -
Austria	Туре	Cover Pool (EURm)	Outst. Volume (EURm)	OC (%)	(S)BMK	LCR level / Risk weight	Maturity Type	Covered Bond rating (Fitch / Moody's / S&P / DBRS)
Bausparkasse Wuestenrot	М	1,633	1,267	28.9	SBMK	2A / 10%	HB	- / - / AAA / -
BAWAG Group	М	8,992	7,865	14.3	BMK	1/10%	HB & SB	- / Aaa / - / -
Erste Group Bank AG	P M	1,632 25,561	1,504 18,103	8.5 41.2	BMK BMK	1 / 10% 1 / 10%	HB HB & SB	- / Aaa / - / - - / Aaa / - / -
	M	2,966	2,682	10.6	BMK	1/10%	SB	-/Aa1/-/-
HYPO NOE Landesbank für NÖ und Wien	Р	4,567	3,548	28.7	BMK	1/10%	SB	-/Aa1/-/-
HYPO Oberösterreich	M	2,728	2,384	14.4	SBMK	2A / 10%	HB	-/-/AA+/-
Hypo Tirol Bank Hypo Vorarlberg Bank	M M	2,843 5,457	2,507 4,144	13.4 31.7	BMK BMK	1 / 10% 1 / 10%	SB HB	- / Aa1 / - / - - / Aaa / - / -
Kommunalkredit Austria	P	1,256	1,124	11.8	SBMK	2A / 20%	HB	-/-/A+/-
Oberbank	M	2,911	1,977	47.3	SBMK	2A / 10%	HB & SB	-/-/AAA/-
Raiffeisen Bank International	М	4,071	3,350	21.5	BMK	1/10%	SB	-/Aa1/-/-
RLB Niederösterreich-Wien	М	8,660	5,751	50.6	BMK	1/10%	HB & SB	- / Aaa / - / -
	Р	2,498	1,852	34.9	BMK	1/10%	SB	- / Aaa / - / -
RLB Oberösterreich RLB Steiermark	M M	5,368 6,084	3,040 4,618	76.6 31.7	BMK BMK	1 / 10% 1 / 10%	HB & SB HB	- / Aaa / - / - - / Aaa / - / -
RLB Tirol	M	3,037	2,031	49.5	SBMK	2A / 10%	HB	- / Aaa / - / -
RLB Vorarlberg	M	3,130	2,656	17.9	BMK	1/10%	HB	- / Aaa / - / -
Raiffeisenverband Salzburg	М	1,766	1,371	28.8	SBMK	2A / 10%	HB	- / Aaa / - / -
UniCredit Bank Austria	М	16,777	8,667	93.6	BMK	1/10%	HB	- / Aaa / - / -
Volksbank Wien	M	5,022	2,663	88.6	BMK	1/10%	HB	- / Aaa / - / -
		- / -	2,005	00.0	DIVIK	-, -0/0	ПD	/ Auu / /
Belgium	Туре	Cover Pool (EURm)	Outst. Volume (EURm)	OC (%)	(S)ВМК	LCR level / Risk weight	Maturity Type	Covered Bond rating (Fitch / Moody's / S&P / DBRS)
Belgium Argenta Spaarbank	Туре М	Cover Pool	Outst. Volume	ос		LCR level /	Maturity	Covered Bond rating
-	M	Cover Pool (EURm) 1,848 11,553	Outst. Volume (EURm) 1,500 9,492	OC (%) 23.2 21.7	(S)ВМК ВМК ВМК	LCR level / Risk weight 1 / 10% 1 / 10%	Maturity Type SB SB	Covered Bond rating (Fitch / Moody's / S&P / DBRS) - / - / AAA / - AAA / - / AAA / -
Argenta Spaarbank Belfius Bank	M M P	Cover Pool (EURm) 1,848 11,553 3,375	Outst. Volume (EURm) 1,500 9,492 1,211	OC (%) 23.2 21.7 178.7	(S)BMK BMK BMK BMK	LCR level / Risk weight 1 / 10% 1 / 10% 1 / 10%	Maturity Type SB SB SB	Covered Bond rating (Fitch / Moody's / S&P / DBRS) - / - / AAA / - AAA / - / AAA / - - / Aaa / AAA / -
Argenta Spaarbank Belfius Bank BNP Paribas Fortis	M M P M	Cover Pool (EURm) 1,848 11,553 3,375 2,951	Outst. Volume (EURm) 1,500 9,492 1,211 2,250	OC (%) 23.2 21.7 178.7 31.2	(S)BMK BMK BMK BMK BMK	LCR level / Risk weight 1 / 10% 1 / 10% 1 / 10% 1 / 10%	Maturity Type SB SB SB SB SB	Covered Bond rating (Fitch / Moody's / S&P / DBRS) - / - / AAA / - AAA / - / AAA / - - / Aaa / AAA / - - / Aaa / AAA / -
Argenta Spaarbank Belfius Bank	M M P	Cover Pool (EURm) 1,848 11,553 3,375	Outst. Volume (EURm) 1,500 9,492 1,211	OC (%) 23.2 21.7 178.7	(S)BMK BMK BMK BMK	LCR level / Risk weight 1 / 10% 1 / 10% 1 / 10%	Maturity Type SB SB SB	Covered Bond rating (Fitch / Moody's / S&P / DBRS) - / - / AAA / - AAA / - / AAA / - - / Aaa / AAA / -
Argenta Spaarbank Belfius Bank BNP Paribas Fortis ING Belgium	M M P M M	Cover Pool (EURm) 1,848 11,553 3,375 2,951 15,650	Outst. Volume (EURm) 1,500 9,492 1,211 2,250 8,500	OC (%) 23.2 21.7 178.7 31.2 84.1	(S)BMK BMK BMK BMK BMK BMK	LCR level / Risk weight 1 / 10% 1 / 10% 1 / 10% 1 / 10% 1 / 10%	Maturity Type SB SB SB SB SB SB	Covered Bond rating (Fitch / Moody's / S&P / DBRS) - / - / AAA / - AAA / - / AAA / - - / Aaa / AAA / - - / Aaa / AAA / - AAA / Aaa / - / -
Argenta Spaarbank Belfius Bank BNP Paribas Fortis ING Belgium KBC Bank	M M P M M	Cover Pool (EURm) 1,848 11,553 3,375 2,951 15,650 16,630 Cover Pool	Outst. Volume (EURm) 1,500 9,492 1,211 2,250 8,500 10,670 Outst. Volume	OC (%) 23.2 21.7 178.7 31.2 84.1 55.9 OC	(S)BMK BMK BMK BMK BMK BMK	LCR level / Risk weight 1 / 10% 1 / 10% 1 / 10% 1 / 10% 1 / 10% LCR level /	Maturity Type SB SB SB SB SB Maturity	Covered Bond rating (Fitch / Moody's / S&P / DBRS) - / - / AAA / - AAA / - / AAA / - - / Aaa / AAA / - - / Aaa / AAA / - AAA / Aaa / - / AAA / Aaa / - / Covered Bond rating
Argenta Spaarbank Belfius Bank BNP Paribas Fortis ING Belgium KBC Bank Canada	M M P M M M Type	Cover Pool (EURm) 1,848 11,553 3,375 2,951 15,650 16,630 Cover Pool (EURm) 29,955 45,221	Outst. Volume (EURm) 1,500 9,492 1,211 2,250 8,500 10,670 Outst. Volume (EURm)	OC (%) 23.2 21.7 178.7 31.2 84.1 55.9 OC (%) 25.4 30.5	(S)BMK BMK BMK BMK BMK BMK (S)BMK	LCR level / Risk weight 1 / 10% 1 / 10% 1 / 10% 1 / 10% 1 / 10% LCR level / Risk weight	Maturity Type SB SB SB SB SB Maturity Type	Covered Bond rating (Fitch / Moody's / S&P / DBRS) - / - / AAA / - AAA / - / AAA / - - / Aaa / AAA / - - / Aaa / AAA / - AAA / Aaa / - /- AAA / Aaa / - /- AAA / Aaa / - /- Covered Bond rating (Fitch / Moody's / S&P / DBRS)
Argenta Spaarbank Belfius Bank BNP Paribas Fortis ING Belgium KBC Bank Canada Bank of Montreal Bank of Nova Scotia Canadian Imperial Bank of Commerce	M M P M M M Type M M M	Cover Pool (EURm) 1,848 11,553 3,375 2,951 15,650 16,630 Cover Pool (EURm) 29,955 45,221 31,346	Outst. Volume (EURm) 1,500 9,492 1,211 2,250 8,500 10,670 Outst. Volume (EURm) 23,880 34,658 24,487	OC (%) 23.2 21.7 178.7 31.2 84.1 55.9 OC (%) 25.4 30.5 28.0	(S)BMK BMK BMK BMK BMK BMK BMK BMK BMK	LCR level / Risk weight 1 / 10% 1 / 10% 1 / 10% 1 / 10% 1 / 10% 1 / 10% LCR level / Risk weight 2A / 20% 2A / 20% 2A / 20%	Maturity Type SB SB SB SB SB Maturity Type SB SB SB	Covered Bond rating (Fitch / Moody's / S&P / DBRS) - / - / AAA / - AAA / - / AAA / - - / Aaa / AAA / - - / Aaa / AAA / - AAA / Aaa / - / - AAA / Aaa / - / AAA AAA / Aaa / - / AAA AAA / Aaa / - / AAA AAA / Aaa / - / AAA
Argenta Spaarbank Belfius Bank BNP Paribas Fortis ING Belgium KBC Bank Canada Bank of Montreal Bank of Nova Scotia Canadian Imperial Bank of Commerce Equitable Bank	M M P M M M Type M M M M	Cover Pool (EURm) 1,848 11,553 3,375 2,951 15,650 16,630 Cover Pool (EURm) 29,955 45,221 31,346 1,265	Outst. Volume (EURm) 1,500 9,492 1,211 2,250 8,500 10,670 Outst. Volume (EURm) 23,880 34,658 24,487 692	OC (%) 23.2 21.7 178.7 31.2 84.1 55.9 OC (%) 25.4 30.5 28.0 82.8	(S)BMK BMK BMK BMK BMK BMK BMK BMK BMK SBMK	LCR level / Risk weight 1 / 10% 1 / 10% 1 / 10% 1 / 10% 1 / 10% LCR level / Risk weight 2A / 20% 2A / 20% 2A / 20% 2A / 20%	Maturity Type SB SB SB SB SB SB SB SB SB SB SB SB	Covered Bond rating (FRch / Moody's / S&P / DBRS) - / - / AAA / - AAA / - / AAA / - - / Aaa / AAA / - - / Aaa / AAA / - AAA / Aaa / - / Covered Bond rating (FRch / Moody's / S&P / DBRS) AAA / Aaa / - / AAA AAA / Aaa / - / AAA AAA / Aaa / - / AAA AAA / Aaa / - / AAA
Argenta Spaarbank Belfius Bank BNP Paribas Fortis ING Belgium KBC Bank Canada Bank of Montreal Bank of Nova Scotia Canadian Imperial Bank of Commerce Equitable Bank Fédération des Caisses Desjardins du Québec	M M P M M M Type M M M M M	Cover Pool (EURm) 1,848 11,553 3,375 2,951 15,650 16,630 Cover Pool (EURm) 29,955 45,221 31,346 1,265 8,644	Outst. Volume (EURm) 1,500 9,492 1,211 2,250 8,500 10,670 Outst. Volume (EURm) 23,880 34,658 24,487 692 6,603	OC (%) 23.2 21.7 178.7 31.2 84.1 55.9 OC (%) 25.4 30.5 28.0 82.8 30.9	(S)BMK BMK BMK BMK BMK BMK C(S)BMK BMK BMK BMK BMK	LCR level / Risk weight 1 / 10% 1 / 10% 1 / 10% 1 / 10% 1 / 10% LCR level / Risk weight 2A / 20% 2A / 20% 2A / 20% 2A / 20% 2A / 20%	Maturity Type SB SB SB SB SB SB SB SB SB SB SB SB SB	Covered Bond rating (FIRCh / Moody's / S&P / DBRS) - / - / AAA / - AAA / - / AAA / - - / Aaa / AAA / - - / Aaa / AAA / - AAA / Aaa / - /- AAA / Aaa / - /- Covered Bond rating (FIRCh / Moody's / S&P / DBRS) AAA / Aaa / - / AAA AAA / Aaa / - / AAA
Argenta Spaarbank Belfius Bank BNP Paribas Fortis ING Belgium KBC Bank Canada Bank of Montreal Bank of Nova Scotia Canadian Imperial Bank of Commerce Equitable Bank Fédération des Caisses Desjardins du Québec HSBC Bank Canada	M M P M M M Type M M M M M M	Cover Pool (EURm) 1,848 11,553 3,375 2,951 15,650 16,630 Cover Pool (EURm) 29,955 45,221 31,346 1,265 8,644 6,172	Outst. Volume (EURm) 1,500 9,492 1,211 2,250 8,500 10,670 Outst. Volume (EURm) 23,880 34,658 24,487 692 6,603 3,881	OC (%) 23.2 21.7 178.7 31.2 84.1 55.9 OC (%) 25.4 30.5 28.0 82.8 30.9 59.0	(S)BMK BMK BMK BMK BMK BMK C(S)BMK BMK BMK BMK BMK BMK	LCR level / Risk weight 1 / 10% 1 / 10% 1 / 10% 1 / 10% 1 / 10% LCR level / Risk weight 2A / 20% 2A / 20% 2A / 20% 2A / 20% 2A / 20% 2A / 20%	Maturity Type SB SB SB SB SB Maturity Type SB SB SB SB SB SB SB	Covered Bond rating (Fitch / Moody's / S&P / DBRS) - / - / AAA / - AAA / - / AAA / - - / Aaa / AAA / - - / Aaa / AAA / - AAA / Aaa / - /- AAA / Aaa / - /- AAA / Aaa / - / AAA AAA / Aaa / - / AAA AAA / Aaa / - / AAA AAA / Aaa / - / - - / - / - / AA AAA / Aaa / - /- AAA / Aaa / - /- AAA / Aaa / - /- AAA / Aaa / - /-
Argenta Spaarbank Belfius Bank BNP Paribas Fortis ING Belgium KBC Bank Canada Bank of Montreal Bank of Nova Scotia Canadian Imperial Bank of Commerce Equitable Bank Fédération des Caisses Desjardins du Québec	M M P M M M Type M M M M M	Cover Pool (EURm) 1,848 11,553 3,375 2,951 15,650 16,630 Cover Pool (EURm) 29,955 45,221 31,346 1,265 8,644	Outst. Volume (EURm) 1,500 9,492 1,211 2,250 8,500 10,670 Outst. Volume (EURm) 23,880 34,658 24,487 692 6,603	OC (%) 23.2 21.7 178.7 31.2 84.1 55.9 OC (%) 25.4 30.5 28.0 82.8 30.9	(S)BMK BMK BMK BMK BMK BMK C(S)BMK BMK BMK BMK BMK	LCR level / Risk weight 1 / 10% 1 / 10% 1 / 10% 1 / 10% 1 / 10% LCR level / Risk weight 2A / 20% 2A / 20% 2A / 20% 2A / 20% 2A / 20%	Maturity Type SB SB SB SB SB SB SB SB SB SB SB SB SB	Covered Bond rating (FIRCh / Moody's / S&P / DBRS) - / - / AAA / - AAA / - / AAA / - - / Aaa / AAA / - - / Aaa / AAA / - AAA / Aaa / - /- AAA / Aaa / - /- Covered Bond rating (FIRCh / Moody's / S&P / DBRS) AAA / Aaa / - / AAA AAA / Aaa / - / AAA
Argenta Spaarbank Belfius Bank BNP Paribas Fortis ING Belgium KBC Bank Canada Bank of Montreal Bank of Nova Scotia Canadian Imperial Bank of Commerce Equitable Bank Fédération des Caisses Desjardins du Québec HSBC Bank Canada	M M P M M M Type M M M M M M M	Cover Pool (EURm) 1,848 11,553 3,375 2,951 15,650 16,630 Cover Pool (EURm) 29,955 45,221 31,346 1,265 8,644 6,172 13,943	Outst. Volume (EURm) 1,500 9,492 1,211 2,250 8,500 10,670 Outst. Volume (EURm) 23,880 34,658 24,487 692 6,603 3,881 9,919	OC (%) 23.2 21.7 178.7 31.2 84.1 55.9 OC (%) 25.4 30.5 28.0 82.8 30.9 59.0 40.6	(S)BMK BMK BMK BMK BMK BMK C(S)BMK BMK BMK BMK BMK BMK BMK	LCR level / Risk weight 1 / 10% 1 / 10% 1 / 10% 1 / 10% 1 / 10% LCR level / Risk weight 2A / 20% 2A / 20% 2A / 20% 2A / 20% 2A / 20% 2A / 20% 2A / 20%	Maturity Type SB SB SB SB SB SB SB SB SB SB SB SB SB	Covered Bond rating (Fitch / Moody's / S&P / DBRS) - / - / AAA / - AAA / - / AAA / - - / Aaa / AAA / - - / Aaa / AAA / - AAA / Aaa / - /- AAA / Aaa / - / AAA AAA / Aaa / - / - / - / - / AA AAA / Aaa / - /- AAA / Aaa / - /-
Argenta Spaarbank Belfius Bank BNP Paribas Fortis ING Belgium KBC Bank Canada Bank of Montreal Bank of Nova Scotia Canadian Imperial Bank of Commerce Equitable Bank Fédération des Caisses Desjardins du Québec HSBC Bank Canada National Bank of Canada Royal Bank of Canada	M M P M M M Type M M M M M M M M M M	Cover Pool (EURm) 1,848 11,553 3,375 2,951 15,650 16,630 Cover Pool (EURm) 29,955 45,221 31,346 1,265 8,644 6,172 13,943 93,951	Outst. Volume (EURm) 1,500 9,492 1,211 2,250 8,500 10,670 Outst. Volume (EURm) 23,880 34,658 24,487 692 6,603 3,881 9,919 43,808	OC (%) 23.2 21.7 178.7 31.2 84.1 55.9 OC (%) 25.4 30.5 28.0 82.8 30.9 59.0 40.6 114.5	(S)BMK BMK BMK BMK BMK BMK C(S)BMK BMK BMK BMK BMK BMK BMK BMK	LCR level / Risk weight 1 / 10% 1 / 10% 1 / 10% 1 / 10% 1 / 10% C LCR level / Risk weight 2A / 20% 2A / 20%	Maturity Type SB SB SB SB SB SB SB SB SB SB SB SB SB	Covered Bond rating (Fitch / Moody's / S&P / DBRS) - / - / AAA / - AAA / - / AAA / - - / Aaa / AAA / - - / Aaa / AAA / - AAA / Aaa / - / AAA / Aaa / - / AAA / Aaa / - / AAA AAA / Aaa / - / AAA AAA / Aaa / - / - / - / AA AAA / Aaa / - / AAA / Aaa / - / AAA
Argenta Spaarbank Belfius Bank BNP Paribas Fortis ING Belgium KBC Bank Canada Bank of Montreal Bank of Montreal Bank of Nova Scotia Canadian Imperial Bank of Commerce Equitable Bank Fédération des Caisses Desjardins du Québec HSBC Bank Canada National Bank of Canada	M M P M M M Type M M M M M M M M M M M M M M M M M M M	Cover Pool (EURm) 1,848 11,553 3,375 2,951 15,650 16,630 Cover Pool (EURm) 29,955 45,221 31,346 1,265 8,644 6,172 13,943 93,951 37,655 Cover Pool (EURm) 37,655	Outst. Volume (EURm) 1,500 9,492 1,211 2,250 8,500 10,670 Outst. Volume (EURm) 23,880 34,658 24,487 692 6,603 3,881 9,919 43,808 24,503 Outst. Volume 43,808 24,503	OC (%) 23.2 21.7 178.7 31.2 84.1 55.9 OC (%) 25.4 30.5 28.0 82.8 30.9 59.0 40.6 114.5 53.7 OC (%) 20.0	(S)BMK BMK BMK	LCR level / Risk weight 1 / 10% 1 / 10% 1 / 10% 1 / 10% 1 / 10% LCR level / Risk weight 2A / 20% 2A / 20%	Maturity Type SB SB SB SB Maturity Type SB SB SB SB SB SB SB SB SB SB SB SB SB	Covered Bond rating (Fitch / Moody's / S&P / DBRS) - / - / AAA / - AAA / - / AAA / - AAA / Aaa / -/ AAA / Aaa / -/ AAA / Aaa / -/ Covered Bond rating (Fitch / Moody's / S&P / DBRS) AAA / Aaa / - / AAA AAA / Aaa / - / AAA AAA / Aaa / -/ AAA / -/ AAA / -/ AAA / -/
Argenta Spaarbank Belfius Bank BNP Paribas Fortis ING Belgium KBC Bank Canada Bank of Montreal Bank of Montreal Bank of Nova Scotia Canadian Imperial Bank of Commerce Equitable Bank Fédération des Caisses Desjardins du Québec HSBC Bank Canada National Bank of Canada Royal Bank of Canada Soyal Bank of Canada	M M P M M Type M M M M M M M M M M M M Type	Cover Pool (EURm) 1,848 11,553 3,375 2,951 15,650 16,630 Cover Pool (EURm) 29,955 45,221 31,346 1,265 8,644 6,172 13,943 93,951 37,655 Cover Pool (EURm) 600 6,326	Outst. Volume (EURm) 1,500 9,492 1,211 2,250 8,500 10,670 Outst. Volume (EURm) 23,880 34,658 24,487 692 6,603 3,881 9,919 43,808 24,503 Outst. Volume (EURm) 500 3,901	OC (%) 23.2 21.7 178.7 31.2 84.1 55.9 OC (%) 25.4 30.5 28.0 82.8 30.9 59.0 40.6 114.5 53.7 OC (%) 20.0 (%)	(S)BMK BMK BMK BMK BMK BMK C(S)BMK BMK BMK BMK BMK BMK BMK BMK BMK	LCR level / Risk weight 1 / 10% 1 / 10% 1 / 10% 1 / 10% 1 / 10% LCR level / Risk weight 2A / 20% 2A / 20%	Maturity Type SB SB SB SB SB SB SB SB SB SB SB SB SB	Covered Bond rating (Fitch / Moody's / S&P / DBRS) - / - / AAA / - AAA / - / AAA / - AAA / AAA / - AAA / Aaa / -/- AAA / Aaa / - / AAA / Aaa / - / AAA AAA / Aaa / - / AAA
Argenta Spaarbank Belfius Bank BNP Paribas Fortis ING Belgium KBC Bank Canada Bank of Montreal Bank of Montreal Bank of Nova Scotia Canadian Imperial Bank of Commerce Equitable Bank Fédération des Caisses Desjardins du Québec HSBC Bank Canada National Bank of Canada	M M P M M M Type M M M M M M M M M M M M M M M M M M M	Cover Pool (EURm) 1,848 11,553 3,375 2,951 15,650 16,630 Cover Pool (EURm) 29,955 45,221 31,346 1,265 8,644 6,172 13,943 93,951 37,655 Cover Pool (EURm) 37,655	Outst. Volume (EURm) 1,500 9,492 1,211 2,250 8,500 10,670 Outst. Volume (EURm) 23,880 34,658 24,487 692 6,603 3,881 9,919 43,808 24,503 Outst. Volume 43,808 24,503	OC (%) 23.2 21.7 178.7 31.2 84.1 55.9 OC (%) 25.4 30.5 28.0 82.8 30.9 59.0 40.6 114.5 53.7 OC (%) 20.0	(S)BMK BMK BMK	LCR level / Risk weight 1 / 10% 1 / 10% 1 / 10% 1 / 10% 1 / 10% LCR level / Risk weight 2A / 20% 2A / 20%	Maturity Type SB SB SB SB Maturity Type SB SB SB SB SB SB SB SB SB SB SB SB SB	Covered Bond rating (Fitch / Moody's / S&P / DBRS) - / - / AAA / - AAA / - / AAA / - AAA / Aaa / -/ AAA / Aaa / -/ AAA / Aaa / -/ Covered Bond rating (Fitch / Moody's / S&P / DBRS) AAA / Aaa / - / AAA AAA / Aaa / - / AAA AAA / Aaa / -/ AAA / -/ AAA / -/ AAA / -/
Argenta Spaarbank Belfius Bank BNP Paribas Fortis ING Belgium KBC Bank Canada Bank of Montreal Bank of Montreal Bank of Nova Scotia Canadian Imperial Bank of Commerce Equitable Bank Fédération des Caisses Desjardins du Québec HSBC Bank Canada National Bank of Canada Royal Bank of Canada	M M M M M M M M M M M M M M M M M M M	Cover Pool (EURm) 1,848 11,553 3,375 2,951 15,650 16,630 Cover Pool (EURm) 29,955 45,221 31,346 1,265 8,644 6,172 13,943 93,951 37,655 Cover Pool (EURm) 600 6,326 Cover Pool (EURm) 600	Outst. Volume (EURm) 1,500 9,492 1,211 2,250 8,500 10,670 Outst. Volume (EURm) 23,880 34,658 24,487 692 6,603 3,881 9,919 43,808 24,503 Outst. Volume (EURm) 500 3,901 500 3,901 1,080	OC (%) 23.2 21.7 178.7 31.2 84.1 55.9 OC (%) 25.4 30.5 28.0 82.8 30.9 59.0 40.6 114.5 53.7 OC (%) 20.0 62.2 OC (%) 23.4	(S)BMK BMK BMK	LCR level / Risk weight 1 / 10% 1 / 10% 1 / 10% 1 / 10% 2 / 20% 2 / 20% 2 A / 20%	MaturitySB<	Covered Bond rating (FIRch / Moody's / S&P / DBRS) - / - / AAA / - AAA / - / AAA / - AAA / AAa / - AAA / Aaa / - / AAA AAA / Aaa / - / AAA Covered Bond rating (FIRch / Moody's / S&P / DBRS) AAA / Aaa / - / AAA AAA / Aaa / - / AAA (FIRCh / Moody's / S&P / DBRS) - / - / A / -
Argenta Spaarbank Belfius Bank BNP Paribas Fortis ING Belgium KBC Bank Canada Bank of Montreal Bank of Montreal Bank of Nova Scotia Canadian Imperial Bank of Commerce Equitable Bank Fédération des Caisses Desjardins du Québec HSBC Bank Canada National Bank of Canada Royal Bank of Canada Toronto-Dominion Bank Czechia Komercni Banka UniCredit Bank Czech Republic & Slovakia	M M P M M Type M M M M M M M M M M M M M M M M M M Type	Cover Pool (EURm) 1,848 11,553 3,375 2,951 15,650 16,630 Cover Pool (EURm) 29,955 45,221 31,346 1,265 8,644 6,172 13,943 93,951 37,655 Cover Pool (EURm) 600 6,326 Cover Pool (EURm)	Outst. Volume (EURm) 1,500 9,492 1,211 2,250 8,500 10,670 Outst. Volume (EURm) 23,880 34,658 24,487 692 6,603 3,881 9,919 43,808 24,503 Outst. Volume 500 3,901 500 3,901	OC (%) 23.2 21.7 178.7 31.2 84.1 55.9 OC (%) 25.4 30.5 28.0 82.8 30.9 59.0 40.6 114.5 53.7 OC (%) 20.0 62.2 OC (%)	<pre>(S)BMK BMK BMK BMK BMK BMK C(S)BMK BMK BMK BMK BMK BMK BMK BMK BMK BMK</pre>	LCR level / Risk weight 1 / 10% 1 / 10% 1 / 10% 1 / 10% 2 / 20% 2 / 20% 2 A	MaturitySB </td <td>Covered Bond rating (FIRch / Moody's / S&P / DBRS) - / - / AAA / - AAA / - AAA / - AAA / Aaa / AAA / - AAA / Aaa / - / AAA / Aaa / - / Covered Bond rating (FIRch / Moody's / S&P / DBRS) AAA / Aaa / - / AAA AAA / Aaa / - / AAA Covered Bond rating (FIRch / Moody's / S&P / DBRS)</td>	Covered Bond rating (FIRch / Moody's / S&P / DBRS) - / - / AAA / - AAA / - AAA / - AAA / Aaa / AAA / - AAA / Aaa / - / AAA / Aaa / - / Covered Bond rating (FIRch / Moody's / S&P / DBRS) AAA / Aaa / - / AAA AAA / Aaa / - / AAA Covered Bond rating (FIRch / Moody's / S&P / DBRS)

Estonia	Туре	Cover Pool (EURm)	Outst. Volume (EURm)	OC (%)	(S)ВМК	LCR level / Risk weight	Maturity Type	Covered Bond rating (Fitch / Moody's / S&P / DBRS)
LHV Pank Luminor Bank	M M	463 2,778	350 1,750	32.3 58.7	SBMK BMK	2A / 10% 1 / 10%	SB SB	- / Aa1 / - / - - / Aa1 / - / -
Finland	Туре	Cover Pool (EURm)	Outst. Volume (EURm)	OC (%)	(S)ВМК	LCR level / Risk weight	Maturity Type	Covered Bond rating (Fitch / Moody's / S&P / DBRS)
Aktia Bank Ålandsbanken Danske Bank Nordea Bank	M M M	2,577 1,218 3,551 24,029	2,100 850 2,250 20,684	22.7 43.3 57.8 16.2	BMK SBMK BMK BMK	1 / 10% 2A / 10% 1 / 10% 1 / 10%	SB SB SB HB	- / Aaa / - / - - / - / AAA / - - / Aaa / - / - - / Aaa / - / -
Oma Savings Bank OP Financial Group POP Mortgage Bank	M M M	2,145 16,480 330 2,211	1,650 14,915 250 1,800	30.0 10.5 32.1 22.8	SBMK BMK SBMK BMK	2A / 10% 1 / 10% 2A / 10% 1 / 10%	SB SB SB SB	- / - / AAA / - - / Aaa / AAA / - - / - / AAA / - - / - / AAA / -
Sp Mortgage Bank Suomen Hypoteekkiyhdistys	M	2,100	1,600	31.3	SBMK	2A / 10%	SB	- / - / AAA / - - / - / AAA / -
France	Туре	Cover Pool (EURm)	Outst. Volume (EURm)	OC (%)	(S)ВМК	LCR level / Risk weight	Maturity Type	Covered Bond rating (Fitch / Moody's / S&P / DBRS)
AXA Bank Belgium / AXA Bank Europe SCF AXA Banque / AXA Home Loan SFH Banque Fédérative du Crédit Mutuel BNP Paribas	M M M	10,896 4,313 38,428 39,630	9,250 3,750 26,345 33,931	17.8 15.0 45.9 16.8	BMK BMK BMK BMK	1 / 10% 1 / 10% 1 / 10% 1 / 10%	SB SB HB & SB HB & SB	- / Aaa / - / - AAA / - / AAA / - AAA / Aaa / AAA / - AAA / - / AAA / -
Caisse de Refinancement de l'Habitat Caisse Francaise de Financement Local Cie de Financement Foncier	M P M M	23,242 59,502 59,684 49,566	16,422 51,966 51,857 33,808	41.5 14.5 15.1 46.6	ВМК ВМК ВМК ВМК	1 / 10% 1 / 10% 1 / 10% 1 / 10%	HB HB HB SB	AAA / - / Aaa / - - / Aaa / AA+ / AAA - / Aaa / AAA / - AAA / Aaa / - / -
Crédit Agricole Crédit Mutuel Arkéa	P M P	5,896 11,603 2,297	4,500 9,183 1,837	31.0 26.4 25.0	BMK BMK BMK	1 / 10% 1 / 10% 1 / 10%	HB & SB HB & SB HB & SB	- / Aaa / AAA / - AAA / Aaa / - / - - / Aaa / - / -
Group BPCE HSBC Continental Europe La Bangue Postale	M M M	50,280 5,004 24,600	37,674 4,250 18,466	33.5 17.7 33.2	BMK BMK BMK	1 / 10% 1 / 10% 1 / 10%	HB & SB HB & SB HB & SB HB & SB	- / Aaa / AAA / - - / Aaa / AAA / - - / - / AAA / -
My Money Bank	М	2,929	2,400	22.0	BMK	1/10%	SB	-/-/AAA/-
Société Générale	Р	16,476	12,720	29.5	BMK	1/10%	HB	- / Aaa / AAA / -
Société Générale Germany	P M Type	16,476 53,717 Cover Pool (EURm)	12,720 46,490 Outst. Volume (EURm)	29.5 15.5 OC (%)	ВМК ВМК (S)ВМК	1 / 10% 1 / 10% LCR level / Risk weight	HB HB & SB Maturity Type	- / Aaa / AAA / - AAA / Aaa / - / - Covered Bond rating (Fitch / Moody's / S&P / DBRS)
	M Type M M	53,717 Cover Pool (EURm) 15,187 2,455	46,490 Outst. Volume (EURm) 13,055 2,537	15.5 OC (%) 16.3 -3.2	вмк (S)вмк вмк вмк	1 / 10% LCR level / Risk weight 1 / 10% 1 / 10%	HB & SB Maturity Type SB SB	AAA / Aaa / - / - Covered Bond rating (Fitch / Moody's / S&P / DBRS) - / Aaa / - / - - / Aaa / - / -
Germany Aareal Bank Bausparkasse Schwäbisch Hall Bayerische Landesbank	M Type M M M P	53,717 Cover Pool (EURm) 15,187 2,455 11,293 24,154	46,490 Outst. Volume (EURm) 13,055 2,537 7,082 17,133	15.5 OC (%) 16.3 -3.2 59.4 41.0	ВМК (S)ВМК ВМК ВМК ВМК ВМК	1 / 10% LCR level / Risk weight 1 / 10% 1 / 10% 1 / 10% 1 / 10%	HB & SB Maturity Type SB SB SB SB SB	AAA / Aaa / - / - Covered Bond rating (Fitch / Moody's / S&P / DBRS) - / Aaa / - / - - / Aaa / - / - - / Aaa / - / - - / Aaa / - / -
Germany Aareal Bank Bausparkasse Schwäbisch Hall Bayerische Landesbank Berlin Hyp Commerzbank	M Type M M P M M M M	53,717 Cover Pool (EURm) 15,187 2,455 11,293 24,154 19,484 38,413 1,207	46,490 Outst. Volume (EURm) 13,055 2,537 7,082 17,133 18,108 23,885 445	15.5 OC (%) 16.3 -3.2 59.4 41.0 7.6 60.8 171.2	BMK (S)BMK BMK BMK BMK BMK BMK SBMK	1 / 10% LCR level / Risk weight 1 / 10% 1 / 10% 1 / 10% 1 / 10% 1 / 10% 1 / 10% 2 A / 10%	HB & SB Maturity Type SB SB SB SB SB SB SB SB SB	AAA / Aaa / - / - Covered Bond rating (Fitch / Moody's / S&P / DBRS) - / Aaa / - / - - / Aaa / - / -
Germany Aareal Bank Bausparkasse Schwäbisch Hall Bayerische Landesbank Berlin Hyp	M Type M M P M M M P M	53,717 Cover Pool (EURm) 15,187 2,455 11,293 24,154 19,484 38,413 1,207 4,419 9,271	46,490 Outst. Volume (EURm) 13,055 2,537 7,082 17,133 18,108 23,885 445 3,504 8,449	15.5 C (%) 16.3 -3.2 59.4 41.0 7.6 60.8 171.2 26.1 9.7	BMK (S)BMK BMK BMK BMK BMK SBMK SBMK BMK	1 / 10% LCR level / Risk weight 1 / 10% 1 / 10% 1 / 10% 1 / 10% 1 / 10% 1 / 10% 2 A / 10% 2 A / 10% 1 / 10%	HB & SB Maturity Type SB SB SB SB SB SB SB SB SB SB SB SB SB	AAA / Aaa / - / - Covered Bond rating (Fitch / Moody's / S&P / DBRS) - / Aaa / - / - - / Aaa / - / -
Germany Aareal Bank Bausparkasse Schwäbisch Hall Bayerische Landesbank Berlin Hyp Commerzbank DekaBank Deutsche Girozentrale Deutsche Apotheker-und Ärztebank Deutsche Bank	M Type M M P M M M P	53,717 Cover Pool (EURm) 15,187 2,455 11,293 24,154 19,484 38,413 1,207 4,419	46,490 Outst. Volume (EURm) 13,055 2,537 7,082 17,133 18,108 23,885 445 3,504	15.5 OC (%) 16.3 -3.2 59.4 41.0 7.6 60.8 171.2 26.1	BMK (S)BMK BMK BMK BMK BMK BMK SBMK SBMK	1 / 10% LCR level / Risk weight 1 / 10% 1 / 10% 1 / 10% 1 / 10% 1 / 10% 1 / 10% 2 A / 10% 2 A / 10%	HB & SB Maturity Type SB SB SB SB SB SB SB SB SB SB SB	AAA / Aaa / - / - Covered Bond rating (Fitch / Moody's / S&P / DBRS) - / Aaa / - / - - / Aaa / - / -
Germany Aareal Bank Bausparkasse Schwäbisch Hall Bayerische Landesbank Berlin Hyp Commerzbank DekaBank Deutsche Girozentrale Deutsche Apotheker-und Ärztebank	M Type M M P M M M M M M M M M M M M M M M M	53,717 Cover Pool (EURm) 15,187 2,455 11,293 24,154 19,484 38,413 1,207 4,419 9,271 15,577 3,233 6,528 7,877 18,649	46,490 Outst. Volume (EURm) 13,055 2,537 7,082 17,133 18,108 23,885 445 3,504 8,449 12,332 2,310 5,465 6,545 16,064	15.5 OC (%) 16.3 -3.2 59.4 41.0 7.6 60.8 171.2 26.1 9.7 26.3 40.0 19.5 20.4 16.1	BMK (S)BMK BMK BMK BMK BMK SBMK SBMK BMK BMK BMK BMK BMK BMK	1 / 10% LCR level / Risk weight 1 / 10% 1 / 10% 1 / 10% 1 / 10% 1 / 10% 2 A / 10% 2 A / 10% 2 A / 10% 1 / 10%	HB & SB Maturity Type SB SB SB SB SB SB SB SB SB SB SB SB SB	AAA / Aaa / - / - Covered Bond rating (Fitch / Moody's / S&P / DBRS) - / Aaa / - / - - / Aaa / - / -
Germany Aareal Bank Bausparkasse Schwäbisch Hall Bayerische Landesbank Berlin Hyp Commerzbank DekaBank Deutsche Girozentrale Deutsche Apotheker-und Ärztebank Deutsche Bank Deutsche Kreditbank	M Type M M M M M M M M M M P	53,717 Cover Pool (EURm) 15,187 2,455 11,293 24,154 19,484 38,413 1,207 4,419 9,271 15,577 3,233 6,528 7,877 18,649 11,014 39,185 13,579	46,490 Outst. Volume (EURm) 13,055 2,537 7,082 17,133 18,108 23,885 445 3,504 8,449 12,332 2,310 5,465 6,545	15.5 C(%) 16.3 -3.2 59.4 41.0 7.6 60.8 171.2 26.1 9.7 26.3 40.0 19.5 20.4	BMK (S)BMK BMK BMK BMK BMK BMK BMK BMK BMK BMK	1 / 10% LCR level / Risk weight 1 / 10% 1 / 10% 1 / 10% 1 / 10% 1 / 10% 2 A / 10% 2 A / 10% 1 / 10%	HB & SB Maturity Type SB SB SB SB SB SB SB SB SB SB SB SB SB	AAA / Aaa / - / - Covered Bond rating (FRch / Moody's / S&P / DBRS) - / Aaa / - / - - / Aaa / - / - / Aaa / AAA / - - / Aaa / AAA / -
GermanyAareal Bank Bausparkasse Schwäbisch HallBayerische LandesbankBerlin Hyp CommerzbankDekaBank Deutsche GirozentraleDeutsche Apotheker-und ÄrztebankDeutsche BankDeutsche KreditbankDeutsche Pfandbriefbank	M Type M M M P M M M M M M P M M M P M M M M	53,717 Cover Pool (EURm) 15,187 2,455 11,293 24,154 19,484 38,413 1,207 4,419 9,271 15,577 3,233 6,528 7,877 18,649 11,014 39,185	46,490 Outst. Volume (EURm) 13,055 2,537 7,082 17,133 18,108 23,885 445 3,504 8,449 12,332 2,310 5,465 6,545 16,064 9,810 33,906 11,274 2,577 2,078	15.5 OC (%) 16.3 -3.2 59.4 41.0 7.6 60.8 171.2 26.1 9.7 26.3 40.0 19.5 20.4 16.1 12.3 15.6	BMK (S)BMK BMK BMK BMK BMK SBMK SBMK BMK BMK BMK BMK BMK BMK BMK BMK	1 / 10% LCR level / Risk weight 1 / 10% 1 / 10% 1 / 10% 1 / 10% 1 / 10% 2A / 10% 2A / 10% 1	HB & SB Maturity Type SB SB SB SB SB SB SB SB SB SB SB SB SB	AAA / Aaa / - / - Covered Bond rating (FRch / Moody's / S&P / DBRS) - / Aaa / - / - - / Aaa / - / - / Aaa / AAA / - / Aaa / AAA / - / Aaa / AAA / - / Aaa / - / - / Aaa / AAA /- - / Aaa / - /-
GermanyAareal Bank Bausparkasse Schwäbisch HallBayerische LandesbankBayerische LandesbankBerlin Hyp CommerzbankDekaBank Deutsche GirozentraleDeutsche Apotheker-und ÄrztebankDeutsche BankDeutsche KreditbankDeutsche PfandbriefbankDZ HYPHamburg Commercial BankHamburger Sparkasse ING-DiBa	M Type M M M P M M M M P M M P M M P M S M M	53,717 Cover Pool (EURm) 15,187 2,455 11,293 24,154 19,484 38,413 1,207 4,419 9,271 15,577 3,233 6,528 7,877 18,649 11,014 39,185 13,579 3,534 2,435 7,909 10,231	46,490 Outst. Volume (EURm) 13,055 2,537 7,082 17,133 18,108 23,885 445 3,504 8,449 12,332 2,310 5,465 6,545 16,064 9,810 33,906 11,274 2,577 2,078 6,595 6,355	15.5 OC (%) 16.3 -3.2 59.4 41.0 7.6 60.8 171.2 26.1 9.7 26.3 40.0 19.5 20.4 16.1 12.3 15.6 20.4 37.1 17.2 19.9 61.0	BMK (S)BMK BMK BMK BMK BMK BMK BMK BMK BMK BMK	1 / 10% LCR level / Risk weight 1 / 10% 1 / 10% 1 / 10% 1 / 10% 1 / 10% 2A / 10% 2A / 10% 2A / 10% 1	HB & SB Maturity Type SB SB SB SB SB SB SB SB SB SB SB SB SB	AAA / Aaa / - / - Covered Bond rating (FRch / Moody's / S&P / DBRS) - / Aaa / - / - - / Aaa / - / - / Aaa / AAA / - - / Aaa / - / - - / Aaa / - / - - / Aaa / - / -
GermanyAareal Bank Bausparkasse Schwäbisch HallBayerische LandesbankBerlin Hyp CommerzbankDekaBank Deutsche GirozentraleDeutsche Apotheker-und ÄrztebankDeutsche BankDeutsche BankDeutsche PfandbriefbankDZ HYPHamburg Commercial BankHamburger Sparkasse	M Type M M M P M M M M P M M P M M P M S M	53,717 Cover Pool (EURm) 15,187 2,455 11,293 24,154 19,484 38,413 1,207 4,419 9,271 15,577 3,233 6,528 7,877 18,649 11,014 39,185 13,579 3,534 2,435 7,909	46,490 Outst. Volume (EURm) 13,055 2,537 7,082 17,133 18,108 23,885 445 3,504 8,449 12,332 2,310 5,465 6,545 16,064 9,810 33,906 11,274 2,577 2,078 6,595	15.5 OC (%) 16.3 -3.2 59.4 41.0 7.6 60.8 171.2 26.1 9.7 26.3 40.0 19.5 20.4 16.1 12.3 15.6 20.4 37.1 17.2 19.9	BMK (S)BMK BMK BMK BMK BMK BMK BMK BMK BMK BMK	1 / 10% LCR level / Risk weight 1 / 10% 1 / 10% 1 / 10% 1 / 10% 1 / 10% 2A / 10% 2A / 10% 1	HB & SB Maturity Type SB SB SB SB SB SB SB SB SB SB SB SB SB	AAA / Aaa / - / - Covered Bond rating (FRch / Moody's / S&P / DBRS) - / Aaa / - / - - / Aaa / AAA / - - / Aaa / - / -
GermanyAareal Bank Bausparkasse Schwäbisch HallBayerische LandesbankBayerische LandesbankBerlin Hyp CommerzbankDekaBank Deutsche GirozentraleDeutsche Apotheker-und ÄrztebankDeutsche BankDeutsche KreditbankDeutsche PfandbriefbankDZ HYPHamburge Commercial BankHamburger Sparkasse ING-DiBa Kreissparkasse Köln	M Type M M M P M M M M P M M P M M P M S M M M M	53,717 Cover Pool (EURm) 15,187 2,455 11,293 24,154 19,484 38,413 1,207 4,419 9,271 15,577 3,233 6,528 7,877 18,649 11,014 39,185 13,579 3,534 2,435 7,909 10,231 6,198 16,113	46,490 Outst. Volume (EURm) 13,055 2,537 7,082 17,133 18,108 23,885 445 3,504 8,449 12,332 2,310 5,465 6,545 16,064 9,810 33,906 11,274 2,577 2,078 6,595 6,355 1,192 11,520	15.5 OC (%) 16.3 -3.2 59.4 41.0 7.6 60.8 171.2 26.1 9.7 26.3 40.0 19.5 20.4 16.1 12.3 15.6 20.4 37.1 17.2 19.9 61.0 420.0 39.9	BMK (S)BMK BMK BMK BMK BMK BMK BMK BMK BMK BMK	1 / 10% LCR level / Risk weight 1 / 10% 1 / 10% 1 / 10% 1 / 10% 1 / 10% 2A / 10% 2A / 10% 1	HB & SB Maturity Type SB SB SB SB SB SB SB SB SB SB SB SB SB	AAA / Aaa / - / - Covered Bond rating (FRch / Moody's / S&P / DBRS) - / Aaa / - / / Aaa /

Germany	Туре	Cover Pool (EURm)	Outst. Volume (EURm)	OC (%)	(S)ВМК	LCR level / Risk weight	Maturity Type	Covered Bond rating (Fitch / Moody's / S&P / DBRS)
Münchener Hypothekenbank NATIXIS Pfandbriefbank	M M	33,454 1,529	31,895 1,316	4.9 16.2	BMK SBMK	1 / 10% 2A / 10%	SB SB	- / Aaa / - / - - / Aaa / - / -
Norddeutsche Landesbank	М	10,957	8,627	27.0	BMK	1/10%	SB	-/Aa1/-/-
	P	14,355	12,099	18.6	BMK	1/10%	SB	-/Aa1/-/-
Oldenburgische Landesbank Santander Consumer Bank	M M	1,040 1,162	881 1,025	18.0 13.4	SBMK BMK	2A / 10% 1 / 10%	SB SB	- / Aa1 / - / - AAA / Aaa / - / -
	M	2,400	1,658	44.8	SBMK	2A / 10%	SB	AAA / - / - / -
Sparkasse Hannover	Р	969	313	209.4	SBMK	2B / 20%	SB	-/-/-
Sparkasse KölnBonn	M	7,001	1,495	368.4	BMK	1 / 10% 2A / 10%	SB	- / Aaa / - / -
Sparkasse Pforzheim Calw Stadtsparkasse München	M M	2,539 1,276	1,853 715	37.0 78.4	SBMK SBMK	2A / 10% 2A / 10%	SB SB	AAA / - / - / - AA+ / - / - / -
	M	30,313	24,916	21.7	BMK	1/10%	SB	- / Aaa / - / -
UniCredit Bank	Р	6,376	4,042	57.7	BMK	1/10%	SB	- / Aaa / - / -
Wüstenrot Bausparkasse	Μ	3,103	2,537	22.3	BMK	1/10%	SB	- / - / AAA / -
Greece	Туре	Cover Pool (EURm)	Outst. Volume (EURm)	OC (%)	(S)ВМК	LCR level / Risk weight	Maturity Type	Covered Bond rating (Fitch / Moody's / S&P / DBRS)
Alpha Bank	М	675	500	35.1	BMK	2B / 20%	SB	BBB- / A3 / - / -
Iceland	Туре	Cover Pool (EURm)	Outst. Volume (EURm)	OC (%)	(S)ВМК	LCR level / Risk weight	Maturity Type	Covered Bond rating (Fitch / Moody's / S&P / DBRS)
Arion Banki	М	2,216	1,392	59.2	BMK	2A / 20%	SB	-/-/A/-
Islandsbank	Μ	2,627	2,108	24.6	SBMK	- / 50%	SB	-/-/A/-
Ireland	Туре	Cover Pool (EURm)	Outst. Volume (EURm)	OC (%)	(S)ВМК	LCR level / Risk weight	Maturity Type	Covered Bond rating (Fitch / Moody's / S&P / DBRS)
Allied Irish Banks	M	15,764	8,775	79.6	BMK	1/10%	SB	- / Aaa / AAA / -
Bank of Ireland	Μ	10,238	3,954	158.9	BMK	1/10%	SB	- / Aaa / - / -
Italy	Туре	Cover Pool (EURm)	Outst. Volume (EURm)	OC (%)	(S)BMK	LCR level / Risk weight	Maturity Type	Covered Bond rating (Fitch / Moody's / S&P / DBRS)
Banca Carige	М	3,539	2,592	36.5	BMK	1/10%	SB	- / Aa3 / - / AA
Banca Monte dei Paschi di Siena Banca Popolare dell'Alto Adige	M M	12,186 492	7,450 300	63.6 63.9	BMK SBMK	1 / 10% 2A / 10%	CPT SB	A+ / Aa3 / - / AA AA / - / - / -
Banca Popolare di Sondrio	M	1,263	500	152.6	BMK	1/10%	SB	AA / - / - / -
Banco BPM	М	8,630	5,000	72.6	ВМК	1/10%	SB	- / Aa3 / - / -
Banco Desio	М	1,774	1,175	51.0	BMK	1/10%	SB	AA / - / - / -
BPER Banca Crédit Agricole Italia	M M	5,298 16,604	4,250 12,000	24.7 38.4	BMK BMK	1 / 10% 1 / 10%	SB SB	- / Aa3 / - / - - / Aa3 / - / -
Credito Emiliano	M	3,989	2,100	90.0	BMK	1/10%	SB	AA / Aa3 / - / -
Iccrea Banca	Μ	1,294	500	158.7	BMK	1/10%	SB	- / Aa3 / - / -
Intesa Sanpaolo	M	20,354	15,560	30.8	BMK	1/10%	SB	-/Aa3/-/-
Mediobanca	M M	9,728 7,421	8,100 5,000	20.1 48.4	BMK BMK	1 / 10% 1 / 10%	SB SB	- / Aa3 / - / AA AA / - / - / -
UniCredit	M	6,706	2,606	157.3	BMK	1/10%	SB	AA / Aa3 / AA- / -
Unicredit	М	31,356	19,250	62.9	BMK	1/10%	СРТ	- / Aa3 / - / -
Japan	Туре	Cover Pool (EURm)	Outst. Volume (EURm)	OC (%)	(S)BMK	LCR level / Risk weight	Maturity Type	Covered Bond rating (Fitch / Moody's / S&P / DBRS)
Sumitomo Mitsui Banking Corporation Sumitomo Mitsui Trust Bank	M M	6,363 2,280	4,551 1,562	39.8 46.0	BMK BMK	- / 20% - / 20%	SB SB	- / Aaa / - / - - / Aaa / - / -
Korea	Туре	Cover Pool (EURm)	Outst. Volume (EURm)	OC (%)	(S)ВМК	LCR level / Risk weight	Maturity Type	Covered Bond rating (Fitch / Moody's / S&P / DBRS)
Hana Financial Group / KEB Hana Bank	М	2,327	500	372.1	BMK	2A / 20%	SB	AAA / - / - / -
KB Financial Group / KB Kookmin Bank	M	4,135	1,500	173.1	BMK	2A / 20%	SB	AAA / - / AAA / -
	M M	520 556	500 500	8.3 12.5	BMK BMK	2A / 20% 2A / 20%	HB HB	- / Aa1 / - / - - / - / AAA / -
	M	1,112	1,000	15.9	BMK	2A / 20%	НВ	-/-/AAA/-
Korea Housing Finance Corporation	Μ	556	550	11.3	BMK	2A / 20%	HB	-/-/AAA/-
	M	1,108	1,000	10.3	BMK	2A / 20%	HB	-/-/AAA/-
	M M	601 869	550 600	8.1 44.2	BMK BMK	2A / 20% 2A / 20%	HB HB	- / - / AAA / - - / - / AAA / -
	M	869 649	500	44.2 32.7	BMK	2A / 20% 2A / 20%	НВ	- / - / AAA / - - / - / AAA / -
Luxembourg	Туре	Cover Pool (EURm)	Outst. Volume (EURm)	OC (%)	(S)BMK	LCR level / Risk weight	Maturity Type	Covered Bond rating (Fitch / Moody's / S&P / DBRS)
	Р	4,290	3,508	22.3	BMK	1/20%	HB	- / Aa2 / - / -
NORD/LB Luxembourg Covered Bond Bank	RE	330	300	10.1	SBMK	2A / 20%	HB	- / Aa2 / - / -

Netherlands	Туре	Cover Pool (EURm)	Outst. Volume (EURm)	OC (%)	(S)BMK	LCR level / Risk weight	Maturity Type	Covered Bond rating (Fitch / Moody's / S&P / DBRS)
ABN AMRO	М	36,886	29,392	25.5	ВМК	1/10%	SB	AAA / Aaa / - / -
Achmea Bank	M M	1,838 1,256	1,500 1,000	22.5 25.6	BMK BMK	1 / 10% 1 / 10%	CPT SB	AAA / Aaa / - / - - / - / AAA / -
AEGON Bank	M	2,412	2,000	20.6	BMK	1/10%	CPT	- / - / AAA / -
	М	575	500	15.1	BMK	1/10%	SB	-/-/AAA/-
De Volksbank	M M	5,540 20,624	4,570 16,584	21.2 24.4	BMK BMK	1 / 10% 1 / 10%	SB SB	AAA / Aaa / - / - AAA / Aaa / AAA / -
ING Bank	M	691	500	38.1	BMK	1 / 10%	SB	- / - / AAA / -
NIBC Bank	М	4,251	3,500	21.4	BMK	1/10%	СРТ	AAA / - / - / -
NN Bank Rabobank	M M	5,260 20,050	4,845 17,993	8.6 11.4	BMK BMK	1 / 10% 1 / 10%	SB SB	- / - / AAA / - - / Aaa / - / -
	M	1,327	1,000	32.7	BMK	1 / 10%	CPT	AAA / - / - / -
Van Lanschot Kempen	М	704	500	40.9	BMK	1/10%	SB	- / - / AAA / -
New Zealand	Туре	Cover Pool (EURm)	Outst. Volume (EURm)	OC (%)	(S)ВМК	LCR level / Risk weight	Maturity Type	Covered Bond rating (Fitch / Moody's / S&P / DBRS)
ANZ Bank New Zealand	М	6,746	2,423	178.4	ВМК	2A / 20%	SB	AAA / Aaa / - / -
ASB Bank Bank of New Zealand	M M	3,091 3,161	2,235 2,500	38.3 26.5	BMK BMK	2A / 20% 2A / 20%	SB SB	AAA / Aaa / - / - AAA / Aaa / - / -
Westpac New Zealand	M	3,525	1,556	126.5	BMK	2A / 20%	SB	AAA / Aaa / - / -
Norway	Туре	Cover Pool (EURm)	Outst. Volume (EURm)	OC (%)	(S)ВМК	LCR level / Risk weight	Maturity Type	Covered Bond rating (Fitch / Moody's / S&P / DBRS)
DNB Bank	М	66,242	36,259	82.7	ВМК	1/10%	SB	- / Aaa / AAA / -
Eika Boligkreditt	М	10,847	9,973	8.8	BMK	1/10%	SB	- / Aaa / - / -
Sbanken SpareBank 1	M M	3,622 26,009	3,011 24,630	20.3 5.6	BMK BMK	1 / 10% 1 / 10%	SB SB	- / Aaa / - / - - / Aaa / - / -
SpareBank 1 SR-Bank	M	9,832	7,857	25.1	BMK	1/10%	SB	- / Aaa / - / -
Sparebanken Møre	М	2,795	2,319	20.5	SBMK	2A / 10%	SB	- / Aaa / - / -
Sparebanken Sør	М	5,438	4,753	14.4	BMK	1/10%	SB	- / Aaa / - / -
Sparebanken Vest	М	12,211	9,486	28.7	BMK	1/10%	SB	- / Aaa / - / -
Poland	Туре	Cover Pool (EURm)	Outst. Volume (EURm)	OC (%)	(S)ВМК	LCR level / Risk weight	Maturity Type	Covered Bond rating (Fitch / Moody's / S&P / DBRS)
mBank PKO Bank Polski	M M	1,968 4,255	1,570 2,632	25.4 61.7	SBMK BMK	2A / 10% 1 / 10%	SB/CPT SB/CPT	-/Aa1/-/- -/Aa1/-/-
Portugal	Туре	Cover Pool (EURm)	Outst. Volume (EURm)	OC (%)	(S)ВМК	LCR level / Risk weight	Maturity Type	Covered Bond rating (Fitch / Moody's / S&P / DBRS)
Banco BPI	М	8,690	7,300	19.0	ВМК	1/10%	SB	- / Aa2 / - / AAL
Banco Santander Totta	M	9,990	8,600	16.2	ВМК	1/10%	SB	A+ / Aa2 / - / AA
Caixa Económica Montepio Geral	М	2,757	2,300	19.9	BMK	1/10%	СРТ	AA- / Aa3 / - / -
Singapore	Туре	Cover Pool (EURm)	Outst. Volume (EURm)	OC (%)	(S)ВМК	LCR level / Risk weight	Maturity Type	Covered Bond rating (Fitch / Moody's / S&P / DBRS)
DBS Group Holdings	М	12,177	5,296	129.9	BMK	2A / 20%	SB	AAA / Aaa / - / -
Oversea-Chinese Banking Corporation United Overseas Bank	M M	7,310 12,029	2,183 6,587	234.8 82.6	BMK BMK	2A / 20% 2A / 20%	SB SB	AAA / Aaa / - / - - / Aaa / AAA / -
Slovakia	Туре	Cover Pool (EURm)	Outst. Volume (EURm)	OC (%)	(S)ВМК	LCR level / Risk weight	Maturity Type	Covered Bond rating (Fitch / Moody's / S&P / DBRS)
Prima Banka Slovensko	М	2,797	1,500	86.5	ВМК	1/10%	SB	- / Aaa / - / -
Slovenská sporiteľňa	М	4,815	2,811	71.3	BMK	1/10%	SB	- / Aaa / - / -
Tatra Banka	М	2,342	1,948	20.2	SBMK	2A / 10%	SB	- / Aaa / - / -
	IVI				DIVIK			
Spain	Туре	(EURm)	(EURm)	(%)	(S)ВМК	Risk weight	Туре	Covered Bond rating (Fitch / Moody's / S&P / DBRS)
ABANCA Banco de Sabadell	M	16,109 43 589	2,990		BMK BMK	-		
						-		
Bankinter	M	33,800	15,712	115.1	BMK	1/10%	HB	-/ Aa1/ AA+/-
BBVA	М	41,704	29,945	39.3	ВМК	1/10%	НВ	- / Aa1 / AA+ / AAA
CaixaBank Caia Rural da Navarra	M	137,430	69,188	98.6 120.4	BMK	1/10%	HB	- / Aa1 / AA+ / AAA
•						-		
		- , =				,		
Všeobecná úverová banka Spain ABANCA Banco de Sabadell Banco Santander Bankinter BBVA	M Type M M M M M	4,811 Cover Pool (EURm) 16,109 43,589 80,899 33,800 41,704	4,267 Outst. Volume (EURm) 2,990 15,936 51,179 15,712 29,945	12.8 OC (%) 438.8 173.5 58.1 115.1 39.3	BMK (S)BMK BMK BMK BMK BMK BMK	1/10% LCR level / Risk weight 1/10% 1/10% 1/10% 1/10% 1/10%	SB Maturity Type HB HB & SB HB HB	- / Aa1 / - / - Covered Bond rating (Fitch / Moody's / S&P / DBRS) - / Aa1 / AA+ / - - / Aa1 / - / AAA AA / Aa1 / - / - - / Aa1 / AA+ / - - / Aa1 / AA+ / AAA

NORD/LB

Туре	Cover Pool (EURm)	Outst. Volume (EURm)	OC (%)	(S)ВМК	LCR level / Risk weight	Maturity Type	Covered Bond rating (Fitch / Moody's / S&P / DBRS)
M M M	3,441 18,234 24,729 36,067	1,200 4,100 1,347 9,664	186.7 344.7 1736.3 273.2	BMK BMK BMK BMK	1 / 10% 1 / 10% 1 / 10% 1 / 10%	HB HB HB	- / Aa1 / - / - - / Aa1 / AA / - - / Aa1 / AA+ / - - / Aa1 / - / -
Туре	Cover Pool (EURm)	Outst. Volume (EURm)	OC (%)	(S)ВМК	LCR level / Risk weight	Maturity Type	Covered Bond rating (Fitch / Moody's / S&P / DBRS)
M M M M M	26,525 40,200 66,279 6,814 59,205 100,400	20,992 31,344 30,636 5,912 53,557 38,920	26.4 28.3 116.3 15.3 10.5 158.0	BMK BMK BMK BMK BMK	1 / 10% 1 / 10% 1 / 10% 1 / 10% 1 / 10% 1 / 10%	HB & SB SB HB SB SB HB	- / Aaa / AAA / - - / Aaa / - / - - / Aaa / AAA / -
Туре	Cover Pool (EURm)	Outst. Volume (EURm)	OC (%)	(S)BMK	LCR level / Risk weight	Maturity Type	Covered Bond rating (Fitch / Moody's / S&P / DBRS)
M M M M M M	8,605 7,857 3,689 36,305 8,611 23,420 27,432 4,134 9,411	3,336 850 500 500 500 1,000 500 1,000	157.9 69.9 47.9 48.6 163.6 52.6 46.6 48.4 60.0	BMK BMK BMK BMK BMK BMK BMK	2A / 20% 2A / 20%	SB SB SB SB SB SB SB SB	AAA / Aaa / - / - AAA / Aaa / AAA / - AAA / Aaa / AAA / - AAA / Aaa / - / -
	M M M Type M M M M M M M M M M M M M M M M M M M	M 3,441 M 18,234 M 24,729 M 26,525 M 40,200 M 66,279 M 68,14 M 59,205 M 100,400 Type Cover Pool (EURm) M 59,205 M 59,205 M 100,400 Type Cover Pool (EURm) M 8,605 M 7,857 M 3,689 M 36,305 M 8,611 M 23,420 M 23,420 M 23,420	M 3,441 1,200 M 18,234 4,100 M 24,729 1,347 M 24,729 1,347 M 36,067 9,664 Type Cover Pool (EURm) Outst. Volume (EURm) M 26,525 20,992 M 40,200 31,344 M 66,279 30,636 M 6,814 5,912 M 59,205 53,557 M 100,400 38,920 Type Cover Pool (EURm) Outst. Volume (EURm) M 8,605 3,336 M 7,857 850 M 3,689 500 M 36,305 500 M 3,611 500 M 23,420 500 M 27,432 1,000 M 4,134 500	(EURM) (EURM) (%) M 3,441 1,200 186.7 M 18,234 4,100 344.7 M 24,729 1,347 1736.3 M 24,729 1,347 1736.3 M 24,729 1,347 1736.3 M 26,525 20,992 26.4 M 40,200 31,344 28.3 M 66,279 30,636 116.3 M 6,814 5,912 15.3 M 59,205 53,557 10.5 M 100,400 38,920 158.0 Type Cover Pool (EURm) Outst. Volume (EURm) OC (%) M 8,605 3,336 157.9 M 3,689 500 47.9 M 36,305 500 48.6 M 3,611 500 163.6 M 3,611 500 52.6 M 23,420 500 52.6 <td>M (EURm) (EURm) (%) M M 3,441 1,200 186.7 BMK M 18,234 4,100 344.7 BMK M 24,729 1,347 1736.3 BMK M 24,729 1,347 1736.3 BMK M 24,729 1,347 1736.3 BMK M 36,067 9,664 273.2 BMK Type Cover Pool (EURm) Outst. Volume (EURm) OC (%) (S)BMK M 26,525 20,992 26.4 BMK M 66,279 30,636 116.3 BMK M 66,279 30,636 116.3 BMK M 59,205 53,557 10.5 BMK M 100,400 38,920 158.0 BMK Type Cover Pool (EURm) Outst. Volume (EURm) OC (%) (S)BMK M 3,689 500 47.9 BMK M 36,3</td> <td>M (EURm) (EURm) (%) M Risk weight M 3,441 1,200 186.7 BMK 1/10% M 18,234 4,100 344.7 BMK 1/10% M 24,729 1,347 1736.3 BMK 1/10% M 24,729 1,347 1736.3 BMK 1/10% M 24,729 1,347 1736.3 BMK 1/10% M 36,067 9,664 273.2 BMK 1/10% M 26,525 20,992 26.4 BMK 1/10% M 40,200 31,344 28.3 BMK 1/10% M 66,279 30,636 116.3 BMK 1/10% M 6,814 5,912 15.3 BMK 1/10% M 59,205 53,557 10.5 BMK 1/10% M 100,400 38,920 158.0 BMK 2/20% M 7,857 <td< td=""><td>M (EURm) (%) M Risk weight Type M 3,441 1,200 186.7 BMK 1/10% HB M 18,234 4,100 344.7 BMK 1/10% HB M 24,729 1,347 1736.3 BMK 1/10% HB M 36,067 9,664 273.2 BMK 1/10% HB Type Cover Pool (EURm) Outst. Volume (EURm) OC (%) (S)BMK LCR level / Risk weight Maturity Type M 26,525 20,992 26.4 BMK 1/10% HB & SB M 40,200 31,344 28.3 BMK 1/10% SB M 66,279 30,636 116.3 BMK 1/10% SB M 59,205 53,557 10.5 BMK 1/10% SB M 100,400 38,920 158.0 BMK 1/10% SB M 7,857 850 69.9</td></td<></td>	M (EURm) (EURm) (%) M M 3,441 1,200 186.7 BMK M 18,234 4,100 344.7 BMK M 24,729 1,347 1736.3 BMK M 24,729 1,347 1736.3 BMK M 24,729 1,347 1736.3 BMK M 36,067 9,664 273.2 BMK Type Cover Pool (EURm) Outst. Volume (EURm) OC (%) (S)BMK M 26,525 20,992 26.4 BMK M 66,279 30,636 116.3 BMK M 66,279 30,636 116.3 BMK M 59,205 53,557 10.5 BMK M 100,400 38,920 158.0 BMK Type Cover Pool (EURm) Outst. Volume (EURm) OC (%) (S)BMK M 3,689 500 47.9 BMK M 36,3	M (EURm) (EURm) (%) M Risk weight M 3,441 1,200 186.7 BMK 1/10% M 18,234 4,100 344.7 BMK 1/10% M 24,729 1,347 1736.3 BMK 1/10% M 24,729 1,347 1736.3 BMK 1/10% M 24,729 1,347 1736.3 BMK 1/10% M 36,067 9,664 273.2 BMK 1/10% M 26,525 20,992 26.4 BMK 1/10% M 40,200 31,344 28.3 BMK 1/10% M 66,279 30,636 116.3 BMK 1/10% M 6,814 5,912 15.3 BMK 1/10% M 59,205 53,557 10.5 BMK 1/10% M 100,400 38,920 158.0 BMK 2/20% M 7,857 <td< td=""><td>M (EURm) (%) M Risk weight Type M 3,441 1,200 186.7 BMK 1/10% HB M 18,234 4,100 344.7 BMK 1/10% HB M 24,729 1,347 1736.3 BMK 1/10% HB M 36,067 9,664 273.2 BMK 1/10% HB Type Cover Pool (EURm) Outst. Volume (EURm) OC (%) (S)BMK LCR level / Risk weight Maturity Type M 26,525 20,992 26.4 BMK 1/10% HB & SB M 40,200 31,344 28.3 BMK 1/10% SB M 66,279 30,636 116.3 BMK 1/10% SB M 59,205 53,557 10.5 BMK 1/10% SB M 100,400 38,920 158.0 BMK 1/10% SB M 7,857 850 69.9</td></td<>	M (EURm) (%) M Risk weight Type M 3,441 1,200 186.7 BMK 1/10% HB M 18,234 4,100 344.7 BMK 1/10% HB M 24,729 1,347 1736.3 BMK 1/10% HB M 36,067 9,664 273.2 BMK 1/10% HB Type Cover Pool (EURm) Outst. Volume (EURm) OC (%) (S)BMK LCR level / Risk weight Maturity Type M 26,525 20,992 26.4 BMK 1/10% HB & SB M 40,200 31,344 28.3 BMK 1/10% SB M 66,279 30,636 116.3 BMK 1/10% SB M 59,205 53,557 10.5 BMK 1/10% SB M 100,400 38,920 158.0 BMK 1/10% SB M 7,857 850 69.9

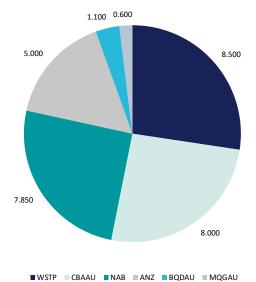
Source: Issuer, Rating agencies, Bloomberg, NORD/LB Markets Strategy & Floor Research;

Type: M= Mortgage, P = Public Sector, S = Ship, RE = Renewable Energy; Maturity Type: HB = Hard Bullet, SB = Soft Bullet, CPT = Conditional pass-through LCR level: - = not eligible

Market Overview Covered Bonds

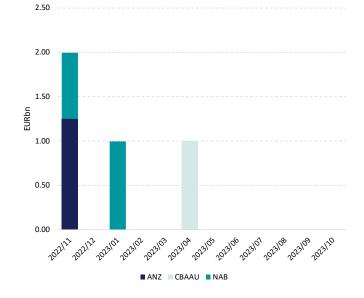
Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Cover Pool Volume	EUR 82.23bn	Outstanding volume (Bmk)	EUR 31.05bn
Amount outstanding	EUR 61.42bn	Number of benchmarks	32
Number of issuer	6	Outstanding ESG volume (Bmk)	-
No of cover pools	6	Number of ESG benchmarks	-
there of M / PS / others	6/0/0	Outstanding volume (SBmk)	-
Ratings (low / high)	AAA / AAA	Number of subbenchmarks	-
Best possible LCR level	Level 2A	Maturity types	SB, CPT

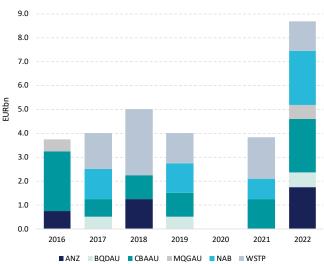


Outstanding benchmark volume¹ (EURbn)

Benchmark redemption profile¹: 11/2022 - 10/2023



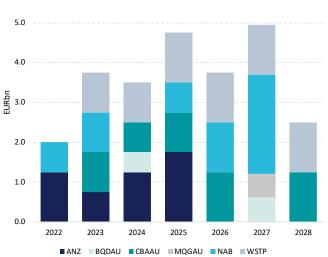
3.0



Benchmark issuance volume¹

10.0

Benchmark redemption profile¹² 6.0



Source: Issuer, Rating agencies, Bloomberg, NORD/LB Markets Strategy & Floor Research; ¹ based on Bloomberg ticker; ² Redemptions 2022: 11/22 – 12/22

Australia 🗮

Australia and New Zealand Banking Group

Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Ratings		
	Rating	Outlook
Fitch	A+	Stable
Moody's	Aa3	Stable
S&P	AA-	Stable

Homepage

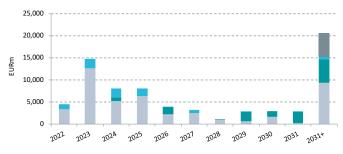
www.anz.com

The Australia and New Zealand Banking Group (ANZ) is a bank with an international focus headquartered in Melbourne, Australia. Measured by assets, ANZ is the second-largest of the four major Australian banks (as at H1 2022). ANZ offers its retail and corporate customers a broad spectrum of both traditional banking and financial products as well as financial services, primarily in Australia and New Zealand. ANZ conducts reporting across five segments: Australia Retail and Commercial, Institutional, New Zealand, Pacific and Technology, Service & Operations and Group Centre. Overall, approximately 68% of operating income are attributable to Australia, 22% to New Zealand and 10% to international markets (data as at FY 2021). In Australia, ANZ boasts a market share of 13.2% for property financing, 17.9% in the area of credit cards and 12.4% for retail customer deposits. Operating via its subsidiary ANZ Bank New Zealand, the group is the largest bank in New Zealand with a market share of 30.7% for mortgage loans. In July 2022, ANZ announced the acquisition of Suncorp Bank in Australia (purchase price: AUD 4.9bn; mortgages total AUD 47bn, deposits of AUD 45bn and commercial loans of AUD 11bn). The group is pursuing a strategic aim of strengthening its core business in Australia and New Zealand in addition to improving its sustainability and customer proximity. ANZ has been classified as a domestic systemically important bank (D-SIB) by APRA, the country's financial supervisory authority. In line with the APRA specifications, the CET1 ratio of ANZ stands at 11.5% as at H1 2022 (comparative international level: 18.0%). The financial year of ANZ ends on 30 September each year.

Balance Sheet

(EURm)	2020Y	2021Y	2022H1
Net Loans to Customers	376,714	393,540	439,960
Total Securities	170,708	104,085	111,050
Total Deposits	357,033	394,522	437,639
Tier 1 Common Capital	29,731	32,097	34,114
Total Assets	636,280	611,732	687,095
Total Risk-weighted Assets	262,124	260,031	295,751

Redemption Profile



Sr Unsecured Subordinated Unsecured Secured Jr Subordinated Unsecured

Company Ratios

Net Interest Income	8,512
Net Fee & Commission Inc,	1,409
Net Trading Income	1,096
Operating Expense	5,637

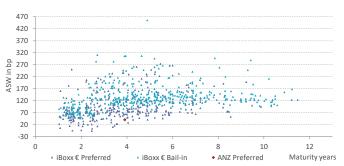
Income Statement

Credit Commit, Impairment

(EURm)

Pre-tax Profit

Senior Unsecured Bonds (EUR BMK)



2020Y

1,659

3,342

2021Y

8.909

1.348

5,693

-357

5,622

863

2022H1

4,556

631

721

3,073

-182

3,231

	2020Y	2021Y	2022H1		2020Y	2021Y	2022H1
Net Interest Margin	1.63	1.64	1.58	Liquidity Coverage Ratio	139.39	135.76	130.74
ROAE	5.86	9.86	11.26	IFRS Tier 1 Leverage Ratio	5.39	5.47	5.23
Cost-to-Income	50.42	51.95	51.15	Gr. Imp. Loans / Loans at Am. Costs	-	-	-
Core Tier 1 Ratio	11.34	12.34	11.53	Reserves/Loans at Amort. Cost	0.81	0.64	0.55

Source: Bloomberg, S&P Global Market Intelligence, NORD/LB Markets Strategy & Floor Research; as of: 11.10.2022

Strengths / Opportunities

- Market position in AU and NZ
- Capitalisation

Probability of state support

Risks / Weaknesses

- Competitive landscape on the domestic market •
- Debt level of private households
- Dependency on wholesale funding



Australia 🇮

Australia 찬

ANZ Banking Group – Mortgage

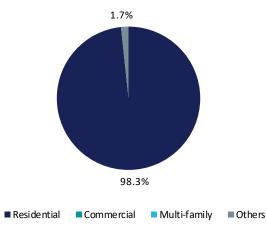
Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Cover Pool Data

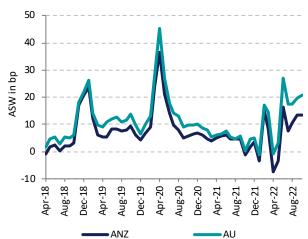
Cover pool volume (EURm)	11,831
Amount outstanding (EURm)	6,501
-thereof ≥ EUR 500m	57.7%
Current OC (nominal)	82.0%
Committed OC	10.5%
Cover type	Mortgage
Main country	100% Australia
Main region	34% New South Wales & ACT
Number of loans	64,135
Number of borrowers	53,351
Avg. exposure to borrowers (E	UR) 221,762
WAL (cover pool)	25.3y
WAL (covered bonds)	2.9y
Fixed interest (cover pool)	30.8%
Fixed interest (covered bonds)	100.0%
LTV (indexed)	52.8%
LTV (unindexed)	60.3%
Loans in arrears	0.7%

Aaa
-
AAA
-
Probable
4
4.0%
-
-
-
-
6
-
No
Yes
2A
20%
SB

Borrower Types

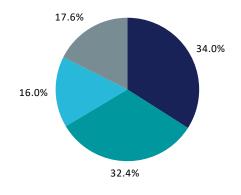


Spread Development



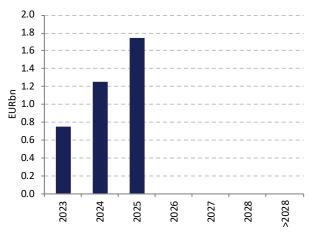
Source: Issuer, Rating agencies, Bloomberg, NORD/LB Markets Strategy & Floor Research

Regional Distribution



■ New South Wales & ACT ■ Victoria ■ Queensland ■ Others

Redemption Profile (Bmk)



Bank of Queensland

Australia 🗮

Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Ratings

	Rating	Outlook
Fitch	A-	Stable
Moody's	A3	Stable
S&P	BBB+	Positive

Homepage

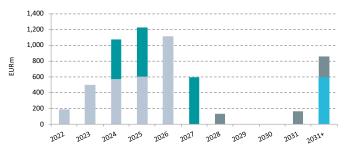
www.boq.com

Bank of Queensland (BOQ) is an independent, regional bank which is not owned by any of the major Australian banks. The bank, which is listed on the Australian Securities Exchange (ASX), has a network of more than 158 branches in Australia. As a universal bank which employs roughly 3,400 staff (data as at H1 2022), BOQ serves both retail and corporate customers, offering traditional banking products including a deposit business, mortgage loans and business loans. The business model is rounded off by niche products in the form of asset and resource funding. July 2021 saw the completion of a takeover of the Melbourne-based direct bank Members Equity Bank (ME Bank; purchase price: AUD 1.32bn; as at June 2021: 550k customers, AUD 26.7bn in loans, AUD 17.2bn in deposits). Through this acquisition, BOQ has been able to significantly expand its market position, including in regions outside of its domestic market (e.g. New South Wales and Victoria), in addition to strengthening its core business. Furthermore, BOQ has specialised in various niche markets such as the medical and dental segments, corporate health care, pensions, the hospitality industry as well as the tourism and agricultural sectors. The bank's geographical focus is firmly fixed on its home region of Queensland as well as the neighbouring state of New South Wales, with 32% and 30% of the loan portfolio (H1 2022) respectively attributable to these regions. The bank is divided into the following operating segments: Retail Banking (incl. Virgin Money and ME Bank), BOQ Business and Group Functions. The CET1 ratio stands at 9.68%, with BOQ having defined a target value of 9.0-9.5% for FY 2022 as a whole. BOQ's financial year ends on 31 August each year.

Balance Sheet

(EURm)	2020Y	2021Y	2022Y
Net Loans to Customers	28,810	46,698	55,183
Total Securities	4,039	6,768	9,807
Total Deposits	24,439	40,601	48,182
Tier 1 Common Capital	1,907	2,683	2,979
Total Assets	35,043	56,603	68,118
Total Risk-weighted Assets	19,490	27,379	31,131

Redemption Profile



Sr Unsecured Secured Jr Subordinated Unsecured Subordinated Unsecured

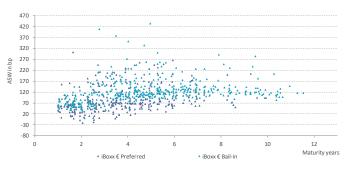
Company Ratios

2020Y	2021Y	2022Y
1.90	1.37	1.75
2.84	7.08	6.61
64.47	58.61	61.32
9.78	9.80	9.57
	1.90 2.84 64.47	1.90 1.37 2.84 7.08 64.47 58.61

Income Statement

(EURm)	2020Y	2021Y	2022Y
Net Interest Income	598	709	1,007
Net Fee & Commission Inc,	51	52	61
Net Trading Income	1	6	6
Operating Expense	428	460	673
Credit Commit, Impairment	106	-13	-1
Pre-tax Profit	105	338	409

Senior Unsecured Bonds (EUR BMK)



	2020Y	2021Y	2022Y
Liquidity Coverage Ratio	159.64	149.12	135.68
IFRS Tier 1 Leverage Ratio	5.61	4.84	4.46
Gr. Imp. Loans / Loans at Am. Costs	-	-	-
Reserves/Loans at Amort. Cost	0.78	0.41	0.36

Source: Bloomberg, S&P Global Market Intelligence, NORD/LB Markets Strategy & Floor Research; as of: 11.10.2022

Strengths / Opportunities

- Capitalisation
- Liquidity
- Funding (deposit basis)

Risks / Weaknesses

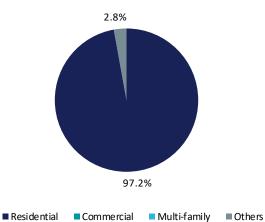
- Concentration risks in the AU property market
 - Debt level of private households
 - Competition in the domestic market

Bank of Queensland – Mortgage

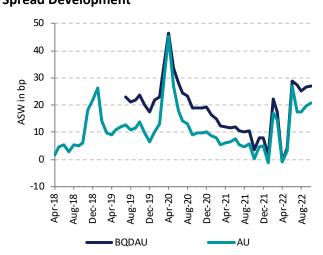
Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Cover Pool Data

3,145
2,252
48.8%
39.6%
10.0%
Mortgage
100% Australia
49% Queensland
16,573
14,564
215,960
24.5y
2.6y
12.5%
72.1%
44.2%
55.9%
1.3%



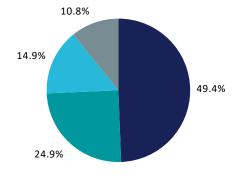
Spread Development



Source: Issuer, Rating agencies, Bloomberg, NORD/LB Markets Strategy & Floor Research

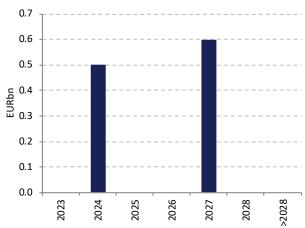
Rating (Moody's)	Aaa
Rating (S&P)	-
Rating (Fitch)	AAA
Rating (DBRS)	-
TPI	TPI-delinked
TPI leeway	Not Applicable
Collateral score	4.0%
RRL	-
JRL	-
Unused notches	-
AAA credit risk (%)	-
PCU	8
Recovery uplift	2
Outstanding ESG BMKs	No
LCR ELIGIBLE	Yes
LCR level (Bmk)	2A
Risk weight	20%
Maturity structure (Bmk)	СРТ

Regional Distribution



■ Queensland ■ New South Wales & ACT ■ Victoria ■ Others

Redemption Profile (Bmk)





Commonwealth Bank of Australia

Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Ratings

_	Rating	Outlook
Fitch	A+	Stable
Moody's	Aa3	Stable
S&P	AA-	Stable

Homepage

www.commbank.com.au

The Commonwealth Bank of Australia (CBA) is the largest banking group in Australia in terms of assets and is categorised as a domestic systemically important bank (D-SIB) by the Australian Prudential Regulation Authority (APRA). NAB shares are listed on the Sydney stock exchange. The two largest shareholders are the BlackRock Group (26 September 2022: 6.2%) and State Street Corp. (5.1%). The Sydney-based financial institute offers the full spectrum of universal bank services to more than 16 million customers. CBA's activities are primarily concentrated on the domestic market of Australia, although it also maintains a presence in New Zealand. According to information from the bank itself, CBA has one of the most extensively developed branch networks in Australia (approximately 807 branches and 3,526 agencies). The bank reports across the following segments: Retail Banking Services, Business Banking, Institutional Banking & Markets, New Zealand and Corporate Centre and Other. The "Wealth Management" has been discontinued with the sale of the 55% stake in Colonial First State (sale 05/2020; closing of the transaction: 12/2021) to KKR. The most important business segment for CBA, as measured by net profit after tax, is retail banking with a share of around 48% (FY 2022). In the area of mortgage loans and deposits, CBA boasts market shares of 25.1% and 27.5% respectively in Australia. With a CET1 ratio of 11.5% (APRA; H1 2022; comparative international level: 18.6%). Funding is primarily composed of customer deposits (around 74% of the total funding mix). Long-term funding accounts for a share of 49% (of which covered bonds make up 17%). The financial year of CBA ends on 30 June each year.

Income Statement

Net Interest Income

Net Trading Income

Operating Expense

Pre-tax Profit

470

420 370

320

220

120

70 20

-30

d 270

ASW 170

Net Fee & Commission Inc,

Credit Commit, Impairment

iBoxx € Prefe

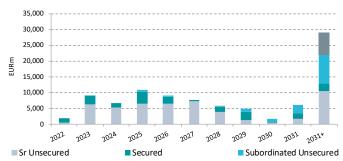
Senior Unsecured Bonds (EUR BMK)

(EURm)

Balance Sheet

(EURm)	2020Y	2021Y	2022Y
Net Loans to Customers	474,227	513,044	579,242
Total Securities	101,248	96,098	95,622
Total Deposits	421,205	472,389	543,366
Tier 1 Common Capital	32,240	37,223	37,583
Total Assets	622,996	690,487	800,963
Total Risk-weighted Assets	279,113	284,978	328,155

Redemption Profile



■ Jr Subordinated Unsecured ■ 1st Lien Secured

Company Ratios

	2020Y	2021Y	2022Y
Net Interest Margin	2.12	2.08	1.90
ROAE	13.55	13.52	14.22
Cost-to-Income	44.35	44.74	44.85
Core Tier 1 Ratio	11.55	13.06	11.45

	2020Y	2021Y	2022Y
Liquidity Coverage Ratio	154.43	129.06	129.51
IFRS Tier 1 Leverage Ratio	5.38	5.52	4.86
Gr. Imp. Loans / Loans at Am. Costs	0.86	0.41	0.82
Reserves/Loans at Amort. Cost	0.80	0.75	0.59

iBoxx € Bail-in

2020Y

11.544

1,606

6,263

1.529

6,301

647

2021Y

12.086

1.642

6,623

7.749

CBA Preferred

347

572

2022Y

12.545

1,629

7.076

-230

8,816

12

Maturity years

792

Source: Bloomberg, S&P Global Market Intelligence, NORD/LB Markets Strategy & Floor Research; as of: 11.10.2022

Strengths / Opportunities

- Capital basis
- Franchise in AU and NZ
- Probability of state support

Risks / Weaknesses

- Concentration risks in AU property market
- Competition in the domestic market
- Dependency on wholesale funding



Commonwealth Bank of Australia – Mortgage

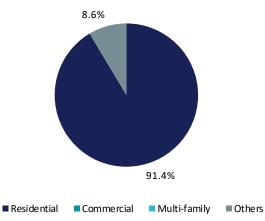
Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Cover Pool Data

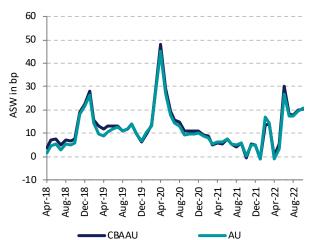
Cover pool volume (EURm)	21,060
Amount outstanding (EURm)	17,697
-thereof ≥ EUR 500m	45.2%
Current OC (nominal)	19.0%
Committed OC	7.5%
Cover type	Mortgage
Main country	100% Australia
Main region	36% New South Wales & ACT
Number of loans	137,213
Number of borrowers	112,080
Avg. exposure to borrowers (E	UR) 187,900
WAL (cover pool)	23.2y
WAL (covered bonds)	5.7y
Fixed interest (cover pool)	27.0%
Fixed interest (covered bonds)	89.9%
LTV (indexed)	37.8%
LTV (unindexed)	54.3%
Loans in arrears	0.5%

Rating (S&P)	-
Rating (Fitch)	AAA
Rating (DBRS)	-
TPI	Probable
TPI leeway	4
Collateral score	4.0%
RRL	-
JRL	-
Unused notches	-
AAA credit risk (%)	-
PCU	6
Recovery uplift	2
Outstanding ESG BMKs	No
LCR ELIGIBLE	Yes
LCR level (Bmk)	2A
Risk weight	20%
Maturity structure (Bmk)	SB

Borrower Types



Spread Development

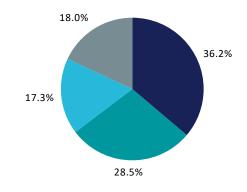


Source: Issuer, Rating agencies, Bloomberg, NORD/LB Markets Strategy & Floor Research

Regional Distribution

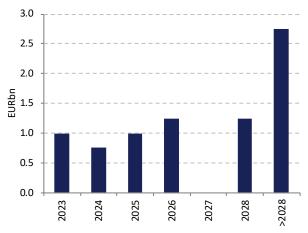
Rating (Moody's)

D - +!.-



■ New South Wales & ACT ■ Victoria ■ Queensland ■ Others

Redemption Profile (Bmk)



NORD/LB

Aaa

Australia 찬

Macquarie Group

Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Ratings

	Rating	Outlook
Fitch	А	Stable
Moody's	A3	Positive
S&P	BBB+	Stable

Homepage

www.macquarie.com

Macquarie Bank Limited (MBL), headquartered in Sydney, is the fifth-largest financial institute in Australia as measured by total assets (FY 2022: AUD 349.6bn). MBL is a wholly owned subsidiary of the Macquarie Group (MGL, total assets: AUD 399.2bn), which is listed on the Sydney stock exchange. As one of the three dominant subsidiaries of MGL, MBL is responsible for all of the Group's banking activities. In addition to the domestic market of Australia (Dec. 2021: market share of 2.4% for deposits and 4.2% for mortgages), the bank is also active in various other regions around the world. In geographic terms, the largest share of earnings is attributable to Australia (FY 2022: 43%), followed by the region Americas (26%), EMEA (24%) and Asia (7%). The bank reports across two operating segments, namely Banking and Financial Services (BFS; FY 2022: 27.8% of operating earnings) and Commodities and Global Markets (CGM; 40.0%), in addition to the non-operating business area Corporate (32.8%). The segment BFS comprises the areas of Personal Banking as well as asset management and business banking products. In the CMG business unit, the bank offers its customers around the world solutions in areas such as commodities, financial markets, financing and risk management. All activities not covered by the operational business areas as well as the head office and central group services are assigned to the Corporate segment. In the first quarter of the 2023 financial year, the CET1 stood at 12.3%, having previously amounted to 11.5% in FY 2022. It therefore exceeds the minimum requirement set by the APRA of 7.0%. MBL's financial year ends on 31 March each year.

Income Statement

Net Interest Income

Net Trading Income

Operating Expense

Pre-tax Profit

470 420

370

320

220

120

70 20

-30

0

iBoxx € Preferred

d 270

ASW 170

Net Fee & Commission Inc,

Credit Commit, Impairment

Senior Unsecured Bonds (EUR BMK)

(EURm)

Balance Sheet

(EURm)	2020Y	2021Y	2022Y
Net Loans to Customers	52,541	68,104	91,002
Total Securities	39 <i>,</i> 854	33,690	74,693
Total Deposits	37,594	54,599	68,663
Tier 1 Common Capital	6,505	7,678	10,114
Total Assets	142,801	159,294	269,591
Total Risk-weighted Assets	53,379	60,954	88,230

Redemption Profile



■ Jr Subordinated Unsecured ■ Secured

Company Ratios

	2020Y	2021Y	2022Y	
Net Interest Margin	1.01	1.03	1.02	Liquidity Coverage
ROAE	13.58	13.63	19.36	IFRS Tier 1 Leverage
Cost-to-Income	66.65	65.73	58.91	Gr. Imp. Loans / Loa
Core Tier 1 Ratio	12.19	12.60	11.46	Reserves/Loans at a

2020Y 2021Y 2022Y Ratio ge Ratio 5.44 5.25 4.82 oans at Am. Costs 0.41 1.00 1.07 0.76 Amort. Cost

iBoxx € Bail-in

2020Y

1.141

2,990

1.779

5.482

2,119

379

2021Y

1.351

2.646

2.279

5.221

2,405

Macquarie Bail-in

208

2022Y

1.820

3.728

2.701

6.431

4,161

12

Maturity years

89

Source: Bloomberg, S&P Global Market Intelligence, NORD/LB Markets Strategy & Floor Research; as of: 11.10.2022

Strengths / Opportunities

- **Diversified business**
- Capitalisation
- Increased profitability

Risks / Weaknesses

- Dependency on the wholesale market
- Operational diversity leads to complexity
- Increasing earnings volatility (capital market business)

Australia 🇮

Australia 찬

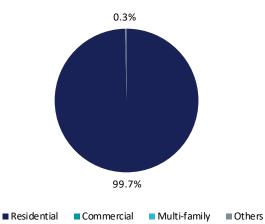
Macquarie Bank – Mortgage

Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

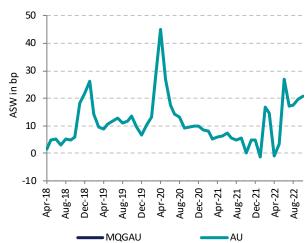
Cover Pool Data

Cover pool volume (EURm)	1,859
Amount outstanding (EURm)	-
-thereof ≥ EUR 500m	-
Current OC (nominal)	-
Committed OC	5.3%
Cover type	Mortgage
Main country	100% Australia
Main region	43% New South Wales & ACT
Number of loans	12,443
Number of borrowers	8,718
Avg. exposure to borrowers (E	UR) 213,244
WAL (cover pool)	23.1y
WAL (covered bonds)	n/a
Fixed interest (cover pool)	14.4%
Fixed interest (covered bonds)) n/a
LTV (indexed)	43.2%
LTV (unindexed)	58.1%
Loans in arrears	0.9%

Borrower Types



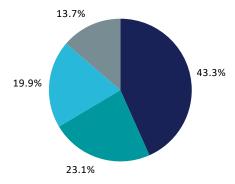
Spread Development



Source: Issuer, Rating agencies, Bloomberg, NORD/LB Markets Strategy & Floor Research

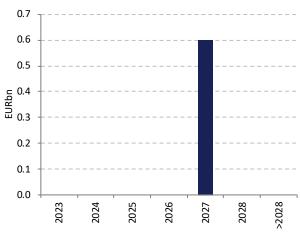
Rating (Moody's)	Aaa
Rating (S&P)	-
Rating (Fitch)	-
Rating (DBRS)	-
TPI	Probable
TPI leeway	2
Collateral score	5.8%
RRL	-
JRL	-
Unused notches	-
AAA credit risk (%)	-
PCU	-
Recovery uplift	-
Outstanding ESG BMKs	No
LCR ELIGIBLE	Yes
LCR level (Bmk)	2A
Risk weight	20%
Maturity structure (Bmk)	SB

Regional Distribution



■ New South Wales & ACT ■ Victoria ■ Queensland ■ Others

Redemption Profile (Bmk)



National Australia Bank

Australia 🗮

Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Ratings

	Rating	Outlook
Fitch	A+	Stable
Moody's	Aa3	Stable
S&P	AA-	Stable

Homepage

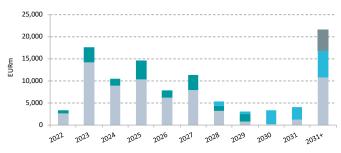
www.nab.com.au

National Australia Bank (NAB) is the fourth-largest bank in Australia measured in terms of assets. More than 32,000 employees stationed across roughly 590 branches in Australia and 140 in New Zealand (data as at H1 2022) serve over 8.5 million customers. NAB, whose shares are listed on the Sydney stock exchange, is categorised by the APRA, as a domestic systemically important bank (D-SIB). The largest shareholders in the bank are BlackRock Inc. (27 September 2022: 5.6%) as well as State Street Corp. (5.1%). NAB operates in the form of a universal bank and focuses on financing SMEs, individuals, the agricultural sector and large institutions. In particular, it has a significant position in its domestic market in the areas of corporate lending to SMEs in Australia (February 2022: market share 27%) and agribusinesses (34%). NAB reports across the following five segments: Business & Private Banking, Personal Banking, Corporate & Institutional Banking and New Zealand Banking, in addition to the Corporate Functions and Other segment. The geographic focus on Australia and New Zealand is reflected in the breakdown of the loan portfolio, with the former accounting for a share of 83% and the latter 14% (H1 2022). The bank's long-term strategy includes its commitment to the Net Zero Banking Alliance, which is aiming for climateneutral operations by 2050. To this end, a total of AUD 70bn is to be directed towards green financing by 2025. The CET1 ratio of 12.48% (APRA; H1 2022) exceeds the minimum requirement of 10.5%. The sale of BNZ Life and the acquisition of the consumer business of Citigroup Australia and share buy-back scheme produce a pro forma CET1 ratio of 11.65% (H1 2022). The financial year of NAB ends on 30 September each year.

Balance Sheet

(EURm)	2020Y	2021Y	2022H1
Net Loans to Customers	358,845	389,786	442,007
Total Securities	93,090	81,728	-
Total Deposits	307,545	342,330	398,421
Tier 1 Common Capital	29,760	33,893	36,419
Total Assets	529,008	578,680	659,077
Total Risk-weighted Assets	259,538	260,704	291,719

Redemption Profile

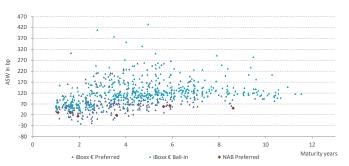


Sr Unsecured Secured Subordinated Unsecured Jr Subordinated Unsecured

Income Statement (EURm)

(EURm)	2020Y	2021Y	2022H1
Net Interest Income	8,407	8,677	4,540
Net Fee & Commission Inc.	1,194	1,283	671
Net Trading Income	659	384	468
Operating Expense	5,424	4,907	2,596
Credit Commit. Impairment	1,667	-127	-1
Pre-tax Profit	3,128	5,705	3,209

Senior Unsecured Bonds (EUR BMK)



Company Ratios

	2020Y	2021Y	2022H1
Net Interest Margin	1.78	1.71	1.62
ROAE	4.39	10.26	11.47
Cost-to-Income	52.38	46.76	44.71
Core Tier 1 Ratio	11.47	13.00	12.48

	2020Y	2021Y	2022H1
Liquidity Coverage Ratio	139.43	127.91	134.24
IFRS Tier 1 Leverage Ratio	5.87	6.04	5.75
Gr. Imp. Loans / Loans at Am. Costs	1.05	0.95	0.76
Reserves/Loans at Amort. Cost	1.02	0.83	0.76

Source: Bloomberg, S&P Global Market Intelligence, NORD/LB Markets Strategy & Floor Research; as of: 11.10.2022

Strengths / Opportunities

- Market position for SMEs in AU and NZ
- Liquidity management
- Capitalisation

Risks / Weaknesses

- Dependency on wholesale funding
- Property market: risk of price corrections
- Competition in the home market

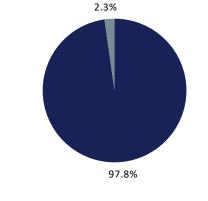
National Australia Bank – Mortgage

Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Cover Pool Data

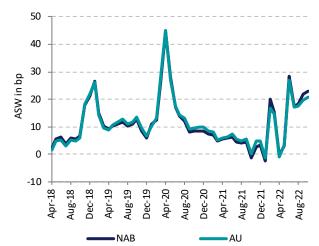
Cover pool volume (EURm) Amount outstanding (EURm) -thereof ≥ EUR 500m	18,508 13,841 51.3%
Current OC (nominal)	33.7%
Committed OC	8.7%
Cover type	Mortgage
Main country	100% Australia
Main region	41% New South Wales & ACT
Number of loans	96,103
Number of borrowers	96,103
Avg. exposure to borrowers (E	UR) 192,583
WAL (cover pool)	24.1y
WAL (covered bonds)	3.1y
Fixed interest (cover pool)	35.0%
Fixed interest (covered bonds)	71.6%
LTV (indexed)	48.2%
LTV (unindexed)	55.0%
Loans in arrears	1.1%

Borrower Types



Residential Commercial Multi-family Others

Spread Development



Source: Issuer, Rating agencies, Bloomberg, NORD/LB Markets Strategy & Floor Research

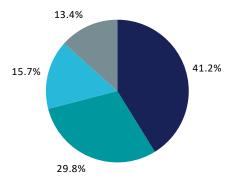
Rating (Fitch) Rating (DBRS) TPI Probable **TPI** leeway **Collateral score** RRL JRL Unused notches AAA credit risk (%) PCU Recovery uplift **Outstanding ESG BMKs** LCR ELIGIBLE LCR level (Bmk)

Maturity structure (Bmk) **Regional Distribution**

Risk weight

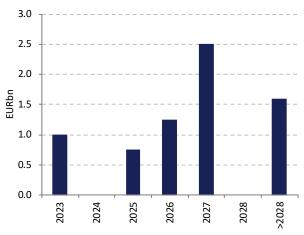
Rating (Moody's)

Rating (S&P)



■ New South Wales & ACT ■ Victoria ■ Queensland ■ Others

Redemption Profile (Bmk)







Aaa

AAA

4 4.0%

.

_

_

6

_

No

Yes

2A

SB

20%



Australia 🇮

Westpac Banking Corporation

Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Ratings

	Rating	Outlook
Fitch	A+	Stable
Moody's	Aa3	Stable
S&P	AA-	Stable

Homepage

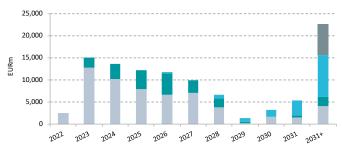
www.westpac.com

Westpac Banking Corporation (Westpac; headquarters in Sydney) is Australia's oldest bank and operates chiefly in Australia and New Zealand. In terms of total assets (H1 2022), Westpac is the third-largest banking group in Australia and is classified as one of Australia's domestic systemically important banks (D-SIBs) by APRA, the financial regulatory authority in Australia. Westpac is listed on the ASX in Australia and NZX in New Zealand. BlackRock Inc. and The Vanguard Group Inc. hold shares of around 6.2% and 5.1% respectively in Westpac (26.09.2022). The universal bank serves around 12.6 million customers (H1 2022) and, in so doing, it pursues a strategy that concentrates on corporate and retail customers, institutional investors in addition to high-net-worth individuals. Its market shares in Australia and New Zealand are consistently around 20%. Westpac accordingly divides its business activities into four core segments: Consumer, Business, Westpac Institutional Bank and Westpac New Zealand, in addition to the non-operating units Group Businesses (Treasury, IT, Head Office) and Specialist Business (business areas for winding down, Westpac Pacific). According to information from Westpac itself, as at H1 2022, the bank has a market share of 21% for deposits and mortgage loans in the domestic market. In New Zealand, its market shares for deposits and consumer loans stand at 18% in each case. The bank is pursuing a strategy that aims to streamline its business activities. For example, Coinbase, General Insurance, Vendor Finance and Westpac LMI were all sold off in 2021, with sales of Motor Vehicle Finance, Westpac NZ Life Insurance and Westpac Life Insurance following in 2022. Westpac's financial year ends on 30 September.

Balance Sheet

(EURm)	2020Y	2021Y	2022H1
Net Loans to Customers	423,089	443,576	485,966
Total Securities	96,411	79,626	75,945
Total Deposits	360,865	391,813	436,023
Tier 1 Common Capital	29,750	33,627	35,204
Total Assets	556,712	584,872	651,562
Total Risk-weighted Assets	267,326	272,883	310,640

Redemption Profile

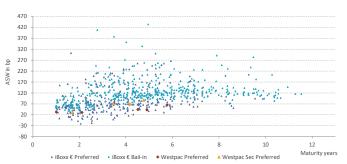


Sr Unsecured Secured Subordinated Unsecured Jr Subordinated Unsecured

Income Statement (EURm)

(EURm)	2020Y	2021Y	2022H1
Net Interest Income	10,115	10,605	5,318
Net Fee & Commission Inc.	965	932	542
Net Trading Income	497	862	234
Operating Expense	7,614	8,069	3,448
Credit Commit. Impairment	1,913	-357	90
Pre-tax Profit	2,585	5,348	3,027

Senior Unsecured Bonds (EUR BMK)



Company Ratios

	2020Y	2021Y	2022H1
Net Interest Margin	2.03	2.06	1.90
ROAE	3.43	7.80	9.22
Cost-to-Income	63.26	60.56	52.59
Core Tier 1 Ratio	11.13	12.32	11.33

2020Y	2021Y	2022H1
151.06	129.42	136.60
5.55	5.93	5.61
1.60	1.34	1.10
0.80	0.64	0.58
	151.06 5.55 1.60	151.06 129.42 5.55 5.93 1.60 1.34

Source: Bloomberg, S&P Global Market Intelligence, NORD/LB Markets Strategy & Floor Research; as of: 11.10.2022

Strengths / Opportunities

- Market position (retail and corporates in AU, NZ)
- Capital ratios
- Profitability

Risks / Weaknesses

- Dependency on wholesale funding
- Property markets in AU and NZ: risk of price corrections
- Private household debt levels

Westpac Banking Corporation – Mortgage

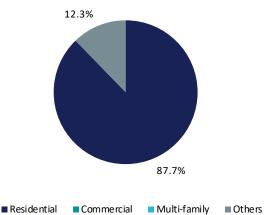
Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

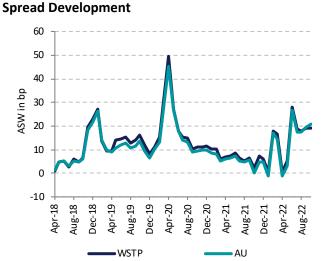
Cover Pool Data

Cover pool volume (EURm)	25,830
Amount outstanding (EURm)	21,133
-thereof ≥ EUR 500m	40.2%
Current OC (nominal)	22.2%
Committed OC	9.9%
Cover type	Mortgage
Main country	100% Australia
Main region	38% New South Wales & ACT
Number of loans	118,103
Number of borrowers	118,103
Avg. exposure to borrowers (E	UR) 218,703
WAL (cover pool)	24.9y
WAL (covered bonds)	4.1y
Fixed interest (cover pool)	51.0%
Fixed interest (covered bonds)	84.6%
LTV (indexed)	48.2%
LTV (unindexed)	58.8%
Loans in arrears	0.3%

	164
Rating (S&P)	-
Rating (Fitch)	AAA
Rating (DRS)	-
TPI	Probable
TPI leeway	4
Collateral score	4.0%
RRL	-
JRL	-
Unused notches	-
AAA credit risk (%)	-
PCU	6
Recovery uplift	2
Outstanding ESG BMKs	No
LCR ELIGIBLE	Yes
LCR level (Bmk)	2A
Risk weight	20%
Maturity structure (Bmk)	SB

Borrower Types

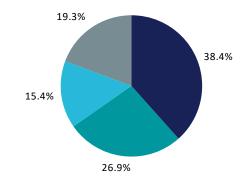




Source: Issuer, Rating agencies, Bloomberg, NORD/LB Markets Strategy & Floor Research

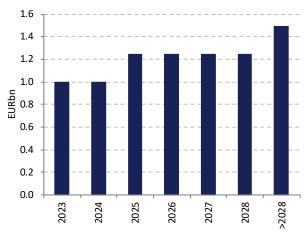
Regional Distribution

Rating (Moody's)



■ New South Wales & ACT ■ Victoria ■ Queensland ■ Others

Redemption Profile (Bmk)









Aaa

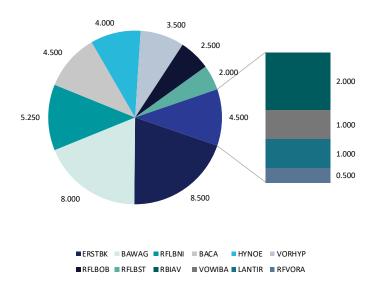
Austria

Market Overview Covered Bonds

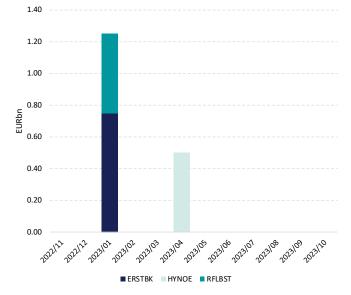
Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Cover Pool Volume	EUR 116.96bn	Outstanding volume (Bmk)	EUR 42.75bn
Amount outstanding	EUR 83.10bn	Number of benchmarks	76
Number of issuer	18	Outstanding ESG volume (Bmk)	EUR 1.50bn
No of cover pools	21	Number of ESG benchmarks	3
there of M / PS / others	17/4/0	Outstanding volume (SBmk)	EUR 5.75bn
Ratings (low / high)	AA+ / AAA	Number of subbenchmarks	20
Best possible LCR level	Level 1	Maturity types	HB, SB

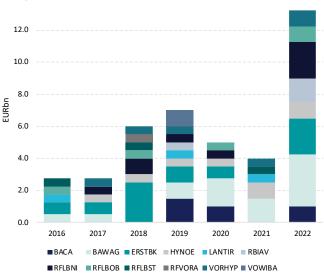
Outstanding benchmark volume¹ (EURbn)



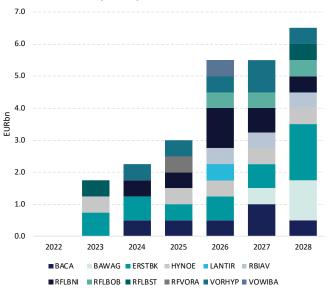
Benchmark redemption profile¹: 11/2022 - 10/2023



Benchmark issuance volume¹



Benchmark redemption profile¹²



Source: Issuer, Rating agencies, Bloomberg, NORD/LB Markets Strategy & Floor Research; ¹ based on Bloomberg ticker; ² Redemptions 2022: 11/22 – 12/22

BAWAG Group

Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Ratings*

Natings			shar
	Rating	Outlook	5.6%
Fitch	-	-	Asse
Moody's	A2	Stable	mul
S&P	-	-	reve
llomono	~~		Wes
Homepa	ge		rang
www.baw	aggroup.c	om	real
			segr
*BAWAG	PSK		Pub
			gear
			cont
			sust
			buyl

BAWAG Group is the holding company of BAWAG P.S.K., headquartered in Vienna. Its res are listed in the Austrian ATX share index. The shares are distributed as follows: % to T. Rowe Price, 5.0% each to Wellington and BlackRock, and 4.6% to Golden Tree et Management, with most shares in free float. The focus of the group, which pursues a ti-brand strategy, is on the DACH region and the Netherlands (76% of core operating enues, of which 80% in AT, FY 2021), while the remaining nearly 24% is spread across stern Europe and the US. BAWAG offers its more than 2.2 million customers a broad ge of retail and corporate banking products. In addition, BAWAG offers international estate financing and capital market solutions. The business is divided into the core ments "Retail & SME" (98% of net income before taxes; FY 2021), "Corporates & lic" (28%), "Treasury" (9%) and "Corporates Center" (-35%). The bank's strategy is red to growth in its own core markets as well as customer focus and efficiency. In this text, ESG topics are embedded in the Group's strategic roadmap so that responsible, ainable and profitable growth is targeted. The CET1 ratio after the authorised share buyback of EUR 325m and EUR 135m dividend provision was 12.7% at the half-year 2022. The bank also acquired a German consumer loan portfolio and bond portfolio from Sberbank. BAWAG plans to achieve earnings before taxes of EUR >675m in 2022 (Q1 2022: EUR 146m, +21% Y/Y).

Balance Sheet

(EURm)	2020Y	2021Y	2022H1
Net Loans to Customers	32 <i>,</i> 387	35,148	37,335
Total Securities	8,389	6,840	5,783
Total Deposits	32,415	35,160	33,532
Tier 1 Common Capital	2,807	3,012	2,982
Total Assets	53,122	56,325	55,029
Total Risk-weighted Assets	20,073	20,135	21,326

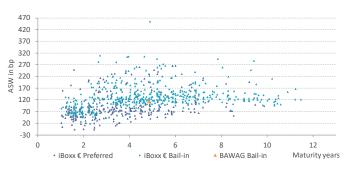
Redemption Profile



Income Statement (EURm)

(EURm)	2020Y	2021Y	2022H1
Net Interest Income	915	938	492
Net Fee & Commission Inc,	255	282	159
Net Trading Income	-27	11	-2
Operating Expense	514	508	242
Credit Commit, Impairment	220	76	50
Pre-tax Profit	371	600	323

Senior Unsecured Bonds (EUR BMK)



Company Ratios

	2020Y	2021Y	2022H1
Net Interest Margin	1.90	1.78	1.83
ROAE	7.11	11.00	11.47
Cost-to-Income	45.93	46.12	39.42
Core Tier 1 Ratio	13.98	14.96	13.98

	2020Y	2021Y	2022H1
Liquidity Coverage Ratio	231.14	238.64	183.54
IFRS Tier 1 Leverage Ratio	5.43	5.45	5.51
NPL/ Loans at Amortised Cost	2.75	2.40	2.17
Reserves/Loans at Amort. Cost	1.14	1.13	1.16

Source: Bloomberg, S&P Global Market Intelligence, NORD/LB Markets Strategy & Floor Research; as of: 10.10.2022

Strengths / Opportunities

- Capitalization
- Deposit base
- Cost management

Risks / Weaknesses

- Competitive business
- Non-Retail Exposure
- Niche position in the German market



Austria

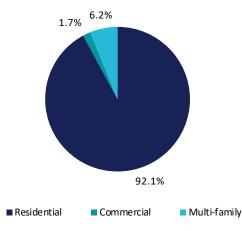
BAWAG P.S.K. – Mortgage

Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

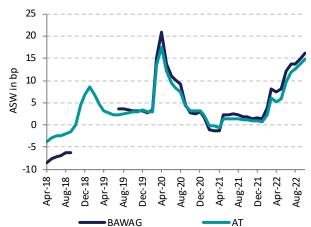
Cover Pool Data

Cover pool volume (EURm)	8,992
Amount outstanding (EURm)	7,865
-thereof ≥ EUR 500m	95.4%
Current OC (nominal)	14.3%
Committed OC	2.0%
Cover type	Mortgage
Main country	57% Austria
Main region	15% Lower Austria
Number of loans	73,275
Number of borrowers	n/a
Avg. exposure to borrowers (EUR)	n/a
WAL (cover pool)	25.3y
WAL (covered bonds)	8.0y
Fixed interest (cover pool)	70.4%
Fixed interest (covered bonds)	100.0%
LTV (indexed)	n/a
LTV (unindexed)	64.0%
Loans in arrears	0.0%

Borrower Types



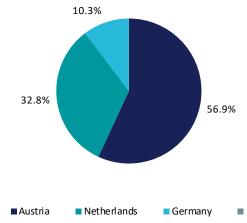
Spread Development



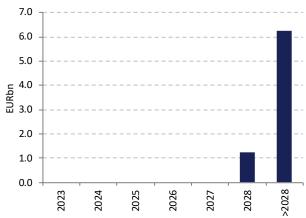
Source: Issuer, Rating agencies, Bloomberg, NORD/LB Markets Strategy & Floor Research

Rating (Moody's)	Aaa
Rating (S&P)	-
Rating (Fitch)	-
Rating (DBRS)	-
TPI	Probable-High
TPI leeway	3
Collateral score	4.8%
RRL	-
JRL	-
Unused notches	-
AAA credit risk (%)	-
PCU	-
Recovery uplift	-
Outstanding ESG BMKs	Yes
LCR ELIGIBLE	Yes
LCR level (Bmk)	1
Risk weight	10%
Maturity structure (Bmk)	hb & SB

Regional Distribution



Redemption Profile (Bmk)





Austria 🗖

BAWAG P.S.K. – Public Sector

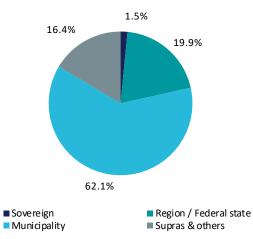
Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Cover Pool Data

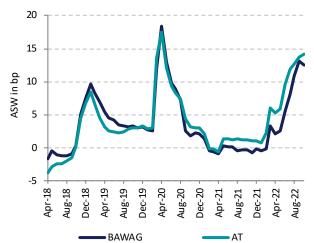
Cover pool volume (EURm)	1,632
Amount outstanding (EURm)	1,504
-thereof \geq EUR 500m	33.2%
	·
Current OC (nominal)	8.5%
Committed OC	2.0%
Cover type	Public Sector
Main country	99% Austria
Main region	25% Upper Austria
Number of loans	2,746
Number of borrowers	n/a
Avg. exposure to borrowers (EUR)	n/a
WAL (cover pool)	14.4v
WAL (covered bonds)	, 3.6v
Fixed interest (cover pool)	43.4%
Fixed interest (covered bonds)	100.0%
LTV (indexed)	-
LTV (unindexed)	-
Loans in arrears	0.0%
	0.0%

Rating (Moody's)	Aaa
Rating (S&P)	-
Rating (Fitch)	-
Rating (DBRS)	-
TPI	High
TPI leeway	4
Collateral score	8.4%
RRL	-
JRL	-
Unused notches	-
AAA credit risk (%)	-
PCU	-
Recovery uplift	-
Outstanding ESG BMKs	No
LCR ELIGIBLE	Yes
LCR level (Bmk)	1
Risk weight	10%
Maturity structure (Bmk)	HB

Borrower Types

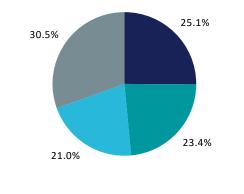


Spread Development



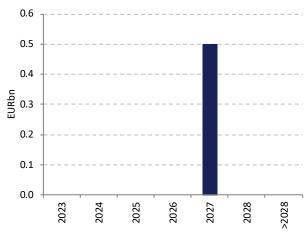
Source: Issuer, Rating agencies, Bloomberg, NORD/LB Markets Strategy & Floor Research

Regional Distribution



Upper Austria Lower Austria Styria Others

Redemption Profile (Bmk)



Bausparkasse Wüstenrot

Austria 💳

Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Ratings

	Rating	Outlook
Fitch	-	-
Moody's	-	-
S&P	BBB	Stable

Homepage

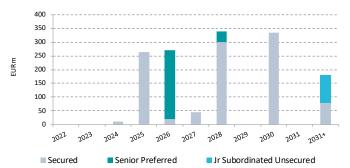
www.wuestenrot.at

Bausparkasse Wüstenrot AG was founded in 1925 as Austria's first building society and, together with its subsidiary Wüstenrot Versicherungs-AG, forms the main units of the Wüstenrot Group. The Group also includes building societies in Slovakia, Croatia and Hungary. With total assets of EUR 11.3bn (FY 2021), the Group employs nearly 2,400 people and serves more than 2.1m customers in Austria, Croatia and Slovakia. Strategically, the Group focuses on bancassurance retail business in its home market of Austria. For Wüstenrot Versicherungs-AG, the focus is equally on retail business in Austria. The Wüstenrot Group thus offers its customers complete solutions from a single source in the areas of savings, financing, pensions, and insurance. The core business of Bausparkasse Wüstenrot comprises the deposit business and residential mortgage business, with first-ranking collateral being the predominant form of collateral in Austria. At the end of March 2022, Bausparkasse Wüstenrot's home savings deposits totaled EUR 4.3bn with EUR 17.2bn in building society savings contract. Since 2017, funding has been supplemented by the issuance of Pfandbriefe, but the focus continues to be on liabilities to customers at around 80% (September 30, 2021). The NPL ratio was 0.9% (Q3 2021; FY 2020: 1.0%) and thus below the banking average in Austria (FY 2020: 1.5%). The regulatory requirements for the LCR (Q3 2021: 667.4%), the leverage ratio (8.0%) and the NSFR (136.9%) were exceeded.

Balance Sheet

(EURm)	2019Y	2020Y	2021Y
Net Loans to Customers	4,846	4,911	4,983
Total Securities	892	723	617
Total Deposits	5,434	5,212	4,330
Tier 1 Common Capital	557	576	529
Total Assets	6,566	6,464	6,341
Total Risk-weighted Assets	3,330	3,377	3,268

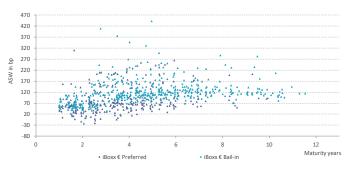
Redemption Profile



Income Statement

(EURm)	2019Y	2020Y	2021Y
Net Interest Income	91	95	83
Net Fee & Commission Inc,	8	7	10
Net Trading Income	-	-	-
Operating Expense	108	65	69
Credit Commit, Impairment	-	-	-
Pre-tax Profit	22	25	28

Senior Unsecured Bonds (EUR BMK)



Company Ratios

	2019Y	2020Y	2021Y
Net Interest Margin	1.51	1.58	1.42
ROAE	3.37	4.02	4.08
Cost-to-Income	79.86	63.33	64.80
Core Tier 1 Ratio	16.73	17.05	16.20

	2019Y	2020Y	2021Y
Liquidity Coverage Ratio	396.50	318.30	340.30
IFRS Tier 1 Leverage Ratio	8.56	9.04	8.42
NPL/ Loans at Amortised Cost	1.18	1.20	-
Reserves/Loans at Amort. Cost	0.61	0.69	-

Source: Bloomberg, S&P Global Market Intelligence, NORD/LB Markets Strategy & Floor Research; as of: 10.10.2022

Strengths / Opportunities

- Market position in domestic mortgage business
- Deposit base

Risks / Weaknesses

- Profitability
- Geographical credit concentration risks

Bausparkasse Wüstenrot – Mortgage

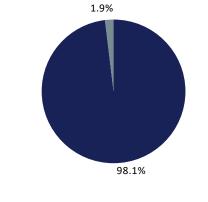
Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Cover Pool Data

Cover pool volume (EURm)	1,633
Amount outstanding (EURm)	1,267
-thereof ≥ EUR 250m	67.1%
Current OC (nominal)	28.9%
Committed OC	2.0%
Cover type	Mortgage
Main country	100% Austria
Main region	22% Lower Austria
Number of loans	13,932
Number of borrowers	n/a
Avg. exposure to borrowers (EUR)	n/a
WAL (cover pool)	26.5y
WAL (covered bonds)	7.9y
Fixed interest (cover pool)	72.8%
Fixed interest (covered bonds)	96.5%
LTV (indexed)	70.4%
LTV (unindexed)	n/a
Loans in arrears	0.0%

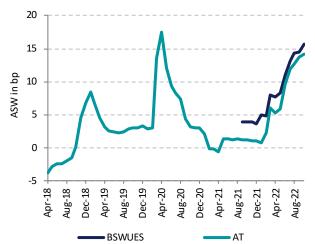
Rating (S&P)AAARating (Fitch)-Rating (DBRS)-TPI-TPI leeway-Collateral score-RRLa-JRLaa-Unused notches1AAA credit risk (%)2.6PCU-Recovery uplift-Outstanding ESG BMKsNoLCR ELIGIBLEYesLCR level (SBmk)2ARisk weight10%	Rating (Moody's)	-
Rating (DBRS)-TPI-TPI leeway-Collateral score-RRLa-JRLaa-Unused notches1AAA credit risk (%)2.6PCU-Recovery uplift-Outstanding ESG BMKsNoLCR ELIGIBLEYesLCR level (SBmk)2ARisk weight10%	Rating (S&P)	AAA
TPI-TPI leeway-Collateral score-RRLa-JRLaa-Unused notches1AAA credit risk (%)2.6PCU-Recovery uplift-Outstanding ESG BMKsNoLCR ELIGIBLEYesLCR level (SBmk)2ARisk weight10%	Rating (Fitch)	-
TPI leeway-Collateral score-RRLa-JRLaa-Unused notches1AAA credit risk (%)2.6PCU-Recovery uplift-Outstanding ESG BMKsNoLCR ELIGIBLEYesLCR level (SBmk)2ARisk weight10%	Rating (DBRS)	-
Collateral score-RRLa-JRLaa-Unused notches1AAA credit risk (%)2.6PCU-Recovery uplift-Outstanding ESG BMKsNoLCR ELIGIBLEYesLCR level (SBmk)2ARisk weight10%	TPI	-
RRLa-JRLaa-Unused notches1AAA credit risk (%)2.6PCU-Recovery uplift-Outstanding ESG BMKsNoLCR ELIGIBLEYesLCR level (SBmk)2ARisk weight10%	TPI leeway	-
JRLaa-Unused notches1AAA credit risk (%)2.6PCU-Recovery uplift-Outstanding ESG BMKsNoLCR ELIGIBLEYesLCR level (SBmk)2ARisk weight10%	Collateral score	-
Unused notches1AAA credit risk (%)2.6PCU-Recovery uplift-Outstanding ESG BMKsNoLCR ELIGIBLEYesLCR level (SBmk)2ARisk weight10%	RRL	a-
AAA credit risk (%)2.6PCU-Recovery uplift-Outstanding ESG BMKsNoLCR ELIGIBLEYesLCR level (SBmk)2ARisk weight10%	JRL	aa-
PCU-Recovery uplift-Outstanding ESG BMKsNoLCR ELIGIBLEYesLCR level (SBmk)2ARisk weight10%	Unused notches	1
Recovery uplift-Outstanding ESG BMKsNoLCR ELIGIBLEYesLCR level (SBmk)2ARisk weight10%	AAA credit risk (%)	2.6
Outstanding ESG BMKsNoLCR ELIGIBLEYesLCR level (SBmk)2ARisk weight10%	PCU	-
LCR ELIGIBLEYesLCR level (SBmk)2ARisk weight10%	Recovery uplift	-
LCR level (SBmk)2ARisk weight10%	Outstanding ESG BMKs	No
Risk weight 10%	LCR ELIGIBLE	Yes
5	LCR level (SBmk)	2A
Maturity structure (SBmk) HB	Risk weight	10%
	Maturity structure (SBmk)	HB

Borrower Types



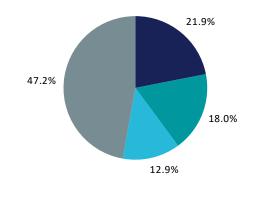
■ Residential ■ Commercial ■ Multi-family ■ Others

Spread Development



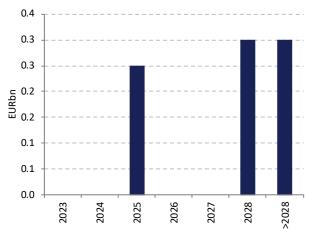
Source: Issuer, Rating agencies, Bloomberg, NORD/LB Markets Strategy & Floor Research

Regional Distribution



■Lower Austria ■ Upper Austria ■ Styria ■ Others

Redemption Profile (SBmk)







Erste Group Bank

Austria 📃

Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Ratings

	Rating	Outlook
Fitch	А	Stable
Moody's	A2	Stable
S&P	A+	Stable

Homepage

www.erstegroup.com

Austria's Erste Group Bank AG (Erste) was founded in 1819 and was listed on the Vienna stock exchange for the first time in 1997. As at 01 September 2022, the Sparkassen Beteiligungs GmbH & Co KG is the largest individual shareholder (11.4%), followed by the direct shareholder ERSTE Stiftung (5.62%). Together with local savings banks, Erste is represented across all nine Austrian Bundeslaender and is the country's largest bank in terms of assets. Erste Bank Österreich (wholly owned subsidiary of the Erste Group) acts as the leading institution for savings banks in Austria, while the holding company Erste Group Bank AG is responsible for strategic management. Geographically, the bank operates in Austria, Croatia, Romania, Serbia, Slovakia, Czech Republic and Hungary. Across its seven core markets, Erste serves more than 15.7 million customers (3.9 million of which are in Austria) across a network of more than 2,000 branches. In addition, Erste maintains majority and minority stakes in banks located in Slovenia, Montenegro, Bosnia and Herzegovina, North Macedonia and Moldova. Erste is one of the market leaders in the fields of retail and corporate banking in certain CEE countries. As at Q1 2022, the market share for loans and deposits (retail and corporate customers) stood at more than 20% in each case in the domestic market of Austria. Erste divides its business activities into the following segments: Retail, Corporates, Group Markets, ALM & Local LLC, Savings Banks, Group Corporate Center and Intragroup Elimination. In terms of core customer groups, the focus is on retail customers and SMEs. The LCR ratio as at H1 2022 was 154.3% (FY 2021: 177.3%) and the CET1 ratio was 14.5% (14.2%).

Balance Sheet

(EURm)	2020Y	2021Y	2022H1
Net Loans to Customers	164,705	178,113	188,995
Total Securities	47,060	53,286	56,592
Total Deposits	191,070	210,523	225,515
Tier 1 Common Capital	17,057	18,804	19,605
Total Assets	277,394	307,428	327,093
Total Risk-weighted Assets	118,005	127,448	135,654

Redemption Profile



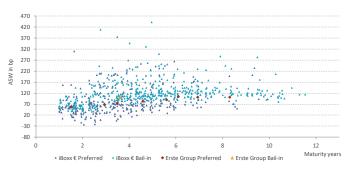
Company Ratios

	2020Y	2021Y	2022H1
Net Interest Margin	1.86	1.69	1.82
ROAE	4.82	10.35	11.25
Cost-to-Income	60.84	58.03	58.45
Core Tier 1 Ratio	14.45	14.75	14.45

Income Statement

(EURm)	2020Y	2021Y	2022H1
Net Interest Income	4,775	4,976	2,837
Net Fee & Commission Inc,	1,977	2,304	1,215
Net Trading Income	206	199	-45
Operating Expense	4,220	4,307	2,285
Credit Commit, Impairment	1,284	161	-23
Pre-tax Profit	1,368	2,933	1,659

Senior Unsecured Bonds (EUR BMK)



2020Y 2021Y 2022H1 Liquidity Coverage Ratio 189.30 177.31 156.13 IFRS Tier 1 Leverage Ratio 6.23 6.18 6.06 NPL/ Loans at Amortised Cost 2.76 2.46 2.26 2.35 2.13 1.98 Reserves/Loans at Amort, Cost

Source: Bloomberg, S&P Global Market Intelligence, NORD/LB Markets Strategy & Floor Research; as of: 10.10.2022

Strengths / Opportunities

- Franchise in AT and CEE
- Funding profile
- Deposit base

Risks / Weaknesses

- Fiercely competitive environment
- Credit quality
- Exposure in higher risk foreign markets

Erste Group Bank – Mortgage

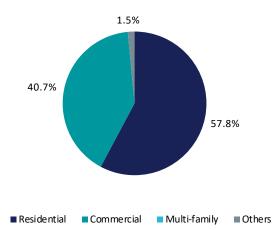
Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Cover Pool Data

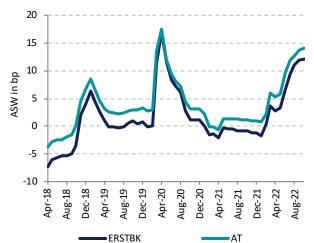
	25 564
Cover pool volume (EURm)	25,561
Amount outstanding (EURm)	18,103
-thereof ≥ EUR 500m	47.0%
Current OC (nominal)	41.2%
Committed OC	2.0%
Cover type	Mortgage
Main country	98% Austria
Main region	29% Vienna
Number of loans	107,152
Number of borrowers	n/a
Avg. exposure to borrowers (EUR)	n/a
WAL (cover pool)	9.8y
WAL (covered bonds)	5.4y
Fixed interest (cover pool)	45.2%
Fixed interest (covered bonds)	48.3%
LTV (indexed)	64.6%
LTV (unindexed)	68.0%
Loans in arrears	0.0%

Rating (Moody's)	Aaa
Rating (S&P)	-
Rating (Fitch)	-
Rating (DBRS)	-
TPI	Probable-High
TPI leeway	3
Collateral score	13.7%
RRL	-
JRL	-
Unused notches	-
AAA credit risk (%)	-
PCU	-
Recovery uplift	-
Outstanding ESG BMKs	No
LCR ELIGIBLE	Yes
LCR level (Bmk)	1
Risk weight	10%
Maturity structure (Bmk)	HB & SB

Borrower Types

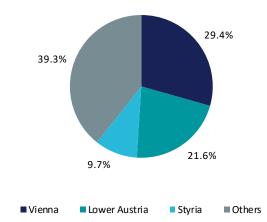


Spread Development

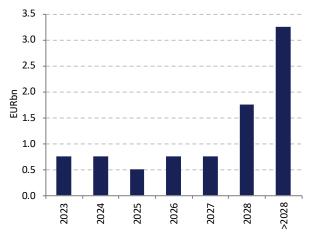


Source: Issuer, Rating agencies, Bloomberg, NORD/LB Markets Strategy & Floor Research

Regional Distribution



Redemption Profile (Bmk)



NORD/LB

Austria 🗖

HYPO NOE Landesbank für NÖ und Wien

Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

RatingsRatingOutlookFitch-Moody's-S&PA

Homepage

www.hyponoe.at

HYPO NOE Landesbank für Niederösterreich und Wien AG (HYPO NOE Landesbank) is a universal bank that specialises in mortgages. With 636 employees (as at H1 2022), it is one of the largest landesbanks in Austria. Lower Austria, the largest federal state in Austria, is the sole owner of the banking group. HYPO NOE Landesbank has a strong regional focus on Lower Austria and Vienna, with a market share of 25% in Lower Austria. Indeed, it is active across the whole of Austria and in Germany, as well as in other select EU markets. The HYPO NOE Group divides its business activities into the following segments: Public Sector (24% of operating income in H1 2022; focus: public financing, leasing, investment solutions), Real Estate (27%; non-profit and commercial housing development), Retail and Corporate Customers (35%; mortgage financing, payment transactions and insurance products) and Treasury & ALM (27%), as well as the administrative segment Corporate Center (-12%). The funding mix at HYPO NOE Landesbank comprises savings, demand and term deposits (around 34%), public sector and mortgage-backed Pfandbriefe (30%) in addition to unsecured bonds (23%). Two benchmark bonds, each in the amount of EUR 500m, have been issued in 2022. One of these was in the form of a green senior preferred bond. According to the refinancing outlook for H2 2022, the focus of the bank is on the covered segment. In a year-on-year comparison, the NPL ratio rose from 0.68% in H1 2021 to 0.87% as at H1 2022. As at the end of June 2022, the CET1 ratio stood at 19.41% (FY 2021: 19.35%).

Balance Sheet

(EURm)	2020Y	2021Y	2022H1
Net Loans to Customers	11,414	12,266	11,874
Total Securities	2,650	2,365	2,163
Total Deposits	4,228	3,796	3,814
Tier 1 Common Capital	691	730	725
Total Assets	16,417	16,763	16,425
Total Risk-weighted Assets	3,857	3,770	3,733

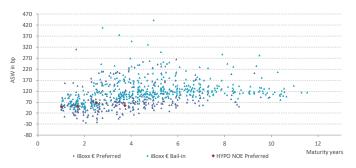
Redemption Profile



Income Statement

(EURm)	2020Y	2021Y	2022H1
Net Interest Income	129	140	68
Net Fee & Commission Inc,	17	19	9
Net Trading Income	4	2	4
Operating Expense	105	101	59
Credit Commit, Impairment	20	11	-3
Pre-tax Profit	41	54	26

Senior Unsecured Bonds (EUR BMK)



Company Ratios

	2020Y	2021Y	2022H1
Net Interest Margin	0.81	0.85	0.83
ROAE	4.61	5.74	5.15
Cost-to-Income	63.07	61.33	72.08
Core Tier 1 Ratio	17.92	19.35	19.41

	2020Y	2021Y	2022H1
Liquidity Coverage Ratio	199.55	202.45	232.23
IFRS Tier 1 Leverage Ratio	4.55	4.60	4.61
NPL/ Loans at Amortised Cost	0.84	0.92	0.91
Reserves/Loans at Amort. Cost	0.60	0.64	0.60

Source: Bloomberg, S&P Global Market Intelligence, NORD/LB Markets Strategy & Floor Research; as of: 10.10.2022

Strengths / Opportunities

- Federal state of Lower Austria is the owner (support)
- Capitalisation
- Risk structure of the loan portfolio

- Geographical concentration
- Profitability
- Concentration in the public sector



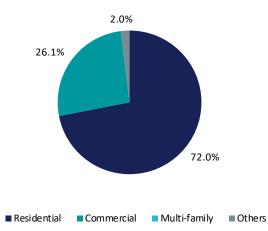


HYPO NOE – Mortgage

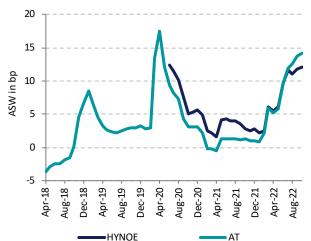
Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Cover Pool Data

Cover pool volume (EURm)	2,966
Amount outstanding (EURm)	2,682
-thereof ≥ EUR 500m	55.9%
Current OC (nominal)	10.6%
Committed OC	2.0%
Cover type	Mortgage
Main country	83% Austria
Main region	52% Lower Austria
Number of loans	11,367
Number of borrowers	8,981
Avg. exposure to borrowers (EUR)	330,208
WAL (cover pool)	9.8y
WAL (covered bonds)	5.2y
Fixed interest (cover pool)	44.0%
Fixed interest (covered bonds)	58.9%
LTV (indexed)	n/a
LTV (unindexed)	56.0%
Loans in arrears	0.0%



Spread Development



Source: Issuer, Rating agencies, Bloomberg, NORD/LB Markets Strategy & Floor Research

Regional Distribution

Maturity structure (Bmk)

Outstanding ESG BMKs

Rating (Moody's)

Rating (S&P) Rating (Fitch) Rating (DBRS)

TPI leeway

Collateral score

Unused notches AAA credit risk (%)

Recovery uplift

LCR level (Bmk)

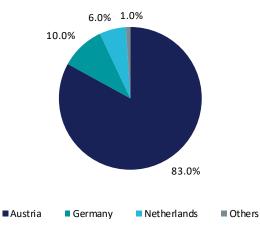
LCR ELIGIBLE

Risk weight

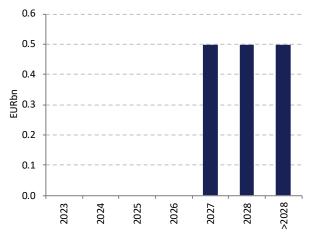
TPI

RRL JRL

PCU



Redemption Profile (Bmk)





Austria 🗖

Aa1

Probable-High

Unpublished

10.1%

_

_

No

Yes

10%

SB

1

HYPO NOE – Public Sector

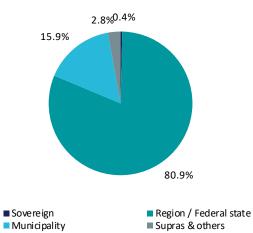
Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Cover Pool Data

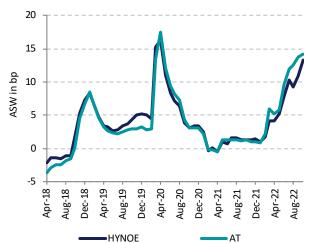
Cover pool volume (EURm)	4,567
Amount outstanding (EURm)	3,548
-thereof \geq EUR 500m	70.5%
Current OC (nominal)	28.7%
Committed OC	2.0%
Cover type	Public Sector
Main country	100% Austria
Main region	86% Lower Austria
Number of loans	48,165
Number of borrowers	41,596
Avg. exposure to borrowers (EUR)	109,794
WAL (cover pool)	10.1y
WAL (covered bonds)	5.7y
Fixed interest (cover pool)	50.9%
Fixed interest (covered bonds)	70.1%
LTV (indexed)	-
LTV (unindexed)	-
Loans in arrears	0.0%

Rating (Moody's)	Aa1
Rating (S&P)	-
Rating (Fitch)	-
Rating (DBRS)	-
ТРІ	High
TPI leeway	Unpublished
Collateral score	14.6%
RRL	-
JRL	-
Unused notches	-
AAA credit risk (%)	-
PCU	-
Recovery uplift	-
Outstanding ESG BMKs	No
LCR ELIGIBLE	Yes
LCR level (Bmk)	1
Risk weight	10%
Maturity structure (Bmk)	SB

Borrower Types

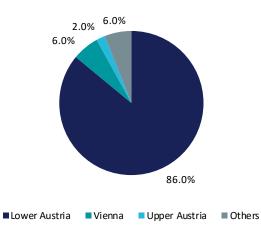


Spread Development

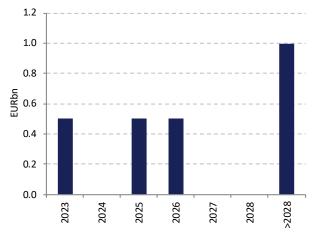


Source: Issuer, Rating agencies, Bloomberg, NORD/LB Markets Strategy & Floor Research

Regional Distribution



Redemption Profile (Bmk)







HYPO Oberösterreich

Austria

Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Ratings

	Rating	Outlook
Fitch	-	-
Moody's	-	-
S&P	A+	Negative

Homepage

www.hypo.at

Hypo Oberösterreich (HO) was established in 1891 as a public-sector special bank. As a regional bank, HO operates eleven branches in Upper Austria and Vienna. It employs more than 400 staff and serves around 100,000 customers. Furthermore, HO is the house bank for Upper Austria and market leader in subsidised and non-profit housing projects in Upper Austria. The majority owner is the Federal State of Upper Austria (50.6%; FY 2021), followed by Raiffeisenlandesbank Oberösterreich AG (41.1%) and Oberösterreichische Versicherung AG (7.5%). The institute defines its business activities as the following: Major Clients (large-scale housing construction projects, public institutions, corporate customers and church and social; 38% of assets in H1 2022), Retail and Residential Housing (homeowner support in addition to doctors and freelancers; 34%). Financial Markets (financial investments, trading portfolios, interbank operations; 22%) and Other (subsidiary companies, equity participations; 5%). The CET1 ratio as at the end of June 2022 stood at 12.9% (FY 2021: 14.4%). As at H1 2022, HYPO Oberösterreich posted a cost-income ratio of 66.9%, which is supposed to fall to 60% by 2025. The Bank is targeting a core tier 1 capital ratio of 12%. HO has also determined ROE of 6% as a further target value for 2025. This most recently stood at 5.0% (H1 2022). As at H1 2022, the NPL ratio had risen from 0.35% at the end of 2021 to 0.46%. In relation to sustainability, the bank has committed to achieving net zero emissions by 2025 in both Scope 1 (direct emissions) and Scope 2 (indirect emissions produced by the supply of energy). Sustainable funding is set to be increased by 10% each year.

Balance Sneet	
(EURm)	
Net Loans to Customers	

Net Loans to Customers	5,460	5,599	5,775
Total Securities	1,593	1,466	1,162
Total Deposits	1,737	1,945	2,262
Tier 1 Common Capital	458	481	445
Total Assets	7,825	8,158	8,056
Total Risk-weighted Assets	3,104	3,348	3,447

2020Y

2021Y

2022H1

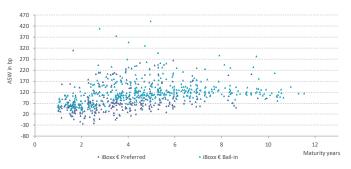
Redemption Profile



Income Statement

2020Y	2021Y	2022H1
57	61	34
15	17	9
-5	10	1
55	58	29
6	3	2
11	33	12
	57 15 -5 55 6	57 61 15 17 -5 10 55 58 6 3

Senior Unsecured Bonds (EUR BMK)



Company Ratios

	2020Y	2021Y	2022H1
Net Interest Margin	0.74	0.78	0.87
ROAE	2.02	5.72	4.71
Cost-to-Income	77.11	61.77	66.90
Core Tier 1 Ratio	14.76	14.35	12.92

	2020Y	2021Y	2022H1
Liquidity Coverage Ratio	165.70	196.80	-
IFRS Tier 1 Leverage Ratio	5.94	5.95	5.58
NPL/ Loans at Amortised Cost	-	-	-
Reserves/Loans at Amort. Cost	0.21	0.24	-

Source: Bloomberg, S&P Global Market Intelligence, NORD/LB Markets Strategy & Floor Research; as of: 10.10.2022

Strengths / Opportunities

- Regional market position
- Diversification of the funding structure
- Majority shareholder Upper Austria (support) •

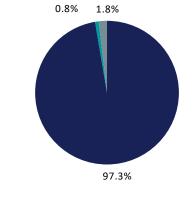
- Low-margin business model
- Credit risk concentrations
- Risk from second-round effects (RU-UA conflict)

HYPO Oberösterreich – Mortgage

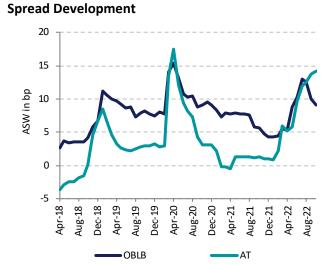
Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Cover Pool Data

Cover pool volume (EURm)	2,728
Amount outstanding (EURm)	2,384
-thereof ≥ EUR 250m	46.1%
Current OC (nominal)	14.4%
Committed OC	n/a
Cover type	Mortgage
Main country	100% Austria
Main region	90% Upper Austria
Number of loans	46,796
Number of borrowers	n/a
Avg. exposure to borrowers (EUR)	n/a
WAL (cover pool)	8.6y
WAL (covered bonds)	6.0y
Fixed interest (cover pool)	19.4%
Fixed interest (covered bonds)	82.0%
LTV (indexed)	32.2%
LTV (unindexed)	n/a
Loans in arrears	0.0%



Residential Commercial Multi-family Others



Source: Issuer, Rating agencies, Bloomberg, NORD/LB Markets Strategy & Floor Research

Regional Distribution

Maturity structure (SBmk)

Rating (Moody's) Rating (S&P)

Rating (Fitch) Rating (DBRS)

Unused notches

Recovery uplift

LCR level (SBmk)

LCR ELIGIBLE

Risk weight

AAA credit risk (%)

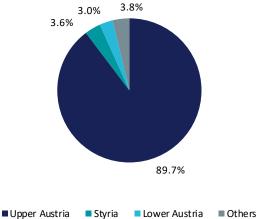
Outstanding ESG BMKs

TPI TPI leeway Collateral score

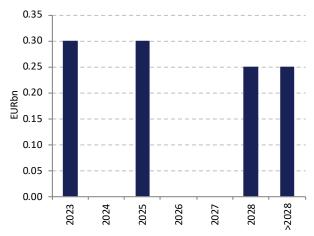
RRL

JRL

PCU



Redemption Profile (SBmk)



NORD/LB

Austria 🗖

AA+

a+

aa+

20.22

0

_

No

Yes

2A

10%

ΗB

Hypo Tirol Bank

Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Ratings

C C	Rating	Outlook	
C:tab	0		
Fitch	-	-	
Moody's*	Baa1	Stable	
S&P	А	Negative	
Homepage			
www.hypotirol.com			

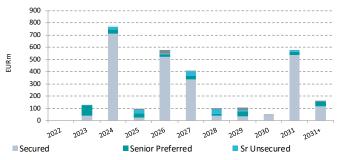
*Senior Unsecured

Hypo Tirol Bank AG (Hypo Tirol), headquartered in Innsbruck, is a regional universal bank that was founded in 1901. Since being founded, it has been wholly owned by the Federal State of Tyrol. Geographically, the bank has a clear focus on the core market Tyrol, while it is also active in the region around Vienna with a different customer and product focus. The Hypo Tirol Group employs 497 staff members (FY 2021) and comprises 18 business centres in addition to a specialist unit for private banking and independent professionals in north and east Tyrol, a branch in Bolzano as well as a business centre in Vienna. The broad portfolio of financial services for retail and business customers is supplemented by Hypo Tirol Versicherung GmbH, Hypo Immobilien Betriebs GmbH and Hypo Tirol Leasing GmbH. Hypo Tirol Bank reports in the following segments: Retail Customers, Corporate Clients, Treasury, Real Estate and Participations and Corporate Center. The NPL ratio most recently totalled 2.81% (HY 2021: 2.50%). This increase is more down to the decline in the total loan portfolio. Loans to customers now stand at EUR 5.9bn, having totalled EUR 6.4bn as at the end of 2021 (-6.8%). At 15.04% (H1 2022), the core capital ratio was above the value recorded at year-end 2021 of 14.11%. In addition to deposits, funding comprises elements such as SSDs, Pfandbriefe and TLTRO III financing. As such, unsecured funding takes place exclusively via private placements and is granted exclusively to retail customers. The bank has a sustainable focus in all segments as well as with its funding activities. To this end, in March 2021, the bank placed a social Pfandbrief (EUR 500m) on the basis of its Social Bond Framework.

Balance	Sheet
---------	-------

(EURm) Net Loans to Customers	2020Y 6,023	2021Y 6,373	2022H1 5,940
Total Securities	1,250	1,181	1,276
Total Deposits	3,727	3,718	3,618
Tier 1 Common Capital	558	564	561
Total Assets	8,769	8,957	9,017
Total Risk-weighted Assets	3,843	3,995	3,731

Redemption Profile



Subordinated Unsecured Senior Non-Preferred

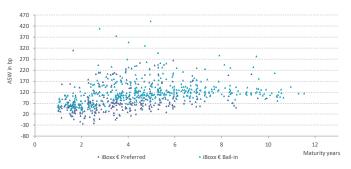
Company Ratios

	2020Y	2021Y	2022H1
Net Interest Margin	0.99	1.00	0.99
ROAE	1.38	3.92	4.45
Cost-to-Income	66.92	64.37	61.83
Core Tier 1 Ratio	14.52	14.11	15.04

Income Statement

(EURm)	2020Y	2021Y	2022H1
Net Interest Income	78	87	44
Net Fee & Commission Inc,	29	32	17
Net Trading Income	2	5	7
Operating Expense	71	74	37
Credit Commit, Impairment	23	11	8
Pre-tax Profit	12	30	15

Senior Unsecured Bonds (EUR BMK)



	2020Y	2021Y	2022H1
Liquidity Coverage Ratio	209.81	197.62	315.53
IFRS Tier 1 Leverage Ratio	6.43	6.35	6.37
NPL/ Loans at Amortised Cost	3.21	2.41	2.91
Reserves/Loans at Amort. Cost	1.59	1.19	1.38

Source: Bloomberg. S&P Global Market Intelligence. NORD/LB Markets Strategy & Floor Research; as of: 10.10.2022

Strengths / Opportunities

- Regional market positioning (esp. with corporates)
- Owned by Federal State of Tyrol (support)
- Capitalisation

Risks / Weaknesses

- Geographical concentration risks
- Profitability
- Dependency on wholesale funding



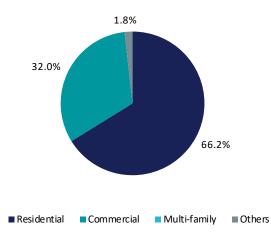
Austria

Hypo Tirol Bank – Mortgage

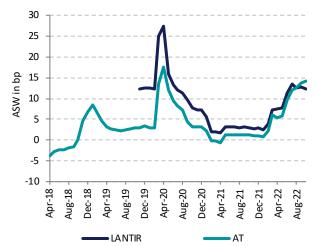
Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Cover Pool Data

Cover peel volume (FLIPm)	2 0 4 2
Cover pool volume (EURm)	2,843
Amount outstanding (EURm)	2,507
-thereof ≥ EUR 500m	39.9%
Current OC (nominal)	13.4%
Committed OC	2.0%
Cover type	Mortgage
Main country	98% Austria
Main region	84% Tyrol
Number of loans	13,190
Number of borrowers	9,743
Avg. exposure to borrowers (EUR)	291,799
WAL (cover pool)	9.9y
WAL (covered bonds)	4.9y
Fixed interest (cover pool)	21.1%
Fixed interest (covered bonds)	98.9%
LTV (indexed)	n/a
LTV (unindexed)	59.7%
Loans in arrears	0.1%



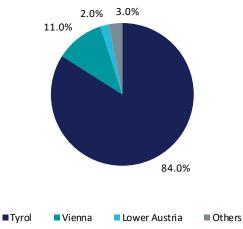
Spread Development



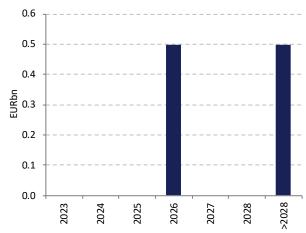
Source: Issuer, Rating agencies, Bloomberg, NORD/LB Markets Strategy & Floor Research

Rating (Moody's)	Aa1
Rating (S&P)	-
Rating (Fitch)	-
Rating (DBRS)	-
TPI	Probable-High
TPI leeway	2
Collateral score	11.1%
RRL	-
JRL	-
Unused notches	-
AAA credit risk (%)	-
PCU	-
Recovery uplift	-
Outstanding ESG BMKs	Yes
LCR ELIGIBLE	Yes
LCR level (Bmk)	1
Risk weight	10%
Maturity structure (Bmk)	SB

Regional Distribution



Redemption Profile (Bmk)







Hypo Vorarlberg Bank

Austria 💳

Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Ratings

	Rating	Outlook
Fitch	-	-
Moody's	A3	Stable
S&P	A+	Negative

Homepage

www.hypovbg.at

Founded in 1897, Hypo Vorarlberg Bank AG (Hypo VBG) focuses its business activities on the Austrian Federal State of Vorarlberg. Here, Hypo VBG is the largest bank in terms of assets (balance sheet total: EUR 15.6bn as at FY 2021). The institute is also active in southern Germany, Eastern Switzerland and in South Tyrol. It serves around 90,000 retail customers and 11,000 corporate clients. The Federal State of Vorarlberg holds a stake of nearly 77% in Hypo VBG via Vorarlberger Landesbank-Holding. Approximately 23% is held by Austria Beteiligungsgesellschaft (indirectly LBBW 15% and L-Bank 8%). A glance at the regional diversification of the loan portfolio (FY 2021) reveals that around 41% is attributable to Vorarlberg, while the rest of Austria accounts for a share of 36%, with Germany accounting for an additional 13%. Hypo VBG employs around 900 employees and operates with more than 20 branches in Austria, of which 15 are located in Vorarlberg. The bank reports across the following four segments: Corporate Clients, Retail Customers, Financial Markets and Corporate Center. Hypo VBG has subsidiaries for specialised products such as leasing and insurance. At 1.45%, the NPL ratio is practically unchanged versus the previous year (FY 2020: 1.42%). In terms of funding, as at May 2022, the largest share of wholesale funding was attributable to mortgage-backed Pfandbriefe (share of approximately 56%), followed by senior unsecured bonds (EUR BMK; 32%) and public Pfandbriefe (5%). Since 2017, green bonds have also been issued in both EUR and CHF to supplement funding as part of an internal sustainability strategy. The CET1 ratio decreased by 67bp in H1 2022 to 14.72% (FY/2020: 15.39%).

Balance Sheet

(EURm)	2020Y	2021Y	2022H1
Net Loans to Customers	10,340	10,379	10,641
Total Securities	3,163	2,907	3,018
Total Deposits	5,647	5,418	5,401
Tier 1 Common Capital	1,240	1,302	1,294
Total Assets	15,297	15,626	16,150
Total Risk-weighted Assets	8,645	8,459	8,793

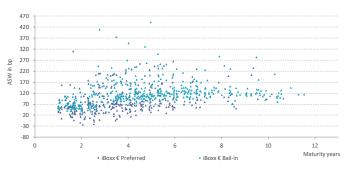
Redemption Profile



Income Statement

(EURm)	2020Y	2021Y	2022H1
Net Interest Income	174	196	79
Net Fee & Commission Inc,	35	38	18
Net Trading Income	-7	-5	41
Operating Expense	103	107	59
Credit Commit, Impairment	41	15	-5
Pre-tax Profit	49	94	72

Senior Unsecured Bonds (EUR BMK)



Company Ratios

	2020Y	2021Y	2022H1
Net Interest Margin	1.21	1.29	1.01
ROAE	3.07	5.29	8.21
Cost-to-Income	52.60	49.45	46.84
Core Tier 1 Ratio	14.34	15.39	14.72

	2020Y	2021Y	2022H1
Liquidity Coverage Ratio	153.53	164.21	157.89
IFRS Tier 1 Leverage Ratio	8.26	8.46	8.26
NPL/ Loans at Amortised Cost	2.70	2.76	2.58
Reserves/Loans at Amort. Cost	1.23	1.17	1.11

Source: Bloomberg, S&P Global Market Intelligence, NORD/LB Markets Strategy & Floor Research; as of: 10.10.2022

Strengths / Opportunities

- Market shares in Vorarlberg
- Asset quality
- Owner: Federal State of Vorarlberg (support)

- Fierce competition
- Geographical risk concentration
- Profitability

Hypo Vorarlberg Bank – Mortgage

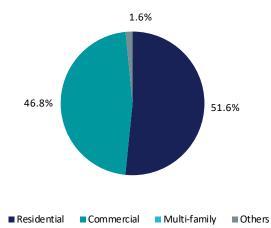
Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Cover Pool Data

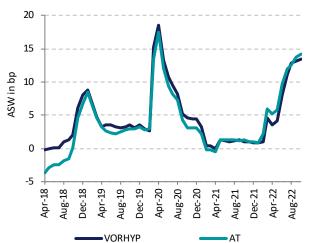
Cover pool volume (EURm)	5,457
Amount outstanding (EURm)	4,144
-thereof ≥ EUR 500m	84.5%
Current OC (nominal)	31.7%
Committed OC	n/a
Cover type	Mortgage
Main country	75% Austria
Main region	42% Vorarlberg
Number of loans	19,054
Number of borrowers	n/a
Avg. exposure to borrowers (EUR)	n/a
WAL (cover pool)	13.6y
WAL (covered bonds)	3.9y
Fixed interest (cover pool)	38.3%
Fixed interest (covered bonds)	80.7%
LTV (indexed)	62.2%
LTV (unindexed)	n/a
Loans in arrears	0.1%

Rating (Moody's)	Aaa
Rating (S&P)	-
Rating (Fitch)	-
Rating (DBRS)	-
TPI	Probable-High
TPI leeway	2
Collateral score	18.8%
RRL	-
JRL	-
Unused notches	-
AAA credit risk (%)	-
PCU	-
Recovery uplift	-
Outstanding ESG BMKs	No
LCR ELIGIBLE	Yes
LCR level (Bmk)	1
Risk weight	10%
Maturity structure (Bmk)	HB & SB

Borrower Types

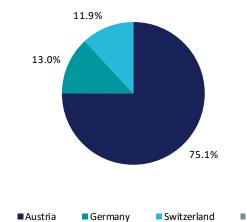


Spread Development

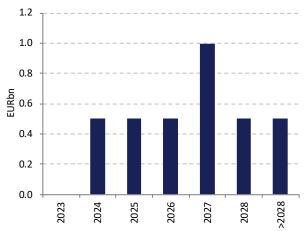


Source: Issuer, Rating agencies, Bloomberg, NORD/LB Markets Strategy & Floor Research

Regional Distribution



Redemption Profile (Bmk)







Kommunalkredit Austria

Austria 💳

Autor: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Rating	Outlool
BBB-	Stable
-	-
BBB-	Stable
	BBB- -

Homepage

www.kommunalkredit.at

Kommunalkredit Austria AG (Kommunalkredit) is a specialist bank in the field of infrastructure financing and sees itself as an intermediary between infrastructure constructors such as municipalities, public sector companies and private project operators on the one hand and institutional investors such as insurance companies and pension funds on the other. The business model is based on an "originate and collaborate" approach. This essentially means that Kommunalkredit maintains a particular focus on placing acquired volumes on the international financial market in close collaboration with its established partners. The bank prioritises projects in the areas of energy and environment (in particular renewable energy), transport, communication and digitalisation, social infrastructure and natural resources. In this regard, the bank represents the entire value chain for the infrastructure segment. In autumn 2015, Kommunalkredit was successfully re-privatised. Kommunalkredit is 99.8% owned by Satere Beteiligungsverwaltung, via which Interritus Limited (55%) and Trinity Investments Designated Activity Company (45%) hold their stakes. From its headquarters in Vienna and representative office in Frankfurt, the bank is primarily active in the EU and in countries associated with the EU. A total of 31% (H1 2022) of the loan portfolio is attributable to Austria, while other EU member states account for a share of 43%. Altogether, 43.4% (H1 2022) of funding comes from customer deposits, with 28.1% attributable to covered bonds. In H1 2022, the CET1 ratio of the bank stood at 14.7% (FY 2021: 17.3%).

Balance Sheet

2020Y	2021Y	2022H1
2,754	3,084	-
496	423	-
2,116	1,861	1,865
338	344	345
4,423	4,428	4,534
1,688	2,027	2,390
	2,754 496 2,116 338 4,423	2,754 3,084 496 423 2,116 1,861 338 344 4,423 4,428

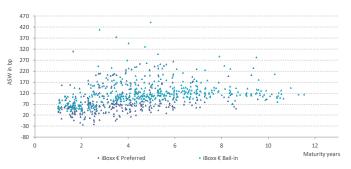
Redemption Profile



Income Statement

(EURm)	2020Y	2021Y	2022H1
Net Interest Income	77	79	54
Net Fee & Commission Inc,	29	29	12
Net Trading Income	1	10	12
Operating Expense	59	66	34
Credit Commit, Impairment	0	0	-0
Pre-tax Profit	48	67	52

Senior Unsecured Bonds (EUR BMK)



Company Ratios

	2020Y	2021Y	2022H1
Net Interest Margin	1.78	1.80	2.42
ROAE	10.37	12.26	17.95
Cost-to-Income	55.03	49.38	39.78
Core Tier 1 Ratio	20.02	16.99	14.41

	2020Y	2021Y	2022H1
Liquidity Coverage Ratio	420.62	734.81	276.02
IFRS Tier 1 Leverage Ratio	8.05	8.09	7.90
NPL/ Loans at Amortised Cost	-	-	-
Reserves/Loans at Amort. Cost	0.22	0.20	-

Source: Bloomberg, S&P Global Market Intelligence, NORD/LB Markets Strategy & Floor Research; as of: 10.10.2022

Strengths / Opportunities

- Market position in niche markets
- Asset quality
- Profitability

- Diversification of business areas
- Syndication risk (individual loan size)
- Dependency on key personnel

Kommunalkredit – Public

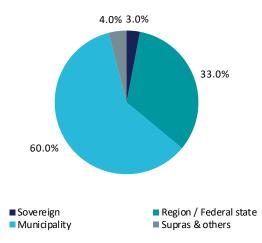
Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Cover Pool Data

Cover pool volume (EURm)	1,256
Amount outstanding (EURm)	1,124
-thereof ≥ EUR 250m	57.8%
Current OC (nominal)	11.8%
Committed OC	-
Cover type	Public Sector
Main country	88% Austria
Main region	23% Upper Austria
Number of loans	2,355
Number of borrowers	1,093
Avg. exposure to borrowers (EUR)	1,148,948
WAL (cover pool)	13.2y
WAL (covered bonds)	4.7y
Fixed interest (cover pool)	84.0%
Fixed interest (covered bonds)	79.4%
LTV (indexed)	-
LTV (unindexed)	-
Loans in arrears	0.0%

Rating (S&P)	A+
Rating (Fitch)	-
Rating (DBRS)	-
TPI	-
TPI leeway	-
Collateral score	-
RRL	bbb+
JRL	a+
Unused notches	0
AAA credit risk (%)	-
PCU	-
Recovery uplift	-
Outstanding ESG BMKs	No
LCR ELIGIBLE	Yes
LCR level (SBmk)	2A
Risk weight	20%
Maturity structure (SBmk)	HB

Borrower Types



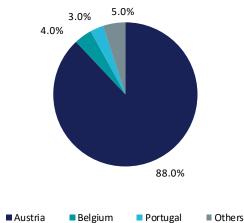
Spread Development



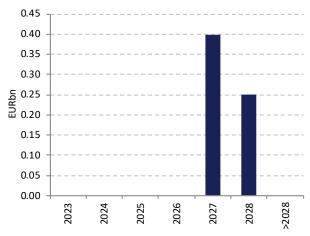
Source: Issuer, Rating agencies, Bloomberg, NORD/LB Markets Strategy & Floor Research

Regional Distribution

Rating (Moody's)



Redemption Profile (SBmk)



NORD/LB



Oberbank

Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Ratings

	Rating	Outlook
Fitch	-	-
Moody's	-	-
S&P	А	Negative

Homepage

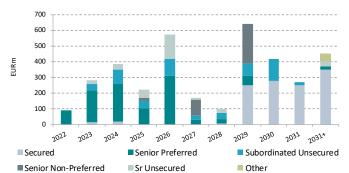
www.oberbank.de

Austria's Oberbank AG (founded in 1869) offers its customer base the full spectrum of universal banking services. It benefits from synergy effects as a result of being part of the 3 Banken Gruppe (3BG). This association is composed of the regional banks BKS Bank (BKS), Bank für Tirol und Vorarlberg (BTV) and Oberbank. Mutual participations exist between all three banks and they cooperate across various fields. For example, the banks have joint participations in the areas of leasing, insurance, investment and the housing sector. Oberbank has more than 2,150 employees, who serve around 281,000 retail customers and more than 58,000 business customers across 178 branches in five countries (Austria, Germany, Czech Republic, Hungary and Slovakia). The bank's major shareholders can be broken down by voting rights as follows: around 24% for CABO Beteiligungsgesellschaft (wholly owned subsidiary of UniCredit Bank Austria), 16% for BTV, 15% for BKS and 5% for Wüstenrot Wohnungswirtschaft. Finally, 32% of the shares conferring voting rights are held in free float. The bank reports across the following four segments: Corporate Clients, Retail Customers, Financial Markets and Other. Corporate Clients is the main business segment, having recorded annual net profit (before tax) of EUR 193.5m, followed by Financial Markets at EUR 98.3m. Although Oberbank is active in various regions, almost three guarters of the loan portfolio is attributable to Austria (56%) and Germany (18%) respectively. The Strategy 2025 includes organic growth in its five target countries and increasing profitability. Die NPL ratio (gross) was reduced by nine basis points year on year to 1.96%.

Balance Sheet

(EURm)	2020Y	2021Y	2022H1
Net Loans to Customers	17,265	18,428	19,008
Total Securities	2,708	2,319	2,383
Total Deposits	13,087	14,729	14,027
Tier 1 Common Capital	2,705	2,971	2,920
Total Assets	24,433	27,540	27,316
Total Risk-weighted Assets	15,167	16,188	16,830

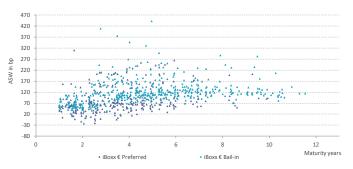
Redemption Profile



Income Statement

(EURm)	2020Y	2021Y	2022H1
Net Interest Income	337	346	190
Net Fee & Commission Inc,	171	192	109
Net Trading Income	11	12	-24
Operating Expense	306	324	167
Credit Commit, Impairment	42	36	4
Pre-tax Profit	168	282	109

Senior Unsecured Bonds (EUR BMK)



Company Ratios

	2020Y	2021Y	2022H1
Net Interest Margin	1.49	1.40	1.46
ROAE	4.18	7.39	5.16
Cost-to-Income	59.38	50.46	59.81
Core Tier 1 Ratio	17.84	18.35	17.35

	2020Y	2021Y	2022H1
Liquidity Coverage Ratio	131.66	203.52	165.83
IFRS Tier 1 Leverage Ratio	11.11	10.82	10.75
NPL/ Loans at Amortised Cost	2.27	1.87	-
Reserves/Loans at Amort. Cost	1.23	1.15	-

Source: Bloomberg, S&P Global Market Intelligence, NORD/LB Markets Strategy & Floor Research; as of: 10.10.2022

Strengths / Opportunities

- Franchise (Upper Austria and Salzburg)
- Capitalisation
- Cost efficiency

- Regional concentration risks
- Niche provider in certain regions
- Concentration: equity participations in Upper Austria





Austria 🗖

Oberbank – Mortgage

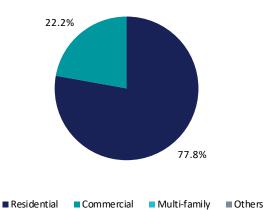
Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Cover Pool Data

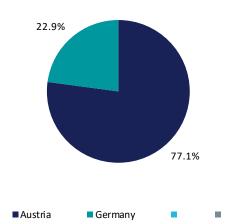
Cover pool volume (EURm)	2,911
Amount outstanding (EURm)	1,977
-thereof ≥ EUR 250m	53.1%
Current OC (nominal)	47.3%
Committed OC	n/a
Cover type	Mortgage
Main country	77% Austria
Main region	30% Upper Austria
Number of loans	15,468
Number of borrowers	n/a
Avg. exposure to borrowers (EUR)	n/a
WAL (cover pool)	16.4y
WAL (covered bonds)	6.7y
Fixed interest (cover pool)	41.5%
Fixed interest (covered bonds)	60.0%
LTV (indexed)	61.2%
LTV (unindexed)	68.7%
Loans in arrears	0.0%

Rating (Moody's)	-
Rating (S&P)	AAA
Rating (Fitch)	-
Rating (DBRS)	-
TPI	-
TPI leeway	-
Collateral score	-
RRL	aa-
JRL	aa+
Unused notches	3
AAA credit risk (%)	11.61
PCU	-
Recovery uplift	1
Outstanding ESG BMKs	No
LCR ELIGIBLE	Yes
LCR level (SBmk)	2A
Risk weight	10%
Maturity structure (SBmk)	hb & SB

Borrower Types



Regional Distribution

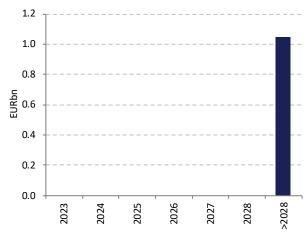


Spread Development



Source: Issuer, Rating agencies, Bloomberg, NORD/LB Markets Strategy & Floor Research

Redemption Profile (SBmk)



RLB Niederösterreich-Wien

Austria 💻

Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Ratings

	Rating	Outlook
Fitch	-	-
Moody's	A3	Stable
S&P	-	-

Homepage

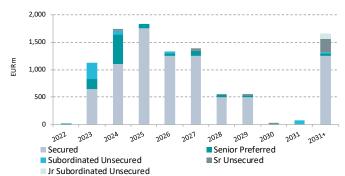
www.raiffeisen.at

Raiffeisenlandesbank Niederösterreich-Wien AG (RLB NÖW) is a regional and commercial bank and the leading institute of the 44 Raiffeisen banks in Lower Austria. It is wholly owned by Raiffeisen Holding NÖ-Wien. In addition to RLB NÖW, which is active in the areas of agriculture, infrastructure and media, the holding company has a range of other subsidiaries, equity participations and investments on its books. In the capital city of Vienna, RLB NÖW serves around 270,000 customers. The independent Raiffeisen banks serve approximately 1 million customers and constitute the leading banking group within Lower Austria. RLB NÖW holds a stake of 22.7% (FY 2021) in Raiffeisen Bank International AG (RBI). This makes it the lead shareholder of the commercial and investment bank, which is active in the CEE region. In so doing, RBI covers other areas in addition to its banking operations such as leasing via its subsidiaries and serves roughly 17 million customers overall. The operating segments at RLB NÖW include: Retail/Raiffeisen Association Services (RAS), Corporate Clients (CC), Financial Markets (FM), RBI, Raiffeisen Association (RA), Other Investments (OI) and Other. As measured by the customer loan portfolio, in geographical terms, 85% of the exposure is allocated to Austria, while in terms of the loan type breakdown, 38% is attributable to mortgage loans. As at the end of 2021, just over one third of funding was obtained from customer deposits, followed by bond issuances and promissory notes at 24% (of which 60% are covereds). As at FY 2021, the CET1 ratio of the bank stood at 19.9%, while that of the Raiffeisen-Holding NÖ-Wien Group amounted to 20.6%. In FY 2021, the NPL ratio fell from 1.5% to 1.2% versus FY 2020.

Balance Sheet

(EURm)	2020Y	2021Y	2022H1
Net Loans to Customers	13,788	13,624	14,357
Total Securities	4,897	4,484	5,195
Total Deposits	9,177	9 <i>,</i> 088	8,983
Tier 1 Common Capital	2,475	2,578	2,291
Total Assets	28,663	28,592	29,037
Total Risk-weighted Assets	13,567	12,981	12,862

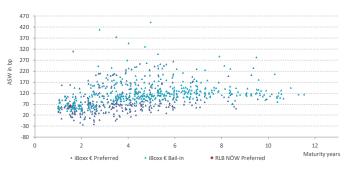
Redemption Profile



Income Statement

(EURm)	2020Y	2021Y	2022H1
Net Interest Income	182	175	110
Net Fee & Commission Inc,	57	56	28
Net Trading Income	-28	9	18
Operating Expense	223	227	120
Credit Commit, Impairment	91	-12	8
Pre-tax Profit	-274	62	-498

Senior Unsecured Bonds (EUR BMK)



Company Ratios

	2020Y	2021Y	2022H1
Net Interest Margin	0.71	0.67	0.83
ROAE	-11.26	2.66	-51.01
Cost-to-Income	55.91	40.38	22.33
Core Tier 1 Ratio	18.24	19.86	17.82

	2020Y	2021Y	2022H1
Liquidity Coverage Ratio	155.00	127.36	120.40
IFRS Tier 1 Leverage Ratio	8.95	9.24	8.08
NPL/ Loans at Amortised Cost	2.32	1.98	1.75
Reserves/Loans at Amort. Cost	1.55	1.38	1.24

Source: Bloomberg, S&P Global Market Intelligence, NORD/LB Markets Strategy & Floor Research; as of: 10.10.2022

Strengths / Opportunities

- Liquidity
- Asset quality
- Capitalisation

- Dependency on income from RBI
- Earnings volatility related to RBI shareholding
- Dependency on wholesale funding

RLB Niederösterreich-Wien – Mortgage

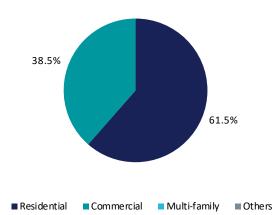
Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Cover Pool Data

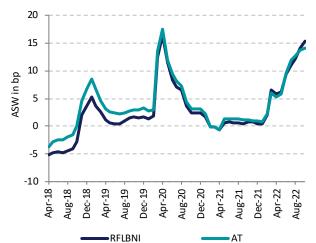
	0.000
Cover pool volume (EURm)	8,660
Amount outstanding (EURm)	5,751
-thereof \geq EUR 500m	82.6%
Current OC (nominal)	50.6%
Committed OC	n/a
Cover type	Mortgage
Main country	100% Austria
Main region	47% Vienna
Number of loans	36,325
Number of borrowers	n/a
Avg. exposure to borrowers (EUR)	n/a
WAL (cover pool)	9.1y
WAL (covered bonds)	4.2y
Fixed interest (cover pool)	, 44.0%
Fixed interest (covered bonds)	65.2%
LTV (indexed)	52.7%
LTV (unindexed)	
Loans in arrears	n/a
	0.0%

Rating (Moody's)	Aaa
Rating (S&P)	-
Rating (Fitch)	-
Rating (DBRS)	-
TPI	Probable-High
TPI leeway	2
Collateral score	9.0%
RRL	-
JRL	-
Unused notches	-
AAA credit risk (%)	-
PCU	-
Recovery uplift	-
Outstanding ESG BMKs	No
LCR ELIGIBLE	Yes
LCR level (Bmk)	1
Risk weight	10%
Maturity structure (Bmk)	HB & SB

Borrower Types

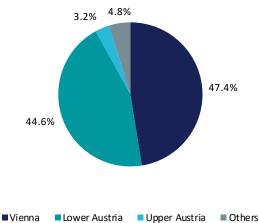


Spread Development

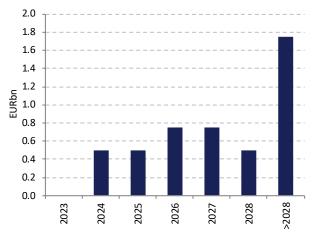


Source: Issuer, Rating agencies, Bloomberg, NORD/LB Markets Strategy & Floor Research

Regional Distribution



Redemption Profile (Bmk)



NORD/LB



RLB Niederösterreich-Wien – Public Sector

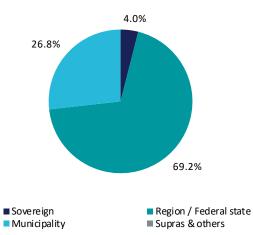
Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Cover Pool Data

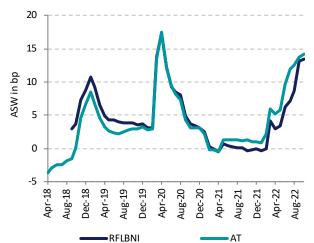
Cover pool volume (EURm)	2,498
	,
Amount outstanding (EURm)	1,852
-thereof ≥ EUR 500m	27.0%
Current OC (nominal)	34.9%
Committed OC	n/a
Cover type	Public Sector
Main country	100% Austria
Main region	82% Lower Austria
Number of loans	3,209
Number of borrowers	n/a
Avg. exposure to borrowers (EUR)	n/a
WAL (cover pool)	5.7y
WAL (covered bonds)	3.0y
Fixed interest (cover pool)	29.0%
Fixed interest (covered bonds)	27.0%
LTV (indexed)	-
LTV (unindexed)	-
Loans in arrears	0.0%

Rating (S&P)	-
Rating (Fitch)	-
Rating (DBRS)	-
TPI	High
TPI leeway	3
Collateral score	25.2%
RRL	-
JRL	-
Unused notches	-
AAA credit risk (%)	-
PCU	-
Recovery uplift	-
Outstanding ESG BMKs	No
LCR ELIGIBLE	Yes
LCR level (Bmk)	1
Risk weight	10%
Maturity structure (Bmk)	SB

Borrower Types



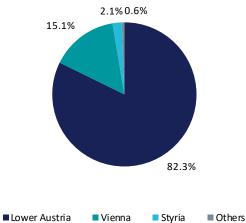
Spread Development



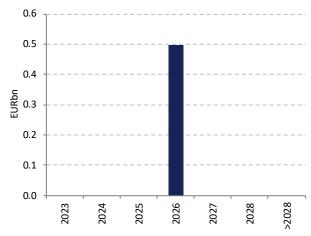
Source: Issuer, Rating agencies, Bloomberg, NORD/LB Markets Strategy & Floor Research

Regional Distribution

Rating (Moody's)



Redemption Profile (Bmk)







Aaa

RLB Oberösterreich

Austria 💳

Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Ratings

	Rating	Outlook
Fitch	-	-
Moody's	A3	Stable
S&P	-	-

Homepage

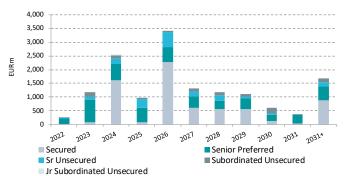
www.raiffeisen.at

Raiffeisenlandesbank Oberösterreich AG (RLB OÖ) is a cooperative headquartered in Linz which was founded in 1898. RLB OÖ is Austria's fifth-largest bank by assets (as at year-end 2021). It is part of Raiffeisen Banking Group Austria and is majority-owned by 75 independent cooperative Raiffeisen banks (with over 400 branches). RLB OÖ is also a shareholder in Raiffeisen Bank International (RBI) with a stake of 9.5%. Within the Group, RLB OÖ acts as the largest of the eight Raiffeisen landesbanks in Austria. As a regional and commercial bank with approximately 4,000 staff, it provides services to both retail and commercial clients. Reporting takes place in the following segments: Corporates, Retail and Private Banking, Financial Markets, Equity Investments and Corporate Center. In organisational terms, RLB OÖ divides allocates its Equity Investments to four portfolios from the following segments: Banks & Financial Institutions, Outsourcing & Banking-Related Investments, Property as well as Opportunity and Partner Capital. The bank has more than 150 fully consolidated subsidiaries, including Vivatis and activ factoring (Munich), in addition some shareholdings such as Salinen AG (41.25%) in Austria. At Group level, the CET1 ratio stands at 14.98% (FY 2021). Having falling from 2.60% in 2018 to 2.1% by year-end 2021, the NPL ratio has now stabilised. In terms of risk provisions, RLB OÖ has an NPL coverage ratio (net) of 35.5% (FY 2021). The Group's loan portfolio is focused mainly on Austria (around 70% as at FY 2021), Germany (17%) and the Czech Republic (3%).

Balance Sheet

2020Y	2021Y	2022H1
24,745	25,295	26,258
8,165	7,237	5,941
12,618	13,501	12,726
4,333	4,595	4,225
48,569	51,447	50,222
27,907	28,748	29,406
	24,745 8,165 12,618 4,333 48,569	24,745 25,295 8,165 7,237 12,618 13,501 4,333 4,595 48,569 51,447

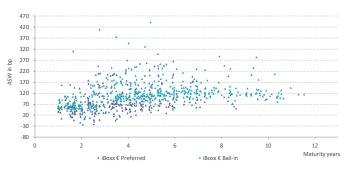
Redemption Profile



Income Statement (EURm)

(EUKIII)	20201	20211	2022H1
Net Interest Income	422	429	215
Net Fee & Commission Inc,	189	199	110
Net Trading Income	-10	176	29
Operating Expense	836	875	485
Credit Commit, Impairment	157	40	38
Pre-tax Profit	182	558	-236

Senior Unsecured Bonds (EUR BMK)



Company Ratios

	2020Y	2021Y	2022H1
Net Interest Margin	1.00	0.94	0.93
ROAE	3.45	9.37	-10.56
Cost-to-Income	65.05	54.41	74.22
Core Tier 1 Ratio	15.53	15.98	14.37

	2020Y	2021Y	2022H1
Liquidity Coverage Ratio	147.86	187.73	178.34
IFRS Tier 1 Leverage Ratio	9.30	9.22	8.68
NPL/ Loans at Amortised Cost	2.72	3.40	3.46
Reserves/Loans at Amort. Cost	1.49	1.62	1.72

Source: Bloomberg, S&P Global Market Intelligence, NORD/LB Markets Strategy & Floor Research; as of: 10.10.2022

Strengths / Opportunities

- Capitalisation
- Liquidity

- Sectoral credit risk concentration
- RBI share (income volatility)

RLB Oberösterreich – Mortgage

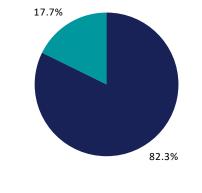
Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Cover Pool Data

Cover pool volume (EURm)	5,368
Amount outstanding (EURm)	3,040
-thereof ≥ EUR 500m	49.3%
Current OC (nominal)	76.6%
Committed OC	0.0%
Cover type	Mortgage
Main country	100% Austria
Main region	72% Upper Austria
Number of loans	36,278
Number of borrowers	n/a
Avg. exposure to borrowers (EUR)	n/a
WAL (cover pool)	12.3y
WAL (covered bonds)	7.8y
Fixed interest (cover pool)	51.1%
Fixed interest (covered bonds)	99.9%
LTV (indexed)	n/a
LTV (unindexed)	59.3%
Loans in arrears	0.0%

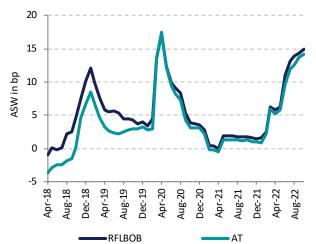
Rating (Moody's)	Aaa
Rating (S&P)	-
Rating (Fitch)	-
Rating (DBRS)	-
TPI	Probable-High
TPI leeway	2
Collateral score	7.1%
RRL	-
JRL	-
Unused notches	-
AAA credit risk (%)	-
PCU	-
Recovery uplift	-
Outstanding ESG BMKs	No
LCR ELIGIBLE	Yes
LCR level (Bmk)	1
Risk weight	10%
Maturity structure (Bmk)	HB & SB

Borrower Types



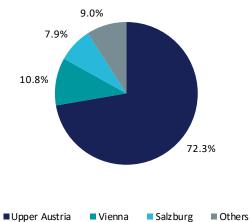
■ Residential ■ Commercial ■ Multi-family ■ Others

Spread Development

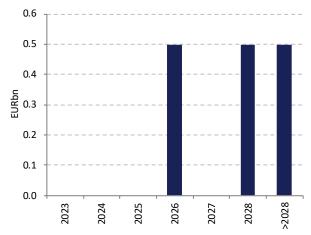


Source: Issuer, Rating agencies, Bloomberg, NORD/LB Markets Strategy & Floor Research

Regional Distribution



Redemption Profile (Bmk)



NORD/LB



RLB Steiermark

Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Ratings

	Rating	Outlook
Fitch	-	-
Moody's	A3	Stable
S&P	-	-

Homepage

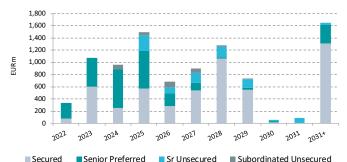
www.raiffeisen.at

Raiffeisen-Landesbank Steiermark (RLBS) is a cooperative bank based in Graz that was formed in 1927. It has since been reorganised into the legal form of a joint stock company. It is the leading institute and central bank for the Raiffeisen banks in the Federal State of Steiermark, where it has a market leading position. The bank has more than 850 employees, who serve approximately 755,000 retail customers and more than 66,500 corporate clients across 16 branches (data as at H1 2022). RLBS reports in the following business segments: Corporate, Retail, Capital market and treasury, Equity Investments, Other and Reconciliation. Around 31% of the loan portfolio is attributable to corporate clients (FY 2021), with retail customers accounting for 10%, real estate for 47% and the public sector and regional authorities for 13%. Landes-Hypothekenbank Steiermark (HYPO Steiermark), which belongs to the RLBS Group, was merged with RLB Steiermark in 2021 with the aim of generating synergy effects. The majority shareholder of RLBS are the 47 Raiffeisen banks, which hold a stake of over 93%. RLBS acts as the central institution of the cooperative Raiffeisen banks, thereby assuming responsibility for various tasks within the Raiffeisen sector of Styria. Raiffeisen Bank International AG (RBI) as at the top of the Raiffeisen Banking Group structure, which, following a merger with Raiffeisen Zentralbank Österreich (RZB) in 2017, replaced this institute as the Group's central entity. With a share of 9.95% (H1 2022), RLBS is the second-largest shareholder in RBI. Deposits account for 25% of the funding mix (FY 2021) and 27% attributable to the cooperative sector. As at H1 2022, the NPL ratio stood at 1.7% with a (net) coverage ratio of 56.5%.

Balance Sheet

(EURm)	2020Y	2021Y	2022H1
Net Loans to Customers	7,156	7,477	7,909
Total Securities	4,137	3,389	3,087
Total Deposits	3,966	4,178	4,067
Tier 1 Common Capital	1,386	1,420	1,197
Total Assets	17,697	18,513	17,791
Total Risk-weighted Assets	7,615	7,956	7,863

Redemption Profile



Net Trading Income Operating Expense Credit Commit. Impairment

Net Fee & Commission Inc.

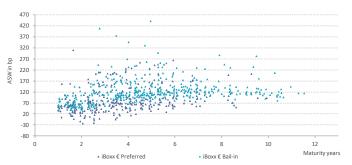
Income Statement

Net Interest Income

Pre-tax Profit

(EURm)

Senior Unsecured Bonds (EUR BMK)



2020Y

114

41

99

176

53

38

2021Y

110

44

12

168

-13

115

2022H1

63

22

-19

66

-4

-212

Company Ratios

	2020Y	2021Y	2022H1		2020Y	2021Y	2022H1
Net Interest Margin	0.76	0.66	0.74	Liquidity Coverage Ratio	213.50	248.00	205.80
ROAE	1.70	5.51	-26.87	IFRS Tier 1 Leverage Ratio	8.00	7.78	6.93
Cost-to-Income	44.90	46.24	27.28	NPL/ Loans at Amortised Cost	-	-	-
Core Tier 1 Ratio	18.20	17.85	15.22	Reserves/Loans at Amort. Cost	2.43	2.04	1.92

Source: Bloomberg, S&P Global Market Intelligence, NORD/LB Markets Strategy & Floor Research; as of: 10.10.2022

Strengths / Opportunities

- Capitalisation
- Liquidity

- Sectoral credit concentration risks
- RBI share (income volatility)





RLB Steiermark – Mortgage

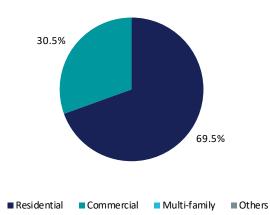
Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Cover Pool Data

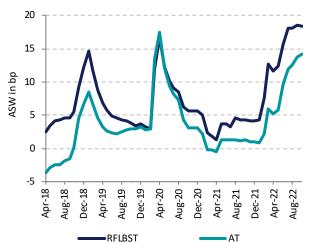
Cover pool volume (EURm)	6,084
Amount outstanding (EURm)	4,618
-thereof ≥ EUR 500m	43.3%
Current OC (nominal)	31.7%
Committed OC	0.0%
Cover type	Mortgage
Main country	95% Austria
Main region	70% Styria
Number of loans	33,873
Number of borrowers	28,254
Avg. exposure to borrowers (EUR)	215,332
WAL (cover pool)	17.5y
WAL (covered bonds)	6.8y
Fixed interest (cover pool)	30.1%
Fixed interest (covered bonds)	46.0%
LTV (indexed)	56.5%
LTV (unindexed)	n/a
Loans in arrears	0.0%

Rating (Moody's)	Aaa
Rating (S&P)	-
Rating (Fitch)	-
Rating (DBRS)	-
TPI	Probable-High
TPI leeway	2
Collateral score	8.0%
RRL	-
JRL	-
Unused notches	-
AAA credit risk (%)	-
PCU	-
Recovery uplift	2
Outstanding ESG BMKs	No
LCR ELIGIBLE	Yes
LCR level (Bmk)	1
Risk weight	10%
Maturity structure (Bmk)	НВ

Borrower Types

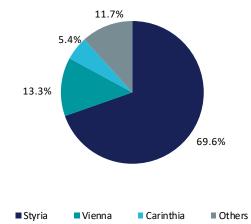


Spread Development

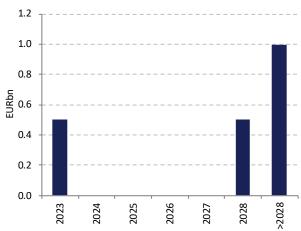


Source: Issuer, Rating agencies, Bloomberg, NORD/LB Markets Strategy & Floor Research

Regional Distribution



Redemption Profile (Bmk)





RLB Tirol

Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Ratings

	Rating	Outlook
Fitch	-	-
Moody's	A3	Stable
S&P	-	-

Homepage

www.raiffeisen.at

Raiffeisen-Landesbank Tirol AG (RLBT), founded in 1895, is the leading institute of the 57 independent Tyrolean Raiffeisen banks (RB) and one of eight Raiffeisen landesbanks in Austria. In the Federal State of Tyrol, RLB Tirol employs approximately 400 staff, who serve around 67,000 customers across 11 branches (H1 2022). The institute focuses on its home market of Tyrol, especially in the retail and private banking segment as well as lending to SMEs. The bank offers its customers the wide range of products typical of a universal bank. In addition to the standardised deposit and loan products, this portfolio also includes products and services from the following segments: insurance, residential mortgages, cash management and liquidity managment. In percentage terms, the largest shares of the customer loan portfolio are attributable to industry (FY 2021: 24.1%), tourism (20.4%) and retail customers (18.4%). The NPL ratio has been in decline over previous years, most recently falling from 1.7% (FY 2020) to 1.4% (FY 2021). RLBT has been part of the new institutional protection system of the Austrian Raiffeisen banks (Österreichische Raiffeisen-Sicherungseinrichtung eGen) since November 2021, having withdrawn from other protection systems on a Federal State or Sovereign level. RLBT's funding structure consists of liabilities to Raiffeisen banks (FY 2021: 41.0%) and customers (31.8%) as well as securitised liabilities (27.2%). In April 2022, the bank placed its first sub-benchmark bond in the form of a covered bond worth EUR 300 million. As at H1 2022, the CET1 ratio stood at 15.37%, having been 15.49% as at year-end 2021.

Balance Sheet

(EURm)	2020Y	2021Y	2022H1
Net Loans to Customers	3,149	3,342	3,362
Total Securities	2,220	1,943	2,071
Total Deposits	2,186	2,200	2,463
Tier 1 Common Capital	460	477	477
Total Assets	9,419	10,889	11,786
Total Risk-weighted Assets	2,868	3,078	3,102

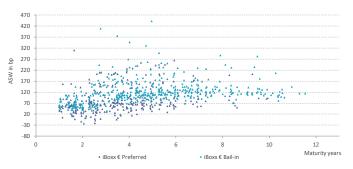
Redemption Profile



Income Statement (EURm)

(EURM)	2020Y	20219	2022H1
Net Interest Income	62	82	30
Net Fee & Commission Inc.	23	24	12
Net Trading Income	1	1	1
Operating Expense	77	74	38
Credit Commit. Impairment	4	15	-1
Pre-tax Profit	16	31	8

Senior Unsecured Bonds (EUR BMK)



Company Ratios

	2020Y	2021Y	2022H1
Net Interest Margin	0.72	0.83	0.54
ROAE	2.05	4.88	1.59
Cost-to-Income	79.68	63.76	82.64
Core Tier 1 Ratio	16.04	15.49	15.37

	2020Y	2021Y	2022H1
Liquidity Coverage Ratio	134.23	136.23	-
IFRS Tier 1 Leverage Ratio	-	-	-
NPL/ Loans at Amortised Cost	1.70	-	-
Reserves/Loans at Amort. Cost	3.11	-	-

Source: Bloomberg, S&P Global Market Intelligence, NORD/LB Markets Strategy & Floor Research; as of: 10.10.2022

Strengths / Opportunities

- Capitalisation
- Integration in the Raiffeisen Group
- Deposit base (also via the Raiffeisen sector)

- Sectoral concentration risks
- RBI share (income volatility)
- Dependency on wholesale funding



RLB Tirol – Mortgage

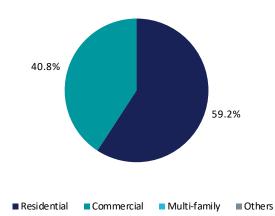
Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Cover Pool Data

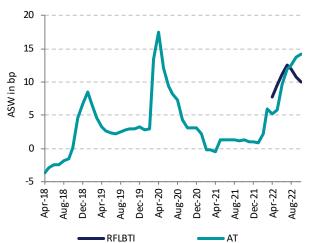
Cover pool volume (EURm)	3,037
Amount outstanding (EURm)	2,031
-thereof ≥ EUR 250m	14.8%
Current OC (nominal)	49.5%
Committed OC	0.0%
Cover type	Mortgage
Main country	100% Austria
Main region	96% Tyrol
Number of loans	16,072
Number of borrowers	n/a
Avg. exposure to borrowers (EUR)	n/a
WAL (cover pool)	11.9y
WAL (covered bonds)	8.8y
Fixed interest (cover pool)	29.4%
Fixed interest (covered bonds)	48.1%
LTV (indexed)	n/a
LTV (unindexed)	53.1%
Loans in arrears	0.0%

Rating (Moody's) Rating (S&P)	Aaa
Rating (Fitch)	-
Rating (DBRS)	-
TPI	Probable-High
TPI leeway	2
Collateral score	12.8%
RRL	-
JRL	-
Unused notches	-
AAA credit risk (%)	-
PCU	-
Recovery uplift	-
Outstanding ESG BMKs	No
LCR ELIGIBLE	Yes
LCR level (SBmk)	2A
Risk weight	10%
Maturity structure (SBmk)	HB

Borrower Types

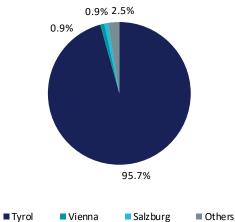


Spread Development

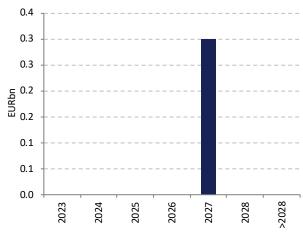


Source: Issuer, Rating agencies, Bloomberg, NORD/LB Markets Strategy & Floor Research

Regional Distribution



Redemption Profile (SBmk)





Austria 🗖

RLB Vorarlberg Waren- und Revisionsverband

Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Ratings		
	Rating	Outlook
Fitch	-	-
Moody's	A3	Stable
S&P	-	-

Homepage

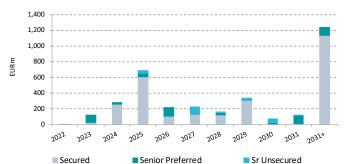
www.raiffeisen.at

Raiffeisenlandesbank Vorarlberg (RLBV), headquartered in Bregenz, was founded in 1895 as "Verband der Sparkassen und Darlehenskassenvereine in Vorarlberg". It is the lead institute of Raiffeisen Banking Group Vorarlberg (RBGV) and a regional bank in its own right. The Raiffeisen Banking Group is structured in three tiers and comprises the local Raiffeisen banks, the regional Raiffeisen landesbanks and Raiffeisen Bank International (RBI), with the latter heading up the Group structure. The eight Raiffeisen landesbanks own 59% of the lead institute RBI (RLBV holds a 2.9% stake in RBI). The 16 regional Raiffeisen banks hold a cumulative stake of 99.9% in RLBV. With the local Raiffeisen banks, RLBV serves just under 21,000 corporate customers and around 241,000 retail customers across 70 bank branches. According to the bank's own information, it is the market leader in Vorarlberg. RLBV operates as a business bank in the retail and corporate client business, while it also operates as a service bank for the Raiffeisen banks. Additional business areas include the Own Business segment (Treasury, Real Estate/Participations) as well as the RLBV audit association. In its function as lead institute, RLBV is responsible for liquidity balancing within the Group and also supports the financial and capital market business. Within RBGV, RLBV is responsible for regulatory coordination and compliance with the regulations (e.g. waiver to comply with the LCR and application for a Group-level waiver for the NSFR). As at FY 2021, RLBV had a market share of around 41% for savings deposits and 38% for loans in the Federal State of Vorarlberg. At 15.7% (FY 2021), the CET1 ratio of RLBV meets the regulatory requirements.

Balance Sheet

(EURm)	2019Y	2020Y	2021Y
Net Loans to Customers	1,659	1,648	1,757
Total Securities	1,772	1,879	1,749
Total Deposits	706	693	729
Tier 1 Common Capital	344	347	356
Total Assets	6,423	7,017	7,563
Total Risk-weighted Assets	2,305	2,211	2,272

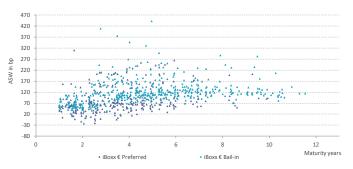
Redemption Profile



Income Statement

(EURm)	2019Y	2020Y	2021Y
Net Interest Income	45	39	53
Net Fee & Commission Inc.	10	10	12
Net Trading Income	1	1	1
Operating Expense	49	50	51
Credit Commit. Impairment	-	-	-
Pre-tax Profit	25	12	43

Senior Unsecured Bonds (EUR BMK)



Company Ratios

	2019Y	2020Y	2021Y
Net Interest Margin	0.72	0.60	0.76
ROAE	6.55	2.37	10.33
Cost-to-Income	66.24	68.81	59.06
Core Tier 1 Ratio	14.94	15.71	15.68

	2019Y	2020Y	2021Y
Liquidity Coverage Ratio	164.90	160.58	176.10
IFRS Tier 1 Leverage Ratio	5.39	4.96	4.73
NPL/ Loans at Amortised Cost	1.54	2.67	-
Reserves/Loans at Amort. Cost	1.21	1.81	-

Source: Bloomberg, S&P Global Market Intelligence, NORD/LB Markets Strategy & Floor Research; as of: 10.10.2022

Strengths / Opportunities

- Capitalisation
- Asset quality
- Access to the Raiffeisen sector

- Profitability (RBI share, equity participations)
- Funding profile
- Credit risk concentration





RLB Vorarlberg – Mortgage

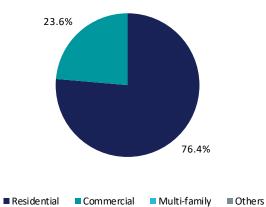
Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Cover Pool Data

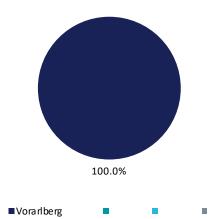
Cover pool volume (ELIRm)	2 120
Cover pool volume (EURm)	3,130
Amount outstanding (EURm)	2,656
-thereof ≥ EUR 500m	18.8%
Current OC (nominal)	17.9%
Committed OC	0.0%
Cover type	Mortgage
Main country	100% Austria
Main region	100% Vorarlberg
Number of loans	18,201
Number of borrowers	14,213
Avg. exposure to borrowers (EUR)	220,228
WAL (cover pool)	22.7y
WAL (covered bonds)	9.2y
Fixed interest (cover pool)	27.5%
Fixed interest (covered bonds)	74.8%
LTV (indexed)	n/a
LTV (unindexed)	54.4%
Loans in arrears	0.0%

Rating (Moody's)	Aaa
Rating (S&P)	-
Rating (Fitch)	-
Rating (DBRS)	-
TPI	Probable-High
TPI leeway	2
Collateral score	8.0%
RRL	-
JRL	-
Unused notches	-
AAA credit risk (%)	-
PCU	-
Recovery uplift	2
Outstanding ESG BMKs	No
LCR ELIGIBLE	Yes
LCR level (Bmk)	1
Risk weight	10%
Maturity structure (Bmk)	HB

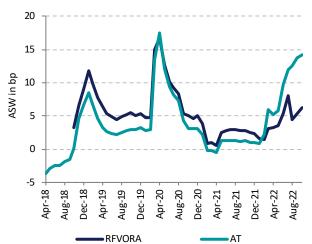
Borrower Types



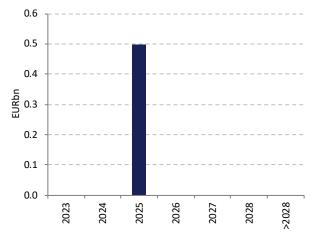
Regional Distribution



Spread Development



Redemption Profile (Bmk)



Source: Issuer, Rating agencies, Bloomberg, NORD/LB Markets Strategy & Floor Research



Austria

Raiffeisen Bank International

Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Ratings

	Rating	Outlook
Fitch	-	-
Moody's	A2	Stable
S&P	A-	Negative

Homepage

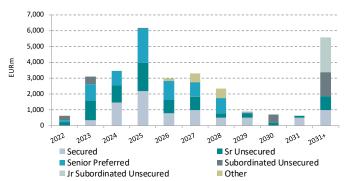
www.rbinternational.com

Raiffeisen Bank International AG (RBI) is a leading commercial and investment bank in Austria, headquartered in Vienna. The bank is listed on the Vienna stock exchange, where the eight Raiffeisen landesbanks in Austria have a share of around 59%, with the remaining 41% being held in free float. A total of 327 Raiffeisen banks are represented via the eight Raiffeisen landesbanks, with around 1,500 business branches and roughly 1.7 million members. Raiffeisenlandesbank NÖ-Wien holds the largest share in RBI, at 22.6%. Although RBI operates in 13 countries, it mainly focuses on the CEE region. It has a market position among the top five banks in eleven countries. Around 17.2 million customers are served by more than 44,300 employees (data as at H1 2022). In addition to a diverse range of typical banking services, RBI also offers products in segments such as leasing, asset management and M&A. These products are offered via a wide range of subsidiaries, including Raiffeisen-Leasing GmbH and Raiffeisen Factor GmbH AG. RBI reports in the following segments: Central Europe (share of pre-tax earnings in H1 2022: 12%), South-East Europe (16%), Eastern Europe (46%), Group Corporates & Markets (19%) and Corporate Center (7%). In 2021, the new protection system of the Raiffeisen banks was established. RBI is also part of this system, which safeguards the solvency and liquidity of the participating banks if such a need arises. The previous regional and federal system was merged into the new Raiffeisen protection scheme. As at H1 2022, the NPL ratio at RBI stood at 1.8%, the NPL coverage ratio amounted to 60.7% and the CET1 ratio totalled 13.4%.

Balance Sheet

(EURm)	2020Y	2021Y	2022H1
Net Loans to Customers	90,671	100,832	107,699
Total Securities	24,984	25,537	29,352
Total Deposits	102,112	115,153	131,283
Tier 1 Common Capital	10,762	11,812	14,620
Total Assets	165,959	192,101	214,200
Total Risk-weighted Assets	78,864	89,928	109,023

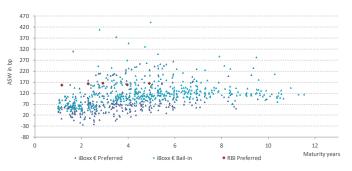
Redemption Profile



Income Statement

(EURm)	2020Y	2021Y	2022H1
Net Interest Income	3,121	3,327	2,199
Net Fee & Commission Inc.	1,684	1,985	1,565
Net Trading Income	78	47	261
Operating Expense	3,048	3,191	1,890
Credit Commit. Impairment	590	302	448
Pre-tax Profit	1,183	1,790	1,590

Senior Unsecured Bonds (EUR BMK)



Company Ratios

	2020Y	2021Y	2022H1
Net Interest Margin	2.00	1.89	2.33
ROAE	6.63	10.09	21.50
Cost-to-Income	61.16	61.02	46.84
Core Tier 1 Ratio	13.65	13.14	13.41

	2020Y	2021Y	2022H1
Liquidity Coverage Ratio	164.23	153.06	165.68
IFRS Tier 1 Leverage Ratio	6.61	6.25	7.04
NPL/ Loans at Amortised Cost	3.14	2.81	2.85
Reserves/Loans at Amort. Cost	2.75	2.48	2.71

Source: Bloomberg. S&P Global Market Intelligence. NORD/LB Markets Strategy & Floor Research; as of: 10.10.2022

Strengths / Opportunities

- Market position in AT, CEE and SEE
- Access to the Raiffeisen sector (central bank function)
- Liquidity

- Profitability
- Concentration risks in CEE region
- Asset quality

Raiffeisen Bank International – Mortgage

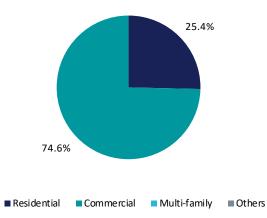
Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Cover Pool Data

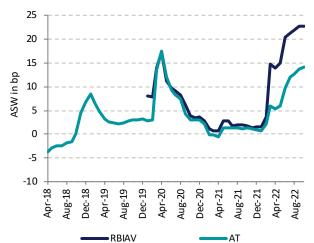
Cover pool volume (EURm)	4,071
Amount outstanding (EURm)	3,350
-thereof \geq EUR 500m	59.7%
Current OC (nominal)	21.5%
Committed OC	n/a
Cover type	Mortgage
Main country	57% Austria
Main region	36% Vienna
Number of loans	7,220
Number of borrowers	n/a
Avg. exposure to borrowers (EUR)	n/a
WAL (cover pool)	5.5v
WAL (covered bonds)	, 5.1y
Fixed interest (cover pool)	26.8%
Fixed interest (covered bonds)	44.8%
LTV (indexed)	n/a
LTV (unindexed)	n/a
Loans in arrears	0.0%

Rating (Moody's)	Aa1
Rating (S&P)	-
Rating (Fitch)	-
Rating (DBRS)	-
TPI	Probable-High
TPI leeway	3
Collateral score	23.1%
RRL	-
JRL	-
Unused notches	-
AAA credit risk (%)	-
PCU	-
Recovery uplift	-
Outstanding ESG BMKs	No
LCR ELIGIBLE	Yes
LCR level (Bmk)	1
Risk weight	10%
Maturity structure (Bmk)	SB

Borrower Types

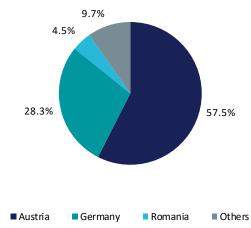


Spread Development

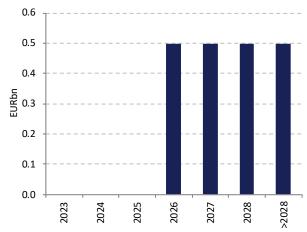


Source: Issuer, Rating agencies, Bloomberg, NORD/LB Markets Strategy & Floor Research

Regional Distribution



Redemption Profile (Bmk)









Austria

Raiffeisenverband Salzburg

Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Ratings			
	Rating	Outlook	
Fitch	-	-	
Moody's	A3	Stable	
S&P	-	-	i
Homono	~~		
Homepa	ge		

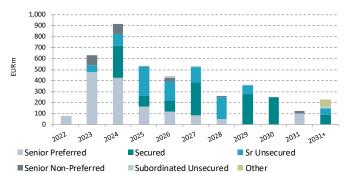
www.raiffeisen.at

Raiffeisenverband Salzburg eGen (RVS) is the lead institute of 36 Salzburg Raiffeisen banks and one of eight Raiffeisen landesbanks in Austria. A total of 36 Raiffeisen banks hold 90.6% of the shares of RVS. Structurally, RVS is divided into the segments Audit Association (audit including year-end audit of the member cooperatives), RVS Bank (banking business) and RVS Warehouse (local service provider for consumers and agribusinesses). The primary focus of the institute is on corporate customers, especially SMEs from the regions Salzburg and southern Bavaria. The bank offers its customers a broad product and service portfolio across 13 branches. In addition to standardised deposit and loan products, this also includes products and services from the following segments: Insurance, Financing, Leasing and Factoring. The most important segments as measured by the loan portfolio are Services (FY 2021: 28.3%), Employed persons (17.3%) and Tourism (13.1%). In FY 2021, the bank reduced its NPL ratio by 40 basis points to 1.4% (FY 2020: 1.8%). The funding structure of RVS comprises customer deposits (FY 2021: 34%), bank deposits (25%), deposits by Raiffeisen banks (23%) and own issues (19%). Secured issuances make up the largest share of own issues, at 59.0% (FY 2021). In May 2022, RVS placed its first covered bond in the sub-benchmark segment. The five-year Pfandbrief was issued with a volume of EUR 300m. The CET1 ratio rose by 90 basis points in FY 2021 to 14.3% (FY 2020: 13.4%).

Balance Sheet

(EURm)	2019Y	2020Y	2021Y
Net Loans to Customers	3,797	3,932	4,174
Total Securities	982	841	837
Total Deposits	2,919	2,981	3,107
Tier 1 Common Capital	606	620	662
Total Assets	7,747	9,108	9,699
Total Risk-weighted Assets	4,696	4,634	4,649

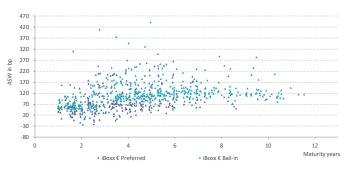
Redemption Profile



Income Statement (EURm)

	20191	20201	20211
Net Interest Income	77	65	83
Net Fee & Commission Inc.	37	38	39
Net Trading Income	3	5	3
Operating Expense	162	168	173
Credit Commit. Impairment	-	-	-
Pre-tax Profit	54	30	43

Senior Unsecured Bonds (EUR BMK)



Company Ratios

	2019Y	2020Y	2021Y
Net Interest Margin	1.09	0.84	0.96
ROAE	8.06	3.55	4.97
Cost-to-Income	76.15	73.84	73.20
Core Tier 1 Ratio	12.91	13.38	14.25

	2019Y	2020Y	2021Y
Liquidity Coverage Ratio	124.01	181.97	150.19
IFRS Tier 1 Leverage Ratio	7.82	6.81	6.83
NPL/ Loans at Amortised Cost	3.42	3.44	-
Reserves/Loans at Amort. Cost	2.13	2.45	-

Source: Bloomberg, S&P Global Market Intelligence, NORD/LB Markets Strategy & Floor Research; as of: 10.10.2022

Strengths / Opportunities

- Liquidity buffer
- Integration in the Raiffeisen Group
- Asset quality

- Equity investments (relative ratio to capital)
- Capitalisation
- Dependency on wholesale funding

Raiffeisenverband Salzburg – Mortgage

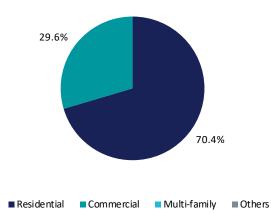
Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Cover Pool Data

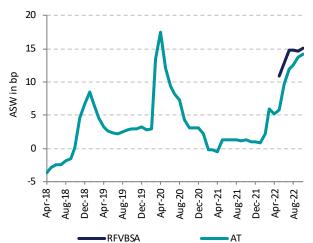
Cover pool volume (EURm)	1,766
Amount outstanding (EURm)	1,371
-thereof ≥ EUR 250m	21.9%
Current OC (nominal)	28.8%
Committed OC	n/a
Cover type	Mortgage
Main country	100% Austria
Main region	85% Salzburg
Number of loans	8,914
Number of borrowers	n/a
Avg. exposure to borrowers (EUR)	n/a
WAL (cover pool)	11.5y
WAL (covered bonds)	5.7y
Fixed interest (cover pool)	22.6%
Fixed interest (covered bonds)	30.7%
LTV (indexed)	n/a
LTV (unindexed)	51.6%
Loans in arrears	0.0%

Rating (Moody's)	Aaa
Rating (S&P)	-
Rating (Fitch)	-
Rating (DBRS)	-
TPI	Probable-High
TPI leeway	2
Collateral score	9.9%
RRL	-
JRL	-
Unused notches	-
AAA credit risk (%)	-
PCU	-
Recovery uplift	2
Outstanding ESG BMKs	No
LCR ELIGIBLE	Yes
LCR level (SBmk)	2A
Risk weight	10%
Maturity structure (SBmk)	HB

Borrower Types

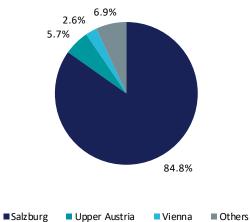


Spread Development

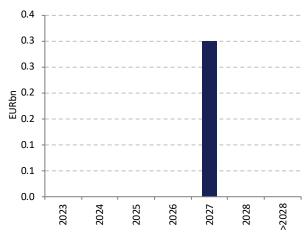


Source: Issuer, Rating agencies, Bloomberg, NORD/LB Markets Strategy & Floor Research

Regional Distribution



Redemption Profile (SBmk)









UniCredit Bank Austria

Austria 📃

Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Ratings

	Rating	Outlook
Fitch	-	-
Moody's*	Baa1	Negative
S&P	BBB+	Negative

Homepage

www.bankaustria.at

* Senior Unsecured

UniCredit Bank Austria AG (BA; brand name: Bank Austria) is one of the leading banks in Austria. It has been part of the Italian UniCredit Group (UC) since 2005. With total assets of EUR 946bn (as at H1 2022), UC is among the largest banks in the world and is considered a global systemically important bank (G-SIB) in line with the Financial Stability Board's definition. UC serves over 15 million customers around the world, of which 14 million are retail customers and 1 million are corporate customers. According to its own information, BA is the leading corporate customer bank in Austria and is also one of the largest retail banks. With around 4,500 employees managing a network of 107 branches, customers are offered a broad portfolio of banking and financial services such as corporate and investment banking, foreign trade financing, capital and money market services, private banking, asset management and leasing. In Austria, BA boasts high market shares in corporate and retail banking as well as in wealth management. As at December 2021, the market shares for loans and deposits stood at 13% and 12% respectively. BA divides its business into the following operating segments: Retail Banking, Corpoarte Banking and Corporate & Investment Banking. At 51% (H1 2022), the Corporate & Investment Banking segment generated the highest share of operating income. BA issues public and mortgagebacked Pfandbriefe (cover pool based exclusively in AT) as well as senior benchmarks and registered securities, among other products. The non-performing exposure amounted to 3.0%, while the CET1 ratio came in at 18.8% (data as at H1 2022 in each case).

Balance Sheet

(EURm)	2020Y	2021Y	2022H1
Net Loans to Customers	62,236	69,013	67,141
Total Securities	17,081	15,161	17,877
Total Deposits	61,497	64,643	62,448
Tier 1 Common Capital	6,324	6,097	6,250
Total Assets	118,510	118,404	123,182
Total Risk-weighted Assets	31,464	36,220	33,299

Redemption Profile

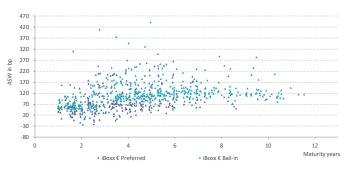


Income Statement (EURm)

(EURm)	2020Y	2021Y	2022H1
Net Interest Income	907	864	457
Net Fee & Commission Inc,	653	697	349
Net Trading Income	51	102	43
Operating Expense	1,334	1,578	662
Credit Commit, Impairment	398	166	-49
Pre-tax Profit	-32	93	317

- - - - -

Senior Unsecured Bonds (EUR BMK)



Company Ratios

	2020Y	2021Y	2022H1
Net Interest Margin	0.86	0.76	0.78
ROAE	0.18	1.21	6.34
Cost-to-Income	73.42	80.96	71.11
Core Tier 1 Ratio	20.10	16.83	18.77

	2020Y	2021Y	2022H1
Liquidity Coverage Ratio	192.15	199.93	-
IFRS Tier 1 Leverage Ratio	5.51	5.26	5.21
NPL/ Loans at Amortised Cost	3.50	2.94	2.99
Reserves/Loans at Amort. Cost	2.26	2.16	2.14

Source: Bloomberg, S&P Global Market Intelligence, NORD/LB Markets Strategy & Floor Research; as of: 10.10.2022

Strengths / Opportunities

- Position in domestic market (corporate banking)
- Funding profile (deposit basis)
- Earnings situation

- Interrelationship with UC (effects on loan portfolio)
 - Banking competition in AT
 - Concentration risks (loans, equity investments)

UniCredit Bank Austria – Mortgage

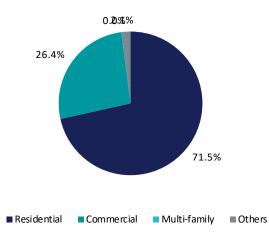
Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Cover Pool Data

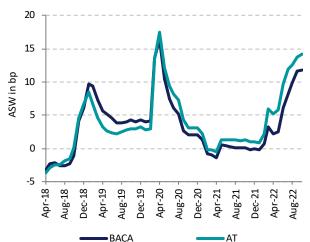
Cover pool volume (EURm)	16,777
	,
Amount outstanding (EURm)	8,667
-thereof ≥ EUR 500m	51.9%
Current OC (nominal)	93.6%
Committed OC	2.0%
Cover type	Mortgage
Main country	100% Austria
Main region	42% Vienna
Number of loans	56,222
Number of borrowers	n/a
Avg. exposure to borrowers (EUR)	n/a
WAL (cover pool)	10.1y
WAL (covered bonds)	4.0y
Fixed interest (cover pool)	37.1%
Fixed interest (covered bonds)	60.7%
LTV (indexed)	n/a
LTV (unindexed)	49.0%
Loans in arrears	0.0%
	0.070

Rating (S&P) Rating (Fitch) Rating (DBRS) TPI **Probable-High TPI** leeway 2 **Collateral score** 8.7% RRL . JRL Unused notches AAA credit risk (%) PCU Recovery uplift _ **Outstanding ESG BMKs** Yes LCR ELIGIBLE Yes LCR level (Bmk) 1 **Risk weight** 10% Maturity structure (Bmk) HB & SB

Borrower Types



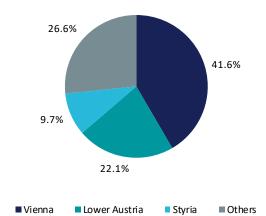
Spread Development



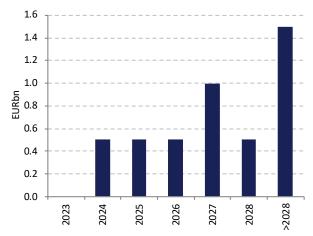
Source: Issuer, Rating agencies, Bloomberg, NORD/LB Markets Strategy & Floor Research

Regional Distribution

Rating (Moody's)



Redemption Profile (Bmk)







Aaa

Volksbank Wien

Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Ratings

	Rating	Outlook
Fitch	BBB+	Stable
Moody's*	Baa1	Positive
S&P	-	-

Homepage

www.volksbankwien.at

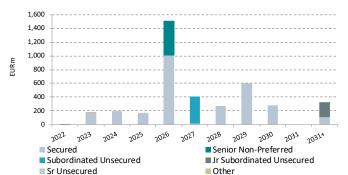
* LT Bank Deposit

Volksbank Wien AG (VBW) is the central organisation of the nine Austrian Volksbanks and is the largest regional Volksbank in terms of total assets. VBW is responsible for control and monitoring functions for the association of Volksbanks (VB-Verbund) as a whole. The association's member banks as well as shareholder and administrative cooperatives hold 75% of the shares, with the Austrian government holding a stake of 25% plus one share. SPARDA-Bank, which was taken over in 2017, remains active under the SPARDA brand within the Group structure. As at H1 2022, the VB-Verbund has 3,062 employees, who work across 240 branches. Reporting is conducted across the following segments: Retail (comprises retail customers, SMEs and commercial customers), ZO (Central Organisation; VBW's activities as the lead bank for the Group plus Treasury activities are bundled here) and Consolidation. The business model includes a focus on retail customers and SMEs. For example, 39% of the loan portfolio is attributable to Retail private, followed by Real estate with 38% and Corp/SME with 23% (H1 2022). The geographical focus is on Austria, where the lion's share of customer loans is granted, followed by Germany. Together with the regional Volksbanks and Österreichische Ärzte- und Apothekerbank, VBW has formed a joint liability association. Funding of the association is dominated by customer deposits (H1 2022: 80%). The efficiency programme Adler, which was launched at the end of 2018, envisages a reduction in the CIR from 85% to 60%, among other things. The measures were implemented at VB-Verbund level and were concluded ahead of schedule in H1 2022 due to a consistent implementation. The CET1 ratio totalled 16.4% in H1 2022.

Balance Sheet

(EURm)	2020Y	2021Y	2022H1
Net Loans to Customers	5,372	5,396	5,400
Total Securities	2,475	2,241	2,371
Total Deposits	6,637	6,922	6,579
Tier 1 Common Capital	656	648	642
Total Assets	14,281	16,925	16,517
Total Risk-weighted Assets	3,909	3,835	3,909

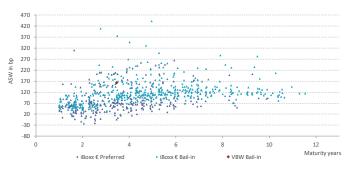
Redemption Profile



Income Statement

(EURm)	2020Y	2021Y	2022H1
Net Interest Income	116	126	56
Net Fee & Commission Inc,	57	59	31
Net Trading Income	-1	7	0
Operating Expense	206	211	107
Credit Commit, Impairment	-	-	-
Pre-tax Profit	50	112	49

Senior Unsecured Bonds (EUR BMK)



Company Ratios

	2020Y	2021Y	2022H1
Net Interest Margin	0.89	0.83	0.69
ROAE	3.42	11.47	8.94
Cost-to-Income	79.04	68.81	71.06
Core Tier 1 Ratio	16.78	16.89	16.41

2020Y	2021Y	2022H1
175.43	251.59	232.30
4.77	3.91	3.97
2.28	2.07	-
1.49	1.18	1.04
	175.43 4.77 2.28	175.43 251.59 4.77 3.91 2.28 2.07

Source: Bloomberg, S&P Global Market Intelligence, NORD/LB Markets Strategy & Floor Research; as of: 10.10.2022

Strengths / Opportunities

- Funding profile
- Problem loans ratio
- Capitalisation

- Scope for capital generation
- Concentration risks (property sector)
- SME portfolio of the association





Volksbank Wien – Mortgage

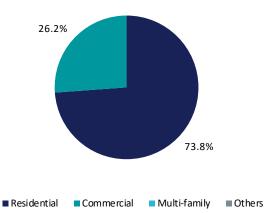
Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Cover Pool Data

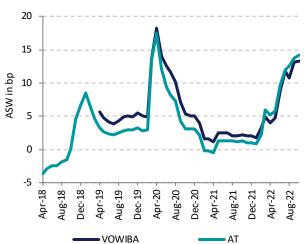
Cover pool volume (EURm)	5,022
Amount outstanding (EURm)	2,663
-thereof ≥ EUR 500m	37.6%
Current OC (nominal)	88.6%
Committed OC	n/a
Cover type	Mortgage
Main country	100% Austria
Main region	24% Lower Austria
Number of loans	37,658
Number of borrowers	31,515
Avg. exposure to borrowers (EUR)	159,364
WAL (cover pool)	18.9y
WAL (covered bonds)	4.9y
Fixed interest (cover pool)	54.7%
Fixed interest (covered bonds)	48.4%
LTV (indexed)	58.0%
LTV (unindexed)	57.9%
Loans in arrears	0.0%

Rating (Moody's)	Aaa
Rating (S&P)	-
Rating (Fitch)	-
Rating (DBRS)	-
TPI	Probable-High
TPI leeway	2
Collateral score	5.2%
RRL	-
JRL	-
Unused notches	-
AAA credit risk (%)	-
PCU	-
Recovery uplift	-
Outstanding ESG BMKs	No
LCR ELIGIBLE	Yes
LCR level (Bmk)	1
Risk weight	10%
Maturity structure (Bmk)	HB

Borrower Types

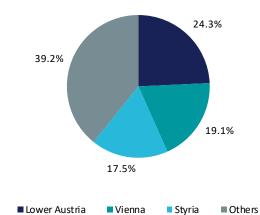


Spread Development

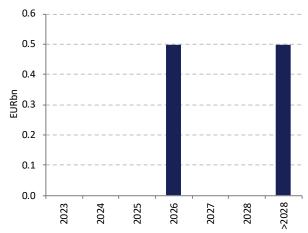


Source: Issuer, Rating agencies, Bloomberg, NORD/LB Markets Strategy & Floor Research

Regional Distribution



Redemption Profile (Bmk)



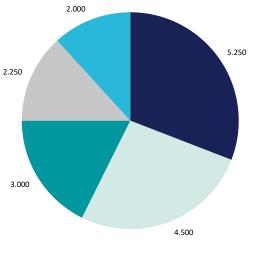


Market Overview Covered Bonds

Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

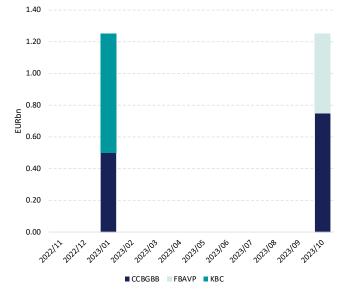
Cover Pool Volume	EUR 52.01bn	Outstanding volume (Bmk)	EUR 17.00bn
Amount outstanding	EUR 33.62bn	Number of benchmarks	25
Number of issuer	5	Outstanding ESG volume (Bmk)	-
No of cover pools	6	Number of ESG benchmarks	-
there of M / PS / others	5/1/0	Outstanding volume (SBmk)	-
Ratings (low / high)	AAA / AAA	Number of subbenchmarks	-
Best possible LCR level	Level 1	Maturity types	SB



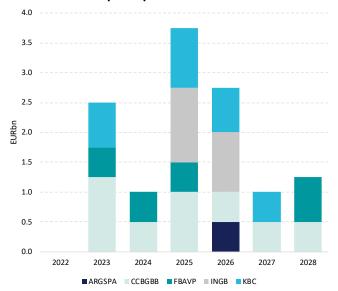


CCBGBB INGB KBC FBAVP ARGSPA

Benchmark redemption profile¹: 11/2022 - 10/2023

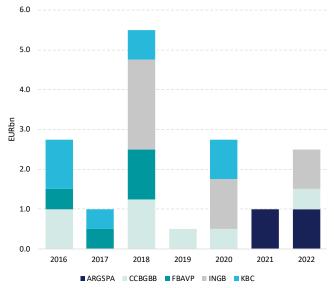


Benchmark redemption profile¹²



Source: Issuer, Rating agencies, Bloomberg, NORD/LB Markets Strategy & Floor Research; ¹ based on Bloomberg ticker; ² Redemptions 2022: 11/22 – 12/22

Benchmark issuance volume¹



Belgium

Belgium

Argenta Spaarbank

Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Ratings

	Rating	Outlook
Fitch	-	-
Moody's	-	-
S&P	А	Stable

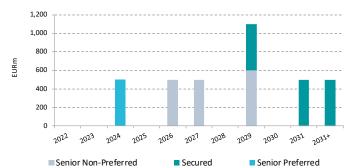
Homepage

https://www.argenta.eu/

Argenta Spaarbank N.V. is part of the Belgian Argenta Group (Argenta Bank- en Verzekeringsgroep N. V.; holding company) and offers retail banking services, primarily in Belgium and the Netherlands. Argenta Spaarbank also offers insurance services via Argenta Assuranties. The bank was founded in 1956 and operates 415 branches (FY 2021). According to information from the bank itself, Argenta Spaarbank is the fifth-largest bank in Belgium as measured by customer deposits. It serves more than 1.7 million customers via its very comprehensive branch network. The Argenta Group has two shareholders: Investar (holding company of the founding family; share of around 87%) and Argen-Co (via cooperative capital from employees and customers; share 13%) (FY 2021). Within the Argenta Group, Argenta Spaarbank is the unit responsible for capital market refinancing activities. In 2021, two covered bonds were issued for the first time in benchmark format following the implementation of diversification measures in the wholesale funding segment (share of 10.1% in FY 2021; retail funding share: 84%). The bank can also fall back on customer deposits in the amount of EUR 40.3bn (FY 2021). The largest share of the loan portfolio is attributable to mortgage loans in the Netherlands with a share of 50%, followed by Belgium at 46% (remaining 4% "other"). The NPL ratio for FY 2021 stood at 0.47%. As at the end of Q1 2022, the CET1 ratio was 20.6%, which is above the minimum requirement of 10.76%. The long-term target (LT target) for the CET1 ratio stands at >18%, while the liquidity coverage ratio amounts to 191% (LT Target: >137%) and the net stable funding ratio is 147% (LT Target: >132%).

Balance Sheet			
(EURm)	2020Y	2021Y	2022H1
Net Loans to Customers	33,882	36,620	38,272
Total Securities	8,159	7,805	9,339
Total Deposits	38,319	40,280	41,760
Tier 1 Common Capital	2,265	2,354	2,288
Total Assets	46,232	48,738	51,890
Total Risk-weighted Assets	9,712	10,907	10,205

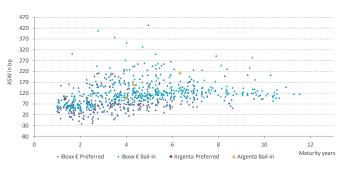
Redemption Profile



Income Statement

(EURm)	2020Y	2021Y	2022H1
Net Interest Income	569	579	253
Net Fee & Commission Inc,	-15	17	23
Net Trading Income	-1	-4	-6
Operating Expense	391	402	258
Credit Commit, Impairment	14	-2	5
Pre-tax Profit	195	250	62

Senior Unsecured Bonds (EUR BMK)



Company Ratios

	2020Y	2021Y	2022H1
Net Interest Margin	1.29	1.23	1.02
ROAE	6.18	7.72	3.13
Cost-to-Income	64.91	63.07	87.90
Core Tier 1 Ratio	23.32	21.59	22.42

	20209	20219	2022H1
Liquidity Coverage Ratio	158.82	164.27	197.26
IFRS Tier 1 Leverage Ratio	5.00	4.89	4.43
NPL/ Loans at Amortised Cost	0.51	0.47	0.44
Reserves/Loans at Amort. Cost	0.11	0.09	0.10

Source: Bloomberg, S&P Global Market Intelligence, NORD/LB Markets Strategy & Floor Research; as of: 11.10.2022

Strengths / Opportunities

- Capitalisation
- Asset quality
- Business focus (retail banking)

- Concentration risks
- Competiton
- Digitisation costs

Belgium

Argenta Spaarbank – Mortgage

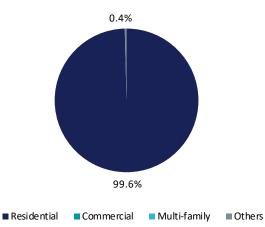
Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Cover Pool Data

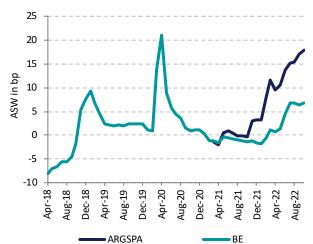
Cover pool volume (EURm)	1,848
Amount outstanding (EURm)	1,500
-thereof ≥ EUR 500m	133.3%
Current OC (nominal)	23.2%
Committed OC	5.0%
Cover type	Mortgage
Main country	100% Belgium
Main region	33% Antwerp
Number of loans	20,029
Number of borrowers	n/a
Avg. exposure to borrowers (EUR)	n/a
WAL (cover pool)	9.7y
WAL (covered bonds)	11.5y
Fixed interest (cover pool)	33.9%
Fixed interest (covered bonds)	100.0%
LTV (indexed)	58.2%
LTV (unindexed)	64.9%
Loans in arrears	0.0%

Rating (S&P)AAARating (Fitch)-Rating (DBRS)-TPI-TPI leeway-Collateral score-RRLa+JRLaaUnused notches3AAA credit risk (%)2.5PCU-Recovery uplift-Outstanding ESG BMKsNoLCR ELIGIBLEYesLCR level (Bmk)1Risk weight10%Maturity structure (Bmk)SB	Rating (Moody's)	-
Rating (DBRS)-TPI-TPI leeway-Collateral score-RRLa+JRLaaUnused notches3AAA credit risk (%)2.5PCU-Recovery uplift-Outstanding ESG BMKsNoLCR ELIGIBLEYesLCR level (Bmk)1Risk weight10%	Rating (S&P)	AAA
TPI-TPI leeway-Collateral score-RRLa+JRLaaUnused notches3AAA credit risk (%)2.5PCU-Recovery uplift-Outstanding ESG BMKsNoLCR ELIGIBLEYesLCR level (Bmk)1Risk weight10%	Rating (Fitch)	-
TPI leeway-Collateral score-RRLa+JRLaaUnused notches3AAA credit risk (%)2.5PCU-Recovery uplift-Outstanding ESG BMKsNoLCR ELIGIBLEYesLCR level (Bmk)1Risk weight10%	Rating (DBRS)	-
Collateral score-RRLa+JRLaaUnused notches3AAA credit risk (%)2.5PCU-Recovery uplift-Outstanding ESG BMKsNoLCR ELIGIBLEYesLCR level (Bmk)1Risk weight10%	TPI	-
RRLa+JRLaaUnused notches3AAA credit risk (%)2.5PCU-Recovery uplift-Outstanding ESG BMKsNoLCR ELIGIBLEYesLCR level (Bmk)1Risk weight10%	TPI leeway	-
JRLaaUnused notches3AAA credit risk (%)2.5PCU-Recovery uplift-Outstanding ESG BMKsNoLCR ELIGIBLEYesLCR level (Bmk)1Risk weight10%	Collateral score	-
Unused notches3AAA credit risk (%)2.5PCU-Recovery uplift-Outstanding ESG BMKsNoLCR ELIGIBLEYesLCR level (Bmk)1Risk weight10%	RRL	a+
AAA credit risk (%)2.5PCU-Recovery uplift-Outstanding ESG BMKsNoLCR ELIGIBLEYesLCR level (Bmk)1Risk weight10%	JRL	аа
PCU-Recovery uplift-Outstanding ESG BMKsNoLCR ELIGIBLEYesLCR level (Bmk)1Risk weight10%	Unused notches	3
Recovery uplift-Outstanding ESG BMKsNoLCR ELIGIBLEYesLCR level (Bmk)1Risk weight10%	AAA credit risk (%)	2.5
Outstanding ESG BMKsNoLCR ELIGIBLEYesLCR level (Bmk)1Risk weight10%	PCU	-
LCR ELIGIBLEYesLCR level (Bmk)1Risk weight10%	Recovery uplift	-
LCR level (Bmk)1Risk weight10%	Outstanding ESG BMKs	No
Risk weight 10%	LCR ELIGIBLE	Yes
0	LCR level (Bmk)	1
Maturity structure (Bmk) SB	Risk weight	10%
	Maturity structure (Bmk)	SB

Borrower Types

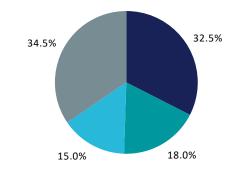


Spread Development



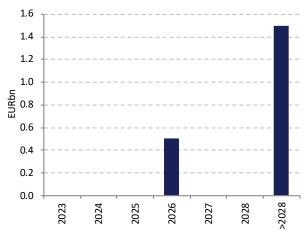
Source: Issuer, Rating agencies, Bloomberg, NORD/LB Markets Strategy & Floor Research

Regional Distribution



■ Antwerp ■ East Flanders ■ Flemish Brabant ■ Others

Redemption Profile (Bmk)



Belfius Bank

Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Ratings

	Rating	Outlook
Fitch	A-	Stable
Moody's*	A1	Stable
S&P	А	Stable

Homepage

www.belfius.be

*Senior Unsecured

Belfius Bank (Belfius) is a domestic systemically important banking (D-SIB; additional capital buffer of 1.5%) and insurance group. Since October 2011, it has been wholly owned by the Belgian state. The state is seeking to partially re-privatise the bank in the mediumterm. According to information from Belfius itself, the bank is the second-largest retail bank in Belgium and serves 3.7 million customers, of which approximately 350,000 are corporate customers. Around 30% of the total Belgian population are Belfius customers. Moreover, market penetration in the public sector amounts to almost 100%. The Group includes seven important, wholly owned subsidiaries (Belfius Insurance, Crefius, Belfius Auto Lease, Belfius Lease, Belfius Lease Services, Belfius Investment Partners and Belfius Commercial Finance). Belfius boasts a diversified income profile from the deposit, investment and insurance businesses. The lending business comprises retail customers (primarily mortgages), SMEs, other corporate customers as well as public institutions and social services. Belfius is among the largest banks in Belgium by market share in various areas. Its segments are divided into Individuals, Entrepreneurs, Enterprises & Public as well as Group Center, with the latter largely focusing on securities and derivative portfolio management. The CET1 ratio totalled 16.4% as at year-end 2021, while the LCR amounted to 195% (average over the past twelve months). Since June 2021 and as part of its sustainability strategy, funding at Belfius has been supplemented by issuances in ESG formats, including an inaugural issuance of a senior non-preferred green bond in the amount of EUR 500 million.

Balance Sheet			
(EURm)	2020Y	2021Y	2022H1
Net Loans to Customers	98,108	102,679	107,518
Total Securities	49,482	44,002	36,485
Total Deposits	95,338	104,404	108,873
Tier 1 Common Capital	10,150	10,658	10,527
Total Assets	187,991	192,151	199,768
Total Risk-weighted Assets	59 <i>,</i> 309	65,095	63,160

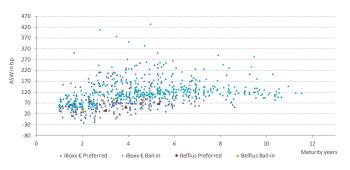
Redemption Profile



Income Statement

(EURm)	2020Y	2021Y	2022H1
Net Interest Income	1,992	2,001	976
Net Fee & Commission Inc,	641	758	393
Net Trading Income	37	25	28
Operating Expense	1,489	1,500	776
Credit Commit, Impairment	453	-1	-13
Pre-tax Profit	679	1,226	545

Senior Unsecured Bonds (EUR BMK)



Company Ratios

	2020Y	2021Y	2022H1
Net Interest Margin	1.12	1.07	1.01
ROAE	5.01	8.42	7.52
Cost-to-Income	56.44	55.03	59.33
Core Tier 1 Ratio	17.11	16.37	16.67

	2020Y	2021Y	2022H1
Liquidity Coverage Ratio	159.57	194.42	182.16
IFRS Tier 1 Leverage Ratio	6.01	6.00	5.50
NPL/ Loans at Amortised Cost	2.06	1.98	1.90
Reserves/Loans at Amort. Cost	1.85	1.71	1.61

Source: Bloomberg, S&P Global Market Intelligence, NORD/LB Markets Strategy & Floor Research; as of: 11.10.2022

Strengths / Opportunities

- Focus on low-risk private mortgage business
- Capitalisation
- Funding structure

- Profitability
- Geographical risk concentration
- Market risk fluctuations





Belfius Bank – Mortgage

Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Cover Pool Data

Borrower Types

Cover pool volume (EURm)	11,553
Amount outstanding (EURm)	9,492
-thereof ≥ EUR 500m	44.8%
Current OC (nominal)	21.7%
Committed OC	n/a
Cover type	Mortgage
Main country	100% Belgium
Main region	15% Antwerp
Number of loans	207,209
Number of borrowers	123,830
Avg. exposure to borrowers (EUR)	93,300
WAL (cover pool)	13.0y
WAL (covered bonds)	6.8y
Fixed interest (cover pool)	87.5%
Fixed interest (covered bonds)	100.0%
LTV (indexed)	43.3%
LTV (unindexed)	53.0%
Loans in arrears	0.0%

1.4%

Regional	Distribution	

Maturity structure (Bmk)

Rating (Moody's) Rating (S&P)

Rating (Fitch)

Rating (DBRS)

Unused notches

Recovery uplift **Outstanding ESG BMKs**

LCR level (Bmk)

LCR ELIGIBLE

Risk weight

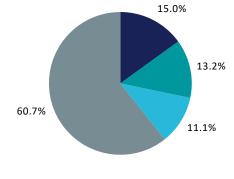
AAA credit risk (%)

TPI **TPI** leeway Collateral score

RRL

JRL

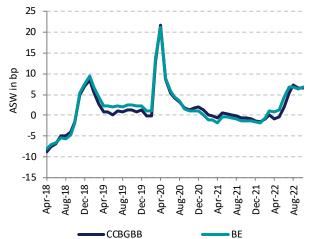
PCU



■ Antwerp ■ East Flanders ■ Flemish Brabant ■ Others

Spread Development

Residential



98.6%

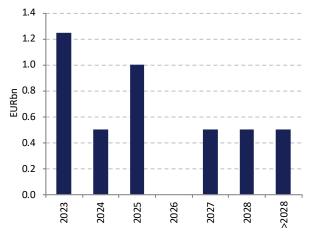
Multi-family

Others

Commercial

Source: Issuer, Rating agencies, Bloomberg, NORD/LB Markets Strategy & Floor Research

Redemption Profile (Bmk)



Belgium

NORD/LB

AAA

AAA

aa-

aa

4

5 2

2.5

No

Yes

10%

SB

1



Belgium

Belfius Bank – Public Sector

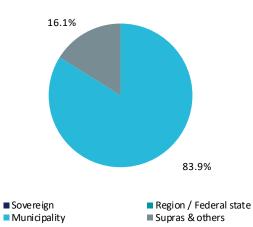
Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Cover Pool Data

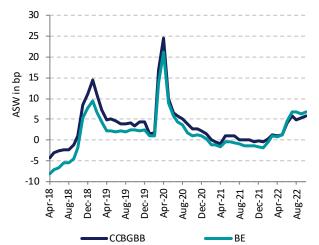
Cover pool volume (EURm)	3,375
Amount outstanding (EURm)	1,211
-thereof ≥ EUR 500m	82.6%
Current OC (nominal)	178.7%
Committed OC	5.0%
Cover type	Public Sector
Main country	100% Belgium
Main region	14% Brussels
Number of loans	19,335
Number of borrowers	644
Avg. exposure to borrowers (EUR)	5,240,528
WAL (cover pool)	11.5y
WAL (covered bonds)	7.1y
Fixed interest (cover pool)	88.8%
Fixed interest (covered bonds)	100.0%
LTV (indexed)	-
LTV (unindexed)	-
Loans in arrears	0.0%

Rating (Moody's)	Aaa
Rating (S&P)	AAA
Rating (Fitch)	-
Rating (DBRS)	-
TPI	Probable-High
TPI leeway	4
Collateral score	6.9%
RRL	aa-
JRL	аа
Unused notches	3
AAA credit risk (%)	2.5
PCU	-
Recovery uplift	2
Outstanding ESG BMKs	No
LCR ELIGIBLE	Yes
LCR level (Bmk)	1
Risk weight	10%
Maturity structure (Bmk)	SB

Borrower Types

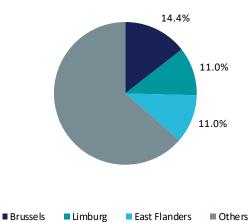


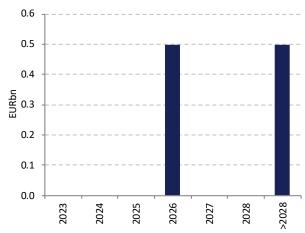
Spread Development



Source: Issuer, Rating agencies, Bloomberg, NORD/LB Markets Strategy & Floor Research

Regional Distribution





BNP Paribas Fortis

Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Ratings

-	Rating	Outlook
Fitch	A+	Stable
Moody's*	A2	Stable
S&P	A+	Stable

Homepage

www.bnpparibasfortis.com

*Senior Unsecured

BNP Paribas Fortis SA (BNPPF), headquartered in Brussels, employs approximately 11,750 employees in Belgium and a further 21,740 abroad. It was established from Fortis Bank Belgium SA, which in turn was taken over by the Belgium government in the wake of the financial crisis in 2008. It has traded under its present name since 2009 and is wholly owned by the French bank BNP Paribas SA, one of the largest financial groups in Europe (global systemically important bank [G-SIB] with additional capital buffer of 2.0%). BNPPF covers both the retail banking and corporate & institutional banking activities of the BNP Group in Belgium. The business is divided into the following segments: Banking Activities in Belgium, Banking Activities in Luxembourg, Banking Activities in Turkey, Other Domestic Markets and Other. The business focus of BNPPF is on retail and corporate banking in Belgium, where it serves 3.4 million retail customers in 386 branches and 16 entrepreneur centres. BNPPF has a strong market position for retail products. Following a digitalisation project, BNPPF is also implementing an expanded digital offering. The focus here is, for example, on its digital bank "Hello Bank!". BNPPF is represented in the mobility and vehicle leasing segment by its subsidiary Arval, which has a market-leading position in Europe. In 2020, Arval was active in 30 countries with approximately 7,500 employees. In March 2021, Arval Mobility Consulting was founded as a service provider in the energy transition segment. Arval has set itself the goal of amassing a fleet of 700,000 electric leasing vehicles by 2025 and in so doing become a leading supplier of sustainable mobility solutions.

Income Statement

Net Interest Income

Net Trading Income

Operating Expense

Pre-tax Profit

470 420

370 320

270 **ASW in bp**

220

170 120

> 70 20

Net Fee & Commission Inc,

Credit Commit, Impairment

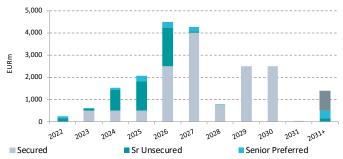
Senior Unsecured Bonds (EUR BMK)

(EURm)

Balance Sheet

(EURm)	2020Y	2021Y	2022H1
Net Loans to Customers	188,846	194,170	212,534
Total Securities	46,774	36,933	37,121
Total Deposits	193,770	199,037	216,029
Tier 1 Common Capital	21,504	21,704	21,729
Total Assets	335,135	341,648	364,076
Total Risk-weighted Assets	135,506	120,884	125,600

Redemption Profile



Ir Subordinated Unsecured Subordinated Unsecured

Company Ratios

	2020Y	2021Y	2022H1	
Net Interest Margin	1.68	1.58	1.56	Liquidity
ROAE	7.91	10.03	12.06	IFRS Tie
Cost-to-Income	56.07	52.31	53.31	NPL/ Lo
Core Tier 1 Ratio	15.87	17.95	17.30	Reserve

-30						
-80						
	0	2	4	6	8	10
		 iBox 	x€ Preferred		 iBoxx € Bail-in 	

	2020Y	2021Y	2022H1
Liquidity Coverage Ratio	191.00	192.00	-
IFRS Tier 1 Leverage Ratio	6.78	6.56	-
NPL/ Loans at Amortised Cost	-	-	-
Reserves/Loans at Amort. Cost	1.60	1.51	1.38

2020Y

4,752

1,274

4.542

2,883

182

662

2022H1

2,424

737

230

126

2.657

2,460

Maturity years

2021Y

4,694

1,395

4,577

3,813

357

214

Source: Bloomberg, S&P Global Market Intelligence, NORD/LB Markets Strategy & Floor Research; as of: 11.10.2022

Strengths / Opportunities

- Core unit of the Group
- Capitalisation
- Focus: private mortgage loans / public sector

Risks / Weaknesses

- Dependency on BNP's Group strategy
- Profitability
- Low-margin public finance business

Belgium

Belgium

BNP Paribas Fortis – Mortgage

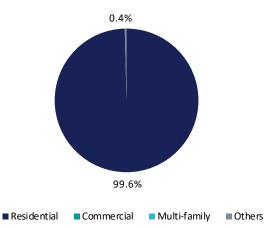
Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Cover Pool Data

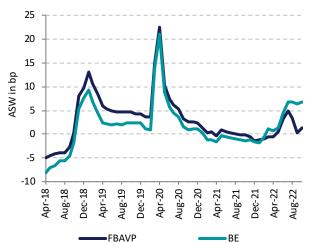
Cover pool volume (EURm)	2,951
Amount outstanding (EURm)	2,250
-thereof ≥ EUR 500m	100.0%
Current OC (nominal)	31.2%
Committed OC	5.0%
Cover type	Mortgage
Main country	100% Belgium
Main region	17% Antwerp
Number of loans	42,987
Number of borrowers	24,157
Avg. exposure to borrowers (EUR)	122,167
WAL (cover pool)	7.3у
WAL (covered bonds)	3.3y
Fixed interest (cover pool)	93.3%
Fixed interest (covered bonds)	100.0%
LTV (indexed)	52.2%
LTV (unindexed)	57.0%
Loans in arrears	0.1%

Rating (Moody's)	Aaa
Rating (S&P)	AAA
Rating (Fitch)	-
Rating (DBRS)	-
TPI	Probable-High
TPI leeway	4
Collateral score	5.0%
RRL	аа
JRL	аа
Unused notches	4
AAA credit risk (%)	2.5
PCU	-
Recovery uplift	-
Outstanding ESG BMKs	No
LCR ELIGIBLE	Yes
LCR level (Bmk)	1
Risk weight	10%
Maturity structure (Bmk)	SB

Borrower Types

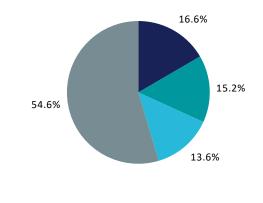


Spread Development

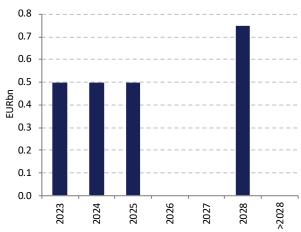


Source: Issuer, Rating agencies, Bloomberg, NORD/LB Markets Strategy & Floor Research

Regional Distribution



■ Antwerp ■ East Flanders ■ Flemish Brabant ■ Others



ING Belgium

Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Ratings

	Rating	Outlook
Fitch	AA-	Stable
Moody's	A1	Stable
S&P	-	-

Homepage

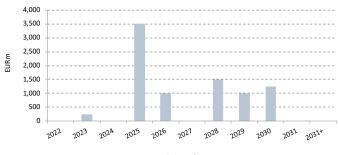
www.ing.be

Balance Sheet

(EURm)	2019Y	2020Y	2021Y
Net Loans to Customers	114,328	102,392	105,266
Total Securities	22,041	23,464	21,294
Total Deposits	107,387	109,052	109,178
Tier 1 Common Capital	9,736	8,785	9,116
Total Assets	160,832	162,258	161,757
Total Risk-weighted Assets	66,006	57,811	54,024

2021.

Redemption Profile



Secured

Income Statement

ING Belgium SA/NV (headquarter: Brussel) operates as a universal bank and is a wholly

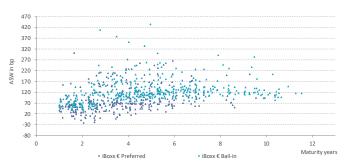
owned subsidiary of the Dutch ING Bank (ING: global systemically important bank [G-SIB]). It therefore forms part of the ING Group. It is one of the four largest banks in Belgium and ranks there as a domestic systemically important bank (D-SIB). The bank offers a number of financial products and services on both the domestic market and in Luxembourg. ING Belgium focuses on three segments: Retail Banking, Business Banking and Wholesale Banking. It is an important strategic unit within the ING Group. Although ING Bank has

provided neither a letter of comfort (LoC) nor implemented a loss absorption mechanism,

due to the high level of relevance of ING Belgium within the Group, support from the parent company is likely. The loan portfolio amounts to EUR 157bn (FY 2021), of which the largest shares are attributable to Belgium (72%), Luxembourg (12%), the Netherlands (4%) and the rest of Europe (9%). The breakdown of pre-tax earnings between the retail and wholesale segments is relatively even at 46% and 52% respectively. Against the backdrop of its 150 years of business, ING Belgium has formulated a new strategy ("Route 24"), which in essence focuses on digitisation (strengthening its online and mobile banking presence as well as more targeted consultations in branches and "Client Houses") and streamlining the organisational structure. One result of this is that in 2021, the number of mobile banking users increased by 13%. Just under 70% of all Belgian customers overall already use the bank's online banking services. As at FY 2021, the CET1 ratio stood at 16.9% and the leverage ratio at 7.16%. ING joined the Net Zero Banking Alliance in August

(EURm)	2019Y	2020Y	2021Y
Net Interest Income	2,363	2,080	2,066
Net Fee & Commission Inc,	574	526	650
Net Trading Income	93	117	227
Operating Expense	1,961	1,946	1,872
Credit Commit, Impairment	278	589	184
Pre-tax Profit	970	268	948

Senior Unsecured Bonds (EUR BMK)



Company Ratios

	2019Y	2020Y	2021Y		2019Y	2020Y	2021Y
Net Interest Margin	1.52	1.30	1.29	Liquidity Coverage Ratio	119.12	200.44	161.76
ROAE	7.03	1.77	6.99	IFRS Tier 1 Leverage Ratio	6.44	5.78	5.93
Cost-to-Income	61.02	69.13	61.98	NPL/ Loans at Amortised Cost	2.95	3.96	3.27
Core Tier 1 Ratio	14.75	15.20	16.87	Reserves/Loans at Amort. Cost	0.79	1.19	1.13

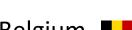
Source: Bloomberg, S&P Global Market Intelligence, NORD/LB Markets Strategy & Floor Research; as of: 11.10.2022

Strengths / Opportunities

- Market position
- Capitalisation

Risks / Weaknesses

- Profitability
- Restructuring





Belgium

Belgium

ING Belgium – Mortgage

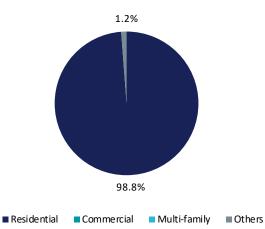
Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Cover Pool Data

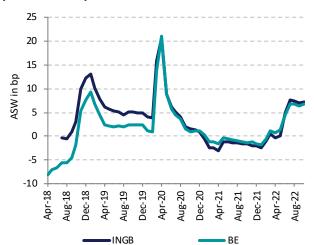
Cover pool volume (EURm)	15,650
Amount outstanding (EURm) -thereof ≥ EUR 500m	8,500 52.9%
Current OC (nominal)	84.1%
Committed OC	5.0%
Cover type	Mortgage
Main country	100% Belgium
Main region	55% Flanders
Number of loans	104,376
Number of borrowers	90,615
Avg. exposure to borrowers (EUR)	172,712
WAL (cover pool)	6.4y
WAL (covered bonds)	4.7y
Fixed interest (cover pool)	92.0%
Fixed interest (covered bonds)	100.0%
LTV (indexed)	46.5%
LTV (unindexed)	49.5%
Loans in arrears	0.0%

Rating (Moody's)	Aaa
Rating (S&P)	-
Rating (Fitch)	AAA
Rating (DBRS)	-
TPI	Probable-High
TPI leeway	4
Collateral score	5.0%
RRL	-
JRL	-
Unused notches	-
AAA credit risk (%)	-
PCU	5
Recovery uplift	-
Outstanding ESG BMKs	No
LCR ELIGIBLE	Yes
LCR level (Bmk)	1
Risk weight	10%
Maturity structure (Bmk)	SB

Borrower Types

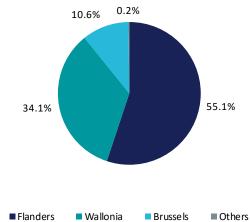


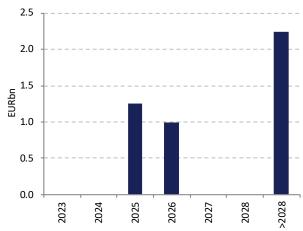
Spread Development



Source: Issuer, Rating agencies, Bloomberg, NORD/LB Markets Strategy & Floor Research

Regional Distribution





KBC Bank

Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Ratings

0		
	Rating	Outlook
Fitch	A+	Stable
Moody's*	A2	Positive
S&P	A+	Stable
Homepa	ge	

.....

www.kbc.com

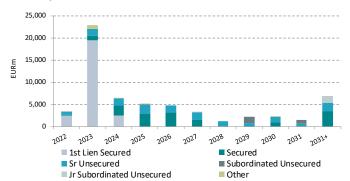
*LT Bank Deposit

KBC Bank NV (KBC) is the banking arm of KBC Group NV, to which KBC Insurance NV also belongs. The KBC Group is listed on the Brussel stock exchange. Its largest shareholders are KBC Ancora (18.6%: cooperative investment company) and MRBB (11.5%: Belgian farmers union group) per august 2022. KBC is one of the leading banking groups in Belgium and is a domestic systemically important bank (D-SIB). The KBC Group operates over 1,200 banking branches, where its 40,000 employees serve around 12 million customers. According to its own information, KBC has a market share of around 19% for banking products and 28% for investment funds as at FY 2021. The group is represented on the market for banking products in the Czech Republic via Ceskoslovenská Obchodní Banka (CSOB) with a share of 20%. KBC operates as a multi-channel bank, focusing on retail and private banking clients in addition to SMEs and medium-sized clients. Its geographic focus is on the core markets Belgium, Bulgaria, Czech Republic, Hungary, Slovakia and Ireland. The Group reports across the segments Belgium, Czech Republic, International Markets and Group Center. With a share of 53% (Q1 2022), the significance of the Belgian domestic market is clear from the geographical breakdown of the loan portfolio. The CET1 ratio of 15.3% (fully-loaded, Q1 2022) stood above the required regulatory minimum (10.9%). The LCR and NSFR also fulfil the regulatory requirements at 162% and 149% respectively (Q1/2022). Thanks to an extensive branch network, KBC primarily turns to deposits from private individuals and SMEs (just under 67% in Q1 2022) in terms of its refinancing activities.

Balance Sheet

(EURm)	2019Y	2020Y	2021Y
Net Loans to Customers	154,729	158,075	158,113
Total Securities	53,133	61,170	54,828
Total Deposits	174,314	191,629	201,026
Tier 1 Common Capital	13,204	14,085	14,915
Total Assets	253,917	284,399	302,991
Total Risk-weighted Assets	89,838	92,903	95,120

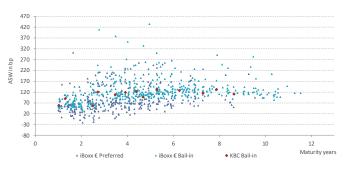
Redemption Profile



Income Statement

(EURm)	2019Y	2020Y	2021Y
Net Interest Income	4,153	4,015	4,054
Net Fee & Commission Inc,	2,085	1,975	2,210
Net Trading Income	99	50	46
Operating Expense	3,797	3,809	3,905
Credit Commit, Impairment	203	1,069	-330
Pre-tax Profit	2,541	1,188	2,816

Senior Unsecured Bonds (EUR BMK)



Company Ratios

	2019Y	2020Y	2021Y
Net Interest Margin	1.70	1.53	1.44
ROAE	12.27	5.72	12.34
Cost-to-Income	58.57	62.12	60.80
Core Tier 1 Ratio	14.70	15.16	15.68

	2019Y	2020Y	2021Y
Liquidity Coverage Ratio	137.62	146.88	166.12
IFRS Tier 1 Leverage Ratio	5.36	5.10	5.04
NPL/ Loans at Amortised Cost	3.87	3.65	3.09
Reserves/Loans at Amort. Cost	1.81	2.29	1.61

Source: Bloomberg, S&P Global Market Intelligence, NORD/LB Markets Strategy & Floor Research; as of: 11.10.2022

Strengths / Opportunities

- Market position (nationally and in CZ)
- Capitalisation
- Earning power

Risks / Weaknesses

- Operational risk from acquisitions in Bulgaria
- Exposure in CEE, IE and HU
- Risk concentration (SMEs)



Belgium

NORD/LB

KBC Bank – Mortgage

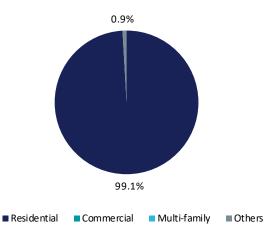
Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Cover Pool Data

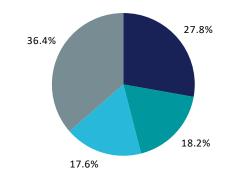
Cover pool volume (EURm)	16,630
Amount outstanding (EURm)	10,670
-thereof ≥ EUR 500m	28.1%
Current OC (nominal)	55.9%
Committed OC	10.0%
Cover type	Mortgage
Main country	100% Belgium
Main region	28% Antwerp
Number of loans	213,219
Number of borrowers	138,622
Avg. exposure to borrowers (EUR)	119,966
WAL (cover pool)	n/a
WAL (covered bonds)	n/a
Fixed interest (cover pool)	100.0%
Fixed interest (covered bonds)	80.5%
LTV (indexed)	62.3%
LTV (unindexed)	n/a
Loans in arrears	0.1%

Rating (Moody's)	Aaa
Rating (S&P)	-
Rating (Fitch)	AAA
Rating (DBRS)	-
TPI	Probable-High
TPI leeway	4
Collateral score	5.9%
RRL	-
JRL	-
Unused notches	-
AAA credit risk (%)	-
PCU	5
Recovery uplift	-
Outstanding ESG BMKs	No
LCR ELIGIBLE	Yes
LCR level (Bmk)	1
Risk weight	10%
Maturity structure (Bmk)	SB

Borrower Types

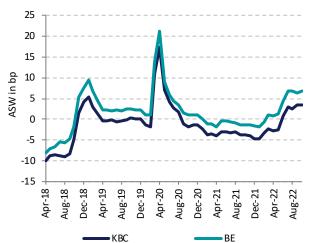


Regional Distribution

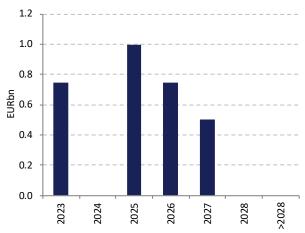


■ Antwerp ■ East Flanders ■ Flemish Brabant ■ Others

Spread Development



Redemption Profile (Bmk)



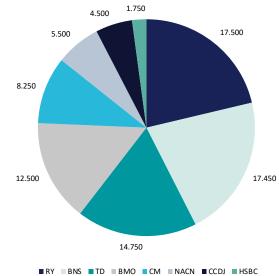
Source: Issuer, Rating agencies, Bloomberg, NORD/LB Markets Strategy & Floor Research



Market Overview Covered Bonds

Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Cover Pool Volume	EUR 268.15bn	Outstanding volume (Bmk)	EUR 82.20bn
Amount outstanding	EUR 172.43bn	Number of benchmarks	63
Number of issuer	9	Outstanding ESG volume (Bmk)	-
No of cover pools	9	Number of ESG benchmarks	-
there of M / PS / others	9/0/0	Outstanding volume (SBmk)	EUR 0.90bn
Ratings (low / high)	AAA / AAA	Number of subbenchmarks	3
Best possible LCR level	Level 2A	Maturity types	SB

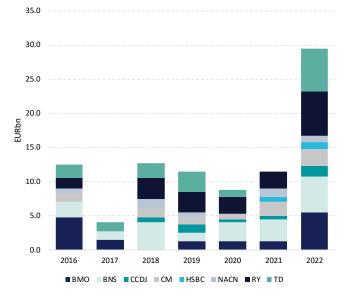


Outstanding benchmark volume¹ (EURbn)

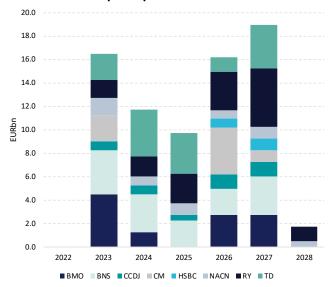
Benchmark redemption profile¹: 11/2022 - 10/2023

4.50 4.00 3.50 3.00 2.50 ENRPU 2.00 1.50 1.00 0.50 0.00 2022/12 2023/09 2023/10 2022/11 2023/01 2023/02 2023/03 2023/05 2023/04 2023/07 2023/06 2023/08 BMO BNS CCDJ CM NACN RY TD

Benchmark issuance volume¹



Benchmark redemption profile¹²



Source: Issuer, Rating agencies, Bloomberg, NORD/LB Markets Strategy & Floor Research; ¹ based on Bloomberg ticker; ² Redemptions 2022: 11/22 – 12/22

Canada 时

Canada

Bank of Montreal

Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Ratings

-		
	Rating	Outlook
Fitch	AA-	Negative
Moody's	Aa2	Stable
S&P	A+	Stable

Homepage

www.bmo.com

Bank of Montreal (BMO) is Canada's oldest bank. In terms of assets, BMO is one of the four largest banks in Canada and is the eighth largest bank across North America as a whole. It has been classified as a domestic systemically important bank (D-SIB). Its geographical focus is on North America. BMO offers a broad product palette, ranging from retail and commercial banking to asset management, all the way through to investment banking and the insurance business. With over 1,400 branches and more than 43,800 employees (FY 2021), BMO serves in excess of 12 million customers worldwide. Outside of North America, BMO operates in the areas of Capital Markets and Asset Management in select markets within Europe and the Asia-Pacific region. Its activities are divided into the core segments Canadian Personal and Commercial Banking P&C, BMO Capital Markets, US P&C, and BMO Wealth Management. The Corporate Services segment is additionally managed for Group-wide tasks and units. At the end of December 2021, BMO announced that it was to acquire Bank of the West (BW) in the USA (purchase price: USD 16.3bn; assets: USD 95bn; loans: USD 58bn; deposits: USD 80bn; customers: 1.8 million; 514 branches, focus: commercial and wealth). The share of mortgages in the loan portfolio amounted to 27% (pro forma; H1 2022). Corporate loans accounted for 44%, followed by consumer loans at 19% and commercial property financing at 10%. As at the end of the financial year (30 September), the CET1 ratio stood at 13.7% (FY 2021). As at H1 2022, this stood at 16.0% (capital increase in March 2022: USD 3.1bn). Following the conclusion of the takeover bid for Bank of the West, the ratio fell to approximately 15.1%.

Income Statement

Net Interest Income

Net Trading Income

Operating Expense

Net Fee & Commission Inc.

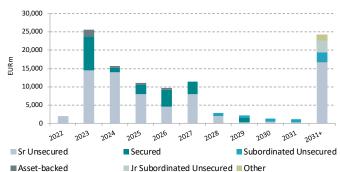
Credit Commit. Impairment

(EURm)

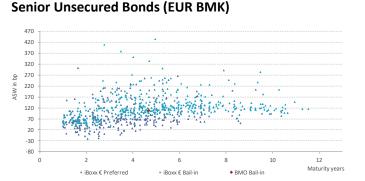
Balance Sheet

(EURm)	2020Y	2021Y	2022Q3
Net Loans to Customers	288,570	319,754	400,167
Total Securities	246,276	262,019	315,263
Total Deposits	399,953	459,673	537,628
Tier 1 Common Capital	25,844	31,033	42,427
Total Assets	612,148	689,261	817,220
Total Risk-weighted Assets	217,067	226,993	269,040

Redemption Profile



Pre-tax Profit 4,194



2020Y

9,230

5,420

9,356

1,940

177

2021Y

9,533

6.116

9,752

6,834

703

18

2022Q3

3,124

1,525

2,805

1,259

106

94

Company Ratios

	2020Y	2021Y	2022Q3
Net Interest Margin	1.58	1.53	1.66
ROAE	9.45	13.70	8.24
Cost-to-Income	60.32	56.83	56.48
Core Tier 1 Ratio	11.91	13.67	15.77

	2020Y	2021Y	2022Q3
Liquidity Coverage Ratio	131.06	124.62	129.13
IFRS Tier 1 Leverage Ratio	4.40	4.68	5.45
Gr. Imp. Loans/ Loans at Am. Cost	-	-	-
Reserves/Loans at Amort. Cost	0.74	0.56	0.46

Source: Bloomberg, S&P Global Market Intelligence, NORD/LB Markets Strategy & Floor Research; as of: 11.10.2022

Strengths / Opportunities

- Market position in North America (US expansion)
- Earnings situation in Canadian business
- Liquidity

- Private household debt level in Canada
- Dependency on wholesale funding
- Competition in US banking business

Canada 🛃

Bank of Montreal – Mortgage

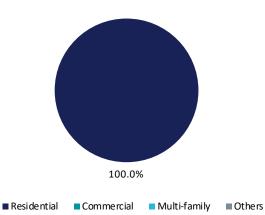
Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Cover Pool Data

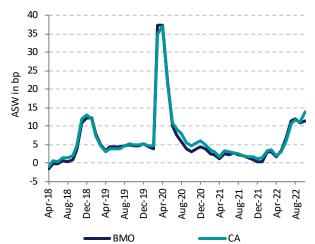
Cover pool volume (EURm)	29,955
Amount outstanding (EURm)	23,880
-thereof ≥ EUR 500m	52.3%
Current OC (nominal)	25.4%
Committed OC	5.3%
Cover type	Mortgage
Main country	100% Canada
Main region	53% Ontario
Number of loans	130,599
Number of borrowers	n/a
Avg. exposure to borrowers (EUR)	n/a
WAL (cover pool)	2.8y
WAL (covered bonds)	2.5y
Fixed interest (cover pool)	68.8%
Fixed interest (covered bonds)	70.1%
LTV (indexed)	44.3%
LTV (unindexed)	n/a
Loans in arrears	0.1%

Rating (Moody's)	Aaa
Rating (S&P)	-
Rating (Fitch)	AAA
Rating (DBRS)	AAA
TPI	Probable
TPI leeway	4
Collateral score	5.0%
RRL	-
JRL	-
Unused notches	-
AAA credit risk (%)	-
PCU	6
Recovery uplift	1
Outstanding ESG BMKs	No
LCR ELIGIBLE	Yes
LCR level (Bmk)	2A
Risk weight	20%
Maturity structure (Bmk)	SB

Borrower Types

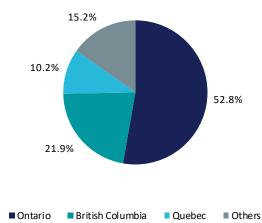


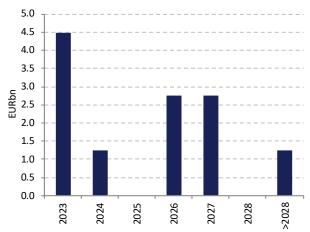
Spread Development



Source: Issuer, Rating agencies, Bloomberg, NORD/LB Markets Strategy & Floor Research

Regional Distribution





Canada 🔸

Bank of Nova Scotia

Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Ratings

Rating	Outlook
AA-	Stable
A2	Stable
A+	Stable
	AA- A2

Homepage

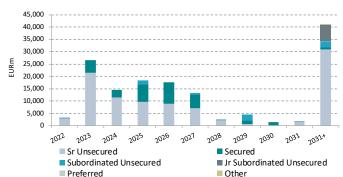
www.scotiabank.com

Bank of Nova Scotia (BNS; brand name: Scotiabank) is Canada's third-largest bank as measured by assets and is assessed as a domestic systemically important bank (D-SIB). BNS is listed on the TSX and NYSE, with the Royal Bank of Canada (10 August 2022: 9.15%) and the Bank of Montreal (4.53%) as the main shareholders. Its activities are the most geographically diversified in comparison with its Canadian peer group. Canada (65% of net income; H1 2022), the USA (6%) and the Pacific Alliance (Mexico, Peru, Chile and Colombia; 20%) form its six core markets. Reporting takes place in the following segments: Canadian Banking (44% of net income; H1 2022), International Banking (23%), Global Banking and Markets (18%) and Global Wealth Management (GWM; 15%). International Banking focuses on the franchise development in the Pacific Alliance countries. Services offered to BNS's client base of more than 25 million customers include retail and corporate banking, investment banking and capital market operations in addition to wealth management and private banking. A total of 65% of the loan portfolio in Canada consists of private mortgage loans, followed by consumer loans at 16%. In the International Banking segment, the shares here stand at 29% for mortgages and 12% for consumer loans, with the bulk here attributable to business customer loans. In Q2 2022, the CET1 ratio reduced by 39 basis points compared with the previous quarter to stand at 11.6%. This development is attributable to a share buy-back (-28bp) and an increased equity stake in Scotiabank Chile (-11bp). The TLAC ratio as at 30 April 2022 was 30.1%. The financial year of BNS ends on 31 October each year.

Balance Sheet

(EURm)	2020Y	2021Y	2022Q3
Net Loans to Customers	394,411	449,963	552 <i>,</i> 040
Total Securities	249,479	267,979	322,597
Total Deposits	470,530	542,238	649,703
Tier 1 Common Capital	31,705	35 <i>,</i> 580	39,501
Total Assets	732,871	826,440	988,388
Total Risk-weighted Assets	268,999	290,237	346,367

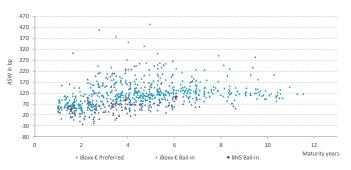
Redemption Profile



Income Statement (EURm)

(EURm)	2020Y	2021Y	2022Q3
Net Interest Income	11,442	11,299	3,480
Net Fee & Commission Inc.	6,313	6,960	1,893
Net Trading Income	1,994	1,634	231
Operating Expense	10,949	11,002	3,102
Credit Commit. Impairment	4,020	1,205	301
Pre-tax Profit	5,547	8,545	2,379

Senior Unsecured Bonds (EUR BMK)



Company Ratios

	2020Y	2021Y	2022Q3
Net Interest Margin	1.58	1.55	1.53
ROAE	9.75	13.95	14.26
Cost-to-Income	53.41	52.83	53.43
Core Tier 1 Ratio	11.79	12.26	11.40

	2020Y	2021Y	2022Q3
Liquidity Coverage Ratio	138.10	124.39	122.00
IFRS Tier 1 Leverage Ratio	4.56	4.53	4.24
Gr. Imp. Loans/ Loans at Am. Cost	-	0.92	0.91
Reserves/Loans at Amort. Cost	1.25	0.88	0.72

Source: Bloomberg, S&P Global Market Intelligence, NORD/LB Markets Strategy & Floor Research; as of: 11.10.2022

Strengths / Opportunities

- Market positioning
- Diversified earnings profile
- Cost discipline

- Expansion into volatile markets
- Dependency on wholesale funding
- Unsecured exposure (including consumer loans)

Bank of Nova Scotia – Mortgage

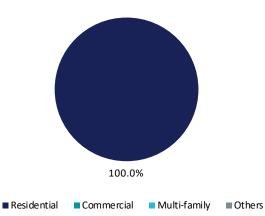
Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Cover Pool Data

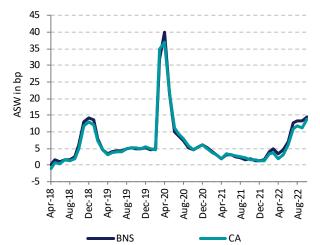
Cover pool volume (EURm)	45,221
Amount outstanding (EURm)	34,658
-thereof ≥ EUR 500m	50.3%
Current OC (nominal)	30.5%
Committed OC	5.3%
Cover type	Mortgage
Main country	100% Canada
Main region	59% Ontario
Number of loans	246,578
Number of borrowers	n/a
Avg. exposure to borrowers (EUR)	n/a
WAL (cover pool)	2.5y
WAL (covered bonds)	3.6y
Fixed interest (cover pool)	82.7%
Fixed interest (covered bonds)	82.5%
LTV (indexed)	40.0%
LTV (unindexed)	n/a
Loans in arrears	0.0%

Rating (Moody's)	Aaa
Rating (S&P)	-
Rating (Fitch)	AAA
Rating (DBRS)	AAA
ТРІ	Probable
TPI leeway	4
Collateral score	5.0%
RRL	-
JRL	-
Unused notches	-
AAA credit risk (%)	-
PCU	6
Recovery uplift	1
Outstanding ESG BMKs	No
LCR ELIGIBLE	Yes
LCR level (Bmk)	2A
Risk weight	20%
Maturity structure (Bmk)	SB

Borrower Types

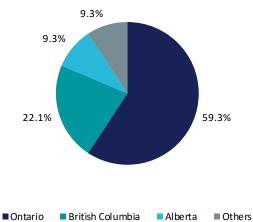


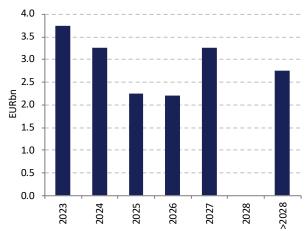
Spread Development



Source: Issuer, Rating agencies, Bloomberg, NORD/LB Markets Strategy & Floor Research

Regional Distribution









Rating

AA-

Aa2

A+

NORD/LB

Canadian Imperial Bank of Commerce

Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

In terms of assets, the Canadian Imperial Bank of Commerce (CIBC) is the fifth-largest bank in Canada and has been assessed as a domestic systemically important bank (D-SIB) by the Outlook Office of the Superintendent of Financial Institutions (OSFI), which is the domestic financial Stable regulatory authority. Approximately 48,000 employees serve around 11 million customers (data as at Q2 2022). The bank's strategic focus is on Canada (in addition to the USA), Stable where the province of Ontario is of particular important to CIBC. The bank reports across Stable the following segments: Canadian Personal & Business Banking (48% of net income, H1 2022), Canadian Commercial Banking & Wealth Management (23%), U.S. Commercial Banking & Wealth Management (2%), Capital Markets (26%) and Corporate and Other (-7%). As part of its sustainability strategy, CIBC aims to reduce its exposure to the oil and gas sector, in addition to cutting scope 1 and 2 emissions by 35% by 2030 and scope 3 emissions by 27%. The sale of shares in FirstCaribbean International Bank Ltd. for USD 797 million that was first announced in 2019 was vetoed by the supervisory authority in February 2021. Therefore, the transaction will no longer take place. The CET1 ratio totalled 11.7% in Q2 2022. As a result of the improved economic environment, the LCR declined to 125% as at Q2 2022 (Q2 2021: 134%). In Q2 2022, the share of loans in arrears for 90 days or longer was 0.19% (Q2 2021: 0.29%). The share of residential mortgage loans in the loan portfolio amounts to around 56% (Q2 2022). CIBC obtains 52% of its funding via deposits, while securitisations and covered bonds account for 5%. The financial year of CIBC ends on 31 October each year.

Balance Sheet

Ratings

Fitch

S&P

Moody's*

Homepage

www.cibc.com

*Senior Unsecured

(EURm)	2020Y	2021Y	2022Q3
Net Loans to Customers	262,321	315,219	386,232
Total Securities	165,033	193,387	220,721
Total Deposits	357,082	419,142	501,182
Tier 1 Common Capital	19,911	23,542	27,322
Total Assets	496,259	584,292	685,995
Total Risk-weighted Assets	164,358	190,290	232,347

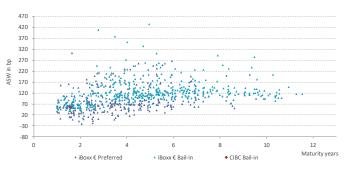
Redemption Profile



Income Statement

(EURm)	2020Y	2021Y	2022Q3
Net Interest Income	7,296	7,634	2,409
Net Fee & Commission Inc.	4,225	4,863	1,347
Net Trading Income	624	647	298
Operating Expense	7,118	7,677	2,328
Credit Commit. Impairment	1,644	105	181
Pre-tax Profit	3,230	5,544	1,597

Senior Unsecured Bonds (EUR BMK)



Company Ratios

	2020Y	2021Y	2022Q3
Net Interest Margin	1.69	1.59	1.62
ROAE	9.51	14.95	13.77
Cost-to-Income	57.47	57.58	56.13
Core Tier 1 Ratio	12.11	12.37	11.76

	2020Y	2021Y	2022Q3
Liquidity Coverage Ratio	144.64	126.73	122.54
IFRS Tier 1 Leverage Ratio	4.22	4.23	4.20
Gr. Imp. Loans/ Loans at Am. Cost	-	0.42	0.56
Reserves/Loans at Amort. Cost	0.92	0.66	0.59

Source: Bloomberg, S&P Global Market Intelligence, NORD/LB Markets Strategy & Floor Research; as of: 11.10.2022

Strengths / Opportunities

- Market position in Canadian retail banking
- Income stability
- Asset quality

- Dependency on wholesale funding
- Exposure in residential mortgage loans
- Private household debt level in Canada



*

Canadian Imperial Bank of Commerce – Mortgage Canada

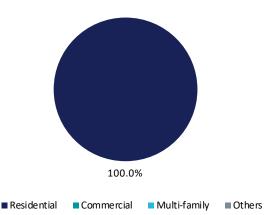
Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Cover Pool Data

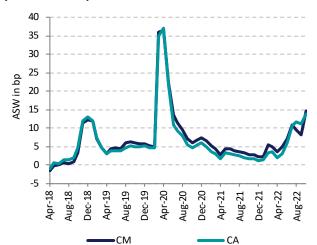
Cover pool volume (EURm)	31,346
Amount outstanding (EURm)	24,487
-thereof ≥ EUR 500m	33.7%
Current OC (nominal)	28.0%
Committed OC	7.5%
Cover type	Mortgage
Main country	100% Canada
Main region	60% Ontario
Number of loans	142,782
Number of borrowers	n/a
Avg. exposure to borrowers (EUR)	n/a
WAL (cover pool)	2.6y
WAL (covered bonds)	3.1y
Fixed interest (cover pool)	62.9%
Fixed interest (covered bonds)	69.9%
LTV (indexed)	39.3%
LTV (unindexed)	n/a
Loans in arrears	0.1%

Rating (Moody's)	Aaa
Rating (S&P)	-
Rating (Fitch)	AAA
Rating (DBRS)	-
TPI	Probable
TPI leeway	4
Collateral score	5.0%
RRL	-
JRL	-
Unused notches	-
AAA credit risk (%)	-
PCU	6
Recovery uplift	2
Outstanding ESG BMKs	No
LCR ELIGIBLE	Yes
LCR level (Bmk)	2A
Risk weight	20%
Maturity structure (Bmk)	SB

Borrower Types

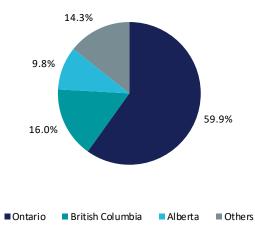


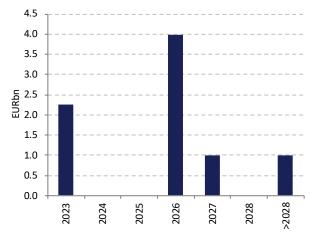
Spread Development



Source: Issuer, Rating agencies, Bloomberg, NORD/LB Markets Strategy & Floor Research

Regional Distribution





Canada

Desjardins Group

Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Ratings*

	Rating	Outlook
Fitch	AA-	Stable
Moody's	A1	Stable
S&P	A+	Stable

Homepage

www.desjardins.com

*FCDQ

The Fédération des Caisses Desjardins du Québec (FCDQ; brand name: Desjardins) opened its first bank in 1900. Today, the Group consists of just under 213 cooperative banks and 782 service centres (Q1 2022). Measured in terms of assets, it is therefore the largest cooperative banking group in North America and the sixth-largest bank in Canada. It serves around 7.5 million members and customers (Q1 2022). Within the Group structure, FCDQ operates as a central unit, assuming responsibility for management and control functions. The bank reports across three business segments (as well as the Other unit): Personal and Business Services, Wealth Management and Life and Health Insurance as well as Property and Casualty Insurance. In Quebec, the Group has high market shares in various segments, including savings deposits (42%, Q1 2022), agricultural loans (44%) and residential real estate mortgages (38%). At 65% (Q1 2022), the majority of the loan portfolio is attributable to residential mortgages, followed by corporate and public sector loans (25%) as well as consumer loans and credit card receivables (10%). On 1 September 2021, the Desjardins Group acquired the investment company Hexavest Inc. (headquarters: Montreal), which serves business customers on an international level, although mainly in Canada. Deposits dominate the funding mix at over 60% of assets. Wholesale funding is diversified in terms of both products and currencies, with the USD and CAD assuming a leading role in this regard. The CET1 ratio of 20.6% (Q1 2022) is above the average value of the major Canadian banks (13.3%). In Q1 2021, the problem loans ratio came to 0.46%.

Balance Sheet

(EURm)	2020Y	2021Y	2022H1
Net Loans to Customers	135,643	160,166	179,711
Total Securities	66,176	77,089	80,337
Total Deposits	144,215	165,353	187,324
Tier 1 Common Capital	16,884	19,759	20,703
Total Assets	232,274	275,906	300,092
Total Risk-weighted Assets	77,054	93,467	106,034

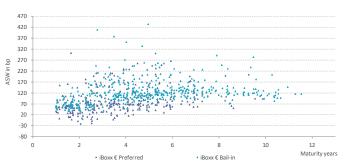
Redemption Profile



Income Statement

(EURm)	2020Y	2021Y	2022H1
Net Interest Income	3,689	3,904	2,233
Net Fee & Commission Inc.	1,692	2,024	1,139
Net Trading Income	2,078	24	-2,853
Operating Expense	5,427	6,455	3,773
Credit Commit. Impairment	564	47	52
Pre-tax Profit	2,015	2,566	963

Senior Unsecured Bonds (EUR BMK)



Company Ratios

	2020Y	2021Y	2022H1	
Net Interest Margin	2.38	2.06	2.11	Liquidity Coverage Ratio
ROAE	7.50	8.19	5.07	IFRS Tier 1 Leverage Ratio
Cost-to-Income	67.79	71.19	78.81	Gr. Imp. Loans/ Loans at A
Core Tier 1 Ratio	21.91	21.14	19.53	Reserves/Loans at Amort.

	2020Y	2021Y	2022H1
Liquidity Coverage Ratio	157.47	139.98	134.70
IFRS Tier 1 Leverage Ratio	7.38	7.27	7.01
Gr. Imp. Loans/ Loans at Am. Cost	-	0.56	0.64
Reserves/Loans at Amort. Cost	0.52	0.42	0.39

Source: Bloomberg, S&P Global Market Intelligence, NORD/LB Markets Strategy & Floor Research; as of: 11.10.2022

Strengths / Opportunities

- Market position in the main market of Quebec
- Capitalisation
- Diversified income sources

- Regional concentration risks (Quebec)
- Private household debt level in Canada
- Cost structure

Desjardins – Mortgage

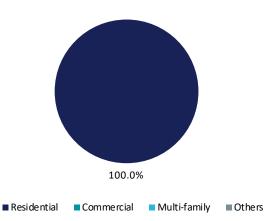
Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Cover Pool Data

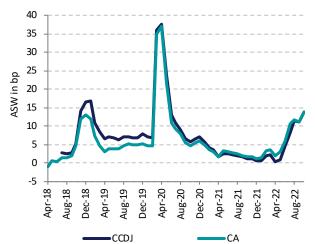
Cover pool volume (FLIPm)	9 6 4 4
Cover pool volume (EURm)	8,644
Amount outstanding (EURm)	6,603
-thereof ≥ EUR 500m	68.1%
Current OC (nominal)	30.9%
Committed OC	3.0%
Cover type	Mortgage
Main country	100% Canada
Main region	100% Quebec
Number of loans	68,610
Number of borrowers	n/a
Avg. exposure to borrowers (EUR)	n/a
WAL (cover pool)	2.7у
WAL (covered bonds)	2.5y
Fixed interest (cover pool)	74.2%
Fixed interest (covered bonds)	100.0%
LTV (indexed)	44.2%
LTV (unindexed)	59.1%
Loans in arrears	0.0%

Rating (Moody's)	Aaa
Rating (S&P)	-
Rating (Fitch)	AAA
Rating (DBRS)	-
TPI	Probable
TPI leeway	4
Collateral score	5.0%
RRL	-
JRL	-
Unused notches	-
AAA credit risk (%)	-
PCU	6
Recovery uplift	-
Outstanding ESG BMKs	No
LCR ELIGIBLE	Yes
LCR level (Bmk)	2A
Risk weight	20%
Maturity structure (Bmk)	SB

Borrower Types

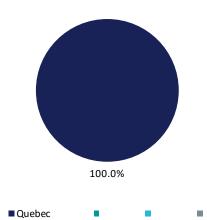


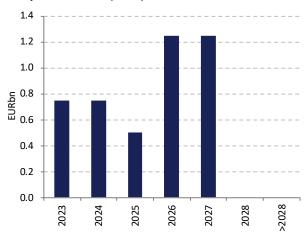
Spread Development

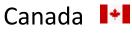


Source: Issuer, Rating agencies, Bloomberg, NORD/LB Markets Strategy & Floor Research

Regional Distribution







Equitable Bank

Analysts: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Ratings

	Rating	Outlook
Fitch	BBB-	Stable
Moody's	-	-
S&P	-	-

Homepage

www.equitablebank.ca

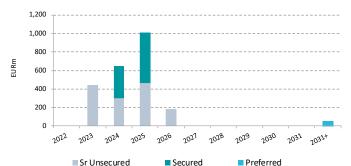
Founded in 1970 and headquartered in Toronto, Equitable Bank (EQB) claims to be the eighth largest Schedule 1 bank in Canada. As a wholly owned subsidiary of EQB Inc., EQB serves more than 360,000 customers with over 1,300 employees. The institution has no physical branches, but operates as a pure online bank. EQB divides its business into Personal Banking (Q2 2022: 66.4% of the loan portfolio) and Commercial Banking (33.6%). In these, the bank focuses on providing real estate mortgages for single-family homes as well as corporate mortgages distributed through brokers and other partners. In February 2022, EQB announced a definitive agreement to acquire all shares in Concentra Bank. As a result of the transaction, EQB expects its loan portfolio to increase to CAD 43.1 billion (Q2 2022: CAD 36.1 billion). The acquisition is expected to close in the second half of 2022. The bank's funding mix consists predominantly of deposits (Q2 2022: 58%) and funding facilities and securitisations (34%). Wholesale funding only plays a subordinate role with a share of 8% of the total funding mix. To diversify its funding structure, the Bank issued its first EUR covered bond in the sub-benchmark segment in September 2021 (volume EUR 350 million). A second covered bond with a volume of EUR 300 million followed in Q2 2022. Compared to Q2 2021, the CET1 ratio fell by 90 basis points to 13.5% (Q2 2022). The CET1 ratio thus met the regulatory requirements (7%) as well as the medium-term target for the years 2022 to 2027 (CET1 ratio > 13%). The leverage ratio decreased insignificantly in Q2 2022 from 5.2% (Q2 2021) to 5.1%.

Income Statement

Balance Sheet

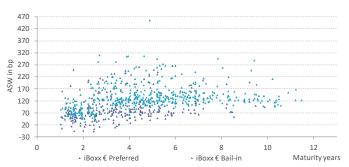
(EURm)	2020Y	2021Y	2022H1
Net Loans to Customers	18,138	22,860	26,919
Total Securities	803	1,294	1,414
Total Deposits	10,641	14,492	17,608
Tier 1 Common Capital	979	1,233	1,483
Total Assets	19,726	25,124	29,275
Total Risk-weighted Assets	6,689	9,248	10,953

Redemption Profile



(EURm)	2020Y	2021Y	2022H1
Net Interest Income	325	393	237
Net Fee & Commission Inc.	-	-	-
Net Trading Income	24	26	6
Operating Expense	140	176	110
Credit Commit. Impairment	28	-5	4
Pre-tax Profit	197	263	139

Senior Unsecured Bonds (EUR BMK)



Company Ratios

	2020Y	2021Y	2022H1		2020Y	2021Y	2022H1
Net Interest Margin	1.70	1.81	1.77	Liquidity Coverage Ratio	-	-	-
ROAE	14.72	16.24	14.46	IFRS Tier 1 Leverage Ratio	4.98	4.93	5.10
Cost-to-Income	38.44	40.47	43.56	Gr. Imp. Loans/ Loans at Am.	-	-	-
Core Tier 1 Ratio	14.63	13.33	13.54	Reserves/Loans at Amort. Cost	0.23	0.15	0.14

Source: Bloomberg, S&P Global Market Intelligence, NORD/LB Fixed Income Research; as of: 17.10.2022

Strengths / Opportunities

- Capitalisation
- Earnings power (online bank)

Risks / Weaknesses

- Credit risk (Alt-A Single-Family mortgage exposure)
- Funding structure

Canada 🕨

NORD/LB

Canada 🛃

Equitable Bank – Mortgage

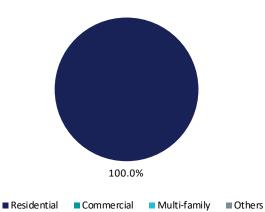
Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Cover Pool Data

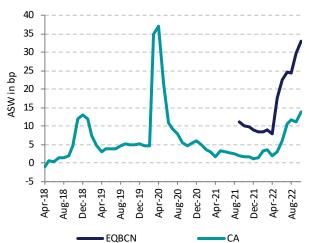
Cover pool volume (EURm)	1,265
Amount outstanding (EURm)	692
-thereof ≥ EUR 250m	130.0%
Current OC (nominal)	82.8%
Committed OC	10.0%
Cover type	Mortgage
Main country	100% Canada
Main region	77% Ontario
Number of loans	3,765
Number of borrowers	n/a
Avg. exposure to borrowers (EUR)	n/a
WAL (cover pool)	1.3y
WAL (covered bonds)	2.3y
Fixed interest (cover pool)	96.4%
Fixed interest (covered bonds)	100.0%
LTV (indexed)	50.7%
LTV (unindexed)	67.9%
Loans in arrears	0.0%

Rating (Moody's)	-
Rating (S&P)	-
Rating (Fitch)	-
Rating (DBRS)	AA
ТРІ	-
TPI leeway	-
Collateral score	-
RRL	-
JRL	-
Unused notches	-
AAA credit risk (%)	-
PCU	-
Recovery uplift	-
Outstanding ESG BMKs	No
LCR ELIGIBLE	Yes
LCR level (SBmk)	2A
Risk weight	20%
Maturity structure (SBmk)	SB

Borrower Types

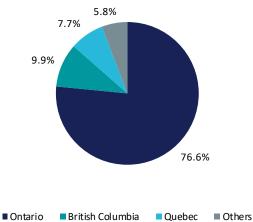


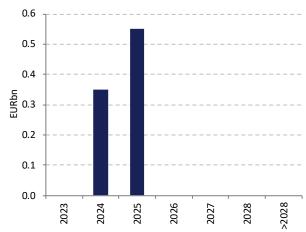
Spread Development



Source: Issuer, Rating agencies, Bloomberg, NORD/LB Markets Strategy & Floor Research

Regional Distribution





Canada 🔸

HSBC Bank Canada

Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Ratings

	Rating	Outlook
Fitch	А	Stable
Moody's	A1	Stable
S&P	A+	Negative

Homepage

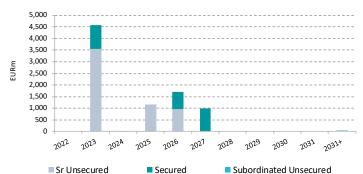
www.hsbc.ca

HSBC Bank Canada (HBC), founded in Vancouver in 1981, is the seventh-largest Canadian bank and a leading international bank. It is a wholly owned subsidiary of the HSBC Holding plc. and therefore part of the HSBC Group, which operates in 64 countries around the world. The customer focus of HBC is on Canadian businesses with their domestic and foreign business as well as on globally orientated retail customers, who are served across more than 130 branches throughout Canada. Geographically, HBC focuses on the provinces of British Columbia and Ontario, which together account for 76% of the loan portfolio and 88% of loans to private individuals (Q1 2022). The bank reports across the following five segments: Commercial Banking (CMB; H1 2022: 42% of operating income), Global Banking (7.4%), Markets and Securities Services (6.0%), Wealth and Personal Banking (44.1%) and Corporate Center (0.8%). In the most profitable segment CMB, the bank supports businesses in the areas of payment transactions, financing and mergers, in addition to helping them access the financial market. Moreover, in the other business segments, businesses, governments and institutions are offered a wide range of financial services. These include global trade and receivables financing, seizing investment opportunities, risk management as well as deposits and account services. In September 2021, HBC issued its first EUR denominated covered bond in the amount of EUR 750 million, followed by a second issue with a volume of EUR 1.0bn in May 2022. As at the end of H1 2022, the CET1 ratio stood at 11.1%.

Balance Sheet

(EURm)	2020Y	2021Y	2022H1
Net Loans to Customers	39,138	47,734	55,219
Total Securities	21,204	20,654	27,746
Total Deposits	46,162	51,158	55 <i>,</i> 894
Tier 1 Common Capital	3,512	3,884	3,557
Total Assets	75,287	83,277	92,862
Total Risk-weighted Assets	25,672	27,679	32,100

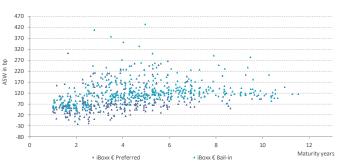
Redemption Profile



Income Statement

(EURm)	2020Y	2021Y	2022H1
Net Interest Income	710	827	508
Net Fee & Commission Inc.	466	536	283
Net Trading Income	119	108	37
Operating Expense	846	883	460
Credit Commit. Impairment	200	-22	28
Pre-tax Profit	264	642	353

Senior Unsecured Bonds (EUR BMK)



Company Ratios

	2020Y	2021Y	2022H1
Net Interest Margin	1.00	1.15	1.27
ROAE	4.63	10.48	11.71
Cost-to-Income	63.88	59.05	54.66
Core Tier 1 Ratio	13.68	14.03	11.08

	2020Y	2021Y	2022H1
Liquidity Coverage Ratio	187.42	146.73	140.53
IFRS Tier 1 Leverage Ratio	4.91	4.79	4.01
Gr. Imp. Loans/ Loans at Am. Cost	0.78	1.57	1.32
Reserves/Loans at Amort. Cost	0.66	0.48	0.35

Source: Bloomberg, S&P Global Market Intelligence, NORD/LB Markets Strategy & Floor Research; as of: 11.10.2022

Strengths / Opportunities

- Important unit within the HSBC Group
- Franchise / band name from Group
- International customer competency

- Geographical concentration risks
- Market share
- Commercial real estate exposure versus peers

HSBC Bank Canada – Mortgage

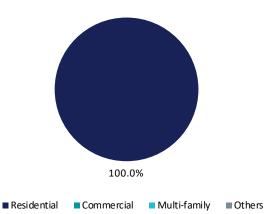
Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Cover Pool Data

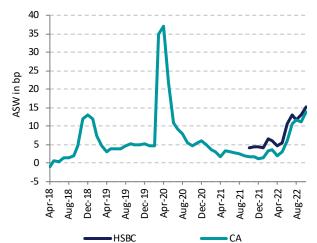
Cover pool volume (EURm)	6,172
Amount outstanding (EURm)	3,881
-thereof ≥ EUR 500m	45.1%
Current OC (nominal)	59.0%
Committed OC	10.5%
Cover type	Mortgage
Main country	100% Canada
Main region	51% British Columbia
Number of loans	19,429
Number of borrowers	n/a
Avg. exposure to borrowers (EUR)	n/a
WAL (cover pool)	2.4y
WAL (covered bonds)	2.5y
Fixed interest (cover pool)	49.0%
Fixed interest (covered bonds)	100.0%
LTV (indexed)	33.2%
LTV (unindexed)	n/a
Loans in arrears	0.0%

Rating (Moody's)	Aaa
Rating (S&P)	-
Rating (Fitch)	AAA
Rating (DBRS)	-
ТРІ	Probable
TPI leeway	1
Collateral score	5.0%
RRL	-
JRL	-
Unused notches	-
AAA credit risk (%)	-
PCU	6
Recovery uplift	-
Outstanding ESG BMKs	No
LCR ELIGIBLE	Yes
LCR level (Bmk)	2A
Risk weight	20%
Maturity structure (Bmk)	SB

Borrower Types

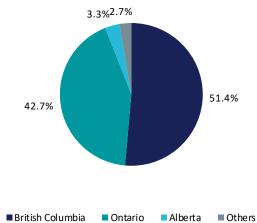


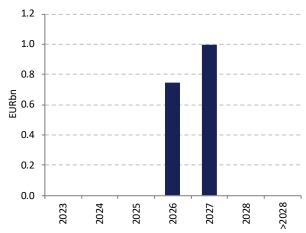
Spread Development



Source: Issuer, Rating agencies, Bloomberg, NORD/LB Markets Strategy & Floor Research

Regional Distribution







National Bank of Canada

Canada 🛃

Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Ratings

	Rating	Outlook
Fitch	A+	Stable
Moody's	A3	Stable
S&P	А	Stable

Homepage

www.nbc.ca

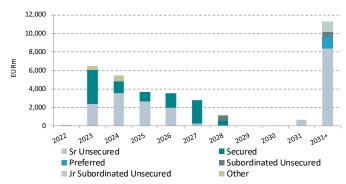
The National Bank of Canada (NBC; brand name: National Bank) was formed following a number of mergers and ranks among the domestic systemically important banks (D-SIBs) in Canada. NBC employs more than 28,000 staff and serves around 2.7 million customers across 469 branches (of which 385 are located in Canada; data as at Q2 2022). The bank's geographic focus is on Canada, with the province of Quebec (52% of total income as at FY 2021) assuming a particularly prominent role for NBC. According to information from NBC, it is one of the market leaders in Quebec. The asset management and financial markets segment is being further advanced in order to diversify the business model. The bank reports across the following four segments: Personal & Commercial (PC), Wealth Management (WM), Financial Markets (FM) and US Specialty Finance & International (USSF&I). As at Q2 2022, PC accounts for 34% of net income, with FM bringing in 31%, WM contributing 18% and USSF&I 17%. NBC has a strategic focus on expanding its consulting services, while at the same time it is aiming to strengthen the core business and further advance digitisation processes. For example, in the first half of 2022, the bank increased its expenditure on technology. Nevertheless, the cost-income ratio remained virtually stable at just over 50%. The bank is also set to strengthen its presence outside of Quebec. As at Q2 2022, the CET1 ratio stands at 12.9%. Furthermore, at 21.2% in Q2 2022, ROE is above the target corridor of 15-20%. According to information from NBC itself, this is a leading value among Canadian banks. The financial year of NBC ends on 31 October each year.

Income Statement

Balance Sheet

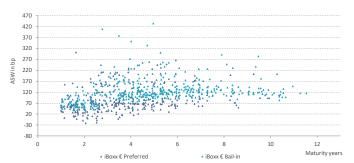
(EURm)	2020Y	2021Y	2022Q3
Net Loans to Customers	106,236	127,427	153,696
Total Securities	83,875	90,888	104,772
Total Deposits	136,252	165,970	193,609
Tier 1 Common Capital	7,201	9,049	10,916
Total Assets	213,854	248,170	296,073
Total Risk-weighted Assets	61,139	72,791	85,197

Redemption Profile



(EURM)	2020Y	2021Y	2022Q3
Net Interest Income	2,811	3,186	1,056
Net Fee & Commission Inc.	1,716	2,028	555
Net Trading Income	529	414	94
Operating Expense	2,915	3,227	972
Credit Commit. Impairment	555	1	43
Pre-tax Profit	1,675	2,713	782

Senior Unsecured Bonds (EUR BMK)



Company Ratios

	2020Y	2021Y	2022Q3		2020Y	2021Y	2022Q3
Net Interest Margin	1.49	1.46	1.63	Liquidity Coverage Ratio	160.28	150.83	147.18
ROAE	13.33	17.83	15.91	IFRS Tier 1 Leverage Ratio	3.54	3.89	3.88
Cost-to-Income	55.50	54.26	54.12	Gr. Imp. Loans/ Loans at Am. Cost	-	1.57	1.32
Core Tier 1 Ratio	11.78	12.43	12.81	Reserves/Loans at Amort. Cost	0.73	0.57	0.50

Source: Bloomberg, S&P Global Market Intelligence, NORD/LB Markets Strategy & Floor Research; as of: 11.10.2022

Strengths / Opportunities

- Regional market positioning (Quebec)
- Profitability
- Capitalisation

- Geographical concentration risks
- Private household debt level in Canada
- Volatility of capital market-based income sources

National Bank of Canada – Mortgage

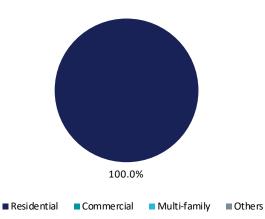
Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Cover Pool Data

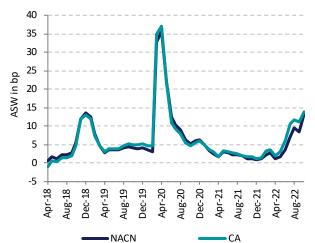
Cover pool volume (EURm)	13,943
Amount outstanding (EURm)	9,919
-thereof ≥ EUR 500m	55.4%
Current OC (nominal)	40.6%
Committed OC	7.5%
Cover type	Mortgage
Main country	100% Canada
Main region	67% Quebec
Number of loans	130,027
Number of borrowers	n/a
Avg. exposure to borrowers (EUR)	n/a
WAL (cover pool)	2.6y
WAL (covered bonds)	2.8y
Fixed interest (cover pool)	78.4%
Fixed interest (covered bonds)	73.5%
LTV (indexed)	41.1%
LTV (unindexed)	n/a
Loans in arrears	0.0%

Rating (Moody's)	Aaa
Rating (S&P)	-
Rating (Fitch)	AAA
Rating (DBRS)	AAA
TPI	Probable
TPI leeway	3
Collateral score	5.0%
RRL	-
JRL	-
Unused notches	-
AAA credit risk (%)	-
PCU	6
Recovery uplift	-
Outstanding ESG BMKs	No
LCR ELIGIBLE	Yes
LCR level (Bmk)	2A
Risk weight	20%
Maturity structure (Bmk)	SB

Borrower Types

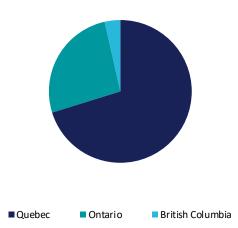


Spread Development

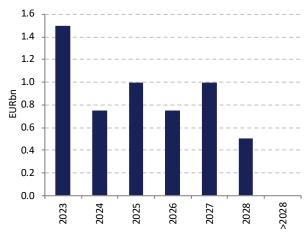


Source: Issuer, Rating agencies, Bloomberg, NORD/LB Markets Strategy & Floor Research

Regional Distribution



Redemption Profile (Bmk)



NORD/LB

Canada 🛃

Royal Bank of Canada

Canada 🛃

Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Ratings

	Rating	Outlook
Fitch	AA-	Stable
Moody's	A1	Stable
S&P	AA-	Stable

Homepage

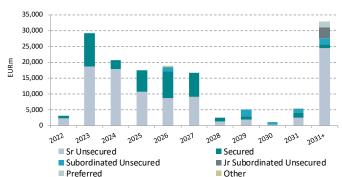
www.rbcroyalbank.com

Headquartered in Toronto, Royal Bank of Canada (RBC) is the second-largest Canadian bank by assets. It has been declared a global systemically important bank (G-SIB) by the Financial Stability Board. RBC is therefore subject to the more stringent capital requirements of the lowest G-SIB category (additional capital buffer: 1%). As a major universal bank with over 89,000 employees, RBC boasts in excess of 17 million customers, who are offered a broad spectrum of financial products and services. Moreover, according to its own information, RBC ranks in tenth place among the largest banks in the world (as measured by market capitalisation; 30 April 2022). RBC reports across five main segments: Personal & Commercial Banking (PCB; 51% of earnings in the period from Q2 2021 to Q2 2022; excluding Corporate Support), Capital Markets (24%), Wealth Management (17%), Insurance (5%), Investor & Treasury Services (3%) and the Corporate Support segment. RBC is among the market leaders in all core areas of Canadian PCB. In geographic terms, RBC is active across a total of 29 countries, with Canada and the USA representing the bank's most important markets. The domestic market also plays a major role in the lending business, accounting for 75% of the loans granted (Q2 2022). Ontario is the most important market within Canada (47%). The CET1 ratio stood at 13.2% (Q2 2022) and therefore exceeds the planned five-year average of 12.1%. At 18.4% in Q2 2022, RBC again complied with its self-defined ROE target of over 16.8%. The financial year of RBC ends on 31 October.

Balance Sheet

(EURm)	2020Y	2021Y	2022Q3
Net Loans to Customers	426,253	500,515	609,137
Total Securities	452,902	480,004	565,614
Total Deposits	623,821	738,552	865,715
Tier 1 Common Capital	43,904	52,720	58,830
Total Assets	1,047,619	1,190,176	1,409,100
Total Risk-weighted Assets	352,254	385,403	450,591

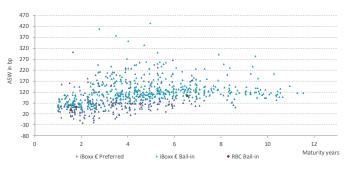
Redemption Profile



Income Statement

(EURm)	2020Y	2021Y	2022Q3
Net Interest Income	13,764	13,325	4,384
Net Fee & Commission Inc.	11,695	13,377	3,507
Net Trading Income	1,547	1,595	112
Operating Expense	16,325	17,249	4,753
Credit Commit. Impairment	2,795	-448	258
Pre-tax Profit	9,506	13,744	3,391

Senior Unsecured Bonds (EUR BMK)



Company Ratios

	2020Y	2021Y	2022Q3
Net Interest Margin	1.34	1.26	1.40
ROAE	13.43	17.25	13.73
Cost-to-Income	56.81	56.53	56.59
Core Tier 1 Ratio	12.46	13.68	13.06

	2020Y	2021Y	2022Q3
Liquidity Coverage Ratio	144.61	123.31	122.77
IFRS Tier 1 Leverage Ratio	4.54	4.73	4.51
Gr. Imp. Loans/ Loans at Am. Cost	-	0.38	0.51
Reserves/Loans at Amort. Cost	0.86	0.58	0.47

Source: Bloomberg, S&P Global Market Intelligence, NORD/LB Markets Strategy & Floor Research; as of: 11.10.2022

Strengths / Opportunities

- Capitalisation
- Market position in Canada
- Liquidity profile

- Private household debt level
- Volatility in the capital markets segment
- Dependency on wholesale funding

Royal Bank of Canada – Mortgage

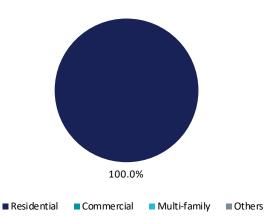
Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Cover Pool Data

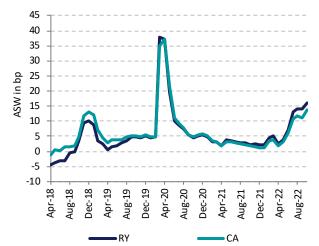
Cover pool volume (EURm)	93,951
Amount outstanding (EURm)	43,808
-thereof ≥ EUR 500m	39.9%
Current OC (nominal)	114.5%
Committed OC	7.5%
Cover type	Mortgage
Main country	100% Canada
Main region	45% Ontario
Number of loans	507,533
Number of borrowers	n/a
Avg. exposure to borrowers (EUR)	n/a
WAL (cover pool)	2.6y
WAL (covered bonds)	3.5y
Fixed interest (cover pool)	67.7%
Fixed interest (covered bonds)	63.5%
LTV (indexed)	46.6%
LTV (unindexed)	n/a
Loans in arrears	0.0%

Rating (Moody's)	Aaa
Rating (S&P)	-
Rating (Fitch)	AAA
Rating (DBRS)	AAA
TPI	Probable
TPI leeway	5
Collateral score	5.0%
RRL	-
JRL	-
Unused notches	-
AAA credit risk (%)	-
PCU	6
Recovery uplift	-
Outstanding ESG BMKs	No
LCR ELIGIBLE	Yes
LCR level (Bmk)	2A
Risk weight	20%
Maturity structure (Bmk)	SB

Borrower Types

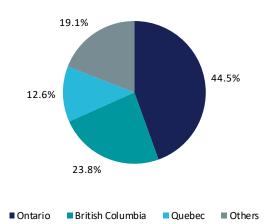


Spread Development

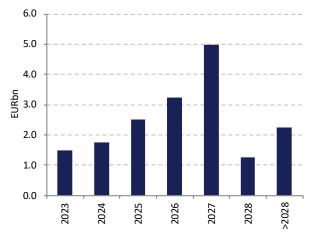


Source: Issuer, Rating agencies, Bloomberg, NORD/LB Markets Strategy & Floor Research

Regional Distribution



Redemption Profile (Bmk)



NORD/LB



Toronto-Dominion Bank

Canada

Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Ratings

	Rating	Outloo
Fitch	AA-u	Stable
Moody's	A1	Stable
S&P	AA-	Stable

Homepage

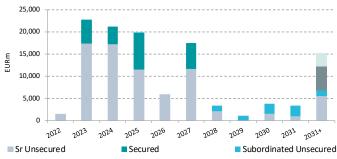
www.td.com

Toronto-Dominion Bank (TD) and its subsidiaries together form the TD Bank Group, headquartered in Toronto. The Group is Canada's largest bank by assets and is regarded as a global systemically important bank (G-SIB; additional capital buffer: 1%). According to its own information, TD is the sixth-largest banking group in North America as measured by assets (data as at Q2 2022). With more than 93,000 employees, TD serves in excess of 26 million customers worldwide. TD's focus on North America is also reflected in its reporting, in which Canadian Retail (Q2 2022: around 56% of net income excluding the Corporate segment) and U.S. Retail (35%; including the stake in TD Ameritrade of approximately 43% and the Investment in Charles Schwab) play prominent roles. The remaining 9% is attributable to the third main segment of Wholesale Banking (corporate and investment banking as well as associated services). Both retail segments include private and corporate banking, asset consultancy services, vehicle financing in addition to insurance and credit card portfolios in Canada. With the retail segments jointly contributing around 91% of net income as at Q2 2022, it could hardly be more obvious that TD's main focus is on this area. In 2020, TD Ameritrade was acquired by The Charles Schwab Corporation. As a result, TD's 43% stake in TD Ameritrade was exchanged for a stake of 13.5% in Schwab. In H1 2022, this share generated a pre-tax result of CAD 526m. The CET1 ratio stands at 14.7% (Q2 2022). The bank's strategy is centred on further strengthening its retail focus and concentrating on the North American market. The financial year of TD ends on 31 October.

Balance Sheet

(EURm)	2020Y	2021Y	2022Q3
Net Loans to Customers	475,076	515,436	617,781
Total Securities	449,340	498,661	601,269
Total Deposits	764,276	865,612	1,017,142
Tier 1 Common Capital	40,379	48,782	56,587
Total Assets	1,106,506	1,205,765	1,408,120
Total Risk-weighted Assets	308,833	321,043	379,188

Redemption Profile

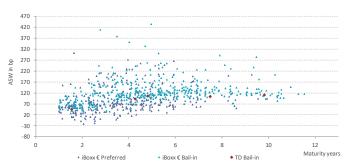


Jr Subordinated Unsecured Preferred

Income Statement

income Statement			
(EURm)	2020Y	2021Y	2022Q3
Net Interest Income	16,183	16,076	5,243
Net Fee & Commission Inc.	7,589	8,475	2,419
Net Trading Income	1,152	308	-
Operating Expense	14,195	15,307	3,994
Credit Commit. Impairment	4,784	-149	261
Pre-tax Profit	7,871	11,415	2,716

Senior Unsecured Bonds (EUR BMK)



Company Ratios

	2020Y	2021Y	2022Q3		2020Y	2021Y	2022Q3
Net Interest Margin	1.72	1.56	1.75	Liquidity Coverage Ratio	144.74	125.72	120.93
ROAE	12.99	14.76	12.73	IFRS Tier 1 Leverage Ratio	3.81	4.23	4.23
Cost-to-Income	54.62	57.46	53.15	Gr. Imp. Loans/ Loans at Am. Cost	-	0.55	0.55
Core Tier 1 Ratio	13.07	15.19	14.92	Reserves/Loans at Amort. Cost	1.14	0.88	0.76

Source: Bloomberg, S&P Global Market Intelligence, NORD/LB Markets Strategy & Floor Research; as of: 11.10.2022

Strengths / Opportunities

- Market position in Canada and the USA
- **Diversified income**
- Asset quality

- Competitive pressure in the USA
- Private household debt level in Canada
 - Concentration risks in retail banking

Toronto-Dominion Bank – Mortgage

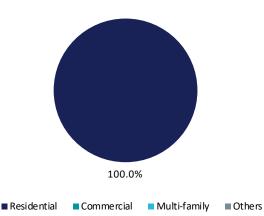
Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

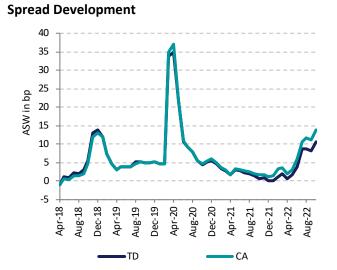
Cover Pool Data

Cover pool volume (EURm)	37,655
Amount outstanding (EURm)	24,503
-thereof ≥ EUR 500m	60.2%
Current OC (nominal)	53.7%
Committed OC	3.1%
Cover type	Mortgage
Main country	100% Canada
Main region	56% Ontario
Number of loans	185,372
Number of borrowers	n/a
Avg. exposure to borrowers (EUR)	n/a
WAL (cover pool)	2.4y
WAL (covered bonds)	2.6y
Fixed interest (cover pool)	71.7%
Fixed interest (covered bonds)	82.6%
LTV (indexed)	39.3%
LTV (unindexed)	n/a
Loans in arrears	0.1%

Rating (Moody's)	Aaa
Rating (S&P)	-
Rating (Fitch)	-
Rating (DBRS)	AAA
ТРІ	Probable
TPI leeway	4
Collateral score	5.0%
RRL	-
JRL	-
Unused notches	-
AAA credit risk (%)	-
PCU	-
Recovery uplift	2
Outstanding ESG BMKs	No
LCR ELIGIBLE	Yes
LCR level (Bmk)	2A
Risk weight	20%
Maturity structure (Bmk)	SB

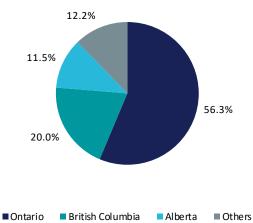
Borrower Types

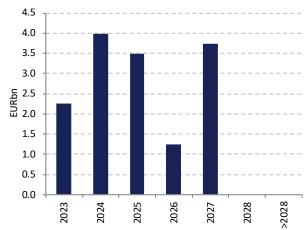




Source: Issuer, Rating agencies, Bloomberg, NORD/LB Markets Strategy & Floor Research

Regional Distribution









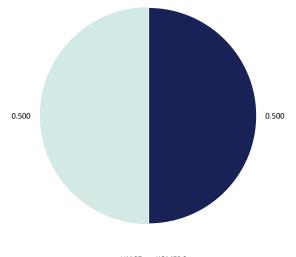
Czechia

Market Overview Covered Bonds

Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

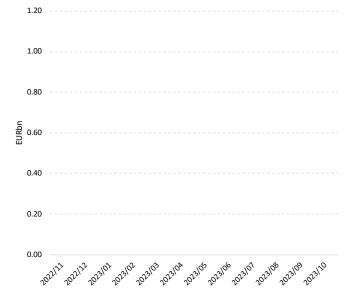
Cover Pool Volume	EUR 6.93bn	Outstanding volume (Bmk)	EUR 1.00bn
Amount outstanding	EUR 4.40bn	Number of benchmarks	2
Number of issuer	2	Outstanding ESG volume (Bmk)	-
No of cover pools	2	Number of ESG benchmarks	-
there of M / PS / others	2/0/0	Outstanding volume (SBmk)	-
Ratings (low / high)	AA / AAA	Number of subbenchmarks	-
Best possible LCR level	Level 1	Maturity types	SB



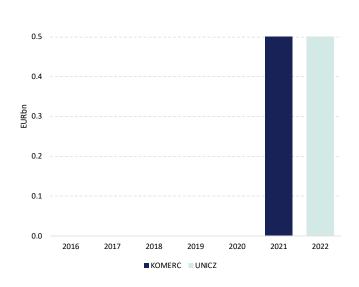


UNICZ KOMERC

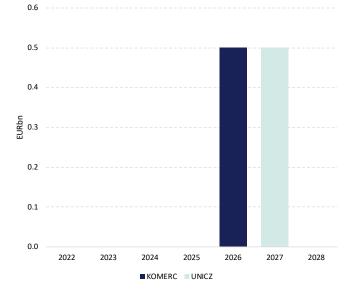
Benchmark redemption profile¹: 11/2022 - 10/2023



Benchmark issuance volume¹



Benchmark redemption profile¹²



Source: Issuer, Rating agencies, Bloomberg, NORD/LB Markets Strategy & Floor Research; ¹ based on Bloomberg ticker; ² Redemptions 2022: 11/22 – 12/22

Komerční Banka

Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Ratings

	Rating	Outlook
Fitch	А	Stable
Moody's*	A1	Stable
S&P	А	Stable

Homepage

www.kb.cz

*LT Bank Deposit

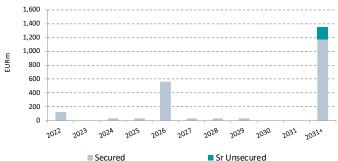
Founded in 1990 and operating as a public limited company since 1992, Komerční Banka, a.s. (KB) has been part of the international Société Générale group since 2001. In its role as a strategic investor, the group holds a stake of 60.4% (03 August 2022) in the bank, with the remaining shares held in free float. As the parent company of the KB Group, the bank operates in the domestic market of Czech Republic in addition to other countries in Central and Eastern Europe. Overall, 1.65 million of the 2.26 million customers overall are attributable to the Czech market (H1 2022). KB is categorised as a domestic systemically important bank (D-SIB) by the Czech National Bank, which is the country's central bank. In addition to the traditional banking business, KB offers its customers products and services from areas including pension funds, factoring, consumer loans and insurance via its subsidiaries. KB reports across the following segments: Retail Banking (H1 2022: 56.8% of operating income), Corporate Banking (38.1%), Investment Banking (5.5%) and Other (-0.4%). The majority of the loan portfolio at KB comprises corporate loans and other lending (Q2 2022: 50.3%) as well as residential mortgages (34.6%). At a share of roughly 75%, customer deposits make up the largest element in the funding mix of KB. In January 2021, the bank placed its first EUR-denominated covered bond (volume of EUR 500m), thereby expanding its refinancing sources. In the first half of 2022, the NPL ratio came in at 2.4% (FY 2021: 2.5%), with an NPL coverage ratio of 51.2% (FY 2021: 51.6%). With a CET1 ratio of 20.0% (H1 2022), the bank exceeded the regulatory minimum requirement of 11.46%.

Income Statement

Balance Sheet

(EURm)	2020Y	2021Y	2022H1
Net Loans to Customers	25 <i>,</i> 893	29,120	30,638
Total Securities	6,570	8,223	9,231
Total Deposits	34,509	38,458	44,636
Tier 1 Common Capital	3,728	4,062	4,305
Total Assets	44,445	50,009	60,222
Total Risk-weighted Assets	17,160	19,466	21,565

Redemption Profile





	2020Y	2021Y	2022H1
Net Interest Margin	1.79	1.72	2.09
ROAE	7.37	10.58	13.19
Cost-to-Income	50.08	47.54	43.71
Core Tier 1 Ratio	21.73	20.87	19.96

	2020Y	2021Y	2022H1
Liquidity Coverage Ratio	200.00	148.00	174.00
IFRS Tier 1 Leverage Ratio	8.72	8.45	-
NPL/ Loans at Amortised Cost	2.67	2.52	2.47
Reserves/Loans at Amort. Cost	1.87	1.80	1.75

Source: Bloomberg, S&P Global Market Intelligence, NORD/LB Markets Strategy & Floor Research; as of: 11.10.2022

Strengths / Opportunities

- Domestic market positioning
- Liquidity profile

Risks / Weaknesses

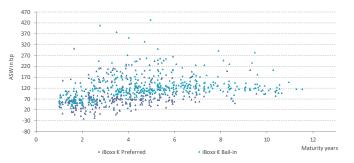
- Geographical concentration
- Loan concentration

NORD/LB

Czech Republic 🛌

(EURm)	2020Y	2021Y	2022H1	
Net Interest Income	808	850	575	
Net Fee & Commission Inc.	197	223	120	
Net Trading Income	109	142	79	
Operating Expense	566	590	342	
Credit Commit. Impairment	173	29	23	
Pre-tax Profit	389	625	422	
Contant lines are di Donado (FLID DNAK)				

Senior Unsecured Bonds (EUR BMK)



Czechia

Komerční Banka – Mortgage

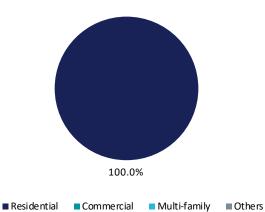
Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Cover Pool Data

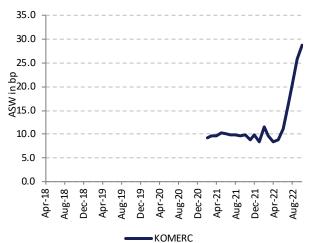
Cover pool volume (EURm)	600
Amount outstanding (EURm)	500
-thereof ≥ EUR 500m	100.0%
Current OC (nominal)	20.0%
Committed OC	5.0%
Cover type	Mortgage
Main country	100% Czechia
Main region	21% Prague
Number of loans	9,731
Number of borrowers	n/a
Avg. exposure to borrowers (EUR)	n/a
WAL (cover pool)	11.8y
WAL (covered bonds)	3.бу
Fixed interest (cover pool)	100.0%
Fixed interest (covered bonds)	100.0%
LTV (indexed)	n/a
LTV (unindexed)	61.8%
Loans in arrears	0.0%

Rating (Moody's)	-
Rating (S&P)	-
Rating (Fitch)	AAA
Rating (DBRS)	-
TPI	-
TPI leeway	-
Collateral score	-
RRL	-
JRL	-
Unused notches	-
AAA credit risk (%)	-
PCU	5
Recovery uplift	-
Outstanding ESG BMKs	No
LCR ELIGIBLE	Yes
LCR level (Bmk)	1
Risk weight	10%
Maturity structure (Bmk)	SB

Borrower Types

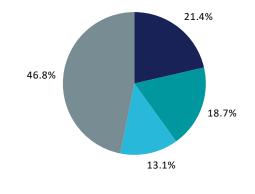


Spread Development



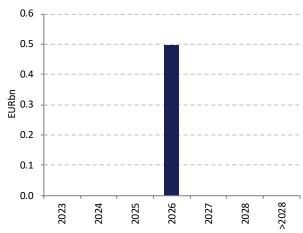
Source: Issuer, Rating agencies, Bloomberg, NORD/LB Markets Strategy & Floor Research

Regional Distribution



PragueSouth Moravian Region

Central Bohemian RegionOthers



UniCredit Bank Czech Republic and Slovakia Czech Republic 🛌

Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

RatingsOutlookFitch-Moody's*A3S&P-

Homepage

www.unicreditbank.cz

*LT Bank Deposit

UniCredit Bank Czech Republic and Slovakia (UniCredit CZ) is a medium-sized universal bank headquartered in Prague. The bank is a wholly owned subsidiary of the UniCredit Group, a global systemically important bank (G-SIB, 1% additional capital buffer), tasked with operating its business in Slovakia and the Czech Republic in particular. According to Negative its own information, the institute is a leader in the corporate customer and private banking segments in these countries. Geographically, more than two thirds (FY 2021: 78.01%) of the balance sheet total is attributable to the Czech Republic business, with business activities in Slovakia accounting for a share of 21.98%. The institute has more than 3,200 employees (FY 2021), who serve retail, corporate and institutional customers across 104 branches. In addition to the primary banking business, UniCredit CZ also offers its customers services from the segments leasing, factoring and derivatives. The bank reports in the segments Retail and Private Banking (H1 2022: 15% of pre-tax income), Corporate and Investment Banking, Leases (100%) and Other (-16%). ESG loans are an important product group with a share of just under 20%, or CZK 33.3 million, in the portfolio for long-term corporate loans at UniCredit CZ (FY 2021). A total of 85% of funding comes from customer deposits (FY 2021), while the issuance of bonds plays a more subordinate role (4.33%). In September 2022, the bank approached investors with its first EUR covered bond in benchmark format (5y term). The CET1 ratio as at year-end 2021 stood at 21.70%. For 2024, the bank envisages a return on tangible equity (RoTE) of 10% and a CET1 Ratio of 12.5%-13%.

Balance Sheet

(EURm)	2020Y	2021Y	2022H1
Net Loans to Customers	17,573	19,425	20,980
Total Securities	1,827	2,772	3,983
Total Deposits	16,190	18,895	26,901
Tier 1 Common Capital	3,079	3,157	-
Total Assets	25 <i>,</i> 299	27,870	38,640
Total Risk-weighted Assets	13,177	14,548	-

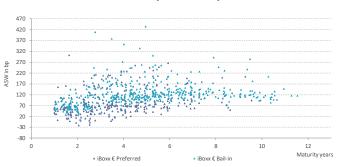
Redemption Profile



Income Statement

(EURm)	2020Y	2021Y	2022H1
Net Interest Income	457	506	313
Net Fee & Commission Inc.	134	140	81
Net Trading Income	92	99	42
Operating Expense	331	351	197
Credit Commit. Impairment	127	79	30
Pre-tax Profit	254	345	225

Senior Unsecured Bonds (EUR BMK)



Company Ratios

	2020Y	2021Y	2022H1		2020Y	2021Y	2022H1
Net Interest Margin	1.83	1.95	1.90	Liquidity Coverage Ratio	-	-	-
ROAE	6.48	8.34	11.26	IFRS Tier 1 Leverage Ratio	12.67	12.27	-
Cost-to-Income	46.32	45.32	43.65	NPL/ Loans at Amortised Cost	3.37	2.55	2.26
Core Tier 1 Ratio	23.37	21.70	-	Reserves/Loans at Amort. Cost	2.33	2.24	2.16

Source: Bloomberg, S&P Global Market Intelligence, NORD/LB Markets Strategy & Floor Research; as of: 11.10.2022

Strengths / Opportunities

- Capitalisation
- Profitability
- Funding profile

- Risks in the property and construction sector
- Dependency on corporate deposits (more volatile)
- Challenging economic environment in CEE

UniCredit Bank CZ and SK – Mortgage

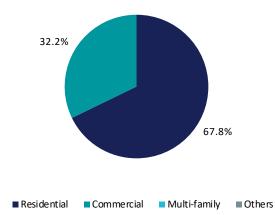
Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Cover Pool Data

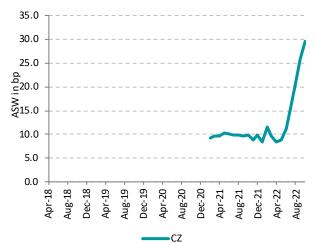
Cover pool volume (EURm)		6,326
Amount outstanding (EURn	n)	3,901
-thereof ≥ EUR 500m		12.8%
Current OC (nominal)		62.2%
Committed OC		10.0%
Cover type		Mortgage
Main country		73% Czechia
Main region	24% Prague-East &	Prague-West
Number of loans		75,657
Number of borrowers		67,377
Avg. exposure to borrowers	s (EUR)	93,893
WAL (cover pool)		9.0y
WAL (covered bonds)		0.0y
Fixed interest (cover pool)		75.2%
Fixed interest (covered bor	nds)	10.5%
LTV (indexed)		n/a
LTV (unindexed)		67.4%
Loans in arrears		0.0%

Rating (Moody's)	Aa3
Rating (S&P)	-
Rating (Fitch)	-
Rating (DBRS)	-
TPI	Improbable
TPI leeway	3
Collateral score	24.0%
RRL	-
JRL	-
Unused notches	-
AAA credit risk (%)	-
PCU	-
Recovery uplift	-
Outstanding ESG BMKs	Yes
LCR ELIGIBLE	Yes
LCR level (Bmk)	1
Risk weight	10%
Maturity structure (Bmk)	SB

Borrower Types

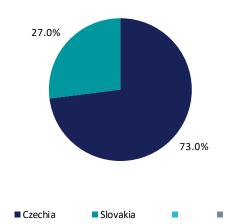


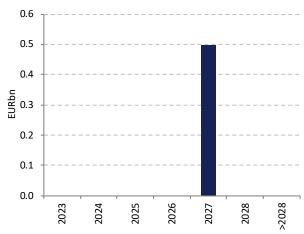
Spread Development



Source: Issuer, Rating agencies, Bloomberg, NORD/LB Markets Strategy & Floor Research

Regional Distribution









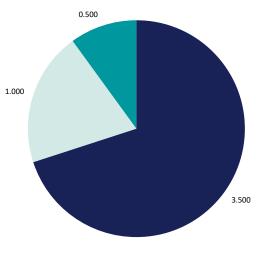
Denmark

Market Overview Covered Bonds

Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

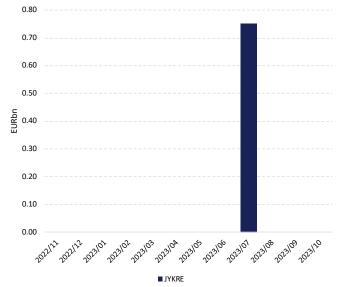
Cover Pool Volume	EUR 67.82bn	Outstanding volume (Bmk)	EUR 5.00bn
Amount outstanding	EUR 60.70bn	Number of benchmarks	9
Number of issuer	3	Outstanding ESG volume (Bmk)	-
No of cover pools	3	Number of ESG benchmarks	-
there of M / PS / others	2/0/1	Outstanding volume (SBmk)	-
Ratings (low / high)	A / AAA	Number of subbenchmarks	-
Best possible LCR level	Level 1	Maturity types	HB, SB



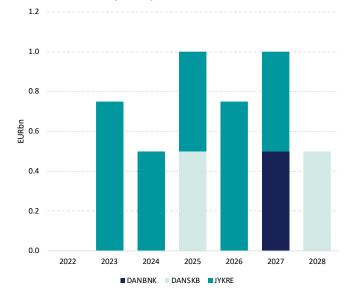


JYKRE DANSKB DANBNK

Benchmark redemption profile¹: 11/2022 - 10/2023

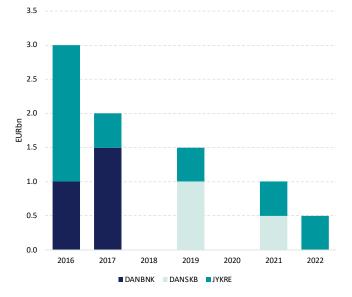


Benchmark redemption profile¹²



Source: Issuer, Rating agencies, Bloomberg, NORD/LB Markets Strategy & Floor Research; ¹ based on Bloomberg ticker; ² Redemptions 2022: 11/22 – 12/22

Benchmark issuance volume¹



Danish Ship Finance

Denmark

Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Ratings

	Rating	Outlook
Fitch	-	-
Moody's	-	-
S&P	BBB+	Stable

Homepage

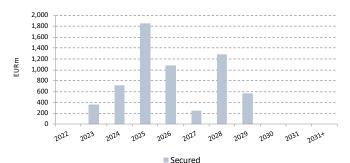
www.shipfinance.dk

Danish Ship Finance A/S (DSF, Danmarks Skibskredit) is a special financier for the maritime industry, with a focus on both the Danish and international markets. At 86.6%, Danish Ship Finance Holding A/S, which is owned almost 33% each by two pension funds and an equity fund and 2.3% by employees, holds a majority stake in DSF. The business model of DSF is based on three pillars: Loans (lending to ship-owning customers), Investments (in highly liquid assets) and Funding (refinancing of the lending business mainly through the issuance of covered bonds and macro-hedging). DSF is pursuing a strategic target of financing the transformation of shipping into a carbon-neutral industry. In 2022, 30% of newly issued loans are set to be linked to sustainability concepts, with the aim of increasing this to 100% by 2025. DSF is targeting a carbon-neutral loan portfolio by 2050. The credit risk is diversified across types of ship, customers and countries, while the bank only grants loans with a maximum LTV of 70% - no equity financing takes place. The bank's five biggest credit commitments are secured by mortgages on 75 ships, split across nine ship categories. In terms of the recovering shipping markets, the NPL ratio has also fallen (FY 2021: 5.1%; FY 2020: 7.1%). Although the LCR declined from 571.8% as at FY 2020 to 449.1% as at the end of 2021, it is still above the minimum requirement of 100%. The CET1 ratio stood at 20.1% in FY 2021 (FY 2020: 22.3%), thereby exceeding the regulatory requirement by 8.5% percentage points. DSF attributes its losses of DKK 100 million (FY 2020: DKK 99 million) in the investment segment to the highly negative money market rates for DKK and to market losses for callable mortgage bonds.

Balance Sheet

(EURm)	2020Y	2021Y	2022H1
Net Loans to Customers	4,292	4,881	4,960
Total Securities	3,492	2,308	2,038
Total Deposits	-	-	-
Tier 1 Common Capital	1,230	1,228	1,179
Total Assets	8,035	7,324	7,208
Total Risk-weighted Assets	5,514	6,116	6,058

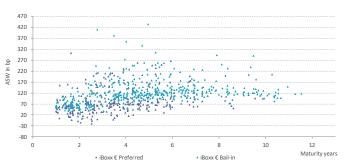
Redemption Profile



Income Statement

(EURm)	2020Y	2021Y	2022H1
Net Interest Income	73	68	35
Net Fee & Commission Inc.	3	4	1
Net Trading Income	-20	-11	-22
Operating Expense	21	23	12
Credit Commit. Impairment	13	-5	-17
Pre-tax Profit	21	44	19

Senior Unsecured Bonds (EUR BMK)



Company Ratios

	2020Y	2021Y	2022H1		2020Y	2021Y	2022H1
Net Interest Margin	-	-	-	Liquidity Coverage Ratio	571.82	449.13	328.00
ROAE	1.26	2.73	2.53	IFRS Tier 1 Leverage Ratio	15.59	17.01	-
Cost-to-Income	37.53	37.14	85.71	NPL/ Loans at Amortised Cost	7.53	5.27	4.38
Core Tier 1 Ratio	22.31	20.08	19.46	Reserves/Loans at Amort. Cost	3.95	2.66	2.42

Source: Bloomberg, S&P Global Market Intelligence, NORD/LB Markets Strategy & Floor Research; as of: 11.10.2022

Strengths / Opportunities

- Capitalisation
- Liquidity buffer
- Funding profile

- Cyclical risks on the ship financing market
- No recourse to central bank funding
- Concentrated business model

Denmark

Danish Ship Finance – Ship

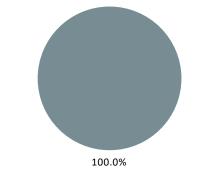
Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Cover Pool Data

Cover pool volume (EURm)	1,333
Amount outstanding (EURm)	1,080
-thereof ≥ EUR 500m	100.0%
Current OC (nominal)	23.4%
Committed OC	n/a
Cover type	Ship
Main country	23% United Kingdom
Main region	n/a
Number of loans	43
Number of borrowers	n/a
Avg. exposure to borrowers (EUR)	n/a
WAL (cover pool)	3.3у
WAL (covered bonds)	3.7у
Fixed interest (cover pool)	1.7%
Fixed interest (covered bonds)	100.0%
LTV (indexed)	n/a
LTV (unindexed)	n/a
Loans in arrears	1.3%

Rating (Moody's)	-
Rating (S&P)	A
Rating (Fitch)	-
Rating (DBRS)	-
TPI	-
TPI leeway	-
Collateral score	-
RRL	a-
JRL	а
Unused notches	N/A
AAA credit risk (%)	-
PCU	-
Recovery uplift	1
Outstanding ESG BMKs	No
LCR ELIGIBLE	Yes
LCR level (Bmk)	2A
Risk weight	20%
Maturity structure (Bmk)	HB

Borrower Types



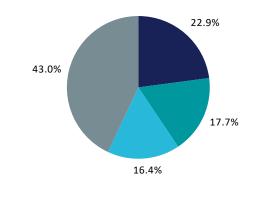
■ Residential ■ Commercial ■ Multi-family ■ Others

Spread Development

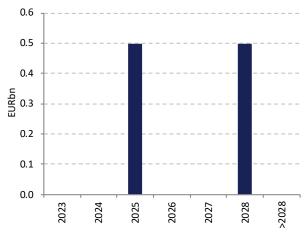


Source: Issuer, Rating agencies, Bloomberg, NORD/LB Markets Strategy & Floor Research

Regional Distribution



■ United Kingdom ■ Denmark ■ Germany ■ Others



Danske Bank

Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Ratings

	Rating	Outlook
Fitch	А	Stable
Moody's	A3	Stable
S&P	A+	Negative

Homepage

www.danskebank.com

Danske Bank A/S (Danske; headquartered in Copenhagen) is the largest bank in Denmark and acts as parent company for the Group. Danske is listed on the Nasdaq Copenhagen. The largest shareholder is AP Moller Holding (Mærsk Group) with a stake of 21%. The universal bank lists Denmark (36% of the loan portfolio), Sweden (11%), Norway (10%), Finland (7%) and Northern Ireland (3%) as its primary markets. In its Q1 2022 report, Danske reported across the following segments: Personal & Business Customers, Large Corporates & Institutions, Danica Pension, Northern Ireland, Non-Core and Group Functions. In May 2022, the Personal & Business Customers segment was divided into two segments, namely Personal Customers and Business Customers. Following this restructuring, Danske will pursue its goal of being more customer focused. The bank is still in dialogue with the relevant authorities regarding its business activities in its former Estonian subsidiary. The green loans and sustainable bonds business has quadrupled since 2019 and is set to rise to a volume of DKK 300bn by 2023 (as at Q1 2022: DKK 213bn). Investments in sustainably-orientated funds amounted to DKK 61bn (Q1 2022) and are set to increase to DKK 150bn by 2023. As at the end of Q1 2022, Danske's CET1 ratio stood at 17.6% (Q1 2021: 18.1%). At 40.0% (Q1 2022), the MREL ratio of the Group stood above the national regulatory requirement of 35.5%. The NPL ratio fell by 0.2 percentage points to 1.0% (FY 2021), while the LCR rose from 155% (Q1 2021) to 164% (Q1 2022).

Income Statement

Net Interest Income

Net Trading Income

Operating Expense

Pre-tax Profit

470

420 370

320

270

220 170

120

70

20

-30

-80

ASW in bp

Net Fee & Commission Inc.

Credit Commit. Impairment

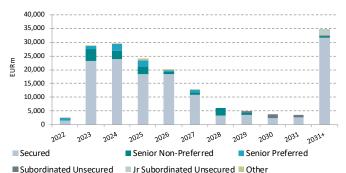
Senior Unsecured Bonds (EUR BMK)

(EURm)

Balance Sheet

(EURm)	2020Y	2021Y	2022H1
Net Loans to Customers	275,138	275,970	272,888
Total Securities	131,625	109,393	130,357
Total Deposits	179,193	173,771	176,199
Tier 1 Common Capital	19,310	20,434	19,843
Total Assets	552,073	529,348	548,245
Total Risk-weighted Assets	105,355	115,689	115,955

Redemption Profile



Company Ratios

	2020Y	2021Y	2022H1
Net Interest Margin	0.84	0.81	0.82
ROAE	2.75	7.46	5.18
Cost-to-Income	69.33	65.33	73.80
Core Tier 1 Ratio	18.33	17.66	17.11

	2020Y	2021Y	2022H1
Liquidity Coverage Ratio	153.35	163.68	154.65
IFRS Tier 1 Leverage Ratio	3.85	4.12	4.04
NPL/ Loans at Amortised Cost	3.22	2.77	3.23
Reserves/Loans at Amort. Cost	2.23	2.16	-

2020Y

3.772

1,533

2,606

4,352

951

846

8

2021Y

3.600

1.629

4.394

4.140

2,228

10

19

2022H1

1.826

-4.795

2,053

49

789

12

Maturity years

792

Source: Bloomberg, S&P Global Market Intelligence, NORD/LB Markets Strategy & Floor Research; as of: 11.10.2022

Strengths / Opportunities

- Loan quality
- Diversified income sources
- Capitalisation

Risks / Weaknesses

- Dependency on wholesale funding
- Reputational damage
- Profitability

Denmark

Denmark

Danske Bank – Mortgage (Pool C)

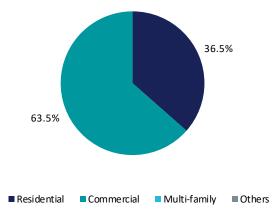
Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Cover Pool Data

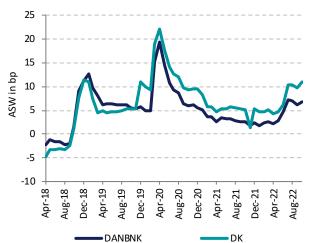
Cover pool volume (EURm)	5,853
Amount outstanding (EURm)	4,806
-thereof ≥ EUR 500m	10.4%
Current OC (nominal)	21.8%
Committed OC	2.0%
Cover type	Mortgage
Main country	91% Sweden
Main region	22% East Sweden
Number of loans	4,851
Number of borrowers	n/a
Avg. exposure to borrowers (EUR)	n/a
WAL (cover pool)	2.1y
WAL (covered bonds)	2.9y
Fixed interest (cover pool)	37.6%
Fixed interest (covered bonds)	100.0%
LTV (indexed)	47.5%
LTV (unindexed)	n/a
Loans in arrears	0.0%

Rating (Moody's)	-
Rating (S&P)	AAA
Rating (Fitch)	AAA
Rating (DBRS)	-
ТРІ	-
TPI leeway	-
Collateral score	-
RRL	аа
JRL	ааа
Unused notches	3
AAA credit risk (%)	6.87
PCU	5
Recovery uplift	-
Outstanding ESG BMKs	No
LCR ELIGIBLE	Yes
LCR level (Bmk)	1
Risk weight	10%
Maturity structure (Bmk)	SB

Borrower Types

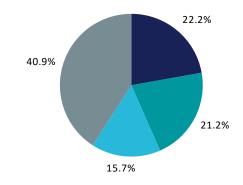


Spread Development



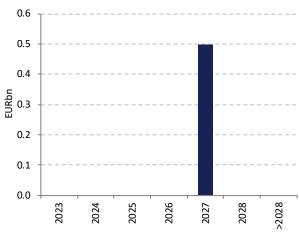
Source: Issuer, Rating agencies, Bloomberg, NORD/LB Markets Strategy & Floor Research

Regional Distribution



East Sweden Greater Stockholm South Sweden Others

Redemption Profile (Bmk)



Jyske Bank

Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Ratings

	Rating	Outlook
Fitch	-	-
Moody's*	A2	Stable
S&P	А	Stable

Homepage

www.jyskebank.com

*Senior Unsecured

The Jyske Bank Group (Jyske) is a systemically important Danish bank headquartered in Silkeborg. The main shareholder of Jyske is Brfholding A/S (25%, FY 2021), a subsidiary of BRFfonden. In addition to the Danish market (87% of the loan portfolio, FY 2021), the institute is also active via a representative office in Hamburg in the area of investment consulting for international private banking customers. Within the Jyske Bank Group, the universal banking business is provided via Jyske Bank. Its mortgage business is operated via the subsidiary Jyske Realkredit and its leasing business is carried out through Jyske Finans. The Jyske Group reports across three segments: Banking (49% of pre-tax profit, Q1 2022), Mortgage (36%) and Leasing (15%). It has set itself a strategic target of improving the cost and income structure, which it is set to achieve through digitisation, greater customer proximity and increased involvement in sustainable investments. In addition, the carbon footprint of its own investments is set to be cut by 75% by 2030 (FY 2021: 50%) and the funding volume of low-energy commercial property is set to increase to DDK 50bn (FY 2021: DKK 39bn). The CET1 ratio and the LCR both exceeded the regulatory requirements at 17.2% (Q1 2022) and 177% (Q1 2022) respectively. The institute is aiming to achieve a CET1 ratio of between 15% and 17% as well as an LCR in excess of 150% over the long term. The NPL ratio went up from 1% (Q1 2021) to 1.4% (Q1 2022). According to Jyske, the main reason for this is a clarification from the FSA, which led to a depreciation in the value of some assets. At 27.3%, the MREL ratio for 2022 stood above the regulatory requirement (2021: 26.3%).

Balance Sheet

(EURm)	2020Y	2021Y	2022H1
Net Loans to Customers	66,016	65,259	64,837
Total Securities	16,772	14,890	15,410
Total Deposits	17,853	17,467	20,562
Tier 1 Common Capital	4,325	4,607	4,675
Total Assets	90,370	87,034	89,779
Total Risk-weighted Assets	24,106	25,309	26,150

Redemption Profile



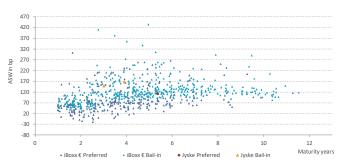
Company Ratios

	2020Y	2021Y	2022H1
Net Interest Margin	0.78	0.77	0.84
ROAE	4.55	8.35	8.81
Cost-to-Income	62.22	56.87	59.15
Core Tier 1 Ratio	17.94	18.20	17.88

Income Statement

(EURm)	2020Y	2021Y	2022H1
Net Interest Income	677	678	365
Net Fee & Commission Inc.	281	310	164
Net Trading Income	77	129	-13
Operating Expense	710	707	350
Credit Commit. Impairment	130	-29	-33
Pre-tax Profit	283	541	283

Senior Unsecured Bonds (EUR BMK)



2020Y 2021Y 2022H1 Liquidity Coverage Ratio 339.00 281.14 229.64 IFRS Tier 1 Leverage Ratio 5.04 5.51 5.42 NPL/ Loans at Amortised Cost 5.82 6.10 6.28 3.44 3.26 2.81 Reserves/Loans at Amort, Cost

Source: Bloomberg, S&P Global Market Intelligence, NORD/LB Markets Strategy & Floor Research; as of: 11.10.2022

Strengths / Opportunities

- Group franchise in Denmark
- Risk profile
- Diversified earnings profile

Risks / Weaknesses

- Dependency on capital market funding
- Sustained price competition for mortgages
- Geographical diversity



Jyske Realkredit – Mortgage (Pool E)

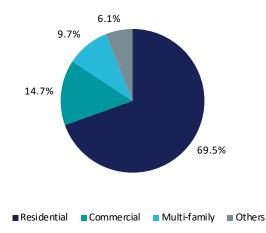
Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Cover Pool Data

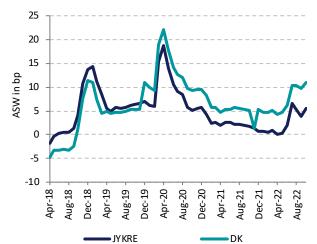
Cover pool volume (EURm)	43,381
Amount outstanding (EURm)	40,745
-thereof ≥ EUR 500m	7.4%
Current OC (nominal)	6.5%
Committed OC	0.0%
Cover type	Mortgage
Main country	99% Denmark
Main region	46% Greater Copenhagen area
Number of loans	133,023
Number of borrowers	n/a
Avg. exposure to borrowers	EUR) n/a
WAL (cover pool)	245
WAL (covered bonds)	11.8y
Fixed interest (cover pool)	67.0%
Fixed interest (covered bond	s) 85.6%
LTV (indexed)	48.0%
LTV (unindexed)	n/a
Loans in arrears	0.0%

Rating (S&P)	AAA
Rating (Fitch)	-
Rating (DBRS)	-
ТРІ	-
TPI leeway	-
Collateral score	-
RRL	aa-
JRL	aaa
Unused notches	3
AAA credit risk (%)	12.31
PCU	-
Recovery uplift	-
Outstanding ESG BMKs	No
LCR ELIGIBLE	Yes
LCR level (Bmk)	1
Risk weight	10%
Maturity structure (Bmk)	SB

Borrower Types



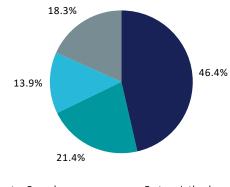
Spread Development

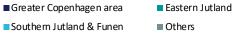


Source: Issuer, Rating agencies, Bloomberg, NORD/LB Markets Strategy & Floor Research

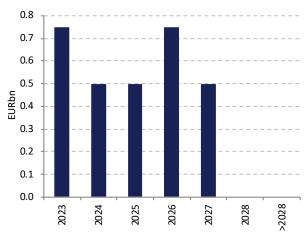
Regional Distribution

Rating (Moody's)





Redemption Profile (Bmk)







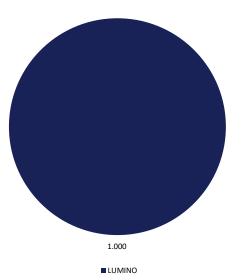
Estonia

Market Overview Covered Bonds

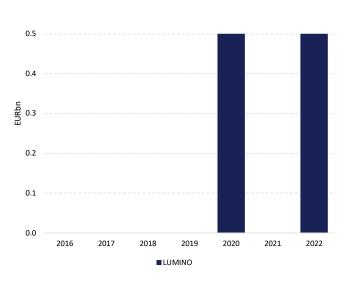
Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Cover Pool Volume	EUR 3.24bn	Outstanding volume (Bmk)	EUR 1.00bn
Amount outstanding	EUR 2.10bn	Number of benchmarks	2
Number of issuer	2	Outstanding ESG volume (Bmk)	-
No of cover pools	2	Number of ESG benchmarks	-
there of M / PS / others	2/0/0	Outstanding volume (SBmk)	EUR 0.25bn
Ratings (low / high)	AA+ / AA+	Number of subbenchmarks	1
Best possible LCR level	Level 1	Maturity types	SB

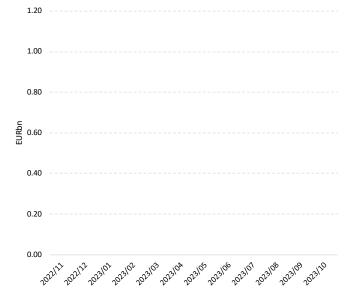
Outstanding benchmark volume¹ (EURbn)



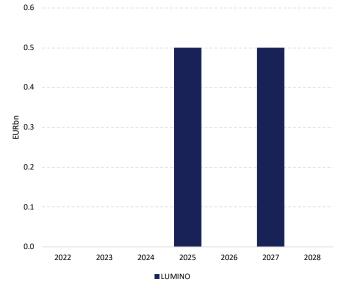
Benchmark issuance volume¹



Benchmark redemption profile¹: 11/2022 - 10/2023



Benchmark redemption profile¹²



Source: Issuer, Rating agencies, Bloomberg, NORD/LB Markets Strategy & Floor Research; ¹ based on Bloomberg ticker; ² Redemptions 2022: 11/22 – 12/22

LHV Pank

Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Ratings

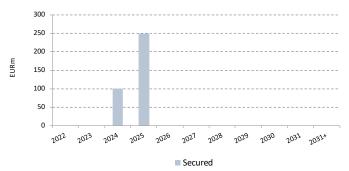
Natings			w
	Rating	Outlook	L
Fitch	-	-	G
Moody's*	Baa1	Positive	а
S&P	-	-	3
Homono	-		р
Homepa	ge		n
www.lhv.e	<u>ee</u>		t
			b
*LT Bank D	Deposits		S
			tl
			0
			n
			g
			S

LHV Pank was established in 1999 and is a wholly owned subsidiary of the LHV Group, which has been listed on the Nasdaq Tallinn since 2015. The main shareholder is Rain öhmus with 22.7% (FY 2021). In addition to LHV Pank, other key subsidiaries of the LHV. Group include LHV Varahaldus (asset management), LHV Kindlustus (insurance business) and LHV UK Ltd., among others. LHV Pank employs over 650 staff, who serve more than 324,000 customers in total from branches in Tallinn, Tartu and London. In addition to payment transaction services, retail customers are also offered services in the area of nortgage business and asset investments. Corporate clients are also offered payment ransaction services in addition to custom financing solutions. According to data from the pank itself, as at year-end 2021 LHV Pank held a market share of more than 10% for savings deposits, retail loans and corporate loans in Estonia, ranking LHV Pank in the top hree largest banks nationwide for these segments in the process. LHV Pank has embarked: on a growth phase over the past few years, which is reflected in increased customer numbers (+24% in FY 2021), the deposit volume (+41%) and loan volume (+21%). This growth can be attributed to various acquisitions, among other aspects. For example, the subsidiary LHV UK Ltd. was founded at the start of 2021, with the aim of commencing business activities on the UK market in the future (application for banking licence still awaiting approval as at June 2022). In March 2020, LHV Pank was authorised to issue covered bonds, which has allowed the bank to diversify its capital market refinancing activities.

Balance Sheet

(EURm)	2020Y	2021Y	2022H1
Net Loans to Customers	2,209	2,677	2,925
Total Securities	323	128	484
Total Deposits	4,141	5,847	5,425
Tier 1 Common Capital	201	265	279
Total Assets	4,939	6,809	6,480
Total Risk-weighted Assets	1,472	1,891	2,125

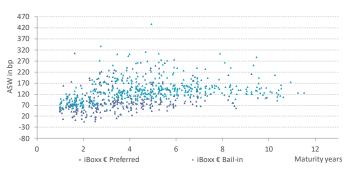
Redemption Profile



Income Statement

(EURm)	2020Y	2021Y	2022H1
Net Interest Income	69	98	53
Net Fee & Commission Inc.	18	31	15
Net Trading Income	1	-2	-1
Operating Expense	36	49	30
Credit Commit. Impairment	11	4	0
Pre-tax Profit	41	75	37

Senior Unsecured Bonds (EUR BMK)



Company Ratios

	2020Y	2021Y	2022H1
Net Interest Margin	1.85	1.64	1.62
ROAE	18.35	26.63	21.66
Cost-to-Income	40.97	38.58	44.63
Core Tier 1 Ratio	13.65	14.00	13.15

	20201	20211	2022H1
Liquidity Coverage Ratio	147.00	140.60	138.50
IFRS Tier 1 Leverage Ratio	4.07	3.89	4.31
NPL/ Loans at Amortised Cost	-	-	-
Reserves/Loans at Amort. Cost	0.76	0.71	0.64

Source: Bloomberg, S&P Global Market Intelligence, NORD/LB Markets Strategy & Floor Research; as of: 13.10.2022

Strengths / Opportunities

- Liquidity profile
- Cost efficiency

Risks / Weaknesses

- Credit growth
- Operational risks



LHV Pank – Mortgage

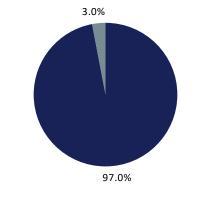
Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Cover Pool Data

Cover pool volume (EURm)	463
Amount outstanding (EURm)	350
-thereof ≥ EUR 250m	71.4%
Current OC (nominal)	32.3%
Committed OC	5.0%
Cover type	Mortgage
Main country	100% Estonia
Main region	54% Tallinn
Number of loans	7,730
Number of borrowers	7,481
Avg. exposure to borrowers (EUR)	61,877
WAL (cover pool)	11.3y
WAL (covered bonds)	2.4y
Fixed interest (cover pool)	0.1%
Fixed interest (covered bonds)	100.0%
LTV (indexed)	45.4%
LTV (unindexed)	57.7%
Loans in arrears	0.0%

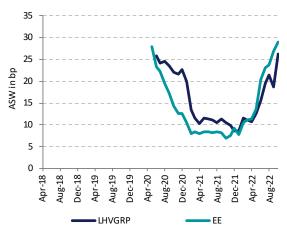
Rating (Moody's)	Aa1
Rating (S&P)	-
Rating (Fitch)	-
Rating (DBRS)	-
ТРІ	Improbable
TPI leeway	0
Collateral score	10.0%
RRL	-
JRL	-
Unused notches	-
AAA credit risk (%)	-
PCU	-
Recovery uplift	-
Outstanding ESG BMKs	No
LCR ELIGIBLE	Yes
LCR level (SBmk)	2A
Risk weight	10%
Maturity structure (SBmk)	SB

Borrower Types



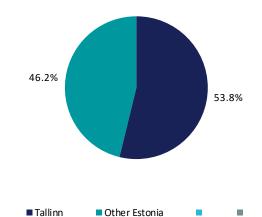
■ Residential ■ Commercial ■ Multi-family ■ Others

Spread Development

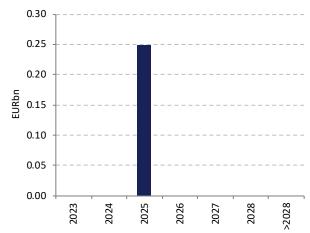


Source: Issuer, Rating agencies, Bloomberg, NORD/LB Markets Strategy & Floor Research

Regional Distribution



Redemption Profile (SBmk)



NORD/LB

Luminor Bank

Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Ratings

•				
	Rating	Outlook		
Fitch	-	-		
Moody's*	Baa1	Stable		
S&P	-	-		
Homepage				
www.lumi	nor.ee			

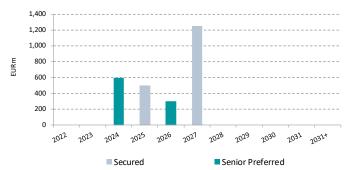
Luminor Bank AS (Luminor) operates as a pan-Baltic credit institution in the countries of Estonia (head office), Latvia and Lithuania, with business in each of the latter two countries being conducted through branches since 2019. Services in leasing, pension funds and other activities are offered through own subsidiaries. The bank was formed in 2017 from the merger of DNB Bank AS and Nordea Bank Abp and their business activities in the three countries mentioned above. According to the bank's own data, it is the third-largest bank in the Baltics, serving about 900,000 retail and corporate customers with about 2,262 employees. Its market share in Baltic lending was 17% and in deposits 15% at the end of Q4/2021. The share of non-performing loans decreased recently was 1.7% as of Q1/2022 (12/2021: 1,8%; 12/2020: 3.2%). Customer deposits dominated the institute's funding at the end of the first quarter of 2022 with around 90%. Covered bonds have supplemented the funding mix since last year. The MREL requirement was 26.9% and the MREL ratio was reported at 29.7% at the end of the first guarter of 2022. The CET1 ratio was 21.2% in Q1/2022 (12/2021: 20.5%; Q1/2021: 23.4%). In late January 2022, Luminor signed an agreement to acquire 99% of Maksekeskus, the largest provider of e-commerce payment services in Estonia (2,600 merchants). According to Luminor, the acquisition supports its strategic direction as well as digital transformation and strengthens its presence in the digital payments market.

Balance Sheet

*Senior Unsecured

(EURm)	2020Y	2021Y	2022H1
Net Loans to Customers	9,431	9,947	10,503
Total Securities	331	687	1,040
Total Deposits	11,822	10,305	10,616
Tier 1 Common Capital	1,586	1,430	1,499
Total Assets	14,924	13,317	14,431
Total Risk-weighted Assets	7,086	6,988	7,278

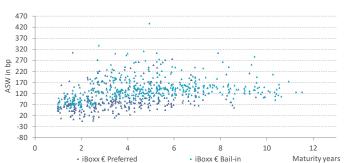
Redemption Profile



Income Statement

(EURm)	2020Y	2021Y	2022H1
Net Interest Income	227	239	129
Net Fee & Commission Inc.	74	79	39
Net Trading Income	28	21	7
Operating Expense	279	261	110
Credit Commit. Impairment	-	-	-
Pre-tax Profit	36	82	51

Senior Unsecured Bonds (EUR BMK)



Company Ratios

	2020Y	2021Y	2022H1		2020Y	2021Y	2022H1
Net Interest Margin	1.66	1.70	1.88	Liquidity Coverage Ratio	197.20	137.20	148.10
ROAE	2.03	4.47	5.67	IFRS Tier 1 Leverage Ratio	10.67	10.80	10.50
Cost-to-Income	84.57	78.95	65.13	NPL/ Loans at Amortised Cost	3.24	1.87	1.66
Core Tier 1 Ratio	22.39	20.46	20.60	Reserves/Loans at Amort. Cost	1.43	1.01	1.02

Source: Bloomberg, S&P Global Market Intelligence, NORD/LB Markets Strategy & Floor Research; as of: 13.10.2022

Strengths / Opportunities

- Capitalisation
- Funding profile

Risks / Weaknesses

- Profitability
- Upcoming investments



Luminor Bank – Mortgage

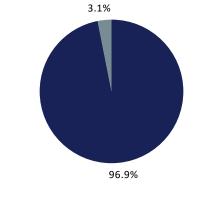
Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Cover Pool Data

Cover pool volume (EURm)	2,778
Amount outstanding (EURm)	1,750
-thereof \geq EUR 500m	
	57.1%
Current OC (nominal)	58.7%
Committed OC	5.0%
Cover type	Mortgage
Main country	45% Lithuania
Main region	25% Other Lithuania
Number of loans	55,081
Number of borrowers	51,945
Avg. exposure to borrowers (EUR)	53,476
WAL (cover pool)	11.6y
WAL (covered bonds)	4.2y
Fixed interest (cover pool)	1.3%
Fixed interest (covered bonds)	100.0%
LTV (indexed)	52.5%
LTV (unindexed)	63.2%
Loans in arrears	0.2%

Rating (Moody's)	Aa1
Rating (S&P)	-
Rating (Fitch)	-
Rating (DBRS)	-
ТРІ	Improbable
TPI leeway	1
Collateral score	10.0%
RRL	-
JRL	-
Unused notches	-
AAA credit risk (%)	-
PCU	-
Recovery uplift	-
Outstanding ESG BMKs	No
LCR ELIGIBLE	Yes
LCR level (Bmk)	1
Risk weight	10%
Maturity structure (Bmk)	SB

Borrower Types



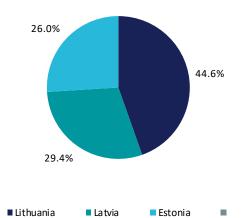
■ Residential ■ Commercial ■ Multi-family ■ Others

Spread Development

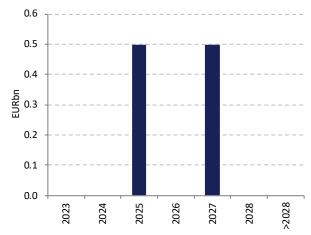


Source: Issuer, Rating agencies, Bloomberg, NORD/LB Markets Strategy & Floor Research

Regional Distribution



Redemption Profile (Bmk)

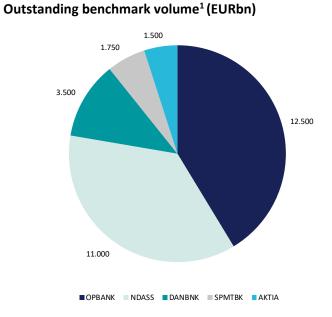




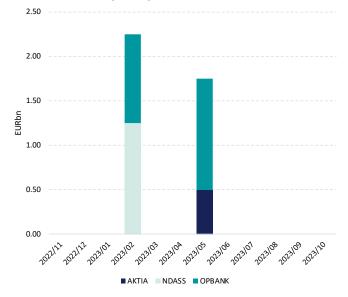
Market Overview Covered Bonds

Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

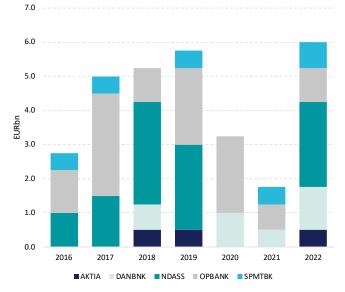
Cover Pool Volume	EUR 54.64bn	Outstanding volume (Bmk)	EUR 30.25bn
Amount outstanding	EUR 46.10bn	Number of benchmarks	32
Number of issuer	9	Outstanding ESG volume (Bmk)	EUR 1.75bn
No of cover pools	9	Number of ESG benchmarks	2
there of M / PS / others	9/0/0	Outstanding volume (SBmk)	EUR 4.15bn
Ratings (low / high)	AAA / AAA	Number of subbenchmarks	13
Best possible LCR level	Level 1	Maturity types	HB, SB



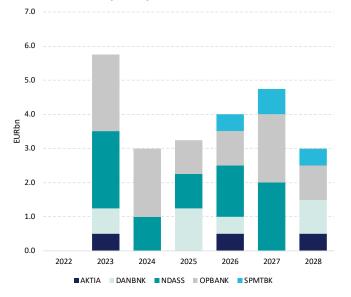
Benchmark redemption profile¹: 11/2022 - 10/2023



Benchmark issuance volume¹



Benchmark redemption profile¹²



Source: Issuer, Rating agencies, Bloomberg, NORD/LB Markets Strategy & Floor Research; ¹ based on Bloomberg ticker; ² Redemptions 2022: 11/22 – 12/22

Finland 🕂

Aktia Bank

Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Ratings

	Rating	Outlook
Fitch	-	-
Moody's*	A2	Stable
S&P	A-	Stable
Homepa	ge	

www.aktia.com

*Senior Unsecured

Originally founded in 1826, Aktia Bank plc (Aktia) forms the parent company of the overall group and is listed on the Helsinki stock exchange. Aktia operates on the Finnish market in the three business areas of retail customers (serving approximately 250,000 customers), corporate and institutional clients (20,000) and asset management (100,000 insurance policies and EUR 15.5bn AuM, among other aspects). The bank reports across the following three segments: Banking, Asset Management and Group Function. Around 70% of the loan portfolio (as at Q1 2022) comprises retail loans, followed by loans to corporate clients (15%) and real estate companies (14%). The bank is striving to become the leading bank in the area of wealth management in Finland. To this end, Aktia has defined the following comparable financial targets up to 2025: operating profits should come in above EUR 120m (FY 2021: EUR 87.4m), with ROE of >12% (FY 2021: 10.3%), a CIR of <60% (FY 2021: 65%) and a CET1 ratio (Q1 2022: 10.6%; FY 2021: 11.2%) 1.5 percentage points in excess of the regulatory requirements (FY 2021: 3.5pp). Moreover, Aktia is striving to offer a climate-neutral investment portfolio by 2050. This aim is to be achieved by way of climate-conscious lending criteria, among other measures. In comparison with the previous quarter, the NPL ratio was unchanged at 1.58% in Q1 2022 (FY 2020: 0.99%). With an LCR of 140%, liquidity has remained relatively stable against the previous year (FY 2020: 138%), while the NSFR declined in the same period from 124% (Q1 2021) to 118% in Q1 2022. As at the end of the first quarter of 2022, the leverage ratio amounted to 3.8% (FY 2021: 3.9%), while the risk-weighted CET1 ratio came in at 10.6% (Q1 2022).

Balance Sheet

(EURm)	2020Y	2021Y	2022H1
Net Loans to Customers	7,000	7,486	7,698
Total Securities	2,011	1,831	1,815
Total Deposits	4,616	5,009	5,512
Tier 1 Common Capital	424	329	321
Total Assets	10,573	11,653	11,889
Total Risk-weighted Assets	3,030	2,941	3,090

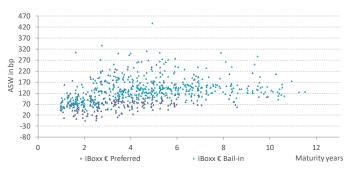
Redemption Profile



Income Statement

(EURm)	2020Y	2021Y	2022H1
Net Interest Income	81	96	51
Net Fee & Commission Inc.	98	124	63
Net Trading Income	1	4	2
Operating Expense	142	165	86
Credit Commit. Impairment	4	4	2
Pre-tax Profit	55	85	38

Senior Unsecured Bonds (EUR BMK)



Company Ratios

	2020Y	2021Y	2022H1
Net Interest Margin	0.88	0.99	0.99
ROAE	6.77	9.55	8.60
Cost-to-Income	70.80	62.90	65.80
Core Tier 1 Ratio	14.00	11.19	10.38

20209	20219	2022H1
138.36	139.82	136.46
4.04	2.87	2.78
0.99	1.58	1.75
0.44	0.43	0.43
	4.04 0.99	138.36139.824.042.870.991.58

Source: Bloomberg, S&P Global Market Intelligence, NORD/LB Markets Strategy & Floor Research; as of: 18.10.2022

Strengths / Opportunities

- Asset quality
- Diversified sources of revenue
- Established and growing franchise in Finland

Risks / Weaknesses

- Geographic concentration in mortgage portfolio
 - Dependency on capital market funding
 - Profitability in a regional comparison



Aktia Bank – Mortgage (Pool 2)

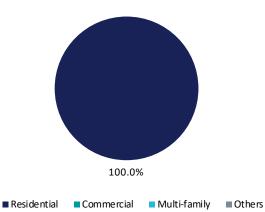
Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Cover Pool Data

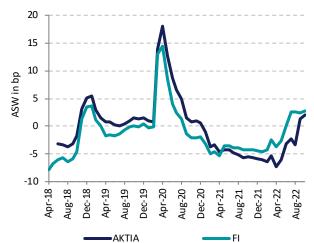
Cover pool volume (EURm)	2,577
Amount outstanding (EURm)	2,100
-thereof ≥ EUR 500m	47.6%
Current OC (nominal)	22.7%
Committed OC	10.0%
Cover type	Mortgage
Main country	100% Finland
Main region	65% Uusimaa
Number of loans	36 <i>,</i> 465
Number of borrowers	25,260
Avg. exposure to borrowers (EUR)	102,033
WAL (cover pool)	7.8y
WAL (covered bonds)	3.4y
Fixed interest (cover pool)	5.6%
Fixed interest (covered bonds)	92.9%
LTV (indexed)	46.7%
LTV (unindexed)	n/a
Loans in arrears	0.0%

Rating (Moody's)	Aaa
Rating (S&P)	-
Rating (Fitch)	-
Rating (DBRS)	-
TPI	Probable-High
TPI leeway	4
Collateral score	5.0%
RRL	-
JRL	-
Unused notches	-
AAA credit risk (%)	-
PCU	-
Recovery uplift	-
Outstanding ESG BMKs	No
LCR ELIGIBLE	Yes
LCR level (Bmk)	1
Risk weight	10%
Maturity structure (Bmk)	SB

Borrower Types

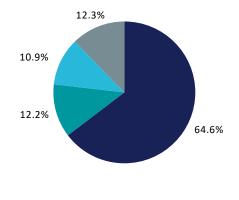


Spread Development



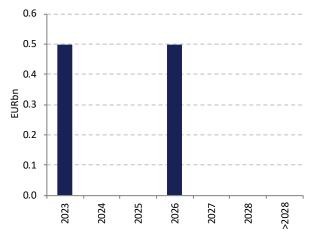
Source: Issuer, Rating agencies, Bloomberg, NORD/LB Markets Strategy & Floor Research

Regional Distribution



■Uusimaa ■Ostrobothnia ■Varsinais-Suomi ■Others

Redemption Profile (Bmk)





Ålandsbanken

Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Ratings

	Rating	Outlook
Fitch	-	-
Moody's	-	-
S&P	BBB+	Stable

Homepage

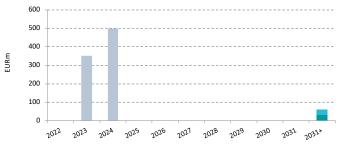
www.alandsbanken.com

Ålandsbanken Abp (Bank of Åland Plc) is a universal bank that operates in Finland and Sweden. The largest shareholder of the bank, which is listed on the Helsinki stock exchange, is Wiklöf Anders with Companies (18 March 2022: 21.3%). Wholly owned subsidiaries of Ålandsbanken Abp include Ålandsbanken Fondbolag (fund management services) and Crosskey Banking Solutions AB (IT). The bank offers a broad range of banking services in Åland. Over on the Finnish and Swedish mainland, the bank focuses on corporates and high-net-worth individuals. The bank reports across the operating segments of Private Banking, Premium Banking, IT and Corporate and Other. In February 2022, the bank transferred the majority of its Swedish mortgage loans (EUR 10.4bn) in addition to part of its covered bond portfolio (EUR 7.5bn) to Borgo AB, a start-up in the area of mortgage financing that holds a stake of 19.9% (Q1 2022) in Ålandsbanken. Further significant shares are held by ICA Banken, Ikano Bank, Söderberg & Partners and Sparbanken Syd. As part of this transaction, the bank received a one-off payment of EUR 9.8m in addition to future distribution fees. Following the conclusion of the transaction with Borgo AB, the funding profile mainly comprises deposits (Q1 2022: 73%; Q4 2021: 63%) and covered bonds (Q1 2022: 11%; Q4 2021: 19%). The climate goals developed in FY 2021 envisage a long-term aim of achieving a net zero carbon footprint by 2050. This roadmap also includes a target of reducing emissions in the areas of lending, investment and treasury by at least 50% (versus 2021) by 2030. The CET1 ratio amounted to 13.9% in Q1 2022 (Q1 2021: 14.2%).

Balance Sheet

2020Y	2021Y	2022H1
4,378	4,788	4,145
815	746	1,099
3,605	4,070	4,295
239	239	236
6,035	6,635	5 <i>,</i> 943
1,671	1,976	1,890
	4,378 815 3,605 239 6,035	4,378 4,788 815 746 3,605 4,070 239 239 6,035 6,635

Redemption Profile



Secured Subordinated Unsecured Jr Subordinated Unsecured

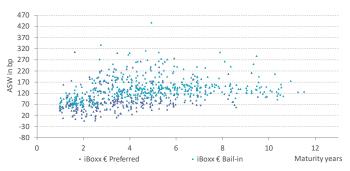
Company Ratios

	2020Y	2021Y	2022H1
Net Interest Margin	1.05	1.02	0.99
ROAE	11.61	12.82	12.30
Cost-to-Income	70.35	71.00	79.43
Core Tier 1 Ratio	14.27	12.09	12.50

Income Statement

(EURm)	2020Y	2021Y	2022H1
Net Interest Income	59	62	30
Net Fee & Commission Inc.	66	79	42
Net Trading Income	2	-0	1
Operating Expense	106	122	67
Credit Commit. Impairment	5	5	3
Pre-tax Profit	40	49	24

Senior Unsecured Bonds (EUR BMK)



2020Y 2021Y 2022H1 Liquidity Coverage Ratio 159.03 151.86 114.01 IFRS Tier 1 Leverage Ratio 3.98 3.62 4.00 NPL/ Loans at Amortised Cost 0.92 1.28 1.47 0.28 0.32 0.45 Reserves/Loans at Amort, Cost

Source: Bloomberg, S&P Global Market Intelligence, NORD/LB Markets Strategy & Floor Research; as of: 18.10.2022

Strengths / Opportunities

- Funding
- Capitalisation
- Credit quality

Risks / Weaknesses

- Concentration risks in the retail banking business
- Cost efficiency
- Susceptibility to property market risks in FI & SE



Finland

Ålandsbanken – Mortgage (Pool FI)

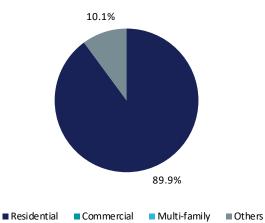
Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Cover Pool Data

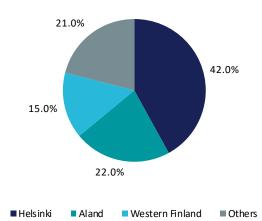
Cover pool volume (EURm)	1,218
Amount outstanding (EURm)	850
-thereof ≥ EUR 250m	64.7%
Current OC (nominal)	43.3%
Committed OC	n/a
Cover type	Mortgage
Main country	100% Finland
Main region	42% Helsinki
Number of loans	12,511
Number of borrowers	10,401
Avg. exposure to borrowers (EUR)	117,104
WAL (cover pool)	7.5y
WAL (covered bonds)	1.5y
Fixed interest (cover pool)	3.0%
Fixed interest (covered bonds)	76.0%
LTV (indexed)	n/a
LTV (unindexed)	54.9%
Loans in arrears	0.0%

Rating (S&P) AA Rating (Fitch)	AA - -
	-
Dating (DDDC)	-
Rating (DBRS)	
TPI	-
TPI leeway	-
Collateral score	-
RRL	а
JRL	aa
Unused notches	2
AAA credit risk (%) 2	.5
PCU	-
Recovery uplift	-
Outstanding ESG BMKs N	١o
LCR ELIGIBLE Y	es
LCR level (SBmk)	2A
Risk weight 10	1%
Maturity structure (SBmk)	SB

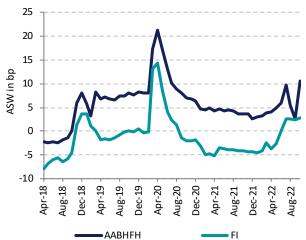
Borrower Types



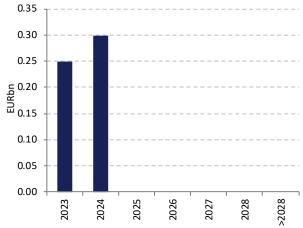
Regional Distribution



Spread Development



Redemption Profile (SBmk)



Source: Issuer, Rating agencies, Bloomberg, NORD/LB Markets Strategy & Floor Research





Danske Bank

Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Ratings

	Rating	Outlook
Fitch	А	Stable
Moody's	A3	Stable
S&P	A+	Negative

Homepage

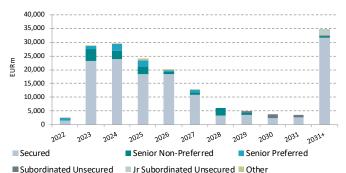
www.danskebank.com

Danske Bank A/S (Danske; headquartered in Copenhagen) is the largest bank in Denmark and acts as parent company for the Group. Danske is listed on the Nasdaq Copenhagen. The largest shareholder is AP Moller Holding (Mærsk Group) with a stake of 21%. The universal bank lists Denmark (36% of the loan portfolio), Sweden (11%), Norway (10%), Finland (7%) and Northern Ireland (3%) as its primary markets. In its Q1 2022 report, Danske reported across the following segments: Personal & Business Customers, Large Corporates & Institutions, Danica Pension, Northern Ireland, Non-Core and Group Functions. In May 2022, the Personal & Business Customers segment was divided into two segments, namely Personal Customers and Business Customers. Following this restructuring, Danske will pursue its goal of being more customer focused. The bank is still in dialogue with the relevant authorities regarding its business activities in its former Estonian subsidiary. The green loans and sustainable bonds business has quadrupled since 2019 and is set to rise to a volume of DKK 300bn by 2023 (as at Q1 2022: DKK 213bn). Investments in sustainably-orientated funds amounted to DKK 61bn (Q1 2022) and are set to increase to DKK 150bn by 2023. As at the end of Q1 2022, Danske's CET1 ratio stood at 17.6% (Q1 2021: 18.1%). At 40.0% (Q1 2022), the MREL ratio of the Group stood above the national regulatory requirement of 35.5%. The NPL ratio fell by 0.2 percentage points to 1.0% (FY 2021), while the LCR rose from 155% (Q1 2021) to 164% (Q1 2022).

Balance Sheet

(EURm)	2020Y	2021Y	2022H1
Net Loans to Customers	275,138	275,970	272,888
Total Securities	131,625	109,393	130,357
Total Deposits	179,193	173,771	176,199
Tier 1 Common Capital	19,310	20,434	19,843
Total Assets	552,073	529 <i>,</i> 348	548,245
Total Risk-weighted Assets	105,355	115,689	115,955

Redemption Profile



Company Ratios

	2020Y	2021Y	2022H1
Net Interest Margin	0.84	0.81	0.82
ROAE	2.75	7.46	5.18
Cost-to-Income	69.33	65.33	73.80
Core Tier 1 Ratio	18.33	17.66	17.11

Senior Unsecured Bonds (EUR BMK)

Income Statement

Net Interest Income

Net Trading Income

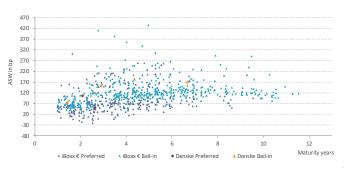
Operating Expense

Pre-tax Profit

Net Fee & Commission Inc.

Credit Commit. Impairment

(EURm)



2020Y

3.772

1,533

2,606

4,352

951

846

2021Y

3.600

1.629

4.394

4.140

2,228

19

2022H1

1.826

-4.795

2,053

49

789

792

terest Margin	0.84	0.81	0.82	Liquidity Covera
	2.75	7.46	5.18	IFRS Tier 1 Leve
o-Income	69.33	65.33	73.80	NPL/ Loans at A
ier 1 Ratio	18.33	17.66	17.11	Reserves/Loans

2020Y 2021Y 2022H1 age Ratio 153.35 163.68 154.65 erage Ratio 3.85 4.12 4.04 Amortised Cost 3.22 2.77 3.23 2.23 2.16 s at Amort. Cost

Source: Bloomberg, S&P Global Market Intelligence, NORD/LB Markets Strategy & Floor Research; as of: 11.10.2022

Strengths / Opportunities

- Loan quality
- Diversified income sources
- Capitalisation

Risks / Weaknesses

- Dependency on wholesale funding
- Reputational damage
- Profitability



Danske Bank – Mortgage

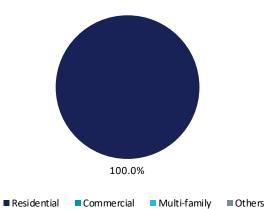
Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Cover Pool Data

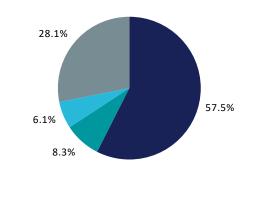
Cover pool volume (EURm)	3,551
Amount outstanding (EURm)	2,250
-thereof ≥ EUR 500m	155.6%
Current OC (nominal)	57.8%
Committed OC	0.0%
Cover type	Mortgage
Main country	100% Finland
Main region	57% Uusimaa
Number of loans	48,182
Number of borrowers	n/a
Avg. exposure to borrowers (EUR)	n/a
WAL (cover pool)	7.9y
WAL (covered bonds)	3.9y
Fixed interest (cover pool)	2.4%
Fixed interest (covered bonds)	100.0%
LTV (indexed)	47.3%
LTV (unindexed)	57.1%
Loans in arrears	0.0%

Rating (Moody's)	Aaa
Rating (S&P)	-
Rating (Fitch)	-
Rating (DBRS)	-
TPI	Probable-High
TPI leeway	2
Collateral score	5.0%
RRL	-
JRL	-
Unused notches	-
AAA credit risk (%)	-
PCU	-
Recovery uplift	-
Outstanding ESG BMKs	No
LCR ELIGIBLE	Yes
LCR level (Bmk)	1
Risk weight	10%
Maturity structure (Bmk)	SB

Borrower Types

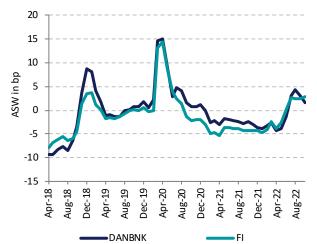


Regional Distribution



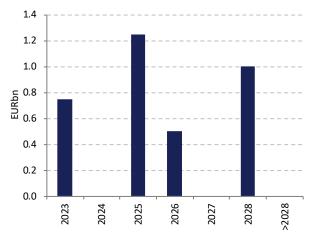
■ Uusimaa ■ Pirkanmaa ■ Varsinais-Suomi ■ Others

Spread Development



Source: Issuer, Rating agencies, Bloomberg, NORD/LB Markets Strategy & Floor Research

Redemption Profile (Bmk)





Nordea Bank

Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Ratings

Rating	Outlook
AA-	Stable
Aa3	Stable
AA-	Stable
	AA- Aa3

Homepage

www.nordea.com

Nordea Bank Abp (headquartered in Helsinki) is the largest bank in the Nordic countries as measured by assets. BlackRock is the largest shareholder in the group (5.2% as at the end of June 2022). The bank enjoys leading market positions in the Nordics, with Sweden accounting for a share of 31% (as at Q1 2021) in the overall lending portfolio, followed by Denmark (24%), Norway (24%) and Finland (20%). The bank divides its business into the segments of Personal Banking (share of operating income in FY 2021: 37.4%), Business Banking (26.8%), Large Corporates & Institutions (20.6%), Asset & Wealth Management (12.9%) as well as Group Functions (2.2%). The bank initially began to withdraw from Russia-based business activities in 2019, with the final steps in this context initiated in the first quarter of 2022. In the wake of the war in Ukraine, the bank decided to terminate all fund investments connected to Russia. In order to remain successful in the future, the bank is focusing on issues such as sustainability and digitalisation. Nordea resolved to integrate sustainability considerations over the long term in its business model in 2021 with the aim of achieving a net zero carbon footprint by 2050 at the latest. In addition to this long-term target, the bank is also planning to reduce emissions connected with its investment and loan portfolio by at least 40%-50% versus 2019 as well as directing a volume of EUR 200bn to sustainable financing by 2025. The bank has set a target of achieving ROE in excess of 13% (Q1 2022: 12.5%) by 2025. This target is to be supported, among other aspects, by a cost-income ratio of between 45% and 47% (Q1 2022: 48%) in addition to a CET1 ratio of between 15% and 16% (Q1 2022: 16.3%).

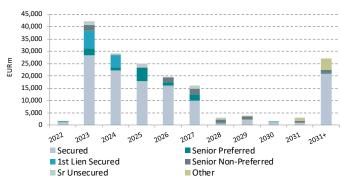
Income Statement

(EURm)

Balance Sheet

(EURm)	2020Y	2021Y	2022H1
Net Loans to Customers	329,765	345 <i>,</i> 050	347,596
Total Securities	124,082	110,403	125,531
Total Deposits	183,431	205,801	223,038
Tier 1 Common Capital	26,553	25,880	25,031
Total Assets	552,160	570,353	610,960
Total Risk-weighted Assets	155,440	151,906	150,723

Redemption Profile



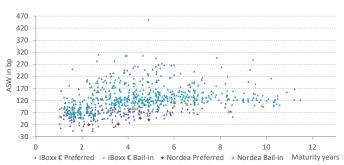
Net Interest Income	4,515	4,925	2,616
Net Fee & Commission Inc.	2,959	3,495	1,708
Net Trading Income	868	1,105	581
Operating Expense	4,591	4,590	2,514
Credit Commit. Impairment	908	118	-44
Pre-tax Profit	2,963	4,936	1,862

2020Y

2021Y

2022H1

Senior Unsecured Bonds (EUR BMK)



Company Ratios

	2020Y	2021Y	2022H1
Net Interest Margin	0.86	0.94	0.96
ROAE	7.05	10.92	8.40
Cost-to-Income	53.99	47.30	50.71
Core Tier 1 Ratio	17.08	17.04	16.61

	2020Y	2021Y	2022H1
Liquidity Coverage Ratio	158.43	160.15	146.78
IFRS Tier 1 Leverage Ratio	5.32	4.84	4.38
NPL/ Loans at Amortised Cost	0.85	0.69	0.48
Reserves/Loans at Amort. Cost	0.94	0.81	0.65

Source: Bloomberg, S&P Global Market Intelligence, NORD/LB Markets Strategy & Floor Research; as of: 18.10.2022

Strengths / Opportunities

- Market position in the Nordics
- Capitalisation and diversified income sources
- Digitalisation

Risks / Weaknesses

- Dependency on capital market funding
- Profitability
- Real estate market in Sweden and Norway



Finland •

Nordea Mortgage Bank – Mortgage

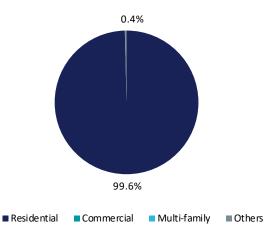
Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Cover Pool Data

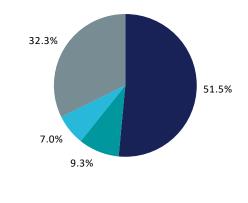
Cover pool volume (EURm)	24,029
Amount outstanding (EURm)	20,684
-thereof \geq EUR 500m	53.2%
	16.2%
Current OC (nominal)	
Committed OC	n/a
Cover type	Mortgage
Main country	100% Finland
Main region	51% Uusimaa
Number of loans	318,809
Number of borrowers	n/a
Avg. exposure to borrowers (EUR)	n/a
WAL (cover pool)	9.5y
WAL (covered bonds)	, 2.7y
Fixed interest (cover pool)	1.2%
Fixed interest (covered bonds)	58.6%
LTV (indexed)	51.7%
LTV (unindexed)	53.5%
Loans in arrears	0.5%

Rating (Moody's)	Aaa
Rating (S&P)	-
Rating (Fitch)	-
Rating (DBRS)	-
TPI	Probable
TPI leeway	5
Collateral score	5.0%
RRL	-
JRL	-
Unused notches	-
AAA credit risk (%)	-
PCU	-
Recovery uplift	-
Outstanding ESG BMKs	No
LCR ELIGIBLE	Yes
LCR level (Bmk)	1
Risk weight	10%
Maturity structure (Bmk)	HB

Borrower Types

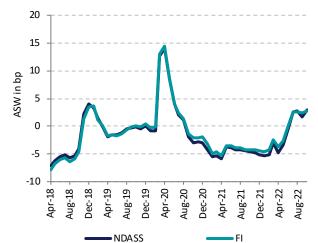


Regional Distribution



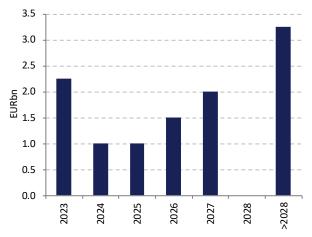
Uusimaa Pirkanmaa Varsinais-Suomi Others

Spread Development



Source: Issuer, Rating agencies, Bloomberg, NORD/LB Markets Strategy & Floor Research

Redemption Profile (Bmk)





Oma Säästöpankki

Finland 🕂

Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Ratings

	Rating	Outlook
Fitch	-	-
Moody's	-	-
S&P	BBB+	Stable

Homepage

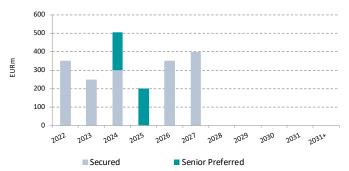
www.omasp.fi

Oma Säästöpankki Oyj (Oma Savings Bank Plc; Oma) is Finland's largest savings bank, employing 330 staff to serve around 150,000 customers. The institute focuses on retail and corporate customers in the areas of payments, mortgage lending, corporate financing, investments and insurance products across 35 different locations. In total, seven savings bank associations hold a stake of around 70% (as at June 2022) in Oma, which has been listed on the Helsinki stock exchange since 2018. The largest shareholder is savings bank association Etelä-Karjalan Säästöpankkisäätiö (June 2022: 30.1%). The real estate company Lappeenrannan Säästökeskus (wholly owned subsidiary) and the car finance and insurance holding SAV-Rahoitus Oyi (stake of 50.7% as at FY 2021) also form part of the Oma Savings Bank Group. The volume of the loan portfolio has risen by 24.5% to EUR 4.5bn (Q1 2022; Q1 2021: EUR 3.6bn). Retail customers account for 62% of the loan portfolio (Q1 2022), with 23% attributable to corporate customers and 6% to the agriculture and forestry sector. The bank's strategic alignment is geared towards high-level customer satisfaction in conjunction with appropriate risk management and clear targets to increase profitability. In December 2021, Oma completed the takeover of Eurajoen Savings Bank, expanding its business in the Satakunta region in the process. For FY 2022, the bank has announced short-term financial targets including an increase in operating earnings of between 10% and 15% (Q1 2022: 18.5%), a cost-income ratio of less than 45% (Q1 2022: 54.6%), ROE in excess of 10% (Q1 2022: 15.3%) and a CET1 ratio of more than 14% (Q1 2022: 14.6%).

Balance Sheet

(EURm)	2020Y	2021Y	2022H1
Net Loans to Customers	3,434	4,326	4,681
Total Securities	523	646	592
Total Deposits	2,377	2,898	3,114
Tier 1 Common Capital	324	372	338
Total Assets	4,382	5,373	5 <i>,</i> 890
Total Risk-weighted Assets	2,037	2,398	2,558

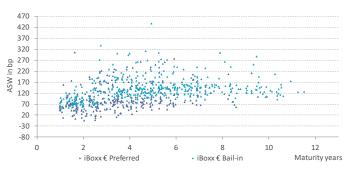
Redemption Profile



Income Statement

(EURm)	2020Y	2021Y	2022H1
Net Interest Income	68	80	47
Net Fee & Commission Inc.	29	34	21
Net Trading Income	13	5	-4
Operating Expense	51	51	37
Credit Commit. Impairment	22	7	-1
Pre-tax Profit	38	83	32

Senior Unsecured Bonds (EUR BMK)



Company Ratios

	2020Y	2021Y	2022H1
Net Interest Margin	1.82	1.72	1.73
ROAE	9.24	17.67	13.84
Cost-to-Income	46.29	41.74	54.67
Core Tier 1 Ratio	15.90	15.51	13.20

	2020Y	2021Y	2022H1
Liquidity Coverage Ratio	140.41	132.99	151.38
IFRS Tier 1 Leverage Ratio	7.41	6.94	5.74
NPL/ Loans at Amortised Cost	1.29	0.65	-
Reserves/Loans at Amort. Cost	0.75	0.66	0.49

Source: Bloomberg, S&P Global Market Intelligence, NORD/LB Markets Strategy & Floor Research; as of: 18.10.2022

Strengths / Opportunities

- Capitalisation
- Income generation
- Regional franchise

Risks / Weaknesses

- Concentration risks in lending business
- Dependency on partner products
- High balance sheet growth → Risk propensity

Oma Säästöpankki – Mortgage

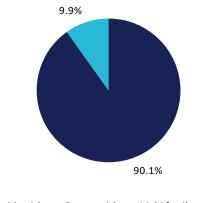
Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Cover Pool Data

Cover pool volume (EURm)	2,145
Amount outstanding (EURm)	1,650
-thereof ≥ EUR 250m	100.0%
Current OC (nominal)	30.0%
Committed OC	n/a
Cover type	Mortgage
Main country	100% Finland
Main region	21% South Ostrobothnia
Number of loans	29,986
Number of borrowers	25,976
Avg. exposure to borrowers (EUR)	82,579
WAL (cover pool)	8.2y
WAL (covered bonds)	2.7у
Fixed interest (cover pool)	14.0%
Fixed interest (covered bonds)	100.0%
LTV (indexed)	61.9%
LTV (unindexed)	n/a
Loans in arrears	0.0%

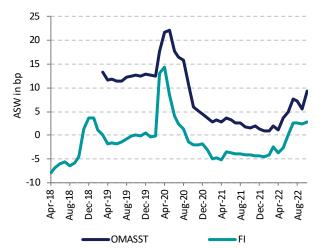
Rating (S&P)	AAA
Rating (Fitch)	-
Rating (DBRS)	-
TPI	-
TPI leeway	-
Collateral score	-
RRL	а
JRL	аа
Unused notches	1
AAA credit risk (%)	2.5
PCU	-
Recovery uplift	-
Outstanding ESG BMKs	No
LCR ELIGIBLE	Yes
LCR level (SBmk)	2A
Risk weight	10%
Maturity structure (SBmk)	SB

Borrower Types



Residential Commercial Multi-family Others

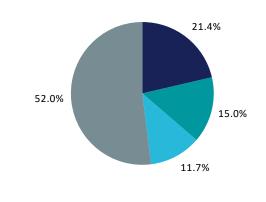
Spread Development



Source: Issuer, Rating agencies, Bloomberg, NORD/LB Markets Strategy & Floor Research

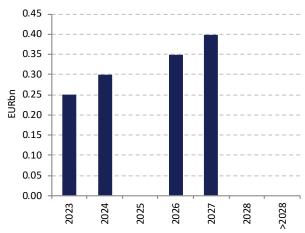
Regional Distribution

Rating (Moody's)



South Ostrobothnia Pirkanmaa Uusimaa Others

Redemption Profile (SBmk)





OP Financial Group

Rating

Aa3

AA-

Finland

Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

The OP Financial Group (OP FG) is the leading provider of financial services in Finland, consisting of various subsidiaries and 119 independent member institutions (as at March Outlook 2022). In turn, these are the owners of the OP Cooperative, under which various subsidiaries such as OP Corporate Bank plc and OP Mortgage Bank are included. The group reports across the segments Retail Banking (FY 2021: 49.4% of operating income), Stable Insurance (31.4%), Corporate Banking (24.5%) and Group Functions (19%). The group Stable boasts a market share of 39% in both the area of private mortgage lending and corporate loans. In the insurance sector, market penetration stands at 32% for non-life insurance and 21% for life insurance. With its 2050 sustainability goals, OP FG is seeking to support the transformation process towards a climate-friendly economy. These goals include a commitment to ensuring that the corporate lending portfolio and fund investments are *Ratings OP Corporate Bank handled on a CO2-neutral basis. By 2030, the carbon intensity of fund investments is to be reduced by 50%, with no further investments to be made in the areas of coal mining and coal power generation. In addition to these sustainability goals, the group is pursuing longterm financial goals up to 2025 that include ROE above 8.0% (Q1 2021: 7.8%) as well as a CET1 ratio (Q1 2022: 18.4%) of at least four percentage points above the regulatory requirements (FY 2021: 13.7%). At 221% in Q1 2022, the LCR exceeded the regulatory requirement. Covered bonds, which are issued via the subsidiary OP Mortgage Bank, are the largest source of capital market funding, accounting for around one third overall.

Balance Sheet

Ratings*

Moody's

Homepage

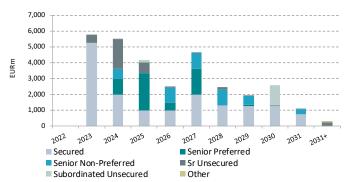
www.op.fi

Fitch

S&P

(EURm)	2020Y	2021Y	2022H1
Net Loans to Customers	93,644	96,947	98,198
Total Securities	27,991	25,525	24,554
Total Deposits	73,422	77,898	77,603
Tier 1 Common Capital	11,293	11,965	12,223
Total Assets	160,207	174,110	167,705
Total Risk-weighted Assets	59,720	65,731	69,338

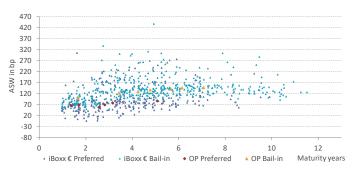
Redemption Profile



Income Statement

(EURm)	2020Y	2021Y	2022H1
Net Interest Income	1,284	1,409	675
Net Fee & Commission Inc.	931	1,034	515
Net Trading Income	420	112	-680
Operating Expense	2,078	2,189	1,103
Credit Commit. Impairment	226	158	100
Pre-tax Profit	785	1,127	459

Senior Unsecured Bonds (EUR BMK)



Company Ratios

	2020Y	2021Y	2022H1		2020Y	2021Y	2022H1
Net Interest Margin	0.92	0.93	0.89	Liquidity Coverage Ratio	186.39	229.69	230.87
ROAE	5.09	6.70	5.37	IFRS Tier 1 Leverage Ratio	7.26	7.01	7.51
Cost-to-Income	69.24	60.62	73.19	NPL/ Loans at Amortised Cost	2.92	2.85	3.47
Core Tier 1 Ratio	18.91	18.20	17.63	Reserves/Loans at Amort. Cost	0.70	0.73	0.77

Source: Bloomberg, S&P Global Market Intelligence, NORD/LB Markets Strategy & Floor Research; as of: 18.10.2022

Strengths / Opportunities

- Market penetration in Finland
- Capitalisation
- Association of cooperatives

Risks / Weaknesses

- Dependency on capital market funding
- Geographical concentration
- Cost efficiency

OP Mortgage Bank – Mortgage

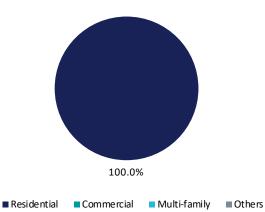
Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Cover Pool Data

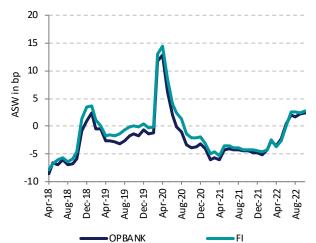
Cover pool volume (EURm)	16,480
Amount outstanding (EURm)	14,915
-thereof ≥ EUR 500m	83.8%
Current OC (nominal)	10.5%
Committed OC	n/a
Cover type	Mortgage
Main country	100% Finland
Main region	34% Uusimaa
Number of loans	282,110
Number of borrowers	n/a
Avg. exposure to borrowers (EUR)	n/a
WAL (cover pool)	8.2y
WAL (covered bonds)	3.9y
Fixed interest (cover pool)	1.4%
Fixed interest (covered bonds)	91.3%
LTV (indexed)	50.6%
LTV (unindexed)	52.0%
Loans in arrears	n/a

Rating (Moody's)	Aaa
Rating (S&P)	AAA
Rating (Fitch)	-
Rating (DBRS)	-
TPI	Probable-High
TPI leeway	5
Collateral score	5.0%
RRL	aa+
JRL	aa+
Unused notches	5
AAA credit risk (%)	13.03
PCU	-
Recovery uplift	-
Outstanding ESG BMKs	Yes
LCR ELIGIBLE	Yes
LCR level (Bmk)	1
Risk weight	10%
Maturity structure (Bmk)	SB

Borrower Types

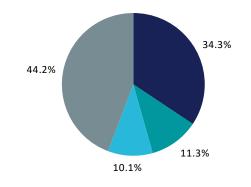


Spread Development



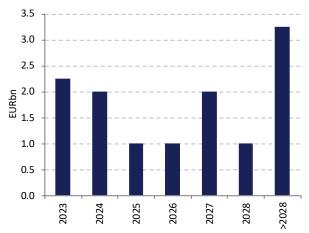
Source: Issuer, Rating agencies, Bloomberg, NORD/LB Markets Strategy & Floor Research

Regional Distribution



■ Uusimaa ■ Pirkanmaa ■ Southwest Finland ■ Others

Redemption Profile (Bmk)







Finland

POP Mortgage Bank

Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

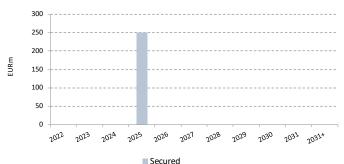
Ratings		
		Outlook
Fitch	-	-
Moody's	-	-
S&P	-	-
Homepag		

As a wholly owned subsidiary of the POP Bank Centre Coop (POPC), POP Mortgage Bank (POPMB) is the refinancing vehicle of the POP Bank Group. The POP Bank Group is made up of 19 cooperative banks, the central institute POPC, the refinancing vehicle POPMB and the central credit institute Bonum Bank (Bonum). Within the Group, POPC is responsible, as the central institute, for control and management tasks on behalf of members. There is a joint and several liability agreement in place for the individual institutes within the group. In addition to banking services, the Group also provides insurance services for private individuals via its subsidiary, Finnish P&C Insurance LTD. Geographically, the focus is on growth centres in central, western and southern Finland. The lending portfolio comprises retail loans (Q2 2022: 66%) and corporate loans (20%), in addition to customers from the agricultural sector (14%). In terms of products, 64% is attributable to residential real estate. The Group reports in the two operating segments Banking and Insurance. In May 2022, the ECB authorised the former POP Newco Plc to carry out the mortgage business, which has since been operated under the POPMB brand. Bonum Bank manages POPMB's issuance activity based on the group's financing plan. In September 2022, the bank placed its first covered bond in the EUR sub-benchmark segment in a volume of EUR 250m. The long-term targets set at Group level include a CET1 ratio of >17.5% (Q2 2022: 19.6%) and a cost-income ratio of 60% (H1 2022: 91.5%, according to bank's own information). As at H1 2022, the CET1 ratio came in at 19.6%.

Balance Sheet (POP Bank Group)

(EURm)	2020Y	2021Y	2022H1
Net Loans to Customers	3,868	4,244	4,371
Total Securities	658	656	665
Total Deposits	4,086	4,222	4,331
Tier 1 Common Capital	513	530	556
Total Assets	5,098	5,358	5,613
Total Risk-weighted Assets	2,578	2,766	2,838

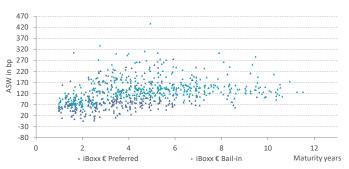
Redemption Profile



Income Statement

(EURm)	2020Y	2021Y	2022H1
Net Interest Income	74	78	41
Net Fee & Commission Inc.	31	36	21
Net Trading Income	-2	0	-1
Operating Expense	104	108	56
Credit Commit. Impairment	6	12	2
Pre-tax Profit	13	45	4

Senior Unsecured Bonds (EUR BMK)



Company Ratios

	2020Y	2021Y	2022H1		2020Y	2021Y	2022H1
Net Interest Margin	1.58	1.53	1.51	Liquidity Coverage Ratio	196.82	141.34	163.52
ROAE	2.16	6.94	0.96	IFRS Tier 1 Leverage Ratio	10.09	9.90	9.92
Cost-to-Income	83.27	79.46	124.51	NPL/ Loans at Amortised Cost	-	-	-
Core Tier 1 Ratio	19.90	19.15	19.59	Reserves/Loans at Amort. Cost	0.83	0.85	0.87

Source: Bloomberg, S&P Global Market Intelligence, NORD/LB Markets Strategy & Floor Research; as of: 18.10.2022

Strengths / Opportunities

- Capitalisation
- Business model
- Regional franchise

Risks / Weaknesses

- Credit risk concentration (retail, SMEs, regional)
- Cost efficiency
- Earning power

POP Mortgage Bank – Mortgage

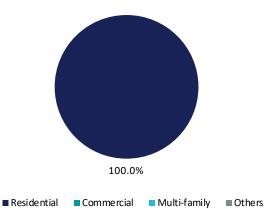
Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Cover Pool Data

Cover pool volume (EURm)	330
Amount outstanding (EURm)	250
-thereof ≥ EUR 250m	100.0%
Current OC (nominal)	32.1%
Committed OC	n/a
Cover type	Mortgage
Main country	100% Finland
Main region	25% South Ostrobothnia
Number of loans	8,867
Number of borrowers	n/a
Avg. exposure to borrowers (EUR)	n/a
WAL (cover pool)	6.6y
WAL (covered bonds)	3.0y
Fixed interest (cover pool)	4.3%
Fixed interest (covered bonds)	100.0%
LTV (indexed)	56.4%
LTV (unindexed)	58.2%
Loans in arrears	0.0%

Rating (Moody's)	-
Rating (S&P)	AAA
Rating (Fitch)	-
Rating (DBRS)	-
TPI	-
TPI leeway	-
Collateral score	-
RRL	a-
JRL	aa-
Unused notches	0
AAA credit risk (%)	-
PCU	4
Recovery uplift	-
Outstanding ESG BMKs	No
LCR ELIGIBLE	Yes
LCR level (SBmk)	2A
Risk weight	10%
Maturity structure (SBmk)	SB

Borrower Types

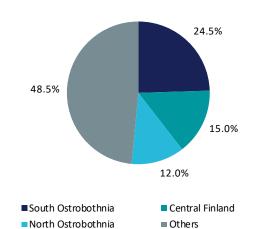


Spread Development

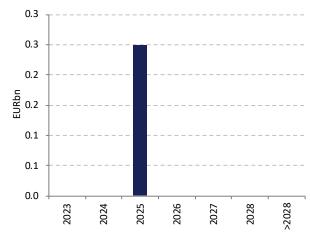


Source: Issuer, Rating agencies, Bloomberg, NORD/LB Markets Strategy & Floor Research

Regional Distribution



Redemption Profile (SBmk)





Ratings*

Fitch

S&P

Moody's

Homepage

www.saastopankki.fi

*Savings Bank Finland Plc

Rating

A-

NORD/LB

Sp Mortgage Bank/Savings Bank Group

Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

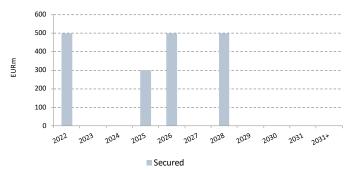
Outlook

Sp Mortgage Bank (SP-Kiinnitysluottopankki) is the covered bond funding vehicle for the Finnish Savings Bank Group. The bank's remit is limited exclusively to the issuance of covered bonds. The bank does not have its own customer base or distribution network, with its operating activities and mortgage lending business offered instead via the Finnish Savings Bank Group. In total, the Finnish Savings Bank Group comprises 17 savings banks. Its business is exclusively focused on Finland, particularly on the economically stronger Negative regions in the south and west of the country. The member banks offer all the services of a universal bank, with insurance policies also part of the portfolio. As at December 2021, Eurajoki Savings Bank left the Finnish Savings Bank Group and was integrated in Oma Savings Bank Plc. In accordance with the Amalgamation Act, the 16 savings banks, the Central Bank of Savings Banks Finland (CBSBF) and Sp Mortgage Bank are liable for debts and liabilities on a joint and several basis. The Finnish Savings Bank Group reports across the following segments: Banking (share of pre-tax profit in FY 2021: 55.4%) and Asset Management Services (44.6%). Mortgage loans account for a share of around 50% in the lending portfolio (FY 2021), with roughly 18% attributable to retail loans and just under 13% to corporate loans. The share of covered bonds in the funding mix of the Finnish Savings Bank Group is set to rise to 19% by 2024 (FY 2021: 14%). Across the same period, retail deposits (FY 2021: 72%) will fall to 69%, while deposits from major customers (5%) will decline to 3%. As at year-end 2021, the Group posted a CET1 ratio of 19.5%, while the equivalent value for Sp Mortgage Bank itself was 15.2%.

Balance Sheet (Savings Bank Group) (FURm) 20202

(EURm)	2020Y	2021Y	2022H1
Net Loans to Customers	9,284	9,603	9,996
Total Securities	1,197	975	855
Total Deposits	7,779	7,682	7,868
Tier 1 Common Capital	1,070	1,097	1,078
Total Assets	13,097	13,079	13,462
Total Risk-weighted Assets	5 <i>,</i> 639	5,627	5,769

Redemption Profile (Sp Mortgage Bank)



Net Trading Income **Operating Expense**

Net Fee & Commission Inc.

Credit Commit. Impairment

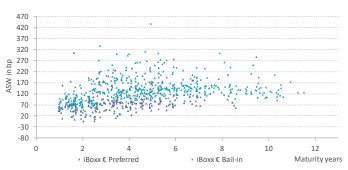
Income Statement

Net Interest Income

(EURm)

Pre-tax Profit

Senior Unsecured Bonds (EUR BMK)



2020Y

161

100

18

15

67

217

2021Y

166

115

14

234

4

90

2022H1

85

59

-22

133

8

43

Company Ratios

	2020Y	2021Y	2022H1
Net Interest Margin	1.42	1.41	1.42
ROAE	4.58	6.20	5.54
Cost-to-Income	70.82	71.53	72.44
Core Tier 1 Ratio	18.97	19.49	18.68

	2020Y	2021Y	2022H1
Liquidity Coverage Ratio	196.29	160.56	138.98
IFRS Tier 1 Leverage Ratio	8.19	8.42	8.11
NPL/ Loans at Amortised Cost	2.56	1.95	1.92
Reserves/Loans at Amort. Cost	0.45	0.43	0.46

Source: Bloomberg, S&P Global Market Intelligence, NORD/LB Markets Strategy & Floor Research; as of: 18.10.2022

Strengths / Opportunities

- Joint and several liability of the Group
- Capitalisation

Risks / Weaknesses

- Geographic diversification (western Finland)
 - Credit risk concentration



Sp Mortgage Bank – Mortgage

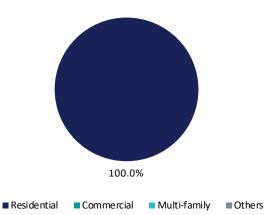
Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Cover Pool Data

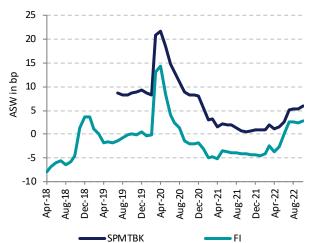
Cover pool volume (EURm)	2,211
Amount outstanding (EURm)	1,800
-thereof ≥ EUR 500m	97.2%
Current OC (nominal)	22.8%
Committed OC	12.3%
Cover type	Mortgage
Main country	100% Finland
Main region	26% Uusimaa
Number of loans	27,171
Number of borrowers	n/a
Avg. exposure to borrowers (EUR)	n/a
WAL (cover pool)	9.1y
WAL (covered bonds)	3.4у
Fixed interest (cover pool)	12.0%
Fixed interest (covered bonds)	100.0%
LTV (indexed)	53.0%
LTV (unindexed)	55.4%
Loans in arrears	0.0%

Rating (Moody's)	-
Rating (S&P)	AAA
Rating (Fitch)	-
Rating (DBRS)	-
TPI	-
TPI leeway	-
Collateral score	-
RRL	a+
JRL	aa+
Unused notches	1
AAA credit risk (%)	2.5
PCU	-
Recovery uplift	-
Outstanding ESG BMKs	No
LCR ELIGIBLE	Yes
LCR level (Bmk)	1
Risk weight	10%
Maturity structure (Bmk)	SB

Borrower Types

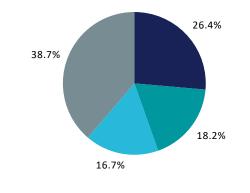


Spread Development



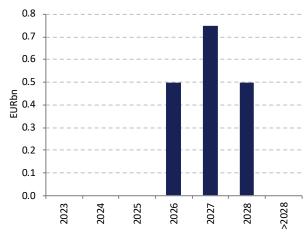
Source: Issuer, Rating agencies, Bloomberg, NORD/LB Markets Strategy & Floor Research

Regional Distribution

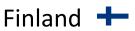


Uusimaa Varsinais-Suomi Pirkanmaa Others

Redemption Profile (Bmk)







Finland +

Suomen Hypoteekkiyhdistys

Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Founded in 1860, Suomen Hypoteekkiyhdistys (Hypo) is a Finnish bank that exclusively specialises in the financing of residential property. Since 2002, deposit products and retail Outlook customer services have also been offered via the wholly owned subsidiary AsuntoHypoPankki Oy. Moreover, Hypo holds a stake of 54.6% (as at FY 2021) in the real estate management firm Bostadsaktiebolaget Taos. As a cooperative bank, Hypo is owned by its members, who are also customers. A total of 50 employees serves a client base of Stable approximately 29,000 customers from its headquarters in Helsinki. The bank's product portfolio is directed exclusively at private individuals, with loans not awarded to companies. In FY 2021, the loan portfolio grew by 3.6% to EUR 2.6bn (FY 2020: EUR 2.51bn) with an NPL ratio of 0.14%. The average LTV as at Q1 2022 was 32.0% (Q1 2021: 33.9%). All loans are collateralised by way of residential real estate. Hypo's business is above all concentrated on the growth regions of Finland, with Helsenki forming a particular focal point. The cost-income ratio rose for the third successive year, with Hypo now calculating a value of 69.0% in FY 2021 for this metric. To strengthen the core business, a new IT system was introduced in Q1 2022. This forms the first part of a new core banking system set to be gradually implemented during 2022. Deposits contribute a total of 50.5% to the bank's funding, while covered bonds account for 48.2% (Q1 2021). The CET1 ratio (Q1 2022: 13.9%) was 2.15 percentage points above the regulatory requirements, while the LCR came in at 134.1% as at the end of March 2022 (Q1 2021: 213.7%).

Balance Sheet

Ratings

Fitch

S&P

Moody's

Homepage

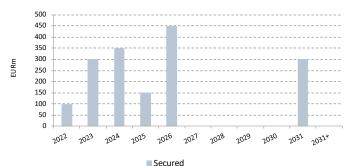
www.hypo.fi

Rating

BBB

(EURm)	2020Y	2021Y	2022H1
Net Loans to Customers	2,511	2,637	2,689
Total Securities	246	206	169
Total Deposits	1,574	1,670	1,456
Tier 1 Common Capital	124	128	136
Total Assets	3,213	3,325	3,316
Total Risk-weighted Assets	887	944	968

Redemption Profile



Company Ratios					
	2020Y	2021Y	2022H1		2020Y
Net Interest Margin	0.47	0.53	0.55	Liquidity Coverage Ratio	169.77
ROAE	4.97	4.67	4.56	IFRS Tier 1 Leverage Ratio	3.87
Cost-to-Income	63.91	68.95	72.18	NPL/ Loans at Amortised Cost	0.12
Core Tier 1 Ratio	13.95	13.58	14.02	Reserves/Loans at Amort. Cost	0.01

Source: Bloomberg, S&P Global Market Intelligence, NORD/LB Markets Strategy & Floor Research; as

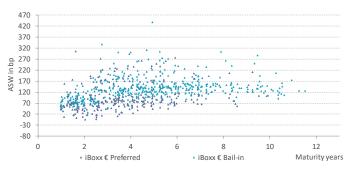
Strengths / Opportunities

- Credit quality
- **Risk profile**
- Capitalisation

Income Statement

(EURm)	2020Y	2021Y	2022H1
Net Interest Income	15	17	9
Net Fee & Commission Inc.	4	4	2
Net Trading Income	1	2	3
Operating Expense	14	18	10
Credit Commit. Impairment	0	0	-0
Pre-tax Profit	8	8	4

Senior Unsecured Bonds (EUR BMK)



2021Y

179.94

2022H1

162.99

IFRS Tier 1 Leverage Ratio	3.87	3.88	4.19
NPL/ Loans at Amortised Cost	0.12	0.15	0.23
Reserves/Loans at Amort. Cost	0.01	0.01	0.01
Floor Research: as of: 18.10.2022			

Risks / Weaknesses

- Concentration risks in lending business
- Deposit basis in comparison with peers
- Diversification of income sources (monoliner)

Suomen Hypoteekkiyhdistys – Mortgage

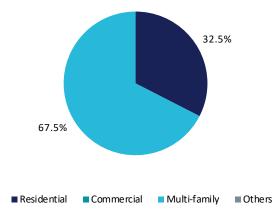
Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Cover Pool Data

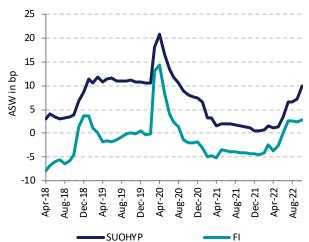
Cover pool volume (EURm) Amount outstanding (EURm)	2,100 1,600
-thereof ≥ EUR 250m	87.5%
Current OC (nominal)	31.3%
Committed OC	n/a
Cover type	Mortgage
Main country	100% Finland
Main region	80% Uusimaa
Number of loans	9,463
Number of borrowers	n/a
Avg. exposure to borrowers (EUR)	n/a
WAL (cover pool)	8.1y
WAL (covered bonds)	2.8y
Fixed interest (cover pool)	1.8%
Fixed interest (covered bonds)	90.6%
LTV (indexed)	29.7%
LTV (unindexed)	31.2%
Loans in arrears	0.0%

Rating (Moody's)	-
Rating (S&P)	AAA
Rating (Fitch)	-
Rating (DBRS)	-
TPI	-
TPI leeway	-
Collateral score	-
RRL	a-
JRL	aa-
Unused notches	0
AAA credit risk (%)	38.43
PCU	-
Recovery uplift	-
Outstanding ESG BMKs	No
LCR ELIGIBLE	Yes
LCR level (SBmk)	2A
Risk weight	10%
Maturity structure (SBmk)	SB

Borrower Types

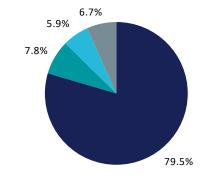


Spread Development



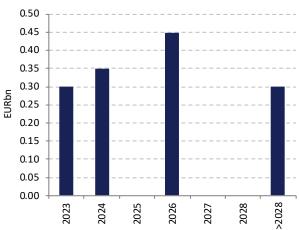
Source: Issuer, Rating agencies, Bloomberg, NORD/LB Markets Strategy & Floor Research

Regional Distribution



Uusimaa Varsinais-Suomi Pirkanmaa Others

Redemption Profile (SBmk)





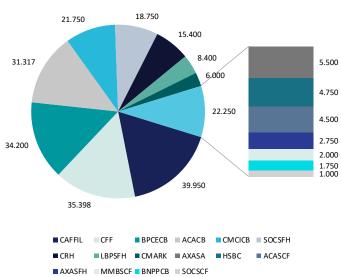


France

Market Overview Covered Bonds

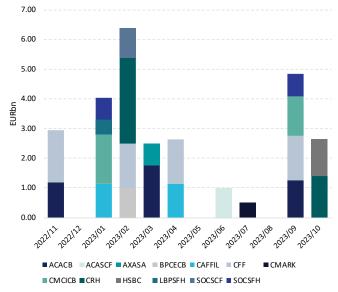
Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Cover Pool Volume	458.06bn	Outstanding volume (Bmk)	EUR 233.42bn
Amount outstanding	EUR 364.85bn	Number of benchmarks	224
Number of issuer	17	Outstanding ESG volume (Bmk)	EUR 14.25bn
No of cover pools	17	Number of ESG benchmarks	14
there of M / PS / others	13/4/0	Outstanding volume (SBmk)	EUR 0.25bn
Ratings (low / high)	AA+ / AAA	Number of subbenchmarks	1
Best possible LCR level	Level 1	Maturity types	HB, SB



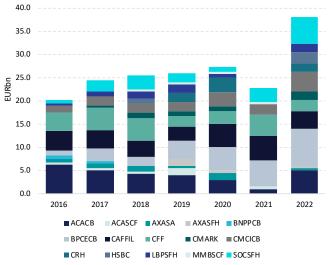
Outstanding benchmark volume¹ (EURbn)

Benchmark redemption profile¹: 11/2022 - 10/2023

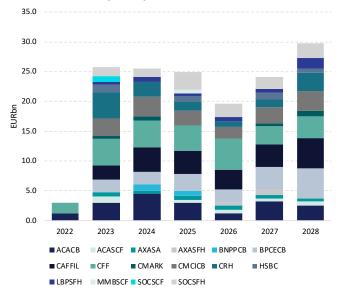


Benchmark issuance volume¹

45.0



Benchmark redemption profile¹²



Source: Issuer, Rating agencies, Bloomberg, NORD/LB Markets Strategy & Floor Research; ¹ based on Bloomberg ticker; ² Redemptions 2022: 11/22 – 12/22

AXA Bank Belgium/AXA Bank Europe SCF

Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Stable

Stable

AXA Bank Europe Société de Crédit Foncier (AXA SCF) is a French subsidiary of the Belgian AXA Bank Belgium SA/NV, which holds 99.9% of its shares. On 31 December 2021, Crelan Outlook Co (Belgian cooperative group) acquired ABB from the former 100% shareholder AXA Group. According to the plans drawn up, ABB will merge with the Belgian banking subsidiary of Crelan Co (Crelan NV) by the end of 2024. Until this time, AXA SCF will remain a subsidiary of ABB. In the future, AXA SCF will become a subsidiary of Crelan NV. Following the takeover, Crelan Co is the fifth-largest banking group in Belgium as measured by total assets (FY 2021: EUR 53.0bn). As AXA SCF does not conduct any operating business of its own accord, but instead serves to exclusively fund ABB via the issuance of covered bonds, the figures here refer to the liable parent company. ABB primarily operates on the Belgian market as a retail bank with a focus on the day-to-day retail customer, deposit and lending business. With 825 employees, ABB serves 860,000 customers in 400 independent bank branches in addition to digital banking platforms. ABB ranks as a domestic systemically important bank (D-SIB) in Belgium and is subject to direct ECB supervision. It has a market share of 9% in the mortgage lending segment. The lion's share of the funding mix consists of customer deposits (FY 2021: 67.7%). Covered bonds issued by AXA SCF representing the second-largest funding source of ABB at EUR 5.5bn (FY 2021: 18.9% of the funding mix). In FY 2021, the CET1 ratio rose to 20.0% (+160bp yoy). an.

Balance Sheet

Ratings

Fitch

S&P

Moody's*

Homepage

www.axabank.be

* LT Bank Deposits

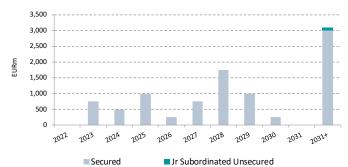
Rating

A3

BBB+

(EURm)	2019Y	2020Y	2021Y
Net Loans to Customers	23,313	24,100	25,909
Total Securities	3,427	1,987	1,091
Total Deposits	19,572	21,351	20,836
Tier 1 Common Capital	1,037	1,102	1,192
Total Assets	28,790	30,458	29,281
Total Risk-weighted Assets	6,324	5 <i>,</i> 995	5,949

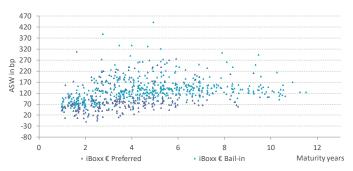
Redemption Profile (ABB)



Income Statement

(EURm)	2019Y	2020Y	2021Y
Net Interest Income	367	273	290
Net Fee & Commission Inc.	-0	13	17
Net Trading Income	-80	20	17
Operating Expense	227	211	212
Credit Commit. Impairment	9	25	0
Pre-tax Profit	70	87	128

Senior Unsecured Bonds (EUR BMK)



Company Ratios

	2019Y	2020Y	2021Y
Net Interest Margin	1.33	0.93	0.98
ROAE	4.29	5.50	7.31
Cost-to-Income	74.20	65.42	62.26
Core Tier 1 Ratio	16.39	18.38	20.04

	2019Y	2020Y	2021Y
Liquidity Coverage Ratio	198.07	196.66	186.00
IFRS Tier 1 Leverage Ratio	3.67	3.64	4.08
NPL/ Loans at Amortised Cost	1.22	1.48	1.11
Reserves/Loans at Amort. Cost	0.33	0.37	0.29

Source: Bloomberg, S&P Global Market Intelligence, NORD/LB Markets Strategy & Floor Research; as of: 18.10.2022

Strengths / Opportunities

- National market position
- Funding structure
- Credit quality

Risks / Weaknesses

- Risk concentration (mortgages in BE)
- Profitability
- Diversification of income sources



AXA Bank Europe SCF – Mortgage

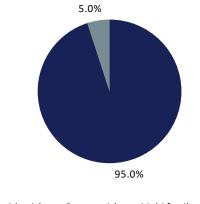
Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Cover Pool Data

Cover pool volume (EURm)	10,896
Amount outstanding (EURm)	9,250
-thereof ≥ EUR 500m	59.5%
Current OC (nominal)	17.8%
Committed OC	12.0%
Cover type	Mortgage
Main country	100% Belgium
Main region	17% Antwerp
Number of loans	131,620
Number of borrowers	n/a
Avg. exposure to borrowers (EUR)	n/a
WAL (cover pool)	8.5y
WAL (covered bonds)	7.0y
Fixed interest (cover pool)	95.1%
Fixed interest (covered bonds)	54.1%
LTV (indexed)	51.7%
LTV (unindexed)	61.9%
Loans in arrears	0.2%

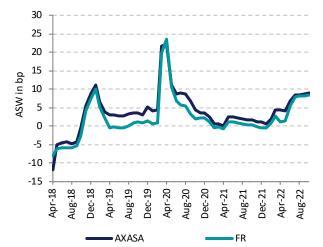
Rating (Moody's)	Aaa
Rating (S&P)	-
Rating (Fitch)	-
Rating (DBRS)	-
TPI	Probable
TPI leeway	3
Collateral score	5.0%
RRL	-
JRL	-
Unused notches	-
AAA credit risk (%)	-
PCU	-
Recovery uplift	-
Outstanding ESG BMKs	No
LCR ELIGIBLE	Yes
LCR level (Bmk)	1
Risk weight	10%
Maturity structure (Bmk)	SB

Borrower Types



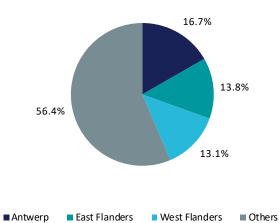
■ Residential ■ Commercial ■ Multi-family ■ Others

Spread Development

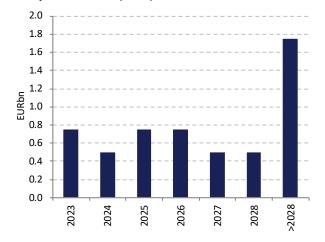


Source: Issuer, Rating agencies, Bloomberg, NORD/LB Markets Strategy & Floor Research

Regional Distribution



Redemption Profile (Bmk)





France

AXA Banque/AXA Home Loan SFH

Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Ratings

	Rating	Outlook
Fitch	A+	Positive
Moody's	-	-
S&P	A+	Stable

Homepage

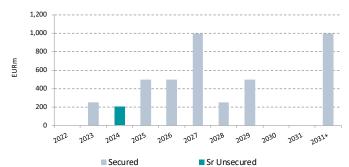
www.axabank.be

AXA Home Loan SFH is a 99.99% subsidiary of the French AXA Banque SA. AXA Banque is the strategic banking entity of AXA France, which in turn is a wholly owned subsidiary of the insurance provider AXA Group. Following the sale of AXA Bank Belgium to Crelan, AXA Banque is the sole banking subsidiary of the French AXA Group. AXA Banque benefits from membership of the insurance group AXA. For its part, AXA France Participations S.A.S. owns 51% of AXA Banque, while AXA France Vie S.A. holds the remaining stake of 49%. AXA Banque, which employs approximately 620 staff (FY 2021), operates as a universal bank with a strong focus on retail customers and benefits from AXA France's sales network. Alongside day-to-day banking activities, the financial institution also offers loans, private banking and wealth management as well as savings and investments. The majority of the lending portfolio consists of mortgage loans (100% France) and Lombard loans (asset-backed loans whereby the assets are usually insurance policies or real estate). AXA Banque's building finance portfolio consists almost exclusively of guaranteed loans (over 95% as at FY 2021), with consumer loans playing a more subordinate role. On the financing side, the highest shares are attributable to customer and demand deposits as well as term deposits. As at FY 2021, the ratio of loans to deposits amounted to 220.2%. In addition to customer deposits, funding also takes place via the issuance of covered bonds via AXA Home Loan SFH. As at FY 2021, the NPL ratio was 2.86%, while the CET1 ratio came it at 10.77%.

Balance Sheet

(EURm)	2019Y	2020Y	2021Y
Net Loans to Customers	11,561	11,499	11,599
Total Securities	1,639	1,792	1,385
Total Deposits	5,011	4,999	5,267
Tier 1 Common Capital	517	485	470
Total Assets	15,027	16,657	16,308
Total Risk-weighted Assets	4,761	4,504	4,365

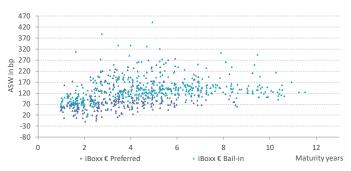
Redemption Profile



Income Statement

(EURm)	2019Y	2020Y	2021Y
Net Interest Income	150	163	159
Net Fee & Commission Inc.	19	17	10
Net Trading Income	7	-20	38
Operating Expense	149	176	183
Credit Commit. Impairment	-	-	-
Pre-tax Profit	5	-42	11

Senior Unsecured Bonds (EUR BMK)



Company Ratios

	2019Y	2020Y	2021Y
Net Interest Margin	1.12	1.05	0.99
ROAE	-0.99	-7.45	0.77
Cost-to-Income	86.62	111.60	89.63
Core Tier 1 Ratio	10.86	10.77	10.77

	2019Y	2020Y	2021Y
Liquidity Coverage Ratio	208.05	198.43	197.10
IFRS Tier 1 Leverage Ratio	3.51	2.99	2.93
NPL/ Loans at Amortised Cost	1.35	3.09	2.88
Reserves/Loans at Amort. Cost	0.67	0.81	0.77

Source: Bloomberg, S&P Global Market Intelligence, NORD/LB Markets Strategy & Floor Research; as of: 18.10.2022

Strengths / Opportunities

- Strategically important part of the AXA Group
- Integration in the AXA Group
- Diversified product range

Risks / Weaknesses

- Concentration risks (retail banking in France)
- Earning power
- Market penetration/market position of the bank

AXA Home Loan SFH – Mortgage

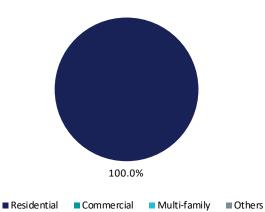
Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Cover Pool Data

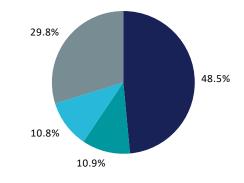
Cover pool volume (EURm)	4,313
Amount outstanding (EURm)	3,750
-thereof ≥ EUR 500m	73.3%
Current OC (nominal)	15.0%
Committed OC	8.1%
Cover type	Mortgage
Main country	100% France
Main region	49% Ile-de-France
Number of loans	27,860
Number of borrowers	n/a
Avg. exposure to borrowers (EUR)	n/a
WAL (cover pool)	9.2y
WAL (covered bonds)	6.8y
Fixed interest (cover pool)	100.0%
Fixed interest (covered bonds)	100.0%
LTV (indexed)	61.8%
LTV (unindexed)	72.4%
Loans in arrears	0.0%

Rating (Moody's)	-
Rating (S&P)	AAA
Rating (Fitch)	AAA
Rating (DBRS)	-
TPI	-
TPI leeway	-
Collateral score	-
RRL	аа
JRL	аа
Unused notches	5
AAA credit risk (%)	21.07
PCU	6
Recovery uplift	-
Outstanding ESG BMKs	No
LCR ELIGIBLE	Yes
LCR level (Bmk)	1
Risk weight	10%
Maturity structure (Bmk)	SB

Borrower Types

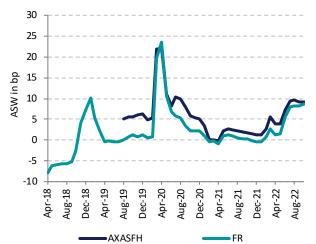


Regional Distribution



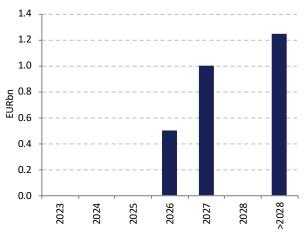
■Ile-de-France ■ Occitanie ■ Provence-Alpes-Cote d'Azur ■ Others

Spread Development



Source: Issuer, Rating agencies, Bloomberg, NORD/LB Markets Strategy & Floor Research

Redemption Profile (Bmk)





France

France

Banque Fédérative du Crédit Mutuel

Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Ratings

	Rating	Outlook
Fitch	A+	Stable
Moody's*	Aa3	Stable
S&P	A+	Stable

Homepage

www.bfcm.creditmutuel.fr

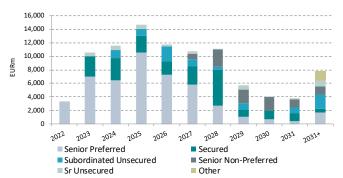
*Senior Unsecured

As part of the Crédit Mutuel Group, Banque Fédérative du Crédit Mutuel SA (BFCM) constitutes the holding and funding unit for the units of the Crédit Mutuel Alliance Fédérale (CMAF). The main shareholders of BFCM are Caisse Fédérale de Crédit Mutuel (around 92%), which belongs to CMAF, in addition to Caisses locales and Caisses régionales (6.4%). BFCM also owns the CIC Group (Crédit Industriel et Commercial), several specialist subsidiaries, various financial institutions such as Targobank and the covered bond issuer Crédit Mutuel Home Loan SFH. As such, the range of products and services offered by BFCM is highly diverse as, in addition to conventional financial services such as banking, insurance and property business, it also provides services in the technology, media and logistics segments via specialist subsidiaries. CMAF has around 5.9 million members in total. As at June 2022, around 76,400 employees serve 29.6 million customers in more than 4,500 branches. In addition to other EU and non-EU countries, CMAF generated 77% of its net income in its main business area Banking France, followed by Germany at 10% and the Iberian Peninsula at 4% (H1 2022). CMAF reports in the following segments: Retail banking (55% of net earnings in H1 2022), Insurance (19%), Specialized Business Lines (23%) and Others (3%). In addition to customer deposits, other funding sources include covered bonds, senior bonds and subordinated bonds, which are also placed as green or social issuances in benchmark format. At 18.2% (H1 2022), the CET1 ratio exceeds the target set by the group for 2023 of 17% to 18%.

Balance Sheet

(EURm)	2020Y	2021Y	2022H1
Net Loans to Customers	279,531	293,092	322,250
Total Securities	60,048	53,562	56,926
Total Deposits	268,802	274,257	280,267
Tier 1 Common Capital	-	-	-
Total Assets	627,244	662,868	669,808
Total Risk-weighted Assets	-	-	-

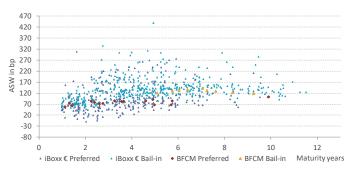
Redemption Profile



Income Statement

(EURm)	2020Y	2021Y	2022H1
Net Interest Income	5,522	5 <i>,</i> 585	3,072
Net Fee & Commission Inc.	2,597	2,920	1,484
Net Trading Income	61	927	330
Operating Expense	6,279	6,328	3,562
Credit Commit. Impairment	1,750	644	424
Pre-tax Profit	2,229	4,113	2,321

Senior Unsecured Bonds (EUR BMK)



Company Ratios

	2020Y	2021Y	2022H1
Net Interest Margin	1.19	1.10	1.15
ROAE	4.67	8.40	9.81
Cost-to-Income	60.36	52.93	56.58
Core Tier 1 Ratio	-	-	-

	2020Y	2021Y	2022H1
Liquidity Coverage Ratio	-	-	-
IFRS Tier 1 Leverage Ratio	-	-	-
NPL/ Loans at Amortised Cost	3.86	3.40	3.23
Reserves/Loans at Amort. Cost	2.91	2.63	2.52

Source: Bloomberg, S&P Global Market Intelligence, NORD/LB Markets Strategy & Floor Research; as of: 18.10.2022

Strengths / Opportunities

- Core member of the Group
- **Risk profile**
- Capitalisation

Risks / Weaknesses

- Pressure on profitability
- Economic environment
- Credit quality dependent on domestic economy

Crédit Mutuel – CIC Home Loan SFH – Mortgage France

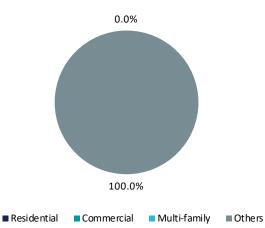
Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Cover Pool Data

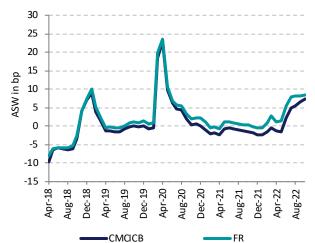
Cover pool volume (EURm)	38,428
Amount outstanding (EURm)	26,345
-thereof ≥ EUR 500m	82.6%
Current OC (nominal)	45.9%
Committed OC	8.1%
Cover type	Mortgage
Main country	100% France
Main region	23% Ile-de-France
Number of loans	338,883
Number of borrowers	n/a
Avg. exposure to borrowers (EUR)	n/a
WAL (cover pool)	8.1y
WAL (covered bonds)	, 4.3y
Fixed interest (cover pool)	98.5%
Fixed interest (covered bonds)	96.2%
LTV (indexed)	62.0%
LTV (unindexed)	69.0%
Loans in arrears	0.0%

Rating (Moody's)	Aaa
Rating (S&P)	AAA
Rating (Fitch)	AAA
Rating (DBRS)	-
ТРІ	Probable-High
TPI leeway	5
Collateral score	5.0%
RRL	аа
JRL	аа
Unused notches	5
AAA credit risk (%)	7.64
PCU	4
Recovery uplift	2
Outstanding ESG BMKs	No
LCR ELIGIBLE	Yes
LCR level (Bmk)	1
Risk weight	10%
Maturity structure (Bmk)	HB & SB

Borrower Types

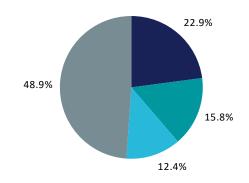


Spread Development



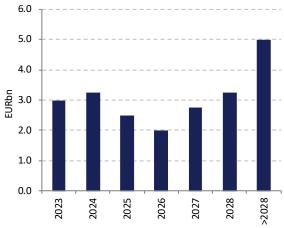
Source: Issuer, Rating agencies, Bloomberg, NORD/LB Markets Strategy & Floor Research

Regional Distribution



■ Ile-de-France ■ Auvergne-Rhone-Alpes ■ Grand Est ■ Others

Redemption Profile (Bmk)





BNP Paribas

Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Ratings

	Rating	Outlook
Fitch	A+	Stable
Moody's	Aa3	Stable
S&P	A+	Stable

Homepage

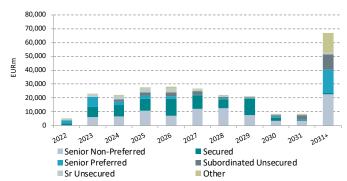
www.bnpparibas.com

BNP Paribas SA (BNP) employs almost 190,000 staff, 145,000 of which are based in Europe, across 65 countries, making it one of the largest banks in the world. The Financial Stability Board has classified it as a global systemically important bank (G-SIB; additional capital buffer: 2.0%). With a stake of 7.8%, the largest shareholder is Société Fédérale de Participations et d'Investissement (SFPI), which is wholly owned by the Belgian state, followed by BlackRock Inc. with around 6.1% (as at: 06 Sept. 2022). In organisational terms, BNP Paribas is divided into three main operating segments: Commercial, Personal Banking & Services (CPBS; 49% of pre-tax income as at H1 2022), Investment & Protection Services (IPS; 15%) and Corporate & Institutional Banking (CIB; 35%). In addition to the core European markets of France, Belgium, Italy and Luxembourg (December 2021: approximately 13.8 million customers in total), the bank also operates its retail business in nine non-EU countries (around 16.8 million customers). The CIB segment serves both business customers and institutional investors in areas including, but not limited to, capital markets, securities services and investment banking. CIB operates in the regions EMEA (Europe, Middle East, Africa), Americas and APAC (Asia-Pacific). Within the scope of its sustainability goals (which are embedded in the strategic alignment GTS 2025), the bank discontinued their financing activities of new carbon projects as far back as 2017. Since November 2016 it has placed green bonds in a total volume of EUR 22bn (as at FY 2021). As at H1 2022, the CET1 ratio amounted to 12.2%. With the finalisation of Basel III, this should stand at 12.0% by the end of 2025.

Balance Sheet

(EURm)	2020Y	2021Y	2022H1
Net Loans to Customers	814,772	822,839	864,004
Total Securities	881,928	834,558	1,023,825
Total Deposits	940,991	957,684	1,008,661
Tier 1 Common Capital	88,767	91,976	91,992
Total Assets	2,488,491	2,634,444	2,891,007
Total Risk-weighted Assets	695,523	713,671	755,989

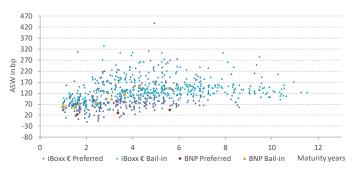
Redemption Profile



Income Statement

(EURm)	2020Y	2021Y	2022H1
Net Interest Income	19,286	19,238	10,318
Net Fee & Commission Inc.	9,579	10,362	5,059
Net Trading Income	6,935	7,671	5,577
Operating Expense	28,098	29,304	16,279
Credit Commit. Impairment	5,152	2,959	1,394
Pre-tax Profit	9,337	12,744	7,246

Senior Unsecured Bonds (EUR BMK)



Company Ratios

	2020Y	2021Y	2022H1
Net Interest Margin	0.92	0.89	0.94
ROAE	6.44	8.24	8.96
Cost-to-Income	65.20	65.67	66.34
Core Tier 1 Ratio	12.76	12.89	12.17

	2020Y	2021Y	2022H1
Liquidity Coverage Ratio	135.15	136.32	135.31
IFRS Tier 1 Leverage Ratio	4.08	3.87	3.60
NPL/ Loans at Amortised Cost	-	-	-
Reserves/Loans at Amort. Cost	2.58	2.39	2.23

Source: Bloomberg, S&P Global Market Intelligence, NORD/LB Markets Strategy & Floor Research; as of: 18.10.2022

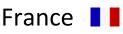
Strengths / Opportunities

- Earning power (retail and commercial franchise)
- Capitalisation
- Credit quality

Risks / Weaknesses

- Cost efficiency in comparison with peers
- Economic risks in Italy
- Dependency on wholesale funding





BNP Home Loan SFH – Mortgage

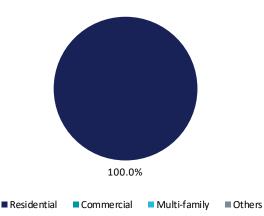
Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Cover Pool Data

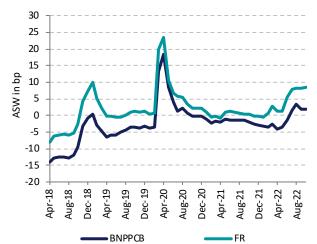
Cover pool volume (EURm)	39,630
Amount outstanding (EURm)	33,931
-thereof ≥ EUR 500m	5.2%
Current OC (nominal)	16.8%
Committed OC	8.1%
Cover type	Mortgage
Main country	100% France
Main region	39% Ile-de-France (incl. Paris)
Number of loans	332,649
Number of borrowers	n/a
Avg. exposure to borrowers (E	EUR) n/a
WAL (cover pool)	8.0y
WAL (covered bonds)	5.5y
Fixed interest (cover pool)	97.7%
Fixed interest (covered bonds) 100.0%
LTV (indexed)	58.4%
LTV (unindexed)	65.2%
Loans in arrears	0.0%

Rating (S&P)	AAA
Rating (Fitch)	AAA
Rating (DBRS)	-
TPI	-
TPI leeway	-
Collateral score	-
RRL	аа
JRL	аа
Unused notches	5
AAA credit risk (%)	12.53
PCU	3
Recovery uplift	1
Outstanding ESG BMKs	No
LCR ELIGIBLE	Yes
LCR level (Bmk)	1
Risk weight	10%
Maturity structure (Bmk)	HB & SB

Borrower Types

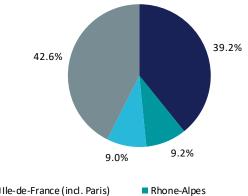


Spread Development



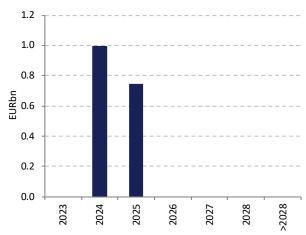
Source: Issuer, Rating agencies, Bloomberg, NORD/LB Markets Strategy & Floor Research

Regional Distribution



Ile-de-France (incl. Paris)
 Provence-Alpes-Cote d'Azur
 Others

Redemption Profile (Bmk)







France

Caisse de Refinancement de l'Habitat

Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

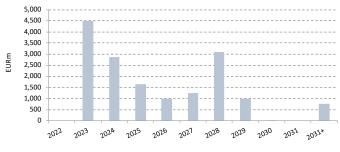
Ratings				
	Rating	Outlook		
Fitch	-	-		
Moody's	-	-		
S&P	-	-		
Homepage www.crh-bonds.com				

Caisse de Refinancement de l'Habitat (CRH) was established by the French government in 1985. The role of the not-for-profit financial institution CRH is to refinance residential mortgage loans for French financial institutions. Today, the specialist institution is a private company owned by French banks, which contribute equity on a pro rata basis and benefit from funding. As at March 2022, the largest shareholders in CRH were Crédit Mutuel (32.0%), the Crédit Agricole Group (33.1%), Société Générale (15.9%), BNP Paribas (7.7%) and BPCE (11.3%). CRH does not charge a margin for its refinancing activity. Its sole task is to issue bonds in accordance with French law (article 13 de la loi du 11 juillet 1985). CRH's cover pool consists of secured mortgage SSDs issued by participating banks. In the event of a bank defaulting, the pledged cover assets pass directly to CRH, which can then sell the portfolio in order to buy back the underlying bonds. The pledged assets are solely French property loans, which are backed by first mortgages or the guarantees that are standard in France. In addition to the legal requirements, the loans must comply with CRH's far more stringent conditions. According to CRH's principle of congruity, the institute issues its respective bonds under conditions (maturity, currency, interest rate) identical to the SSD deals. CRH has been subject to supervision by the ECB since 2014 on account of the volume of its total assets. At 25.06% (January 2022), the CET1 ratio exceeds the regulatory requirement of 7.4%.

Balance Sheet

(EURm)	2020Y	2021Y	2022H1
Net Loans to Customers	-	-	-
Total Securities	24,948	21,095	16,614
Total Deposits	-	-	-
Tier 1 Common Capital	555	554	592
Total Assets	25,352	21,469	17,090
Total Risk-weighted Assets	2,997	2,594	2,146

Redemption Profile

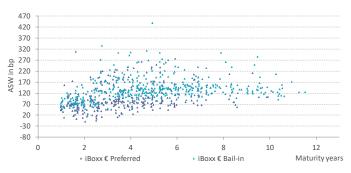


Secured

Income Statement

(EURm)	2020Y	2021Y	2022H1
Net Interest Income	-8	2	1
Net Fee & Commission Inc.	-0	-0	-0
Net Trading Income	-	-	-
Operating Expense	10	10	10
Credit Commit. Impairment	-	-	-
Pre-tax Profit	3	3	3
Credit Commit. Impairment	- 3	- 3	- 3

Senior Unsecured Bonds (EUR BMK)



Company Ratios

	2020Y	2021Y	2022H1		2020Y	2021Y	2022H1
Net Interest Margin	-0.03	0.01	0.01	Liquidity Coverage Ratio	-	-	-
ROAE	0.01	0.01	0.03	IFRS Tier 1 Leverage Ratio	2.19	2.58	3.47
Cost-to-Income	76.17	77.87	76.47	NPL/ Loans at Amortised Cost	-	-	-
Core Tier 1 Ratio	18.52	21.35	27.60	Reserves/Loans at Amort. Cost	-	-	-

Source: Bloomberg, S&P Global Market Intelligence, NORD/LB Markets Strategy & Floor Research; as of: 18.10.2022

Strengths / Opportunities

- Membership association
- Asset quality

- Risk concentration on French property market
- Nominal debt level

CRH – Mortgage

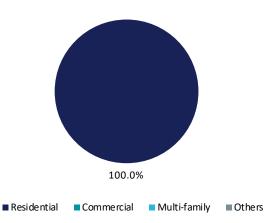
Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Cover Pool Data

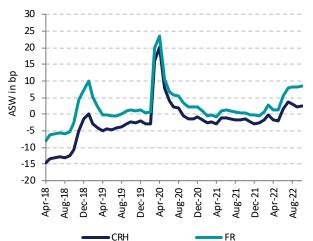
23,242
16,422
93.8%
41.5%
25.0%
Mortgage
100% France
17% Ile-de-France
419,598
375,723
61,860
6.1y
2.9y
93.1%
100.0%
30.6%
36.1%
0.0%

Rating (Moody's)	Aaa
Rating (S&P)	-
Rating (Fitch)	AAA
Rating (DBRS)	-
ТРІ	n/a
TPI leeway	n/a
Collateral score	n/a
RRL	-
JRL	-
Unused notches	-
AAA credit risk (%)	-
PCU	1
Recovery uplift	1
Outstanding ESG BMKs	No
LCR ELIGIBLE	Yes
LCR level (Bmk)	1
Risk weight	10%
Maturity structure (Bmk)	HB

Borrower Types

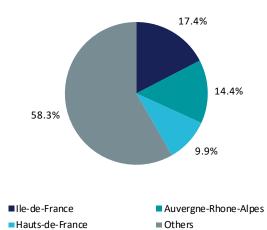


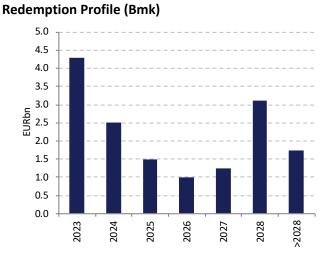
Spread Development



Source: Issuer, Rating agencies, Bloomberg, NORD/LB Markets Strategy & Floor Research

Regional Distribution





France

Caisse Française de Financement Local

Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Ratings Rating Outlook Fitch Moody's S&P Homepage www.caissefrancaisedefinance mentlocal.fr

Caisse Française de Financement Local (CAFFIL) was formed าค purchase of Dexia Municipal Agency (Dexia MA) by the newly established public sector credit institute Société de Financement Local (SFIL; banking licence since Q1 2013). In the wake of this, Dexia MA was renamed as CAFFIL and operates today as an accredited Société de Crédit Foncier (SCF). In the past, SFIL was owned by the French government (75%) as well as Caisse des Dépôts (20%) and La Banque Postale (5%), but has been practically wholly owned (99.99%) by Caisse des Dépôts since September 2020. The French government continues to hold a single share and has the right to elect a board member without voting rights. CAFFIL remains a 100% subsidiary of SFIL and its sphere of activities has not changed. The task of CAFFIL is to refinance the loans to French regions, departments, municipalities and public hospitals granted by La Banque Postal as well as export loans with unconditional and irrevocable guarantees on the part of the French state. In order to fulfil this role at all times, SFIL has provided both a statement of support and a declaration that it will provide funding. CAFFIL issues obligations foncières (covered bonds), as well as other covered debt instruments backed solely by a public sector cover pool (local authority loans). The funding loan is guaranteed by the French government. CAFFIL issues a total of EUR 4-6bn in covered bonds every year. Since 2019, funding has also been supplemented by bonds in ESG format (green and social bonds).

Income Statement

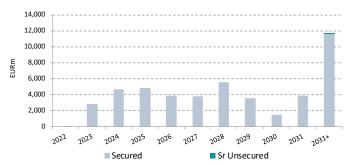
Net Interest Income

(EURm)

Balance Sheet

(EURm)	2020Y	2021Y	2022H1
Net Loans to Customers	50 <i>,</i> 366	49,522	48,761
Total Securities	16,430	12,549	8,577
Total Deposits	-	-	-
Tier 1 Common Capital	-	-	-
Total Assets	72,461	71,154	64,267
Total Risk-weighted Assets	4,672	3,777	-

Redemption Profile



Company Ratios

	2020Y	2021Y	2022H1
Net Interest Margin	0.18	0.21	0.23
ROAE	2.98	3.94	7.09
Cost-to-Income	64.20	50.73	57.45
Core Tier 1 Ratio	-	-	-

2020Y 2021Y 2022H1 Liquidity Coverage Ratio 176.00 771.00 261.00 IFRS Tier 1 Leverage Ratio NPL/ Loans at Amortised Cost 0.98 0.57 0.55 Reserves/Loans at Amort. Cost 0.06 0.05 0.04

Source: Bloomberg, S&P Global Market Intelligence, NORD/LB Markets Strategy & Floor Research; as of: 18.10.2022

Strengths / Opportunities

- Indirectly owned by the government
- Strategic unit within the Group structure

Risks / Weaknesses

- Profitability
- Leverage

b	in	2013	following	th



France

2022H1

79

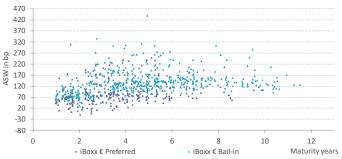
2021Y

152

Net Fee & Commission Inc.	16	1	-2		
Net Trading Income	20	54	16		
Operating Expense	104	104	54		
Credit Commit. Impairment	-9	-4	-5		
Pre-tax Profit	59	102	70		
Senior Unsecured Bonds (EUR BMK)					

2020Y

126



CAFFIL – Public Sector

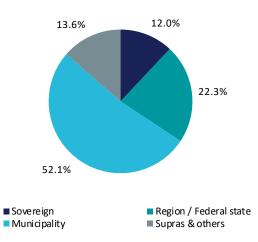
Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Cover Pool Data

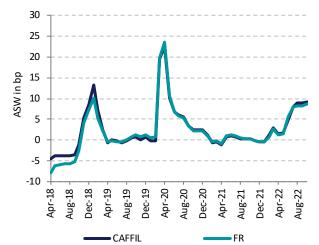
Cover pool volume (EURm)	59,502
Amount outstanding (EURm)	51,966
-thereof ≥ EUR 500m	56.8%
Current OC (nominal)	14.5%
Committed OC	5.0%
Cover type	Public Sector
Main country	91% France
Main region	23% Ile-de-France
Number of loans	40,261
Number of borrowers	n/a
Avg. exposure to borrowers (EUR)	n/a
WAL (cover pool)	7.1y
WAL (covered bonds)	7.3y
Fixed interest (cover pool)	72.5%
Fixed interest (covered bonds)	93.2%
LTV (indexed)	-
LTV (unindexed)	-
Loans in arrears	0.2%

Rating (Moody's)	Aaa
Rating (S&P)	AA+
Rating (Fitch)	-
Rating (DBRS)	AAA
ТРІ	Probable-High
TPI leeway	4
Collateral score	7.1%
RRL	аа
JRL	аа
Unused notches	0
AAA credit risk (%)	15.62
PCU	-
Recovery uplift	-
Outstanding ESG BMKs	Yes
LCR ELIGIBLE	Yes
LCR level (Bmk)	1
Risk weight	10%
Maturity structure (Bmk)	НВ

Borrower Types

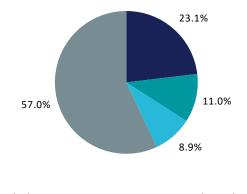


Spread Development



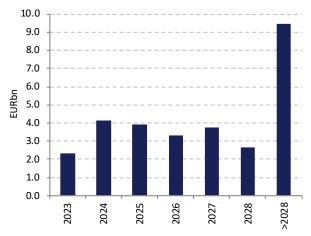
Source: Issuer, Rating agencies, Bloomberg, NORD/LB Markets Strategy & Floor Research

Regional Distribution



Ile-de-FranceAuvergne-Rhone-AlpesHauts-de-FranceOthers

Redemption Profile (Bmk)



NORD/LB



Compagnie de Financement Foncier

Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

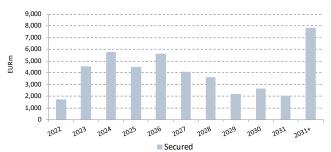
Ratings			•
	Rating	Outlook	
Fitch	-	-	t
Moody's	-	-	ĺ
S&P	-	-	1
Homepa	ge		(
www.fond	cier.fr		(
			9

The financial institution Compagnie de Financement Foncier (CFF) was established in 1999 by Crédit Foncier de France (CF) in response to changes to the legislative framework. The roots of the parent group (100%) can be traced back to 1852, when CF was established by the French government. Since 1999, CF has operated as a private sector financial institution and has been a wholly owned subsidiary of BPCE S.A. since 2010. Then, as now, CF's main role is to provide property financing, which includes funding for the construction of social housing and the public sector. Once established, CFF was integrated completely within the Group, taking over responsibility for funding CF as well as the BPCE Group later on. As a result of this, previously issued covered bonds including the corresponding suitable assets and liabilities were transferred. The assets (March 2022: 88% France) reveal a clear geographic focus. Thereafter follows the rest of the European Union at 7%. In terms of asset type, the focus is on mortgage loans at around 49%, with the public sector accounting for a share of 40% (March 2022). As at June 2022, the total volume of outstanding covered bonds (Obligations Fonciéres) stood at EUR 51.8bn. In 2021, covered bonds amounting to EUR 4.8bn were issued. CFF is one of the largest issuers in France and a major European issuer of benchmark bonds. In addition to the EUR, it also places bonds in USD, JPY, CHF, GBP, HKD, among other currencies. The CET1 ratio of 27.2% (FY 2021) exceeds the regulatory minimum requirements.

Balance Sheet

(EURm)	2020Y	2021Y	2022H1
Net Loans to Customers	35 <i>,</i> 339	33,777	35,004
Total Securities	6,417	6,139	6,047
Total Deposits	-	-	-
Tier 1 Common Capital	3,107	3,107	1,974
Total Assets	68,455	63 <i>,</i> 935	60,543
Total Risk-weighted Assets	12,244	11,425	8,077

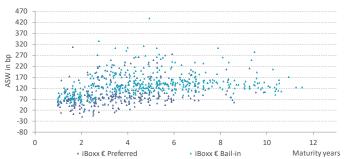
Redemption Profile



Income Statement

(EURm)	2020Y	2021Y	2022H1
Net Interest Income	117	223	119
Net Fee & Commission Inc.	34	30	12
Net Trading Income	20	-0	0
Operating Expense	93	103	46
Credit Commit. Impairment	-4	-7	-8
Pre-tax Profit	78	156	92

Senior Unsecured Bonds (EUR BMK)



Company Ratios

	2020Y	2021Y	2022H1		2020Y	2021Y	2022H1
Net Interest Margin	0.17	0.34	0.39	Liquidity Coverage Ratio	-	-	-
ROAE	1.48	3.33	5.02	IFRS Tier 1 Leverage Ratio	-	-	-
Cost-to-Income	55.77	40.92	35.46	NPL/ Loans at Amortised Cost	3.61	3.79	2.19
Core Tier 1 Ratio	25.38	27.19	24.44	Reserves/Loans at Amort. Cost	0.17	0.15	0.10

Source: Bloomberg, S&P Global Market Intelligence, NORD/LB Markets Strategy & Floor Research; as of: 18.10.2022

Strengths / Opportunities

- Integration in the banking group
- Positioning in FR (covered bond market)

Risks / Weaknesses

- Concentrated credit risk in the retail business
- Competition in the mortgage financial segment in FR

NORD/LB

France

CFF – Mortgage

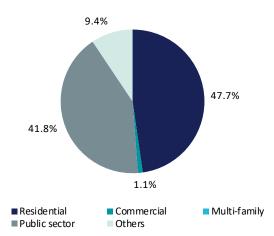
Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Cover Pool Data

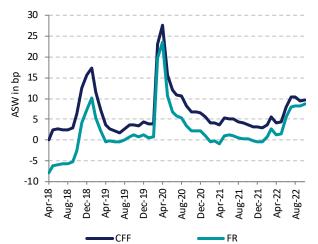
Cover pool volume (EURm)	59,684
Amount outstanding (EURm)	51,857
-thereof \geq EUR 500m	62.5%
Current OC (nominal)	15.1%
Committed OC	5.0%
Cover type	Mortgage
Main country	86% France
Main region	23% Ile-de-France
Number of loans	364,829
Number of borrowers	n/a
Avg. exposure to borrowers (EUR)	n/a
WAL (cover pool)	8.2y
WAL (covered bonds)	6.8y
Fixed interest (cover pool)	84.5%
Fixed interest (covered bonds)	93.5%
LTV (indexed)	57.5%
LTV (unindexed)	72.7%
Loans in arrears	0.9%

Rating (S&P)	AAA
Rating (Fitch)	-
Rating (DBRS)	-
TPI	Probable-High
TPI leeway	4
Collateral score	12.3%
RRL	aa-
JRL	аа
Unused notches	3
AAA credit risk (%)	12.89
PCU	-
Recovery uplift	2
Outstanding ESG BMKs	No
LCR ELIGIBLE	Yes
LCR level (Bmk)	1
Risk weight	10%
Maturity structure (Bmk)	HB

Borrower Types



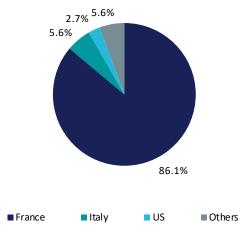
Spread Development



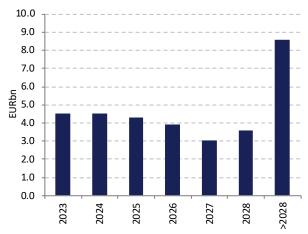
Source: Issuer, Rating agencies, Bloomberg, NORD/LB Markets Strategy & Floor Research

Regional Distribution

Rating (Moody's)



Redemption Profile (Bmk)



NORD/LB

France

Aaa

Crédit Agricole Group

France

Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Ratings*

	Rating	Outlook
Fitch	A+	Stable
Moody's	Aa3	Stable
S&P	A+	Stable

Homepage

www.credit-agricole.com

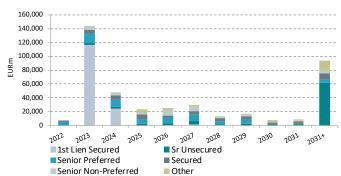
*Crédit Agricole SA

Crédit Agricole S.A. (CASA) can boast a cooperative tradition which retains strong links to agriculture. Today, CASA heads up a group of 39 regional banks which holds 53.0% of the shares in CASA via the holding company SAS La Boétie (07 Sept. 2022) and which alongside CASA and its subsidiaries forms the Crédit Agricole Group. The financial institution holds several top positions within the French banking sector and is among the group of global systemically important banks (G-SIBs) in France. Around the world, it offers 53 million customers all the products of a universal bank in more than 9,500 branches (Q1 2022). The business areas of CASA are divided into the following operating units: Retail Banking, Asset Gathering, Large Customers, Specialised Financial Services and Corporate Centre. At 45% (H1 2022), Retail Banking makes the largest contribution to net earnings. The Crédit Agricole Group operates in 47 countries worldwide in the regions of Europe, the Middle East, Asia-Pacific and the Americas. The majority of the credit exposure is attributable to the domestic market with around 58% (FY 2021), followed by Italy (11%), the rest of Europe (12%) and North America (6%). The bank achieved most of the targets from its Medium-Term Plan 2022, which has now been supplemented with targets for 2025. These include building up liquid assets in the green, social and sustainability ESG formats worth EUR 13.3bn overall (FY 2021; target: EUR 6bn). Since 2018, CASA has supplemented its funding mix with ESG-format bonds such as green bonds as part of its group-wide sustainability strategy. As at H1 2022, CASA had a CET1 ratio of 11.3% (Group: 17.5% phased-in).

Balance Sheet

(EURm)	2020Y	2021Y	2022H1
Net Loans to Customers	969,849	1,055,354	1,087,860
Total Securities	858,779	829,314	814,321
Total Deposits	977,623	1,060,325	1,100,048
Tier 1 Common Capital	96,942	102,693	101,234
Total Assets	2,217,512	2,323,557	2,395,665
Total Risk-weighted Assets	562,059	585,441	579,519

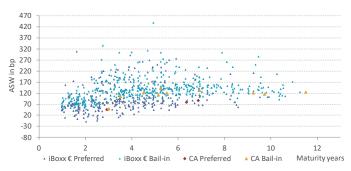
Redemption Profile



Income Statement

(EURm)	2020Y	2021Y	2022H1
Net Interest Income	18,790	19,783	10,858
Net Fee & Commission Inc.	9,443	10,750	5,626
Net Trading Income	2,108	13,710	-12,646
Operating Expense	21,993	23,320	12,573
Credit Commit. Impairment	3,442	1,866	1,519
Pre-tax Profit	7,620	12,410	5,944

Senior Unsecured Bonds (EUR BMK)



Company Ratios

	2020Y	2021Y	2022H1
Net Interest Margin	0.91	0.90	0.96
ROAE	4.20	7.69	6.67
Cost-to-Income	64.57	62.68	62.71
Core Tier 1 Ratio	17.25	17.54	17.47

L
6
3
4
6

Source: Bloomberg, S&P Global Market Intelligence, NORD/LB Markets Strategy & Floor Research; as of: 18.10.2022

Strengths / Opportunities

- Market position in France (retail banking)
- Liquidity
- Capitalisation

- Dependency on capital market funding
- Concentration risks (IT)
- Economic environment

Crédit Agricole Home Loan SFH – Mortgage

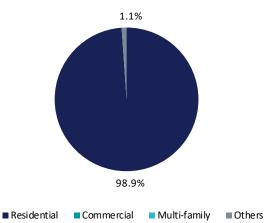
Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Cover Pool Data

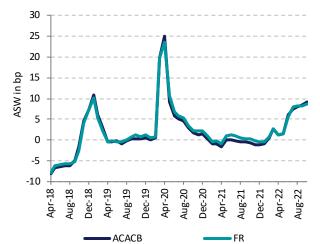
Cover pool volume (EURm)	49,566
Amount outstanding (EURm)	33,808
-thereof ≥ EUR 500m	89.1%
Current OC (nominal)	46.6%
Committed OC	8.1%
Cover type	Mortgage
Main country	100% France
Main region	20% Ile-de-France
Number of loans	772,323
Number of borrowers	n/a
Avg. exposure to borrowers (EUR)	n/a
WAL (cover pool)	7.4y
WAL (covered bonds)	5.6y
Fixed interest (cover pool)	96.4%
Fixed interest (covered bonds)	100.0%
LTV (indexed)	54.1%
LTV (unindexed)	61.8%
Loans in arrears	0.0%

rating (SQF)	-
Rating (Fitch)	AAA
Rating (DBRS)	-
TPI	Probable-High
TPI leeway	5
Collateral score	5.0%
RRL	-
JRL	-
Unused notches	-
AAA credit risk (%)	-
PCU	6
Recovery uplift	2
Outstanding ESG BMKs	Yes
LCR ELIGIBLE	Yes
LCR level (Bmk)	1
Risk weight	10%
Maturity structure (Bmk)	SB

Borrower Types



Spread Development

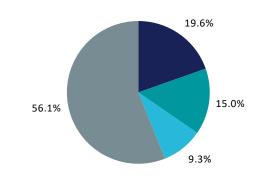


Source: Issuer, Rating agencies, Bloomberg, NORD/LB Markets Strategy & Floor Research

Regional Distribution

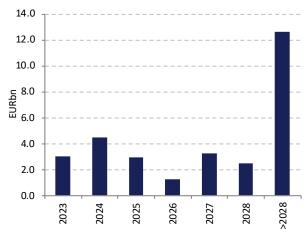
Rating (Moody's)

Rating (S&P)



■ Ile-de-France ■ Auvergne-Rhone-Alpes ■ Occitanie ■ Others

Redemption Profile (Bmk)







Aaa

Crédit Agricole Public Sector SCF – Public Sector

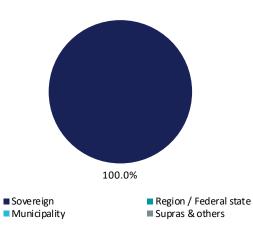
Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Cover Pool Data

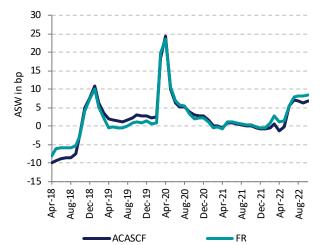
Cover pool volume (EURm)	5,896
Amount outstanding (EURm)	4,500
-thereof ≥ EUR 500m	100.0%
Current OC (nominal)	31.0%
Committed OC	5.3%
Cover type	Public Sector
Main country	27% United Kingdom
Main region	n/a
Number of loans	147
Number of borrowers	76
Avg. exposure to borrowers (EUR)	77,576,316
WAL (cover pool)	3.8y
WAL (covered bonds)	4.8y
Fixed interest (cover pool)	36.6%
Fixed interest (covered bonds)	100.0%
LTV (indexed)	-
LTV (unindexed)	-
Loans in arrears	0.0%

Dating (Maadu's)	A a a
Rating (Moody's)	Aaa
Rating (S&P)	AAA
Rating (Fitch)	-
Rating (DBRS)	-
ТРІ	Probable-High
TPI leeway	5
Collateral score	13.6%
RRL	аа
JRL	аа
Unused notches	5
AAA credit risk (%)	15.64
PCU	-
Recovery uplift	-
Outstanding ESG BMKs	No
LCR ELIGIBLE	Yes
LCR level (Bmk)	1
Risk weight	10%
Maturity structure (Bmk)	HB & SB

Borrower Types

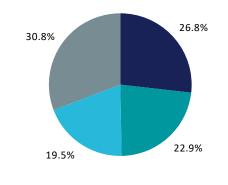


Spread Development



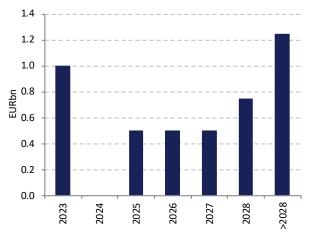
Source: Issuer, Rating agencies, Bloomberg, NORD/LB Markets Strategy & Floor Research

Regional Distribution



■United Kingdom ■ France ■ South Korea ■ Others

Redemption Profile (Bmk)





France

France

Crédit Mutuel Arkéa

Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Ratings

	Rating	Outlook
Fitch	A-	Stable
Moody's	Aa3	Stable
S&P	-	-

Homepage

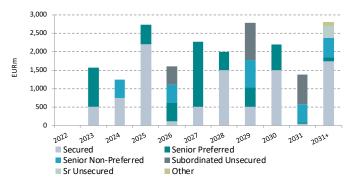
www.cm-arkea.com

With around 5 million customers, of whom roughly 1.5 million are members, and total assets of EUR 182bn (H1 2022), the Crédit Mutuel Arkéa Group (Arkéa) is one of the leading cooperative banking and insurance groups in France. Arkéa includes the two legally independent regional associations Crédit Mutuel de Bretagne and Crédit Mutuel du Sud-Ouest, in addition to 40 specialist subsidiaries. A solidarity mechanism exists within the Crédit Mutuel Group (CMG), which makes compensation payments to loss-making member institutes via a solidarity fund and a reserve fund. The universal bank has more than 11,000 employees and is represented by around 400 local branches throughout the country, maintaining a strong regional presence in Brittany and the south-west of France in particular. Business activities in France comprise retail banking, corporate banking, asset management and insurance. In April 2022, Arkéa sold its majority participation in the payment service provider MANGOPAY SA to the Advent International Corporation and is now a minority shareholder. The strategic plan dubbed "Transitions 2024" adopted in January 2021 focuses on modernising the business model, primarily with regard to improving the sustainability of Crédit Mutuel Arkéa's own products and services. As at H1 2022, the Group has a CET1 ratio of 16.5%. An inaugural social bond was issued in 2019 (senior preferred, EUR 500 million), which was followed by two further deals (senior nonpreferred, EUR 750 million; preferred, EUR 500 million). As at H1 2022, capital market funding amounted to EUR 21bn, of which 34% is attributable to covered bonds.

Balance Sheet

(EURm)	2020Y	2021Y	2022H1
Net Loans to Customers	67,263	73,264	77,470
Total Securities	16,090	13,136	16,485
Total Deposits	68,366	74,598	75,759
Tier 1 Common Capital	6,744	7,308	7,231
Total Assets	169,376	179,281	182,397
Total Risk-weighted Assets	40,039	43,077	43,924

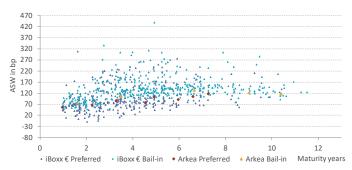
Redemption Profile



Income Statement

(EURm)	2020Y	2021Y	2022H1
Net Interest Income	651	725	403
Net Fee & Commission Inc.	490	520	284
Net Trading Income	15	273	196
Operating Expense	1,574	1,701	871
Credit Commit. Impairment	159	118	50
Pre-tax Profit	493	717	436

Senior Unsecured Bonds (EUR BMK)



Company Ratios

	2020Y	2021Y	2022H1
Net Interest Margin	0.63	0.63	0.67
ROAE	4.72	7.11	8.51
Cost-to-Income	76.02	67.11	64.23
Core Tier 1 Ratio	16.84	16.96	16.46

	2020Y	2021Y	2022H1
Liquidity Coverage Ratio	148.93	163.31	146.88
IFRS Tier 1 Leverage Ratio	4.06	4.14	4.14
NPL/ Loans at Amortised Cost	2.14	1.98	1.90
Reserves/Loans at Amort. Cost	1.65	1.51	1.47

Source: Bloomberg, S&P Global Market Intelligence, NORD/LB Markets Strategy & Floor Research; as of: 18.10.2022

Strengths / Opportunities

- Risk profile
- Funding structure
- Capitalisation

- Split from CMG could have adverse impact
- Profitability
- Concentration risks

Crédit Mutuel Arkéa SFH – Mortgage

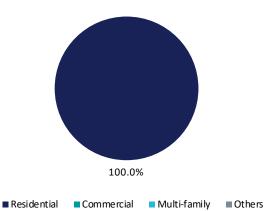
Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Cover Pool Data

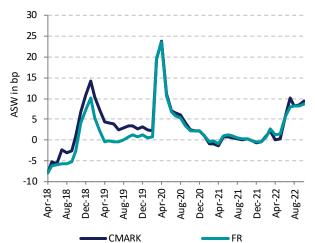
Cover pool volume (EURm)	11,603
Amount outstanding (EURm)	9,183
-thereof ≥ EUR 500m	59.9%
Current OC (nominal)	26.4%
Committed OC	10.7%
Cover type	Mortgage
Main country	100% France
Main region	60% Brittany
Number of loans	210,332
Number of borrowers	n/a
Avg. exposure to borrowers (EUR)	n/a
WAL (cover pool)	6.6y
WAL (covered bonds)	5.4y
Fixed interest (cover pool)	99.6%
Fixed interest (covered bonds)	100.0%
LTV (indexed)	62.6%
LTV (unindexed)	68.6%
Loans in arrears	0.0%

Rating (Moody's)	Aaa
Rating (S&P)	-
Rating (Fitch)	AAA
Rating (DBRS)	-
TPI	Probable-High
TPI leeway	5
Collateral score	5.1%
RRL	-
JRL	-
Unused notches	-
AAA credit risk (%)	-
PCU	4
Recovery uplift	-
Outstanding ESG BMKs	No
LCR ELIGIBLE	Yes
LCR level (Bmk)	1
Risk weight	10%
Maturity structure (Bmk)	hb & SB

Borrower Types

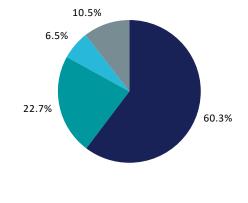


Spread Development



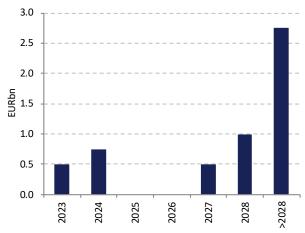
Source: Issuer, Rating agencies, Bloomberg, NORD/LB Markets Strategy & Floor Research

Regional Distribution



■ Brittany ■ Nouvelle-Aquitaine ■ Ile-de-France ■ Others

Redemption Profile (Bmk)



NORD/LB



Crédit Mutuel Arkéa SCF – Public Sector

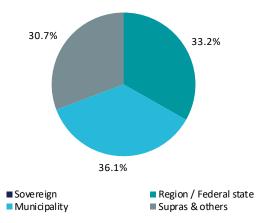
Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Cover Pool Data

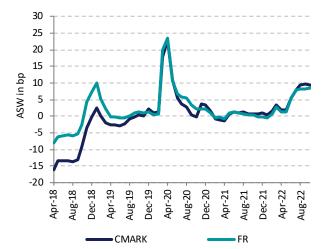
Cover pool volume (EURm)	2,297
Amount outstanding (EURm)	1,837
-thereof ≥ EUR 500m	27.2%
Current OC (nominal)	25.0%
Committed OC	0.0%
Cover type	Public Sector
Main country	100% France
Main region	18% Brittany
Number of loans	710
Number of borrowers	n/a
Avg. exposure to borrowers (EUR)	n/a
WAL (cover pool)	8.2y
WAL (covered bonds)	8.9y
Fixed interest (cover pool)	53.0%
Fixed interest (covered bonds)	100.0%
LTV (indexed)	-
LTV (unindexed)	-
Loans in arrears	0.0%

Rating (Moody's)	Aaa
Rating (S&P)	-
Rating (Fitch)	-
Rating (DBRS)	-
TPI	Probable-High
TPI leeway	5
Collateral score	10.4%
RRL	-
JRL	-
Unused notches	-
AAA credit risk (%)	-
PCU	-
Recovery uplift	-
Outstanding ESG BMKs	No
LCR ELIGIBLE	Yes
LCR level (Bmk)	1
Risk weight	10%
Maturity structure (Bmk)	hb & SB

Borrower Types

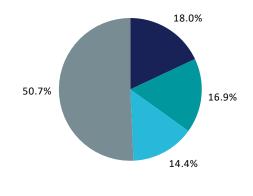


Spread Development



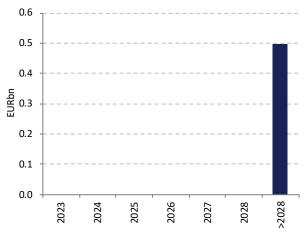
Source: Issuer, Rating agencies, Bloomberg, NORD/LB Markets Strategy & Floor Research

Regional Distribution



■ Brittany ■ Ile-de-France ■ Nord-Pas-de-Calais ■ Others

Redemption Profile (Bmk)







Groupe BPCE

Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Ratings*

R	ating*	Outlook
Fitch	A+	Negative
Moody's**	A1	Stable
S&P	А	Stable

Homepage

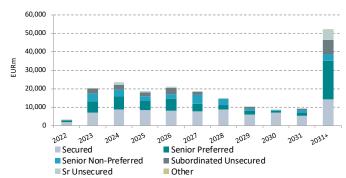
www.groupebpce.com

*BPCE SA **Senior Unsecured

Balance Sheet

(EURm)	2020Y	2021Y	2022H1
Net Loans to Customers	818,907	844,784	885,466
Total Securities	219,050	221,373	210,223
Total Deposits	630,957	665 <i>,</i> 353	678,630
Tier 1 Common Capital	68,969	69,764	68,557
Total Assets	1,446,269	1,516,021	1,483,856
Total Risk-weighted Assets	431,222	441,428	459,214

Redemption Profile



Income Statement

The targets for 2024 include a CET1 ratio of 15.5%, among others.

Groupe BPCE is the second-largest banking group in France with a focus on the retail and

insurance business. Moreover, it is a global systemically important bank (G-SIB; additional capital buffer: 1%). The distribution network consists of Banque Populaires and Caisse d'Epargne as well as Banque Palatine and Oney Bank. With Natixis, it is active worldwide corporate and investment banking, asset management and payment transactions. It serves approximately 36 million customers in more than 40 countries. BPCE SA is the central bank within the French Groupe BPCE. In total, 50% of the shares in BPCE SA are held by 15

Caisses d'Epargne (savings banks), while the other 50% are held by 14 Banques Populaires

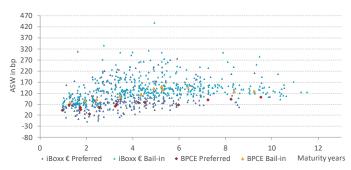
(cooperative banks). Within the Group, BPCE SA is responsible for strategy, coordination and management as well as liquidity management, capitalisation and risk management. In

July 2021, the Groupe BPCE presented a new strategic plan, which includes the

streamlining of the organisational structure announced in February 2021. Part of this strategy included the squeeze-out of Natixis (July 2021, incl. de-listing) and the subsequent reorganisation of the structure and segments. Since this time, it has reported in the segments Retail Banking & Insurance, Global Financial Services and Corporate Center. Cross holdings have also been reduced, for example following the sale of a 16.1% stake in CNP Assurances to La Banque Postale and the acquisition of a 45% stake in Ostrum AM and a 40% share in AEW Europe from La Banque Postale through Natixis Investment Managers, with the result that the Group now holds 100% of shares in these companies.

(EURm)	2020Y	2021Y	2022H1
Net Interest Income	9,170	9 <i>,</i> 879	4,990
Net Fee & Commission Inc.	9,187	10,324	5,022
Net Trading Income	1,250	2,447	1,442
Operating Expense	16,644	17,840	9,211
Credit Commit. Impairment	2,936	1,734	860
Pre-tax Profit	2,789	6,231	3,131

Senior Unsecured Bonds (EUR BMK)



Company Ratios

	2020Y	2021Y	2022H1
Net Interest Margin	0.74	0.75	0.74
ROAE	2.27	5.45	5.38
Cost-to-Income	74.20	69.00	69.66
Core Tier 1 Ratio	15.99	15.80	14.93

	2020Y	2021Y	2022H1
Liquidity Coverage Ratio	156.12	160.43	152.31
IFRS Tier 1 Leverage Ratio	4.97	4.79	4.84
NPL/ Loans at Amortised Cost	2.78	2.62	2.51
Reserves/Loans at Amort. Cost	1.78	1.73	1.71

Source: Bloomberg, S&P Global Market Intelligence, NORD/LB Markets Strategy & Floor Research; as of: 18.10.2022

Strengths / Opportunities

- Market position in FR
- Capitalisation
- Solidarity mechanism within the Group

- Asset quality susceptible to economic downturn
 - Cyclical business areas (Natixis)
- Profitability





BPCE SFH – Mortgage

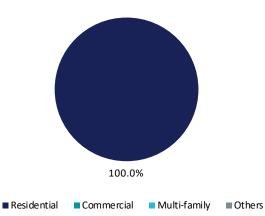
Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Cover Pool Data

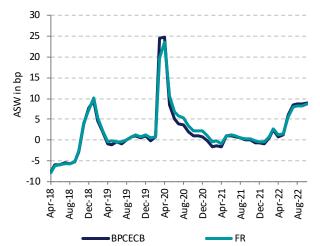
Cover pool volume (EURm)	50,280
Amount outstanding (EURm)	37,674
-thereof ≥ EUR 500m	90.8%
Current OC (nominal)	33.5%
Committed OC	8.1%
Cover type	Mortgage
Main country	100% France
Main region	16% Ile-de-France
Number of loans	655,346
Number of borrowers	n/a
Avg. exposure to borrowers (EUR)	n/a
WAL (cover pool)	7.5v
WAL (covered bonds)	, 3.3y
Fixed interest (cover pool)	99.6%
Fixed interest (covered bonds)	99.8%
LTV (indexed)	60.5%
LTV (unindexed)	70.4%
Loans in arrears	0.0%

Rating (Moody's)	Aaa
Rating (S&P)	AAA
Rating (Fitch)	-
Rating (DBRS)	-
TPI	Probable-High
TPI leeway	4
Collateral score	5.0%
RRL	aa-
JRL	аа
Unused notches	4
AAA credit risk (%)	7.49
PCU	-
Recovery uplift	-
Outstanding ESG BMKs	Yes
LCR ELIGIBLE	Yes
LCR level (Bmk)	1
Risk weight	10%
Maturity structure (Bmk)	HB & SB

Borrower Types

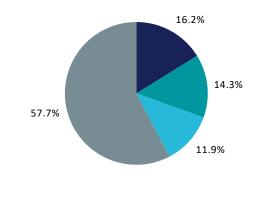


Spread Development



Source: Issuer, Rating agencies, Bloomberg, NORD/LB Markets Strategy & Floor Research

Regional Distribution



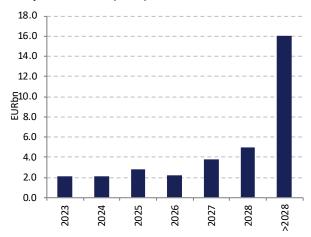
Auvergne-Rhone-Alpes

Others

Redemption Profile (Bmk)

Provence-Alpes-Cote d'Azur

Ile-de-France





France

HSBC Continental Europe

France

Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Ratings			пэ
natings			wh
	Rating	Outlook	wo
Fitch	AA-	Stable	Glo
Moody's*	A1	Stable	Ser
S&P	A+	Stable	Per
			and
Homepa	ge		In t

www.hsbc.fr

www.nspc.n

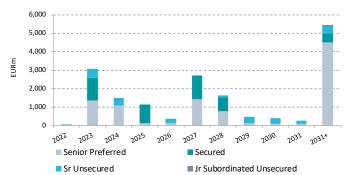
*Senior Unsecured

HSBC Continental Europe (HBCE, formerly HSBC France), headquartered in Paris, is a olly owned subsidiary of HSBC Holdings (HSBCH) and therefore part of one of the orld's leading banking groups. HBCE divides its business into three global divisions: obal Banking and Markets, which consists of the segments Markets and Securities vices, Global Banking and GBM Other, as well as Commercial Banking and Wealth and rsonal Banking. Business is particularly focused on capital market operations, with Paris d London as the two centres for the HSBCH Group's capital market activities in Europe. In funding and liquidity management, HSBCE operates independently from the parent group. In February 2020, HSBCH published a comprehensive strategic plan, outlining its ambition to restructure underperforming business segments in the USA, Europe and the UK in addition to carrying out capital restructuring in Asia, where the Group sees growth opportunities. Part of this strategy includes the withdrawal of HBCE from the French retail banking sector in order to focus on wholesale banking. For example, a takeover agreement was reached with My Money Group (MMG) to acquire HBCE's retail business in 2021. In addition to a network of 244 branches and approximately 800,000 customers, the transaction includes customer loans totalling EUR 21.5bn and deposits in the amount of EUR 18.9bn. Furthermore, the covered bond programme pertaining to the wholly owned subsidiary HSBC SFH (France) is set to be transferred as well. The transaction is expected to be closed in H2 2023. Moreover, plans are also in place for the sale of branch operations in Greece to Pancreta Bank (regulatory approval pending).

Balance Sheet

(EURm)	2020Y	2021Y	2022H1
Net Loans to Customers	56 <i>,</i> 439	60,110	57,717
Total Securities	121,525	101,729	108,090
Total Deposits	61,483	70,231	66,911
Tier 1 Common Capital	5,798	5,742	6,557
Total Assets	237,099	222,664	239,473
Total Risk-weighted Assets	46,113	47,795	47 <i>,</i> 893

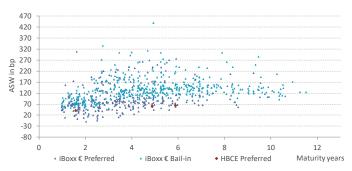
Redemption Profile



Income Statement

(EURm)	2020Y	2021Y	2022H1
Net Interest Income	1,053	987	556
Net Fee & Commission Inc.	858	915	485
Net Trading Income	330	1,364	-1,131
Operating Expense	2,068	1,939	959
Credit Commit. Impairment	287	34	-5
Pre-tax Profit	-945	285	184

Senior Unsecured Bonds (EUR BMK)



Company Ratios

	2020Y	2021Y	2022H1
Net Interest Margin	0.49	0.47	0.53
ROAE	-12.87	3.54	3.08
Cost-to-Income	97.50	87.78	78.74
Core Tier 1 Ratio	12.57	12.01	13.69

	2020Y	2021Y	2022H1
Liquidity Coverage Ratio	142.67	145.14	144.74
IFRS Tier 1 Leverage Ratio	3.21	3.09	3.44
NPL/ Loans at Amortised Cost	2.40	2.17	2.11
Reserves/Loans at Amort. Cost	1.44	1.32	1.23

Source: Bloomberg, S&P Global Market Intelligence, NORD/LB Markets Strategy & Floor Research; as of: 18.10.2022

Strengths / Opportunities

- Capitalisation
- Key location of the Group in the eurozone

- Trading business
- Dependency on capital market funding

HSBC SFH – Mortgage

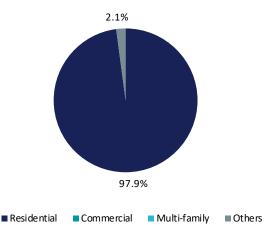
Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Cover Pool Data

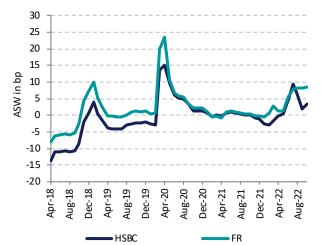
Cover pool volume (EURm)	5,004
Amount outstanding (EURm)	4,250
-thereof ≥ EUR 500m	111.8%
Current OC (nominal)	17.7%
Committed OC	11.0%
Cover type	Mortgage
Main country	100% France
Main region	50% Ile-de-France (incl. Paris)
Number of loans	40,744
Number of borrowers	n/a
Avg. exposure to borrowers (E	EUR) n/a
WAL (cover pool)	5.9y
WAL (covered bonds)	3.5y
Fixed interest (cover pool)	100.0%
Fixed interest (covered bonds) 100.0%
LTV (indexed)	46.4%
LTV (unindexed)	53.7%
Loans in arrears	0.0%

Rating (Moody's)	Aaa
Rating (S&P)	AAA
Rating (Fitch)	-
Rating (DBRS)	-
ТРІ	Probable-High
TPI leeway	4
Collateral score	5.0%
RRL	N/A
JRL	N/A
Unused notches	N/A
AAA credit risk (%)	8.47
PCU	-
Recovery uplift	-
Outstanding ESG BMKs	No
LCR ELIGIBLE	Yes
LCR level (Bmk)	1
Risk weight	10%
Maturity structure (Bmk)	HB & SB

Borrower Types

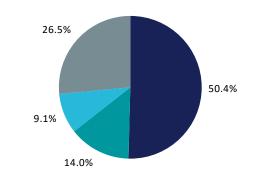


Spread Development



Source: Issuer, Rating agencies, Bloomberg, NORD/LB Markets Strategy & Floor Research

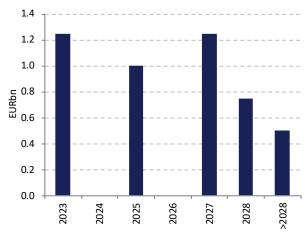
Regional Distribution



Ile-de-France (incl. Paris)
 Auvergne-Rhone-Alpes

Provence-Alpes-Cote d'AzurOthers

Redemption Profile (Bmk)



NORD/LB

France

La Banque Postale

Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Ratings

	Rating	Outlook
Fitch	А	Stable
Moody's	A2	Stable
S&P	A+	Stable

Homepage

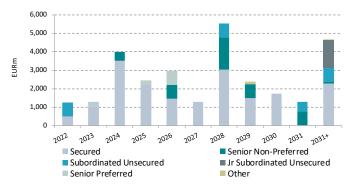
www.labanquepostale.com

La Banque Postale (LBP), which is headquartered in Paris, was established at the end of 2005 and is a wholly owned subsidiary of Le Groupe La Poste, which in turn is 66% owned by Caisse des Dépôts and 34% owned by the French state. While LBP focused on the deposit business and lending in the early days of its operations, in the years that followed, the institute has evolved into a provider of a diverse range of products. The bank is active in 18 countries around the world, including its main market, France, and 11 other countries in Europe. At present, LBP's client base includes around 20 million retail banking customers. LBP organises its business activities via a large number of subsidiaries and participations, which are allocated to the four core business areas, namely Bancassurance France (H1 2022: 52% of net income), International Bancassurance (20%), Corporate and Investment Banking (19%) and Wealth and Asset Management (9%). As a sub-project of the Ministry of Economics and Finance in 2018, LBP became the largest shareholder in CNP Assurance in 2020 (CNP; FY 2021: 79%). After acquiring additional stakes, LBP took over the remaining shares in CNP Assurance in June 2022, following which it pursued a delisting strategy. As a result, LBP is expanding its activities in the French and international insurance business. As a result of the acquisition, the share of the retail segment is set to decline in favour of the insurance business, with increased commission income being targeted as a result. In May 2022, LBP sold its shares of 40% and 45% respectively in AEW Europe and Ostrum Asset Management to Natixis Investment Managers.

Balance Sheet

(EURm)	2020Y	2021Y	2022H1
Net Loans to Customers	134,546	130,959	135,795
Total Securities	442,941	476,811	441,714
Total Deposits	230,393	235 <i>,</i> 038	241,228
Tier 1 Common Capital	17,461	17,367	14,583
Total Assets	737,176	772,310	752,398
Total Risk-weighted Assets	85,532	91,098	90,177

Redemption Profile



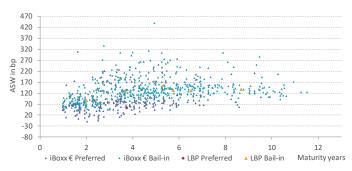
5

(FLIRm)

Income Statement

	20201	20211	202281
Net Interest Income	2,586	3,946	2,555
Net Fee & Commissio	on Inc778	-1,243	-730
Net Trading Income	3,826	11,352	-14,362
Operating Expense	5,711	6,215	3,255
Credit Commit. Impa	irment 592	219	75
Pre-tax Profit	5,107	1,636	880

Senior Unsecured Bonds (EUR BMK)



Company Ratios

	2020Y	2021Y	2022H1
Net Interest Margin	0.69	0.79	1.05
ROAE	21.20	3.50	4.39
Cost-to-Income	82.60	76.54	77.04
Core Tier 1 Ratio	20.42	19.06	16.17

	2020Y	2021Y	2022H1
Liquidity Coverage Ratio	179.00	203.96	181.96
IFRS Tier 1 Leverage Ratio	2.40	2.27	1.97
NPL/ Loans at Amortised Cost	1.29	1.32	1.24
Reserves/Loans at Amort. Cost	0.96	1.08	1.05

Source: Bloomberg, S&P Global Market Intelligence, NORD/LB Markets Strategy & Floor Research; as of: 18.10.2022

Strengths / Opportunities

- Integration in the Group
- Domestic market position
- Liquidity profile

- Geographical diversification
- Risk management in comparison with peers
- Cost efficiency



La Banque Postale Home Loan SFH – Mortgage

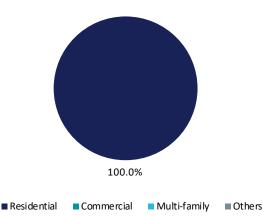
Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Cover Pool Data

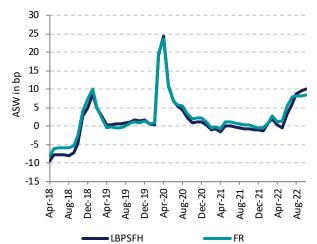
Amount outstanding (EURm) $18,4$ -thereof \geq EUR 500m 45.2 25.2 25.2	5% 2% n/a
	2% 1/a
	n/a
Current OC (nominal) 33.2	
Committed OC r	ige
Cover type Mortga	0 -
Main country 100% Fram	nce
Main region 26% Ile-de-Fran	nce
Number of loans 310,6	640
Number of borrowers r	n/a
Avg. exposure to borrowers (EUR) r	1/a
WAL (cover pool) 7.	.9y
WAL (covered bonds) 5.	.9y
Fixed interest (cover pool) 100.0	0%
Fixed interest (covered bonds) 100.0	0%
LTV (indexed) 56.0	0%
LTV (unindexed) 65.5	5%
Loans in arrears 0.0	0%

Rating (Moody's)	-
Rating (S&P)	AAA
Rating (Fitch)	-
Rating (DBRS)	-
TPI	-
TPI leeway	-
Collateral score	-
RRL	аа
JRL	аа
Unused notches	5
AAA credit risk (%)	2.5
PCU	-
Recovery uplift	2
Outstanding ESG BMKs	Yes
LCR ELIGIBLE	Yes
LCR level (Bmk)	1
Risk weight	10%
Maturity structure (Bmk)	HB & SB

Borrower Types

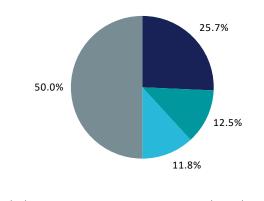


Spread Development



Source: Issuer, Rating agencies, Bloomberg, NORD/LB Markets Strategy & Floor Research

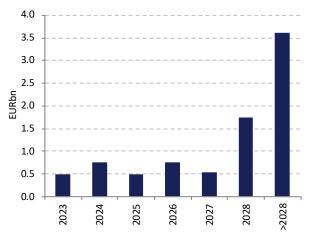
Regional Distribution



Ile-de-France
 Provence-Alpes-Cote d'Azur

Auvergne-Rhone-AlpesOthers

Redemption Profile (Bmk)



NORD/LB

France

France

My Money Bank

Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Ratings

	Rating	Outlook
Fitch	-	-
Moody's	-	-
S&P	BBB-	Stable

Homepage

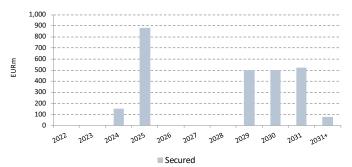
www.mymoneybank.com

Headquartered in Paris, My Money Bank SA (MMB) is an independent banking group which emerged in 2017 from GE Money Bank (subsidiary of GE Capital) and which is wholly owned by Cerberus Capital Management via the subsidiary Promontoria MMB. At 94%, the special financing segment dominates the loan portfolio of My Money Group (FY 2021), while just 6% is attributable to retail banking. In terms of the breakdown at Group level, a total of 77% of the loan portfolio is attributable to My Money Bank (loans, mortgages, insurance products, deposits), while Banque des Caraïbes SA (retail banking) accounts for 6% and 17% is attributable to Somafi-Soguarfi and Sorefi (both active in the car and consumer loans business as well as insurance). My Partner Bank (previously known as BESV) was acquired in 2018 and subsequently merged with MMB in 2020. In the wake of the expansion of the domestic retail business, an agreement on the acquisition of the retail and wealth management business of HSBC Continental Europe (HBCE) was signed in 2021. In addition to a network of 244 branches and approximately 800,000 customers, the transaction includes customer loans totalling EUR 21bn and deposits in the amount of EUR 19bn (FY 2020). Furthermore, the covered bond programme pertaining to the wholly owned subsidiary HSBC SFH (France) is set to be transferred as well. The transaction is expected to be closed in H2 2023. MMB intends to revitalise the established Crédit Commercial de France (CCF) brand, which today is known as HBCE. The Group has high market shares in mortgage financing (France) and car financing (overseas). In total, 62% of funding consists of deposits (FY 2021), followed by covered bonds at 31%, which are issued via MMB SCF.

Balance Sheet

(EURm)	2020Y	2021Y	2022H1
Net Loans to Customers	4,153	4,920	5,432
Total Securities	735	670	908
Total Deposits	3,645	3,942	4,182
Tier 1 Common Capital	-	-	-
Total Assets	6,544	7,249	8,055
Total Risk-weighted Assets	-	-	-

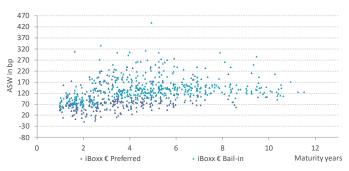
Redemption Profile



Income Statement

(EURm)	2020Y	2021Y	2022H1
Net Interest Income	100	114	-
Net Fee & Commission Inc.	-12	-22	-
Net Trading Income	5	4	-
Operating Expense	112	106	-
Credit Commit. Impairment	-	-	-
Pre-tax Profit	21	17	-

Senior Unsecured Bonds (EUR BMK)



Company Ratios

	2020Y	2021Y	2022H1
Net Interest Margin	1.91	1.68	-
ROAE	5.22	3.53	-
Cost-to-Income	69.24	78.63	-
Core Tier 1 Ratio	-	-	-

	2020Y	2021Y	2022H1
Liquidity Coverage Ratio	-	-	-
IFRS Tier 1 Leverage Ratio	-	-	-
NPL/ Loans at Amortised Cost	-	-	-
Reserves/Loans at Amort. Cost	1.93	1.52	-

Source: Bloomberg, S&P Global Market Intelligence, NORD/LB Markets Strategy & Floor Research; as of: 18.10.2022

Strengths / Opportunities

- Capitalisation
- Market shares in niche markets
- Management team

Risks / Weaknesses

- Dependency on wholesale funding
- Concentration risks (France)
- Transformation process (execution risks)

MMB SCF – Mortgage

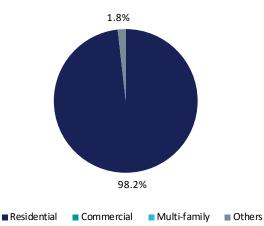
Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Cover Pool Data

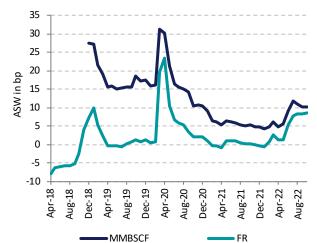
Cover pool volume (EURm)	2,929
Amount outstanding (EURm)	2,400
-thereof ≥ EUR 500m	83.3%
Current OC (nominal)	22.0%
Committed OC	5.0%
Cover type	Mortgage
Main country	100% France
Main region	18% Ile-de-France
Number of loans	30,104
Number of borrowers	n/a
Avg. exposure to borrowers (EUR)	n/a
WAL (cover pool)	9.4y
WAL (covered bonds)	6.8y
Fixed interest (cover pool)	91.2%
Fixed interest (covered bonds)	100.0%
LTV (indexed)	49.1%
LTV (unindexed)	54.8%
Loans in arrears	0.0%

Rating (Moody's)	-
Rating (S&P)	AAA
Rating (Fitch)	-
Rating (DBRS)	-
TPI	-
TPI leeway	-
Collateral score	-
RRL	bbb+
JRL	a+
Unused notches	0
AAA credit risk (%)	4.31
PCU	-
Recovery uplift	1
Outstanding ESG BMKs	No
LCR ELIGIBLE	Yes
LCR level (Bmk)	1
Risk weight	10%
Maturity structure (Bmk)	SB

Borrower Types

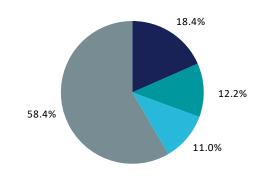


Spread Development



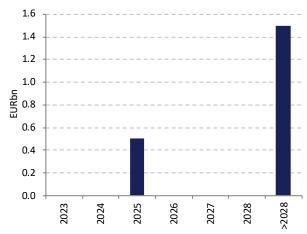
Source: Issuer, Rating agencies, Bloomberg, NORD/LB Markets Strategy & Floor Research

Regional Distribution



■ Ile-de-France ■ Provence-Alpes-Cote d'Azur ■ Occitanie ■ Others

Redemption Profile (Bmk)



NORD/LB

France

France

Société Générale

Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Ratings

-		
	Rating	Outlook
Fitch	A-	Stable
Moody's	A1	Stable
S&P	А	Stable

Homepage

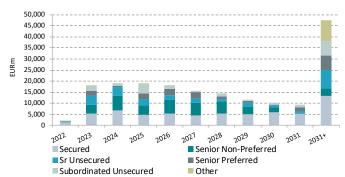
www.societegenerale.com

The French Société Générale (SocGen), headquartered in Paris, is one of the largest financial institutions in Europe and is classified as a global systemically important bank (G-SIB; additional capital buffer: 1.0%). More than 131,000 employees provide services to approximately 26 million customers in 66 countries worldwide. SocGen has a strong position in French retail banking as well as corporate and investment -banking, in addition to leading positions in other countries and segments such as corporate vehicle fleet and equipment financing. Its three core business segments are French Retail Banking (26% of operating income in H1 2022), International Retail Banking and Financial Services (43%) and Global Banking and Investor Solutions (30%). At 46% (H1 2022), the highest share of the credit exposure is attributable to the domestic market of France, while a further 22% is attributable to the rest of Europe and 14% to North America. At EUR 3.3bn, the pre-tax result for H1 2022 was adversely impacted by SocGen's decision to scale back its exposure to Russia. On 11 April 2022, the sale of Rosbank and its Russian insurance subsidiary to Interros Capital was announced (transaction concluded in May 2022, effect: Total assets reduced by EUR 16bn and customer deposits by EUR 10bn). In terms of funding, more than 85% of the volume of EUR 20-22bn earmarked as part of the long-term funding programme (plain vanilla) had been issued by mid-July 2022, of which EUR 5.9bn was in the form of covered bonds. As at the end of H1 2022, the CET1 ratio stood at 12.9%, while the leverage ratio came to 4.1%. In the area of financing sustainable activities, the bank has increased its 2025 target from EUR 120bn to EUR 300bn.

Balance Sheet

(EURm)	2020Y	2021Y	2022H1
Net Loans to Customers	480,334	522,529	527,898
Total Securities	469,083	393,540	439,208
Total Deposits	456,059	509,133	519,431
Tier 1 Common Capital	47,290	49,835	47,254
Total Assets	1,444,404	1,464,449	1,538,624
Total Risk-weighted Assets	351,852	363,371	367,637

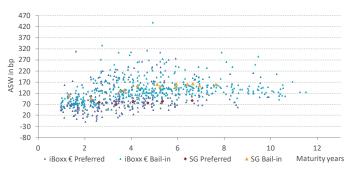
Redemption Profile



Income Statement

(EURm)	2020Y	2021Y	2022H1
Net Interest Income	10,473	10,718	5,408
Net Fee & Commission Inc.	4,917	5,320	2,605
Net Trading Income	2,851	5,723	4,390
Operating Expense	17,019	17,581	8,885
Credit Commit. Impairment	2,981	710	808
Pre-tax Profit	1,400	8,035	495

Senior Unsecured Bonds (EUR BMK)



Company Ratios

	2020Y	2021Y	2022H1
Net Interest Margin	0.89	0.89	0.87
ROAE	0.29	9.21	-0.52
Cost-to-Income	75.44	68.05	61.86
Core Tier 1 Ratio	13.44	13.71	12.85

2020Y	2021Y	2022H1
159.54	135.64	135.96
3.71	3.72	3.38
3.75	3.27	3.18
2.52	2.16	2.08
	159.54 3.71 3.75	159.54 135.64 3.71 3.72 3.75 3.27

Source: Bloomberg, S&P Global Market Intelligence, NORD/LB Markets Strategy & Floor Research; as of: 18.10.2022

Strengths / Opportunities

- Global diversification
- Earnings situation
- Capitalisation

- Economic environment could impair earnings
- Cyclical nature of capital market business
- Dependency on wholesale funding

Société Générale SFH – Mortgage

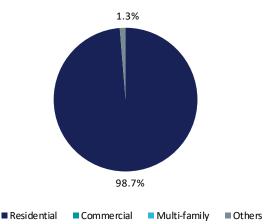
Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Cover Pool Data

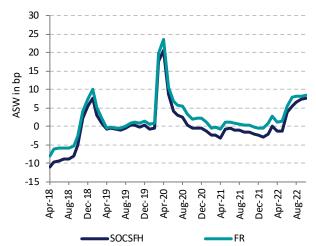
Cover pool volume (EURm)	53,717
Amount outstanding (EURm)	46,490
-thereof ≥ EUR 500m	40.3%
Current OC (nominal)	15.5%
Committed OC	8.5%
Cover type	Mortgage
Main country	100% France
Main region	37% Ile-de-France (incl. Paris)
Number of loans	433,973
Number of borrowers	n/a
Avg. exposure to borrowers (E	EUR) n/a
WAL (cover pool)	8.0y
WAL (covered bonds)	6.2y
Fixed interest (cover pool)	99.3%
Fixed interest (covered bonds) 98.7%
LTV (indexed)	62.4%
LTV (unindexed)	67.8%
Loans in arrears	0.0%

Rating (S&P)	-
Rating (Fitch)	AAA
Rating (DBRS)	-
TPI	Probable-High
TPI leeway	3
Collateral score	5.0%
RRL	-
JRL	-
Unused notches	-
AAA credit risk (%)	-
PCU	6
Recovery uplift	-
Outstanding ESG BMKs	Yes
LCR ELIGIBLE	Yes
LCR level (Bmk)	1
Risk weight	10%
Maturity structure (Bmk)	HB & SB

Borrower Types



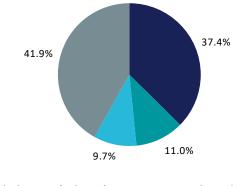
Spread Development



Source: Issuer, Rating agencies, Bloomberg, NORD/LB Markets Strategy & Floor Research

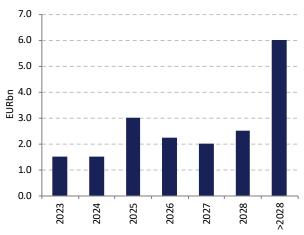
Regional Distribution

Rating (Moody's)



- Ile-de-France (incl. Paris)Provence-Alpes-Cote d'Azur
- Auvergne-Rhone-AlpesOthers

Redemption Profile (Bmk)



NORD/LB



Aaa

Société Générale SCF – Public Sector

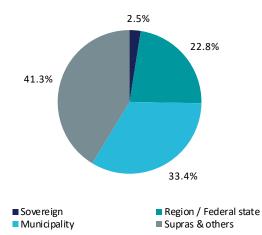
Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Cover Pool Data

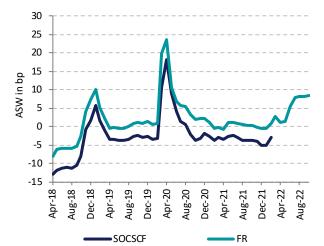
Cover pool volume (EURm)	16,476
Amount outstanding (EURm)	12,720
-thereof ≥ EUR 500m	7.9%
Current OC (nominal)	29.5%
Committed OC	7.5%
Cover type	Public Sector
Main country	83% France
Main region	32% Ile-de-France
Number of loans	1,418
Number of borrowers	n/a
Avg. exposure to borrowers (EUR)	n/a
WAL (cover pool)	6.3y
WAL (covered bonds)	5.4y
Fixed interest (cover pool)	64.4%
Fixed interest (covered bonds)	13.5%
LTV (indexed)	-
LTV (unindexed)	-
Loans in arrears	0.0%

Rating (S&P)	AAA
Rating (Fitch)	-
Rating (DBRS)	-
TPI	Probable-High
TPI leeway	3
Collateral score	6.6%
RRL	aa-
JRL	аа
Unused notches	2
AAA credit risk (%)	2.5
PCU	-
Recovery uplift	-
Outstanding ESG BMKs	No
LCR ELIGIBLE	Yes
LCR level (Bmk)	1
Risk weight	10%
Maturity structure (Bmk)	HB

Borrower Types



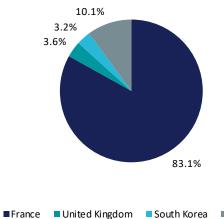
Spread Development



Source: Issuer, Rating agencies, Bloomberg, NORD/LB Markets Strategy & Floor Research

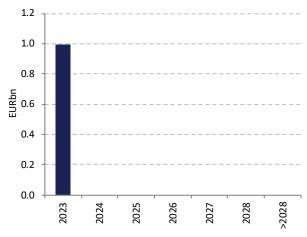
Regional Distribution

Rating (Moody's)



■ United Kingdom ■ South Korea ■ Others

Redemption Profile (Bmk)



NORD/LB

France

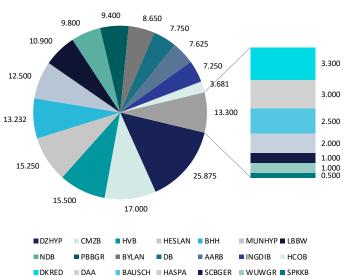
Aaa

Germany

Market Overview Covered Bonds

Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Cover Pool Volume	EUR 476.39bn	Outstanding volume (Bmk)	EUR 177.71bn
Amount outstanding	EUR 368.71bn	Number of benchmarks	254
Number of issuer	30	Outstanding ESG volume (Bmk)	EUR 16.50bn
No of cover pools	42	Number of ESG benchmarks	26
there of M / PS / others	31/10/1	Outstanding volume (SBmk)	EUR 11.10bn
Ratings (low / high)	A+ / AAA	Number of subbenchmarks	43
Best possible LCR level	Level 1	Maturity types	SB, CPT



DIRED DAA DAUSCH HASPA DSCHGER WUWGR SPRA

Benchmark redemption profile¹: 11/2022 - 10/2023

3.50 3.00 2.50 2.00 1.50 1.00 0.50

2023/04

MUNHYP NDB

BYLAN

HASPA

2023/05

CMZB

HCOB

20231 2023107 -2108

DAA

PBBGR

0.00

2022/11

2022/12

AARB

DK RED

■ INGDIB

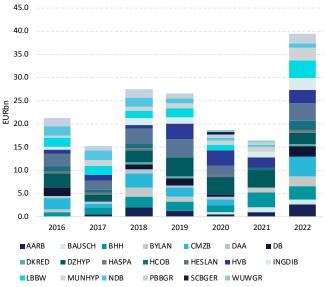
2023/01

BHH

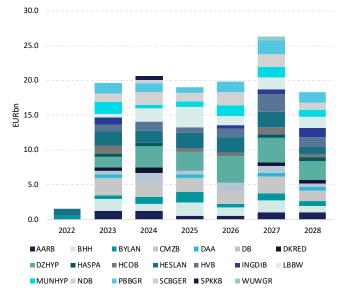
DZHYP

LBBW

Benchmark issuance volume¹



Benchmark redemption profile¹²



Source: Issuer, Rating agencies, Bloomberg, NORD/LB Markets Strategy & Floor Research; ¹ based on Bloomberg ticker; ² Redemptions 2022: 11/22 – 12/22

2023/09

DB

■ HESLAN ■ HVB

2023/10

Outstanding benchmark volume¹ (EURbn)

Aareal Bank

Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Ratings

	Rating	Outlook
Fitch	BBB+	Negative
Moody's	A3	Negative
S&P	-	-

Homepage

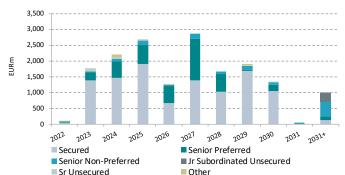
www.aareal-bank.com

Aareal Bank AG (Aareal) is the parent company of the Aareal Bank Group and an international supplier of financing, software products and digital solutions for the commercial real estate sector and adjacent industries. As at 31 December 2021, 100% of the Areal shares are held in free float. In November 2021, Atlantic BidCo GmbH (bidding company comprising Advent International and Centerbridge Partners, among others) submitted a takeover offer for the majority of the shares in Aareal. After an unsuccessful takeover bid in February 2022, Atlantic BidCo GmbH announced that it was able to secure a total of 83.8% of the shares in Aareal by means of a second offer at the end of the additional acceptance period. The minimum acceptance threshold of 60% had already been exceeded when the first deadline expired. According to the planned timeline, the takeover is set to be completed in either Q4 2022 or Q1 2023. Aareal comprises the business segments of Structured Property Financing (SPF), Banking & Digital Solutions and Aareon. The segment SPF deals with financing commercial real estate. Banking & Digital Solutions offers customers a joint package of consultancy services focused on digitalisation and corporate banking. Aareon, the third operating segment, offers ERP software solutions and digital solutions for the European real estate sector. In January 2022, Aareal issued an inaugural senior preferred green bond (EUR 500m) under its Green Finance Framework as well as an additional EUR 500m in the form of green commercial papers. With a CET1 ratio of 22.2% in FY 2021 (18.2% in line with Basel III finalisation), the bank exceeded the regulatory minimum requirement of 9.8%.

Balance Sheet

(EURm)	2020Y	2021Y	2022H1
Net Loans to Customers	27,552	29,546	30,367
Total Securities	11,950	10,852	11,109
Total Deposits	10,592	11,717	12,394
Tier 1 Common Capital	2,286	2,327	2,584
Total Assets	45 <i>,</i> 478	48,728	50,741
Total Risk-weighted Assets	12,138	12,817	13,031

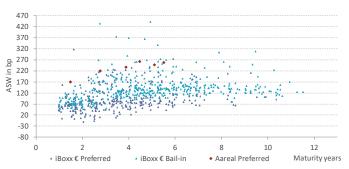
Redemption Profile



Income Statement

(EURm)	2020Y	2021Y	2022H1
Net Interest Income	512	597	330
Net Fee & Commission Inc.	234	245	132
Net Trading Income	2	-12	33
Operating Expense	469	528	295
Credit Commit. Impairment	344	133	107
Pre-tax Profit	-75	155	91

Senior Unsecured Bonds (EUR BMK)



Company Ratios

	2020Y	2021Y	2022H1	
Net Interest Margin	1.21	1.31	1.38	Liquid
ROAE	-2.41	2.25	3.70	IFRS T
Cost-to-Income	63.55	63.85	59.84	NPL/ I
Core Tier 1 Ratio	18.83	18.16	19.83	Reserv

	2020Y	2021Y	2022H1
Liquidity Coverage Ratio	263.50	254.81	227.96
IFRS Tier 1 Leverage Ratio	5.27	5.01	5.49
NPL/ Loans at Amortised Cost	6.15	5.41	4.81
Reserves/Loans at Amort. Cost	2.13	1.65	1.86

Source: Bloomberg, S&P Global Market Intelligence, NORD/LB Markets Strategy & Floor Research; as of: 18.10.2022

Strengths / Opportunities

- Capitalisation
- Liquidity
- Potential of software development income stream

Risks / Weaknesses

- Diversified income sources
- Profitability
- Above-average NPL ratio



Germany 💻

Aareal Bank – Mortgage

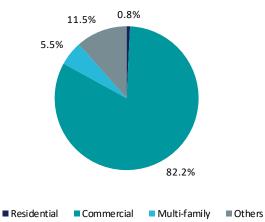
Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Cover Pool Data

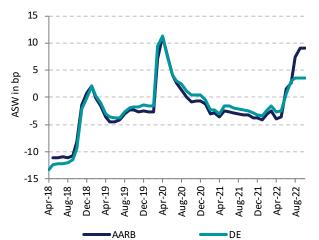
Cover pool volume (EURm)	15,187
Amount outstanding (EURm)	13,055
-thereof ≥ EUR 500m	58.4%
Current OC (nominal)	16.3%
Committed OC	2.0%
Cover type	Mortgage
Main country	27% US
Main region	n/a
Number of loans	3,332
Number of borrowers	3,448
Avg. exposure to borrowers (EUR)	4,404,524
WAL (cover pool)	3.0y
WAL (covered bonds)	4.0y
Fixed interest (cover pool)	55.6%
Fixed interest (covered bonds)	81.6%
LTV (indexed)	n/a
LTV (unindexed)	55.3%
Loans in arrears	0.1%

Rating (S&P) Rating (Fitch) Rating (DBRS) TPI High **TPI** leeway 2 Collateral score 15.3% RRL . JRL Unused notches AAA credit risk (%) PCU Recovery uplift _ **Outstanding ESG BMKs** No LCR ELIGIBLE Yes LCR level (Bmk) 1 **Risk weight** 10% Maturity structure (Bmk) SB

Borrower Types



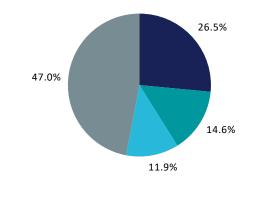
Spread Development



Source: Issuer, Rating agencies, Bloomberg, NORD/LB Markets Strategy & Floor Research

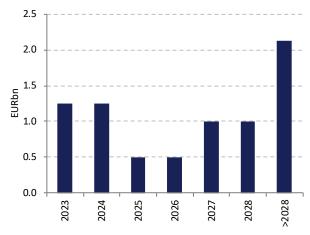
Regional Distribution

Rating (Moody's)



■US ■United Kingdom ■Germany ■Others

Redemption Profile (Bmk)









Aaa

Germany

Bausparkasse Schwäbisch Hall

Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Ratings

-	Rating	Outlook
Fitch	AA-	Stable
Moody's	Aa2	Stable
S&P	A+	Stable

Homepage

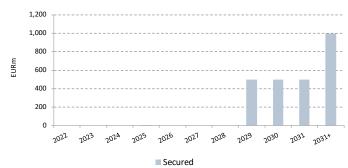
www.schwaebisch-hall.de

The majority of Bausparkasse Schwäbisch Hall AG (BSH), which was founded in 1931, is owned by DZ BANK AG and is therefore also part of the Genossenschaftliche FinanzGruppe (Cooperative Financial Network), with around 800 affiliated cooperative banks and approximately 18.4 million members. A profit and loss transfer agreement is in place between DZ BANK as the cooperative central institution and BSH. The bank divides its business into three segments: Bausparen Domestic (segment profit before tax FY/2021: EUR 103 million), Bausparen Non-Domestic (EUR 22 million), and Bauspar and Loan Proceeding (EUR 21 million). The two core business areas are savings and housing financing. The core business area of housing financing recently posted a record new business volume of EUR 18.3 billion (FY/2021; previous year: EUR 17.1 billion). BSH's products are also sold through cooperative banks. BSH says it is Germany's largest home savings bank with a 30% market share in Germany and serves 8.3 million customers in Germany and abroad, 6.8 of them in Germany. The approximately 8 million home savings contracts have a total home savings volume of EUR 312 billion (FY/2021). Refinancing is largely carried out independently of the capital market through home savings deposits and is supplemented by Pfandbrief issues. The bank plans to expand the share of Pfandbriefe in the future. EUR 44 million was released from the fund for general banking risks. The common equity tier 1 ratio was 32.3% (FY/2021). The leverage ratio was reported at 7.0% (FY/2020 6.0%) and the liquidity coverage ratio at 1,780.9% (FY/2020 441.7%) at fiscal year-end 2021.

Balance Sheet

(EURm)	2019Y	2020Y	2021Y
Net Loans to Customers	53 <i>,</i> 868	58,862	62,979
Total Securities	11,805	12,856	12,895
Total Deposits	63,607	65,074	66,733
Tier 1 Common Capital	4,555	4,967	5,047
Total Assets	77,469	81,673	85,371
Total Risk-weighted Assets	14,528	15,707	16,490

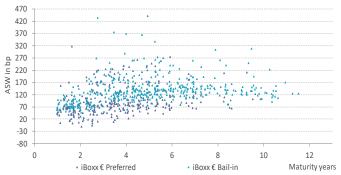
Redemption Profile



Income Statement

(EURm)	2019Y	2020Y	2021Y
Net Interest Income	462	531	581
Net Fee & Commission Inc.	-28	-9	12
Net Trading Income	88	76	20
Operating Expense	486	526	515
Credit Commit. Impairment	3	27	14
Pre-tax Profit	189	81	130

Senior Unsecured Bonds (EUR BMK)



Company Ratios

	2019Y	2020Y	2021Y
Net Interest Margin	0.62	0.67	0.70
ROAE	3.05	1.00	1.52
Cost-to-Income	83.85	82.75	78.70
Core Tier 1 Ratio	31.35	31.62	30.61

	2019Y	2020Y	2021Y
Liquidity Coverage Ratio	271.19	508.33	NM
IFRS Tier 1 Leverage Ratio	5.89	6.10	-
NPL/ Loans at Amortised Cost	-	-	-
Reserves/Loans at Amort. Cost	0.30	0.31	0.31

Source: Bloomberg, S&P Global Market Intelligence, NORD/LB Markets Strategy & Floor Research; as of: 18.10.2022

Strengths / Opportunities

- Support probability FinanzGruppe
- Credit quality in the home market

- Interest rate on depositis in legacy contracts
- Diversification of business activities

Bausparkasse Schwäbisch Hall – Mortgage

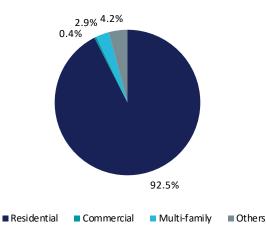
Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Cover Pool Data

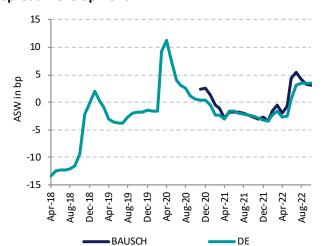
Cover pool volume (EURm)	2,455
Amount outstanding (EURm)	2,006
-thereof ≥ EUR 500m	92.2%
Current OC (nominal)	22.4%
Committed OC	2.0%
Cover type	Mortgage
Main country	100% Germany
Main region	33% Bavaria
Number of loans	17,286
Number of borrowers	27,079
Avg. exposure to borrowers (EUR)	90,648
WAL (cover pool)	10.6y
WAL (covered bonds)	10.1y
Fixed interest (cover pool)	100.0%
Fixed interest (covered bonds)	100.0%
LTV (indexed)	n/a
LTV (unindexed)	50.1%
Loans in arrears	0.0%

Rating (Moody's)	Aaa
Rating (S&P)	-
Rating (Fitch)	-
Rating (DBRS)	-
TPI	High
TPI leeway	6
Collateral score	5.0%
RRL	5.670
JRL	_
Unused notches	
AAA credit risk (%)	_
PCU	-
Recovery uplift	-
Outstanding ESG BMKs	-
	No
LCR level (Bmk)	Yes
Risk weight	1
Maturity structure (Bmk)	10%
	SB

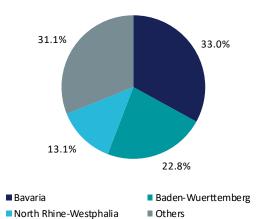
Borrower Types



Spread Development

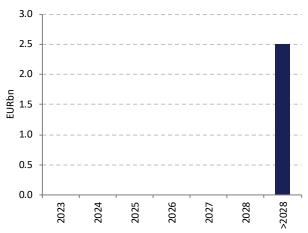


Source: Issuer, Rating agencies, Bloomberg, NORD/LB Markets Strategy & Floor Research



Redemption Profile (Bmk)

Regional Distribution



Germany



Bayerische Landesbank

Germany

Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

RatingsRatingOutlookFitchA-StableMoody'sAa3PositiveS&P--

Homepage

www.bayernlb.de

Bayerische Landesbank (BayernLB) is a specialist bank headquartered in Munich. It is approximately 75% owned by the Free State of Bavaria, with the Association of Bavarian Savings Banks (Sparkassenverband Bayern) holding 25%. The group employs around 8,500 staff (FY 2021). BayernLB focuses on lending to large and medium-sized customers in Germany as well as on real estate financing. It also operates as the lead bank (clearing house) for the 64 Bavarian savings banks. Moreover, the Group operates via its subsidiaries as a direct bank (DKB) and promotional bank with a 100% state guarantee on the part of the Free State of Bavaria (BayernLabo), as well as in the areas of asset and capital management (BayernInvest and REAL I.S.). The Group reports in three operating segments: Corporates & Markets (CM), Real Estate & Savings Banks/Financial Institutions and DKB. Reporting is supplemented by the segments "Central areas and consolidation" and a consolidation item. BayernLB is represented internationally via branches in London, Milan, New York and Paris, as well as a representative office in Moscow. The Group's main centre of business is Germany (FY 2021: 85% of the gross lending volume). Deposits and money market papers (FY 2021: 71.1%) account for the vast majority of the funding mix at Group level. The outstanding volume of ESG products in the funding mix came to EUR 5.2bn as at year-end 2021. The CET1 ratio rose in FY 2021 by 140 basis points to 17.3%, which is in excess of the regulatory minimum requirement of 8.6%. In the first guarter of 2022, the CET1 ratio amounted to 16.6%. With an MREL ratio of 57.2% (FY 2021), the Group exceeded the regulatory minimum requirement of 22.1%.

Balance Sheet

(EURm)	2020Y	2021Y	2022H1
Net Loans to Customers	152,678	158,461	164,880
Total Securities	34,506	29,131	26,933
Total Deposits	109,779	119,292	130,890
Tier 1 Common Capital	10,301	10,966	10,506
Total Assets	256,226	266,554	285,305
Total Risk-weighted Assets	64,974	63,315	66,153

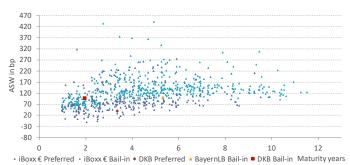
Redemption Profile



Income Statement

(EURm)	2020Y	2021Y	2022H1
Net Interest Income	1,772	1,866	928
Net Fee & Commission Inc.	331	380	219
Net Trading Income	127	222	-42
Operating Expense	1,682	1,716	919
Credit Commit. Impairment	142	48	-46
Pre-tax Profit	197	816	277

Senior Unsecured Bonds (EUR BMK)



Company Ratios

	2020Y	2021Y	2022H1
Net Interest Margin	0.75	0.73	0.69
ROAE	2.00	4.63	2.84
Cost-to-Income	72.85	66.54	79.91
Core Tier 1 Ratio	15.85	17.32	15.88

	2020Y	2021Y	2022H1
Liquidity Coverage Ratio	179.69	271.19	202.78
IFRS Tier 1 Leverage Ratio	4.18	4.25	3.83
NPL/ Loans at Amortised Cost	-	-	-
Reserves/Loans at Amort. Cost	0.70	0.69	0.64

Source: Bloomberg, S&P Global Market Intelligence, NORD/LB Markets Strategy & Floor Research; as of: 18.10.2022

Strengths / Opportunities

- Asset quality
- Capital ratios
- Liquidity profile

- Profitability
- Concentration risk in the CRE sector
- Dependency on wholesale funding

Bayerische Landesbank – Mortgage

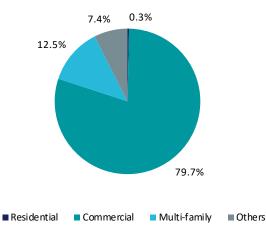
Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Cover Pool Data

Cover pool volume (EURm)	11,293
Amount outstanding (EURm)	7,082
-thereof ≥ EUR 500m	28.2%
Current OC (nominal)	59.4%
Committed OC	2.0%
Cover type	Mortgage
Main country	59% Germany
Main region	44% Bavaria
Number of loans	636
Number of borrowers	476
Avg. exposure to borrowers (EUR)	23,723,950
WAL (cover pool)	3.0y
WAL (covered bonds)	2.0y
Fixed interest (cover pool)	71.2%
Fixed interest (covered bonds)	50.8%
LTV (indexed)	n/a
LTV (unindexed)	58.2%
Loans in arrears	0.0%

Rating (S&P)-Rating (Fitch)-Rating (DBRS)-TPIHighTPI leeway5Collateral score10.0%RRL-JRL-Unused notches-AAA credit risk (%)-PCU-Recovery uplift2Cutateral in ECC RMM-	Rating	(Moody's)	Aaa
Rating (DBRS)-TPIHighTPI leeway5Collateral score10.0%RRL-JRL-Unused notches-AAA credit risk (%)-PCU-Recovery uplift2	Rating	(S&P)	-
TPIHighTPI leeway5Collateral score10.0%RRL-JRL-Unused notches-AAA credit risk (%)-PCU-Recovery uplift2	Rating	(Fitch)	-
TPI leeway5Collateral score10.0%RRL-JRL-Unused notches-AAA credit risk (%)-PCU-Recovery uplift2	Rating	(DBRS)	-
Collateral score10.0%RRL-JRL-Unused notches-AAA credit risk (%)-PCU-Recovery uplift2	TPI		High
RRL-JRL-Unused notches-AAA credit risk (%)-PCU-Recovery uplift2	TPI lee	way	5
JRL - Unused notches - AAA credit risk (%) - PCU - Recovery uplift 2	Collate	ral score	10.0%
Unused notches-AAA credit risk (%)-PCU-Recovery uplift2	RRL		-
AAA credit risk (%) - PCU - Recovery uplift 2	JRL		-
PCU - Recovery uplift 2	Unuse	d notches	-
Recovery uplift 2	AAA cr	edit risk (%)	-
, ,	PCU		-
Outstanding ECC DNAKe	Recove	ery uplift	2
Outstanding ESG BIVIKS Yes	Outsta	nding ESG BMKs	Yes
LCR ELIGIBLE Yes	LCR EL	IGIBLE	Yes
LCR level (Bmk) 1	LCR lev	vel (Bmk)	1
Risk weight 10%	Risk we	eight	10%
Masterite stars (Deals)	Maturi	ty structure (Bmk)	SB

Borrower Types

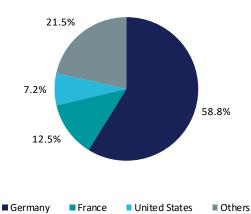


Spread Development

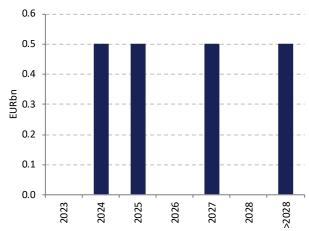


Source: Issuer, Rating agencies, Bloomberg, NORD/LB Markets Strategy & Floor Research

Regional Distribution



Redemption Profile (Bmk)









Bayerische Landesbank – Public Sector

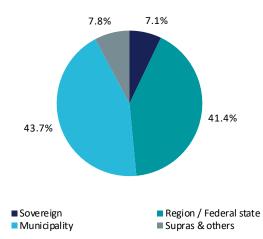
Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Cover Pool Data

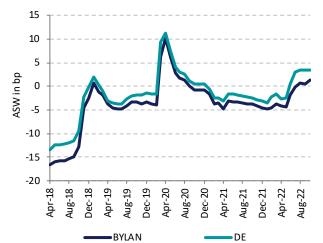
Cover pool volume (EURm)	24,154
Amount outstanding (EURm)	17,133
-thereof ≥ EUR 500m	35.9%
Current OC (nominal)	41.0%
Committed OC	2.0%
Cover type	Public Sector
Main country	94% Germany
Main region	61% Bavaria
Number of loans	80,544
Number of borrowers	51,667
Avg. exposure to borrowers (EUR)	467,496
WAL (cover pool)	9.0y
WAL (covered bonds)	5.0y
Fixed interest (cover pool)	93.0%
Fixed interest (covered bonds)	91.1%
LTV (indexed)	-
LTV (unindexed)	-
Loans in arrears	0.1%

Rating (Moody's)	Aaa
Rating (S&P)	-
Rating (Fitch)	-
Rating (DBRS)	-
TPI	High
TPI leeway	5
Collateral score	6.2%
RRL	-
JRL	-
Unused notches	-
AAA credit risk (%)	-
PCU	-
Recovery uplift	-
Outstanding ESG BMKs	Yes
LCR ELIGIBLE	Yes
LCR level (Bmk)	1
Risk weight	10%
Maturity structure (Bmk)	SB

Borrower Types

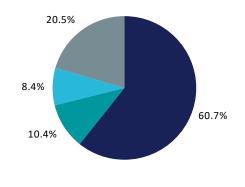


Spread Development



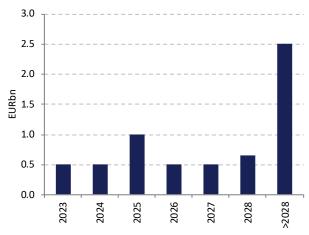
Source: Issuer, Rating agencies, Bloomberg, NORD/LB Markets Strategy & Floor Research

Regional Distribution



■ Bavaria ■ North Rhine-Westphalia ■ Hamburg ■ Others

Redemption Profile (Bmk)







Berlin Hyp

Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Ratings

	Rating	Outlook
Fitch	A-	Stable
Moody's	Aa3	Stable
S&P	-	-

Homepage

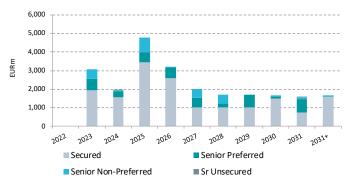
www.berlinhyp.de

Founded in 1868, Berlin Hyp AG is a specialist bank in the area of commercial real estate (CRE) financing. The liquidation of Landesbank Berlin Holding AG (LBB Holding) led to change in the ownership structure. The former owner LBB Holding (FY 2021: 100% owner of Berlin Hyp) came to an agreement with Landesbank Baden-Württemberg (LBBW) in January 2022 for the sale of all shares in Berlin Hyp. As a result, since 01 July 2022, Berlin Hyp has been a wholly owned subsidiary of LBBW. At 70% (FY 2021) of the property portfolio, the bank's geographic focus is on the domestic market of Germany. The domestic business is selectively supplemented by foreign activities through branches in Amsterdam, Paris and Warsaw. In addition to mortgage loans, the Berlin Hyp service portfolio also encompasses avals and rent deposit management in addition to property developer and development financing. Capital market refinancing operations are primarily covered by the issuance of mortgage Pfandbriefe (June 2022: 63% of wholesale funding) and senior unsecured bonds in both preferred (18%) and non-preferred (17%) format. Since 2015, Berlin Hyp has placed a strategic focus on the area of Green Finance, and issued its inaugural green Pfandbrief deal in the same year. As at the end of May 2022, its Green Finance Portfolio had a volume of more than EUR 7.5bn. Most recently, the bank issued a first green senior preferred bond under the new Green Bond Framework (which complies with the EU Taxonomy) in January 2022. In comparison with the previous year, the CET1 ratio has increased by 90 basis points to 14.3% (FY 2021), while the leverage ratio stood at 3.56% (FY 2021).

Balance Sheet

(EURm)	2020Y	2021Y	2022H1
Net Loans to Customers	24,383	26,191	26,941
Total Securities	6,223	6,795	5,829
Total Deposits	4,476	3,972	4,895
Tier 1 Common Capital	1,387	1,562	1,604
Total Assets	33,423	36,210	38,111
Total Risk-weighted Assets	10,321	10,952	11,487

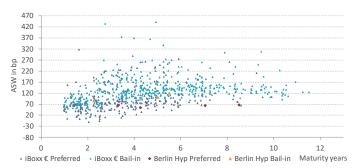
Redemption Profile



Income Statement

(EURm)	2020Y	2021Y	2022H1
Net Interest Income	313	406	259
Net Fee & Commission Inc.	20	25	11
Net Trading Income	-	-	-
Operating Expense	173	184	117
Credit Commit. Impairment	81	17	7
Pre-tax Profit	24	51	30

Senior Unsecured Bonds (EUR BMK)



Company Ratios

H1
.41
-
.20
.96
,

	2020Y	2021Y	2022H1
Liquidity Coverage Ratio	171.16	174.64	166.13
IFRS Tier 1 Leverage Ratio	-	-	-
NPL/ Loans at Amortised Cost	0.58	0.56	0.52
Reserves/Loans at Amort. Cost	1.23	1.20	1.19

Source: Bloomberg, S&P Global Market Intelligence, NORD/LB Markets Strategy & Floor Research; as of: 18.10.2022

Strengths / Opportunities

- Capitalisation
- Asset quality

Risks / Weaknesses

- Dependency on wholesale funding
- Concentration risks in the CRE sector



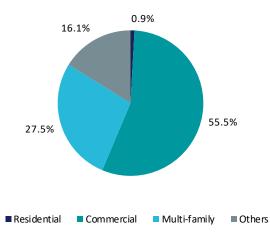
Germany

Berlin Hyp – Mortgage

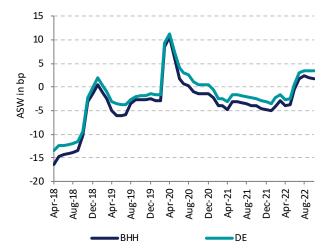
Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Cover Pool Data

Cover pool volume (EURm)	19,484
Amount outstanding (EURm)	18,108
-thereof ≥ EUR 500m	73.1%
Current OC (nominal)	7.6%
Committed OC	2.0%
Cover type	Mortgage
Main country	68% Germany
Main region	23% Berlin
Number of loans	1,500
Number of borrowers	1,369
Avg. exposure to borrowers (EUR)	14,232,308
WAL (cover pool)	4.1y
WAL (covered bonds)	5.3y
Fixed interest (cover pool)	74.4%
Fixed interest (covered bonds)	84.2%
LTV (indexed)	n/a
LTV (unindexed)	56.3%
Loans in arrears	0.0%



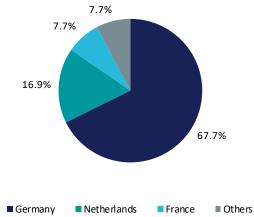
Spread Development



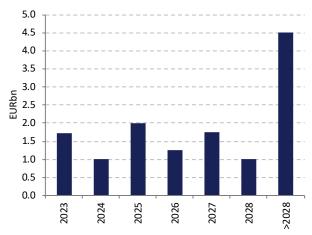
Source: Issuer, Rating agencies, Bloomberg, NORD/LB Markets Strategy & Floor Research

Rating (Moody's)	Aaa
Rating (S&P)	-
Rating (Fitch)	-
Rating (DBRS)	-
TPI	High
TPI leeway	6
Collateral score	15.5%
RRL	-
JRL	-
Unused notches	-
AAA credit risk (%)	-
PCU	-
Recovery uplift	2
Outstanding ESG BMKs	Yes
LCR ELIGIBLE	Yes
LCR level (Bmk)	1
Risk weight	10%
Maturity structure (Bmk)	SB

Regional Distribution



Redemption Profile (Bmk)







Commerzbank

Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Ratings

	Rating	Outlook	
Fitch	-	-	
Moody's	A2	Stable	
S&P	BBB+	Stable	

Homepage

www.commerzbank.de

According to information from the bank itself, Commerzbank AG (Coba) is Germany's leading bank for SMEs. In Germany it serves a total of 11 million retail and corporate customers in addition to 28,000 business associations in 450 branches. The largest shareholder in the MDAX-listed bank is the Federal Republic of Germany with 15.6% (14 August 2022), which it holds via the Financial Market Stabilisation Fund (FMS). Coba operates on an international basis via a network of nearly 400 branches in just under 40 countries. Reporting is conducted across three business areas: Retail and Business Customers (PUK), Corporate Customers (FK) and Other and Consolidation (SuK). Coba bundles its domestic branch business in the PUK segment, in addition to activities under the Comdirect brand and business with its subsidiaries Commerz Real and the mBank Group. The segment FK comprises all SME and large corporate customers in Germany and abroad in addition to institutional clients. The SuK segment serves as a collective item for all activities that do not fall under the two segments PUK and FK. As at H1 2022, Coba has raised a total volume of EUR 54.9bn in capital market funding. Covered bonds account for a share of 48% in wholesale funding, with shares of 41% attributable to senior unsecured bonds (preferred and non-preferred) and 11% to subordinate capital. As part of its sustainability targets, Coba is planning to direct a total of EUR 300bn towards sustainable products (loans, bonds, consulting) by 2025. This is also being reflected in the bank's refinancing activities, with Coba most recently having issued a green non-preferred senior bond (volume of EUR 500m). The CET1 ratio rose to 13.7% (H1 2022; H1 2021: 13.4%).

Balance Sheet

2020Y	2021Y	2022H1
251,277	257,315	-
134,478	121,925	111,729
293,201	272,280	-
23,611	23,765	24,015
506,613	473,044	535,049
178,581	175,188	175,047
	251,277 134,478 293,201 23,611 506,613	251,277257,315134,478121,925293,201272,28023,61123,765506,613473,044

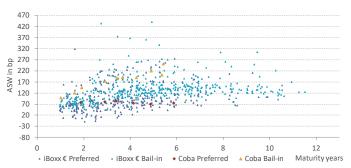
Redemption Profile



Income Statement

(EURm)	2020Y	2021Y	2022H1
Net Interest Income	4,975	4,849	2,879
Net Fee & Commission Inc.	3,317	3,616	1,868
Net Trading Income	455	665	329
Operating Expense	7,477	7,370	3,395
Credit Commit. Impairment	1,734	576	553
Pre-tax Profit	-2,626	105	1,250

Senior Unsecured Bonds (EUR BMK)



Company Ratios

	2020Y	2021Y	2022H1
Net Interest Margin	0.98	0.94	1.14
ROAE	-9.24	1.21	5.50
Cost-to-Income	88.77	88.75	66.26
Core Tier 1 Ratio	13.22	13.57	13.72

2020Y	2021Y	2022H1
128.54	145.85	141.78
5.18	5.49	4.83
2.04	1.69	-
1.28	1.14	-
	128.54 5.18 2.04	128.54 145.85 5.18 5.49 2.04 1.69

Source: Bloomberg, S&P Global Market Intelligence, NORD/LB Markets Strategy & Floor Research; as of: 18.10.2022

Strengths / Opportunities

- Market position in Germany (SMEs)
- Liquidity profile
- Asset quality

Risks / Weaknesses

- Tail risk from CHF portfolio at mBank
- Uncertainty linked to restructuring
- Dependency on wholesale funding



Germany 📕

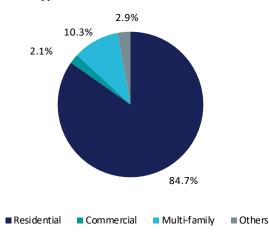
Germany

Commerzbank – Mortgage

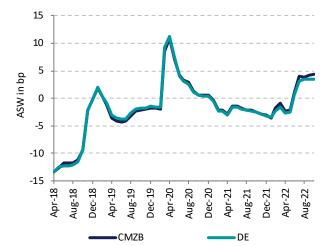
Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Cover Pool Data

Cover pool volume (EURm)	38,413
Amount outstanding (EURm)	23,885
-thereof ≥ EUR 500m	71.2%
Current OC (nominal)	60.8%
Committed OC	2.0%
Cover type	Mortgage
Main country	100% Germany
Main region	n/a
Number of loans	37,315
Number of borrowers	3,942
Avg. exposure to borrowers (EUR)	9,745,068
WAL (cover pool)	5.7у
WAL (covered bonds)	4.5y
Fixed interest (cover pool)	98.3%
Fixed interest (covered bonds)	77.0%
LTV (indexed)	n/a
LTV (unindexed)	51.9%
Loans in arrears	0.0%



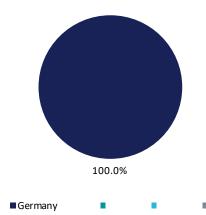
Spread Development



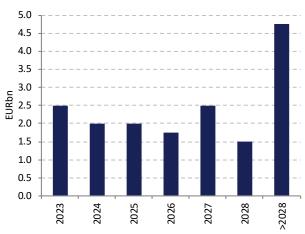
Source: Issuer, Rating agencies, Bloomberg, NORD/LB Markets Strategy & Floor Research

Rating (Moody's)	Aaa
Rating (S&P)	-
Rating (Fitch)	-
Rating (DBRS)	-
TPI	High
TPI leeway	4
Collateral score	5.2%
RRL	-
JRL	-
Unused notches	-
AAA credit risk (%)	-
PCU	-
Recovery uplift	-
Outstanding ESG BMKs	No
LCR ELIGIBLE	Yes
LCR level (Bmk)	1
Risk weight	10%
Maturity structure (Bmk)	SB

Regional Distribution



Redemption Profile (Bmk)



Germany

DekaBank Deutsche Girozentrale

Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Ratings		
	Rating	Outlook
Fitch	-	-
Moody's	Aa2	Stable
S&P	А	Stable

Homepage

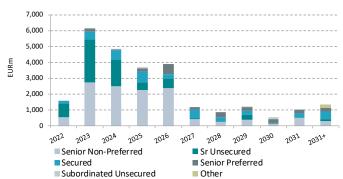
www.deka.de

DekaBank Deutsche Girozentrale (DekaBank) trades in the legal form of a public law institution (Anstalt öffentlichen Rechts) and is headquartered in Frankfurt am Main and Berlin. As one of the largest asset management firms in Germany, the bank declares that it has a market share of 12% in the area of publicly investment funds. With more than 4,200 employees (H1 2022), DekaBank functions as an investment firm for the savings banks. Together with its subsidiaries, these all form the Deka Group. A total of 50% of the shares are held by Deka Erwerbsgesellschaft mhb, while the other 50% is held by the German Savings Banks Association (DSGV). In organisational terms, DekaBank divides its activities into five business fields: both of the asset management business units (AM Securities and AM Real Estate) are focused on funds-based products and services. The business unit Asset Management Services concentrates on the provision of banking services for asset management activities. In addition, the banking business is modelled on the business areas of Capital Market and Financing. DekaBank's target customer groups include savings banks, customers of savings banks and institutional investors. As part of its efforts in the area of sustainable banking, the bank published a Green Bond Framework in September 2020. As at 30 June 2021, the volume of green certificates issued came to EUR 95.0m, with 51% of these being fixed-interest bonds and 49% in the form of step-up bonds without call rights. The NPE ratio at DekaBank fell by 20 basis points year on year to 0.39% (FY 2021), while the NPE coverage ratio stood at 98.53%. With a CET1 ratio of 15.2% (FY 2021), DekaBank exceeded the regulatory minimum requirement of 8.2%.

Balance Sheet

(EURm)	2020Y	2021Y	2022H1
Net Loans to Customers	25,328	31,182	32,375
Total Securities	33,477	26,500	26,947
Total Deposits	21,660	23,595	29,027
Tier 1 Common Capital	4,437	4,716	5,131
Total Assets	85,509	88,865	101,900
Total Risk-weighted Assets	31,307	30,944	32,526

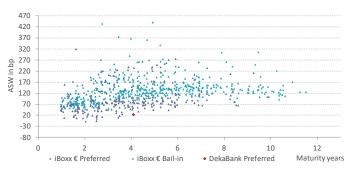
Redemption Profile



Income Statement

(EURm)	2020Y	2021Y	2022H1
Net Interest Income	157	172	102
Net Fee & Commission Inc.	1,309	1,624	783
Net Trading Income	266	220	592
Operating Expense	1,099	1,183	603
Credit Commit. Impairment	162	19	-48
Pre-tax Profit	386	791	915

Senior Unsecured Bonds (EUR BMK)



Company Ratios

	2020Y	2021Y	2022H1
Net Interest Margin	0.17	0.20	0.22
ROAE	3.81	8.95	18.51
Cost-to-Income	65.15	59.94	41.02
Core Tier 1 Ratio	14.17	15.24	15.78

	2020Y	2021Y	2022H1
Liquidity Coverage Ratio	178.06	158.59	165.18
IFRS Tier 1 Leverage Ratio	5.68	5.73	5.76
NPL/ Loans at Amortised Cost	2.18	1.09	1.10
Reserves/Loans at Amort. Cost	0.75	0.56	0.42

Source: Bloomberg, S&P Global Market Intelligence, NORD/LB Markets Strategy & Floor Research; as of: 18.10.2022

Strengths / Opportunities

- Member and strategic unit of S-Finanzgruppe
- Capitalisation
- Recurring provision income

- Dependency on wholesale funding
- Earnings volatility through capital market links
- Risk diversification

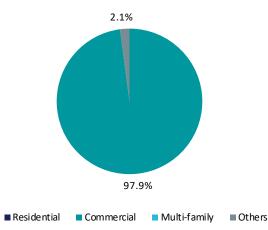
DekaBank – Mortgage

Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

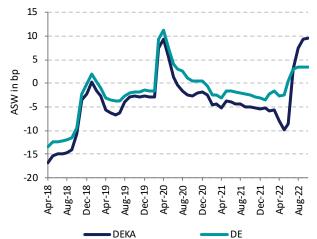
Cover Pool Data

Cover pool volume (EURm)	1,207
Amount outstanding (EURm)	445
-thereof ≥ EUR 500m	56.2%
Current OC (nominal)	171.2%
Committed OC	n/a
Cover type	Mortgage
Main country	54% France
Main region	98% Ile-de-France
Number of loans	29
Number of borrowers	32
Avg. exposure to borrowers (EUR)	37,715,625
WAL (cover pool)	3.5y
WAL (covered bonds)	2.9y
Fixed interest (cover pool)	99.3%
Fixed interest (covered bonds)	65.7%
LTV (indexed)	n/a
LTV (unindexed)	53.6%
Loans in arrears	0.0%

Borrower Types



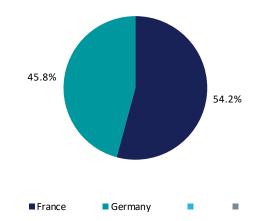
Spread Development



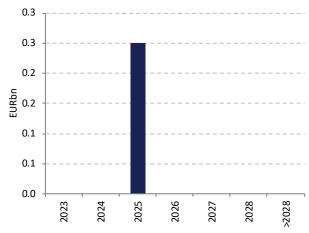
Source: Issuer, Rating agencies, Bloomberg, NORD/LB Markets Strategy & Floor Research

Rating (Moody's)	Aaa
Rating (S&P)	-
Rating (Fitch)	-
Rating (DBRS)	-
TPI	High
TPI leeway	6
Collateral score	27.3%
RRL	-
JRL	-
Unused notches	-
AAA credit risk (%)	-
PCU	-
Recovery uplift	-
Outstanding ESG BMKs	No
LCR ELIGIBLE	Yes
LCR level (SBmk)	2A
Risk weight	10%
Maturity structure (SBmk)	SB

Regional Distribution



Redemption Profile (SBmk)









DekaBank – Public Sector

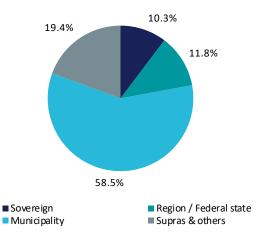
Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Cover Pool Data

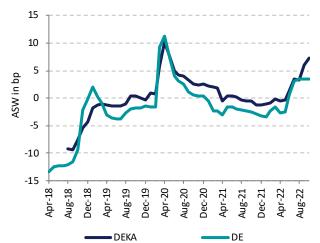
Cover pool volume (EURm)	4,419
Amount outstanding (EURm)	3,504
-thereof ≥ EUR 500m	78.5%
Current OC (nominal)	26.1%
Committed OC	2.0%
Cover type	Public Sector
Main country	86% Germany
Main region	n/a
Number of loans	289
Number of borrowers	96
Avg. exposure to borrowers (EUR)	46,026,042
WAL (cover pool)	6.0y
WAL (covered bonds)	4.7y
Fixed interest (cover pool)	80.3%
Fixed interest (covered bonds)	100.0%
LTV (indexed)	-
LTV (unindexed)	-
Loans in arrears	0.0%

	1 101 01
Rating (S&P)	-
Rating (Fitch)	-
Rating (DBRS)	-
TPI	High
TPI leeway	6
Collateral score	6.6%
RRL	-
JRL	-
Unused notches	-
AAA credit risk (%)	-
PCU	-
Recovery uplift	2
Outstanding ESG BMKs	No
LCR ELIGIBLE	Yes
LCR level (SBmk)	2A
Risk weight	10%
Maturity structure (SBmk)	SB
	Rating (S&P) Rating (Fitch) Rating (DBRS) TPI TPI leeway Collateral score RRL JRL Unused notches AAA credit risk (%) PCU Recovery uplift Outstanding ESG BMKs LCR ELIGIBLE LCR level (SBmk) Risk weight

Borrower Types



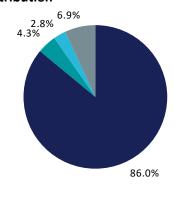
Spread Development



Source: Issuer, Rating agencies, Bloomberg, NORD/LB Markets Strategy & Floor Research

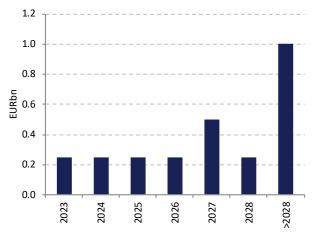
Regional Distribution

Rating (Moody's)



■ Germany ■ United Kingdom ■ Netherlands ■ Others

Redemption Profile (SBmk)





Aaa



Germany

Deutsche Apotheker- und Ärztebank

Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Ratings

I	Rating	Outlool
Fitch*	AA-	Stable
Moody's**	Aa2	Stable
S&P*	A+	Stable

Homepage

www.apobank.de

* Rating der Genossenschafl.FinanzGruppe** Senior Unsecured

Deutsche Apotheker- und Ärztebank (apoBank), which operates as a cooperative, has specialised in providing financial assistance and support for health professionals and their organisations for 120 years in Germany. It has in excess of 115,200 members, who are simultaneously the owners of the bank. More than 2,200 employees of apoBank serve customers and members in a total of 83 branches. The bank is a member of the cooperative FinanzGruppe, and as a result is a member of the cooperative protection scheme. Moreover, apoBank benefits from the protection scheme of the National Association of German Cooperative Banks. Within this association, apoBank is – according to its own information – the largest cooperative primary bank and is a leader in the area of healthcare in terms of financing and supporting start-ups as well as for payment transactions. Furthermore, apoBank offers its customers solutions that have been customised for the healthcare market. The bank splits its activities into two business areas orientated towards its customer groups: Retail Customers as well as Professional Bodies and Key Clients. The bank's capital market refinancing activities comprise three components: Pfandbriefe, ECB tenders (EUR 7.8bn with repayment in 2022, after which capital market funding declines from 29% to 7% of total assets) and unsecured bonds (preferred and non-preferred). Property loans account for 50.0% of the bank's loan portfolio, followed by start-up loans (FY 2021: 21%). The NPL ratio rose by 20 basis points year on year to 1.6% in FY 2021. As at year-end 2021, the CET1 ratio amounted to 15.9%.

Balance Sheet

(EURm)	2020Y	2021Y	2022H1
Net Loans to Customers	38,240	37,787	37,663
Total Securities	8,034	10,213	10,674
Total Deposits	33,241	37,140	35,596
Tier 1 Common Capital	2,459	2,446	2,503
Total Assets	59,440	67,372	66,916
Total Risk-weighted Assets	15,095	15,427	15,420

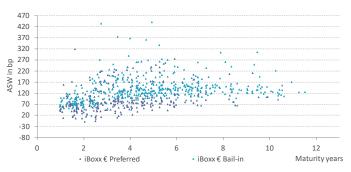
Redemption Profile



Income Statement

2020Y	2021Y	2022H1
750	685	363
184	193	102
6	7	2
799	745	374
6	2	-4
111	124	74
	750 184 6 799 6	750 685 184 193 6 7 799 745 6 2

Senior Unsecured Bonds (EUR BMK)



Company Ratios

	2020Y	2021Y	2022H1
Net Interest Margin	1.39	1.09	1.09
ROAE	2.42	2.32	2.28
Cost-to-Income	81.23	79.83	77.80
Core Tier 1 Ratio	16.29	15.86	16.23

	2020Y	2021Y	2022H1
Liquidity Coverage Ratio	150.75	226.11	268.07
IFRS Tier 1 Leverage Ratio	4.15	3.64	3.75
NPL/ Loans at Amortised Cost	1.64	-	-
Reserves/Loans at Amort. Cost	0.79	-	-

Source: Bloomberg, S&P Global Market Intelligence, NORD/LB Markets Strategy & Floor Research; as of: 18.10.2022

Strengths / Opportunities

- Member of the FinanzGruppe protection scheme
- Market position in the healthcare sector
- Asset quality

- Profitability
- Focus and dependency on the healthcare sector
- Customer satisfaction

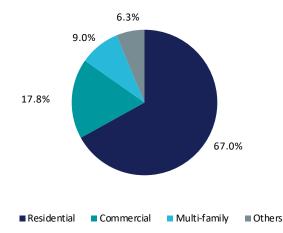
apoBank – Mortgage

Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

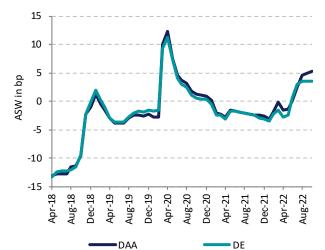
Cover Pool Data

Cover pool volume (EURm)9,271Amount outstanding (EURm)8,449-thereof \geq EUR 500m35.5%Current OC (nominal)9.7%Committed OCn/aCover typeMortgageMain country100% GermanyMain region25% North Rhine-WestphaliaNumber of loans82,718Number of borrowers45,756Avg. exposure to borrowers (EUR)202,620WAL (cover pool)5.0yWAL (covered bonds)5.2yFixed interest (cover pool)992.0%Fixed interest (covered bonds)57.8%LTV (indexed)n/aLTV (unindexed)54.7%		0.271
-thereof \geq EUR 500m35.5%Current OC (nominal)9.7%Committed OCn/aCover typeMortgageMain country100% GermanyMain region25% North Rhine-WestphaliaNumber of loans82,718Number of borrowers45,756Avg. exposure to borrowers (EUR)202,620WAL (covered bonds)5.0yFixed interest (cover pool)5.2yFixed interest (covered bonds)57.8%LTV (indexed)n/a		,
Current OC (nominal)9.7%Committed OCn/aCover typeMortgageMain country100% GermanyMain region25% North Rhine-WestphaliaNumber of loans82,718Number of borrowers45,756Avg. exposure to borrowers (EUR)202,620WAL (cover pool)5.0yWAL (covered bonds)5.2yFixed interest (cover pool)992.0%Fixed interest (covered bonds)57.8%LTV (indexed)n/a	Amount outstanding (EURm)	8,449
Committed OCn/aCover typeMortgageMain country100% GermanyMain region25% North Rhine-WestphaliaNumber of loans82,718Number of borrowers45,756Avg. exposure to borrowers (EUR)202,620WAL (cover pool)5.0yWAL (covered bonds)5.2yFixed interest (cover pool)992.0%Fixed interest (covered bonds)57.8%LTV (indexed)n/a	-thereof ≥ EUR 500m	35.5%
Cover typeMortgageMain country100% GermanyMain region25% North Rhine-WestphaliaNumber of loans82,718Number of borrowers45,756Avg. exposure to borrowers (EUR)202,620WAL (cover pool)5.0yWAL (covered bonds)5.2yFixed interest (cover pool)992.0%Fixed interest (covered bonds)57.8%LTV (indexed)n/a	Current OC (nominal)	9.7%
Main country100% GermanyMain country100% GermanyMain region25% North Rhine-WestphaliaNumber of loans82,718Number of borrowers45,756Avg. exposure to borrowers (EUR)202,620WAL (cover pool)5.0yWAL (covered bonds)5.2yFixed interest (cover pool)992.0%Fixed interest (covered bonds)57.8%LTV (indexed)n/a	Committed OC	n/a
Main region25% North Rhine-WestphaliaNumber of loans82,718Number of borrowers45,756Avg. exposure to borrowers (EUR)202,620WAL (cover pool)5.0yWAL (covered bonds)5.2yFixed interest (cover pool)992.0%Fixed interest (covered bonds)57.8%LTV (indexed)n/a	Cover type	Mortgage
Number of loans82,718Number of borrowers45,756Avg. exposure to borrowers (EUR)202,620WAL (cover pool)5.0yWAL (covered bonds)5.2yFixed interest (cover pool)992.0%Fixed interest (covered bonds)57.8%LTV (indexed)n/a	Main country	100% Germany
Number of borrowers45,756Avg. exposure to borrowers (EUR)202,620WAL (cover pool)5.0yWAL (covered bonds)5.2yFixed interest (cover pool)992.0%Fixed interest (covered bonds)57.8%LTV (indexed)n/a	Main region	25% North Rhine-Westphalia
Avg. exposure to borrowers (EUR)202,620WAL (cover pool)5.0yWAL (covered bonds)5.2yFixed interest (cover pool)992.0%Fixed interest (covered bonds)57.8%LTV (indexed)n/a	Number of loans	82,718
WAL (cover pool)5.0yWAL (covered bonds)5.2yFixed interest (cover pool)992.0%Fixed interest (covered bonds)57.8%LTV (indexed)n/a	Number of borrowers	45,756
WAL (covered bonds)5.2yFixed interest (cover pool)992.0%Fixed interest (covered bonds)57.8%LTV (indexed)n/a	Avg. exposure to borrowers (E	UR) 202,620
Fixed interest (cover pool)992.0%Fixed interest (covered bonds)57.8%LTV (indexed)n/a	WAL (cover pool)	5.0y
Fixed interest (covered bonds)57.8%LTV (indexed)n/a	WAL (covered bonds)	5.2y
LTV (indexed) n/a	Fixed interest (cover pool)	992.0%
	Fixed interest (covered bonds)	57.8%
LTV (unindexed) 54.7%	LTV (indexed)	n/a
	LTV (unindexed)	54.7%
Loans in arrears 0.0%	Loans in arrears	0.0%

Borrower Types



Spread Development



Source: Issuer, Rating agencies, Bloomberg, NORD/LB Markets Strategy & Floor Research

Regional Distribution

Maturity structure (Bmk)

Rating (Moody's) Rating (S&P)

Rating (Fitch) Rating (DBRS)

Unused notches

Recovery uplift Outstanding ESG BMKs

LCR level (Bmk)

LCR ELIGIBLE

Risk weight

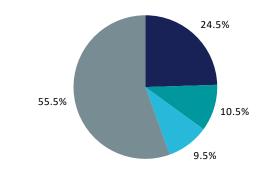
AAA credit risk (%)

TPI TPI leeway Collateral score

RRL

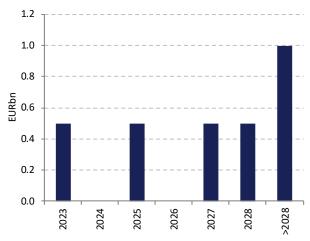
JRL

PCU



■ North Rhine-Westphalia ■ Bavaria ■ Berlin ■ Others

Redemption Profile (Bmk)





AAA

aa

aaa

4

2.5

No

Yes

10%

SB

1



Deutsche Bank

Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Ratings

	Rating	Outloo
Fitch	BBB+	Positive
Moody's	A1	Stable
S&P	A-	Stable

Homepage

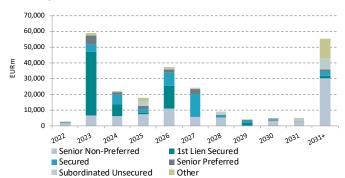
www.db.com

Balance Sheet

(EURm)	2020Y	2021Y	2022H1
Net Loans to Customers	437,520	478,445	488,430
Total Securities	579,572	515,015	556,550
Total Deposits	492,599	519,435	-
Tier 1 Common Capital	44,885	46,506	47,932
Total Assets	1,325,259	1,323,993	1,386,660
Total Risk-weighted Assets	328,951	351,629	369,970

as at H1 2022.

Redemption Profile



Income Statement

Measured by total assets (H1 2022: EUR 1.39bn), Deutsche Bank AG (DB) is Germany's

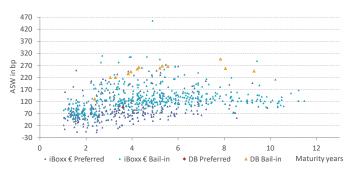
largest financial institution and is the country's only global systemically important bank (G-SIB). Around the world, DB employs nearly 83,000 staff, who work across a network of around 1,600 branches. Reporting at the core bank can be broken down into four key segments: Corporate Bank (services for institutional clients, treasury services, business banking), Investment Bank (fixed income and currencies, issuing and consulting business, DB Research), Private Bank (retail customers, high net worth individuals, commercial

customers and their families, international corporate clients) and Asset Management

(DWS). The core bank also includes the segment Corporate & Other. In addition to its core areas of business, DB also reports in the Capital Release Unit (winding-down segment), which as the name suggests serves the purposes of freeing-up capital. Around 60% of the balance sheet total is refinanced through deposits. Senior non-preferred bonds account for the largest share of capital market funding (H1 2022: 47.8% of outstanding capital market issuances), with a share of 12.4% attributable to covered bonds (H1 2022). As part of its sustainability strategy, DB regularly issues bonds under its Green Financing Framework. The cumulative volume of sustainable financing and investments is set to reach EUR 200bn by the end of 2022 (H1 2022: EUR 119bn). In terms of a financial goal for 2022, the bank is striving to achieve a CET1 ratio of more than 12.5% (H1 2022: 13.0%) in addition to a leverage ratio of roughly 4.5% (phased-in; 4.3%). The LCR amounted to 133%

(EURm)	2020Y	2021Y	2022H1
Net Interest Income	11,526	11,155	6,248
Net Fee & Commission Inc.	9,424	10,934	5,257
Net Trading Income	2,793	3,407	2,032
Operating Expense	20,870	20,921	10,247
Credit Commit. Impairment	1,792	515	525
Pre-tax Profit	1,021	3,390	3,205

Senior Unsecured Bonds (EUR BMK)



Company Ratios

	2020Y	2021Y	2022H1
Net Interest Margin	0.94	0.95	1.04
ROAE	1.00	3.86	7.11
Cost-to-Income	86.86	82.33	73.31
Core Tier 1 Ratio	13.64	13.23	12.96

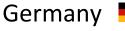
	2020Y	2021Y	2022H1
Liquidity Coverage Ratio	145.62	133.86	131.82
IFRS Tier 1 Leverage Ratio	4.54	4.52	-
NPL/ Loans at Amortised Cost	-	-	-
Reserves/Loans at Amort. Cost	1.13	1.02	1.02

Source: Bloomberg, S&P Global Market Intelligence, NORD/LB Markets Strategy & Floor Research; as of: 18.10.2022

Strengths / Opportunities

- Liquidity
- Diversified business model
- Market position in Germany

- Implementation of medium-term strategy
- Volatility in the investment banking business
- Economic/geopolitical risks





Aaa

Germany

Deutsche Bank – Mortgage

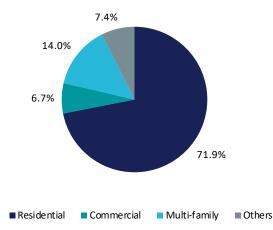
Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Cover Pool Data

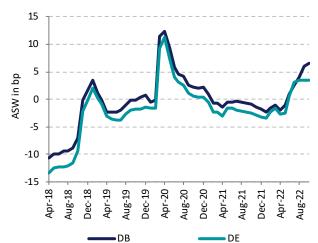
Cover pool volume (EURm)	15,577
Amount outstanding (EURm)	12,332
-thereof ≥ EUR 500m	58.8%
Current OC (nominal)	26.3%
Committed OC	2.0%
Cover type	Mortgage
Main country	100% Germany
Main region	n/a
Number of loans	n/a
Number of borrowers	n/a
Avg. exposure to borrowers (EUR)	n/a
WAL (cover pool)	n/a
WAL (covered bonds)	n/a
Fixed interest (cover pool)	99.3%
Fixed interest (covered bonds)	65.7%
LTV (indexed)	n/a
LTV (unindexed)	53.6%
Loans in arrears	0.0%

	7100
Rating (S&P)	-
Rating (Fitch)	-
Rating (DBRS)	-
TPI	High
TPI leeway	3
Collateral score	5.4%
RRL	-
JRL	-
Unused notches	-
AAA credit risk (%)	-
PCU	-
Recovery uplift	-
Outstanding ESG BMKs	No
LCR ELIGIBLE	Yes
LCR level (Bmk)	1
Risk weight	10%
Maturity structure (Bmk)	SB

Borrower Types



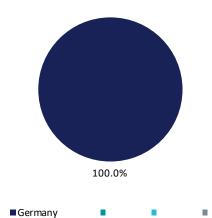
Spread Development



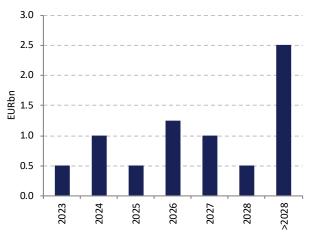
Source: Issuer, Rating agencies, Bloomberg, NORD/LB Markets Strategy & Floor Research

Regional Distribution

Rating (Moody's)



Redemption Profile (Bmk)



Deutsche Bank – Mortgage (CPT)

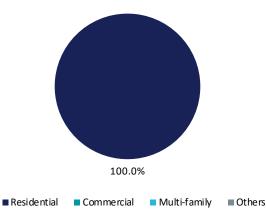
Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Cover Pool Data

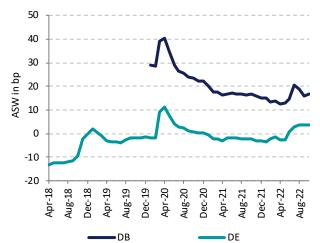
Cover pool volume (EURm)	3,233
Amount outstanding (EURm)	2,310
-thereof ≥ EUR 500m	21.6%
Current OC (nominal)	40.0%
Committed OC	15.0%
Cover type	Mortgage
Main country	100% Germany
Main region	88% North Rhine-Westphalia
Number of loans	46,018
Number of borrowers	36,921
Avg. exposure to borrowers (I	EUR) 87,563
WAL (cover pool)	17.7у
WAL (covered bonds)	1.3y
Fixed interest (cover pool)	98.3%
Fixed interest (covered bonds) 100.0%
LTV (indexed)	n/a
LTV (unindexed)	69.9%
Loans in arrears	0.0%

Rating (Moody's)	Aaa
Rating (S&P)	-
Rating (Fitch)	-
Rating (DBRS)	AA
ТРІ	High
TPI leeway	3
Collateral score	8.4%
RRL	-
JRL	-
Unused notches	-
AAA credit risk (%)	-
PCU	-
Recovery uplift	-
Outstanding ESG BMKs	No
LCR ELIGIBLE	No
LCR level (Bmk)	Not eligible
Risk weight	20%
Maturity structure (Bmk)	CPT
	•

Borrower Types



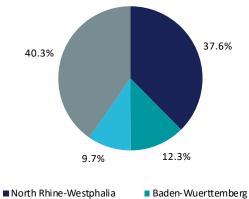
Spread Development



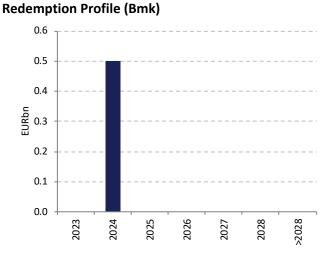
Source: Issuer, Rating agencies, Bloomberg, NORD/LB Markets Strategy & Floor Research

Regional Distribution

Lower Saxony



Others









Deutsche Kreditbank

Germany

Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Ratings

C	Rating	Outlook
Fitch	-	-
Moody's	A1	Stable
S&P	-	-
Homepa	ge	

www.dkb.de

Deutsche Kreditbank AG (DKB), headquartered in Berlin, is one of the largest digital banks in Germany and is fully owned by Bayerische Landesbank (BayernLB). The control and profit transfer agreement between the two banks was announced by BayernLB with effect from 30 September 2021 (on account of a change to the deposit protection scheme). In addition, BayernLB revoked the Letter of Comfort to DKB at the end of November 2021. DKB's business model is based on two pillars. First is the direct banking business for retail clients, in which over 5.1 million customers are served on a digital basis across Germany, with the second comprising corporate customers, who are advised across 26 different locations. DKB employs 4,900 staff overall, who offer customers products including current accounts and business accounts, deposits, credit cards, mortgages, loans and investment products. The DKB Group comprises DKB AG and various subsidiaries such as DKB Service GmbH, DKB Grund GmbH and DKB Finance GmbH. DKB reports across three market segments of Retail Customers, Corporate Clients and Infrastructure, in addition to the business units Financial Markets and Other. The most important refinancing sources for DKB are customer deposits (FY 2021: 59.3%) and targeted longer-term refinancing operations (TLTROs) operated by the ECB (20.0%). In 2021, DKB placed its third green bond in the amount of EUR 500m, which complied with the draft EU Taxonomy and the EU Green Bond Standards. DKB has been actively pursuing a sustainability strategy since as far back as 2016. The CET1 ratio rose by 2.1 percentage points to 11.4% in FY 2021, having been 9.3% in the previous year.

Balance Sheet

(EURm)	2020Y	2021Y	2022H1
Net Loans to Customers	76,140	83,776	86,667
Total Securities	6,705	9,600	7,179
Total Deposits	72,409	83,481	84,284
Tier 1 Common Capital	3,291	4,439	4,637
Total Assets	109,840	134,946	132,943
Total Risk-weighted Assets	35,282	39,093	41,205

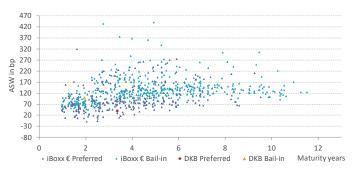
Redemption Profile



Income Statement

(EURm)	2020Y	2021Y	2022H1
Net Interest Income	954	1,019	525
Net Fee & Commission Inc.	-22	22	51
Net Trading Income	61	52	-70
Operating Expense	719	746	437
Credit Commit. Impairment	44	-3	-42
Pre-tax Profit	250	363	123

Senior Unsecured Bonds (EUR BMK)



Company Ratios

	2020Y	2021Y	2022H1
Net Interest Margin	0.99	0.84	0.79
ROAE	6.95	7.01	3.03
Cost-to-Income	71.34	67.71	84.51
Core Tier 1 Ratio	9.33	11.35	11.25

	2020Y	2021Y	2022H1
Liquidity Coverage Ratio	258.77	462.63	445.87
IFRS Tier 1 Leverage Ratio	3.00	3.29	3.49
NPL/ Loans at Amortised Cost	-	-	-
Reserves/Loans at Amort. Cost	0.55	0.47	0.39

Source: Bloomberg, S&P Global Market Intelligence, NORD/LB Markets Strategy & Floor Research; as of: 18.10.2022

Strengths / Opportunities

- Funding profile
- Asset quality
- Capitalisation

- Regional and sectoral credit concentration risks
- Profitability
- Liquidity

Deutsche Kreditbank – Mortgage

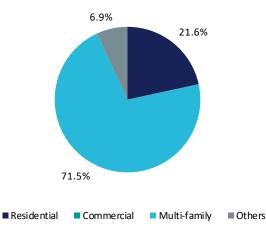
Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Cover Pool Data

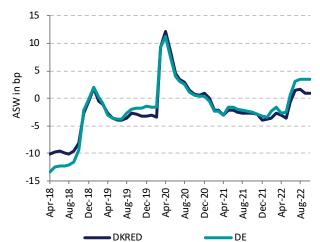
Cover pool volume (EURm)	6,528
	5,465
Amount outstanding (EURm)	,
-thereof \geq EUR 500m	32.9%
Current OC (nominal)	19.5%
Committed OC	2.0%
Cover type	Mortgage
Main country	100% Germany
Main region	20% Berlin
Number of loans	n/a
Number of borrowers	n/a
Avg. exposure to borrowers (EUR)	n/a
WAL (cover pool)	n/a
WAL (covered bonds)	n/a
Fixed interest (cover pool)	95.0%
Fixed interest (covered bonds)	100.0%
LTV (indexed)	n/a
LTV (unindexed)	51.0%
Loans in arrears	0.0%

Rating (S&P) Rating (Fitch) Rating (DBRS) TPI High **TPI** leeway 4 Collateral score 14.7% RRL . JRL Unused notches AAA credit risk (%) PCU Recovery uplift _ **Outstanding ESG BMKs** Yes LCR ELIGIBLE Yes LCR level (Bmk) 1 **Risk weight** 10% Maturity structure (Bmk) SB

Borrower Types



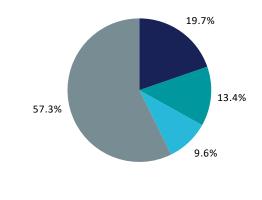
Spread Development



Source: Issuer, Rating agencies, Bloomberg, NORD/LB Markets Strategy & Floor Research

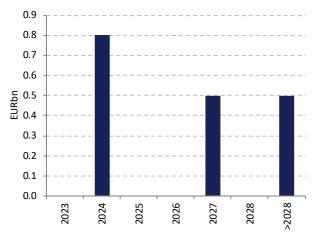
Regional Distribution

Rating (Moody's)



Berlin North Rhine-Westphalia Saxony Others

Redemption Profile (Bmk)





Aaa



Deutsche Kreditbank – Public Sector

Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Cover Pool Data

Cover pool volume (EURm)	7,877
Amount outstanding (EURm)	6,545
-thereof ≥ EUR 500m	22.9%
Current OC (nominal)	20.4%
Committed OC	2.0%
Cover type	Public Sector
Main country	100% Germany
Main region	n/a
Number of loans	n/a
Number of borrowers	n/a
Avg. exposure to borrowers (EUR)	n/a
WAL (cover pool)	n/a
WAL (covered bonds)	n/a
Fixed interest (cover pool)	96.6%
Fixed interest (covered bonds)	96.2%
LTV (indexed)	-
LTV (unindexed)	-
Loans in arrears	0.0%

Maturity structure (Bmk)

Regional Distribution

Rating (Moody's)

Rating (S&P) Rating (Fitch) Rating (DBRS)

TPI leeway

Collateral score

Unused notches

Recovery uplift

LCR level (Bmk)

LCR ELIGIBLE

Risk weight

AAA credit risk (%)

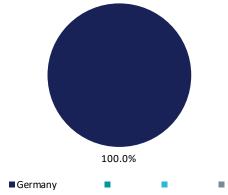
Outstanding ESG BMKs

TPI

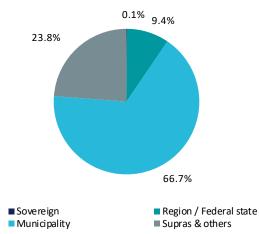
RRL

JRL

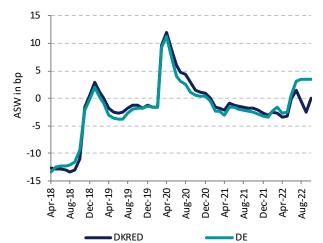
PCU



Borrower Types

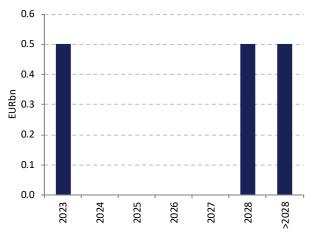


Spread Development



Source: Issuer, Rating agencies, Bloomberg, NORD/LB Markets Strategy & Floor Research

Redemption Profile (Bmk)



NORD/LB

Germany



Aaa

High

3.2%

4

.

_

Yes

Yes

10%

SB

1

Deutsche Pfandbriefbank

Germany

Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Ratings

		Outlool
Fitch		-
Moody's		-
S&P	BBB+	Stable

Homepage

www.pfandbriefbank.com

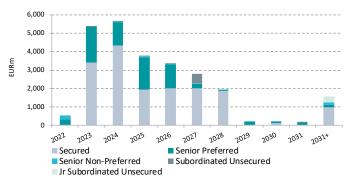
Deutsche Pfandbriefbank AG (pbb) is a leading European specialist bank for commercial real estate finance and public investment finance with a focus on Covered Bond-eligible business. The institution, which was formed from a merger in 2009, employs 828 people (Q1/2022). In 2015, the institute, based in Garching near Munich, was successfully reprivatized through an IPO on the Frankfurt Stock Exchange. The German state still holds a 3% stake in pbb (July 19, 2022). Pbb's core business is real estate finance, offering traditional customized financing solutions as well as derivative financial instruments to hedge the risk of lending transactions. Its customers are primarily professional national and international real estate investors and, particularly in Germany, also medium-sized companies and regional players. Furthermore, Covered Bond-eligible public infrastructure projects are financed. In addition to Germany and Europe, the core markets are primarily the east and west coasts of the USA. Refinancing is largely provided by Covered Bonds (Pfandbriefe), followed by uncovered refinancing. pbb is one of the largest Pfandbrief issuers in Germany with regular benchmark issues in EUR, USD, GBP as well as SEK and CHF. Since 2013, unsecured funding has been complemented by private deposit business (Q1/2022: EUR 3.2bn). In February 2021, the first pbb Green Bond (senior preferred) was issued. In total, EUR 1.95bn of Green Bonds were placed by April 2022. In real estate financing, the bank plans to increase the portfolio share of "green" financing to around 30% by 2024/25.

(EURm)

Balance Sheet

(EURm)	2020Y	2021Y	2022H1
Net Loans to Customers	39 <i>,</i> 955	39,371	38,232
Total Securities	11,415	9,522	7,568
Total Deposits	22,583	20,100	17,768
Tier 1 Common Capital	2,854	2,875	2,824
Total Assets	58 <i>,</i> 859	58,402	55,096
Total Risk-weighted Assets	17,744	16,792	16,481

Redemption Profile



Net Interest Income 476 494 Net Fee & Commission Inc. 6 8 Net Trading Income 23 87 **Operating Expense** 249 268 Credit Commit. Impairment 126 81 Pre-tax Profit 151 242

2020Y

2021Y

2022H1

242

3

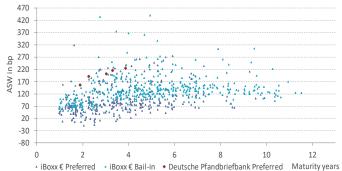
18

146

19

107

Senior Unsecured Bonds (EUR BMK)



Company Ratios

	2020Y	2021Y	2022H1
Net Interest Margin	0.81	0.85	0.86
ROAE	3.72	6.79	5.33
Cost-to-Income	47.34	45.35	53.68
Core Tier 1 Ratio	16.08	17.12	17.13

	2020Y	2021Y	2022H1
Liquidity Coverage Ratio	318.80	293.63	242.10
IFRS Tier 1 Leverage Ratio	5.08	5.10	5.30
NPL/ Loans at Amortised Cost	1.20	1.50	1.57
Reserves/Loans at Amort. Cost	0.61	0.87	0.93

Source: Bloomberg, S&P Global Market Intelligence, NORD/LB Markets Strategy & Floor Research; as of: 18.10.2022

Strengths / Opportunities

- Credit quality
- Capitalization

- Credit risk concentration
- Commercial real estate ightarrow cyclical market

Deutsche Pfandbriefbank – Mortgage

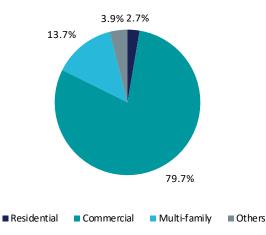
Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Cover Pool Data

Cover pool volume (EURm)	18,649
Amount outstanding (EURm)	16,064
-thereof ≥ EUR 500m	48.9%
Current OC (nominal)	16.1%
Committed OC	2.0%
Cover type	Mortgage
Main country	42% Germany
Main region	35% Berlin
Number of loans	1,567
Number of borrowers	769
Avg. exposure to borrowers (EUR)	24,251,365
WAL (cover pool)	3.бу
WAL (covered bonds)	5.3y
Fixed interest (cover pool)	56.0%
Fixed interest (covered bonds)	86.5%
LTV (indexed)	32.0%
LTV (unindexed)	56.0%
Loans in arrears	0.0%

Rating (Moody's)	Aa1
Rating (S&P)	-
Rating (Fitch)	-
Rating (DBRS)	-
TPI	High
TPI leeway	Unpublished
Collateral score	17.8%
RRL	-
JRL	-
Unused notches	-
AAA credit risk (%)	-
PCU	-
Recovery uplift	1
Outstanding ESG BMKs	No
LCR ELIGIBLE	Yes
LCR level (Bmk)	1
Risk weight	10%
Maturity structure (Bmk)	SB

Borrower Types

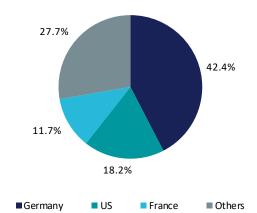


Spread Development

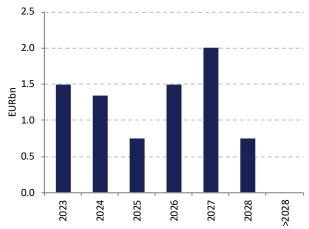


Source: Issuer, Rating agencies, Bloomberg, NORD/LB Markets Strategy & Floor Research

Regional Distribution



Redemption Profile (Bmk)



NORD/LB





Deutsche Pfandbriefbank – Public Sector

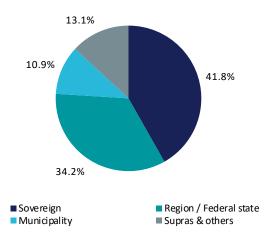
Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Cover Pool Data

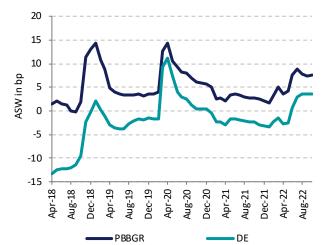
Cover pool volume (EURm)	11,014
Amount outstanding (EURm)	9,810
-thereof ≥ EUR 500m	15.8%
Current OC (nominal)	12.3%
Committed OC	2.0%
Cover type	Public Sector
Main country	35% Austria
Main region	99% Vienna
Number of loans	495
Number of borrowers	210
Avg. exposure to borrowers (EUR)	223
WAL (cover pool)	8.7y
WAL (covered bonds)	7.0y
Fixed interest (cover pool)	73.3%
Fixed interest (covered bonds)	71.2%
LTV (indexed)	-
LTV (unindexed)	-
Loans in arrears	0.0%

Rating (Moody's)	Aa1
Rating (S&P)	-
Rating (Fitch)	-
Rating (DBRS)	-
TPI	High
TPI leeway	Unpublished
Collateral score	15.7%
RRL	-
JRL	-
Unused notches	-
AAA credit risk (%)	-
PCU	-
Recovery uplift	1
Outstanding ESG BMKs	No
LCR ELIGIBLE	Yes
LCR level (Bmk)	1
Risk weight	10%
Maturity structure (Bmk)	SB

Borrower Types

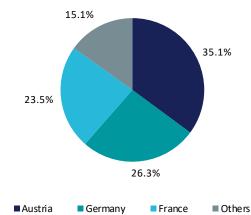


Spread Development

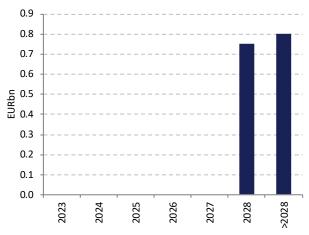


Source: Issuer, Rating agencies, Bloomberg, NORD/LB Markets Strategy & Floor Research

Regional Distribution



Redemption Profile (Bmk)







DZ HYP

NORD/LB

Germany

Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Ratings

	Rating	Outloo
Fitch*	AA-	Stable
Moody's	Aa2	Stable
S&P	A+	Stable

Homepage

www.dzhyp.de

* Rating der Genossenschaftl. FinanzGruppe

DZ HYP AG is a leading German real estate and Pfandbrief bank headquartered in Hamburg and Münster. It is a subsidiary of DZ Bank AG (FY 2021: 96.4% of the shares) and therefore forms part of the National Association of German Cooperative Banks. In this association, DZ Hyp acts as a specialist in the area of property and municipal financing. Corporate customers are the most important customer group for the bank as measured by business volume (FY 2021: 66.6%). In 2021, around 830 staff were employed at the two main locations in addition to regional centres and offices across the country. In addition to the German market, the bank is also selectively active in foreign markets with a business volume of EUR 1,957bn (FY 2021). This includes the Dutch market, which at 48.2% of the total foreign business volume is the most important market outside Germany for DZ Hyp. A control and profit transfer agreement is in place between DZ BANK AG and DZ HYP AG, while DZ BANK has issued a letter of comfort for DZ HYP as well. Moreover, DZ HYP makes use of the waiver regulation, according to which equity requirements can be managed at Group level. The market activities of DZ Hyp are focused on three business segments: Corporate Customers (commercial customers and housing sector business are bundled here), Retail Customers (exclusively focused on the brokering business through the Volksbanks and Raiffeisenbanks) and Public Sector Customers. The vast majority of the capital market funding of DZ Hyp is covered by mortgage Pfandbriefe (FY 2021: 49.6%), followed by unsecured bonds (33.0%) and public sector Pfandbriefe (17.4%). The CET1 ratio increased in FY 2021 by 1.7 percentage points to 10.7% and therefore complied with the regulatory requirement.

Balance Sheet			
(EURm)	2020Y	2021Y	2022H1
Net Loans to Customers	66,124	67 <i>,</i> 352	67,536
Total Securities	10,518	9 <i>,</i> 834	9,042
Total Deposits	15,770	13,814	13,038
Tier 1 Common Capital	1,588	1,669	1,825
Total Assets	81,920	81,631	80,041
Total Risk-weighted Assets	17,644	15,601	15,210

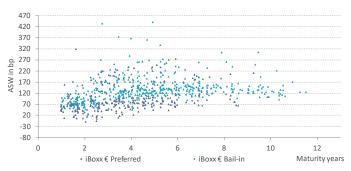
Redemption Profile



Income Statement

(EURm)	2020Y	2021Y	2022H1
Net Interest Income	602	665	335
Net Fee & Commission Inc.	-38	-38	-10
Net Trading Income	-	-	-
Operating Expense	272	274	177
Credit Commit. Impairment	47	25	40
Pre-tax Profit	199	192	77

Senior Unsecured Bonds (EUR BMK)



Company Ratios

	2020Y	2021Y	2022H1
Net Interest Margin	0.75	0.82	0.84
ROAE	-	-	-
Cost-to-Income	45.53	41.91	53.87
Core Tier 1 Ratio	9.00	10.70	12.00

11
-
-
-
-

Source: Bloomberg, S&P Global Market Intelligence, NORD/LB Markets Strategy & Floor Research; as of: 18.10.2022

Strengths / Opportunities

- Group integration
- Domestic market position
- Credit quality (NPLs)

- Diversified income sources
- Concentration of the loan portfolio
- Dependency on wholesale funding

Aaa

Germany

DZ HYP – Mortgage

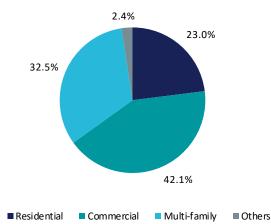
Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Cover Pool Data

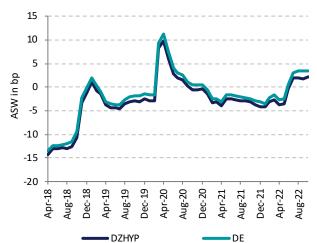
Cover pool volume (EURm)	39,185
Amount outstanding (EURm)	33,906
-thereof ≥ EUR 500m	74.8%
Current OC (nominal)	15.6%
Committed OC	2.0%
Cover type	Mortgage
Main country	97% Germany
Main region	32% North Rhine-Westphalia
Number of loans	107,845
Number of borrowers	93,062
Avg. exposure to borrowers (E	UR) 421,067
WAL (cover pool)	6.6у
WAL (covered bonds)	6.2y
Fixed interest (cover pool)	88.8%
Fixed interest (covered bonds)	99.4%
LTV (indexed)	n/a
LTV (unindexed)	54.2%
Loans in arrears	0.0%

Rating (S&P)	AAA
Rating (Fitch)	-
Rating (DBRS)	-
TPI	High
TPI leeway	6
Collateral score	13.2%
RRL	аа
JRL	ааа
Unused notches	4
AAA credit risk (%)	3.95
PCU	-
Recovery uplift	2
Outstanding ESG BMKs	Yes
LCR ELIGIBLE	Yes
LCR level (Bmk)	1
Risk weight	10%
Maturity structure (Bmk)	SB

Borrower Types



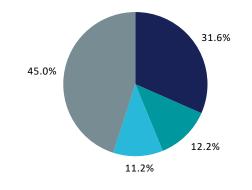
Spread Development



Source: Issuer, Rating agencies, Bloomberg, NORD/LB Markets Strategy & Floor Research

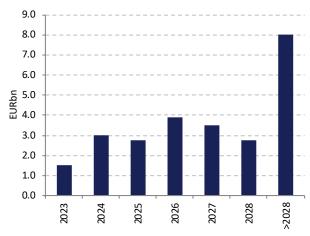
Regional Distribution

Rating (Moody's)



■ North Rhine-Westphalia ■ Berlin ■ Bavaria ■ Others

Redemption Profile (Bmk)



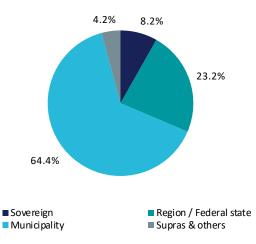
DZ HYP – Public Sector

Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Cover Pool Data

Cover pool volume (EURm)	13,579
Amount outstanding (EURm)	11,274
-thereof ≥ EUR 500m	4.4%
Current OC (nominal)	20.4%
Committed OC	2.0%
Cover type	Public Sector
Main country	81% Germany
Main region	22% North Rhine-Westphalia
Number of loans	17,156
Number of borrowers	5,016
Avg. exposure to borrowers (E	UR) 2,707,037
WAL (cover pool)	8.2y
WAL (covered bonds)	7.0y
Fixed interest (cover pool)	98.1%
Fixed interest (covered bonds)	94.4%
LTV (indexed)	-
LTV (unindexed)	-
Loans in arrears	0.0%

Borrower Types



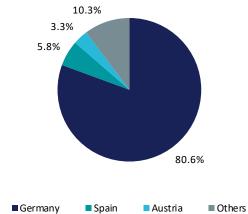
Spread Development



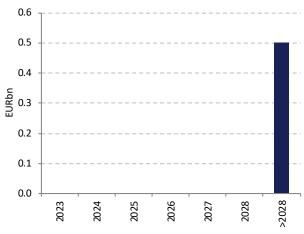
Source: Issuer, Rating agencies, Bloomberg, NORD/LB Markets Strategy & Floor Research

Rating (Moody's) Aaa Rating (S&P) AAA Rating (Fitch) Rating (DBRS) _ TPI High **TPI** leeway 6 Collateral score 3.5% RRL aa JRL aaa Unused notches 4 AAA credit risk (%) n/a PCU Recovery uplift 2 **Outstanding ESG BMKs** No LCR ELIGIBLE Yes LCR level (Bmk) 1 **Risk weight** 10% Maturity structure (Bmk) SB

Regional Distribution



Redemption Profile (Bmk)









Germany

Hamburg Commercial Bank

Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Hamburg Commercial Bank (HCOB), which operated as HSH Nordbank until February 4, 2019, is headquartered in Hamburg. HSH was the first Landesbank in Germany to be suc-Outlook cessfully privatized at the end of 2018. HCOB's shares are now distributed among the owners Cerberus Capital Management (42.41%), J. C. Flowers & Co. (34.93%), GoldenTree Asset Management (12.47%), an acquisition company of Centaurus Capital (7.48%), BAWAG P.S.K Positive (2.49%) and HCOB (0.20%). Since January 01, 2022, HCOB has been assigned to the Com-Stable pensation Scheme of German Banks (Entschädigungseinrichtung deutscher Banken GmbH; EdB) and also participates voluntarily in the Deposit Protection Fund of the Association of German Banks (Einlagensicherungsfonds des Bundesverbands deutscher Banken e.V.; ESF). HCOB operates as a private commercial bank and specialist financier. The business activities include commercial real estate financing, international corporate customers, a focused corporate client business in Germany, project financing and international ship financing. Segment reporting is based on the categories Real Estate, Shipping, Project Finance as well as Corporates and Treasury & Group Functions. Sustainability aspects are also an integral part of HCOB's business model through the anchoring of established ESG criteria. One of the bank's milestones for 2022 and beyond in this context is the alignment of new business activities with the Sustainable Development Goals (SDG). Specifically, the institute defines for itself, for example, the goal of more than 10% of net new business being accounted for by green assets in 2025.

Balance Sheet

Ratings

Fitch

S&P

Moody's

Homepage

www.hcob-bank.de

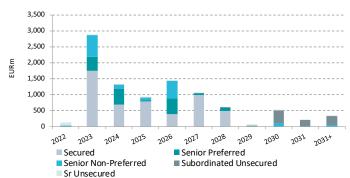
Rating

Baa1

BBB

(EURm)	2020Y	2021Y	2022H1
Net Loans to Customers	21,909	19,752	19,801
Total Securities	7,113	5,271	4,812
Total Deposits	13,104	11,141	12,341
Tier 1 Common Capital	4,193	4,055	3,897
Total Assets	33,815	30,271	30,347
Total Risk-weighted Assets	15,523	14,026	16,107

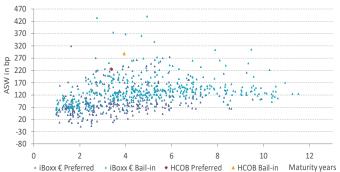
Redemption Profile



Income Statement

(EURm)	2020Y	2021Y	2022H1
Net Interest Income	629	526	286
Net Fee & Commission Inc.	48	38	18
Net Trading Income	-21	78	-
Operating Expense	397	360	179
Credit Commit. Impairment	189	-32	-30
Pre-tax Profit	257	299	178

Senior Unsecured Bonds (EUR BMK)



Company Ratios

	2020Y	2021Y	2022H1
Net Interest Margin	1.60	1.70	1.94
ROAE	2.35	7.75	8.52
Cost-to-Income	56.55	52.86	52.03
Core Tier 1 Ratio	27.01	28.91	24.19

	2020Y	2021Y	2022H1
Liquidity Coverage Ratio	169.67	160.38	162.19
IFRS Tier 1 Leverage Ratio	12.89	13.67	13.08
NPL/ Loans at Amortised Cost	-	-	-
Reserves/Loans at Amort. Cost	2.70	2.35	2.13

Source: Bloomberg, S&P Global Market Intelligence, NORD/LB Markets Strategy & Floor Research; as of: 18.10.2022

Strengths / Opportunities

- Capitalization
- Deleveraging (risk reduction of the asset portfolio)

- Risk concentration
- Dependency on market-based funding

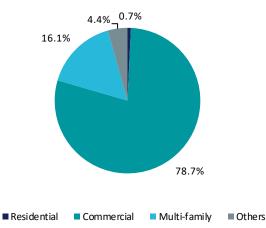
Hamburg Commercial Bank – Mortgage

Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Cover Pool Data

Cover pool volume (EURm)	3,534
Amount outstanding (EURm)	2,577
-thereof ≥ EUR 500m	123.5%
Current OC (nominal)	37.1%
Committed OC	2.0%
Cover type	Mortgage
Main country	92% Germany
Main region	14% North Rhine-Westphalia
Number of loans	393
Number of borrowers	232
Avg. exposure to borrowers (E	UR) 15,232,328
WAL (cover pool)	2.9y
WAL (covered bonds)	3.0y
Fixed interest (cover pool)	57.8%
Fixed interest (covered bonds)	88.0%
LTV (indexed)	n/a
LTV (unindexed)	57.2%
Loans in arrears	0.0%

Borrower Types



Spread Development



Source: Issuer, Rating agencies, Bloomberg, NORD/LB Markets Strategy & Floor Research

Rating (DBRS) TPI TPI leeway Collateral score RRL JRL Unused notches AAA credit risk (%) PCU Recovery uplift Outstanding ESG BMKs LCR ELIGIBLE

Rating (Moody's)

Rating (S&P) Rating (Fitch)

LCR level (Bmk)

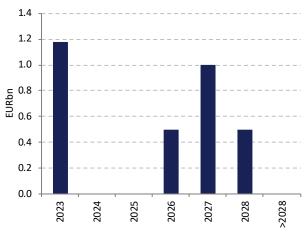
Maturity structure (Bmk)

Risk weight

Regional Distribution

■ North Rhine-Westphalia ■ Hesse ■ Bavaria ■ Others

Redemption Profile (Bmk)









Aa1

High

21.0%

2

_

No

Yes

10%

SB

1

Hamburg Commercial Bank – Ship

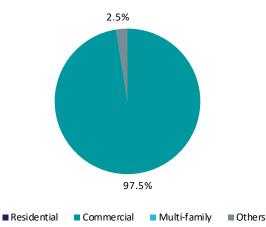
Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Cover Pool Data

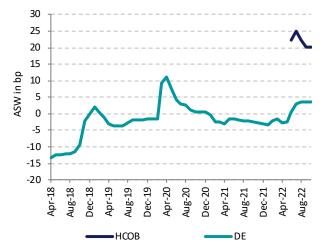
Cover pool volume (EURm)	2,435
Amount outstanding (EURm)	2,078
-thereof ≥ EUR 500m	24.1%
Current OC (nominal)	17.2%
Committed OC	2.0%
Cover type	Ship
Main country	25% Marshall Islands
Main region	n/a
Number of loans	257
Number of borrowers	127
Avg. exposure to borrowers (EUR)	19,171,654
WAL (cover pool)	1.9y
WAL (covered bonds)	2.2y
Fixed interest (cover pool)	14.6%
Fixed interest (covered bonds)	3.3%
LTV (indexed)	-
LTV (unindexed)	-
Loans in arrears	0.0%

Rating (Moody's)	A1
Rating (S&P)	-
Rating (Fitch)	-
Rating (DBRS)	-
TPI	Improbable
TPI leeway	2
Collateral score	65.0%
RRL	-
JRL	-
Unused notches	-
AAA credit risk (%)	-
PCU	-
Recovery uplift	-
Outstanding ESG BMKs	No
LCR ELIGIBLE	Yes
LCR level (Bmk)	2A
Risk weight	20%
Maturity structure (Bmk)	SB

Borrower Types

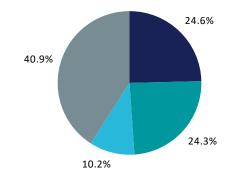


Spread Development



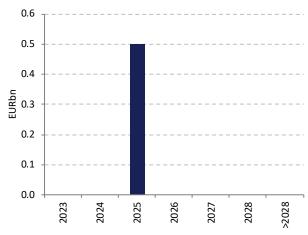
Source: Issuer, Rating agencies, Bloomberg, NORD/LB Markets Strategy & Floor Research

Regional Distribution



Marshall Islands Liberia Germany Others

Redemption Profile (Bmk)







Germany

Hamburger Sparkasse

Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Ratings

•			
	Rating	Outlook	
Fitch	A+	Stable	
Moody's*	Aa2	Stable	
S&P	-	-	
Homepage			
www.hasp	ba.de		
*Verbundrating			

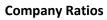
Established in 1827, Hamburger Sparkasse AG (Haspa) is the leading bank for retail customers and SMEs in the Hamburg metropolitan region, according to data from the bank itself. HASPA Finanzholding holds 100% of the shares in Haspa, with the articles of association obliging the bank to perform the role of a savings bank. The bank is active in the fields of retail customers, corporate customers and private banking. It is one of the few independent savings banks in Germany and is a member of both the Hanseatische Sparkassen- und Giroverband (HSGV = Hanseatic Savings Bank and Clearing House Association) and the Verband der Freien Sparkassen (Association of Independent Savings Banks) in Frankfurt. Its membership of the HSGV means Haspa is part of the German Savings Banks Association (DSGV). Haspa is therefore fully integrated into the comprehensive protection system of the German savings banks. In terms of future alignment, Haspa will turn to its comprehensive branch network. For example, a further six branches were redesigned in line with an innovative concept in 2021. As at year-end, there were 89 (Haspa target: 100) of these "neighbourhood branches". Moreover, increased earnings and cost-cutting exercises are the focus of the future strategy "Haspa Spring -Sparkasse richtig neu gedacht", which should be achieved on the back of improved digitalisation and streamlining processes in addition to a socially acceptable (i.e. not excessive) level of redundancies. In addition to customer deposits, Pfandbriefe are a key pillar in the refinancing structure of HASPA. The CET1 ratio of 12.9% (FY 2021) is likewise in excess of the regulatory minimum requirements.

Balance Sheet

(EURm)	2020Y	2021Y	2022H1
Net Loans to Customers	35,797	37,235	38,079
Total Securities	6,932	8,758	9,339
Total Deposits	36,741	37,279	38,326
Tier 1 Common Capital	3,515	-	-
Total Assets	55,157	59,931	61,426
Total Risk-weighted Assets	26,362	-	-

Redemption Profile





	2020Y	2021Y	2022H1
Net Interest Margin	1.12	1.17	1.07
ROAE	-	-	-
Cost-to-Income	89.91	83.37	75.65
Core Tier 1 Ratio	13.34	12.90	12.70

2020Y 2021Y 2022H1 Liquidity Coverage Ratio 182.15 154.00 172.00 IFRS Tier 1 Leverage Ratio 6.38 NPL/ Loans at Amortised Cost 0.18 0.33 Reserves/Loans at Amort, Cost

Source: Bloomberg, S&P Global Market Intelligence, NORD/LB Markets Strategy & Floor Research; as of: 18.10.2022

Strengths / Opportunities

- Integration in the Sparkassen financial group
- Capitalisation

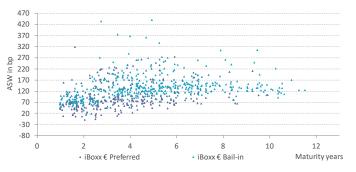
Risks / Weaknesses

- Regional credit risk concentration
- High cost ratio

Income Statement

(EURm)	2020Y	2021Y	2022H1
Net Interest Income	567	666	321
Net Fee & Commission Inc.	316	347	188
Net Trading Income	-0	3	-0
Operating Expense	817	879	394
Credit Commit. Impairment	61	40	51
Pre-tax Profit	45	116	56

Senior Unsecured Bonds (EUR BMK)



Hamburger Sparkasse – Mortgage

Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Cover Pool Data

Cover pool volume (EURm)	7,909
Amount outstanding (EURm)	6,595
-thereof ≥ EUR 500m	30.3%
Current OC (nominal)	19.9%
Committed OC	2.0%
Cover type	Mortgage
Main country	100% Germany
Main region	n/a
Number of loans	n/a
Number of borrowers	n/a
Avg. exposure to borrowers (EUR)	n/a
WAL (cover pool)	n/a
WAL (covered bonds)	n/a
Fixed interest (cover pool)	84.0%
Fixed interest (covered bonds)	99.7%
LTV (indexed)	n/a
LTV (unindexed)	51.9%
Loans in arrears	0.0%

AAA credit risk (%) PCU Recovery uplift Outstanding ESG BMKs LCR ELIGIBLE LCR level (Bmk) Risk weight Maturity structure (Bmk)

Rating (Moody's)

Rating (S&P)

Rating (Fitch)

Rating (DBRS)

Collateral score

Unused notches

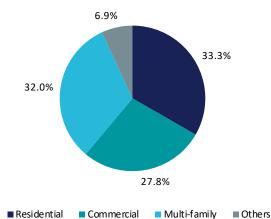
TPI leeway

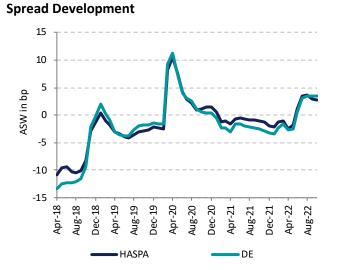
TPI

RRL

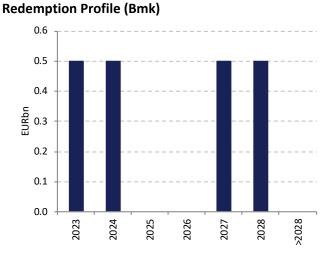
JRL

Borrower Types





Source: Issuer, Rating agencies, Bloomberg, NORD/LB Markets Strategy & Floor Research



NORD/LB

Germany



Aaa

High

10.2%

6

_

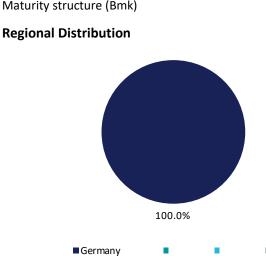
No

Yes

10%

SB

1



ING-DiBa

Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Ratings

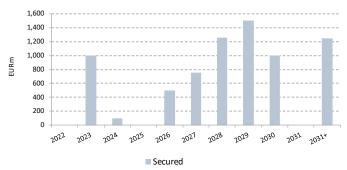
	Rating	Outlook
Fitch	-	-
Moody's	A2	Stable
S&P	-	-
Homepa	•	

Since 2003, ING-DiBa AG has been wholly owned by the ING Group in the Netherlands (global systemically important bank; G-SIB) via the holding company ING Deutschland GmbH. With more than 9 million customers, ING-DiBa is an established retail bank and the third-largest private bank in Germany. The headquarters of ING-DiBa are located in Frankfurt am Main and it operates branches in Hanover, Nuremberg and Vienna in addition to a representative office in Berlin. The business activities of ING-DiBa are focused on direct banking with retail customers (in the Retail Banking business unit) as well as financing corporate customers (in the Wholesale Banking business unit). In the Retail Banking business, the bank focuses on retail customers, lending to SMEs with annual sales of \leq EUR 50m and offering insurance products in conjunction with AXA. In the Wholesale Banking business, ING-DiBa concentrates on global corporate customers with annual sales in excess of EUR 250m. Its core products include: current accounts, mortgage lending, savings, consumer loans and securities. Following the sale of the Austrian retail business (in November 2021), ING-DiBa announced its plans to cease all activities in Austria at the start of 2022. Refinancing is predominantly covered by deposits. As part of its sustainability strategy, ING-DiBa issued a green bond with a volume of EUR 1.25bn in 2021 under its Green Bond Framework. In FY 2021, the CET1 ratio of ING Holding Deutschland rose to 16.5%, having been 15.7% in the prior year.

Balance Sheet (ING Holding Deutschland GmbH)

(EURm)	2020Y	2021Y	2022H1
Net Loans to Customers	122,608	127,476	125,844
Total Securities	32,944	26,421	32,739
Total Deposits	145,608	136,005	130,168
Tier 1 Common Capital	8,134	7,629	7,719
Total Assets	190,070	181,897	188,230
Total Risk-weighted Assets	48,675	45,579	47,534

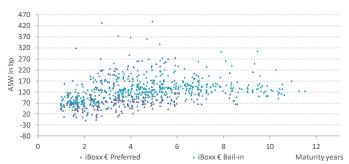
Redemption Profile



Income Statement (EURm)

(EURm)	2020Y	2021Y	2022H1
Net Interest Income	2,041	1,965	-
Net Fee & Commission Inc.	479	543	-
Net Trading Income	39	107	-
Operating Expense	1,301	1,348	-
Credit Commit. Impairment	-	-	-
Pre-tax Profit	1,042	1,169	-

Senior Unsecured Bonds (EUR BMK)



Company Ratios

	2020Y	2021Y	2022H1		2020Y	2021Y	2022H1
Net Interest Margin	1.12	1.06	-	Liquidity Coverage Ratio	226.41	227.71	209.18
ROAE	7.72	8.60	-	IFRS Tier 1 Leverage Ratio	4.43	4.30	4.38
Cost-to-Income	49.88	51.27	-	NPL/ Loans at Amortised Cost	-	-	-
Core Tier 1 Ratio	16.71	16.74	16.24	Reserves/Loans at Amort. Cost	0.44	0.44	-

Source: Bloomberg, S&P Global Market Intelligence, NORD/LB Markets Strategy & Floor Research; as of: 18.10.2022

Strengths / Opportunities

- Profitability
- Deposit basis
- Credit risk profile

Risks / Weaknesses

- Loan portfolio concentration (real estate)
- Group integration: ratings of ING Groep N.V. impact the bank's own rating
- Regulatory-related rise in RWAs expected (IRBA)



Germany

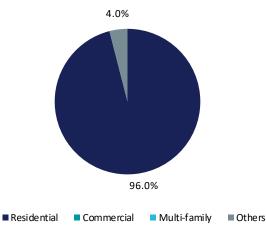
ING-DiBa – Mortgage

Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

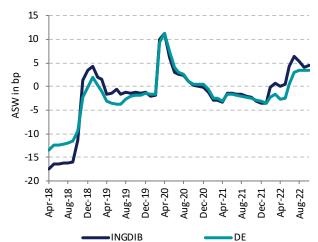
Cover Pool Data

Cover pool volume (EURm)	10,231
Amount outstanding (EURm)	6,355
-thereof ≥ EUR 500m	114.1%
Current OC (nominal)	61.0%
Committed OC	2.0%
Cover type	Mortgage
Main country	100% Germany
Main region	19% North Rhine-Westphalia
Number of loans	85,592
Number of borrowers	84,314
Avg. exposure to borrowers (El	UR) 121,349
WAL (cover pool)	8.3y
WAL (covered bonds)	6.9y
Fixed interest (cover pool)	100.0%
Fixed interest (covered bonds)	99.2%
LTV (indexed)	n/a
LTV (unindexed)	54.5%
Loans in arrears	0.0%

Borrower Types



Spread Development



Source: Issuer, Rating agencies, Bloomberg, NORD/LB Markets Strategy & Floor Research

Regional Distribution

Maturity structure (Bmk)

Rating (Moody's)

Rating (S&P) Rating (Fitch) Rating (DBRS)

TPI leeway

Collateral score

Unused notches AAA credit risk (%)

Recovery uplift

LCR level (Bmk)

LCR ELIGIBLE

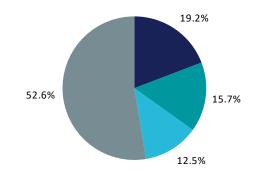
Risk weight

Outstanding ESG BMKs

TPI

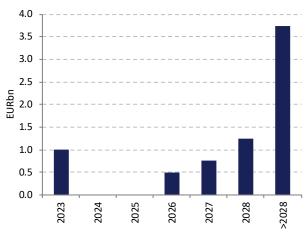
RRL JRL

PCU



■ North Rhine-Westphalia ■ Bavaria ■ Hesse ■ Others

Redemption Profile (Bmk)







Aaa

High

5.0%

5

_

Yes

Yes

10%

SB

1

Germany

Kreissparkasse Köln

Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Ratings

	Rating	Outlook
Fitch	A+	Stable
Moody's	Aa3	Stable
S&P	-	-

Homepage

www.ksk-koeln.de

Kreissparkasse Köln (KSK) was established in 1853 and operates under the legal status of a public law institution (Anstalt öffentlichen Rechts). The responsible body is the special purpose association for regional savings banks in Cologne, covering districts such as the Rhein-Erft-Kreis, the Rhein-Sieg-Kreis, the Rheinisch-Bergischen Kreis and the Oberbergischen Kreis. KSK is a member of the protection system of the Sparkassen financial group in Germany. As a universal bank, KSK's workforce of approximately 3,400 employees serve around one million customers in the Cologne region. A total of 43 cities and municipalities in the area around Cologne form the focus of KSK's operations. KSK business activities are supported by a customer base that covers a broad section of the economy and population. The focus here is on retail customers and SMEs. The bank's loan portfolio can be broken down by customer segment: Companies and Self-Employed Individuals (FY 2021: 51%), Private Individuals (42%), public authorities (5%) and other borrowers (2%). In accordance with the principle of "quality before growth", KSK is aiming for moderate growth in the retail and corporate client markets. In FY 2021, gross income declined by EUR 50.7m to EUR 508m. KSK attributes this development to a deterioration in net interest income resulting from prematurely terminated derivatives transactions. The bank's core business is the financing of residential property. Moreover, KSK works closely with the local communities in order to fulfil its public mandate. For refinancing purposes, KSK issues public sector Pfandbriefe and mortgage Pfandbriefe on the capital market, among other instruments.

Balance Sheet

(EURm)	2019Y	2020Y	2021Y
Net Loans to Customers	20,631	21,521	21,992
Total Securities	2,315	2,484	2,401
Total Deposits	20,151	21,794	22,226
Tier 1 Common Capital	2,029	2,095	-
Total Assets	26,854	28,604	28,975
Total Risk-weighted Assets	13,398	14,259	-

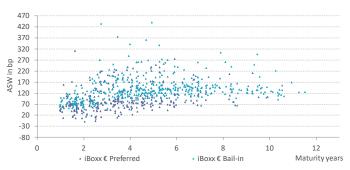
Redemption Profile



Income Statement

(EURm)	2019Y	2020Y	2021Y
Net Interest Income	361	376	314
Net Fee & Commission Inc.	157	163	174
Net Trading Income	4	4	5
Operating Expense	476	460	453
Credit Commit. Impairment	-14	28	-6
Pre-tax Profit	48	53	46

Senior Unsecured Bonds (EUR BMK)



Company Ratios

	2019Y	2020Y	2021Y
Net Interest Margin	1.40	1.39	1.12
ROAE	0.57	0.44	0.72
Cost-to-Income	83.95	78.34	85.09
Core Tier 1 Ratio	15.15	14.69	-

	2019Y	2020Y	2021Y
Liquidity Coverage Ratio	-	-	-
IFRS Tier 1 Leverage Ratio	-	-	-
NPL/ Loans at Amortised Cost	0.29	0.40	-
Reserves/Loans at Amort. Cost	0.35	0.49	-

Source: Bloomberg, S&P Global Market Intelligence, NORD/LB Markets Strategy & Floor Research; as of: 18.10.2022

Strengths / Opportunities

- Capitalisation
- Funding profile

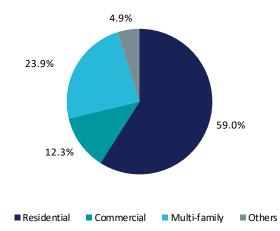
- Profitability
- Concentration risks in the CRE sector

Kreissparkasse Köln – Mortgage

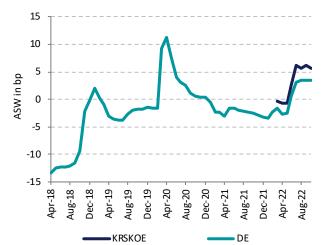
Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Cover Pool Data

Cover pool volume (EURm)	6,198
Amount outstanding (EURm)	1,192
-thereof ≥ EUR 250m	41.9%
Current OC (nominal)	420.0%
Committed OC	2.0%
Cover type	Mortgage
Main country	100% Germany
Main region	n/a
Number of loans	45,736
Number of borrowers	36,473
Avg. exposure to borrowers (EUR)	169,946
WAL (cover pool)	5.7y
WAL (covered bonds)	2.5y
Fixed interest (cover pool)	100.0%
Fixed interest (covered bonds)	100.0%
LTV (indexed)	n/a
LTV (unindexed)	53.1%
Loans in arrears	0.0%



Spread Development



Source: Issuer, Rating agencies, Bloomberg, NORD/LB Markets Strategy & Floor Research

Regional Distribution

Maturity structure (SBmk)

Rating (Moody's)

Rating (S&P) Rating (Fitch)

Rating (DBRS)

Collateral score

Unused notches AAA credit risk (%)

Recovery uplift Outstanding ESG BMKs

LCR level (SBmk)

LCR ELIGIBLE

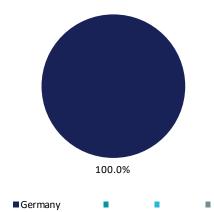
Risk weight

TPI leeway

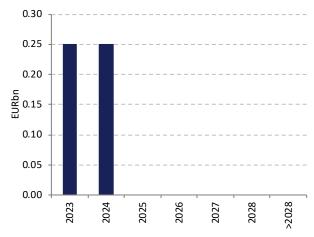
TPI

RRL JRL

PCU



Redemption Profile (SBmk)









Aaa

High

5.8%

7

2

No

Yes

2A

SB

10%

Germany

Landesbank Baden-Württemberg

Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Ratings

	Rating	Outlook
Fitch	A-	Stable
Moody's	Aa3	Stable
S&P	-	-

Homepage

www.lbbw.de

Landesbank Baden-Württemberg (LBBW) is an independent public law institution and the largest Landesbank in Germany. It is the parent company of the LBBW Group and operates out of four main offices (Stuttgart, Karlsruhe, Mannheim and Mainz). Its shareholders are the Sparkassenverband Baden-Württemberg (40.53% stake of share capital), the Bundesland capital Stuttgart (18.93%) and the Bundesland of Baden-Württemberg (BW; 40.53%). BW holds its shares both directly and indirectly via the Landesbeteiligungen Baden-Württemberg GmbH. The LBBW Group has just under 9,900 employees and offers its retail and corporate customers the full product and service portfolio of a universal bank. Its range of products is supplemented by Group companies for special segments such as Leasing, Factoring, Asset Management and Real Estate. LBBW also performs the role of savings bank central bank for savings banks in the Laender of Baden-Württemberg, Saxony and Rhineland-Palatinate. The bank reports across the following five business segments: Corporate Clients, Real Estate/Project Financing, Capital Market Business, Retail Customers/Savings Banks and Corporate Items/Transfer/Consolidation. Its regional focus is on the core markets of southern Germany (Baden-Württemberg and Bavaria), Rhineland-Palatinate, the Rhine-Main region, the Rhine-Ruhr region, Berlin and Hamburg. Moreover, the bank also operates in select foreign markets. In January 2022, LBBW announced that it had agreed a takeover deal for Berlin Hyp. This transaction was legally and economically concluded on 01 July 2022. As at the end of 2021, the outstanding volume of green and social bonds amounted to EUR 6.6bn.

Balance Sheet

(EURm)	2020Y	2021Y	2022H1
Net Loans to Customers	113,561	125,141	125,395
Total Securities	74,642	68 <i>,</i> 059	71,761
Total Deposits	95,288	97,022	116,632
Tier 1 Common Capital	12,415	12,473	12,644
Total Assets	276,444	282,344	329,432
Total Risk-weighted Assets	82,112	84,416	91,154

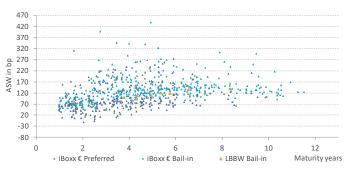
Redemption Profile



Income Statement

(EURm)	2020Y	2021Y	2022H1
Net Interest Income	1,771	2,031	1,039
Net Fee & Commission Inc.	538	598	322
Net Trading Income	179	252	213
Operating Expense	1,893	1,940	1,087
Credit Commit. Impairment	544	240	84
Pre-tax Profit	252	817	476

Senior Unsecured Bonds (EUR BMK)



Company Ratios

	2020Y	2021Y	2022H1	
Net Interest Margin	0.68	0.74	0.69	Liquid
ROAE	1.24	2.97	4.43	IFRS T
Cost-to-Income	70.16	64.37	65.52	NPL/ I
Core Tier 1 Ratio	15.12	14.78	13.87	Reserv

	2020Y	2021Y	2022H1
Liquidity Coverage Ratio	142.04	139.87	133.34
IFRS Tier 1 Leverage Ratio	4.89	4.69	4.06
NPL/ Loans at Amortised Cost	0.86	0.84	0.86
Reserves/Loans at Amort. Cost	0.99	1.06	1.11

Source: Bloomberg, S&P Global Market Intelligence, NORD/LB Markets Strategy & Floor Research; as of: 18.10.2022

Strengths / Opportunities

- Capitalisation
- NPL ratio
- Funding profile (savings bank access)

- Credit risk concentration in cyclical sectors
- Profitability
- Dependency on capital market funding

LBBW – Mortgage

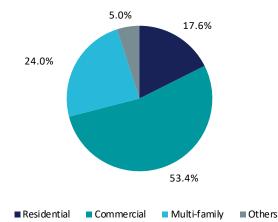
Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Cover Pool Data

Cover pool volume (EURm)	16,113
Amount outstanding (EURm)	11,520
-thereof ≥ EUR 500m	58.6%
Current OC (nominal)	39.9%
Committed OC	2.0%
Cover type	Mortgage
Main country	81% Germany
Main region	33% Baden-Wuerttemberg
Number of loans	37,017
Number of borrowers	28,007
Avg. exposure to borrowers (EUI	R) 575,328
WAL (cover pool)	4.6у
WAL (covered bonds)	3.7у
Fixed interest (cover pool)	80.4%
Fixed interest (covered bonds)	66.4%
LTV (indexed)	n/a
LTV (unindexed)	55.3%
Loans in arrears	0.0%

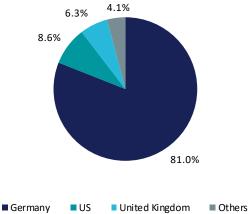
	, 10101
Rating (S&P)	-
Rating (Fitch)	-
Rating (DBRS)	-
TPI	High
TPI leeway	5
Collateral score	10.8%
RRL	-
JRL	-
Unused notches	-
AAA credit risk (%)	-
PCU	-
Recovery uplift	1
Outstanding ESG BMKs	Yes
LCR ELIGIBLE	Yes
LCR level (Bmk)	1
Risk weight	10%
Maturity structure (Bmk)	SB

Borrower Types

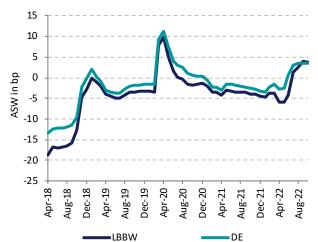


Regional Distribution

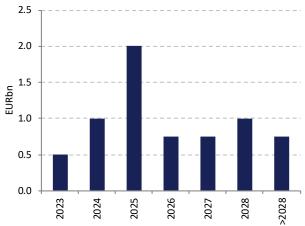
Rating (Moody's)



Spread Development



Redemption Profile (Bmk)



Source: Issuer, Rating agencies, Bloomberg, NORD/LB Markets Strategy & Floor Research





Aaa

LBBW – Public Sector

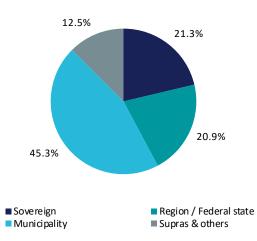
Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Cover Pool Data

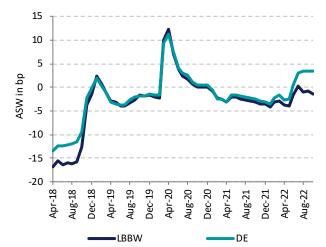
Cover pool volume (EURm)	12,505
Amount outstanding (EURm)	10,725
-thereof ≥ EUR 500m	38.7%
Current OC (nominal)	16.6%
Committed OC	2.0%
Cover type	Public Sector
Main country	94% Germany
Main region	42% Baden-Wuerttemberg
Number of loans	7,327
Number of borrowers	2,884
Avg. exposure to borrowers (EUF	R) 4,336,096
WAL (cover pool)	6.0y
WAL (covered bonds)	4.8y
Fixed interest (cover pool)	75.0%
Fixed interest (covered bonds)	56.7%
LTV (indexed)	-
LTV (unindexed)	-
Loans in arrears	0.0%

Rating (Moody's)	Aaa
Rating (S&P)	-
Rating (Fitch)	-
Rating (DBRS)	-
ТРІ	High
TPI leeway	5
Collateral score	3.9%
RRL	-
JRL	-
Unused notches	-
AAA credit risk (%)	-
PCU	-
Recovery uplift	1
Outstanding ESG BMKs	No
LCR ELIGIBLE	Yes
LCR level (Bmk)	1
Risk weight	10%
Maturity structure (Bmk)	SB

Borrower Types

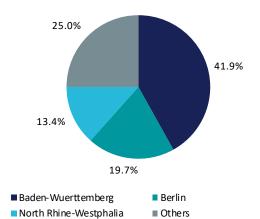


Spread Development

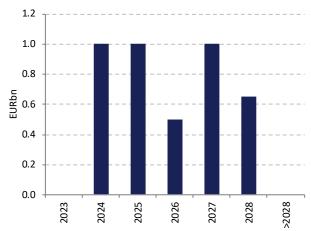


Source: Issuer, Rating agencies, Bloomberg, NORD/LB Markets Strategy & Floor Research

Regional Distribution



Redemption Profile (Bmk)









Landesbank Berlin

Germany

Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Outlook

Stable

Ratings Rating Fitch -

Aa3

S&P Homepage

Moody's

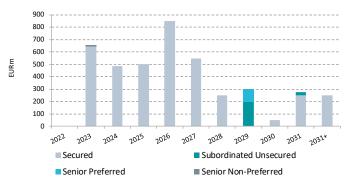
www.lbb.de

Landesbank Berlin AG (LBB) is a non-listed joint stock company which is the governmentally appointed sponsor of Berliner Sparkasse (BSK). In accordance with the Berlin Sparkassen Act, LBB is classified as a savings bank association in its own right and is therefore a member of the DSGV (German savings bank and giro association). The institution benefits from membership of the Sparkassen financial group and the associated protection system. LBB and BSK (branch of LBB in line with German commercial law) is a wholly owned subsidiary of Landesbank Berlin Holding AG (LBBH), which indirectly places it into the ownership of the acquisition company affiliated with S-Finanzgruppe mbH & Co. KG. This company holds a direct stake of 89.37% in LBBH and also functions as a general partner in the investment company of S-Finanzgruppe mbH & Co. KG (10.63% stake in LBBH). In 2021, LBB/BSK reorganised its business units so that it now reports across the following segments: Retail Customers, Direct Bank Service (credit card business), Business Customers, Commercial Real Estate Financing, Private Banking, Treasury and Corporate Customers. In Berlin, LBB/BSK operates its whole retail and corporate client business in a single business unit with 78 branches. In the Commercial Real Estate Financing segment, the target clientele of the institute on the Berlin market ranges from investors to real estate companies, although it also focuses on private individuals. Since 01 July 2022, the real estate subsidiary Berlin Hyp has no longer been part of the Group after it was sold to LBBW. As part of the future programme "Z25!", the core business of the capital city savings bank is set to be strengthened, while at the same time costs are to be scaled back and earnings in the customer business

Balance Sheet

(EURm)	2020Y	2021Y	2022H1
Net Loans to Customers	25 <i>,</i> 787	27,381	28,206
Total Securities	9,546	8,264	8,374
Total Deposits	30,964	34,395	36,174
Tier 1 Common Capital	2,385	2,570	2,582
Total Assets	49,145	52,484	56,485
Total Risk-weighted Assets	14,350	13,840	14,092

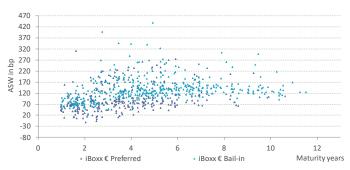
Redemption Profile



Income Statement

(EURm)	2020Y	2021Y	2022H1
Net Interest Income	766	771	411
Net Fee & Commission Inc.	233	248	137
Net Trading Income	-	-	-
Operating Expense	925	958	441
Credit Commit. Impairment	124	-104	45
Pre-tax Profit	40	41	43

Senior Unsecured Bonds (EUR BMK)



Company Ratios

2020Y	2021Y	2022H1
1.78	1.57	1.55
-	-	-
87.10	86.67	75.84
16.62	18.57	18.32
	1.78	1.78 1.57 87.10 86.67

	2020Y	2021Y	2022H1
Liquidity Coverage Ratio	175.78	210.03	192.13
IFRS Tier 1 Leverage Ratio	-	-	-
NPL/ Loans at Amortised Cost	0.36	-	-
Reserves/Loans at Amort. Cost	1.94	1.28	-

Source: Bloomberg, S&P Global Market Intelligence, NORD/LB Markets Strategy & Floor Research; as of: 18.10.2022

Strengths / Opportunities

- Capitalisation
- Liquidity profile
- Deposit basis

- Geographical concentration in Berlin-Brandenburg
- CRE exposure
- Cost basis

Landesbank Berlin – Mortgage

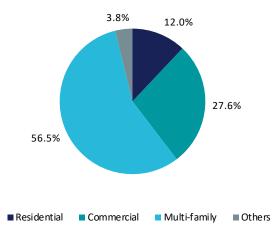
Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Cover Pool Data

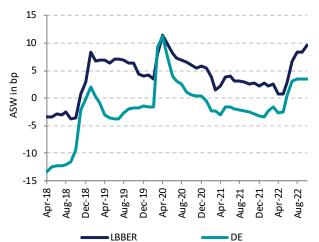
Cover pool volume (EURm)	5,801
Amount outstanding (EURm)	3,513
-thereof ≥ EUR 500m	59.8%
Current OC (nominal)	65.1%
Committed OC	2.0%
Cover type	Mortgage
Main country	100% Germany
Main region	n/a
Number of loans	7,780
Number of borrowers	6,993
Avg. exposure to borrowers (EUR)	829,530
WAL (cover pool)	10.8y
WAL (covered bonds)	5.1y
Fixed interest (cover pool)	90.0%
Fixed interest (covered bonds)	96.0%
LTV (indexed)	n/a
LTV (unindexed)	55.0%
Loans in arrears	0.0%

Rating (S&P)	-
Rating (Fitch)	-
Rating (DBRS)	-
ТРІ	High
TPI leeway	6
Collateral score	14.6%
RRL	-
JRL	-
Unused notches	-
AAA credit risk (%)	-
PCU	-
Recovery uplift	1
Outstanding ESG BMKs	No
LCR ELIGIBLE	Yes
LCR level (Bmk)	2A
Risk weight	10%
Maturity structure (Bmk)	SB

Borrower Types



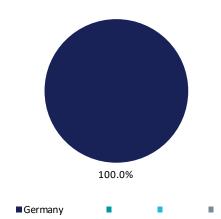
Spread Development



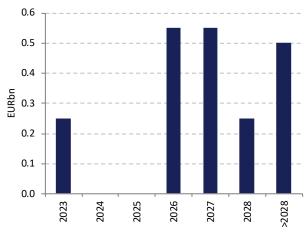
Source: Issuer, Rating agencies, Bloomberg, NORD/LB Markets Strategy & Floor Research

Regional Distribution

Rating (Moody's)



Redemption Profile (Bmk)





Aaa



Germany

Landesbank Hessen-Thüringen

Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Ratings

	Rating	Outlook
Fitch	A+	Stable
Moody's	Aa3	Stable
S&P	-	-

Homepage

www.helaba.com

Landesbank Hessen-Thüringen Girozentrale (Helaba) was established in 1953 as Hessische Landesbank. The majority shareholder (88%) is the savings bank sector, followed by the Bundeslaender of Hesse and Thuringia (12% on joint basis). With around 6,300 employees, the bank is not only one of the leading banks in the financial centre of Frankfurt am Main, but also deeply integrated within the Sparkassen financial group owing to its function as savings bank central bank and associate bank for approximately 40% of all German savings banks. Helaba pursues a universal bank business model with a strong regional focus and selective international presence. Helaba is active across four operating business units: Real Estate, Corporates & Markets, Retail & Asset Management and WIBank. These are supplemented by the segments Consolidation/Transition and Other. The latter includes the Treasury function, among other aspects. Since 2020, a new organisational structure and other innovations were introduced as part of the project "Scope - Growth through efficiency". The diversification of the business model and the digital transformation are also set to be advanced further. After Helaba published its Green Bond Framework in 2021, a Sustainable Lending Framework followed in 2022. In 2021, the issuance volume of green bonds amounted to around EUR 604.3 million. For refinancing purposes, Helaba makes use of the funding sources at its disposal through its association membership (direct/indirect savings bank business), in addition to subsidies and Pfandbrief issuances on the part of WIBank and its own issuances as well. As at H1 2022, the CET1 ratio stood at 13.9%.

Balance Sheet

(EURm)	2020Y	2021Y	2022H1
Net Loans to Customers	119,273	119,036	120,229
Total Securities	49,801	36,615	31,575
Total Deposits	72,467	72,199	75,467
Tier 1 Common Capital	8,882	9,157	8,887
Total Assets	219,324	212,341	213,797
Total Risk-weighted Assets	60,542	63,881	63,942

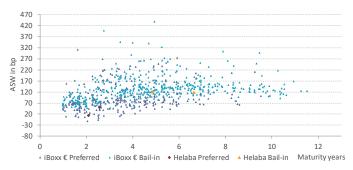
Redemption Profile



Income Statement

(EURm)	2020Y	2021Y	2022H1
Net Interest Income	1,172	1,326	666
Net Fee & Commission Inc.	435	485	269
Net Trading Income	13	183	158
Operating Expense	1,468	1,515	869
Credit Commit. Impairment	304	208	85
Pre-tax Profit	223	569	327

Senior Unsecured Bonds (EUR BMK)



Company Ratios

	2020Y	2021Y	2022H1
Net Interest Margin	0.56	0.63	0.64
ROAE	2.02	5.55	4.73
Cost-to-Income	74.03	64.11	67.52
Core Tier 1 Ratio	14.67	14.33	13.90

20209	20211	2022H1
186.24	185.91	172.37
4.49	4.65	4.41
0.64	0.99	0.91
0.48	0.62	0.68
	186.24 4.49 0.64	186.24 185.91 4.49 4.65 0.64 0.99

Source: Bloomberg, S&P Global Market Intelligence, NORD/LB Markets Strategy & Floor Research; as of: 18.10.2022

Strengths / Opportunities

- Part of the Sparkassen financial group
- Capitalisation
- Refinancing sources

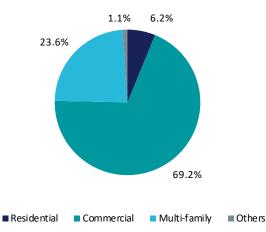
- Risk concentration (commercial loan portfolio)
- Profitability
- Dependency on wholesale funding

Landesbank Hessen-Thüringen – Mortgage

Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Cover Pool Data

Cover pool volume (EURm)	16,180
Amount outstanding (EURm)	8,179
-thereof ≥ EUR 500m	94.8%
Current OC (nominal)	97.8%
Committed OC	n/a
Cover type	Mortgage
Main country	49% Germany
Main region	28% Hesse
Number of loans	9,499
Number of borrowers	8,247
Avg. exposure to borrowers (EUR)	1,961,865
WAL (cover pool)	3.7y
WAL (covered bonds)	2.7y
Fixed interest (cover pool)	61.5%
Fixed interest (covered bonds)	81.9%
LTV (indexed)	n/a
LTV (unindexed)	59.2%
Loans in arrears	0.0%



Spread Development



Source: Issuer, Rating agencies, Bloomberg, NORD/LB Markets Strategy & Floor Research

Regional Distribution

Maturity structure (Bmk)

Rating (Moody's)

Rating (S&P)

Rating (Fitch) Rating (DBRS)

TPI leeway

Collateral score

Unused notches

Recovery uplift

LCR level (Bmk)

LCR ELIGIBLE

Risk weight

AAA credit risk (%)

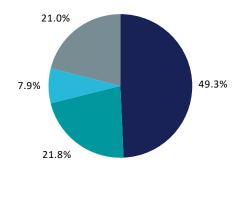
Outstanding ESG BMKs

TPI

RRL

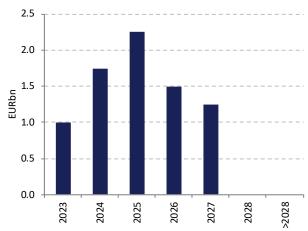
JRL

PCU



Germany US France Others

Redemption Profile (Bmk)







Aaa

High

11.5%

5

.

_

_

No

Yes

10%

SB

1



Landesbank Hessen-Thüringen – Public Sector

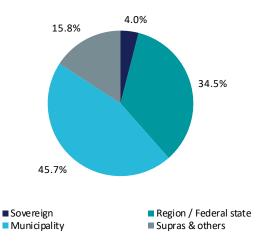
Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Cover Pool Data

Cover pool volume (EURm)	33,563
Amount outstanding (EURm)	28,167
-thereof ≥ EUR 500m	23.1%
Current OC (nominal)	19.2%
Committed OC	2.0%
Cover type	Public Sector
Main country	92% Germany
Main region	40% Hesse
Number of loans	19,894
Number of borrowers	4,651
Avg. exposure to borrowers (EUR)	7,216,362
WAL (cover pool)	7.1y
WAL (covered bonds)	5.3y
Fixed interest (cover pool)	94.5%
Fixed interest (covered bonds)	76.3%
LTV (indexed)	-
LTV (unindexed)	-
Loans in arrears	0.0%

Rating (Moody's)	Aaa
Rating (S&P)	-
Rating (Fitch)	AAA
Rating (DBRS)	-
TPI	High
TPI leeway	5
Collateral score	3.1%
RRL	-
JRL	-
Unused notches	-
AAA credit risk (%)	-
PCU	6
Recovery uplift	-
Outstanding ESG BMKs	No
LCR ELIGIBLE	Yes
LCR level (Bmk)	1
Risk weight	10%
Maturity structure (Bmk)	SB

Borrower Types

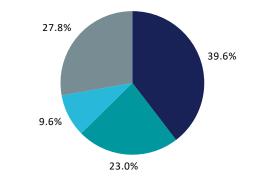


Spread Development



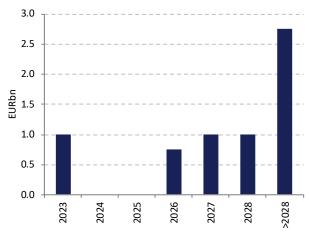
Source: Issuer, Rating agencies, Bloomberg, NORD/LB Markets Strategy & Floor Research

Regional Distribution



■Hesse ■North Rhine-Westphalia ■Berlin ■Others

Redemption Profile (Bmk)





Germany

Germany

Landesbank Saar

Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Ratings

	Rating	Outlook
Fitch	A-	Stable
Moody's	A1	Stable
S&P	-	-

Homepage

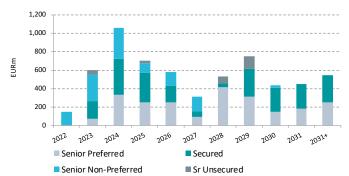
www.saarlb.de

Landesbank Saar (SaarLB) is a publicly funded German-French regional bank. The Bundesland Saarland is the main shareholder in the bank with 74.9% (FY 2021), followed by the Sparkassenverband Saar (25.1%). Alongside Saarland and neighbouring regions in Germany, the geographic focus of SaarLB is additionally on the French regions Grand Est and Hauts-de-France, Île-de-France, Bourgogne-Franche-Comté and Auvergne-Rhône-Alpes. In FY 2021, just over 50% of the new business was attributable to France-based business. The bank also supports cross-border investments via the forum Pôle Franco-Allemand. The institute operates a branch in Strasbourg (SaarLB France) and a sales office in Paris. With a workforce comprising around 500 employees, SaarLB focuses on SME customers, property investors, project financiers, high net-worth retail customers and institutional customers. As part of its own funding strategy, SaarLB focuses on Pfandbrief issuances for long-term refinancing and supplements these through uncovered bank bonds. In the short term, funding is secured via customer deposits, refinancing via the banking market and open market transactions with the ECB. SaarLB has a framework for the issuance of green bonds, which is aligned with its aim to finance projects in the renewable energy sector. In June 2022, SaarLB placed its first social bond in the subbenchmark segment (volume: EUR 150 million.) The CET1 ratio rose by 10 basis points to 13.2% (FY 2021) in comparison with FY 2020.

Balance Sheet

(EURm)	2020Y	2021Y	2022H1
Net Loans to Customers	12,116	12,574	12,949
Total Securities	1,030	1,068	1,175
Total Deposits	6,085	6,241	6,741
Tier 1 Common Capital	752	763	787
Total Assets	15,157	16,163	17,920
Total Risk-weighted Assets	5,739	5,798	5,880

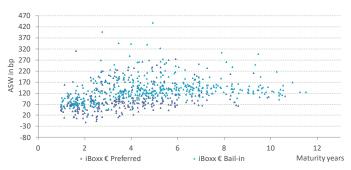
Redemption Profile



Income Statement

(EURm)	2020Y	2021Y	2022H1
Net Interest Income	133	136	71
Net Fee & Commission Inc.	7	7	5
Net Trading Income	1	0	0
Operating Expense	85	88	52
Credit Commit. Impairment	25	14	8
Pre-tax Profit	37	45	16

Senior Unsecured Bonds (EUR BMK)



Company Ratios

	2020Y	2021Y	2022H1
Net Interest Margin	0.90	0.88	0.85
ROAE	2.28	3.83	2.34
Cost-to-Income	58.80	59.07	67.11
Core Tier 1 Ratio	13.11	13.15	13.38

	2020Y	2021Y	2022H1
Liquidity Coverage Ratio	218.42	199.76	225.54
IFRS Tier 1 Leverage Ratio	-	-	-
NPL/ Loans at Amortised Cost	1.61	-	-
Reserves/Loans at Amort. Cost	0.57	-	-

Source: Bloomberg, S&P Global Market Intelligence, NORD/LB Markets Strategy & Floor Research; as of: 18.10.2022

Strengths / Opportunities

- Funding profile
- Asset quality

Risks / Weaknesses

- Credit concentration
- Profitability

Landesbank Saar – Public Sector

Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Cover Pool Data

core: · cor bata	
Cover pool volume (EURm)	3,926
Amount outstanding (EURm)	3,072
-thereof ≥ EUR 500m	32.5%
Current OC (nominal)	27.8%
Committed OC	n/a
Cover type	Public Sector
Main country	61% Germany
Main region	n/a
Number of loans	n/a
Number of borrowers	n/a
Avg. exposure to borrowers (EUR)	n/a
WAL (cover pool)	n/a
WAL (covered bonds)	n/a
Fixed interest (cover pool)	75.8%
Fixed interest (covered bonds)	98.4%
LTV (indexed)	-
LTV (unindexed)	-
Loans in arrears	0.0%

Regional	Distribution

Maturity structure (SBmk)

Rating (Moody's) Rating (S&P) Rating (Fitch)

Rating (DBRS)

Unused notches AAA credit risk (%)

Recovery uplift

LCR level (SBmk)

LCR ELIGIBLE

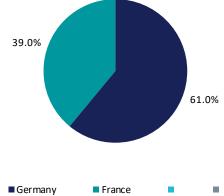
Risk weight

Outstanding ESG BMKs

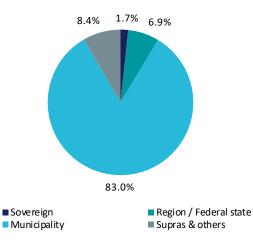
TPI TPI leeway Collateral score

RRL JRL

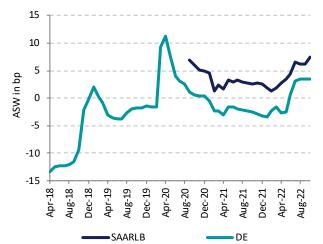
PCU



Borrower Types

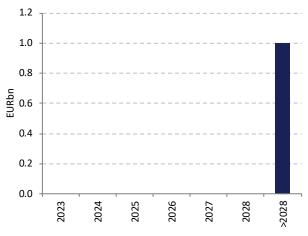


Spread Development



Source: Issuer, Rating agencies, Bloomberg, NORD/LB Markets Strategy & Floor Research

Redemption Profile (SBmk)



Germany

AAA

_

6

1

No

Yes

2A

SB

10%

Germany

Münchener Hypothekenbank

Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Rating	Outlook
AA-	Stable
Aa3	Stable
AA-	Stable
	AA- Aa3

Homepage

www.muenchenerhyp.de

* Rating der Genossenschaftl. FinanzGruppe Münchener Hypothekenbank eG (MünchenerHyp), established in 1896, is one of the few mortgage banks which operates in the legal form of a registered cooperative (around 62,300 members as at FY 2021). It has a broadly-based ownership structure and is a member of the cooperative FinanzGruppe, one of the largest banking groups in Germany. The bank's partners include approximately 770 Volksbanks and Raiffeisen banks. As an independent real estate bank, the institute is focused on long-term property funding. Its core business areas are financing residential and commercial real estate both in Germany and abroad. A total of 78.5% of the mortgage portfolio is attributable to Germany, with foreign business accounting for a share of 21.5%. This includes Switzerland with 12.4% and other countries with 9.1%. Mortgage Pfandbriefe constitute the main refinancing source at MünchenerHyp (FY 2021: EUR 31.8bn). In addition, uncovered bearer bonds are also issued on the capital market, while funds are raised on the money market as well. Moreover, funding is increasingly supplemented through ESG-related instruments. An increasing number of green and/or sustainable products are being offered by both the lending and deposit businesses, contributing to the diversification of both the customer and investor base. As a domestic systemically important bank (D-SIB), MünchenerHyp is subject to direct ECB supervision. The Common Equity Tier 1 ratio for FY 2021 stands at 20.39% (previous year: 20.46%) and therefore above the SREP requirement of 7.88%. Furthermore, the liquidity ratio LCR fulfilled the regulatory minimum requirements (more than 300% in a fiveyear average).

Balance Sheet

(EURm)	2020Y	2021Y	2022H1
Net Loans to Customers	40,265	43,046	44,676
Total Securities	5,804	6,861	6,900
Total Deposits	14,848	14,867	15,681
Tier 1 Common Capital	1,517	1,626	1,659
Total Assets	48,558	52 <i>,</i> 538	55,135
Total Risk-weighted Assets	7,350	7,975	8,756

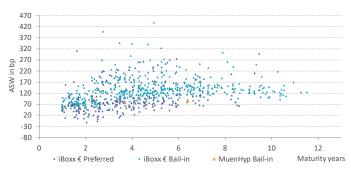
Redemption Profile



Income Statement

(EURm)	2020Y	2021Y	2022H1
Net Interest Income	348	403	212
Net Fee & Commission Inc.	-109	-130	-59
Net Trading Income	-	-	-
Operating Expense	135	139	77
Credit Commit. Impairment	11	27	21
Pre-tax Profit	75	113	61

Senior Unsecured Bonds (EUR BMK)



Company Ratios

	2020Y	2021Y	2022H1
Net Interest Margin	0.77	0.80	0.79
ROAE	2.47	3.49	3.69
Cost-to-Income	55.85	50.51	50.09
Core Tier 1 Ratio	20.64	20.39	18.95

	2020Y	2021Y	2022H1
Liquidity Coverage Ratio	563.43	349.00	415.04
IFRS Tier 1 Leverage Ratio	-	-	-
NPL/ Loans at Amortised Cost	0.52	0.52	-
Reserves/Loans at Amort. Cost	0.11	0.13	-

Source: Bloomberg, S&P Global Market Intelligence, NORD/LB Markets Strategy & Floor Research; as of: 18.10.2022

Strengths / Opportunities

- Capitalisation
- Credit quality on the domestic market
- High likelihood of support from FinanzGruppe

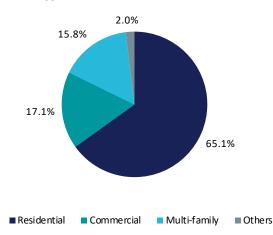
- Cyclical nature of commercial property markets
- Leverage
- Dependency on wholesale funding

Münchener Hypothekenbank – Mortgage

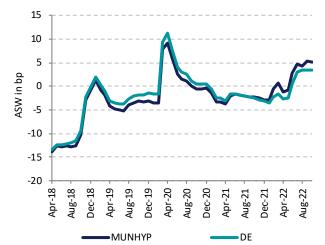
Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Cover Pool Data

Cover pool volume (EURm)	33,454
Amount outstanding (EURm)	31,895
-thereof ≥ EUR 500m	39.2%
Current OC (nominal)	4.9%
Committed OC	2.0%
Cover type	Mortgage
Main country	79% Germany
Main region	n/a
Number of loans	199,510
Number of borrowers	175,468
Avg. exposure to borrowers (EUR)	190,656
WAL (cover pool)	8.4y
WAL (covered bonds)	9.0y
Fixed interest (cover pool)	96.0%
Fixed interest (covered bonds)	85.0%
LTV (indexed)	n/a
LTV (unindexed)	52.0%
Loans in arrears	0.0%



Spread Development



Source: Issuer, Rating agencies, Bloomberg, NORD/LB Markets Strategy & Floor Research

Regional Distribution

Maturity structure (Bmk)

Rating (Moody's)

Rating (S&P)

Rating (Fitch) Rating (DBRS)

TPI leeway

Collateral score

Unused notches

Recovery uplift

LCR level (Bmk)

LCR ELIGIBLE

Risk weight

AAA credit risk (%)

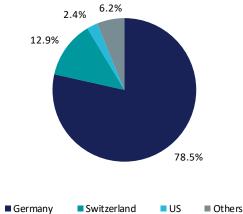
Outstanding ESG BMKs

TPI

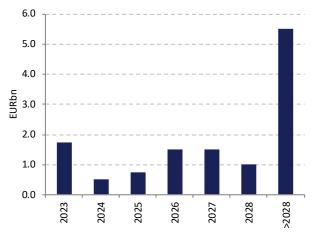
RRL

JRL

PCU



Redemption Profile (Bmk)



NORD/LB





Aaa

High

8.7%

5

1

Yes

Yes

10%

SB

1

NATIXIS Pfandbriefbank



Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Ratings

	Rating	Outlook
Fitch	-	-
Moody's	-	-
S&P	-	-

Homepage

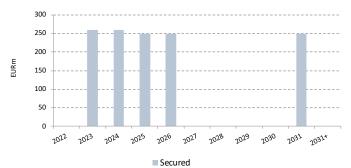
www.pfb.natixis.com

NATIXIS Pfandbriefbank AG (NPB), headquartered in Frankfurt am Main, is a wholly owned subsidiary of the French NATIXIS S.A., which in turn forms part of BPCE S.A. and Groupe BPCE, the second largest banking group in France and classified as a global systemically important bank (G-SIB). NPB has concluded a control and profit transfer agreement with the parent company NATIXIS, with the latter also providing a letter of comfort worth EUR 2bn to NPB, which was established in 2012. In 2021, around 50 employees were working for NPB on average. Since August 2012, NPB has also been licensed to issue mortgage Pfandbriefe. Additionally, the institute benefits from the supportive group liability of the members of BPCE through corresponding legislation in France. Although in principle the institute has the business opportunities of a universal bank, it primarily operates in segments which can be used for Pfandbrief coverage in accordance with Pfandbrief legislation. The bank has been active on the market since the beginning of 2013. NPB's unsecured funding is guaranteed by NATIXIS in France. NPB itself is an issuer of both bearer and registered securities in addition to issuing private placements and syndicated, public transactions. Geographically, the assets, the vast majority of which focus on the commercial real estate segment, are primarily attributable to France and Germany (90%), followed by Italy, Spain, Austria and the Netherlands. In addition, NATIXIS secures every mortgage loan issued by NPB through a guarantee that matches the maturity.

Balance Sheet

(EURm)	2019Y	2020Y	2021Y
Net Loans to Customers	2,368	2,398	2,422
Total Securities	209	193	293
Total Deposits	77	67	61
Tier 1 Common Capital	125	130	132
Total Assets	2,646	2,650	2,888
Total Risk-weighted Assets	354	364	877

Redemption Profile



Company Ratios

	2019Y	2020Y	2021Y	
Net Interest Margin	1.22	1.13	1.13	Liquidity Coverage
ROAE	-	-	-	IFRS Tier 1 Leverage
Cost-to-Income	40.20	46.70	56.80	NPL/ Loans at Amo
Core Tier 1 Ratio	35.35	35.67	15.09	Reserves/Loans at /

	2019Y	2020Y	2021Y
Liquidity Coverage Ratio	378.02	363.57	222.12
IFRS Tier 1 Leverage Ratio	4.78	4.96	4.61
NPL/ Loans at Amortised Cost	-	-	-
Reserves/Loans at Amort. Cost	-	-	-

Source: Bloomberg, S&P Global Market Intelligence, NORD/LB Markets Strategy & Floor Research; as of: 18.10.2022

Strengths / Opportunities

- Member of a joint liability scheme
- Capitalisation
- Liquidity

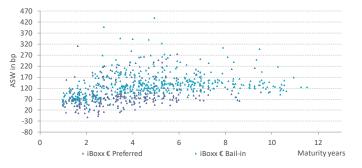
Risks / Weaknesses

- Diversification
- Dependency on wholesale funding
- Cyclical nature of the commercial property business

Income Statement

(EURm)	2019Y	2020Y	2021Y
Net Interest Income	35	30	31
Net Fee & Commission Inc.	-2	-4	-6
Net Trading Income	-	-	-
Operating Expense	14	14	17
Credit Commit. Impairment	-	-	-
Pre-tax Profit	15	12	9

Senior Unsecured Bonds (EUR BMK)



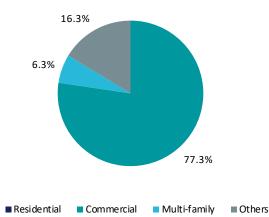
NATIXIS Pfandbriefbank – Mortgage

Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

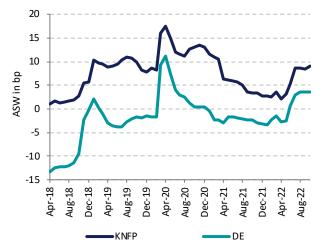
Cover Pool Data

Cover pool volume (EURm)	1,529
Amount outstanding (EURm)	1,316
-thereof ≥ EUR 250m	85.6%
Current OC (nominal)	16.2%
Committed OC	2.0%
Cover type	Mortgage
Main country	47% Germany
Main region	n/a
Number of loans	70
Number of borrowers	88
Avg. exposure to borrowers (EUR)	17,375,000
WAL (cover pool)	3.3y
WAL (covered bonds)	3.8y
Fixed interest (cover pool)	42.2%
Fixed interest (covered bonds)	100.0%
LTV (indexed)	n/a
LTV (unindexed)	56.8%
Loans in arrears	0.0%

Borrower	Types
----------	-------



Spread Development



Source: Issuer, Rating agencies, Bloomberg, NORD/LB Markets Strategy & Floor Research

Regional Distribution

Maturity structure (SBmk)

Outstanding ESG BMKs

Rating (Moody's)

Rating (S&P) Rating (Fitch) Rating (DBRS)

TPI leeway

Collateral score

Unused notches AAA credit risk (%)

Recovery uplift

LCR level (SBmk)

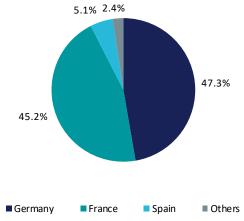
LCR ELIGIBLE

Risk weight

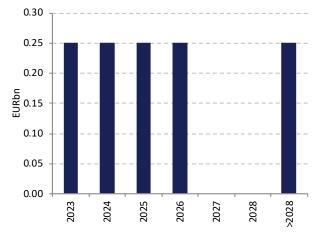
TPI

RRL JRL

PCU



Redemption Profile (SBmk)







Aaa

High

14.5%

5

1

No

Yes

2A

SB

10%



NORD/LB

Norddeutsche Landesbank

Germany

Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Ratings

	Rating	Outlook
Fitch	A-	Stable
Moody's	A3	Stable
S&P	-	-

Homepage

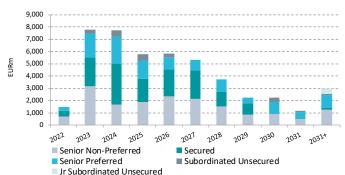
www.nordlb.de

Norddeutsche Landesbank Girozentrale (NORD/LB) is a public-law institution and part of the Savings Bank Finance Group. It is one of the leading German commercial banks and, due to its balance sheet total, is one of the nationally system-relevant banks. The largest owner is the state of Lower Saxony with 56.76%, followed by the two trustee companies of the savings bank financial group (FIDES Gamma and FIDES Delta) with 12.27% each. In addition to its headquarters in Hanover, Braunschweig and Magdeburg, the Group is also represented worldwide. NORD/LB acts as the central bank for the savings banks in Lower Saxony (NI), Saxony-Anhalt (SA) and Mecklenburg-Western Pomerania (MV). As a landesbank, it supports its sponsoring federal states of NI and SA in managing their financial transactions. In addition, it conducts promotional business on behalf of the federal states via Investitionsbank SA, Magdeburg (institution within NORD/LB), and via LFI MV, Schwerin (NORD/LB business unit). The business model of the group is divided into the segments Private and Business Customers and Savings Bank Network, Corporate Customers, Markets, Special Financing and Real Estate. The transformation programme "NORD/LB 2024" with ambitious targets in the areas of balance sheet reduction, cost reduction and group restructuring has achieved important interim targets, according to the bank. For example, the former subsidiary Deutsche Hypo was merged with NORD/LB on 01.07.2021 with legal retroactive effect from 01.01.2021, but the brand established on the market will be continued. NORD/LB has integrated the topic of sustainability into its business model by clearly defining ESG guidelines.

Balance Sheet

(EURm)	2020Y	2021Y	2022H1
Net Loans to Customers	74,105	68,810	68,846
Total Securities	29,039	22,943	22,068
Total Deposits	52,414	49,357	48,813
Tier 1 Common Capital	5,763	5,831	5,618
Total Assets	126,176	114,663	112,257
Total Risk-weighted Assets	39,791	37,609	37,085

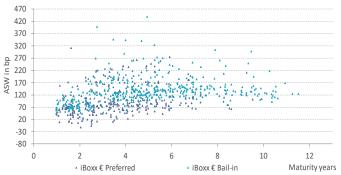
Redemption Profile



Income Statement

(EURm)	2020Y	2021Y	2022H1
Net Interest Income	1,286	816	438
Net Fee & Commission Inc.	-38	52	62
Net Trading Income	225	139	-164
Operating Expense	915	910	432
Credit Commit. Impairment	419	-11	-69
Pre-tax Profit	-27	16	-90

Senior Unsecured Bonds (EUR BMK)



Company Ratios

	2020Y	2021Y	2022H1		2020Y	2021Y	2022H1
Net Interest Margin	0.98	0.69	0.79	Liquidity Coverage Ratio	157.80	147.03	145.18
ROAE	0.22	0.32	-2.11	IFRS Tier 1 Leverage Ratio	4.80	5.26	5.12
Cost-to-Income	65.31	92.01	134.58	NPL/ Loans at Amortised Cost	2.10	1.43	1.17
Core Tier 1 Ratio	14.48	15.50	15.15	Reserves/Loans at Amort. Cost	1.38	1.28	1.19

Source: Bloomberg, S&P Global Market Intelligence, NORD/LB Markets Strategy & Floor Research; as of: 18.10.2022

Information: A SWOT analysis cannot be offered due to the obvious conflict of interest here

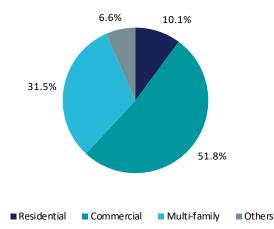
Norddeutsche Landesbank – Mortgage

Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

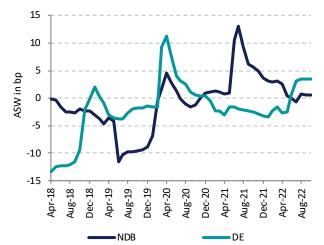
Cover Pool Data

Cover pool volume (EURm)	10,957
Amount outstanding (EURm)	8,627
-thereof ≥ EUR 500m	86.9%
Current OC (nominal)	27.0%
Committed OC	2.0%
Cover type	Mortgage
Main country	73% Germany
Main region	n/a
Number of loans	n/a
Number of borrowers	n/a
Avg. exposure to borrowers (EUR)	n/a
WAL (cover pool)	n/a
WAL (covered bonds)	n/a
Fixed interest (cover pool)	83.6%
Fixed interest (covered bonds)	97.6%
LTV (indexed)	n/a
LTV (unindexed)	60.0%
Loans in arrears	0.0%

Borrower Types



Spread Development



Source: Issuer, Rating agencies, Bloomberg, NORD/LB Markets Strategy & Floor Research

Maturity structure (Bmk) Regional Distribution

Rating (Moody's)

Rating (S&P)

Rating (Fitch)

Rating (DBRS)

Collateral score

Unused notches

Recovery uplift

LCR level (Bmk)

LCR ELIGIBLE

Risk weight

AAA credit risk (%)

Outstanding ESG BMKs

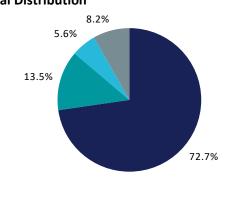
TPI leeway

TPI

RRL

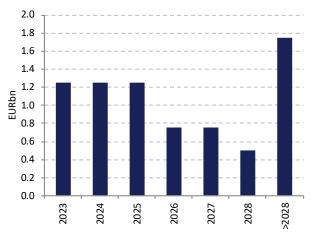
JRL

PCU



■ Germany ■ Netherlands ■ United Kingdom ■ Others

Redemption Profile (Bmk)









Aa1

High

16.0%

3

.

_

Yes

Yes

10%

SB

1

Norddeutsche Landesbank – Public Sector

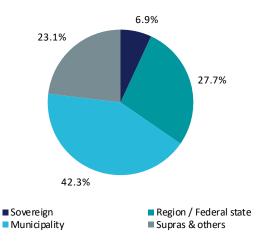
Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Cover Pool Data

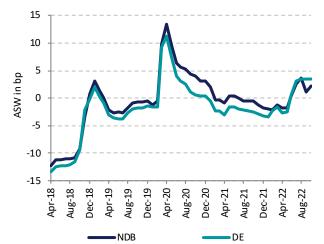
Cover pool volume (EURm)	14,355
Amount outstanding (EURm)	12,099
-thereof ≥ EUR 500m	16.9%
Current OC (nominal)	18.6%
Committed OC	2.0%
Cover type	Public Sector
Main country	89% Germany
Main region	n/a
Number of loans	3,944
Number of borrowers	1,416
Avg. exposure to borrowers (EUR)	10,137,500
WAL (cover pool)	6.9y
WAL (covered bonds)	6.7у
Fixed interest (cover pool)	87.6%
Fixed interest (covered bonds)	96.6%
LTV (indexed)	-
LTV (unindexed)	-
Loans in arrears	0.1%

Rating (Moody's)	Aa1
Rating (S&P)	-
Rating (Fitch)	-
Rating (DBRS)	-
TPI	High
TPI leeway	3
Collateral score	5.9%
RRL	-
JRL	-
Unused notches	-
AAA credit risk (%)	-
PCU	-
Recovery uplift	-
Outstanding ESG BMKs	No
LCR ELIGIBLE	Yes
LCR level (Bmk)	1
Risk weight	10%
Maturity structure (Bmk)	SB

Borrower Types

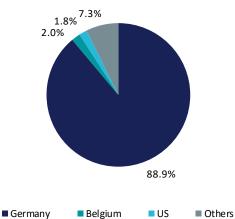


Spread Development

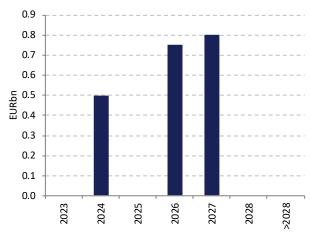


Source: Issuer, Rating agencies, Bloomberg, NORD/LB Markets Strategy & Floor Research

Regional Distribution



Redemption Profile (Bmk)









Germany

Oldenburgische Landesbank

Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

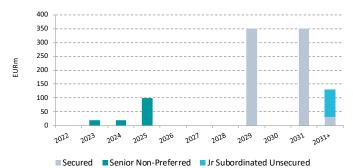
Ratings					
	Rating	Outlook			
Fitch	-	-			
Moody's	Baa2	Positive			
S&P	-	-			
Homepage					
www.olb.	<u>de</u>				

Oldenburgische Landesbank AG (OLB) is a financial institute based in northern Germany. It operates nationwide under the OLB Bank and Bankhaus Neelmeyer brands. The bank in its present form was established following the merger of OLB with BKB Bank and Bankhaus Neelmeyer in 2018 and then Wüstenrot Bank AG Pfandbriefbank in 2019. The three owners of OLB are Apollo Global Management, Grovepoint Investment Management and Teacher Retirement System of Texas. None of the owners has a controlling influence (FY 2021: < 40% shareholding in OLB in each case). OLB has around 1,400 employees (target FY 2022: 1,250), who serve over 600,000 customers (Q1 2022) in 41 branches (target FY 2022: 40). OLB focuses primarily on the two business segments Private & Business Customers (BBC; FY 2021: 52% of operating income) and Corporate & Diversified Lending (CDL; 43%). The BBC segment includes the retail customer business, the SME business and OLB Private Banking & Wealth Management, while the CDL business segment focuses on corporate customers and diversified lending (e.g. commercial real estate and shipping). In addition to its branch business, which is exclusively based in north-west Germany, the institute also operates across the whole of Germany with its digital offering. Outside of Germany, OLB is active in select niche markets. The NPL ratio fell in FY 2021 by 80 percentage points to 1.9%. With a CET1 ratio of 12.6% (Q1 2022), the bank has exceeded the regulatory requirement of 8.4%.

Balance Sheet

(EURm)	2020Y	2021Y	2022H1
Net Loans to Customers	15,541	16,950	17,691
Total Securities	3,057	3 <i>,</i> 895	2,504
Total Deposits	13,011	14,063	14,936
Tier 1 Common Capital	1,056	1,146	1,143
Total Assets	21,475	24,611	24,147
Total Risk-weighted Assets	8,659	9,539	9,399

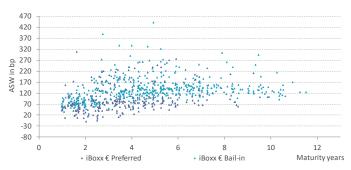
Redemption Profile



Income Statement

(EURm)	2020Y	2021Y	2022H1
Net Interest Income	336	360	212
Net Fee & Commission Inc.	113	120	60
Net Trading Income	0	0	9
Operating Expense	307	315	134
Credit Commit. Impairment	51	17	4
Pre-tax Profit	115	137	146

Senior Unsecured Bonds (EUR BMK)



Company Ratios

	2020Y	2021Y	2022H1
Net Interest Margin	1.66	1.60	1.78
ROAE	6.88	7.27	15.11
Cost-to-Income	66.00	61.22	47.34
Core Tier 1 Ratio	12.19	12.02	12.16

	2020Y	2021Y	2022H1
Liquidity Coverage Ratio	151.89	147.74	-
IFRS Tier 1 Leverage Ratio	4.98	4.69	4.75
NPL/ Loans at Amortised Cost	2.69	1.88	1.62
Reserves/Loans at Amort. Cost	1.01	0.78	0.88

Source: Bloomberg, S&P Global Market Intelligence, NORD/LB Markets Strategy & Floor Research; as of: 18.10.2022

Strengths / Opportunities

- Increased earning power
- Funding via deposits
- NPL ratio

- Credit risks from non-retail business
- Rising capital requirements
- Asset-based business model

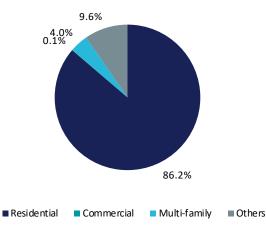
Oldenburgische Landesbank – Mortgage

Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

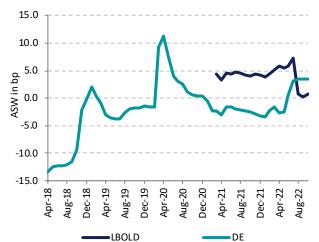
Cover Pool Data

Cover pool volume (EURm)	1,040
Amount outstanding (EURm)	881
-thereof ≥ EUR 500m	79.5%
Current OC (nominal)	18.0%
Committed OC	2.0%
Cover type	Mortgage
Main country	100% Germany
Main region	n/a
Number of loans	n/a
Number of borrowers	n/a
Avg. exposure to borrowers (EUR)	n/a
WAL (cover pool)	n/a
WAL (covered bonds)	n/a
Fixed interest (cover pool)	91.8%
Fixed interest (covered bonds)	100.0%
LTV (indexed)	n/a
LTV (unindexed)	56.0%
Loans in arrears	0.0%

Borrower Types



Spread Development



Source: Issuer, Rating agencies, Bloomberg, NORD/LB Markets Strategy & Floor Research

Maturity structure (SBmk)
Regional Distribution

Rating (Moody's)

Rating (S&P)

Rating (Fitch) Rating (DBRS)

TPI leeway

Collateral score

Unused notches

Recovery uplift

LCR level (SBmk)

LCR ELIGIBLE

Risk weight

AAA credit risk (%)

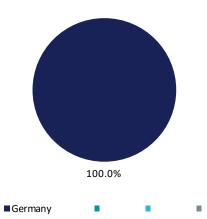
Outstanding ESG BMKs

TPI

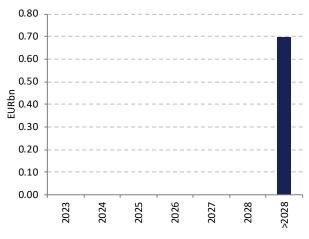
RRL

JRL

PCU



Redemption Profile (SBmk)



NORD/LB





Aa1

High

5.1%

3

1

No

Yes

2A

SB

10%

Santander Consumer Bank

Germany

Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Santander Consumer Bank AG (SCB), headquartered in Mönchengladbach, was established in 1957 before being taken over by Banco Santander (global systemically important bank; Outlook G-SIB) in 1987. As part of the Santander banking group, the bank is indirectly owned by Stable Banco Santander, Spain, via Santander Consumer Finance and the Santander Consumer Holding. There is a control and profit transfer agreement in place with the holding compa-Stable ny. As a domestic systemically important bank (D-SIB), SCB is subject to supervision on the Stable part of the ECB. The institute employs around 2,870 staff in 189 branches (FY 2021). Its activities are divided into four primary business areas: Mobility Business, Consumer Financial Services, Direct Business and Business & Corporate Banking. SCB has a service and product range that includes current accounts, credit cards, construction loans, securities business and financial services for business and retail customers. In terms of client base size, SCB is one of the top five retail banks in Germany, where it is the largest manufacturer-independent financier of mobility and consumer goods. SCB serves approximately 3.8 million retail customers and has been licensed to issue Pfandbriefe since 2016. Since 2019, the bank has held a stake of 51% in Hyundai Capital Bank Europe GmbH (HCBE). Since taking over SIXT Leasing SE (since renamed Allane SE) in 2020, both the market position of HCBE in automotive financing has been strengthened and the product portfolio has been expanded to include mobility services and the vehicle fleet business. As at FY 2021, 36.4% of the funding mix consisted of retail customer deposits, followed by ECB funding at 19.3%. Covered bonds account for just 1.9% of the funding mix.

Balance Sheet

Ratings

Fitch

S&P

Moody's*

Homepage

www.santander.de

*Senior Unsecured

Rating

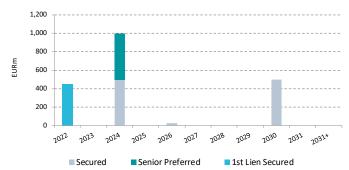
A-

A2

A

(EURm)	2019Y	2020Y	2021Y
Net Loans to Customers	29,961	29,217	28,856
Total Securities	9,515	11,435	11,969
Total Deposits	23,170	22,774	23,390
Tier 1 Common Capital	2,602	2,938	2,907
Total Assets	46,102	50,127	55,623
Total Risk-weighted Assets	20,032	19,734	19,368

Redemption Profile



Company Ratios

	2019Y	2020Y	2021Y
Net Interest Margin	2.41	2.15	2.08
ROAE	14.80	12.33	16.05
Cost-to-Income	63.07	59.66	52.03
Core Tier 1 Ratio	12.99	14.89	15.01

	2019Y	2020Y	2021Y
Liquidity Coverage Ratio	187.80	236.60	519.60
IFRS Tier 1 Leverage Ratio	-	-	-
NPL/ Loans at Amortised Cost	1.79	1.71	1.92
Reserves/Loans at Amort. Cost	1.76	1.81	1.72

Source: Bloomberg, S&P Global Market Intelligence, NORD/LB Markets Strategy & Floor Research; as of: 18.10.2022

Strengths / Opportunities

- Market position in DE (car/consumer finance)
- Granularity of loan portfolio
- Capitalisation

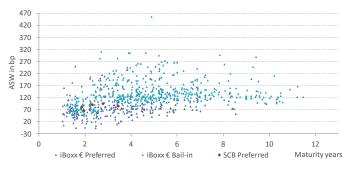
Risks / Weaknesses

- Sectoral concentration risks
- Fierce competition
- Share of own ABS as ECB collateral (TLTRO)

Income Statement

(EURm)	2019Y	2020Y	2021Y
Net Interest Income	1,055	1,010	1,071
Net Fee & Commission Inc.	155	158	182
Net Trading Income	-	-	-
Operating Expense	833	774	752
Credit Commit. Impairment	33	124	134
Pre-tax Profit	454	394	533

Senior Unsecured Bonds (EUR BMK)



Santander Consumer Bank – Mortgage

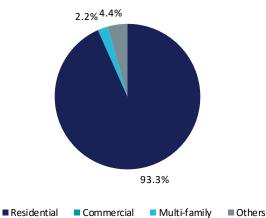
Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Cover Pool Data

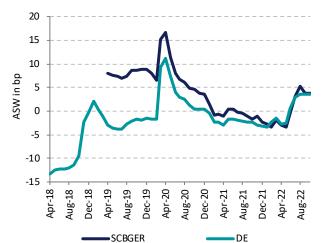
Cover pool volume (EURm) Amount outstanding (EURm)	1,162 1,025
-thereof \geq EUR 500m	97.6%
Current OC (nominal) Committed OC	13.4% 2.0%
Cover type	Mortgage
Main country	100% Germany
Main region	33% North Rhine-Westphalia
Number of loans	18,756
Number of borrowers	23,063
Avg. exposure to borrowers (E	UR) 50,380
WAL (cover pool)	5.0y
WAL (covered bonds)	5.0y
Fixed interest (cover pool)	100.0%
Fixed interest (covered bonds)	100.0%
LTV (indexed)	n/a
LTV (unindexed)	44.9%
Loans in arrears	0.0%

Rating (S&P) Rating (Fitch) AAA Rating (DBRS) TPI High **TPI** leeway 4 Collateral score 5.0% RRL JRL Unused notches _ AAA credit risk (%) _ PCU 6 Recovery uplift 1 **Outstanding ESG BMKs** No LCR ELIGIBLE Yes LCR level (Bmk) 1 **Risk weight** 10% Maturity structure (Bmk) SB

Borrower Types



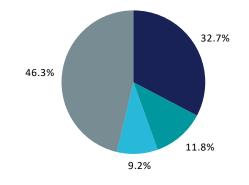
Spread Development



Source: Issuer, Rating agencies, Bloomberg, NORD/LB Markets Strategy & Floor Research

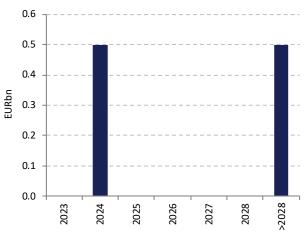
Regional Distribution

Rating (Moody's)



■North Rhine-Westphalia ■ Lower Saxony ■ Hesse ■ Others

Redemption Profile (Bmk)





Aaa



Germany

Sparkasse Hannover

Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Ratings

	Rating	Outlook
Fitch	A+	Stable
Moody's	-	-
S&P	-	-

Homepage

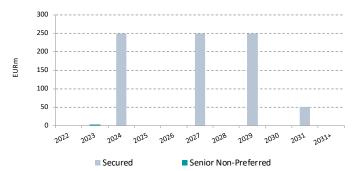
www.sparkasse-hannover.de

Sparkasse Hannover (SPK) is a public law institution and the sixth largest savings bank in Germany as measured by assets (data as at October 2021). It is the regional market leader in the core business areas of retail and corporate banking. As at the end of 2021, SPK had 80 locations with banking businesses. As a member of the support fund for savings banks of the Sparkassenverband Niedersachsen (association of savings banks in Lower Saxony), it benefits from a joint protection scheme for German savings banks. SPK has shares in 45 companies worth EUR 189m overall, including FacilityServices Hannover GmbH. Ten of these firms, which strengthen the core activities of SPK, form the SPK Group along with SPK itself. In 2021, according to its own information, the focus was on offering a transparent, simple and fair range of products and services for retail and business customers. A total of 668,000 customers were served with 676,000 current and instant access savings accounts. Over half of the population of the Hanover region are customers of SPK. As at the end of 2021, Sparkasse Hannover had 1,708 employees. The savings bank manages customer deposits worth EUR 14.96bn in total; these have risen by around EUR 1 million year on year. The loans business was fully funded via customer deposits. SPK has been issuing mortgage Pfandbriefe since 2010 and public sector Pfandbriefe since 2018. In July 2021, the institute placed its first green Pfandbrief. According to the bank's calculations, its cost-income ratio as at FY 2021 was 66.9% (previous year: 63.6%). SPK recorded a liquidity ratio of 176%, which exceeds its own internal strategic floor value (107.5%).

Balance Sheet

(EURm)	2019Y	2020Y	2021Y
Net Loans to Customers	12,292	13,218	13,921
Total Securities	2,316	2,209	2,299
Total Deposits	12,888	13,865	14,924
Tier 1 Common Capital	1,181	1,282	1,401
Total Assets	16,503	18,520	20,404
Total Risk-weighted Assets	9,525	10,425	11,295

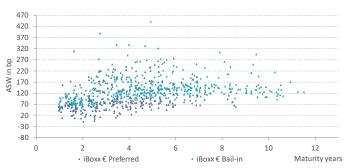
Redemption Profile



Income Statement

(EURm)	2019Y	2020Y	2021Y
Net Interest Income	241	237	192
Net Fee & Commission Inc.	110	114	111
Net Trading Income	-	-	-
Operating Expense	261	249	248
Credit Commit. Impairment	21	34	3
Pre-tax Profit	54	54	56

Senior Unsecured Bonds (EUR BMK)



Company Ratios

	2019Y	2020Y	2021Y
Net Interest Margin	1.55	1.38	1.01
ROAE	1.48	1.45	1.42
Cost-to-Income	72.36	69.14	76.19
Core Tier 1 Ratio	12.40	12.30	12.40

	2019Y	2020Y	2021Y
Liquidity Coverage Ratio	140.00	165.00	176.00
IFRS Tier 1 Leverage Ratio	-	-	-
NPL/ Loans at Amortised Cost	0.81	0.70	-
Reserves/Loans at Amort. Cost	0.61	0.76	-

Source: Bloomberg, S&P Global Market Intelligence, NORD/LB Markets Strategy & Floor Research; as of: 18.10.2022

Strengths / Opportunities

- Regional market leader in the retail and SME segments
- Deposit basis
- Liability member of the Sparkassen financial group

- Regional concentration
- Profitability
- Fierce competition

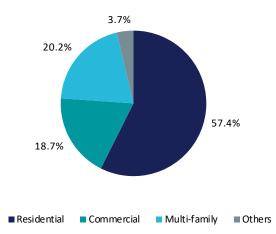
Sparkasse Hannover – Mortgage

Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

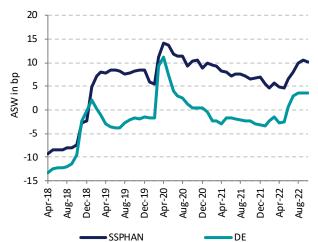
Cover Pool Data

Cover pool volume (EURm)	2,400
Amount outstanding (EURm)	1,658
-thereof ≥ EUR 250m	30.2%
Current OC (nominal)	44.8%
Committed OC	n/a
Cover type	Mortgage
Main country	100% Germany
Main region	n/a
Number of loans	n/a
Number of borrowers	n/a
Avg. exposure to borrowers (EUR)	n/a
WAL (cover pool)	n/a
WAL (covered bonds)	n/a
Fixed interest (cover pool)	89.1%
Fixed interest (covered bonds)	100.0%
LTV (indexed)	n/a
LTV (unindexed)	56.2%
Loans in arrears	0.0%

Borrower Types



Spread Development



Source: Issuer, Rating agencies, Bloomberg, NORD/LB Markets Strategy & Floor Research

Regional Distribution

Maturity structure (SBmk)

Outstanding ESG BMKs

Rating (Moody's)

Rating (S&P) Rating (Fitch)

Rating (DBRS)

Unused notches AAA credit risk (%)

Recovery uplift

LCR level (SBmk)

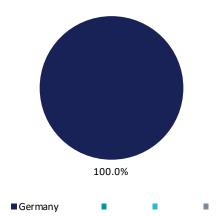
LCR ELIGIBLE

Risk weight

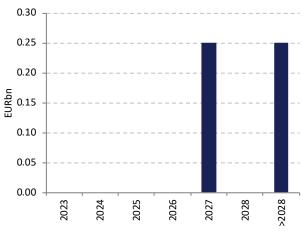
TPI TPI leeway Collateral score

RRL JRL

PCU



Redemption Profile (SBmk)









AAA

_

6

_

No

Yes

2A

SB

10%

Sparkasse Hannover – Public Sector

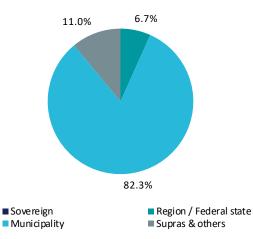
Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Cover Pool Data

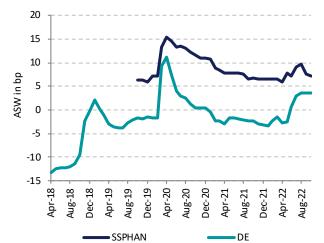
	000
Cover pool volume (EURm)	969
Amount outstanding (EURm)	313
-thereof ≥ EUR 250m	79.8%
Current OC (nominal)	209.4%
Committed OC	n/a
Cover type	Public Sector
Main country	100% Germany
Main region	n/a
Number of loans	n/a
Number of borrowers	n/a
Avg. exposure to borrowers (EUR)	n/a
WAL (cover pool)	n/a
WAL (covered bonds)	n/a
Fixed interest (cover pool)	93.0%
Fixed interest (covered bonds)	100.0%
LTV (indexed)	-
LTV (unindexed)	-
Loans in arrears	0.0%

Rating (Fitch) Rating (DBRS) TPI **TPI** leeway Collateral score RRL JRL Unused notches AAA credit risk (%) PCU Recovery uplift _ **Outstanding ESG BMKs** No LCR ELIGIBLE Yes LCR level (SBmk) 2B **Risk weight** 20% Maturity structure (SBmk) SB

Borrower Types



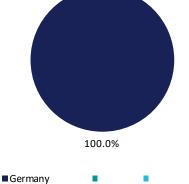
Spread Development



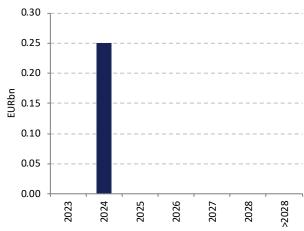
Source: Issuer, Rating agencies, Bloomberg, NORD/LB Markets Strategy & Floor Research

Regional Distribution

Rating (Moody's) Rating (S&P)



Redemption Profile (SBmk)







Sparkasse KölnBonn

Germany

Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Ratings

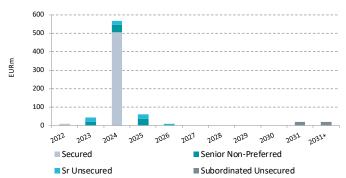
0			S
	Rating	Outlook	S
Fitch	A+	Stable	r
Moody's*	A1	Stable	h
S&P	-	-	i
Homepa	70		b
пошера	ge		С
www.spar	kasse-koe	Inbonn.de	fi
			e
*Senior U	nsecured		(
			а
			р
			S
			b

Sparkasse KölnBonn (SKB) emerged in 2005 from the merger of Sparkasse Köln and Sparkasse Bonn and employs nearly 3,600 staff. The bank benefits from the joint liability cheme of the Sparkassen financial group (deposit/institutional guarantee). SKB has strong egional roots, with 64 branches as well as 46 self-service branches. The institute has also nad a mobile branch since 2020 along with a direct branch. The target customers of SKB nclude retail customers, freelancers, and small and medium-sized enterprises (SMEs) pased in the region. Therefore, its main business activities are the retail customer and corporate customer business. As a universal bank, it offers its customers a broad range of inancial services. In the lending business, SKB mainly serves SMEs in addition to economically disadvantaged sections of the population. Around 60% of the loan portfolio EUR 21.3bn; FY 2021) is attributable to corporates and freelancers, while private entities account for roughly 30% and the rest is attributable to the category "Other". The loan portfolio was offset by customer deposits worth EUR 22.1bn. The CET1 ratio for FY 2021 stands at 12.1%. In connection with the strategic realignment "Strategie 2025", which is peing continued across the present financial year, staff numbers are being further reduced. The aim here is also to place a greater focus on customer needs as well as generating a sustained improvement in the earnings and financial situation. SKB obtains its funding from customer deposits, ECB funding as well as the issuance of Pfandbriefe, bonds and savings certificates. In April 2022, SKB issued its first green Pfandbrief.

Balance Sheet

(EURm)	2019Y	2020Y	2021Y
Net Loans to Customers	19,096	19,862	20,691
Total Securities	3,746	3,255	3,248
Total Deposits	21,098	21,748	21,947
Tier 1 Common Capital	1,680	1,743	1,786
Total Assets	27,106	27,766	27,969
Total Risk-weighted Assets	14,099	14,056	14,738

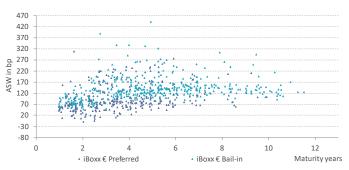
Redemption Profile



Income Statement

(EURm)	2019Y	2020Y	2021Y
Net Interest Income	384	415	328
Net Fee & Commission Inc.	176	177	185
Net Trading Income	5	5	4
Operating Expense	548	524	504
Credit Commit. Impairment	27	72	12
Pre-tax Profit	68	60	58

Senior Unsecured Bonds (EUR BMK)



Company Ratios

	2019Y	2020Y	2021Y
Net Interest Margin	1.49	1.57	1.22
ROAE	1.41	1.10	0.96
Cost-to-Income	79.75	76.20	84.56
Core Tier 1 Ratio	11.92	12.40	12.12

	2019Y	20209	20219
Liquidity Coverage Ratio	177.00	157.95	152.83
IFRS Tier 1 Leverage Ratio	-	-	-
NPL/ Loans at Amortised Cost	0.64	0.54	0.98
Reserves/Loans at Amort. Cost	0.70	0.69	1.14

Source: Bloomberg, S&P Global Market Intelligence, NORD/LB Markets Strategy & Floor Research; as of: 18.10.2022

Strengths / Opportunities

- Asset quality
- Funding profile (deposit basis)
- Capitalisation

- Profitability
- Pressure on margins
- Credit risk concentration

Sparkasse KölnBonn – Mortgage

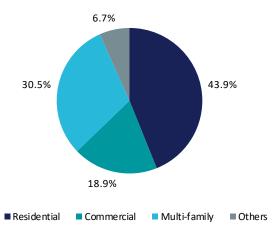
Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Cover Pool Data

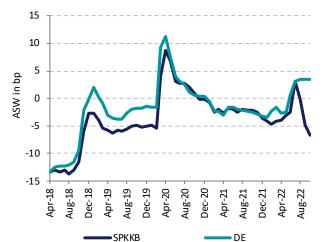
Cover pool volume (EURm)	7,001
Amount outstanding (EURm)	1,495
-thereof ≥ EUR 500m	33.5%
Current OC (nominal)	368.4%
Committed OC	2.0%
Cover type	Mortgage
Main country	100% Germany
Main region	n/a
Number of loans	n/a
Number of borrowers	n/a
Avg. exposure to borrowers (EUR)	n/a
WAL (cover pool)	n/a
WAL (covered bonds)	n/a
Fixed interest (cover pool)	93.1%
Fixed interest (covered bonds)	100.0%
LTV (indexed)	n/a
LTV (unindexed)	52.9%
Loans in arrears	0.0%
	0.0/0

Rating (S&P) Rating (Fitch) Rating (DBRS) TPI High **TPI** leeway 6 Collateral score 7.2% RRL JRL Unused notches AAA credit risk (%) PCU Recovery uplift 1 **Outstanding ESG BMKs** No LCR ELIGIBLE Yes LCR level (Bmk) 1 **Risk weight** 10% Maturity structure (Bmk) SB

Borrower Types



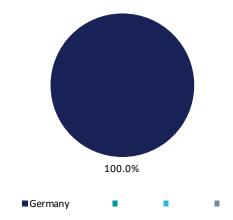
Spread Development



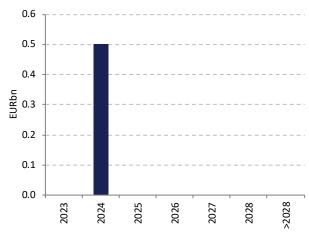
Source: Issuer, Rating agencies, Bloomberg, NORD/LB Markets Strategy & Floor Research

Regional Distribution

Rating (Moody's)



Redemption Profile (Bmk)



NORD/LB





Aaa

Sparkasse Pforzheim Calw

Germany

Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Ratings

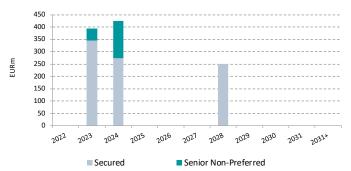
_		
	Rating	Outlook
Fitch	A+	Stable
Moody's	-	-
S&P	-	-
Homepa	ge	

www.sparkasse-pforzheimcalw.de Sparkasse Pforzheim Calw was established in 1834 and is the largest savings bank in Baden-Württemberg by total assets. In 2003, the institute merged with Kreissparkasse Calw. In its legal form as a non-commercial, independent public law institution, the bank is administered by the special purpose association STADT+KREISSPARKASSE PFORZHEIM ENZKREIS CALW. Sparkasse Pforzheim Calw is a member of the Association of Savings Banks in Baden-Württemberg (SVBW). As part of the SVBW, the institute is also part of the Sparkassen financial group. The support fund for savings banks serves as a deposit protection system at Sparkasse Pforzheim-Calw. Almost 1,900 staff serve retail customers, businesses and municipalities with financial products and services from its headquarters and a total of 92 branches. More than half of the customer loan portfolio is attributable to corporates at 52.6%, while retail customers account for around 44% and municipalities 3.3%. In light of its multi-channel strategy, Sparkasse Pforzheim Calw views linking digital and non-digital sales channels as key to its success. This includes the digital orientation of internal processes. Its business focus is on residential and commercial real estate. Since 2008, Sparkasse Pforzheim Calw has issued mortgage-backed bearer and registered Pfandbriefe for funding purposes. The terms to maturity extend up to 20 years. Structured bonds are also issued, which feature a debtor call option and lower/upper interest rate limits, for example. According to its own information, LCR requirements were exceeded over the course of the whole year of 2021, standing at 123.5% as at financial year-end.

Balance Sheet

(EURm)	2019Y	2020Y	2021Y
Net Loans to Customers	8,845	9,500	9,940
Total Securities	2,957	3,722	3,357
Total Deposits	9,014	9,624	9,921
Tier 1 Common Capital	995	1,055	1,104
Total Assets	13,038	15,470	16,096
Total Risk-weighted Assets	8,148	8,598	9,063

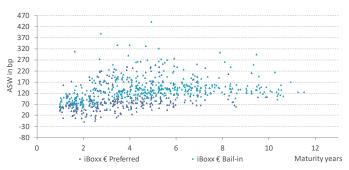
Redemption Profile



Income Statement

(EURm)	2019Y	2020Y	2021Y
Net Interest Income	196	194	211
Net Fee & Commission Inc.	74	73	74
Net Trading Income	20	38	20
Operating Expense	225	219	201
Credit Commit. Impairment	-6	23	31
Pre-tax Profit	51	44	49

Senior Unsecured Bonds (EUR BMK)



Company Ratios

	2019Y	2020Y	2021Y	
Net Interest Margin	1.60	1.41	1.38	
ROAE	1.46	1.38	1.32	
Cost-to-Income	72.00	69.59	62.94	
Core Tier 1 Ratio	12.21	12.27	12.18	

	2019Y	2020Y	2021Y
Liquidity Coverage Ratio	142.20	158.90	123.50
IFRS Tier 1 Leverage Ratio	-	-	-
NPL/ Loans at Amortised Cost	2.73	2.27	-
Reserves/Loans at Amort. Cost	1.41	1.28	-

Source: Bloomberg, S&P Global Market Intelligence, NORD/LB Markets Strategy & Floor Research; as of: 18.10.2022

Strengths / Opportunities

- Regional market position
- Member of the Sparkassen financial group (support)

- Profitability
- Regional concentration risks

Sparkasse Pforzheim Calw – Mortgage

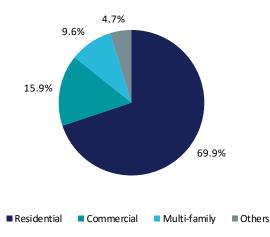
Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Cover Pool Data

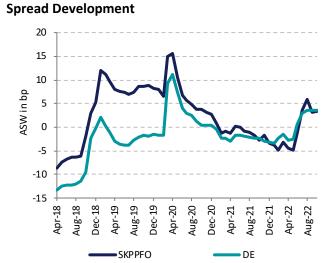
Cover pool volume (EURm)	2,539
Amount outstanding (EURm)	1,853
-thereof ≥ EUR 250m	27.0%
Current OC (nominal)	37.0%
Committed OC	n/a
Cover type	Mortgage
Main country	100% Germany
Main region	n/a
Number of loans	n/a
Number of borrowers	n/a
Avg. exposure to borrowers (EUR)	n/a
WAL (cover pool)	n/a
WAL (covered bonds)	n/a
Fixed interest (cover pool)	94.2%
Fixed interest (covered bonds)	43.3%
LTV (indexed)	n/a
LTV (unindexed)	52.9%
Loans in arrears	0.0%
	0.078

Rating (S&P) Rating (Fitch) AAA Rating (DBRS) TPI **TPI** leeway Collateral score RRL JRL Unused notches AAA credit risk (%) PCU 6 Recovery uplift 2 **Outstanding ESG BMKs** No LCR ELIGIBLE Yes LCR level (SBmk) 2A 10% Risk weight Maturity structure (SBmk) SB

Borrower Types



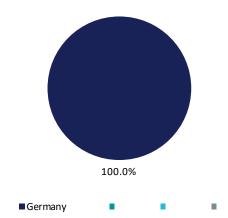
.



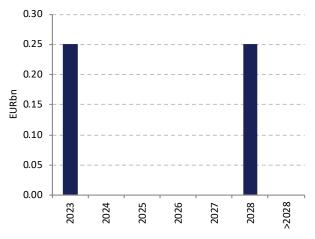
Source: Issuer, Rating agencies, Bloomberg, NORD/LB Markets Strategy & Floor Research

Regional Distribution

Rating (Moody's)



Redemption Profile (SBmk)







Stadtsparkasse München

Germany

Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Ratings

	Rating	Outlook
Fitch	A+	Stable
Moody's	-	-
S&P	-	-

Homepage

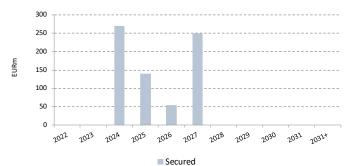
www.sskm.de

Stadtsparkasse München (SSKM) was established in 1824 and is the fourth largest savings bank in Germany. It operates in the legal form of a public law institution. SSKM has around 2,000 employees and 240 apprentice, who serve both retail and business customers at over 130 locations (including self-service locations). As a result, SSKM has by far the most comprehensive branch network in Munich and is the largest bank in Bavaria. According to information from SSKM itself, it is also a market leader in the retail customer segment for the metropolitan area of Munich. SSKM is part of the Sparkassenverband Bayern (Association of Bavarian Savings Banks) and benefits from a joint protection scheme as a member of the Sparkassen financial group. In addition, SSKM is advancing the digital transformation of its business. According to its own information, around 180,000 of its approximately 807,400 customers are already using the bank's own mobile banking app. In the loans business, the focus of the institute is on the corporate and freelance customer segment with a funding volume of EUR 5.5bn, while a total of EUR 9.9bn is attributable to retail customers (FY 2021). As at year-end 2021, the cumulative lending volume amounted to around EUR 16.2bn (2020: EUR 15.5bn). This equates to a year-on-year increase of 4.7%. The total volume of customer deposits amounted to EUR 18.7bn (FY 2021), with the share of retail customer deposits coming in at around 79% here. In addition to deposits, SSKM's refinancing operations also include mortgage Pfandbriefe and public Pfandbriefe issuances. As at financial year-end 2021, the bank posted a cost-income ratio of 63.2% (FY 2020: 64.3%).

Balance Sheet

(EURm)	2019Y	2020Y	2021Y
Net Loans to Customers	14,525	15,183	15,847
Total Securities	2,785	2,807	2,422
Total Deposits	16,419	17,694	18,660
Tier 1 Common Capital	1,826	1,968	2,000
Total Assets	20,065	22,095	23,749
Total Risk-weighted Assets	13,512	13,546	14,618

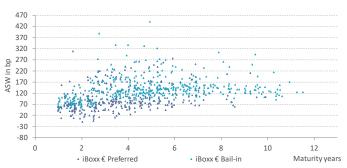
Redemption Profile



Income Statement

(EURm)	2019Y	2020Y	2021Y
Net Interest Income	258	257	238
Net Fee & Commission Inc.	131	132	148
Net Trading Income	3	2	2
Operating Expense	336	318	312
Credit Commit. Impairment	135	72	58
Pre-tax Profit	46	78	84

Senior Unsecured Bonds (EUR BMK)



Company Ratios

	2019Y	2020Y	2021Y	
Net Interest Margin	1.38	1.29	1.10	Li
ROAE	2.19	1.74	2.00	١F
Cost-to-Income	54.81	67.52	68.57	Ν
Core Tier 1 Ratio	13.51	14.53	13.68	R

	2019Y	2020Y	2021Y
Liquidity Coverage Ratio	149.60	181.00	141.11
IFRS Tier 1 Leverage Ratio	-	-	-
NPL/ Loans at Amortised Cost	-	-	-
Reserves/Loans at Amort. Cost	0.12	0.20	0.30
Flage Deservely as af 10 10 2022			

Source: Bloomberg, S&P Global Market Intelligence, NORD/LB Markets Strategy & Floor Research; as of: 18.10.2022

Strengths / Opportunities

- Market penetration in it's home region
- Member of the joint liability scheme of the Sparkassen

 Regional risk concentration financial group

- Profitability

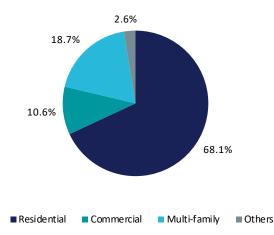
Stadtsparkasse München – Mortgage

Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

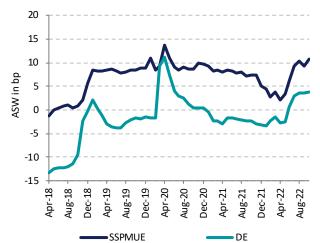
Cover Pool Data

Cover pool volume (EURm)	1,276
Amount outstanding (EURm)	715
-thereof ≥ EUR 250m	69.9%
Current OC (nominal)	78.4%
Committed OC	n/a
Cover type	Mortgage
Main country	100% Germany
Main region	n/a
Number of loans	n/a
Number of borrowers	n/a
Avg. exposure to borrowers (EUR)	n/a
WAL (cover pool)	n/a
WAL (covered bonds)	n/a
Fixed interest (cover pool)	98.6%
Fixed interest (covered bonds)	100.0%
LTV (indexed)	n/a
LTV (unindexed)	51.1%
Loans in arrears	0.0%

Borrower Types

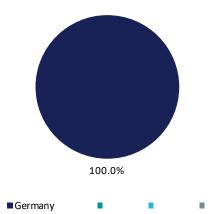


Spread Development

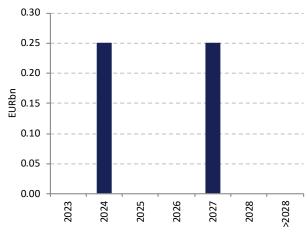


Source: Issuer, Rating agencies, Bloomberg, NORD/LB Markets Strategy & Floor Research

Regional Distribution

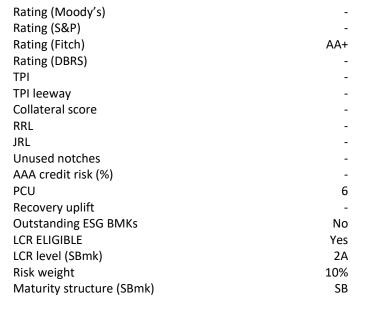


Redemption Profile (SBmk)



Germany





NORD/LB

UniCredit Bank

Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Ratings

	Rating	Outlook
Fitch	BBB+	Negative
Moody's	A2	Negative
S&P	BBB+	Stable

Homepage

www.hypovereinsbank.de

UniCredit Bank AG (UCB) is the parent company of HVB Group and is wholly owned by the Italian UniCredit S.p.A (global systemically important institution; add. capital buffer: 1.0%). Although the name has been changed from Bayerische Hypo- und Vereinsbank AG to UCB, the established HypoVereinsbank brand remains. Worldwide, HVB Group has around 461 business outlets, 325 of which are in Germany. HVB Group offers its retail and corporate customers, public-sector entities, international companies and institutional customers comprehensive services of a universal bank, and in doing so can offer its customers access to commercial banks from the UniCredit Group in 13 countries. The business is divided into the segments "Commercial Banking", "Corporate & Investment Banking (CIB)", "Group Corporate Center" and "Others". As a universal bank, UCB focuses on the regional development of the German market and represents the competence center for the investment banking and markets activities of the entire UniCredit Group. The Group-wide strategic plan "Team 23" was successfully implemented, and the focus of the new threeyear strategic plan "UniCredit Unlocked 2022-24" is on simplifying the operating model with comprehensive process optimization and digitalization, growth in selected business areas, and an increase in capital efficiency. According to UCB, 2022 profit before tax is expected to be very significantly higher than the 2021 result. In terms of CET1 ratio, the bank expects a slight decrease compared to year-end 2021 (FY/2021: 17.4%).

Balance Sheet

(EURm)	2020Y	2021Y	2022H1
Net Loans to Customers	144,247	146,794	152,382
Total Securities	107,062	105,709	101,767
Total Deposits	143,803	134,340	150,137
Tier 1 Common Capital	15,122	15,167	15,800
Total Assets	338,124	312,112	342,016
Total Risk-weighted Assets	80,637	86,928	81,000

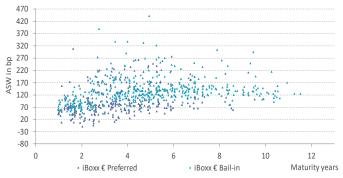
Redemption Profile



Income Statement

(EURm)	2020Y	2021Y	2022H1
Net Interest Income	2,413	2,516	1,291
Net Fee & Commission Inc.	1,007	1,115	607
Net Trading Income	581	731	487
Operating Expense	2,809	3,405	1,322
Credit Commit. Impairment	730	113	-28
Pre-tax Profit	1,072	545	939

Senior Unsecured Bonds (EUR BMK)



Company Ratios

	2020Y	2021Y	2022H1
Net Interest Margin	0.77	0.79	0.81
ROAE	3.63	1.38	8.14
Cost-to-Income	68.66	81.93	59.02
Core Tier 1 Ratio	18.75	17.45	19.51

	2020Y	2021Y	2022H1
Liquidity Coverage Ratio	-	-	-
IFRS Tier 1 Leverage Ratio	5.25	5.68	5.44
NPL/ Loans at Amortised Cost	2.30	2.05	1.96
Reserves/Loans at Amort. Cost	1.31	1.19	1.12

Source: Bloomberg, S&P Global Market Intelligence, NORD/LB Markets Strategy & Floor Research; as of: 05.06.2020

Strengths / Opportunities

- Liquidity profile
- Capitalization

Risks / Weaknesses

- Strong link to parent company affects rating
- Earnings volatile due to capital market business



Germany 📕



UniCredit Bank – Mortgage

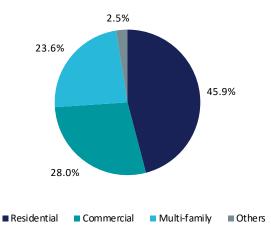
Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Cover Pool Data

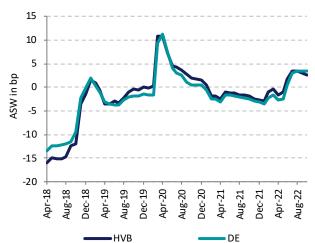
Cover pool volume (EURm)	30,313
Amount outstanding (EURm)	24,916
-thereof ≥ EUR 500m	58.2%
Current OC (nominal)	21.7%
Committed OC	2.0%
Cover type	Mortgage
Main country	100% Germany
Main region	44% Bavaria
Number of loans	138,437
Number of borrowers	106,040
Avg. exposure to borrowers (EUR)	285,868
WAL (cover pool)	6.9y
WAL (covered bonds)	6.6y
Fixed interest (cover pool)	82.7%
Fixed interest (covered bonds)	98.9%
LTV (indexed)	n/a
LTV (unindexed)	42.0%
Loans in arrears	0.0%

Rating (Moody's)	Aaa
Rating (S&P)	-
Rating (Fitch)	-
Rating (DBRS)	-
TPI	High
TPI leeway	4
Collateral score	12.2%
RRL	-
JRL	-
Unused notches	-
AAA credit risk (%)	-
PCU	-
Recovery uplift	-
Outstanding ESG BMKs	Yes
LCR ELIGIBLE	Yes
LCR level (Bmk)	1
Risk weight	10%
Maturity structure (Bmk)	SB

Borrower Types

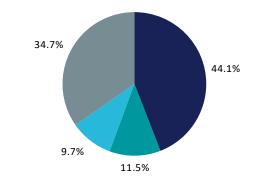


Spread Development



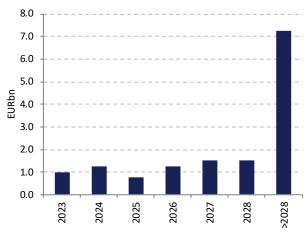
Source: Issuer, Rating agencies, Bloomberg, NORD/LB Markets Strategy & Floor Research

Regional Distribution



■ Bavaria ■ Berlin ■ North Rhine-Westphalia ■ Others

Redemption Profile (Bmk)





UniCredit Bank – Public Sector

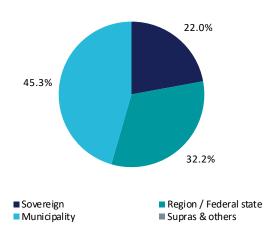
Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Cover Pool Data

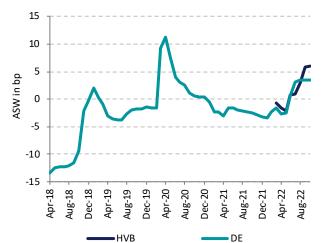
Cover pool volume (EURm)	6,376
Amount outstanding (EURm)	4,042
-thereof ≥ EUR 500m	24.7%
Current OC (nominal)	57.7%
Committed OC	2.0%
Cover type	Mortgage
Main country	92% Germany
Main region	24% Berlin
Number of loans	1,601
Number of borrowers	843
Avg. exposure to borrowers (EUR)	7,563,108
WAL (cover pool)	5.2y
WAL (covered bonds)	3.9y
Fixed interest (cover pool)	71.4%
Fixed interest (covered bonds)	99.9%
LTV (indexed)	n/a
LTV (unindexed)	n/a
Loans in arrears	0.0%

Rating (Moody's)	Aaa
Rating (S&P)	-
Rating (Fitch)	-
Rating (DBRS)	-
TPI	High
TPI leeway	4
Collateral score	4.9%
RRL	-
JRL	-
Unused notches	-
AAA credit risk (%)	-
PCU	-
Recovery uplift	-
Outstanding ESG BMKs	No
LCR ELIGIBLE	Yes
LCR level (Bmk)	1
Risk weight	10%
Maturity structure (Bmk)	SB

Borrower Types

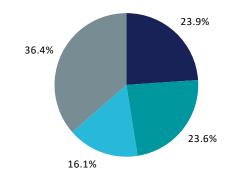


Spread Development



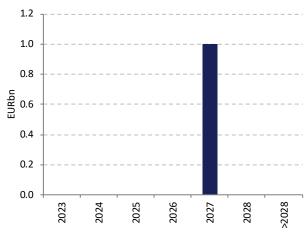
Source: Issuer, Rating agencies, Bloomberg, NORD/LB Markets Strategy & Floor Research

Regional Distribution



■ Berlin ■ North Rhine-Westphalia ■ Bavaria ■ Others

Redemption Profile (Bmk)







Wüstenrot Bausparkasse

Germany

Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Ratings

	Rating	Outlook
Fitch	-	-
Moody's	-	-
S&P	A-	Stable

Homepage

www.wuestenrot.de

Founded in 1921, Wüstenrot Bausparkasse AG (Wüstenrot) is the oldest private building society in Germany. In 2017, it became the first building society to obtain a Pfandbrief licence. Since merging with the long-standing Wüstenrot und Württembergische (W&W), the savings bank has been part of the eponymous Group. W&W is the sole owner of Wüstenrot. Headquartered in Ludwigsburg, Wüstenrot focuses on the German market, although a representative branch is also operated in Luxembourg. Within the Group, this is responsible for the "Wohnen" (residential) segment, which also includes in addition to the building society Wüstenrot Haus- und Städtebau GmbH and Wüstenrot Immobilien GmbH. As the second-largest building society in Germany, it primarily offers building loan agreements and construction finance. In 2017, significant portions of Wüstenrot Bank AG Pfandbriefbank's customer deposit business in addition to the construction finance and Pfandbrief business in their entirety were transferred over to Wüstenrot. In 2020, Wüstenrot formulated a strategic approach on the basis of four key pillars that is being consistently pursued under the "W&W Besser!" initiative. The key pillars are as follows: "Service - inspire customers and employees", "Double market growth in profitable segments", "Sales - tap into new customer groups and improve service for existing customers", and "Reduce costs to at least market level". Another focus for Wüstenrot is the implementation of a new core banking system (b@w) as an investment in its digital transformation and to support the expansion of construction financing.

Balance Sheet

2020Y	2021Y	2022H1
22,190	23,235	24,140
3,928	4,238	3,687
22,923	23,020	23,462
1,052	1,155	1,167
29,195	29,705	30,512
6,681	6,639	6,859
	22,190 3,928 22,923 1,052 29,195	22,190 23,235 3,928 4,238 22,923 23,020 1,052 1,155 29,195 29,705

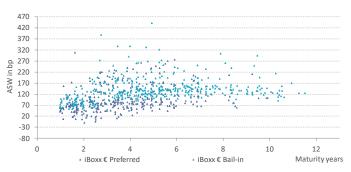
Redemption Profile



Income Statement

(EURm)	2020Y	2021Y	2022H1
Net Interest Income	343	355	225
Net Fee & Commission Inc.	-64	-48	-30
Net Trading Income	-	-	-
Operating Expense	360	373	199
Credit Commit. Impairment	-12	-42	67
Pre-tax Profit	56	49	39

Senior Unsecured Bonds (EUR BMK)



Company Ratios

	2020Y	2021Y	2022H1
Net Interest Margin	1.20	1.21	1.50
ROAE	2.61	2.53	2.50
Cost-to-Income	113.41	102.74	61.23
Core Tier 1 Ratio	15.75	17.40	17.01

	2020Y	2021Y	2022H1
Liquidity Coverage Ratio	238.38	202.15	177.97
IFRS Tier 1 Leverage Ratio	-	-	-
NPL/ Loans at Amortised Cost	1.13	1.08	-
Reserves/Loans at Amort. Cost	0.64	-	-

Source: Bloomberg, S&P Global Market Intelligence, NORD/LB Markets Strategy & Floor Research; as of: 18.10.2022

Strengths / Opportunities

- Market position in building society business
- Deposit basis

- Fiercely competitive market
- Profitability

Wüstenrot Bausparkasse – Mortgage

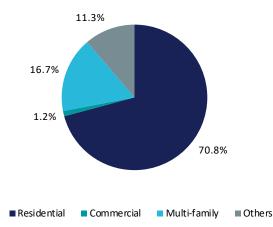
Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Cover Pool Data

Cover pool volume (EURm)	3,103
	,
Amount outstanding (EURm)	2,537
-thereof ≥ EUR 250m	39.4%
Current OC (nominal)	22.3%
Committed OC	n/a
Cover type	Mortgage
Main country	100% Germany
Main region	22% Bavaria
Number of loans	33,570
Number of borrowers	29,857
Avg. exposure to borrowers (EUR)	103,923
WAL (cover pool)	5.0y
WAL (covered bonds)	5.5y
Fixed interest (cover pool)	99.2%
Fixed interest (covered bonds)	99.2%
LTV (indexed)	n/a
LTV (unindexed)	46.6%
Loans in arrears	0.0%

Rating (S&P)	AAA
Rating (Fitch)	-
Rating (DBRS)	-
TPI	-
TPI leeway	-
Collateral score	-
RRL	a+
JRL	aa+
Unused notches	2
AAA credit risk (%)	3.74
PCU	-
Recovery uplift	-
Outstanding ESG BMKs	No
LCR ELIGIBLE	Yes
LCR level (Bmk)	1
Risk weight	10%
Maturity structure (SBmk)	SB

Borrower Types



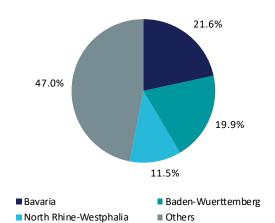
Spread Development



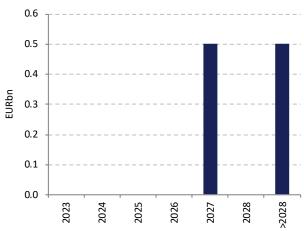
Source: Issuer, Rating agencies, Bloomberg, NORD/LB Markets Strategy & Floor Research

Regional Distribution

Rating (Moody's)



Redemption Profile (SBmk)







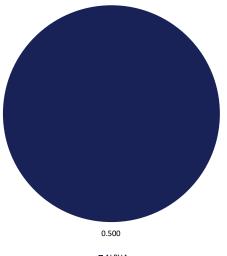
Greece 🔚

Market Overview Covered Bonds

Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Cover Pool Volume	EUR 0.68bn	Outstanding volume (Bmk)	EUR 0.50bn
Amount outstanding	EUR 0.50bn	Number of benchmarks	1
Number of issuer	1	Outstanding ESG volume (Bmk)	-
No of cover pools	1	Number of ESG benchmarks	-
there of M / PS / others	1/0/0	Outstanding volume (SBmk)	-
Ratings (low / high)	BBB- / A3	Number of subbenchmarks	-
Best possible LCR level	Level 1	Maturity types	SB

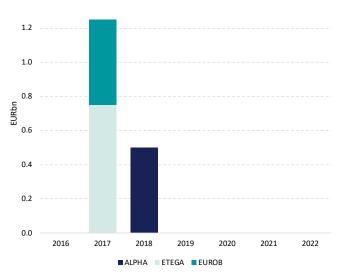
Outstanding benchmark volume¹ (EURbn)



ALPHA

1.4 -----

Benchmark issuance volume¹



Benchmark redemption profile¹: 11/2022 - 10/2023

0.60

0.50

0.40

EURbn 0.30

0.20

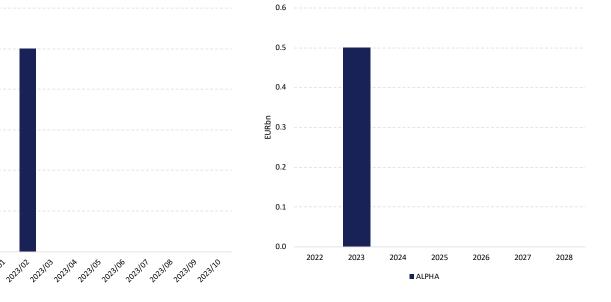
0.10

0.00

2022/11

2022/12 23/01





Source: Issuer, Rating agencies, Bloomberg, NORD/LB Markets Strategy & Floor Research; ¹ based on Bloomberg ticker; ² Redemptions 2022: 11/22 – 12/22

Greece 🔚

Alpha Services and Holdings

Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Ratings		
	Rating	Outlook
Fitch	В	Positive
Moody's	B3	Positive
S&P	B-	Positive

Homepage

www.alpha.gr

Alpha Bank (Alpha), which was founded in 2021, is one of the leading banks in the Greek financial sector. Since April 2021, as part of a restructuring process, the former Alpha Bank A.E. has been acting under the new name Alpha Services and Holdings S.A. (Alpha Holdings). Following the name change, Alpha Holdings outsourced all its banking activities to its wholly owned subsidiary, the recently established Alpha Bank S.A., making Alpha the operating business unit of the Group. The main shareholder of the Group is the Hellenic Financial Stability Fund with 9.0% (02 August 2022). In Greece, the bank has high market shares for deposits (FY 2021: 21.7%) and loans (23.3%). Alpha operates on its domestic market of Greece in addition to the UK, Cyprus, Romania, Serbia, Bulgaria, Ireland and Albania. However, the majority of earnings is generated in Greece. Alpha is a universal bank. Therefore, in addition to the traditional banking products, it also offers its customers products and services from the insurance, factoring, leasing, asset management and investment banking segments. Following the conclusion of the Galaxy Transaction in 2021, Alpha was able to reduce its NPEs by EUR 10.8bn. As part of the transaction, the bank transferred 80% of its shares in Cepal Holdings S.A. and 51% of its shares in Mezzanine and Junior Notes to Davidson Kempner Capital Management LP. For the next 13 years, the portfolio will be managed by Alpha. As a result of the transaction, the NPE ratio has reduced from 42.8% (Q1 2021) by more than 30pp. As at May 2022, it stood at 12.8% (target FY 2022: fall into single-digit range). In its strategic plan, Alpha is aiming for an increase in the CET1 ratio to above 15% by 2024 (fully loaded; Q1 2021: 10.9%).

Balance Sheet

(EURm)	2020Y	2021Y	2022H1
Net Loans to Customers	39,380	36,860	38,098
Total Securities	11,348	11,587	14,042
Total Deposits	43,831	46,970	48,496
Tier 1 Common Capital	7,827	4,662	4,445
Total Assets	70,040	73,356	75,782
Total Risk-weighted Assets	45,369	35,333	35,966

Redemption Profile



Operating Expense Credit Commit. Impairment

Income Statement

Net Interest Income

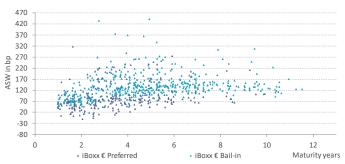
Net Trading Income

Pre-tax Profit

Net Fee & Commission Inc.

(EURm)

Senior Unsecured Bonds (EUR BMK)



2020Y

1,527

332

51

1,052

1,306

111

2021Y

1,376

400

-31

1,050

1,412

-2,929

2022H1

586 209

93

495

386

337

Company Ratios

	2020Y	2021Y	2022H1
Net Interest Margin	2.61	2.22	1.84
ROAE	1.24	-41.86	7.94
Cost-to-Income	54.55	59.09	53.79
Core Tier 1 Ratio	17.25	13.19	12.36

	2020Y	2021Y	2022H1
Liquidity Coverage Ratio	150.00	171.18	177.90
IFRS Tier 1 Leverage Ratio	11.57	6.51	6.04
NPL/ Loans at Amortised Cost	37.45	6.58	4.40
Reserves/Loans at Amort. Cost	18.94	5.48	3.04

Source: Bloomberg, S&P Global Market Intelligence, NORD/LB Markets Strategy & Floor Research; as of: 17.10.2022

Strengths / Opportunities

- Position in domestic market
- Funding profile
- Capitalisation

- Asset quality (NPE exposure)
- Level of DTCs
- Profitability

Alpha Bank – Mortgage

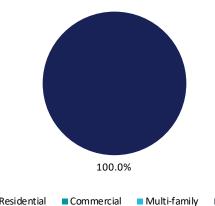
Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Cover Pool Data

Cover pool volume (EURm)	675
Amount outstanding (EURm)	500
-thereof ≥ EUR 500m	100.0%
Current OC (nominal)	35.1%
Committed OC	27.0%
Cover type	Mortgage
Main country	100% Greece
Main region	46% Attica
Number of loans	19,813
Number of borrowers	16,813
Avg. exposure to borrowers (EUR)	40,165
WAL (cover pool)	7.9y
WAL (covered bonds)	0.5y
Fixed interest (cover pool)	17.1%
Fixed interest (covered bonds)	100.0%
LTV (indexed)	44.4%
LTV (unindexed)	43.1%
Loans in arrears	0.0%

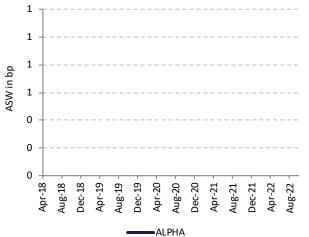
Rating (Moody's)	A3
Rating (S&P)	-
Rating (Fitch)	BBB-
Rating (DBRS)	-
TPI	Improbable
TPI leeway	0
Collateral score	18.7%
RRL	-
JRL	-
Unused notches	-
AAA credit risk (%)	-
PCU	6
Recovery uplift	-
Outstanding ESG BMKs	No
LCR ELIGIBLE	Yes
LCR level (Bmk)	2B
Risk weight	20%
Maturity structure (Bmk)	SB

Borrower Types



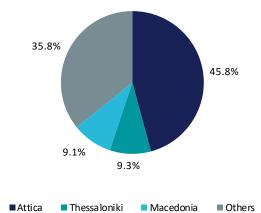
Residential Others

Spread Development

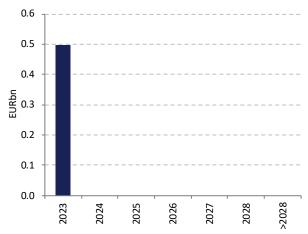


Source: Issuer, Rating agencies, Bloomberg, NORD/LB Markets Strategy & Floor Research

Regional Distribution



Redemption Profile (Bmk)



NORD/LB

Greece 🔚



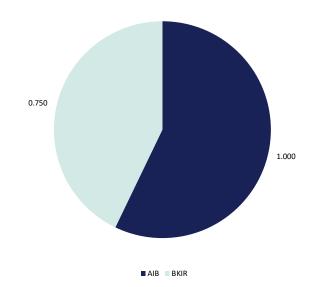
Ireland

Market Overview Covered Bonds

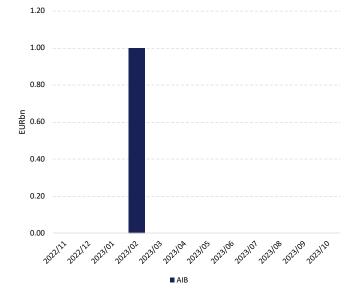
Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Cover Pool Volume	EUR 26.00bn	Outstanding volume (Bmk)	EUR 1.75bn
Amount outstanding	EUR 12.73bn	Number of benchmarks	2
Number of issuer	2	Outstanding ESG volume (Bmk)	-
No of cover pools	2	Number of ESG benchmarks	-
there of M / PS / others	2/0/0	Outstanding volume (SBmk)	-
Ratings (low / high)	ΑΑΑ / ΑΑΑ	Number of subbenchmarks	-
Best possible LCR level	Level 1	Maturity types	SB

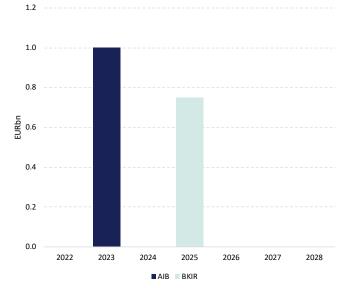




Benchmark redemption profile¹: 11/2022 - 10/2023

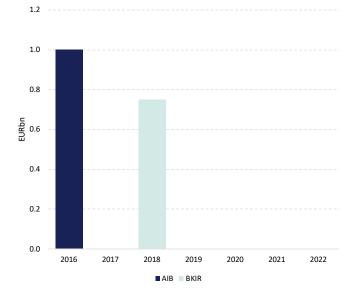


Benchmark redemption profile¹²



Source: Issuer, Rating agencies, Bloomberg, NORD/LB Markets Strategy & Floor Research; ¹ based on Bloomberg ticker; ² Redemptions 2022: 11/22 – 12/22

Benchmark issuance volume¹



Allied Irish Banks

Ireland

Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Ratings

-		
	Rating	Outlook
Fitch	BBB+	Stable
Moody's*	A1	Stable
S&P	A-	Stable

Homepage

www.aib.ie

*Senior Unsecured

Allied Irish Banks plc (AIB) provides its primarily Irish retail, corporate and business clients with a wide range of financial products and services in its role as a universal bank. The majority of AIB's operating earnings is accordingly generated in Ireland. AIB is the secondlargest Irish bank in terms of assets, although it is actually the market leader in many product segments within the domestic market. AIB has a market share of 37% for current accounts (H1 2022), 21% for private loans and 31% for mortgage loans. In 2021, AIB purchased the corporate and commercial loan portfolio of Ulster Bank. It also entered into a joint venture with Great-West LifeCo (insurance products, investment solutions) and Goodbody (stockbroker) and acquired a 50% stake in Nifti (car leasing), in this way expanding its product base. AIB was bailed out at the start of the financial crisis in 2008 by the Irish government, which practically assumed full control of the bank in 2010. Today (1 August 2022), the Irish government continues to hold around 63% of the shares via the Ireland Strategic Investment Fund. AIB is divided into the following four segments: Retail Banking, AIB Capital Markets, AIB UK and Group. In addition to a realignment strategy that focused on investment in digitisation, cost-cutting exercises and capital strengthening, the holding structure of the bank was also created in the form of the AIB Group plc as holding company for the issuance of MREL-eligible senior bonds and Allied Irish Banks p.l.c. as its operating subsidiary (OpCo). The MREL requirement stands at 27.1% of RWA from 2022 and as at H1 2022, the MREL ratio stood at 30.8%. As at H1 2022, the gross NPE ratio stood at 4.2%, compared with 5.2% as at FY 2021.

Balance Sheet			
(EURm)	2020Y	2021Y	2022H1
Net Loans to Customers	56,841	56,508	57 <i>,</i> 055
Total Securities	21,714	21,752	23,577
Total Deposits	81,957	92 <i>,</i> 866	95,917
Tier 1 Common Capital	10,047	10,102	9,424
Total Assets	110,385	127,875	132,948

Redemption Profile (Group)

Total Risk-weighted Assets



53,036

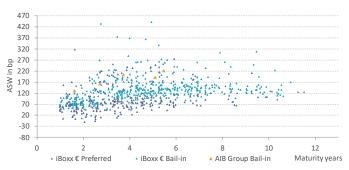
52.637

Income Statement

56,776

(EURm)	2020Y	2021Y	2022H1
Net Interest Income	1,872	1,794	895
Net Fee & Commission Inc.	395	480	287
Net Trading Income	78	100	122
Operating Expense	1,754	1,819	976
Credit Commit. Impairment	1,460	-239	-310
Pre-tax Profit	-931	629	537

Senior Unsecured Bonds (Group; EUR BMK)



Company Ratios

	2020Y	2021Y	2022H1
Net Interest Margin	1.89	1.58	1.44
ROAE	-5.36	4.76	7.18
Cost-to-Income	73.45	75.79	74.62
Core Tier 1 Ratio	18.94	19.19	16.60

	2020Y	2021Y	2022H1
Liquidity Coverage Ratio	168.91	194.70	204.22
IFRS Tier 1 Leverage Ratio	9.28	8.03	7.25
NPL/ Loans at Amortised Cost	7.66	5.55	4.28
Reserves/Loans at Amort. Cost	4.23	3.24	2.40

Source: Bloomberg, S&P Global Market Intelligence, NORD/LB Markets Strategy & Floor Research; as of: 17.10.2022

Strengths / Opportunities

- Liquidity
- Capital ratios
- National market position in core segments

- Loan quality (positive trend)
- Concentration risks
- Profitability

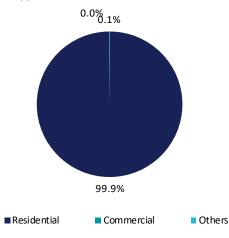
Ireland

Allied Irish Banks – Mortgage

Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Cover Pool Data

Cover pool volume (EURm)	15,764
Amount outstanding (EURm)	8,775
-thereof ≥ EUR 500m	11.4%
Current OC (nominal)	79.6%
Committed OC	25.0%
Cover type	Mortgage
Main country	100% Ireland
Main region	36% Dublin
Number of loans	122,190
Number of borrowers	n/a
Avg. exposure to borrowers (EUR)	n/a
WAL (cover pool)	19.6y
WAL (covered bonds)	3.2y
Fixed interest (cover pool)	46.2%
Fixed interest (covered bonds)	11.7%
LTV (indexed)	49.2%
LTV (unindexed)	58.3%
Loans in arrears	0.0%



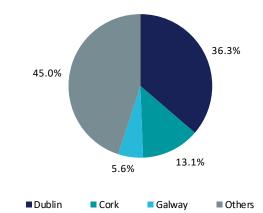
Spread Development



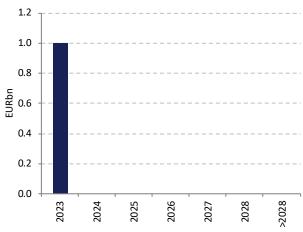
Source: Issuer, Rating agencies, Bloomberg, NORD/LB Markets Strategy & Floor Research

Rating (Moody's)	Aaa
Rating (S&P)	AAA
Rating (Fitch)	-
Rating (DBRS)	-
TPI	Probable-High
TPI leeway	3
Collateral score	5.1%
RRL	a+
JRL	aa-
Unused notches	3
AAA credit risk (%)	9.89
PCU	-
Recovery uplift	-
Outstanding ESG BMKs	No
LCR ELIGIBLE	Yes
LCR level (Bmk)	1
Risk weight	10%
Maturity structure (Bmk)	SB

Regional Distribution



Redemption Profile (Bmk)



Bank of Ireland Group

Ireland

Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Ratings

	Rating	Outlook
Fitch	BBB	Stable
Moody's	A3	Stable
S&P	BBB-	Stable

Homepage

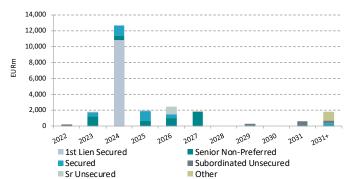
www.bankofireland.com

Having been founded as early as 1783, Bank of Ireland (BOI) today constitutes the largest Irish financial institution in terms of assets following numerous acquisitions. In addition to retail banking and corporate banking, BOI is also active in the areas of insurance, credit cards and property financing. According to its own information, it has high market shares in the life assurance business in Ireland (FY 2021: 20%) and the lending business (23%), and is the national leader in the retail segment. The bank offers its products and services predominantly on its domestic market and in the UK via a comprehensive branch and distribution network, but it is also active in selected international markets. BOI divides its operations into the segments Retail Ireland, Wealth and Insurance, Retail UK, Corporate & Markets and Group Centre. Following significant value adjustments in BOI's property portfolio, in 2008, the bank was forced to call on state support (EUR 3.5bn). The Irish government sold all of its shares in BOI in September 2022. The main shareholder is BlackRock with 8.3%, followed by Norges Bank with 5.1%. The NPE ratio as at Q1 2022 was 5.3%. As at the end of 2021, the MREL ratio stood at 31.4%, 645 basis points above the requirement of 24.95%. In 2021, BOI presented its ambitious sustainability strategy, "Investing in Tomorrow." In addition to issuing green bonds, the bank also plans to achieve net-zero emissions by 2030. BOI exceeds the regulatory minimum requirements for leverage ratio and CET1 ratio at 6.2% (fully loaded; FY 2021) and 16.3% (fully phased; FY 2021; 16.0%) respectively.

Balance Sheet

(EURm)	2020Y	2021Y	2022H1
Net Loans to Customers	76,581	76,346	74,616
Total Securities	36,817	37,134	31,442
Total Deposits	88,637	92,754	92,570
Tier 1 Common Capital	7,216	7,896	7,577
Total Assets	133,754	155,268	156,153
Total Risk-weighted Assets	48,368	46,386	47,330

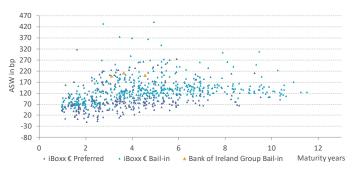
Redemption Profile (Group)



Income Statement

(EURm)	2020Y	2021Y	2022H1
Net Interest Income	2,089	2,227	1,077
Net Fee & Commission Inc.	256	269	130
Net Trading Income	33	127	96
Operating Expense	2,091	1,938	990
Credit Commit. Impairment	1,130	-200	45
Pre-tax Profit	-760	1,221	335

Senior Unsecured Bonds (Group; EUR BMK)



Company Ratios

	2020Y	2021Y	2022H1
Net Interest Margin	1.66	1.62	1.46
ROAE	-7.05	10.07	4.77
Cost-to-Income	79.17	64.73	70.46
Core Tier 1 Ratio	14.92	17.02	16.01

	2020Y	2021Y	2022H1
Liquidity Coverage Ratio	152.83	181.36	193.91
IFRS Tier 1 Leverage Ratio	5.52	5.19	5.03
NPL/ Loans at Amortised Cost	5.91	5.68	5.61
Reserves/Loans at Amort. Cost	2.86	2.51	2.47

Source: Bloomberg, S&P Global Market Intelligence, NORD/LB Markets Strategy & Floor Research; as of: 17.10.2022

Strengths / Opportunities

- Market position in Ireland
- Deposit basis
- Liquidity buffer

- Concentration risks (UK, IE)
- Competition
- NPL ratio

Bank of Ireland – Mortgage

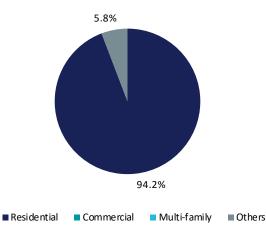
Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Cover Pool Data

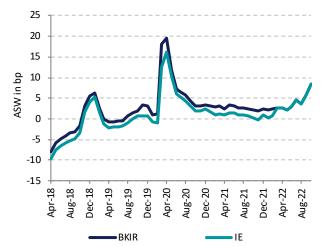
Cover pool volume (EURm)	10,238
Amount outstanding (EURm)	3,954
-thereof ≥ EUR 500m	19.0%
Current OC (nominal)	158.9%
Committed OC	5.0%
Cover type	Mortgage
Main country	100% Ireland
Main region	41% Dublin
Number of loans	73,021
Number of borrowers	n/a
Avg. exposure to borrowers (EUR)	n/a
WAL (cover pool)	10.7y
WAL (covered bonds)	3.9y
Fixed interest (cover pool)	72.0%
Fixed interest (covered bonds)	31.7%
LTV (indexed)	47.1%
LTV (unindexed)	59.1%
Loans in arrears	0.0%

nating (modal) s/	7100
Rating (S&P)	-
Rating (Fitch)	-
Rating (DBRS)	-
TPI	Probable-High
TPI leeway	3
Collateral score	9.9%
RRL	-
JRL	-
Unused notches	-
AAA credit risk (%)	-
PCU	-
Recovery uplift	2
Outstanding ESG BMKs	No
LCR ELIGIBLE	Yes
LCR level (Bmk)	1
Risk weight	10%
Maturity structure (Bmk)	SB

Borrower Types



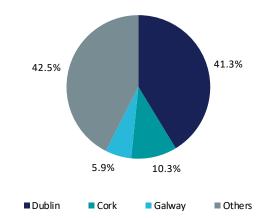
Spread Development



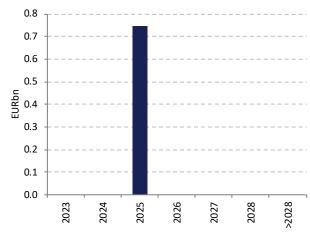
Source: Issuer, Rating agencies, Bloomberg, NORD/LB Markets Strategy & Floor Research

Regional Distribution

Rating (Moody's)



Redemption Profile (Bmk)







Aaa

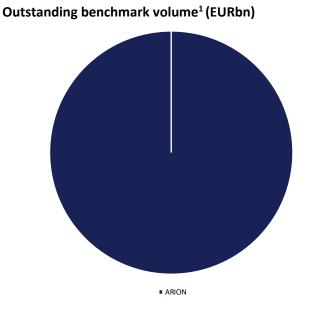
Iceland

Market Overview Covered Bonds

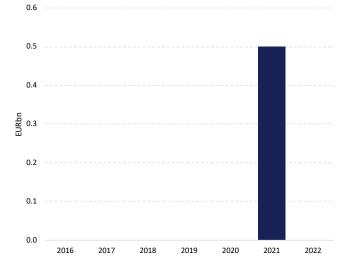
Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Cover Pool Volume	EUR 4.84bn	Outstanding volume (Bmk)	EUR 0.50bn
Amount outstanding	EUR 3.50bn	Number of benchmarks	1
Number of issuer	2	Outstanding ESG volume (Bmk)	-
No of cover pools	2	Number of ESG benchmarks	-
there of M / PS / others	2/0/0	Outstanding volume (SBmk)	EUR 0.30bn
Ratings (low / high)	A / A	Number of subbenchmarks	1
Best possible LCR level	(Level 1) ^a	Maturity types	SB

^a under the assumption of finalized adjustments in the context of the EU directive for bonds issued after 8 July 2022



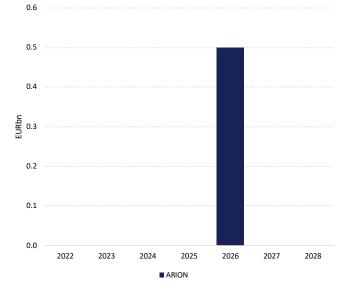
Benchmark issuance volume¹



Benchmark redemption profile¹: 11/2022 - 10/2023

1.00 0.80 0.60 EURbn 0.40 0.20 0.00 2022/12 2023/01 2023/02 2022/12 2023/03 2023/05 2023/04 2023/06 2023/07 2023/08 2023/10

Benchmark redemption profile¹²



Source: Issuer, Rating agencies, Bloomberg, NORD/LB Markets Strategy & Floor Research; ¹ based on Bloomberg ticker; ² Redemptions 2022: 11/22 – 12/22

Arion Banki

Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Ratings

	Rating	Outlook
Fitch	-	-
Moody's	Baa1	Positive
S&P	BBB	Stable

Homepage

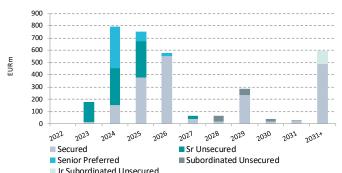
www.arionbanki.is

Founded in 2008, the Reykjavík-based Arion Banki (Arion) is one of three domestic systemically important banks (D-SIBs) in Iceland, where the bank boasts a market share of 20% for mortgages and 25% in the area of lending to large and medium-sized companies. The largest shareholder in Arion, which is listed on the Icelandic stock exchange, is the pension fund Gildi lífeyrissjódur (Q2 2022: 9.64%). With 746 employees, the bank offers various financial services to institutional customers in addition to retail and corporate clients. Arion's traditional deposit and lending business is supplemented by services in areas such as investment banking, funds management and insurance products. Funds management and insurance services are offered via the wholly owned subsidiaries Stefnir and Vördur respectively. The bank has defined three operational business segments: Retail Banking, Corporate & Investment Banking (CIB) as well as Markets and Stefnir. Moreover, reporting at Arion is rounded off by the segments Treasury, Subsidiaries (excl. Stefnir and Vördur) and Supporting Units and Eliminations. As part of its sustainability strategy, the bank published its Green Financing Framework in July 2021, which led to the issuance of its first green bond (EUR 300m) in the same month. In addition to an inaugural green bond, the bank also issued the first EURdenominated covered bond (volume again EUR 300m) by an Icelandic bank in the 2021 financial year. In terms of a medium-term financial target, the bank has defined a value of around 17% for the CET1 ratio (Q2 2022: 19.7%). With an MREL ratio of 27.3% (Q2 2022), Arion exceeded the regulatory minimum requirement of 22.4%.

Balance Sheet

(EURm)	2020Y	2021Y	2022H1
Net Loans to Customers	5,289	6,314	7,268
Total Securities	1,460	1,522	1,465
Total Deposits	3,653	4,421	5,228
Tier 1 Common Capital	1,067	1,075	1,219
Total Assets	7,536	8,861	9,948
Total Risk-weighted Assets	4,793	5,482	6,272

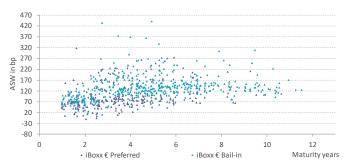
Redemption Profile



Income Statement

(EURm)	2020Y	2021Y	2022H1
Net Interest Income	202	214	137
Net Fee & Commission Inc.	76	98	57
Net Trading Income	18	41	-0
Operating Expense	159	172	91
Credit Commit. Impairment	33	-21	2
Pre-tax Profit	130	227	98

Senior Unsecured Bonds (EUR BMK)



Company Ratios

	2020Y	2021Y	2022H1		2020Y	2021Y	2022H1
Net Interest Margin	2.79	2.71	3.02	Liquidity Coverage Ratio	188.49	202.83	163.18
ROAE	6.57	14.79	17.16	IFRS Tier 1 Leverage Ratio	14.32	12.28	12.46
Cost-to-Income	48.15	44.44	43.30	NPL/ Loans at Amortised Cost	2.94	-	1.44
Core Tier 1 Ratio	22.25	19.61	19.44	Reserves/Loans at Amort. Cost	1.44	0.81	0.76

Source: Bloomberg, S&P Global Market Intelligence, NORD/LB Markets Strategy & Floor Research; as of: 17.10.2022

Strengths / Opportunities

- Capitalisation
- Market position
- Profitability

- Geographical concentration
- Cyclical nature of the economic landscape
- Property market (risk of price corrections)





Arion Bank – Mortgage

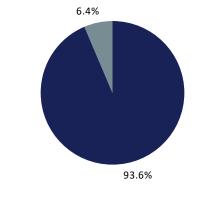
Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Cover Pool Data

	2 210
Cover pool volume (EURm)	2,216
Amount outstanding (EURm)	1,392
-thereof ≥ EUR 500m	35.9%
Current OC (nominal)	59.2%
Committed OC	-
Cover type	Mortgage
Main country	100% Iceland
Main region	39% Reykjavík
Number of loans	14,034
Number of borrowers	n/a
Avg. exposure to borrowers (EUR)	n/a
WAL (cover pool)	30.7y
WAL (covered bonds)	5.3y
Fixed interest (cover pool)	45.5%
Fixed interest (covered bonds)	100.0%
LTV (indexed)	21.2%
LTV (unindexed)	34.0%
Loans in arrears	0.0%

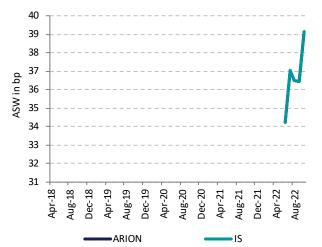
Rating (Moody's) Rating (S&P)	- A
Rating (Fitch)	-
Rating (DBRS)	-
TPI	-
TPI leeway	-
Collateral score	-
RRL	a-
JRL	а
Unused notches	1
AAA credit risk (%)	2.5
PCU	-
Recovery uplift	-
Outstanding ESG BMKs	No
LCR ELIGIBLE	Not eligible at time of going to press
LCR level (Bmk)	2A
Risk weight	20%
Maturity structure (Bmk))	SB

Borrower Types



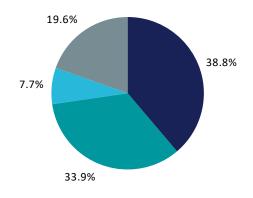
■ Residential ■ Commercial ■ Multi-family ■ Others

Spread Development



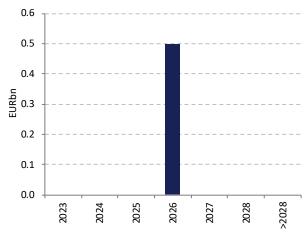
Source: Issuer, Rating agencies, Bloomberg, NORD/LB Markets Strategy & Floor Research

Regional Distribution



Reykjavík Capital Area excl. Reykjavik South Others

Redemption Profile (Bmk)



NORD/LB



Íslandsbanki

Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Rating	Outlook
-	-
-	-
BBB	Stable
	-

Homepage

Ratings

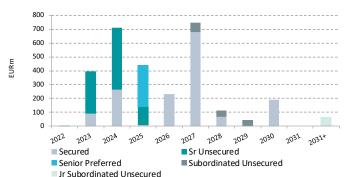
www.islandsbanki.is

Founded in 2008 with its headquarters in the Icelandic capital Reykjavík, Íslandsbanki is one of three D-SIBs in Iceland. According to information from the bank itself, Íslandsbanki boasts a market share of 31% for retail customers, 37% for SMEs and 35% for large and medium-sized companies (Q2 2022). The largest shareholder of this bank, which is listed on the Icelandic stock exchange, is the Icelandic government, with a stake of 42.5% (Q2 2022). After selling a stake of 22.5% in March 2022, the Icelandic government consequently forfeited its status as majority owner of the bank. With a total of 702 employees (H1 2022), Íslandsbanki serves customers in 12 branches supplemented by digital channels. In addition to the conventional banking business, the bank offers its customers services in areas such as funds management and insurance products via its subsidiaries Íslandssjóðir and Allianz Ísland respectively. In geographical terms, a total of 73% of the bank's mortgage portfolio is concentrated on the Greater Reykjavik region, followed by South-West Iceland at 10% (Q1 2021). The bank reports across the three main operating areas of Personal Banking, Business Banking and Corporate & Investment Banking, in addition to the segments Treasury & Proprietary Trading, Cost Centres and Subsidiaries, Eliminations & Adjustments. Deposits account for the highest share of the bank's long-term funding (H1 2022: 46%), followed by covered bonds (14%). In September 2022, the bank issued its first EUR-denominated sub-benchmark covered bond in the amount of EUR 300m with a term to maturity of five years. In the first half of 2022, the CET1 ratio amounted to 18.2%.

Balance Sheet

(EURm)	2020Y	2021Y	2022H1
Net Loans to Customers	6,470	7,326	8,297
Total Securities	962	1,122	1,010
Total Deposits	4,366	5,018	5,443
Tier 1 Common Capital	1,207	1,296	1,302
Total Assets	8,638	9,636	10,336
Total Risk-weighted Assets	5,999	6,081	7,140

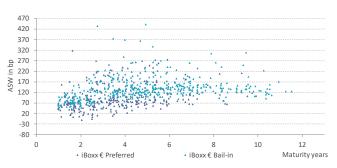
Redemption Profile



Income Statement

(EURm)	2020Y	2021Y	2022H1
Net Interest Income	217	227	138
Net Fee & Commission Inc.	68	86	46
Net Trading Income	-6	20	3
Operating Expense	152	159	85
Credit Commit. Impairment	57	-20	-7
Pre-tax Profit	61	184	105

Senior Unsecured Bonds (EUR BMK)



Company Ratios

	2020Y	2021Y	2022H1
Net Interest Margin	2.65	2.44	2.75
ROAE	3.73	12.35	11.04
Cost-to-Income	54.28	47.66	45.29
Core Tier 1 Ratio	20.12	21.32	18.23

	2020Y	2021Y	2022H1
Liquidity Coverage Ratio	196.17	155.99	146.51
IFRS Tier 1 Leverage Ratio	14.08	13.56	12.72
NPL/ Loans at Amortised Cost	2.91	1.99	1.77
Reserves/Loans at Amort. Cost	1.71	1.23	1.03
IFRS Tier 1 Leverage Ratio NPL/ Loans at Amortised Cost	14.08 2.91	13.56 1.99	12.72 1.77

Source: Bloomberg, S&P Global Market Intelligence, NORD/LB Markets Strategy & Floor Research; as of: 17.10.2022

Strengths / Opportunities

- Capitalisation
- Market position
- Earnings situation

- Property market (risk of price corrections) •
- Geographical concentration
- Credit risk concentration (property market)





Islandsbanki – Mortgage

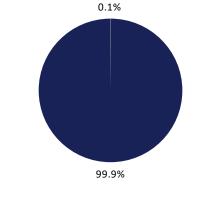
Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Cover Pool Data

Cover pool volume (EURm)	2,627
Amount outstanding (EURm)	2,108
-thereof ≥ EUR 250m	14.2%
Current OC (nominal)	24.6%
Committed OC	-
Cover type	Mortgage
Main country	100% Iceland
Main region	73% Reykjavík
Number of loans	15,607
Number of borrowers	13,898
Avg. exposure to borrowers (EUR)	189,002
WAL (cover pool)	33.6y
WAL (covered bonds)	4.5y
Fixed interest (cover pool)	26.5%
Fixed interest (covered bonds)	72.6%
LTV (indexed)	56.7%
LTV (unindexed)	n/a
Loans in arrears	0.0%

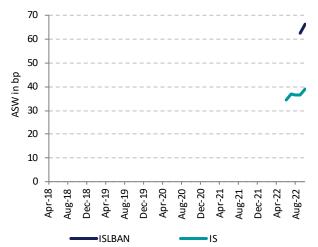
Rating (Moody's)	-
Rating (S&P)	А
Rating (Fitch)	-
Rating (DBRS)	-
TPI	-
TPI leeway	-
Collateral score	-
RRL	a-
JRL	а
Unused notches	1
AAA credit risk (%)	3.57
PCU	-
Recovery uplift	-
Outstanding ESG BMKs	No
LCR ELIGIBLE	Not eligible at time of going to press
LCR level (SBmk)	- 50% (at time of going to press)
Risk weight	SB
Maturity structure (SBmk)	30

Borrower Types



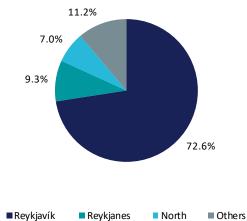
Residential Commercial Multi-family Others

Spread Development

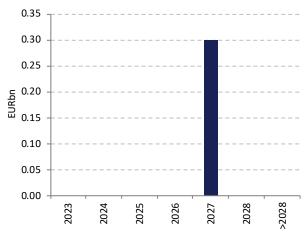


Source: Issuer, Rating agencies, Bloomberg, NORD/LB Markets Strategy & Floor Research

Regional Distribution



Redemption Profile (SBmk)







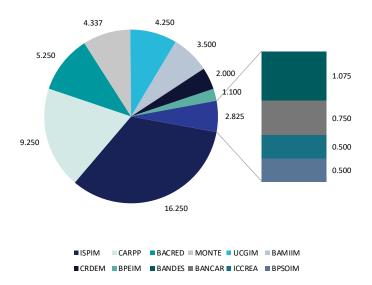


Market Overview Covered Bonds

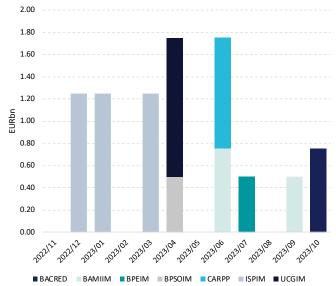
Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

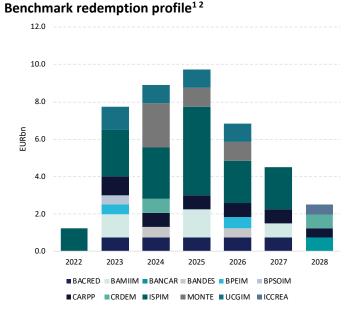
Cover Pool Volume	EUR 130.63bn	Outstanding volume (Bmk)	EUR 48.76bn
Amount outstanding	EUR 86.38bn	Number of benchmarks	59
Number of issuer	13	Outstanding ESG volume (Bmk)	EUR 1.25bn
No of cover pools	16	Number of ESG benchmarks	2
there of M / PS / others	16/0/0	Outstanding volume (SBmk)	EUR 0.30bn
Ratings (low / high)	A+ / AA	Number of subbenchmarks	1
Best possible LCR level	Level 1	Maturity types	SB, CPT

Outstanding benchmark volume¹ (EURbn)



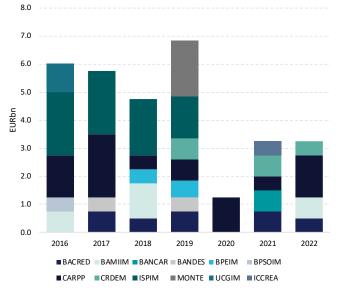
Benchmark redemption profile¹: 11/2022 - 10/2023





Source: Issuer, Rating agencies, Bloomberg, NORD/LB Markets Strategy & Floor Research; ¹ based on Bloomberg ticker; ² Redemptions 2022: 11/22 – 12/22

Benchmark issuance volume¹



Banca Carige

Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Ratings

	Rating	Outlook
Fitch	-	-
Moody's	Ba1	Negative
S&P	-	-

Homepage

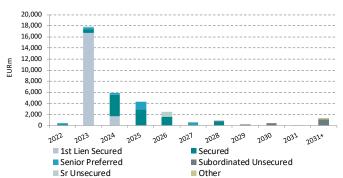
www.gruppocarige.it

The Banca Carige Group (BC) is a universal bank headquartered in Genoa. In June 2022, the Italian deposit insurance fund, Fondo Interbancario di Tutela dei Depositi, sold its entire shareholding (FY 2021: 79.99%) to BPER Banca S.P.A. (BPER). Following a takeover offer for the remaining outstanding shares, BPER held more than 95% of shares in BC as at the start of September 2022. This was followed by a delisting on the stock exchange. In October 2022, the ECB approved the merger of Banca Carige with BPER. This process is set to be completed by the end of February 2023. The bank predominately serves Italian retail customers and SMEs from its 382 branches (FY 2022). In addition to the traditional banking business, BC also offers its customers products and services from the leasing, insurance and factoring segments. Geographically, a total of 43.3% (FY 2021) of the loan portfolio is attributable to the domestic market in the Liguria region, followed by the regions of Tuscany (12.4%) and Lombardy (11.3%). BC reports across the following four segments: Retail (FY 2021: 105% of income (loss) of the continued business segments), Corporate (12.1%), Corporate Center (-1.1%) and Cancellations (16.0%). In terms of its strategic orientation, the bank is focused on continuing to cut risks, among other aspects. This shall be achieved through the sale of NPLs in particular. Since 2018, the NPL ratio has fallen from in excess of 20% to 2.6% (H1 2022) and most recently posted a coverage ratio of 53.5%. Following a hiatus of six years, BC placed a covered bond on the market in the form of a EUR benchmark with a volume of EUR 750m in October 2021. The CET1 ratio (fully loaded) stood at 13.9% as at H1 2022.

Balance	Sheet
---------	-------

(EURm) Net Loans to Customers	2020Y 12,445	2021Y 12,279	2022H1 11,076
Total Securities	2,673	2,683	2,911
Total Deposits	12,819	13,644	12,414
Tier 1 Common Capital	1,213	992	1,228
Total Assets	22,030	22,310	22,423
Total Risk-weighted Assets	9,441	9,167	8,762

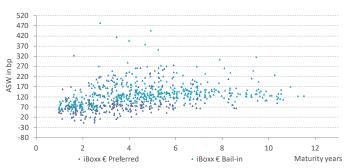




Income Statement

(EURm)	2020Y	2021Y	2022H1
Net Interest Income	124	1,730	102
Net Fee & Commission Inc.	187	226	107
Net Trading Income	58	-5	-87
Operating Expense	507	2,533	376
Credit Commit. Impairment	86	603 46	25
Pre-tax Profit	-161	-94	-240

Senior Unsecured Bonds (EUR BMK)



Company Ratios

	2020Y	2021Y	2022H1
Net Interest Margin	0.69	0.82	1.05
ROAE	-18.71	-7.08	-32.36
Cost-to-Income	117.30	110.71	234.52
Core Tier 1 Ratio	12.84	10.82	14.02

	20201	20211	202201
Liquidity Coverage Ratio	271.71	230.00	286.00
IFRS Tier 1 Leverage Ratio	5.59	4.52	5.54
NPL/ Loans at Amortised Cost	5.11	5.07	5.67
Reserves/Loans at Amort. Cost	3.55	3.21	3.60

Source: Bloomberg, S&P Global Market Intelligence, NORD/LB Markets Strategy & Floor Research; as of: 17.10.2022

Strengths / Opportunities

- Takeover by BPER
- Regional market position

- Profitability
- Restructuring process





Banca Carige – Mortgage

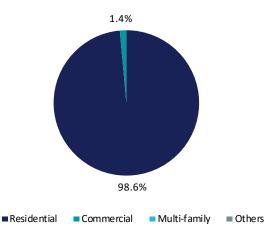
Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Cover Pool Data

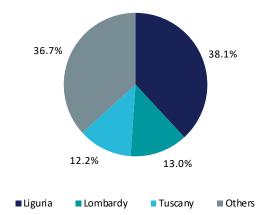
Cover pool volume (EURm)	3,539
Amount outstanding (EURm)	2,592
-thereof ≥ EUR 500m	28.9%
Current OC (nominal)	36.5%
Committed OC	22.0%
Cover type	Mortgage
Main country	100% Italy
Main region	38% Liguria
Number of loans	51,376
Number of borrowers	n/a
Avg. exposure to borrowers (EUR)	n/a
WAL (cover pool)	7.3y
WAL (covered bonds)	5.3y
Fixed interest (cover pool)	39.3%
Fixed interest (covered bonds)	70.4%
LTV (indexed)	n/a
LTV (unindexed)	47.0%
Loans in arrears	0.4%

Rating (Moody's)	Aa3
Rating (S&P)	-
Rating (Fitch)	-
Rating (DBRS)	AA
TPI	Probable
TPI leeway	1
Collateral score	5.2%
RRL	-
JRL	-
Unused notches	-
AAA credit risk (%)	-
PCU	-
Recovery uplift	2
Outstanding ESG BMKs	No
LCR ELIGIBLE	Yes
LCR level (Bmk)	1
Risk weight	10%
Maturity structure (Bmk)	SB

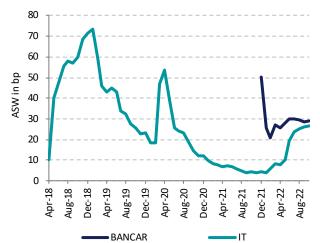
Borrower Types



Regional Distribution

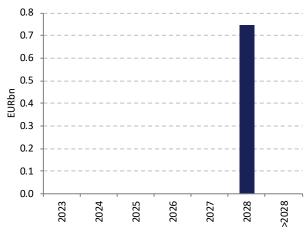


Spread Development



Source: Issuer, Rating agencies, Bloomberg, NORD/LB Markets Strategy & Floor Research

Redemption Profile (Bmk)



NORD/LB

Italy

Banca Monte dei Paschi di Siena

Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Ratings

-		
	Rating	Outlook
Fitch	В	Develop
Moody's*	Caa1	Stable
5&P	-	-

Homepage

www.gruppomps.it

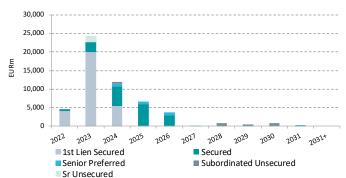
*Senior Unsecured

Banca Monte dei Paschi di Siena (MPS) is one of Italy's largest financial institutions and is considered to be the world's oldest bank (established in 1472). In Italy, it is a domestic systemically important bank (D-SIB). The Italian government is the majority shareholder in the institute with around 64.2% (19 June 2022). Indeed, the bank has had to receive support several times over the last few years. In a consultation with the ECB, it was agreed that the Italian government would divest all stakes in the bank by the end of 2021. After acquisition talks with UniCredit S.p.A. fell through at the end of 2021, its shares will remain under state ownership for the foreseeable future. MPS is active throughout Italy as well as in selected global financial centres. Its business activities in Italy are focused on retail and corporate clients in more than 1,300 branches and 160 specialist centres. The Group is also active in all major business segments such as Leasing, Factoring, Corporate Finance and Investment Banking via specialised subsidiaries. MPS reports in the following operating business segments: Retail Banking, Wealth Management, Corporate Banking and Corporate Center. The goals of the current business plan from June 2022 are further streamlining and simplification of the business model, risk reduction and greater resilience. By 2026, the CIR should be lower than 57% (Q1 2022: 68.4%) and the CET1 ratio should exceed 15.4% (fully loaded; Q1 2022: 10.8%). In September 2022, it was announced that a capital increase (EUR 2.5 billion) was planned. In terms of ESG goals, MPS is aiming to achieve a 60% reduction in its own greenhouse gas emissions by 2026 compared with 2017.

Balance Sheet

(EURm)	2020Y	2021Y	2022H1
Net Loans to Customers	92,145	88,187	86,680
Total Securities	15,394	15,600	15,785
Total Deposits	94,498	82,230	74,932
Tier 1 Common Capital	6,053	5,992	5,576
Total Assets	150,345	137,869	131,378
Total Risk-weighted Assets	49,903	47,787	47,780

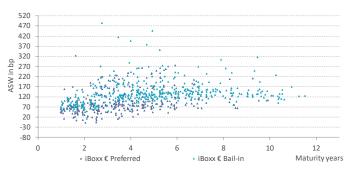
Redemption Profile



Income Statement

(EURm)	2020Y	2021Y	2022H1
Net Interest Income	1,271	1,730	658
Net Fee & Commission Inc.	1,393	1,484	728
Net Trading Income	122	132	93
Operating Expense	3,523	2,533	1,350
Credit Commit. Impairment	745	603 190	230
Pre-tax Profit	-1,347	258	18

Senior Unsecured Bonds (EUR BMK)



Company Ratios

	2020Y	2021Y	2022H1
Net Interest Margin	0.96	0.89	1.05
ROAE	-23.37	5.09	0.90
Cost-to-Income	111.51	83.41	82.67
Core Tier 1 Ratio	12.13	12.54	11.67

	20201	20211	2022H1
Liquidity Coverage Ratio	169.44	185.47	181.76
IFRS Tier 1 Leverage Ratio	4.12	4.44	4.30
NPL/ Loans at Amortised Cost	4.36	4.66	4.72
Reserves/Loans at Amort. Cost	2.53	2.62	2.87

Source: Bloomberg, S&P Global Market Intelligence, NORD/LB Markets Strategy & Floor Research; as of: 17.10.2022

Strengths / Opportunities

- Liquidity
- Market position

- Profitability
- Restructuring process

Banca Monte dei Paschi di Siena – Mortgage (CPT)

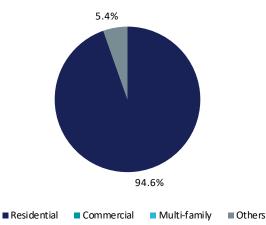
Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Cover Pool Data

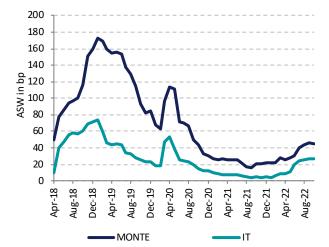
Cover pool volume (EURm)	12,186
Amount outstanding (EURm)	7,450
-thereof ≥ EUR 500m	58.2%
Current OC (nominal)	63.6%
Committed OC	23.5%
Cover type	Mortgage
Main country	100% Italy
Main region	20% Trentino-South
Number of loans	Tyrol
Number of borrowers	148,181
Avg. exposure to borrowers (EUR)	n/a
WAL (cover pool)	n/a
WAL (covered bonds)	9.4y
Fixed interest (cover pool)	3.0y
Fixed interest (covered bonds)	42.5%
LTV (indexed)	57.3%
LTV (unindexed)	53.8%
Loans in arrears	49.5%

-
A+
AA
Very High
0
7.5%
-
-
-
-
6
-
No
Yes
1
10%
CPT

Borrower Types



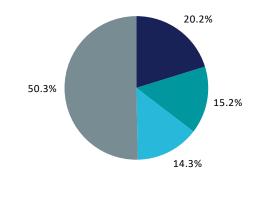
Spread Development



Source: Issuer, Rating agencies, Bloomberg, NORD/LB Markets Strategy & Floor Research

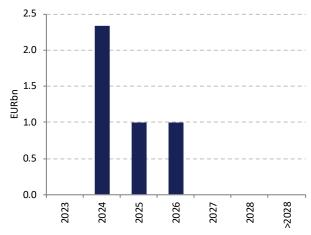
Regional Distribution

Rating (Moody's)



■ Trentino-South Tyrol ■ Lazio ■ Lombardy ■ Others

Redemption Profile (Bmk)



NORD/LB

Italy

Aa3

Italy

Banca Popolare di Sondrio

Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Ratings			
	Rating	Outlook	
Fitch	BB+	Stable	
Moody's	-	-	
S&P	-	-	
Homepage			

www.popso.it

The Banca Popolare di Sondrio (BPS) banking group consists of the holding company Banca Popolare di Sondrio, headquartered in Sondrio, in addition to various subsidiaries. As a result of the corporate transformation process that the bank underwent in 2021 to become a public limited company, BPSO is now owned by 154,000 shareholders. The main shareholders are: UnipolSai Assicurazioni S.P.A. (FY 2021: 9.5%) and Amber Capital UK LLP (3.0%). BPSO has more than 900,000 customers, whom it offers, either directly or indirectly (via its subsidiary), all universal banking services. In addition, BPSO employs over 3,300 employees (FY 2021) across more than 500 branches. In addition to its strong presence in its home province of Sondrio, the Group has also expanded its business activities to further parts of northern Italy, the Lazio region and Switzerland. The funding mix consists of retail funding (Q1 2022: 73.8%), wholesale funding (7.1%) and ECB funding (19.1%). In July 2021, BPSO approved its internal green bond framework. This was followed by the successful issuance of its first senior preferred green bond in the amount of EUR 500 million. The Group is continuing with its "derisking" strategy to reduce its volumes of higher-risk assets. For example, in December 2021, it sold non-performing loans in a volume of EUR 420 million. The net NPL ratio saw a year-on-year reduction from 3.6% (Q1 2021) to 2.5% (Q1 2022). The bank aims to reduce this still further to 2.1% by the end of 2025. With a CET1 ratio of 15.2% (FY 2021), BPSO exceeds the current regulatory requirements. Compared with year-end 2021, the LCR fell by 15 percentage points to 149% (Q1 2022).

Balance Sheet

(EURm)	2020Y	2021Y	2022H1
Net Loans to Customers	35,900	39 <i>,</i> 845	42,157
Total Securities	3,496	4,130	3,595
Total Deposits	32,728	35,603	34,679
Tier 1 Common Capital	2,967	3,163	3,164
Total Assets	49,808	55,016	54,661
Total Risk-weighted Assets	18,187	20,043	20,849

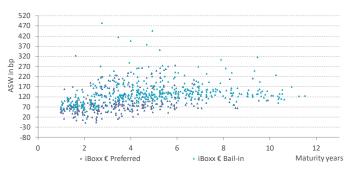
Redemption Profile



Income Statement

(EURm)	2020Y	2021Y	2022H1
Net Interest Income	490	529	320
Net Fee & Commission Inc.	316	358	185
Net Trading Income	2	131	-27
Operating Expense	583	631	336
Credit Commit. Impairment	107	125	43
Pre-tax Profit	157	375	154

Senior Unsecured Bonds (EUR BMK)



Company Ratios

	2020Y	2021Y	2022H1
Net Interest Margin	1.13	1.04	1.24
ROAE	3.70	8.53	6.32
Cost-to-Income	64.46	55.79	62.80
Core Tier 1 Ratio	16.32	15.78	15.18

	2020Y	2021Y	2022H1
Liquidity Coverage Ratio	187.76	225.58	177.50
IFRS Tier 1 Leverage Ratio	5.97	5.76	5.81
NPL/ Loans at Amortised Cost	6.45	4.76	4.32
Reserves/Loans at Amort. Cost	3.72	2.85	2.70

Source: Bloomberg, S&P Global Market Intelligence, NORD/LB Markets Strategy & Floor Research; as of: 17.10.2022

Strengths / Opportunities

- Economic environment in northern Italy
- Deposit basis
- Liquidity

- Economic development
- Asset quality
- Diversification

Banca Popolare di Sondrio – Mortgage

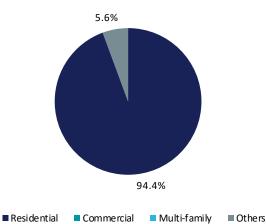
Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Cover Pool Data

Cover pool volume (EURm)	1,263
Amount outstanding (EURm)	500
-thereof ≥ EUR 500m	100.0%
Current OC (nominal)	152.6%
Committed OC	n/a
Cover type	Mortgage
Main country	100% Italy
Main region	72% Lombardy
Number of loans	14,355
Number of borrowers	n/a
Avg. exposure to borrowers (EUR)	n/a
WAL (cover pool)	6.7y
WAL (covered bonds)	0.8y
Fixed interest (cover pool)	23.7%
Fixed interest (covered bonds)	100.0%
LTV (indexed)	n/a
LTV (unindexed)	57.4%
Loans in arrears	0.1%

Rating (S&P)	-
Rating (Fitch)	AA
Rating (DBRS)	-
TPI	-
TPI leeway	-
Collateral score	-
RRL	-
JRL	-
Unused notches	-
AAA credit risk (%)	-
PCU	6
Recovery uplift	-
Outstanding ESG BMKs	No
LCR ELIGIBLE	Yes
LCR level (Bmk)	1
Risk weight	10%
Maturity structure (Bmk)	SB

Borrower Types



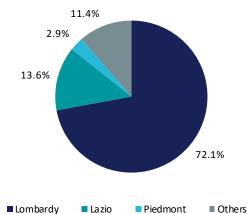
Spread Development



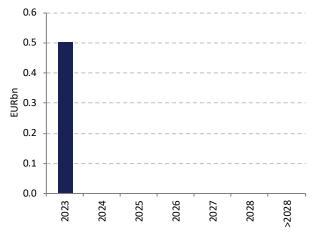
Source: Issuer, Rating agencies, Bloomberg, NORD/LB Markets Strategy & Floor Research

Regional Distribution

Rating (Moody's)



Redemption Profile (Bmk)



NORD/LB

Banco BPM

Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Ratings

	Rating	Outlook
Fitch	BBB-	Stable
Moody's	Ba1	Stable
S&P	-	-

Homepage

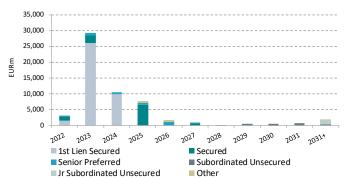
www.bancobpm.it

Banca Popolare di Milano Scarl (BPM) and Banco Popolare Societa Cooperativa (BP), both formerly organised along cooperative lines, merged with effect from 1 January 2017. The resultant bank now operates under the name Banco BPM. The holding company is listed on the Milan stock exchange in the form of a public limited company. Since April 2022, Crédit Agricole S.A has been the biggest shareholder with just under 9.2% (01.08.2022), followed by Capital Research and Management Company with just under 5.0%. Banco BPM is the third largest banking group in Italy measured by assets (FY 2021: EUR 200bn) and is a domestic systemically important bank (D-SIB). It employs around 22,000 staff, who serve about four million customers. Of these, 470,000 are business and corporate clients. Its geographical business focus is on the north Italian regions. As a universal bank, BPM offers a broad spectrum of banking products, which it also provides via its wide range of subsidiaries. As measured by operating income, the main business segments are the following: Retail (FY 2021: 56.0%), Corporate (16.4%) and Corporate Center (15.7%). Furthermore, BPM reports in the segments Institutional, Private, Investment Banking, Strategic Partnerships and Leases. In Q1 2022 and based on the Green, Social and Sustainability Framework that it adopted in 2021, BPM issued its first green covered bond with a volume of EUR 750 million. BPM plans to continue to reduce its problem loans over the coming years. Accordingly, the NPE (Q1 2022: 4.9%) is set to go down to no more than 4.8% by 2024. The Group plans to increase its CET1 ratio to at least 14.4% by 2024 (fully loaded; FY 2021: 13.4%).

Balance Sheet

(EURm)	2020Y	2021Y	2022H1
Net Loans to Customers	131,117	127,995	131,947
Total Securities	17,630	16,629	18,516
Total Deposits	109,663	114,941	117,280
Tier 1 Common Capital	9,575	9,387	8,884
Total Assets	183,685	200,489	208,662
Total Risk-weighted Assets	65,604	63,931	63,321

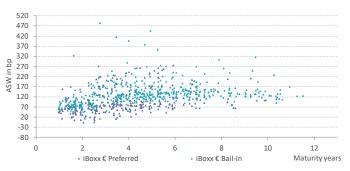
Redemption Profile



Income Statement

(EURm)	2020Y	2021Y	2022H1
Net Interest Income	1,957	2,016	1,031
Net Fee & Commission Inc.	1,642	1,901	958
Net Trading Income	-7	-43	15
Operating Expense	3,201	3,071	1,537
Credit Commit. Impairment	1,061	635	134
Pre-tax Profit	-249	654	584

Senior Unsecured Bonds (EUR BMK)



Company Ratios

	2020Y	2021Y	2022H1
Net Interest Margin	1.19	1.10	1.08
ROAE	0.14	4.44	5.92
Cost-to-Income	77.74	67.50	67.84
Core Tier 1 Ratio	14.59	14.68	14.03

	2020Y	2021Y	2022H1
Liquidity Coverage Ratio	188.79	206.01	207.66
IFRS Tier 1 Leverage Ratio	5.36	4.76	4.35
NPL/ Loans at Amortised Cost	6.61	4.99	4.17
Reserves/Loans at Amort. Cost	3.54	2.72	2.28

Source: Bloomberg, S&P Global Market Intelligence, NORD/LB Markets Strategy & Floor Research; as of: 17.10.2022

Strengths / Opportunities

- Market position (franchise)
- Liquidity

Risks / Weaknesses

- Asset quality (positive trend)
- Profitability

NORD/LB

Banco BPM – Mortgage II

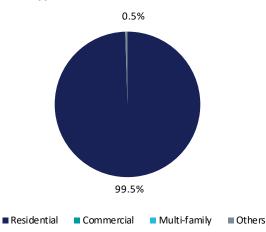
Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Cover Pool Data

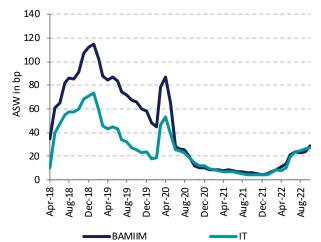
Cover pool volume (EURm)	8,630
Amount outstanding (EURm)	5,000
-thereof ≥ EUR 500m	70.0%
Current OC (nominal)	72.6%
Committed OC	7.5%
Cover type	Mortgage
Main country	100% Italy
Main region	42% Lombardy
Number of loans	85,894
Number of borrowers	n/a
Avg. exposure to borrowers (EUR)	n/a
WAL (cover pool)	10.2y
WAL (covered bonds)	2.3y
Fixed interest (cover pool)	77.3%
Fixed interest (covered bonds)	100.0%
LTV (indexed)	56.6%
LTV (unindexed)	66.3%
Loans in arrears	0.5%

Rating (Moody's)	Aa3
Rating (S&P)	-
Rating (Fitch)	-
Rating (DBRS)	-
TPI	Probable
TPI leeway	1
Collateral score	5.0%
RRL	-
JRL	-
Unused notches	-
AAA credit risk (%)	-
PCU	-
Recovery uplift	-
Outstanding ESG BMKs	Yes
LCR ELIGIBLE	Yes
LCR level (Bmk)	1
Risk weight	10%
Maturity structure (Bmk)	SB

Borrower Types

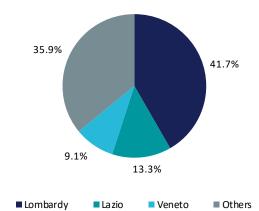


Spread Development

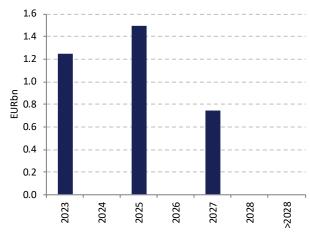


Source: Issuer, Rating agencies, Bloomberg, NORD/LB Markets Strategy & Floor Research

Regional Distribution



Redemption Profile (Bmk)





Banco Desio

Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Ratings

	Rating	Outlool
Fitch	BB+	Stable
Moody's	-	-
S&P	-	-

Homepage

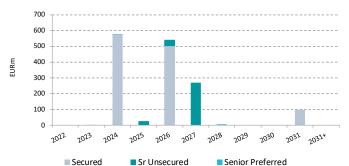
www.bancodesio.it

Banco di Desio e della Brianza (Banco Desio), which has been listed on the Italian stock exchange since 1995, is the parent company of the Banco Desio Group. Just over 50% is family owned via Brianza Unione di Luigi Gavazzi & C. SapA. The Group offers a wide range of banking, financial and insurance products, with a special focus on individuals and small businesses. The Group is represented by 232 branches in ten regions in Italy (FY 2021). In 2021, 17 branches were closed in order to increase the efficiency of its distribution network. Most branches are located in Lombardy (42.7%), followed by Umbria (17.8%) and Lazio (12.1%). In addition to the main business segment, Banking, (FY 2021: 97.6% of operating income), the Group also reports in the segments Near-banking (3.4%) and Consolidation adjustments (-1.0%). The subsidiaries Fides (100% stake) and Desio OBG (60%) are part of the Group. While Fides looks after consumer loans, Desio OBG serves as the SPV for the issuance of covered bonds. In FY 2021, the issuance of loans to private persons grew to EUR 11.1bn. Moving forwards, Banco Desio plans to further reduce its share of problem loans. In FY 2021, the gross NPL ratio reduced by 130 basis points to 4.1%, standing at 4.0% as at Q1 2022. The sale of non-performing loans in the amount of EUR 71.3 million (FY 2021) served to support this development. The CET1 ratio rose from 14.7% (FY 2020) to 15.6% (FY 2021). The bank also meets the LCR requirement (FY 2021: 195.7%).

Balance Sheet

(EURm)	2020Y	2021Y	2022H1
Net Loans to Customers	12,967	13,885	14,168
Total Securities	720	679	931
Total Deposits	10,256	10,978	11,099
Tier 1 Common Capital	1,030	1,127	1,119
Total Assets	15,664	17,805	18,338
Total Risk-weighted Assets	7,022	7,217	7,385

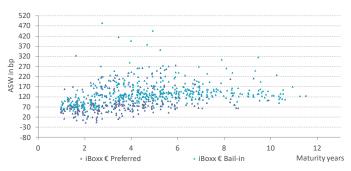
Redemption Profile



Income Statement

(EURm)	2020Y	2021Y	2022H1
Net Interest Income	222	254	137
Net Fee & Commission Inc.	166	197	94
Net Trading Income	5	-2	2
Operating Expense	325	319	156
Credit Commit. Impairment	74	86	25
Pre-tax Profit	32	69	78

Senior Unsecured Bonds (EUR BMK)



Company Ratios

	2020Y	2021Y	2022H1
Net Interest Margin	1.57	1.53	1.57
ROAE	2.44	5.14	9.77
Cost-to-Income	75.52	67.35	60.18
Core Tier 1 Ratio	14.66	15.62	15.15

	20209	20219	2022H1
Liquidity Coverage Ratio	206.74	199.88	170.29
IFRS Tier 1 Leverage Ratio	6.59	6.34	6.11
NPL/ Loans at Amortised Cost	4.48	3.25	2.97
Reserves/Loans at Amort. Cost	2.63	2.43	2.26
Reserves/Loans at Amort. Cost	2.05	2.45	2.20

Source: Bloomberg, S&P Global Market Intelligence, NORD/LB Markets Strategy & Floor Research; as of: 17.10.2022

Strengths / Opportunities

- Einlagenbasis
- Kapitalisierung
- Regionale Marktstellung

Risks / Weaknesses

- Effizienz
- Problemkreditquote im internationalen Vergleich
- Ökonomisches Umfeld

Italy

NORD/LB

Banco Desio – Mortgage

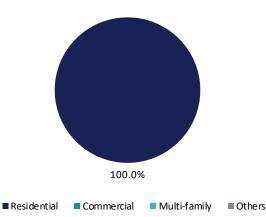
Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Cover Pool Data

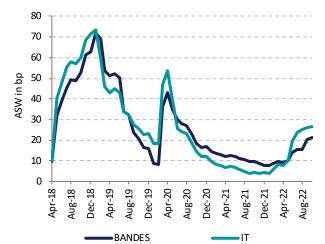
Cover pool volume (EURm)	1,774
Amount outstanding (EURm)	1,175
-thereof ≥ EUR 500m	91.5%
Current OC (nominal)	51.0%
Committed OC	n/a
Cover type	Mortgage
Main country	100% Italy
Main region	42% Lombardy
Number of loans	18,319
Number of borrowers	n/a
Avg. exposure to borrowers (EUR)	n/a
WAL (cover pool)	16.3y
WAL (covered bonds)	3.5y
Fixed interest (cover pool)	70.6%
Fixed interest (covered bonds)	100.0%
LTV (indexed)	n/a
LTV (unindexed)	58.6%
Loans in arrears	0.0%

Rating (Moody's)	-
Rating (S&P)	-
Rating (Fitch)	AA
Rating (DBRS)	-
ТРІ	-
TPI leeway	-
Collateral score	-
RRL	-
JRL	-
Unused notches	-
AAA credit risk (%)	-
PCU	6
Recovery uplift	-
Outstanding ESG BMKs	No
LCR ELIGIBLE	Yes
LCR level (Bmk)	1
Risk weight	10%
Maturity structure (Bmk)	SB

Borrower Types

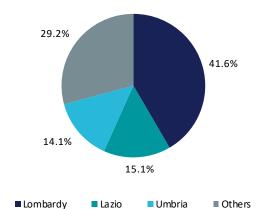


Spread Development

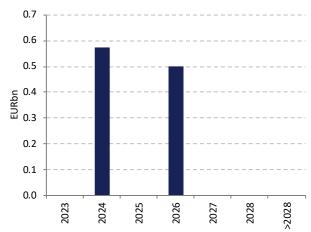


Source: Issuer, Rating agencies, Bloomberg, NORD/LB Markets Strategy & Floor Research

Regional Distribution



Redemption Profile (Bmk)



NORD/LB



BPER Banca

Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Ratings Rating Outlook Fitch BB+ Positive (Moody's Ba1 Negative a S&P - - - N

Homepage

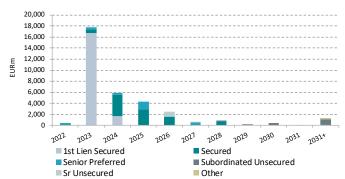
www.bper.it

Banca Popolare dell'Emilia Romagna (BPER Banca) is listed on the Italian stock exchange. It is the fourth largest banking group in Italy measured by assets (Q1 2022: EUR 136bn total assets). As at the end of May 2022, the main shareholders of the bank were Unipol Gruppo (May 2022: 19.9%) and Fondazione di Sardegna (10.4%). In the wake of several acquisitions, the bank expanded its sphere of influence throughout the whole of Italy, where it has more than 1,700 branches (Q1 2022). The Group reports in the following business segments: Retail, Private, Corporate, Large Corporates, Finance, Corporate Center and Other activities. In February 2022, BPER Banca acquired 620 branches from Intesa Sanpaolo, including the assets and liabilities. As a result of the acquisition, the loan portfolio went up by EUR 30bn. The takeover of Gruppo Banca Carige was successfully completed in Q2/2022. completed. As a universal bank, BPER offers a wide range of financial services. Additional specialist entities round off the range of products provided (assets management, private loans, and leasing and factoring). In March 2022, BPER Banca joined the Net-Zero Banking Alliance, which aims to achieve net-zero carbon emissions by 2050. For its part, the bank plans to reduce its CO_2 emissions by at least 23% by 2025. The gross NPE ratio reduced by 2.9 percentage points year on year to 4.9% (FY 2021; FY 2020: 7.8%) and remained stable in Q1 2022. The target value is a ratio of approximately 3.6% by the end of 2025. With a CET1 ratio of 13.6% (fully phased; Q1 2022), the bank stood above the regulatory requirement of 8.3%.

Balance Sheet

(EURm)	2020Y	2021Y	2022H1
Net Loans to Customers	65 <i>,</i> 665	93 <i>,</i> 859	105,758
Total Securities	7,500	7,974	11,414
Total Deposits	58,314	96,461	107,629
Tier 1 Common Capital	5,932	6,576	7,114
Total Assets	93,062	136,348	161,679
Total Risk-weighted Assets	33,488	45,341	53,664

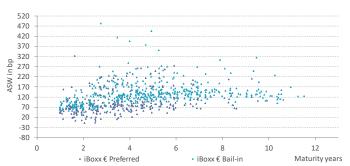
Redemption Profile



Income Statement

(EURm)	2020Y	2021Y	2022H1
Net Interest Income	1,239	1,505	785
Net Fee & Commission Inc.	1,073	1,642	902
Net Trading Income	136	193	95
Operating Expense	1,849	2,437	1,294
Credit Commit. Impairment	548	855	240
Pre-tax Profit	197	693	1,530

Senior Unsecured Bonds (EUR BMK)



Company Ratios

	2020Y	2021Y	2022H1		2020Y	2021Y	2022H1
Net Interest Margin	1.55	1.23	1.16	Liquidity Coverage Ratio	170.27	200.79	211.46
ROAE	4.80	8.20	38.87	IFRS Tier 1 Leverage Ratio	6.47	4.85	4.43
Cost-to-Income	70.44	68.70	68.19	NPL/ Loans at Amortised Cost	6.62	4.29	3.87
Core Tier 1 Ratio	17.71	14.50	13.26	Reserves/Loans at Amort. Cost	3.51	2.59	3.15

Source: Bloomberg, S&P Global Market Intelligence, NORD/LB Markets Strategy & Floor Research; as of: 17.10.2022

Strengths / Opportunities

- Capitalisation
- Liquidity profile

Risks / Weaknesses

- Non-performing exposures
- Profitability

NORD/LB

BPER Banca – Mortgage

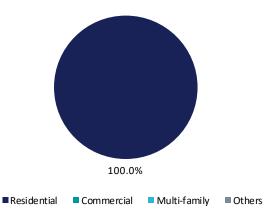
Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Cover Pool Data

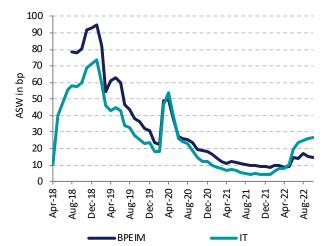
Cover pool volume (EURm)	5,298
Amount outstanding (EURm)	4,250
-thereof ≥ EUR 500m	25.9%
Current OC (nominal)	24.7%
Committed OC	19.0%
Cover type	Mortgage
Main country	100% Italy
Main region	39% Emilia-Romagna
Number of loans	68,193
Number of borrowers	67,740
Avg. exposure to borrowers (EUR)	78,211
WAL (cover pool)	16.8y
WAL (covered bonds)	2.9y
Fixed interest (cover pool)	55.1%
Fixed interest (covered bonds)	72.9%
LTV (indexed)	48.8%
LTV (unindexed)	48.8%
Loans in arrears	0.1%

Rating (Moody's)	Aa3
Rating (S&P)	-
Rating (Fitch)	-
Rating (DBRS)	-
ТРІ	Probable
TPI leeway	1
Collateral score	5.0%
RRL	-
JRL	-
Unused notches	-
AAA credit risk (%)	-
PCU	-
Recovery uplift	-
Outstanding ESG BMKs	No
LCR ELIGIBLE	Yes
LCR level (Bmk)	1
Risk weight	10%
Maturity structure (Bmk)	SB

Borrower Types

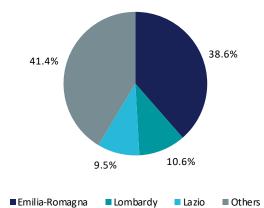


Spread Development

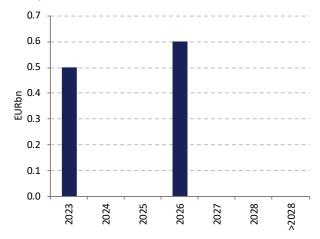


Source: Issuer, Rating agencies, Bloomberg, NORD/LB Markets Strategy & Floor Research

Regional Distribution



Redemption Profile (Bmk)







Italy

Crédit Agricole Italia

Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

RatingsOutlookFitch-Moody's*Baa1S&P-

Homepage

www.credit-agricole.com

*LT Bank Deposit Rating

Since February 2019, the bank formerly known as Crédit Agricole Cariparma has been operating under the name Crédit Agricole Italia (CA Italia). The financial institution is part of the Crédit Agricole Italia Banking Group (CAIBG) and is an Italian subsidiary of the French financial institution Crédit Agricole S.A., which holds 75.6% of the shares (FY 2021). Crédit Agricole defines Italy as its second domestic market and CA Italia as the institute with the most responsibility for the Italian market. CA Italia has other subsidiaries such as Crédit Agricole FriulAdria, Credito Valtellinese, Crédit Agricole Leasing and CRM. CAIBG has 13,200 employees serving some 2.7 million clients in around 1,200 branches throughout the whole of Italy, although the focus is on the affluent north (around 70% of all branches). The institute offers a wide range of services for retail customers as well as for business and corporate clients, particularly in the agricultural and foodstuff production segments. The income of the bank is divided into the following segments: specialised financial services (FY 2021: 39%), retail banking (33%), asset gathering (22%) and large businesses (6%). In May 2021, the institute purchased all the shares in Credito Valtellinese (Creval; bank headquartered in Lombardy) for EUR 880 million. The process of merging Creval with CA Italia was completed in April 2022, whereby the market shares of the bank increased to 5% in Italy (FY 2021). CA Italia places bonds on the capital market for funding, with a total of 8% of the capital market issuances of the Crédit Agricole Group attributable to CA Italia. As part of its sustainability activities, in March 2021, the bank issued its first green covered bond totalling EUR 500 million.

Balance Sheet

(EURm)	2020Y	2021Y	2022H1
Net Loans to Customers	58,307	77,800	76,547
Total Securities	4,626	5,017	4,506
Total Deposits	44,477	63,323	60,324
Tier 1 Common Capital	3,814	3,988	4,467
Total Assets	76,454	104,943	103,407
Total Risk-weighted Assets	27,337	34,456	33,997

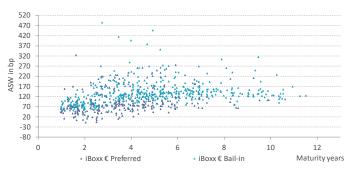
Redemption Profile



Income Statement

(EURm)	2020Y	2021Y	2022H1
Net Interest Income	972	1,123	601
Net Fee & Commission Inc.	880	1,145	613
Net Trading Income	-2	-74	36
Operating Expense	1,541	2,204	1,006
Credit Commit. Impairment	388	459	106
Pre-tax Profit	30	344	326

Senior Unsecured Bonds (EUR BMK)



Company Ratios

	2020Y	2021Y	2022H1
Net Interest Margin	1.38	1.32	1.24
ROAE	-0.68	8.82	6.44
Cost-to-Income	69.35	86.86	69.82
Core Tier 1 Ratio	13.95	11.57	13.14
ROAE Cost-to-Income	-0.68 69.35	8.82 86.86	6.44 69.82

	2020Y	2021Y	2022H1
Liquidity Coverage Ratio	242.35	262.05	278.06
IFRS Tier 1 Leverage Ratio	5.19	3.91	4.48
NPL/ Loans at Amortised Cost	5.22	3.76	3.73
Reserves/Loans at Amort. Cost	3.10	2.61	2.42

Source: Bloomberg, S&P Global Market Intelligence, NORD/LB Markets Strategy & Floor Research; as of: 17.10.2022

Strengths / Opportunities

- Liquidity
- Support from the Crédit Agricole Group

- Capitalisation
- National government bond portfolio (volatility)

Crédit Agricole Cariparma – Mortgage

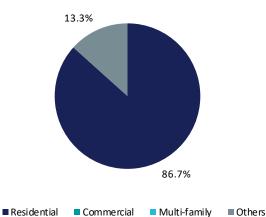
Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Cover Pool Data

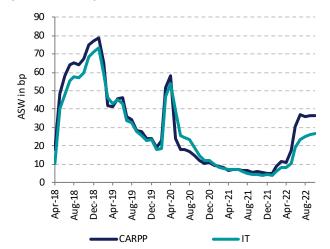
Cover pool volume (EURm)	16,604
Amount outstanding (EURm)	12,000
-thereof ≥ EUR 500m	77.1%
Current OC (nominal)	38.4%
Committed OC	7.5%
Cover type	Mortgage
Main country	100% Italy
Main region	25% Lombardy
Number of loans	175,840
Number of borrowers	n/a
Avg. exposure to borrowers (EUR)	n/a
WAL (cover pool)	7.8y
WAL (covered bonds)	6.7y
Fixed interest (cover pool)	59.1%
Fixed interest (covered bonds)	77.1%
LTV (indexed)	54.4%
LTV (unindexed)	53.4%
Loans in arrears	0.5%

Rating (Moody's)	Aa3
Rating (S&P)	-
Rating (Fitch)	-
Rating (DBRS)	-
TPI	Probable
TPI leeway	2
Collateral score	5.0%
RRL	-
JRL	-
Unused notches	-
AAA credit risk (%)	-
PCU	-
Recovery uplift	-
Outstanding ESG BMKs	Yes
LCR ELIGIBLE	Yes
LCR level (Bmk)	1
Risk weight	10%
Maturity structure (Bmk)	SB

Borrower Types

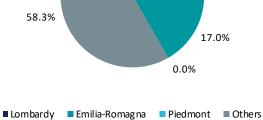


Spread Development



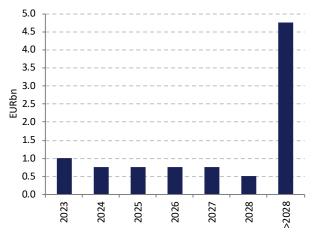
.....

Regional Distribution



24.7%

Redemption Profile (Bmk)



Source: Issuer, Rating agencies, Bloomberg, NORD/LB Markets Strategy & Floor Research

NORD/LB

Credito Emiliano

Rating

BBB

Baa3

Ratings

Fitch

S&P

Moody's*

Homepage

www.credem.it

*Senior Unsecured

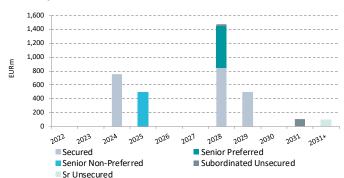
Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Credito Emiliano S.p.A. (Credem) is a financial institution headquartered in the northern Italian region of Emilia-Romagna which was founded in 1910. It has been listed on the Outlook Italian stock exchange since October 1997. Its biggest shareholder is Credito Emiliano Stable Holding S.p.A. with 74.9% of shares (01 August 2022). Credem is the operating unit of the Credem Group. It focuses on retail and commercial banking (with particular focus on retail Negative and SME customers) as well as wealth management. In addition to the original banking services offered, leasing and factoring (Credemleasing, Credemfactor and Banca Euromobiliare) services are also provided. Credem has more than 5,700 employees (Q1 2022) and 522 financial advisors, who serve more than 1.3 million customers across 435 branches. The Group is increasingly focusing on digital sales channels in addition to its analogue business. In March 2021, 93.5% of all its transactions took place digitally (via online and mobile banking, among other methods). Credem reports in the following business segments: Commercial Banking, Asset Management, Bancassurance, Trading, ALM Treasury and Corporate Centre & other. Around two thirds of the funding mix consist of retail funding, while the remaining third is made up of wholesale funding (Q1 2022). In January 2022 and based on its internal ESG framework, Credem issued its first green bond (senior preferred) in the amount of EUR 600 million. In 2021, the NPL ratio reduced by 50 basis points to 2.4% (gross, unchanged as at Q1 2022) and the NPL coverage ratio rose to 53.7% (FY 2020: 52.0%). The CET1 ratio (FY 2021: 15.1%; fully loaded) and the liquidity key metrics (LCR and NSFR; 217% and 141% respectively) all fulfilled the regulatory requirements.

Balance Sheet

(EURm)	2020Y	2021Y	2022H1
Net Loans to Customers	34,361	40,189	41,033
Total Securities	3,944	6,955	7,361
Total Deposits	33,079	37,714	36,603
Tier 1 Common Capital	2,580	2,868	2,695
Total Assets	56,650	67,579	65,764
Total Risk-weighted Assets	16,555	18,747	18,066

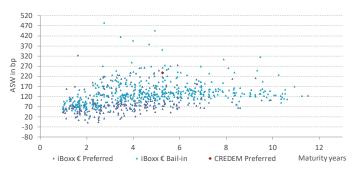
Redemption Profile



Income Statement (FURm)

(EURm)	2020Y	2021Y	2022H1
Net Interest Income	486	490	270
Net Fee & Commission Inc.	517	635	301
Net Trading Income	270	205	119
Operating Expense	940	1,053	532
Credit Commit. Impairment	109	32	7
Pre-tax Profit	253	466	225

Senior Unsecured Bonds (EUR BMK)



Company Ratios

	2020Y	2021Y	2022H1
Net Interest Margin	1.13	0.94	0.96
ROAE	6.87	10.84	9.50
Cost-to-Income	72.28	74.25	70.65
Core Tier 1 Ratio	15.59	15.30	14.92

	2020Y	2021Y	2022H1
Liquidity Coverage Ratio	250.14	245.64	235.20
IFRS Tier 1 Leverage Ratio	4.64	4.31	4.16
NPL/ Loans at Amortised Cost	2.55	2.04	1.82
Reserves/Loans at Amort. Cost	1.62	1.29	1.12

Source: Bloomberg, S&P Global Market Intelligence, NORD/LB Markets Strategy & Floor Research; as of: 17.10.2022

Strengths / Opportunities

- Capitalisation
- Asset quality

- Economic environment in Italy
- Profitability



Credito Emiliano – Mortgage

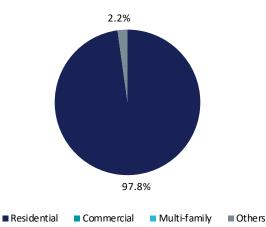
Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Cover Pool Data

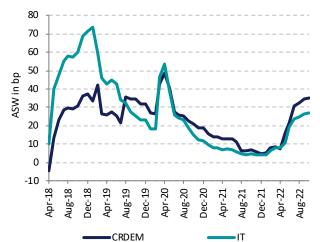
Cover pool volume (EURm)	3,989
Amount outstanding (EURm)	2,100
-thereof ≥ EUR 500m	95.2%
Current OC (nominal)	90.0%
Committed OC	7.5%
Cover type	Mortgage
Main country	100% Italy
Main region	17% Emilia-Romagna
Number of loans	53,634
Number of borrowers	n/a
Avg. exposure to borrowers (EUR)	n/a
WAL (cover pool)	14.4y
WAL (covered bonds)	4.7y
Fixed interest (cover pool)	61.9%
Fixed interest (covered bonds)	100.0%
LTV (indexed)	44.4%
LTV (unindexed)	55.0%
Loans in arrears	0.0%

AAA credit risk (%)
PCU
Recovery uplift
Outstanding ESG BMKs
LCR ELIGIBLE
LCR level (Bmk)
Risk weight
Maturity structure (Bmk)

Borrower Types



Spread Development



Source: Issuer, Rating agencies, Bloomberg, NORD/LB Markets Strategy & Floor Research

Regional Distribution

Rating (Moody's)

Rating (S&P) Rating (Fitch)

Rating (DBRS)

Collateral score

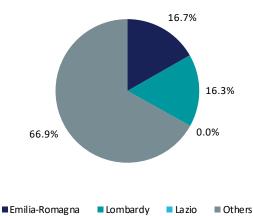
Unused notches

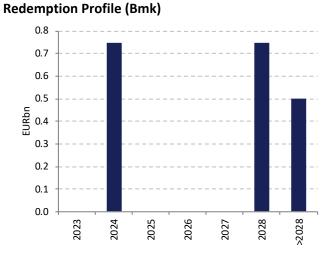
TPI leeway

TPI

RRL

JRL





NORD/LB

Italy

Aa3

AA

1

_

_

_

-6

2 No Yes 1 10%

SB

5.0%

Probable

Iccrea Banca

Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Ratings

	Rating	Outlook
Fitch	BB-	Positive
Moody's	-	-
S&P	BB	Stable

Homepage

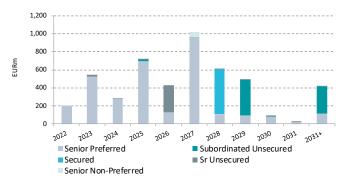
www.iccreabanca.it

Iccrea Banca S.p.A. is the parent company of the cooperative Iccrea Cooperative Banking Group (ICBG). This was established in 2019 on the basis of a cohesion agreement between Iccrea Banca and currently 128 affiliated cooperative banks. The agreement governs mutual rights, powers, and obligations and includes, in particular, joint and several liability and mutual support within the group to ensure solvency and liquidity. ICBG is the largest Italian cooperative banking group and the fourth largest Italian banking group in terms of total assets (FY 2021). In the following, we refer to ICBG data as of end-2021: over 22,000 employees serve primarily retail customers in 2,474 branches. At group level, EUR 88.8 billion in net loans were reported (FY 2021). The item "Direct Funding from Customers", on the other hand, amounted to EUR 122 billion. The parent company Iccrea Banca is also regularly active as an issuer on the capital market. Common Equity Tier 1 capital stood at EUR 11.3 billion at year-end 2021, resulting in a CET1 ratio of 17.7% on a portfolio of EUR 63.7 billion in RWAs. An ECB approval ("waiver") in December 2021 allows a risk-weighting factor of zero on intra-group exposures. The improvement in asset quality focused on in the strategic plan resulted in a reduction in the gross NPL ratio to 6.9% (previous year: 9.1%) and the net NPL ratio to 2.7% (previous year: 4.3%) and is to be continued. The liquidity ratios LCR (FY 2021: 291%) and NSFR (134%) met the minimum regulatory requirements.

Balance Sheet

(EURm)	2020Y	2021Y	2022H1
Net Loans to Customers	144,794	149,883	151,094
Total Securities	9,170	8,847	10,438
Total Deposits	108,397	117,436	116,894
Tier 1 Common Capital	11,025	11,246	11,304
Total Assets	169,268	178,985	176,343
Total Risk-weighted Assets	65,939	63,670	63,476

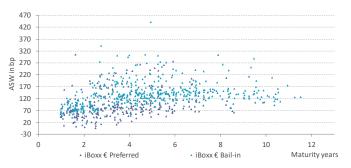
Redemption Profile



Income Statement

(EURm)	2020Y	2021Y	2022H1
Net Interest Income	2,521	1,730	1,670
Net Fee & Commission Inc.	1,262	1,286	659
Net Trading Income	281	470	123
Operating Expense	3,262	2,533	1,649
Credit Commit. Impairment	862	603 1,250	189
Pre-tax Profit	202	438	774

Senior Unsecured Bonds



Company Ratios

	2020Y	2021Y	2022H1
Net Interest Margin	1.63	1.66	1.98
ROAE	1.97	4.38	12.61
Cost-to-Income	74.28	65.13	62.94
Core Tier 1 Ratio	16.72	17.66	17.81

	2020Y	2021Y	2022H1
Liquidity Coverage Ratio	282.86	289.15	251.20
IFRS Tier 1 Leverage Ratio	6.55	6.31	6.43
NPL/ Loans at Amortised Cost	5.87	4.32	3.69
Reserves/Loans at Amort. Cost	3.74	3.41	3.06

Source: Bloomberg, S&P Global Market Intelligence, NORD/LB Markets Strategy & Floor Research; as of: 26.10.2022

Strengths / Opportunities

- Deposit base
- Franchise/regional anchoring

Risks / Weaknesses

- Diversification of revenue sources/profitability
- Credit quality

NORD/LB



Iccrea Banca – Mortgage

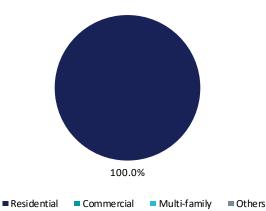
Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Cover Pool Data

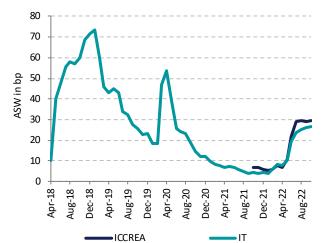
Cover pool volume (EURm)	1,294
Amount outstanding (EURm)	500
-thereof ≥ EUR 500m	100.0%
Current OC (nominal)	158.7%
Committed OC	7.5%
Cover type	Mortgage
Main country	100% Italy
Main region	29% Emilia-Romagna
Number of loans	12,010
Number of borrowers	n/a
Avg. exposure to borrowers (EUR)	n/a
WAL (cover pool)	18.5y
WAL (covered bonds)	6.2y
Fixed interest (cover pool)	51.5%
Fixed interest (covered bonds)	100.0%
LTV (indexed)	n/a
LTV (unindexed)	56.0%
Loans in arrears	0.0%

Rating (Moody's)	Aa3
Rating (S&P)	-
Rating (Fitch)	-
Rating (DBRS)	-
TPI	Probable
TPI leeway	-
Collateral score	6.7%
RRL	-
JRL	-
Unused notches	-
AAA credit risk (%)	-
PCU	-
Recovery uplift	2
Outstanding ESG BMKs	No
LCR ELIGIBLE	Yes
LCR level (Bmk)	1
Risk weight	10%
Maturity structure (Bmk)	SB

Borrower Types

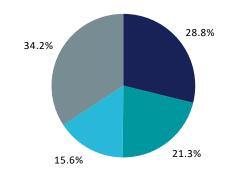


Spread Development



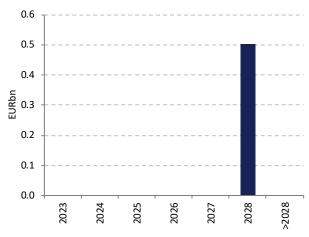
Source: Issuer, Rating agencies, Bloomberg, NORD/LB Markets Strategy & Floor Research

Regional Distribution



Emilia-Romagna Lombardy Veneto Others

Redemption Profile (Bmk)





Intesa Sanpaolo

Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Ratings

-		
	Rating	Outlook
Fitch	BBB	Stable
Moody's	Baa1	Negative
S&P	BBB	Stable

Homepage

Intesasanpaolo.com

As measured by its balance sheet total, Intesa Sanpaolo S.p.A. (Intesa) is the biggest bank in Italy (Q1 2022: EUR 1,073bn). It is a domestic systemically important bank (D-SIB). The institute is listed on the Borsa Italia, where its main shareholder is Compagnia di San Paolo (31.07.2022: 5.95%), followed by BlackRock (4.87%). Intesa is a universal bank and conducts its business activities via 3,700 national and almost 1,000 international branches serving 13.5 million customers on the domestic market as well as a further 7 million clients around the world (as at: May 2022). In 12 countries, the bank serves retail customers and in 25 countries (in particular the Middle East and North Africa), it serves corporate clients. The bank's business activities are divided into six business divisions with various consolidated banks and specialised companies, which together form the Intesa Sanpaolo Group. These divisions comprise Banca dei Territori (domestic Commercial Banking, Retail, Personal and SME clients), Corporate and Investment Banking, (corporate clients, public finance and financial institutions), International Subsidiaries, Private Banking, Insurance and Asset Management. The bank holds a market-leading position in the following areas: loans (Q1 2022: 20.3% market share), deposits (22.3%), asset management (24.1%), pension funds (24.3%) and factoring (25.3%). In April 2021, Intensa concluded its acquisition of UBI Banca. As a result of the merger, 2.4 million customers joined Intensa. A total of 83% of the funding mix consists of retail funding (Q1 2022) and 17% of wholesale funding. The bank plans to have issued loans for the funding of the green transformation in the amount of EUR 90bn by 2025.

Balance Sheet

(EURm)	2020Y	2021Y	2022H1
Net Loans to Customers	506,594	506,725	519,254
Total Securities	118,185	120,601	112,855
Total Deposits	425,191	458,243	460,455
Tier 1 Common Capital	51,070	47,247	41,321
Total Assets	1,002,614	1,069,003	1,032,315
Total Risk-weighted Assets	347,072	326,903	325,341

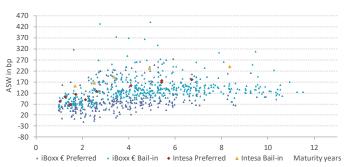
Redemption Profile



Income Statement (EURm)

(EURm)	2020Y	2021Y	2022H1
Net Interest Income	7,732	7,993	4,083
Net Fee & Commission Inc.	7,978	9,364	4,399
Net Trading Income	1,294	1,339	867
Operating Expense	14,347	14,024	6,311
Credit Commit. Impairment	4,352	2,716	1,291
Pre-tax Profit	2,208	5,181	3,598

Senior Unsecured Bonds (EUR BMK)



Company Ratios

	2020Y	2021Y	2022H1	
Net Interest Margin	1.13	1.02	1.01	I
ROAE	5.35	6.11	7.31	I
Cost-to-Income	73.12	63.28	55.55	I
Core Tier 1 Ratio	14.71	14.45	12.70	I

	2020Y	2021Y	2022H1
Liquidity Coverage Ratio	161.30	184.17	191.51
IFRS Tier 1 Leverage Ratio	5.39	4.61	-
NPL/ Loans at Amortised Cost	4.14	3.02	2.16
Reserves/Loans at Amort. Cost	2.53	2.09	-

Source: Bloomberg, S&P Global Market Intelligence, NORD/LB Markets Strategy & Floor Research; as of: 17.10.2022

Strengths / Opportunities

- Positioning on the domestic market
- Funding
- Liquidity buffer

Risks / Weaknesses

- Russian business
- Capitalisation
- Credit risk concentration (Italy)

NORD/LB

Intesa Sanpaolo – Mortgage

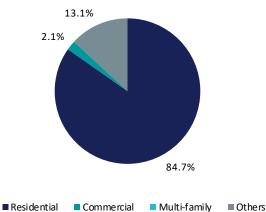
Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Cover Pool Data

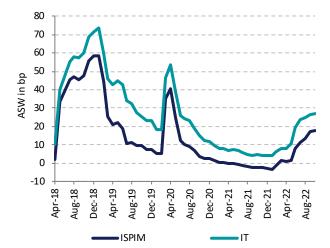
Cover pool volume (EURm)	20,354
Amount outstanding (EURm)	15,560
-thereof ≥ EUR 500m	49.8%
Current OC (nominal)	30.8%
Committed OC	7.5%
Cover type	Mortgage
Main country	100% Italy
Main region	23% Lombardy
Number of loans	228,403
Number of borrowers	n/a
Avg. exposure to borrowers (EUR)	n/a
WAL (cover pool)	9.4y
WAL (covered bonds)	4.0y
Fixed interest (cover pool)	74.9%
Fixed interest (covered bonds)	61.8%
LTV (indexed)	50.7%
LTV (unindexed)	63.1%
Loans in arrears	0.1%

Rating (Moody's)	Aa3
Rating (S&P)	-
Rating (Fitch)	-
Rating (DBRS)	-
TPI	Probable
TPI leeway	1
Collateral score	5.0%
RRL	-
JRL	-
Unused notches	-
AAA credit risk (%)	-
PCU	-
Recovery uplift	-
Outstanding ESG BMKs	No
LCR ELIGIBLE	Yes
LCR level (Bmk)	1
Risk weight	10%
Maturity structure (Bmk)	SB

Borrower Types

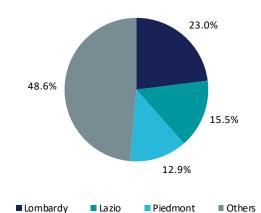


Spread Development

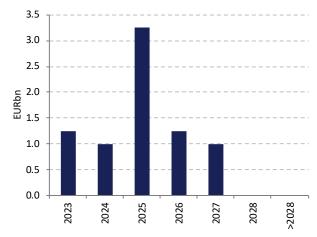


Source: Issuer, Rating agencies, Bloomberg, NORD/LB Markets Strategy & Floor Research

Regional Distribution



Redemption Profile (Bmk)





Intesa Sanpaolo – Mortgage (UBI)

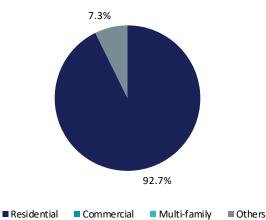
Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

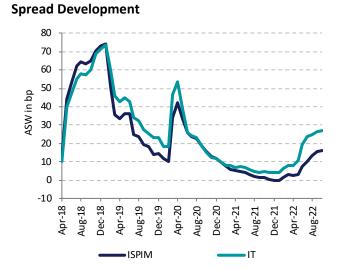
Cover Pool Data

Cover pool volume (EURm)	9,728
Amount outstanding (EURm)	8,100
-thereof \geq EUR 500m	89.5%
Current OC (nominal)	20.1%
Committed OC	5.8%
Cover type	Mortgage
Main country	100% Italy
Main region	37% Lombardy
Number of loans	123,488
Number of borrowers	n/a
Avg. exposure to borrowers (EUR)	n/a
WAL (cover pool)	8.7y
WAL (covered bonds)	3.6v
Fixed interest (cover pool)	44.6%
Fixed interest (covered bonds)	92.6%
LTV (indexed)	48.9%
LTV (unindexed)	65.3%
Loans in arrears	0.1%

Rating (Moody's)	Aa3
Rating (S&P)	-
Rating (Fitch)	-
Rating (DBRS)	AA
ТРІ	Probable
TPI leeway	1
Collateral score	5.0%
RRL	-
JRL	-
Unused notches	-
AAA credit risk (%)	-
PCU	-
Recovery uplift	1
Outstanding ESG BMKs	No
LCR ELIGIBLE	Yes
LCR level (Bmk)	1
Risk weight	10%
Maturity structure (Bmk)	SB

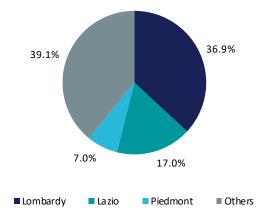
Borrower Types



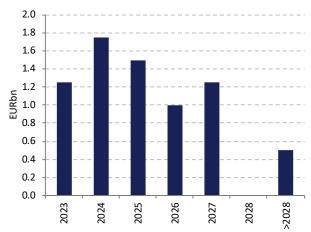


Source: Issuer, Rating agencies, Bloomberg, NORD/LB Markets Strategy & Floor Research

Regional Distribution



Redemption Profile (Bmk)



NORD/LB

Mediobanca

Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Ratings

	Rating	Outlook
Fitch	BBB	Stable
Moody's	Baa1	Negative
S&P	BBB	Stable

Homepage

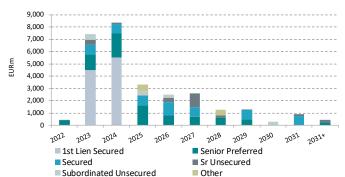
www.mediobanca.com

Mediobanca S.p.A. (MB) was established in 1946. It is a financial group active at international level offering its customers services in the areas of loans, financial advisory and asset management. The institute is listed on the Italian stock exchange and employs around 4,900 staff (FY 2022). The main shareholders in the institute are Leonardo Del Vecchio (31 July2022: 19.4%) and Francesco Gaetano Caltagirone (5.5%). Over the past few years, the Group has strengthened its international presence as a result of various acquisitions. In Q2 2022, the acquisition of Bybook Capital LLP (management of nonperforming loans, headquartered in London) was concluded. The financial institute, which reports on 30 June each year, is divided into the following segments: Corporate & Investment Banking, Consumer Banking (mainly via the subsidiary Compass), Wealth Management (via various subsidiaries and brands), Principal Investing (proprietary participation, mainly its 13% share in Assicurazioni Generali) and the Holding function (ALM, Treasury). A total of 56% of its funding mix consists of deposits and retail bonds (FY 2022), while 44% is attributable to wholesale funding, which in turn is divided into bonds (FY 2022: 21%), ECB (TLTRO funds; 14%) and Banks and other (9%). With its strategic orientation 2019-2023, MB is also incorporating extensive integration of its ESG strategy into its business plan. As part of this strategy, the bank is set to achieve net-zero emissions by 2050. It already issued its first green bond (senior preferred) in 2020. The volume amounted to EUR 500 million. The CET1 ratio of 15.7% (FY 2022) exceeds the regulatory requirements.

Balance Sheet

(EURm)	2020Y	2021Y	2022Y
Net Loans to Customers	50,079	51,920	57,279
Total Securities	13,623	16,881	15,162
Total Deposits	27,882	29 <i>,</i> 586	36,444
Tier 1 Common Capital	7,745	7,689	7,894
Total Assets	78 <i>,</i> 950	82,599	90,568
Total Risk-weighted Assets	48,030	47,159	50,378

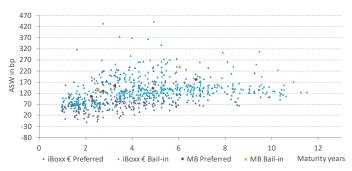
Redemption Profile



Income Statement

(EURm)	2020Y	2021Y	2022Y
Net Interest Income	1,442	1,418	1,494
Net Fee & Commission Inc.	487	585	668
Net Trading Income	68	202	-9
Operating Expense	1,301	1,410	1,478
Credit Commit. Impairment	401	277	201
Pre-tax Profit	815	1,081	1,162

Senior Unsecured Bonds (EUR BMK)



Company Ratios

	2020Y	2021Y	2022Y
Net Interest Margin	1.99	1.90	1.86
ROAE	5.99	7.68	8.27
Cost-to-Income	49.67	49.69	51.92
Core Tier 1 Ratio	16.13	16.31	15.67

	2020Y	2021Y	2022Y
Liquidity Coverage Ratio	158.36	158.54	151.54
IFRS Tier 1 Leverage Ratio	10.63	10.19	9.52
NPL/ Loans at Amortised Cost	4.48	3.85	2.96
Reserves/Loans at Amort. Cost	3.08	3.19	2.81

Source: Bloomberg, S&P Global Market Intelligence, NORD/LB Markets Strategy & Floor Research; as of: 17.10.2022

Strengths / Opportunities

- Market positioning
- Capitalisation
- Diversified sources of revenue

Risks / Weaknesses

- Dependency on wholesale funding
- Geographical credit concentration
- Economic environment



NORD/LB

Mediobanca – Mortgage

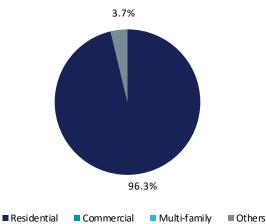
Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Cover Pool Data

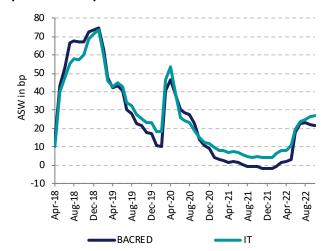
Cover pool volume (EURm)	7,421
Amount outstanding (EURm)	5,000
-thereof ≥ EUR 500m	105.0%
Current OC (nominal)	48.4%
Committed OC	n/a
Cover type	Mortgage
Main country	100% Italy
Main region	25% Lombardy
Number of loans	72,452
Number of borrowers	n/a
Avg. exposure to borrowers (EUR)	n/a
WAL (cover pool)	19.6y
WAL (covered bonds)	4.6y
Fixed interest (cover pool)	55.6%
Fixed interest (covered bonds)	100.0%
LTV (indexed)	54.8%
LTV (unindexed)	64.9%
Loans in arrears	0.0%

Rating (Moody's)	-
Rating (S&P)	-
Rating (Fitch)	AA
Rating (DBRS)	-
ТРІ	-
TPI leeway	-
Collateral score	-
RRL	-
JRL	-
Unused notches	-
AAA credit risk (%)	-
PCU	6
Recovery uplift	2
Outstanding ESG BMKs	No
LCR ELIGIBLE	Yes
LCR level (Bmk)	1
Risk weight	10%
Maturity structure (Bmk)	SB

Borrower Types

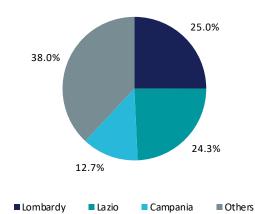


Spread Development

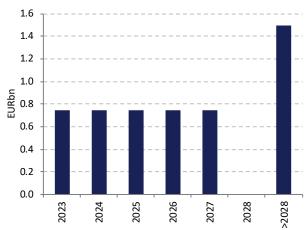


Source: Issuer, Rating agencies, Bloomberg, NORD/LB Markets Strategy & Floor Research

Regional Distribution



Redemption Profile (Bmk)



NORD/LB



UniCredit

Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Ratings

_		
	Rating	Outlook
Fitch	BBB	Stable
Moody's*	Baa1	Negative
S&P	BBB	Stable

Homepage

www.unicreditgroup.eu

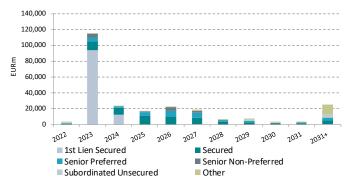
*Senior Unsecured

UniCredit S.p.A. is the second largest banking group and Italy's only bank of global systemic importance (G-SIB, additional capital requirement of 1%) in Italy. The Group is listed on the Italian stock exchange, where its main shareholder is the BlackRock Group (31 July 2022: 5,68%), followed by the Europacific Growth Fund (5.65%). UniCredit is a globally active universal bank with a strong focus on Europe. It employs 86,000 staff, who serve a total of 15 million customers (FY 2021). In FY 2021, the institute changed the structure of its business segments. Now, it reports in the four core markets Italy (FY 2021: 46% of operating income), Germany (25%), Central Europe (17%) and Eastern Europe (13%). The bank also reports in the segments Group Corporate Centre and Non Core (most recently FY 2021). In December 2021, it announced its new strategic orientation, UniCredit Unlocked, for the years 2022 to 2024. This is set to strengthen its financial performance in the areas of cost efficiency, digitisation, capital allocation and income growth. The barometers for performance improvement include a CIR of approximately 50% (Q2 2022: 49%) and a CET1 ratio of between 12.5% and 13.0% (14%). In addition to these financial key metrics, sustainability aspects are also anchored in the new strategy. For example, by 2024, up to EUR 150bn are set to be invested in ESG-related activities. The gross NPE ratio fell from 5.0% to 2.8% (Q2 2022) compared to FY 2021 and in so doing, it has reached the target defined in the strategic orientation. The NPE coverage ratio amounted to 49.2% (Q2 2022).

Balance Sheet

(EURm)	2020Y	2021Y	2022H1
Net Loans to Customers	515,321	531,008	543,391
Total Securities	158,404	148,149	133,128
Total Deposits	509,623	513,677	537,550
Tier 1 Common Capital	51,971	50 <i>,</i> 933	51,906
Total Assets	931,456	917,227	945,756
Total Risk-weighted Assets	325,665	321,992	316,731

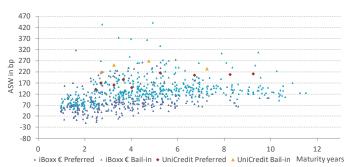
Redemption Profile



Income Statement

(EURm)	2020Y	2021Y	2022H1
Net Interest Income	9,497	9,050	4,822
Net Fee & Commission Inc.	5,957	6,709	3,479
Net Trading Income	1,059	1,620	962
Operating Expense	12,852	9,786	5,687
Credit Commit. Impairment	4,970	1,634	1,253
Pre-tax Profit	-2,505	1,780	3,112

Senior Unsecured Bonds (EUR BMK)



Company Ratios

2020Y	2021Y	2022H1
1.11	-	1.07
-4.55	3.45	7.40
70.48	-	56.46
15.96	15.82	16.39
	1.11 -4.55 70.48	1.11 - -4.55 3.45 70.48 -

	20201	20211	2022H1
Liquidity Coverage Ratio	171.64	182.08	171.56
IFRS Tier 1 Leverage Ratio	5.89	5.84	5.70
NPL/ Loans at Amortised Cost	4.20	3.37	2.63
Reserves/Loans at Amort. Cost	3.22	-	2.34

0201

Source: Bloomberg, S&P Global Market Intelligence, NORD/LB Markets Strategy & Floor Research; as of: 17.10.2022

Strengths / Opportunities

- Leading market position in core markets
- Liquidity
- Geographical diversification

Risks / Weaknesses

- Credit risk concentration
- NPE
- Income pressure (diversification, interest rate environment)

NORD/LB

UniCredit – Mortgage

Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Cover Pool Data

Cover pool volume (EURm)	6,706
Amount outstanding (EURm)	2,606
-thereof ≥ EUR 500m	86.3%
Current OC (nominal)	157.3%
Committed OC	7.5%
Cover type	Mortgage
Main country	100% Italy
Main region	24% Lombardy
Number of loans	105,880
Number of borrowers	105,523
Avg. exposure to borrowers (EUR)	63,547
WAL (cover pool)	6.2y
WAL (covered bonds)	1.7y
Fixed interest (cover pool)	23.9%
Fixed interest (covered bonds)	100.0%
LTV (indexed)	43.4%
LTV (unindexed)	38.1%
Loans in arrears	0.8%

Rating (Moody's)	Aa3
Rating (S&P)	AA-
Rating (Fitch)	AA
Rating (DBRS)	-
ТРІ	Probable
TPI leeway	1
Collateral score	5.0%
RRL	a-
JRL	a-
Unused notches	1
AAA credit risk (%)	17.37
PCU	6
Recovery uplift	3
Outstanding ESG BMKs	No
LCR ELIGIBLE	Yes
LCR level (Bmk)	1
Risk weight	10%
Maturity structure (Bmk)	SB

23.6%

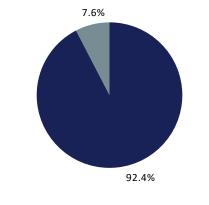
11.7%

Piedmont

14.1%

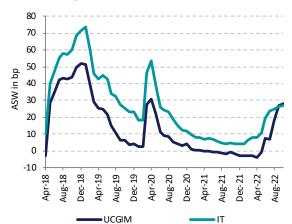
Others

Borrower Types



■ Residential ■ Commercial ■ Multi-family ■ Others

Spread Development

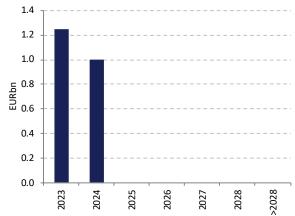


Redemption Profile (Bmk)

■ Lombardy

Regional Distribution

50.6%



La zio

Source: Issuer, Rating agencies, Bloomberg, NORD/LB Markets Strategy & Floor Research

NORD/LB

UniCredit – Mortgage (CPT)

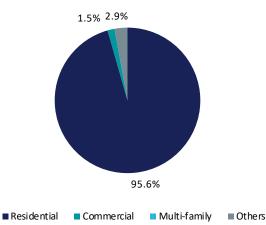
Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Cover Pool Data

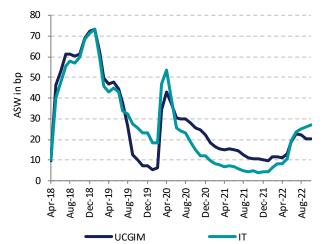
Cover pool volume (EURm)	31,356
Amount outstanding (EURm)	19,250
-thereof ≥ EUR 500m	10.4%
Current OC (nominal)	62.9%
Committed OC	7.8%
Cover type	Mortgage
Main country	100% Italy
Main region	21% Lombardy
Number of loans	377,163
Number of borrowers	357,438
Avg. exposure to borrowers (EUR)	87,724
WAL (cover pool)	8.8y
WAL (covered bonds)	7.2y
Fixed interest (cover pool)	46.9%
Fixed interest (covered bonds)	31.4%
LTV (indexed)	55.7%
LTV (unindexed)	49.3%
Loans in arrears	0.3%

		, 10.0
R	ating (S&P)	-
R	ating (Fitch)	-
R	ating (DBRS)	-
Т	PI	Probable
Т	PI leeway	1
С	ollateral score	6.5%
R	RL	-
JF	RL	-
U	nused notches	-
A	AA credit risk (%)	-
Р	CU	-
R	ecovery uplift	1
0	utstanding ESG BMKs	No
L	CR ELIGIBLE	Yes
L	CR level (Bmk)	1
R	isk weight	10%
N	1aturity structure (Bmk)	CPT

Borrower Types



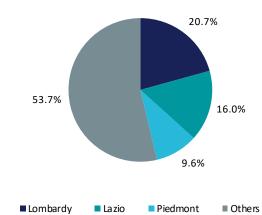
Spread Development



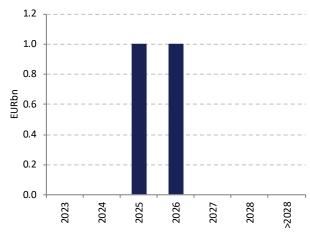
Source: Issuer, Rating agencies, Bloomberg, NORD/LB Markets Strategy & Floor Research

Regional Distribution

Rating (Moody's)



Redemption Profile (Bmk)







Aa3

Volksbank Südtirol

Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Ratings		
	Rating	Outlook
Fitch	BB+	Stable
Moody's	-	-
S&P	BB+	Stable

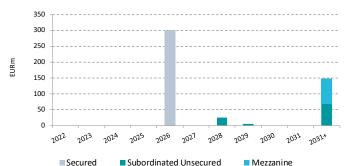
Homepage

www.volksbank.it

Volksbank Südtirol (VS) is a regional bank headquartered in Bolzano. In addition to its original domestic market in South Tyrol (55 branches), it is also active in Trento (17), Belluno (19), Treviso (21), Padua (5), Pordenone (2), Venice (14) and Vicenza (31). After several mergers and acquisitions, VS has been operating as a Società per azioni (public limited company) and listed in the Bolzano commercial register. VS has a broad shareholder basis amounting to around 58,000. Most of its shareholders are located in South Tyrol and Vicenza. In total, the bank has more than 1,300 employees, who serve around 280,000 customers, 242,500 of which are retail customers (FY 2021). VS reports in the three operating segments: Private (FY 2021: 32.7% of operating income), Enterprises (43.3%) and Financial/ALM (23.8%) as well as the non-operating segment Reconciliation. With its Sustainable 2023 strategic plan, the institute is set to place an even stronger focus on its core business in the retail and SME segment. It also aims to support the transformation to a more sustainable economy and society. For example, VS is planning to issue a volume of EUR 1bn in sustainable construction financing by 2023. The financial targets that it has set for 2023 as part of the strategy include: a total capital ratio of more than 15.5% (FY 2021: 18.2%), a CIR of less than 63.7% (52.1%), a ROTE of above 4.2% (9.4%) and a gross NPL ratio of below 8.3% (5.8%). In FY 2021, the institute registered a NPL coverage ratio of 54% (FY 2021; FY 2020: 55.7%). The capital and liquidity key metrics CET1 ratio (14.6%; fully phased-in) and leverage ratio (just under 5.4%) exceeded the regulatory requirements.

Balance Sheet				
(EURm)	2020Y	2021Y	2022H1	
Net Loans to Customers	9,697	10,361	7,431	
Total Securities	647	730	3,817	
Total Deposits	8,057	9,033	9,001	
Tier 1 Common Capital	771	816	-	
Total Assets	11,626	13,283	13,023	
Total Risk-weighted Assets	5,303	5,199	-	

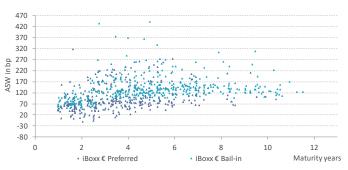
Redemption Profile



Income Statement

(EURm)	2020Y	2021Y	2022H1
Net Interest Income	173	177	-
Net Fee & Commission Inc.	84	94	-
Net Trading Income	6	45	-
Operating Expense	190	202	-
Credit Commit. Impairment	64	55	-
Pre-tax Profit	21	78	-

Senior Unsecured Bonds (EUR BMK)



Company Ratios

	2020Y	2021Y	2022H1		2020Y	2021Y	2022H1
Net Interest Margin	1.63	1.47	-	Liquidity Coverage Ratio	229.00	235.45	229.00
ROAE	2.12	8.78	7.62	IFRS Tier 1 Leverage Ratio	6.64	6.15	-
Cost-to-Income	67.13	59.66	-	NPL/ Loans at Amortised Cost	5.34	4.53	6.17
Core Tier 1 Ratio	14.54	15.69	15.20	Reserves/Loans at Amort. Cost	3.50	3.13	-

Source: Bloomberg, S&P Global Market Intelligence, NORD/LB Markets Strategy & Floor Research; as of: 17.10.2022

Strengths / Opportunities

- Funding profile
- Market position in domestic market Trento South Tyrol

- Profitability (diversification of income sources)
 - Capitalisation (internal capital generation)



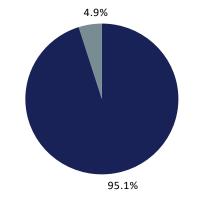
Banca Popolare dell'Alto Adige – Mortgage

Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Cover Pool Data

Cover pool volume (EURm)	492
Amount outstanding (EURm)	300
-thereof ≥ EUR 250m	100.0%
Current OC (nominal)	63.9%
Committed OC	26.6%
Cover type	Mortgage
Main country	100% Italy
Main region	51% Trentino-South Tyrol
Number of loans	5,395
Number of borrowers	n/a
Avg. exposure to borrowers (EUR)	n/a
WAL (cover pool)	7.4y
WAL (covered bonds)	4.3y
Fixed interest (cover pool)	35.1%
Fixed interest (covered bonds)	100.0%
LTV (indexed)	39.2%
LTV (unindexed)	39.4%
Loans in arrears	0.0%

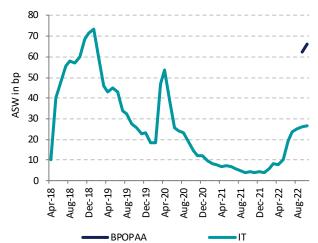
Borrower Types



Residential Commercial Multi-family

Others

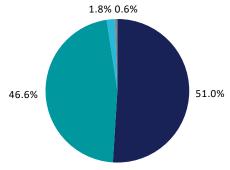
Spread Development



Source: Issuer, Rating agencies, Bloomberg, NORD/LB Markets Strategy & Floor Research

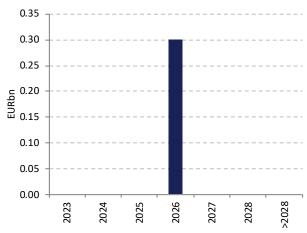
-
-
AA
-
-
-
-
-
-
-
-
6
-
No
Yes
2A
10%
SB

Regional Distribution



■ Trentino-South Tyrol ■ Veneto ■ Friuli Venezia Giulia ■ Others

Redemption Profile (SBmk)



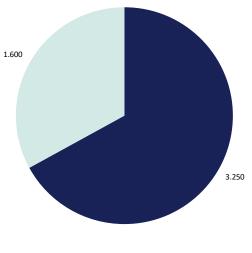


Market Overview Covered Bonds

Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

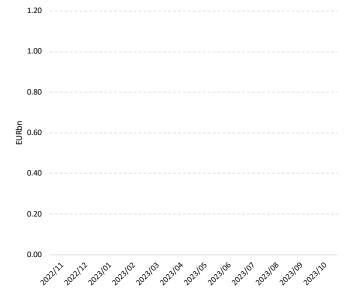
Cover Pool Volume	EUR 8.64bn	Outstanding volume (Bmk)	EUR 4.85bn
Amount outstanding	EUR 6.11bn	Number of benchmarks	6
Number of issuer	2	Outstanding ESG volume (Bmk)	-
No of cover pools	2	Number of ESG benchmarks	-
there of M / PS / others	2/0/0	Outstanding volume (SBmk)	-
Ratings (low / high)	AAA / AAA	Number of subbenchmarks	-
Best possible LCR level	Not eligible	Maturity types	SB



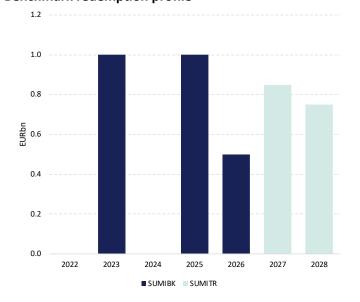


SUMIBK SUMITR

Benchmark redemption profile¹: 11/2022 - 10/2023



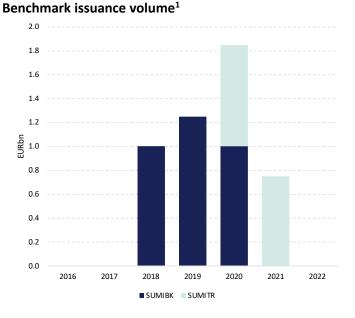
Benchmark redemption profile¹²



Source: Issuer, Rating agencies, Bloomberg, NORD/LB Markets Strategy & Floor Research; ¹ based on Bloomberg ticker; ² Redemptions 2022: 11/22 – 12/22

Japan

-



Japan

Sumitomo Mitsui Financial Group

Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Ratings		
	Rating	Outlool
Fitch	А	Negative
Moody's	A1	Stable
S&P	A-	Stable

Homepage

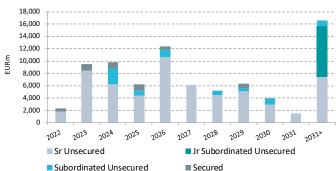
www.smbc.co.jp

The Sumitomo Mitsui Banking Corporation (SMBC) is a globally active universal bank that is headquartered in Tokyo. It is the biggest institute in Japan. With the creation of the holding company, Sumitomo Mitsui Financial Group (SMFG), and the transfer of shares from SMBC to SMFG, SMBC became a wholly owned subsidiary of SMFG. SMFG is one of the 30 global systemically important banks (G-SIBs, additional capital buffer 1.0%). In terms of geographical allocation, 66.1% of the loan portfolio is attributable to the domestic market (FY 2021). In Japan, the bank has more than 454 branches and serves around 27 million retail customers. While SMBC focuses on financial products and services in the banking segment, the other subsidiaries that form part of the Holding offer its international customers leasing, security, credit card and consumer finance services. The Group reports in the following business segments: Retail, Wholesale, Global, Global Markets and Head Office Account and Other. SMBC has been issuing green bonds to support its sustainability obligations as part of its green bond framework since 2015. As at March 2021, the volume of green bonds issued amounts to around EUR 1.7bn. It has a TLAC ratio of 28.51% (March 2022) and has therefore already exceeded the 2022 regulatory requirement (21.05%). In FY 2022, the NPL ratio rose by 10 basis points to 1.08%; the NPL coverage ratio is 66.98% (FY 2022). SMFG has also exceeded the regulatory requirements for CET1 ratio and leverage ratio at 14.45% (FY 2022) and 5.17% respectively. The bank's financial year ends on 31 March each year.

Balance Sheet

(EURm)	2020Y	2021Y	2022Y
Net Loans to Customers	693,806	650,744	667,298
Total Securities	456,050	477,665	482,889
Total Deposits	1,160,505	1,190,937	1,198,363
Tier 1 Common Capital	81,030	81,370	77,529
Total Assets	1,859,406	1,868,750	1,910,385
Total Risk-weighted Assets	520,949	508,493	536,337

Redemption Profile



Subordinated Unsecured

Company Ratios

	2020Y	2021Y	2022Y
Net Interest Margin	1.02	0.93	0.98
ROAE	6.42	4.57	5.87
Cost-to-Income	61.20	61.98	58.07
Core Tier 1 Ratio	15.55	16.00	14.46

	2020Y	2021Y	2022Y
Liquidity Coverage Ratio	125.68	140.14	141.77
IFRS Tier 1 Leverage Ratio	4.46	4.43	4.12
NPL/ Loans at Amortised Cost	0.79	1.14	1.29
Reserves/Loans at Amort. Cost	0.58	0.77	0.90

Source: Bloomberg, S&P Global Market Intelligence, NORD/LB Markets Strategy & Floor Research; as of: 17.10.2022

Strengths / Opportunities

- Leading market position in Japan
- Liquidity situation
- Probability of state support

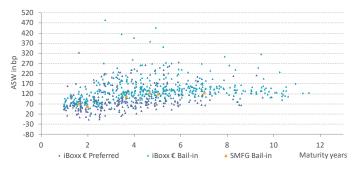
Risks / Weaknesses

- Inorganic growth
- Need for foreign currency funding
- Profitability (peer to peer)

Income Statement

(EURm)	2020Y	2021Y	2022Y
Net Interest Income	10,819	10,803	11,708
Net Fee & Commission Inc.	9,007	8,891	9,237
Net Trading Income	2,176	1,615	775
Operating Expense	14,401	14,135	13,954
Credit Commit. Impairment	1,413	2,917	2,102
Pre-tax Profit	7,356	5,439	7,123

Senior Unsecured Bonds (EUR BMK)



SMBC – Mortgage

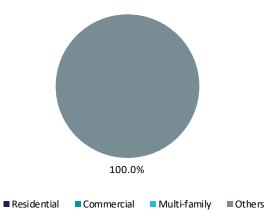
Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Cover Pool Data

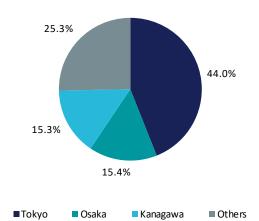
Cover pool volume (EURm)	6,363
Amount outstanding (EURm)	4,551
-thereof ≥ EUR 500m	71.4%
Current OC (nominal)	39.8%
Committed OC	25.0%
Cover type	Mortgage
Main country	100% Japan
Main region	44% Tokyo
Number of loans	42,059
Number of borrowers	n/a
Avg. exposure to borrowers (EUR)	n/a
WAL (cover pool)	29.0y
WAL (covered bonds)	2.9y
Fixed interest (cover pool)	0.0%
Fixed interest (covered bonds)	100.0%
LTV (indexed)	72.7%
LTV (unindexed)	83.9%
Loans in arrears	0.0%

Rating (Moody's)	Aaa
Rating (S&P)	-
Rating (Fitch)	-
Rating (DBRS)	-
TPI	Probable
TPI leeway	2
Collateral score	0.0%
RRL	-
JRL	-
Unused notches	-
AAA credit risk (%)	-
PCU	-
Recovery uplift	2
Outstanding ESG BMKs	No
LCR ELIGIBLE	No
LCR level (Bmk)	Not eligible
Risk weight	20%
Maturity structure (Bmk)	SB

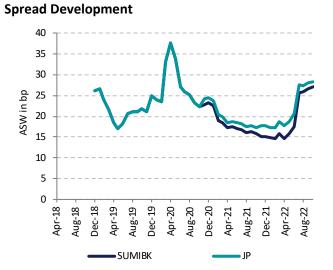
Borrower Types



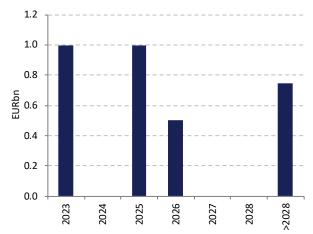
Regional Distribution



.. .



Redemption Profile (Bmk)



Source: Issuer, Rating agencies, Bloomberg, NORD/LB Markets Strategy & Floor Research



Japan

Japan

Sumitomo Mitsui Trust Holding

Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Ratings*

•		
	Rating	Outlook
Fitch	A-	Stable
Moody's**	A1	Stable
S&P	А	Stable

Homepage

www.smth.jp

*Sumitomo Mitsui Trust Bank

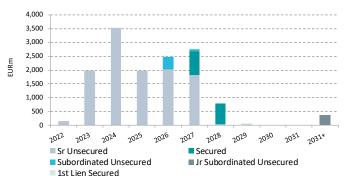
**Senior Unsecured

Sumitomo Mitsui Trust Bank (SMTB) was established in 1924 and is headquartered in Tokyo. The institute is a wholly owned subsidiary of the Sumitomo Mitsui Trust Holding (SMTH) and forms the core of the Sumitomo Mitsui Trust Group. The focus of its business operations is on trust activities and banking transactions. Its trust activities are divided into management and administration of customer property such as real estate, securities and assets. SMTH has been classified as a domestic systemically important bank (D-SIB) by Japan's Financial Services Agency and is also listed on the Tokyo and Nagoya stock exchanges. Following a restructuring process, since 01 April 2022, the business segments have been divided as follows: Retail, Wholesale, Investor Services, Real Estate, Global Markets, Asset Management Business and Others. The largest of these is the Wholesale segment with a share of 36.8% of net results (FY 2022). A total of 86.2% of the loan portfolio is attributable to the domestic market Japan, while the international loan portfolio is divided between the three main regions North America, Asia-Oceania and Europe. The market share for the loan business on the domestic market stands at around 5% (September 2021). Net income at SMTB most recently totalled JPY 113.3bn (FY 2022), equating to a share of 67.0% in overall Group earnings. With a CET1 ratio of 12.3%, the bank has exceeded the regulatory requirement of 7.5%. The NPL ratio was reduced by 20 basis points to 0.6% (FY 2022). The financial year of the bank runs from 01 April until 31 March.

Balance Sheet

(EURm)	2020Y	2021Y	2022Y
Net Loans to Customers	250,128	234,015	227,679
Total Securities	90,142	80,446	83,127
Total Deposits	309,100	312,980	295,175
Tier 1 Common Capital	20,338	18,913	18,386
Total Assets	477,830	488,160	479,131
Total Risk-weighted Assets	161,141	155,945	149,265

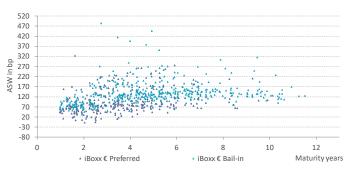
Redemption Profile



Income Statement

(EURm)	2020Y	2021Y	2022Y
Net Interest Income	1,055	1,831	2,052
Net Fee & Commission Inc.	3,244	3,040	3,234
Net Trading Income	846	-269	103
Operating Expense	3,567	3,394	3,335
Credit Commit. Impairment	363	63	319
Pre-tax Profit	1,993	1,618	1,747

Senior Unsecured Bonds (EUR BMK)



Company Ratios

	2020Y	2021Y	2022Y
Net Interest Margin	0.25	0.41	0.46
ROAE	6.13	5.49	6.17
Cost-to-Income	58.83	68.72	61.60
Core Tier 1 Ratio	12.62	12.13	12.32

	2020Y	2021Y	2022Y
Liquidity Coverage Ratio	129.26	166.51	173.49
IFRS Tier 1 Leverage Ratio	4.29	3.93	3.90
NPL/ Loans at Amortised Cost	0.38	0.46	0.72
Reserves/Loans at Amort. Cost	0.43	0.42	0.53

Source: Bloomberg, S&P Global Market Intelligence, NORD/LB Markets Strategy & Floor Research; as of: 17.10.2022

Strengths / Opportunities

- Position in domestic market
- Stable income from asset management
- Asset quality

- Profitability of loan portfolio
- Capitalisation
- FX risks in the funding profile

SMTB – Mortgage

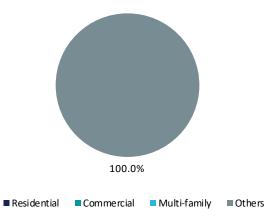
Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Cover Pool Data

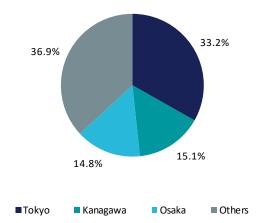
Cover pool volume (EURm)	2,280
Amount outstanding (EURm)	850
-thereof ≥ EUR 500m	188.2%
Current OC (nominal)	46.0%
Committed OC	25.0%
Cover type	Mortgage
Main country	100% Japan
Main region	33% Tokyo
Number of loans	11,733
Number of borrowers	n/a
Avg. exposure to borrowers (EUR)	n/a
WAL (cover pool)	29.1y
WAL (covered bonds)	5.7y
Fixed interest (cover pool)	0.0%
Fixed interest (covered bonds)	100.0%
LTV (indexed)	87.0%
LTV (unindexed)	79.3%
Loans in arrears	0.0%

Rating (Moody's)	Aaa
Rating (S&P)	-
Rating (Fitch)	-
Rating (DBRS)	-
TPI	Probable
TPI leeway	2
Collateral score	0.0%
RRL	-
JRL	-
Unused notches	-
AAA credit risk (%)	-
PCU	-
Recovery uplift	2
Outstanding ESG BMKs	No
LCR ELIGIBLE	No
LCR level (Bmk)	Not eligible
Risk weight	20%
Maturity structure (Bmk)	SB

Borrower Types



Regional Distribution

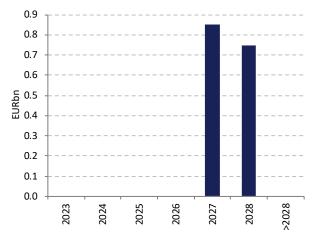


Spread Development



Source: Issuer, Rating agencies, Bloomberg, NORD/LB Markets Strategy & Floor Research

Redemption Profile (Bmk)



NORD/LB

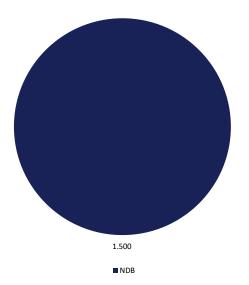
Japan

Market Overview Covered Bonds

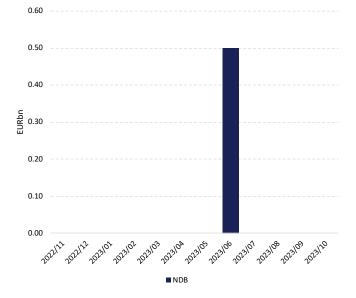
Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Cover Pool Volume	EUR 4.62bn	Outstanding volume (Bmk)	EUR 1.50bn
Amount outstanding	EUR 3.81bn	Number of benchmarks	3
Number of issuer	1	Outstanding ESG volume (Bmk)	-
No of cover pools	2	Number of ESG benchmarks	-
there of M / PS / others	0/1/1	Outstanding volume (SBmk)	EUR 0.30bn
Ratings (low / high)	AA / AA	Number of subbenchmarks	1
Best possible LCR level	Level 1	Maturity types	НВ

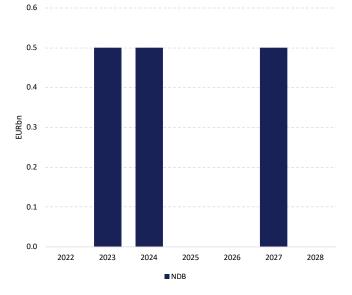
Outstanding benchmark volume¹ (EURbn)



Benchmark redemption profile¹: 11/2022 - 10/2023

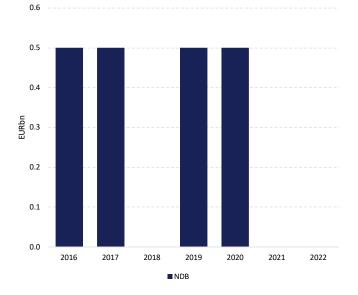


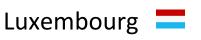
Benchmark redemption profile¹²



Source: Issuer, Rating agencies, Bloomberg, NORD/LB Markets Strategy & Floor Research; ¹ based on Bloomberg ticker; ² Redemptions 2022: 11/22 – 12/22

Benchmark issuance volume¹





NORD/LB Luxembourg SA. Covered Bond Bank Luxembourg

Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Ratings			
	Rating	Outlook	
Fitch	-	-	
Moody's	A3	Stable	
S&P	-	-	
Homepage			

www.nordlb.lu

NORD/LB Luxembourg S.A. Covered Bond Bank (NORD/LB CBB) is a Pfandbrief bank that operates in accordance with Luxembourg law. The institute is a wholly owned subsidiary of Norddeutsche Landesbank Girozentrale (NORD/LB). In order to ensure that NORD/LB CBB is able to meet all its obligations, NORD/LB has is issued a Letter of Comfort to its subsidiary. Until 01 January 2022, the primary mission of NORD/LB CBB was focused on refinancing the core business of the NORD/LB Group through the issuance of covered bonds (Lettres de Gage). As part of the Group-wide transformation programme NORD/LB 2024, the Pfandbrief business, which is actively operated by NORD/LB CBB, will be discontinued from 2022 onwards. This applies to both new issuance activities and the further registration of new lending business in connection with the development of the respective cover pools. Only the segments focused on the sale of receivables and Fixed Income Relationship Management & Sales Europe will remain in operation until 2024. The future focus of NORD/LB CBB will be on the administration of existing portfolios, cover pools and ensuring operational stability. NORD/LB CBB is also set to remain an integral part of the NORD/LB Group after the transformation. The institute reports across the following segments: Financial Markets, Loans & Loan Services, Client Services In-house and Bank Management & Other. As at the end of June 2022, the nominal value of the issued Lettres de Gage amounted to EUR 3.5bn (H1 2022). In FY 2021, the CET1 ratio rose by 5.2 percentage points to 29.7%.

Balance Sheet

(EURm)	2019Y	2020Y	2021Y
Net Loans to Customers	9,958	7,996	7,033
Total Securities	4,734	4,213	3,178
Total Deposits	2,632	2,614	2,822
Tier 1 Common Capital	647	646	630
Total Assets	15,549	12,734	10,580
Total Risk-weighted Assets	3,567	2,643	2,122

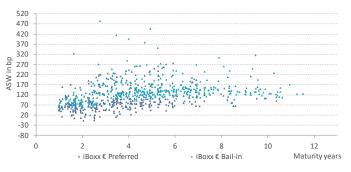
Redemption Profile



Income Statement

(EURm)	2019Y	2020Y	2021Y
Net Interest Income	121	113	98
Net Fee & Commission Inc.	-53	-59	-50
Net Trading Income	-28	-19	-16
Operating Expense	35	35	31
Credit Commit. Impairment	1	1	-6
Pre-tax Profit	-0	-9	-4





Company Ratios

	2019Y	2020Y	2021Y		2019Y	2020Y	2021Y
Net Interest Margin	0.74	0.80	0.85	Liquidity Coverage Ratio	-	-	-
ROAE	-0.02	-1.29	-0.61	IFRS Tier 1 Leverage Ratio	4.34	5.33	6.26
Cost-to-Income	108.81	113.85	202.12	NPL/ Loans at Amortised Cost	0.33	0.27	0.66
Core Tier 1 Ratio	18.12	24.44	29.69	Reserves/Loans at Amort. Cost	0.03	0.09	0.04
Courses Discussions COD Clobal				Clear Desservely as afr 17 10 2022			

Source: Bloomberg, S&P Global Market Intelligence, NORD/LB Markets Strategy & Floor Research; as of: 17.10.2022

Information: A SWOT analysis cannot be offered due to the obvious conflict of interest here.

NORD/LB Luxembourg CBB – Public Sector

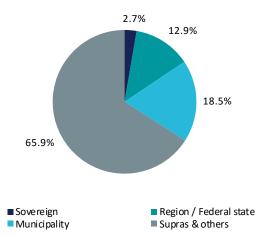
Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Cover Pool Data

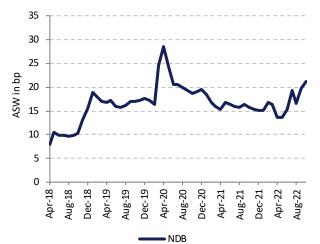
Cover pool volume (EURm)	4,290
Amount outstanding (EURm)	3,508
-thereof ≥ EUR 500m	42.8%
Current OC (nominal)	22.3%
Committed OC	2.0%
Cover type	Public Sector
Main country	38% Germany
Main region	n/a
Number of loans	331
Number of borrowers	184
Avg. exposure to borrowers (EUR)	23,313,587
WAL (cover pool)	6.4y
WAL (covered bonds)	6.0y
Fixed interest (cover pool)	53.5%
Fixed interest (covered bonds)	96.8%
LTV (indexed)	-
LTV (unindexed)	-
Loans in arrears	0.0%

Rating (Moody's)	Aa2
Rating (S&P)	-
Rating (Fitch)	-
Rating (DBRS)	-
ТРІ	Probable
TPI leeway	3
Collateral score	17.5%
RRL	-
JRL	-
Unused notches	-
AAA credit risk (%)	-
PCU	-
Recovery uplift	-
Outstanding ESG BMKs	No
LCR ELIGIBLE	Yes
LCR level (Bmk)	1
Risk weight	20%
Maturity structure (Bmk)	HB

Borrower Types

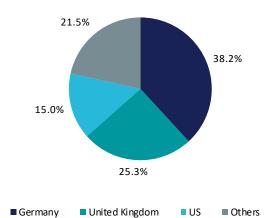


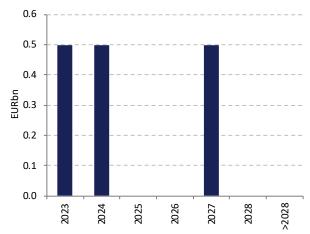
Spread Development



Source: Issuer, Rating agencies, Bloomberg, NORD/LB Markets Strategy & Floor Research

Regional Distribution











NORD/LB Luxembourg CBB – Renewable

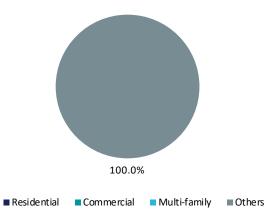
Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Cover Pool Data

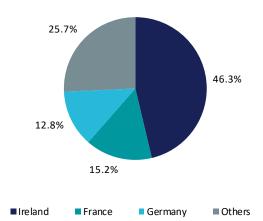
Cover pool volume (EURm)	330
Amount outstanding (EURm)	300
-thereof ≥ EUR 250m	100.0%
Current OC (nominal)	10.1%
Committed OC	2.0%
Cover type	Renewable Energy
Main country	46% Ireland
Main region	n/a
Number of loans	30
Number of borrowers	26
Avg. exposure to borrowers (EUR)	12,703,846
WAL (cover pool)	5.9y
WAL (covered bonds)	2.6y
Fixed interest (cover pool)	10.4%
Fixed interest (covered bonds)	100.0%
LTV (indexed)	n/a
LTV (unindexed)	n/a
Loans in arrears	0.0%

Rating (Moody's)	Aa2
Rating (S&P)	-
Rating (Fitch)	-
Rating (DBRS)	-
TPI	Improbable
TPI leeway	1
Collateral score	25.6%
RRL	-
JRL	-
Unused notches	-
AAA credit risk (%)	-
PCU	-
Recovery uplift	-
Outstanding ESG BMKs	No
LCR ELIGIBLE	Yes
LCR level (SBmk)	2A
Risk weight	20%
Maturity structure (SBmk)	HB

Borrower Types



Regional Distribution

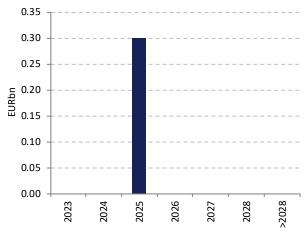


Spread Development



Source: Issuer, Rating agencies, Bloomberg, NORD/LB Markets Strategy & Floor Research

Redemption Profile (SBmk)



NORD/LB





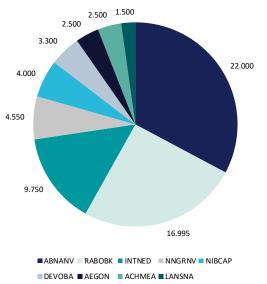
Netherlands

Market Overview Covered Bonds

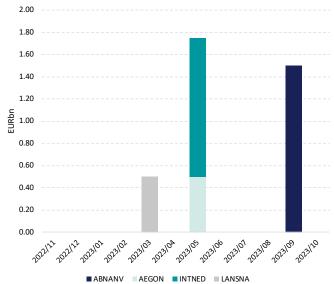
Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Cover Pool Volume EUR 101.41bn Outstanding volume (Bmk) EUR 67.10bn EUR 83.88bn Number of benchmarks Amount outstanding 69 Number of issuer 9 Outstanding ESG volume (Bmk) EUR 0.50bn No of cover pools 13 Number of ESG benchmarks 1 there of M / PS / others 13/0/0 Outstanding volume (SBmk) Ratings (low / high) AAA / AAA Number of subbenchmarks Best possible LCR level Level 1 Maturity types SB, CPT

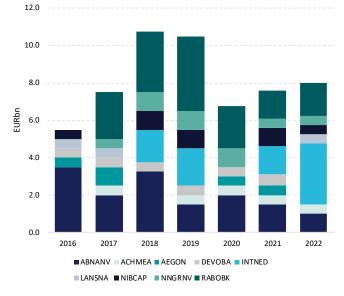




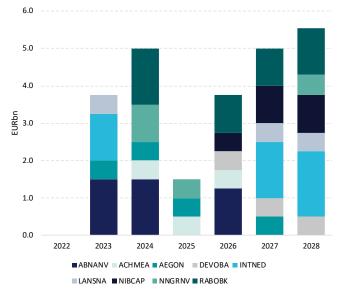
Benchmark redemption profile¹: 11/2022 - 10/2023



Benchmark issuance volume¹



Benchmark redemption profile¹²



Source: Issuer, Rating agencies, Bloomberg, NORD/LB Markets Strategy & Floor Research; ¹ based on Bloomberg ticker; ² Redemptions 2022: 11/22 – 12/22

ABN AMRO

Rating

А

A1

A

Ratings*

Fitch

S&P

Moody's

Homepage

www.abnamro.com

*ABN AMRO Bank

Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Netherlands

ABN AMRO Bank N.V. is a universal bank that serves retail, business and corporate customers. The ABN AMRO Group, which is a domestic systemically important bank Outlook (D-SIB), has a geographical focus on the Netherlands and north-west Europe. Outside of Stable the Netherlands, the bank is active in 13 countries, with a focus on the Netherlands, Belgium, France, Germany and the UK. Retail Banking is only offered in the Netherlands Stable and Germany, while Wealth Management is operated in four of the previously mentioned Stable core countries and Commercial Banking in five. It is only Corporate Banking that is offered across all Group countries. According to its own information, ABN AMRO is one of the market leaders in the Netherlands in the Retail Banking segment (mortgages and SMEs 17% each; H1 2022). The Dutch state currently holds a stake of around 59% in ABN AMRO via the Dutch finance agency, NLFI. In order to further increase its customer focus, the business structure was streamlined at the start of 2022. As such, reporting now only takes place in three segments (previously four). As at H1 2022, 18% of pre-tax income was attributable to Personal & Business Banking, while 75% went to Corporate Banking and 14% was allocated to Wealth Management. The bank also operates the supporting segment Group Functions. The majority of the loan portfolio consists of mortgage and corporate loans (H1 2022: 57% and 31% respectively). The lion's share of the funding mix comprises deposits (FY 2021: around 65%) and has been supplemented by capital market instruments such as green bonds, among others, since 2015 (6% of the funding mix;

Balance Sheet

(EURm)	2020Y	2021Y	2022H1
Net Loans to Customers	252,161	258,253	259,646
Total Securities	71,874	64,241	75,921
Total Deposits	238,570	251,218	265,191
Tier 1 Common Capital	19,548	19,206	19,628
Total Assets	395,623	399,113	421,504
Total Risk-weighted Assets	110,481	117,693	126,676

Redemption Profile

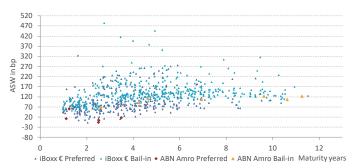


Income Statement

outstanding volume H1 2022: EUR 4.9bn). The CET1 ratio amounted to 15.5% (H1 2022).

(EURm)	2020Y	2021Y	2022H1
Net Interest Income	5,863	5,210	2,583
Net Fee & Commission Inc.	1,558	1,664	895
Net Trading Income	137	37	123
Operating Expense	5,176	5,327	2,745
Credit Commit. Impairment	1,687	-46	-
Pre-tax Profit	356	1,838	989

Senior Unsecured Bonds (EUR BMK)



Company Ratios

	2020Y	2021Y	2022H1
Net Interest Margin	1.47	1.31	1.27
ROAE	-0.21	5.73	6.91
Cost-to-Income	67.77	72.00	71.92
Core Tier 1 Ratio	17.69	16.32	15.49

	2020Y	2021Y	2022H1
Liquidity Coverage Ratio	149.36	167.44	157.28
IFRS Tier 1 Leverage Ratio	5.04	4.87	4.70
NPL/ Loans at Amortised Cost	-	-	-
Reserves/Loans at Amort. Cost	1.36	0.93	0.91

Source: Bloomberg, S&P Global Market Intelligence, NORD/LB Markets Strategy & Floor Research; as of: 14.10.2022

Strengths / Opportunities

- Position in domestic market
- Capital ratios
- Risk reduction: Reduction of higher-risk exposures

Risks / Weaknesses

- Profitability hit by reduction in high-margin business
 - Dependency on wholesale funding
 - Internal control mechanisms (ongoing restructuring)



Netherlands

ABN AMRO Bank – Mortgage

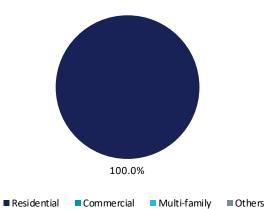
Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Cover Pool Data

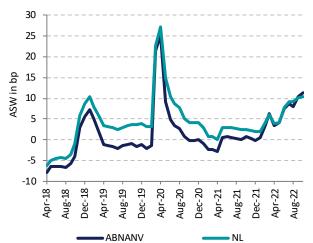
Cover pool volume (EURm)	36,886
Amount outstanding (EURm)	29,392
-thereof ≥ EUR 500m	74.8%
Current OC (nominal)	25.5%
Committed OC	14.9%
Cover type	Mortgage
Main country	100% Netherlands
Main region	26% North Holland
Number of loans	154,895
Number of borrowers	n/a
Avg. exposure to borrowers (EUR)	n/a
WAL (cover pool)	16.5y
WAL (covered bonds)	9.7y
Fixed interest (cover pool)	99.1%
Fixed interest (covered bonds)	99.6%
LTV (indexed)	55.5%
LTV (unindexed)	70.6%
Loans in arrears	0.0%

Rating (Moody's)	Aaa
Rating (S&P)	-
Rating (Fitch)	AAA
Rating (DBRS)	-
TPI	Probable-High
TPI leeway	4
Collateral score	5.0%
RRL	-
JRL	-
Unused notches	-
AAA credit risk (%)	-
PCU	6
Recovery uplift	-
Outstanding ESG BMKs	No
LCR ELIGIBLE	Yes
LCR level (Bmk)	1
Risk weight	10%
Maturity structure (Bmk)	SB

Borrower Types

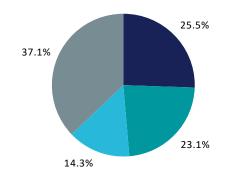


Spread Development

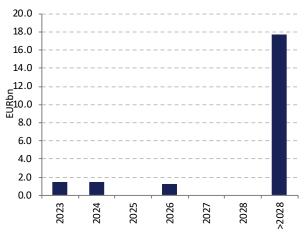


Source: Issuer, Rating agencies, Bloomberg, NORD/LB Markets Strategy & Floor Research

Regional Distribution



■ North Holland ■ South Holland ■ North Brabant ■ Others



Achmea Bank

Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Ratings

	Rating	Outlook
Fitch	А	Stable
Moody's	-	-
S&P	A-	Stable

Homepage

www.achmeabank.com

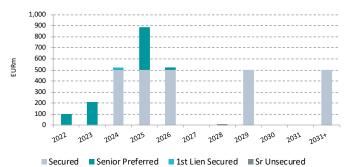
Achmea Bank NV (AB) is a wholly owned subsidiary of Achmea BV, which, according to its own information, is the largest insurance group with a cooperative background in the Netherlands. The Achmea Association owns roughly 63% of Achmea BV, with Rabobank holding a stake of 29%. Achmea Bank is of strategic significance within the Group structure and is the competence and service centre for mortgage loans and savings products. These are offered via the brands "Woonfonds" and "Central Beheer", which serve approximately 70,000 customers in the mortgage business and 400,000 customers in the area of deposits. Furthermore, the bank manages the former loan portfolio of Staalbankiers, better known as "Acier", which was transferred to AB in 2015. AB, which is headquartered in Tilburg, has around 200 employees. In November 2021, AB acquired a mortgage portfolio worth EUR 0.5bn from the Dutch insurer a.s.r., which remains responsible for its administration. In addition, both parties announced that further transactions are planned in 2022 and 2023 as part of their strategic partnership. Achmea Bank is also pursuing growth targets in the Cross Selling segment with its partners Syntrus Achmea, Central Beheer and Achmea Investment Management (insurance, pensions). Its sustainability strategy focuses on the mortgage portfolio, among other aspects, where the aim is to secure an average energy label rating of A by 2030 (FY 2021: C). Almost 60% of funding is obtained from customer deposits. The bank has defined a target CET1 ratio of >13.6%; as at FY 2021, this stood at 20.9%.

Income Statement

Balance Sheet

(EURm)	2020Y	2021Y	2022H1
Net Loans to Customers	12,093	11,364	10,904
Total Securities	82	62	311
Total Deposits	7,447	7,515	7,530
Tier 1 Common Capital	807	779	-
Total Assets	13,834	12,848	12,461
Total Risk-weighted Assets	3,954	3,726	-

Redemption Profile



Company Ratios

	2020Y	2021Y	2022H1
Net Interest Margin	1.03	1.03	0.87
ROAE	3.35	4.75	1.97
Cost-to-Income	71.64	70.24	79.69
Core Tier 1 Ratio	20.42	20.90	20.10

	2020Y	2021Y	2022H1
Liquidity Coverage Ratio	332.30	296.83	516.00
IFRS Tier 1 Leverage Ratio	6.03	6.23	-
NPL/ Loans at Amortised Cost	0.91	-	-
Reserves/Loans at Amort Cost	0.23	0 12	-

Source: Bloomberg, S&P Global Market Intelligence, NORD/LB Markets Strategy & Floor Research; as of: 14.10.2022

Strengths / Opportunities

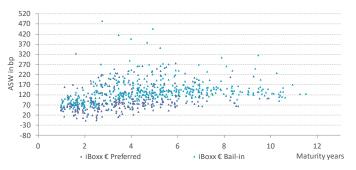
- Strategic entity of the Achmea Group
- Capitalisation
- Loan quality

Risks / Weaknesses

- Credit risk concentration (Netherlands)
- Profitability
- Economies of scale (small institute)

(EURm)	2020Y	2021Y	2022H1
Net Interest Income	141	138	55
Net Fee & Commission Inc.	9	1	-
Net Trading Income	-5	5	8
Operating Expense	105	101	51
Credit Commit. Impairment	3	-9	2
Pre-tax Profit	37	52	11

Senior Unsecured Bonds (EUR BMK)



NORD/LB

Netherlands

Netherlands

Achmea Bank – Mortgage (CPT)

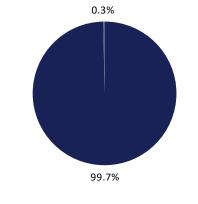
Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Cover Pool Data

Cover pool volume (EURm)	1,838
Amount outstanding (EURm)	1,500
-thereof ≥ EUR 500m	100.0%
Current OC (nominal)	22.5%
Committed OC	n/a
Cover type	Mortgage
Main country	100% Netherlands
Main region	20% South Holland
Number of loans	23,656
Number of borrowers	n/a
Avg. exposure to borrowers (EUR)	n/a
WAL (cover pool)	14.8y
WAL (covered bonds)	2.9y
Fixed interest (cover pool)	96.6%
Fixed interest (covered bonds)	100.0%
LTV (indexed)	50.1%
LTV (unindexed)	67.2%
Loans in arrears	0.0%

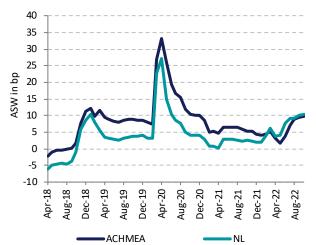
Rating (Moody's)	Aaa
Rating (S&P)	-
Rating (Fitch)	AAA
Rating (DBRS)	-
TPI	Very High
TPI leeway	Unpublished
Collateral score	5.0%
RRL	-
JRL	-
Unused notches	-
AAA credit risk (%)	-
PCU	8
Recovery uplift	2
Outstanding ESG BMKs	No
LCR ELIGIBLE	Yes
LCR level (Bmk)	1
Risk weight	10%
Maturity structure (Bmk)	CPT

Borrower Types



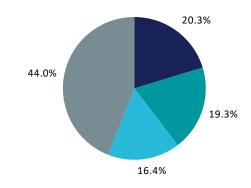
■ Residential ■ Commercial ■ Multi-family ■ Others

Spread Development

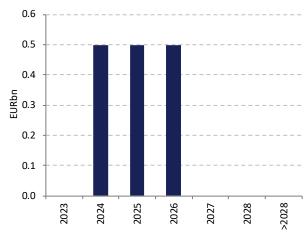


Source: Issuer, Rating agencies, Bloomberg, NORD/LB Markets Strategy & Floor Research

Regional Distribution



South Holland North Holland North Brabant Others



Netherlands

Achmea Bank – Mortgage (SB)

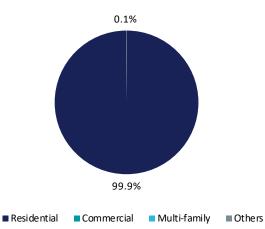
Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Cover Pool Data

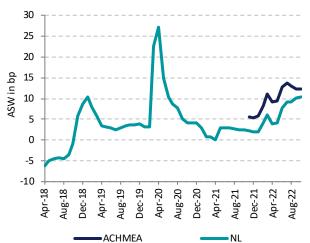
Cover pool volume (EURm)	1,256
Amount outstanding (EURm)	1,000
-thereof ≥ EUR 500m	100.0%
Current OC (nominal)	25.6%
Committed OC	n/a
Cover type	Mortgage
Main country	100% Netherlands
Main region	21% South Holland
Number of loans	19,428
Number of borrowers	n/a
Avg. exposure to borrowers (EUR)	n/a
WAL (cover pool)	14.1y
WAL (covered bonds)	10.5y
Fixed interest (cover pool)	95.9%
Fixed interest (covered bonds)	100.0%
LTV (indexed)	48.6%
LTV (unindexed)	66.5%
Loans in arrears	0.0%

Rating (Moody's)	-
Rating (S&P)	AAA
Rating (Fitch)	-
Rating (DBRS)	-
ТРІ	-
TPI leeway	-
Collateral score	-
RRL	a+
JRL	aa+
Unused notches	3
AAA credit risk (%)	17.58
PCU	-
Recovery uplift	-
Outstanding ESG BMKs	No
LCR ELIGIBLE	Yes
LCR level (Bmk)	1
Risk weight	10%
Maturity structure (Bmk)	SB

Borrower Types

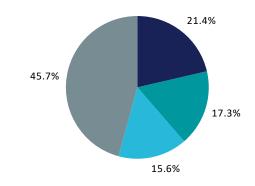


Spread Development

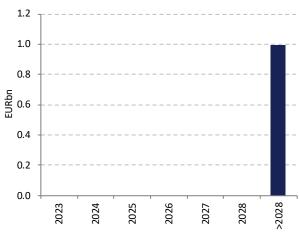


Source: Issuer, Rating agencies, Bloomberg, NORD/LB Markets Strategy & Floor Research

Regional Distribution



South Holland North Holland North Brabant Others



AEGON Bank

Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Ratings

	Rating	Outlook
Fitch	-	-
Moody's	-	-
S&P	А	Stable

Homepage

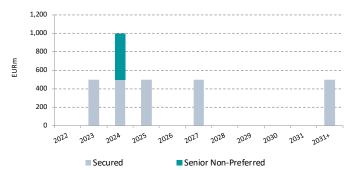
www.aegon.com

AEGON Bank N.V. (AEB) is part of the Dutch AEGON Group, one of the largest insurance groups in Europe. The geographical focus of the Group is on the USA (Transamerica), the Netherlands and the UK (AEGON). It has around 21,500 employees, who serve approximately 31.7 million customers in the following segments: life insurance, asset management, banking services and pension products. As a wholly owned subsidiary of AEGON Nederland N.V, AEB is fully integrated within the holding company AEGON N.V. at the top of the Group structure. The bank's deep integration in the parent company and its joint branding mean that strategic decisions and back office roles are the domain of the AEGON Group. AEB's business activities comprise mortgage and investment products, especially for entrepreneurs and freelancers and their families, in addition to SMEs. To this end, since 2022 AEB has been operating mainly under the brand Knab (purely digital bank), which focuses on long-term capital accumulation and all the usual banking services, with a focus on a high quality of service. The business activities previously pertaining to the AEGON Bank brand (which was still actively used up to financial year-end 2021) were also transferred to Knab in 2021. AEB discontinued its business in the area of savings products in order to concentrate on developing Knab products targeted specifically for its target customer groups. As at H1 2022, Knab served around 325,000 customers. Most of the funding mix (around 75%) is covered by deposits. The CET1 ratio most recently totalled 19.5% (H1 2022).

Balance Sheet

(EURm)	2020Y	2021Y	2022H1
Net Loans to Customers	13,726	13,042	12,165
Total Securities	1,645	1,984	2,487
Total Deposits	12,540	11,586	11,815
Tier 1 Common Capital	696	724	682
Total Assets	17,137	16,150	16,944
Total Risk-weighted Assets	3,331	3,496	3,490

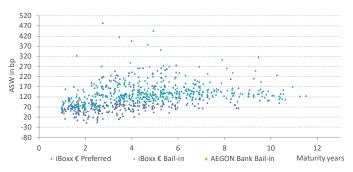
Redemption Profile



Income Statement

(EURm)	2020Y	2021Y	2022H1
Net Interest Income	232	218	95
Net Fee & Commission Inc.	21	24	14
Net Trading Income	40	18	-11
Operating Expense	236	172	82
Credit Commit. Impairment	93	-26	-6
Pre-tax Profit	-36	112	22

Senior Unsecured Bonds (EUR BMK)



Company Ratios

	2020Y	2021Y	2022H1
Net Interest Margin	1.41	1.32	1.15
ROAE	-4.35	11.30	4.48
Cost-to-Income	80.53	66.38	83.69
Core Tier 1 Ratio	20.89	20.71	19.53

	2020Y	2021Y	2022H1
Liquidity Coverage Ratio	163.75	202.00	223.00
IFRS Tier 1 Leverage Ratio	4.26	4.62	4.16
NPL/ Loans at Amortised Cost	-	-	-
Reserves/Loans at Amort. Cost	1.16	0.67	-

Source: Bloomberg, S&P Global Market Intelligence, NORD/LB Markets Strategy & Floor Research; as of: 14.10.2022

Strengths / Opportunities

- Strategic unit of the AEGON Group
- Risk profile (mortgage portfolio)
- Profitability

Risks / Weaknesses

- Size of the SME and consumer exposure (peer group)
 - Economies of scale (small institute)
- Credit risk concentration (Netherlands)



Netherlands 💳

Netherlands

AEGON Bank – Mortgage (CPT)

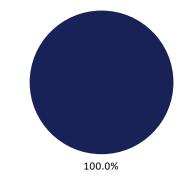
Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Cover Pool Data

Cover pool volume (EURm)	2,412
Amount outstanding (EURm)	2,000
-thereof ≥ EUR 500m	100.0%
Current OC (nominal)	20.6%
Committed OC	10.0%
Cover type	Mortgage
Main country	100% Netherlands
Main region	20% South Holland
Number of loans	15,193
Number of borrowers	n/a
Avg. exposure to borrowers (EUR)	n/a
WAL (cover pool)	18.2y
WAL (covered bonds)	2.8y
Fixed interest (cover pool)	97.9%
Fixed interest (covered bonds)	100.0%
LTV (indexed)	46.3%
LTV (unindexed)	68.5%
Loans in arrears	0.0%

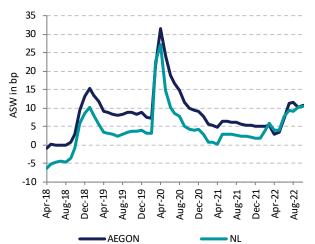
Rating (Moody's)	-
Rating (S&P)	AAA
Rating (Fitch)	-
Rating (DBRS)	-
TPI	-
TPI leeway	-
Collateral score	-
RRL	aa-
JRL	aaa
Unused notches	N/A
AAA credit risk (%)	N/A
PCU	-
Recovery uplift	-
Outstanding ESG BMKs	No
LCR ELIGIBLE	Yes
LCR level (Bmk)	1
Risk weight	10%
Maturity structure (Bmk)	CPT

Borrower Types



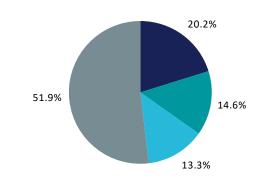
■ Residential ■ Commercial ■ Multi-family ■ Others

Spread Development

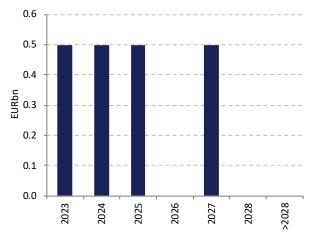


Source: Issuer, Rating agencies, Bloomberg, NORD/LB Markets Strategy & Floor Research

Regional Distribution







AEGON Bank – Mortgage (SB)

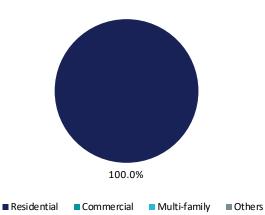
Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Cover Pool Data

Cover pool volume (EURm)	575
Amount outstanding (EURm)	500
-thereof \geq EUR 500m	100.0%
Current OC (nominal)	15.1%
Committed OC	n/a
Cover type	Mortgage
Main country	100% Netherlands
Main region	19% South Holland
Number of loans	3,706
Number of borrowers	n/a
Avg. exposure to borrowers (EUR)	n/a
WAL (cover pool)	16.9y
WAL (covered bonds)	13.8y
Fixed interest (cover pool)	97.4%
Fixed interest (covered bonds)	100.0%
LTV (indexed)	44.7%
LTV (unindexed)	69.3%
Loans in arrears	0.0%

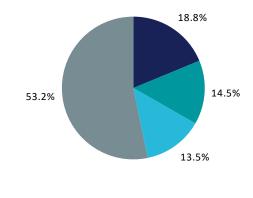
Rating (S&P)	AAA
Rating (Fitch)	-
Rating (DBRS)	-
ТРІ	-
TPI leeway	-
Collateral score	-
RRL	aa-
JRL	ааа
Unused notches	4
AAA credit risk (%)	3.63
PCU	-
Recovery uplift	-
Outstanding ESG BMKs	No
LCR ELIGIBLE	Yes
LCR level (Bmk)	1
Risk weight	10%
Maturity structure (Bmk)	SB

Borrower Types



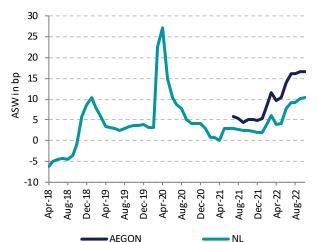
Regional Distribution

Rating (Moody's)

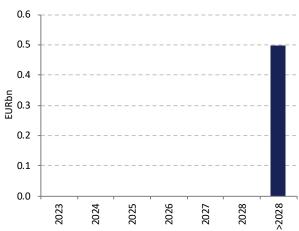


South Holland Brabant North Holland Others

Spread Development



Redemption Profile (Bmk)



Source: Issuer, Rating agencies, Bloomberg, NORD/LB Markets Strategy & Floor Research

Netherlands

de Volksbank

Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Ratings

	Rating	Outlook
Fitch	A-	Stable
Moody's*	A2	Stable
S&P	А	Stable

Homepage

www.devolksbank.nl

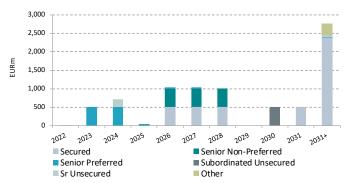
*Senior Unsecured

With just under 3.5 million customers and almost 3,200 employees, de Volksbank (headquarters: Utrecht) is the fourth-largest retail bank in the Netherlands. Its focus is on the domestic market in the retail banking and SME segments. De Volksbank is a domestic systemically important bank (D-SIB) in the Netherlands, with a strategic focus on mortgage loans, payment transactions and various savings products. Insurance products are also offered, as well as an investment and lending business. The bank has four distinct brands -ASN Bank, BLG Wonen, RegioBank and SNS – that each have a particular focus on one of the above-mentioned segments. The bank was nationalised in 2013 following significant losses incurred by the former SNS Group (SNS REAAL) in the commercial mortgage segment. It is wholly owned by the agency NL Financial Investments (NLFI), although a reprivatisation is planned. However, due to the market situation, this has been paused for the time being. As at Q1 2022, the bank has a market share in the Netherlands of 6.0% for mortgage loans and around 11% for customer deposits (H1 2022). As at H1 2022, the funding mix mainly consists of deposits (87%). Covered bonds (51%) dominate wholesale funding (13% of total funding), followed by senior preferred bonds and senior nonpreferred bonds at 20% and 16% respectively. In 2022, senior non-preferred bonds were also issued under the internal green bond framework (total volume of EUR 1bn). At 20.8% (H1 2022), the CET1 ratio exceeded the internal target of more than 19% by 2025. At 4.6%, the leverage ratio (fully loaded) is also above the internal minimum requirement of 4.5%.

Balance Sheet

2020Y	2021Y	2022H1
50,542	50,570	49,363
5,977	6,229	8,266
53,652	58,128	58,722
3,223	3,182	3,102
67,484	72,081	74,858
10,331	13,993	14,924
	50,542 5,977 53,652 3,223 67,484	50,54250,5705,9776,22953,65258,1283,2233,18267,48472,081

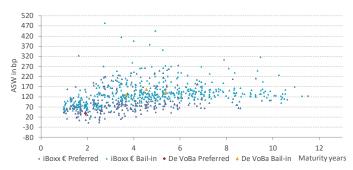
Redemption Profile



Income Statement

(EURm)	2020Y	2021Y	2022H1
Net Interest Income	850	775	372
Net Fee & Commission Inc.	46	39	24
Net Trading Income	24	13	67
Operating Expense	617	692	323
Credit Commit. Impairment	38	-59	8
Pre-tax Profit	233	218	129

Senior Unsecured Bonds (EUR BMK)



Company Ratios

	2020Y	2021Y	2022H1
Net Interest Margin	1.31	1.12	1.02
ROAE	5.05	4.67	5.31
Cost-to-Income	66.85	83.68	69.76
Core Tier 1 Ratio	31.20	22.74	20.79

	2020Y	2021Y	2022H1
Liquidity Coverage Ratio	233.00	324.00	359.00
IFRS Tier 1 Leverage Ratio	4.93	4.48	4.20
NPL/ Loans at Amortised Cost	1.34	1.20	1.06
Reserves/Loans at Amort. Cost	0.33	0.21	0.24

Source: Bloomberg, S&P Global Market Intelligence, NORD/LB Markets Strategy & Floor Research; as of: 14.10.2022

Strengths / Opportunities

- Liquidity profile
- Low risk business model (focus: mortgages)
- Capitalisation

Risks / Weaknesses

- Geographical diversification
- Concentration risk in the loan portfolio
- Profitability

NORD/LB

Netherlands 💳

Netherlands

de Volksbank – Mortgage

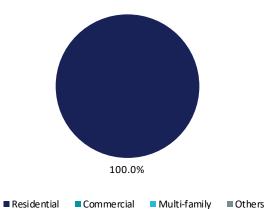
Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Cover Pool Data

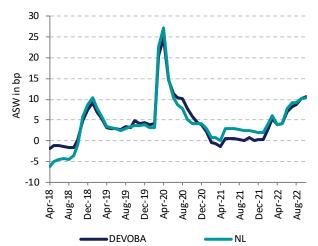
Cover pool volume (EURm)	5,540
Amount outstanding (EURm)	4,570
-thereof ≥ EUR 500m	72.2%
Current OC (nominal)	21.2%
Committed OC	13.0%
Cover type	Mortgage
Main country	100% Netherlands
Main region	16% North Brabant
Number of loans	30,266
Number of borrowers	n/a
Avg. exposure to borrowers (EUR)	n/a
WAL (cover pool)	16.1y
WAL (covered bonds)	12.0y
Fixed interest (cover pool)	96.3%
Fixed interest (covered bonds)	100.0%
LTV (indexed)	47.6%
LTV (unindexed)	69.1%
Loans in arrears	0.0%

Rating (Moody's)	Aaa
Rating (S&P) Rating (Fitch)	AAA
Rating (DBRS) TPI	- Probable-High
TPI leeway	4
Collateral score	5.0%
RRL	-
JRL	-
Unused notches	-
AAA credit risk (%)	-
PCU	6
Recovery uplift	-
Outstanding ESG BMKs	No
LCR ELIGIBLE	Yes
LCR level (Bmk)	1
Risk weight	10%
Maturity structure (Bmk)	SB

Borrower Types

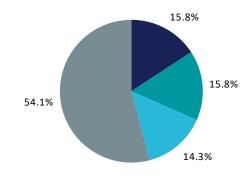


Spread Development

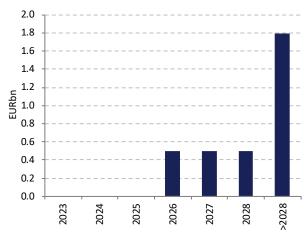


Source: Issuer, Rating agencies, Bloomberg, NORD/LB Markets Strategy & Floor Research

Regional Distribution



■ North Brabant ■ Gelderland ■ South Holland ■ Others



ING Groep

Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Ratings

	Rating	Outlook
Fitch	A+	Stable
Moody's*	Baa1	Stable
S&P	A-	Stable

Homepage

www.ing.com

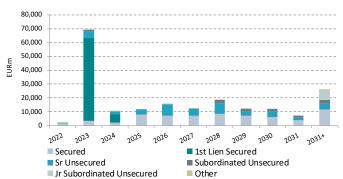
*Senior Unsecured

The ING Group N.V. (ING; headquarters in Amsterdam), which wholly owns ING Bank, is the largest financial group in the Netherlands. Its shares are listed on the stock exchanges in Amsterdam, Brussels and New York. The Financial Stability Board has classified ING as the only global systemically important bank (G-SIB; additional capital requirement of 1.0%) in the Netherlands. Due to the extremely high relevance of the bank for the Group, we are mainly using financial data from the ING Group. More than 57,000 employees across the Group serve around 38 million retail and corporate customers in more than 40 countries. ING divides its markets into the following segments: Market Leaders (the Netherlands, Belgium and Luxembourg), Challengers (Germany, Spain, Italy, France [Retail Banking exit planned] and Australia), Growth Markets (Poland, Romania, Turkey, the Philippines [Retail Banking exit planned] and Asia) and Wholesale Banking, which is operated across all markets. In terms of income generation, the main focus is on the retail customer and SME business (65% of operating income; H1 2022). A total of 31% of income is attributable to the domestic market (the Netherlands), with Belgium and Germany accounting for 16% and 14% respectively. The bank reports across the operating segments Retail Netherlands, Retail Belgium, Retail Germany, Retail Other and Wholesale Banking. As at H1 2022, the loan portfolio of ING was mainly retail-based at 61%, with the focus on residential mortgages (65%). At the start of April 2022, the acquisition of the retail business in France by Boursorama Société Anonyme was announced. The transaction is set to be concluded by the end of 2022. The CET1 ratio for H1 2022 stands at 14.7%.

Balance Sheet

(EURm)	2020Y	2021Y	2022H1
Net Loans to Customers	654,230	679,299	637,805
Total Securities	133,798	129,119	216,939
Total Deposits	657,757	660,322	-
Tier 1 Common Capital	47,333	49,760	49,414
Total Assets	937,275	951,290	1,020,064
Total Risk-weighted Assets	306,323	313,064	335,898

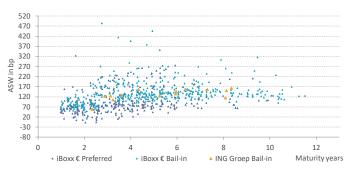
Redemption Profile (ING Groep)



Income Statement

(EURm)	2020Y	2021Y	2022H1
Net Interest Income	13,604	13,615	6,880
Net Fee & Commission Inc.	3,011	3,517	1,822
Net Trading Income	879	892	877
Operating Expense	10,595	10,549	5,476
Credit Commit. Impairment	2,675	516	1,189
Pre-tax Profit	3,809	6,782	2,411

Senior Unsecured Bonds (EUR BMK)



Company Ratios

	2020Y	2021Y	2022H1
Net Interest Margin	1.46	1.42	1.40
ROAE	4.64	8.73	6.28
Cost-to-Income	59.70	57.28	56.54
Core Tier 1 Ratio	15.45	15.89	14.71

	2020Y	2021Y	2022H1
Liquidity Coverage Ratio	137.14	138.92	136.07
IFRS Tier 1 Leverage Ratio	5.21	5.35	-
NPL/ Loans at Amortised Cost	2.12	1.83	1.77
Reserves/Loans at Amort. Cost	0.96	0.83	0.91

Source: Bloomberg, S&P Global Market Intelligence, NORD/LB Markets Strategy & Floor Research; as of: 14.10.2022

Strengths / Opportunities

- Profitability
- Market position (retail) in Benelux countries
- Capitalisation

Risks / Weaknesses

- Exposure in cyclical sectors (oil, gas)
- Exposure in Turkey/Russia (winding-down in progress)
- High private household debt level (NL)



Netherlands 💳

ING Bank – Mortgage (Hard- and Soft Bullet) Netherlands 💳

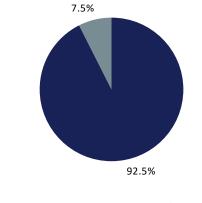
Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Cover Pool Data

Cover pool volume (EURm)	20,624
Amount outstanding (EURm)	16,584
-thereof ≥ EUR 500m	58.8%
Current OC (nominal)	24.4%
Committed OC	2.5%
Cover type	Mortgage
Main country	100% Netherlands
Main region	23% South Holland
Number of loans	100,763
Number of borrowers	n/a
Avg. exposure to borrowers (EUR)	n/a
WAL (cover pool)	14.4y
WAL (covered bonds)	5.5y
Fixed interest (cover pool)	92.0%
Fixed interest (covered bonds)	91.0%
LTV (indexed)	46.5%
LTV (unindexed)	49.5%
Loans in arrears	0.0%

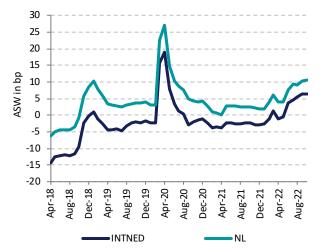
Rating (Moody's)	Aaa
Rating (S&P)	AAA
Rating (Fitch)	AAA
Rating (DBRS)	-
TPI	Probable-High
TPI leeway	4
Collateral score	5.0%
RRL	аа
JRL	ааа
Unused notches	4
AAA credit risk (%)	25.11
PCU	6
Recovery uplift	-
Outstanding ESG BMKs	No
LCR ELIGIBLE	Yes
LCR level (Bmk)	1
Risk weight	10%
Maturity structure (Bmk)	SB

Borrower Types



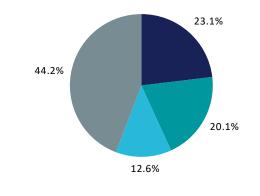
■ Residential ■ Commercial ■ Multi-family ■ Others

Spread Development

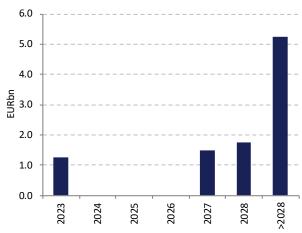


Source: Issuer, Rating agencies, Bloomberg, NORD/LB Markets Strategy & Floor Research

Regional Distribution



South Holland North Holland Brabant Others



NIBC Bank

Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Ratings

	Rating	Outlook
Fitch	BBB	Stable
Moody's*	Baa1u	Stable
S&P	BBB+	Stable

Homepage

www.nibc.com

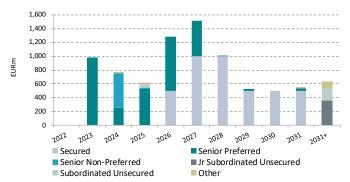
*Senior Unsecured

NIBC Bank is a business bank with branches in The Hague, Amsterdam, Frankfurt, London and Brussels, where its serves more than 400,000 private companies and around 600 SMEs, mainly in north-west Europe. It is a wholly owned subsidiary of NIBC Holding. It was delisted from the Euronext Amsterdam on 18 February 2021 after the acquisition of all shares by Blackstone Inc at year-end 2020. In addition to mortgages and savings products, the product portfolio also consists of brokerage services for retail customers via the direct banking subsidiary NIBC Direct, particularly specialist financial solutions and platform products (including loans, leasing, mezzanine and equity financing as well as M&A consulting) for corporate customers in the mid-market segment. In the context of the ongoing implementation and revision of its strategic direction, which includes an increased focus on asset-based financing, in 2022 NIBC has re-aligned its business model towards specialist and platform products and the risk reduction of its organisational structure. In so doing, the bank now reports in the following four segments: Mortgages, Asset-backed & Specialty Finance, Non-core Activities and Treasury & Group Functions. The primary geographical focus is on the Netherlands with a share of 95% in pre-tax income as at H1 2022, followed by Germany (3%), Belgium (2%) and the UK (0%). Around 50% of the funding mix at NIBC consists of retail funding, while wholesale funding above all comprises covered bonds and unsecured instruments at 20% each (H1 2022).

Balance Sheet

(EURm)	2020Y	2021Y	2022H1
Net Loans to Customers	16,700	18,477	17,981
Total Securities	1,683	1,479	1,399
Total Deposits	11,137	11,333	11,351
Tier 1 Common Capital	1,631	1,630	1,624
Total Assets	21,055	22,658	22,934
Total Risk-weighted Assets	7,640	8,572	9,123

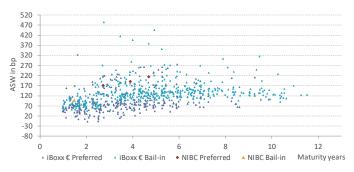
Redemption Profile



Income Statement

(EURm)	2020Y	2021Y	2022H1
Net Interest Income	386	361	194
Net Fee & Commission Inc.	43	46	24
Net Trading Income	-20	89	-10
Operating Expense	205	229	123
Credit Commit. Impairment	132	36	9
Pre-tax Profit	62	226	77

Senior Unsecured Bonds (EUR BMK)



Company Ratios

	2020Y	2021Y	2022H1
Net Interest Margin	1.79	1.66	1.72
ROAE	3.00	9.43	6.17
Cost-to-Income	50.37	46.08	58.85
Core Tier 1 Ratio	21.35	19.02	17.80

2020Y	2021Y	2022H1
221.00	184.00	166.00
7.78	7.24	-
2.15	2.72	2.60
1.09	1.08	1.09
	221.00 7.78 2.15	221.00 184.00 7.78 7.24 2.15 2.72

Source: Bloomberg, S&P Global Market Intelligence, NORD/LB Markets Strategy & Floor Research; as of: 14.10.2022

Strengths / Opportunities

- Capitalisation
- Sector diversification
- Secured loan portfolio

Risks / Weaknesses

- Involvement in cyclical/volatile sectors
- Niche strategy → Search for growth areas
- Trust-based business model

NORD/LB

Netherlands 💳

Netherlands

NIBC Bank – Mortgage (SB)

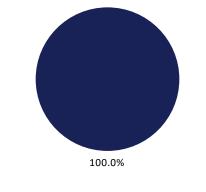
Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Cover Pool Data

coverroorbata	
Cover pool volume (EURm)	691
Amount outstanding (EURm)	500
-thereof ≥ EUR 500m	100.0%
Current OC (nominal)	38.1%
Committed OC	n/a
Cover type	Mortgage
Main country	100% Netherlands
Main region	25% North Holland
Number of loans	2,632
Number of borrowers	n/a
Avg. exposure to borrowers (EUR)	n/a
WAL (cover pool)	19.8y
WAL (covered bonds)	4.9y
Fixed interest (cover pool)	100.0%
Fixed interest (covered bonds)	100.0%
LTV (indexed)	54.4%
LTV (unindexed)	70.5%
Loans in arrears	0.0%

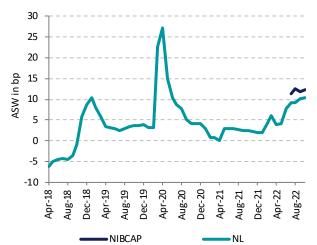
Rating (Moody's)	-
Rating (S&P)	AAA
Rating (Fitch)	-
Rating (DBRS)	-
TPI	-
TPI leeway	-
Collateral score	-
RRL	а
JRL	аа
Unused notches	2
AAA credit risk (%)	4.17
PCU	-
Recovery uplift	-
Outstanding ESG BMKs	No
LCR ELIGIBLE	Yes
LCR level (Bmk)	1
Risk weight	10%
Maturity structure (Bmk)	SB

Borrower Types



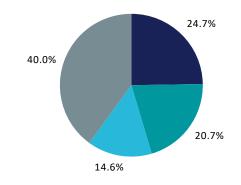
■ Residential ■ Commercial ■ Multi-family ■ Others

Spread Development

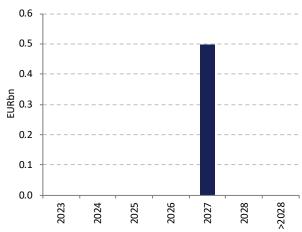


Source: Issuer, Rating agencies, Bloomberg, NORD/LB Markets Strategy & Floor Research

Regional Distribution



■ North Holland ■ South Holland ■ North Brabant ■ Others



Netherlands

NIBC Bank – Mortgage (CPT)

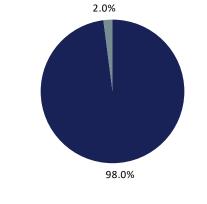
Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Cover Pool Data

Cover pool volume (EURm)	4,251
Amount outstanding (EURm)	3,500
-thereof ≥ EUR 500m	100.0%
Current OC (nominal)	21.4%
Committed OC	15.0%
Cover type	Mortgage
Main country	100% Netherlands
Main region	23% North Holland
Number of loans	17,802
Number of borrowers	n/a
Avg. exposure to borrowers (EUR)	n/a
WAL (cover pool)	18.1y
WAL (covered bonds)	6.4y
Fixed interest (cover pool)	98.5%
Fixed interest (covered bonds)	100.0%
LTV (indexed)	52.2%
LTV (unindexed)	74.3%
Loans in arrears	0.0%

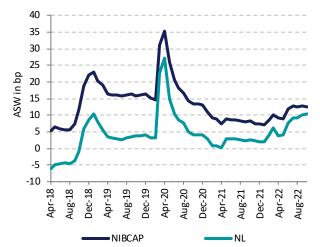
Rating (Moody's)	-
Rating (S&P)	-
Rating (Fitch)	AAA
Rating (DBRS)	-
ТРІ	-
TPI leeway	-
Collateral score	-
RRL	-
JRL	-
Unused notches	-
AAA credit risk (%)	-
PCU	8
Recovery uplift	-
Outstanding ESG BMKs	No
LCR ELIGIBLE	Yes
LCR level (Bmk)	1
Risk weight	10%
Maturity structure (Bmk)	CPT

Borrower Types



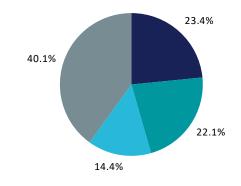
■ Residential ■ Commercial ■ Multi-family ■ Others

Spread Development

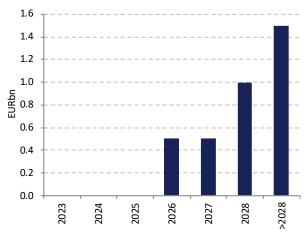


Source: Issuer, Rating agencies, Bloomberg, NORD/LB Markets Strategy & Floor Research

Regional Distribution



■ North Holland ■ South Holland ■ North Brabant ■ Others



NN Bank

Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Ratings

	Rating	Outlook
Fitch	-	-
Moody's	-	-
S&P	A-	Positive

Homepage

www.nn-group.com

Nationale-Nederlanden Bank N.V. (NN Bank) is the banking arm of NN Group N.V. and is the fifth-largest retail bank in the Netherlands. The NN Group is a financial services provider that is listed on the stock exchange, employing around 15,000 staff and serving approximately 18 million customers in 11 countries (H1 2022). The business activities of the NN Group are divided into the following areas: Netherlands Life (H1 2022: 33% of net income), Netherlands Non-Life (5%), Insurance Europe (5%), Japan Life (5%) and Banking (2%). The Other segment (49%) is also operated in order to incorporate smaller business segments, among other aspects. The Asset Management business (and segment in its own right) was discontinued following the sale of NN Investment Partners to Goldman Sachs in August 2021. The transaction was concluded in April 2022. The NN Group focuses on pension products, insurance, investments and traditional banking products in the core markets Europe and Japan. NN Bank has around one million customers, who are offered a comprehensive product portfolio that complement the NN Group's insurance products (mortgage loans and savings products). The bank conducts its business without a branch network. In addition to building up ESG-relevant assets in the asset management and mortgages segments, its sustainability strategy above all focuses on targets aimed at reducing carbon emissions. The NN Group has also had a sustainability bond framework as well as a green bond framework since February 2022. The CET1 ratio was 14.6% as at H1 2022. The bank expects that the effect from the finalisation of Basel III will be limited due to the application of the credit risk standard approach.

Balance Sheet

(EURm)	2020Y	2021Y	2022H1
Net Loans to Customers	21,255	21,228	20,296
Total Securities	959	1,280	1,072
Total Deposits	15,743	15,904	16,127
Tier 1 Common Capital	1,047	1,063	927
Total Assets	25,465	24,363	24,319
Total Risk-weighted Assets	6,001	6,120	6,356

Redemption Profile (NN Group)





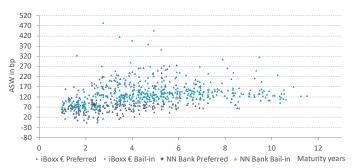
Company Ratios

	2020Y	2021Y	2022H1
Net Interest Margin	1.11	0.99	0.98
ROAE	11.69	9.13	9.50
Cost-to-Income	57.13	66.69	65.06
Core Tier 1 Ratio	17.44	17.37	14.58

Income Statement

(EURm)	2020Y	2021Y	2022H1
Net Interest Income	275	244	119
Net Fee & Commission Inc.	102	130	59
Net Trading Income	26	6	-
Operating Expense	230	253	122
Credit Commit. Impairment	-	-	-
Pre-tax Profit	169	136	67

Senior Unsecured Bonds (EUR BMK)



2020Y 2021Y 2022H1 Liquidity Coverage Ratio 157.91 173.16 194.00 IFRS Tier 1 Leverage Ratio 4.14 4.37 3.83 NPL/ Loans at Amortised Cost 1.24 0.49 0.45 0.12 0.05 0.04 Reserves/Loans at Amort, Cost

Source: Bloomberg, S&P Global Market Intelligence, NORD/LB Markets Strategy & Floor Research; as of: 14.10.2022

Strengths / Opportunities

- Operative contribution within the Group
- Strategic Group entity (complementary products)
- Risk profile (mortgage portfolio)

Risks / Weaknesses

- Concentration risks (Netherlands)
- Market share
- High private household debt level (Netherlands)

NORD/LB

Netherlands

NN Bank – Mortgage (Soft Bullet)

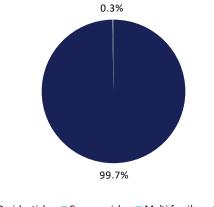
Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Cover Pool Data

Cover pool volume (EURm)	5,260
Amount outstanding (EURm)	4,845
-thereof ≥ EUR 500m	93.9%
Current OC (nominal)	8.6%
Committed OC	0.0%
Cover type	Mortgage
Main country	100% Netherlands
Main region	27% South Holland
Number of loans	22,863
Number of borrowers	n/a
Avg. exposure to borrowers (EUR)	n/a
WAL (cover pool)	22.2y
WAL (covered bonds)	8.4y
Fixed interest (cover pool)	99.6%
Fixed interest (covered bonds)	100.0%
LTV (indexed)	49.5%
LTV (unindexed)	76.1%
Loans in arrears	0.0%

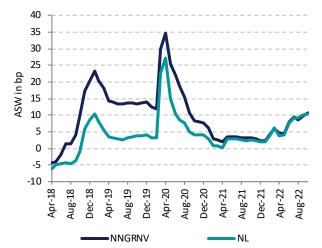
Rating (S&P)	AAA
Rating (Fitch)	-
Rating (DBRS)	-
ТРІ	-
TPI leeway	-
Collateral score	-
RRL	a+
JRL	aa+
Unused notches	3
AAA credit risk (%)	4.17
PCU	-
Recovery uplift	-
Outstanding ESG BMKs	Yes
LCR ELIGIBLE	Yes
LCR level (Bmk)	1
Risk weight	10%
Maturity structure (Bmk)	SB

Borrower Types



Residential Commercial Multi-family Others

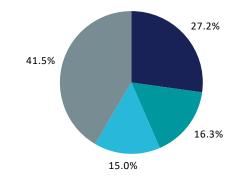
Spread Development



Source: Issuer, Rating agencies, Bloomberg, NORD/LB Markets Strategy & Floor Research

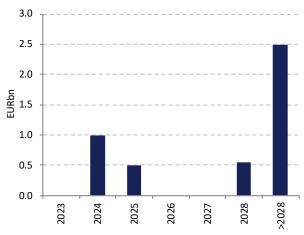
Regional Distribution

Rating (Moody's)



South Holland North Holland North Brabant Others

Redemption Profile (Bmk)



NORD/LB





Rabobank

Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Ratings

	Rating	Outlook
Fitch	A+	Stable
Moody's	Aa2	Stable
S&P	A+	Stable

Homepage

www.rabobank.com

Today, the cooperative Rabobank Group (headquarters: Utrecht) is one of the major financial service providers in the Netherlands. The Group serves approximately 9.1 million customers in the Netherlands and a further 0.3 million international customers in 36 countries with a full range of financial products and services. The Group is made up of 84 independent local banks in addition to the umbrella organisation Rabobank Nederland. It operates around 150 branches in the domestic market, with the aim of reducing this figure to 120. The geographical breakdown of the loan portfolio to retail customers (H1 2022) is as follows: 68% attributable to the Netherlands, 11% to North America, 8% to the rest of Europe, 7% to Australia and New Zealand, 4% to South America and 2% to Asia. In its domestic market, according to its own information, the Group has a market share of around 16% for mortgage loans and 35% for retail deposits. Reporting takes place in the following segments: Domestic Retail Banking (H1 2022: 46% of net earnings), Wholesale, Rural and Retail (36%), Leasing (6%), Property Development (4%) and Other Segments (6%). The CET1 ratio was 15.1% (target: >14%) as at H1 2022. Its strategic orientation in the Netherlands, which focuses on the infrastructure of the retail business, was further advanced in 2021. This was supplemented by investments in digitisation processes and IT infrastructure in addition to a focus on growth. Since 2015, Rabobank has reduced its wholesale funding by EUR 82bn to EUR 122bn at the end of 2021, although this recently climbed back to EUR 160bn. Nevertheless, deposits constitute the largest share of funding at EUR 385bn.

Balance Sheet

(EURm)	2020Y	2021Y	2022H1
Net Loans to Customers	438,074	438,379	436,339
Total Securities	47,853	39,593	45,502
Total Deposits	361,821	372,775	385,111
Tier 1 Common Capital	34,647	36,846	37,861
Total Assets	632,258	639 <i>,</i> 575	666,844
Total Risk-weighted Assets	205,773	211,855	251,455

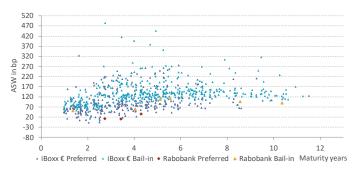
Redemption Profile



Income Statement

(EURm)	2020Y	2021Y	2022H1
Net Interest Income	7,997	8,351	4,380
Net Fee & Commission Inc.	1,780	2,008	1,050
Net Trading Income	117	809	48
Operating Expense	7,090	7,766	3,782
Credit Commit. Impairment	1,913	-475	43
Pre-tax Profit	1,496	4,877	2,135

Senior Unsecured Bonds (EUR BMK)



Company Ratios

	2020Y	2021Y	2022H1
Net Interest Margin	1.34	1.35	1.38
ROAE	2.67	8.79	7.04
Cost-to-Income	65.76	63.82	63.47
Core Tier 1 Ratio	16.84	17.39	15.06

	2020Y	2021Y	2022H1
Liquidity Coverage Ratio	192.77	183.95	198.59
IFRS Tier 1 Leverage Ratio	5.74	5.94	5.87
NPL/ Loans at Amortised Cost	3.18	2.11	1.91
Reserves/Loans at Amort. Cost	1.07	0.79	0.77

Source: Bloomberg, S&P Global Market Intelligence, NORD/LB Markets Strategy & Floor Research; as of: 14.10.2022

Strengths / Opportunities

- Market positioning in the Netherlands
- Growth strategy
- Capitalisation

Risks / Weaknesses

- Concentration risks (retail business in NL)
- Wholesale funding (trend positive)
- Cost efficiency

NORD/LB

Netherlands 💳

Netherlands

Rabobank – Mortgage

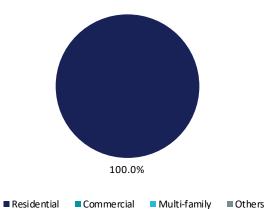
Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Cover Pool Data

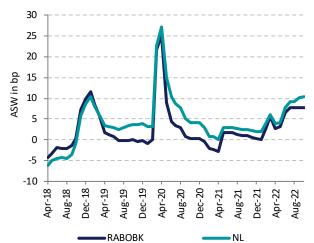
Coverroor Butu	
Cover pool volume (EURm)	20,050
Amount outstanding (EURm)	17,993
-thereof ≥ EUR 500m	94.5%
Current OC (nominal)	11.4%
Committed OC	0.0%
Cover type	Mortgage
Main country	100% Netherlands
Main region	19% South Holland
Number of loans	87,132
Number of borrowers	n/a
Avg. exposure to borrowers (EUR)	n/a
WAL (cover pool)	19.3y
WAL (covered bonds)	9.8y
Fixed interest (cover pool)	99.8%
Fixed interest (covered bonds)	100.0%
LTV (indexed)	50.8%
LTV (unindexed)	70.1%
Loans in arrears	0.0%

Rating (Moody's)	Aaa
Rating (S&P)	-
Rating (Fitch)	-
Rating (DBRS)	-
TPI	Probable-High
TPI leeway	5
Collateral score	5.0%
RRL	-
JRL	-
Unused notches	-
AAA credit risk (%)	-
PCU	-
Recovery uplift	-
Outstanding ESG BMKs	No
LCR ELIGIBLE	Yes
LCR level (Bmk)	1
Risk weight	10%
Maturity structure (Bmk)	SB

Borrower Types

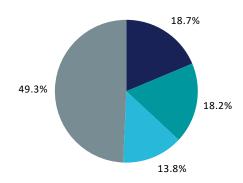


Spread Development

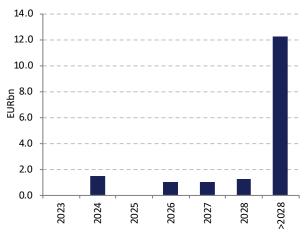


Source: Issuer, Rating agencies, Bloomberg, NORD/LB Markets Strategy & Floor Research

Regional Distribution



South Holland North Brabant North Holland Others



Netherlands

Van Lanschot Kempen

Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Ratings

	Rating	Outlook
Fitch	BBB+	Stable
Moody's	-	-
S&P	BBB+	Stable

Homepage

www.vanlanschotkempen.com

Van Lanschot Kempen (VLK) is an independent asset management firm which specialises in maintaining and generating assets for its customers (AuM H1 2022: EUR 99.6bn; FY 2021: EUR 112bn; reduction due to market performance). VLK is active on the market with its three brands Van Lanschot (asset management), Kempen (asset management and merchant banking) and Evi (online bank; focus on deposits and savings products). As at H1 2022, VLK employed a total of 1,713 staff. Its shares are listed on the Amsterdam stock exchange. As at 05 October 2022, the main shareholder is Romij BV with a stake of 9.7%. Since 2021, VLK has been conducting its business activities within a realigned organisational structure that comprises the following four segments: Private Clients, Wholesale & Institutional Clients, Investment Banking Clients and Other. The geographical focus of the bank is on the Benelux countries. Indeed, as at FY 2021, around 87% of operating income was attributable to the Netherlands, 9% to Belgium and 3% to other jurisdictions. Mortgage loans account for around 74% of the lending portfolio (H1 2022). The majority of the funding mix is made up of deposits (71%, H1 2022), followed by interbank funding (12%). The integration of Hof Hoorneman Bankiers, which was acquired in 2020, has been concluded on schedule. Moreover, VLK acquired a 70% stake in the Belgian asset management firm Mercier Vanderlinden in 2021, with the remaining shares set to be acquired within the space of five years. VLK has set itself the following targets for 2023: a CET1 ratio of 15%-17% (H1 2022: 20.2%) and ROE on CET1 of 10%-12% (12.5%), among other objectives.

Balance Sheet

(EURm)	2020Y	2021Y	2022H1
Net Loans to Customers	8,448	8,876	9,094
Total Securities	3,754	2,971	3,261
Total Deposits	10,141	11,730	11,933
Tier 1 Common Capital	1,021	931	907
Total Assets	15,149	16,307	16,702
Total Risk-weighted Assets	4,195	3,927	4,482

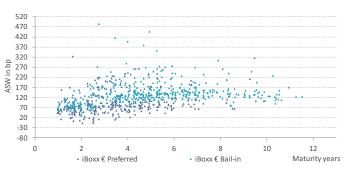
Redemption Profile



Income Statement

(EURm)	2020Y	2021Y	2022H1
Net Interest Income	152	148	57
Net Fee & Commission Inc.	296	386	201
Net Trading Income	-32	-16	17
Operating Expense	387	438	229
Credit Commit. Impairment	-	-	-
Pre-tax Profit	54	178	61

Senior Unsecured Bonds (EUR BMK)



Company Ratios

	2020Y	2021Y	2022H1
Net Interest Margin	1.07	0.98	0.72
ROAE	3.73	10.40	7.00
Cost-to-Income	87.33	73.16	80.74
Core Tier 1 Ratio	24.34	23.70	20.23

	2020Y	2021Y	2022H1
Liquidity Coverage Ratio	177.40	172.00	173.00
IFRS Tier 1 Leverage Ratio	7.04	5.89	5.61
NPL/ Loans at Amortised Cost	-	-	-
Reserves/Loans at Amort. Cost	0.75	0.55	0.45

Source: Bloomberg, S&P Global Market Intelligence, NORD/LB Markets Strategy & Floor Research; as of: 14.10.2022

Strengths / Opportunities

- Capitalisation
- Funding mix
- Liquidity profile

Risks / Weaknesses

- Market penetration
- Fiercely competitive market
- Fixed cost basis

Netherlands

Van Lanschot – Mortgage (SB)

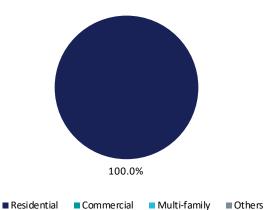
Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Cover Pool Data

Cover pool volume (EURm)	704
Amount outstanding (EURm)	500
-thereof ≥ EUR 500m	100.0%
Current OC (nominal)	40.9%
Committed OC	n/a
Cover type	Mortgage
Main country	100% Netherlands
Main region	31% North Holland
Number of loans	1,293
Number of borrowers	n/a
Avg. exposure to borrowers (EUR)	n/a
WAL (cover pool)	15.7y
WAL (covered bonds)	5.6y
Fixed interest (cover pool)	98.5%
Fixed interest (covered bonds)	100.0%
LTV (indexed)	45.2%
LTV (unindexed)	65.2%
Loans in arrears	0.0%

Rating (Moody's)	-
Rating (S&P)	AAA
Rating (Fitch)	-
Rating (DBRS)	-
TPI	-
TPI leeway	-
Collateral score	-
RRL	а
JRL	аа
Unused notches	2
AAA credit risk (%)	4.17
PCU	-
Recovery uplift	2
Outstanding ESG BMKs	No
LCR ELIGIBLE	Yes
LCR level (Bmk)	1
Risk weight	10%
Maturity structure (Bmk)	SB

Borrower Types

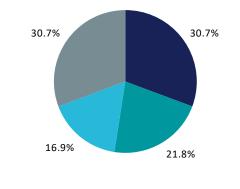


Spread Development

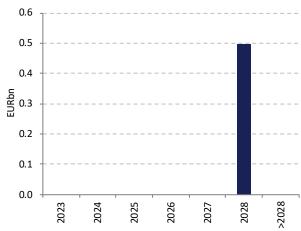


Source: Issuer, Rating agencies, Bloomberg, NORD/LB Markets Strategy & Floor Research

Regional Distribution



■North Holland ■South Holland ■Utrecht ■Others



Netherlands

Van Lanschot – Mortgage (CPT)

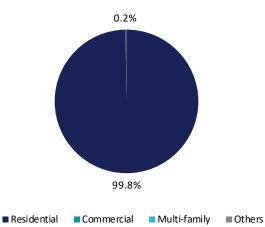
Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Cover Pool Data

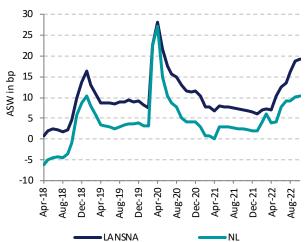
Cover pool volume (EURm)	1,327
Amount outstanding (EURm)	1,000
-thereof ≥ EUR 500m	100.0%
Current OC (nominal)	32.7%
Committed OC	n/a
Cover type	Mortgage
Main country 10	0% Netherlands
Main region 369	% North Holland
Number of loans	2,751
Number of borrowers	n/a
Avg. exposure to borrowers (EUR)	n/a
WAL (cover pool)	17.4y
WAL (covered bonds)	2.6y
Fixed interest (cover pool)	99.4%
Fixed interest (covered bonds)	100.0%
LTV (indexed)	45.3%
LTV (unindexed)	62.4%
Loans in arrears	0.0%

Rating (Moody's)	-
Rating (S&P)	-
Rating (Fitch)	AAA
Rating (DBRS)	-
ТРІ	-
TPI leeway	-
Collateral score	-
RRL	-
JRL	-
Unused notches	-
AAA credit risk (%)	-
PCU	8
Recovery uplift	-
Outstanding ESG BMKs	No
LCR ELIGIBLE	Yes
LCR level (Bmk)	1
Risk weight	10%
Maturity structure (Bmk)	CPT

Borrower Types

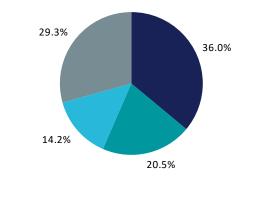


Spread Development

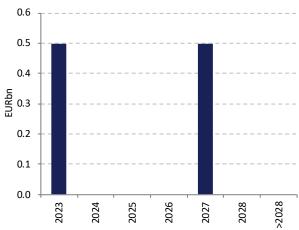


Source: Issuer, Rating agencies, Bloomberg, NORD/LB Markets Strategy & Floor Research

Regional Distribution



■North Holland ■South Holland ■Utrecht ■Others

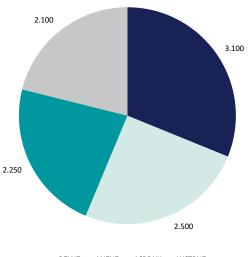


Market Overview Covered Bonds

Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

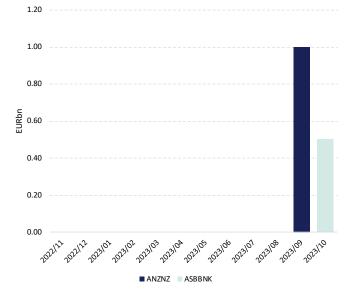
Cover Pool Volume	EUR 16.52bn	Outstanding volume (Bmk)	EUR 9.95bn
Amount outstanding	EUR 8.71bn	Number of benchmarks	14
Number of issuer	4	Outstanding ESG volume (Bmk)	-
No of cover pools	4	Number of ESG benchmarks	-
there of M / PS / others	4/0/0	Outstanding volume (SBmk)	-
Ratings (low / high)	AAA / AAA	Number of subbenchmarks	-
Best possible LCR level	Level 2A	Maturity types	SB

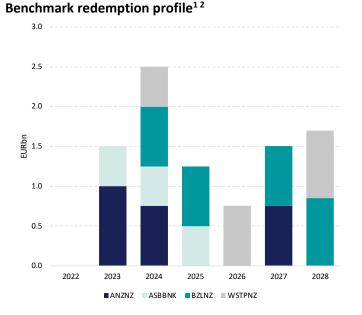
Outstanding benchmark volume¹ (EURbn)



BZLNZ ANZNZ ASBBNK WSTPNZ

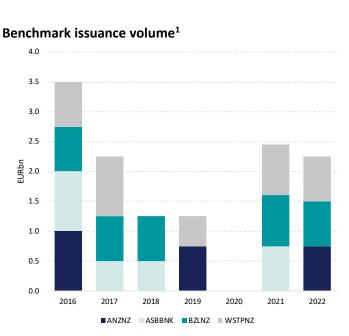
Benchmark redemption profile¹: 11/2022 - 10/2023





Source: Issuer, Rating agencies, Bloomberg, NORD/LB Markets Strategy & Floor Research; ¹ based on Bloomberg ticker; ² Redemptions 2022: 11/22 – 12/22

New Zealand 🗮



New Zealand

ANZ Bank New Zealand

Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Ratings

	Rating	Outlook
Fitch	A+	Stable
Moody's	A1	Stable
S&P	AA-	Stable

Homepage

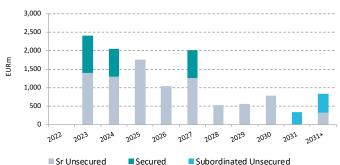
www.anz.co.nz

Headquartered in Auckland, ANZ Bank New Zealand Ltd. (ANZ NZ) is the largest financial group in New Zealand as measured by assets (H1 2022: NZD 190.4bn). The bank is a wholly owned subsidiary of the Australia and New Zealand Banking Group (ANZ) and is heavily integrated in its parent group. ANZ NZ accounts for 18% of assets and 30% of the net income in connection with its parent company's consolidated earnings (FY 2021). In FY 2021, a reorganisation process of the business segments was initiated, which is set to be brought to a close in 2022. As a result of this, the Retail and Commercial segments were renamed Personal and Business. In connection with this reorganisation, the customer group SMEs is also being separated from the former Retail segment and integrated in the newly formed Business segment as part of an ongoing process. ANZ NZ now divides its business into four segments: Personal (asset management and private banking for retail customers; H1 2022: 40% of pre-tax income), Business (corporate client business; 34%), Institutional (financial market solutions for global stakeholders and institutions; 11%) and Other (treasury and back office services; 14%). ANZ NZ registered a market share of over 25% for almost all product groups (FY 2021). With a market share of 36%, its marketleading position for deposits is particularly noteworthy. Altogether, 80.9% of funding at ANZ NZ is covered by deposits and 19.1% is provided by wholesale funding (FY 2021). The share of covered bonds in wholesale funding amounted to 19.8%. The CET1 ratio of 11.7% (FY 2020) rose to 13.1% in FY 2021. As at H1 2022, it stood at 12.4%. The financial year of ANZ NZ ends on 30 September each year.

Balance Sheet

(EURm)	2020Y	2021Y	2022H1
Net Loans to Customers	74,719	83,992	91,378
Total Securities	18,239	18,388	16,953
Total Deposits	68,055	74,667	80,903
Tier 1 Common Capital	6,719	7,758	8,265
Total Assets	101,210	110,256	119,125
Total Risk-weighted Assets	57,597	57,988	66,455

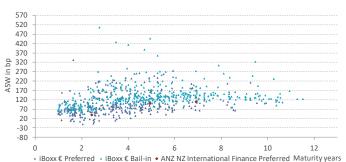
Redemption Profile



Income Statement

(EURm)	2020Y	2021Y	2021Y
Net Interest Income	1,864	2,020	2,020
Net Fee & Commission Inc.	319	327	327
Net Trading Income	149	106	106
Operating Expense	985	956	956
Credit Commit. Impair-	230	-67	-67
Pre-tax Profit	1,094	1,582	1,582

Senior Unsecured Bonds (EUR BMK)



Company Ratios

	2020Y	2021Y	2022H1	
Net Interest Margin	2.02	2.03	1.93	Liquidity Coverage Ratio
ROAE	9.06	11.84	12.98	IFRS Tier 1 Leverage Rat
Cost-to-Income	42.04	38.83	35.45	NPL/ Loans at Amortise
Core Tier 1 Ratio	11.66	13.38	12.44	Reserves/Loans at Amo

2020Y2021Y2022H1Liquidity Coverage Ratio--IFRS Tier 1 Leverage Ratio7.097.47NPL/ Loans at Amortised Cost--Reserves/Loans at Amort. Cost0.520.410.39

Source: Bloomberg, S&P Global Market Intelligence, NORD/LB Markets Strategy & Floor Research; as of: 14.10.2022

Strengths / Opportunities

- National market position
- Integration in the Group (likelihood of support)
- Capitalisation

Risks / Weaknesses

- Probable price corrections on NZ real estate market
- Rising funding costs could adversely impact income
- Dependency on capital market funding

ANZ Bank New Zealand – Mortgage

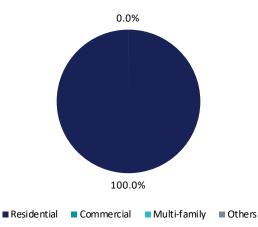
Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Cover Pool Data

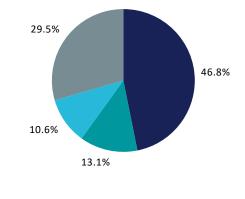
Cover pool volume (EURm)	6,746
Amount outstanding (EURm)	2,423
-thereof ≥ EUR 500m	100.0%
Current OC (nominal)	178.4%
Committed OC	11.1%
Cover type	Mortgage
Main country	100% New Zealand
Main region	47% Auckland
Number of loans	55,424
Number of borrowers	30,854
Avg. exposure to borrowers (EUR)	218,633
WAL (cover pool)	18.7y
WAL (covered bonds)	2.4y
Fixed interest (cover pool)	94.6%
Fixed interest (covered bonds)	100.0%
LTV (indexed)	38.5%
LTV (unindexed)	55.4%
Loans in arrears	0.4%

Rating (Moody's)	Aaa
Rating (S&P)	-
Rating (Fitch)	AAA
Rating (DBRS)	-
ТРІ	Probable
TPI leeway	3
Collateral score	5.0%
RRL	-
JRL	-
Unused notches	-
AAA credit risk (%)	-
PCU	6
Recovery uplift	-
Outstanding ESG BMKs	No
LCR ELIGIBLE	Yes
LCR level (Bmk)	2A
Risk weight	20%
Maturity structure (Bmk)	SB

Borrower Types

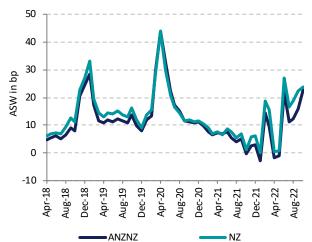


Regional Distribution

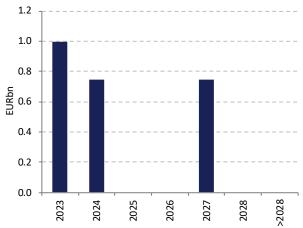


■ Auckland ■ Wellington ■ Canterbury ■ Others

Spread Development



Redemption Profile (Bmk)



Source: Issuer, Rating agencies, Bloomberg, NORD/LB Markets Strategy & Floor Research



New Zealand



ASB Bank

Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Ratings

	Rating	Outloo
Fitch	A+	Stable
Moody's	A1	Stable
S&P	AA-	Stable

Homepage

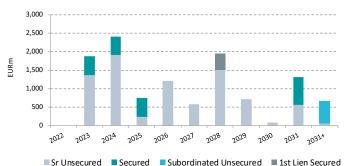
www.asb.co.nz

Auckland Savings Bank (ASB Bank, ASB), headquartered in Auckland, is a wholly owned subsidiary of ASB Holdings Limited, which in turn forms part of the Commonwealth Bank of Australia (CBA). ASB is the third largest bank in New Zealand as measured by total assets and has 1.3 million customers. In addition to traditional banking business, ASB also offers its customers products and services in the insurance and asset management segment as well as international and national payment transactions. As at year-end 2021, the institute registered a market share of 19% for deposits and 20% for loans. The focus of the bank is on retail customers and SMEs, while institutional customers and larger corporations are served by the New Zealand arm of CBA. The Reserve Bank of New Zealand (RBNZ), which functions as the financial supervisory authority of New Zealand, has classified ASB as a domestic systemically important bank (D-SIB). ASB is divided into the following segments: Retail Banking, Business Banking, Corporate Banking, Private Banking, Wealth & Insurance and Other. The highest-profit segments as measured by contribution to operating income are Retail Banking (FY 2022: 50.3%) and Business Banking (34.8%). In contrast, Corporate Banking and Private Banking, Wealth & Insurance are less important, accounting for shares of 6.5% and 10.4% respectively, but serve to diversify the range of income sources nonetheless. In terms of the debt instruments issued by the bank, the share of covered bonds amounted to 15.4% (FY 2022). In financial year 2022, the CET1 ratio decreased by 40 basis points to 12.3% compared to the previous year (FY 2021: 12.7%). The financial year ends on 30 June each year.

Balance Sheet

(EURm)	2020Y	2021Y	2022Y
Net Loans to Customers	51,738	58,522	62,363
Total Securities	5,194	5,185	5,044
Total Deposits	42,676	45,490	47,900
Tier 1 Common Capital	-	4,594	4,988
Total Assets	60,355	66,326	72,347
Total Risk-weighted Assets	-	36,065	40,663

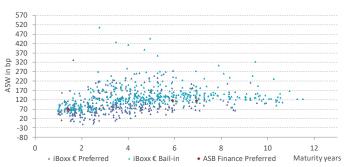
Redemption Profile



Income Statement

(EURm)	2020Y	2021Y	2022Y
Net Interest Income	1,233	1,391	1,570
Net Fee & Commission Inc.	296	279	286
Net Trading Income	52	61	88
Operating Expense	642	665	710
Credit Commit. Impair-	176	-3	25
Pre-tax Profit	765	1,070	1,229

Senior Unsecured Bonds (EUR BMK)



2021Y

6.96

0.55

2022Y

6.97

0.52

Company Ratios

	2020Y	2021Y	2022Y		2020Y
Net Interest Margin	2.13	2.18	2.24	Liquidity Coverage Ratio	-
ROAE	12.13	15.49	15.39	IFRS Tier 1 Leverage Ratio	-
Cost-to-Income	40.56	38.39	36.14	NPL/ Loans at Amortised Cost	-
Core Tier 1 Ratio	10.80	12.74	12.27	Reserves/Loans at Amort. Cost	0.69

Source: Bloomberg, S&P Global Market Intelligence, NORD/LB Markets Strategy & Floor Research; as of: 14.10.2022

Strengths / Opportunities

- National market position
- Capitalisation
- Integration in the Group (likelihood of support)

Risks / Weaknesses

- Dependency on wholesale funding
- Downside risks linked to agri sector & property market

Credit risk concentration



New Zealand

New Zealand

ASB Bank – Mortgage

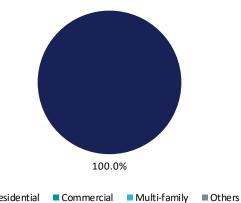
Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Cover Pool Data

Cover pool volume (EURm)	3,091
Amount outstanding (EURm)	2,235
-thereof ≥ EUR 500m	100.0%
Current OC (nominal)	38.3%
Committed OC	11.7%
Cover type	Mortgage
Main country	100% New Zealand
Main region	58% Auckland
Number of loans	27,294
Number of borrowers	20,042
Avg. exposure to borrowers (EUR)	154,247
WAL (cover pool)	21.3y
WAL (covered bonds)	4.5y
Fixed interest (cover pool)	94.7%
Fixed interest (covered bonds)	100.0%
LTV (indexed)	30.1%
LTV (unindexed)	42.1%
Loans in arrears	0.1%

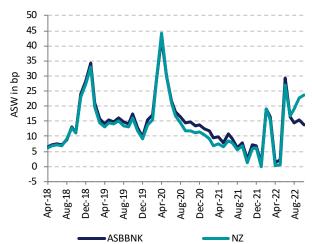
Rating (Moody's)	Aaa
Rating (S&P)	-
Rating (Fitch)	AAA
Rating (DBRS)	-
ТРІ	Probable
TPI leeway	3
Collateral score	5.0%
RRL	-
JRL	-
Unused notches	-
AAA credit risk (%)	-
PCU	6
Recovery uplift	-
Outstanding ESG BMKs	No
LCR ELIGIBLE	Yes
LCR level (Bmk)	2A
Risk weight	20%
Maturity structure (Bmk)	SB

Borrower Types



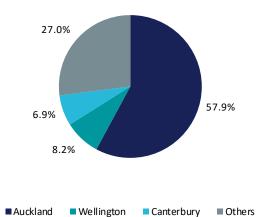
Residential Commercial Multi-family

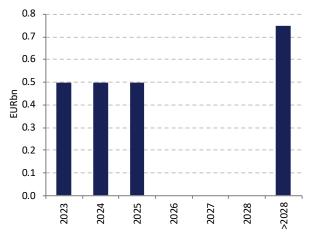
Spread Development



Source: Issuer, Rating agencies, Bloomberg, NORD/LB Markets Strategy & Floor Research

Regional Distribution





New Zealand

Bank of New Zealand

Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Ratings

	Rating	Outlook
Fitch	A+	Stable
Moody's	A1	Stable
S&P	AA-	Stable

Homepage

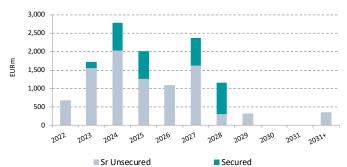
www.bnz.co.nz

The Bank of New Zealand (BNZ), headquartered in Auckland, is the second-largest bank in New Zealand as measured by total assets (H1 2022: NZD 124.1bn). BNZ is a wholly owned subsidiary of the National Australia Bank (NAB). The Reserve Bank of New Zealand (RBNZ), the country's financial supervisory authority, has classified BNZ as a domestic systemically important bank (D-SIB). BNZ mainly focuses on the New Zealand market and covers the following customer groups: retail, business, agriculture, corporate and institutional. Its three business segments are Partnership Banking (retail and business banking customers; H1 2022: 67.7% of operating income) and Corporate and Institutional Banking (financial solutions for agricultural enterprises and institutional customers; 25.4%). The segment Other (7.0%) is accounted for separately and offers auxiliary management and administrative activities. In December 2021, BNZ had a market share of around 19% for deposits and loans, while in the area of loans to non-financial corporates it is the New Zealand market leader with a market share of 24%. The loan portfolio primarily consists of mortgage loans (H1 2022: 55%), followed by loans in the agricultural and commercial real estate sectors at 15% and 8% respectively. A total of 68.3% of the funding mix consists of deposits, while 31.7% is made up of wholesale funding (FY 2021). The CET1 ratio was 13.8% at the end of the 2021 financial year, and the Bank reported a Common Equity Tier 1 ratio of 12.5% at the end of the first half of 2022. The financial year ends on 30 September each year.

Balance Sheet

(EURm)	2020Y	2021Y	2022H1
Net Loans to Customers	49,635	56,522	61,162
Total Securities	9,546	7,013	6,833
Total Deposits	38,053	42,513	46,314
Tier 1 Common Capital	4,552	5,582	6,083
Total Assets	63,239	71,083	77,581
Total Risk-weighted Assets	38,412	40,555	47,952

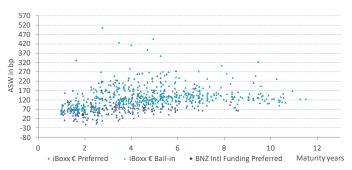
Redemption Profile



Income Statement

(EURm)	2020Y	2021Y	2022H1
Net Interest Income	1,190	1,287	705
Net Fee & Commission Inc.	-	-	-
Net Trading Income	50	163	87
Operating Expense	662	623	296
Credit Commit. Impair-	171	-22	13
Pre-tax Profit	607	1,083	598

Senior Unsecured Bonds (EUR BMK)



Company Ratios

	2020Y	2021Y	2022H1
Net Interest Margin	1.92	1.92	1.95
ROAE	9.19	14.26	13.93
Cost-to-Income	45.95	36.94	32.64
Core Tier 1 Ratio	11.85	13.76	12.69

	2020Y	2021Y	2022H1
Liquidity Coverage Ratio	-	-	-
IFRS Tier 1 Leverage Ratio	7.53	8.09	8.12
NPL/ Loans at Amortised Cost	-	-	-
Reserves/Loans at Amort. Cost	1.02	0.81	0.79

Source: Bloomberg, S&P Global Market Intelligence, NORD/LB Markets Strategy & Floor Research; as of: 14.10.2022

Strengths / Opportunities

- National market position
- Asset quality
- Integration in the Group (likelihood of support)

Risks / Weaknesses

- Dependency on capital market funding
- Rising funding costs
- Downside risks linked to agri sector & property market

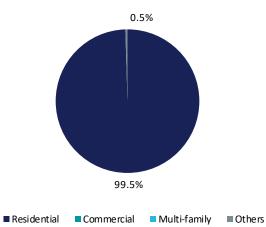
Bank of New Zealand – Mortgage

Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

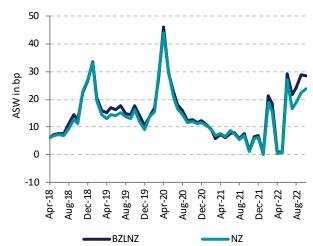
Cover Pool Data

Cover pool volume (EURm)	3,161
Amount outstanding (EURm)	2,500
-thereof ≥ EUR 500m	92.4%
Current OC (nominal)	26.5%
Committed OC	15.8%
Cover type	Mortgage
Main country	100% New Zealand
Main region	14% Auckland
Number of loans	28,518
Number of borrowers	28,518
Avg. exposure to borrowers (EUR)	110,839
WAL (cover pool)	23.1y
WAL (covered bonds)	3.7у
Fixed interest (cover pool)	80.2%
Fixed interest (covered bonds)	100.0%
LTV (indexed)	36.4%
LTV (unindexed)	46.9%
Loans in arrears	0.0%

Borrower	Types
----------	-------

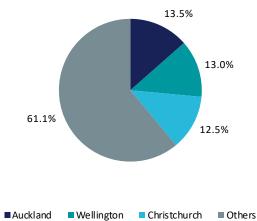


Spread Development

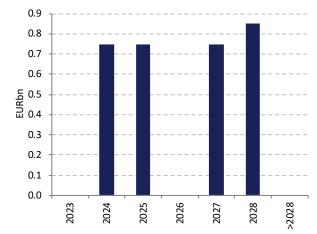


Source: Issuer, Rating agencies, Bloomberg, NORD/LB Markets Strategy & Floor Research

Regional Distribution



Redemption Profile (Bmk)



Rating (Moody's)	Aaa
Rating (S&P)	-
Rating (Fitch)	AAA
Rating (DBRS)	-
TPI	Probable
TPI leeway	3
Collateral score	5.1%
RRL	-
JRL	-
Unused notches	-
AAA credit risk (%)	-
PCU	6
Recovery uplift	-
Outstanding ESG BMKs	No
LCR ELIGIBLE	Yes
LCR level (Bmk)	2A
Risk weight	20%
Maturity structure (Bmk)	SB





NORD/LB

Westpac New Zealand

Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Ratings		
	Rating	Outlook
Fitch	A+	Stable
Moody's	A1	Stable
S&P	AA-	Stable

Homepage

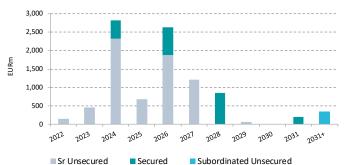
www.westpac.co.nz

Westpac New Zealand Ltd. (WNZ) is a wholly owned subsidiary of the Westpac Banking Corporation (headquarter: Australia). WNZ is responsible for 11.5% of total assets and 16% of the parent company's earnings (FY 2021). As a universal bank, it handles the banking, asset management and insurance business in New Zealand. WNZ has 4,500 employees, who serve around 1.3 million customers in New Zealand. The New Zealand financial supervisory authority, the Reserve Bank of New Zealand (RBNZ), has classified WNZ as a domestic systemically important bank (D-SIB). Its operating segments are divided into Consumer Banking and Wealth (FY 2021: 51.6% of operating income), Institutional and Business Banking (43.9%) and Investments & Insurance (4.5%). The non-operating segment Reconciling Items serves as a collective item for all business transactions not grouped under one of the operating segments. In October 2020, the segment Commercial, Corporate and Institutional Banking was renamed Institutional and Business Banking. The loan portfolio mainly consists of residential mortgages (H1 2022: 65.9% of the loan portfolio) and loans to businesses (30.9%). Deposits constitute the main source of funding for the bank at 76% (FY 2021). In FY 2021, the CET1 ratio rose from 12.3% (FY 2020) to 13.8%. Year-on-year, the CET1 ratio increased by 150 basis points (FY 2020: 12.3%). The financial year ends on 30 September each year.

Balance Sheet

(EURm)	2020Y	2021Y	2022H1
Net Loans to Customers	49,528	55,276	58,802
Total Securities	4,537	4,285	4,422
Total Deposits	41,651	47,360	50,881
Tier 1 Common Capital	3,847	4,425	4,613
Total Assets	58,105	67,060	73,431
Total Risk-weighted Assets	31,286	32,056	40,844

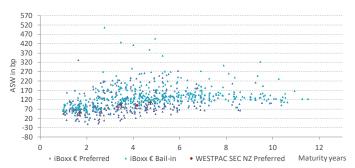
Redemption Profile



Income Statement

(EURm)	2020Y	2021Y	2022H1
Net Interest Income	1,071	1,219	658
Net Fee & Commission Inc.	130	139	73
Net Trading Income	-	-	-
Operating Expense	589	648	329
Credit Commit. Impair-	183	-50	-9
Pre-tax Profit	439	762	417

Senior Unsecured Bonds (EUR BMK)



Company Ratios

	2020Y	2021Y	2022H1	
Net Interest Margin	1.94	1.98	1.97	Liquidity Coverage Ratio
ROAE	7.28	11.60	11.79	IFRS Tier 1 Leverage Rat
Cost-to-Income	48.63	47.66	44.65	NPL/ Loans at Amortised
Core Tier 1 Ratio	12.30	13.80	11.29	Reserves/Loans at Amor

2020Y 2021Y 2022H1 o itio 6.68 6.65 6.33 d Cost 0.80 0.66 0.64 ort. Cost 0.68 0.51 0.43

Source: Bloomberg, S&P Global Market Intelligence, NORD/LB Markets Strategy & Floor Research; as of: 14.10.2022

Strengths / Opportunities

- National market position
- Integration in the Group (likelihood of support)
- Asset quality

Risks / Weaknesses

- Increasing funding costs
- Dependency on wholesale fundingownside risks linked to agri sector & property market



Westpac New Zealand – Mortgage

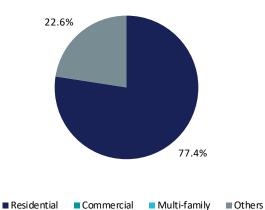
Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Cover Pool Data

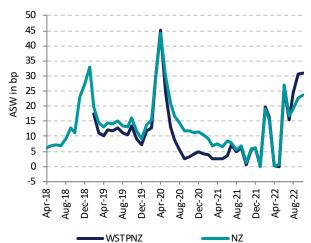
Cover pool volume (EURm)	3,525
Amount outstanding (EURm)	1,556
-thereof ≥ EUR 500m	100.0%
Current OC (nominal)	126.5%
Committed OC	11.1%
Cover type	Mortgage
Main country	100% New Zealand
Main region	38% Auckland
Number of loans	29,248
Number of borrowers	29,248
Avg. exposure to borrowers (EUR)	120,511
WAL (cover pool)	21.7у
WAL (covered bonds)	4.9y
Fixed interest (cover pool)	91.7%
Fixed interest (covered bonds)	100.0%
LTV (indexed)	30.9%
LTV (unindexed)	44.0%
Loans in arrears	0.2%

Rating (Moody's)	Aaa
Rating (S&P)	-
Rating (Fitch)	AAA
Rating (DBRS)	-
TPI	Probable
TPI leeway	3
Collateral score	5.0%
RRL	-
JRL	-
Unused notches	-
AAA credit risk (%)	-
PCU	6
Recovery uplift	-
Outstanding ESG BMKs	No
LCR ELIGIBLE	Yes
LCR level (Bmk)	2A
Risk weight	20%
Maturity structure (Bmk)	SB

Borrower Types

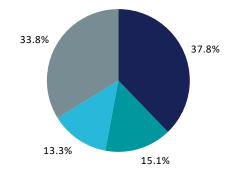


Spread Development



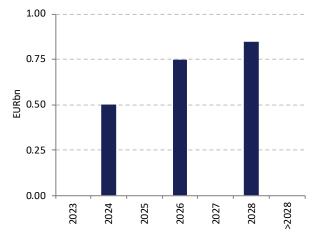
Source: Issuer, Rating agencies, Bloomberg, NORD/LB Markets Strategy & Floor Research

Regional Distribution



■ Auckland ■ Wellington ■ Canterbury/West Coast ■ Others

Redemption Profile (Bmk)



NORD/LB

New Zealand

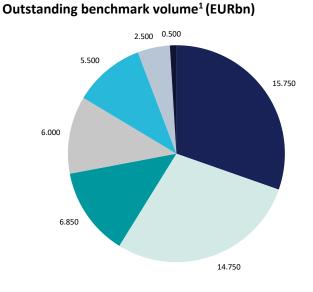


Norway 📕

Market Overview Covered Bonds

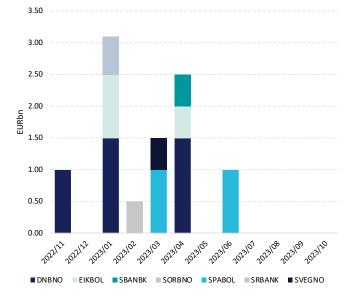
Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Cover Pool Volume	EUR 136.99bn	Outstanding volume (Bmk)	EUR 51.85bn
Amount outstanding	EUR 98.29bn	Number of benchmarks	61
Number of issuer	8	Outstanding ESG volume (Bmk)	EUR 8.25bn
No of cover pools	8	Number of ESG benchmarks	10
there of M / PS / others	8/0/0	Outstanding volume (SBmk)	EUR 0.75bn
Ratings (low / high)	AAA / AAA	Number of subbenchmarks	3
Best possible LCR level	Level 1	Maturity types	SB

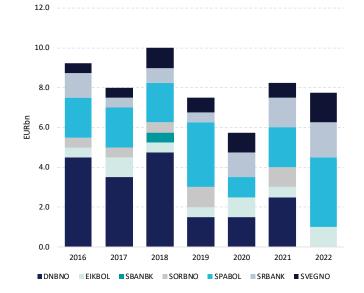


DNBNO SPABOL SRBANK EIKBOL SVEGNO SORBNO SBANBK

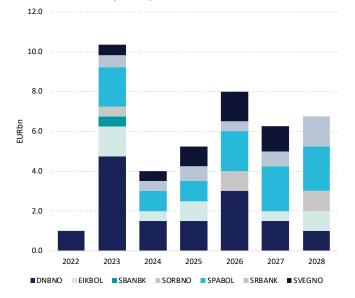
Benchmark redemption profile¹: 11/2022 - 10/2023



Benchmark issuance volume¹



Benchmark redemption profile¹²



Source: Issuer, Rating agencies, Bloomberg, NORD/LB Markets Strategy & Floor Research; ¹ based on Bloomberg ticker; ² Redemptions 2022: 11/22 – 12/22

DNB Bank

Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Ratings

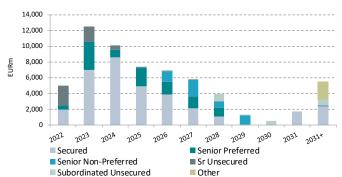
0-		
	Rating	Outlook
Fitch	-	-
Moody's*	Aa2	Positive
S&P	AA-	Stable
Homepage		
www.ir.dn	ib.no	
*Senior Unsecured		

DNB Bank ASA (DNB) is headquartered in Oslo and is the largest financial group in Norway with market capitalisation of NOK 313bn (FY 2021). The group is listed on the Oslo stock exchange, where the lead shareholder is the Norwegian government with a stake of 34% (as at: 30 September 2022). DNB serves around 2.1 million retail and 231,000 corporate customers. The business activities of DNB are split across four segments: Personal Customers (30% of operating earnings as at Q1 2022), Corporate Customers (63%), Other Operations (11%) and Eliminations (-4%). DNB is a market leader in Norway with high market shares, particularly in the area of retail loans (FY 2021: 23%), corporate loans (21%) and corporate client deposits (35%). On 30 March 2022, DNB completed a takeover of SBanken. The merger will aim to leverage synergies in the Norwegian retail banking sector and expand the deposit business. SBanken was one of the leading online retail banks in Norway with over 484,000 customers. DNB has set targets in the area of sustainability with differing timelines. It plans to increase sustainability-related funding and investments to NOK 1,500bn by 2030 (as at Q1 2022: NOK 382.4bn). Meanwhile, it aims to increase capital invested in sustainable investment funds to NOK 100bn by 2025 (as at Q1 2022: NOK 26.1bn). DNB's financial targets include an annual reduction of the CIR to a level below 40% over the long term (43% as at Q1 2022). In addition, ROE should be increased to above 12% (10.7% as at F1 2021) and the CET1 should come in at above 17.6% (FY 2021: 19.4%).

Balance Sheet

(EURm)	2020Y	2021Y	2022H1
Net Loans to Customers	161,552	174,156	186,349
Total Securities	62,504	59 <i>,</i> 482	67,876
Total Deposits	105,447	124,531	134,920
Tier 1 Common Capital	17,274	18,894	18,651
Total Assets	278,402	291,362	320,292
Total Risk-weighted Assets	92,244	97,155	103,675

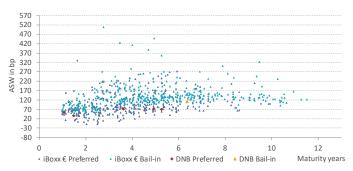
Redemption Profile



Income Statement

W 2021V	2022111
	2022H1
06 3 <i>,</i> 808	2,203
90 1,084	569
52 352	319
25 2,345	1,239
26 -85	-80
27 3,215	1,982
	52 352 25 2,345 26 -85

Senior Unsecured Bonds (EUR BMK)



Company Ratios

	2020Y	2021Y	2022H1
Net Interest Margin	1.36	1.38	1.53
ROAE	8.20	10.30	12.63
Cost-to-Income	40.35	42.68	39.28
Core Tier 1 Ratio	18.73	19.45	17.99

	2020Y	2021Y	2022H1
Liquidity Coverage Ratio	148.07	130.26	144.13
IFRS Tier 1 Leverage Ratio	6.61	6.76	6.24
NPL/ Loans at Amortised Cost	-	-	-
Reserves/Loans at Amort. Cost	0.85	0.58	0.46

Source: Bloomberg, S&P Global Market Intelligence, NORD/LB Markets Strategy & Floor Research; as of: 14.10.2022

Strengths / Opportunities

- Market leader in the Norwegian financial sector
- Income generation capacity
- Capital ratios

- Dependency on capital market funding
- Exposure to cyclical sectors
- Concentration risks for property loans





DNB Boligkreditt – Mortgage

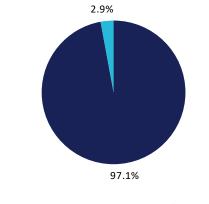
Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Cover Pool Data

Cover pool volume (EURm)	66,242
Amount outstanding (EURm)	36,259
-thereof ≥ EUR 500m	40.7%
Current OC (nominal)	82.7%
Committed OC	n/a
Cover type	Mortgage
Main country	100% Norway
Main region	32% Viken
Number of loans	366,929
Number of borrowers	314,925
Avg. exposure to borrowers (EUR)	210,341
WAL (cover pool)	13.1y
WAL (covered bonds)	3.9y
Fixed interest (cover pool)	5.2%
Fixed interest (covered bonds)	72.0%
LTV (indexed)	49.8%
LTV (unindexed)	60.9%
Loans in arrears	0.1%

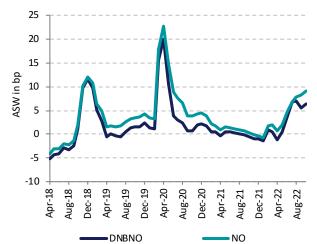
Rating (Moody's)	Aaa
Rating (S&P)	AAA
Rating (Fitch)	-
Rating (DBRS)	-
ТРІ	Probable
TPI leeway	5
Collateral score	5.0%
RRL	aa+
JRL	ааа
Unused notches	4
AAA credit risk (%)	2.5
PCU	-
Recovery uplift	-
Outstanding ESG BMKs	Yes
LCR ELIGIBLE	Yes
LCR level (Bmk)	1
Risk weight	10%
Maturity structure (Bmk)	SB

Borrower Types



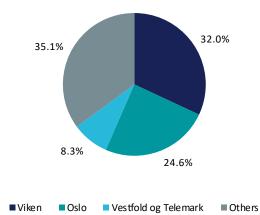
Residential Commercial Multi-family Others

Spread Development

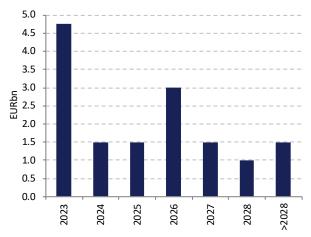


Source: Issuer, Rating agencies, Bloomberg, NORD/LB Markets Strategy & Floor Research

Regional Distribution



Redemption Profile (Bmk)



NORD/LB



Eika Boligkreditt

Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Ratings

-	Rating	Outlook	
Fitch	-	-	
Moody's	Baa1	Positive	
S&P	-	-	
Homepage			

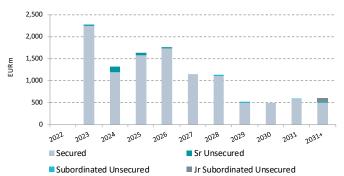
www.eikbol.no

Eika Boligkreditt AS (EikBol) provides banks in the Eika Alliance with funding in the form of covered bonds. In addition to the EikBol and Eika Gruppen AS, the Eika Alliance also consists of 51 independent local banks and OBOS (the largest residential housing cooperative in Norway). All in all, more than 700,000 customers are served. As at 24 October 2021, 10 banks left the Eika Alliance, selling their shares to 19 banks in the Eika Alliance. The departing banks transferred 14.5% of their portfolios to EikBol. In terms of ownership structure, EikBol is owned by 62 local banks, which includes 51 banks in the Eika Alliance and OBOS. The banks in the Eika Alliance focus on retail customers and small businesses. In Q1 2022, they achieved a market share of 9.4% for Norwegian retail loans. Eika Gruppen AS acts as a financial services group and offers its member banks a complete infrastructure platform. The owners of EikBol guarantee that it is always sufficiently capitalised and that liquidity requirements for the next twelve months are met at all times. Funding in the form of covered bonds placed by EikBol accounts for around 21% of the Eika Alliance funding mix as a whole (FY 2021). In February 2021, EikBol launched a green bond framework, with the aim of refinancing the most energy efficient mortgage-backed securities from the cover pool. EikBol issued its first green covered bond under this framework (EUR 500m) in June 2021. The CET1 ratio was 15.2%. (FY 2021).

Balance Sheet

(EURm)	2020Y	2021Y	2022H1
Net Loans to Customers	8,514	9,115	9,027
Total Securities	2,872	2,232	2,372
Total Deposits	-	-	-
Tier 1 Common Capital	486	510	493
Total Assets	11,499	11,464	11,668
Total Risk-weighted Assets	3,550	3,722	3,713

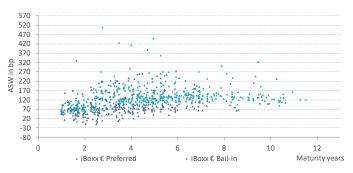
Redemption Profile



Income Statement

(EURm)	2020Y	2021Y	2022H1
Net Interest Income	76	82	33
Net Fee & Commission Inc.	-60	-76	-27
Net Trading Income	4	3	-4
Operating Expense	6	7	4
Credit Commit. Impairment	-	-	-
Pre-tax Profit	14	6	0

Senior Unsecured Bonds (EUR BMK)



Company Ratios

	2020Y	2021Y	2022H1
Net Interest Margin	-	-	-
ROAE	2.13	0.89	0.30
Cost-to-Income	30.97	67.76	97.26
Core Tier 1 Ratio	13.70	13.70	13.28

	2020Y	2021Y	2022H1
Liquidity Coverage Ratio	102.01	103.01	107.00
IFRS Tier 1 Leverage Ratio	4.24	4.48	4.31
NPL/ Loans at Amortised Cost	-	0.05	-
Reserves/Loans at Amort. Cost	-	-	-

Source: Bloomberg, S&P Global Market Intelligence, NORD/LB Markets Strategy & Floor Research; as of: 14.10.2022

Strengths / Opportunities

- Credit quality
- Probability of support from Eika Alliance
- Capitalisation

- No explicit guarantee of support from Alliance
 - Concentrated credit risk on domestic market
 - Profitability





Eika Boligkreditt – Mortgage

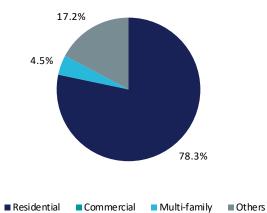
Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Cover Pool Data

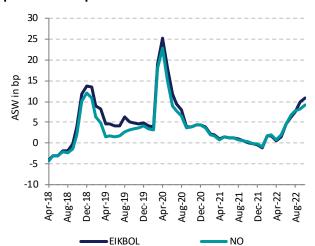
Cover pool volume (EURm)	10,847
Amount outstanding (EURm)	9,973
-thereof ≥ EUR 500m	60.2%
Current OC (nominal)	8.8%
Committed OC	5.0%
Cover type	Mortgage
Main country	100% Norway
Main region	28% Viken
Number of loans	52,868
Number of borrowers	n/a
Avg. exposure to borrowers (EUR)	n/a
WAL (cover pool)	12.6y
WAL (covered bonds)	4.1y
Fixed interest (cover pool)	9.3%
Fixed interest (covered bonds)	56.4%
LTV (indexed)	46.0%
LTV (unindexed)	52.7%
Loans in arrears	0.0%

Rating (Moody's)	Aaa
Rating (S&P)	-
Rating (Fitch)	-
Rating (DBRS)	-
ТРІ	High
TPI leeway	2
Collateral score	5.0%
RRL	-
JRL	-
Unused notches	-
AAA credit risk (%)	-
PCU	-
Recovery uplift	-
Outstanding ESG BMKs	Yes
LCR ELIGIBLE	Yes
LCR level (Bmk)	1
Risk weight	10%
Maturity structure (Bmk)	SB

Borrower Types

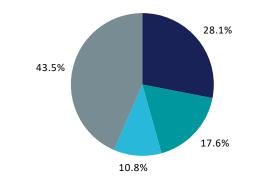


Spread Development



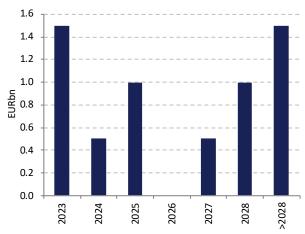
Source: Issuer, Rating agencies, Bloomberg, NORD/LB Markets Strategy & Floor Research

Regional Distribution



■ Viken ■ Trondelag ■ Vestfold og Telemark ■ Others

Redemption Profile (Bmk)







SpareBank 1 Boligkreditt

Norway 🔚

Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Ratings

_	Rating	Outlook
Fitch	-	-
Moody's	A2	Positive
S&P	-	-

Homepage

www.sparebank1.no

SpareBank 1 Boligkreditt (SpaBol) is the funding vehicle for members of the SpareBank 1 Alliance, which consists of 14 savings banks, all of which are independent from one another. With the exception of SpareBank 1 SR-Bank, they are also all shareholders of SpaBol. The SpareBank 1 Alliance is the second largest financial group in Norway as measured by assets and focuses on private mortgage loans on the domestic market (FY 2021: 67.4% of the loan portfolio) and commercial real estate (FY 2021: 12.9%). It serves approximately 1.1 million retail customers and 100,000 SMEs. The aim of the alliance is to use synergy effects to strengthen the individual savings banks, without limiting them in their individual business operations or hampering regional customer relationships. For example, this is achieved by way of joint companies offering non-core banking products. This is the aim of SpareBank 1 Group Holding Co., which combines insurance, asset management and debt collection/sales of receivables. SpareBank 1 Development Holding Co. offers Alliance members services in the areas of marketing, procurement, distribution and IT systems. In addition to deposits (FY 2021: 45%), a significant portion of funding for the individual savings banks is generated by way of covered bond issuances (24%), which are placed via SpaBol. Most of the cover pool of SpaBol consists of private mortgage loans. In return for funding, the savings banks undertake to provide SpaBol with equity capital and liquidity. The CET1 ratio (Q1 2022: 20.3%; Q1 2021: 19.3%) and the LCR (Q1 2022: 519.4%; Q1 2021: 139.6%) have both increased and exceed the minimum requirements.

Income Statement

Net Interest Income

Net Trading Income

Operating Expense

Pre-tax Profit

570 520

470

420

370

습 320 년 270

> 170 120

70

20

-30

-80

0

≥ 220 SV 170

Net Fee & Commission Inc.

Credit Commit. Impairment

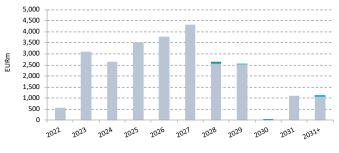
Senior Unsecured Bonds (EUR BMK)

(EURm)

Balance Sheet

(EURm)	2020Y	2021Y	2022H1
Net Loans to Customers	19,897	22,238	23,004
Total Securities	5,333	3,372	3,566
Total Deposits	-	-	-
Tier 1 Common Capital	1,040	1,094	1,097
Total Assets	25,875	25,774	26,979
Total Risk-weighted Assets	5,284	5,594	5,764

Redemption Profile



Secured Subordinated Unsecured Jr Subordinated Unsecured

Company Ratios

2020Y	2021Y	2022H1
-	-	-
1.13	0.88	-0.34
17.83	25.02	-
19.68	19.56	19.03
	1.13 17.83	1.13 0.88 17.83 25.02

	2020Y	2021Y	2022H1
Liquidity Coverage Ratio	135.58	102.52	166.89
IFRS Tier 1 Leverage Ratio	4.03	4.29	4.18
NPL/ Loans at Amortised Cost	-	-	-
Reserves/Loans at Amort. Cost	0.01	0.01	0.01

2020Y

200

-165

-13

4

2

16

iBoxx € Bail-in

2021Y

231

-206

-9

4

-1

13

10

12

Maturity years

2022H1

97

-78

-20

2

0

-3

Source: Bloomberg, S&P Global Market Intelligence, NORD/LB Markets Strategy & Floor Research; as of: 14.10.2022

Strengths / Opportunities

- Asset quality
- Incorporation in the SpareBank 1 Alliance with a support obligation

Risks / Weaknesses

- Dependency on wholesale funding
- Credit risk concentration

2

iBoxx € Preferred

SpareBank 1 Boligkreditt – Mortgage

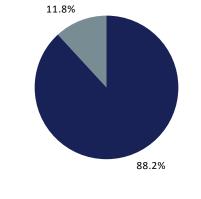
Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Cover Pool Data

Cover pool volume (EURm)	26,009
Amount outstanding (EURm)	24,630
-thereof \geq EUR 500m	59.9%
Current OC (nominal)	5.6%
Committed OC	2.0%
Cover type	Mortgage
Main country	100% Norway
Main region	26% Viken
Number of loans	144,086
Number of borrowers	n/a
Avg. exposure to borrowers (EUR)	n/a
WAL (cover pool)	22.1y
WAL (covered bonds)	5.0y
Fixed interest (cover pool)	0.0%
Fixed interest (covered bonds)	69.0%
LTV (indexed)	48.3%
LTV (unindexed)	60.2%
Loans in arrears	0.0%

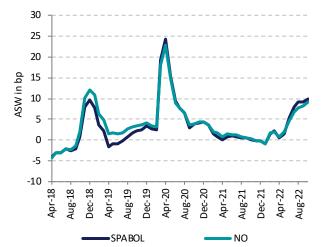
Rating (Moody's)	Aaa
Rating (S&P)	-
Rating (Fitch)	-
Rating (DBRS)	-
TPI	High
TPI leeway	3
Collateral score	5.0%
RRL	-
JRL	-
Unused notches	-
AAA credit risk (%)	-
PCU	-
Recovery uplift	-
Outstanding ESG BMKs	Yes
LCR ELIGIBLE	Yes
LCR level (Bmk)	1
Risk weight	10%
Maturity structure (Bmk)	SB

Borrower Types



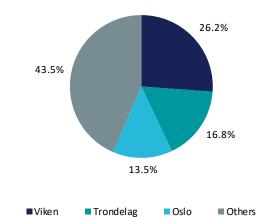
■ Residential ■ Commercial ■ Multi-family ■ Others

Spread Development

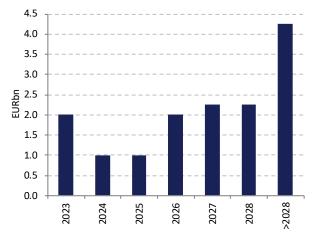


Source: Issuer, Rating agencies, Bloomberg, NORD/LB Markets Strategy & Floor Research

Regional Distribution



Redemption Profile (Bmk)



NORD/LB





SpareBank 1 SR-Bank

Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Ratings

•		
	Rating	Outlook
Fitch	Au	Stable
Moody's	A1	Positive
S&P	-	-

Homepage

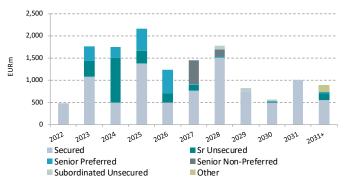
www.sparebank1.no

SpareBank 1 SR-Bank ASA (SR-Bank) is a founding member of the SpareBank 1 Alliance, Norway's second largest financial group. The SpareBank 1 Alliance consists of 14 independent savings banks, which have merged in order to generate synergy effects in areas such as IT infrastructure and to convey a consistent brand image. SR-Bank focuses its business activities in the south and west of Norway, and is a market leader within its domestic market in the Rogaland region (Q1 2022: loan portfolio NOK 135bn). The bank has just under 1,550 employees and operates 34 branches (FY 2021), which focus on the savings deposits and mortgage business. The lion's share of the loan portfolio consists of retail customers (Q1 2022: 62.2%), followed by CRE (13.4%). The bank divides its business activities into the three most profitable segments of Retail Market (FY 2021: 45.7% of pretax profit), Corporate Market (38.4%) and SME & Agriculture (12.3%), in addition to six smaller segments. The institute has several subsidiaries and maintains a number of equity participations. Refinancing via covered bonds takes place via the wholly owned subsidiary SR-Boligkreditt, which was established in 2015. As a Group, SR-Bank has set itself the goal of recording net-zero carbon emissions in the financing and investments segments by 2050. Furthermore, a total of NOK 50bn is to be put towards financing sustainable activities by 2030 (as at Q1 2022: NOK 5.2bn). The bank has also set itself financial targets in addition to its sustainability goals. These include ROE of above 12% (Q1 2022: 11.4%), a CET1 ratio of more than 16.85% (17.6%) and a CIR of under 40% (42.6%). As at Q1 2022, the CET1 ratio fulfilled the regulatory requirement of 15.2%.

Balance Sheet

(EURm)	2020Y	2021Y	2022H1
Net Loans to Customers	20,694	22,814	23,357
Total Securities	4,721	6,220	6,466
Total Deposits	11,271	13,740	14,105
Tier 1 Common Capital	2,115	2,222	2,244
Total Assets	27,378	30,382	30,854
Total Risk-weighted Assets	11,566	12,773	12,551

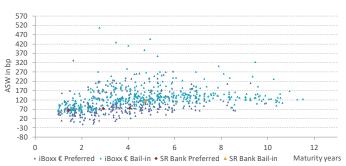
Redemption Profile



Income Statement

(EURm)	2020Y	2021Y	2022H1
Net Interest Income	387	394	212
Net Fee & Commission Inc.	130	168	89
Net Trading Income	-2	31	1
Operating Expense	222	267	138
Credit Commit. Impairment	190	19	-4
Pre-tax Profit	170	378	195

Senior Unsecured Bonds (EUR BMK)



Company Ratios

	2020Y	2021Y	2022H1	
Net Interest Margin	1.54	1.39	1.38	Liquidity Cov
ROAE	6.26	12.00	11.23	IFRS Tier 1 Le
Cost-to-Income	40.27	40.24	42.77	NPL/ Loans a
Core Tier 1 Ratio	18.29	17.39	17.88	Reserves/Loa

2020Y 2021Y 2022H1 157.00 168.00 151.44 verage Ratio 7.92 7.40 7.55 everage Ratio at Amortised Cost 1.80 1.32 1.37 1.06 0.78 0.70 ans at Amort. Cost

Source: Bloomberg, S&P Global Market Intelligence, NORD/LB Markets Strategy & Floor Research; as of: 14.10.2022

Strengths / Opportunities

- Capitalisation
- Market position

- Exposure to oil sector and CRE business
- Dependency on wholesale funding



SR-Boligkreditt – Mortgage

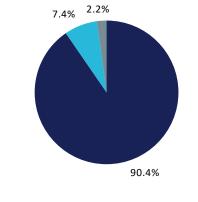
Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Cover Pool Data

Cover pool volume (EURm)	9,832
Amount outstanding (EURm)	7,857
-thereof \geq EUR 500m	
	87.2%
Current OC (nominal)	25.1%
Committed OC	2.0%
Cover type	Mortgage
Main country	100% Norway
Main region	67% Rogaland
Number of loans	52,074
Number of borrowers	51,724
Avg. exposure to borrowers (EUR)	190,094
WAL (cover pool)	15.6y
WAL (covered bonds)	5.1y
Fixed interest (cover pool)	0.0%
Fixed interest (covered bonds)	79.5%
LTV (indexed)	55.3%
LTV (unindexed)	61.7%
Loans in arrears	0.0%

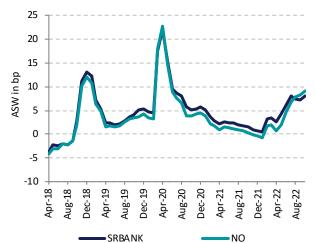
Rating (Fitch)	-
Rating (DBRS)	-
ТРІ	Probable-High
TPI leeway	3
Collateral score	5.0%
RRL	-
JRL	-
Unused notches	-
AAA credit risk (%)	-
PCU	-
Recovery uplift	-
Outstanding ESG BMKs	Yes
LCR ELIGIBLE	Yes
LCR level (Bmk)	1
Risk weight	10%
Maturity structure (Bmk)	SB

Borrower Types



■ Residential ■ Commercial ■ Multi-family ■ Others

Spread Development

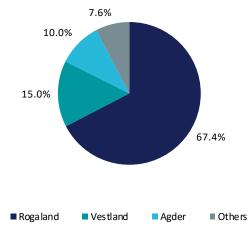


Source: Issuer, Rating agencies, Bloomberg, NORD/LB Markets Strategy & Floor Research

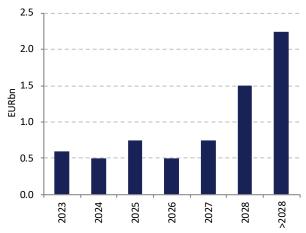
Regional Distribution

Rating (Moody's)

Rating (S&P)



Redemption Profile (Bmk)





Aaa

-



Sparebanken Møre

Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Ratings

	Rating	Outlook
Fitch	-	-
Moody's	A1	Stable
S&P	-	-
Homepa	ge	

www.sbm.no

The roots of Sparebanken Møre (SBM) extend back to the year 1843. Its shares have been listed on the Oslo stock exchange since 1989. The independent institute (SBM has not joined any alliances) employs 364 staff (FY 2021) and operates 27 business centres in its home region Møre og Romsdal. The focus of the institute is on retail customers (Q1 2022: 67.7% of the loan portfolio) and SMEs (32.3%). SBM also has three wholly owned subsidiaries: Møre Boligkreditt AS (MBOL), Møre Eiendomsmegling AS (MES) and Sparebankeiendom AS (SBE). The purpose of MBOL is to purchase mortgages from SBM and to finance these by issuing covered bonds. Moreover, SBM secures payment obligations on the part of MBOL vis à vis bond creditors for the next 12 months via revolving credit facilities. MES offers brokering services in the retail estate business for retail and corporate customers. SBE is the real estate arm of SBM. It owns and administers the commercial property portfolio. SBM reports across the following segments: Corporate (Q1 2022: 42.9% of operating income), Retail (57.4%) and Real estate brokerage (1.8%) as well as the non-operating segment Other (1.8%) and Elimination (-3.9%). The bank's funding is mainly covered by deposits (62% in Q1 2022), followed by covered bonds (34%) as a focus in wholesale funding. The bank has defined three financial goals for 2022: a CET1 ratio in excess of 16.45% (Q1 2022: 17.2%) a CIR of below 40% (Q1 2022: 46.0%) and ROE of more than 11% (Q1 2022: 9.3%). In addition to these short-term financial goals, SBM also plans to operate on a climate-neutral basis by 2050.

Balance Sheet

(EURm)	2020Y	2021Y	2022H1
Net Loans to Customers	6,376	6,979	7,001
Total Securities	1,005	1,118	1,105
Total Deposits	3,722	4,177	4,352
Tier 1 Common Capital	552	608	584
Total Assets	7,581	8,264	8,261
Total Risk-weighted Assets	3,257	3,524	3,333

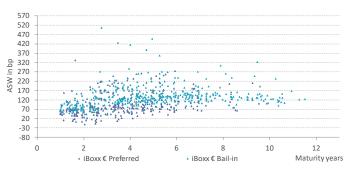
Redemption Profile



Income Statement (EURm)

(EURm)	2020Y	2021Y	2022H1
Net Interest Income	115	125	69
Net Fee & Commission Inc.	17	19	10
Net Trading Income	5	4	-1
Operating Expense	58	63	35
Credit Commit. Impairment	14	5	-1
Pre-tax Profit	69	82	45

Senior Unsecured Bonds (EUR BMK)



Company Ratios

	2020Y	2021Y	2022H1
Net Interest Margin	1.55	1.55	1.64
ROAE	8.04	8.66	9.20
Cost-to-Income	41.38	42.24	44.61
Core Tier 1 Ratio	16.95	17.24	17.53

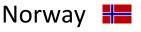
2020Y	2021Y	2022H1
138.29	122.39	140.12
7.34	7.39	7.14
0.13	0.07	0.07
0.44	0.50	0.46
	138.29 7.34 0.13	138.29 122.39 7.34 7.39 0.13 0.07

Source: Bloomberg, S&P Global Market Intelligence, NORD/LB Markets Strategy & Floor Research; as of: 14.10.2022

Strengths / Opportunities

- Capitalisation
- Deposit basis

- Dependency on capital market funding
- Diversification of income sources



╡┝═

Aaa

Norway

Møre Boligkreditt – Mortgage

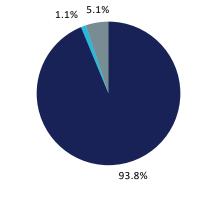
Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Cover Pool Data

	2 705
Cover pool volume (EURm)	2,795
Amount outstanding (EURm)	2,319
-thereof \geq EUR 250m	32.3%
Current OC (nominal)	20.5%
Committed OC	2.0%
Cover type	Mortgage
Main country	100% Norway
Main region	77% More og Romsdal
Number of loans	17,957
Number of borrowers	n/a
Avg. exposure to borrowers (EUR)	n/a
WAL (cover pool)	17.2y
WAL (covered bonds)	2.8y
Fixed interest (cover pool)	9.4%
Fixed interest (covered bonds)	40.3%
LTV (indexed)	52.2%
LTV (unindexed)	57.4%
Loans in arrears	0.0%

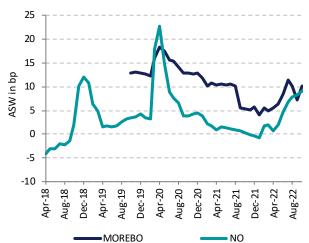
	, 10.0
Rating (S&P)	-
Rating (Fitch)	-
Rating (DBRS)	-
TPI	High
TPI leeway	4
Collateral score	5.0%
RRL	-
JRL	-
Unused notches	-
AAA credit risk (%)	-
PCU	-
Recovery uplift	2
Outstanding ESG BMKs	No
LCR ELIGIBLE	Yes
LCR level (SBmk)	2A
Risk weight	10%
Maturity structure (SBmk)	SB

Borrower Types



■ Residential ■ Commercial ■ Multi-family ■ Others

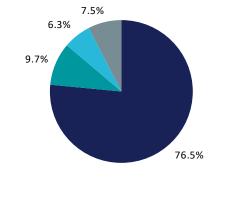
Spread Development



Source: Issuer, Rating agencies, Bloomberg, NORD/LB Markets Strategy & Floor Research

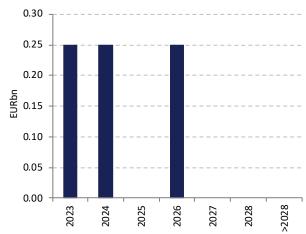
Regional Distribution

Rating (Moody's)



■ More og Romsdal ■ Oslo ■ Viken ■ Others

Redemption Profile (SBmk)



Norway 🚼

Sparebanken Sør

Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Ratings

-	Rating	Outlook
Fitch	-	-
Moody's	A1	Positive
S&P	-	-
Homepa	ge	

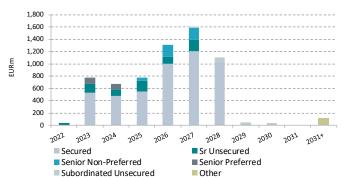
www.sor.no

Sparebanken Sør (Sør) is an independent Norwegian universal bank that offers a wideranging product portfolio to private individuals, companies and public institutions in its retail and corporate customer businesses. Sparebankstiftelsen Sparebanken Sør is the majority shareholder with a stake of 51.0%. Sør equity certificates are traded on the Oslo stock exchange. The bank operates on an exclusively regional basis, with a geographic focus on the south of Norway, particularly the Agder region, where it has a market leading share of 30.1% in the retail segment (Q1 2022). Sparebanken Sør works in tandem with other savings banks to offer real estate and insurance brokering services in addition to leasing products. Moreover, it also operates in the deposit and lending business as well as facilitating both national and international payment transactions. The business areas of Sør are divided into the two operational segments of Retail Market (Q1 2022: around 52.0% of operating income), Corporate Market (39.7%), in addition with the business Undistributed and Elimination (2.5%) and Sørmegleren (5.9%). Sør funding mainly comprises customer deposits (Q1 2022: 51%) and covered bonds (36%). Its wholly owned subsidiary Sparebanken Sør Boligkreditt serves as the funding vehicle via covered bonds. The bank aims to grow its core business further over the coming years. To this end, it has outlined various financial goals for the period up to 2025. These include a CET1 ratio of more than 16.2% (Q1 2022: 16.7%), a CIR of less than 40% (42.4%) and ROE of above 11% (7.8%). In addition to these goals, Sør plans to operate on a climate-neutral basis by 2050 and to reduce its CO_2 emissions by 55% by as early as 2030 (compared with 2017).

Balance Sheet

(EURm)	2020Y	2021Y	2022H1
Net Loans to Customers	10,642	11,643	11,746
Total Securities	2,396	2,331	2,445
Total Deposits	5,707	6,302	6,509
Tier 1 Common Capital	1,164	1,298	1,296
Total Assets	13,556	14,390	14,699
Total Risk-weighted Assets	7,438	7,914	7,432

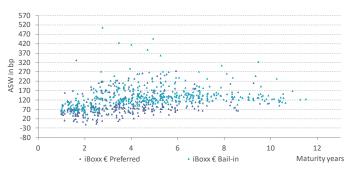
Redemption Profile



Income Statement

(EURm)	2020Y	2021Y	2022H1
Net Interest Income	179	191	108
Net Fee & Commission Inc.	32	41	20
Net Trading Income	1	-1	-6
Operating Expense	89	100	54
Credit Commit. Impairment	8	-2	1
Pre-tax Profit	131	152	71

Senior Unsecured Bonds (EUR BMK)



Company Ratios

	2020Y	2021Y	2022H1
Net Interest Margin	1.37	1.38	1.47
ROAE	8.14	8.63	7.27
Cost-to-Income	39.08	39.82	42.42
Core Tier 1 Ratio	15.65	16.40	17.44

2020Y	2021Y	2022H1
172.81	135.27	142.37
8.63	9.08	8.94
0.95	0.70	0.69
0.40	0.36	0.30
	8.63 0.95	172.81 135.27 8.63 9.08 0.95 0.70

Source: Bloomberg, S&P Global Market Intelligence, NORD/LB Markets Strategy & Floor Research; as of: 14.10.2022

Strengths / Opportunities

- Asset quality
- Capitalisation
- Deposit basis

- Credit risk concentration
- Dependency on capital market funding
- Profitability

Sparebanken Sør Boligkreditt – Mortgage

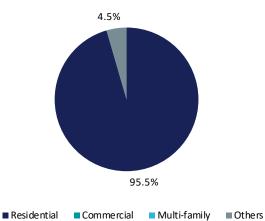
Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Cover Pool Data

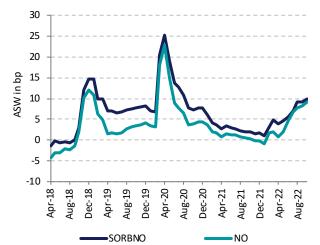
Cover pool volume (EURm)	5,438
Amount outstanding (EURm)	4,753
-thereof ≥ EUR 500m	52.6%
Current OC (nominal)	14.4%
Committed OC	2.0%
Cover type	Mortgage
Main country	100% Norway
Main region	65% Agder
Number of loans	38,740
Number of borrowers	n/a
Avg. exposure to borrowers (EUR)	n/a
WAL (cover pool)	9.4y
WAL (covered bonds)	4.1y
Fixed interest (cover pool)	0.0%
Fixed interest (covered bonds)	52.7%
LTV (indexed)	50.3%
LTV (unindexed)	61.0%
Loans in arrears	0.4%

Rating (Moody's)	Aaa
Rating (S&P)	-
Rating (Fitch)	-
Rating (DBRS)	-
TPI	High
TPI leeway	4
Collateral score	5.0%
RRL	-
JRL	-
Unused notches	-
AAA credit risk (%)	-
PCU	-
Recovery uplift	-
Outstanding ESG BMKs	Yes
LCR ELIGIBLE	Yes
LCR level (Bmk)	1
Risk weight	10%
Maturity structure (Bmk)	SB

Borrower Types

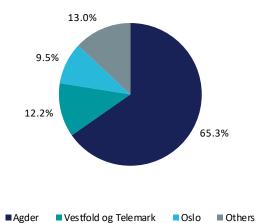


Spread Development

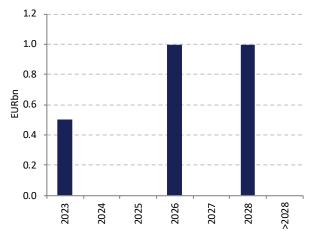


Source: Issuer, Rating agencies, Bloomberg, NORD/LB Markets Strategy & Floor Research

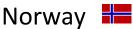
Regional Distribution



Redemption Profile (Bmk)



NORD/LB





Sparebanken Vest

Norway 🚼

Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Ratings

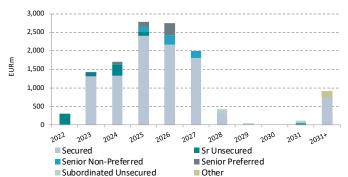
•		
	Rating	Outlook
Fitch	-	-
Moody's*	Aa3	Stable
S&P	-	-
Homepag		
*Senior Ur		

The Bergen-based Sparebanken Vest (SV) is one of Norway's largest independent savings banks. The main shareholder of the bank, which is listed on the Oslo stock exchange, is Sparebankstiftinga Hardanger (Q3 2022: 11.1%). Around 750 employees work in more than 34 branches, offering the complete product range of a universal bank to its private and corporate customers. Moreover, insurance services, securities trading and leasing are offered via subsidiaries. SV focuses its activities on the west of Norway. However, with its digital concepts, it is also seeking to build a nationwide presence. SV holds its highest share in the retail customer business in the Vestland region (Q1 2022: 27.8%), followed by Rogaland (7.0%), while under the brand name Bulder Bank (Bulder), the bank offers its customers an exclusively digital banking concept. The loan portfolio comprises the following segments: Retail (Q1 2022: 76%) and Corporate (24%). The majority of borrowers are based in Vestland (Q1 2022: 66.5%). Approximately 81% of the capital market funding of SV (Q1 2022) is comprised of covered bonds, which are issued via its wholly owned subsidiary Vest Boligkreditt AS. The institute has defined a target of reaching net zero CO_2 emissions by as early as 2040, along with the interim goal of gradually reducing its carbon footprint by 2025 (-50% CO_2 emissions compared with 2018). This had already been achieved by 2020. A long-term financial goal at SV is to achieve a CET1 ratio of around one percentage point above the regulatory requirement of 14.2% (Q1 2022: 17.5%).

Balance Sheet

(EURm)	2020Y	2021Y	2022H1
Net Loans to Customers	17,332	20,258	20,666
Total Securities	3,255	2,582	3,158
Total Deposits	7,883	9,064	10,307
Tier 1 Common Capital	1,435	1,615	1,632
Total Assets	21,105	23,412	24,551
Total Risk-weighted Assets	7,955	9,258	8,809

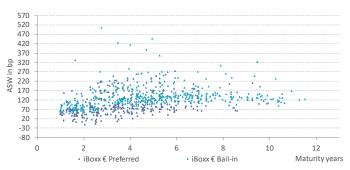
Redemption Profile



Income Statement

(EURm)	2020Y	2021Y	2022H1
Net Interest Income	290	325	182
Net Fee & Commission Inc.	62	78	42
Net Trading Income	-8	5	3
Operating Expense	135	151	83
Credit Commit. Impairment	42	-3	3
Pre-tax Profit	223	301	157

Senior Unsecured Bonds (EUR BMK)



Company Ratios

	2020Y	2021Y	2022H1
Net Interest Margin	1.45	1.50	1.52
ROAE	11.69	13.19	13.56
Cost-to-Income	35.79	33.71	34.85
Core Tier 1 Ratio	18.04	17.44	18.53

	2020Y	2021Y	2022H1
Liquidity Coverage Ratio	155.88	140.99	160.42
IFRS Tier 1 Leverage Ratio	6.87	6.95	6.70
NPL/ Loans at Amortised Cost	0.36	0.27	0.33
Reserves/Loans at Amort. Cost	0.63	0.49	0.47

Source: Bloomberg, S&P Global Market Intelligence, NORD/LB Markets Strategy & Floor Research; as of: 14.10.2022

Strengths / Opportunities

- Capitalisation
- Domestic market position (retail banking in particular)
 Geographical diversification

- Dependency on capital market funding

Sparebanken Vest Boligkreditt – Mortgage

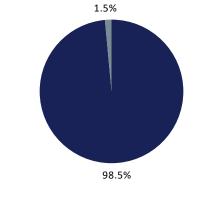
Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Cover Pool Data

Cover pool volume (EURm)	12,211
Amount outstanding (EURm)	9,486
-thereof ≥ EUR 500m	58.0%
Current OC (nominal)	28.7%
Committed OC	2.0%
Cover type	Mortgage
Main country	100% Norway
Main region	68% Vestland
Number of loans	74,775
Number of borrowers	63,165
Avg. exposure to borrowers (EUR)	193,315
WAL (cover pool)	12.5y
WAL (covered bonds)	3.6y
Fixed interest (cover pool)	16.7%
Fixed interest (covered bonds)	48.0%
LTV (indexed)	50.4%
LTV (unindexed)	53.8%
Loans in arrears	0.0%

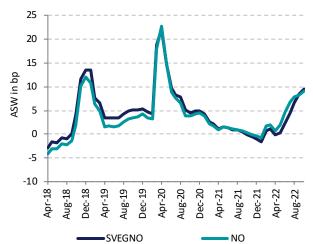
Rating (DBRS) TPI Probable-High **TPI** leeway **Collateral score** 5.0% RRL JRL Unused notches AAA credit risk (%) PCU Recovery uplift **Outstanding ESG BMKs** Yes LCR ELIGIBLE Yes LCR level (Bmk) **Risk weight** 10% Maturity structure (Bmk) SB

Borrower Types



Others Residential Commercial Multi-family





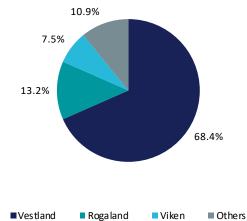
Source: Issuer, Rating agencies, Bloomberg, NORD/LB Markets Strategy & Floor Research

Regional Distribution

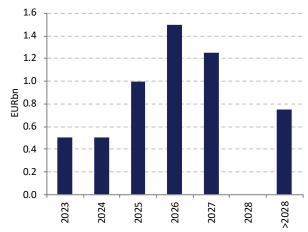
Rating (Moody's)

Rating (S&P)

Rating (Fitch)



Redemption Profile (Bmk)









Aaa

4

2

1

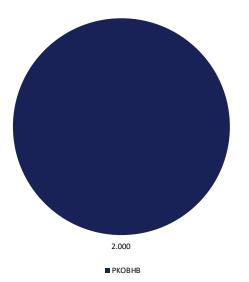
Poland

Market Overview Covered Bonds

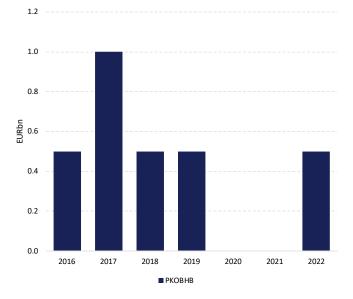
Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Cover Pool Volume	EUR 6.22bn	Outstanding volume (Bmk)	EUR 2.00bn
Amount outstanding	EUR 4.20bn	Number of benchmarks	4
Number of issuer	2	Outstanding ESG volume (Bmk)	EUR 0.50bn
No of cover pools	2	Number of ESG benchmarks	1
there of M / PS / others	2/0/0	Outstanding volume (SBmk)	EUR 0.60bn
Ratings (low / high)	AA+ / AA+	Number of subbenchmarks	2
Best possible LCR level	Level 1	Maturity types	SB/CPT

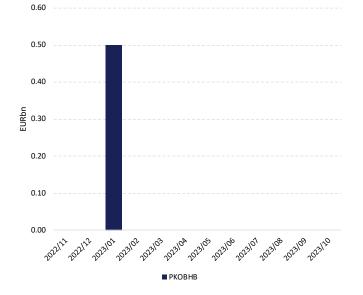
Outstanding benchmark volume¹ (EURbn)



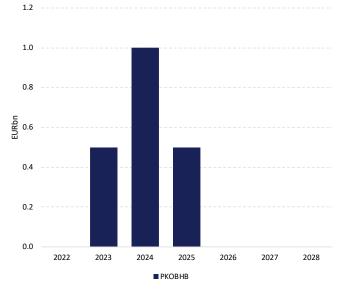
Benchmark issuance volume¹



Benchmark redemption profile¹: 11/2022 - 10/2023



Benchmark redemption profile¹²



Source: Issuer, Rating agencies, Bloomberg, NORD/LB Markets Strategy & Floor Research; ¹ based on Bloomberg ticker; ² Redemptions 2022: 11/22 – 12/22

mBank

Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Ratings

	Rating	Outlook
Fitch	BBB-	Negative
Moody's*	A3u	Stable
S&P	BBB	Develop

Homepage

www.mbank.pl

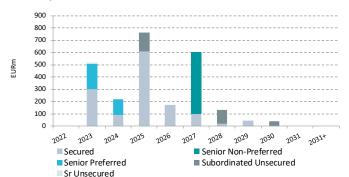
*LT Bank Deposit Rating

mBank is the fifth-largest bank in Poland as measured by total assets (Q1 2022: PLN 204.9bn). Its shares are listed on the Warsaw stock exchange. At 69.2% (02 August 2022), Commerzbank is the majority shareholder. mBank is a universal bank, offering its 5.5 million retail and 31,900 corporate customers a wide range of financial products and services. According to its own information, the bank is a leader in the online banking sector, with more than 3.1 million mobile banking users (March 2022). The Polish Financial Supervisory Authority (KNF) has classified mBank as an O-SIFI (other systemically important financial institute). Since 2007, the bank has also been active in the Czech Republic and Slovakia. However, the domestic market with 4.5 million retail customers continues to be its most important market. The bank divides its business activities into the following segments: Retail Banking (Q1 2022: 57.4% of operating income), Corporate and Investment Banking (36.5%), Treasury and Other (3.9%) and FX Mortgage Loans (2.3%). On the domestic market, the bank has a share of 8.4% for deposits and 8.6% for mortgages (March 2022). In September 2021, the bank issued its first green senior non-preferred bond with a volume of EUR 500 million. In Q1 2022, the NPL ratio fell by 70 basis points against the same quarter in the previous year (Q1 2021: 4.6%) to stand at 3.9%. One of the financial targets that mBank has defined for the period from 2021 to 2025 is a CET1 ratio (Q1 2022: 13.47%) of at least 2.5 percentage points above the regulatory requirement (Q1 2022: 10.64%) by the end of the year.

Balance Sheet

(EURm)	2020Y	2021Y	2022H1
Net Loans to Customers	23,761	25,740	26,945
Total Securities	11,846	12,271	10,730
Total Deposits	30,136	34,871	34,915
Tier 1 Common Capital	3,293	2,955	2,780
Total Assets	39,147	43,506	43,512
Total Risk-weighted Assets	19,378	20,874	19,964

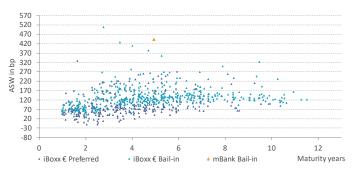
Redemption Profile



Income Statement

(EURm)	2020Y	2021Y	2022H1
Net Interest Income	903	899	688
Net Fee & Commission Inc.	340	414	249
Net Trading Income	67	43	-8
Operating Expense	953	1,353	586
Credit Commit. Impairment	275	189	97
Pre-tax Profit	137	-129	283

Senior Unsecured Bonds (EUR BMK)



Company Ratios

	2020Y	2021Y	2022H1
Net Interest Margin	2.33	2.14	3.23
ROAE	0.62	-7.23	10.94
Cost-to-Income	70.03	96.20	61.04
Core Tier 1 Ratio	16.99	14.16	13.93

	2020Y	2021Y	2022H1
Liquidity Coverage Ratio	232.77	239.29	214.85
IFRS Tier 1 Leverage Ratio	8.54	6.91	6.51
NPL/ Loans at Amortised Cost	5.08	4.07	3.96
Reserves/Loans at Amort. Cost	3.29	2.65	2.61

Source: Bloomberg, S&P Global Market Intelligence, NORD/LB Markets Strategy & Floor Research; as of: 14.10.2022

Strengths / Opportunities

- Capitalisation
- Funding profile
- Digitisation status

Risks / Weaknesses

- Litigation risks
- Foreign currency risks
- Uncertainty: strategic direction of Cobra



Poland ____

mBank Hipoteczny – Mortgage

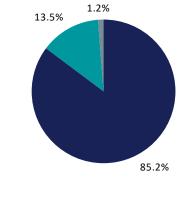
Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Cover Pool Data

Cover pool volume (EURm)	1,968
Amount outstanding (EURm)	1,570
-thereof ≥ EUR 250m	38.2%
Current OC (nominal)	25.4%
Committed OC	10.0%
Cover type	Mortgage
Main country	100% Poland
Main region	32% Masovia
Number of loans	32,062
Number of borrowers	n/a
Avg. exposure to borrowers (EUR)	n/a
WAL (cover pool)	18.7y
WAL (covered bonds)	2.7у
Fixed interest (cover pool)	0.0%
Fixed interest (covered bonds)	27.1%
LTV (indexed)	n/a
LTV (unindexed)	75.9%
Loans in arrears	0.1%

Rating (Moody's)	Aa1
Rating (S&P)	-
Rating (Fitch)	-
Rating (DBRS)	-
TPI	Probable
TPI leeway	3
Collateral score	13.0%
RRL	-
JRL	-
Unused notches	-
AAA credit risk (%)	-
PCU	-
Recovery uplift	-
Outstanding ESG BMKs	No
LCR ELIGIBLE	Yes
LCR level (SBmk)	2A
Risk weight	10%
Maturity structure (SBmk)	SB/CPT

Borrower Types



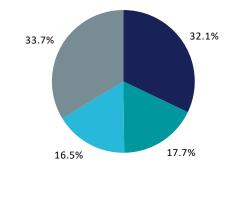
■ Residential ■ Commercial ■ Multi-family ■ Others

Spread Development



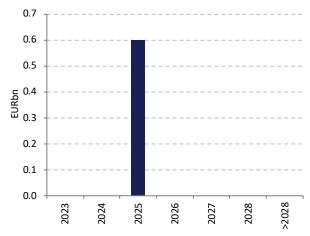
Source: Issuer, Rating agencies, Bloomberg, NORD/LB Markets Strategy & Floor Research

Regional Distribution



■ Masovia ■ Lower Silesia ■ Lesser Poland ■ Others

Redemption Profile (SBmk)







PKO Bank Polski

Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Ratings

Ratings			42
	Rating	Outlook	20
Fitch	-	-	rc
Moody's*	A3	Stable	B
S&P	-	-	S١
Homono	~~		aı
Homepa	ge		1
www.pkot	op.pl		20
			ar
*Senior Ur	nsecured		aı
			Se
			а
			in
			0
			~

PKO Bank Polski (PKO BP) is the largest bank in Poland with a balance sheet total of PLN 21.6 million (Q1 2022). Its shares have been listed on the Warsaw stock exchange since 004 and the Polish government is the lead shareholder of the bank with a stake of oughly 29.4% (02 August 2022). The Aviva Group also holds 8.3% and NN-OFE 8.0% in PKO IP. Alongside the domestic market of Poland, the bank is active via subsidiaries in Ukraine, weden and the Republic of Ireland in addition to branches in Germany, Czech Republic nd Slovakia. The bank has 25,600 employees (Q1 2022), who serve 11.1 million retail and 7,000 business customers (FY 2021) across just under 1,400 branches (incl. agencies, Q1 022). The bank is the market leader in Poland for loans (FY 2021: market share of 17.4%) nd investment funds for private individuals (19.2%). PKO BP reports across the following reas: Retail Segment (Q1 2022: 71.5% of operating income), Corporate and Investment egment (22.3%) and Transfer Center and Other (6.3%). PKO Bank Hipoteczny (PKO BH) is wholly owned subsidiary and a key strategic and operational unit of PKO BP. It specialises n issuing mortgage loans to retail customers. PKO BH issues covered bonds to refinance its wn mortgage portfolio, which in turn is supplemented by mortgages from the parent company. In 2019, PKO BH issued two green mortgage covered bonds, which both featured a volume of PLN 250 million, under its green bond framework. In Q1 2022, the NPL ratio fell to 3.93% (Q1 2021: 4.73%), while the NPL coverage ratio came in at 95.4%. The CET1 ratio of 17.0% (FY 2021) exceeds the regulatory requirements.

Balance Sheet

(EURm)	2020Y	2021Y	2022H1
Net Loans to Customers	48,718	51,085	49,940
Total Securities	28,482	32,111	31,974
Total Deposits	61,796	70,271	69,466
Tier 1 Common Capital	8,495	8,593	7,749
Total Assets	82,502	91,156	91,292
Total Risk-weighted Assets	49,990	49,030	48,111

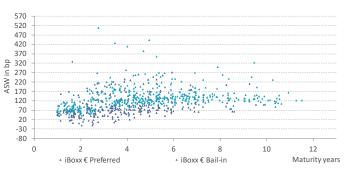
Redemption Profile



Income Statement

(EURm)	2020Y	2021Y	2022H1
Net Interest Income	2,329	2,165	1,476
Net Fee & Commission Inc.	882	971	524
Net Trading Income	70	153	18
Operating Expense	3,096	1,597	1,300
Credit Commit. Impairment	480	272	164
Pre-tax Profit	-382	1,427	594

Senior Unsecured Bonds (EUR BMK)



Company Ratios

	2020Y	2021Y	2022H1		2020Y	2021Y	2022H1
Net Interest Margin	2.90	2.60	3.37	Liquidity Coverage Ratio	194.03	220.66	181.27
ROAE	-5.95	12.03	10.49	IFRS Tier 1 Leverage Ratio	10.57	9.88	9.18
Cost-to-Income	93.62	47.94	63.41	NPL/ Loans at Amortised Cost	4.43	3.96	3.82
Core Tier 1 Ratio	16.99	17.53	16.11	Reserves/Loans at Amort. Cost	3.91	3.64	3.87

Source: Bloomberg, S&P Global Market Intelligence, NORD/LB Markets Strategy & Floor Research; as of: 14.10.2022

Strengths / Opportunities

- Capitalisation
- Liquidity ratios
- Market positioning

Risks / Weaknesses

- Asset quality
- Subsidiary/exposure in Ukraine
- Foreign currency risks



Poland

PKO Bank Hipoteczny – Mortgage

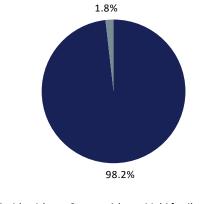
Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Cover Pool Data

Cover pool volume (EURm)	4,255
Amount outstanding (EURm)	2,632
3 ()	
-thereof ≥ EUR 500m	76.0%
Current OC (nominal)	61.7%
Committed OC	7.0%
Cover type	Mortgage
Main country	100% Poland
Main region	23% Masovia
Number of loans	111,816
Number of borrowers	n/a
Avg. exposure to borrowers (EUR)	n/a
WAL (cover pool)	20.2y
WAL (covered bonds)	1.8y
Fixed interest (cover pool)	9.5%
Fixed interest (covered bonds)	80.3%
LTV (indexed)	39.8%
LTV (unindexed)	n/a
Loans in arrears	0.0%

Rating (Moody's)	Aa1
Rating (S&P)	-
Rating (Fitch)	-
Rating (DBRS)	-
TPI	Probable
TPI leeway	3
Collateral score	5.8%
RRL	-
JRL	-
Unused notches	-
AAA credit risk (%)	-
PCU	-
Recovery uplift	-
Outstanding ESG BMKs	Yes
LCR ELIGIBLE	Yes
LCR level (Bmk)	1
Risk weight	10%
Maturity structure (Bmk)	SB/CPT

Borrower Types



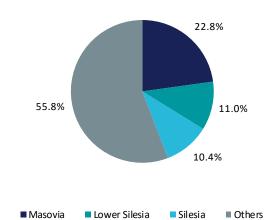
■ Residential ■ Commercial ■ Multi-family ■ Others

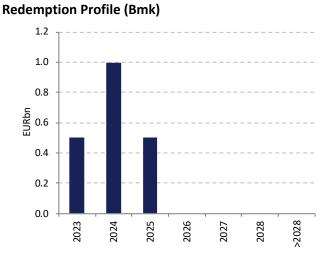
Spread Development



Source: Issuer, Rating agencies, Bloomberg, NORD/LB Markets Strategy & Floor Research

Regional Distribution









۲

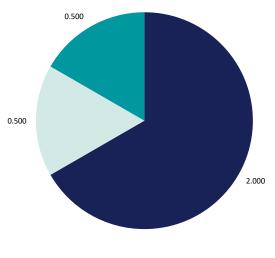
Portugal

Market Overview Covered Bonds

Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

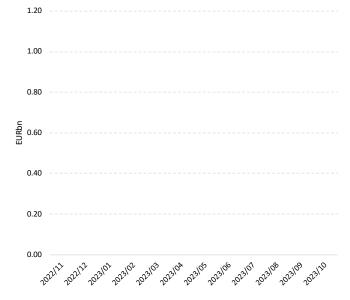
Cover Pool Volume	EUR 21.44bn	Outstanding volume (Bmk)	EUR 3.00bn
Amount outstanding	EUR 18.20bn	Number of benchmarks	4
Number of issuer	3	Outstanding ESG volume (Bmk)	-
No of cover pools	3	Number of ESG benchmarks	-
there of M / PS / others	3/0/0	Outstanding volume (SBmk)	-
Ratings (low / high)	A+ / AA	Number of subbenchmarks	-
Best possible LCR level	Level 1	Maturity types	SB, CPT



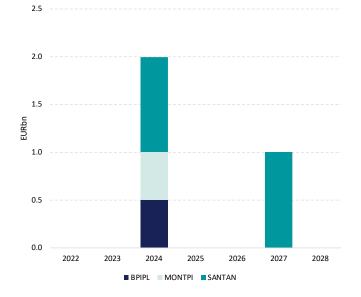


SANTAN BPIPL MONTPI

Benchmark redemption profile¹: 11/2022 - 10/2023

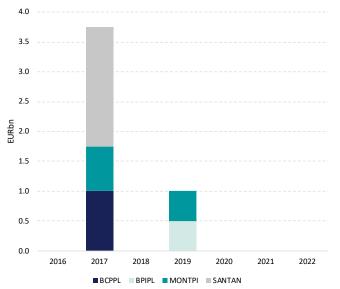


Benchmark redemption profile¹²



Source: Issuer, Rating agencies, Bloomberg, NORD/LB Markets Strategy & Floor Research; ¹ based on Bloomberg ticker; ² Redemptions 2022: 11/22 – 12/22

Benchmark issuance volume¹



Banco BPI

Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Ratings

	Rating	Outlook
Fitch	BBB	Stable
Moody's	Baa2	Stable
S&P	BBB+	Stable

Homepage

www.bancobpi.pt

Banco BPI (BPI) was established in 1981 and is today the fifth-largest bank in Portugal as measured by assets. Since the end of 2018, BPI has been a wholly owned subsidiary of the Spanish CaixaBank. BPI has 4,461 employees, who serve 1.7 million retail and 190,000 corporate customers across a network of 339 business units (which includes 290 branches, 16 premier centres as well as 29 corporate and institutional centres; June 2022). BPI has a particularly strong presence in the domestic retail banking segment, boasting a market share of around 11% each for loans and deposits (May 2022). The bank has a 35% stake in Allianz Portugal (life and non-life insurance) and a 50% stake in Cosec (export loan insurance). The banks reports across the segments Domestic Activities (FY 2021: 84.7% of operating income; divided into Commercial Banking and Equity Holdings) and Equity Holdings in BFA and BCI (15.3%; divided into Angola and Mozambique). BPI holds minority shares of 48.1% and 35.7% respectively in Banco de Fomento Angola and Banco Comercial e de Investimentos from Mozambique. Together, these form the segment Equity Holdings. The lion's share of the funding mix consists of customer deposits (H1 2022: 70% of total assets), while only 4.5% is made up of covered bonds and NPS. In order to promote sustainable economic development, BPI launched a project with the aim of issuing green bonds in October 2021. As at H1 2022, the NPE ratio amounted to 1.6%, with the coverage ratio standing at 145%. In H1 2022, BPI registered a CET1 ratio (phased-in) of 13.6%.

Balance Sheet

(EURm)	2020Y	2021Y	2022H1
Net Loans to Customers	22,636	24,290	25,326
Total Securities	8,113	8,787	8,916
Total Deposits	26,009	28,872	29,955
Tier 1 Common Capital	2,529	2,600	2,572
Total Assets	37,786	41,378	43,119
Total Risk-weighted Assets	17,991	18,281	18,949

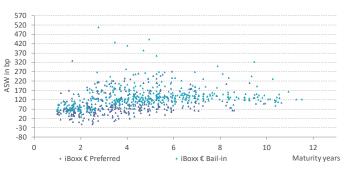
Redemption Profile



Income Statement

(EURm)	2020Y	2021Y	2022H1
Net Interest Income	450	460	241
Net Fee & Commission Inc.	245	288	145
Net Trading Income	-12	27	37
Operating Expense	434	432	224
Credit Commit. Impairment	147	43	25
Pre-tax Profit	125	378	244

Senior Unsecured Bonds (EUR BMK)



2020Y

260.16

6.75

2.61

2.08

2021Y

272.09

6.32

2.58

2.06

2022H1

259.33

5.98

2.56

2.03

Company Ratios

	2020Y	2021Y	2022H1	
Net Interest Margin	1.28	1.20	1.17	Liquidity Coverage Ratio
ROAE	3.20	8.65	10.72	IFRS Tier 1 Leverage Ratio
Cost-to-Income	59.05	48.63	45.34	NPL/ Loans at Amortised Cost
Core Tier 1 Ratio	14.06	14.22	13.57	Reserves/Loans at Amort. Cost

Source: Bloomberg, S&P Global Market Intelligence, NORD/LB Markets Strategy & Floor Research; as of: 14.10.2022

Strengths / Opportunities

- Probability of support from CaixaBank
- Credit quality in a national comparison
- Capitalisation

Risks / Weaknesses

- Economic environment
- Exposure risks in Angola
- Profitability

NORD/LB

Portugal 🧧

Banco BPI – Mortgage

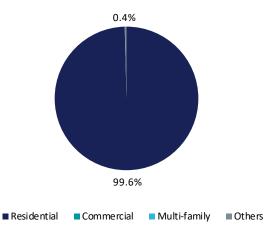
Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Cover Pool Data

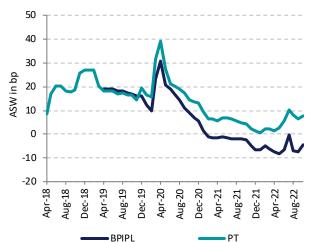
Cover pool volume (EURm)	8,690
Amount outstanding (EURm)	7,300
-thereof ≥ EUR 500m	6.8%
Current OC (nominal)	19.0%
Committed OC	16.5%
Cover type	Mortgage
Main country	100% Portugal
Main region	41% Lisbon
Number of loans	171,016
Number of borrowers	n/a
Avg. exposure to borrowers (EUR)	n/a
WAL (cover pool)	12.7v
WAL (covered bonds)	3.5y
Fixed interest (cover pool)	8.2%
Fixed interest (covered bonds)	6.8%
LTV (indexed)	n/a
LTV (unindexed)	53.6%
Loans in arrears	0.0%

Rating (Moody's) Aa2 Rating (S&P) -Rating (Fitch) Rating (DBRS) AAL TPI Probable **TPI** leeway 2 Collateral score 5.0% RRL . JRL Unused notches AAA credit risk (%) PCU Recovery uplift _ **Outstanding ESG BMKs** No LCR ELIGIBLE Yes LCR level (Bmk) 1 **Risk weight** 10% Maturity structure (Bmk) SB

Borrower Types

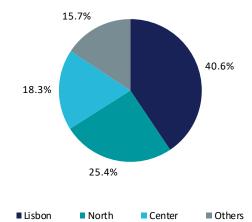


Spread Development

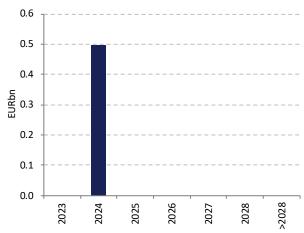


Source: Issuer, Rating agencies, Bloomberg, NORD/LB Markets Strategy & Floor Research

Regional Distribution



Redemption Profile (Bmk)





۲

Portugal

Banco Santander Totta

Portugal 🧧

Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Ratings

	Rating	Outlook
Fitch	BBB+	Stable
Moody's*	Baa2	Stable
5&P	BBB+	Stable

Homepage

www.santandertotta.pt

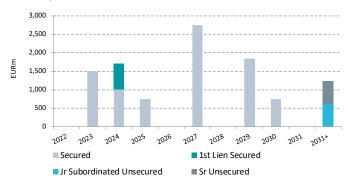
*Senior Unsecured

Banco Santander Totta S.A. (BST), headquartered in Lisbon, is the main operating unit of Banco Santander in Portugal. In December 2000, BST was integrated in the Santander Group and is now a wholly owned subsidiary of the Spanish Banco Santander S.A. (BS; global systemically important bank [G-SIB]; 1% additional capital buffer) by way of various holding companies. The Santander Totta Group is the third-largest banking group in Portugal. It has more than 4,700 employees, almost all of whom are located in Portugal, working across a network of around 390 branches (FY 2022). Business is divided into the following segments: Retail Banking (FY 2021: 62.0% of operating income), Corporate Banking (8.4%), Corporate Investment Banking (8.3%) and Corporate Activities (21.3%). Year on year, BST recorded an increase of 7.5% in digital customers to hit the benchmark of 1.0 million in FY 2021. As a result of this, its online sales share has also risen to 56%. The lending portfolio mainly consists of retail customer loans (FY 2021: 55.4%) and loans to corporate customers (37.2%). At 91.2%, mortgages account for the largest share loans to retail customers. BST's market share for new mortgage loans amounted to 21.7% in FY 2021. In comparison with the previous year, the NPE ratio has fallen from 2.6% to 2.3% as at year-end 2021. Across the same period, the NPE coverage ratio increased to 81.0% (FY 2021; 72.3% in FY 2020). For FY 2021, the capital requirements in terms of the CET1 ratio (26,4%) and MREL (26,5%) ratio amounted to 8.3% and 17.8% respectively. The liquidity level as measured by the LCR came in at 131.6% as at year-end 2021.

Balance Sheet

(EURm)	2020Y	2021Y	2022H1
Net Loans to Customers	38,975	39,864	39,883
Total Securities	9,602	6,514	6,538
Total Deposits	36,270	38,959	41,298
Tier 1 Common Capital	3,759	3,918	2,705
Total Assets	54,403	56,167	58,271
Total Risk-weighted Assets	17,982	14,428	15,981

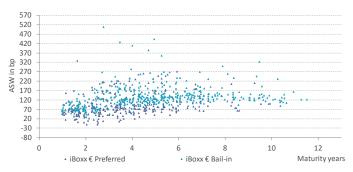
Redemption Profile



Income Statement

(EURm)	2020Y	2021Y	2022H1
Net Interest Income	785	729	369
Net Fee & Commission Inc.	378	432	242
Net Trading Income	96	141	20
Operating Expense	673	803	281
Credit Commit. Impairment	188	73	-1
Pre-tax Profit	368	403	340

Senior Unsecured Bonds (EUR BMK)



Company Ratios

	2020Y	2021Y	2022H1
Net Interest Margin	1.51	1.35	1.31
ROAE	6.65	6.47	12.27
Cost-to-Income	54.04	61.94	45.22
Core Tier 1 Ratio	20.90	27.16	16.93

	2020Y	2021Y	2022H1
Liquidity Coverage Ratio	122.00	131.60	145.97
IFRS Tier 1 Leverage Ratio	7.11	7.09	4.70
NPL/ Loans at Amortised Cost	3.88	3.41	3.33
Reserves/Loans at Amort. Cost	2.70	2.67	2.65

Source: Bloomberg, S&P Global Market Intelligence, NORD/LB Markets Strategy & Floor Research; as of: 14.10.2022

Strengths / Opportunities

- Strategically important entity of Banco Santander
- Positioning on the Portuguese banking market
- Asset quality

- Risk concentration in Portugal
- Profitability
- Level of asset encumbrance

Banco Santander Totta – Mortgage

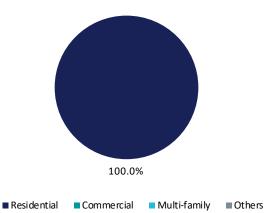
Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Cover Pool Data

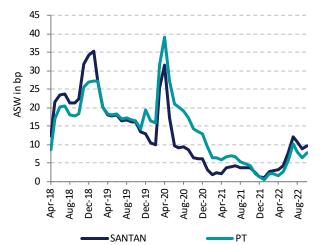
Cover pool volume (EURm)	9,990
	,
Amount outstanding (EURm)	8,600
-thereof ≥ EUR 500m	23.3%
Current OC (nominal)	16.2%
Committed OC	15.0%
Cover type	Mortgage
Main country	100% Portugal
Main region	37% Lisbon
Number of loans	170,869
Number of borrowers	n/a
Avg. exposure to borrowers (EUR)	n/a
WAL (cover pool)	26.3v
WAL (covered bonds)	4.5y
Fixed interest (cover pool)	0.9%
Fixed interest (covered bonds)	100.0%
LTV (indexed)	53.9%
LTV (unindexed)	53.6%
Loans in arrears	0.0%

Rating (Moody's)	Aa2
Rating (S&P)	-
Rating (Fitch)	A+
Rating (DBRS)	AA
ТРІ	Probable
TPI leeway	2
Collateral score	5.0%
RRL	-
JRL	-
Unused notches	-
AAA credit risk (%)	-
PCU	0
Recovery uplift	1
Outstanding ESG BMKs	No
LCR ELIGIBLE	Yes
LCR level (Bmk)	1
Risk weight	10%
Maturity structure (Bmk)	SB

Borrower Types

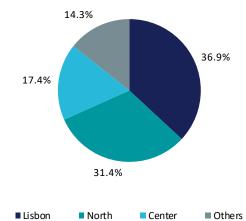


Spread Development

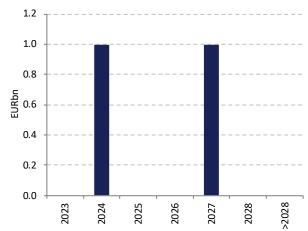


Source: Issuer, Rating agencies, Bloomberg, NORD/LB Markets Strategy & Floor Research

Regional Distribution



Redemption Profile (Bmk)







(1)

()

Portugal

Caixa Económica Montepio Geral

Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Ratings			Found
Natings			focuse
	Rating	Outlook	Associ
Fitch	B-	Positive	coope
Moody's*	B2	Stable	custon
S&P	-	-	of 5%
llomono			owned
Homepage			consol
www.band	comontep	io.pt	custon

Founded in 1884, Caixa Económica Montepio Geral (CEMG) is a savings bank primarily ed on retail banking. A total of 99.99% of the shares are held by Montepio Geral iação Mutualista (MGAM). As a result, CEMG is wholly owned by the largest rative organisation in Portugal. CEMG has around 3,500 employees, who serve mers across nearly 279 branches (H1 2022) in Portugal, where it has a market share for deposits and loans (FY 2021). The institute is also active in Angola via its 80.2%d subsidiary Finibanco Angola S.A. The bank plans to further reduce its share and delidate Finibanco. Its business activities are mainly focused on loans to retail customers and SMEs. Reporting takes place in the segments Banca Commercial (subdivided into Retail Banking, Social Economy and Specialized Credit) and Corporate and Investment Banking, International Activity (subdivided into Finibanco and Banco MG Cabe Verde (in liquidation)). The most important CEMG segment is Retail Banking with a share of 63.6% of operating income (FY 2021). As at H1 2022, the NPE ratio stood at 7.7% (H1 2021: 9.3%), while the coverage ratio was 53.8%. As part of its Transformation Plan 2022-2024, the bank will be reorganised and its activities restructured, with progress already being made in this context with divestments and the decision to liquidate its wholly owned subsidiary Montepio Geral Cabo Verde. A CET1 ratio (fully phased) of 12.6% was posted for H1 2022.

Balance Sheet

*Senior Unsecured

(EURm)	2020Y	2021Y	2022H1
Net Loans to Customers	11,587	11,677	11,930
Total Securities	3,014	3,334	4,415
Total Deposits	12,502	12,787	13,036
Tier 1 Common Capital	1,114	1,122	1,137
Total Assets	17,941	19,713	19,842
Total Risk-weighted Assets	9,577	8,800	8,695

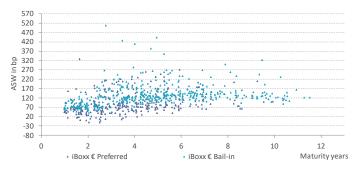
Redemption Profile



Income Statement (EUR BMK)

(EURm)	2020Y	2021Y	2022H1
Net Interest Income	243	244	121
Net Fee & Commission Inc.	115	116	60
Net Trading Income	18	11	21
Operating Expense	260	245	112
Credit Commit. Impairment	185	54	3
Pre-tax Profit	-119	34	45

Senior Unsecured Bonds



Company Ratios

	2020Y	2021Y	2022H1
Net Interest Margin	1.51	1.36	1.32
ROAE	-5.72	0.57	3.31
Cost-to-Income	66.23	64.58	63.04
Core Tier 1 Ratio	11.63	12.74	13.08

	2020Y	20219	2022H1
Liquidity Coverage Ratio	200.43	284.91	262.70
IFRS Tier 1 Leverage Ratio	6.23	5.70	5.75
NPL/ Loans at Amortised Cost	-	-	-
Reserves/Loans at Amort. Cost	6.31	4.28	4.14

Source: Bloomberg, S&P Global Market Intelligence, NORD/LB Markets Strategy & Floor Research; as of: 14.10.2022

Strengths / Opportunities

- Capitalisation (supported by the parent company)
- Focus on core activities (restructuring)
- Funding profile

- Asset quality
- Profitability
- Risk absorption capacity

Caixa Económica Montepio Geral – Mortgage

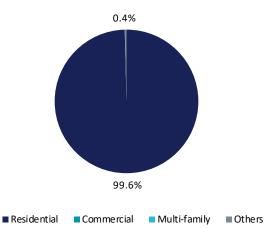
Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Cover Pool Data

Cover pool volume (EURm)	2,757
Amount outstanding (EURm)	2,300
-thereof ≥ EUR 500m	21.7%
Current OC (nominal)	19.9%
Committed OC	18.00%
Cover type	Mortgage
Main country	100% Portugal
Main region	36% Lisbon
Number of loans	56,217
Number of borrowers	n/a
Avg. exposure to borrowers (EUR)	n/a
WAL (cover pool)	12.2y
WAL (covered bonds)	2.0y
Fixed interest (cover pool)	7.3%
Fixed interest (covered bonds)	54.3%
LTV (indexed)	n/a
LTV (unindexed)	51.1%
Loans in arrears	0.0%

Rating (Moody's)	Aa3
Rating (S&P)	-
Rating (Fitch)	AA-
Rating (DBRS)	-
TPI	Very High
TPI leeway	0
Collateral score	7.5%
RRL	-
JRL	-
Unused notches	-
AAA credit risk (%)	-
PCU	8
Recovery uplift	-
Outstanding ESG BMKs	No
LCR ELIGIBLE	Yes
LCR level (Bmk)	1
Risk weight	10%
Maturity structure (Bmk)	СРТ

Borrower Types

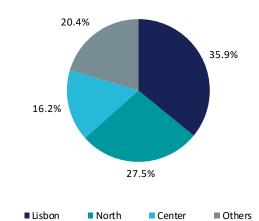


Spread Development

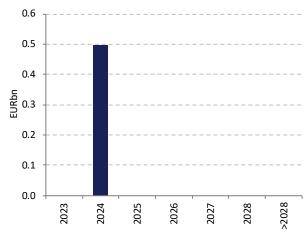


Source: Issuer, Rating agencies, Bloomberg, NORD/LB Markets Strategy & Floor Research

Regional Distribution



Redemption Profile (Bmk)





۲

Portugal

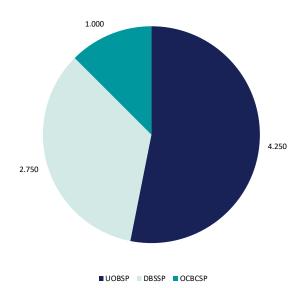
Singapore

Market Overview Covered Bonds

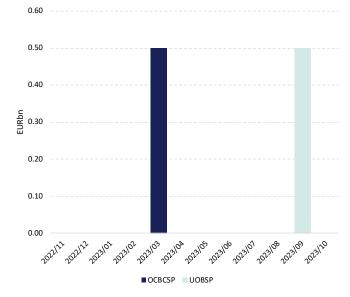
Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Cover Pool Volume	EUR 31.52bn	Outstanding volume (Bmk)	EUR 8.00bn
Amount outstanding	EUR 14.07bn	Number of benchmarks	11
Number of issuer	3	Outstanding ESG volume (Bmk)	-
No of cover pools	3	Number of ESG benchmarks	-
there of M / PS / others	3/0/0	Outstanding volume (SBmk)	-
Ratings (low / high)	AAA / AAA	Number of subbenchmarks	-
Best possible LCR level	Level 2A	Maturity types	SB

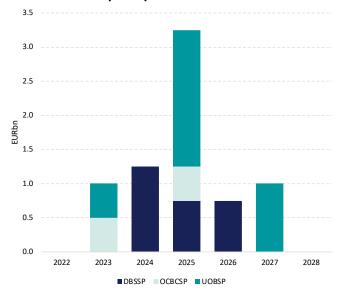




Benchmark redemption profile¹: 11/2022 - 10/2023

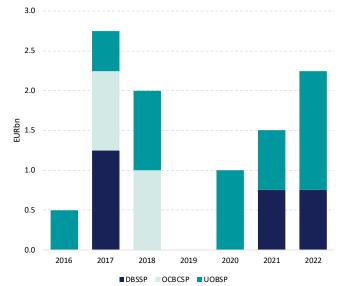


Benchmark redemption profile¹²



Source: Issuer, Rating agencies, Bloomberg, NORD/LB Markets Strategy & Floor Research; ¹ based on Bloomberg ticker; ² Redemptions 2022: 11/22 – 12/22

Benchmark issuance volume¹



Singapore

DBS Group Holdings

Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Ratings

	Rating	Outlool
Fitch	AA-	Stable
Moody's	Aa2	Stable
S&P	-	-

Homepage

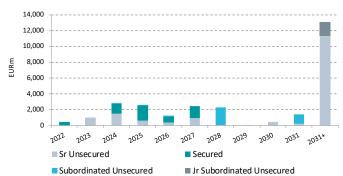
www.dbs.com

DBS Group Holdings (DBS) is the largest of the three dominant financial groups in Singapore as measured by assets (FY 2021: SGD 686bn). The Monetary Authority of Singapore (MAS) classifies DBS as a domestic systemically important bank (D-SIB). DBS is listed on the Singapore stock exchange, where its main shareholder is Temasek Holdings Itd. (Singapore government holding; 02 August 2022) at 29.6%. DBS Bank Ltd. is a wholly owned subsidiary of DBS and the Group's main operating unit. DBS has more than 33,000 employees, who serve 340,000 institutional customers as well as 11.8 million retail/asset management customers worldwide. The Group offers all the financial services of a universal bank and reports across the three core business segments of Institutional Banking, Consumer Banking/Wealth Management and Treasury Markets, as well as the segment Other. In addition to its domestic market Singapore (FY 2021: 66.0% of pre-tax profit), DBS also has a strong presence in the regions Hong Kong (18.2%), Greater China (excluding Hong Kong; 5.9%) as well as South and South-East Asia (3.8%). While DBS mainly issues capital instruments, covered bonds are placed via DBS Bank Ltd. The overwhelming majority of funding comes from deposits (FY 2021: 84%). In FY 2021, covered bonds constituted 10% of wholesale funding. In July 2017, DBS issued its first floating rate green bond in a volume of USD 500 million in order to promote sustainable projects. In comparison with Q1 2021, the NPL ratio reduced by 30 basis points to 1.3% (Q1 2022). With a CET1 ratio of 14.0% (Q1 2022), DBS has complied with the regulatory requirements.

Balance Sheet

(EURm)	2020Y	2021Y	2022H1
Net Loans to Customers	229,565	266,750	291,914
Total Securities	91,700	93 <i>,</i> 028	120,653
Total Deposits	287,505	327,384	362,941
Tier 1 Common Capital	27,700	32,120	34,002
Total Assets	401,979	447,465	512,710
Total Risk-weighted Assets	198,594	223,507	240,030

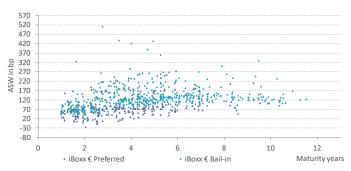
Redemption Profile



Income Statement

(EURm)	2020Y	2021Y	2022H1
Net Interest Income	5,771	5,313	3,112
Net Fee & Commission Inc.	1,944	2,218	1,112
Net Trading Income	-	-	-
Operating Expense	3,940	4,077	2,214
Credit Commit. Impairment	1,836	15	69
Pre-tax Profit	3,413	4,897	2,773

Senior Unsecured Bonds (EUR BMK)



Company Ratios

	2020Y	2021Y	2022H1
Net Interest Margin	1.62	1.45	1.51
ROAE	8.77	11.97	12.74
Cost-to-Income	42.47	45.30	43.80
Core Tier 1 Ratio	13.95	14.37	14.17

	2020Y	2021Y	2022H1
Liquidity Coverage Ratio	138.33	134.73	141.36
IFRS Tier 1 Leverage Ratio	7.32	7.46	7.05
NPL/ Loans at Amortised Cost	1.64	1.30	1.29
Reserves/Loans at Amort. Cost	1.75	1.47	1.43

Source: Bloomberg, S&P Global Market Intelligence, NORD/LB Markets Strategy & Floor Research; as of: 14.10.2022

Strengths / Opportunities

- Liquidity
- Profitability

- Regional expansion
- Potential capital pressure from acquisition of the Citigroup consumer banking business in Taiwan

Singapore

DBS Bank – Mortgage

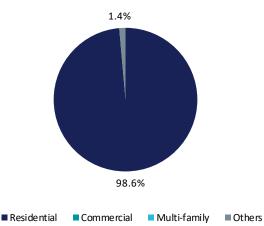
Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Cover Pool Data

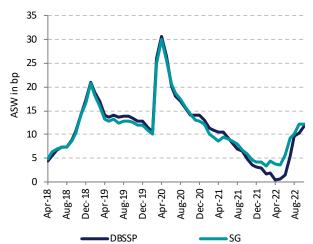
Cover pool volume (ELIPm)	10 177
Cover pool volume (EURm)	12,177
Amount outstanding (EURm)	5,296
-thereof ≥ EUR 500m	51.9%
Current OC (nominal)	129.9%
Committed OC	9.9%
Cover type	Mortgage
Main country	100% Singapore
Main region	49% Outside Central Region
Number of loans	25,032
Number of borrowers	n/a
Avg. exposure to borrowers (EL	JR) n/a
WAL (cover pool)	20.0y
WAL (covered bonds)	3.1y
Fixed interest (cover pool)	53.6%
Fixed interest (covered bonds)	67.1%
LTV (indexed)	45.4%
LTV (unindexed)	53.6%
Loans in arrears	0.0%

Rating (Moody's)	Aaa
Rating (S&P)	-
Rating (Fitch)	AAA
Rating (DBRS)	-
TPI	Probable
TPI leeway	5
Collateral score	5.0%
RRL	-
JRL	-
Unused notches	-
AAA credit risk (%)	-
PCU	6
Recovery uplift	-
Outstanding ESG BMKs	No
LCR ELIGIBLE	Yes
LCR level (Bmk)	2A
Risk weight	20%
Maturity structure (Bmk)	SB

Borrower Types

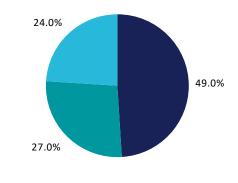


Spread Development



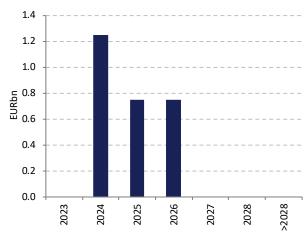
Source: Issuer, Rating agencies, Bloomberg, NORD/LB Markets Strategy & Floor Research

Regional Distribution



Outside Central Region	Rest Central Region
Core Central Region	-

Redemption Profile (Bmk)



OCBC

NORD/LB

Singapore [@]

Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Ratings

	Rating	Outlook
Fitch	AA-	Stable
Moody's*	Aa1	Stable
S&P	AA-	Stable

Homepage

www.ocbc.com

*Senior Unsecured

Oversea-Chinese Banking Corporation Ltd. (OCBC) was founded in 1932 following a merger between three regional banks and is the oldest credit institute in Singapore. Its shares are listed on the Singapore stock exchange. The main shareholders are Citibank with 15.4% and Selat PTE Ltd. with 14.5% (02 August 2022). OCBC is the second-largest banking group in Singapore as measured by total assets (FY 2021: SGD 542.2bn) and ranks as one of its domestic systemically important banks (D-SIB). Its core markets include Singapore (FY 2021: 40.0% of the loan portfolio), Malaysia (9.7%), Indonesia (6.6%), Greater China (25.4%) and the rest of the world (18.3%). Overall, the Group operates more than 430 branches and representative offices in 19 countries and regions. A total of 210 of these are located in Indonesia and operated via the subsidiary OCBC NISP. The Group focuses on the retail and corporate client business, asset management and insurance products. OCBC reports across the following segments: Global Wholesale Banking (FY 2021: 15% of pre-tax earnings), Global Consumer/Private Banking (29%), Global Treasury and Markets, (22%), Insurance (22%) and the non-operating segment Others (12%). As part of its sustainability goals, OCBC has committed to promoting an ecological and social transformation. To this end, in March 2020, it developed a sustainability bond framework, enabling it to issue green, social and sustainable bonds. In comparison with Q1 2021, the NPL ratio fell by 10 basis points to 1.4% (Q1 2022). With a CET1 ratio of 15.2% (Q1 2022), OCBC has complied with its current regulatory requirements.

Balance Sheet

(EURm)	2020Y	2021Y	2022H1
Net Loans to Customers	162,995	186,716	202,488
Total Securities	50,504	52 <i>,</i> 538	55,601
Total Deposits	194,766	223,314	239,854
Tier 1 Common Capital	20,538	22,726	23,773
Total Assets	322,477	353,621	381,530
Total Risk-weighted Assets	134,920	146,660	159,235

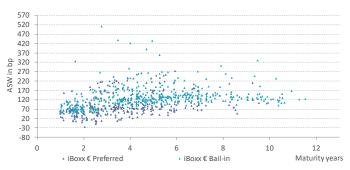
Redemption Profile



Income Statement

(EURm)	2020Y	2021Y	2022H1
Net Interest Income	3,794	3,685	2,148
Net Fee & Commission Inc.	1,274	1,413	670
Net Trading Income	681	538	278
Operating Expense	2,824	3,002	1,683
Credit Commit. Impairment	1,277	546	73
Pre-tax Profit	2,648	3,575	2,277

Senior Unsecured Bonds (EUR BMK)



Company Ratios

	2020Y	2021Y	2022H1		2020Y	2021Y	2022H1
Net Interest Margin	1.61	1.54	1.62	Liquidity Coverage Ratio	150.27	158.76	145.45
ROAE	7.47	9.54	10.74	IFRS Tier 1 Leverage Ratio	6.63	6.60	6.44
Cost-to-Income	41.71	42.12	41.69	NPL/ Loans at Amortised Cost	1.49	1.47	1.31
Core Tier 1 Ratio	15.22	15.50	14.93	Reserves/Loans at Amort. Cost	1.39	1.19	1.15

Source: Bloomberg, S&P Global Market Intelligence, NORD/LB Markets Strategy & Floor Research; as of: 14.10.2022

Strengths / Opportunities

- Funding profile
- Capitalisation

- Economic outlook in Greater China
- Asset risk (coronavirus pandemic)

Singapore

OCBC – Mortgage

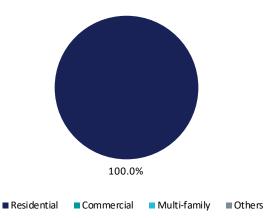
Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Cover Pool Data

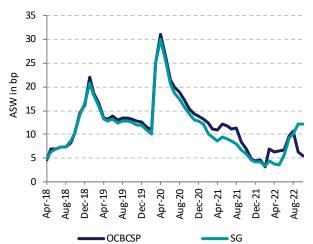
Cover pool volume (EURm)	7,310
Amount outstanding (EURm)	2,183
-thereof ≥ EUR 500m	45.8%
Current OC (nominal)	234.8%
Committed OC	15.6%
Cover type	Mortgage
Main country	100% Singapore
Main region	64% Outside Central Region
Number of loans	16,050
Number of borrowers	n/a
Avg. exposure to borrowers (EL	IR) n/a
WAL (cover pool)	19.4y
WAL (covered bonds)	1.1y
Fixed interest (cover pool)	31.3%
Fixed interest (covered bonds)	85.1%
LTV (indexed)	45.7%
LTV (unindexed)	54.5%
Loans in arrears	0.1%

Aaa
-
AAA
-
Probable
5
5.0%
-
-
-
-
6
-
No
Yes
2A
20%
SB

Borrower Types

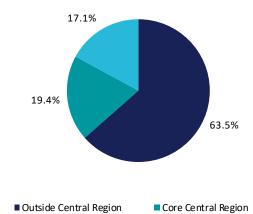


Spread Development



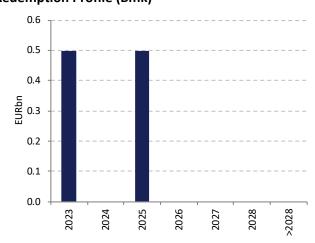
Source: Issuer, Rating agencies, Bloomberg, NORD/LB Markets Strategy & Floor Research

Regional Distribution



Redemption Profile (Bmk)

Rest Central Region



United Overseas Bank

Singapore <a>

Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Ratings

	Rating	Outlook			
Fitch	AA-	Negative			
Moody's*	Aa1	Stable			
S&P	AA-	Stable			
Homepage www.uobgroup.com					
*Senior Ur	nsecured				

United Overseas Bank Ltd. (UOB), headquartered in Singapore, was founded in 1935 and is classified as a domestic systemically important bank (D-SIB). Today, it is one of the three largest banks in Singapore and maintains a global presence with a focus on Asia. Its shares are listed on the Singapore stock exchange. UOB reports across the following segments: Group Retail, Group Wholesale Banking, Global Markets and the non-operating segment Other. The UOB Group has an extensive network of over 500 branches spread across 19 countries around the world, with a focus on the Asia-Pacific region. Regarding the loan portfolio, the largest share is attributable to the domestic market Singapore (51%; as at 31 March 2022), followed by the Greater China region (16%) and Malaysia (9%). In January 2022, UOB announced that it had agreed a deal to acquire the Citigroup retail banking business in Indonesia, Malaysia, Thailand and Vietnam for a sum of SGD 4.9bn. In so doing, UOB has doubled the number of its retail customers in ASEAN countries. The bank offers its customers a broad range of financial services. These include private banking, commercial and corporate banking, investment banking, capital market activities, treasury services, asset management, insurance and securities trading services, as well as credit cards. In 2021, UOB issued its first sustainability bond in two tranches and ESG bank capital in order to finance sustainability projects. As at 30 June 2022, UOB registered a CET1 ratio of 13.1% and a leverage ratio of 6.6%, while the NSFR stood at 111%.

Balance Sheet

(EURm)	2020Y	2021Y	2022H1
Net Loans to Customers	171,446	200,042	218,337
Total Securities	38,837	40,791	54,911
Total Deposits	200,760	229,992	246,200
Tier 1 Common Capital	20,553	22,785	23,695
Total Assets	267,072	299,576	339,191
Total Risk-weighted Assets	139,433	168,967	180,632

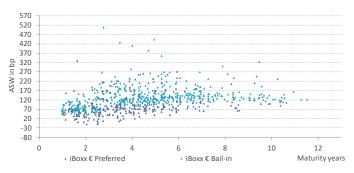
Redemption Profile



Income Statement

(EURm)	2020Y	2021Y	2022H1
Net Interest Income	3,837	4,021	2,380
Net Fee & Commission Inc.	1,214	1,484	764
Net Trading Income	614	494	172
Operating Expense	2,660	2,715	1,503
Credit Commit. Impairment	1,014	376	214
Pre-tax Profit	2,248	3,108	1,715

Senior Unsecured Bonds (EUR BMK)



Company Ratios

	2020Y	2021Y	2022H1
Net Interest Margin	1.57	1.56	1.61
ROAE	7.24	9.73	9.47
Cost-to-Income	45.12	43.53	43.83
Core Tier 1 Ratio	14.74	13.48	13.12

	2020Y	2021Y	2022H1
Liquidity Coverage Ratio	139.12	132.91	140.42
IFRS Tier 1 Leverage Ratio	7.99	7.76	7.23
NPL/ Loans at Amortised Cost	1.66	1.66	1.71
Reserves/Loans at Amort. Cost	1.51	1.33	1.30

Source: Bloomberg, S&P Global Market Intelligence, NORD/LB Markets Strategy & Floor Research; as of: 14.10.2022

Strengths / Opportunities

- Loan quality
- Market positioning (SMEs) in Singapore

- Exposure risk in emerging nations
- Asset risk (coronavirus pandemic)

United Overseas Bank – Mortgage

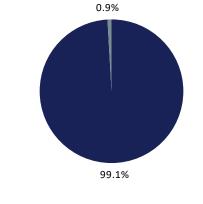
Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Cover Pool Data

Cover pool volume (EURm)	12,029
Amount outstanding (EURm)	6,587
-thereof ≥ EUR 500m	64.5%
Current OC (nominal)	82.6%
Committed OC	15.9%
Cover type	Mortgage
Main country	100% Singapore
Main region	74% Outside Central Region
Number of loans	25,757
Number of borrowers	n/a
Avg. exposure to borrowers (EU	IR) n/a
WAL (cover pool)	21.0y
WAL (covered bonds)	1.3y
Fixed interest (cover pool)	67.3%
Fixed interest (covered bonds)	76.6%
LTV (indexed)	50.2%
LTV (unindexed)	56.4%
Loans in arrears	0.0%

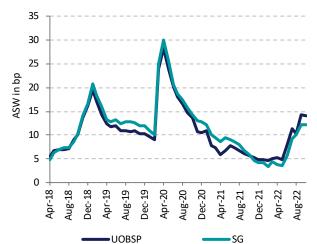
	,
Rating (S&P)	AAA
Rating (Fitch)	-
Rating (DBRS)	-
TPI	Probable
TPI leeway	5
Collateral score	5.0%
RRL	aa-
JRL	аа
Unused notches	1
AAA credit risk (%)	2.5
PCU	-
Recovery uplift	-
Outstanding ESG BMKs	No
LCR ELIGIBLE	Yes
LCR level (Bmk)	2A
Risk weight	20%
Maturity structure (Bmk)	SB

Borrower Types



■ Residential ■ Commercial ■ Multi-family ■ Others

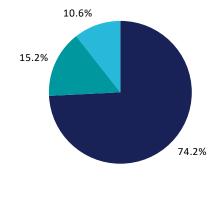
Spread Development



Source: Issuer, Rating agencies, Bloomberg, NORD/LB Markets Strategy & Floor Research

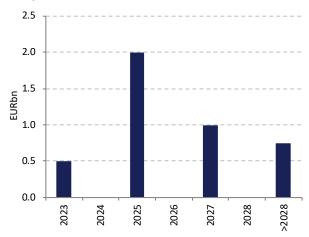
Regional Distribution

Rating (Moody's)



Outside Central Region Core Central Region Rest Central Region

Redemption Profile (Bmk)









Aaa

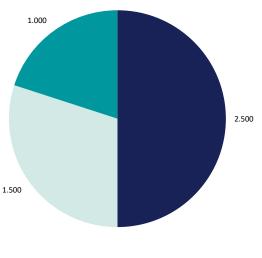
Slovakia

Market Overview Covered Bonds

Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

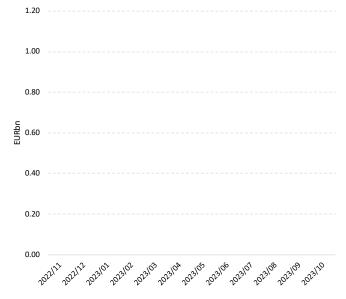
Cover Pool Volume	EUR 14.76bn	Outstanding volume (Bmk)	EUR 5.00bn
Amount outstanding	EUR 10.53bn	Number of benchmarks	10
Number of issuer	4	Outstanding ESG volume (Bmk)	EUR 0.50bn
No of cover pools	4	Number of ESG benchmarks	1
there of M / PS / others	4/0/0	Outstanding volume (SBmk)	EUR 0.50bn
Ratings (low / high)	AA+ / AAA	Number of subbenchmarks	2
Best possible LCR level	Level 1	Maturity types	SB



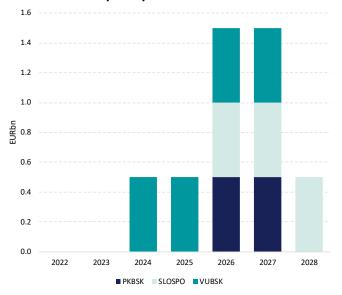


VUBSK SLOSPO PKBSK

Benchmark redemption profile¹: 11/2022 - 10/2023



Benchmark redemption profile¹²



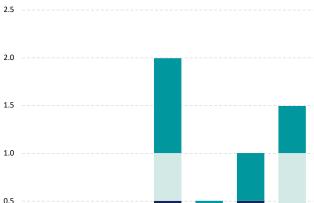
Source: Issuer, Rating agencies, Bloomberg, NORD/LB Markets Strategy & Floor Research; ¹ based on Bloomberg ticker; ² Redemptions 2022: 11/22 – 12/22

Benchmark issuance volume¹

2.0 1.5 EURbn 1.0 0.5 0.0 2016 2017 2018 2019 2020 2021 2022

■ PKBSK ■ SLOSPO ■ VUBSK





Prima Banka

Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Ratings

	Rating	Outlook
Fitch	-	-
Moody's	-	-
S&P	-	-
Homepa	ge	

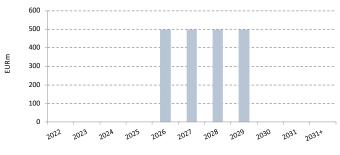
www.primabanka.sk

Prima banka Slovensko, a.s (Prima Banka), headquartered in Žilina, was founded by a total of 193 Slovakian cities and municipalities in 1992, for whom it provided funding and services at the time. In 2011, Penta Investments (private equity investor) purchased a majority stake in the bank. Since then, its focus has increasingly been on the retail sector. As at year-end 2021, Penta Financial Services Ltd (private equity) held over 99% of shares. Today, Prima Banka mainly focuses on retail customers, freelancers, SMEs and municipalities. The bank is the market leader for municipalities with over 2,000 customers. It has a market share of 5.0% and 5.6% for loans and deposits respectively (June 2021). In FY 2021, growth of 14.4% was recorded in the loan portfolio. According to information from the bank itself, the loan portfolio is growing three times as fast as the market overall. Its range of products and services comprises the fundamental banking services of a universal bank such as account management, deposits and lending in addition to domestic and cross-border payment transaction services. The bank is represented in all 79 districts of Slovakia via its network of 120 branches. Retail customer deposits account for the vast majority of the funding mix. The share of covered bonds in the funding mix has increased to 11% of liabilities (June 2021) since its debut issuance in 2019. The NPL ratio has been on the decline since 2017 (FY 2017: 8.1%), standing at 2.0% as at H1 2021. The coverage ratio is 169%.

Balance Sheet

(EURm)	2020Y	2021Y	2022H1
Net Loans to Customers	3,834	4,406	5,118
Total Securities	221	170	161
Total Deposits	3,609	3,890	3,886
Tier 1 Common Capital	347	364	382
Total Assets	4,531	5,331	5,735
Total Risk-weighted Assets	2,109	2,271	2,696

Redemption Profile

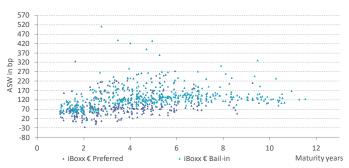




Income Statement

(EURm)	2020Y	2021Y	2022H1
Net Interest Income	54	48	23
Net Fee & Commission Inc.	25	26	15
Net Trading Income	0	1	-0
Operating Expense	58	53	25
Credit Commit. Impairment	4	7	1
Pre-tax Profit	18	18	13

Senior Unsecured Bonds (EUR BMK)



Company Ratios

	2020Y	2021Y	2022H1		2020Y	2021Y	2022H1
Net Interest Margin	1.26	0.98	0.84	Liquidity Coverage Ratio	250.09	-	-
ROAE	4.93	4.79	6.82	IFRS Tier 1 Leverage Ratio	7.65	6.83	6.66
Cost-to-Income	72.25	69.41	64.85	NPL/ Loans at Amortised Cost	-	-	-
Core Tier 1 Ratio	16.43	16.04	14.17	Reserves/Loans at Amort. Cost	3.61	3.16	2.66

Source: Bloomberg, S&P Global Market Intelligence, NORD/LB Markets Strategy & Floor Research; as of: 13.10.2022

Strengths / Opportunities

- Customer deposit basis
- NPL ratio

Risks / Weaknesses

- Credit growth
- Diversification



Slovakia

Prima Banka – Mortgage

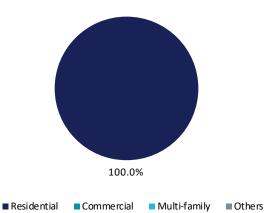
Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Cover Pool Data

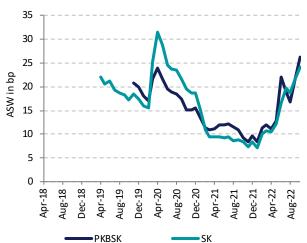
Cover pool volume (EURm)	2,797
Amount outstanding (EURm)	1,500
-thereof ≥ EUR 500m	66.7%
Current OC (nominal)	86.5%
Committed OC	5.0%
Cover type	Mortgage
Main country	100% Slovakia
Main region	23% Bratislava
Number of loans	60,082
Number of borrowers	n/a
Avg. exposure to borrowers (EUR)	n/a
WAL (cover pool)	11.3y
WAL (covered bonds)	5.1y
Fixed interest (cover pool)	100.0%
Fixed interest (covered bonds)	100.0%
LTV (indexed)	55.3%
LTV (unindexed)	n/a
Loans in arrears	0.0%

Rating (Moody's)	Aaa
Rating (S&P)	-
Rating (Fitch)	-
Rating (DBRS)	-
TPI	Probable
TPI leeway	Unpublished
Collateral score	8.6%
RRL	-
JRL	-
Unused notches	-
AAA credit risk (%)	-
PCU	-
Recovery uplift	2
Outstanding ESG BMKs	No
LCR ELIGIBLE	Yes
LCR level (Bmk)	1
Risk weight	10%
Maturity structure (Bmk)	SB

Borrower Types

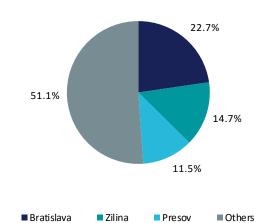


Spread Development

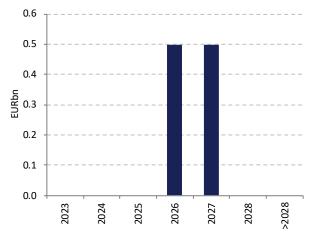


Source: Issuer, Rating agencies, Bloomberg, NORD/LB Markets Strategy & Floor Research

Regional Distribution



Redemption Profile (Bmk)





Slovakia 🐸

Slovenská sporiteľňa

Slovakia 😃

Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Ratings

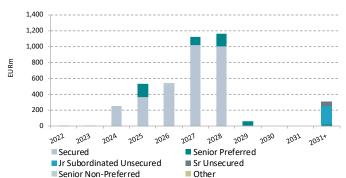
Rating	Outlook
-	-
A2	Stable
-	-
•	
	-

In 1825, Slovenská sporiteľňa (SLSP) was established as the first savings bank in Slovakia. Since 2001, this domestic systemically important bank (D-SIB; subject to direct ECB supervision) headquartered in Bratislava has been wholly owned by the Erste Group in Austria. The Erste Group is one of the most important banking groups for retail and corporate customers in the Central and Eastern Europe (CEE) region. As measured by its balance sheet total (H1 2022: EUR 24.0bn), SLSP is the largest commercial bank in Slovakia, with more than 3,630 employees serving 2.0 million customers in nationwide 195 branches. In addition to its original banking services, SLSP also offers its retail and corporate customers as well as SMEs and public institutions products from the asset management sector. The bank has market shares of 23.3% and 22.5% (June 2022) respectively in the deposit and lending businesses. In a national comparison, it ranks second for loans, while it takes the top spot for deposits. The institute reports across the following segments: Retail (FY 2021: 48% of operating income), Corporates (26%), Asset Liability Management, Local Corporate Center (22%) and Group Markets (4%). The overwhelming majority of the funding mix comprises retail funding (FY 2021: 66.1% of the overall funding mix). In June 2021, the bank issued its first green bond in a volume of EUR 100 million as part of its sustainability activities. The bond was placed in compliance with Sustainable Finance Framework of the Erste Group. At the end of June 2022, the NPL ratio was 1.8%, while the NPL ratio was 104.2%. The CET1 ratio of 15.6% (H1 2022) met the regulatory requirements.

Balance Sheet

(EURm)	2020Y	2021Y	2022H1
Net Loans to Customers	14,820	15,768	16,846
Total Securities	3,789	3,991	3,983
Total Deposits	14,869	15,973	16,302
Tier 1 Common Capital	1,250	1,400	1,503
Total Assets	20,706	23,154	24,041
Total Risk-weighted Assets	8,629	8,971	9,647

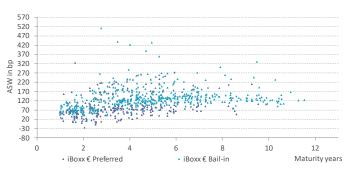
Redemption Profile



Income Statement

(EURm)	2020Y	2021Y	2022H1
Net Interest Income	434	428	213
Net Fee & Commission Inc.	147	174	94
Net Trading Income	9	6	9
Operating Expense	287	292	155
Credit Commit. Impairment	108	1	25
Pre-tax Profit	148	302	130

Senior Unsecured Bonds (EUR BMK)



Company Ratios

	2020Y	2021Y	2022H1
Net Interest Margin	2.27	1.93	1.86
ROAE	6.24	12.23	9.90
Cost-to-Income	52.91	49.10	50.02
Core Tier 1 Ratio	14.49	15.61	15.58

	2020Y	2021Y	2022H1
Liquidity Coverage Ratio	-	-	-
IFRS Tier 1 Leverage Ratio	6.08	6.07	6.28
NPL/ Loans at Amortised Cost	2.43	1.84	1.81
Reserves/Loans at Amort. Cost	2.54	2.08	2.03

Source: Bloomberg, S&P Global Market Intelligence, NORD/LB Markets Strategy & Floor Research; as of: 13.10.2022

Strengths / Opportunities

- Franchise position
- Capitalisation
- Deposit basis

- Credit growth
- Focus on domestic market
- Pressure on earnings due to intense competition

Slovenská sporiteľňa – Mortgage

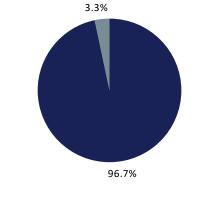
Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Cover Pool Data

Cover pool volume (EURm)	4,815
Amount outstanding (EURm)	2,811
-thereof ≥ EUR 500m	53.4%
Current OC (nominal)	71.3%
Committed OC	7.5%
Cover type	Mortgage
Main country	100% Slovakia
Main region	23% Bratislava
Number of loans	101,377
Number of borrowers	93,022
Avg. exposure to borrowers (EUR)	51,758
WAL (cover pool)	20.8y
WAL (covered bonds)	4.3y
Fixed interest (cover pool)	86.0%
Fixed interest (covered bonds)	100.0%
LTV (indexed)	48.9%
LTV (unindexed)	53.8%
Loans in arrears	0.0%

Rating (S&P)	-
Rating (Fitch)	-
Rating (DBRS)	-
ТРІ	Probable
TPI leeway	3
Collateral score	6.7%
RRL	-
JRL	-
Unused notches	-
AAA credit risk (%)	-
PCU	-
Recovery uplift	2
Outstanding ESG BMKs	No
LCR ELIGIBLE	Yes
LCR level (Bmk)	1
Risk weight	10%
Maturity structure (Bmk)	SB

Borrower Types



■ Residential ■ Commercial ■ Multi-family ■ Others

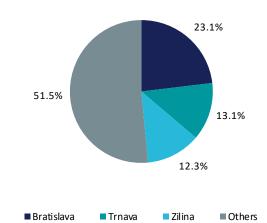
Spread Development



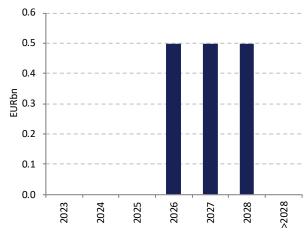
Source: Issuer, Rating agencies, Bloomberg, NORD/LB Markets Strategy & Floor Research

Regional Distribution

Rating (Moody's)



Redemption Profile (Bmk)





Aaa



Tatra banka

Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Ratings

Rating	Outlook
-	-
A3	Negative
-	-
	-

Homepage

www.tatrabanka.sk

Tatra banka (Tatra), which is headquartered in Bratislava, was founded in 1990 and is today the third-largest bank in Slovakia as measured by assets (FY 2021: EUR 19.5bn). Tatra shares are listed on the Bratislava stock exchange, with Raiffeisen CEE Region Holding GmbH, Vienna (indirect Raiffeisen Bank International) the majority shareholder with a stake of 78.8% (FY 2021) of the shares conferring voting rights. A series of subsidiaries are owned by the Tatra banka Group, e.g. Tatra Leasing, Tatra Residence and Tatra Asset Management. The universal bank employs more than 3,300 staff and operates 149 branches (FY 2021; branches of both Tatra and Raiffeisen Bank). Traditionally, its franchise in the corporate segment and for high-net-worth individuals has been strong. Tatra splits its business activities into four operating segments for its reporting: Corporate Clients, Financial Institutions and Public Sector, Retail Customers and Investment Banking and Treasury as well as the non-operating segment Equity Investments and Others. As measured by liabilities, 74% of its funding mix (Q3 2021) consists of customer deposits (both retail and corporate), while this figure stands at 20% for bank deposits and 5% for issued bonds. Covered bonds account for 51% of all bonds issued, with senior unsecured issues making up the remaining 49%. In April 2021, Tatra issued an inaugural green bond worth EUR 300 million. The proceeds generated from the issuance are to be exclusively put towards funding environmentally friendly projects. In comparison with Q3 2021, the NPE ratio fell from 1.3% to 1.2%. The CET1 ratio was 15.5% at the year end of 2021

Balance Sheet

(EURm)	2020Y	2021Y	2022H1
Net Loans to Customers	11,328	12,486	13,353
Total Securities	2,217	2,431	2,516
Total Deposits	12,270	13,474	13,973
Tier 1 Common Capital	941	1,103	1,115
Total Assets	15,641	19,512	20,018
Total Risk-weighted Assets	6,295	7,103	7,728

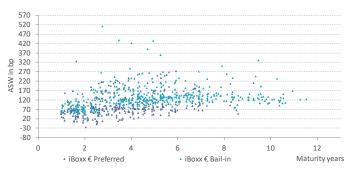
Redemption Profile



Income Statement

(EURm)	2020Y	2021Y	2022H1
Net Interest Income	292	300	150
Net Fee & Commission Inc.	133	155	79
Net Trading Income	29	27	15
Operating Expense	246	242	130
Credit Commit. Impairment	66	27	24
Pre-tax Profit	140	210	92

Senior Unsecured Bonds (EUR BMK)



Company Ratios

	2020Y	2021Y	2022H1
Net Interest Margin	1.97	1.73	1.54
ROAE	8.17	11.67	10.01
Cost-to-Income	53.97	50.12	53.02
Core Tier 1 Ratio	14.94	15.52	14.43

	2020Y	2021Y	2022H1
Liquidity Coverage Ratio	-	-	-
IFRS Tier 1 Leverage Ratio	6.06	5.68	5.63
NPL/ Loans at Amortised Cost	2.06	1.92	1.92
Reserves/Loans at Amort. Cost	1.94	1.88	1.87

Source: Bloomberg, S&P Global Market Intelligence, NORD/LB Markets Strategy & Floor Research; as of: 13.10.2022

Strengths / Opportunities

- Capitalisation
- Funding profile

- Concentration risks (commercial property)
- Liquidity buffer





Tatra banka – Mortgage

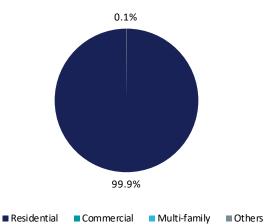
Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Cover Pool Data

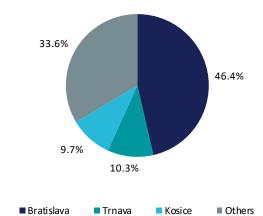
Cover pool volume (EURm)	2,342
Amount outstanding (EURm)	1,948
-thereof ≥ EUR 250m	12.8%
Current OC (nominal)	20.2%
Committed OC	5.0%
Cover type	Mortgage
Main country	100% Slovakia
Main region	46% Bratislava
Number of loans	37,339
Number of borrowers	36,217
Avg. exposure to borrowers (EUR)	64,652
WAL (cover pool)	20.1y
WAL (covered bonds)	3.2y
Fixed interest (cover pool)	100.0%
Fixed interest (covered bonds)	100.0%
LTV (indexed)	n/a
LTV (unindexed)	54.9%
Loans in arrears	0.0%

Rating (Moody's)	Aaa
Rating (S&P)	-
Rating (Fitch)	-
Rating (DBRS)	-
ТРІ	Probable
TPI leeway	2
Collateral score	9.1%
RRL	-
JRL	-
Unused notches	-
AAA credit risk (%)	-
PCU	-
Recovery uplift	2
Outstanding ESG BMKs	No
LCR ELIGIBLE	Yes
LCR level (SBmk)	2A
Risk weight	10%
Maturity structure (SBmk)	SB

Borrower Types



Regional Distribution

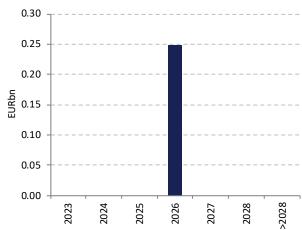


Spread Development



Source: Issuer, Rating agencies, Bloomberg, NORD/LB Markets Strategy & Floor Research

Redemption Profile (SBmk)



Slovakia 🐸



Všeobecná úverová banka

Slovakia 😃

Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

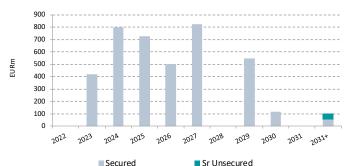
Ratings			\
natings	Rating	Outlook	r F
Fitch	-	-	r
Moody's*	A2	Negative	S
S&P	-	-	S
Homona	70		r
Homepa	ge		S
www.vub.	<u>sk</u>		2
			C
*LT Bank D	Deposits		t
	•		C
			L
			t
			C
			S

Všeobecná úverová banka (VUB) was founded in 1990 as a state-owned bank before being partially privatised in 1992. In November 2001, the Italian banking group Intesa Sanpaolo purchased all shares in VUB via its subsidiary Intesa Sanpaolo Holding International, making it the sole owner of the bank today (FY 2021). VUB is the second largest bank in Slovakia as measured by total assets (FY 2021: EUR 23.2bn). It employs more than 3,400 staff, who offer 1.2 million customers (FY 2021) a wide range of banking services across a network of 182 branches. As a domestic systemically important bank (D-SIB), VUB is subject to direct supervision on the part of the ECB. In Slovakia, VUB has market shares of 21.1% for lending and 19.5% for deposits (data as at December 2021). Its business focus is on mortgages and consumer loans, deposits and payment transaction products in addition to services related to this, the corporate customer business, foreign trade financing, consumer financing and factoring. Via its subsidiaries, VUB offers leasing services (VUB Leasing) and pension plan products (VUB Generali Pension Fund). The bank reports in the three operating business segments Retail Banking (FY 2021: 67.3% of operating income), Corporate Banking (33.1%) and Central Treasury (2.1%) as well as the non-operating segment Other (-2.5%). Deposits comprise the majority of the funding mix at 74% (as measured against liabilities), followed by covered bonds (FY 2021: 17%). The CET1 ratio fell by 58 percentage points to 17.2% (FY 2021) in comparison with December 2020.

Balance Sheet

2020Y	2021Y	2022H1
15,240	16,660	16,991
1,809	1,768	1,695
12,987	13,953	14,148
1,513	1,590	1,572
19,228	23,243	24,017
9,080	9,220	9,664
	15,240 1,809 12,987 1,513 19,228	15,24016,6601,8091,76812,98713,9531,5131,59019,22823,243

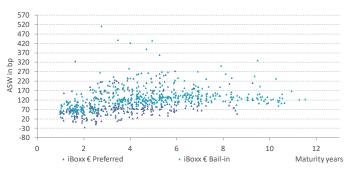
Redemption Profile



Income Statement

(EURm)	2020Y	2021Y	2022H1
Net Interest Income	295	287	148
Net Fee & Commission Inc.	135	147	83
Net Trading Income	11	28	15
Operating Expense	231	231	113
Credit Commit. Impairment	64	80	31
Pre-tax Profit	109	144	85

Senior Unsecured Bonds (EUR BMK)



Company Ratios

	2020Y	2021Y	2022H1
Net Interest Margin	1.63	1.38	1.27
ROAE	4.98	6.59	7.28
Cost-to-Income	57.37	50.80	49.45
Core Tier 1 Ratio	16.66	17.24	16.27

	2020Y	2021Y	2022H1
Liquidity Coverage Ratio	131.62	134.77	131.14
IFRS Tier 1 Leverage Ratio	8.00	6.91	6.65
NPL/ Loans at Amortised Cost	2.69	2.18	1.97
Reserves/Loans at Amort. Cost	2.13	2.04	2.01

Source: Bloomberg, S&P Global Market Intelligence, NORD/LB Markets Strategy & Floor Research; as of: 13.10.2022

Strengths / Opportunities

- Market position (mortgages and SMEs)
- Capitalisation
- Funding profile

- Focus on domestic market
- Profitability
- Credit growth

Všeobecná úverová banka – Mortgage

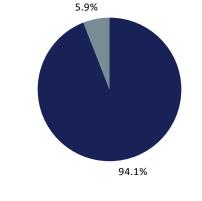
Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Cover Pool Data

Cover pool volume (EURm)	4,811
Amount outstanding (EURm)	4,267
-thereof ≥ EUR 500m	58.6%
Current OC (nominal)	12.8%
Committed OC	5.0%
Cover type	Mortgage
Main country	100% Slovakia
Main region	36% Bratislava
Number of loans	86,158
Number of borrowers	70,334
Avg. exposure to borrowers (EUR)	68,408
WAL (cover pool)	22.2y
WAL (covered bonds)	3.6у
Fixed interest (cover pool)	100.0%
Fixed interest (covered bonds)	100.0%
LTV (indexed)	n/a
LTV (unindexed)	60.6%
Loans in arrears	0.0%

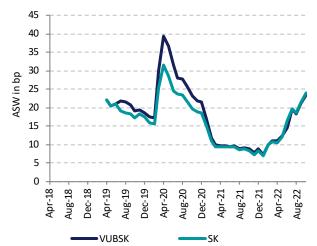
Rating (S&P)	-
Rating (Fitch)	-
Rating (DBRS)	-
TPI	Probable
TPI leeway	3
Collateral score	6.6%
RRL	-
JRL	-
Unused notches	-
AAA credit risk (%)	-
PCU	-
Recovery uplift	2
Outstanding ESG BMKs	No
LCR ELIGIBLE	Yes
LCR level (Bmk)	1
Risk weight	10%
Maturity structure (Bmk)	SB

Borrower Types



■ Residential ■ Commercial ■ Multi-family ■ Others

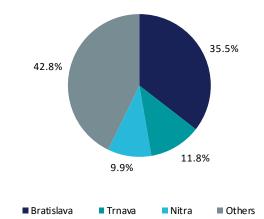
Spread Development



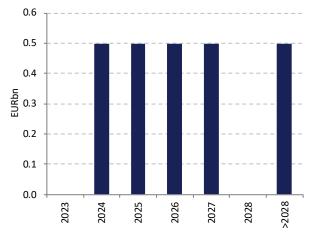
Source: Issuer, Rating agencies, Bloomberg, NORD/LB Markets Strategy & Floor Research

Regional Distribution

Rating (Moody's)



Redemption Profile (Bmk)



NORD/LB

Slovakia



Aa1

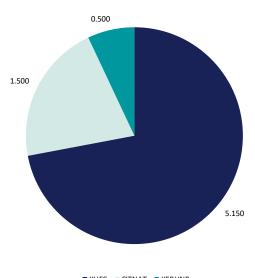
Korea

Market Overview Covered Bonds

Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

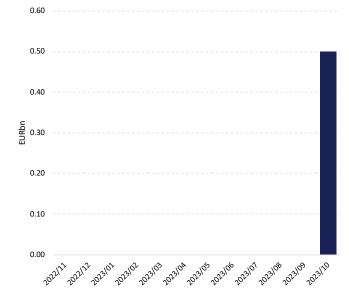
Outstanding benchmark volume¹ (EURbn)

Cover Pool Volume	EUR 12.43bn	Outstanding volume (Bmk)	EUR 7.15bn
Amount outstanding	EUR 7.09bn	Number of benchmarks	12
Number of issuer	3	Outstanding ESG volume (Bmk)	EUR 7.15bn
No of cover pools	10	Number of ESG benchmarks	12
there of M / PS / others	10/0/0	Outstanding volume (SBmk)	-
Ratings (low / high)	AA+ / AAA	Number of subbenchmarks	-
Best possible LCR level	Level 2A	Maturity types	HB, SB

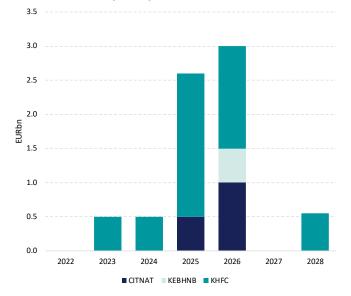


KHFC CITNAT KEBHNB

Benchmark redemption profile¹: 11/2022 - 10/2023

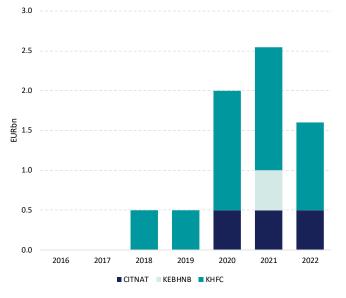


Benchmark redemption profile¹²



Source: Issuer, Rating agencies, Bloomberg, NORD/LB Markets Strategy & Floor Research; ¹ based on Bloomberg ticker; ² Redemptions 2022: 11/22 – 12/22

Benchmark issuance volume¹



Korea

KB Financial Group

Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Ratings

	Rating	Outlook
Fitch	-	-
Moody's	A1	Stable
S&P	А	Stable

Homepage

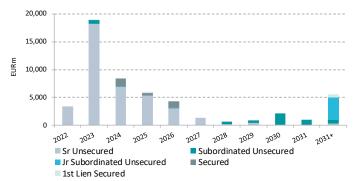
www.kbfg.de

KB Kookmin Bank (KBK; founded 1963) is headquartered in Seoul. Since 2008, it has been a wholly owned subsidiary of the KB Financial Group (Holding) and therefore part of one of the largest banking groups in South Korea. The Group is listed on the South Korean and New York stock exchanges, with its largest shareholders being the Korean National Pension Service (04 August 2022: 10.1%) and JPMorgan Chase Bank (6.5%). The Group has over 25,000 employees, who serve 36.3 million customers. In total, with its 13 subsidiaries, the Group covers all traditional banking services as well as services relating to the insurance, residential real estate and investment business. The Group, which is active around the world, focuses on the domestic market of South Korea and select international markets. KBK is the main operating unit of the Group and focuses on the retail and corporate banking, asset management, capital markets and trustee activities. Its market share for loans and deposits stands at 11% on the domestic market (December 2021). A total of 53.4% of the loan portfolio consists of loans to households (of which 54.2% are mortgages), while 46.6% is attributable to corporate loans, with more than 83% of these being awarded to SMEs. Since 2018, KBK has issued 16 sustainability bonds to support the group's ecological and social targets. The NPL ratio of the bank reduced by 8 basis points (bp) year on year to 0.20% (FY 2021), while the ratio of its subsidiary KB Kookmin Card fell by 6bp to 0.96%. With a CET1 ratio of 14.7% (FY 2021), the bank complies with the minimum regulatory requirements.

Balance Sheet

(EURm)	2020Y	2021Y	2022H1
Net Loans to Customers	283,799	308,919	321,415
Total Securities	123,605	128,291	132,754
Total Deposits	254,339	274,624	277,031
Tier 1 Common Capital	26,206	28,896	29,374
Total Assets	458,768	490,080	512,791
Total Risk-weighted Assets	197,075	214,749	227,134

Redemption Profile (Group)



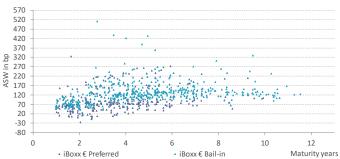
Company Ratios

	2020Y	2021Y	2022H1
Net Interest Margin	1.72	1.77	1.86
ROAE	8.65	9.57	11.49
Cost-to-Income	62.64	59.03	57.31
Core Tier 1 Ratio	13.30	13.46	12.93

Income Statement

(EURm)	2020Y	2021Y	2022H1
Net Interest Income	7,233	8,295	4,671
Net Fee & Commission Inc.	2,201	2,678	1,328
Net Trading Income	1,160	980	82
Operating Expense	7,264	7,735	4,146
Credit Commit. Impairment	776	875	342
Pre-tax Profit	3,556	4,492	2,746

Senior Unsecured Bonds (EUR BMK)



2020Y

2022H1

0.30 0.82

2021Y

11.49	IFRS Tier 1 Leverage Ratio	5.89	6.04
57.31	NPL/ Loans at Amortised Cost	0.40	0.32
12.93	Reserves/Loans at Amort. Cost	0.86	0.87
	Floor Development (12.40.2022)		

Source: Bloomberg, S&P Global Market Intelligence, NORD/LB Markets Strategy & Floor Research; as of: 13.10.2022

Strengths / Opportunities

- Capitalisation
- Credit quality (low level of corporate exposure)
- Funding profile

Risks / Weaknesses

Liquidity Coverage Ratio

- Liquidity situation
- Profitability
- Level of household debt in South Korea

Kookmin Bank – Mortgage

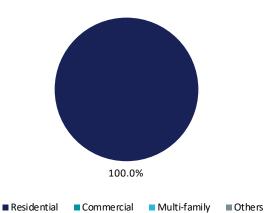
Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Cover Pool Data

Cover pool volume (EURm)	4,135
Amount outstanding (EURm)	1,500
-thereof \geq EUR 500m	100.0%
Current OC (nominal)	173.1%
Committed OC	173.1%
Cover type	Mortgage
Main country	100% South Korea
Main region	39% Gyeonggi
Number of loans	38,325
Number of borrowers	n/a
Avg. exposure to borrowers (EUR)	n/a
WAL (cover pool)	29.3y
WAL (covered bonds)	3.6у
Fixed interest (cover pool)	0.0%
Fixed interest (covered bonds)	100.0%
LTV (indexed)	37.6%
LTV (unindexed)	46.3%
Loans in arrears	0.0%

Rating (Moody's)	-
Rating (S&P)	AAA
Rating (Fitch)	AAA
Rating (DBRS)	-
ТРІ	-
TPI leeway	-
Collateral score	-
RRL	a+
JRL	a+
Unused notches	0
AAA credit risk (%)	3.06
PCU	6
Recovery uplift	2
Outstanding ESG BMKs	Yes
LCR ELIGIBLE	Yes
LCR level (Bmk)	2A
Risk weight	20%
Maturity structure (Bmk)	SB

Borrower Types

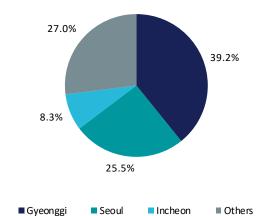


Spread Development

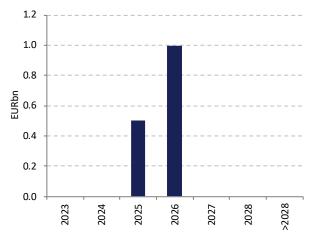


Source: Issuer, Rating agencies, Bloomberg, NORD/LB Markets Strategy & Floor Research

Regional Distribution



Redemption Profile (Bmk)





Korea



Hana Financial Group

Korea 🔅

Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Ratings*

	Rating	Outlook
Fitch	А	Stable
Moody's**	A1	Positive
S&P	A+	Stable

Homepage

www.kebhana.com

*KEB Hana Bank

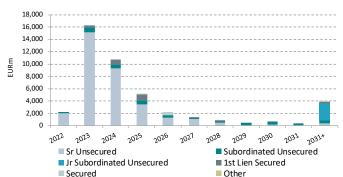
**Senior Unsecured

KEB Hana Bank (Hana Bank) is wholly owned by the South Korean Hana Financial Group and was established following a merger between Korea Exchange Bank (KEB) and Hana Bank in 2015. The Group is listed on the South Korean stock exchange, where the largest shareholder is the National Pension Service at 9.3% (04 August 2022). As part of the Hana Financial Group, Hana Bank offers its customers a wide range of financial products and services from the retail and commercial banking sectors. As at year-end 2021, the bank has a market share of around 10% for deposits and loans in South Korea. The bank has a branch network spanning 24 countries, where it serves a total of 21.7 million customers (FY 2021). In addition to its domestic market South Korea, it also focuses on the following regions: Europe, America, the Middle East and Asia-Pacific. In Q1 2022, Hana Bank's net income totalled KRW 667.1bn, equating to a share of 73.9% of the net income of the Hana Financial Group (KRW 902.2bn in Q1 2022). At 50.8% and 49.2% respectively (FY 2021), the loan portfolio is divided almost equally between the retail customers and corporates target groups. Loans to SMEs account for the lion's share of corporate loans at more than 86% (FY 2021), followed by loans to large businesses (11.3%). In comparison with the same period of the previous year, the NPL ratio reduced by 10 basis points to 0.24% in Q1 2022. The NPL coverage ratio stood at 179.2%. As at year-end 2021, Hana Bank registered a CET1 ratio of 15.1%, equating to an increase of 2.3 percentage points versus FY 2020 (12.8%).

Balance Sheet

(EURm)	2020Y	2021Y	2022H1
Net Loans to Customers	233,083	250,989	258,134
Total Securities	72,359	76,862	88,064
Total Deposits	181,717	192,742	-
Tier 1 Common Capital	20,460	22,147	22,950
Total Assets	346,260	370,899	406,507
Total Risk-weighted Assets	169,874	160,754	174,140

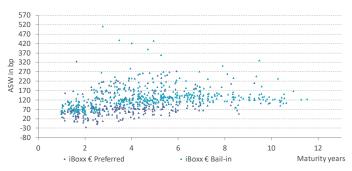
Redemption Profile



Income Statement

(EURm)	2020Y	2021Y	2022H1
Net Interest Income	4,791	5,494	3,111
Net Fee & Commission Inc.	1,141	1,287	681
Net Trading Income	1,155	700	189
Operating Expense	4,192	4,511	2,378
Credit Commit. Impairment	641	388	265
Pre-tax Profit	2,775	3,623	1,776

Senior Unsecured Bonds (EUR BMK)



Company Ratios

	2020Y	2021Y	2022H1
Net Interest Margin	1.56	1.65	1.72
ROAE	8.86	10.75	9.85
Cost-to-Income	55.03	52.93	53.68
Core Tier 1 Ratio	12.04	13.78	13.18

	2020Y	2021Y	2022H1
Liquidity Coverage Ratio	-	-	-
IFRS Tier 1 Leverage Ratio	6.19	6.16	5.91
NPL/ Loans at Amortised Cost	0.41	0.33	0.39
Reserves/Loans at Amort. Cost	0.57	0.56	0.61

Source: Bloomberg, S&P Global Market Intelligence, NORD/LB Markets Strategy & Floor Research; as of: 13.10.2022

Strengths / Opportunities

- Position on the domestic market
- Business in trade finance and FX segment
- Handling of credit risks

- Cross selling potential
- Private household debt
- Potential reputational risks

KEB Hana Bank – Mortgage

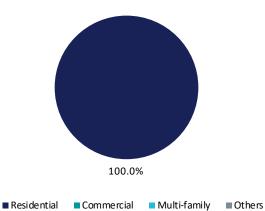
Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Cover Pool Data

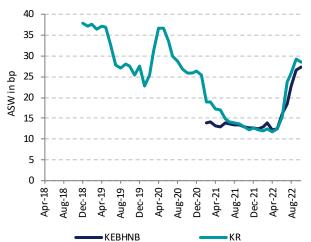
2,327
500
100.0%
372.1%
19.4%
Mortgage
100% South Korea
30% Gyeonggi
, 19,501
n/a
n/a
30.7y
3.4y
0.0%
100.0%
37.4%
52.6%
0.0%

Rating (Moody's)	-
Rating (S&P)	-
Rating (Fitch)	AAA
Rating (DBRS)	-
TPI	-
TPI leeway	-
Collateral score	-
RRL	-
JRL	-
Unused notches	-
AAA credit risk (%)	-
PCU	6
Recovery uplift	-
Outstanding ESG BMKs	Yes
LCR ELIGIBLE	Yes
LCR level (Bmk)	2A
Risk weight	20%
Maturity structure (Bmk)	SB

Borrower Types

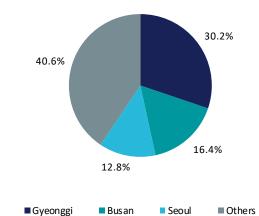


Spread Development

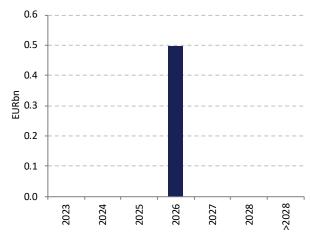


Source: Issuer, Rating agencies, Bloomberg, NORD/LB Markets Strategy & Floor Research

Regional Distribution



Redemption Profile (Bmk)





Korea 🔅

Korea Housing Finance Corporation

Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Ratings		
	Rating	Outlook
Fitch	AAu	Stable
Moody's	Aa2	Stable
S&P	AA	Stable

Homepage

www.hf.go.kr

The Korea Housing Finance Corporation (KHFC), established in March 2004, is a government institute. Its mission is to support the South Korean economy through the provision of real estate financing. KHFC divides its business into four segments: public mortgages, home financing guarantees, property-based pensions and mortgage-backed securities. KHCF employs more than 823 staff, who serve its customers in four regional headquarters, 25 departments and 28 branches across the country. KHFC sees itself as a partner for low to middle income families, and this commitment is particularly evident in the products on offer. KHFC issues "Bogeumjari Loans" and "Confirming Loans" as longterm mortgages with a term to maturity of at least 10 years and a fixed interest rate. This enables low to middle income households as well as vulnerable groups to obtain stable property financing without the risk of a change to the interest rate. The business is supplemented by the issue of guarantees in order to enable private individuals and professionals in the residential construction industry to secure loans from other institutes. Moreover, with a focus on older demographics, KHFC gives homeowners over the age of 55 the opportunity to use their own property as collateral for a life-long pension via the "Joo Taek Yeon Keum" (JTYK) construct. KHFC purchases mortgage loans from banks and issues mortgage-backed bonds and mortgage-backed securities on the capital market for refinancing purposes. In FY 2021, KHFC placed social covered bonds worth EUR 1.55bn as part of its social bond framework.

Balance Sheet

(EURm)	2019Y	2020Y	2021Y
Net Loans to Customers	94,915	105,957	112,229
Total Securities	1,207	1,729	2,341
Total Deposits	-	-	-
Tier 1 Common Capital	-	-	-
Total Assets	101,671	115,381	119,318
Total Risk-weighted Assets	-	-	-

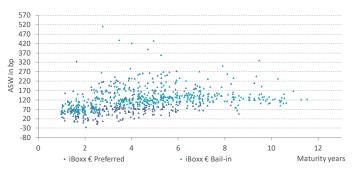
Redemption Profile



Income Statement (EURm)

	20191	20201	20211
Net Interest Income	482	435	462
Net Fee & Commission Inc.	-90	-77	-72
Net Trading Income	-42	-83	-153
Operating Expense	120	126	144
Credit Commit. Impairment	-	-	-
Pre-tax Profit	268	189	134

Senior Unsecured Bonds (EUR BMK)



Company Ratios

	2019Y	2020Y	2021Y
Net Interest Margin	0.49	0.41	0.40
ROAE	7.20	5.65	3.44
Cost-to-Income	30.33	39.61	50.60
Core Tier 1 Ratio	-	-	-

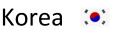
	2019Y	2020Y	2021Y
Liquidity Coverage Ratio	-	-	-
IFRS Tier 1 Leverage Ratio	-	-	-
NPL/ Loans at Amortised Cost	-	-	-
Reserves/Loans at Amort. Cost	0.05	0.05	0.05

Source: Bloomberg, S&P Global Market Intelligence, NORD/LB Markets Strategy & Floor Research; as of: 13.10.2022

Strengths / Opportunities

- Probability of state support (owners)
- Stable loan quality

- High leverage
- Concentration of the loan portfolio



KHFC – Mortgage (2018 Issue)

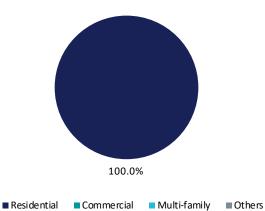
Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Cover Pool Data

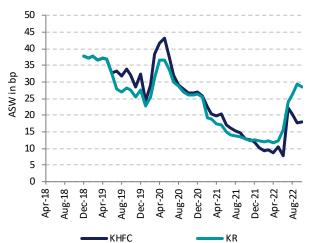
Cover pool volume (EURm)	520
Amount outstanding (EURm)	500
-thereof ≥ EUR 500m	100.0%
Current OC (nominal)	8.3%
Committed OC	3.0%
Cover type	Mortgage
Main country	100% South Korea
Main region	33% Gyeonggi
Number of loans	7,898
Number of borrowers	7,885
Avg. exposure to borrowers (EUR)	65,911
WAL (cover pool)	21.0y
WAL (covered bonds)	2.6y
Fixed interest (cover pool)	100.0%
Fixed interest (covered bonds)	100.0%
LTV (indexed)	32.8%
LTV (unindexed)	50.2%
Loans in arrears	0.0%

Rating (Moody's)	Aa1
Rating (S&P)	-
Rating (Fitch)	-
Rating (DBRS)	-
ТРІ	Improbable
TPI leeway	3
Collateral score	8.0%
RRL	-
JRL	-
Unused notches	-
AAA credit risk (%)	-
PCU	-
Recovery uplift	-
Outstanding ESG BMKs	Yes
LCR ELIGIBLE	Yes
LCR level (Bmk)	2A
Risk weight	20%
Maturity structure (Bmk)	HB

Borrower Types

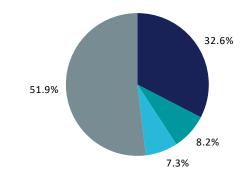


Spread Development



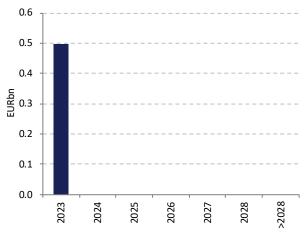
Source: Issuer, Rating agencies, Bloomberg, NORD/LB Markets Strategy & Floor Research

Regional Distribution



■ Gyeonggi ■ Northern Seoul ■ Southern Seoul ■ Others

Redemption Profile (Bmk)







KHFC – Mortgage (2019 Issue)

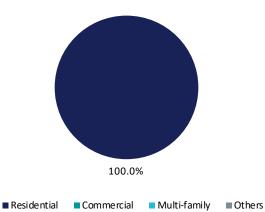
Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Cover Pool Data

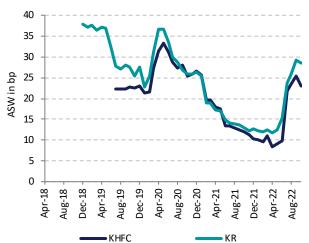
Cover pool volume (EURm)	556
Amount outstanding (EURm)	500
-thereof ≥ EUR 500m	100.0%
Current OC (nominal)	12.5%
Committed OC	6.0%
Cover type	Mortgage
Main country	100% South Korea
Main region	31% Gyeonggi
Number of loans	8,124
Number of borrowers	n/a
Avg. exposure to borrowers (EUR)	n/a
WAL (cover pool)	22.2y
WAL (covered bonds)	1.9y
Fixed interest (cover pool)	100.0%
Fixed interest (covered bonds)	100.0%
LTV (indexed)	35.6%
LTV (unindexed)	52.7%
Loans in arrears	0.0%

Rating (Moody's)	-
Rating (S&P)	AAA
Rating (Fitch)	-
Rating (DBRS)	-
TPI	-
TPI leeway	-
Collateral score	-
RRL	аа
JRL	аа
Unused notches	0
AAA credit risk (%)	5.08
PCU	-
Recovery uplift	-
Outstanding ESG BMKs	Yes
LCR ELIGIBLE	Yes
LCR level (Bmk)	2A
Risk weight	20%
Maturity structure (Bmk)	HB

Borrower Types

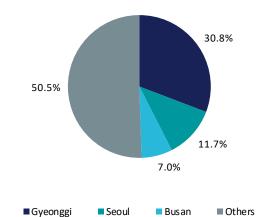


Spread Development

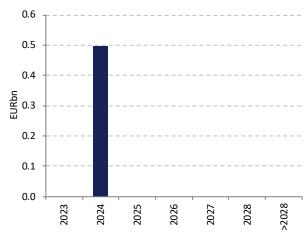


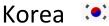
Source: Issuer, Rating agencies, Bloomberg, NORD/LB Markets Strategy & Floor Research

Regional Distribution



Redemption Profile (Bmk)





KHFC – Mortgage (2020/01 Issue)

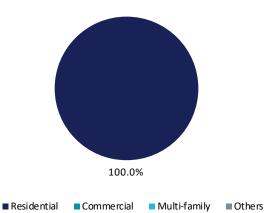
Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Cover Pool Data

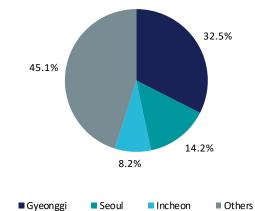
	1 112
Cover pool volume (EURm)	1,112
Amount outstanding (EURm)	1,000
-thereof ≥ EUR 500m	100.0%
Current OC (nominal)	15.9%
Committed OC	6.0%
Cover type	Mortgage
Main country	100% South Korea
Main region	33% Gyeonggi
Number of loans	14,125
Number of borrowers	n/a
Avg. exposure to borrowers (EUR)	n/a
WAL (cover pool)	22.6y
WAL (covered bonds)	2.5y
Fixed interest (cover pool)	100.0%
Fixed interest (covered bonds)	100.0%
LTV (indexed)	32.8%
LTV (unindexed)	50.0%
Loans in arrears	0.0%

Rating (Moody's)	-
Rating (S&P)	AAA
Rating (Fitch)	-
Rating (DBRS)	-
TPI	-
TPI leeway	-
Collateral score	-
RRL	аа
JRL	аа
Unused notches	0
AAA credit risk (%)	6.64
PCU	-
Recovery uplift	-
Outstanding ESG BMKs	Yes
LCR ELIGIBLE	Yes
LCR level (Bmk)	2A
Risk weight	20%
Maturity structure (Bmk)	HB

Borrower Types



Regional Distribution

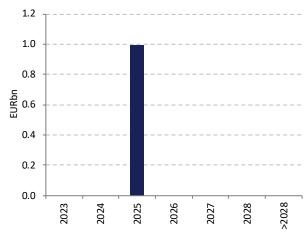


Spread Development



Source: Issuer, Rating agencies, Bloomberg, NORD/LB Markets Strategy & Floor Research

Redemption Profile (Bmk)



NORD/LB

Korea

(•)

KHFC – Mortgage (2020/02 Issue)

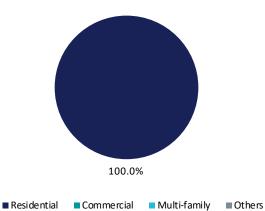
Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Cover Pool Data

Cover pool volume (EURm)	556
Amount outstanding (EURm)	550
-thereof ≥ EUR 500m	100.0%
Current OC (nominal)	11.3%
Committed OC	6.0%
Cover type	Mortgage
Main country	100% South Korea
Main region	28% Gyeonggi
Number of loans	7,961
Number of borrowers	n/a
Avg. exposure to borrowers (EUR)	n/a
WAL (cover pool)	22.7у
WAL (covered bonds)	2.9y
Fixed interest (cover pool)	100.0%
Fixed interest (covered bonds)	100.0%
LTV (indexed)	33.9%
LTV (unindexed)	51.1%
Loans in arrears	0.0%

Rating (Moody's)	-
Rating (S&P)	AAA
Rating (Fitch)	-
Rating (DBRS)	-
TPI	-
TPI leeway	-
Collateral score	-
RRL	аа
JRL	аа
Unused notches	0
AAA credit risk (%)	16.17
PCU	-
Recovery uplift	-
Outstanding ESG BMKs	Yes
LCR ELIGIBLE	Yes
LCR level (Bmk)	2A
Risk weight	20%
Maturity structure (Bmk)	HB

Borrower Types

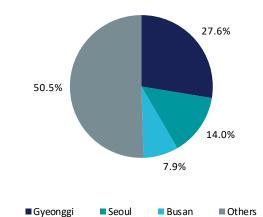


Spread Development

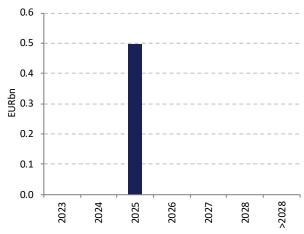


Source: Issuer, Rating agencies, Bloomberg, NORD/LB Markets Strategy & Floor Research

Regional Distribution











KHFC – Mortgage (2021/01 Issue)

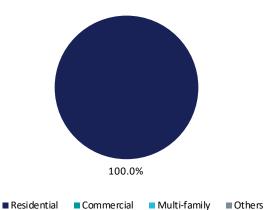
Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Cover Pool Data

Cover pool volume (EURm)	1,108
Amount outstanding (EURm)	1,000
-thereof ≥ EUR 500m	100.0%
Current OC (nominal)	10.3%
Committed OC	6.0%
Cover type	Mortgage
Main country	100% South Korea
Main region	36% Gyeonggi
Number of loans	9,194
Number of borrowers	n/a
Avg. exposure to borrowers (EUR)	n/a
WAL (cover pool)	26.8y
WAL (covered bonds)	3.9y
Fixed interest (cover pool)	100.0%
Fixed interest (covered bonds)	100.0%
LTV (indexed)	48.3%
LTV (unindexed)	57.5%
Loans in arrears	0.0%

Rating (Moody's)	-
Rating (S&P)	AAA
Rating (Fitch)	-
Rating (DBRS)	-
TPI	-
TPI leeway	-
Collateral score	-
RRL	аа
JRL	аа
Unused notches	0
AAA credit risk (%)	4.75
PCU	-
Recovery uplift	-
Outstanding ESG BMKs	Yes
LCR ELIGIBLE	Yes
LCR level (Bmk)	2A
Risk weight	20%
Maturity structure (Bmk)	HB

Borrower Types

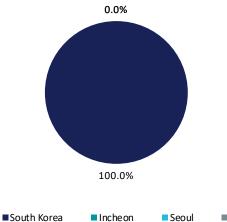


Spread Development

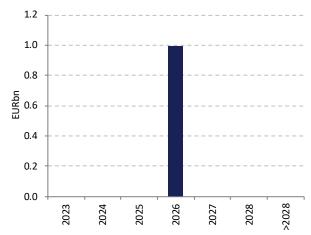


Source: Issuer, Rating agencies, Bloomberg, NORD/LB Markets Strategy & Floor Research

Regional Distribution



Redemption Profile (Bmk)





Korea

(•)

KHFC – Mortgage (2021/02 Issue)

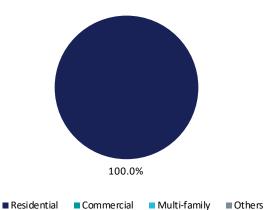
Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Cover Pool Data

Cover pool volume (EURm)	601
Amount outstanding (EURm)	550
-thereof ≥ EUR 500m	100.0%
Current OC (nominal)	8.1%
Committed OC	6.0%
Cover type	Mortgage
Main country	100% South Korea
Main region	30% Gyeonggi
Number of loans	9,785
Number of borrowers	n/a
Avg. exposure to borrowers (EUR)	n/a
WAL (cover pool)	21.6y
WAL (covered bonds)	6.2y
Fixed interest (cover pool)	100.0%
Fixed interest (covered bonds)	100.0%
LTV (indexed)	35.6%
LTV (unindexed)	50.4%
Loans in arrears	0.0%

Rating (Moody's)	-
Rating (S&P)	AAA
Rating (Fitch)	-
Rating (DBRS)	-
TPI	-
TPI leeway	-
Collateral score	-
RRL	аа
JRL	аа
Unused notches	0
AAA credit risk (%)	5.28
PCU	-
Recovery uplift	1
Outstanding ESG BMKs	Yes
LCR ELIGIBLE	Yes
LCR level (Bmk)	2A
Risk weight	20%
Maturity structure (Bmk)	HB

Borrower Types

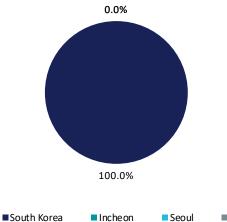


Spread Development

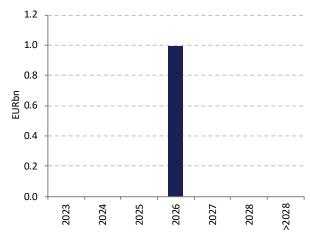


Source: Issuer, Rating agencies, Bloomberg, NORD/LB Markets Strategy & Floor Research

Regional Distribution



Redemption Profile (Bmk)







KHFC – Mortgage (2022/01 Issue)

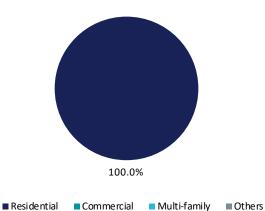
Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Cover Pool Data

Cover pool volume (EURm)	869
Amount outstanding (EURm)	600
S ()	
-thereof ≥ EUR 500m	100.0%
Current OC (nominal)	44.2%
Committed OC	6.0%
Cover type	Mortgage
Main country	100% South Korea
Main region	38% Gyeonggi
Number of loans	7,082
Number of borrowers	n/a
Avg. exposure to borrowers (EUR)	n/a
WAL (cover pool)	27.9y
WAL (covered bonds)	2.6y
Fixed interest (cover pool)	100.0%
Fixed interest (covered bonds)	100.0%
LTV (indexed)	51.8%
LTV (unindexed)	57.4%
Loans in arrears	0.0%

Rating (Moody's)	-
Rating (S&P)	AAA
Rating (Fitch)	-
Rating (DBRS)	-
TPI	-
TPI leeway	-
Collateral score	-
RRL	аа
JRL	аа
Unused notches	0
AAA credit risk (%)	5.29
PCU	-
Recovery uplift	-
Outstanding ESG BMKs	Yes
LCR ELIGIBLE	Yes
LCR level (Bmk)	2A
Risk weight	20%
Maturity structure (Bmk)	HB

Borrower Types

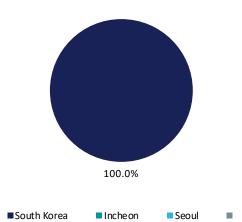


Spread Development

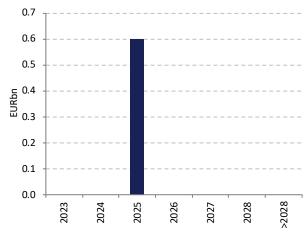


Source: Issuer, Rating agencies, Bloomberg, NORD/LB Markets Strategy & Floor Research

Regional Distribution



Redemption Profile (Bmk)



NORD/LB

Korea



KHFC – Mortgage (Covered Bond Programme)

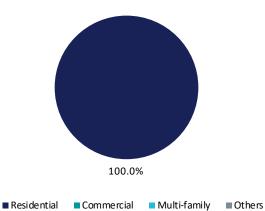
Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Cover Pool Data

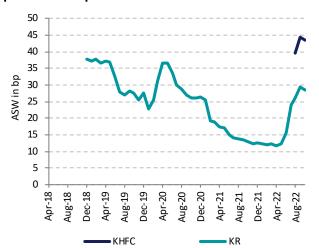
Cover pool volume (EURm)	649
	500
Amount outstanding (EURm)	
-thereof ≥ EUR 500m	100.0%
Current OC (nominal)	32.7%
Committed OC	14.5%
Cover type	Mortgage
Main country	100% South Korea
Main region	33% Gyeonggi
Number of loans	4,771
Number of borrowers	n/a
Avg. exposure to borrowers (EUR)	n/a
WAL (cover pool)	29.8y
WAL (covered bonds)	4.0y
Fixed interest (cover pool)	100.0%
Fixed interest (covered bonds)	100.0%
LTV (indexed)	57.5%
LTV (unindexed)	58.0%
Loans in arrears	0.0%

Rating (Moody's)	-
Rating (S&P)	AAA
Rating (Fitch)	-
Rating (DBRS)	-
TPI	-
TPI leeway	-
Collateral score	-
RRL	аа
JRL	аа
Unused notches	0
AAA credit risk (%)	2.5
PCU	-
Recovery uplift	-
Outstanding ESG BMKs	Yes
LCR ELIGIBLE	Yes
LCR level (Bmk)	2A
Risk weight	20%
Maturity structure (Bmk)	HB

Borrower Types

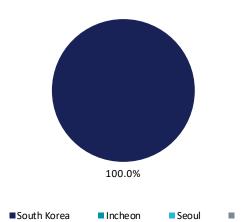


Spread Development

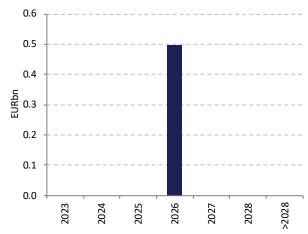


Source: Issuer, Rating agencies, Bloomberg, NORD/LB Markets Strategy & Floor Research

Regional Distribution



Redemption Profile (Bmk)





Korea

- **:**

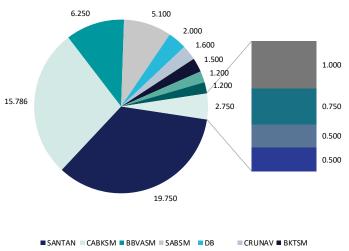
Spain

Market Overview Covered Bonds

Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

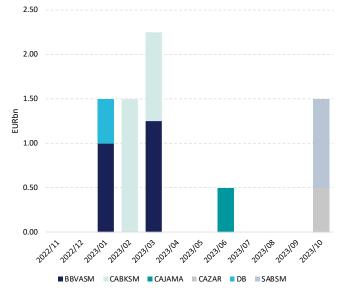
Cover Pool Volume	EUR 461.96bn	Outstanding volume (Bmk)	EUR 57.14bn
Amount outstanding	EUR 214.06bn	Number of benchmarks	50
Number of issuer	13	Outstanding ESG volume (Bmk)	EUR 3.30bn
No of cover pools	13	Number of ESG benchmarks	5
there of M / PS / others	13/0/0	Outstanding volume (SBmk)	-
Ratings (low / high)	AA+ / AAA	Number of subbenchmarks	-
Best possible LCR level	Level 1	Maturity types	HB, SB

Outstanding benchmark volume¹ (EURbn)

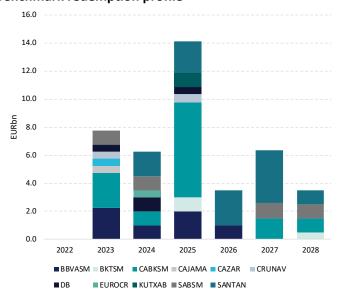


EUROCR EUCAJLN KUTXAB ABANCA CAJAMA CAZAR

Benchmark redemption profile¹: 11/2022 - 10/2023

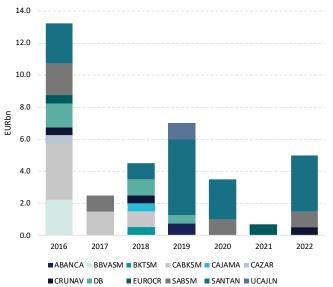


Benchmark redemption profile¹²



Source: Issuer, Rating agencies, Bloomberg, NORD/LB Markets Strategy & Floor Research; ¹ based on Bloomberg ticker; ² Redemptions 2022: 11/22 – 12/22

Benchmark issuance volume¹



ABANCA Corporación Bancaria, S.A.

Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Ratings Rating Outlook BBB-Stable Stable Moody's* Baa3 BBB-Stable Homepage www.abancacorporacionbanca ria.com *Senior Unsecured

ABANCA Corporación Bancaria, S.A. (formerly NCG Banco, ABANCA) was created in 2011 from the merger of several banks. ABANCA is a regional retail bank with a leading position in the north-west of Spain. In addition to retail customers, the group maintains a focus on SMEs, which it offers a wide range of financial services that includes insurance products and asset management. The Group has a network of 670 branches (H1 2022). Of these, 624 are located in Spain and 44 in Portugal, while the bank also operates representative offices and branches in a further nine countries around the world. The main shareholder of the Group is Juan Carlos Escotet Rodríguez. The private individual and owner of the Escotet Family Office S.L. holds 84.4% of shares (FY 2021). The Group is a market leader in Galicia for loans (June 2021: 36%) and deposits (46%), while its nationwide market share stands at 3%. The bank reports in the business segments Retail Banking (H1 2022: 61.8% of the pre-tax profit of the continued business areas), Wholesale Banking (17.5%) and Non-Financial Subsidiaries (20.7%). In FY 2021, ABANCA acquired the Spanish subsidiary of the Portuguese Novo Banco S.A. The lion's share of the funding mix consists of retail funding (H1 2022: 71%). The CET1 ratio stood at 12.5% (phased-in; H1 2022), while the MREL was 17.9%. In its action plan for responsible and sustainable banking, the Group has outlined various goals, including net zero carbon emissions in its operating business by 2024.

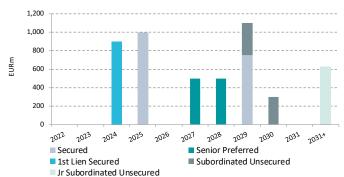
Balance Sheet

Fitch

S&P

(EURm)	2020Y	2021Y	2022H1
Net Loans to Customers	39,100	45,982	47,114
Total Securities	13,765	13,929	13,988
Total Deposits	46,393	54,256	55,213
Tier 1 Common Capital	4,088	4,251	4,116
Total Assets	67,417	80,497	80,329
Total Risk-weighted Assets	29,908	32,639	32,935

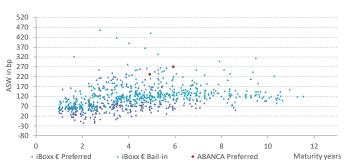
Redemption Profile



Income Statement

(EURm)	2020Y	2021Y	2022H1
Net Interest Income	643	674	349
Net Fee & Commission Inc.	234	258	142
Net Trading Income	247	127	24
Operating Expense	658	803	388
Credit Commit. Impairment	233	64	17
Pre-tax Profit	194	370	134

Senior Unsecured Bonds (EUR BMK)



Company Ratios

	2020Y	2021Y	2022H1	
Net Interest Margin	1.15	1.02	0.97	Liquidity Co
ROAE	3.38	7.03	4.67	IFRS Tier 1
Cost-to-Income	59.12	75.75	70.67	NPL/ Loans
Core Tier 1 Ratio	13.67	13.02	12.50	Reserves/Lo

L		2020Y	2021Y	2022H1
7	Liquidity Coverage Ratio	415.61	372.47	264.55
7	IFRS Tier 1 Leverage Ratio	6.15	5.34	5.20
7	NPL/ Loans at Amortised Cost	2.05	2.17	2.14
C	Reserves/Loans at Amort. Cost	1.64	1.81	1.74

Source: Bloomberg, S&P Global Market Intelligence, NORD/LB Markets Strategy & Floor Research; as of: 13.10.2022

Strengths / Opportunities

- Market position in Galicia
- Deposit basis
- Asset quality in comparison with peers

- Continued high share of DTAs •
- Concentration risk
- Profitability



ABANCA – Mortgage

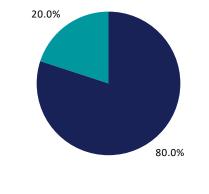
Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Cover Pool Data

Cover pool volume (EURm)	16,109
Amount outstanding (EURm)	2,990
-thereof \geq EUR 500m	25.1%
Current OC (nominal)	438.8%
Committed OC	25.0%
Cover type	Mortgage
Main country	86% Spain
Main region	45% Galicia
Number of loans	197,318
Number of borrowers	325,967
Avg. exposure to borrowers (EUR)	49,418
WAL (cover pool)	9.9y
WAL (covered bonds)	4.4y
Fixed interest (cover pool)	5.4%
Fixed interest (covered bonds)	66.6%
LTV (indexed)	n/a
LTV (unindexed)	53.5%
Loans in arrears	1.3%

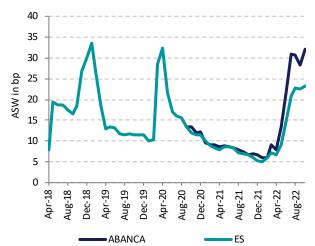
Rating (Moody's)	Aa1
Rating (S&P)	AA+
Rating (Fitch)	-
Rating (DBRS)	-
TPI	Probable
TPI leeway	1
Collateral score	11.6%
RRL	bbb+
JRL	а
Unused notches	1
AAA credit risk (%)	3.52
PCU	-
Recovery uplift	-
Outstanding ESG BMKs	No
LCR ELIGIBLE	Yes
LCR level (Bmk)	1
Risk weight	10%
Maturity structure (Bmk)	HB

Borrower Types



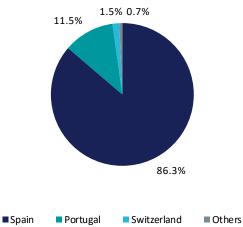
■ Residential ■ Commercial ■ Multi-family ■ Others

Spread Development

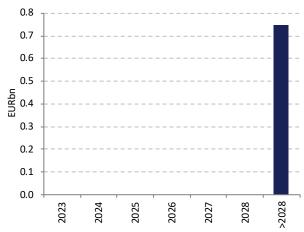


Source: Issuer, Rating agencies, Bloomberg, NORD/LB Markets Strategy & Floor Research

Regional Distribution



Redemption Profile (Bmk)



NORD/LB

Spain 💻

Banco de Sabadell

Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Ratings

	Rating	Outlook
Fitch	BBB-	Stable
Moody's*	Baa3	Stable
S&P	BBB-	Stable

Homepage

www.grupbancsabadell.com

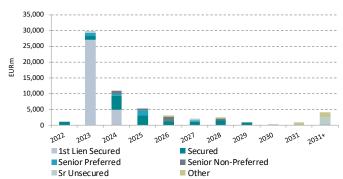
*Senior Unsecured

In terms of total assets, Banco de Sabadell, S.A., which comprises a number of banks, brands and subsidiaries, is the fourth-largest banking group in Spain (H1 2022: total assets worth EUR 257bn). Its shares are listed on the four Spanish stock exchanges. The institute, which has its headquarters in Alicante and employs 19,000 staff (H1 2022), operates a multi-brand strategy and, alongside its domestic market of Spain (Sabadell brand), also focuses on the UK (TSB brand) and Mexico (Sabadell brand). As such, around 12 million customers are served in more than 1,500 branches around the world. The banking group covers a broad spectrum of banking products in Spain and Mexico, although the TSB brand in the UK is restricted solely to the retail banking market. Geographically, the largest share of the loan portfolio is attributable to the domestic market Spain at 70% (H1 2022), followed by the UK at 28% and Mexico at 2%. In Spain, Sabadell boasts a market share of 8% for consumer loans and 8% for customer deposits (FY 2021). In a comparison with H1 2021, the NPL ratio has been reduced from 1.6% to 1.3% (H1 2022). The overwhelming majority of funding is obtained via deposits (FY 2021: 71%), followed by ECB refinancing (14%). Covered bonds constitute the main share of wholesale funding at 46% (FY 2021). Several green bonds have been issued since 2020 in connection with the sustainability strategy and the SDG framework (ICMA-compliant), with three of these bonds being in benchmark format (≥EUR 500 million). The green bond issuance volume up to the end of July 2022 therefore totalled EUR 1.99bn. The CET1 ratio of 12.48% (fully-loaded; H1 2022) exceeded the target outlined in its business plan.

Balance Sheet

(EURm)	2020Y	2021Y	2022H1
Net Loans to Customers	149,183	157,366	160,835
Total Securities	28,569	24,632	30,926
Total Deposits	151,270	162,239	164,619
Tier 1 Common Capital	9,911	10,080	10,151
Total Assets	235,763	251,947	257,229
Total Risk-weighted Assets	78,858	80,646	80,524

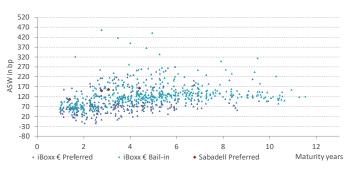
Redemption Profile



Income Statement

2020Y	2021Y	2022H1
3,399	3,425	1,757
1,350	1,468	729
201	344	83
3,334	3,075	1,465
1,745	960	394
-121	620	572
	3,399 1,350 201 3,334 1,745	3,3993,4251,3501,4682013443,3343,0751,745960

Senior Unsecured Bonds (EUR BMK)



Company Ratios

	2020Y	2021Y	2022H1
Net Interest Margin	1.58	1.48	1.47
ROAE	0.02	4.23	6.26
Cost-to-Income	70.77	60.86	59.14
Core Tier 1 Ratio	12.57	12.50	12.61

	2020Y	2021Y	2022H1
Liquidity Coverage Ratio	197.95	221.41	224.80
IFRS Tier 1 Leverage Ratio	4.32	4.07	4.03
NPL/ Loans at Amortised Cost	3.57	3.62	3.25
Reserves/Loans at Amort. Cost	2.02	2.06	1.82

Source: Bloomberg, S&P Global Market Intelligence, NORD/LB Markets Strategy & Floor Research; as of: 13.10.2022

Strengths / Opportunities

- Market position in Spain (esp. with SMEs)
- Liquidity buffer
- Reduction of balance sheet risks

- Continued high share of DTAs
- Profitability
- Earning situation in UK business



Banco de Sabadell – Mortgage

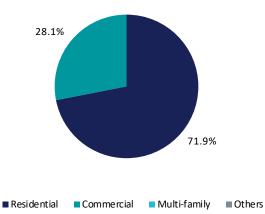
Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Cover Pool Data

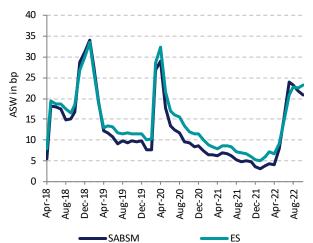
Cover pool volume (EURm)	43,589
Amount outstanding (EURm)	15,936
-thereof ≥ EUR 500m	32.0%
Current OC (nominal)	173.5%
Committed OC	25.0%
Cover type	Mortgage
Main country	100% Spain
Main region	37% Catalonia
Number of loans	439,250
Number of borrowers	n/a
Avg. exposure to borrowers (EUR)	n/a
WAL (cover pool)	9.5y
WAL (covered bonds)	3.5y
Fixed interest (cover pool)	51.6%
Fixed interest (covered bonds)	44.4%
LTV (indexed)	n/a
LTV (unindexed)	56.5%
Loans in arrears	2.9%

Rating (Moody's)	Aa1
Rating (S&P)	-
Rating (Fitch)	-
Rating (DBRS)	AAA
TPI	Probable
TPI leeway	1
Collateral score	14.6%
RRL	-
JRL	-
Unused notches	-
AAA credit risk (%)	-
PCU	-
Recovery uplift	-
Outstanding ESG BMKs	No
LCR ELIGIBLE	Yes
LCR level (Bmk)	1
Risk weight	10%
Maturity structure (Bmk)	HB

Borrower Types

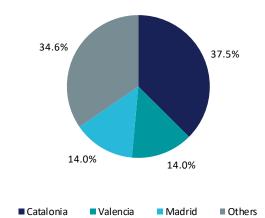


Spread Development

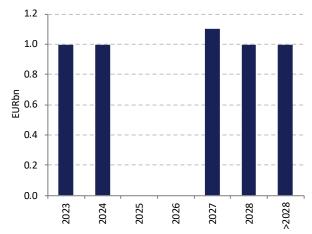


Source: Issuer, Rating agencies, Bloomberg, NORD/LB Markets Strategy & Floor Research

Regional Distribution



Redemption Profile (Bmk)









Banco Santander

Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Ratings

	Rating	Outlook
Fitch	A-	Stable
Moody's	A2	Stable
S&P	A+	Stable

Homepage

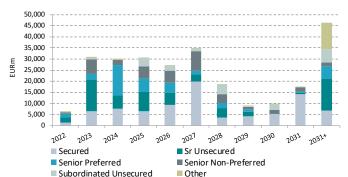
www.santander.com

As one of the largest financial groups in the world, Banco Santander (Santander) is a global systemically important bank (G-SIB; additional capital buffer: 1.0%). Its shares are traded on various stock exchanges around the world. The main shareholder is Vanguard Inc. (08 August 2022: 4.4% of shares). Around the world, nearly 157 million customers are served by approximately 200,600 employees at around 9,200 branches (H1 2022). The institute is the largest financial group in Spain as measured by assets (H1 2022: EUR 1.7 trillion). Group earnings are divided into the regions and primary segments of Europe (H1 2022: 31%), South America (33%) and North America (26%) in addition to the segment Digital Consumer Bank (10%). Secondary reporting is conducted across the segments of Retail Banking, Corporate & Investment Banking, Wealth Management & Insurance, Santander Global Platform and Corporate Center. Deposits account for the vast majority of the funding mix (H1 2022: 71%). The main components of the wholesale funding are senior debt (H1 2022: 62%) and covered bonds (23%). Banco Santander has outlined three strategic priorities for 2022: increased efficiency, profitability and sustainability of the banking business, expanding the global platform PagoNext and developing the largest online retail bank. As part of its sustainability strategy, the Group placed its third green bond in the form of a non-preferred senior bond (volume of EUR 1bn) in 2021. The bank complied with the regulatory requirements for key metrics such as the CET1 ratio (fullyloaded; H1 2022: 12.1%; requirement: 8.85%) and the MREL ratio (36.0%; requirement 32.5%).

Balance Sheet

(EURm)	2020Y	2021Y	2022H1
Net Loans to Customers	916,199	972,681	1,037,720
Total Securities	269,630	244,888	276,069
Total Deposits	849,310	918,344	973,787
Tier 1 Common Capital	69,399	72,402	74,091
Total Assets	1,508,249	1,595,838	1,722,840
Total Risk-weighted Assets	562,580	578,930	604,777

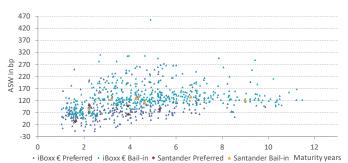
Redemption Profile (Group)



Income Statement

(EURm)	2020Y	2021Y	2022H1
Net Interest Income	31,994	33,370	18,409
Net Fee & Commission Inc.	10,015	10,501	5,852
Net Trading Income	2,187	1,564	743
Operating Expense	23,507	24,229	12,371
Credit Commit. Impairment	12,363	7,388	4,762
Pre-tax Profit	-2,076	14,547	7,915

Senior Unsecured Bonds (EUR BMK)



2020Y

161.99

4.88

3.60

2.61

2021Y

165.01

4.76

3.51

2.37

2022H1

161.23

4.55

3.40

2.27

Company Ratios

	2020Y	2021Y	2022H1	
Net Interest Margin	2.24	2.27	2.36	Liquidity Coverage Ratio
ROAE	-7.90	10.21	11.27	IFRS Tier 1 Leverage Ratio
Cost-to-Income	52.90	52.04	49.27	NPL/ Loans at Amortised Cost
Core Tier 1 Ratio	12.34	12.51	12.25	Reserves/Loans at Amort. Cost

Source: Bloomberg, S&P Global Market Intelligence, NORD/LB Markets Strategy & Floor Research; as of: 13.10.2022

Strengths / Opportunities

- Liquidity
- Geographical diversification
- **Retail business**

Risks / Weaknesses

- Dependency on wholesale funding
- Asset quality in comparison with peers
- Activities in higher-risk markets

NORD/LB



Banco Santander – Mortgage

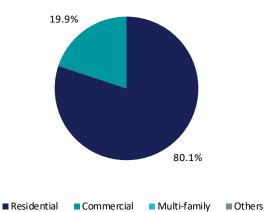
Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Cover Pool Data

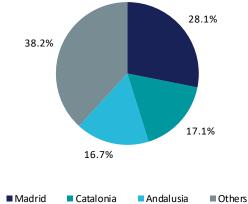
Cover pool volume (EURm)	80,899
Amount outstanding (EURm)	51,179
-thereof ≥ EUR 500m	38.6%
Current OC (nominal)	58.1%
Committed OC	25.0%
Cover type	Mortgage
Main country	100% Spain
Main region	28% Madrid
Number of loans	796,713
Number of borrowers	n/a
Avg. exposure to borrowers (EUR)	n/a
WAL (cover pool)	16.5y
WAL (covered bonds)	6.6y
Fixed interest (cover pool)	31.3%
Fixed interest (covered bonds)	67.9%
LTV (indexed)	n/a
LTV (unindexed)	59.2%
Loans in arrears	1.6%

Rating (Moody's)	Aa1
Rating (S&P)	-
Rating (Fitch)	AA
Rating (DBRS)	-
TPI	Probable
TPI leeway	2
Collateral score	13.6%
RRL	-
JRL	-
Unused notches	-
AAA credit risk (%)	-
PCU	0
Recovery uplift	-
Outstanding ESG BMKs	No
LCR ELIGIBLE	Yes
LCR level (Bmk)	1
Risk weight	10%
Maturity structure (Bmk)	HB & SB

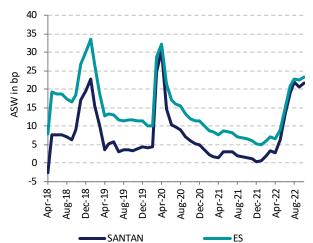
Borrower Types



Regional Distribution

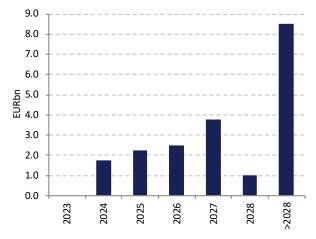


Spread Development



Source: Issuer, Rating agencies, Bloomberg, NORD/LB Markets Strategy & Floor Research

Redemption Profile (Bmk)



NORD/LB

Spain 💻

Bankinter

Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Ratings

	Rating	Outlook
Fitch	-	-
Moody's*	Baa1	Stable
S&P	BBB+	Stable

Homepage

www.bankinter.com

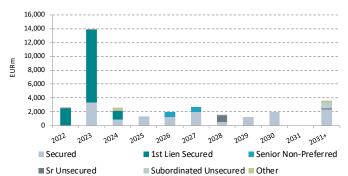
*Senior Unsecured

Bankinter, which was founded in 1965, is listed on the stock exchanges of Barcelona and Madrid. At just under 23.2%, Cartival is the largest shareholder, followed by Corporación Masaveu at 5.0% (08 August 2022). The Group consists of the parent company, Bankinter, and various subsidiaries, which mainly operate in the banking services, asset management and credit card sectors. The Group has more than 6,100 employees (Q1 2022) that offer customers a broad range of financial services. Since acquiring Evo Banco in 2020, Bankinter has also been represented outside of its domestic market of Spain, for example in Portugal (FY 2021: share of operating income 8%) and Ireland (3%). The largest portion of operating income at Bankinter is attributable to the segments Commercial Banking (FY 2021: 35.7%) and Corporate Banking (33.5%). Reporting also takes place in the main segments BKCF, BK Portugal, BK Ireland and Other businesses. In FY 2021, the demerger of Línea Directa Aseguradora (insurance provider) and its IPO was concluded. Following the IPO, Bankinter still holds 17.4% of the shares in its previously wholly owned subsidiary (08 August 2022). The bank integrates sustainability aspects into its business model and, according to its own information, is one of the most sustainable banks in the world. For example, in 2020, Bankinter placed an inaugural senior non-preferred green bond in benchmark format (EUR 750 million). In Q1 2022, the NPL ratio reduced by 17bp to 2.20% and registered a coverage ratio of 64.6%. The CET1 ratio (fully loaded) and MREL ratio are 11.9% and 21.4% respectively (as at Q1 2022), with both metrics therefore complying with the regulatory requirements of 7.726% and 18.7% respectively.

Balance Sheet

(EURm)	2020Y	2021Y	2022H1
Net Loans to Customers	63,217	66,282	69,951
Total Securities	11,816	12,481	13,478
Total Deposits	63,516	72,318	75,987
Tier 1 Common Capital	4,172	4,254	4,293
Total Assets	96,252	107,584	111,490
Total Risk-weighted Assets	33,954	35,303	36,225

Redemption Profile



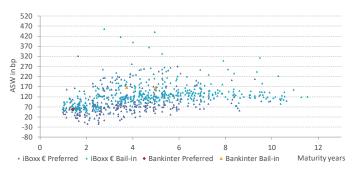
Company Ratios

	2020Y	2021Y	2022H1
Net Interest Margin	1.41	1.28	1.23
ROAE	6.64	27.09	11.19
Cost-to-Income	61.10	56.21	49.39
Core Tier 1 Ratio	12.29	12.05	11.85

Income Statement

(EURm)	2020Y	2021Y	2022H1
Net Interest Income	1,247	1,275	666
Net Fee & Commission Inc.	497	603	303
Net Trading Income	49	74	53
Operating Expense	1,034	1,036	473
Credit Commit. Impairment	426	263	107
Pre-tax Profit	231	537	374

Senior Unsecured Bonds (EUR BMK)



2020Y 2021Y 2022H1 Liquidity Coverage Ratio 178.54 229.57 230.04 IFRS Tier 1 Leverage Ratio 4.39 3.99 3.90 NPL/ Loans at Amortised Cost 2.67 2.56 2.44 1.43 1.47 1.45 Reserves/Loans at Amort, Cost

Source: Bloomberg, S&P Global Market Intelligence, NORD/LB Markets Strategy & Floor Research; as of: 13.10.2022

Strengths / Opportunities

- Franchise (high net-worth individuals, corporates)
- Profitability
- Asset quality

- Economic environment could impair asset quality
 - Loss of income from the sale of Línea Directa
 - Market position in a comparison with major national banks





Bankinter – Mortgage

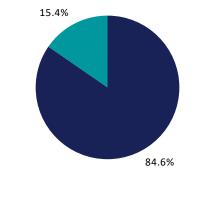
Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Cover Pool Data

Cover neel volume (FUDm)	22.000
Cover pool volume (EURm)	33,800
Amount outstanding (EURm)	15,712
-thereof ≥ EUR 500m	9.5%
Current OC (nominal)	115.1%
Committed OC	25.0%
Cover type	Mortgage
Main country	85% Spain
Main region	30% Madrid
Number of loans	285,406
Number of borrowers	n/a
Avg. exposure to borrowers (EUR)	n/a
WAL (cover pool)	10.1y
WAL (covered bonds)	4.0y
Fixed interest (cover pool)	30.9%
Fixed interest (covered bonds)	16.2%
LTV (indexed)	n/a
LTV (unindexed)	50.6%
Loans in arrears	1.0%

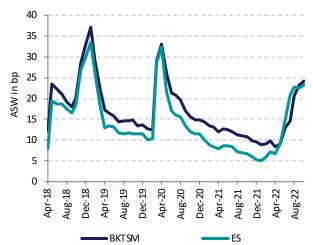
Rating (Moody's)	Aa1
Rating (S&P)	AA+
Rating (Fitch)	-
Rating (DBRS)	-
TPI	Probable
TPI leeway	2
Collateral score	9.6%
RRL	а
JRL	а
Unused notches	3
AAA credit risk (%)	3
PCU	-
Recovery uplift	-
Outstanding ESG BMKs	No
LCR ELIGIBLE	Yes
LCR level (Bmk)	1
Risk weight	10%
Maturity structure (Bmk)	HB

Borrower Types



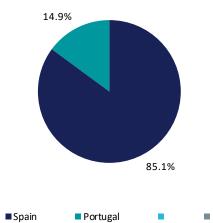
■ Residential ■ Commercial ■ Multi-family ■ Others



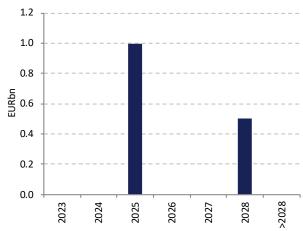


Source: Issuer, Rating agencies, Bloomberg, NORD/LB Markets Strategy & Floor Research

Regional Distribution



Redemption Profile (Bmk)







BBVA

NORD/LB

Spain 💻

Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Ratings

	Rating	Outlook
Fitch	BBB+	Stable
Moody's	A3	Stable
S&P	А	Stable

Homepage

www.bbva.com

In terms of assets, Banco Bilbao Vizcaya Argentaria S.A. (BBVA) is the second-largest banking group in Spain and is listed as a domestic systemically important bank (D-SIB) under direct ECB supervision. It has more than 112,400 employees, who serve a total of 85.1 million customers in more than 25 countries. The bank, which is listed on the stock exchange, boasts a leading position in Spain and is also the largest financial institute in Mexico. Moreover, BBVA has a strong franchise in both South America as well as in Turkey. Mexico generates the largest contribution to gross profit, at 42% (H1 2022), followed by Spain (26%), Turkey (12%) and South America (17%). BBVA reports in the following regionally focused segments: Spain, Mexico, Turkey and South America, in addition to Rest of Business. In addition to the geographical breakdown, BBVA also reports in the administrative segment Corporate Centre. A total of 45% of the loan portfolio consists of retail customers (Q1 2022), with 48% attributable to business customers, while the public sector accounts for 6%. In FY 2021, BBVA sold its entire USA business to the PNC Financial Services Group. The Group retains its US presence, particularly in the wholesale business, via its New York subsidiary. As part of its sustainability and climate protection goals, the Group has issued three green bonds (volume: EUR 3bn) and two social bonds (EUR 2bn) since 2018. As at H1 2022, the NPL ratio fell by 50 basis points to 3.7% yoy (H1 2021: 4.3%). With a CET1 ratio (fully loaded) of 12.7% (Q1 2022), the Group has both met the regulatory requirement of 8.6% and exceeded its own target of 11.5-12%.

Balance Sheet

(EURm)	2020Y	2021Y	2022H1
Net Loans to Customers	323,753	335,018	359,872
Total Securities	188,402	176,193	189,953
Total Deposits	353,026	367,441	388,068
Tier 1 Common Capital	42,931	39,949	41,563
Total Assets	733,797	662,885	715,294
Total Risk-weighted Assets	353,273	307,795	330,871

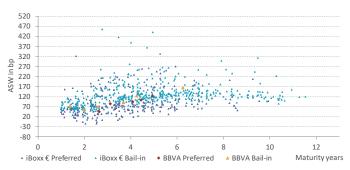
Redemption Profile



Income Statement

(EURm)	2020Y	2021Y	2022H1
Net Interest Income	14,592	14,686	8,551
Net Fee & Commission Inc.	4,109	4,741	2,650
Net Trading Income	1,535	1,893	1,095
Operating Expense	9,759	9,746	5,165
Credit Commit. Impairment	5,150	2,989	1,391
Pre-tax Profit	5,248	7,247	4,787

Senior Unsecured Bonds (EUR BMK)



Company Ratios

	2020Y	2021Y	2022H1
Net Interest Margin	2.37	2.39	2.62
ROAE	4.13	11.20	12.81
Cost-to-Income	46.63	45.33	47.98
Core Tier 1 Ratio	12.15	12.98	12.56

	2020Y	2021Y	2022H1
Liquidity Coverage Ratio	146.76	164.79	166.45
IFRS Tier 1 Leverage Ratio	6.24	6.38	6.21
NPL/ Loans at Amortised Cost	4.72	4.60	4.17
Reserves/Loans at Amort. Cost	3.74	3.37	3.23

Source: Bloomberg, S&P Global Market Intelligence, NORD/LB Markets Strategy & Floor Research; as of: 13.10.2022

Strengths / Opportunities

- Geographical diversification
- Profitability
- Liquidity situation

- Exposure to high-risk markets
- Profitability in mature markets
- Economic environment (Ukraine war)

BBVA – Mortgage

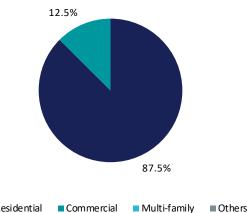
Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Cover Pool Data

Cover pool volume (EURm)	41,704
Amount outstanding (EURm)	29,945
-thereof ≥ EUR 500m	20.9%
Current OC (nominal)	39.3%
Committed OC	25.0%
Cover type	Mortgage
Main country	100% Spain
Main region	35% Catalonia
Number of loans	637,914
Number of borrowers	n/a
Avg. exposure to borrowers (EUR)	n/a
WAL (cover pool)	9.1y
WAL (covered bonds)	2.9y
Fixed interest (cover pool)	31.0%
Fixed interest (covered bonds)	26.5%
LTV (indexed)	47.9%
LTV (unindexed)	n/a
Loans in arrears	0.1%

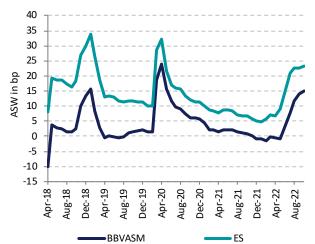
Rating (Moody's)	Aa1
Rating (S&P)	AA+
Rating (Fitch)	-
Rating (DBRS)	AAA
TPI	Probable
TPI leeway	2
Collateral score	10.2%
RRL	aa-
JRL	aa-
Unused notches	1
AAA credit risk (%)	3.05
PCU	-
Recovery uplift	-
Outstanding ESG BMKs	No
LCR ELIGIBLE	Yes
LCR level (Bmk)	1
Risk weight	10%
Maturity structure (Bmk)	HB

Borrower Types



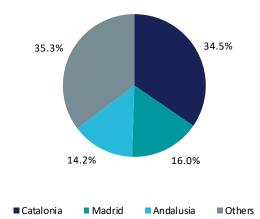
Residential Commercial Multi-family

Spread Development

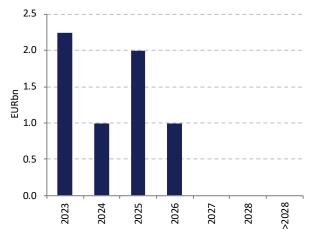


Source: Issuer, Rating agencies, Bloomberg, NORD/LB Markets Strategy & Floor Research

Regional Distribution



Redemption Profile (Bmk)





Spain 💻

CaixaBank

Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Ratings

	Rating	Outlook
Fitch	BBB+	Stable
Moody's	Baa1	Stable
S&P	A-	Stable

Homepage

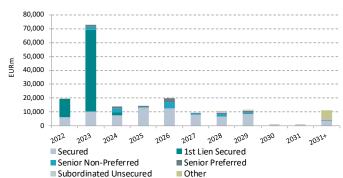
www.caixabank.com

CaixaBank (Caixa) is one of the leading banks in the European market and is active in the banking and insurance business. Following the merger with Bankia that was concluded in 2021, Caixa has become the third-largest bank on its domestic market of Spain with a balance sheet total of EUR 704bn (data as at H1 2022). The bank is listed on the stock exchanges in Barcelona, Madrid, Valencia and Bilbao. It is active throughout Spain as well as in Portugal via its wholly owned subsidiary Banco BPI. The main shareholders in the bank are Criteria Caixa (08 August 2022: 30.0%) and the Spanish government, which holds an indirect stake of 16.1%. It has 45,884 employees, who serve 20.4 million customers in around 4,551 branches (H1 2022). The bank has significant market shares on the Spanish market for loans and deposits. Caixa is a market leader in the long-term savings sector (investment funds, pension plans, insurance) with a market share of around 30% (H1 2022). As part of its SDG framework, the bank has also been active as an issuer of ESG bonds since 2019, having now placed four social bonds and four green bonds with a total volume of EUR 7.6bn. A total of 90% of the funding takes place via deposits, with the rest obtained via wholesale funding (Q1 2022). The NPL ratio declined from 3.6% (Q1 2021) to 3.5% (Q1 2022), with a coverage ratio of 65%. By 2024, the NPL ratio is set to drop to below 3%. In Q1 2022, the CET1 ratio fell by 30 basis points to 13.4% compared with yearend 2021 (FY 2020: 13.6%). According to Caixa, the merger with Bankia reduced the CET1 ratio by 83 basis points in FY 2021. Both the CET1 ratio and the MREL ratio (fully phased; Q1 2022: 25.7%) meet the regulatory requirements of 8.3% and 22.2% respectively.

Balance Sheet

(EURm)	2020Y	2021Y	2022H1
Net Loans to Customers	237,073	344,591	355,498
Total Securities	52 <i>,</i> 369	97,693	102,459
Total Deposits	245,167	392,479	428,404
Tier 1 Common Capital	18,938	27,701	26,338
Total Assets	451,520	680,036	704,505
Total Risk-weighted Assets	144,649	216,149	215,947

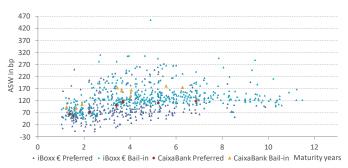
Redemption Profile



Income Statement

(EURm)	2020Y	2021Y	2022H1
Net Interest Income	4,900	5 <i>,</i> 975	3,156
Net Fee & Commission Inc.	2,576	3,705	1,994
Net Trading Income	238	220	247
Operating Expense	4,691	6,348	3,103
Credit Commit. Impairment	1,942	897	375
Pre-tax Profit	1,600	5,315	2,120

Senior Unsecured Bonds (EUR BMK)



Company Ratios

	2020Y	2021Y	2022H1
Net Interest Margin	1.48	1.13	1.10
ROAE	5.62	15.42	8.87
Cost-to-Income	55.52	61.30	54.57
Core Tier 1 Ratio	13.09	12.82	12.20

	2020Y	2021Y	2022H1
Liquidity Coverage Ratio	275.82	336.31	311.75
IFRS Tier 1 Leverage Ratio	4.25	4.14	3.78
NPL/ Loans at Amortised Cost	3.63	3.96	3.50
Reserves/Loans at Amort. Cost	2.31	2.34	2.13

Source: Bloomberg, S&P Global Market Intelligence, NORD/LB Markets Strategy & Floor Research; as of: 13.10.2022

Strengths / Opportunities

- Market position in Spain
- Liquidity
- Long-term advantages from the merger with Bankia

Risks / Weaknesses

- Asset quality
- Profitability
- Geographical concentration



NORD/LB

Spain

CaixaBank – Mortgage

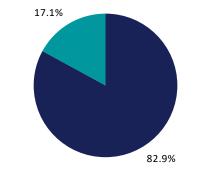
Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Cover Pool Data

Cover pool volume (EURm)	137,430
Amount outstanding (EURm)	69,188
-thereof ≥ EUR 500m	22.8%
Current OC (nominal)	98.6%
Committed OC	25.0%
Cover type	Mortgage
Main country	100% Spain
Main region	23% Catalonia
Number of loans	1,867,256
Number of borrowers	n/a
Avg. exposure to borrowers (EUR)	n/a
WAL (cover pool)	9.2y
WAL (covered bonds)	4.1y
Fixed interest (cover pool)	25.8%
Fixed interest (covered bonds)	33.3%
LTV (indexed)	n/a
LTV (unindexed)	56.7%
Loans in arrears	2.8%

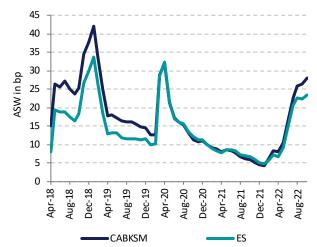
Rating (Moody's)	Aa1
Rating (S&P)	AA+
Rating (Fitch)	-
Rating (DBRS)	AAA
TPI	Probable
TPI leeway	2
Collateral score	11.8%
RRL	a+
JRL	a+
Unused notches	0
AAA credit risk (%)	6.44
PCU	-
Recovery uplift	2
Outstanding ESG BMKs	No
LCR ELIGIBLE	Yes
LCR level (Bmk)	1
Risk weight	10%
Maturity structure (Bmk)	HB

Borrower Types



■ Residential ■ Commercial ■ Multi-family ■ Others

Spread Development

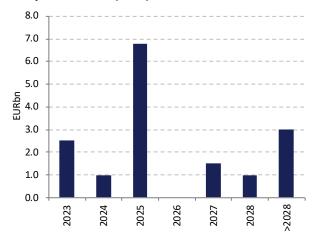


Source: Issuer, Rating agencies, Bloomberg, NORD/LB Markets Strategy & Floor Research

Regional Distribution



Redemption Profile (Bmk)



NORD/LB

Spain 💻

- **18**1

Spain

Grupo Cooperativo Cajamar

Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Ratings*		
	Rating	Outlook
Fitch	-	-
Moody's	-	-
S&P	BB	Positive
Homepa	ge	

www.cajamar.es

* Banco de Crédito Cooperativo This cooperative bank conducts its business operations under the name Cajamar Caja Rural, Sociedad Cooperativa de Crédito (Cajamar). Cajamar is a subsidiary of the Grupo Cooperativo Cajamar (GCC). The parent company of the Group is Banco de Crédito Cooperativo (BCC). The main shareholder of GCC is Cajamar (84.9% of the shares as at Q1 2022). Since 2009, as well as Cajamar, a further 18 banks have been part of the joint liability scheme (Institutional Protection Scheme, IPS), which guarantees the solvency and liquidity of the member institutes by way of mutual guarantees. As part of the IPS, the Group is liable for payment commitments of the individual member institutes. More than 5,260 employees serve 3.6 million clients (of whom more than 1.5 million are members of the cooperative) across 868 branches. The Group reports exclusively in the retail banking segment. Although Cajamar is a bank for all industries, its focus is on the agriculture and food industry (Q1 2022: 15% market share in Spain). BCC issues senior debt and hybrid capital, whilst Cajamar is responsible for issuing covered bonds. As the parent company and settlement unit, BCC recorded a CET1 ratio of 12.98% and a leverage ratio of 5.08% (fully loaded) as at H1 2022. The liquidity ratios LCR (H1 2022: 189.16%) and NSFR (133.891%) have also met the minimum requirement of 100% including a buffer. The NPL ratio improved from 4.15% in H1 2021 to 2.97% in H1 2022, with the coverage ratio now standing at 74.6%. We refer to the figures of Grupo Cooperativo Cajamar (GCC) in the table below.

Balance Sheet

2020Y	2021Y	2022H1
32,753	34,159	35,361
13,901	15,890	16,657
37,136	39,733	41,734
3,145	3,297	3,267
53,617	58,513	62,292
22,812	24,814	24,709
	32,753 13,901 37,136 3,145 53,617	32,753 34,159 13,901 15,890 37,136 39,733 3,145 3,297 53,617 58,513

Redemption Profile



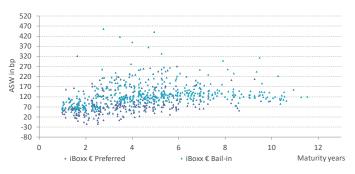
Company Ratios

	2020Y	2021Y	2022H1
Net Interest Margin	1.30	1.28	1.16
ROAE	0.71	1.80	2.75
Cost-to-Income	60.18	76.61	53.46
Core Tier 1 Ratio	13.79	13.29	13.22

Income Statement

(EURm)	2020Y	2021Y	2022H1
Net Interest Income	611	672	329
Net Fee & Commission Inc.	225	225	135
Net Trading Income	217	9	124
Operating Expense	616	645	303
Credit Commit. Impairment	314	307	122
Pre-tax Profit	23	78	56

Senior Unsecured Bonds (EUR BMK)



2021Y

230.37

5.67

3.88

2.69

2022H1

215.56

5.27

3.21

2.33

 2021Y
 2022H1
 2020Y

 1.28
 1.16
 Liquidity Coverage Ratio
 235.94

 1.80
 2.75
 IFRS Tier 1 Leverage Ratio
 5.91

 76.61
 53.46
 NPL/ Loans at Amortised Cost
 5.11

 13.29
 13.22
 Reserves/Loans at Amort. Cost
 2.92

Source: Bloomberg, S&P Global Market Intelligence, NORD/LB Markets Strategy & Floor Research; as of: 13.10.2022

Strengths / Opportunities

- Market position
- Deposit basis
- Capitalisation

- Geographical concentration risks
- Loan quality compared with peers
- Profitability

Cajamar Caja Rural – Mortgage

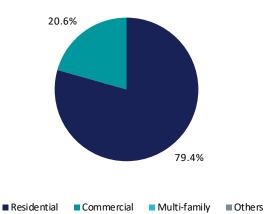
Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Cover Pool Data

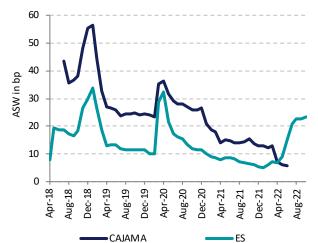
Cover pool volume (EURm)	13,061
Amount outstanding (EURm)	5,000
-thereof \geq EUR 500m	10.0%
Current OC (nominal)	161.2%
Committed OC	n/a
Cover type	Mortgage
Main country	100% Spain
Main region	33% Andalusia
Number of loans	176,392
Number of borrowers	162,341
Avg. exposure to borrowers (EUR)	80,454
WAL (cover pool)	11.0y
WAL (covered bonds)	5.2y
Fixed interest (cover pool)	14.8%
Fixed interest (covered bonds)	100.0%
LTV (indexed)	n/a
LTV (unindexed)	52.5%
Loans in arrears	4.5%

Rating (Moody's)	-
Rating (S&P)	AA
Rating (Fitch)	-
Rating (DBRS)	-
TPI	-
TPI leeway	-
Collateral score	-
RRL	bbb-
JRL	a-
Unused notches	0
AAA credit risk (%)	-
PCU	-
Recovery uplift	-
Outstanding ESG BMKs	No
LCR ELIGIBLE	Yes
LCR level (Bmk)	1
Risk weight	10%
Maturity structure (Bmk)	HB

Borrower Types

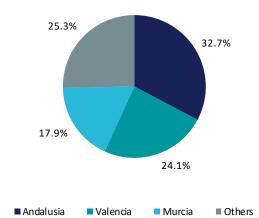


Spread Development

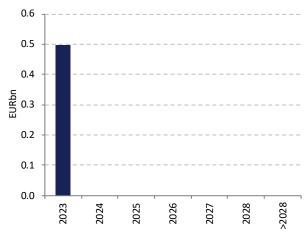


Source: Issuer, Rating agencies, Bloomberg, NORD/LB Markets Strategy & Floor Research

Regional Distribution



Redemption Profile (Bmk)





Spain 💻

Eurocaja Rural

Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Ratings

_		
	Rating	Outlook
Fitch	BBB	Stable
Moody's	-	-
S&P	-	-

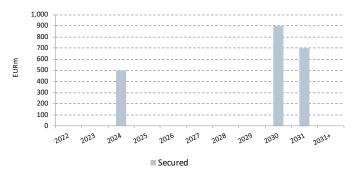
Homepage

www.eurocajarural.es

Eurocaja Rural, SCC (Eurocaja) was previously known as Caja Rural de Castilla-La Mancha before taking its current name in April 2018. It is a not-for-profit establishment with its own legal entity and has full legal capacity, acting as a foundation and issuer of social security. Having originally been founded in 1963 in order to meet the financial needs of the regional agricultural sector, today Eurocaja is a universal bank that primarily focuses on retail customers and SMEs. Via its subsidiaries, the bank also offers services as a property agent and insurance broker. Headquartered in Toledo, the bank has around 1,000 employees and operates a network of over 400 branches. Eurocaja defines the region of Castilla-La Mancha as its home market, where it boasts a market share of 11% in the deposit business and 8% for lending (data as at June 2021). However, the bank is also active in the Madrid metropolitan region, Ávila, the Valencian Community and in Murcia. In future, the bank will strive to achieve stronger growth beyond the borders of its core market. At national level, Eurocaja's market share is less than 1% (December 2020). The vast majority of the bank's loan portfolio comprises private mortgage loans (Q1 2021: 65%). In a national comparison, Eurocaja has a low NPL ratio (FY 2021: 1.72%), which is attributable to its conservative risk policy. As part of its sustainability strategy and taking account of the adopted ESG framework, Eurocaja issued a sustainable mortgage bond in the amount of EUR 700m in 2021. The minimum requirement for the CET1 ratio of 8.38% was determined by the Spanish central bank, Banco de España. At a value of 17.2% in FY 2021, this minimum requirement was exceeded.

Balance Sheet			
(EURm)	2019Y	2020Y	2021Y
Net Loans to Customers	4,542	4,945	4,576
Total Securities	2,528	3,135	2,663
Total Deposits	5,790	6,373	6,627
Tier 1 Common Capital	475	506	533
Total Assets	7,921	8,761	9,080
Total Risk-weighted Assets	2,763	3,074	3,106

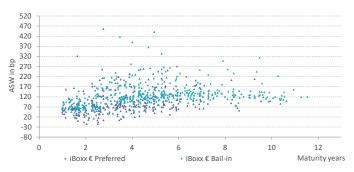
Redemption Profile



Income Statement

2021Y
83
46
9
86
-
45

Senior Unsecured Bonds (EUR BMK)



Company Ratios

2019Y	2020Y	2021Y	
1.20	1.06	0.94	Liqu
8.12	7.01	7.48	IFRS
59.49	66.06	63.97	NPL
17.19	16.47	17.15	Res
	1.20 8.12 59.49	1.20 1.06 8.12 7.01 59.49 66.06	1.20 1.06 0.94 8.12 7.01 7.48 59.49 66.06 63.97

	2019Y	2020Y	2021Y
Liquidity Coverage Ratio	388.62	289.00	277.78
IFRS Tier 1 Leverage Ratio	6.01	5.79	5.88
NPL/ Loans at Amortised Cost	1.93	1.72	1.75
Reserves/Loans at Amort. Cost	2.42	2.19	2.22

Source: Bloomberg, S&P Global Market Intelligence, NORD/LB Markets Strategy & Floor Research; as of: 13.10.2022

Strengths / Opportunities

- Asset quality in a sector comparison
- Capitalisation
- Regional franchise

- Economic environment
- Capital generation capacity
- Profitability





Eurocaja – Mortgage

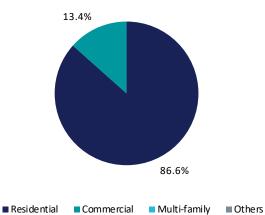
Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Cover Pool Data

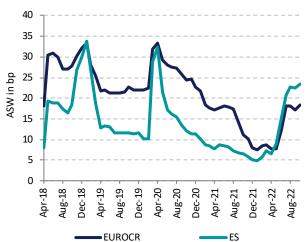
Cover pool volume (EURm)	3,441
Amount outstanding (EURm)	1,200
-thereof ≥ EUR 500m	100.0%
Current OC (nominal)	186.7%
Committed OC	25.0%
Cover type	Mortgage
Main country	100% Spain
Main region	51% Castila-La Mancha
Number of loans	39,311
Number of borrowers	n/a
Avg. exposure to borrowers (EUR)	n/a
WAL (cover pool)	12.4y
WAL (covered bonds)	6.2y
Fixed interest (cover pool)	19.4%
Fixed interest (covered bonds)	100.0%
LTV (indexed)	n/a
LTV (unindexed)	59.0%
Loans in arrears	1.2%

Rating (Fitch)	-
Rating (DBRS)	-
TPI	Probable
TPI leeway	Unpublished
Collateral score	9.4%
RRL	-
JRL	-
Unused notches	-
AAA credit risk (%)	-
PCU	-
Recovery uplift	2
Outstanding ESG BMKs	Yes
LCR ELIGIBLE	Yes
LCR level (Bmk)	1
Risk weight	10%
Maturity structure (Bmk)	HB

Borrower Types



Spread Development

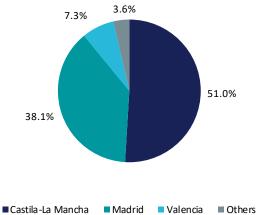


Source: Issuer, Rating agencies, Bloomberg, NORD/LB Markets Strategy & Floor Research

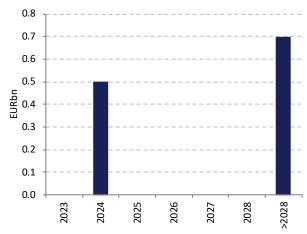
Regional Distribution

Rating (Moody's)

Rating (S&P)



Redemption Profile (Bmk)







Aa1

Caja Rural de Navarra

Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Ratings

	Rating	Outlook
Fitch	BBB+	Stable
Moody's*	Baa1	Stable
S&P		-

Homepage

www.cajaruraldenavarra.com

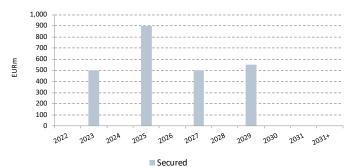
*LT Bank Deposits

Founded in 1910, Caja Rural de Navarra, Sociedad Cooperativa de Crédito (CRN) is a regional cooperative bank with just under 950 employees and more than 250 branches. The bank focuses primarily on the region of Navarre, where it boasts high market shares for loans (FY 2021: 28.1%) and deposits (30.0%). It also operates in the neighbouring regions of La Rioja and the Basque Country. In geographical terms, around 90% of the loan portfolio is attributable to the regions of Navarre and the Basque Country. The owners of this cooperative bank are its 178,000 members. CRN is the third-largest cooperative bank in Spain as measured by total assets (FY 2021: EUR 16.3bn). Alongside 29 other cooperative banks, CRN is part of Banco Cooperativo Español S.A (an association of cooperative banks), which in turn is 88% owned by the Grupo Caja Rural. Together, these 30 cooperative banks have started an institutional protection scheme. This fund, which is financed by paid-in capital from the cooperative banks, aims to safeguard the financial stability of its members in addition to improving their respective risk profiles. The bank focuses its business activities on retail banking and SMEs. In connection with its Sustainability Framework, CRN has issued three sustainable bonds and one green bond since 2016, with an overall volume of EUR 1.6bn. In February 2022, CRN placed its inaugural green covered bond with a term to maturity of 7 years and a volume of EUR 500m. Capital metrics including the CET1 ratio (fully loaded; FY 2021: 18.1%) and the MREL ratio (18.7%) fulfilled the regulatory requirements of 7.6% and 15.2% respectively.

Balance Sheet

(EURm)	2019Y	2020Y	2021Y
Net Loans to Customers	8,177	9,314	9,446
Total Securities	3,959	4,648	5,093
Total Deposits	8,729	10,198	10,261
Tier 1 Common Capital	1,218	1,317	1,425
Total Assets	13,133	15,850	16,333
Total Risk-weighted Assets	7,255	7,202	7,613

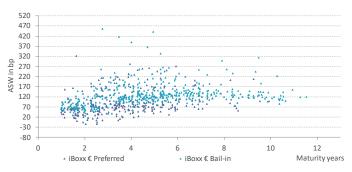
Redemption Profile



Income Statement (EURm)

2019Y	2020Y	2021Y
144	147	141
68	69	83
7	1	3
174	110	192
-	-	-
109	99	102
	144 68 7 174	144 147 68 69 7 1 174 110

Senior Unsecured Bonds (EUR BMK)



Company Ratios

	2019Y	2020Y	2021Y
Net Interest Margin	1.18	1.05	0.90
ROAE	8.24	6.67	6.52
Cost-to-Income	58.54	38.14	61.99
Core Tier 1 Ratio	16.79	18.28	18.72

	2019Y	2020Y	2021Y
Liquidity Coverage Ratio	369.95	391.10	332.40
IFRS Tier 1 Leverage Ratio	9.28	8.31	8.77
NPL/ Loans at Amortised Cost	1.99	1.90	1.90
Reserves/Loans at Amort. Cost	1.56	2.15	2.20

Source: Bloomberg, S&P Global Market Intelligence, NORD/LB Markets Strategy & Floor Research; as of: 13.10.2022

Strengths / Opportunities

- Capitalisation
- Funding profile
- Loan quality in a sector comparison

- Economic environment could impair asset quality
 - Diversification of funding instruments
 - Profitability



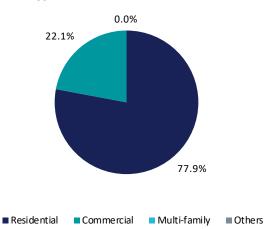
Caja Rural de Navarra – Mortgage

Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

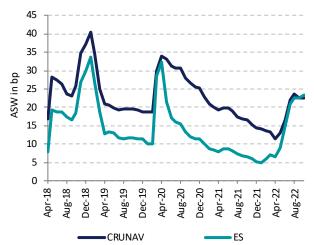
Cover Pool Data

Cover pool volume (EURm)	5,401
Amount outstanding (EURm)	2,450
-thereof ≥ EUR 500m	65.3%
Current OC (nominal)	120.4%
Committed OC	25.0%
Cover type	Mortgage
Main country	100% Spain
Main region	47% Basque Country
Number of loans	49,114
Number of borrowers	n/a
Avg. exposure to borrowers (EUR)	n/a
WAL (cover pool)	10.3y
WAL (covered bonds)	3.9y
Fixed interest (cover pool)	33.0%
Fixed interest (covered bonds)	100.0%
LTV (indexed)	n/a
LTV (unindexed)	60.0%
Loans in arrears	0.9%

Borrower Types



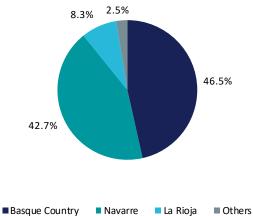
Spread Development



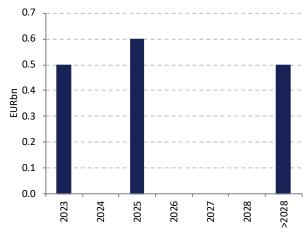
Source: Issuer, Rating agencies, Bloomberg, NORD/LB Markets Strategy & Floor Research

Rating (Moody's) Aa1 Rating (S&P) Rating (Fitch) Rating (DBRS) _ TPI Probable **TPI** leeway 2 Collateral score 12.7% RRL _ JRL Unused notches AAA credit risk (%) PCU Recovery uplift _ **Outstanding ESG BMKs** Yes LCR ELIGIBLE Yes LCR level (Bmk) 1 **Risk weight** 10% Maturity structure (Bmk) ΗB

Regional Distribution



Redemption Profile (Bmk)



NORD/LB





Deutsche Bank S.A.E.

Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Ratings

_	Rating	Outlool
Fitch	-	-
Moody's	-	-
S&P	-	-
Homepa	ge	

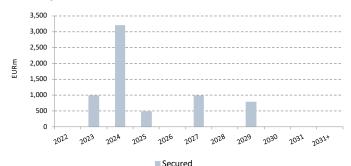
www.deutsche-bank.es

Deutsche Bank Sociedad Anónima Española (DB S.A.E.) is headquartered in Madrid and has been operating in the Spanish market since 1993 under its brand. The institute is one of the largest foreign banks in Spain. Deutsche Bank AG owns 100% of DB S.A.E. (FY 2021), making both the bank itself and its subsidiaries part of the globally operating Deutsche Bank Group. DB S.A.E. employs around 2,300 staff, who serve approximately 650,000 customers across 158 branches (FY 2021) in addition to 50 business centres and consulting offices. In geographical terms, the bank primarily focuses on the regions of Catalonia, Madrid, Valencia and Andalusia. As at year-end 2021, total assets amounted to over EUR 18.1bn (FY 2020: EUR 18.3bn). The universal bank divides its activities into the business segments of International Private Bank (IPB), Corporate Bank (CB) and Investment Bank. Asset management services in Spain are offered via a DWS subsidiary. In the Private Banking segment, the bank has a market share of around 20% and serves more than 27,000 corporates and over 6,900 SMEs. The bank received EUR 988m (FY 2020: EUR 965m) from its parent company as part of group financing, as well as other specific intragroup funds to comply with regulatory capital requirements, in particular the MREL. Furthermore, DB S.A.E. is an active issuer of bonds on the capital market. In FY 2021, the CET1 ratio fell by 38 basis points year on year to 9.98% (FY 2020: 10.36%), although this value was still in excess of the regulatory requirement of 7.0%.

Balance Sheet

(EURm)	2020Y	2021Y	2022H1
Net Loans to Customers	13,543	14,222	15,029
Total Securities	554	281	676
Total Deposits	9,930	10,095	10,846
Tier 1 Common Capital	1,121	1,109	1,103
Total Assets	18,324	18,109	19,779
Total Risk-weighted Assets	10,821	11,106	11,496

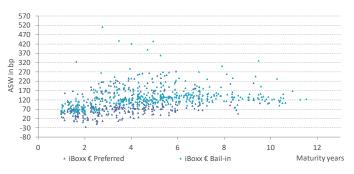
Redemption Profile



Income Statement

(EURm)	2020Y	2021Y	2022H1
Net Interest Income	238	268	129
Net Fee & Commission Inc.	257	243	119
Net Trading Income	5	6	10
Operating Expense	402	430	201
Credit Commit. Impairment	80	70	48
Pre-tax Profit	-7	-12	-6

Senior Unsecured Bonds (EUR BMK)



Company Ratios

	2020Y	2021Y	2022H1
Net Interest Margin	1.35	1.50	1.41
ROAE	-0.45	-0.88	-0.89
Cost-to-Income	84.94	89.22	82.60
Core Tier 1 Ratio	10.36	9.98	9.59

	2020Y	2021Y	2022H1
Liquidity Coverage Ratio	-	-	-
IFRS Tier 1 Leverage Ratio	6.25	6.19	5.79
NPL/ Loans at Amortised Cost	-	-	-
Reserves/Loans at Amort. Cost	2.44	2.51	2.38

Source: Bloomberg, S&P Global Market Intelligence, NORD/LB Markets Strategy & Floor Research; as of: 13.10.2022

Strengths / Opportunities

- Integration in the Deutsche Bank Group
- Regional market position

- Geographical diversification
- Economic environment may impair asset quality





Deutsche Bank S.A.E. – Mortgage

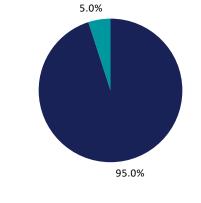
Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Cover Pool Data

Cover need volume (FLIPm)	7 500
Cover pool volume (EURm)	7,500
Amount outstanding (EURm)	5,350
-thereof ≥ EUR 500m	37.4%
Current OC (nominal)	40.2%
Committed OC	25.0%
Cover type	Mortgage
Main country	100% Spain
Main region	30% Barcelona
Number of loans	77,194
Number of borrowers	n/a
Avg. exposure to borrowers (EUR)	n/a
WAL (cover pool)	20.3y
WAL (covered bonds)	3.1y
Fixed interest (cover pool)	12.8%
Fixed interest (covered bonds)	40.0%
LTV (indexed)	n/a
LTV (unindexed)	51.0%
Loans in arrears	1.8%

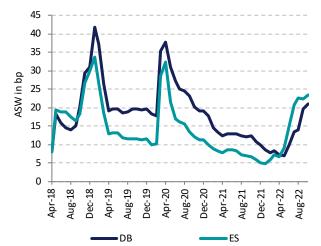
Rating (Moody's)	Aa1
Rating (S&P)	-
Rating (Fitch)	-
Rating (DBRS)	-
ТРІ	Probable
TPI leeway	Unpublished
Collateral score	6.3%
RRL	-
JRL	-
Unused notches	-
AAA credit risk (%)	-
PCU	-
Recovery uplift	-
Outstanding ESG BMKs	No
LCR ELIGIBLE	Yes
LCR level (Bmk)	1
Risk weight	10%
Maturity structure (Bmk)	HB

Borrower Types



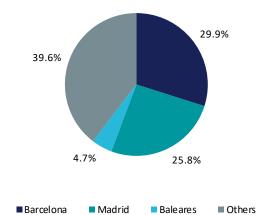
Residential Commercial Multi-family Others

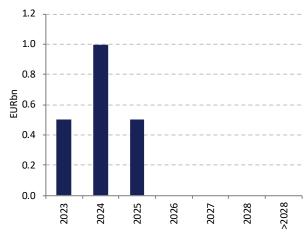
Spread Development



Source: Issuer, Rating agencies, Bloomberg, NORD/LB Markets Strategy & Floor Research

Regional Distribution









Ibercaja Banco

Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Ratings

	Rating	Outlook
Fitch	BBB-	Stable
Moody's*	Ba1	Stable
S&P	BB+	Stable

Homepage

www.ibercaja.com

*LT Bank Deposits

Ibercaja Banco S.A. (Ibercaja) was formed in 2011 as a spin-off from the banking business of Caja de Ahorros y Monte de Piedad de Zaragoza, Aragón y Rioja. As a universal bank, Ibercaja employs more than 4,800 staff, who serve a total of 2.6 million customers. With a share of 85% (FY 2021) in the loans and receivables of the bank, private individuals and SMEs form the most important customer groups for Ibercaja. As a part of the Fundación Bancaria Ibercaja (BI), the bank offers its customer services in the areas of insurance, leasing and investments as well. BI is the main shareholder of Ibercaja with a stake of 88.0%. The group defines its home market as the regions of Aragón, La Rioja, Guadalajara, Burgos and Badajoz, where it boasts significant market shares in the areas of loans and deposits (approximately 27% in each case; FY 2021). Alongside its home market, the Group operates in many other regions of Spain too. At national level, Ibercaja has a market share of around 2.5% for the lending business and 3.5% for deposits (June 2021). In January 2022, the Group announced that it was seeking to list Ibercaja on the Spanish stock exchanges. This plan was postponed at the end of January 2022 due to high volatility on the capital markets until a relative normalisation occurs. Retail funding accounts for 79% of the funding mix at Ibercaja as at Q1 2022. Over the medium term, the bank is applying the following benchmark values to gauge the success of its strategic alignment: a CET1 ratio (fully loaded; Q1 2022: 12.5%) of 12.5%, an NPL ratio (Q1 2022: 2.1%) of around 2.5% and an NPL coverage ratio (51.6%) of in excess of 65%. The LCR stood at 430% and the NSFR was 152%.

Balance Sheet

(EURm)	2020Y	2021Y	2022H1
Net Loans to Customers	30,942	30,655	31,584
Total Securities	16,506	18,188	18,479
Total Deposits	37,881	38,268	39,176
Tier 1 Common Capital	2,485	2,420	2,333
Total Assets	58,401	58,631	60,363
Total Risk-weighted Assets	18,248	18,052	18,227

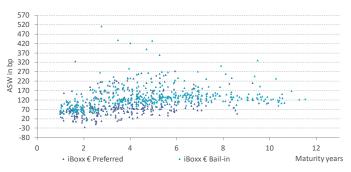
Redemption Profile



Income Statement

(EURm)	2020Y	2021Y	2022H1
Net Interest Income	534	493	246
Net Fee & Commission Inc.	374	438	223
Net Trading Income	25	5	4
Operating Expense	553	601	286
Credit Commit. Impairment	218	80	33
Pre-tax Profit	54	215	145

Senior Unsecured Bonds (EUR BMK)



Company Ratios

	2020Y	2021Y	2022H1
Net Interest Margin	1.01	0.89	0.88
ROAE	0.75	4.61	7.16
Cost-to-Income	62.57	65.94	59.88
Core Tier 1 Ratio	13.62	13.41	12.80

	2020Y	2021Y	2022H1
Liquidity Coverage Ratio	468.11	452.03	435.78
IFRS Tier 1 Leverage Ratio	4.29	4.17	3.91
NPL/ Loans at Amortised Cost	3.27	2.34	1.96
Reserves/Loans at Amort. Cost	2.05	1.73	1.58

Source: Bloomberg, S&P Global Market Intelligence, NORD/LB Markets Strategy & Floor Research; as of: 13.10.2022

Strengths / Opportunities

- Regional market position
- Credit quality in a sector comparison
- Funding profile

- Geographical concentration
- Profitability
- Capitalisation (high share of DTAs)





Spain 💻

Ibercaja Banco – Mortgage

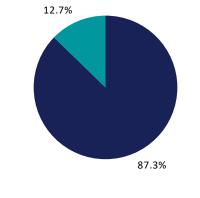
Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Cover Pool Data

Cover pool volume (EURm)	18,234
Amount outstanding (EURm)	4,100
-thereof ≥ EUR 500m	12.2%
Current OC (nominal)	344.7%
Committed OC	25.0%
Cover type	Mortgage
Main country	100% Spain
Main region	28% Madrid
Number of loans	250,786
Number of borrowers	n/a
Avg. exposure to borrowers (EUR)	n/a
WAL (cover pool)	9.9y
WAL (covered bonds)	2.9y
Fixed interest (cover pool)	12.5%
Fixed interest (covered bonds)	39.0%
LTV (indexed)	n/a
LTV (unindexed)	51.2%
Loans in arrears	1.8%

Rating (Moody's)	Aa1
Rating (S&P)	AA
Rating (Fitch)	-
Rating (DBRS)	-
TPI	Probable
TPI leeway	0
Collateral score	10.8%
RRL	bbb
JRL	а
Unused notches	0
AAA credit risk (%)	2.77
PCU	-
Recovery uplift	-
Outstanding ESG BMKs	No
LCR ELIGIBLE	Yes
LCR level (Bmk)	1
Risk weight	10%
Maturity structure (Bmk)	HB

Borrower Types



Residential Commercial Multi-family Others

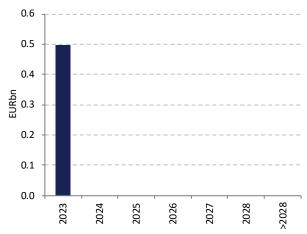
Spread Development



Source: Issuer, Rating agencies, Bloomberg, NORD/LB Markets Strategy & Floor Research

Regional Distribution





Kutxabank

Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Ratings

	Rating	Outloo
Fitch	BBB+	Stable
Moody's*	Baa1	Positive
S&P	BBB	Stable

Homepage

www.kutxabank.com

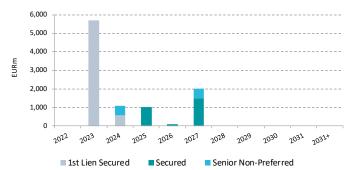
*LT Bank Deposits

Headquartered in Bilbao, Kutxabank S.A. (Kutxa) is the leading commercial bank in the Basque country with total assets of EUR 66.8bn (data as at H1 2022). Kutxa is the parent company of the Kutxabank Group, which was established in 2011 from the merger of three Basque savings banks. The largest shareholder of Kuxta is the Bilbao Bizkaia Kutxa Fundación Bancaria with a stake of 57%, followed by Fundación Bancaria Kutxa with 32% and Fundación Bancaria Vital with 11% (H1 2022). In addition to its home region, the Basque Country (FY 2021: 282 branches), the bank is active in the region of Andalusia via its wholly owned subsidiary CajaSur Banco (297 branches) in addition to other regions across Spain (195 branches). The banking group splits its business activities across the following six segments: Kutxabank Subgroup, CajaSur Banco Subgroup, Insurance Companies, Asset Management Companies and Other Business Activities in addition to Adjustments and Eliminations. Activities are focused on lending to private individuals and small and medium-sized enterprises (SMEs). In addition to providing traditional banking services, it also offers other services such as insurance products via its subsidiaries. The funding mix is dominated by customer deposits at approximately 70% (Q1 2022), with covered bonds accounting for a share of roughly 12%. As part of its sustainability aims, the Group issued its first non-preferred green bond in the amount of EUR 500m in October 2021. The level of non-performing loans (NPL), reflected in the NPL ratio, declined in comparison with FY 2020 by 40 basis points to 1.9% in FY 2021, before falling again to 1.38% as at H1 2022. The CET1 ratio amounted to 17.0% (phased-in; H1 2022).

Balance Sheet

(EURm)	2020Y	2021Y	2022H1
Net Loans to Customers	44,262	47,516	48,413
Total Securities	8,037	8,195	8,608
Total Deposits	46,356	47,945	49,298
Tier 1 Common Capital	5,391	5,335	5,167
Total Assets	63,780	65,805	66,812
Total Risk-weighted Assets	30,241	30,171	30,431

Redemption Profile



Income Statement (EURm)

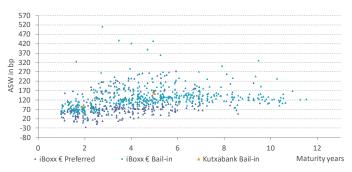
(20111)	20201	20211	2022111
Net Interest Income	566	559	280
Net Fee & Commission Inc.	388	471	239
Net Trading Income	1	2	11
Operating Expense	751	703	318
Credit Commit. Impairment	159	71	36
Pre-tax Profit	235	295	222

20202

20210

2022H1

Senior Unsecured Bonds (EUR BMK)



Company Ratios

	2020Y	2021Y	2022H1
Net Interest Margin	0.99	0.92	0.90
ROAE	2.99	3.46	5.25
Cost-to-Income	70.01	59.69	54.30
Core Tier 1 Ratio	17.83	17.68	16.98

2020Y	2021Y	2022H1
253.53	233.21	185.64
8.55	8.22	7.84
2.43	1.93	1.42
1.61	1.49	1.34
	253.53 8.55 2.43	253.53 233.21 8.55 8.22 2.43 1.93

Source: Bloomberg, S&P Global Market Intelligence, NORD/LB Markets Strategy & Floor Research; as of: 13.10.2022

Strengths / Opportunities

- Capitalisation
- NPL ratio
- Deposit basis (funding)

- Asset quality (real estate)
- Profitability
- Geographical diversification





Kutxabank – Mortgage

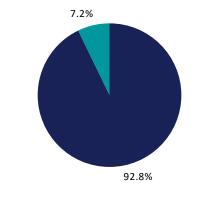
Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Cover Pool Data

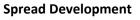
Cover pool volume (EURm)	24,729
Amount outstanding (EURm)	1,347
-thereof \geq EUR 500m	74.3%
Current OC (nominal)	1736.3%
Committed OC	25.0%
Cover type	Mortgage
Main country	100% Spain
Main region	48% Basque Country
Number of loans	242,171
Number of borrowers	384,529
Avg. exposure to borrowers (EUR)	64,309
WAL (cover pool)	11.2y
WAL (covered bonds)	2.9y
Fixed interest (cover pool)	35.4%
Fixed interest (covered bonds)	100.0%
LTV (indexed)	n/a
LTV (unindexed)	54.4%
Loans in arrears	2.4%

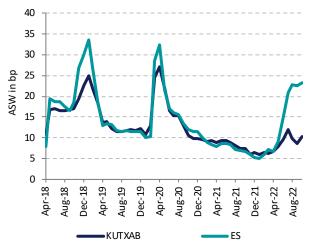
Rating (Moody's)	Aa1
Rating (S&P)	AA+
Rating (Fitch)	-
Rating (DBRS)	-
TPI	Probable
TPI leeway	2
Collateral score	7.5%
RRL	a-
JRL	а
Unused notches	2
AAA credit risk (%)	2.5
PCU	-
Recovery uplift	2
Outstanding ESG BMKs	Yes
LCR ELIGIBLE	Yes
LCR level (Bmk)	1
Risk weight	10%
Maturity structure (Bmk)	HB

Borrower Types



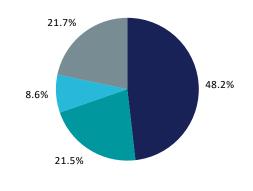
■ Residential ■ Commercial ■ Multi-family ■ Others





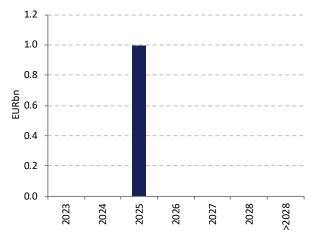
Source: Issuer, Rating agencies, Bloomberg, NORD/LB Markets Strategy & Floor Research

Regional Distribution



Basque Country Madrid Catalonia Others

Redemption Profile (Bmk)





Spain

.

Unicaja Banco

Rating

BBB-

Baa3

Ratings

Fitch

S&P

Moody's*

Homepage

www.liberbank.es

*LT Bank Deposits

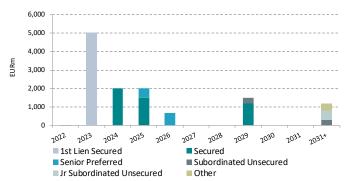
Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Headquartered in Malaga in the south of Spain, Unicaja Banco (Unicaja) is Spain's fifthlargest bank as measured by total assets (Q2 2022: EUR 114.8bn). The bank is listed on the Outlook stock exchanges in Madrid, Bilbao, Barcelona and Valencia, where the largest shareholder is Fundación Bancaria Unicaja with a stake of 30% (data as at 19 July 2022). In total, 80% of Stable the bank's business activities are concentrated on Spain, with a particular focus on the Stable regions of Madrid (FY 2021: 48.3% of the loan portfolio) and Andalusia (19.6%). With more than 8,300 employees working across a network of around 1,100 branches, Unicaja focuses on retail banking customers and SMEs, boasting a market share of >5% in Spain (Q2 2022). The bank reports across the following three segments: Entities Credit and Insurance, Other Entities and Adjustments and Deletions. The merger of Liberbank and Unicaja was concluded on 30 July 2021. All assets and liabilities pertaining to Liberbank, including covered bonds, were transferred to Unicaja. With the merger, Unicaja has identified strategic opportunities linked to the consolidation of the two banks, particularly with regard to the challenges associated with the ever-increasing digitalisation of the business landscape. The majority of Unicaja's loan portfolio consists of residential mortgages (Q2 2022: 58%) and corporate loans (24%). In comparison with Q2 2021, the NPL ratio increased by 30 basis points to 3.5% (Q2 2022). As part of the bank's sustainability strategy, Unicaja issued its first green senior preferred bond in May 2022 in the amount of EUR 500m. At 12.8% (Q2 2022), the CET1 ratio (fully loaded) fulfilled the regulatory minimum requirement of 8.2%.

Balance Sheet

(EURm)	2020Y	2021Y	2022H1
Net Loans to Customers	27,629	56,157	56,598
Total Securities	24,553	27,200	27,972
Total Deposits	48,701	84,154	79,921
Tier 1 Common Capital	3,740	4,802	4,711
Total Assets	65,544	115,550	114,832
Total Risk-weighted Assets	22,492	35,291	34,899

Redemption Profile



(EURm)

Income Statement

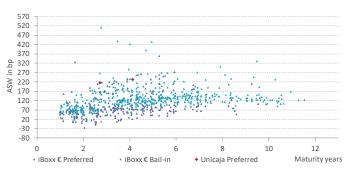
(=•····)	20201	20211	2022111
Net Interest Income	578	730	502
Net Fee & Commission Inc.	233	362	264
Net Trading Income	92	52	30
Operating Expense	615	777	488
Credit Commit. Impairment	242	182	89
Pre-tax Profit	99	1,021	225

20202

2021

2022H1

Senior Unsecured Bonds (EUR BMK)



Company Ratios

	2020Y	2021Y	2022H1
Net Interest Margin	1.04	0.96	0.97
ROAE	1.93	23.36	5.30
Cost-to-Income	63.53	70.16	59.58
Core Tier 1 Ratio	16.63	13.61	13.50

	2020Y	2021Y	2022H1
Liquidity Coverage Ratio	310.05	298.20	300.00
IFRS Tier 1 Leverage Ratio	5.77	4.20	4.14
NPL/ Loans at Amortised Cost	4.27	3.53	3.49
Reserves/Loans at Amort. Cost	2.80	2.38	2.23

Source: Bloomberg, S&P Global Market Intelligence, NORD/LB Markets Strategy & Floor Research; as of: 13.10.2022

Strengths / Opportunities

- Funding profile
- Increased profitability (following Liberbank merger)
- Market position

- Capitalisation
- Asset quality (NPL ratio)
- Diversification of business areas





Unicaja Banco – Mortgage

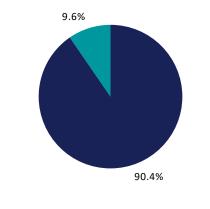
Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Cover Pool Data

Cover pool volume (EURm)	36,067
	,
Amount outstanding (EURm)	9,664
-thereof ≥ EUR 500m	12.4%
Current OC (nominal)	273.2%
Committed OC	25.0%
Cover type	Mortgage
Main country	100% Spain
Main region	30% Andalusia
Number of loans	509,621
Number of borrowers	n/a
Avg. exposure to borrowers (EUR)	n/a
WAL (cover pool)	9.7у
WAL (covered bonds)	4.4y
Fixed interest (cover pool)	33.4%
Fixed interest (covered bonds)	63.5%
LTV (indexed)	n/a
LTV (unindexed)	57.0%
Loans in arrears	4.1%

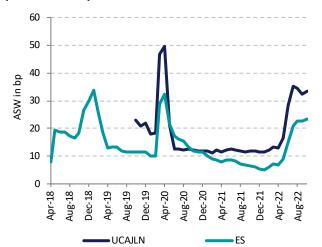
Rating (Moody's)	Aa1
Rating (S&P)	-
Rating (Fitch)	-
Rating (DBRS)	-
TPI	Probable
TPI leeway	0
Collateral score	8.7%
RRL	-
JRL	-
Unused notches	-
AAA credit risk (%)	-
PCU	-
Recovery uplift	-
Outstanding ESG BMKs	No
LCR ELIGIBLE	Yes
LCR level (Bmk)	1
Risk weight	10%
Maturity structure (Bmk)	HB

Borrower Types



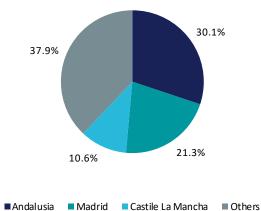
Residential Commercial Multi-family Others

Spread Development

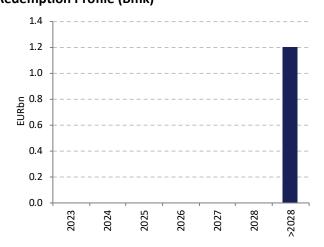


Source: Issuer, Rating agencies, Bloomberg, NORD/LB Markets Strategy & Floor Research

Regional Distribution



Redemption Profile (Bmk)



NORD/LB

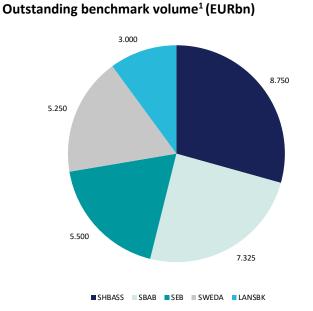


Sweden

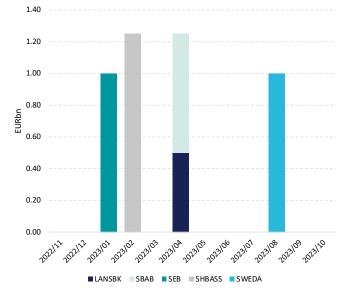
Market Overview Covered Bonds

Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

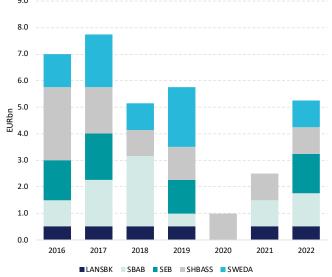
Cover Pool Volume	EUR 299.42bn	Outstanding volume (Bmk)	EUR 29.83bn
Amount outstanding	EUR 181.36bn	Number of benchmarks	35
Number of issuer	5	Outstanding ESG volume (Bmk)	-
No of cover pools	6	Number of ESG benchmarks	-
there of M / PS / others	6/0/0	Outstanding volume (SBmk)	-
Ratings (low / high)	ΑΑΑ / ΑΑΑ	Number of subbenchmarks	-
Best possible LCR level	Level 1	Maturity types	HB, SB



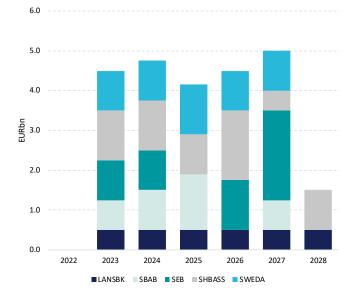
Benchmark redemption profile¹: 11/2022 - 10/2023



Benchmark issuance volume¹ 9.0



Benchmark redemption profile¹²



Source: Issuer, Rating agencies, Bloomberg, NORD/LB Markets Strategy & Floor Research; ¹ based on Bloomberg ticker; ² Redemptions 2022: 11/22 – 12/22

LF Bank

Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Ratings

	Rating	Outlook
Fitch	-	-
Moody's*	A1	Stable
S&P	А	Stable

Homepage

www.lansforsakringar.se

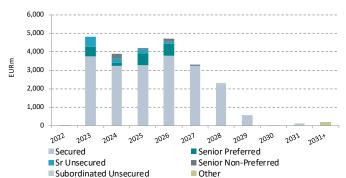
*Senior Unsecured

Länsförsäkringar Bank (LF Bank) is one of the largest retail banks in Sweden. It is a wholly owned subsidiary and the banking arm of Länsförsäkringar AB (LF AB). In turn, LF AB is owned by 23 customer-owned regional insurance companies. Collectively, LF AB and the 23 insurers form the Länsförsäkringar Alliance, which provides its 3.9 million customers with banking and insurance services as well as pension products and real estate brokering. The institute reports across the following segments: Banking Operations (BO), Mortgage Institution (MI), Finance Company (FC), Mutual Funds (MF) and Eliminations/Adjustments. MI, FC and MF are organised as separate public limited companies: Länsförsäkringar Hypothek, Wasa Kredit and Länsförsäkringar Fondförvaltning, respectively. In Q1 2022, operating earnings fell by 23% to SEK 512.5 million (Q1 2021: SEK 662.9 million). The bank attributes this reduction in profits to losses in the lending business and the risk tax that has been recently introduced in Sweden (Q1 2022: SEK 52.8 million) as well as the positive contribution from the release of reserves in the previous year. LF Bank's market share totals 5.3% in deposits and 7.1% in retail mortgage lending (as at FY 2021). The main funding sources of LF Bank are covered bonds (FY 2021: 49%), deposits (33%) and senior unsecured bonds (10%). At the end of 2021, LF Bank introduced a set of exclusion criteria for its own investments. For example, no further investments may be made in oil and gas extraction and only a maximum of 5% of investments can be made in companies in the coal and tobacco industries. Moreover, no investments may be made in controversial weapons. The CET1 ratio fell to 15.3% in FY 2021 (FY 2020: 16.5%).

Balance Sheet

(EURm)	2020Y	2021Y	2022H1
Net Loans to Customers	33,844	35,202	36,000
Total Securities	6,413	6,893	6,330
Total Deposits	13,576	14,223	14,550
Tier 1 Common Capital	1,638	1,724	1,662
Total Assets	40,773	43,876	43,511
Total Risk-weighted Assets	10,981	11,300	11,185

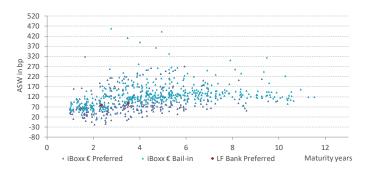
Redemption Profile



Income Statement

Senior Unsecured Bonds

(EURm)	2020Y	2021Y	2022H1
Net Interest Income	462	479	225
Net Fee & Commission Inc.	-53	-33	-0
Net Trading Income	-3	5	-2
Operating Expense	201	231	128
Credit Commit. Impairment	31	-33	5
Pre-tax Profit	176	226	91



Company Ratios

	2020Y	2021Y	2022H1
Net Interest Margin	1.19	1.14	1.03
ROAE	7.77	8.90	7.53
Cost-to-Income	49.30	50.74	57.29
Core Tier 1 Ratio	14.92	15.26	14.86

.77
-
-
.14

Source: Bloomberg, S&P Global Market Intelligence, NORD/LB Markets Strategy & Floor Research; as of: 12.10.2022

Strengths / Opportunities

- Integration in the group
- Capitalisation
- Loan quality

Risks / Weaknesses

- Dependency on capital market funding
- Credit concentration risks
- Low market penetration in nationwide comparison



Sweden

LF Hypotek – Mortgage

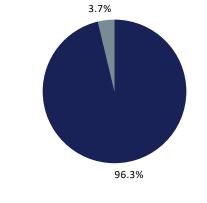
Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Cover Pool Data

Cover pool volume (EURm)	26,525
Amount outstanding (EURm)	20,992
-thereof ≥ EUR 500m	14.3%
Current OC (nominal)	26.4%
Committed OC	10.0%
Cover type	Mortgage
Main country	100% Sweden
Main region	24% West Sweden
Number of loans	434,041
Number of borrowers	n/a
Avg. exposure to borrowers (EUR)	n/a
WAL (cover pool)	26.2y
WAL (covered bonds)	3.2y
Fixed interest (cover pool)	48.3%
Fixed interest (covered bonds)	94.7%
LTV (indexed)	55.3%
LTV (unindexed)	62.9%
Loans in arrears	0.0%

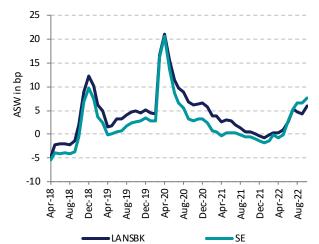
Rating (Moody's)	Aaa
Rating (S&P)	AAA
Rating (Fitch)	-
Rating (DBRS)	-
ТРІ	Probable-High
TPI leeway	4
Collateral score	5.0%
RRL	aa-
JRL	ааа
Unused notches	2
AAA credit risk (%)	n/a
PCU	-
Recovery uplift	2
Outstanding ESG BMKs	No
LCR ELIGIBLE	Yes
LCR level (Bmk)	1
Risk weight	10%
Maturity structure (Bmk)	HB & SB

Borrower Types



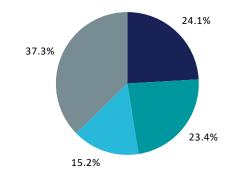
■ Residential ■ Commercial ■ Multi-family ■ Others

Spread Development



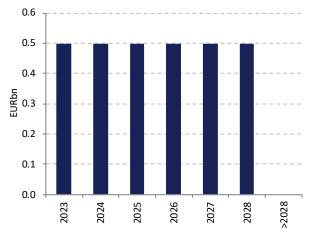
Source: Issuer, Rating agencies, Bloomberg, NORD/LB Markets Strategy & Floor Research

Regional Distribution



■ West Sweden ■ East Sweden ■ North Sweden ■ Others

Redemption Profile (Bmk)



NORD/LB



SBAB

NORD/LB

Sweden 🔚

Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Ratings

	Rating	Outloo
Fitch	-	-
Moody's	A1	Stable
S&P	А	Stable

Homepage

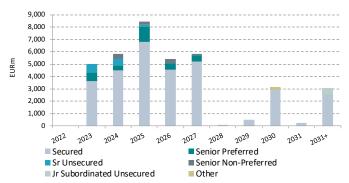
www.sbab.se

SBAB Bank AB (SBAB) was founded in 1985 to finance state mortgages. SBAB is wholly owned by the Swedish state. In addition to its core business of mortgage loans, SBAB today offers private lending in the retail business in addition to savings products and brokering insurance policies. In corporate banking, SBAB offers services in the areas of savings and residential construction financing for property companies and home owner associations. The bank divides its business into the following three segments: Retail, Corporate Clients & Tenant-Owners' Associations and Other. Swedish real estate financing remains the main business focus, with a market share of 8.53% (Q1 2022) in the residential mortgage financing business. The private mortgage sector accounts for around 71% (SEK 340bn) of the overall loan portfolio. The bank is mainly funded by covered bonds (59%, Q1 2022) and deposits (27%, Q1 2022). In Q1 2022, net earnings at the bank stood at SEK 452 million (Q1 2021: SEK 576 million), with SBAB attributing the decline to depreciation of financial instruments following hedging operations, higher net loan losses and the recently introduced risk tax. The strategy of the institute is focused on increasing its market share and continuing its growth in deposits. It has defined a financial target of ROE of higher than 10% (as at Q1 2022: 9.5%) and a CET1 ratio of 0.6 percentage points above the regulatory requirement. The CET1 ratio amounted to 13.1% (Q1 2022), exceeding the regulatory requirement by 3.9 percentage points.

Balance Sheet

(EURm)	2020Y	2021Y	2022H1
Net Loans to Customers	42,089	45,417	45,860
Total Securities	7,974	7,698	8,216
Total Deposits	13,503	14,096	14,413
Tier 1 Common Capital	1,741	1,829	1,781
Total Assets	50,901	54,295	56,004
Total Risk-weighted Assets	12,967	13,505	14,016

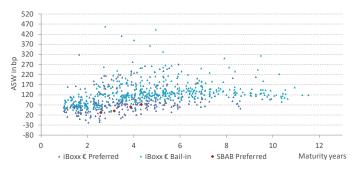
Redemption Profile



Income Statement

(EURm)	2020Y	2021Y	2022H1
Net Interest Income	357	406	207
Net Fee & Commission Inc.	-2	3	2
Net Trading Income	-4	-7	-3
Operating Expense	120	144	91
Credit Commit. Impairment	3	-1	3
Pre-tax Profit	225	260	116

Senior Unsecured Bonds



Company Ratios

	2020Y	2021Y	2022H1
Net Interest Margin	0.73	0.77	0.76
ROAE	8.03	8.34	8.24
Cost-to-Income	33.88	35.47	43.35
Core Tier 1 Ratio	13.43	13.55	12.71

2020Y	2021Y	2022H1
262.31	232.46	224.94
3.44	3.39	3.28
0.06	0.05	0.05
0.04	0.03	0.03
	262.31 3.44 0.06	262.31 232.46 3.44 3.39 0.06 0.05

Source: Bloomberg, S&P Global Market Intelligence, NORD/LB Markets Strategy & Floor Research; as of: 12.10.2022

Strengths / Opportunities

- Asset quality
- Capitalisation
- Cost ratio

- Dependency on capital market funding
- Credit concentration risks
- Profitability

SBAB – Mortgage

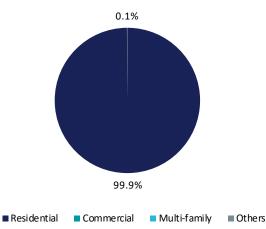
Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Cover Pool Data

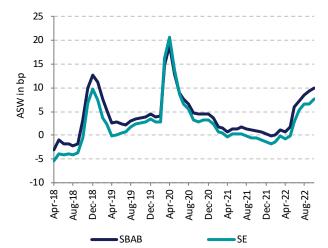
Cover pool volume (EURm)	40,200
Amount outstanding (EURm)	31,344
-thereof ≥ EUR 500m	23.4%
Current OC (nominal)	28.3%
Committed OC	n/a
Cover type	Mortgage
Main country	100% Sweden
Main region	55% Stockholm area
Number of loans	430,927
Number of borrowers	n/a
Avg. exposure to borrowers (EUR)	n/a
WAL (cover pool)	19.9y
WAL (covered bonds)	4.2y
Fixed interest (cover pool)	53.8%
Fixed interest (covered bonds)	98.4%
LTV (indexed)	n/a
LTV (unindexed)	51.2%
Loans in arrears	0.0%

nating (moody 3)	7100
Rating (S&P)	-
Rating (Fitch)	-
Rating (DBRS)	-
ТРІ	Probable-High
TPI leeway	4
Collateral score	5.0%
RRL	-
JRL	-
Unused notches	-
AAA credit risk (%)	-
PCU	-
Recovery uplift	-
Outstanding ESG BMKs	No
LCR ELIGIBLE	Yes
LCR level (Bmk)	1
Risk weight	10%
Maturity structure (Bmk)	SB

Borrower Types



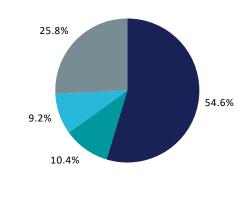
Spread Development



Source: Issuer, Rating agencies, Bloomberg, NORD/LB Markets Strategy & Floor Research

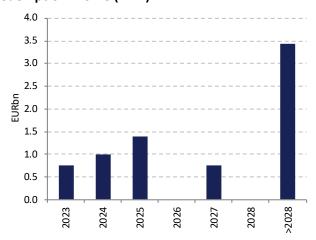
Regional Distribution

Rating (Moody's)



Stockholm area
 West (excl Gothenburg)
 Cthers

Redemption Profile (Bmk)







Aaa

SEB

NORD/LB

Sweden 🔚

Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Ratings

	Rating	Outlook
Fitch	AA-	Stable
Moody's	Aa3	Stable
S&P	A+	Stable

Homepage

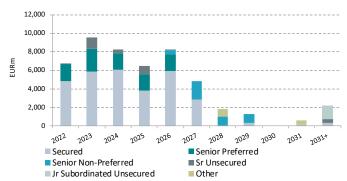
www.sebgroup.com

The parent company of the SEB Group is Skandinaviska Enskilda Banken AB (SEB). SEB serves 4 million retail customers, 400,000 SMEs and 3,100 large enterprises and institutes across more than 20 countries. Its shares are listed on the Stockholm stock exchange. The largest shareholder is Investor AB (March 2022: 20.8%), followed by Alecta Pension Insurance (5.7%). Since 2022, the Group has reported across the following segments: Large Corporates & Financial Institutions (Q1 2022: 35.5% of operating income), Corporate & Private Customers (23.2%), Private Wealth Management & Family Office (3.3%), Investment Management (7.9%), Life (6.3%), Baltic (11.6%) and Group Functions (12.3%). The recently created segment Private Wealth Management & Family Office is designed to allow SEB to place a heavier focus on high-net-worth individuals and their families. At 62%, Sweden is its most important market as measured by operating income (as at Q1 2021). The Group intends to achieve its self-defined sustainability goals for 2030 by realising measures such as reducing exposure in fossil fuels (target: reduction of 45%-60%) and increasing its sustainable financing, among other aspects. The main funding components include corporate deposits (Q1 2022: 48%), deposits by private customers (16%), covered bonds (12%) and CP/CDs (11%). As at Q1 2022, the bank had exceeded the CET1 ratio regulatory requirement by 490 basis points at 18.7%. Over the long term, this is set to stand at 100-300 basis points above the regulatory minimum. The bank's ROE target is 15% (Q1 2022: 13.4%) in line with its strategic plan for 2022-2024.

Balance Sheet

(EURm)	2020Y	2021Y	2022H1
Net Loans to Customers	176,203	179,549	186,193
Total Securities	51,072	44,027	67,324
Total Deposits	136,493	155,344	193,476
Tier 1 Common Capital	15,143	15,056	14,800
Total Assets	302,647	321,319	383,927
Total Risk-weighted Assets	72,223	76,579	79,445

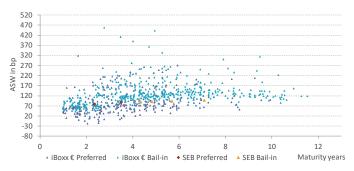
Redemption Profile



Income Statement

(EURm)	2020Y	2021Y	2022H1
Net Interest Income	2,399	2,572	1,413
Net Fee & Commission Inc.	1,723	2,084	1,040
Net Trading Income	530	-	-
Operating Expense	2,150	2,361	1,254
Credit Commit. Impairment	584	50	89
Pre-tax Profit	1,893	3,042	1,445

Senior Unsecured Bonds



Company Ratios

	2020Y	2021Y	2022H1
Net Interest Margin	0.90	0.88	0.91
ROAE	9.74	13.88	12.90
Cost-to-Income	45.33	43.04	44.96
Core Tier 1 Ratio	20.97	19.66	18.63

	2020Y	2021Y	2022H1
Liquidity Coverage Ratio	153.22	129.85	126.38
IFRS Tier 1 Leverage Ratio	5.30	4.87	4.16
NPL/ Loans at Amortised Cost	0.97	0.60	-
Reserves/Loans at Amort. Cost	0.57	0.46	-

Source: Bloomberg, S&P Global Market Intelligence, NORD/LB Markets Strategy & Floor Research; as of: 12.10.2022

Strengths / Opportunities

- Market position in the Nordic countries
- Loan quality
- Capitalisation

- Funding profile
- Concentration risk in corporate loans
- Residential real estate market in Sweden

SEB – Mortgage

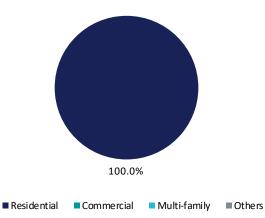
Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Cover Pool Data

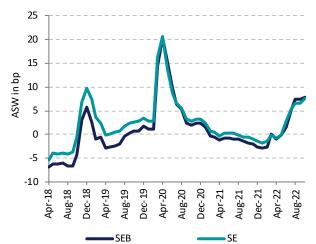
Cover pool volume (EURm)	66,279
Amount outstanding (EURm)	30,636
-thereof ≥ EUR 500m	18.0%
Current OC (nominal)	116.3%
Committed OC	n/a
Cover type	Mortgage
Main country	100% Sweden
Main region	41% Greater Stockholm
Number of loans	764,342
Number of borrowers	n/a
Avg. exposure to borrowers (EUR)	n/a
WAL (cover pool)	25.2y
WAL (covered bonds)	2.8y
Fixed interest (cover pool)	49.2%
Fixed interest (covered bonds)	97.9%
LTV (indexed)	47.5%
LTV (unindexed)	55.4%
Loans in arrears	0.0%

Rating (Moody's)	Aaa
Rating (S&P)	-
Rating (Fitch)	-
Rating (DBRS)	-
TPI	Probable-High
TPI leeway	5
Collateral score	5.0%
RRL	-
JRL	-
Unused notches	-
AAA credit risk (%)	-
PCU	-
Recovery uplift	2
Outstanding ESG BMKs	No
LCR ELIGIBLE	Yes
LCR level (Bmk)	1
Risk weight	10%
Maturity structure (Bmk)	HB

Borrower Types

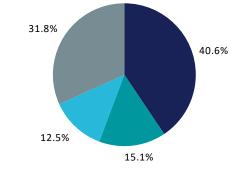


Spread Development

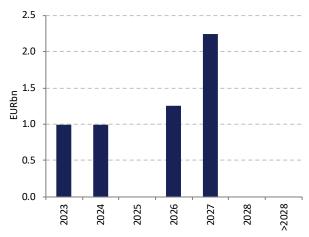


Source: Issuer, Rating agencies, Bloomberg, NORD/LB Markets Strategy & Floor Research

Regional Distribution











Svenska Handelsbanken

Sweden 🔚

Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Ratings

	Rating	Outlook
Fitch	AA	Stable
Moody's	Aa2	Stable
S&P	AA-	Stable

Homepage

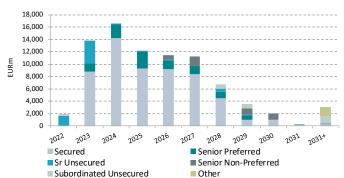
www.handelsbanken.com

Founded in 1871, Svenska Handelsbanken (HB) is a global universal bank with 11,000 employees. Its shares are listed on the Stockholm stock exchange. Its main shareholders are the Swedish investment company Industrivärden (FY 2021: 11.1%) and the foundation Oktogonen Fundation (10.2%). The domestic markets defined by HB include Sweden (Q1 2022: 63% of operating earnings), Norway (8%), the UK (8%) and the Netherlands (2%). Along with Capital Markets, Others and Adjustments and eliminations these four domestic markets constitute the seven operational segments of HB. In financial year 2021, HB withdrew from the Finnish and Danish markets, reducing the number of segments in which it operates as a result. According to HB, one of the reasons for this withdrawal was the increasingly divergent regulatory requirements, which made cross-border business operations more cost-intensive. In Q1 2022, operating earnings increased by 24% year on year to SEK 6,650m. New lending to households has increased by 5% year on year (Q1 2022), while new business lending rose by 8% year on year (Q1 2022). The institute has created a sustainable business model by incorporating sustainability concepts into its corporate culture and into every business transaction. Indeed, green and social investments are set to grow to at least 20% of the overall funding volume by 2025, while the bank is set to achieve climate neutrality by 2040 at the latest. The long-term funding of HB consists mainly of covered bonds. At 18.7% (Q1 2022), the CET1 ratio exceeded the regulatory requirement of 13.9%. As at the end of March 2022, the LCR stood at 169% and the NSFR was 114%.

Balance Sheet

(EURm)	2020Y	2021Y	2022H1
Net Loans to Customers	225,919	210,354	210,006
Total Securities	19,449	17,498	19,920
Total Deposits	122,411	125,119	135,252
Tier 1 Common Capital	14,549	14,558	14,510
Total Assets	312,089	325,455	344,381
Total Risk-weighted Assets	71,809	75,186	77,548

Redemption Profile

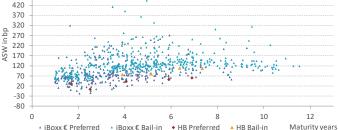


Income Statement

Senior Unsecured Bonds

(EURm)	2020Y	2021Y	2022H1
Net Interest Income	2,859	2,989	1,566
Net Fee & Commission Inc.	923	1,129	539
Net Trading Income	116	167	9
Operating Expense	1,933	2,008	1,082
Credit Commit. Impairment	62	4	6
Pre-tax Profit	1,793	2,314	1,129

520 470 420 370



Company Ratios

	2020Y	2021Y	2022H1
Net Interest Margin	0.94	0.98	1.13
ROAE	9.48	10.97	10.85
Cost-to-Income	49.10	46.43	50.80
Core Tier 1 Ratio	20.26	19.36	18.71

	2020Y	2021Y	2022H1
Liquidity Coverage Ratio	150.34	152.04	180.14
IFRS Tier 1 Leverage Ratio	4.73	4.50	4.25
NPL/ Loans at Amortised Cost	-	-	-
Reserves/Loans at Amort. Cost	0.15	0.11	0.12

Source: Bloomberg, S&P Global Market Intelligence, NORD/LB Markets Strategy & Floor Research; as of: 12.10.2022

Strengths / Opportunities

- Leading market position in core markets
- Loan quality
- Capitalisation

- Dependency on capital market funding
- Concentration risks in lending business
- Residential real estate market in Sweden

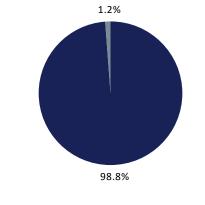
Stadshypotek – Mortgage (Swedish Pool)

Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Cover Pool Data

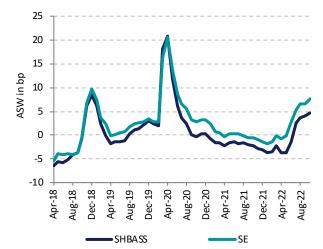
Cover pool volume (EURm)	59,205
Amount outstanding (EURm)	53,557
-thereof ≥ EUR 500m	7.9%
Current OC (nominal)	10.5%
Committed OC	2.0%
Cover type	Mortgage
Main country	100% Sweden
Main region	38% Greater Stockholm
Number of loans	842,591
Number of borrowers	336,463
Avg. exposure to borrowers (EUR)	175,963
WAL (cover pool)	28.8y
WAL (covered bonds)	2.7у
Fixed interest (cover pool)	63.0%
Fixed interest (covered bonds)	94.4%
LTV (indexed)	48.2%
LTV (unindexed)	n/a
Loans in arrears	0.0%

Borrower Types



■ Residential ■ Commercial ■ Multi-family ■ Others

Spread Development



Source: Issuer, Rating agencies, Bloomberg, NORD/LB Markets Strategy & Floor Research

Maturity structure (Bmk) Regional Distribution

Rating (Moody's)

Rating (S&P) Rating (Fitch) Rating (DBRS)

TPI leeway

Collateral score

Unused notches AAA credit risk (%)

Recovery uplift

LCR level (Bmk)

LCR ELIGIBLE

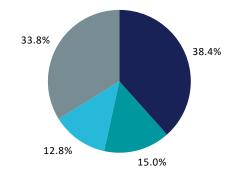
Risk weight

Outstanding ESG BMKs

TPI

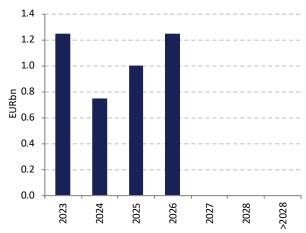
RRL JRL

PCU



Greater Stockholm East Sweden West Sweden Others

Redemption Profile (Bmk)







Aaa

6

_

No

Yes

10%

SB

1

5.0%

Probable-High

Stadshypotek-Mortgage (Norwegian Pool)

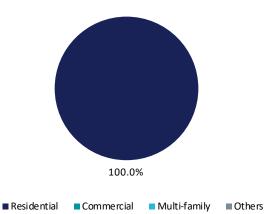
Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Cover Pool Data

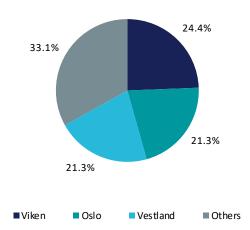
Cover pool volume (EURm)	6,814
Amount outstanding (EURm)	5,912
-thereof ≥ EUR 500m	42.3%
Current OC (nominal)	15.3%
Committed OC	2.0%
Cover type	Mortgage
Main country	100% Norway
Main region	24% Viken
Number of loans	17,442
Number of borrowers	16,545
Avg. exposure to borrowers (EUR)	411,861
WAL (cover pool)	24.2y
WAL (covered bonds)	4.7y
Fixed interest (cover pool)	5.0%
Fixed interest (covered bonds)	60.8%
LTV (indexed)	47.3%
LTV (unindexed)	n/a
Loans in arrears	0.0%

Rating (Moody's)	Aaa
Rating (S&P)	-
Rating (Fitch)	-
Rating (DBRS)	-
TPI	Probable-High
TPI leeway	6
Collateral score	5.0%
RRL	-
JRL	-
Unused notches	-
AAA credit risk (%)	-
PCU	-
Recovery uplift	-
Outstanding ESG BMKs	No
LCR ELIGIBLE	Yes
LCR level (Bmk)	1
Risk weight	10%
Maturity structure (Bmk)	SB

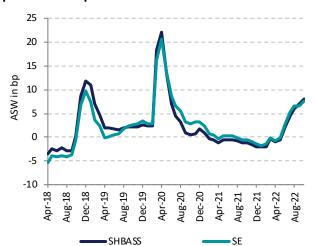
Borrower Types



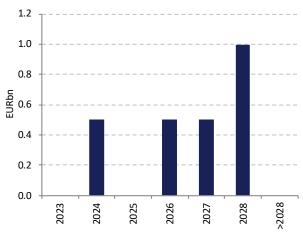
Regional Distribution



Spread Development



Source: Issuer, Rating agencies, Bloomberg, NORD/LB Markets Strategy & Floor Research







Swedbank

Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Ratings

	Rating	Outlook
Fitch	AA-	Stable
Moody's	Aa3	Negative
S&P	A+	Stable

Homepage

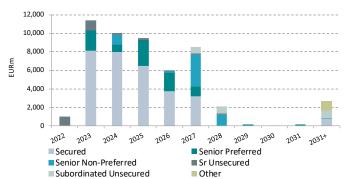
www.swedbank.com

Swedbank AB is one of the largest retail banks in Sweden. The largest shareholder is the Sparbanksgruppen, which holds a stake of 11.8% (September 2022), followed by Folksam (6.9%). The bank boasts a market-leading position in loans, deposits, payment transactions and funds on each of its domestic markets Sweden (Q1 2022: 84% of the loan book), Estonia, Latvia and Lithuania. Its market share in Sweden for private loans stands at 21% (Q1 2022). In 99% of cases (FY 2021), the bank's interactions with its retail banking client base comprising more than 7 million people and 620,000 corporate customers take place online, while physical meeting points serve as a complement to this digital strategy. Swedbank divides its business into the operational segments Swedish Banking, Baltic Banking, Large Corporates & Institutions and Group Functions & Other. The institute has set itself an ROE target of above 15% (FY 2021: 13.2%). Proceedings against Swedbank regarding money laundering accusations were discontinued in Sweden but continue in other countries (Q1 2022). In its sustainability report, Swedbank has defined various interim goals on its journey towards climate neutrality in 2050. For example, by 2040, its assets under management are set to constitute exclusively CO₂-neutral investments. In financial year 2021, the volume of sustainable financing more than doubled from SEK 23.7bn (FY 2020) to SEK 56.0bn (FY 2021). The CET1 ratio amounted to 18.3% (Q1 2022), exceeding the regulatory requirement by 460 basis points. The liquidity ratios LCR and NSFR were also in excess of the requirements, at 166% and 123% respectively (Q1 2022).

Balance Sheet

(EURm)	2020Y	2021Y	2022H1
Net Loans to Customers	167,327	165,628	171,763
Total Securities	26,710	26,633	24,032
Total Deposits	114,297	123,091	121,649
Tier 1 Common Capital	11,994	12,607	12,691
Total Assets	258,273	267,483	271,842
Total Risk-weighted Assets	68,643	68,825	69,432

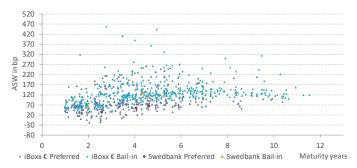
Redemption Profile



Income Statement

(EURm)	2020Y	2021Y	2022H1
Net Interest Income	2,644	2,666	1,324
Net Fee & Commission Inc.	1,231	1,464	681
Net Trading Income	249	176	6
Operating Expense	2,044	2,133	1,075
Credit Commit. Impairment	413	17	19
Pre-tax Profit	1,601	2,545	1,108

Senior Unsecured Bonds



Company Ratios

	2020Y	2021Y	2022H1
Net Interest Margin	1.17	1.07	1.11
ROAE	8.86	13.12	11.80
Cost-to-Income	45.91	45.38	48.82
Core Tier 1 Ratio	17.47	18.32	18.28

	2020Y	2021Y	2022H1
Liquidity Coverage Ratio	174.11	162.71	140.09
IFRS Tier 1 Leverage Ratio	4.78	4.80	4.80
NPL/ Loans at Amortised Cost	-	-	-
Reserves/Loans at Amort. Cost	0.49	0.30	0.27

Source: Bloomberg, S&P Global Market Intelligence, NORD/LB Markets Strategy & Floor Research; as of: 12.10.2022

Strengths / Opportunities

- Profitability
- Cost efficiency through digitisation
- Market position in Sweden and the Baltic

- Dependency on capital market funding
- Credit concentration risks
- Legal risks (possible fines, reputational damage)





Swedbank – Mortgage

Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Cover Pool Data

Borrower Types

	100,400
Cover pool volume (EURm)	100,400
Amount outstanding (EURm)	38,920
-thereof ≥ EUR 500m	13.5%
Current OC (nominal)	158.0%
Committed OC	n/a
Cover type	Mortgage
Main country	100% Sweden
Main region	27% Greater Stockholm
Number of loans	1,641,622
Number of borrowers	n/a
Avg. exposure to borrowers (EUR)	n/a
WAL (cover pool)	25.9y
WAL (covered bonds)	2.9y
Fixed interest (cover pool)	60.5%
Fixed interest (covered bonds)	85.0%
LTV (indexed)	47.7%
LTV (unindexed)	52.8%
Loans in arrears	0.0%

1.0% 0.3%

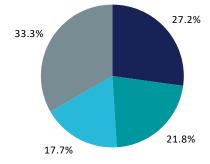
98.7%

Multi-family

Others

Commercial

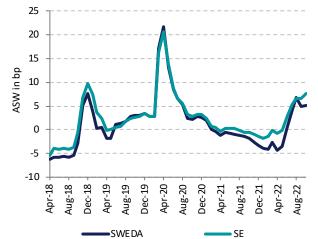
Regional	Distribution	



■ Greater Stockholm ■ West Sweden ■ East Sweden ■ Others

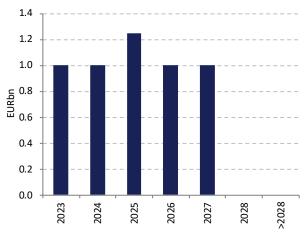
Spread Development

Residential



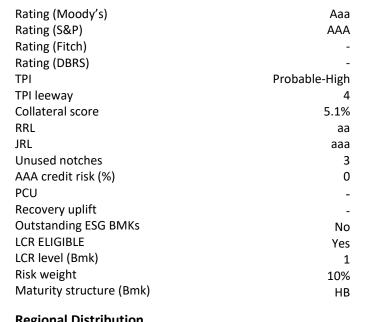
Source: Issuer, Rating agencies, Bloomberg, NORD/LB Markets Strategy & Floor Research

Redemption Profile (Bmk)



NORD/LB

Sweden



Cover Pool Volume

Amount outstanding

Number of issuer

No of cover pools

Ratings (low / high)

Best possible LCR level

there of M / PS / others

Market Overview Covered Bonds

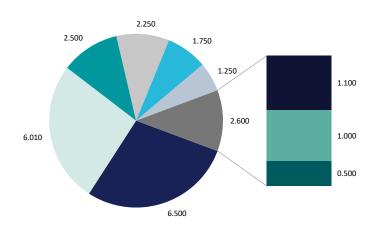
Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

AAA / AAA Number of subbenchmarks Level 2A Maturity types

EUR 129.46bn Outstanding volume (Bmk)

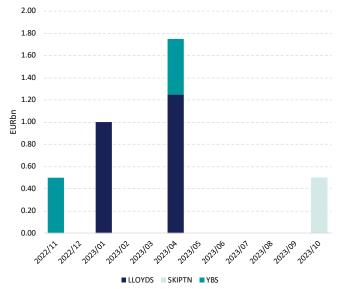
EUR 80.88bn Number of benchmarks

Outstanding benchmark volume¹ (EURbn)



■LLOYDS NWIDE ¥BS COVBS SANUK NWG ■CLYDES SKIPTN ■LEED

Benchmark redemption profile¹: 11/2022 - 10/2023

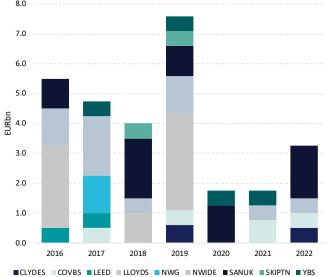


Benchmark issuance volume¹ 8.0

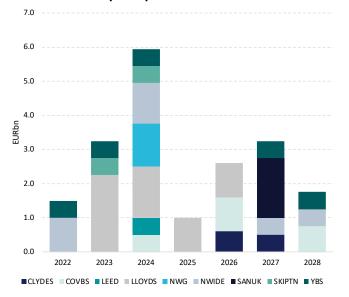
9 Outstanding ESG volume (Bmk)

9 Number of ESG benchmarks

9/0/0 Outstanding volume (SBmk)



Benchmark redemption profile¹²



Source: Issuer, Rating agencies, Bloomberg, NORD/LB Markets Strategy & Floor Research; ¹ based on Bloomberg ticker; ² Redemptions 2022: 11/22 – 12/22





EUR 22.86bn

EUR 0.50bn

31

1

SB

Clydesdale Bank

Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Ratings

	Rating	Outlook
Fitch	A-	Stable
Moody's*	A3	Stable
S&P	A-	Stable

Homepage

www.cbonline.co.uk

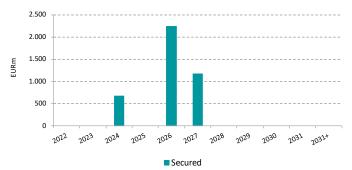
*LT Bank Deposits

Clydesdale Bank plc. (CDB) was founded in 1838 and is a wholly owned subsidiary of Virgin Money UK plc (VMUK) and forms the operating unit within the Group structure. In addition to CDB, the brands Yorkshire Bank and Virgin Money also form part of the Group. CDB focuses on the retail and corporate banking business with a geographical focus on Scotland, Yorkshire and the Humber, as well as the north west and north east of England. In contrast, VMUK is active across huge swathes of the UK, with a particular focus on Greater London (H1 2022: 29% of the mortgage portfolio), the rest of southern England (32%) and the Midlands (12%). CDB banking products are provided both through its branch network and Business Banking Centres as well as via brokers and online banking. As part of its "Digital Fist" strategy, the Group is planning to shut some 30 branches in FY 2022 in order to focus more strongly on the digital business. Customers are offered a classic range of banking services, from residential mortgages and current accounts to payment services. In FY 2021, the integration of the majority of CDB credit products under the new Virgin Money brand was successfully completed. At 14.4% in H1 2022, the regulatory capital requirement for the CET1 ratio of 8.7% was exceeded. In comparison with FY 2021, the LCR fell from 151% to 139% (H1 2022). The UK leverage ratio (fully loaded) rose from 4.7% (September 2021) to 4.9% as at H1 2022. At 31.7% (H1 2022; transitional), the MREL ratio is above the regulatory requirement of 7.0%. The financial year of CDB ends on 30 September each year.

Balance Sheet

(EURm)	2020Y	2021Y	2022H1
Net Loans to Customers	79,971	83 <i>,</i> 883	84,638
Total Securities	5,946	5,251	5,460
Total Deposits	74,566	78,016	76,275
Tier 1 Common Capital	3,863	4,197	4,214
Total Assets	99,451	103,930	104,981
Total Risk-weighted Assets	26 <i>,</i> 853	28,184	28,575

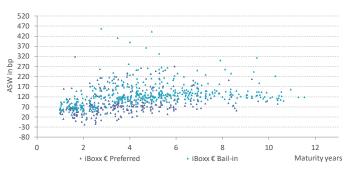
Redemption Profile



Income Statement

(EURm)	2020Y	2021Y	2022H1
Net Interest Income	1,462	1,558	922
Net Fee & Commission Inc.	162	142	80
Net Trading Income	15	8	2
Operating Expense	916	925	516
Credit Commit. Impairment	577	-150	25
Pre-tax Profit	-197	476	372

Senior Unsecured Bonds (EUR BMK)



Company Ratios

	2020Y	2021Y	2022H1
Net Interest Margin	1.45	1.55	1.79
ROAE	-3.77	10.06	7.90
Cost-to-Income	56.03	54.34	51.66
Core Tier 1 Ratio	14.39	14.89	14.75

	20209	20219	2022H1
Liquidity Coverage Ratio	140.29	150.86	139.03
IFRS Tier 1 Leverage Ratio	3.92	4.07	4.04
NPL/ Loans at Amortised Cost	1.07	1.24	1.32
Reserves/Loans at Amort. Cost	1.00	0.69	0.66

Source: Bloomberg, S&P Global Market Intelligence, NORD/LB Markets Strategy & Floor Research; as of: 12.10.2022

Strengths / Opportunities

- Asset quality
- Capitalisation
- Liquidity

- Profitability
- Diversification of business fields
- Leverage



United Kingdom 😹

Clydesdale Bank – Mortgage II

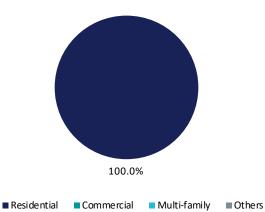
Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Cover Pool Data

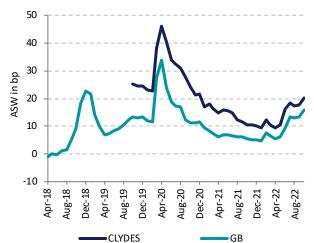
Cover pool volume (EURm)	8,605
Amount outstanding (EURm)	3,336
-thereof ≥ EUR 500m	18.0%
Current OC (nominal)	157.9%
Committed OC	810.0%
Cover type	Mortgage
Main country	100% United Kingdom
Main region	25% South East
Number of loans	43,642
Number of borrowers	n/a
Avg. exposure to borrowers (EUR)	n/a
WAL (cover pool)	20.2y
WAL (covered bonds)	3.8y
Fixed interest (cover pool)	, 97.7%
Fixed interest (covered bonds)	58.1%
LTV (indexed)	49.4%
LTV (unindexed)	57.7%
Loans in arrears	0.0%

Rating (Moody's)	Aaa
Rating (S&P)	-
Rating (Fitch)	AAA
Rating (DBRS)	-
TPI	Probable
TPI leeway	3
Collateral score	5.0%
RRL	-
JRL	-
Unused notches	-
AAA credit risk (%)	-
PCU	6
Recovery uplift	-
Outstanding ESG BMKs	No
LCR ELIGIBLE	Yes
LCR level (Bmk)	2A
Risk weight	20%
Maturity structure (Bmk)	SB

Borrower Types



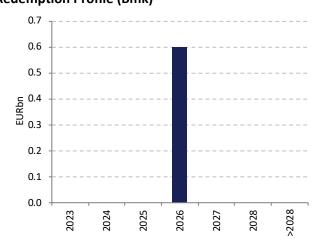
Spread Development



Source: Issuer, Rating agencies, Bloomberg, NORD/LB Markets Strategy & Floor Research

Regional Distribution





UK 🎽

Coventry Building Society

Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Ratings			C
natings			m
	Rating	Outlook	e>
Fitch	A-	Stable	cι
Moody's*	A2	Stable	br
S&P	-	-	fo
			m
Homepa	ge		th
www.cove	entrybuild	lingsociety.	Er
<u>co.uk</u>			pa
			∕⊢

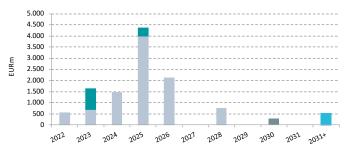
*Senior Unsecured

Coventry Building Society (CBS) is the second-largest building society in the UK as neasured by total assets (H1 2022: GBP 55.6bn). CBS is a cooperative that focuses xclusively on the UK market. Around 2,800 CBS employees offer more than 2 million ustomers a broad product range in the retail banking segment across a total of 66 ranches and agencies in addition to alternative sales channels. There is a pronounced ocus on the mortgage and deposit business. In FY 2021, CBS posted stronger growth in its nortgage portfolio (+7.2%) than the market average, although no growth was recorded in he first half of 2022. The majority of the mortgage portfolio is attributable to the south of ngland, with London (27.8% as at FY 2021) and South East England (18.5%) forming articular focal points here. Covered bonds account for around 21% of wholesale funding (H1 2022), with the largest share accounted for by central bank liquidity. In 2021, CBS increased the share attributable to TFSME in its funding (Bank of England programme) by GBP 0.7bn to GBP 5.3bn (FY 2021). CBS's traditionally conservative credit risk management results in low impairment adjustments and NPL ratios (H1 2022: 0.40% impaired loans in relation to the gross loan portfolio). The "Climate Action Plan" published in 2021 commits CBS to reducing its emissions to net zero by 2040. By the end of 2021, climate neutrality had already been achieved in the areas of Scope 1 and Scope 2. The CET1 ratio (H1 2022: 29.9%; FY 2021: 36.2%) dropped slightly and the LCR rose (H1 2022: 206.3%; FY 2021: 187%).

Balance Sheet

(EURm)	2020Y	2021Y	2022H1
Net Loans to Customers	48 <i>,</i> 533	55 <i>,</i> 508	54,218
Total Securities	1,719	943	1,783
Total Deposits	43,263	48,226	47,316
Tier 1 Common Capital	1,991	2,291	-
Total Assets	57,479	64,924	64,618
Total Risk-weighted Assets	6,039	6,317	-

Redemption Profile



Secured Senior Preferred Jr Subordinated Unsecured Senior Non-Preferred

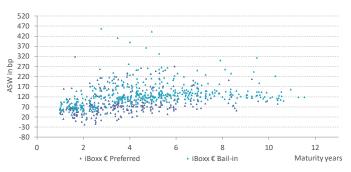
Company Ratios

	2020Y	2021Y	2022H1
Net Interest Margin	0.81	0.90	1.11
ROAE	4.60	8.18	9.83
Cost-to-Income	60.56	56.41	46.41
Core Tier 1 Ratio	32.97	36.27	-

Income Statement

(EURm)	2020Y	2021Y	2022H1
Net Interest Income	460	554	361
Net Fee & Commission Inc.	-3	-3	-0
Net Trading Income	-1	-8	-6
Operating Expense	278	307	165
Credit Commit. Impairment	41	-33	3
Pre-tax Profit	140	271	188

Senior Unsecured Bonds (EUR BMK)



	2020Y	2021Y	2022H1
Net Interest Margin	0.81	0.90	1.11
ROAE	4.60	8.18	9.83
Cost-to-Income	60.56	56.41	46.41
Core Tier 1 Ratio	32.97	36.27	-

	20201	20211	2022H1
Liquidity Coverage Ratio	204.40	182.83	206.00
IFRS Tier 1 Leverage Ratio	3.51	3.54	-
NPL/ Loans at Amortised Cost	-	-	-
Reserves/Loans at Amort. Cost	0.11	0.04	0.05

Source: Bloomberg, S&P Global Market Intelligence, NORD/LB Markets Strategy & Floor Research; as of: 12.10.2022

Strengths / Opportunities

- Asset quality
- Capitalisation
- Liquidity

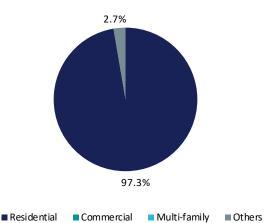
- Buy-to-let exposure
- Diversification
- Pressure on margins

Coventry Building Society – Mortgage

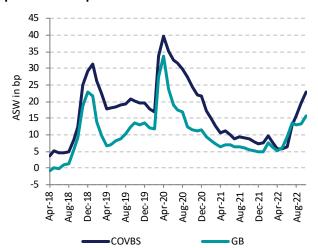
Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Cover Pool Data

Cover pool volume (EURm)	7,857
Amount outstanding (EURm)	4,624
-thereof ≥ EUR 500m	48.7%
Current OC (nominal)	69.9%
Committed OC	n/a
Cover type	Mortgage
Main country	100% United Kingdom
Main region	18% Outer Metropoli-
Number of loans	tan
Number of borrowers	56,448
Avg. exposure to borrowers (EUR)	48,122
WAL (cover pool)	163,280
WAL (covered bonds)	18.4y
Fixed interest (cover pool)	2.4y
Fixed interest (covered bonds)	84.6%
LTV (indexed)	38.3%
LTV (unindexed)	40.1%
Loans in arrears	48.8%



Spread Development

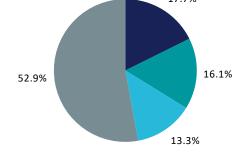


Source: Issuer, Rating agencies, Bloomberg, NORD/LB Markets Strategy & Floor Research

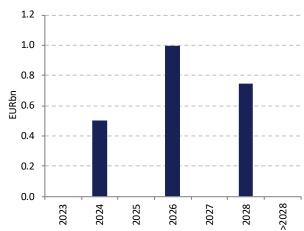
Rating (Moody's) Aaa Rating (S&P) Rating (Fitch) AAA Rating (DBRS) TPI Probable **TPI** leeway 4 Collateral score 5.0% RRL . JRL Unused notches _ AAA credit risk (%) _ PCU 6 **Recovery uplift** 2

United Kingdom

No
Yes
2A
20%
SB



■ Outer Metropolitan ■ London ■ Outer South East ■ Others



Leeds Building Society

Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

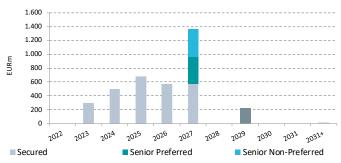
Ratings			Leed
Natiligs			asse
	Rating	Outlook	acro
Fitch	А	Stable	on o
Moody's*	A3	Stable	In re
S&P	-	-	post
			to L
Homepa	ge		mar
www.leed	sbuilding	society.co.u	mor
<u>k</u>			prop
			mix
*Senior U	nsecured		com
			and
			emis
			mea

ds Building Society (Leeds) is among the five largest UK building societies with total ets of GBP 24.1bn (H1 2022). Leeds is owned by its 788,000 customers, who are served oss 50 branches in Leeds and Yorkshire. Digital and telephone banking services are also offer. The building society focuses on private mortgage lending and deposits in the UK. ecent years, the cooperative bank has registered continual balance sheet growth, ting a record pre-tax profit of GBP 163.7m in FY 2021 (FY 2020: GBP 80.7m). According eeds, this record year can be attributed to increased lending and a rise in interest. gins. Gross new lending amounted to GBP 4.4bn (FY 2021; GBP 2.5bn in FY 2020). The rtgage portfolio comprises two main components: mortgages for owner-occupied perties (FY 2021: 44%) and buy-to-let residential mortgage loans (30%). The funding comprises retail funding (75% as at H1 2022) and wholesale funding (25%). The main ponents of wholesale funding include central bank liquidity (TFSME; H1 2022: 44%) covered bonds (32%). As part of the building society's aim to achieve net zero carbon ssions by 2050, the product portfolio was supplemented in 2021 by, among other asures, green mortgages for the promotion of energy-efficient properties. The CET1 ratio totalled 33.3% in H1 2021 (FY 2021: 37.6%). As is the case with the CET1 ratio, the UK Leverage Ratio (H1 2022: 6.1%), the LCR (191%) and MREL ratio (47.8%) all complied with the regulatory requirements.

Balance Sheet

(EURm)	2020Y	2021Y	2022H1
Net Loans to Customers	18,962	22,059	22,872
Total Securities	1,382	1,190	1,491
Total Deposits	16,094	18,521	19,444
Tier 1 Common Capital	1,245	1,463	1,556
Total Assets	23,037	26,805	27,975
Total Risk-weighted Assets	3,427	3,847	4,665

Redemption Profile

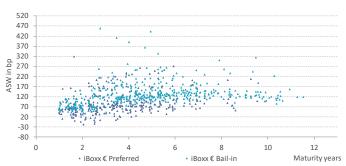


Subordinated Unsecured Jr Subordinated Unsecured

Income Statement

(EURm)	2020Y	2021Y	2022H1
Net Interest Income	231	328	205
Net Fee & Commission Inc.	6	7	3
Net Trading Income	-19	-1	50
Operating Expense	114	148	76
Credit Commit. Impairment	16	-5	4
Pre-tax Profit	91	190	174

Senior Unsecured Bonds (EUR BMK)



Company Ratios

	2020Y	2021Y	2022H1	
Net Interest Margin	1.01	1.33	1.50	Liquio
ROAE	5.53	9.90	16.94	IFRS 1
Cost-to-Income	51.58	44.39	30.05	NPL/
Core Tier 1 Ratio	36.34	38.03	33.35	Reser

	2020Y	2021Y	2022H1
Liquidity Coverage Ratio	195.00	195.00	189.28
IFRS Tier 1 Leverage Ratio	5.47	5.49	5.60
NPL/ Loans at Amortised Cost	-	-	-
Reserves/Loans at Amort. Cost	0.28	0.23	0.23

Source: Bloomberg, S&P Global Market Intelligence, NORD/LB Markets Strategy & Floor Research; as of: 12.10.2022

Strengths / Opportunities

- Capitalisation
- Funding profile
- Cost efficiency

- Buy-to-let exposure
- Diversification of business activities
- Margin and competitive pressures



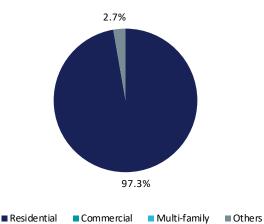
Leeds Building Society – Mortgage

Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

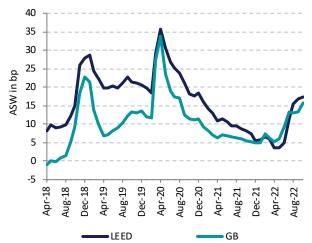
Cover Pool Data

Cover pool volume (FUDm)	2,690
Cover pool volume (EURm)	3,689
Amount outstanding (EURm)	2,494
-thereof ≥ EUR 500m	20.0%
Current OC (nominal)	47.9%
Committed OC	n/a
Cover type	Mortgage
Main country	100% United Kingdom
Main region	15% South East
Number of loans	27,338
Number of borrowers	n/a
Avg. exposure to borrowers (EUR)	n/a
WAL (cover pool)	19.5y
WAL (covered bonds)	2.3y
Fixed interest (cover pool)	92.5%
Fixed interest (covered bonds)	20.6%
LTV (indexed)	46.8%
LTV (unindexed)	56.9%
Loans in arrears	0.6%

Borrower Types



Spread Development



Source: Issuer, Rating agencies, Bloomberg, NORD/LB Markets Strategy & Floor Research

Recovery uplift Outstanding ESG BMKs LCR ELIGIBLE LCR level (Bmk) Risk weight

Regional Distribution

Maturity structure (Bmk)

Rating (Moody's)

Rating (S&P) Rating (Fitch)

Rating (DBRS)

Collateral score

Unused notches

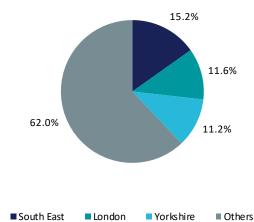
AAA credit risk (%)

TPI leeway

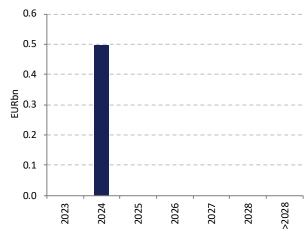
TPI

RRL JRL

PCU



Redemption Profile (Bmk)



United Kingdom



Aaa

AAA

3

_

_

6

1

No

Yes

2A

SB

20%

5.0%

Probable

Lloyds Banking Group

Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Ratings		
	Rating	Outlook
Fitch	А	Stable
Moody's*	A3	Stable
S&P	BBB+	Stable
Homepa	ge	

www.lloydsbankinggroup.com

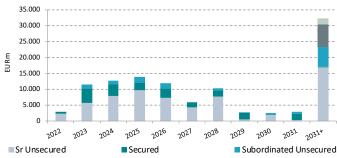
*Senior Unsecured

n . . !

Lloyds Banking Group (LBG) operates as the holding company for its wholly owned subsidiary, Lloyds Bank, which acts as the key operating unit. As the UK's leading retail bank, LBG focuses on the retail and corporate banking business, insurance products, asset management and pensions. The largest shareholders of LBG, which is listed on the London and New York stock exchanges, are BlackRock (7.5%; data as at 07 August 2022) and Vanguard Group (5.6%). LBG reports across the segments Retail, Commercial Banking, Insurance & Wealth and Other. With Lloyds Bank (UK banking), Scottish Widows (insurance business), Bank of Scotland (banking business in Scotland) and Halifax (mortgages), the Group comprises several strong brands on the domestic market. Having outsourced the majority of the banking business to Lloyds Bank (ring-fenced bank) and Bank of Scotland plc, the Group structure complies with the ring-fencing requirements applicable since 2019, whereby Personal Banking had to be separated from higher-risk business units. The higher-risk corporate and capital market segments were transferred to Lloyds Bank Corporate Markets. The strategic realignment implemented in 2021 has brought about an increased focus on sustainability goals. LBG has declared its aim of reducing CO₂ emissions by at least 50% by 2030 in addition to increasing financing for green mortgage loans to a value of at least GBP 10bn by 2024. The CET1 ratio (Q1 2022: 14.2%; Q1 2021: 16.7%), MREL ratio (Q1 2022: 31.6%; Q1 2021: 36.1%) and the leverage ratio (Q1 2022: 5.2%; Q1 2021: 6.0%) all declined year on year.

(EURm) Net Loans to Customers	2020Y 518,119	2021Y 564,279	2022H1 555,442
Total Securities	319,932	344,101	316,364
Total Deposits	502 <i>,</i> 986	567,147	555,876
Tier 1 Common Capital	36,634	40,261	35,736
Total Assets	972,452	1,055,518	1,035,013
Total Risk-weighted Assets	226,292	233,323	243,662

Redemption Profile

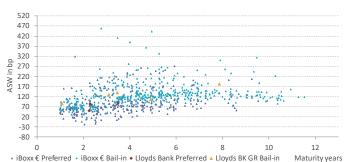


■ Jr Subordinated Unsecured ■ Preferred

Income Statement (EURm)

(EURm)	2020Y	2021Y	2022H1
Net Interest Income	12,095	10,897	8,549
Net Fee & Commission Inc.	1,305	1,656	886
Net Trading Income	8,527	19,340	-22,973
Operating Expense	10,961	12,565	5,558
Credit Commit. Impairment	4,663	-1,603	443
Pre-tax Profit	1,379	8,030	4,347

Senior Unsecured Bonds (EUR BMK)



Company Ratios

2020Y	2021Y	2022H1	
1.33	1.12	1.67	Liquid
2.78	11.46	10.92	IFRS T
65.04	66.28	53.95	NPL/
16.19	17.26	14.67	Reser
	1.33 2.78 65.04	1.33 1.12 2.78 11.46 65.04 66.28	1.331.121.672.7811.4610.9265.0466.2853.95

	2020Y	2021Y	2022H1
Liquidity Coverage Ratio	135.57	134.57	141.77
IFRS Tier 1 Leverage Ratio	3.92	3.92	3.59
NPL/ Loans at Amortised Cost	1.47	1.44	1.77
Reserves/Loans at Amort. Cost	1.29	0.84	0.84

Source: Bloomberg, S&P Global Market Intelligence, NORD/LB Markets Strategy & Floor Research; as of: 12.10.2022

Other

Strengths / Opportunities

- Market-leading retail banking franchise in the UK
- Liquidity
- Funding profile

- Geographical concentration risks
- Economic environment
- Capital basis (peer comparison)



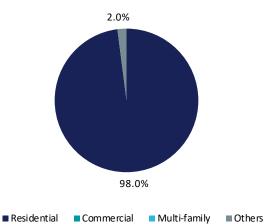
Lloyds Bank – Mortgage

Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

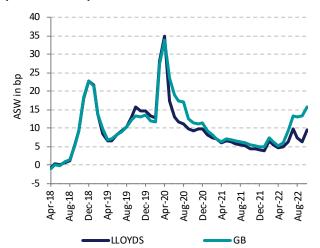
Cover Pool Data

	26.205
Cover pool volume (EURm)	36,305
Amount outstanding (EURm)	24,431
-thereof ≥ EUR 500m	26.6%
Current OC (nominal)	48.6%
Committed OC	7.5%
Cover type	Mortgage
Main country	100% United Kingdom
Main region	19% South East
Number of loans	290,699
Number of borrowers	n/a
Avg. exposure to borrowers (EUR)	n/a
WAL (cover pool)	15.5y
WAL (covered bonds)	3.6y
Fixed interest (cover pool)	58.3%
Fixed interest (covered bonds)	59.5%
LTV (indexed)	44.6%
LTV (unindexed)	61.4%
Loans in arrears	0.7%

Borrower Types



Spread Development



Source: Issuer, Rating agencies, Bloomberg, NORD/LB Markets Strategy & Floor Research

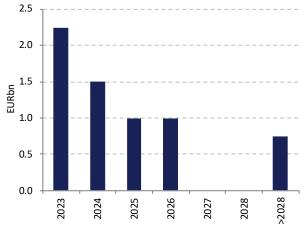
United Kingdom 😹



Rating (Moody's)	Aaa
Rating (S&P)	-
Rating (Fitch)	AAA
Rating (DBRS)	-
TPI	Probable
TPI leeway	4
Collateral score	5.0%
RRL	-
JRL	-
Unused notches	-
AAA credit risk (%)	-
PCU	6
Recovery uplift	2
Outstanding ESG BMKs	No
LCR ELIGIBLE	Yes
LCR level (Bmk)	2A
Risk weight	20%
Maturity structure (Bmk)	SB

Regional Distribution





National Westminster Bank

Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Ratings NatWest Group			
	Rating	Outlook	
Fitch	A+	Stable	
Moody's	A1	Stable	
S&P	А	Stable	

Homepage

www.natwestgroup.com

National Westminster Bank (NatWest) is a wholly owned subsidiary of NatWest Holding ltd., which in turn is a wholly owned subsidiary of the NatWest Group. The UK government is the largest shareholder of the Group (FY 2021: 53.0%). In accordance with UK ringfencing legislation, the lower-risk customer business had to be separated from the higherrisk segments. The ring-fenced institutes within the NatWest Group include NatWest, Royal Bank of Scotland plc and Ulster Bank Ireland DAC, which are brought together under NatWest Holdings Ltd. Following NatWest's withdrawal from the Irish market and initial binding agreements on the sale of essential parts of Ulster Bank, this was integrated into NatWest and new customer business was suspended. In addition to "Ulster Bank Republic of Ireland", a segment which is in the process of being liquidated, NatWest divides its business activities into the following areas: Retail Banking, Commercial Banking, Private Banking, RBSI International, NatWest Markets in addition to Central Items and Other. Group funding consists of customer deposits (86.2%) and capital market funding (13.8%). Medium Term Notes (FY 2021: 46%) and TFSME (16%) account for the most significant shares of wholesale funding. As part of its climate protection goals, NatWest is planning to put a total of GBP 100bn towards the financing and funding of sustainable activities by 2030 (value for FY 2021: GBP 17.5bn), in addition to achieving net zero carbon emissions by 2050 at the latest. In comparison with the previous year, the CET1 ratio (FY 2021: 18.2%) declined by 30bp, but still complied with both the regulatory minimum requirements and the bank's internal target (14%).

Balance Sheet			
(EURm)	2020Y	2021Y	2022H1
Net Loans to Customers	303,652	342,181	342,982
Total Securities	45,546	36,988	28,000
Total Deposits	327,704	392,279	394,543
Tier 1 Common Capital	17,215	16,578	14,338
Total Assets	434,777	517,401	508,028
Total Risk-weighted Assets	96,972	102,652	123,460

Redemption Profile (NatWest Group)



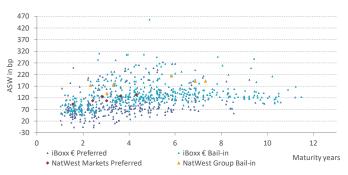
Company Ratios

	2020Y	2021Y	2022H1
Net Interest Margin	1.68	1.48	1.59
ROAE	2.71	14.31	18.22
Cost-to-Income	69.25	65.98	53.43
Core Tier 1 Ratio	17.75	16.15	11.61

Income Statement

(EURm)	2020Y	2021Y	2022H1
Net Interest Income	6,537	6,983	4,043
Net Fee & Commission Inc.	1,557	1,724	936
Net Trading Income	144	150	-
Operating Expense	6,836	7,183	3,598
Credit Commit. Impairment	2,441	-946	-21
Pre-tax Profit	677	4,518	3,157

Senior Unsecured Bonds (EUR BMK)



	2020Y	2021Y	2022H1
Liquidity Coverage Ratio	-	-	-
IFRS Tier 1 Leverage Ratio	4.04	3.24	-
NPL/ Loans at Amortised Cost	1.20	1.04	1.31
Reserves/Loans at Amort. Cost	1.35	0.87	0.80

Source: Bloomberg, S&P Global Market Intelligence, NORD/LB Markets Strategy & Floor Research; as of: 12.10.2022

Strengths / Opportunities

- Capitalisation
- Market position in the UK
- Funding

Risks / Weaknesses

- Geographical concentration in the UK
- Restructuring process (operational risks)
- Profitability



National Westminster Bank – Mortgage United Kingdom 😹

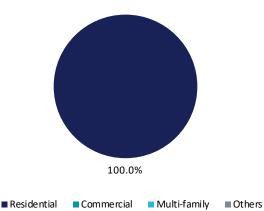
Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Cover Pool Data

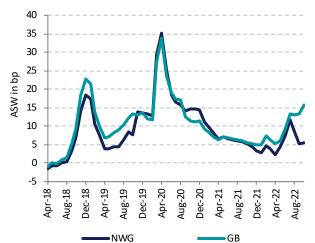
Cover pool volume (EURm)	8,611
Amount outstanding (EURm)	3,267
-thereof ≥ EUR 500m	38.3%
Current OC (nominal)	163.6%
Committed OC	8.0%
Cover type	Mortgage
Main country	100% United Kingdom
Main region	21% Greater London
Number of loans	96,047
Number of borrowers	n/a
Avg. exposure to borrowers (EUR)	n/a
WAL (cover pool)	17.3y
WAL (covered bonds)	1.4y
Fixed interest (cover pool)	92.2%
Fixed interest (covered bonds)	57.1%
LTV (indexed)	41.0%
LTV (unindexed)	54.9%
Loans in arrears	0.0%

Rating (Moody's)	Aaa
Rating (S&P)	-
Rating (Fitch)	AAA
Rating (DBRS)	-
ТРІ	Probable
TPI leeway	4
Collateral score	5.0%
RRL	-
JRL	-
Unused notches	-
AAA credit risk (%)	-
PCU	6
Recovery uplift	-
Outstanding ESG BMKs	No
LCR ELIGIBLE	Yes
LCR level (Bmk)	2A
Risk weight	20%
Maturity structure (Bmk)	SB

Borrower Types

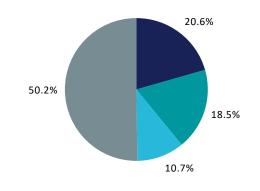


Spread Development

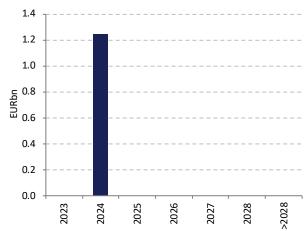


Source: Issuer, Rating agencies, Bloomberg, NORD/LB Markets Strategy & Floor Research

Regional Distribution



Greater London South East East Anglia Others





Nationwide Building Society

Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Ratings

	Rating	Outlook
Fitch	А	Stable
Moody's*	A1	Stable
S&P	A+	Stable

Homepage

www.nationwide.co.uk

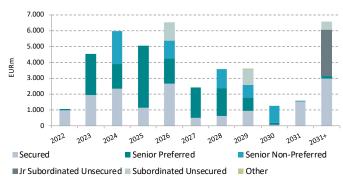
*Senior Unsecured

Nationwide Building Society (NBS) is the UK's largest building society and features a cooperative structure. It is ranked as a domestic systemically important bank (D-SIB). It has more than 16.3 million members and boasts strong market positions in the areas of private mortgage loans (FY 2022: market share of 12.4%), deposits (9.4%) and current accounts (10.3%) in particular. In its primary area of business, retail banking, NBS focuses on residential mortgages, deposits and insurance products in addition to personal banking and financial planning. Lending at NBS covers the areas of Residential Mortgages (FY 2022: 95.2% of the loan portfolio, of which just under one third are buy-to-let arrangements), Consumer Banking (2.2%) and Commercial & Other Lending (2.6%). Retail funding (FY 2022: 65.3%) and wholesale funding (24.7%) account for the overwhelming majority of the funding mix at NBS. The most important components of wholesale funding are TFSME (refinancing via the Bank of England; FY 2022: 21.7%), covered bonds (12.9%), repo transactions (11.1%) and Medium Term Notes (10.0%). As a member of the Net-Zero Banking Alliance, NBS will strive to reduce its carbon emissions to net zero by 2050 in addition to ensuring that at least 50% of the mortgage portfolio is allocated to a high energy-efficiency category (EPC rating of C or better) by 2030. In the wake of changing regulatory requirements for the calculation of risk-weighted assets, the CET1 ratio of NBS fell by 12.3 percentage points to 24.1% in FY 2022 (FY 2021: 36.4%). NBS has stated that the CET1 ratio would have risen by 4.1 percentage points to 40.5% without the regulatory change. The financial year of NBS ends on 04 April each year.

Balance Sheet

(EURm)	2020Y	2021Y	2022Y
Net Loans to Customers	228,091	237,039	246,209
Total Securities	30,131	35,551	32,854
Total Deposits	186,321	205,623	216,755
Tier 1 Common Capital	12,104	14,121	14,757
Total Assets	281,503	299,803	322,282
Total Risk-weighted Assets	37,905	38,776	61,323

Redemption Profile



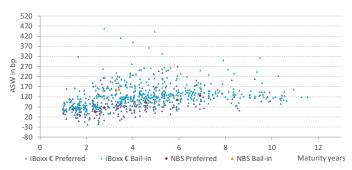
Company Ratios

	2020Y	2021Y	2022Y
Net Interest Margin	1.17	1.27	1.37
ROAE	2.79	4.57	8.40
Cost-to-Income	76.04	67.31	57.51
Core Tier 1 Ratio	31.93	36.42	24.06

Income Statement

(EURm)	2020Y	2021Y	2022Y
Net Interest Income	3,213	3,527	4,189
Net Fee & Commission Inc.	193	166	302
Net Trading Income	57	84	58
Operating Expense	2,643	2,505	2,611
Credit Commit. Impairment	239	213	-32
Pre-tax Profit	533	923	1,878

Senior Unsecured Bonds (EUR BMK)



2020Y 2021Y 2022Y Liquidity Coverage Ratio 150.79 158.51 180.97 IFRS Tier 1 Leverage Ratio 4.36 4.76 4.62 NPL/ Loans at Amortised Cost 0.39 0.42 0.36 Reserves/Loans at Amort, Cost

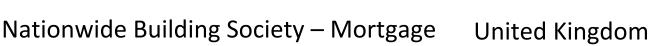
Source: Bloomberg, S&P Global Market Intelligence, NORD/LB Markets Strategy & Floor Research; as of: 12.10.2022

Strengths / Opportunities

- Franchise position in the domestic market
- Capitalisation

- Concentration risks (UK residential mortgages)
- Profitability (competitive pressure)





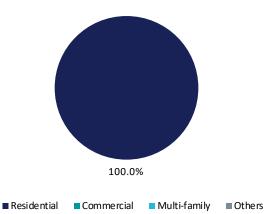
Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Cover Pool Data

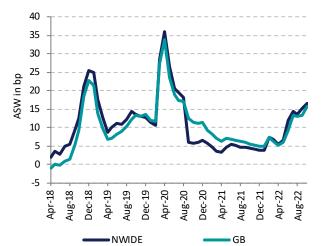
Cover pool volume (EURm)	23,420
Amount outstanding (EURm)	15,347
-thereof ≥ EUR 500m	32.6%
Current OC (nominal)	52.6%
Committed OC	7.5%
Cover type	Mortgage
Main country	100% United Kingdom
Main region	16% Outer Metropolitan
Number of loans	203,892
Number of borrowers	n/a
Avg. exposure to borrowers (EUR)	n/a
WAL (cover pool)	18.3y
WAL (covered bonds)	5.4y
Fixed interest (cover pool)	81.4%
Fixed interest (covered bonds)	64.5%
LTV (indexed)	41.1%
LTV (unindexed)	54.7%
Loans in arrears	0.4%

Rating (S&P)	AAA
Rating (Fitch)	AAA
Rating (DBRS)	-
TPI	Probable
TPI leeway	4
Collateral score	5.0%
RRL	aa-
JRL	аа
Unused notches	2
AAA credit risk (%)	0
PCU	6
Recovery uplift	1
Outstanding ESG BMKs	No
LCR ELIGIBLE	Yes
LCR level (Bmk)	2A
Risk weight	20%
Maturity structure (Bmk)	SB

Borrower Types



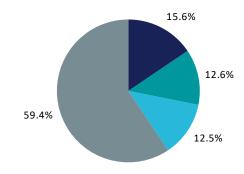
Spread Development



Source: Issuer, Rating agencies, Bloomberg, NORD/LB Markets Strategy & Floor Research

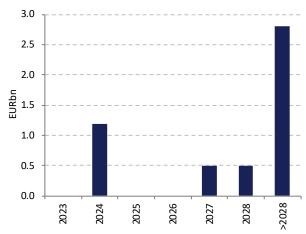
Regional Distribution

Rating (Moody's)



■ Outer Metropolitan ■ Outer South East ■ London ■ Others

Redemption Profile (Bmk)



NORD/LB



Aaa

UK

Santander UK Group Holdings

Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Ratings

	Rating	Outlook
Fitch	А	Stable
Moody's	Baa1	Stable
S&P	BBB	Stable

Homepage

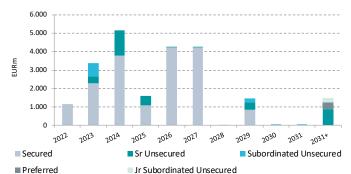
www.santander.co.ukx

Santander UK Group Holdings (Santander UK) is a wholly owned subsidiary of the global systemically important bank (G-SIB) Banco Santander. In turn, Santander UK plc is a wholly owned subsidiary of Santander UK Group Holdings and is categorised as a domestic systemically important bank (D-SIB) by the UK financial supervisory body. Santander UK plc is the Group's ring-fenced bank. The ring-fencing legislation stipulates that high-risk and low-risk business segments must be separated. Through the implementation of a ringfenced structure, the corporate and wholesale market business of Santander UK was transferred to Banco Santander (London branch). In 2021, Santander UK served more than 14.4 million customers across 450 branches, giving it a market share of 11% (FY 2020) in the area of retail mortgages in the UK. The Group divides its business activities into the following segments: Retail (FY 2021: 96% of pre-tax profit), Corporate & Commercial (10%), Consumer Finance (15%) and Corporate Centre (-22%). Capital market funding at Group level is handled predominantly via Santander UK plc by way of the dominant instruments TFSME (Q1 2022: 51.6%), covered bonds (22.6%) and HoldCo senior unsecured bonds (17.7%). In addition to the climate protection goals resulting from its membership in the Net-Zero Banking Alliance, Santander UK has committed to financing green activities with a volume of GBP 20bn by 2025 (equivalent value in FY 2021: GBP 4bn). As at Q1 2022, the LCR increased to 178% (FY 2021: 166%), while the leverage ratio (Q1 2022: 5.1%; FY 2021: 5.2%) and the CET1 ratio (15,5%; 15,9%) declined.

Balance Sheet

(EURm)	2020Y	2021Y	2022H1
Net Loans to Customers	237,503	254,862	257,549
Total Securities	37,261	24,889	18,948
Total Deposits	215,930	229,954	222,096
Tier 1 Common Capital	12,343	12,916	12,702
Total Assets	333,795	349,658	338,065
Total Risk-weighted Assets	81,391	81,134	81,795

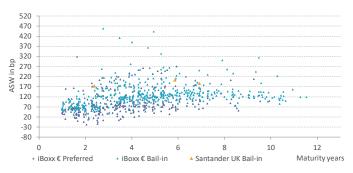
Redemption Profile



Income Statement

(EURm)	2020Y	2021Y	2022H1
Net Interest Income	3,804	4,650	2,551
Net Fee & Commission Inc.	358	326	197
Net Trading Income	83	-5	-
Operating Expense	2,702	2,827	1,387
Credit Commit. Impairment	719	-271	140
Pre-tax Profit	572	2,162	1,179

Senior Unsecured Bonds (EUR BMK)



Company Ratios

	2020Y	2021Y	2022H1
Net Interest Margin	1.18	1.38	1.51
ROAE	2.61	8.45	9.31
Cost-to-Income	64.91	53.57	49.08
Core Tier 1 Ratio	15.17	15.92	15.53

	2020Y	2021Y	2022H1
Liquidity Coverage Ratio	150.22	165.96	171.80
IFRS Tier 1 Leverage Ratio	3.74	3.73	3.79
NPL/ Loans at Amortised Cost	1.36	1.38	1.15
Reserves/Loans at Amort. Cost	0.61	0.39	0.40

Source: Bloomberg, S&P Global Market Intelligence, NORD/LB Markets Strategy & Floor Research; as of: 12.10.2022

Strengths / Opportunities

- Profitability
- Loan quality
- Capitalisation

Risks / Weaknesses

- Debt level in comparison with peers
- Dependency on capital market funding
- Diversification of business areas versus UK peers

United Kingdom 😹

Santander UK – Mortgage

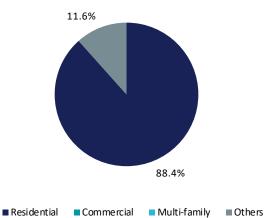
Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Cover Pool Data

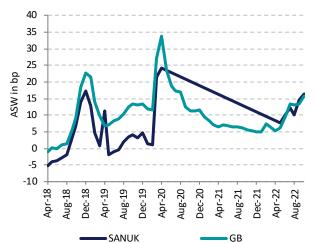
Cover pool volume (EURm)	27,432
Amount outstanding (EURm)	18,707
-thereof ≥ EUR 500m	9.4%
Current OC (nominal)	46.6%
Committed OC	17.9%
Cover type	Mortgage
Main country	100% United Kingdom
Main region	22% South East
Number of loans	148,796
Number of borrowers	n/a
Avg. exposure to borrowers (EUR)	n/a
WAL (cover pool)	21.6y
WAL (covered bonds)	3.1y
Fixed interest (cover pool)	90.4%
Fixed interest (covered bonds)	63.3%
LTV (indexed)	49.6%
LTV (unindexed)	60.3%
Loans in arrears	0.0%

Rating (Moody's)	Aaa
Rating (S&P)	AAA
Rating (Fitch)	AAA
Rating (DBRS)	-
TPI	Probable
TPI leeway	4
Collateral score	5.0%
RRL	a+
JRL	aa-
Unused notches	1
AAA credit risk (%)	0
PCU	6
Recovery uplift	-
Outstanding ESG BMKs	No
LCR ELIGIBLE	Yes
LCR level (Bmk)	2A
Risk weight	20%
Maturity structure (Bmk)	SB

Borrower Types

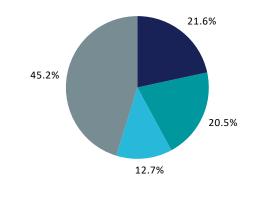


Spread Development



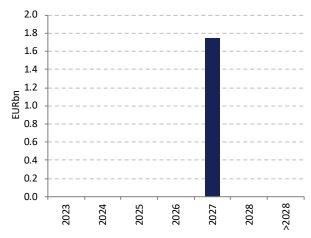
Source: Issuer, Rating agencies, Bloomberg, NORD/LB Markets Strategy & Floor Research

Regional Distribution



South East London East Anglia Others

Redemption Profile (Bmk)



Skipton Building Society

Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Ratings

	Rating	Outlook		
Fitch	A-	Stable		
Moody's*	A2	Stable		
S&P	-	-		
Homepage				
www.skipton.co.uk				

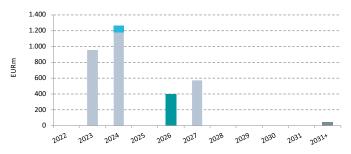
Skipton Building Society (Skipton) has 1.1 million members and employs more than 2,200 staff, which makes it one of the major UK building societies. Skipton's traditional banking activities comprise a broad product portfolio, with mortgages, savings accounts, financial consultancy services in addition to real estate brokerage and other associated services offered across the UK. Reporting is conducted across the four segments Mortgages and Savings (FY 2021: 24.0% operating income), Estate Agency (74.1%), Investment Portfolio (2.2%) and Sundry incl. inter-divisional adjustments (-0.2%). The 99.9% subsidiary Connells Itd (estate agent) completed a GBP 131.8m takeover of the estate agent Countrywide plc. Following the takeover, Connells became the UK's largest estate agent based both on market share and number of branches. Wholesale funding accounts for a share of 19.8% (FY 2021) in the overall funding mix, although there is a distinct focus on retail funding here (80.2%). Excluding the funding activities of the wholly owned subsidiary Skipton Investment ltd, wholesale funding is dominated by the components of TFSME (Bank of England refinancing scheme; share of 43.3% FY 2021) and covered bonds (40.9%). Skipton has drawn up plans to operate on a climate-positive basis from 2025 onwards. In FY 2021, the Group's carbon footprint was cut by 1.9%. The CET1 ratio rose to 44.6% in FY 2021 (FY 2020: 38.5%), although the LCR of 173% registered a decline of 21 percentage points. In comparison with the previous year, the UK leverage ratio also rose, moving from 6.5% in FY 2020 to 6.8% in FY 2021.

Balance Sheet

*Senior Unsecured

(EURm)	2020Y	2021Y	2022H1
Net Loans to Customers	24,890	27,899	27,554
Total Securities	1,753	2,895	4,273
Total Deposits	23,260	26,204	26,834
Tier 1 Common Capital	1,770	2,114	2,170
Total Assets	31,546	35,085	36,487
Total Risk-weighted Assets	4,602	4,744	5,948

Redemption Profile



Secured Senior Non-Preferred 1st Lien Secured Jr Subordinated Unsecured

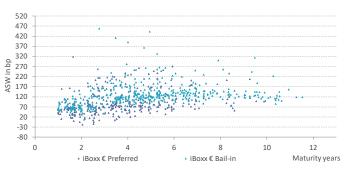
Company Ratios

	2020Y	2021Y	2022H1
Net Interest Margin	0.90	1.05	1.31
ROAE	5.81	11.77	12.21
Cost-to-Income	80.17	45.76	78.59
Core Tier 1 Ratio	38.46	44.56	36.49

Income Statement

(EURm)	2020Y	2021Y	2022H1
Net Interest Income	268	345	231
Net Fee & Commission Inc.	465	1,217	632
Net Trading Income	-3	-1	14
Operating Expense	589	716	691
Credit Commit. Impairment	30	-15	-2
Pre-tax Profit	134	316	190

Senior Unsecured Bonds (EUR BMK)



2020Y	2021Y	2022H1
185.21	186.02	180.83
5.73	6.16	6.08
-	-	-
0.19	0.12	0.11
	185.21 5.73	185.21 186.02 5.73 6.16

Source: Bloomberg, S&P Global Market Intelligence, NORD/LB Markets Strategy & Floor Research; as of: 12.10.2022

Strengths / Opportunities

- Asset quality
- Capitalisation
- Profitability (in a peer comparison)

Risks / Weaknesses

- Economic environment
- Above-average lending growth
- Geographical concentration



United Kingdom

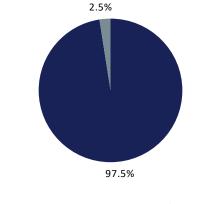
Skipton Building Society – Mortgage

Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Cover Pool Data

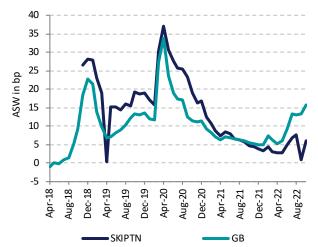
Cover pool volume (EURm)	4,134
Amount outstanding (EURm)	2,787
-thereof ≥ EUR 500m	35.9%
Current OC (nominal)	48.4%
Committed OC	n/a
Cover type	Mortgage
Main country	100% United Kingdom
Main region	19% South East
Number of loans	28,746
Number of borrowers	n/a
Avg. exposure to borrowers (EUR)	n/a
WAL (cover pool)	20.1y
WAL (covered bonds)	2.1y
Fixed interest (cover pool)	93.9%
Fixed interest (covered bonds)	37.3%
LTV (indexed)	48.0%
LTV (unindexed)	59.3%
Loans in arrears	0.1%

Borrower Types



■ Residential ■ Commercial ■ Multi-family ■ Others

Spread Development



Source: Issuer, Rating agencies, Bloomberg, NORD/LB Markets Strategy & Floor Research

Regional Distribution

Maturity structure (Bmk)

Rating (Moody's)

Rating (S&P) Rating (Fitch)

Rating (DBRS)

Collateral score

Unused notches

Recovery uplift

LCR level (Bmk)

LCR ELIGIBLE

Risk weight

AAA credit risk (%)

Outstanding ESG BMKs

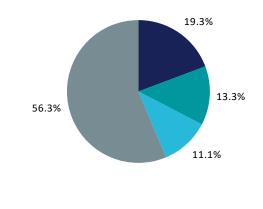
TPI leeway

TPI

RRL

JRL

PCU



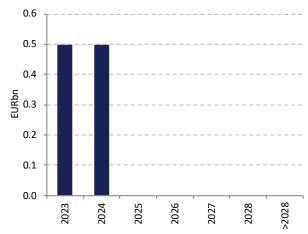
South West

Others

London

Redemption Profile (Bmk)

South East





Aaa

AAA

4

.

_

_

6

_

No

Yes

2A

SB

20%

5.0%

Probable

UK

Yorkshire Building Society

Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Ratings

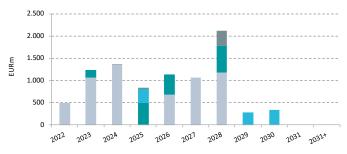
	Rating	Outlook
Fitch	A-	Stable
Moody's*	A3	Stable
S&P	-	-
Homepa	ge	
www.ybs.	<u>co.uk</u>	
*Senior U	nsecured	

The cooperative Yorkshire Building Society (YBS) was founded in 1864. The business development of YBS has been shaped by a number of mergers, mainly with other building societies. As a result, it has grown to become the third-largest building society in the UK. More than 2,300 employees offer over three million YBS members in the UK both traditional building society products such as savings accounts and mortgages in addition to insurance products. Its core business activities are in the area of mortgage loans (prime owner-occupied) to private customers. In the UK, YBS successfully increased its market share in the mortgage business to 3.2% in FY 2021 (FY 2020: 2.8%). In addition to mortgages, YBS primarily offers intermediary lending for residential properties under the Accord Mortgages brand. In terms of the funding mix, a share of 26% (FY 2021) is attributable to wholesale funding, with retail funding accounting for a majority share of 71.6%. The most important components of wholesale funding include TFSME (Bank of England refinancing scheme; 42%), covered bonds (31%) and senior preferred bonds (13%). YBS is planning to achieve climate neutrality by 2050. As part of this journey, Scope 1 and Scope 2 CO_2 emissions are to be cut to net zero by 2025. In FY 2021, YBS was able to scale back its carbon footprint by 6%. As at the end of FY 2021, the leverage ratio at YBS came in at 5.9% (FY 2020: 5.9%), while the LCR stood at 198.9% (FY 2020: 192%). As such, these metrics largely remained stable in comparison with FY 2020. The CET1 ratio (FY 2021: 16.8%) and MREL ratio (21.7%) fulfilled the regulatory requirements of 7.0% and 18.5% respectively.

Balance Sheet

8	2020Y	2021Y	2022H1
Net Loans to Customers	43,304	49,914	50,346
Total Securities	3,657	5,437	7,756
Total Deposits	37,841	43,315	45,174
Tier 1 Common Capital	3,023	3 <i>,</i> 536	3,662
Total Assets	53,497	62,774	65,572
Total Risk-weighted Assets	18,054	20,992	22,070

Redemption Profile



Secured Senior Preferred Senior Non-Preferred Subordinated Unsecured

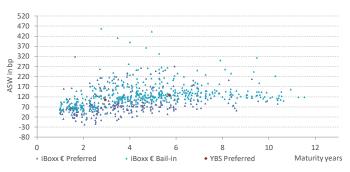
Company Ratios

	2020Y	2021Y	2022H1
Net Interest Margin	0.96	1.07	1.23
ROAE	4.52	8.74	11.71
Cost-to-Income	61.80	48.13	37.47
Core Tier 1 Ratio	16.74	16.85	16.59

Income Statement

(EURm)	2020Y	2021Y	2022H1
Net Interest Income	493	625	397
Net Fee & Commission Inc.	10	10	4
Net Trading Income	2	32	62
Operating Expense	314	322	174
Credit Commit. Impairment	14	-23	1
Pre-tax Profit	181	372	289

Senior Unsecured Bonds (EUR BMK)



	2020Y	2021Y	2022H1
Net Interest Margin	0.96	1.07	1.23
ROAE	4.52	8.74	11.71
Cost-to-Income	61.80	48.13	37.47
Core Tier 1 Ratio	16.74	16.85	16.59

	2020Y	2021Y	2022H1
Liquidity Coverage Ratio	158.67	178.57	179.10
IFRS Tier 1 Leverage Ratio	5.71	5.67	5.63
NPL/ Loans at Amortised Cost	-	-	-
Reserves/Loans at Amort. Cost	0.11	0.06	0.06

Source: Bloomberg, S&P Global Market Intelligence, NORD/LB Markets Strategy & Floor Research; as of: 12.10.2022

Strengths / Opportunities

- Deposit basis
- Capitalisation
- Profitability

Risks / Weaknesses

- Competition in the domestic market
- Geographical concentration
- Economic environment could impair asset quality

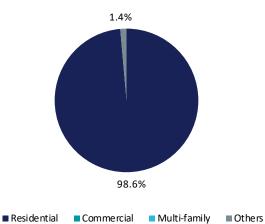
Yorkshire Building Society – Mortgage 🛛 United Kingdom 😹

Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

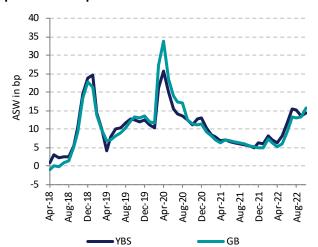
Cover Pool Data

Cover pool volume (FUDm)	0.411
Cover pool volume (EURm)	9,411
Amount outstanding (EURm)	5,883
-thereof ≥ EUR 500m	34.0%
Current OC (nominal)	60.0%
Committed OC	n/a
Cover type	Mortgage
Main country	100% United Kingdom
Main region	19% South East
Number of loans	48,264
Number of borrowers	n/a
Avg. exposure to borrowers (EUR)	n/a
WAL (cover pool)	23.3v
WAL (covered bonds)	3.3y
Fixed interest (cover pool)	, 95.8%
Fixed interest (covered bonds)	41.6%
LTV (indexed)	58.0%
LTV (unindexed)	66.2%
Loans in arrears	0.2%

Borrower Types



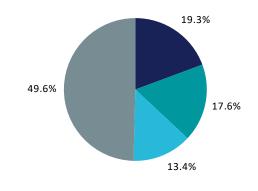
Spread Development



Source: Issuer, Rating agencies, Bloomberg, NORD/LB Markets Strategy & Floor Research

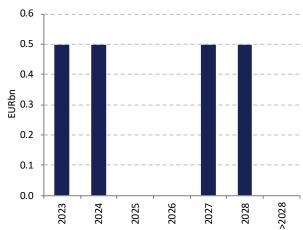
Rating (Moody's)	Aaa
Rating (S&P)	-
Rating (Fitch)	AAA
Rating (DBRS)	-
TPI	Probable
TPI leeway	3
Collateral score	5.0%
RRL	-
JRL	-
Unused notches	-
AAA credit risk (%)	-
PCU	6
Recovery uplift	2
Outstanding ESG BMKs	Yes
LCR ELIGIBLE	Yes
LCR level (Bmk)	2A
Risk weight	20%
Maturity structure (Bmk)	SB

Regional Distribution



■ South East ■ London ■ Yorks hire and Humber ■ Others

Redemption Profile (Bmk)



Regulatory Risk weights of covered bonds

Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Risk weights as the starting point for risk-weighted assets

The Capital Requirements Regulation (CRR) includes provisions on calculating the capital requirements for credit institutions that follow the credit risk standardised approach (SACR) to determine the risk weightings of covered bonds, among other assets. Establishing the relevant risk weighting is important insofar as, under the SACR, the risk-weighted portion of an asset is obtained from multiplication of the position's value and the risk weighting. The sum of all the portions results in the risk-weighted assets (RWA), which must be backed accordingly by equity capital. In addition to the Covered Bond Directive (CBD) applicable to the issuance of covered bonds from 8 July 2022 onwards, collateralisation by eligible cover assets and appropriately transparent cover pool reporting, rating assessments of a risk position in particular play an important role in determining the risk weighting of a covered bond. The Credit Quality Step system used for this purpose and the other conditions for preferential risk weighting of covered bonds are dealt with below.

Compliance with Article 129 of the CRR required for preferential risk weighting

Covered bonds are generally eligible for preferential treatment in relation to risk weighting under the credit risk standardised approach. The requirements that a bond has to meet in order to comply with this are laid down in <u>Article 129 CRR</u>. The date of issuance is also of crucial importance in this regard. The Covered Bond Directive entered into force on 8 July 2022, together with a revised Article 129 CRR and an amendment to the liquidity requirements for credit institutions (LCR-R). In the past, reference was made here to Article 52(4) of the UCITS Directive, which superficially described a covered bond. Now, however, this article also refers to the Covered Bond Directive or, based on the CBD, Article 129 CRR specifies requirements so that a covered bond can be eligible for preferential risk weighting. As a result, conformity with the covered bond legislation in the particular country will now have to be checked, as the Member States had to transpose the CBD into national law. Nevertheless, slightly different requirements apply to covered bonds issued before 8 July 2022.

Until now, Article 52(4) of the UCITS Directive had been the "anchor" in the risk weighting of covered bonds

The relevant Article (Article 52(4) of the UCITS Directive) defined requirements for covered bonds, even though this definition under the UCITS Directive may not initially have been seen in connection with establishing risk weightings or other regulatory metrics. Instead, Article 52(4) provides that undertakings for collective investment in transferable securities (UCITS) may, under certain conditions, hold a higher proportion of certain bonds. This is still the case. However, the Article also served in many cases as a basis for defining covered bonds. The aforementioned Directive was previously adapted to the future CB Directive in January 2020.

Article 52(4) of the UCITS Directive was adapted to the CBD in 2020

It also followed from the requirements of "old" Article 52(4) of the UCITS Directive, which has referred to the CBD since 7 January 2020, that covered bonds issued outside the European Economic Area (EEA) may under no circumstances be UCITS-compliant. The Covered Bond Directive, or rather the relevant transposition into national law, is now regarded as the reference point.

Article 129 CRR defines the requirements for covered bonds and risk weighting

Together with the Covered Bond Directive a clear definition of the collateral and requirements for covered bonds was also included in Article 129 CRR. In conjunction with Directive 2019/2162, this Article will then be used for determining the risk weighting. Certain requirements of Article 129 do not apply to covered bonds issued up to 31 December 2007 or, as the case may be, up to 7 July 2022. If an issuer's covered bonds (both "old" and "new") are issued from one cover pool, however, the requirements must be met in full, so that this applies automatically to the old bonds as well. The table below shows which assets qualify as eligible collateral. However, covered bonds issued up to 7 July 2022 must also meet the requirements of Art. 129 (1) to (3), i.e. including requirements and limite for creditworthiness and borrowers, as well as LTV limits and regular collateral monitoring. Liens on aircraft and loans to small and medium-sized enterprises (SMEs) are still disregarded, with the result that they are neither eligible as cover assets within the meaning of the CRR, nor do they benefit from preferential risk weighting.

Review of property values as a hurdle for preferential risk weighting

As mentioned above, the revised Article 129 CRR has brought about changes in the monitoring of property values. These reviews must now be conducted at least once a year, regardless of whether the property is residential, commercial or a ship. This is a fundamental point in the grandfathering of "old bonds". When the CRR was introduced in 2013, real estate values were to be monitored annually in the case of commercial properties, and every three years for residential properties. Although issuers do not have to conduct the review each year if the bond was issued before 31 December 2007, the annual review now also applies to bonds placed at a later date. In Germany, the Association of German Pfandbrief Banks (Verband Deutscher Pfandbriefbanken, vdp) maintains a database as an ongoing market monitoring system. The database has been tracking price trends in Germany since 2007 and meets the requirements of Art. 208 CRR. As reported by vdpResearch, 90% of the credit institutions based in Germany use the system for monitoring annual rent and price changes, thus fulfilling the extended requirement of Art. 129(3) CRR. Issuers and covered bond creditors will consequently need to spend more time on additional checks in order to continue to benefit from a lower risk weighting, because not every country can provide access to the type of transaction database mentioned above. Statistical market trends are sufficient to meet the requirement; monitoring at individual asset level is not necessary at this point. In Germany, BaFin (the German financial regulator) has agreed the following: in the event of changes in market values as provided by the vdp, at the level of -10% for commercial and -20% for residential properties within a period of three years, a "warning" will be issued. On this basis, the institutions using this data will examine their portfolio more closely and, if necessary, only then conduct a review at individual loan level. There is only a change to the required cycle of monitoring itself.

Issued up to (para-

graphs marked with x

do not need to be met

.12.2007 2022

Transparency requirement / investor information now regulated through the CBD

Up to 7 July 2022, Art. 129(7) CRR required that investors must be able to present certain portfolio information to the competent authority in order to obtain preferential treatment of covered bonds. This included: value of the cover pool and outstanding covered bonds, geographical distribution and type of cover assets, loan size, interest rate and currency risks, maturity structure of cover assets and covered bonds, and loans ≥90 days past due. However, this passage no longer appears in the current version of Article 129 CRR. Instead, Article 129 CRR now requires compliance with Art. 3 No. 1 CBD. Article 14 CBD includes extensive requirements that issuers must meet with regard to investor information. This information must be made available at least every quarter, whereas previously it was twice a year. In addition to the above-mentioned information, the following must be reported: an ISIN list of all covered bonds (if available), the type of cover assets, the valuation method, extended information on market risk and on credit and liquidity risks, maturity extension triggers, required/actual overcollateralisation (statutory, contractual, voluntary).

Article 129 CRR (from 8 July 2022)

Para-	LZ9 CKK (IFOM 8 JUIY 2022) do not need to be met in order to qualify for lower risk weighting)	Current	Up to 31.12.
graph	Description		ц Ч
1	To be eligible for the preferential treatment set out in Art. 3(1) No. 1 CBD, covered bonds must meet the requirements set out in Art. 129(3)(3a)(3b) CRR and be collateralised by any of the following assets:		х
	Exposures to or guaranteed by:		
	a) Central governments, the ESCB central banks, public sector entities, regional governments or local au- thorities in the Union		
	b) Third-country central governments, third-country central banks, multilateral development banks, in-		
	ternational organisations (CQS 1), third-country public sector entities, third-country regional govern-		
	ments or third-country local authorities (CQS 1), and exposures within the meaning of this point that		
	qualify with CQS 2, provided that they do not exceed 20% of the nominal amount of outstanding cov- ered bonds of the issuing institutions		
	c) Credit institutions that qualify for CQS 1 and 2 or CQS 3 under the following conditions: i) short-term		
	deposits (original maturity <100 days), provided they comply with Art. 16 CBD, or ii) derivative con- tracts as referred to in Art. 11(1) CBD		
	d) Residential loans: LTV limit 80% (in conjunction with paragraph 1c)		
	e) Residential loans (guaranteed by a protection provider referred to in Art. 201 CRR with min. CQS 2) with max. LTV of 80% for a residential property located in France, provided that the loan-to-income ra-		
	tio is $\leq 33\%$ when the loan has been granted (further requirements apply to borrower and collateral)		
	f) Commercial property loans: LTV limit 60%; LTV limit of 70% if OC (overcollateralisation) is at least 10%,		
	the bondholders' claim meets the legal certainty requirements set out in Chapter 4 CRR, and this claim has priority over all other claims on the collateral		
	g) Loans secured by maritime liens: LTV limit 60%; 60% of the ship's value less any prior maritime liens		
1a	 a) Exposures to credit institutions (Art. 129(1) subparagraph 1 (c) with CQS 1, ≤ 15% of the nominal amount of issued covered bonds) 		х
	b) Exposures to credit institutions with CQS 2, \leq 10% of the nominal amount of issued covered bonds		
	c) Short-term deposits of credit institutions or derivative contracts with CQS 3 (in accordance with Art.		
	129(1) subparagraph 1 (c) (i) or (ii) CRR); ≤8% of the nominal amount of the issued covered bonds (ad-		
	ditional approval requirements apply in the case of derivative contracts)		
	d) Total exposure to credit institutions with CQS 1, 2 or 3, ≤15% of the nominal amount of the issued cov-		
	ered bonds, and exposure to credit institutions that are assigned to CQS 2 or 3 may not exceed 10% of		
	the nominal amount of the issuing institution's outstanding covered bonds		

Source: CRR, NORD/LB Markets Strategy & Floor Research; X = condition is NOT to be fulfilled or that version from the time of issue

Article 129 CRR (from 8 July 2022) – (CONTINUED)

Article 1	L29 CRR (from 8 July 2022) -	- (CONTINU	ED)				marke need to to quali	p to (paragraphs d with x do <u>not</u> be met in order fy for lower risk reighting)	Current	31.12.2007	
Absatz		Bez	eichnung							31	
1b	Art. 129(1a) CRR applies not t eral of an internal covered bo			Art. 8 CBD (ir	nternally is	sued cove	red bonds	; collat-			
1c	For the purposes of Art. 129(1) subparagra		, the LTV cei	ling of 80%	6 per loan s	shall apply	; it ap-		_	
1d	plies over the entire term of t For the purposes of Art. 129(apply; it applies over the enti	1) subparagra) CRR, the LT	V ceiling c	of 60% or 7	'0% per loa	an shall			
2	The cases referred to in Art. 1 solely for the protection of co	.29(1) subpar	agraph 1 (a t		relate to o	collateral v	vhich is int	ended			
3	In the case of collateralisation quirements for immovable pr least annually.	n with immov	able property	y and ships,	-					х	
За	Minimum overcollateralisatic Member States may set a low vided that: a) overcollateralisation is bas assets, or asset valuation is b b) the ratio does not fall belo The assets contributing to the Art. 129(1a) CRR	ver ratio or al ed on a form ased on the c w 2%, based	low their com al approach ti ollateral valu on the nomin	npetent auth hat takes int e and nal principle	orities to a o account referred to	set an app the under o in Art. 15	ropriate ra lying risk c (6) and (7)	itio, pro- If the CBD.		X	Х
3b	Exposures referred to in Art. provided the thresholds for c with									х	х
4	Covered bonds for which a ra corresponds to Art. 136 CRR: Credit quality step (CQS)	ting by an EC 1	Al is available 2	e are assigne 3	d the follo	owing risk v	veighting, 5	which 6			
	Risk weighting (RW)	10%	20%	20%	50%	5	0%	100%			
5	Unrated covered bonds are a sures to the issuing institution		weighting ba	ased on the	risk weight	ing of prio	r unsecure	ed expo-			
	If a RW of X% applies to expo	sure to the ir	stitution,		20%	50%	100%	150%			
	then the covered bond is assi	gned a RW o	f X%		10%	20%	50%	100%			
6	Covered bonds issued before (3), (3a) and (3b) CRR. The pro- until their due date.			-							
7	Covered bonds issued before plicable at the time of issue, s ential treatment under parag	shall not be s	ubject to the	requiremen	ts of parag	raphs 3a a					

NORD/LB

Rating assessments as further decisive factor

Fulfilment of the requirements described above constitutes a necessary condition for a preferential risk weighting of covered bonds. As a further and decisive factor in determining the risk weighting, Article 129 (4) and (5) CRR lay down requirements with regard to rating assessments. While paragraph 4 applies risk weighting in the case of at least one existing rating assessment, paragraph 5 applies risk weighting in the case where a covered bond does not have a rating.

	-		-	•				-	-				
	Rating 2		CQ	S 1			CQS 2			CQS 3			
Rating 1		AAA	AA+	AA	AA-	A+	А	A-	BBB+	BBB	BBB-		
	AAA												
COC 1	AA+	Credit Quality Step 1			Credit Quality Step 2			Credit Quality Step 3					
CQS 1	AA												
	AA-												
	A+	Cradit Quality			Cradit Quality		Cradit Quality						
CQS 2	А		Credit Quality		Credit Quality		Credit Quality						
	A-		Ste	p 2			Step 2			Step 3			
	BBB+		Cradit Quality			Cradit Ou		Cr	odit Qua	lity	Cro	dit Oua	lity
CQS 3	BBB		Credit Quality Credit Quality		iity	Credit Quality							
	BBB-		Ste	р3			Step 3			Step 3			

Determining the Credit Quality Step for more than one recognised rating assessment

Source: Regulation 2016/1799 and 2021/2005, Regulation 575/2013, NORD/LB Markets Strategy & Floor Research

Deriving the Credit Quality Step of a covered bond

Rating assessments are always taken into account using the Credit Quality Step system, which is laid down in <u>Regulation 2016/1799</u> and in the <u>2021/2005 amendment</u>. A total of six different credit rating categories are assigned through ratings issued by recognised External Credit Assessment Institutions (ECAI) (see: Mapping of rating assessments). Since risk positions can in principle have several ECAI ratings, a new mapping is required to determine the Credit Quality Step (CQS) if there is more than one rating available (see table above). Irrespective of the number of eligible ratings, Article 138 CRR is key to determining the Credit Quality Step. If two ratings are available for a risk position, the applicable rating shall be the one resulting in the higher of the two possible risk weightings, if the two ratings differ (see table). A higher risk weighting is equivalent to a lower credit rating. In this respect, we understand an AA-equivalent rating to be lower than an AAAequivalent rating. If more than two ratings are available for a risk position, the two ratings resulting in the lowest risk weighting, i.e. the two highest ratings, are applicable. If these two assessments differ from each other, the Credit Quality Step is determined on the basis of the rating (out of these two ratings) that results in the higher risk weighting. It follows from the requirements of Article 138 CRR that only the two highest ratings, if available, are relevant to determining the Credit Quality Step as defined in the CRR, even if a position has more than two ratings from recognised rating agencies. The resulting simplification of CQS provisions is shown in the table; no distinction is made with regard to the rating grades of individual agencies. Mapping of these equivalence ratings is shown in the Mapping of rating assessments table.

Best rating and fulfilment of all requirements leads to a risk weighting of 10%

To be eligible for preferential treatment of risk weighting, Article 129(1) CRR stipulates that, in addition to cover by eligible assets referred to in the aforementioned Article, the requirements of paragraphs 3 (monitoring of property/ship value), 3a (overcollateralisation) and 3b (substitution cover) must be met. If the requirements are deemed to have been met, the preferential risk weighting is determined on the basis of the corresponding Credit Quality Step of the issue in accordance with Article 129(4) CRR, assuming that at least one ECAI rating assessment is available. Accordingly, covered bonds that qualify for Credit Quality Step 1 can benefit from a preferential risk weighting of 10%. If, on the other hand, the creditworthiness of a covered bond corresponds only to Credit Quality Step 2, the risk weighting increases to 20%. This also applies to bonds that qualify for Credit Quality Step 3. With regard to covered bonds issued between 1 January 2008 and 8 July 2022, the requirements of the CRR in force at the time of issue must be met. They are not subject to the requirements of Art. 129(3a) and (3b) CRR. The assignment system applies uniform-ly.

Risk weighting of covered bonds according to Article 129(4) CRR: necessary conditions met; ECAI rating

Credit Quality		Covered bond rating		Risk weighting of covered bonds;
Step	Fitch / S&P	Moody's	DBRS	with rating
1	AAA bis AA-	Aaa bis Aa3	AAA bis AA (low)	10%
2	A+ bis A-	A1 bis A3	A (high) bis A (low)	20%
3	BBB+ bis BBB-	Baa1 bis Baa3	BBB (high) bis BBB (low)	20%
4	BB+ bis BB-	Ba1 bis Ba3	BB (high) bis BB (low)	50%
5	B+ bis B-	B1 bis B3	B (high) bis B (low)	50%
6	≤CCC+	≤Caa1	≤CCC (high)	100%

Source: Regulation 2016/1799 and 2021/2005, CRR, NORD/LB Markets Strategy & Floor Research

Unrated bonds can also benefit from preferential risk weighting

If a covered bond meets the requirements of the previous paragraph, but does not have a rating by a recognised ECAI, this does not automatically result in an increased risk weighting for the bond. Instead, the senior unsecured credit rating of the issuer must be taken into account in this case. For this purpose, the corresponding Credit Quality Step of unsecured risk positions is first determined and then the relevant covered bond risk weighting is derived from this step. It follows that, in the event that senior unsecured bonds and covered bonds are assigned to the same Credit Quality Step, there will be no regulatory disadvantage due to the lack of rating assessment.

Risk weighting of covered bonds according to Article 129(5) CRR: necessary conditions met; no ECAI rating

Credit Quality		Senior unsecure	ed rating	Risikogewicht		Risk weighting of covered bonds;
Step	Fitch / S&P	Moody's	DBRS	Senior Unsecured		without rating
1	AAA bis AA-	Aaa bis Aa3	AAA bis AA (low)	20%	\rightarrow	10%
2	A+ bis A-	A1 bis A3	A (high) bis A (low)	50%	\rightarrow	20%
3	BBB+ bis BBB-	Baa1 bis Baa3	BBB (high) bis BBB (low)	50%	\rightarrow	20%
4	BB+ bis BB-	Ba1 bis Ba3	BB (high) bis BB (low)	100%	\rightarrow	50%
5	B+ bis B-	B1 bis B3	B (high) bis B (low)	100%	\rightarrow	50%
6	≤CCC+	≤Caa1	≤CCC (high)	150%	\rightarrow	100%

Source: Regulation 2016/1799 and 2021/2005, CRR, NORD/LB Markets Strategy & Floor Research

Risk weighting of covered bonds according to Articles 120 and 121 CRR: necessary conditions not met

Credit Quality	Cov	vered bond or sov	vereign rating	Risk weighting of covered bonds;	Risk weighting of covered bonds;
Step	Fitch / S&P	Moody's	DBRS	with rating, Art. 120	without rating ¹⁾ , Art. 121
1	AAA bis AA-	Aaa bis Aa3	AAA bis AA (low)	20%	20%
2	A+ bis A-	A1 bis A3	A (high) bis A (low)	50%	50%
3	BBB+ bis BBB-	Baa1 bis Baa3	BBB (high) bis BBB (low)	50%	100%
4	BB+ bis BB-	Ba1 bis Ba3	BB (high) bis BB (low)	100%	100%
5	B+ bis B-	B1 bis B3	B (high) bis B (low)	100%	100%
6	≤CCC+	≤Caa1	≤CCC (high)	150%	150%

¹⁾ In this case, the risk weighting is assigned on the basis of the credit quality step of the central government in which the institution is domiciled Source: Regulation 2016/1799 and 2021/2005, CRR, NORD/LB Markets Strategy & Floor Research

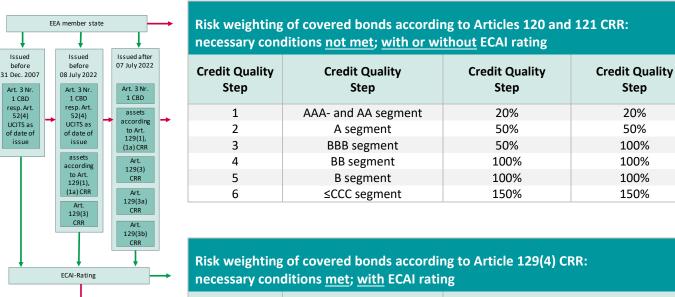
Non-EEA covered bonds: Failure to meet the necessary conditions leads to a risk weighting of at least 20%

In addition to the possibility that the necessary conditions, that the bond is CBD-compliant according to Art. 3 No. 1 and meets the requirements of Article 129(3), (3a) and (3b) CRR, and that it is collateralised with cover assets according to Art. 129(1) CRR, and a rating by an ECAI is available, or such a rating is not available, there is also a classification system in the event that the covered bond is not CBD-compliant. This is relevant, for example, to issues from outside the EEA. In this case, too, rating assessments play a crucial role and have a significant influence on the risk weighting to be applied. The decisive factor in this respect is no longer Article 129 CRR, but Articles 120 and 121 CRR (exposure to rated or unrated institutions). The risk weighting must be determined on the basis of Article 120 CRR if at least one ECAI assessment is available, while Article 121 CRR deals with positions without an ECAI rating. Article 120 CRR also makes a distinction between positions with a residual maturity of more than three months and those with a shorter maturity. Due to the long-term nature of covered bonds, however, we will only look at determining the risk weighting for maturities of more than three months. Covered bonds that do not meet the requirements of the three necessary conditions have a risk weighting of 20% if they have at least one recognised rating assessment at Credit Quality Step 1. This is also the lowest possible risk weighting for non-EEA covered bonds. If, on the other hand, an ECAI rating assessment is not available for the covered bonds, the relevant risk weighting is determined on the basis of the Credit Quality Step of the central government in which the issuer is domiciled; the risk weighting is higher compared with exposures to central governments in the investment-grade segment.

No ECAI-Rating

NORD/LB

Determining covered bond risk weights





Risk weighting of covered bonds according to Article 129(5) CRR: necessary conditions <u>met</u>; <u>without</u> ECAI rating

Credit Quality Step	Credit Quality Step	Credit Quality Step		Credit Quality Step
1	AAA and AA segment	20%	\rightarrow	10%
2	A segment	50%	\rightarrow	20%
3	BBB segment	50%	\rightarrow	20%
4	BB segment	100%	\rightarrow	50%
5	B segment	100%	\rightarrow	50%
6	≤CCC segment	150%	\rightarrow	100%

Source: Regulation 2016/1799 and 2021/2005, CRR, NORD/LB Markets Strategy & Floor Research Green arrow: condition met, red arrow: condition not met

Regulatory Basis of the liquidity coverage ratio

Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

The LCR as liquidity requirement in a stress scenario

Based on the CRR (Art. 412(1) CRR and cont.), the liquidity coverage ratio (LCR) requires credit institutions to hold high-quality liquid assets (HQLA) to compensate for potential net liquidity outflows within a 30-day stress scenario. The relevant requirements to supplement the CRR are laid down in <u>Delegated Regulation 2015/61</u> and apply to credit institutions supervised under the CRD (2013/36/EU). The LCR Regulation specifies in particular the eligible assets and the structure of the liquidity buffer. Firstly, a distinction is made between Level 1 and Level 2 assets. Within Level 2, a further distinction is made between Level 2B assets. In addition to the allocation of eligible assets to the aforementioned Level categories, the market values of eligible assets are subject to haircuts in some cases; these are higher for units in undertakings for collective investment (UCI) (see table: Eligible assets, which shows an excerpt of possible assets that could be used).

Calculation of the LCR (Art. 4 LCR-R)

The LCR is calculated using the following formula:

 $LCR = \frac{Liquidity Buffer}{Net cash outflows within 30 days} \ge 100\%$

Source: Delegated Regulation 2015/61, NORD/LB Markets Strategy & Floor Research

Disclosure of the LCR

The disclosure shall take into account Article 447 CRR (key metrics) and Articles 433a to 433c CRR (disclosure by "category of institution"), in each case in conjunction with Article 451a CRR (disclosure of liquidity requirements). Article 451a CRR in conjunction with Articles 433a to 433c CRR require large listed institutions to disclose on a quarterly basis, for each quarter of the disclosure period, the average of their LCR, the average or averages of the liquidity coverage ratio, total liquid assets (after applying haircuts), liquidity outflows, inflows and net liquidity outflows, based on the observations of the last twelve months. Large unlisted institutions and small and non-complex listed institutions report semi-annually; all others disclose this information annually.

LCR for different currencies (Art. 415 CRR and Art. 4(5) and 19 LCR-R)

Credit institutions include all items in the calculation, regardless of their denomination. However, calculation of the LCR is mandatory in the reporting currency and in all currencies in which the institution holds more than 5% of its total liabilities or those of the respective liquidity sub-group. In countries where the institution has a significant branch as referred to in Article 51 CRD, a separate LCR must also be calculated in this currency for the relevant liabilities.



Failure to meet the requirements of the LCR (Article 414 CRR, Art. 4 LCR-R)

As a general rule, assets used to calculate the LCR may be sold to cover liquidity outflows. Institutions are allowed to do so even if disposal of the asset during periods of stress leads to an LCR below the required level. If an institution does not meet, or does not expect to meet, the LCR requirements, a plan for the restoration of compliance must be submitted to the competent authority. The competent authorities will then monitor implementation of the plan to restore compliance with requirements.

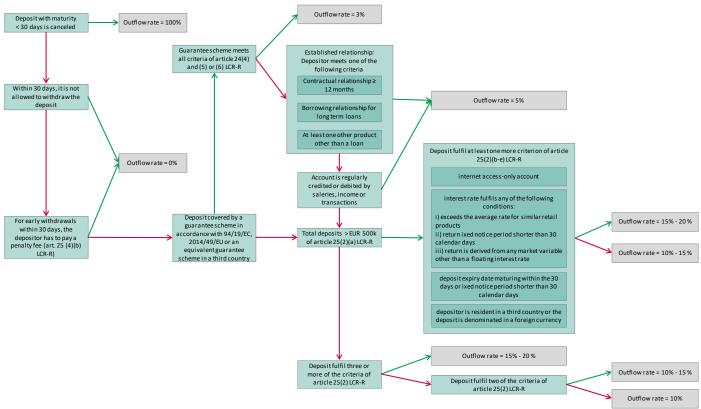
Liquidity level (Art. 5 LCR-R)

In order to identify a period of stress, Article 5 of the LCR Regulation defines certain indicators of circumstances in which a credit institution may be considered as being subject to stress:

- The run-off of a significant proportion of its retail deposits
- A partial or total loss of unsecured wholesale funding capacity, including wholesale deposits and other sources
- A partial or total loss of secured, short-term funding
- Liquidity outflows as a result of a credit rating downgrade of up to three notches
- Increased market volatility affecting the value of collateral or its quality or creating additional collateral needs
- Unscheduled draws on liquidity and credit facilities
- Potential obligation to buy-back debt or to honour non-contractual obligations

Calculation of net liquidity outflows (Art. 20 LCR-R)

In addition to the classification of assets into liquidity classes, it is important to establish which items are included as cash inflows or outflows in the calculation of net liquidity outflows. Article 20 of the LCR-R basically states that liquidity inflows are deducted from liquidity outflows. The sum shall not be less than zero. The rules for determining liquidity outflows are set out in Articles 22 to 31a of the LCR-R. Liquidity inflows are defined in Articles 32 to 34 LCR-R. The outflow or inflow rates in each case are multiplied by the value of the position, the maximum outflows or inflow amount, or the maturity amount of the next 30 days. The liquidity outflows listed below are not intended to be exhaustive. For example, we have omitted Art. 26 ("Outflows with inter-dependent inflows").



Outflows from retail deposits (Article 24 / 25 LCR-R)

Source: LCR-R, NORD/LB Markets Strategy & Floor Research; Note: higher outflow rates possible on the instruction of the authority, or due to divergent rates in third countries; green = condition met; red = condition not met

Outflows from operational deposits and other liabilities (Article 27 / 28 LCR-R)

Article	Item	Rate
28(2)	Liabilities resulting from the institution's own operating expenses	0%
27(2)	Deposits covered by a deposit guarantee scheme, for clearing, custody, cash management or other com- parable services	5%
28(1)	Deposits by clients that are non-financial customers, sovereigns, central banks, multilateral development banks, public sector entities, credit unions authorised by a competent authority, personal investment companies or by clients that are deposit brokers (to the extent they do not fall under Art. 27 LCR-R), which are covered by a deposit guarantee scheme	20%
27(1)(a) and (4)	Deposits held in order to obtain clearing, custody, cash management or other comparable services	25%
27(1)(b)	Deposits held within institutional protection schemes or within a group of cooperative credit institutions	25%
27(1)(c), (4), (6)	Deposits held in the context of another established operational relationship	25%
27(1)(d) and (4)	Deposits held to obtain cash clearing, central institution or guarantee scheme services	25%
28(1)	Deposits by clients that are non-financial customers, sovereigns, central banks, multilateral development banks, public sector entities, credit unions authorised by a competent authority, personal investment companies or by clients that are deposit brokers (unless Art. 27 LCR-R applies)	40%

Source: LCR-R, NORD/LB Markets Strategy & Floor Research; Note: deposits received as collateral are not covered by the provisions of Articles 24, 25, 27, 28 or 31a LCR-R



Outflows from operational deposits and other liabilities (Article 27 / 28 LCR-R)

Article	Item	Rate
27(3)	Deposits from credit institutions placed at the central institution that are considered as liquid assets	100%
27(5)	Deposits arising out of a correspondent banking relationship or from the provision of prime brokerage services	100%
28(5)	Offsetting balances held by law in segregated accounts are treated in accordance with Art. 32 LCR-R	100%
28(6)	Bonds and other debt securities issued by the credit institution (except purely retail transactions, in which case they are treated as deposits)	100%

Source: LCR-R, NORD/LB Markets Strategy & Floor Research; Note: deposits received as collateral are not covered by the provisions of Articles 24, 25, 27, 28 or 31a LCR-R

Outflows arising from liabilities resulting from securities financing transactions and capital market-driven transactions maturing in ≤ 30 days (Article 28 LCR-R)

Article	Collateral	Rate
28(3) (2nd	In derogation of Art. 28(3) subparagraph 1, the outflow rate is 0% if the counterparty is the domestic cen-	0%
(2nd	tral bank of the credit institution	
subpara-		
graph)	If they are called available hyperate that would avail for a UOLA 1A (avaant caused hands)	00/
28(3)(a)	If they are collateralised by assets that would qualify as HQLA 1A (except covered bonds)	0%
28(3)(b)	If they are collateralised by assets that would qualify as HQLA 1B (covered bonds)	7%
28(3)(c)	If they are collateralised by assets that would qualify as HQLA 2A	15%
28(3)(d)	If they are collateralised by assets that would qualify as HQLA 2B as listed in Art. 13(2)(g) i, ii, iv LCR-R	25%
28(3)	In derogation of Art. 28(3) subparagraph 1, the outflow rate is 25% if the outflow rate would require >25%,	25%
(3rd	but the counterparty is an eligible counterparty	
subpara-		
graph)		
28(3)(e)	If they are collateralised by assets that would qualify as HQLA 2B covered bonds	30%
28(3)(f)	If they are collateralised by assets that would qualify as HQLA 2B as listed in Art. 13(2)(g) iii or v LCR-R	35%
28(3)(g)	If they are collateralised by corporate debt securities, shares or certain non-interest-bearing assets (CQS 5	50%
	or better) issued by religiously observant credit institutions that would qualify as HQLA 2B (Art.	
	12(1)(b)(c)(f) LCR-R)	
28(3)(h)	If they are collateralised by shares or units in a UCI and would be classified as HQLA, same minimum hair-	0-55%
	cut as set out in Article 15(2) and (3) LCR-R	
28(3)(i)	If they are collateralised by assets that do not fall under Art. 28(3) a) to h) LCR-R	100%
28(4)	In the case of collateral swaps and similar transactions, maturity \leq 30 calendar days, an outflow is only	Difference arising from
	recognised for the net value if the borrowed asset would be subject to a lower haircut than the lent asset.	the haircuts
	If the asset is not liquid, 100% is applicable	on borrowed and lent
		assets
	By way of derogation, 0% on the borrowed asset if the counterparty is the domestic central bank	0%
	By way of derogation, the outflow rate is 25% if the outflow rate would require >25%, but the counterparty	25%
	is an eligible counterparty	
28(7)	In the case of assets borrowed on an unsecured basis (maturity \leq 30 days), unless the credit institution	100%
	owns the borrowed assets and they are not part of the liquidity buffer	

Source: LCR-R, NORD/LB Markets Strategy & Floor Research; Note: deposits received as collateral are not covered by the provisions of Articles 24, 25, 27, 28 or 31a LCR-R

Additional outflows (Articles 23, 29 and Art. 30 LCR-R)

Article	Item	Rate
23	 In the context of products or services assessed in accordance with Art. 5 LCR-R, any material reputational damage: a) Other off-balance sheet and contingent funding obligations, including uncommitted funding facilities b) Undrawn loans and advances to wholesale counterparties c) Mortgage loans that have been agreed but not yet drawn down d) Credit cards e) Overdrafts f) Planned outflows related to renewal or extension of existing retail or wholesale loans, or the granting of new retail or wholesale loans g) Planned derivatives payables, other than the contracts and credit derivatives listed in Annex II of Regulation (EU) No. 575/2013 h) h) Trade finance off-balance-sheet related products as referred to in Art. 429 and Annex I of Regulation (EU) No. 575/2013 (5% possible if approved by the competent authority) 	Case- specific
29	Outflows within a group or an institutional protection scheme – therefore not described in more detail In-	
30(1)	Collateral for derivative interest rate and foreign currency transactions and credit derivatives in the form of HQLA 1B assets as referred to in Article 10(f) LCR-R	
30(1)	Collateral for interest rate and foreign currency transactions and credit derivatives (apart from cash and HQLA 1 assets as referred to in Art. 10 LCR-R)	20%
30(12)	Prime brokerage services: where a credit institution has financed the assets of one client by matching them with the short sales of another client, the contingent obligation will apply in this case	50%
30(2)	Collateral or cash outflows due to steps taken by the supervisory authority in the event of deterioration in credit quality	100%
30(3)	Collateral for adverse market conditions of derivatives transactions (30(3) LCR-R in conjunction with Art. 415 CRR and delegated regulation (EU)2017/208)	100%
30(4)	Net liquidity outflow within a 30-day period from interest rate and foreign currency transactions	100%
30(5)	Securities or other assets sold short and to be delivered within 30 days (covered by securities financing transaction)	100% (0%)
30(6)(a)	Excess collateral that can be called at any time	100%
30(6)(b)	Collateral that is due to be posted to a counterparty within 30 days	100%
30(6)(c)	Collateral that would qualify as liquid assets, but which can be substituted by non-liquid assets at any time	100%
30(8) and (10)	Asset-backed securities, covered bonds and structured financing instruments issued by the institution or an SPV; maturity within 30 calendar days	100%
30(9) and (10)	Maturing amount of financing facilities (including asset-backed money market instruments, conduits, securities investment vehicles) or the amount of assets that could potentially be returned	100%

Source: LCR-R, NORD/LB Markets Strategy & Floor Research; Note: deposits received as collateral are not covered by the provisions of Articles 24, 25, 27, 28 or 31a LCR-R



Outflows from credit and liquidity facilities and other outflows (Articles 31 and 31a LCR-R)

Article	Committed undrawn credit lines in respect of:	Factor
31(3)	Retail customers; maximum amount that can be drawn down within 30 days	5%
31(4)	Non-retail, non-financial customers, sovereigns, central banks, multilateral development banks and public sector entities, provided they are <u>not</u> used as a substitute for the customer's normal market access; max- imum amount that can be drawn down within 30 days	10%
31(9)	Promotional loans as referred to in Article 31(9) LCR-R may either use a symmetric inflow and outflow	0%/
	procedure (in the case of pass through loans) or treatment by the lender is based on Art. 31(3)(4) LCR-R	5%/10%
31(6)	Maximum amount of the undrawn committed liquidity facility that was provided to a securitisation spe- cial purpose entity (SSPE) for the purchase of assets from non-financial customers	10%
31(5)	Facilities <u>not</u> for a) retail, b) financial customers, sovereigns, central banks, multilateral development banks and public sector entities, c) financing not as a substitute for the customer's normal market access, when the customer is unable to cover its financing requirements on those markets at that time; maximum amount that can be drawn down within 30 days	30%
31(5)	Personal investment companies; maximum amount that can be drawn down within 30 days	40%
31(8)(a)	Credit institutions, other regulated financial institutions, UCIs and non-open ended investment schemes, insurance undertakings and investment firms; maximum amount that can be drawn down within 30 days	40%
31(7)	Central institutions shall take into account liquidity funding committed to a member credit institution, provided that it qualifies as liquid assets in accordance with Art. 16(2) LCR-R (calculation with committed capital amount)	75%
31(8)(b)	Securitisation special purpose entities other than those referred to in Article 31(6) LCR-R and where there are arrangements under which the credit institution is required to buy or swap assets	100%
31(8)(c)	Financial customers other than those listed in Article 31 (1) to (7), (8a) and (8b) LCR-R	100%
31a(1)	Liabilities becoming due within the next 30 calendar days and not covered by Art. 24 to 31 LCR-R	100%
31a(2)	Net contractual commitments to non-financial customers (all except central banks and financial customers) within the next 30 calendar days, other than commitments referred to in Art. 24 to 31 LCR-R	100%

Source: LCR-R, NORD/LB Markets Strategy & Floor Research; Note: deposits received as collateral are not covered by the provisions of Articles 24, 25, 27, 28 or 31a LCR-R

Other cash outflows

All liquidity outflows not mentioned in Articles 23 - 31 LCR-R that could occur within the next 30 calendar days are weighted at 100%.

Liquidity inflows

The liquidity inflows to be deducted from the liquidity outflows are also calculated by weighting the nominal inflow exposure with an inflow rate. As a general rule, only inflows that are expected within the next 30 days, are contractually agreed and are not considered overdue, and for which the credit institution has no reason to expect non-performance, are taken into account. Assets valued at market value are not included in the LCR calculation, as the market value already prices in future payment flows. Inflows are generally only recognised up to a maximum of 75% of the outflows. However, Article 33 of the LCR Regulation allows various exceptions in this respect.

Overview of inflows (Article 32 LCR-R)

Article	Exposures contractually expected/becoming due within 30 days, and are not overdue:	Factor
32(2)(a)	Monies due from central banks and financial customers	100%
32(2)(b)	Monies due from trade finance transactions referred to in Art. 162(3) subparagraph 2 (b) CRR	100%
32(2)(c)	Monies due from securities	100%
32(2)(d)	Monies due from positions in major indexes of equity instruments, unless also recognised as HQLA	100%
32(3)(a)	Monies due from trade finance transactions or maturing securities (32(3)(a) does not apply to payments from securities financing transactions and capital market-driven transactions)	100%
32(4) 1st sen- tence	Payments for redemption purposes from non-financial customers (payments due from credit institutions established/sponsored by a central government or regional authority to provide promotional loans, commitments from multilateral development banks or public sector entities; taking into account inflows up to the value of outflows)	50% (Propor tionate
32(3)(b)	 Monies due from collateralised securities financing transactions and capital market-driven transactions: i) If collateralised by an asset that would qualify as HQLA 1A if re-used (except covered bonds referred to in Art. 10(1)(f) LCR-R) ii) If collateralised by an asset that would qualify as HQLA 1B if re-used (covered bond) 	0% 7%
	iii) If collateralised by an asset that would qualify as HQLA 2A if re-used	15%
	 iv) If collateralised by an asset that would qualify as HQLA 2B RMBS if re-used (Art. 13(2)(g)(i), (ii), (iv) LCR-R) 	25%
	 v) If collateralised by an asset that would qualify as HQLA 2B covered bonds if re-used (Art. 12(1)e LCR-R) vi) If collateralised by an asset that would qualify as HQLA 2B ABS covered by leasing, corporate financing ar consumer leases if re-used (Art. 12(2)(c)(iii) ar (v) LCR R) 	30%
	or consumer loans if re-used (Art. 13(2)(g)(iii) or (v) LCR-R) vii) If collateralised by an asset that would qualify as HQLA 2B corporate bond, share, unit, non-interest- bearing assets with credit quality step 5 or better, issued by religiously observant credit institutions, if re-used viii) If collateralised by an asset that would be classified as a share or unit in a UCI (Art. 15(2)(3) LCR-R) on	35% 50%
	 the same level as HQLA ix) If collateralised by an asset not covered by items i to viii above 	% 100%
	Use of the collateral to cover a short sale position	0%
32(3)(c)	Monies due from lombard transactions, if collateralised with non-liquid assets	50%
32(3)(d)	Monies due from operating deposits are multiplied by a symmetrical inflow rate, except deposits at the central institution; otherwise the adjacent factor applies	5%
32(3)(e)	Collateral swaps: amount by which the liquidity value of the lent assets exceeds that of the borrowed as- sets	100%
32(3)(f)	Monies due from reverse repos, securities borrowings, collateral swaps used to cover short positions that can be extended beyond 30 days	0%
32(3)(g)	Undrawn credit or liquidity facilities (including those from central banks, and excluding any within protec- tion schemes and promotional loans)	0%
32(3)(h)	Monies due from securities issued by the credit institution itself or by an SPV with which the credit institu- tion has close links, net basis multiplied by rate for the asset	
32(3)(i)	Loans without a due date, provided that the contract allows the credit institution to withdraw or to request payment within 30 days	20%
32(4)	Inflows from the release of balances held in segregated accounts for the protection of customer trading assets	100%
	Net liquidity inflow from derivative interest rate and foreign currency transactions	100%

Source: LCR-R, NORD/LB Markets Strategy & Floor Research

* If there are contractual commitments to pay out funding to the customer and if the value of these commitments is more than 50% of the value of the pay-

ment, the latter is reduced by the higher value; divergences possible in accordance with Article 32(4) LCR-R

Note: further special regulations with regard to groups and institutional protection schemes in Article 34 LCR-R

Overview of inflows (Article 32 LCR-R)

Exposures contractually expected/becoming due within 30 days, and are not overdue:						
Inflows from any new obligations entered into are not taken into account	-					
Inflows in the amount of outflows to third countries with transfer restrictions or, if denominated in non-						
convertible currencies, in the amount of []						
l c	nflows in the amount of outflows to third countries with transfer restrictions or, if denominated in non-					

Source: LCR-R, NORD/LB Markets Strategy & Floor Research

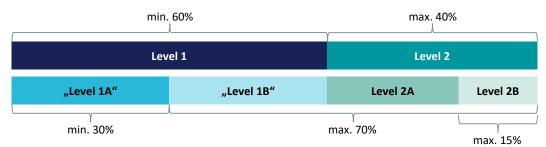
* If there are contractual commitments to pay out funding to the customer and if the value of these commitments is more than 50% of the value of the pay-

ment, the latter is reduced by the higher value; divergences possible in accordance with Article 32(4) LCR-R Note: further special regulations with regard to groups and institutional protection schemes in Article 34 LCR-R

Composition of the liquidity buffer by asset level (Art. 17 LCR-R)

Once the net outflow for the next 30 days has been determined using the inflows and outflows as described above, the liquidity buffer must be determined. Different liquidity levels are assigned to assets for calculation of the LCR respectively the liquidity buffer. There are certain minimum or maximum ratios for each of these levels (Article 17 LCR-R), at which the respective liquidity level may/must be included in the liquidity buffer. In order to obtain an additional distinction within Level 1 assets for later comments, a modified level classification is defined at this point. This is nevertheless based on the minimum and maximum ratios normally specified by the CRR.

Structure of the LCR portfolio



Source: Delegated Regulation 2015/61, NORD/LB Markets Strategy & Floor Research

LCR portion of covered bonds limited to 70%

With regard to the composition of the LCR portfolio, the requirements stipulate that at least 60% of the liquidity buffer must consist of Level 1 assets. Conversely, it follows that the proportion of Level 2 assets may not exceed 40%. In addition to this initially rough subdivision of the LCR portfolio, there are further restrictions on both Level 1 and Level 2. For example, at least 30% of the overall portfolio must consist of Level 1 assets, but these may not be Level 1 covered bonds. In market practice, a distinction is sometimes made within Level 1 between Level 1A and Level 1B assets (Level 1 covered bonds, since a haircut is mandatory), even if a linguistic distinction of this type does not exist either under the CRR or the LCR Regulation. Since Level 2B assets may account for not more than 15% of the total liquidity buffer, a distinction is also made within Level 2 with regard to the maximum proportion of the overall LCR portfolio. When using covered bonds in the LCR context, it can therefore be stated that they may total a maximum of 70% of the LCR portfolio. As no more than 40% of the total liquidity buffer may consist of Level 2 assets, 30% of the overall portfolio must comprise Level 1 covered bonds. In addition, a maximum of 15% of the assets may be covered bonds that are Level 2B according to the Regulation.

Regulatory LCR management: Eligible assets Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

	Level 1 assets (in accordance with Article 10 LCR Regulation)	Haircut (for units in UCIs
a)	Coins and banknotes	- (0%)
b)	 Following exposures to central banks: i) Assets representing claims on or guaranteed by the ECB or an EEA member state's central bank ii) Assets representing claims on or guaranteed by central banks of third countries, provided that they are rated as Credit Quality Step 1 by ECAI iii) Reserves held by the credit institution in a central bank referred to in points (i) and (ii) provided that the credit institution is permitted to withdraw such reserves at any time during stress periods and the conditions for such withdrawal have been specified in an agreement between the relevant competent authority and the ECB or the central bank 	- (0%)
c)	 Assets representing claims on or guaranteed by the following central or regional governments, local authorities or public sector entities: i) Central government of an EEA member state ii) Central government of a third country, provided that it is rated at least Credit Quality Step 1 iii) Regional governments or local authorities or public sector entities in an EEA member state, provided that they are treated as exposures to the central government of the EEA member state (i.e. risk weighting of 0%) 	- (5%)
	 iv) Regional governments or local authorities in a third country of the type referred to in (ii), provided that they are treated as exposures to the central government of the third country (i.e. same risk weighting as central government [0%]) v) Public sector entities provided that they are treated as exposures to the central government of an EEA member state or to one of the regional governments or local authorities referred to in (iii) (i.e. same risk weighting of 0%) 	
d)	 i) Assets representing claims on or guaranteed by the central government or the central bank of a third country, which are not assigned CQS 1 (rating lower than AA-) ii) Reserves held by the credit institution in a central bank pursuant to (i) and meeting certain conditions 	- (5%)
e)	 Assets issued by credit institutions which meet at least one of the following requirements: i) The issuer is a credit institution incorporated or established by the central government of an EEA member state or the regional government or local authority in a member state, the government or local authority is under the legal obligation to protect the economic basis of the credit institution and maintain its financial viability throughout its life-time and any exposure to that regional government or local authority, if applicable, is treated as an exposure to the EEA central government (i.e. RW of 0%) ii) The credit institution provides promotional loans, within the meaning of Article 10(1)(e)(ii) 	- (5%)
f)	 Certain covered bonds from the EEA which meet all the following criteria: i) Covered bonds within the meaning of Article 3 No. 1 CBD or they were issued before 8 July 2022 and meet the requirements of Art. 52(4) UCITS Directive at the time of issue, with the result that they may be considered for more favourable treatment as a covered bond until maturity ii) Exposures to institutions in the cover pool meet the requirements of Art. 129(1)(c) & 129(1a) CRR iii) Deleted iv) Issue size of at least EUR 500m or equivalent amount in local currency v) Rating: CQS 1 by ECAI; no rating: 10% risk weight according to Art. 129(5) CRR vi) Overcollateralisation of at least 2% 	7% (12%)
g)	Assets representing claims on or guaranteed by the multilateral development banks and the international organisations referred to in Article 117(2) and Article 118 CRR	- (5%)

	Level 2A assets (in accordance with Article 11 LCR Regulation)	Haircut (for units in UCIs)						
a)	entities in an EEA member state, where exposures to them are assigned a risk weighting of 20% pursuant to Art. 115(1)(5) and Art. 116(1)(2)(3) CRR							
b)	Assets representing claims on or guaranteed by the central government, central bank or by a regional government, local authority or public sector entity in a <u>third country</u> , where exposures to them are assigned a risk weighting of 20% pursuant to Art. 114(2) and Art. 115 or Art. 116 CRR							
c)	 Certain covered bonds from the <u>EEA</u> which meet the following criteria, among other requirements: i) Covered bonds within the meaning of Article 3 No. 1 of the Covered Bond Directive or they were issued before 8 July 2022 and meet the requirements of Art. 52(4) UCITS Directive in the version applicable at the time of issue, with the result that they may be considered for more favourable treatment as a covered bond until maturity ii) Exposures to institutions in the cover pool meet the requirements set out in Articles 129(1)(c) and 129(1a) CRR iii) Deleted iv) Issue size of at least EUR 250m or equivalent amount in local currency v) Rating: min. CQS 2 by ECAI; no rating: 20% risk weight according to Art. 129(5) CRR vi) Overcollateralisation of at least 7%; min. 2% if CQS 1 rating is applicable, provided all requirements referred to in Art. 10 (1) LCR Regulation are met, with the exception of Art. 10(1)(f)(iv) 	15% (20%)						
d)	 Certain covered bonds issued by credit institutions in <u>third countries</u> which meet all of the following criteria: i) Issued by a credit institution, or by a wholly owned subsidiary of a credit institution which guarantees the issue, in accordance with the national law of the third country ii) Issuer and bonds are subject to equivalent public supervision for the protection of the bondholders, and the supervisory and regulatory provisions are equivalent to those in the EU iii) Cover pool consists of assets corresponding to one or more of the exposure types referred to in Article 129(1)(b)(d)(f) and (g) CRR. If the pool consists of real estate loans, Article 6(2)(3)(a) and (5) of the CB Directive must be complied with iv) Exposures to institutions comply with the requirements of Article 129(1)(c) or 129(1)(a) CRR v) Transparency requirement referred to in Art. 14 CB Directive is met vi) Rating: CQS 1 by ECAI; no rating: 10% risk weight according to Art. 129(5) CRR vii) Overcollateralisation of at least 7%; minimum 2% with value of at least EUR 500m or equivalent value in local currency 	15% (20%)						
e)	Corporate bonds which meet all of the following requirements: i) Minimum rating: CQS 1 by ECAI ii) Issue size of at least EUR 250m or equivalent amount in local currency iii) Residual term to maturity of the securities at the time of issuance is max. 10 years	15% (20%)						

Source: Delegated Regulation 2015/61, NORD/LB Markets Strategy & Floor Research

	Level 2B assets (in accordance with Article 12 LCR Regulation)	Haircut (for units in UCIs)						
a)	Exposures in the form of ABS under certain conditions (in accordance with Art. 13 LCR Regulation)	25/35%						
		(30/40%)						
b)	 Corporate bonds which meet all of the following requirements: i) Minimum rating: CQS 3 by ECAI ii) Issue size of at least EUR 250m or equivalent amount in local currency iii) Residual term to maturity of the securities at the time of issuance is max. 10 years 							
c)	 Shares or units meeting the conditions of Art. 12(1)(c) of the LCR Regulation i) Component of a major share index ii) Denomination in home currency, otherwise Level 2B asset (limit on amount) iii) They are also considered a reliable source of liquidity in stress periods (requirement: in a 30-day stress period, the market value does not fall by more than 40% or 40 percentage points) 	50% (55%)						
d)								
e)	 Certain covered bonds from the <u>EEA</u> which meet the following criteria, among other requirements: i) Covered bonds within the meaning of Article 3 No. 1 of the Covered Bond Directive or they were issued before 8 July 2022 and meet the requirements of Art. 52(4) UCITS Directive in the version applicable at the time of issue, with the result that they may be considered for more favourable treatment as a covered bond until maturity ii) Deleted iii) Deleted iv) Issue size of at least EUR 250m or equivalent amount in local currency v) Cover assets comply with Article 129(1)(a), (d)(i) and (e) CRR vi) Cover assets are assigned a risk weighting of max. 35% in accordance with Art. 125 CRR vii) Monthly disclosure regarding required overcollateralisation of min. 10% 	30% (35%)						
f)	Exemption for religiously observant credit institutions: certain non-interest-bearing assets representing claims on or guaranteed by central banks, central governments, regional or local authorities or public sector entities, provided at least CQS 5 was assigned by ECAI	50% (55%)						
	Level 2B assets (in accordance with Articles 13 to 16 LCR Regulation)	Haircut (for units in UCIs)						
	We will not go into detail about the indicated articles. Article 13 Level 2B securitisations (explanatory notes on Art. 12(1)(a) LCR-R) Article 14 Restricted-use committed liquidity facilities (explanatory notes on Art. 12(1)d) LCR-R) Article 15 CIUs Article 16 Deposits and other funding in cooperative networks and institutional protection schemes	0-55% 25%						

Source: Delegated Regulation 2015/61, NORD/LB Markets Strategy & Floor Research

Regulatory Covered bonds within the framework of LCR management

Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Dynamic criteria for covered bonds under the LCR

While a large proportion of the assets eligible for LCR management are classified statically, covered bonds are subject to dynamic criteria. Over time, the allocation of an issue to a specific Level category may change, which in turn may lead to the need for constant monitoring. In practice, fulfilment of the transparency criteria laid down in Article 14 of the Covered Bond Directive and/or the national legislation based on Art. 14 CBD turns out to be the trouble spot. This is because extensive data must be provided on the issuer side at least every quarter, and the investor must also be able to prove this to the supervisory authority. In addition to reviewing the information provided in cover pool reporting on outstanding covered bonds and their cover pools, the relevant ratings should also be constantly monitored with regard to the dynamic criteria for covered bonds, as rating changes of just one notch may have a direct impact on the LCR classification. In addition to the change in a rating, the addition or discontinuation of a rating assessment can also have an impact on the LCR classification. This is why we use not only the ratings of <u>Moody's</u>, <u>Fitch</u> and <u>S&P</u> but also those of <u>DBRS</u>.

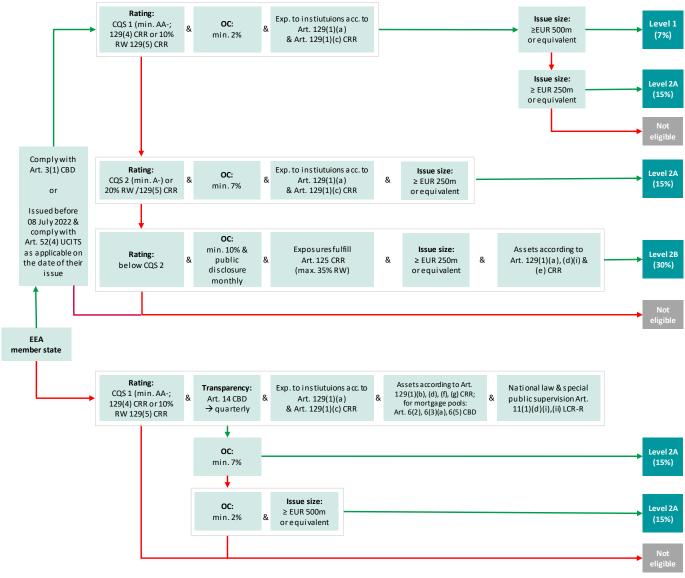
Table summarising the regulatory classification of covered bonds

In this study, we analyse the bonds listed in iBoxx EUR Covered and assign them to the LCR category that we believe to be relevant. We also assign them to the resulting haircut. For this purpose, we have reviewed the relevant pool reports to ensure that their content is complete on the basis of the provisions in Article 129 CRR and have summarised the results initially at <u>programme level</u>. In addition to the links to the relevant reports on the issuers' websites, the list also includes the ratings provided by the rating agencies mentioned in the previous section, a statement on the legal framework for the issue, and the overcollateralisation of the relevant programme. While some privileges of covered bonds can be derived from the affiliation of the particular jurisdiction to a community of states, affiliations of this nature also result in obligations for national legislators.

Covered bonds within the framework of CBPP3

For example, issues from the European Economic Area (EEA) benefit from preferential regulatory treatment, while only bonds from the EEA that meet certain requirements are purchased under the CBPP3. At the same time, the member states of the EEA are obliged to implement certain regulatory requirements, for example in relation to harmonisation of the European covered bond market. For this reason, in our biannual LCR study "<u>Risk</u> weights and LCR levels of covered bonds", we indicate in a table in the appendix whether an issue or an issuer belongs to the jurisdiction of the European Central Bank (eurozone), to the European Economic Area and to the G10 countries (relevant, among other things, for repo eligibility in transactions with the ECB).

LCR classification of rated covered bonds



Source: Delegated Regulation 2015/61, NORD/LB Markets Strategy & Floor Research

Numerous criteria for eligible covered bonds

As mentioned above, covered bonds may in principle reach any of the three LCR levels. In every case, there are numerous criteria that an issue must meet in order to achieve the status of an eligible asset. While non-compliance with some criteria automatically results in exclusion from eligible assets, other requirements take the form of scores or tiers. For example, covered bonds whose reporting does not comply with the Covered Bond Directive may under no circumstances be used as LCR assets. With regard to the issue volume or rating assessment, in contrast, the LCR system stipulates requirements in tiered form. This results in numerous paths on the way to the final LCR assessment of an issue. In order to approach this quite complex procedure, we will deal in the following with each of the eligibility criteria, which we have presented graphically in the form of a decision tree.

What does "in compliance with Art. 3 CBD" mean?

In order to be recognised as an LCR-eligible covered bond (apart from the criteria listed above), the LCR Regulation stipulates that the covered bond must either be a bond within the meaning of Art. 3(1) CBD, or the security was issued before 8 July 2022 and meets the requirements of Art. 52(4) UCITS in force at that time. However, reference is also made to the CBD in the UCITS and the CRR. As a result, there are also changes to "old bonds" in order to remain LCR-eligible. This requires a look at the transitional rules of the CBD: Art. 30 CBD reads as follows: "Member States shall ensure that covered bonds issued before 8 July 2022 that comply with the requirements laid down in Article 52(4) of Directive 2009/65/EC, as applicable on the date of their issue, are not subject to the requirements set out in Articles 5 to 12 and Articles 15, 16, 17 and 19 of this Directive, but may continue to be referred to as covered bonds in accordance with this Directive until their maturity."

Digression: EU Covered Bond Directive

Article	Description	Content / Remarks
1	Subject matter of the Directive	 Issuing requirements and structural features of covered bonds Uniform requirements for national supervisory authorities Publication requirements
2	Scope of the Directive	 Covered bonds issued by credit institutions within the geographical territory of the Member States
3	Definitions	 Definitions relevant to the Directive Total of 21 definitions of terms (including covered bond, cover pool, cover assets)
4	Dual recourse	 Dual recourse mechanism (allowing claims against both the covered bond issuer and the cover assets) is a core characteristic of the covered bond Claim against the credit institution; in the event of insolvency of the issuer, a priority claim against the cover pool Claim against the insolvency estate
5	Bankruptcy remoteness of covered bonds	 Ensuring that CB claims are not subject to automatic acceleration in the event of insolvency or resolution Ensuring compliance with payment flows established by contract
6	Eligible assets	 Collateralisation at all times through cover assets of very high quality CRR-compliant cover assets and other defined high-quality cover assets as well as public undertakings (in accordance with 2006/111/EC)
7	Collateral assets located outside the Union	 National legislators' option with regard to including assets that are secured by collateral assets located outside the Union Must be formulated in accordance with Article 6 and legal recourse secured
8	Intragroup pooled covered bond structures	 Possible to use internal CB issues as collateral for external CB issues (investors outside the group) Cover assets are recorded on the balance sheet of the issuer of the external CB
9	Joint funding	 The Directive allows issuers to pool covered assets from different institutions The purpose here is to enable smaller credit institutions to access the market
10	Composition of the cover pool	 Requirement to lay down rules on the composition of cover pools No explicit requirement to achieve homogeneity
11	Derivative contracts in the cover pool	 Derivative contracts may be included in the cover pool for hedging purposes Derivative contracts are segregated in accordance with Article 12
12	Segregation of cover assets in the cover pool	 Specification of requirements relating to the segregation of assets Cover assets must be identifiable Requirements must apply to all assets in the cover pool (including derivatives)
13	Cover pool monitor	 National legislators can enshrine cover pool monitors in law Criteria relating to the cover pool monitor's responsibilities and duties for monitoring the cover pool

Source: Directive 2019/2162, NORD/LB Markets Strategy & Floor Research

Digression: EU Covered Bond Directive – (CONTINUED)

Article	Description	Content / Remarks
14	Investor information	 On a quarterly basis: Mandatory transparency of the cover pool, including reporting Among others: publication of an ISIN list for the covered bonds issued under the programme, details in relation to market risk, incl. interest rate-, currency-, credit and liquidity risk
15	Coverage requirements	 Requirements for nominal minimum overcollateralisation (nominal principle) Possible to determine overcollateralisation in divergence from the nominal collateralisation method, as long as the resulting overcollateralisation is at least equal to the nominal coverage
16	Requirement for a cover pool liquidity buffer	 CB issuers must maintain a liquidity buffer in the amount of the net liquidity outflows over the next 180 calendar days Possible for national legislators to avoid an overlap [with the cover pool liquidity buffer] by not implementing the requirements for the time being (dependence on legal provisions of the Union in the context of LCR)
17	Conditions for extendable maturity structures	 National legislators may allow for the issue of CBs with extendable maturity structures Extension subject to objective triggers enshrined in law
18	Covered bond public super- vision	 Detailed requirements for supervision of CBs Monitoring the issue, listing and documentation of CBs Ensuring aspects such as independence, expertise, resources and powers CB issuers must obtain permission from the competent supervisory authority before issuing
19	Permission for covered bond programmes	 Issuer must be adequate organisational structures, processes and methodologies in place to protect covered bond investors
20	Covered bond public super- vision in the event of insol- vency or resolution	 Ensuring that the rights assured to investors are preserved. In addition, it is the national legislator's duty to require the appointment of a special administrator in the event of insolvency
21	Reporting to the competent authorities	 Issuers are required to report on their CB programmes at regular intervals, or upon request Also obliged to report in the event of insolvency or resolution
22	Powers of competent au- thorities for the purposes of covered bond public supervision	 Supervisory authority to be granted appropriate powers Duty to grant or refuse permission to conduct covered bond business
23	Administrative penalties and other administrative measures	 Establishing appropriate penalties and administrative measures for breaches of CB issuer requirements Proportional to the breach and deterrent effect
24	Publication of administra- tive penalties and other administrative measures	 Publication of penalties on the official websites of the competent national authorities Supervisory authorities must inform EBA
25	Cooperation obligations	 Close cooperation with the national banking supervisory authority Sharing of information with both the EBA and other national supervisory authorities In addition to harmonisation of issuing activities, the Directive also provides for standardisation of the EEA-wide supervision of the covered bond market.
26	Disclosure requirements	 Accessibility of legal texts and regulations Overview of institutions permitted to issue CBs List of issuers that are entitled to use the label 'European Covered Bond' Annual reporting to EBA on covered bonds and on institutions authorised to issue them
27	Labelling Amendment to Directive	Entitlement to use the label
28	2009/65/EC	Reference to Directive and amendment
29	Amendment to Directive 2014/59/EU	Reference to Directive and amendment

Source: Directive 2019/2162, NORD/LB Markets Strategy & Floor Research

Digression: EU Covered Bond Directive - (CONTINUED)

Article	Description Transitional measures	Content / Remarks "Grandfathering" and top-ups of old issues
31	Reviews and reports	 Report on equivalence regime for third countries (EU Commission; coordination with EBA) Report on the level of investor protection (EU Commission; coordination with EBA) Report on risk and benefits of CBs with extendable maturity structures (European Commission; coordination with EBA) Report on the introduction of ESNs (EU Commission)
32	Transposition	 Timeframe for transposition into national law and application Report to European Commission
33	Entry into force	• Entry into force on 20th day following that of its publication in the Official Journal of the European Union
34	Addressees	Member States

Source: Directive 2019/2162, NORD/LB Markets Strategy & Floor Research

General distinction between EEA and non-EEA covered bonds

The requirements to be met by Level 1, Level 2A and Level 2B assets can be found in <u>Articles 10 to 12 of the LCR Regulation</u>. Since the requirements of the Delegated Regulation are EEA-relevant, a general distinction is also made in the requirements for covered bonds between issues from the EEA and those issued by entities from third countries. For example, EEA bonds can generally be considered both as Level 1 assets and as the two subdivisions of Level 2. Covered bonds from third countries can only be assigned to Level 2A if they are eligible as LCR assets.

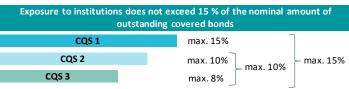
Article 129(4) CRR and Article 129(5) CRR

Covered bonds from member states of the EEA must comply with the Covered Bond Directive in order to qualify for treatment under <u>Articles 129(4) or 129(5) CRR</u>, or comply with Art. 129(3), (3a) and (3b) CRR in order to be eligible as an LCR asset (with the date of issue also playing a role in this respect). Alternatively, in cases where bonds were issued before 8 July 2022, these must comply with Art. 52(4) UCITS in the version applicable on the date of issue instead of the CBD. The Covered Bond Directive defines requirements for covered bonds, while Art. 129 CRR additionally limits the type of cover assets, defines certain minimum requirements for overcollateralisation, and so on. In contrast, paragraphs 4 and 5 of Article 129 CRR describe the requirements to be met by covered bonds in order to benefit from a preferential risk weighting. Paragraph 4 deals with bonds that have a rating assessment, while paragraph 5 deals with bonds that do not have a rating. If a covered bond issued in the EEA does not comply with Covered Bond Directive Art. 3 No. 1, and does not meet the requirements of the Directive nor those of Article 129(4) or Article 129(5) of the CRR, it cannot be used as HQLA in the context of LCR management.

Article 129(1)(c) CRR in conjunction with Article 129(1a) CRR

Article 129(1)(c) in conjunction with Article 129(1a) CRR is part of the requirements for eligible cover assets. Specifically, this concerns substitute cover assets in the form of exposures to credit institutions, which are generally limited to 15% of the outstanding covered bond volume. Exposures to institutions that qualify for Credit Quality Step 1 (CQS 1) or 2 are generally permitted. Exposures to institutions that qualify for CQS3 may only include up to a maximum of 8% of the nominal amount of outstanding covered bonds, subject to the following conditions: i) original maturity not exceeding 100 days, provided that the deposits meet the requirements of the CBD, ii) derivative contracts that comply with Art. 11(1) of the CBD (minimum requirements for derivatives in the cover pool). These articles must be complied with by Level 1 covered bonds and by Level 2A covered bonds, irrespective of whether the covered bond is issued in the EEA or a third country.

Exposures to credit institutions in the cover pool



Source: Delegated Regulation 575/2013, NORD/LB Markets Strategy & Floor Research

Article 14 CBD: transparency requirements for covered bond programmes

As covered bonds within the meaning of Art. 3 No. 1 of the Covered Bond Directive, the securities must consequently meet the transparency requirements set out in Art. 14 CBD. For recognition as LCR Level 2A, however, this also applies to covered bonds from third countries; for this purpose, Art. 14 CBD was explicitly included as a requirement in Article 11(1d)(v) of LCR Regulation 2015/61. As a result, it applies equally to all levels, so that corresponding covered bonds can be used as HQLA in the context of LCR management. In order to benefit from preferential regulatory treatment, a covered bond investor must be able to demonstrate to the relevant supervisory authority that it has a minimum level of information regarding its investment. Accordingly, the following information must be provided at least on a quarterly basis:

- i) Value of the cover pool and outstanding covered bonds
- ii) A list of ISINs for all issues made under this programme to which an ISIN was assigned
- iii) Geographical distribution and type of cover assets, loan size and valuation method
- iv) Information on market risk, including interest rate and currency risk, as well as credit and liquidity risks
- v) Maturity structure of the cover assets and the covered bonds, which may include an overview of the triggers for maturity extension
- vi) Level of required and available cover, and the level of statutory, contractual and voluntary overcollateralisation
- vii) Percentage of loans considered to be in default as defined in Article 178 CRR (NPL), and in any case of loans more than 90 days past due.

For issues prior to July 08, 2022, Art. 52(4) UCITS applies at the time of issue, whereby the LCR-R requires the transparency requirement from Art. 14 CBD, so that this must also be fulfilled for "old bonds", which also comes from Art. 30 CBD. In addition, covered bonds of level 2B are subject to a monthly transparency requirement for overcollateralization.

Credit Quality Steps as a vehicle for assessing creditworthiness

Rating assessments play a particularly important role in determining the LCR level of covered bonds. Credit assessments are taken into account with the help of the Credit Quality Step system, which is defined in <u>Regulation 2016/1799</u>. A total of six different credit rating categories are assigned through ratings issued by recognised <u>External Credit Assessment</u> <u>Institutions (ECAI)</u> (see: <u>Mapping of rating assessments</u>).

The Credit Quality Step system is based on Art. 138 CRR

While categories 1 to 3 are assigned to the investment grade segment, categories 4 to 6 are used for non-investment grade credit ratings. In principle, risk positions may have more than one ECAI rating. This means that if more than one rating is used to determine the Credit Quality Step, further mapping actions are necessary (depending on the context, we therefore present the table below with corresponding text passages once again). Irrespective of the number of available ratings, Article 138 CRR is key to determining the Credit Quality Step. If two ECAI ratings are available for a risk position, the applicable rating shall be the one resulting in the higher of the two possible risk weightings, if the two ratings differ. A higher risk weighting is equivalent to a lower credit rating. In this respect, we understand an AA-equivalent rating to be lower than an AAA-equivalent rating. If more than two ratings are available for a risk position, the two ratings resulting in the lowest risk weighting, i.e. the two highest ratings, are applicable. If these two assessments differ from each other, the Credit Quality Step is determined on the basis of the rating (out of these two ratings) that results in the higher risk weighting. It follows from the requirements of Article 138 CRR that only the two highest ratings, if available, are relevant to determining the Credit Quality Step, even if a position has more than two recognised ratings. The resulting simplification of CQS provisions is shown in the following table; no distinction is made with regard to the rating grades of individual agencies. Mapping of these equivalence ratings is shown in the Mapping of rating assessments table.

	Rating 2	CQS 1				CQS 2			CQS 3		
Rating 1		AAA	AA+	AA	AA-	A+	А	A-	BBB+	BBB	BBB-
	AAA										
COS 1	AA+	Credit Quality Step 1				Credit Quality Step 2			Credit Quality Step 3		
CQS 1	AA										
	AA-			-					·		
	A+		Cradit	Quality		Credit Quality			Credit Quality		
CQS 2	А	Credit Quality				. ,			- ,		
	A-		Ste	p 2		Step 2			Step 3		
	BBB+	Cradit Quality				Cradit Quality			Cradit Quality		
CQS 3	BBB		Credit Quality			Credit Quality			Credit Quality		
	BBB-	Step 3			Step 3			Step 3			

Determining the Credit Quality Step for more than one recognised rating assessment

Source: Regulation 2016/1799 and 2021/2005, Regulation 575/2013 (Art. 138), NORD/LB Markets Strategy & Floor Research

LCR-eligible covered bonds and credit rating assessments

As regards ratings, covered bonds also have to fulfil certain requirements in order to be deemed LCR-eligible. Only level 2B covered bonds are not subject to any requirements in terms of credit ratings. For the remaining levels, a distinction can firstly be made between covered bonds with or without a corresponding ECAI rating. Especially when combined with the issuance volume requirements for LCR-eligible covered bonds, it can be said that unrated covered bonds in the publicly placed benchmark/sub-benchmark bond segment are comparatively rare. However, the LCR Directive does provide an option for acquiring status as an LCR asset in these cases. Given the limited prevalence of such securities, we shall look at the system for unrated papers in the next but one paragraph, merely for the sake of completeness, and then, for reasons of market practice, concentrate solely on rated covered bonds.

Rating requirements for covered bonds with ECAI rating

With regard to the rating requirements for covered bonds, a fundamental distinction must first be made between issues from third countries and those from the EEA. While covered bonds issued by a third country issuer must comply with Credit Quality Step 1 in order to be classified as an eligible asset for the purposes of LCR management, EEA bonds are not subject to a mandatory requirement of this type. Instead, in the case of issues from the EEA, creditworthiness is taken into account as a criterion in three tiers. In order to be classified as a Level 1 asset, bonds must meet the requirements of CQS 1. Nevertheless, being included as a CQS 1 asset does not automatically lead to classification as a Level 1 asset, as the issue must also have a volume of at least EUR 500m and feature overcollateralisation of 2%. If, on the other hand, it is a sub-benchmark issue (EUR 250m \leq bond < EUR 500m), a CQS 1 assessment only results in Level 2A classification. The same applies to CQS 2 subbenchmarks that are overcollateralised by a minimum of 7% instead of 2%. Covered bonds with a rating below Credit Quality Step 2 or without a rating can at best only be assigned to Level 2B.

Rating requirements for covered bonds without an ECAI rating

Covered bonds without an ECAI rating can also be classified as LCR level under certain conditions. In the event that an issue does not have an ECAI rating, the <u>LCR Regulation</u> always refers to Article 129(5) CRR, which is used to <u>determine the risk weightings of unrated covered bonds</u>. In our opinion, however, in the case of determining the LCR level, Article 129(5) CRR must be considered separately from the other requirements of Article 129 CRR, since this Article is also decisive for covered bonds from third countries. Risk weights continue to be determined based on Article 129 CRR as a whole. If an EEA issue does not have a rating, but meets the other requirements, the bond can still be classified as Level 1 if it is assigned a risk weighting of 10% according to the provisions of Article 129(5) CRR. A preferential risk weighting of 10% therefore acts as a substitute for a CQS 1 ECAI rating.

Rating requirements for third-country covered bonds without an ECAI rating

The same applies to issues from third countries, as these must also comply with CQS 1 if a rating is available. In contrast to EEA bonds, however, they can only reach Level 2A. If a rating of at least CQS 2 is required, however, an unrated covered bond must be assigned a risk weight of 20% as laid down in Article 129(5) CRR.

Issue volume: different treatment of EEA and non-EEA bonds

Certain requirements must also be met with regard to the issue volume of a bond, but these also have different implications. For example, in order to be Level 1 eligible, the issue size of EEA bonds must be at least EUR 500m or its equivalent in the local currency. In order to remain eligible as a Level 2 (2A or 2B) asset, the volume must be at least EUR 250m or equivalent. Conversely, bonds issued by issuers domiciled outside the EEA are not subject to any special issue volume requirements. In the case of issues with an equivalent volume of at least EUR 500m, however, they benefit from preferential treatment with regard to the required overcollateralisation (2% overcollateralisation instead of 7%). While EEA bonds must therefore have a minimum volume of EUR 250m in order to be recognised as an LCR asset, this requirement does not apply to covered bonds from third countries. In general, all requirements relating to the issue volume refer to a figure that is equivalent to the required EUR volume.

Overcollateralisation: three different minimum levels of overcollateralisation

As the core characteristic of a covered bond, great importance is attached to the level of overcollateralisation, also in relation to its eligibility as an LCR asset. The LCR Regulation distinguishes between the three overcollateralisation levels: i) 2%, ii) 7% and iii) 10%. A minimum overcollateralisation of 2% is required in cases where the issue volume of EEA and non-EEA CQS 1 bonds is at least EUR 500m. In addition, CQS 2 sub-benchmarks from the EEA are also LCR-eligible, starting from an overcollateralisation rate of 2%. However, if the volume required for non-EEA bonds is less than EUR 500m, overcollateralisation of 7% is required. The same applies to EEA bonds of CQS 2 level that are assigned to the sub-benchmark format. Since Level 2B covered bonds, as mentioned above, do not necessarily need to have a rating assessment, these assets are subject to increased requirements. In addition to quarterly reporting (now required in all level classes), they must also have overcollateralisation of at least 10%. Furthermore, compliance with the overcollateralisation requirement must be disclosed by the issuer on a monthly basis.

Special requirements for third-country issues

As is the case with Level 2B covered bonds, non-EEA bonds must meet additional requirements to be recognised as an LCR asset. Article 11 of the LCR Regulation stipulates that bonds from outside the EEA must be issued in accordance with the national legislation of the third country. The issuer must also be a credit institution or a wholly owned subsidiary of a credit institution which guarantees the issue. Furthermore, the bond must have a dual recourse, i.e. it must enable investors to have recourse to the cover pool in addition to the receivables from the credit institution in the event of the issuer's insolvency. In addition, the issuer and the covered bonds must be subject to separate supervision; these arrangements must be at least equivalent to those applied in the EEA.

Special requirements for third-country issues

Like Level 1 and 2A EEA bonds, third-country issues must meet the requirements of Article 129(1)(c) and 129 (1a) CRR, but at the same time, like Level 1 covered bonds, may also benefit from the exemptions in Article 129(1a). In addition, cover assets for bonds not issued in the EEA are limited to those referred to in Article 129(1)(b), (d), (f) and (g) CRR. Overall, in addition to the assets referred to in Article 129(1)(c) and (1a), the eligible cover assets of issues from third countries include residential property (section d), commercial immovable property (section f) and loans secured by maritime liens on ships (section g). Collateralisation by public-sector collateral is also possible and follows the requirements specified in Article 129(1)(b). Accordingly, exposures to central governments and central banks from third countries, multilateral development banks and international organisations that qualify for Credit Quality Step 1 are eligible, as well as risk positions guaranteed by these institutions. In addition, exposures to public sector entities as well as regional or local authorities are also eligible if they meet further requirements. If, on the other hand, risk positions that qualify as Credit Quality Step 2 are involved, the share of these assets is limited to 20% of the cover pool. Where cover assets are loans secured by immovable property, the requirements of Articles 208 and 229(1) CRR must also be met.

Additional requirements for Level 2B covered bonds

Although Level 2B covered bonds are regarded as HQLA, they differ from Level 1 and 2A assets in terms of quality and/or liquidity. This is why the regulator has formulated additional requirements in this regard. As a result, the cover assets in question are limited to those referred to in Article 129(1)(a), (d)(i) and (e) CRR. Article 129(1)(a) CRR includes exposures to the public sector within Member States, consisting of (i) central governments; (ii) ESCB central banks (European System of Central Banks); (iii) public sector entities; or (iv) regional governments or local authorities. Furthermore, these assets are eligible as cover assets for Level 2B covered bonds that are guaranteed by one of the aforementioned institutions. For covered bonds backed by residential property loans, Article 129(1)(d) and (e) is also relevant as it lays down the requirements for this form of cover asset. EEA covered bonds with a rating lower than CQS 2 (or without a rating) may additionally only have cover assets that allow a risk weighting of 35% or lower. Article 125 CRR allows a 35% risk weighting for exposures that are fully collateralised by residential property which is or shall be occupied or let by the owner.

Regulatory Comparison table of covered bond legislation

Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Significant changes in the European landscape for covered bond legislation

The legislative package for greater harmonisation of the European covered bond market, which comprises a Directive and Regulation, formally came into effect as early as 07 January 2020. The harmonisation efforts in connection with European covered bond legislation had to be transposed into the national legal frameworks of EEA countries by a final deadline of 8 July 2022 at the latest and be applied accordingly. Although establishing minimum standards for covered bonds in Europe should also improve cross-border comparability for investors, the complexity of the analysis will initially increase, at least during a transitional period. On the one hand, this is due to the fact that the respective national legislators have gone their own way in terms of implementing the Covered Bond Directive and the timetables for incorporating the requirements into the national legal texts also differed greatly. Moreover, national characteristics in covered bond legislation will not necessarily disappear over the long term anyway. On the other hand, the grandfathering of covered bonds issued before 08 July 2022 may also lead to an overlapping of "old" and "new" laws, which is also important for the regulatory treatment of covered bonds, among other aspects.

Comparison table of covered bond laws

With the formal application of the new laws in Europe, in our view the time has now come to include the comparison table of covered bond legislation in the NORD/LB Issuer Guide Covered Bonds again. As usual, we present the new European legislation together with the currently valid frameworks from the non-EEA countries. The table below is intended to provide an overview of the covered bond legislation of particular relevance for the EUR benchmark segment and for placements in EUR sub-benchmark format. This is limited to a selection of comparative features in order to maintain presentational clarity. Accordingly, this tabular representation of the legislative frameworks for covered bonds should by no means be understood as offering a complete overview or, in some cases, as a substitute for examining the respective national legislation in detail.

Reforms to the current edition: maturity extension

The most significant change in the comparison table relates to the option to postpone the maturity. The Covered Bond Directive integrated this option into the new European framework in the form of an optional, or "can", regulation. If national legislators make use of this potential regulation, they are also required to legally regulate the trigger events for a maturity extension. In its new version, the table therefore contains data on these two features. It should be borne in mind that the legal regulation of maturity extensions and specifications for trigger events are initially limited to those jurisdictions that can be attributed to the European legal framework of the Directive and Regulation.

Country	Australia	Austria	Belgium	Canada
Designation	Australian Covered Bonds	Pfandbriefe (Mortgage Pfandbriefe, Public Pfandbriefe, Ship Pfandbriefe)	Belgian Pandbrieven / Lettres de	Canadian Registered Covered Bonds
Short form		-	-	
Special covered bond law	Yes	Yes	Yes	Yes
Cover assets			Mortgage loans, public sector loans, bank loans (max. 3 month)	Residential mortgage Ioans
Owner of assets	SPV	lssuer	Issuer	SPV
Special bank principle	No	No	No	No
Geographical scope - Mortgage loans	AU	EEA, CH, UK	EEA	СА
Geographical scope - Public sector loans	AU	EEA, CH, UK	OECD	-
Loan to value - Mortgage loans	Residential: 80% Commercial: 60%	Residential: 80%, Commercial: 60%, Ships: 60%	Residential: 80% Commercial: 60%	Residential: 80%
Preferential claim by law	Yes	Yes	Yes	Yes
Cover pool register	Yes	Yes	Yes	No
Derivatives as cover assets	Yes	Yes	Yes	Yes
Substitute assets	Yes	Yes	Yes	Yes
Limit of substitute assets	15%	15%	15% / 10%	10%
Minimum OC	3% nominal value	2% nominal value	5% nominal value	3% nominal value
Asset encumbrance * Issue limit ** Cover pool limit	8% of domestic assets**	-	8% of total assets*	5.5% of total on-balance sheet assets*
Deferral of maturity	Yes	Yes	Yes	Yes
Trigger Deferral of maturity	Insolvency, Inability to pay	Insolvency / Resolution of the Issuer	Insolvency, Inability to pay	Insolvency, default of issuer, other events
CRD compliant	No	Yes	Lettres de Gage/ Belgian Pandbrieven: Yes	No
ECB eligible	No	Yes	Yes	Yes ¹

Source: ECBC, national legislation, NORD/LB Markets Strategy & Floor Research; FOKUS AUF "RELEVANTE" Covered BOND Arten; ¹ if denominated in euro

Country	Czech Republic		Denmark	
Designation	Hypotecni zástavní listy / verejnoprávní zástavní listy / Smíšené zástavní listy	Realkredit obligationer	Saerligt Daekkede Obligationer	Saerligt Daekkede Realkreditobligationer
Short form	-	RO	SDO	SDRO
Special covered bond law	Yes	Yes	Yes	Yes
Cover assets	Mortgage loans, public sector loans	Mortgage loans, public sector loans	Mortgage loans, public sector loans, bank loans, ship loans	Mortgage loans, public sector loans
Owner of assets	Issuer	Issuer	Issuer	lssuer
Special bank principle	No	Yes	Yes	Yes
Geographical scope - Mortgage loans	CZ, EEA	EEA ³	EEA ³	EEA ³
Geographical scope - Public sector loans	CZ, OECD	EEA ³	EEA ³	EEA ³
Loan to value - Mortgage loans	100%	Residential: 80% Holiday homes: 60%/75% ⁴ Agriculture 70% Commercial: 60%	Residential: 75%/80% ⁶ Holiday homes: 60%/75% ⁴ Agriculture 60%/70% ⁷ Commercial: 60%/70% ⁷	Residential: 75%/80% ⁶ Holiday homes: 60%/75% ⁴ Agriculture 60%/70% ⁷ Commercial: 60%/70% ⁷
Preferential claim by law	Yes	Yes	Yes	Yes
Cover pool register	Yes	Yes	Yes	Yes
Derivatives as cover assets	Yes	Yes	Yes	Yes
Substitute assets	Yes	No	Yes	No
Limit of substitute assets	15%	-	15%	-
Minimum OC	2% nominal value ²	2% nominal value	2% nominal value	2% nominal value
Asset encumbrance * Issue limit ** Cover pool limit	-	Balance Principle	Balance Principle	Balance Principle
Deferral of maturity	Yes	Yes	Yes	Yes
Trigger Deferral of maturity	Insolvency, issuer de- fault, lack of liquidity	Refinancing CBs not guaranteed, interest rate increases by 5% or more	Depending on the issuer	Refinancing CBs not guaranteed, interest rate increases by 5% or more
CRD compliant	Yes	Depending on programme⁵	Yes	Yes
ECB eligible	Yes	Yes	Yes	Yes

Source: ECBC, national legislation, NORD/LB Markets Strategy & Floor Research; ²Public Covered Bonds where the Statutory 85% Limit is met using predominantly public receivables: 10% nominal ³ with the approval of the Danish Financial Supervisory Authority ⁴60%: private use; 75%: commercial use ⁵All ROs issued before 1 January 2008 are grandfathered and hence UCITS and CRR compliant ⁶80%: loans issued up to 30y maturity and 10y interest-only period; 75%: loans with an unlimited maturity and interest-only period ⁷up to 70% if the bank adds additional collateral

Country	Finland		France	
Designation	Finnish Covered Bond	Obligations Foncières	Obligations à l'Habitat	Caisse de Refinancement de l`Habitat
Short form	-	OF	ОН	CRH
Special covered bond law	Yes	Yes	Yes	Yes
Cover assets	Mortgage loans, public sector loans	Mortgage loans (resi- dential & commercial), public sector loans	Mortgage loans (only residential)	Mortgage loans (only residential, max. 1m & 25Y remaining maturi- ty
Owner of assets	lssuer	Issuer or credit institu- tion (transfer of assets)	Issuer or credit institu- tion (transfer of assets)	Credit institution (transfer of assets)
Special bank principle	No	Yes	Yes	Yes
Geographical scope - Mortgage loans	EEA	EEA, step 1 countries ⁸	EEA, step 1 countries ⁸	EEA
Geographical scope - Public sector loans	EEA	EEA (outside only with rating minimum credit quality step 2)	-	-
Loan to value - Mortgage loans	Residential: 80% Commercial: 60%	Residential: 80% Commercial: 60% FGAS guarantee: 100%	Residential: 80% FGAS guarantee: 100%	Residential: 80% FGAS guarantee: 100%
Preferential claim by law	Yes	Yes	Yes	Yes
Cover pool register	Yes	No	No	Yes
Derivatives as cover assets	Yes	Yes	Yes	No
Substitute assets	Yes	Yes	Yes	Yes
Limit of substitute assets	20%	15%	15%	15%
Minimum OC	5% present value	5% nominal value	5% nominal value	5% nominal value
Asset encumbrance * Issue limit ** Cover pool limit	-	-	-	-
Deferral of maturity	Yes	Yes	Yes	Yes
Trigger Deferral of maturity	Insolvency	Insolvency, liquidation, default Issuer, lack of liquidity	Insolvency, liquidation, default Issuer, lack of liquidity	Insolvency, liquidation, default Issuer, lack of liquidity
CRD compliant	Yes	Yes	Yes	Yes
ECB eligible	Yes	Yes	Yes	Yes
		0		

Source: ECBC, national legislation, NORD/LB Markets Strategy & Floor Research ⁸Step 1 countries: state that receives the highest credit rating from an external rating agency recognized by ACPR

NORD/LB

Designation Hypotheken-, Schiffs-A Greek Covered Bond Jetralogievel Bonds Short form Hypfe, Öpfe, Schipfe, Flupfe - - - Special covered Yes Yes Yes Yes Cover assets Mortgage loans, public Mortgage loans, public sector loans, aircraft loans Mortgage loans, public sector loans, ship loans, bank loans Mortgage loans Mortgage loans public sector loans Owner of assets Issuer Issuer Issuer Issuer Issuer Issuer Special bank principle No No Yes No Yes No Geographical scope - Mortgage loans IP, AU, NZ, SG, UK ³ , Schipfe and Flupfe worldwide GR, EU, Multilateral devel- opment banks EEA EEA Loan to value - Mortgage loans 60% of mortgage lending value Residential : 80% Commercial: 60% Ships: 60% Residential : 70% Commercial: 60% Residential :	Country	Germany	Greece	Hungary	Iceland
Special covered bond lawYesYesYesYesCover assetsMortgage loans, public sector loans, ship loans, aircraft loansMortgage loans, ship loans, bank loansMortgage loans public sector loans, sector loans, ship loans, bank loansMortgage loansMortgage loansMortgage loansOwner of assetsIssuerIssuerIssuerIssuerIssuerIssuerNoGeographical scope - Public sector loansJP, AU, NZ, SG, UK ^o , Schipfe and Flupfe worldwideGR, EU, Multilateral devel- commercial: 60% Ships: 60%Residential : 70% Commercial: 60% Commercial: 60% Commercial: 60% Ships: 60%Residential : 70% Commercial: 60% Commercial: 60% Commercial: 60% Commercial: 60% Commercial: 60% Commercial: 60% Ships: 60%Residential : 70% Commercial: 60% Commercial: 60% Commercial: 60% Commercial: 60% Commercial: 60% Commercial: 60% Ships: 60%Residential : 70% Commercial: 60% Commercial: 60% Comm	Designation	Hypotheken-, Schiffs- &	Greek Covered Bond	Jelzáloglevél	Icelandic Covered Bonds
bond lawYesYesYesYesYesYesCover assetsMortgage loans, ship loans, aircraft loansMortgage loans, public sector loans, ship loans, bank loansMortgage loansMortgage loansOwner of assetsIssuerIssuerIssuerIssuerIssuerIssuerSpecial bank principleNoNoYesNoGeographical scopeJP, AU, NZ, SC, IK*, SchipfeGR, EUEEAEEA- Mortgage loans60% of mortgageGR, EU, Multilateral devel- opment banks-EEACoan to value60% of mortgage lending valueResidential : 80% 	Short form	Hypfe, Öpfe, Schipfe, Flupfe	-	-	-
Cover assetssector loans, ship loans, aircraft loanspublic sector loans, ship loans, bank loansMortgage loanspublic sector loansOwner of assetsIssuerIssuerIssuerIssuerIssuerIssuerIssuerSpecial bank principleNoNoYesNoGeographical scope - Mortgage loansIP, AU, NZ, SG, UK ⁹ , Schipfe and Flupfe worldwideGR, EUEEAEEAGeographical scope - Public sector loansEEA, CH, US, CA, JP, UK ⁹ Multilateral devel- opment banks-EEACoan to value - Mortgage loans60% of mortgage lending valueResidential : 80% Commercial: 60%Residential : 70% Commercial: 60%Residential : 70% Agriculture: 77Residential : 80% Commercial: 60%Residential : 70% Commercial: 60%Residential : 70% Agriculture: 78Preferential clain by lawYesYesYesYesYesby lawYesYesYesYesYesCover pool register substitute assetsYesYesYesYesImit of substitute * toyser yes15% of pfe, 20% Schipfe / Flupfe15% of nominal value of outstanding bonds20%20%Minimum OCHypfe/Opfe: 2% Schipfe /Flupfe: 5%YesYesYesYesPeferral of maturity rulesYesYesYesYesYesPeferral of maturity rulesYesYesYesYesYesPreforentiantGolfe / Hypfe / Schipfe / SchipfeYesYesYesYes <td>-</td> <td>Yes</td> <td>Yes</td> <td>Yes</td> <td>Yes</td>	-	Yes	Yes	Yes	Yes
Special bank principleNoNoYesNoGeographical scope - Mortgage loansEEA, CH, US, CA, JP, AU, NZ, SG, UK*, Schipfe and Flupfe worldwideGR, EU,EEAEEAEEAGeographical scope - Public sector loansEEA, CH, US, CA, JP, UK*Multilateral devel- opment banks-EEALoan to value - Mortgage loans60% of mortgage lending valueResidential : 80% Commercial: 60% Ships: 60%Residential : 70% Commercial: 60% Ships: 60%Residential : 70% Commercial: 60% Commercial: 60% Ships: 60%Residential : 70% Commercial: 60% Commercial: 60% Ships: 60%Residential : 70% Commercial: 60% Commercial: 60% Commercial: 60% Commercial: 60% Ships: 60%Residential : 70% Commercial: 60% Commercial: 60% Commercial: 60% Commercial: 60% Commercial: 60%Residential : 70% Commercial: 60% Commercial: 6	Cover assets	sector loans, ship loans,	public sector loans,	Mortgage loans	Mortgage loans, public sector loans
Geographical scope - Mortgage loansEEA, CH, US, CA, JP, AU, NZ, SG, UK ⁹ , Schipfe and Flupfe worldwideGR, EUEEAEEAGeographical scope - Public sector loansEEA, CH, US, CA, JP, UK ⁹ Multilateral devel- opment banks-EEALoan to value - Mortgage loans60% of mortgage 	Owner of assets	Issuer	Issuer	Issuer	lssuer
Geographical scope - Mortgage loansJP, AU, NZ, SG, UK ⁹ , Schipfe and Flupfe worldwideGR, EU, GR, EU, Multilateral devel- opment banksEEAEEAGeographical scope - Public sector loansEEA, CH, US, CA, JP, UK ⁹ Multilateral devel- opment banks-EEALoan to value - Mortgage lands60% of mortgage lending valueResidential : 80% Commercial : 60%Residential : 70% Commercial : 60%Residential : 70	Special bank principle	No	No	Yes	No
Geographical scope Public sector loansEEA, CH, US, CA, JP, UK®Multilateral development banksEEALoan to value - Mortgage loans60% of mortgage lending valueResidential : 80% Commercial: 60% Ships: 60%Residential : 70% Commercial: 60% Ships: 60%Residential : 70% Commercial: 60% Commercial: 60% Ships: 60%Residential : 70% Commercial: 60% Agriculture: 7Preferential claim by lawYesYesYesYesQuery pool register cover assetsYesYesYesYesYesYesYesYesYesYesSubstitute assets substituteYesYesYesYesYesMinimum OCHypfe / Schipfe / Flupfe Schipfe / Flupfe15% of nominal value of outstanding bonds20% nominal20% nominalAsset encumbrance * Issue limit ** Cover pool limitYesYesYesYesYesDeferal of maturity maturityYesYesYesYesYesYesYes (Öpfe / Hypfe / Schipfe)YesYesYesYesYesYesCover pool limitYesYesYesYesYesYes	Geographical scope	JP, AU, NZ, SG, UK ⁹ , Schipfe	GR, EU	EEA	EEA
Loan to value60% of mortgage lending valueCommercial: 60% Ships: 60%Residential : 70% Commercial: 60% Commercial: 60%Commercial: 60% Agriculture: 7Preferential claim by lawYesYesYesYesYesPreferential claim by lawYesYesYesYesYesDerivatives as cover assetsYesYesYesYesYesDerivatives as cover assetsYesYesYesYesYesSubstitute assetsYesYesYesYesYesUini of substitute assets15% of per 20% Opfe, 20%15% of nominal value of outstanding bonds20%20%20%Minimum OCHypfe/Opfe: 2% Schipfe/Flupfe5% nominal value2% nominal /NPV5% nominal includes limit tion *Asset encumbrance * Issue limit ** Cover pool limitLegal No; licer includes limit tion *Prigger Deferral of maturityYesYesYesYesYesYesYes (Öpfe / Hypfe / Schipfe)YesYesYesYesYesYesYes (Öpfe / Hypfe / Schipfe)YesYesYesYesYesYesYes	•••		Multilateral devel-	-	EEA
by lawYesYesYesYesCover pool registerYesYesYesYesYesDerivatives as cover assetsYesYesYesYesYesSubstitute assetsYesYesYesYesYesSubstitute assetsYesYesYesYesYesSubstitute assetsYesYesYesYesYesIminiat of substitute15% öpfe, 20%15% of nominal value of outstanding bonds20%20%Minimum OCHypfe//Schipfe / Flupfe Schipfe/Flupfe: 5%5% nominal value2% nominal /NPV5% nominalAsset encumbrance * Issue limit ** Cover pool limitDeferral of maturityYesYesYesYesYesTrigger Deferral of maturityBankruptcy/resolutionLack of liquidity; breach of liquidity rulesDepending on the design of the pro- rules-Yes (öpfe / Hypfe / Schipfe)YesYesYesYesYes (öpfe / Hypfe / Schipfe)YesYesYesYes			Commercial: 60%		Residential: 80% Commercial: 60% Agriculture: 70%
Cover pool registerYesYesYesYesDerivatives as cover assetsYesYesYesYesYesSubstitute assetsYesYesYesYesYesSubstitute assetsYesYesYesYesYesLimit of substitute assets15% öpfe, 20% Hypfe / Schipfe / Flupfe15% of nominal value of outstanding bonds20%20%Minimum OCHypfe/Öpfe: 2% Schipfe/Flupfe: 5%5% nominal value2% nominal /NPV5% nominalAsset encumbrance 		Yes	Yes	Yes	Yes
Cover assetsYesYesYesYesSubstitute assetsYesYesYesYesLimit of substitute15% Öpfe, 20%15% of nominal value of outstanding bonds20%20%Minimum OCHypfe/Öpfe: 2% Schipfe/Flupfe: 5%5% nominal value2% nominal /NPV5% nominalAsset encumbrance * Issue limit ** Cover pool limitLegal No; licer includes limit tion *Deferral of maturityYesYesYesYesYesYesTrigger Deferral of maturityBankruptcy/resolutionLack of liquidity; breach of liquidity; rulesDepending on the design of the pro- gramme-Yes (Öpfe / Hypfe / Schipfe)YesYesYesYesYes	-	Yes	Yes	Yes	Yes
Limit of substitute assets15% Öpfe, 20% Hypfe / Schipfe / Flupfe15% of nominal value of outstanding bonds20%20%Minimum OCHypfe/Öpfe: 2% Schipfe/Flupfe: 5%5% nominal value2% nominal /NPV5% nominalAsset encumbrance * Issue limit ** Cover pool limitLegal No; licer includes limit tion *Deferral of maturity maturityYesYesYesYesYesYesYes (Öpfe / Hypfe / Schipfe)YesYesYesYesYesYesYes (Öpfe / Hypfe / Schipfe)YesYesYesYesYesYes		Yes	Yes	Yes	Yes
assetsHypfe / Schipfe / Flupfeof outstanding bonds20%20%Minimum OCHypfe/Öpfe: 2% Schipfe/Flupfe: 5%5% nominal value2% nominal /NPV5% nominalAsset encumbrance * Issue limit ** Cover pool limitLegal No; licer includes limit tion *Deferral of maturity maturityYesYesYesYesYesYesTrigger Deferral of maturityBankruptcy/resolutionLack of liquidity; breach of liquidity; rulesDepending on the design of the pro- grammeCBD compliantYes (Öpfe / Hypfe / Schipfe)YesYesYesYesYesYes	Substitute assets		Yes	Yes	Yes
Minimum OC Schipfe/Flupfe: 5% nominal value 2% nominal /NPV 5% nominal /NPV Asset encumbrance * Issue limit ** Cover pool limit - - - Legal No; licer includes limit tion * Deferral of maturity Yes Yes Yes Yes Trigger Deferral of maturity Bankruptcy/resolution Lack of liquidity; breach of liquidity; rules Depending on the design of the pro- rules - CBD compliant Yes (Öpfe / Hypfe / Schipfe) Yes Yes Yes Yes		• •		20%	20%
* Issue limit ** Cover pool limit Deferral of maturity Trigger Deferral of maturity Bankruptcy/resolution Yes (Öpfe / Hypfe / Schipfe) Yes Yes Yes Yes Bankrupt / Schipfe) Yes Yes Yes Yes Yes Yes Yes Yes Yes Yes Yes Yes Yes Yes Yes Yes Yes Yor ab Jan 2	Minimum OC			2% nominal /NPV	5% nominal ¹⁰
Trigger Deferral of maturity Lack of liquidity; breach of liquidity; breach of liquidity design of the pro- rules Depending on the design of the pro- gramme CRD compliant Yes (Öpfe / Hypfe / Schipfe) Yes Yes Yes Vorr ab lan 2	* Issue limit	-	-	-	Legal No; licence includes limita- tion *
Trigger Deferral of maturity Lack of liquidity; breach of liquidity; Depending on the design of the pro- rules Yes (Öpfe / Hypfe / Schipfe) Yes Yes Vorr ab lan 2	Deferral of maturity	Yes	Yes	Yes	Yes
Yes (Öpfe / Hypfe / Schipfe) Yes Ves Vorr ab Jan 2	Trigger Deferral of		Lack of liquidity; breach of liquidity	Depending on the design of the pro-	-
	CRD compliant	Yes (Öpfe / Hypfe / Schipfe) No (Flupfe)	Yes	-	Vorr. ab Jan. 2023
ECB eligible Yes Yes Yes Yes	ECB eligible		Yes	Yes	Yes

Source: ECBC, national legislation, NORD/LB Markets Strategy & Floor Research ⁹Non-EEA assets are limited to 10% unless security is assured ¹⁰Not mandatory, but contractual obligation and/or by rating agencies

Country	Ireland	Italy	Luxembourg	Netherlands
Designation	Asset Covered Securities	Obbligazioni Bancarie Garantite	Lettres de Gage (publiques / mobilières / hypothécaires / énergies renouvelables)	Geregistreerde Gedekte Obligaties
Short form	ACS	OBG	LdG	GGO
Special covered bond law	Yes	Yes	Yes	Yes
Cover assets	Mortgage loans (Commercial max. 10%) public sector loans	Mortgage loans, public sector loans bank loans (max. 8- 15%)	Mortgage loans , public sector loans, movable assets bank loans, renewable en- ergy (RE) loans	Mortgage loans, public sector loans, ship loans
Owner of assets	lssuer	SPV	lssuer	SPV
Special bank principle	Yes	No	No	No
Geographical scope - Mortgage loans	EEA, US, CA, JP, CH, NZ, AU	EEA, CH	EU, EEA, OECD, others (CQS 1: up to 50%; CQS 2 up to 10%)	EEA
Geographical scope - Public sector loans	EEA, US, CA, JP, CH, NZ, AU	EEA, CH	EEA, OECD, other	EEA
Loan to value - Mortgage loans	Residential : 75% Commercial: 60%	Residential : 80% Commercial: 60%	Residential: 80% Other: 60% Renewable energy: 50% (up to 80%)	Residential : 80% Commercial: 60%/70% Ships: 60%
Preferential claim by law	Yes	Yes	Yes	Yes
Cover pool register	Yes	No	Yes	No
Derivatives as cover assets	Yes	Yes	Yes	Yes
Substitute assets	Yes	-	Yes	Yes
Limit of substitute assets	20%	-	20%	20%
Minimum OC	3% nominal value	-	5% nominal value (10% LdG Publiques)	5% nominal value
Asset encumbrance * Issue limit ** Cover pool limit	-	Dependent on the issuer's equity**	20% of total liabilities if not a specialist institution**	Case-by-case based on healthy ratio ¹¹ *
Deferral of maturity	Yes	Yes	No	Yes
Trigger Deferral of maturity	Default, instruction authority or admin- istrator	Insolvency, default	-	Insolvency, resolution, default of issuer
CRD compliant	Yes	Yes	Depending on programme	Yes
ECB eligible	Yes	Yes	Depending on programme	Yes

Source: ECBC, national legislation, NORD/LB Markets Strategy & Floor Research ¹¹The Dutch Central Bank makes sure, on a case-by-case basis, that a healthy relationship is maintained between the nominal value of the registered covered bonds outstanding and the consolidated balance sheet total of the issuing bank (healthy ratio)

NORD/LB

Country	New Zealand	Norway	Poland	Portugal
Designation	New Zealand Registered Covered Bonds	Obligasjoner med fortrinnsrett	Hypoteczne Listy Zastawne / Pub- liczne Listy Zastawne	Obrigações Cobertas
Short form	-	OMF	LZ	ObC
Special covered bond law	Yes	Yes	Yes	Yes
Cover assets	No legal guideline (in practice: mortgage loans)	Mortgage loans, public sector loans, Loans collateralised with other assets	Mortgage loans, public sector loans	Mortgage loans, public sector loans ships
Owner of assets	SPV	Issuer	Issuer	Issuer
Special bank principle	No	Yes	Yes	No
Geographical scope - Mortgage loans	NZ (practice)	EEA, OECD	PL	EU/EEA
Geographical scope - Public sector loans	-	EEA, OECD	PL, EEA, OECD	EU/EEA
Loan to value - Mortgage loans	Not regulated by law, valuation limited by asset coverage test ¹²	Residential: 75% Commercial: 60% Holiday homes: 60%	Residential: 80% Commercial: 60%	Residential: 80% Commercial: 60% Ships: 60%
Preferential claim by law	Yes	Yes	Yes	Yes
Cover pool register	Yes Yes Yes		Yes	
Derivatives as cover assets	Yes	Yes	Yes	Yes
Substitute assets	Yes	Yes	Yes	Yes
Limit of substitute assets	Cash no limit 13	20%	15%	20%
Minimum OC	-	2% / 5% nominal value	5% nominal value	5% (Premium); 10% (Commercial LTV over 70%; Non-Premium)
Asset encumbrance * Issue limit ** Cover pool limit	10% of total assets**	-	Max. 40 times equity *	-
Deferral of maturity	Yes	Yes	Yes	Yes
Trigger Deferral of maturity	-	Issuer insol- veny/resolution	Insolvency	Default / Withdrawal banking licence
CRD compliant	No	Yes	Yes	Yes
ECB eligible	No	Yes	Yes	Yes

Source: ECBC, national legislation, NORD/LB Markets Strategy & Floor Research ¹² The ACT limits the valuation of property in the case of ASB and Westpac at 75% for ANZ, BNZ as well as Kiwibank at 80% ¹³ Westpac and BNZ: 15%, ANZ, ASB, Kiwibank: 10%



DesignationSingapore Covered BondsKrytý DlhopisSouth Korean Covered BondsKHFC Covered BondsShort form-KD-KHFCSpecial covered bond lawYesYesYesYes	3onds
Special covered bond lawYesYesYesYesSpecial covered bond lawYesYesYes	
bond law Yes Yes Yes Yes Yes Yes	
Cover assetsResidential mortgage loansMortgage loans public sector loansgage loans, ship loans, aircraftResidential mor loansIoansIoansotherloans, public sector loans, RMBS	tgage
Owner of assetsIssuer/SPVIssuerIssuer	
Special bank principle No No Yes	
Geographical scope - Slovakia KR KR - Mortgage loans - Slovakia KR KR	
Geographical scope - Slovakia, EU KR -	
Loan to valueResidential: 80%Residential: 70%- Mortgage loansResidential: 80%Commercial: 60%//70%Ships: 70%0%-100%12Other: 70%Aircraft: 70%	5
Preferential claimYesYesYesYesby law	
Cover pool registerYesYesYesYes	
Derivatives asYesYesYesYescover assetsYesYesYesYes	
Substitute assets Yes Yes -	
Limit of substitute 15% ¹⁴ 10% / 20% 10% - assets -	
Minimum OC 3% nominal value 5% CRR Assets / - Value) 10% other (nominal value - -	
Asset encumbrance4% of total assets* Issue limit10% of total assets**-(Presidential De- ty capital *** Cover pool limitcree)*ty capital *	-
Deferral of maturityYesYesYesYes	
Trigger Deferral of maturity Regulated by contract Insolvency, issuer de- fault, withdrawal of the covered bond pro- gramme Default -	
CRD compliantNoYesNoNo	
ECB eligible No Yes No No	

Source: ECBC, national legislation, NORD/LB Markets Strategy & Floor Research ¹⁴The 15%-limit can be temporarily exceeded in order to build up the necessary liquidity to meet payments in the upcoming 12 months or to account for operational timing differences ¹⁵ No legal standard defined, valuation is determined individually based on the duration of the payment default in the transaction documents

NORD/LB

Country	Spain	Sweden	Switzerland	Turkey
Designation	Cédulas Hipotecarias / Cédulas Territoriales/ Cédulas de internacion- alización	Swedish Covered Bonds (Säkerställda Obligationer)	Contractual Law Based Covered Bonds	Ipotek Teminatli Menkul Kiymetler
Short form	CH, CT, CI	-	-	ITMK
Special covered bond law	Yes	Yes	No	Yes
Cover assets	Mortgage loans, public sector loans Export credits	Mortgage loans ¹⁶ , public sector loans, bank loans	Mortgage loans	Mortgage loans, bank loans
Owner of assets	Issuer	Issuer	SPV	Issuer
Special bank principle	No	No	No	No
Geographical scope - Mortgage loans	EEA	EEA	СН	TR
Geographical scope - Public sector loans	EEA	EU	-	-
Loan to value - Mortgage loans	Residential: 80% Commercial: 60%	Residential : 80% Commercial: 60%/70%	Residential: 70%/80%	Residential: 80% Commercial: 50%
Preferential claim by law	Yes	Yes	No	Yes
Cover pool register	Yes	Yes	No	Yes
Derivatives as cover assets	Yes	Yes	Yes	Yes
Substitute assets	Yes	No	Yes	Yes
Limit of substitute assets	10%	-	15%	15%
Minimum OC	5% nomial value	2% present and nomi- nal value	Contractual ar- rangements	Nominal coverage, 2% present value
Asset encumbrance * Issue limit ** Cover pool limit	-	-	-	-
Deferral of maturity	Yes	Yes	Yes	-
Trigger Deferral of maturity	Insolvency, resolution, lack of liquidity, breach of liquidity regulations	Permission by the FSA required	Issuer default, lack of liquidity	-
CRD compliant	Yes	Yes	No	No
ECB eligible	Yes	Yes	No	No
-				

Source: ECBC, national legislation, NORD/LB Markets Strategy & Floor Research ¹⁶Commercial mortgages are limited to 10% of the total value of the cover pool



Short form RCB Special covered Yes Special covered Yes Cover assets Mortgage loans, public sector loans Cover assets SPV Special bank principle No Special bank principle No Geographical scope UK, EEA, CH, US, CA, JP, NZ, AU, Channel Islands, Isle of Man Geographical scope UK, EEA, CH, US, CA, JP, NZ, AU, Channel Islands, Isle of Man Public sector loans Residential: 80% Preferential claim Yes Downer sets Yes Special scope Yes Preferential claim Yes Special sets Yes Special scope Yes Preferential claim Yes Special sets Yes	Country
Special covered bond law Yes Cover assets Mortgage loans, public sector loans Cover assets SPV Owner of assets SPV Special bank principle No Geographical scope · Mortgage loans UK, EEA, CH, US, CA, JP, NZ, AU, Channel Islands, Isle of Man Geographical scope · Public sector loans UK, EEA, CH, US, CA, JP, NZ, AU, Channel Islands, Isle of Man Geographical scope · Public sector loans VK, EEA, CH, US, CA, JP, NZ, AU, Channel Islands, Isle of Man Cover pool register Yes Cover pool register Yes Cover assets Yes Cover assets Yes	Designation
bond law Yes Cover assets Mortgage loans, public sector loans Cover assets SPV Owner of assets SPV Special bank principle No Geographical scope NZ, AU, Channel Islands, Isle of Man Geographical scope Public sector loans UK, EEA, CH, US, CA, JP, NZ, AU, Channel Islands, Isle of Man Geographical scope Public sector loans Residential: 80% Preferential claim Ves Derivatives as Yes	Short form
Cover assets sector loans Dwner of assets SPV Special bank principle No Special bank principle No Mortgage loans UK, EEA, CH, US, CA, JP, NZ, AU, Channel Islands, Isle of Man VK, EEA, CH, US, CA, JP, Special bank principle No Awortgage loans NZ, AU, Channel Islands, Isle of Man Special bank principle No Public sector loans NZ, AU, Channel Islands, Isle of Man Special bank principle No Preferential claim Yes Cover pool register Yes Perivatives as cover assets Yes	Special covered bond law
Special bank principle No Geographical scope UK, EEA, CH, US, CA, JP, · Mortgage loans UK, EEA, CH, US, CA, JP, · Public sector loans UK, EEA, CH, US, CA, JP, · Public sector loans UK, EEA, CH, US, CA, JP, · No NZ, AU, Channel Islands, · Isle of Man Preferential claim Yes Cover pool register Yes Prefixed Sector Preferential claim Yes Preferenti	Cover assets
Geographical scope UK, EEA, CH, US, CA, JP, • Mortgage loans NZ, AU, Channel Islands, Isle of Man UK, EEA, CH, US, CA, JP, Seographical scope UK, EEA, CH, US, CA, JP, • Public sector loans UK, EEA, CH, US, CA, JP, NZ, AU, Channel Islands, Isle of Man Loan to value Residential: 80% • Mortgage loans Yes Preferential claim Yes by law Yes Cover pool register Yes Derivatives as Yes Yes Yes	Owner of assets
Geographical scope NZ, AU, Channel Islands, Isle of Man Geographical scope NZ, AU, Channel Islands, Isle of Man Public sector Ioans UK, EEA, CH, US, CA, JP, NZ, AU, Channel Islands, 	Special bank principle
Seegraphical scope NZ, AU, Channel Islands, Public sector loans NZ, AU, Channel Islands, Isle of Man Loan to value Mortgage loans Residential: 80% Preferential claim by law Cover pool register Yes Derivatives as Yes	Geographical scope - Mortgage loans
Mortgage loans Residential: 80% Preferential claim Yes by law Yes Cover pool register Yes Derivatives as Yes cover assets Yes	Geographical scope - Public sector loans
Yes Cover pool register Yes Derivatives as cover assets	Loan to value - Mortgage loans
Cover pool register Yes Derivatives as Yes cover assets Yes	Preferential claim by law
cover assets Yes	Cover pool register
	Derivatives as cover assets
	Substitute assets
10%	Limit of substitute assets
Minimum OC 8% nominal value	Minimum OC
* Issue limit FCA approval required	Asset encumbrance * Issue limit ** Cover pool limit
	Deferral of maturity
	Trigger Deferral of maturity
CRD compliant No	CRD compliant
ECB eligible Yes ¹⁷	ECB eligible

Source: ECBC, national legislation, NORD/LB Markets Strategy & Floor Research ¹⁷ if denominated in euro

Regulatory Central bank-eligibility of covered bonds

Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Covered bonds as central bank-eligible securities

For banks, the provision of collateral is an important criterion in connection with borrowing from central banks. In this context, covered bonds are of major importance to the central banks. These are among the eligible assets in the ECB Collateral Framework and can be deposited as collateral, provided that the relevant criteria are met. In an international comparison, the acceptance criteria vary, among other aspects, depending on the issuance currency, rating, issuance volume, coupon and jurisdiction of origin (cf. <u>table overview</u>) and lead to various haircuts (discounts) when recognized as eligible collateral. Moreover, for the ECB, covered bonds play a not insignificant role within the framework of TLTROs. This is due, among other things, to the fact that in the eurozone retained covered bonds (also referred to as "own use" covered bonds) can generally be used as collateral in the Eurosystem, albeit with additional discounts (<u>Directive (EU)</u> <u>2016/65</u>).

ECB criteria allow for a broad spectrum of international covered bonds

In principle, central bank eligibility applies to legally regulated, EUR-denominated investment grade covered bonds from the EEA. This specification is extended to include currencies such as the USD, GBP and JPY on the basis of the ECB's Temporary Guidelines. In addition, covered bonds from G10 jurisdictions can also be submitted as collateral as part of a relaxation of EEA restrictions. In practice, however, this extension only includes Canadian and UK covered bonds. In our regularly published NORD/LB Covered Bond Special entitled "Covered bonds as eligible collateral for central banks", we look at the eligibility of covered bonds in greater detail.

COVID-19 crisis: temporary adjustments and phasing out until March 2024 in Europe

The central importance of covered bonds in the provision of collateral is also reflected in the fact that numerous central banks made temporary adjustments to their frameworks in the wake of the COVID-19 crisis. The temporary measures agreed on <u>07 April 2020</u> and <u>22 April 2020</u> continue to apply partially or in a watered down form (cf. <u>ECB announcement from 24 March 2022</u>). For example, the 20% reduction in the applicable haircuts was reduced to 10% by way of an ECB resolution on 08 July 2022, before being fully revoked from June 2023 onwards. Central banks around the world also made crisis-related adjustments to the eligibility of covered bonds, although the majority of these measures have already been phased out (e.g. by the Swedish Riksbank, Norges Bank and the Bank of Canada).

ECB data for central bank-eligible collateral

The ECB provides information on the list of eligible collateral on the homepage of its website. In the <u>Downloads</u> section, users can access both the entire database as well as the changes versus the previous working day. Moreover, <u>queries</u> can be submitted to ascertain whether a given security is eligible as collateral.



Regulatory Table: Central bank eligibility of covered bonds¹

Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

		Eurozone	United I	<u>Kingdom</u>	Switzerland	United States
		European Central Bank	Bank of	England	Swiss National Bank	<u>Federal</u> <u>Reserve Bank</u>
Eligibility crite	ria	link	lin	<u>nk</u>	link	link
Eligible securit	ies	link	lin	n <u>k</u>	link	
Category		Category II & III	Level B	Level C	L2A, L2A CHF	German Jumbo Pfandbrief
Rating require	ments	Min. BBB-/Baa3	AAA/Aaa equivalent	A-/A3 equivalent	Min. AA-/Aa3	AAA/Aaa
Rating agencies		ECAI (accepted for ECAF)	-	-	Fitch, Moody's, S&P	-
Rating treatme	ent	First best	-	-	Second best	-
Min. volume (home currenc	:y)	Category II: EUR 1,000m	> GBP 1,000m	-	CHF 100m	German Jumbo
Min. volume equivalent (foreign currency)		Category III: -	> EUR 1,000m	-	CHF 1,000m	Pfandbrief
Own-use		\checkmark	×	\checkmark	×	-
	TtM	\checkmark	✓	✓	×	\checkmark
Haircuts based on	Coupon	✓	✓	✓	×	✓
	Currency	✓	✓	✓	×	✓
		Own-use	-	-	-	-
	EUR	\checkmark	✓	\checkmark	\checkmark	\checkmark
	USD	√2	✓	✓	✓	✓
	GBP	√2	✓	✓	\checkmark	✓
	JPY	√2	×	×	×	✓
	CHF	×	\checkmark	\checkmark	\checkmark	\checkmark
Currencies	SEK	×	✓	✓	\checkmark	\checkmark
currencies	NOK	×	×	×	\checkmark	×
	DKK	×	×	×	\checkmark	\checkmark
	CAD	×	✓	✓	×	\checkmark
	AUD	×	✓	✓	×	✓
	NZD	×	×	×	×	×
	PLN	×	×	×	×	×
	EU	\checkmark	-	\checkmark	✓(non CHF-Bonds)	-
	EEA	\checkmark	-	\checkmark	✓(non CHF-Bonds)	-
Country of	G10	✓	-	×	×	-
issuance	others	-	UK, DE, FR	US	UK (non CHF-Bonds), CH; CHF bonds: no limitations	DE

¹ The table serves to ensure comparability of the requirements for eligible collateral and therefore does not address possible special/individual cases. Therefore, a case-by-case assessment is essential to determine the eligibility of securities and cannot be based solely on this table. ² Based on Temporary Guidelines Source: Nationale central banks, NORD/LB Markets Strategy & Floor Research

Regulatory Table: Central bank eligibility of covered bonds (continued)

		Sweden	<u>Norway</u>	<u>Denmark</u>
		Sveriges Riksbank	Norges Bank	<u>Danmarks</u> <u>Nationalbank</u>
Eligibility crite	eria	link	link	link
Eligible securi	ties	link	link	link
Category		Category 2	Category 2,3 & 4	Category 2 & 3
Rating require	ements	Min. AA-/Aa3	Min. BBB-/Baa3	-
Rating agencie	es	Fitch, Moody's, S&P	Fitch, Moody's, S&P	-
ating treatm	ent	≥ two ratings: at least two min. AA-/Aa3	Second best	-
vlin. volume home curren	cy)	SEK 100m	NOK 300m	Category 2: EUR 1,000m (or equivalent in DKK)
Min. volume e foreign curre		SEK 100m	EUR 100m	Category 3: -
Own-use		✓	\checkmark	×
	TtM	✓	\checkmark	✓
laircuts	Coupon	\checkmark	\checkmark	✓ × × ✓ Theoretical price
ased on	Currency	\checkmark	\checkmark	✓
		Theoretical and/or old price	Own-use	Theoretical price
EUR	EUR	\checkmark	\checkmark	✓
	USD	\checkmark	\checkmark	×
	GBP	\checkmark	\checkmark	×
	JPY	\checkmark	\checkmark	×
	CHF	×	\checkmark	×
Currencies	SEK	\checkmark	\checkmark	×
urrencies	NOK	\checkmark	\checkmark	×
	DKK	\checkmark	\checkmark	\checkmark
	CAD	×	\checkmark	×
	AUD	×	\checkmark	×
	NZD	×	\checkmark	×
	PLN	×	×	×
	EU	-	\checkmark	-
	EEA	-	\checkmark	-
Country of	G10	✓	-	×
ssuance	others	NO, DK, FI, AT, LU, IE, PT, ES, GR, AU, NZ	AU, NZ, US, CA, CH, GG, JE, KY, UK	DК

Source: Nationale central banks, NORD/LB Markets Strategy & Floor Research

Regulatory Table: Central bank eligibility of covered bonds (continued)

		<u>Canada</u>	<u>Australia</u>	New Zealand	<u>Poland</u>
		Bank of Canada	Reserve Bank	Reserve Bank	Narodowy Bank
		Dalik Ul Callaud	<u>of Australia</u>	of New Zealand	<u>Polski</u>
Eligibility crite	eria	link	link	link	link
Eligible securi	ties		link	link	<u>link</u>
Category		Covered Bonds	ADI-issued, other securities	Covered Bonds	Mortgage Bonds
Rating require	ements	AAA equivalent	ADI-issued >1y: min. BBB-/Baa3, ADI-issued ≤1y: public credit rating, other securities: AAA/Aaa	AAA/Aaa	-
Rating agencie	es	-	Fitch, Moody's, S&P	Acceptable rating agencies	-
Rating treatm	ent	-	>1y: two ratings (average rating), ≤1y: one rating	at least two ratings; more than two ratings: at least two AAA/Aaa and no rating lower than AA+/Aa1	-
Min. volume (home curren	cy)	CAD 1,000m	-	-	PLN 10m
Min. volume e (foreign curre		×	-	-	×
Own-use		×	×	×	-
	TtM	\checkmark	\checkmark	✓	\checkmark
Haircuts Coupon	Coupon	×	×	×	\checkmark
	Currency	×	×	×	×
		-	-	-	-
	EUR	×	×	×	×
	USD	\checkmark	×	×	×
	GBP	×	×	×	×
	JPY	×	×	×	×
	CHF	×	×	×	×
Currensies	SEK	×	×	×	×
Currencies	NOK	×	×	×	×
	DKK	×	×	×	×
	CAD	✓	× ×		×
	AUD	×	\checkmark	×	×
	NZD	×	×	✓	×
	PLN	×	×	×	\checkmark
	EU	×	×	×	-
Country of	EEA	×	×	×	-
issuance	G10	-	×	×	×
	others	CA	AU	NZ	PL

Source: Nationale central banks, NORD/LB Markets Strategy & Floor Research

Regulatory Repayment structures on the covered bond market

Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Repayment structures for covered bonds

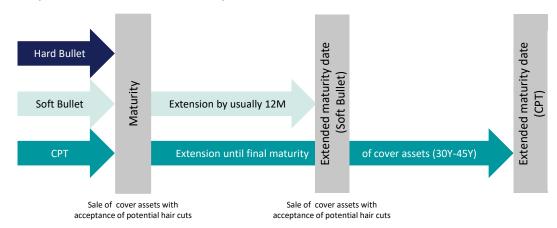
Market players were preoccupied with the various options for designing a covered bond's repayment structure long before the transposition of the Covered Bond Directive into national legislation, but there has since been an increased here. From a fundamental perspective, investors tend to focus on the latest possible date for repayment of their investment, while issuers often focus on the fact that rating agencies view extendable maturity structures positively when rating their bonds. Although hard bullet structures tended to be chosen most frequently in the past, the soft bullet structure has now become the most popular form for EUR benchmarks. Occasionally, bonds also appear on the market with the conditional pass-through structure (CPT) introduced by NIBC in the Netherlands in 2013. Until now, the option of postponing the maturity date in connection with specific trigger events was usually anchored in the programme documentation for the bonds or issuance programmes concerned. In the course of the EU covered bond harmonisation, however, the Covered Bond Directive formulated concrete requirements for legislators if they wish to allow maturity deferrals. The amendment to the German Pfandbrief Act therefore put an end to hard bullet Pfandbriefe when it came into force. Due to the size of the Pfandbrief market alone, this will lead to a lasting shift in how repayment structures are viewed on the covered bond market, both in terms of global volume and with regard to the iBoxx EUR Covered as a benchmark index. In total, <u>26 of the 27 Member</u> States have already fully implemented the Covered Bond Directive. However, the current and prospective impact from implementing the directive will be less significant here. We provide an overview of the currently valid repayment structures.

Hard bullet structures: no option for extending the maturity

Until a few years ago, hard bullet structures were regarded as standard market practice when it came to structuring the repayment arrangements for a covered bond. If a covered bond issuer is not able to comply with their outstanding payment obligations, investors will obtain access to the respective covered bond programme's cover pool – regardless of the repayment structure chosen – via the trustee or administrator because of the dual recourse mechanism. If redemption of an issue is pending and the liquid funds available are not sufficient to redeem the bond and liquidity cannot be generated by another means, the collateral in the pool will be sold if the bond has a hard bullet structure. Investors can expect prompt repayment on the one hand, but on the other hand this carries the risk that due to market turbulence the market values of the assets may be reduced and, in extreme cases, the full repayment amount will not be covered by the sale proceeds.

Soft bullet structures: maturity extended through trigger events

Soft bullet structures and, more rarely, CPT structures exist to counter this risk. If investors' claims can be serviced when they originally fall due, there are no differences between the three payment structures as far as investors are concerned. Since no uniform trigger events have so far become established on the market to activate an extension, different variants are currently possible, which lead to the repayment date originally agreed under a soft bullet structure being postponed. Examples of various models within the soft bullet variant include (i) the issuer's insolvency and postponement of redemption to a later repayment date by an independent trustee or (ii) the postponement of the original repayment date by the issuer. With regard to possible extension periods, a postponement of maturity by twelve months has become established in most cases under soft bullet structures. Interest payments during the extended maturity are largely based on 1-month or 3month Euribor plus a premium or discount, but in some cases are also defined as a fixed coupon. Only now with the national implementation of the Covered Bond Directive have the trigger events been legally anchored in the European Member States, although noticeable differences remain.



Comparison of the various maturity structures

Conditional pass-through structures: final maturity is actually uncertain

The original repayment date can be postponed for far longer in the case of bonds which feature a CPT (conditional pass-through) structure. This also reduces the refinancing risk to a minimum at the same time. In contrast to the soft bullet structure, once the pass-through structure is triggered (for which, like soft bullet structures, there are no uniform trigger events), the outstanding covered bond issues are redeemed firstly from the inflows generated from the assets associated with them and also from the sale of assets, if they can be sold at adequate market prices. However, in contrast to the soft bullet structure, the date at which investors can expect the outstanding claims to be serviced cannot be determined ex ante. Rather, in the worst-case scenario, it can only be determined upon maturity of the assets with the longest term. Rating agencies view soft bullet, and even more so CPT structures, as positive factors in assessing their ratings because the refinancing risk is lower.

Source: NORD/LB Markets Strategy & Floor Research

Special case Poland: soft bullet with conversion option to CPT

Polish legislation can be considered a special case as regards the maturity structure of covered bonds. Covered bonds that cannot be serviced on their maturity date are initially extended by twelve months. During this extension period, a test is carried out at six-month intervals to determine whether sufficient assets are available to service the investor claims and whether sufficient liquidity is also available to service these claims on time. If the two tests are not passed during the extension period, transition to a CPT structure takes place at the end of the twelve-month period. The repayment date is thus postponed to the latest maturity date of the cover assets plus three years. However, such an extension can be prevented by a 2/3 majority of the investors. Thus, Polish covered bonds are initially soft bullet bonds whose final maturity cannot be clearly determined in advance due to the possible conversion to a CPT structure, meaning that their repayment structure cannot be clearly assigned to one of the three repayment forms. This means we do not take into account the EUR benchmarks of PKO Bank Hipoteczny contained in the iBoxx EUR Covered in the following analysis.

Overview of possible triggers for maturity postponement

Country	Trigger event
Australia	Insolvency, issuer insolvency
Belgium	Insolvency, issuer insolvency
Denmark	RO: Refinancing CBs not guaranteed, interest rate rises by 5% or more;
	SDO: depends on issuer;
	SDRO: Refinancing CBs not guaranteed, interest rate rises by 5% or more
Germany	Issuer insolvency/liquidation
Finland	Issuer insolvency
France	OF: Insolvency, liquidation, default, lack of liquidity
	OH: Insolvency, liquidation, issuer default, lack of liquidity
	CRH: Insolvency, liquidation, issuer default, lack of liquidity
Greece	Lack of liquidity, breach of liquidity rules
Ireland	Default, instruction by authorities or administrator
Iceland	-
Italy	Insolvency, issuer insolvency
Canada	Insolvency, issuer default, other events
Luxembourg	-
New Zealand	-
Netherlands	Insolvency/issuer's liquidation, issuer default
Norway	Insolvency/issuer's liquidation
Austria	Insolvency/issuer's liquidation
Poland	Issuer insolvency
Portugal	Default, withdrawal of banking licence
Sweden	Permission needed from FSA
Singapore	Contractually regulated
Slovakia	Insolvency, issuer default, cancellation of covered bond programme
Spain	Insolvency, liquidation, lack of liquidity, violation of liquidity rules
South Korea	South Korean covered bonds: Issuer default
	KHFC covered bonds: -
Czech Republic	Insolvency, issuer default, lack of liquidity
Turkey	
Hungary	Depends on the programme structure
United Kingdom	Insolvency, liquidation, issuer default

Source: National legislation, NORD/LB Markets Strategy & Floor Research

Special case Slovakia: soft bullet with a possible second extension of maturity

Slovakia also deviates to a certain extent from current market standards as far as maturityextending structures are concerned, which is due to a change in legislation that came into effect on 1 January 2018. Accordingly, in the event of an institution becoming insolvent, the new legislative framework initially provides for postponing the due date by twelve months. Should there be no sign that investors' claims will be serviced when the extension period expires, the programme may be transferred to one or more other Slovakian banks. If such a transfer is not possible within the first extension period, a further postponement of the due date by another twelve months may be approved by the regulator. The renewed extension of maturity will affect both those bonds that were extended because of the first postponement and those whose due dates fall within the second 12-month period. The Slovakian EUR benchmark covered bonds included in the iBoxx EUR Covered are therefore soft bullet issues, whose structures differ, however, from other soft bullet issues in the index because their due dates may be postponed twice. Unlike Polish issues, Slovakian issues may, in our opinion, clearly be assigned to the soft bullet bond segment, albeit with a maximum extension of 24 months.

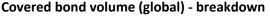
Soft bullet and CPT bonds under CBPP3 and for repo transactions

Given that their maturities may, under certain circumstances, be very long, covered bonds with a conditional pass-through structure are subject to special requirements. The ECB currently purchases no covered bonds with this (CPT) structure under the CBPP3, and, as we understand it, also justifies this decision by pointing to the relatively modest size of the CPT market. CPT bonds also have a particular feature in the context of repo transactions with the ECB. Adjustments to valuation discounts are relevant for own-use soft bullet or CPT covered bonds. In the course of recognition, it is the extended not the originally envisaged maturity that is used to determine the discount. In the case of a soft bullet, the maturity would have to be extended by a year as a rule, while all CPT structures fall into the maturity range of ">10 years" when determining any haircut because of their theoretically very long extension period.

Maturity extension also an issue for harmonisation efforts

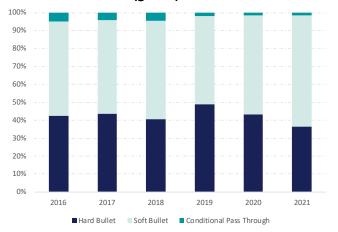
As mentioned above, extendable maturity structures were also discussed as part of the harmonisation of the European covered bond market. The aim is to create opportunities to counter risks resulting from mismatching maturities and potential liquidity shortages. In this context, the Covered Bond Directive envisages in the form of Article 17 that it will be left to the responsible national supervisory authorities whether to allow extendable maturity structures. If they are approved, the event that triggers the extension or postponement of maturity is critical for such structures. This trigger event must be included in the national framework and may not be left to the issuer's discretion. Bond investors must be provided with detailed information regarding the trigger, the effects on the maturity structure in the event of insolvency and the role of the supervisory authority and the trustee following any extension to maturity. It is already clear from the above that the refinancing risk can be significantly reduced by means of a soft bullet or CPT structure compared with a hard bullet structure. The aforementioned table "Overview of possible triggers for maturity postponement" contains the trigger events for the European Member States (provided that the jurisdictions have a bond in the iBoxx EUR Covered) as well as for selected third countries. Investing in such a covered bond requires prior, detailed examination of the terms of the bond in question since the Covered Bond Directive does not apply to all countries and it has not been implemented uniformly either. As such, it is still necessary to check what happens to the interest payments in the extension period when the trigger event occurs. With regard to the refinancing risk following the issuer's insolvency, it must be mentioned that, in the case of hard bullet structures, issuers are already obliged by law in some cases to reduce this risk by maintaining a liquidity buffer. In the wake of the harmonisation efforts, Article 16 CBD also envisages the mandatory introduction of a liquidity buffer to cover net liquidity outflows for 180 calendar days for all jurisdictions subject to the regulation.





Source: ECBC, NORD/LB Markets Strategy & Floor Research

Covered bond issues (global) - breakdown



ECBC - Repayment structures: soft bullets accounted for largest share of issues in 2021

Based on the ECBC annual statistics as at the reference date of 31 December 2021, the market for all outstanding and newly issued covered bonds can be subdivided in terms of the maturity structure. For the first time since this data was recorded for 2016, soft bullet structures account for the largest share of the volume of bonds outstanding in this data-base at 58% (2020: 44%). This essentially shows that, as a result of the amendment of Pfandbrief Act in Germany, all hard bullet structures (2020: EUR 371,947m) have been changed to soft bullet structures (2020: - ; 2021: EUR 391,366m). With regard to newly issued covered bonds in 2021, 62% were soft bullets and 36% (2020: 44%) hard bullets. The CPT bond category accounts for only comparatively small shares, at 3% (outstanding volume) and 1% (new issues 2021).

iBoxx EUR Covered: influence of EU harmonisation on repayment structures

While the shifts with regard to the weightings of the maturity structures in the iBoxx EUR Covered have been rather generic - as an example, the switch of some issuers in the Netherlands from CPT to soft bullet - a significant driver has been added with the harmonisation of the European covered bond market. This can be clearly seen in the example of the German Pfandbrief market, although an increased number of soft bullets can also be expected in other jurisdictions due to the legislative adjustments. None of the national legislators have opted for a "big bank" solution in line with the adjustments to the Pfandbrief Act and relied heavily on extendable structures. This is currently particularly true for those countries that have active issuers with both hard bullets and extendable structures. Below we refer to the iBoxx composition October 2022.

iBoxx dominated by purely soft bullet issuers

With 106 out of 152 issuers (69.7%), most of the issuers (excl. Spanish multi-cedulas) listed in the iBoxx EUR Covered currently only have outstanding benchmarks with soft bullet structures. Due in particular to the new soft bullet heavyweight Germany, only 15.0% (23 issuers) is attributable to institutions that only have hard bullet bonds and 2.0% (three issuers) to those which only use CPT structures. Consequently, a clear maturity model can be assigned to 86.7% of institutions with outstanding EUR benchmarks. However, the remaining 13.3% is attributable to issuers that have outstanding benchmarks with two differing maturity structures. The most frequent combination (9.2% or fourteen issuers) is hard and soft bullet bonds. In addition to the Italian UniCredit and the NIBC Bank from the Netherlands, the issuers Achmea Bank, Aegon Bank, Van Lanschot Kempen (all three NL) and Deutsche Bank (DE) have EUR benchmarks with a soft bullet and CPT structure. In addition to Pfandbriefe placed in accordance with the Pfandbrief Act (previously "hard bullet", now, by law, with a maturity extension option), Deutsche Bank also has a CPT benchmark on a contractual basis. This is a unique feature in the market for EUR benchmarks. The EUR benchmarks issued by Poland's PKO Bank Hipoteczny are not taken into account at this point because of their hybrid maturity structure model (soft bullet with option to switch to CPT) to avoid confusing them with those issuers that have both soft bullet and CPT bonds outstanding.

5; 3.2% 5; 3.2% 29; 18.7% 5; 3.2% 5; 3.2% 5; 11; 7.1% 0; 0.0% 5; 67.7% 5; 67.7% 612.1; 75.7\% 612.1; 75.7\% 612

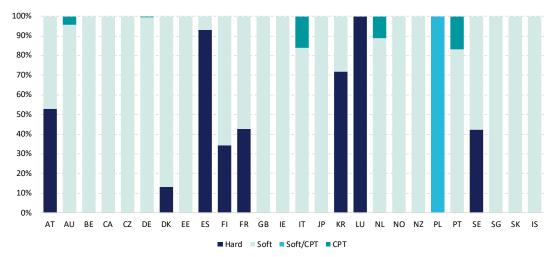
Repayment structures by volume

Source: Market data, NORD/LB Markets Strategy & Floor Research

Soft bullet EUR benchmarks with largest outstanding volume

At 75.7% (EUR 612.1bn), covered bonds with a soft bullet structure now account for the largest share by far of the volume of bonds in the iBoxx with a clear maturity structure (i.e. excluding Poland, see above and the following table, as well as Spanish multi-cedulas). In most cases this provides for a maturity extension of 12 months if a trigger event occurs. EUR benchmarks with a CPT structure continue to represent a niche in the benchmark segment as they only account for 1.9% of the volume of bonds in the iBoxx index. Traditional hard bullet covered bonds with no option for maturity extension account for the remaining 23.3%. Hard bullet issues with a volume of EUR 85.05bn originated in France, while Spain (EUR 47.89bn), Austria (EUR 21.5bn) and Sweden (EUR 10.75bn) accounted for the next-highest volumes. In our view, it is worth mentioning in this context that France (EUR 114.12bn) and also Austria (EUR 19.00bn) and Sweden (EUR 14.58bn) already have significant volumes of soft bullets.

EUR benchmark volume by structure



Repayment structures by jurisdiction

Source: Market data, NORD/LB Markets Strategy & Floor Research

Numerous jurisdictions feature a range of repayment structures

Looking at the spread of the three repayment structures at jurisdiction level, it is also apparent that only EUR benchmarks from Luxembourg are exclusively represented in the iBoxx with hard bullet structures. Conversely, with Belgium, Canada, Czech Republic, Estonia, the UK, Ireland, Japan, Norway, New Zealand, Singapore and Slovakia, there are 11 jurisdictions with only soft bullet EUR benchmarks in the iBoxx. Poland's EUR benchmarks also have a standard (hybrid) maturity structure. CPT bonds were issued as well in Australia, Germany, Italy, the Netherlands and Portugal. There is more than one repayment model in 12 out of the 26 EUR benchmark jurisdictions represented in the iBoxx index. In the following, we provide a tabular overview of the individual issuers and the maturity models they use for these jurisdictions. It should be noted that under certain circumstances, repayment structures can be used in the respective jurisdictions, and by the listed issuers, that differ from those of the EUR benchmarks or are no longer listed in the iBoxx due to their residual maturity. For reasons of simplicity, this article is based exclusively on EUR benchmarks in the iBoxx EUR Covered index (excluding Spanish multi-cedulas).

Repayment structures in Austria

Hard **BAWAG PSK** Х Х Erste Group Bank HYPO NOE Hypo Tirol Bank Hypo Vorarlberg Bank Х Raiffeisen Bank International Raiffeisenlandesbank Niederoesterreich-Wien Х Raiffeisenlandesbank Oberoesterreich Х Х **Raiffeisen-Landesbank Steiermark** Х Raiffeisenlandesbank Vorarlberg UniCredit Bank Austria Х Х Volksbank Wien

Repayment structures in Italy

Soft		Soft	СРТ
Х	Banca Monte dei Paschi di Siena		Х
Х	Banco BPM	Х	
Х	Banca Carige	Х	
Х	Banco di Desio e della Brianza	Х	
	BPER	Х	
Х	Credit Agricole Italia	Х	
Х	Credito Emiliano	Х	
Х	Intesa Sanpaolo	Х	
	Mediobanca Banca di Credito Finanziario	Х	
	lccrea Banca	Х	
Х	UniCredit	Х	Х

Source: Market data, NORD/LB Markets Strategy & Floor Research

Repayment structures in Austria

Although EUR benchmarks with a hard bullet structure continue to dominate in Austria (EUR 21.5bn), there has recently been a certain trend towards soft bullet bonds. Consequently, eight out of the total of 12 Austrian issuers have outstanding EUR benchmarks with a maturity extension option (EUR 19.0bn). Due to maturities, Raiffeisen Bank International, HYPO NOE and Hypo Vorarlberg only have soft bullet issues.



Repayment structures in Italy

Italy is one of the jurisdictions that has outstanding covered bonds with CPT structures (EUR 6.3bn), even though such bonds play only a rather minor role in the Italian market for publicly placed EUR benchmarks compared with soft bullet bonds (EUR 33.43bn). While the EUR benchmarks from Banca Monte dei Paschi are exclusively CPT bonds, UniCredit has outstanding soft bullet bonds as well as issues in CPT format.

Repayment structures in Denmark

With regard to the Danish market, we would like to highlight the bonds issued by Danish Ship Finance (Danmarks Skibskredit), which differ not just because of their cover assets (ship mortgages) but also because of the repayment structure in that the bonds are issued as hard bullets. Danske Bank and Jyske Realkredit, on the other hand, have each placed their EUR benchmarks on the market with soft bullet structures (extension by up to twelve months). For soft bullet structures, there are now legal triggers for maturity postponements in Denmark, although we understand that these adjustments (in contrast to the changes for Pfandbriefe) only took effect on 8 July 2022 and will apply to bonds placed from this date onwards.

Repayment structures in Denmark

	Hard	So
Danmarks Skibskredit	Х	
Danske Bank		Х
Jyske Realkredit		Х

Repayment structures in Finland

Soft		Hard	Soft
	Aktia Bank		Х
Х	Danske Mortgage Bank		Х
Х	Nordea Kiinnitysluottopankki	Х	Х
	OP Mortgage Bank		Х
	SP-Kiinnitysluottopankki		Х

Source: Market data, NORD/LB Markets Strategy & Floor Research

Repayment structures in Finland

Of the outstanding EUR benchmarks from Finnish issuers currently on the market, only eight bonds from Nordea Mortgage Bank have a hard bullet structure. In contrast, the four other issuers have 17 outstanding EUR benchmarks with a soft bullet structure, each with the option to extend maturity by 12 months. Nordea Mortgage Bank also issued its first soft bullet bond in 2022, so that all five Finnish issuers have now issued bonds with this structure.

Repayment structures in France

There are a total of sixteen issuers in France, seven of which have structured their bonds with a uniform maturity structure, i.e. exclusively hard or soft bullet bonds. The majority of these issuers (nine banks) have chosen extendable maturities. Only CRH, CAFFIL and CFF exclusively have outstanding hard bullet bonds. A further six issuers have placed EUR benchmarks in the past with both hard and soft bullet structures. The hard bullet bonds of Société Générale SCF are not included in the iBoxx EUR Covered due to maturities or the remaining term of less than one year.



Repayment structures in France

	Hard	Soft		Hard	СРТ
Arkea Home Loans SFH		Х	Aareal Bank	Х	
Arkea Public Sector SCF		Х	Bausparkasse Schwaebisch Hall	Х	
AXA Bank Europe SCF		Х	Bayerische Landesbank	Х	
AXA Home Loan SFH		Х	Berlin Hyp	Х	
BNP Paribas Home Loan SFH	Х	Х	Commerzbank	Х	
BPCE SFH	Х	Х	Deutsche Apotheker-und Aerztebank	Х	
Caisse de Refinancement de l'Habitat	х		Deutsche Bank	Х	Х
Caisse Francaise de Financement Local	х		Deutsche Hypothekenbank	х	
Cie de Financement Foncier	х		Deutsche Kreditbank	Х	
Credit Agricole Home Loan SFH		Х	Deutsche Pfandbriefbank	Х	
Credit Agricole Public Sector SCF		Х	DZ HYP	Х	
Credit Mutuel Home Loan SFH	Х	Х	Hamburg Commercial Bank	Х	
HSBC SFH France	Х	Х	Hamburger Sparkasse	Х	
La Banque Postale Home Loan SFH	Х	Х	ING-DiBa	Х	
MMB SCF	Х	Х	Landesbank Baden-Wuerttemberg	Х	
Societe Generale SFH	Х	Х	Landesbank Hessen-Thueringen Girozentrale	Х	
			Muenchener Hypothekenbank	Х	
			Norddeutsche Landesbank-Girozentrale	Х	
			Santander Consumer Bank	Х	
			Sparkasse KoelnBonn	Х	
			UniCredit Bank	Х	
			Wuestenrot Bausparkasse	Х	

Source: Market data, NORD/LB Markets Strategy & Floor Research

Repayment structures in Germany

The adjustment of the legal basis for issuing Pfandbriefe in Germany has implemented maturity extensions for all outstanding and newly issued Pfandbriefe, which we understand as soft bullets. Moreover, since November 2019 Deutsche Bank has had one bond with a CPT structure. To achieve this, Deutsch Bank used a contractual covered bond, which therefore does not constitute a bond pursuant to the German Pfandbrief Act and consequently does not constitute a Pfandbrief.

Repayment structures in Germany

Repayment structures in Sweden

In Sweden, three of the five issuers use covered bonds with no maturity extension. While SCBC and Stadshypotek are exclusively represented with soft bullet bonds in the iBoxx EUR Covered, LF Hypothek, which placed its first soft bullet issue in May 2022, is now the first issuer in the market with both repayment structures outstanding. In terms of volume, hard bullets (EUR 10.75bn) are now lagging behind Swedish soft bullets with a volume of EUR 14.58bn in the iBoxx.

Repayment structures in Sweden

	Hard	Soft
Lansforsakringar Hypotek	Х	Х
Skandinaviska Enskilda Banken	х	
Stadshypotek		Х
Sveriges Sakerstallda Obligationer		Х
Swedbank Hypotek	Х	
Source: Market data, NORD/LB Markets Strategy & Floor Rese	earch	

Repayment structures in Portugal

	Soft	СРТ
Banco BPI	Х	
Banco Santander Totta	Х	
Caixa Economica Montepio		Х

Repayment structures in Portugal

Alongside Australia, Germany, Italy and the Netherlands, Portugal is the fifth national market with EUR benchmarks featuring CPT structures. Two out of the three Portuguese EUR benchmark issuers still represented in the iBoxx exclusively use soft bullet structures. Only the bond issued by Montepio has a maturity extension option in CPT form, which in this specific instance provides for a maturity extension of up to 45 years.

Repayment structures in the Netherlands

The introduction of the CPT repayment structure by NIBC Bank in 2013 was followed by four more issuers in the shape of Achmea Bank, Van Lanschot, Aegon Bank and NN Bank issuing bonds in CPT format. Currently, there are only four banks featuring CPT structures, nevertheless the Netherlands still not only has the most CPT EUR benchmark issuers, but also the most outstanding CPT benchmarks (14 deals) in the world by far. NN Bank organised a bondholder meeting in April 2022, which voted to convert its outstanding CPT bonds into soft bullet structures. At EUR 56.35bn, the volume of soft bullet bonds is more than eight times higher than that of the CPT bonds (EUR 7.00bn). However, the gap is smaller when it comes to the number of issues: 51 soft bullet deals versus 14 bonds in CPT format. NN Bank made its soft bullet debut in the Netherlands in June 2020, followed by Achmea Bank and Aegon Bank, although only these two institutions in the Netherlands still have outstanding EUR benchmarks with two different maturity structures.

Repayment structures in the Netherlands

	Soft	СРТ
ABN AMRO Bank	Х	
Achmea Bank	Х	Х
Aegon Bank	Х	Х
Cooperatieve Rabobank	Х	
de Volksbank	Х	
ING Bank	Х	
Nationale-Nederlanden Bank	Х	
NIBC Bank		Х
Van Lanschot Kempen		Х

Repayment structures in Australia

	Soft	СРТ
Australia & New Zealand Banking Group	Х	
Bank of Queensland		Х
Commonwealth Bank of Australia	Х	
National Australia Bank	Х	
Westpac Banking Corp	Х	
Macquarie Bank	х	

Source: Market data, NORD/LB Markets Strategy & Floor Research

Repayment structures in Australia

Before ANZ Banking Group's hard bullet covered bond (matured in July 2022) disappeared from the iBoxx due to its residual maturity or later maturity, Australia was for a time the only jurisdiction to have all three maturity structures in the index. Currently the Bank of Queensland has bonds outstanding in CPT format (outstanding volume EUR 500m). Soft bullet issues account for by far the largest share of the volume at EUR 24.95bn.

Repayment structures in Spain

Since Banco Santander's soft bullet debut (dual tranche) in September 2022, the heavyweight jurisdiction of Spain (EUR 51.4bn in EUR benchmark covered bonds) has also been among those jurisdictions where covered bonds have different maturity structures. Nationwide, there are twelve EUR-covered bond issuers with outstanding hard bullet bonds -42 bonds in total - including Banco Santander. There are currently only two bonds with a soft bullet structure.

Repayment structures in Spain

	Hard	Soft
Abanca Corp Bancaria	Х	
BBVA	Х	
Banco de Sabadell	Х	
Banco Santander	Х	Х
Bankinter	Х	
CaixaBank	Х	
Caja Rural de Navarra	Х	
Deutsche Bank SA Espanola	Х	
Eurocaja Rural	Х	
Ibercaja Banco	Х	
Kutxabank	Х	
Liberbank	Х	

Repayment structures in South Korea

	Hard	Soft
Kookmin Bank		Х
Korea Housing Finance Corp	Х	
KEB Hana Bank		Х

Source: Market data, NORD/LB Markets Strategy & Floor Research

Repayment structures in South Korea

Since the inaugural EUR benchmark bond from Kookmin Bank, South Korea has been part of the group of jurisdictions with covered bonds featuring different maturity structures. While the eight EUR benchmarks from KHFC do not include any maturity extension option and are therefore hard bullet bonds, Kookmin Bank issued its debut EUR benchmark in soft bullet format and now has three bonds outstanding. The market entry of KEB Hana Bank saw another institution join the ranks of South Korean soft bullet bond issuers.

Appendix Bloomberg ticker Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Country	Ticker	Issuer
Australia	ANZ	Australia & New Zealand Banking Group Ltd
Australia	BQDAU	Bank of Queensland Ltd
Australia	CBAAU	Commonwealth Bank of Australia
Australia	MQGAU	Macquarie Bank Ltd
Australia	NAB	National Australia Bank Ltd
Australia	WSTP	Westpac Banking Corp
Austria	BAWAG	BAWAG PSK Bank fuer Arbeit und Wirtschaft und Oesterreichische Postsparkasse AG
Austria	BSWUES	Bausparkasse Wüstenrot
Austria	ERSTBK	Erste Group Bank AG
Austria	HYNOE	HYPO NOE Landesbank fuer Niederoesterreich und Wien AG
Austria	LANTIR	Hypo Tirol Bank AG
Austria	VORHYP	Hypo Vorarlberg Bank AG
Austria	OBLB	Hypo Oberösterreich
Austria	КА	Kommunalkredit Austria AG
Austria	OBERBK	Oberbank AG
Austria	RFLBNI	Raiffeisenlandesbank Niederoesterreich-Wien AG
Austria	RFLBOB	Raiffeisenlandesbank Oberoesterreich AG
Austria	RFLBST	Raiffeisen-Landesbank Steiermark AG
Austria	RFLBTI	Raiffeisen-Landesbank Tirol AG
Austria	RFVORA	Raiffeisenlandesbank Vorarlberg
Austria	RBIAV	Raiffeisen Bank International
Austria	RFVBSA	Raiffeisenverband Salzburg
Austria	BACA	UniCredit Bank Austria AG
Austria	VOWIBA	Volksbank Wien AG
Belgium	ARGSPA	Argenta Spaarbank
Belgium	CCBGBB	Belfius Bank SA
Belgium	FBAVP	BNP Paribas Fortis SA
Belgium	INGB	ING Belgium SA
Belgium	KBC	KBC Bank NV
Canada	BMO	Bank of Montreal
Canada	BNS	Bank of Nova Scotia
Canada	CM	Canadian Imperial Bank of Commerce
Canada	CCDJ	Federation des Caisses Desjardins du Quebec
Canada	HSBCAN	HSBC Bank Canada CA
Canada	NACN	National Bank of Canada
Canada	RY	Royal Bank of Canada
Canada	TD	Toronto-Dominion Bank/The
Czech Republic	KOMERC	Komercni Banka
Czech Republic	UNICZ	UniCredit Bank Czech Republic and Slovakia
Denmark	JYBC	Jyske Bank
Denmark	DANBNK	Danske Bank A/S
Denmark	DANSKB	Danmarks Skibskredit A/S
Estonia	LUMINO	Luminor Bank AS/Estonia
Estonia	LHVGRP	LHV Pank AS
Finland	AKTIA	Aktia Bank OYJ
Finland	AABHFH	Alandsbanken Abp
Finland	DANBNK	Danske Bank
Finland	NDASS	Nordea Mortgage Bank Plc
Finland	OMASST	Oma Saastopankki Oyj
Finland	OPBANK	OP Financial Group

Country	Ticker	Issuer
Finland	POPBGR	POP Mortgage Bank
Finland	SPMTBK	SP-Kiinnitysluottopankki Oyj
Finland	SUOHYP	Suomen Hypoteekkiyhdistys
France	AXASA	AXA Bank Belgium
France	AXABAN	AXA Banque
France	BFCM	Banque Federative du Credit Mutuel
France	BNP	BNP Paribas
France	CRH	Caisse de Refinancement de l'Habitat SA
France	CAFFIL	Caisse Francaise de Financement Local
France	CFF	Cie de Financement Foncier SA
France	ACAFP	Credit Agricole SA
France	CMARK	Credit Mutuel Arkea
France	BPCEGP	Groupe BPCE
France	HSBCFR	HSBC Continental Europe
France	FRLBP	La Banque Postale
France	MMBSCF	My Money Bank
France	SOCGEN	Societe Generale
Germany	AARB	Aareal Bank AG
Germany	BAUSCH	Bausparkasse Schwaebisch Hall
Germany	BYLAN	Bayerische Landesbank
Germany	BHH	Berlin Hyp AG
Germany	CMZB	Commerzbank AG
Germany	DEKA	DekaBank Deutsche Girozentrale
Germany	DAA	Deutsche Apotheker-und Aerztebank eG
Germany	DB	Deutsche Bank AG
Germany	DKRED	Deutsche Kreditbank AG
Germany	PBBGR	Deutsche Pfandbriefbank AG
Germany	DZHYP	DZ HYP AG
Germany	HCOB	Hamburg Commercial Bank AG
Germany	HASPA	Hamburger Sparkasse AG
Germany	INGDIB	ING-DiBa AG
Germany	KRSKOE	Kreissparkasse Koeln
Germany	LBBW	Landesbank Baden-Wuerttemberg
Germany	LBBER	Landesbank Berlin AG
Germany	HESLAN	Landesbank Hessen-Thueringen Girozentrale
Germany	SAARLB	Landesbank Saar
Germany	MUNHYP	Muenchener Hypothekenbank eG
Germany	KNFP	Natixis Pfandbriefbank AG
Germany	NDB	Norddeutsche Landesbank-Girozentrale
Germany	LBOLD	Oldenburgische Landesbank
Germany	SCBGER	Santander Consumer Bank AG
Germany	SSPHAN	Sparkasse Hannover
Germany	SPKKB	Sparkasse KoelnBonn
Germany	SKPPFO	Sparkasse Pforzheim Calw
Germany	SSPMUE	Stadtsparkasse Muenchen
Germany	HVB	UniCredit Bank AG
Germany	WUWGR	Wuestenrot Bausparkasse AG

Source: Bloomberg, NORD/LB Markets Strategy & Floor Research

Country	Ticker	Issuer
Greece	ALPHA	Alpha Bank AE
Ireland	AIB	Allied Irish Banks
Ireland	BKIR	Bank of Ireland
Iceland	ARION	Arion Banki
Iceland	ISLBAN	Islandsbanki
Italy	BANCAR	Banca Carige SpA
Italy	MONTE	Banca Monte dei Paschi di Siena SpA
Italy	BPSOIM	Banca Popolare di Sondrio SCPA
Italy	BAMIIM	Banco BPM SpA
Italy	BANDES	Banco di Desio e della Brianza SpA
Italy	BPEIM	BPER Banca
Italy	CARPP	Credit Agricole Italia SpA
Italy	CRDEM	Credito Emiliano SpA
Italy	ICCREA	Iccrea Banca / Gruppo BBC Iccrea
Italy	ISPIM	Intesa Sanpaolo SpA
Italy	BACRED	Mediobanca Banca di Credito Finanziario SpA
Italy	BPOPAA	Volksbank Südtirol
Italy	UCGIM	UniCredit SpA
Japan	SUMIBK	Sumitomo Mitsui Banking Corp
Japan	SUMITR	Sumitomo Mitsui Trust Bank
Luxembourg	NDB	NORD/LB Luxembourg SA Covered Bond Bank
Netherlands	ABNANV	ABN AMRO Bank NV
Netherlands	ACHMEA	Achmea Bank NV
Netherlands	AEGON	Aegon Bank NV
Netherlands	DEVOBA	de Volksbank NV
Netherlands	INTNED	ING Groep
Netherlands	NIBCAP	NIBC Bank NV
Netherlands	NNGRNV	NN Bank
Netherlands	RABOBK	Rabobank
Netherlands	INTNED	ING Bank NV
Netherlands	LANSNA	Van Lanschot Kempen
New Zealand	ANZNZ	ANZ New Zealand Int'l Ltd/London
New Zealand	ASBBNK	ASB Bank
New Zealand	BZLNZ	Bank of New Zealand
New Zealand	WSTP	Westpac New Zealand
Norway	DNBNO	DNB Bank
Norway	EIKBOL	Eika Boligkreditt AS
Norway	SPABOL	SpareBank 1 Boligkreditt AS
Norway	SRBANK	SpareBank 1 SR-Bank
Norway	MOREBO	Sparebanken Moere
Norway	SORBNO	Sparebanken Soer
Norway	SVEGNO	Sparebanken Vest Boligkreditt AS
Poland	MBKHIP	mBank
Poland	РКОВНВ	PKO Bank
Portugal	BPIPL	Banco BPI SA
Portugal	SANTAN	Banco Santander Totta SA
Portugal	CXGD	Caixa Geral de Depositos SA

Source: Bloomberg, NORD/LB Markets Strategy & Floor Research

NORD/LB

Country	Ticker	Issuer
Singapore	DBSSP	DBS Group Holdings
Singapore	OCBCSP	Oversea-Chinese Banking Corp Ltd
Singapore	UOBSP	United Overseas Bank Ltd
Slovakia	PKBSK	Prima Banka Slovensko AS
Slovakia	SLOSPO	Slovenska Sporitelna AS
Slovakia	TATSK	Tatra Banka AS
Slovakia	VUBSK	Vseobecna Uverova Banka AS
South Korea	CITNAT	Kookmin Bank
South Korea	KHFC	Korea Housing Finance Corp
South Korea	KEBHNB	KEB Hana Bank
Spain	ABANCA	Abanca Corp Bancaria SA
Spain	SABSM	Banco de Sabadell SA
Spain	SANTAN	Banco Santander SA
Spain	BKTSM	Bankinter SA
Spain	BBVASM	Banco Bilbao Vizcaya Argentaria SA
Spain	CABKSM	CaixaBank SA
Spain	CRUNAV	Caja Rural de Navarra SCC
Spain	CAJAMA	Cajamar Caja Rural SCC
Spain	DB	Deutsche Bank SA Espanola
Spain	EUROCR	Eurocaja Rural SCC
Spain	CAZAR	Ibercaja Banco SA
Spain	KUTXAB	Kutxabank SA
Spain	LBKSM	Liberbank SA
Sweden	LANSBK	Lansforsakringar Hypotek AB
Sweden	SBAB	Sveriges Sakerstallda Obligationer AB
Sweden	SEB	Skandinaviska Enskilda Banken AB
Sweden	SHBASS	Svenska Handelsbanken
Sweden	SWEDA	Swedbank
United Kingdom	CLYDES	Clydesdale Bank PLC
United Kingdom	COVBS	Coventry Building Society
United Kingdom	LEED	Leeds Building Society
United Kingdom	LLOYDS	Lloyds Bank PLC
United Kingdom	RBS	National Westminster Bank PLC
United Kingdom	NWIDE	Nationwide Building Society
United Kingdom	SANUK	Santander UK PLC
United Kingdom	SKIPTN	Skipton Building Society
United Kingdom	YBS	Yorkshire Building Society

Source: Bloomberg, NORD/LB Markets Strategy & Floor Research



Appendix Rating scale mapping and rating modifiers

Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

		Long-ter	m Ratings		Credit	Credit	Credit
	Fitch	S&P	Moody's	DBRS	Quality Step gem. CRR ¹	Quality Step gem. EZB ²	Quality Step gem. Solvency II ³
	AAA	AAA	Aaa	AAA			CQS 0
	AA+	AA+	Aa1	AA (high)	CQS 1	CQS 1	
	AA	AA	Aa2	AA	CQ3 I	CQ3 1	CQS 1
	AA-	AA-	Aa3	AA (low)			
Investment	A+	A+	A1	A (high)			
Grade	А	А	A2	А	CQS 2	CQS 2	CQS 2
	A-	A-	A3	A (low)			
	BBB+	BBB+	Baa1	BBB (high)			
	BBB	BBB	Baa2	BBB	CQS 3	CQS 3	CQS 3
	BBB-	BBB-	Baa3	BBB (low)			
	BB+	BB+	Ba1	BB (high)		CQS 4	
	BB	BB	Ba2	BB	CQS 4	CQS 5	CQS 4
	BB-	BB-	Ba3	BB (low)			
	B+	B+	B1	B (high)			
	В	В	B2	В	CQS 5		CQS 5
	B-	B-	B3	B (low)			
Non-	CCC+	CCC+	Caa1	CCC (high)			
Investment	CCC	CCC	Caa2	CCC			
Grade	CCC-	CCC-	Caa3	CCC (low)			
0.000				CC (high)			
	CC	CC	Са	CC	CQS 6		CQS 6
				CC (low)			
				C (high)			
	С	С	С	С			
		<u> </u>		C (low)			
	RD/D	SD/D		D			

Rating modifiers

*	Review with direction uncertain	е	Expected rating
*+	Review for possible upgrade	WD	Withdrawn
*_	Review for possible downgrade	WR	Withdrawn
u	Unsolicited	NR	Not rated
(D)	Provisional / Proliminary		

(P) Provisional / Preliminary

¹ Article 136 Regulation (EU) No 575/2013 (CRR), Regulation (EU) 2016/1799

² Guideline (EU) 2015/510, https://www.ecb.europa.eu/paym/coll/risk/ecaf/html/index.en.html

³ Article 109a Directive 2009/138/EC (Solvency II), Regulation (EU) 2016/1800

Source: Rating agencies, ECB, EU, NORD/LB Markets Strategy & Floor Research

Appendix Decsription of financial ratios

Balance sheet	
Net Loans to Customers	Total loans to customers, net of reserves for loan losses. Includes any loans held at amor- tised cost, available for sale, fair value through profit and loss and trading. For U.S. GAAP companies, this is total loans and finance leases outstanding, including those held for sale.
Total Securities	Total of all securities owned, valued as shown on the balance sheet according to the appli- cable accounting standards used for this financial statement. For U.S. GAAP, includes all securities in the trading, available for sale, held to maturity and other securities categories and does not include segregated securities or securities pledged as collateral for broker- dealers and asset managers. For full coverage banks outside of the U.S. and Canada and summary coverage banks, includes other financial assets
Total Deposits	Total amount of deposits from customers.
Tier 1 Common Capital	Tier 1 Common Capital (Common Equity Tier 1) as defined by the latest regulatory and supervisory guidelines. For US institutions, this will be transitional amounts when applicable. For non-US institutions, this may be transitional or fully loaded amounts, depending on availability.
Total Assets	All assets owned by the company as of the date indicated, as carried on the balance sheet and defined under the indicated accounting principles.
Total Risk-weighted Assets	Total risk-weighted assets according to appropriate accounting or regulatory standards.
Income statement	
Net Interest Income	Interest income less interest expense before the provision for loan losses.
Net Fee & Commission Income	Revenue from services to customers, net of expense from third parties related to services provided to the company.
Net Trading Income	Realised and unrealised gains on trading account securities, plus any realised gains on se- curities available for sale or held to maturity.
Operating Expense	Total operating expenses from banking, insurance and asset management.
Credit Commitments Impairment	Impairment charge of on and off-balance sheet loans.
Pre-tax Profit	Net profit before the effect of income taxes and any after-tax items, including minority interest and extraordinary items.

Company ratios	
Net Interest Margin	Net interest income, on a fully taxable-equivalent basis if available, as a percent of average earning assets. If average earning assets is not available, average financial assets may be used.
ROAE	Return on average equity; net profit as a percent of average equity.
Cost-to-Income	Operating expense as a percent of operating income
Core Tier 1 Ratio	Tier 1 common capital (core capital) as a percent of total risk-adjusted assets. For full cov- erage European banks, this excludes transitional capital adjustments when available.
Liquidity Coverage Ratio	High quality liquid assets as a percent of net cash outflows over a thirty day period as de- fined by local regulatory requirements.
IFRS Tier 1 Leverage Ratio	Tier 1 common capital as a percent of tangible assets less derivative liabilities. This ratio seeks to replicate the U.S. GAAP Leverage Ratio by roughly netting derivative assets against liabilities.
Net Stable Funding Ratio	Portfolio of permanently available liabilities (at least 1 year) as a percentage of the re- quired stable refinancing for the lending business.
NPL / Loans at Amortised Cost	Non-performing loans as a percent of loans held at amortised cost
Reserves / Loans at Amortised Cost	Reserves for loan losses as a percent of loans held at amortised cost

Appendix Database

Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Data used for cover pool analysis and market overview

The key metrics reported in connection with the cover pools are based on information disclosed by the issuers themselves and the rating agencies, with the most recently available data at the time of preparing the Issuer Guide used in each case. As such, is some cases different reporting dates apply to the range of cover pools. Key metrics were either taken at face value or calculated on the basis of the reported information. In some cases, for example within the framework of the borrower types, there is a partially modified classification into individual categories. In turn, percentage data on regional allocation may in some cases refer to the most strongly represented country. Cover pool data in foreign currencies has been converted using exchange rates as at 30 June 2022 as reported by the European Central Bank. Aspects including "LCR ELIGIBLE", "LCR level (Bmk/SBmk)" and "Risk weight" reflect the assessments made by us based on the available data. In terms of Committed OC, this can reflect contractual obligations, e.g. to a rating agency, or legal requirements. Data relating to the share of loans in arrears is based, where available, on arrears of three months (>90 days). The "Spread Development (>1y)" is also an aggregated calculation of the EUR benchmark deals (equal to or greater than EUR 500m) and/or EUR sub-benchmark deals (equal to or greater than EUR 250m, but less than EUR 500m) from the individual issuers taking into account the specific asset class, while the country aggregations include all collateral types in the EUR benchmark segment. The "Spread Development" is based on data as at 26 October 2022 and exclusively contains EUR benchmarks and EUR sub-benchmarks with a residual term to maturity of at least one year in each case. Significant jumps in the spread trend can be attributed in particular to new issues or repayments. The "Redemption Profile" is based on historical data and can therefore contain bonds that are not included in the respective cover pool due to the issuance date. The "Market Overview Covered Bonds" presented at respective jurisdiction level is based on the key metrics recorded for the Issuer Guide relating to cover pools and outstanding EUR benchmarks. The charts and graphs exclusively depict EUR benchmarks and are based on Bloomberg ticker data.

Covered bond ratings

The ratings of the covered bond programmes were reviewed via Bloomberg as at 03 November 2022, while other rating metrics have in certain instances been taken from regular reports published by the rating agencies. In such cases, these may refer to an earlier reference date and therefore potentially older ratings. The ratings presented as part of the Cover Pool Overview are to be understood as aggregated data. As such, it is imperative to check ratings at ISIN level, since the rating agencies rate ISINs and not individual programmes. ISINs issued under a given programme can therefore have different ratings, meaning that their regulatory treatment may also differ as a result.

Data used for the issuer profiles

The figures, data and information used are based on information provided by the issuers or groups included in this Issuer Guide, the data provider S&P Global Markets Intelligence, Bloomberg L.P., the national central banks or supervisory authorities, as well as the individual and sector analyses carried out by the rating agencies Moody's, Standard & Poor's and Fitch (where available). The tables containing financial data on the issuers were created using the uniform presentation system (templated) from S&P Global Markets Intelligence. The tables and graphs are also presented in English. As a general rule, the end of the previous reporting period and the two previous financial year-ends (where the data is available for this) are used as reference timeframes. Nevertheless, in some cases, issuer reporting periods for the publication of data differ. As such, while the most up-to-date data is always used for this study, some data is more recent than others. Efforts were also made to always identify the same data, although in some cases this has not been possible due to the different accounting approaches. The date of the last data update is given in each case. The maturity profiles by asset category (secured, unsecured, etc.) are taken from Bloomberg. The same is true of the asset swap spreads (ASW) of EUR-denominated, benchmarksize senior unsecured issues as well as those issues that feature in the iBoxx € Financials Senior, which are broken down by maturity. The ratings in the Issuer Profiles were reviewed as at 12 October 2022.

Relevant legal texts and regulations

The assessments and classifications we have made regarding LCR classification and risk weighting are based in particular on the applications of the applicable legal texts, which are presented schematically in the chapters <u>Risk Weights of Covered Bonds</u>, <u>Covered Bonds</u> in the Context of LCR Management and <u>LCR Management</u>: <u>Eligible Assets</u>. In this context, we focus on the legal and regulatory framework applicable since July 08, 2022.

Focus on EUR benchmark and EUR sub-benchmark issues

The classifications are determined with a focus on the relevant EUR benchmark and EUR sub-benchmark issues from the respective issuer. In this respect, for example, we present the LCR level for EUR sub-benchmark issuers, which can be derived on the basis of the issue size of equal to or greater than EUR 250m but less than EUR 500m. At jurisdiction level (i.e. in the respective country Market Overviews) the best-case consideration is based on the EUR benchmark size.

LCR classification and risk weight in line with the CRR: best case consideration and assumptions for the rating presented

Particularly in the context of the new regulatory framework, there are new regulatory implications for both the covered bonds that fall under the Covered Bond Directive and for issues outside of its scope. We have presented these in detail in the above chapters. At this point, we believe it would be worthwhile to emphasise again that we base the regulatory classification of the jurisdictions presented here on the assumption of regulatory equivalence and that the issuers comply with transparency requirements. In our view, Iceland represents a special case. We expect the adjustments to Iceland's national legal texts to be implemented on the basis of the Covered Bond Directive. However, at the time that the NORD/LB Issuer Guide Covered Bonds was published, those covered bonds issued after 08 July 2022, for example, are not to be treated as preferred covered bonds for regulatory purposes. We present this accordingly for the affected cover pools.

Appendix Contacts at NORD/LB

Markets Strategy & Floor Research



Dr Frederik Kunze Covered Bonds/Banks

+49 172 354 8977 frederik.kunze@nordlb.de



Covered Bonds/Banks

Melanie Kiene

+49 172 169 2633 melanie.kiene@nordlb.de



Stefan Rahaus Covered Bonds/Banks

+49 172 6086 438 stefan.rahaus@nordlb.de





Dr Norman Rudschuck SSA/Public Issuers

+49 152 090 24094 norman.rudschuck@nordlb.de

Jan-Phillipp Hensing SSA/Public Issuers

+49 172 425 2877 jan-phillipp.hensing@nordlb.de

Sales		Trading	
Institutional Sales	+49 511 9818-9440	Covereds/SSA	+49 511 9818-8040
Sales Sparkassen & Regionalbanken	+49 511 9818-9400	Financials	+49 511 9818-9490
Sales MM/FX	+49 511 9818-9460	Governments	+49 511 9818-9660
Sales Europe	+352 452211-515	Länder/Regionen	+49 511 9818-9550
		Frequent Issuers	+49 511 9818-9640
Origination & Syndicate			
Origination FI	+49 511 9818-6600	Sales Wholesale Customers	
Origination FI Origination Corporates	+49 511 9818-6600 +49 511 361-2911	Sales Wholesale Customers	+49 511 361-4003
2			_
2		Firmenkunden	+49 511 361-4003
Origination Corporates		Firmenkunden	+49 511 361-4003

NORD/LB

Disclaimer

The present report (hereinafter referred to as "information") was drawn up by NORDDEUTSCHE LANDESBANK GIROZENTRALE (NORD/LB). The supervisory authorities responsible for NORD/LB are the European Central Bank (ECB), Sonnemannstraße 20, D-60314 Frankfurt am Main, and the Federal Financial Supervisory Authority in Germany (Bundesanstalt für Finanzdienstleitungsaufsicht; BaFin), Graurheindorfer Str. 108, D-53117 Bonn and Marie-Curie-Str. 24-28, D-60439 Frankfurt am Main. The present report and the products and services described herein have not been reviewed or approved by the relevant supervisory authority.

The present information is addressed exclusively to Recipients in Austria, Belgium, Canada, Cyprus, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Indonesia, Ireland, Italy, Japan, Korea, Luxembourg, the Netherlands, New Zealand, Poland, Portugal, Singapore, Portugal, Spain, Sweden, Switzerland, the Republic of China (Taiwan), Thailand, the United Kingdom and Vietnam (hereinafter referred to as "Relevant Persons" or "Recipients"). The contents of the information are disclosed to the Recipients on a strictly confidential basis and, by accepting such information, the Recipients shall agree that they will not forward it to third parties, copy and/or reproduce this information without the prior written consent of NORD/LB. The present information is addressed solely to the Relevant Persons and any parties other than the Relevant Persons shall not rely on the information contained herein. In particular, neither this information nor any copy thereof shall be forwarded or transmitted to the United States of America or its territories or possessions, or distributed to any employees or affiliates of Recipients resident in these jurisdictions.

The present information does not constitute financial analysis within the meaning of Art. 36 (1) of the Delegate Regulation (EU) 2017/565, but rather represents a marketing communication for your general information within the meaning of Art. 36 (2) of this Regulation. Against this background, NORD/LB expressly points out that this information has not been prepared in accordance with legal provisions promoting the independence of investment research and is not subject to any prohibition of trading following the dissemination of investment research. Likewise, this information does not constitute an investment recommendation or investment strategy recommendation within the meaning of the Market Abuse Regulation (EU) No. 596/2014.

This report and the information contained herein have been compiled and are provided exclusively for information purposes. The present information is not intended as an investment incentive. It is provided for the Recipient's personal information, subject to the express understanding, which shall be acknowledged by the Recipient, that it does not constitute any direct or indirect offer, recommendation, solicitation to purchase, hold or sell or to subscribe for or acquire any securities or other financial instruments nor any measure by which financial instruments might be offered or sold.

All actual details, information and statements contained herein were derived from sources considered reliable by NORD/LB. For the preparation of this information, NORD/LB uses issuer-specific financial data providers, own estimates, company information and public media. However, since these sources are not verified independently, NORD/LB cannot give any assurance as to or assume responsibility for the accuracy and completeness of the information contained herein. The opinions and prognoses given herein on the basis of these sources constitute a non-binding evaluation of the employees of the Markets Strategy & Floor Research division of NORD/ LB. Any changes in the underlying premises may have a material impact on the developments described herein. Neither NORD/LB nor its governing bodies or employees can give any assurances as to or assume any responsibility or liability for the accuracy, appropriateness and completeness of this information or for any loss of return, any indirect, consequential or other damage which may be suffered by persons relying on the information or any statements or opinions set forth in the present Report (irrespective of whether such losses are incurred due to any negligence on the part of these persons or otherwise).

Past performance is not a reliable indicator of future performance. Exchange rates, price fluctuations of the financial instruments and similar factors may have a negative impact on the value and price of and return on the financial instruments referred to herein or any instruments linked thereto. Fees and commissions apply in relation to securities (purchase, sell, custody), which reduce the return on investment. An evaluation made on the basis of the historical performance of any security does not necessarily provide an indication of its future performance.

The present information neither constitutes any investment, legal, accounting or tax advice nor any assurance that an investment or strategy is suitable or appropriate in the light of the Recipient's individual circumstances, and nothing in this information constitutes a personal recommendation to the Recipient thereof. The securities or other financial instruments referred to herein may not be suitable for the Recipient's personal investment strategies and objectives, financial situation or individual needs.

Moreover, the present report in whole or in part is not a sales or other prospectus. Accordingly, the information contained herein merely constitutes an overview and does not form the basis for any potential decision to buy or sell on the part of an investor. A full description of the details relating to the financial instruments or transactions which may relate to the subject matter of this report is given in the relevant (financing) documentation. To the extent that the financial instruments described herein are NORD/LB's own issues and subject to the requirement to publish a prospectus, the conditions of issue applicable to any individual financial instrument and the relevant prospectus published with respect thereto as well NORD/LB's relevant registration form, all of which are available for download at www.nordlb.de and may be obtained free of charge from NORD/LB, Georgsplatz 1, 30159 Hanover, shall be solely binding. Furthermore, any potential investment decision should be made exclusively on the basis of such (financing) documentation. The present information cannot replace personal advice. Before making an investment decision, each Recipient should consult an independent investment adviser for individual investment advice with respect to the appropriateness of an investment in financial instruments or investment strategies subject to this information as well as for other and more recent information on certain investment opportunities.

Each of the financial instruments referred to herein may involve substantial risks, including capital, interest, index, currency and credit risks in addition to political, fair value, commodity and market risks. The financial instruments could experience a sudden and substantial deterioration in value, including a total loss of the capital invested. Each transaction should only be entered into on the basis of the relevant investor's assessment of his or her individual financial situation as well as of the suitability and risks of the investment.

NORD/LB and its affiliated companies may participate in transactions involving the financial instruments described in the present information or their underlying basis values for their own account or for the account of third parties, may issue other financial instruments with the same or similar features as those of the financial instruments presented in this information and may conduct hedging transactions to hedge positions. These measures may affect the price of the financial instruments described in the present information.

If the financial instruments presented in this information are derivatives, they may, depending on their structure, have an initial negative market value from the customer's perspective at the time the transaction is concluded. NORD/LB further reserves the right to transfer its economic risk from a derivative concluded with it to a third party on the market by means of a mirror-image counter transaction.

More detailed information on any commission payments which may be included in the selling price can be found in the "Customer Information on Securities Business" brochure, which is available to download at <u>www.nordlb.de</u>.

The information contained in the present report replaces all previous versions of corresponding information and refers exclusively to the time of preparation of the information. Future versions of this information will replace this version. NORD/LB is under no obligation to update and/or regularly review the data contained in such information. No guarantee can therefore be given that the information is up-to-date and continues to be correct. By making use of this information, the Recipient shall accept the terms and conditions outlined above.

NORD/LB is a member of the protection scheme of Deutsche Sparkassen-Finanzgruppe. Further information for the Recipient is indicated in clause 28 of the General Terms and Conditions of NORD/LB or at <u>www.dsgv.de/sicherungssystem</u>.

Additional information for Recipients in Australia:

NORD/LB IS NOT A BANK OR DEPOSIT TAKING INSTITUTION AUTHORISED UNDER THE 1959 BANKING ACT OF AUSTRALIA. IT IS NOT SUPERVISED BY THE AUSTRALIAN PRUDENTIAL REGULATION AUTHORITY. NORD/LB does not provide personal advice with this information and does not take into account the objectives, financial situation or needs of the Recipient (other than for the purpose of combating money laundering).

Additional information for Recipients in Austria:

None of the information contained herein constitutes a solicitation or offer by NORD/LB or its affiliates to buy or sell any securities, futures, options or other financial instruments or to participate in any other strategy. Only the published prospectus pursuant to the Austrian Capital Market Act should be the basis for any investment decision of the Recipient. For regulatory reasons, products mentioned herein may not be on offer in Austria and therefore not available to investors in Austria. Therefore, NORD/LB may not be able to sell or issue these products, nor shall it accept any request to sell or issue these products to investors located in Austria or to intermediaries acting on behalf of any such investors.

Additional information for Recipients in Belgium:

Evaluations of individual financial instruments on the basis of past performance are not necessarily indicative of future results. It should be noted that the reported figures relate to past years.

Additional information for Recipients in Canada:

This report has been prepared solely for information purposes in connection with the products it describes and should not, under any circumstances, be construed as a public offer or any other offer (direct or indirect) to buy or sell securities in any province or territory of Canada. No financial market authority or similar regulatory body in Canada has made any assessment of these securities or reviewed this information and any statement to the contrary constitutes an offence. Potential selling restrictions may be included in the prospectus or other documentation relating to the relevant product.

Additional information for Recipients in Cyprus:

This information constitutes an analysis within the meaning of the section on definitions of the Cyprus Directive D1444-2007-01 (No. 426/07). Furthermore, this information is provided for information and promotional purposes only and does not constitute an individual invitation or offer to sell, buy or subscribe to any investment product.

Additional information for Recipients in the Czech Republic:

There is no guarantee that the invested amount will be recouped. Past returns are no guarantee of future results. The value of the investments may rise or fall. The information contained herein is provided on a non-binding basis only and the author does not guarantee the accuracy of the content.

Additional information for Recipients in Denmark:

This Information does not constitute a prospectus under Danish securities law and consequently is not required to be, nor has been filed with or approved by the Danish Financial Supervisory Authority, as this Information either (i) has not been prepared in the context of a public offering of securities in Denmark or the admission of securities to trading on a regulated market within the meaning of the Danish Securities Trading Act or any executive orders issued pursuant thereto, or (ii) has been prepared in the context of a public offering of securities in Denmark or the admission of securities to trading on a regulated market within the meaning of the Danish Securities Trading Act or any executive orders issued pursuant thereto, or (ii) has been prepared in the context of a public offering of securities in Denmark or the admission of securities to trading on a regulated market in reliance on one or more of the exemptions from the requirement to prepare and publish a prospectus in the Danish Securities Trading Act or any executive orders issued pursuant thereto.

Additional information for Recipients in Estonia:

It is advisable to closely examine all the terms and conditions of the services provided by NORD/LB. If necessary, Recipients of this information should consult an expert.

Additional information for Recipients in Finland:

The financial products described herein may not be offered or sold, directly or indirectly, to any resident of the Republic of Finland or in the Republic of Finland, except pursuant to applicable Finnish laws and regulations. Specifically, in the case of shares, such shares may not be offered or sold, directly or indirectly, to the public in the Republic of Finland as defined in the Finnish Securities Market Act (746/2012, as amended). The value of investments may go up or down. There is no guarantee of recouping the amount invested. Past performance is no guarantee of future results.

Additional information for Recipients in France:

NORD/LB is partially regulated by the "Autorité des Marchés Financiers" for the conduct of French business. Details concerning the extent of our regulation by the respective authorities are available from us on request. The present information does not constitute an analysis within the meaning of Article 24 (1) Directive 2006/73/EC, Article L.544-1 and R.621-30-1 of the French Monetary and Financial Code, but does represent a marketing communication and does qualify as a recommendation pursuant to Directive 2003/6/EC and Directive 2003/125/EC.

Additional information for Recipients in Greece:

The information contained herein gives the view of the author at the time of publication and may not be used by its Recipient without first having confirmed that it remains accurate and up to date at the time of its use. Past performance, simulations or forecasts are therefore not a reliable indicator of future results. Investment funds have no guaranteed performance and past returns do not guarantee future performance.

Additional information for Recipients in Indonesia:

This report contains generic information and has not been tailored to the circumstances of any individual or specific Recipient. This information is part of NORD/LB's marketing material.

Additional information for Recipients in the Republic of Ireland:

This information has not been prepared in accordance with Directive (EU) 2017/1129 (as amended) on prospectuses (the "Prospectus Directive") or any measures made under the Prospectus Directive or the laws of any Member State or EEA treaty adherent state that implement the Prospectus Directive or such measures and therefore may not contain all the information required for a document prepared in accordance with the Prospectus Directive or the laws.

Additional information for Recipients in Japan:

This information is provided to you for information purposes only and does not constitute an offer or solicitation of an offer to enter into securities transactions or commodity futures transactions. Although the actual data and information contained herein has been obtained from sources which we believe to be reliable and trustworthy, we are unable to vouch for the accuracy and completeness of this actual data and information.

Additional information for Recipients in South Korea:

This information has been provided to you free of charge for information purposes only. The information contained herein is factual and does not reflect any opinion or judgement of NORD/LB. The information contained herein should not be construed as an offer, marketing, solicitation to submit an offer or investment advice with respect to the financial investment products described herein.

Additional information for Recipients in Luxembourg:

Under no circumstances shall the present information constitute an offer to purchase or issue or the solicitation to submit an offer to buy or subscribe for financial instruments and financial services in Luxembourg.

Additional information for Recipients in New Zealand:

NORD/LB is not a bank registered in New Zealand. This information is for general information only. It does not take into account the Recipient's financial situation or objectives and is not a personalised financial advisory service under the 2008 Financial Advisers Act.

Additional information for Recipients in the Netherlands:

The value of your investment may fluctuate. Past performance is no guarantee for the future.

Additional information for Recipients in Poland:

This information does not constitute a recommendation within the meaning of the Regulation of the Polish Minister of Finance Regarding Information Constituting Recommendations Concerning Financial Instruments or Issuers thereof dated 19 October 2005.

Additional information for Recipients in Portugal:

This information is intended only for institutional clients and may not be (i) used by, (ii) copied by any means or (iii) distributed to any other kind of investor, in particular not to retail clients. The present information does not constitute or form part of an offer to buy or sell any of the securities covered by the report, nor should it be understood as a request to buy or sell securities where that practice may be deemed unlawful. The information contained herein is based on information obtained from sources which we believe to be reliable, but is not guaranteed as to accuracy or completeness. Unless otherwise stated, all views contained herein relate solely to our research and analysis and are subject to change without notice.

Additional information for Recipients in Sweden:

This information does not constitute (or form part of) a prospectus, offering memorandum, any other offer or solicitation to acquire, sell, subscribe for or otherwise trade in shares, subscription rights or other securities, nor shall it or any part of it form the basis of or be relied on in connection with any contract or commitment whatsoever. The present information has not been approved by any regulatory authority. Any offer of securities will only be made pursuant to an applicable prospectus exemption under the EC Prospectus Directive (Directive (EU) 2017/1129), and no offer of securities is being directed to any person or investor in any jurisdiction where such action is wholly or partially subject to legal restrictions or where such action would require additional prospectuses, other offer documentation, registrations or other actions.

Additional information for Recipients in Switzerland:

This information has not been approved by the Federal Banking Commission (merged into the Swiss Financial Market Supervisory Authority (FINMA) on 1 January 2009). NORD/LB will comply with the Directives of the Swiss Bankers Association on the Independence of Financial Research (as amended). The present information does not constitute an issuing prospectus pursuant to article 652a or article 1156 of the Swiss Code of Obligations. The information is published solely for the purpose of information on the products mentioned herein. The products do not qualify as units of a collective investment scheme pursuant to the Federal Act on Collective Investment Schemes (CISA) and are therefore not subject to supervision by FINMA.



Additional information for Recipients in the Republic of China (Taiwan):

This information is provided for general information only and does not take into account the individual interests or requirements, financial status and investment objectives of any specific investor. Nothing herein should be construed as a recommendation or advice for you to subscribe to a particular investment product. You should not rely solely on the information provided herein when making your investment decisions. When considering any investment, you should endeavour to make your own independent assessment and determination on whether the investment is suitable for your needs and seek your own professional financial and legal advice. NORD/LB has taken all reasonable care in producing this report and trusts that the information is reliable and suitable for your situation at the date of publication or delivery. However, no guarantee of accuracy or completeness is given. To the extent that NORD/LB has exercised the due care of a good administrator, we accept no responsibility for any errors, omissions, or misstatements in the information given. NORD/LB does not guarantee any investment results and does not guarantee that the strategies employed will improve investment performance or achieve your investment objectives.

Information for Recipients in the United Kingdom:

NORD/LB is subject to partial regulation by the Financial Conduct Authority (FCA) and the Prudential Regulation Authority (PRA). Details of the scope of regulation by the FCA and the PRA are available from NORD/LB on request. The present information is "financial promotion". Recipients in the United Kingdom should contact the London office of NORD/LB, Investment Banking Department, telephone: 0044 / 2079725400, in the event of any queries. An investment in financial instruments referred to herein may expose the investor to a significant risk of losing all the capital invested.

Time of going to press: Friday, 04 November 2022 (12:31h)

Distribution: 23.12.2022 16:08:28