



Covered Bond & SSA View

NORD/LB Markets Strategy & Floor Research





Agenda

Market	overview

Covered Bonds	3
SSA/Public Issuers	5
Return of the Australian covered bond market: National Australia Bank issues first EUR benchmark since 2019	7
ECB tracker	
Asset Purchase Programme (APP)	11
Pandemic Emergency Purchase Programme (PEPP)	16
Aggregated purchase activity under APP and PEPP	19
Charts & Figures	
Covered Bonds	20
SSA/Public Issuers	26
Overview of latest Covered Bond & SSA View editions	29
Publication overview	30
Contacts at NORD/LB	31

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Markets Strategy & Floor Research	Covered Bond Research	SSA/Public Issuer Research	RESP NRDR <go></go>



Market overview Covered Bonds

Author: Henning Walten, CIIA

A note for the diary: NORD/LB Capital Market Spotlight next Wednesday

The first half of 2021 is already behind us, and we would like to take this opportunity to look back briefly at the most important developments so far this year in the covered bond and SSA segments, as well as to look further ahead. To this end, we cordially invite you to join our NORD/LB Capital Market Spotlight (incl. Q&A) <u>next Wednesday from 2.30 pm</u>. If you are interested, please contact us at <u>event-markets@nordlb.de</u>. We look forward to seeing you there.

EUR benchmark segment I: three new deals

After a somewhat quieter primary market last week, three institutions have offered benchmark bonds in the past five trading days. CAFILL and KHFC used last Wednesday to place a fourth and first EUR benchmark of the current year respectively. While the French brought EUR 1.0bn for ten years to market, the South Koreans also raised EUR 1.0bn, but for five years. Like the four EUR benchmarks issued so far by KHFC, the latest transaction was also in the form of a social covered bond. As has been typical recently, both deals were only slightly oversubscribed, which was also reflected in the narrowing of two and three basis points respectively during the book-building process. At the beginning of the current trading week, Australia returned to the EUR benchmark market. The National Australia Bank ended a dry spell lasting more than two years in terms of EUR issues from Australia. A total of EUR 850m changed hands at ms +10bp. Here, too, the order book was only slightly above the final allotment. The three recently placed new issues from New Zealand have therefore certainly injected new life into the market Down Under (see article in this issue).

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Issuer	Country	Timing	ISIN	Maturity	Size	Spread	Rating	ESG
National Australia Bank	AU	28.06	XS2360589217	7.5y	0.85bn	ms +10bp	AAA / Aaa / -	-
KHFC	KR	23.06.	XS2355599353	5.0y	1.00bn	ms +18bp	-/-/AAA	Χ
CAFFIL	FR	23.06.	FR00140049N1	10.0y	1.00bn	ms +4bp	- / Aaa / AA+	-

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

EUR sub-benchmark segment I: Oberbank issues green EUR sub-benchmark

Last Thursday, Oberbank from Austria also issued a bond in the EUR sub-benchmark segment. While this is the third EUR sub-benchmark bond for the institution since its debut in this sub-market in May 2018, it was also its first own covered bond issue in ESG format. The EUR 250m green bond was also the first covered bond of its kind from Austria. Previously, Kommunalkredit Austria (07/2017) in the sub-benchmark segment and Hypo Tirol Bank (03/2021) in the benchmark segment had already placed covered bonds in social format on the market. The deal therefore not only extends the bank's portfolio, but also the range of sustainable covered bonds from Austria. We understand that this is only the fourth sustainable placement in the EUR sub-benchmark market, following one transaction each by Kommunalkredit Austria, Münchener Hypothekenbank and NORD/LB Luxembourg.

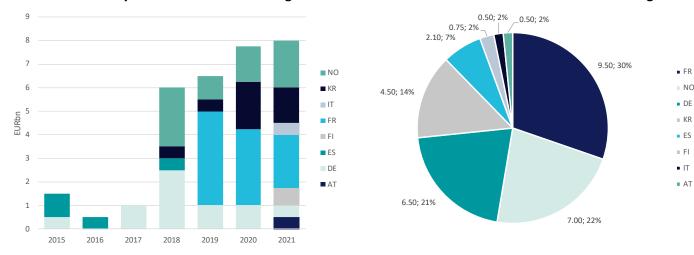


EUR benchmark segment II: ESG volume exceeds figure from 2020

With KHFC's social covered bond worth EUR 1.0bn, the volume of ESG placements in the EUR benchmark segment in 2021 now stands at EUR 8.0bn, meaning that the volume of the ESG record year 2020 (EUR 7.75bn) has already been surpassed. This trend is hardly surprising given the current push for sustainable issues, not only in the covered bond market. With six months remaining in the current year, the sub-segment is also likely to produce more deals and consequently increase in volume. The growth in terms of issuers and jurisdictions is also pleasing, offering investors with a sustainable focus a wider range of investment opportunities. Overall, we assume that the market for sustainable bonds will grow in significance and therefore size in the coming years and that covered bonds in the social, green and sustainable format will become an integral part of the EUR benchmark segment.

ESG: issuance history in the EUR benchmark segment

ESG: market overview of the EUR benchmark segment



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

EUR sub-benchmark segment II: 2021 volume exceeds previous year's figure

The above-mentioned placement by Oberbank takes the volume issued in 2021 in the EUR sub-benchmark segment to EUR 2.2bn, therefore already exceeding the issuance volume of the previous year (EUR 2.05bn). However, the volume issued via EUR sub-benchmarks in the current year is still significantly below the full-year figures of the past. In 2019 the volume came to EUR 3.8bn, while a value of EUR 3.6bn was recorded for 2018. The previous record year was 2017, when a volume of EUR 3.9bn in new issues was recorded. Although this sub-market only accounts for a fraction of the market for publicly placed EUR bonds, the smaller volumes and therefore lower liquidity certainly offer interesting investment opportunities.



Market overview SSA/Public Issuers

Authors: Dr Norman Rudschuck, CIIA // Henning Walten, CIIA

A note for the diary: NORD/LB Capital Market Spotlight next Wednesday

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Differing ideas on continuing PEPP flexibility

In contrast to the PSPP, the PEPP has a higher degree of freedom in terms of the purchase criteria, as seen, for example, in a higher deviation from the ECB's capital key. The handling of precisely those deviations, which we have calculated for our ECB Tracker for both the PSPP and PEPP, have once again been the subject of discussion by ECB officials. Fabio Panetta, for example, a member of the ECB Executive Board, has spoken positively about the flexibility used under the PEPP, especially with regard to compliance with the capital key, and argued that after the end of the PEPP (at the earliest at the end of March 2022), the PSPP should be given such flexibility, as the interim deviation from the ECB capital key has proved to be a useful tool. However, there has been some backlash to his comments: Jens Weidmann, President of the Bundesbank and member of ECB's Governing Council, has voiced some criticisms. And Isabell Schnabel, like Panetta a member of the ECB Executive Board, has also spoken out against it in the past. Although, as things stand, we assume that with the end of the PEPP and therefore the assessment that the coronavirus crisis is over the APP programmes will continue in their current form, the recent discussion shows that there are definitely opposing positions on this issue within the ECB and possible debates are likely over the months to come.

ESM/EFSF funding and investor newsletter

The quarterly investor newsletter of the ESM and EFSF celebrates its 40th issue, having been published continuously for ten years. It also provided us with plenty of information at the end of Q2. One section of the "Annual Report" that the ESM and EFSF are particularly proud of is their performance as an investor in the area of Environment, Social and Governance (ESG). A particular highlight was the signing of the United Nations-backed Principles for Responsible Investment, recognised as the leading global network for investors dedicated to integrating ESG aspects in their investment practices. The current ESG portfolio now amounts to EUR 4.5bn and has quadrupled since last year's report — this also equates to a tenfold increase since 2018. This growth is therefore significantly stronger than the growth of the purchasable market segment as such, which rose from EUR 171bn to EUR 484bn. This corresponds to a factor of 2.8 due to the self-imposed rules.



ESM/EFSF confirm funding plans for the rest of the year

Both players plan to be active in the primary market with bond issues in the third quarter and for the rest of the year — albeit with much lower values in total in Q3 than in Q2: cumulatively only EUR 4.0bn (of which EFSF with EUR 2.0bn and ESM with EUR 2.0bn). EFSF's funding target is EUR 500m lower than in the last quarterly newsletter, as more funding was raised in Q2. As planned, the second quarter was the period with the highest funding in 2021, as shown in the table below. In contrast to 2019 and previous years, we do not expect early repayments by individual eurozone states due to the pandemic, so funding requirements in crisis mode are likely to rise rather than fall. In Q4, the EFSF will as planned then no longer be represented on the market. As the ESM has come to market with EUR 2bn every quarter throughout the year, we also see enough scope here for further transactions by the European Union and its NGEU programme. ESM/EFSF are also planning on only two windows in the whole quarter due to the summer break. Therefore, we think there will be one issuer per window coming to the market. In addition, we are still waiting for the ESM's annual USD transaction to appear.

Long-term funding plan 2021 (EUR bn)

	Q1	Q2	Q3	Q4		Σ 2021
EFSF	7.0	7.5	2.0	-		16.5
ESM	2.0	2.0	2.0	2.0		8.0
ESM/EFSF	bond issuances	ESM Bill a	auctions (3M	, 6M and	12M)	
CW 27	July 05-(09	July	Tu 06	Tu 20	Tu 13
CW 38	September	20-24	August	Tu 03	Tu 10	Tu 17

September

Tu 07

Tu 14

Tu 21

Time window for...

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

Primary market

The most important primary market appearance in recent days was probably that of the EU on Tuesday. Its second NGEU appearance raised EUR 9bn for five years and EUR 6bn for 30 years. The order books were once again well above the allocation: EUR 88bn for the 5y bond and EUR 83bn for the 30y transaction. Pricing was three basis points tighter compared to guidance in both cases. Last Wednesday, Cassa Depositi e Prestiti (CDP) placed a social bond for EUR 500m and a term of eight years. The bond went to market twelve basis points above the reference bond (BTPS 3% 08/01/29). We also saw two transactions from Germany from the state of Brandenburg and Rentenbank. A total of EUR 1.0bn (RENTEN) and EUR 500m (BRABUR) changed hands for ten years in both cases, while the former deal was also placed in green format. We saw a large tap (EUR 1.25bn) from NRW (NRW 0% 04/02/24), while the Council of Europe Development Bank topped up its COE 0.375% 06/08/26 by EUR 100m.

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Issuer	Country	Timing	ISIN	Maturity	Size	Spread	Rating	ESG
EU	SNAT	29.06.	EU000A3KTGV8	5.0y	9.00bn	ms -11bp	AAA / Aaa / AA	-
EU	SNAT	29.06.	EU000A3KTGW6	30.0y	6.00bn	ms +22bp	AAA / Aaa / AA	-
BRABUR	DE	24.06.	DE000A289NQ8	10.0y	0.50bn	ms -3bp	- / Aaa / -	-
RENTEN	DE	23.06.	XS2359292955	10.0y	1.00bn	ms -8bp	AAA / Aaa / AAA	Χ
CDEP	Other	23.06.	IT0005451197	8.0y	0.50bn	ms +85bp	BBB-/-/BBB	Χ

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



Covered Bonds

Return of the Australian covered bond market: National Australia Bank issues first EUR benchmark since 2019

Author: Dr Frederik Kunze

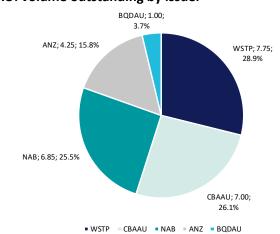
National Australia Bank stirs Australian covered bond market from its slumber

In May this year, New Zealand's ASB Finance became the first issuer from "Down Under" to place an EUR benchmark bond issue since 2019. We have since been asking ourselves when issuers from Australia would follow suit. National Australia Bank (NAB) has now become the first Australian financial institution to approach investors, ending the slumber mode in which the Australian EUR benchmark bond segment has found itself since 2019. We propose to take NAB's welcome presence in the market as an opportunity to provide a new assessment of the Australian sub-market and also an outlook for the second half of 2021. Although negative net supply is expected in view of the maturity profile for Australia in 2021, the primary market may see dynamic acceleration – something that recently occurred impressively in New Zealand.

Australian EUR benchmark segment – covered bonds outstanding worth EUR 26.85bn

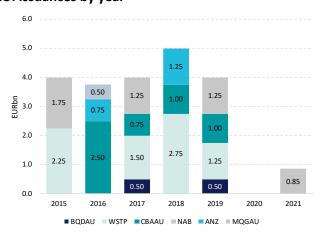
In Australia, five issuers currently have EUR benchmark bonds outstanding: Westpac Banking Group (WSTP, EUR 7.75bn, 8 bond issues), National Australia Bank (NAB, EUR 6.85bn, 7 bond issues), Commonwealth Bank of Australia (CBAAU, EUR 7bn, 7 bond issues), Australia & New Zealand Banking Group (ANZ, 4.25bn, 4 bond issues) and Bank of Queensland (BQDAU, EUR 1bn, 2 bond issues). In 2020, no primary market transactions were reported in Australia. Prior to this National Australia Bank deal, the Bank of Queensland was the issuer most recently active in the market when it placed an EUR benchmark bond issue on 23 May 2019 (EUR 500m, BQDAU 0 1/8 06/04/24). Since its last EUR benchmark issue matured in March this year (MQGAU 0 3/8 03/03/21), Macquarie Bank no longer has bonds outstanding in this format.

AU: volume outstanding by issuer



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

AU: issuances by year





Overview of Australian benchmark bond issuers (reference date: 31 May 2021)

Issuer¹	Cover pool volume (AUD m)	Total outstanding (AUD m)	No of loans (consolidated)	LTV (current/indexed)	Rating Moody's/S&P/Fitch/DBRS)	LCR Level Bmk / Risk weight
ANZ	16,102	10,095	52,707	59.86% / 53.72%	Aaa / - / AAA / -	2A / 20%
BQDAU	3,384	2,304	13,331	56.46% / 51.39%	Aaa / - / AAA / -	2A / 20%
CBAAU	27,628	26,829	108,952	53.50% / 45.52%	Aaa / - / AAA / -	2A / 20%
NAB	25,934	18,866	91,343	55.42% / 55.73%	Aaa / - / AAA / -	2A / 20%
WSTP	26.144	24.518	93,654	58.71% / 53.01%	Aaa / - / AAA / -	2A / 20%

Source: Issuers, rating agencies, NORD/LB Markets Strategy & Floor Research

Cover pools – only Australian cover assets

The covered bond programmes of the five active EUR benchmark bond issuers all have top ratings from Fitch (AAA) and Moody's (Aaa) and also feature excellent collateral scores from Moody's in an international comparison. All cover assets originate in Australia. With regard to both the LTV ratios and granularity of the cover assets, the cover pools of Australian issuers are comparable. In terms of the regulatory assessment, it should be noted in our opinion that the best possible features for overseas bond issues are achieved. The maturity structure is somewhat more differentiated. As a matter of fact, Australia is the only place where all three standard formats are currently used, i.e. soft bullet, hard bullet and conditional pass-through (CPT). ANZ has both hard and soft bullet covered bonds, whereas the Bank of Queensland is only active with the CPT format. CBAAU, NAB and WSTP are among the soft bullet issuers.

Australian covered bonds often placed in currencies other than the euro

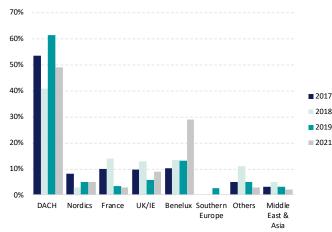
The five financial institutions analysed here also are among the active covered bond issuers with transactions denominated in currencies other than the euro. In fact, BQDAU (AUD 750m 05/2020), NAB (GBP 1.0bn 01/2020), WSTP (USD 1.75bn, 01/2020) and CBAAU (GBP 1.0bn, 01/2020) are four financial institutions with activities in forex markets during 2020. WSTP accounts for the highest volume of USD deals outstanding (USD 3.75bn), followed by CBAAU (USD 2.5bn) and NAB (USD 2.15bn). At present, CBAAU is the biggest issuer in the Australian GBP segment (GBP 1.75bn), followed by NAB (GBP 1.45bn). WSTP has the highest volume of publicly placed covered bonds in local currency (AUD 2.725bn), ahead of NAB (AUD 1.8bn). Issuances denominated in currencies other than the euro are therefore common in Australia and represented an important funding vehicle in 2020 - partly as a direct effect of uncertainty in the context of the start of the coronavirus crisis. The highest amount as a euro equivalent based on current rates was attributable to USD (EUR 7.05bn), with GBP accounting for EUR 5.76bn and AUD for EUR 5.52bn. The total FX market amounts to an equivalent of EUR 18.33bn. This means that the euro remains by far the most important currency measured in terms of the volume outstanding. We see this partly as the result of the significance of the EUR market on the investor side.

Investor structure in the EUR benchmark bond segment

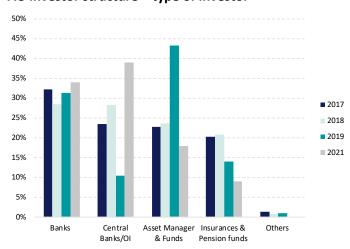
With regard to primary market allocation, in the past, the highest shares of EUR-denominated bond issues from Australia went to the DACH region. In the recent NAB deal, investors from Germany and Austria also accounted for the highest share allocated at 49%. In the ranking, the considerable weighting of Benelux investors (29%) is also striking. In terms of the types of investors, a significant share for banks is evident on average, with the share at a relatively steady level.







AU investor structure - type of investor

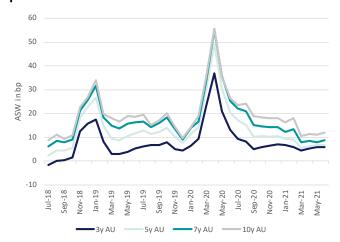


Source: Market data, NORD/LB Markets Strategy & Floor Research

Spread overview and yield curve

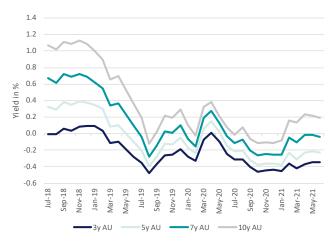
The widening of the ASW spread, observed also in Australia in the wake of the coronavirus crisis, decreased again relatively quickly – similar to what happened in other covered bond jurisdictions. In view of the fact that CBPP3 is restricted to EMU bonds, Australian covered bonds do not directly benefit from Eurosystem purchases. Nevertheless, the general spread level radiates to the overseas markets and consequently also to Australia. In our opinion, this is also reflected in current spread levels for covered bonds from Australia. In this context, the most recent benchmark bond issue from Australia seems remarkable to us. With a maturity of 7.5 years, the NAB bond deal just achieved a positive yield (issuing yield: +0.048%). Based on current Bloomberg screen prices, only bonds with a longer maturity have a positive yield in the Australian market. In the remaining months of this year, we expect a sideways movement in spreads.

Spread curve Australia



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

Yield curve Australia





Outlook for the Australian EUR benchmark bond segment – taking a backward step

As previously mentioned in May this year, the EUR benchmark bond segment in Australia is also set to shrink noticeably in 2021. In May, we assumed a primary market volume of EUR 1bn, having still expected EUR 2bn up to March 2021. The fact that NAB was successfully present in the market before the summer lull increases the forecasting risk regarding the EUR 1 bn amount – as we indicated in May. An amount of EUR 2bn now seems more probable again. At the same time, maturities amounting to EUR 5.5bn are due in 2021 as a whole. This means that if new bond issues worth EUR 2bn are launched, a negative net supply of EUR 3.5bn would arise.

Reserve Bank of Australia, COVID-19 and the Australian covered bond market

In the wake of the outbreak of the coronavirus pandemic, the Australian central bank, the Reserve Bank of Australia (RBA), also attempted to counteract potential distortions in the financial market and the resultant possible negative consequences in terms of liquidity and/or financing terms for the real economy. The instrument of the term funding facility (TFF), which was introduced in March 2020, represented a decisive element. Funding with a term of three years via the RBA was to reduce the interest rate for financing via commercial banks and provide incentives for the country's commercial banks (authorised deposittaking institutions, ADI) to finance SMEs in particular. In September 2020, the duration of the programme was extended (new end date of 30 June 2021) and in November 2020, the RBA decided to enhance the terms for any new TFF drawing (from 0.25% to 0.10%). As part of the latest RBA interest rate decision, the strength of Australia's economic recovery was emphasised, although downside risks still needed to be taken into account. With regard to the property markets, a recovery was also mentioned. In our view, this is to be assessed as a positive signal for the covered bond market and issuing behaviour. At the same time, the RBA pointed out the need to maintain lending standards for residential property as well. The RBA also indicated that AUD 134bn had been raised to date under the TFF and that a further AUD 75bn where available up until 30 June 2021. The end of the TFF may also have implications for Australia's covered bond market, although the maturity (3y) has no major relevance in the EUR benchmark bond segment. Nonetheless, the funding mix of financial institutions may be subject to sustained change in connection with lower customer deposits, in favour of public issues. It remains to be seen to what extent the liquidity increase in Australia's banking sector (via TFF and bond purchases by the RBA), observed since the pandemic started, will also have a sustained impact on the covered bond market. Ultimately, our expectation is that, in particular, access to the liquid EUR market combined with a dynamic property market represented an important unique feature of covered bonds in EUR benchmark format and will be so again.

Conclusion

National Australia Bank has brought the Australian EUR benchmark bond segment out of its slumber mode. Following a year of foreign currency transactions (i.e. non-EUR deals) only in 2020 and taking economic and monetary policy perspectives into account, we expect further bond issues in EUR benchmark format from Australia in 2021. Similar to the NAB deal, the focus is likely to be on placing longer maturities — not least in order to achieve a positive issuing yield. However, developing a new Australian curve is also likely to be a matter of concern to some financial institutions, having stayed away in recent years.

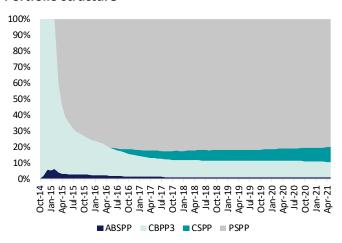


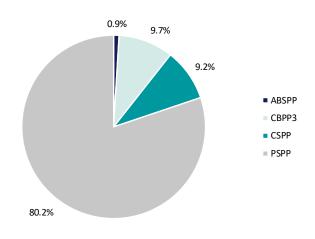
ECB tracker

Asset Purchase Programme (APP)

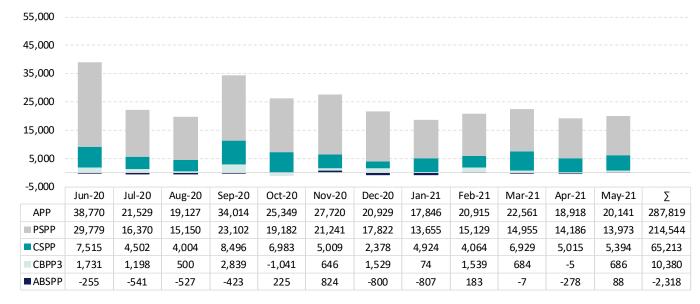
	ABSPP	CBPP3	CSPP	PSPP	APP
Apr-21	28,432	289,418	271,075	2,393,239	2,982,164
May-21	28,520	290,104	276,469	2,407,212	3,002,305
Δ	+88	+686	+5,394	+13,973	+20,141

Portfolio structure





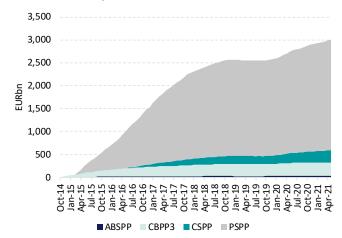
Monthly net purchases (in EURm)



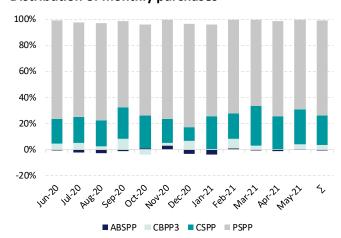
Source: ECB, NORD/LB Markets Strategy & Floor Research



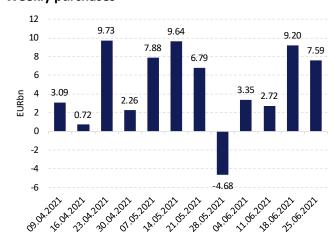
Portfolio development



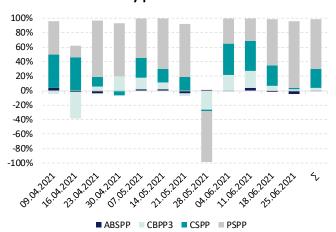
Distribution of monthly purchases



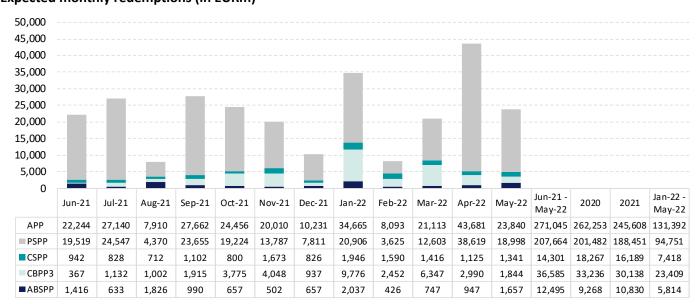
Weekly purchases



Distribution of weekly purchases



Expected monthly redemptions (in EURm)

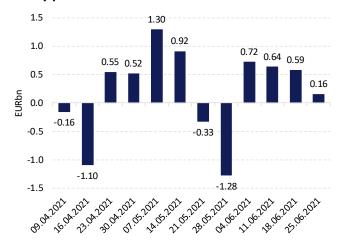


Source: ECB, Bloomberg, NORD/LB Markets Strategy & Floor Research

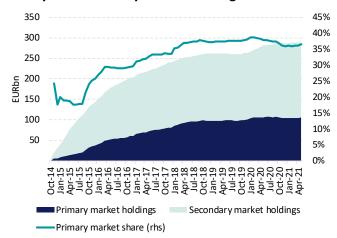


Covered Bond Purchase Programme 3 (CBPP3)

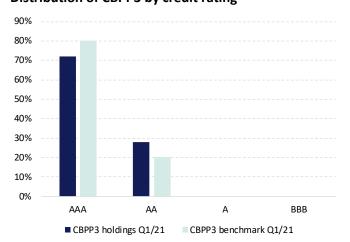
Weekly purchases



Primary and secondary market holdings

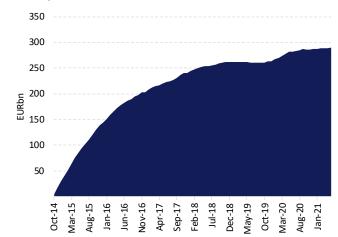


Distribution of CBPP3 by credit rating

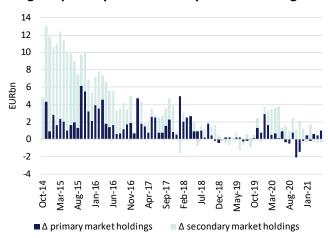


Source: ECB, Bloomberg, NORD/LB Markets Strategy & Floor Research

Development of CBPP3 volume



Change of primary and secondary market holdings



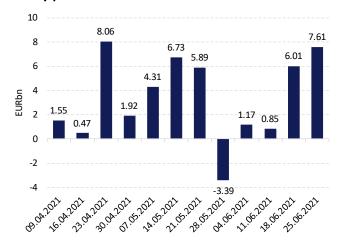
Distribution of CBPP3 by country of risk



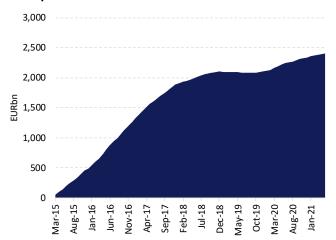


Public Sector Purchase Programme (PSPP)

Weekly purchases



Development of PSPP volume



Overall distribution of PSPP buying at month-end

Jurisdiction	Adjusted distribution key ¹	Purchases (EURm)	Expected purchases (EURm) ²	Difference (EURm)	Avg. time to maturity ³ (in years)	Market average ³ (in years) ³	Difference (in years)
AT	2.7%	71,167	68,471	2,696	7.5	7.6	-0.1
BE	3.4%	89,678	85,229	4,449	8.0	10.2	-2.2
CY	0.2%	3,677	5,034	-1,357	9.9	8.8	1.1
DE	24.3%	605,446	616,694	-11,248	6.6	7.6	-1.0
EE	0.3%	387	6,590	-6,203	9.2	7.5	1.7
ES	11.0%	299,019	278,961	20,058	8.0	8.4	-0.4
FI	1.7%	36,889	42,971	-6,082	6.9	7.7	-0.8
FR	18.8%	491,798	477,802	13,996	7.2	8.1	-0.9
GR	0.0%	0	0	0	0.0	0.0	0.0
IE	1.6%	39,118	39,615	-497	8.5	10.1	-1.6
IT	15.7%	425,346	397,425	27,921	7.1	7.9	-0.8
LT	0.5%	4,921	13,539	-8,618	10.2	10.6	-0.4
LU	0.3%	3,356	7,706	-4,350	5.6	7.2	-1.7
LV	0.4%	2,882	9,115	-6,233	11.3	10.4	0.9
MT	0.1%	1,259	2,454	-1,195	9.5	9.2	0.3
NL	5.4%	123,437	137,098	-13,661	7.7	9.0	-1.4
PT	2.2%	46,498	54,753	-8,255	7.0	7.2	-0.2
SI	0.4%	9,255	11,264	-2,009	9.9	10.2	-0.3
SK	1.1%	15,716	26,791	-11,075	8.2	8.3	-0.1
SNAT	10.0%	265,166	253,502	11,665	7.7	8.9	-1.2
Total / Avg.	100.0%	2,535,015	2,535,015	0	7.3	8.2	-0.9

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

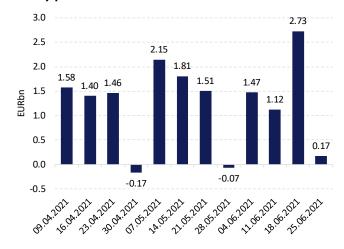
² Based on the adjusted distribution key

³ Weighted average time to maturity of the bonds eligible for purchasing under the PSPP (semi-annual data, Q1/2021) Source: ECB, NORD/LB Markets Strategy & Floor Research

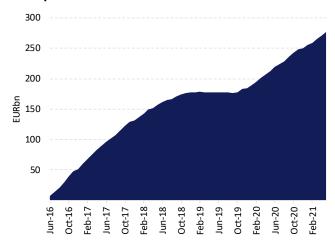


Corporate Sector Purchase Programme (CSPP)

Weekly purchases

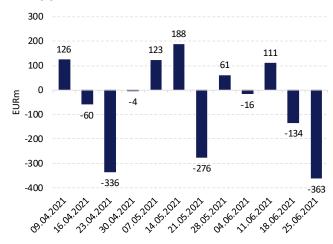


Development of CSPP volume



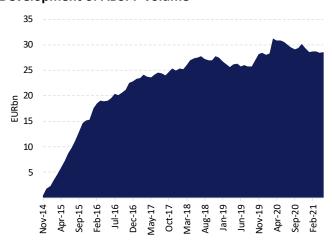
Asset-Backed Securities Purchase Programme (ABSPP)

Weekly purchases



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

Development of ABSPP volume

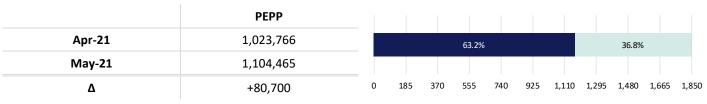




Pandemic Emergency Purchase Programme (PEPP)

Holdings (in EURm)

Volume already invested (in EURbn)



Estimated portfolio development

Assumed pace of purchases

Average weekly
net purchase volume

EUR 18.0bn

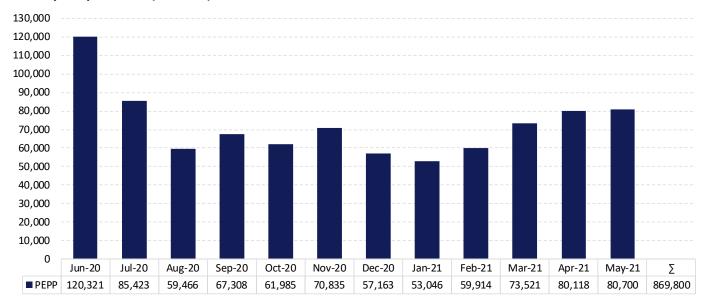
BUR 18.0bn

BUR 18.0bn

BUR 18.0bn

BUR 18.0bn

Monthly net purchases (in EURm)

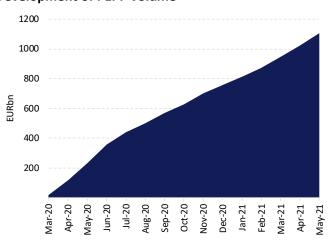


Weekly purchases



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

Development of PEPP volume

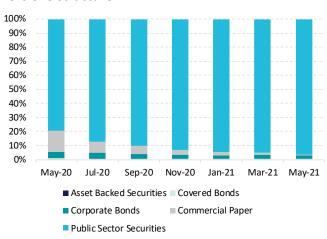


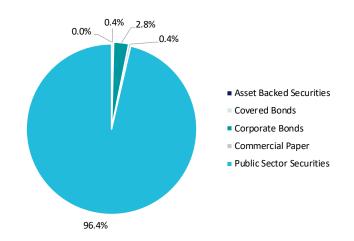


Holdings under the PEPP (in EURm)

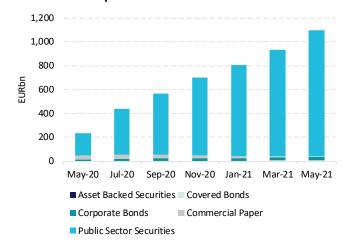
	Asset-backed Securities	Covered Bonds	Corporate Bonds	Commercial Paper	Public Sector Securities	PEPP
Mar-21	0	4,055	27,058	12,766	893,844	937,723
May-21	0	4,055	31,014	4,590	1,058,882	1,098,541
Δ	0	0	+3.956	-8.176	+165.038	+160.818

Portfolio structure

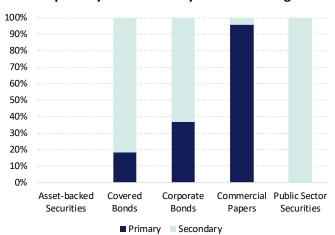




Portfolio development



Share of primary and secondary market holdings



Breakdown of private sector securities under the PEPP

May-21	Asset-backed securities		Covered bonds		Corporate bonds		Commercial paper	
	Primary	Secondary	Primary	Secondary	Primary	Secondary	Primary	Secondary
Holdings in EURm	0	0	745	3,310	11,431	19,583	4,397	193
Share	0.0%	0.0%	18.4%	81.6%	36.9%	63.1%	95.8%	4.2%

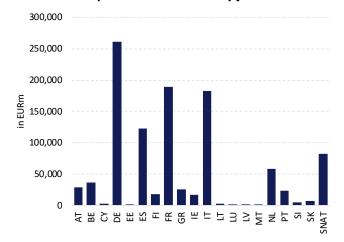
Source: ECB, Bloomberg, NORD/LB Markets Strategy & Floor Research



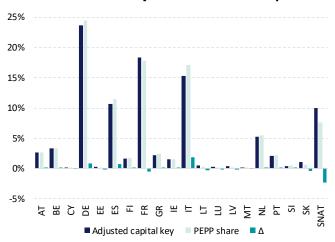
Breakdown of public sector securities under the PEPP

Jurisdiction	Holdings (in EURm)	Adj. distribution key ¹	PEPP share	Deviations from the adj. distribution key ²	ø time to maturity (in years)	Market average ³ (in years)	Difference (in years)
AT	28,731	2.6%	2.7%	0.1%	9.4	6.9	2.6
BE	36,086	3.3%	3.4%	0.1%	6.7	9.1	-2.5
CY	2,060	0.2%	0.2%	0.0%	9.7	8.3	1.4
DE	261,137	23.7%	24.5%	0.8%	6.1	6.8	-0.7
EE	255	0.3%	0.0%	-0.2%	9.0	7.3	1.7
ES	122,583	10.7%	11.5%	0.8%	8.3	7.6	0.7
FI	18,174	1.7%	1.7%	0.1%	7.3	7.5	-0.2
FR	189,672	18.4%	17.8%	-0.6%	8.5	7.7	0.8
GR	25,680	2.2%	2.4%	0.2%	9.5	9.9	-0.5
IE	16,770	1.5%	1.6%	0.1%	9.2	9.5	-0.3
IT	182,946	15.3%	17.2%	1.9%	6.9	7.0	-0.1
LT	2,505	0.5%	0.2%	-0.3%	11.1	9.9	1.2
LU	1,726	0.3%	0.2%	-0.1%	7.0	6.6	0.5
LV	1,344	0.4%	0.1%	-0.2%	9.8	9.7	0.1
MT	305	0.1%	0.0%	-0.1%	7.9	8.7	-0.8
NL	58,043	5.3%	5.5%	0.2%	6.0	8.4	-2.3
PT	23,730	2.1%	2.2%	0.1%	7.4	7.3	0.1
SI	4,838	0.4%	0.5%	0.0%	9.2	9.3	-0.2
SK	6,384	1.0%	0.6%	-0.4%	9.5	8.4	1.1
SNAT	81,801	10.0%	7.7%	-2.3%	10.4	8.4	2.1
Total / Avg.	1,064,769	100.0%	100.0%	0.0%	7.6	7.5	0.1

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 Weighted average time to maturity of the bonds eligible for purchasing 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
Apr-21	2,982,164	1,023,766	4,005,930
May-21	3,002,305	1,104,465	4,106,770
Δ	+20,141	+80,700	+100,841

Monthly net purchases (in EURm)

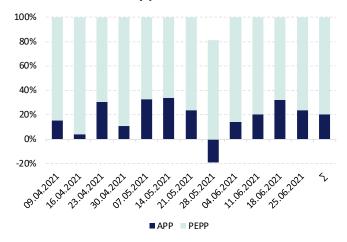


Weekly purchases



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

Distribution of weekly purchases



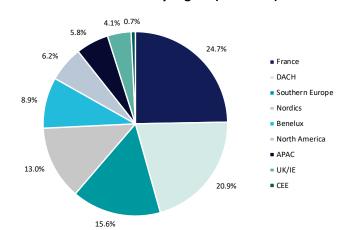


Charts & Figures Covered Bonds

EUR benchmark volume by country (in EURbn)

126.3; 14.1% 220.8; 24.7% = DE 30.3; 3.4% ■ ES 31.5; 3.5% = NL CA 33.5: 3.8% IT ■ NO 50.5; 5.6% ■ GB AT 51.7; 5.8% 153.1; 17.1% ■ SE Others 55.3; 6.2% 58.9; 6.6% 81.9; 9.2%

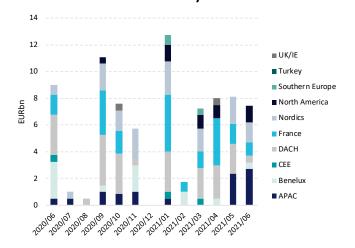
EUR benchmark volume by region (in EURbn)



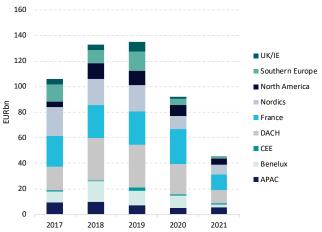
Top-10 jurisdictions

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	220.8	206	206	0.95	10.1	5.5	1.05
2	DE	153.1	229	229	0.60	8.4	4.7	0.43
3	ES	81.9	67	67	1.13	11.4	3.9	1.79
4	NL	58.9	60	60	0.93	11.3	7.3	0.90
5	CA	55.3	48	48	1.12	6.1	3.1	0.26
6	IT	51.7	60	60	0.83	9.1	4.1	1.41
7	NO	50.5	57	57	0.89	7.3	4.0	0.45
8	GB	33.5	39	39	0.89	8.6	3.5	1.02
9	AT	31.5	58	58	0.54	10.0	6.5	0.63
10	SE	30.3	36	36	0.84	7.5	3.6	0.44

EUR benchmark issue volume by month

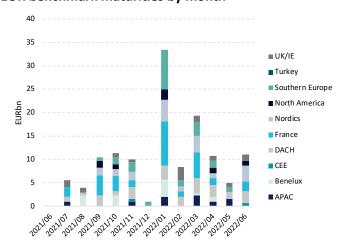


EUR benchmark issue volume by year

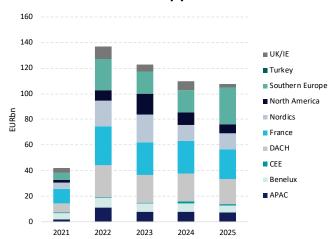




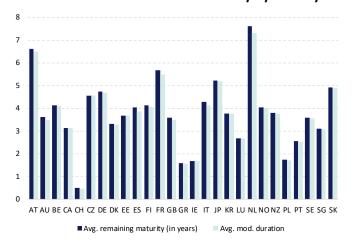
EUR benchmark maturities by month



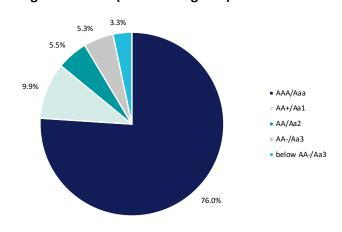
EUR benchmark maturities by year



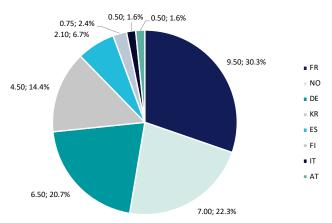
Modified duration and time to maturity by country



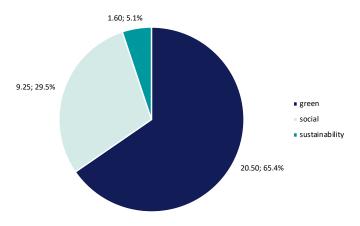
Rating distribution (volume weighted)



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

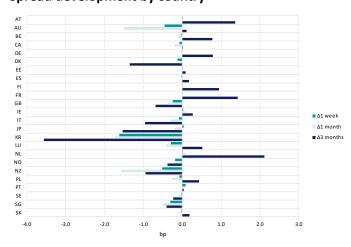


EUR benchmark volume (ESG) by type (in EURbn)

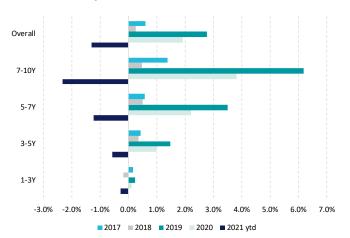




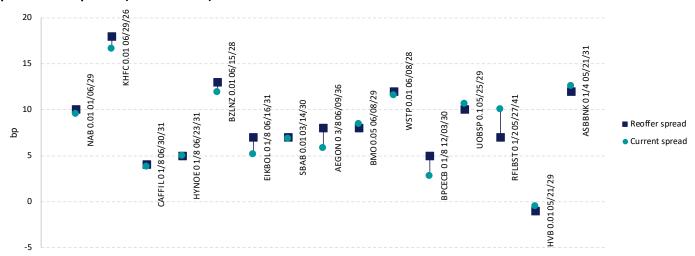
Spread development by country



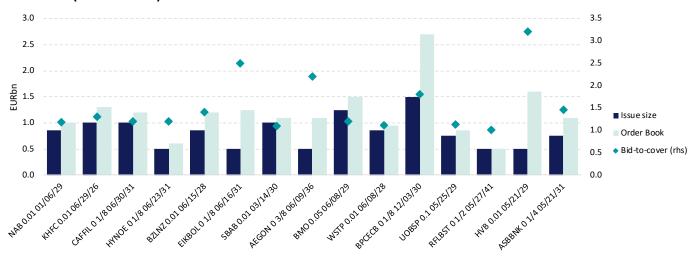
Covered bond performance (Total return)



Spread development (last 15 issues)

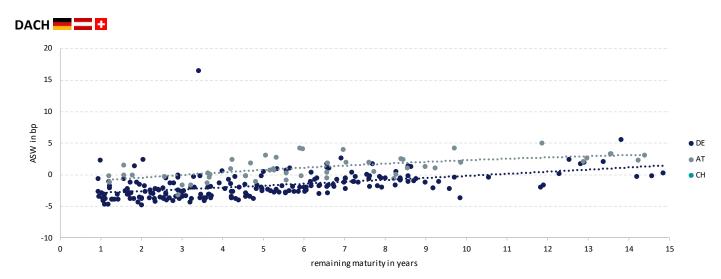


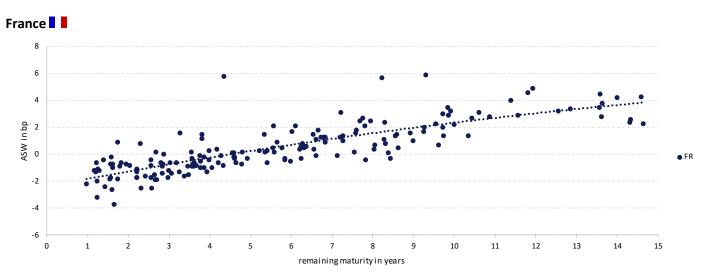
Order books (last 15 issues)

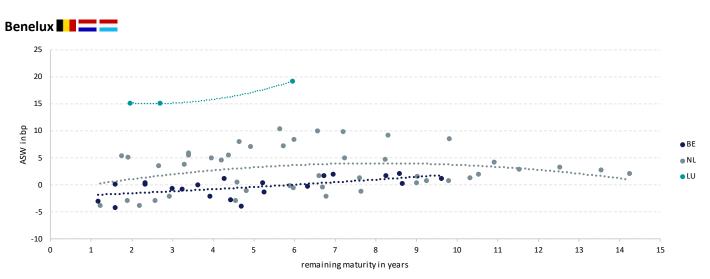




Spread overview¹

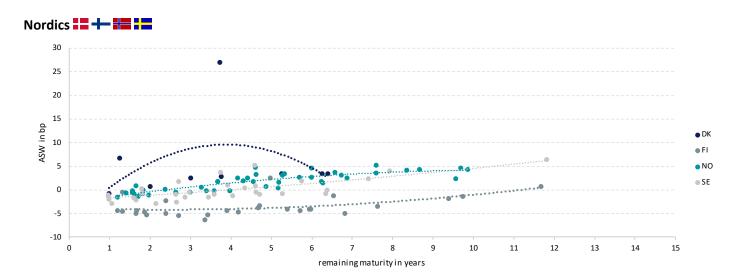


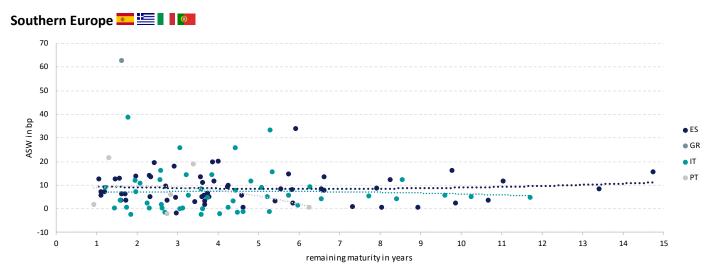


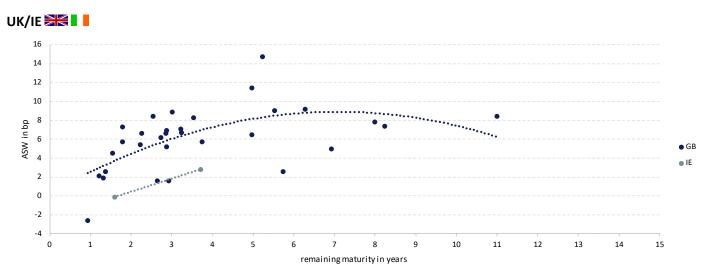


Source: Market data, Bloomberg, NORD/LB Markets Strategy & Floor Research 1 Time to maturity $1 \le y \le 15$

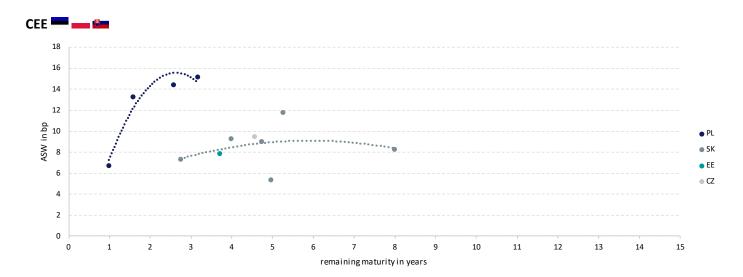


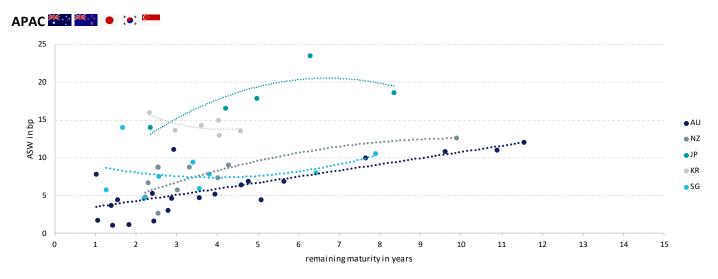


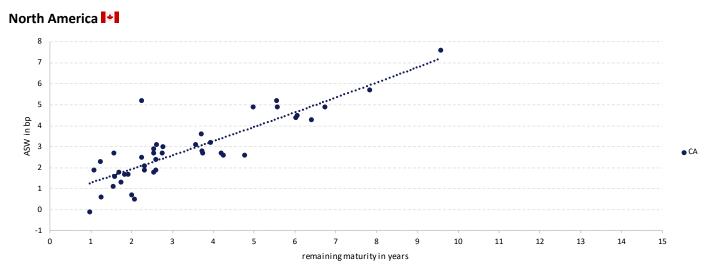








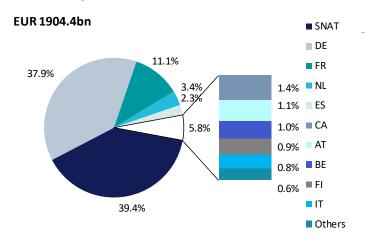






Charts & Figures SSA/Public Issuers

Outstanding volume (bmk)



Top 10 countries (bmk)

Country	Vol. (€bn)	No. of bonds	ØVol. (€bn)	Vol. weight. ØMod. Dur.
SNAT	750.8	191	3.9	8.5
DE	721.3	560	1.3	6.8
FR	211.8	141	1.5	5.6
NL	64.4	65	1.0	6.5
ES	44.7	55	0.8	5.3
CA	26.5	18	1.5	5.9
AT	21.8	23	0.9	5.0
BE	19.2	23	0.8	14.8
FI	17.0	22	0.8	5.8
IT	15.0	19	0.8	6.1

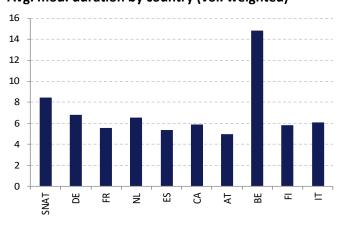
Issue volume by year (bmk)



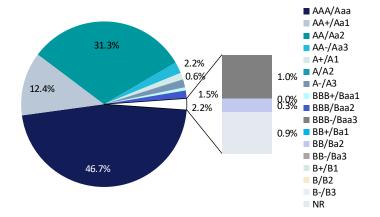
Maturities next 12 months (bmk)



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

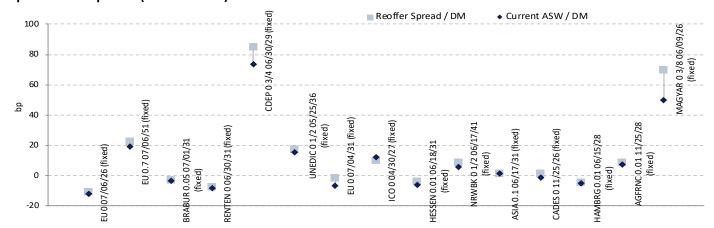


Rating distribution (vol. weighted)

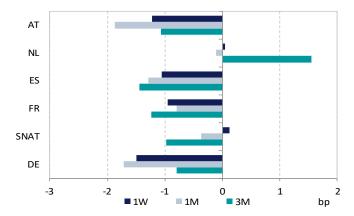




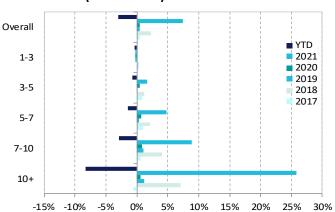
Spread development (last 15 issues)



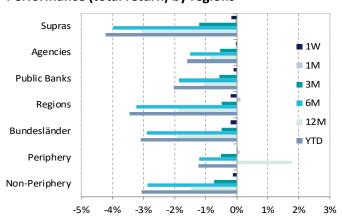
Spread development by country



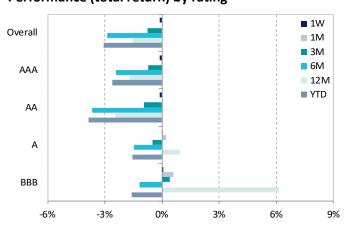
Performance (total return)



Performance (total return) by regions

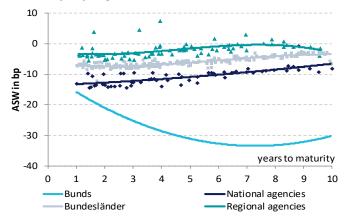


Performance (total return) by rating

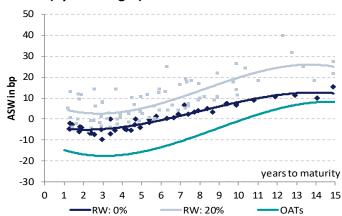




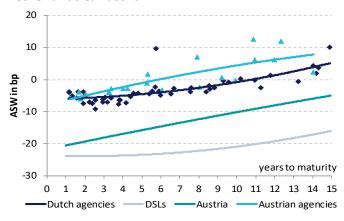
Germany (by segments)



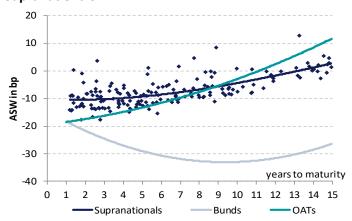
France (by risk weight)



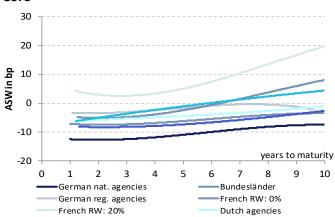
Netherlands & Austria



Supranationals

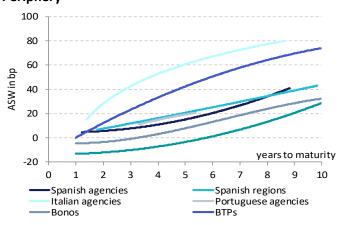


Core



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

Periphery





Appendix

Overview of latest Covered Bond & SSA View editions

Publication	Topics
22/2021 ♦ 23 June	 TLTRO III.8 neither really strong nor extraordinarily weak: implications for the covered bond market Realignment of the German real property tax
21/2021 ♦ 16 June	■ ICMA Green and Social Bond Principles: 2021 update
	The covered bond universe of Moody's: an overview Covered bonds vs. senior unsecured bonds
20/2021 ♦ 09 June	 PEPP reporting: increased pace of purchases in Q2
	Covered bonds vs. senior unsecured bonds
19/2021 ♦ 02 June	 ECB preview: Spectre of inflation fuelling tapering thoughts
	FX covered bonds: Same symptomatology as EUR benchmarks?
18/2021 ♦ 19 May	 United Overseas Bank reinvigorates the market in Singapore
	 Transparency requirements §28 PfandBG Q1 2021
17/2021 ♦ 12 May	ASB Finance opens primary market "Down Under": Our outlook for the rest of the year
	 Development of the German property market
16/2021 ♦ 05 May	Austria implements requirements of the covered bond directive and harmonises existing legal frameworkEIB goes Blockchain
15/2021 ♦ 28 April	EU Taxonomy meets the market for sustainable covered bonds
14/2021 ♦ 22 April	LCR levels and risk weights of EUR benchmarks
	 NextGenerationEU: NGEU is taking shape
13/2021 ♦ 14 April	Predominant ECB strategy: wait-and-see but remain proactive
	 PEPP reporting: First year done; a second (at least) now follows
	 OSFI abandons temporarily increased 10% limit with immediate effect: (in)direct implications for Canadian benchmarks
12/2021 ♦ 31 March	 Unusual Q1 and revised supply forecast for 2021
	■ Collective Action Clauses (CACs)
11/2021 ♦ 24 March	 Surprising dynamic: Eurosystem lends EUR 331bn to EMU banks via TLTRO III.7
	 German Pfandbrief savings banks in Q4 2020
10/2021 ♦ 17 March	■ Transparency requirements §28 PfandBG Q4/2020
	 Credit authorisations for German Bundeslaender in 2021
09/2021 ♦ 10 March	■ Moody's covered bond universe – an overview
	 Oldenburgische Landesbank expands sub-benchmark segment
08/2021 ♦ 03 March	Repayment structures on the covered bond market
	 ECB in a tight spot: litmus test for PEPP flexibility and preview of the second interest rate meeting of the year
07/2021 ♦ 24 February	An overview of the EUR sub-benchmark segment
	■ ECB: crowding-out effects take hold
	PEPP vs. PSPP: Similarities and differences

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

NORD/LB:

Bloomberg: RESP NRDR <GO>

Covered Bond Research SSA/Public Issuer Research



Appendix Publication overview

Covered Bonds:

Issuer Guide Covered Bonds 2020

Risk weights and LCR levels of covered bonds

Transparency requirements §28 PfandBG

Transparenzvorschrift §28 PfandBG Sparkassen (German only)

SSA/Public Issuers:

Issuer Guide - Supranationals & Agencies 2019

Issuer Guide – Canadian Provinces & Territories 2020

Issuer Guide - German Bundeslaender 2020

Issuer Guide - Down Under 2019

Fixed Income:

ESG update

Analysis of ESG reporting

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

ECB launches corona pandemic emergency

ECB responds to corona risks



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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 Management	+49 511 9818-9620
Elquidity 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

Firmenkunden	+49 511 361-4003
Asset Finance	+49 511 361-8150



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Additional information

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None

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Positive: Positive expectations for the issuer, a bond type or a bond placed by the

Neutral: Neutral expectations for the issuer, a bond type or a bond of the issuer.

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Breakdown of recommendations (12 months)

Positive: 37% Neutral: 55%

Negative: 8%

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Issuer / security Date Recommendation Bond type Cause

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