NORD/LB



Covered Bond & SSA View

NORD/LB Markets Strategy & Floor Research





Agenda

Market	overview

Covered Bonds	3
SSA/Public Issuers	5
A brief spotlight on the EUR sub-benchmark segment	7
Deutsche Hypo real estate climate: index falls again	9
ECB tracker	
Asset Purchase Programme (APP)	12
Pandemic Emergency Purchase Programme (PEPP)	17
Aggregated purchase activity under APP and PEPP	20
Charts & Figures	
Covered Bonds	21
SSA/Public Issuers	27
Overview of latest Covered Bond & SSA View editions	30
Publication overview	31
Contacts at NORD/LB	32

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Market overview Covered Bonds

Author: Stefan Rahaus

Primary market: LBBW issues its first EUR benchmark under the new legislation

Following DekaBank's successful placement of a sub-benchmark with investors last week, LBBW issued its first EUR benchmark under the new legislation this Monday. The mortgage Pfandbrief with an initial time to maturity of 5.6 years was issued in green format. LBBW approached its investors with guidance of ms +10bp area and succeeded in generating an order book of over EUR 4.6bn. The final issue spread therefore tightened to ms +5bp and the issue volume was set at EUR 1bn. A bid-to-cover ratio of more than 4x was last seen at the beginning of May, while new issue premiums of less than 5bp and a tightening of 5bp to guidance last occurred at the beginning of June. LBBW's second EUR benchmark bond this year can definitely therefore be rated a success, although the fact that the first deal with an initial term of 7.5 years was placed at a spread of -5bp in January 2022 should not be overlooked. On Tuesday, Deutsche Pfandbriefbank (pbb) (Issuer View pbb) followed with a mortgage Pfandbrief that will mature in March 2027. The initial guidance was ms +10bp area and generated interest of over EUR 1.25bn, whereupon the volume was set at EUR 750m and the final spread at ms +6bp. At the beginning of April, pbb placed a bond with an initial maturity of 4 years at ms +1bp. Both issues were placed smoothly and show that German issuers at least have adapted to the new legal situation without difficulty. We largely attribute the higher spreads to the deterioration in the market environment.

Issuer	Country	Timing	ISIN	Maturity	Size	Spread	Rating	ESG
pbb	DE	19.07.	DE000A30WFU3	4.6y	0.75bn	ms +6bp	-/Aa1/-	-
LBBW	DE	18.07.	DE000LB2ZV93	5.6y	1.00bn	ms +5bp	- / Aaa / -	Χ

Source: Bloomberg, NORD/LB Markets Strategy & Floor Research, (Rating: Fitch / Moody's / S&P)

A week of significant decisions – limited impact on covered bonds

With the ECB meeting on Thursday, the planned recommencement of gas flows via the Nord Stream 1 pipeline and further decisions about the political situation in Italy, this week promises more trendsetting events. In our last issue (Covered Bond & SSA View 23), we analysed the upcoming meeting of the ECB Governing Council in detail. We do not expect any significant effects for covered bonds. We consider speculation about a renewal of the TLTRO III tender, which would result in reduced funding via covered bonds, to be premature. Given the prevailing uncertainties, we do not expect any decision to come out of the burgeoning TLTRO carry discussion. A disappointment with the anti-fragmentation programme, which would result in a significant expansion in the spreads of peripheral jurisdictions, is likely to reverse the re-stabilisation in the sentiment surrounding Italian and Spanish covered bonds that occurred at the beginning of the week. If gas deliveries are not resumed, a general risk-off movement is likely to occur on the markets, which would also affect covered bonds. Nevertheless, due to their configuration, we expect covered bonds to significantly outperform other asset classes in the event of such a movement.



Secondary market: picture improves slightly thanks to technical support

Sentiment in the secondary market has improved slightly since the middle of last week. Technical support in the form of the absence of new issues and rising CBPP3 purchases by the ECB led to outflows from trading books and stabilised spreads in the core segment. Most issues from previous weeks, which are known to have featured substantial new issuance premiums, tightened slightly as a result. In particular, the 15y bond placed by Deutsche Bank, which has now been increased by EUR 200m to EUR 1.0bn, tightened compared with the issue spread (ms +26bp) and the tap spread (ms +24bp) to ms +17bp. A yield around 2.5% seems to be generating demand here. Generally speaking, demand was again strongest for maturities of less than five years. In the non-EEA segment, Asian and Australian issuers were the exception, where the substantial new issue premiums for the two July issues by Westpac Securities NZ (WSTP) and Korea Housing Finance Corp (KHFC) also led to a revaluation of secondary market prices. Italian securities, which have been suffering from political uncertainties, also remained under pressure, while there were signs of the first purchasers of Spanish bonds following the widening in spreads in recent weeks. Given persistent interest rate volatility (the Bund future and the German 10-year yield traded in a range of 150 points or 100 yield points on each trading day), many investors held back, and trading volumes were accordingly below average. As we explained last week, we still expect a certain equilibration in the substantial new issue spreads and the levels on the secondary market over the summer months. New issues from Germany show the strong demand for core names in the mid-maturities segment and did not have any adverse spread effects on the secondary market prices for German Pfandbriefe. Compared with the reoffer spread, the LBBW transaction tightened towards ms flat and the new pbb bond is also trading below the issue spread.



Market overview SSA/Public Issuers

Author: Dr Norman Rudschuck, CIIA

Where has all the commitment gone?

It's been a long, long time. Even under Christine Lagarde's (pre)predecessor at the helm of the ECB, Jean-Claude Trichet, it was always said that the central bank would never commit in advance ("We never pre-commit"). But the ECB is now in a right old mess, after having fallen so far behind its own curve that the decision to commit to +25bp at tomorrow's meeting for all three key interest rates was probably too hasty after all. The ECB Governing Council has already raised the prospect of a larger hike at its September meeting, but not for July. As a consequence, certain people were saying yesterday that they had heard from well-informed ECB circles that +50bp was now being discussed internally and was therefore on the table as a relevant option for Thursday. This would mean that the negative interest rate would vanish sooner than expected and some calm would set in. This would also explain a small surge by the euro against the dollar, which would only continue if the ECB were to deliver in full, i.e. in line with market expectations. Nevertheless, as things stand the ECB is not heading for calmer waters as far as its communications are concerned, which is a regrettable development. On Thursday, as is so often the case, its every word will be carefully considered. Speaking of communications, please make a note of the new times for ECB procedures, namely from tomorrow the ECB is changing the specific times for publication of its monetary policy decisions and the press conference at which these decisions are explained. From 21 July 2022, monetary policy decisions will be published at 2.15 pm CET (instead of 1.45 pm CET, as was previously the case). The press conference will now start at 2.45 CET (instead of 2.30 pm CET as before). The publication of related documents such as the Monetary Policy Statement will be postponed accordingly (to 3.00 pm CET). The new times apply to all future monetary policy decisions and press conferences.

When the "severe scenario" becomes reality... or perhaps something worse?

In March, as part of its projections for 2022, the ECB predicted an average inflation rate of 5.1% in tandem with growth of 3.7% as a baseline scenario. In the meantime, we have directly bypassed the adverse situation and the reality is now a severe scenario. At that time, this was said to be 7.1% inflation and 2.3% economic growth. As we do not see any sign of a drop in prices at present and any prospective interest rate hikes will do nothing, and we mean absolutely nothing, to change the inflation rate for 2022, we can assume that these figures will be used again in September to form a new basis. The following serve as an anchor point: Inflation in 2022 higher than 7.1%, growth correspondingly lower than 2.3%.

Former ECB projections for eurozone growth and inflation*

	March 2022 projections			Adverse scenario				Severe scenario				
	2021	2022	2023	2024	2021	2022	2023	2024	2021	2022	2023	2024
Real GDP	5,4	3,7	2,8	1,6	5,4	2,5	2,7	2,1	5,4	2,3	2,3	1,9
HICP inflation	2,6	5,1	2,1	1,9	2,6	5,9	2,0	1,6	2,6	7,1	2,7	1,9

^{*} Changes versus previous year in %

Source: ECB, NORD/LB Markets Strategy & Floor Research



Crisis tool: keyword "anti-fragmentation"

No anti-fragmentation tool can help to combat the heat wave. Speculation is currently rife regarding the scope (specific or unlimited?) and conditionality (unconditional or partial loss of sovereignty?) that this new ECB tool might take. We strongly advise the ECB against too little conditionality. No specific scope (in EUR bn) could make the problem bigger than it is, while too little scope could bring speculators onto the scene who could overly test Italian or Greek spreads against Bunds. We are very curious about the balancing act and how the ECB will explain why such a tool is appropriate within the framework of an inflation-only mandate. Another even bigger acid test for the fragmentation of Europe could come on Thursday, 21 July, namely if Nord Stream 1 is not switched back on. This would have more serious consequences than an interest rate hike by the ECB.

Primary market

Sparse, sparser, summer slump? Although – or precisely because – one of the most significant days in terms of monetary policy for more than ten years is due tomorrow (Thursday), the primary market has largely taken its leave. The Governing Council meeting is already casting a shadow, which is certainly not the worst thing in the current temperatures. On the other hand, such a landmark meeting will "block" one or two new deals. Accordingly, we have not yet been able to spot any interaction between issuers and investors in the SSA segment in the course of this calendar week. Therefore, we are going to comment on two deals from 13 July. Firstly, the seldom-seen market guest EUROFIMA. Created in 1956 as part of an international treaty between 14 European countries (now 25), the mission of the European Company for the Financing of Railroad Rolling Stock is to promote the development of rail transport in Europe. Originally limited to 50 years, it was decided on 1 February 1984 to extend the mandate until 2056. To promote rail transport, EUROFIMA finances rolling stock such as rail vehicles by providing rail companies with debt finance or equity finance to renew and/or modernise their rail vehicle fleets. The quality of the loan portfolio is very high. Either the institution holds the financed assets until the loans granted have been repaid, or direct or indirect collateralisation is used. Never before has a railway company that received EUROFIMA funds not been able to repay any loans received. The last EUR benchmark dates back to 2020, although EUROF (to use its ticker) has now decided to issue a 5y benchmark in the amount of EUR 500m. The spread was fixed at ms +8bp following guidance that started at ms +10bp area. The order books grew to EUR 1.25bn. The Asian Development Bank (ADB) was also active; this is already the second EUR benchmark of the year from this issuer, which can certainly be described as unusual. We have never previously seen two EUR 1.0bn deals issued under the ASIA ticker. The 10y deal came in at ms +2bp. The books just exceeded the target, with the result that there was no tightening compared with the guidance (ms +2bp area).

Issuer	Country	Timing	ISIN	Maturity	Size	Spread	Rating	ESG
ASIA	SNAT	12.07.	XS2504099669	10.0y	1.00bn	ms +2bp	AAA / Aaa / AAA	-
EUROF	SNAT	11.07.	XS2502850865	5.0y	0.50bn	ms +8bp	AA / Aa2 / AA	-

Source: Bloomberg, NORD/LB Markets Strategy & Floor Research (Rating: Fitch / Moody's / S&P)



Covered Bonds

A brief spotlight on the EUR sub-benchmark segment

Author: Dr Frederik Kunze

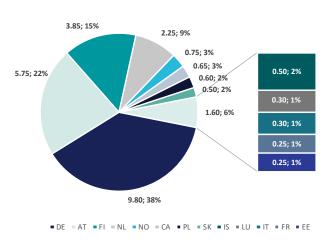
The EUR sub-benchmark segment for covered bonds in the first half of 2022

Looking ahead to the second half of the year, DekaBank has already opened the primary market for the EUR sub-benchmark segment. At the same time, the bank placed the first Pfandbrief under the new legal framework on 11 July. The bond had a volume of EUR 250m. In the first six months of the current year, covered bonds with a volume of EUR 5.05bn were already issued in the EUR sub-benchmark segment. The total of 19 ISINs are spread across four jurisdictions. In direct comparison with the EUR benchmark segment, the issuing momentum is far less dynamic, according to the figures. Nevertheless, a detailed analysis reveals interesting developments in the EUR sub-benchmark segment. Also, as we regard this sub-market of the covered bond universe as a relevant port of call for some issuers and investors despite its small size, we would like to look at some aspects of the EUR sub-benchmark segment in the current issue of our weekly publication.

EUR SBMK: Issuance history (EUR bn)



EUR SBMK: Issues (EUR bn ; 2022 ytd)



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

Highest volume in the first six months of the year from Austria

As mentioned above, the issuance volume in the months January to June was EUR 5.05bn spread over 19 bonds. This figure is significantly higher than the volume in the respective first six months of the previous years 2021 (EUR 2.2bn), 2020 (EUR 1.55bn), 2019 (EUR 1.65bn) and 2018 (EUR 2.6bn), and even exceeds the total issuance volumes of all previous years. As has been the case in the EUR benchmark segment, in 2022 issuers from Austria have been active at an above-average frequency in the primary market. With nine issues from eight issuers (total volume EUR 2.5bn), Austria was the most active jurisdiction in the months January to June 2022. Bausparkasse Wüstenrot made two separate appearances on the market during this time frame.



Germany, Finland and Canada also active

The dynamics from Austria must be placed in the context of covered bond harmonisation. In line with the EUR benchmark segment, we accordingly saw significant pre-funding activities on the part of sub-benchmark issuers. Germany was the second-largest jurisdiction in regard to primary market activity in the first six months of the year (EUR 1.85bn; 7 bonds). Two issues (totalling EUR 650m) came from Finland, while Equitable Bank from Canada issued a bond for EUR 300m. A certain tendency towards shorter maturities can also be observed for sub-benchmarks. The general repricing is also reflected in the current spreads in this sub-market.

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Issuer	Country	Timing	ISIN	Maturity	Size (EURbn)	Spread (reoffer)	Spread (current)	Debut	
DekaBank	DE	11.07.	XS2502402360	10.0y	0.250	ms +9bp	ms +8bp	-	
BS Wuestenrot	AT	14.06.	AT0000A2YBY4	3.0y	0.250	ms +12bp	ms +13bp	-	
OÖ Landesbank	AT	24.05.	AT0000A2Y7L6	7.0y	0.250	ms +15bp	ms +15bp	-	
Landesbank Saar	DE	24.05.	DE000SLB4SA6	10.0y	0.250	ms +11bp	ms +11bp	-	
Equitable Bank	CA	18.05.	XS2484201467	3.0y	0.300	ms +20bp	ms +25p	-	
RV Salzburg	AT	18.05.	AT0000A2Y735	5.0y	0.300	ms +11bp	ms +12bp	Χ	
Oma Säästöpankki	FI	11.05.	FI4000522974	4.6y	0.350	ms +8bp	ms +8bp	-	
RLB Vorarlberg	AT	03.05.	AT000B066998	7.0y	0.300	ms +9bp	ms +10bp	-	
RLB Tirol	AT	27.04.	AT0000A2XLB3	5.0y	0.300	ms +9bp	ms +11bp	Χ	
Oberbank	AT	26.04.	AT0000A2VLR3	7.0y	0.250	ms +10bp	ms +12bp	-	
Hypo Tirol Bank	AT	21.04.	AT0000A2XLD9	5.0y	0.300	ms +10bp	ms +11bp	-	
Sp Mortgage Bank	FI	20.04.	XS2472651632	3.0y	0.300	ms +4bp	ms +7bp	-	
OLB	DE	06.04.	DE000A11QJM4	7.0y	0.350	ms +13bp	ms +11bp	-	
Natixis Pfandbriefbank	DE	16.03.	DE000A14J0N7	3.2y	0.250	ms +2bp	ms +3bp	-	
Kommunalkredit Austria	AT	23.02.	AT0000A2VL52	5.0y	0.250	ms +17bp	ms +24bp	-	
DekaBank	DE	21.02.	XS2449929194	5.0y	0.250	ms -1bp	ms -3bp	-	
Landesbank Saar	DE	01.02.	DE000SLB4253	7.0y	0.250	ms +2bp	ms +1bp	-	
Landesbank Berlin	DE	31.01.	DE000A162BD0	10.0y	0.250	ms -3bp	ms -2bp	-	
BS Wuestenrot	AT	25.01.	AT0000A2VCS0	8.0y	0.300	ms +8bp	ms +10bp	-	

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

Summary of EUR sub-benchmark segment: Germany as the largest jurisdiction

The EUR sub-benchmark segment currently comprises a total of twelve jurisdictions with outstanding bonds. Iceland should be mentioned in this context, which is no longer considered a jurisdiction in this segment based on the outstanding volume. Arion Banki upgraded its sub-benchmark to benchmark size a few months ago. The bond is now listed in the iBoxx EUR Covered. In the two charts above, Iceland is still listed because the original issue sizes are shown there. The current outstanding volume in the EUR sub-benchmark segment comes to EUR 25.25bn (86 bonds). Germany accounts for the largest volume (EUR 9.8bn; 38 bonds), followed by Austria (EUR 5.75bn; 21 bonds) and Finland (EUR 3.85bn; 12 bonds).

Conclusion

The EUR sub-benchmark segment was characterised by relatively high momentum in the first six months of this year, with the primary market volume record in this period already exceeding the annual volumes of all previous years. We see pre-funding activities carried out by Austrian issuers as an especially significant driving force here, among other aspects.



Covered Bonds

Deutsche Hypo real estate climate: index falls again

Authors: Stefan Rahaus // Dr Frederik Kunze

Deutsche Hypo's real estate climate index falls to a new annual low of 80.3 points

Last Wednesday, Deutsche Hypo published its current report on the real estate climate. The monthly survey of around 1,200 experts from the real estate sector produced a new annual low of 80.3 points in the overall index for July 2022. However, the downturn has flattened significantly with a fall of 0.5 index points following the dramatic slump of more than 17% in the previous month compared with the reporting month May 2022. Most subindices reflect this development, although the residential climate (-0.3% to 109.2 points) and the logistics climate (-0.7% to 122.3 points) recorded comparatively minor reductions. A more significant deterioration was apparent in retail, at -5.6% to 53.9 points, and in the hotel climate, at -7.9% to 76.3 points. In our opinion, this reflects the expectation that the reduction in consumers' disposable income caused by high inflation could lead to lower sales in the retail and hotel industries. The only glimmer of hope to be found within the sub-indices is the sentiment on the office property market, which recorded a rise from 73.6 to 76.3 points (+3.7% compared with the previous month) in the office climate subindex. We would attribute this development to increasing numbers of employees returning to their workplaces coupled with a labour market that remains buoyant. The opposing trends in the investment and rental climate are striking. While the investment climate fell by -9.5% to 65.6 points, the rental climate improved by 7.1% to 95.7 points. Our view is that the deterioration in investment expectations is caused by the uncertain economic outlook and the very sharp increase in lending rates. We take the view that the positive trend in the investment climate can be attributed to the positive trend (until recently) in property prices and rents. Accordingly, the vdp property price index last hit a new high in the first quarter of 2022. We looked at the vdp property price index in more detail in our weekly publication on 18 May 2022.

Real estate climate overall index and change (M/M)



Real estate climate by segment



Source: Deutsche Hypo, bulwiengesa, NORD/LB Markets Strategy & Floor Research



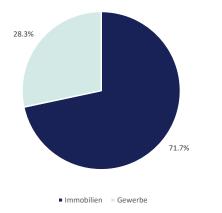
Frank Schrader believes the German commercial real estate market is still doing well

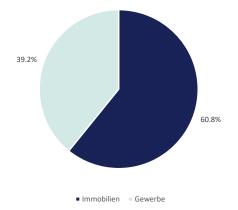
The Head of Deutsche Hypo NORD/LB Real Estate Finance, Frank Schrader, takes the view that the German commercial real estate market is still doing well overall. However, in his comments he refers to the uncertainties (previously discussed by us on several occasions) resulting from the war in Ukraine, higher inflation, persistent supply bottlenecks and fears regarding the energy supply. He states that these factors are currently leading to a certain caution among buyers and vendors. The increase in interest rates and uncertainties regarding the future trend in long-term interest rates are also prompting some market participants to adopt a wait-and-see approach. Vendors and purchasers' expected returns inevitably levelled off initially in this new environment. Frank Schrader still does not see any decline in any new tenancy agreements and rents.

Percentage of commercial properties in the mortgage cover pools of German Pfandbriefe is comparatively high

We view the trend in the German commercial real estate market as not insignificant for covered bond investors, since the proportion of real estate used for commercial purposes in the mortgage cover pools of German Pfandbrief banks is comparatively high. Statistics produced by the Association of German Pfandbrief banks (vdp) on real estate financing business show commercial real estate financing accounting for 28.3% (EUR 273.9bn) of the total real estate financing business of EUR 966.5bn in Germany. In contrast, the data prepared by vdp for the report in accordance with section 28 PfandBG shows that commercial properties account for a share of 39.2% (EUR 120.6bn) of all cover assets held by German Pfandbrief banks, which amount to EUR 307.8bn. When compared with other countries, the percentage of commercial financing in the cover pools of German Pfandbrief banks is also comparatively high, since numerous cover pools held by foreign issuers only contain residential mortgages.

Loan portfolio: breakdown by types of property (in %) Cover pools: breakdown by types of property (in %)





Sourcee: vdp, NORD/LB Markets Strategy & Floor Research



Conclusion

The slump in Deutsche Hypo's real estate climate index has paused for the moment, as the index only weakened slightly last month. Significant uncertainties are depressing the outlook for retail and hotel properties, in particular. The rental climate is currently supported by stable rents, while the residential climate is also likely to find continued support from high prices at present. Accordingly, future development is focused on the extent to which factors that are currently still boosting sentiment, such as prices for residential real estate and rents, can maintain their current level and whether the economic and commercial prospects for retail and the hotel industry, but also for office properties, deteriorate further. In the short term, we believe that a stable labour market (key word: shortage of specialist staff) will continue to provide support, while support from the real estate sector itself will come from the prevailing excess demand, which will not be reduced very rapidly either because of rising prices and a shortage of resources on the supply side. However, the spectre of a recession currently hovers over everything. In this scenario, the performance of commercial real estate is certainly of significance for covered bond investors with regard to Germany, as commercial property accounts for a relatively high proportion of Pfandbrief cover pools. By the same token, the regulatory requirements of the PfandBG for overcollateralisation, requirements for real estate valuation and even voluntary overcollateralisation must be considered as risk mitigating factors.

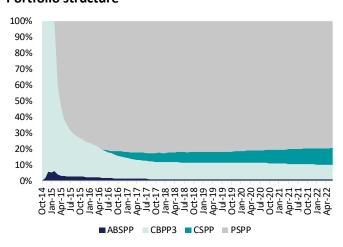


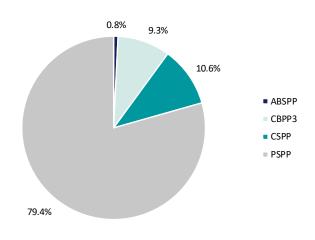
ECB tracker

Asset Purchase Programme (APP)

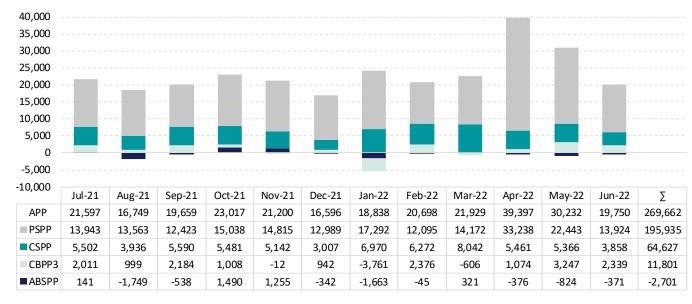
	ABSPP	СВРР3	CSPP	PSPP	APP
May-22	25,779	300,171	341,432	2,581,291	3,248,673
Jun-22	25,365	302,210	344,952	2,592,645	3,265,172
Δ	-371	+2,339	+3,858	+13,924	+19,750

Portfolio structure





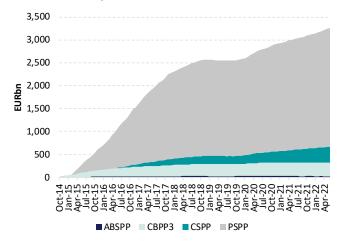
Monthly net purchases (in EURm)



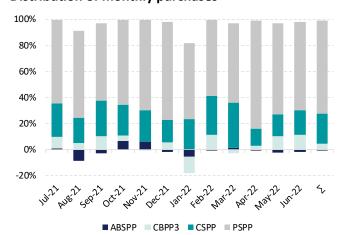
Source: ECB, NORD/LB Markets Strategy & Floor Research



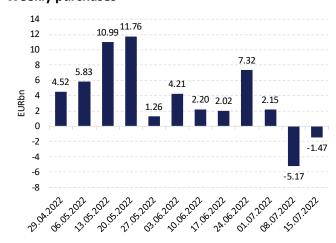
Portfolio development



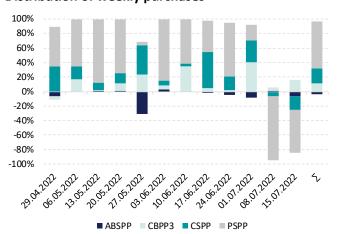
Distribution of monthly purchases



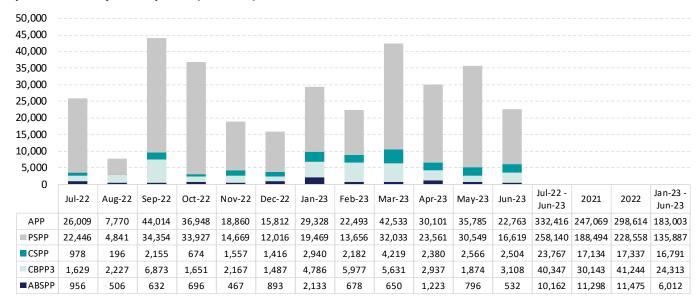
Weekly purchases



Distribution of weekly purchases



Expected monthly redemptions (in EURm)

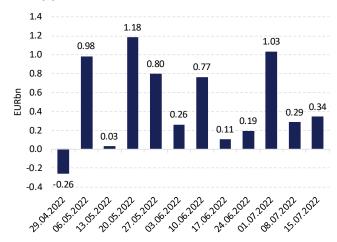


Source: ECB, Bloomberg, NORD/LB Markets Strategy & Floor Research

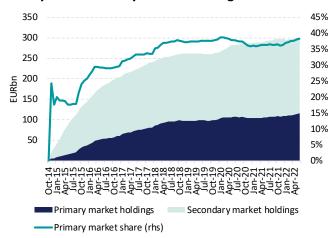


Covered Bond Purchase Programme 3 (CBPP3)

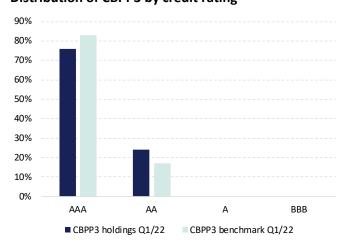
Weekly purchases



Primary and secondary market holdings

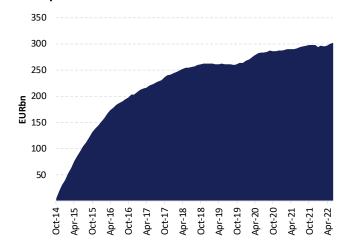


Distribution of CBPP3 by credit rating



Source: ECB, Bloomberg, NORD/LB Markets Strategy & Floor Research

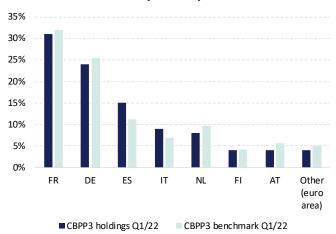
Development of CBPP3 volume



Change of primary and secondary market holdings



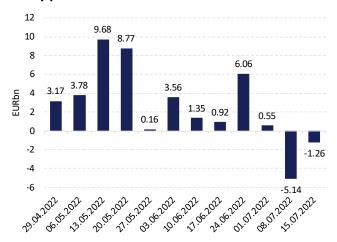
Distribution of CBPP3 by country of risk



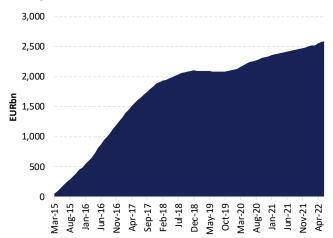


Public Sector Purchase Programme (PSPP)

Weekly purchases



Development of PSPP volume



Overall distribution of PSPP buying at month-end

Jurisdiction	Adjusted distribution key ¹	Holdings (EURm)	Expected holdings (EURm) ²	Difference (EURm)	Current WAM of portfolio ³ (in years)	WAM of eligible universe⁴ (in years)	Difference (in years)
AT	2.7%	77,504	74,123	3,381	7.3	8.1	-0.8
BE	3.4%	94,970	92,265	2,705	7.5	9.9	-2.4
CY	0.2%	4,240	5,449	-1,209	8.5	8.9	-0.5
DE	24.3%	666,639	667,600	-961	6.7	8.0	-1.3
EE	0.3%	444	7,134	-6,690	8.1	8.1	0.0
ES	11.0%	315,066	301,988	13,078	8.0	8.2	-0.2
FI	1.7%	43,617	46,518	-2,901	7.9	8.9	-1.0
FR	18.8%	531,309	517,242	14,067	6.9	8.4	-1.5
GR	0.0%	0	0	0	0.0	0.0	0.0
IE	1.6%	42,418	42,885	-467	8.4	10.1	-1.7
IT	15.7%	447,979	430,231	17,748	7.2	7.8	-0.7
LT	0.5%	5,881	14,657	-8,776	10.6	10.4	0.1
LU	0.3%	3,777	8,342	-4,565	5.8	6.1	-0.3
LV	0.4%	3,772	9,868	-6,096	9.5	9.4	0.1
MT	0.1%	1,414	2,656	-1,242	11.1	9.8	1.3
NL	5.4%	132,716	148,414	-15,698	7.7	9.3	-1.6
PT	2.2%	54,982	59,273	-4,291	7.5	7.9	-0.4
SI	0.4%	10,775	12,194	-1,419	9.7	9.9	-0.2
SK	1.1%	18,171	29,003	-10,832	8.1	8.8	-0.7
SNAT	10.0%	288,595	274,427	14,168	8.2	9.4	-1.2
Total / Avg.	100.0%	2,744,270	2,744,270	0	7.3	8.4	-1.1

 $^{^{\}mathrm{1}}$ Based on the ECB capital key, adjusted to include supras and the disqualification of Greece

² Based on the adjusted distribution key

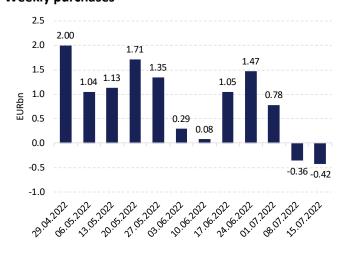
³ Weighted average time to maturity of PSPP portfolio holdings

 $^{^4}$ Weighted average time to maturity of the bonds eligible for purchasing under the PSPP Source: ECB, NORD/LB Markets Strategy & Floor Research

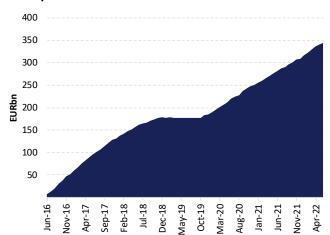


Corporate Sector Purchase Programme (CSPP)

Weekly purchases

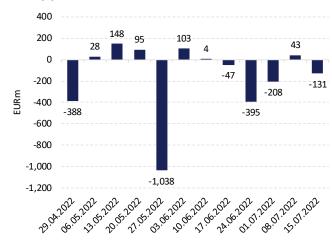


Development of CSPP volume



Asset-Backed Securities Purchase Programme (ABSPP)

Weekly purchases



Source: ECB, Bloomberg, NORD/LB Markets Strategy & Floor Research

Development of ABSPP volume



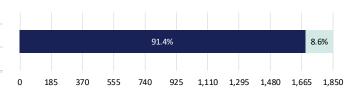


Pandemic Emergency Purchase Programme (PEPP)

Holdings (in EURm)

Invested share of PEPP envelope (in EURbn)

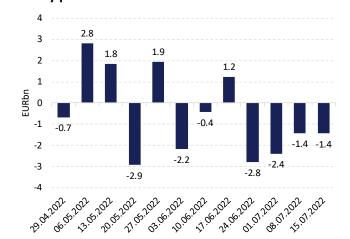
	PEPP
May-22	1,718,061
Jun-22	1,718,074
Δ (net purchases)	+12



Monthly net purchases (in EURm)

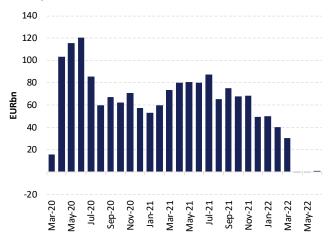


Weekly purchases



Source: ECB, Bloomberg, NORD/LB Markets Strategy & Floor Research

Development of PEPP volume

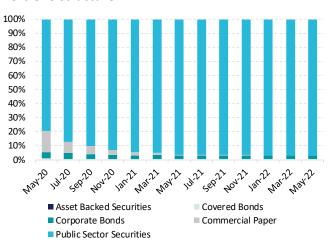


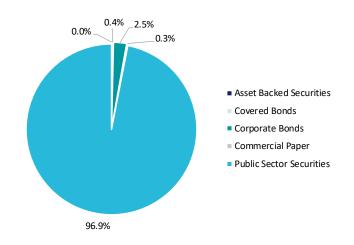


Holdings under the PEPP (in EURm)

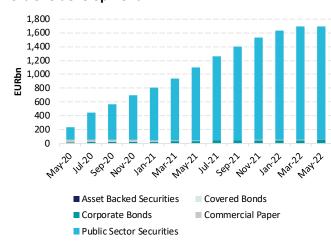
	Asset-backed Securities	Covered Bonds	Corporate Bonds	Commercial Paper	Public Sector Securities	PEPP
Mar-22	0	6,067	40,313	5,862	1,644,247	1,696,489
May-22	0	6,067	41,825	4,352	1,644,230	1,696,474
Δ (net purchases)	0	0	+1,512	-1,510	-17	-14

Portfolio structure

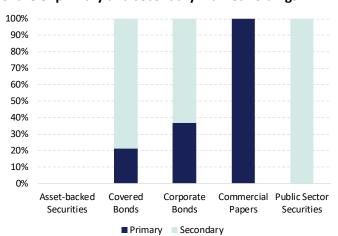




Portfolio development



Share of primary and secondary market holdings



Breakdown of private sector securities under the PEPP

May-22	Asset-backed securities		Covered bonds		Corporate bonds		Commercial paper	
	Primary	Secondary	Primary	Secondary	Primary	Secondary	Primary	Secondary
Holdings in EURm	0	0	1,298	4,769	15,332	26,493	4,353	0
Share	0.0%	0.0%	21.4%	78.6%	36.7%	63.3%	100.0%	0.0%

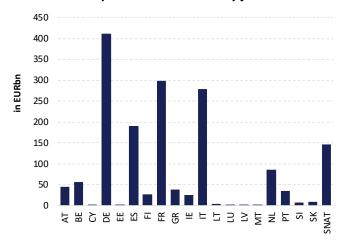
Source: ECB, Bloomberg, NORD/LB Markets Strategy & Floor Research



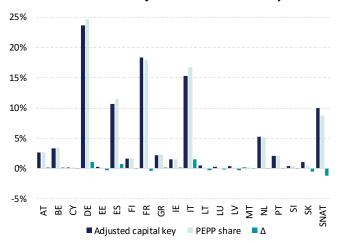
Breakdown of public sector securities under the PEPP

Jurisdiction	Holdings (in EURm)	Adj. distribution key ¹	PEPP share	Deviations from the adj. distribution key ²	Current WAM ³ (in years)	WAM of eligible universe ⁴ (in years)	Difference (in years)
AT	44,280	2.6%	2.7%	0.0%	7.8	7.3	0.5
BE	57,052	3.3%	3.4%	0.1%	6.5	8.9	-2.4
CY	2,464	0.2%	0.1%	0.0%	9.0	8.3	0.7
DE	412,492	23.7%	24.8%	1.0%	6.4	6.8	-0.4
EE	256	0.3%	0.0%	-0.2%	8.0	6.5	1.6
ES	190,463	10.7%	11.4%	0.7%	7.6	7.5	0.1
FI	26,918	1.7%	1.6%	0.0%	7.2	7.8	-0.6
FR	298,979	18.4%	17.9%	-0.4%	8.1	7.8	0.2
GR	38,677	2.2%	2.3%	0.1%	8.6	9.7	-1.0
IE	25,832	1.5%	1.6%	0.0%	9.0	9.2	-0.2
IT	279,302	15.3%	16.8%	1.5%	7.2	7.0	0.2
LT	3,216	0.5%	0.2%	-0.3%	10.1	9.6	0.5
LU	1,853	0.3%	0.1%	-0.2%	6.3	7.2	-0.9
LV	1,890	0.4%	0.1%	-0.2%	8.6	8.5	0.1
MT	609	0.1%	0.0%	-0.1%	10.9	9.1	1.8
NL	86,124	5.3%	5.2%	-0.1%	7.7	8.6	-0.9
PT	34,802	2.1%	2.1%	0.0%	6.8	7.1	-0.3
SI	6,532	0.4%	0.4%	0.0%	9.2	9.2	0.0
SK	7,966	1.0%	0.5%	-0.6%	8.8	8.3	0.5
SNAT	145,953	10.0%	8.8%	-1.2%	10.4	8.5	1.9
Total / Avg.	1,665,660	100.0%	100.0%	0.0%	7.6	7.6	0.0

Distribution of public sector assets by jurisdiction



Deviations from the adjusted distribution key



 $^{^{\}mathrm{1}}$ Based on the ECB capital key, adjusted to include supras $^{\mathrm{2}}$ Based on the adjusted distribution key

³ Current WAM of public sector securities holdings under the PEPP ⁴ WAM of eligible universe of public sector securities holdings under the PEPP Source: ECB, Bloomberg, NORD/LB Markets Strategy & Floor Research



Aggregated purchase activity under APP and PEPP

Holdings (in EURm)

	APP	PEPP	APP & PEPP
May-22	3,248,673	1,718,061	4,966,734
Jun-22	3,265,172	1,718,074	4,983,246
Δ	+19,750	+12	+19,762

Monthly net purchases (in EURm)

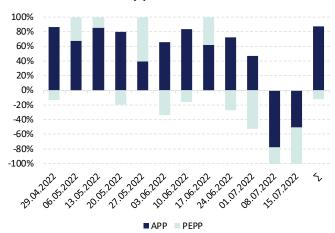


Weekly purchases



Source: ECB, Bloomberg, NORD/LB Markets Strategy & Floor Research

Distribution of weekly purchases



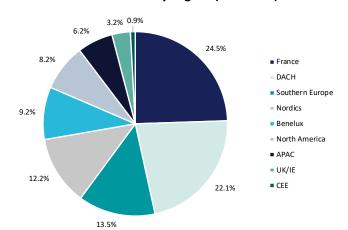


Charts & Figures Covered Bonds

EUR benchmark volume by country (in EURbn)

125.0; 13.4% ■ FR 228.8; 24.5% ■ DE 28.8; 3.1% CA 30.0; 3.2% ■ ES 39.0; 4.2% ■ NL ı IT 49.4; 5.3% ■ NO AT 49.5; 5.3% • FI 167.6; 17.9% ■ SE 67.4; 7.2% Others 72.7; 7.8% 76.7; 8.2%

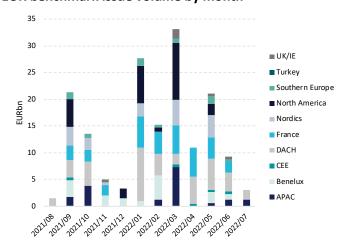
EUR benchmark volume by region (in EURbn)



Top-10 jurisdictions

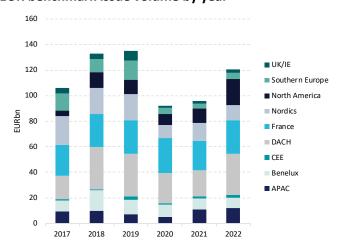
Rank	Country	Amount outst. (EURbn)	No. of BMKs	There of ESG BMKs	Avg. issue size (EURbn)	Avg. initial maturity (in years)	Avg. mod. Duration (in years)	Avg. coupon (in %)
1	FR	228.8	220	14	0.94	10.0	5.5	0.83
2	DE	167.6	243	21	0.63	8.4	4.6	0.48
3	CA	76.7	60	0	1.24	5.9	3.1	0.28
4	ES	72.7	59	5	1.12	11.7	3.6	1.73
5	NL	67.4	69	1	0.91	11.5	7.4	0.79
6	IT	49.5	60	2	0.80	9.2	4.1	1.27
7	NO	49.4	58	9	0.85	7.5	4.0	0.40
8	AT	39.0	71	3	0.55	9.3	5.9	0.65
9	FI	30.0	32	2	0.94	7.7	3.7	0.40
10	SE	28.8	34	0	0.84	7.6	3.8	0.52

EUR benchmark issue volume by month



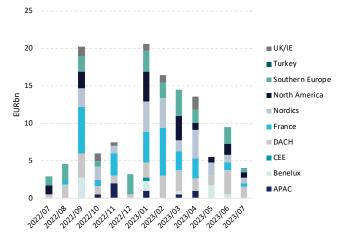
Source: Market data, Bloomberg, NORD/LB Markets Strategy & Floor Research

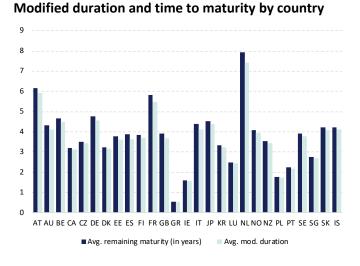
EUR benchmark issue volume by year



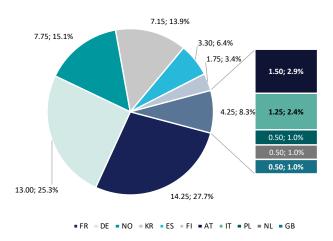


EUR benchmark maturities by month



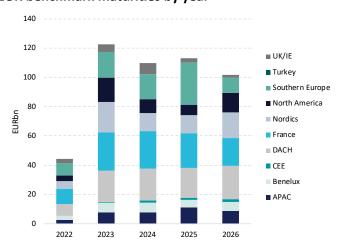


EUR benchmark volume (ESG) by country (in EURbn)

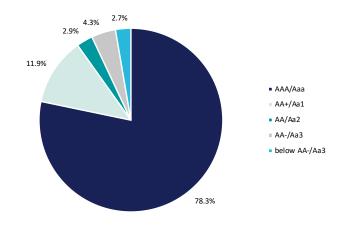


Source: Market data, Bloomberg, NORD/LB Markets Strategy & Floor Research

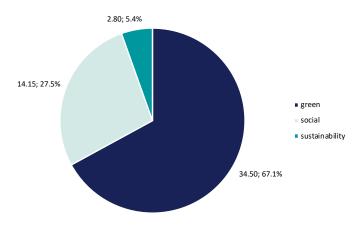
EUR benchmark maturities by year



Rating distribution (volume weighted)

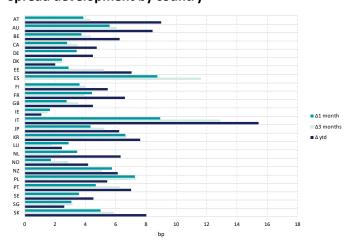


EUR benchmark volume (ESG) by type (in EURbn)

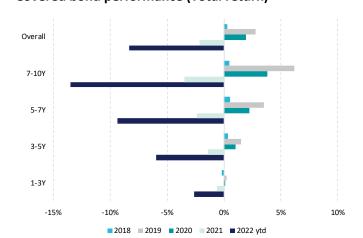




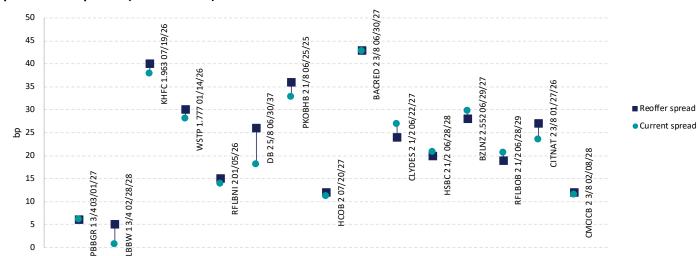




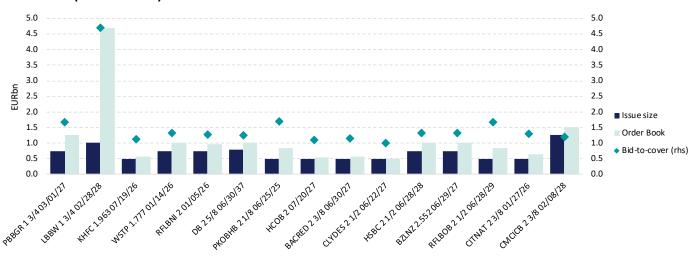
Covered bond performance (Total return)



Spread development (last 15 issues)



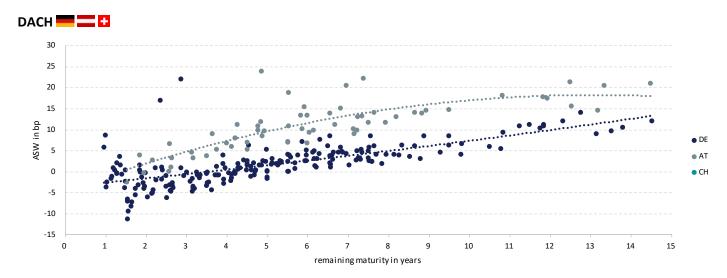
Order books (last 15 issues)

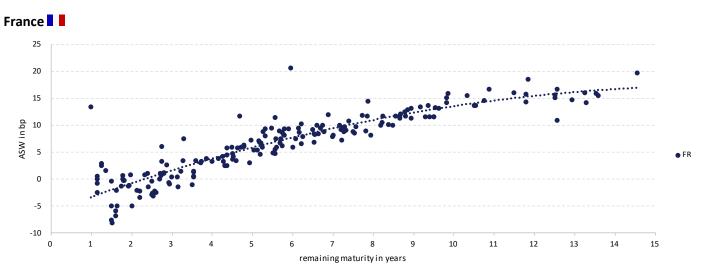


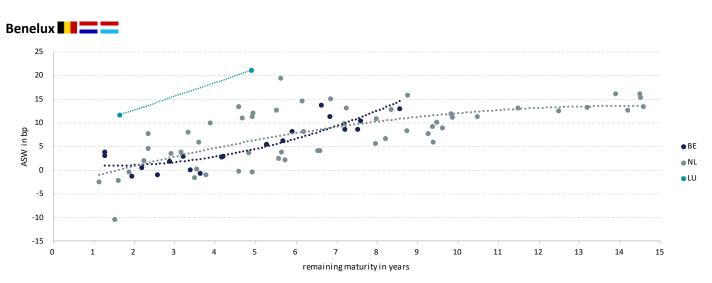
Source: Market data, Bloomberg, NORD/LB Markets Strategy & Floor Research



Spread overview¹

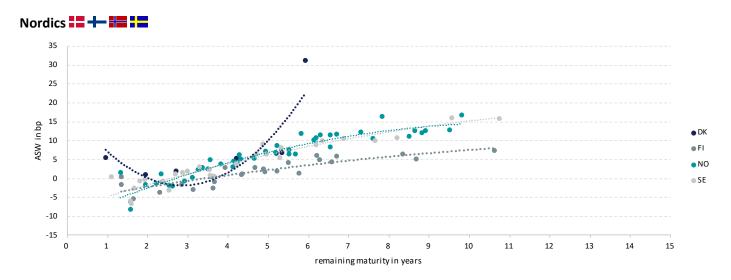


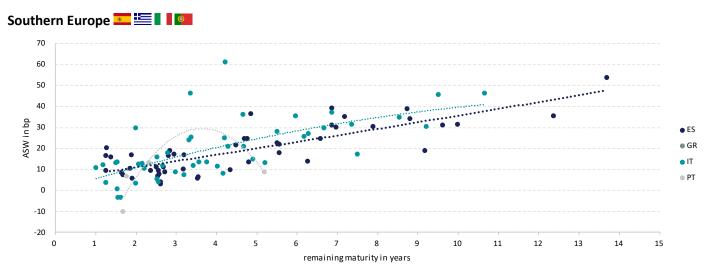


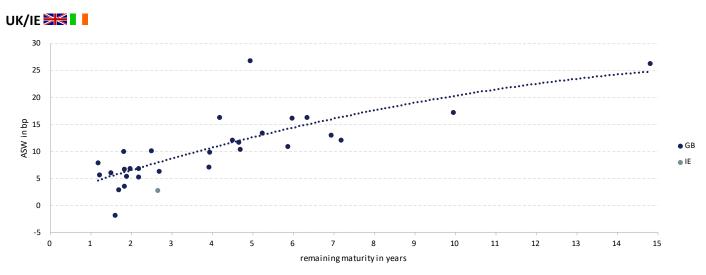


Source: Market data, Bloomberg, NORD/LB Markets Strategy & Floor Research 1 Time to maturity $1 \le y \le 15$



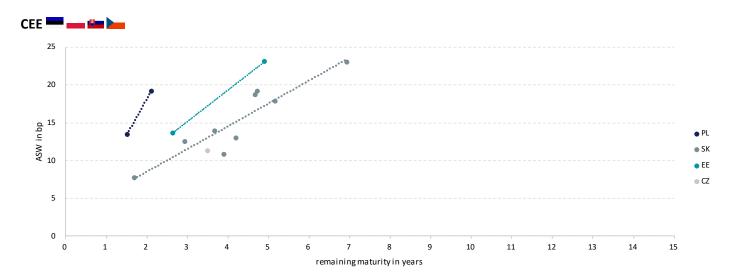


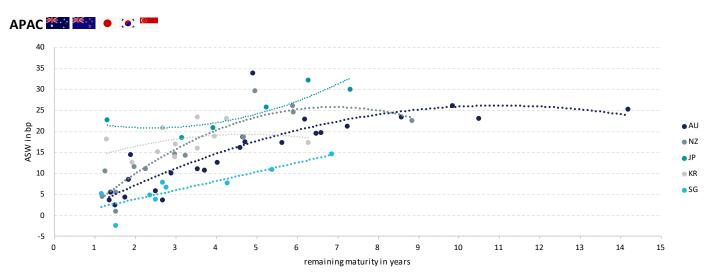


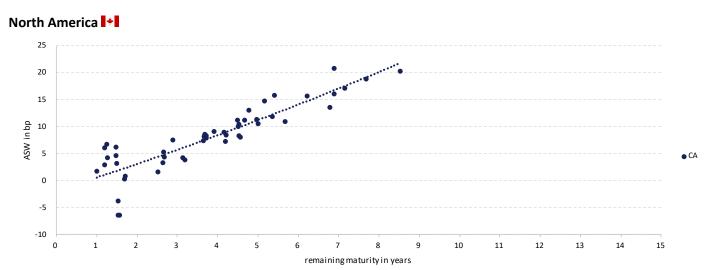


Source: Market data, Bloomberg, NORD/LB Markets Strategy & Floor Research







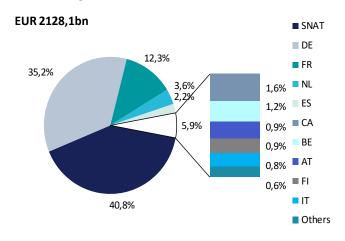


Source: Market data, Bloomberg, NORD/LB Markets Strategy & Floor Research



Charts & Figures SSA/Public Issuers

Outstanding volume (bmk)



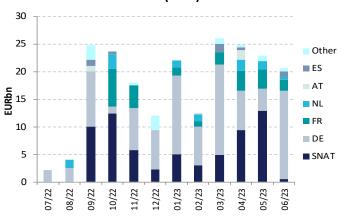
Top 10 countries (bmk)

Country	Vol. (€bn)	No. of bonds	ØVol. (€bn)	Vol. weight. ØMod. Dur.
SNAT	869,0	213	4,1	8,4
DE	749,8	567	1,3	6,6
FR	261,8	178	1,5	6,5
NL	77,2	69	1,1	6,6
ES	45,8	59	0,8	5,0
CA	33,2	22	1,5	4,9
BE	24,5	28	0,9	12,5
AT	20,2	23	0,9	4,7
FI	18,1	22	0,8	5,6
IT	16,0	19	0,8	5,3

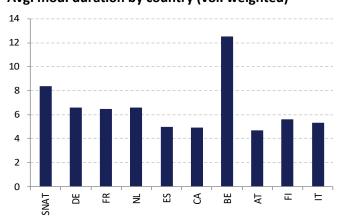
Issue volume by year (bmk)



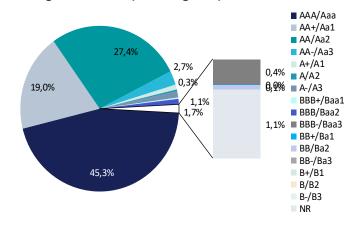
Maturities next 12 months (bmk)



Avg. mod. duration by country (vol. weighted)



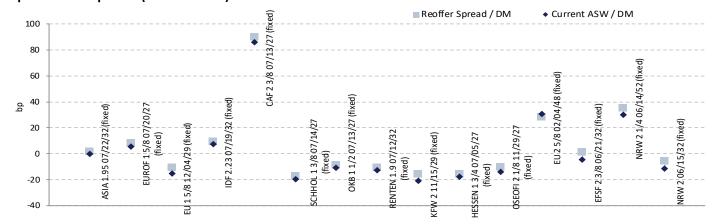
Rating distribution (vol. weighted)



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



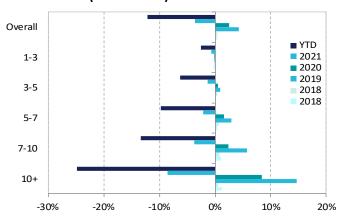
Spread development (last 15 issues)



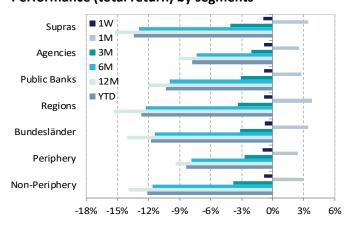
Spread development by country



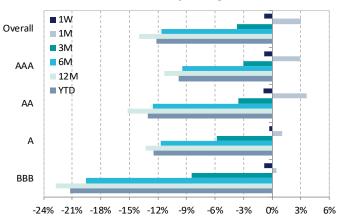
Performance (total return)



Performance (total return) by segments



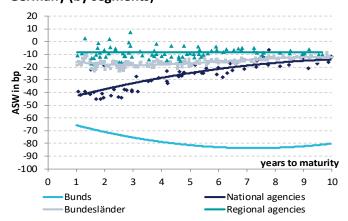
Performance (total return) by rating



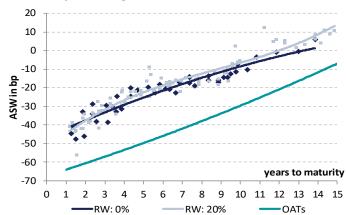
Source: Bloomberg, NORD/LB Markets Strategy & Floor Research



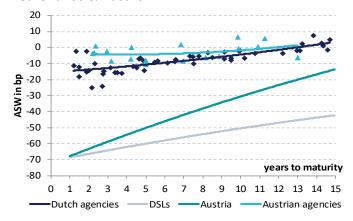
Germany (by segments)



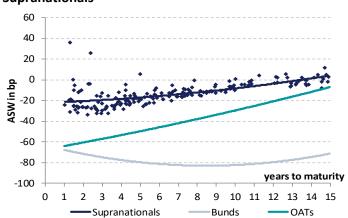
France (by risk weight)



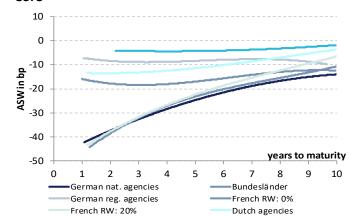
Netherlands & Austria



Supranationals

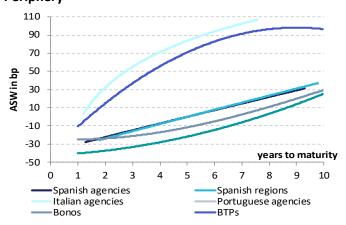


Core



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

Periphery





Appendix

Overview of latest Covered Bond & SSA View editions

Publication	Topics
23/2022 ♦ 13 July	ECB preview: might the ECB go slightly further?
	EBA Report on Asset Encumbrance: levels increasing
22/2022 ♦ 06 July	 H1 review and outlook for H2 2022
	 Half time in the 2022 SSA year – taking stock
21/2022 ♦ 22 June	 Focus on ESG covered bonds: BayernLB's "green rail" public sector Pfandbrief
	 Stability Council convenes for 25th meeting
20/2022 ♦ 15 June	Covered bond jurisdictions in focus: a look at Australia and New Zealand
	■ NGEU: Green Bond Dashboard
19/2022 ♦ 01 June	■ ECB: 3, 2, 1 – lift-off! Decisive June, active summer ahead
	The covered bond universe of Moody's: an overview
	 ECB Financial Stability Review identifies increasing risks in the eurozone: a brief overview of covered
	bonds
18/2022 ♦ 25 May	 Transparency requirements §28 PfandBG Q1 2022
	ESG: EUR-benchmarks 2022 in the SSA segment (ytd)
17/2022 ♦ 18 May	 Development of the German property market
	The SSA market in 2022 a review of the first four months
16/2022 ♦ 11 May	 Focus on covered bond jurisdictions: a look at Austria
	 Update on DEUSTD – Joint German cities (bond No. 1)
15/2022 ♦ 04 May	Focus on covered bond jurisdictions: Spotlight on Sweden
	 ESG covered bonds from Germany: DKB issues social Pfandbrief in the form of a "Berlin Social Housing
	Bond"
	 Issuer Guide SSA 2022: The Spanish agency market
14/2022 ♦ 13 April	First ECB meeting after the end of the PEPP: (Not) a non-event!?
	PEPP reporting: (Not) an obituary
13/2022 ♦ 06 April	 ECB adjusts order behaviour in time for the new quarter
	 United Kingdom: spotlight on the EUR benchmark segment
	Issuer Guide SSA 2022: the Nordic agency market
12/2022 ♦ 30 March	 An overview of the market for ESG covered bonds
	Issuer Guide SSA 2022: the Austrian agency market
11/2022 ♦ 23 March	■ ESG update 2022 in the spotlight
	 The ratings approach of DBRS
10/2022 ♦ 16 March	What does the recent ECB meeting mean for covered bonds?
	 Credit authorisations of the German Laender for 2022
09/2022 ♦ 09 March	■ Transparency requirements § 28 PfandBG Q4/2021
	Issuer Guide SSA 2022: The Dutch agency market
NOPD/LR·	NOPD/IR: NOPD/IR: Bloomberg:

NORD/LB: Markets Strategy & Floor Research NORD/LB:
Covered Bond Research

NORD/LB: SSA/Public Issuer Research Bloomberg: RESP NRDR <GO>



Appendix Publication overview

Covered Bonds:

Issuer Guide Covered Bonds 2021

Risk weights and LCR levels of covered bonds (updated semi-annually)

<u>Transparency requirements §28 PfandBG</u> (quarterly update)

Covered bonds as eligible collateral for central banks

SSA/Public Issuers:

<u>Issuer Guide – German Laender 2021</u>

Beyond Bundeslaender: Greater Paris (IDF/VDP)

Spotlight on Belgian regions

Spotlight on Spanish regions

Fixed Income Specials:

ESG-Update 2022

ECB ready for lift-off: Every journey starts with a first step

Face-saving ECB decision: Hawks have won – for now

ECB decision: PEPP benched for now, APP comes in as Point Guard

ECB holds course, but ups the ante – PEPP running until 2022



Appendix Contacts at NORD/LB

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Sales

Institutional Sales	+49 511 9818-9440
Sales Sparkassen & Regionalbanken	+49 511 9818-9400
Sales MM/FX	+49 511 9818-9460
Sales Europe	+352 452211-515

Origination & Syndicate

Origination FI	+49 511 9818-6600
Origination Corporates	+49 511 361-2911

Treasury

Collat. Management/Repos	+49 511 9818-9200
Liquidity Managament	+49 511 9818-9620
Liquidity Management	+49 511 9818-9650

Trading

Covereds/SSA	+49 511 9818-8040
Financials	+49 511 9818-9490
Governments	+49 511 9818-9660
Laender/Regionen	+49 511 9818-9550
Frequent Issuers	+49 511 9818-9640

Sales Wholesale Customers

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