



Covered Bond & SSA View

NORD/LB Markets Strategy & Floor Research





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NORD/LB:NORD/LB:NORD/LB:Bloomberg:Markets Strategy & Floor ResearchCovered Bond ResearchSSA ResearchRESP NRDR < GO>



Market overview Covered Bonds

Analyst: Henning Walten, CIIA

No new EUR benchmark issues

No new deals were recorded in the EUR benchmark segment over the past five trading days, although Caja Rural de Navarra did bring a tap issue to market. The Spanish bank increased its sustainable covered bond CRUNAV 0.875 05/08/25 by EUR 100m at ms +25bp, pushing the outstanding volume of this deal (listed under the ISIN ES0415306069) up to EUR 600m in the process. This brings the volume of ESG bonds (including taps) issued so far this year to EUR 7.85bn, which already outstrips the level recorded in the prior year (EUR 6.5bn) by more than EUR 1.0bn. Moreover, since the summer break ended, a further two issuers, namely Berlin Hyp and SpareBank 1, have offered new deals to investors in ESG format. The market for sustainable covered bonds is therefore maintaining its growth trajectory and has already set a new issuance record. In addition, Deutsche Pfandbriefbank was active in the foreign currency market, placing a GBP benchmark with a volume of GBP 500m. The floater with a maturity of three years went to the market with guidance of SONIA +43bp, although the deal was ultimately priced five basis points tighter at SONIA +38bp on account of decent demand (final order book: GBP 1.7bn). Canada's Desjardins also started investor calls yesterday (Tuesday) for a 3-year USD transaction, which is likely to be placed in the near future.

	Issuer	Country	Timing	ISIN	Maturity	Volume	Spread	Rating
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Source: Bloomberg, NORD/LB Markets Strategy & Floor Research (Rating: Fitch / Moody's / S&P)

Another EUR benchmark issuer from Japan in the starting blocks

Another issuer from Japan, Sumitomo Mitsui Trust Bank, has announced it is entering the EUR benchmark segment. At the start of the week, the bank mandated a consortium to hold investor calls as of today, Wednesday, for an inaugural EUR benchmark in the form of a 7-year deal. Alongside Sumitomo Mitsui Banking Corp. (SMBC), with which it has no equity links despite the similar names, Sumitomo Mitsui Trust Bank will become only the second Japanese bank to be active in the market for EUR-denominated benchmark bonds. As with SMBC, the new deal will be a contractual covered bond. This is because Japan has still yet to adopt any covered bond legislation for the time being. Rating agency Moody's also already assigned a preliminary rating of Aaa to the forthcoming issue.



ECB amends list of eligible collateral

The European Central Bank has announced that it has amended its collateral framework with effect from 1 January 2021. Accordingly, in terms of covered bonds, only legislative covered bonds and multi-cédulas will still be eligible as collateral from the new year onwards. In contrast, non-legislative covered bonds (i.e. contractual covered bonds) will no longer be accepted as collateral by the central bank. Consequently, with regard to covered bond securities, only legislative covered bonds from the European Economic Area (EEA) or the group of G10 States will be eligible as collateral with the ECB in future. The actual impact of this change, however, is likely to be limited as there are very few contractual covered bonds from the EEA or G10 group in the EUR benchmark segment. In addition to EUR benchmarks from Japan (4 issues which are currently not eligible anyway due to the underlying RMBS transactions used for coverage) and Switzerland (4), we understand the new regulation only affects the CPT deal from Deutsche Bank (DE000DL19U15), since these bonds were issued on a contractual basis (see NORD/LB Covered Bond Special - risk weights and LCR levels of covered bonds starting on p. 23). In addition to Deutsche Bank's CPT bond, the list of currently eligible assets only includes the two EUR benchmarks from Credit Suisse. These bonds will therefore no longer be accepted as collateral by the central bank as of the new year.

TLTRO-III.5: EUR 174.5bn allocated

The <u>fifth round</u> of the TLTRO-III tender has ended with around EUR 174.5bn allocated to 388 bidders. The funds fall due on 27 September 2023 at the latest, but can be repaid early on a voluntary basis at the end of each quarter from September 2021 onwards. The figure shows that banks requested more central bank liquidity than had previously been expected. According to our calculations, the interest rate for borrowing TLTRO-III.5 funds can drop down to -0.87% (preferential interest rate and early repayment in September 2021). However, in the base case scenario without preferential interest rates, the costs lie between -0.39% (early repayment in September 2021) and -0.17% (repayment on final maturity) and in some cases is therefore likely to have made borrowing central bank liquidity more attractive again than market funding. Moreover, as of 30 September, voluntary repayments amounting to EUR 10.9bn were made under the TLTRO-II tender, EUR 5.1bn under TLTRO-II.3 and EUR 5.8bn under the TLTRO-II.4 tender.



Market overview SSA/Public Issuers

Analyst: Dr Norman Rudschuck, CIIA

EIB increases funding leeway for rest of year

The European Investment Bank announced last Thursday that it has increased its borrowing authorisation, i.e. the maximum possible funding volume, for 2020 by EUR 5bn from EUR 65bn to EUR 70bn. This is intended to take account of the funding activity that has already taken place since the start of the year, on the one hand, and increase the leeway for possible pre-funding for 2021 on the other. As of 18 September, the EIB had already raised EUR 63.4bn, significantly restricting its scope for further issues up to the end of 2020. This latest adjustment to the funding volume ceiling should therefore also be seen in this context and does not constitute a binding funding target in any way.

Numerous ESG deals in the primary market

Once again, there were some primary market deals to discuss over the past five trading days. The autonomous community of Galicia, a rare visitor to the market for EUR benchmarks, kicked off the action. The EUR 500m 7-year deal also marked the Spanish issuer's debut in the sustainable bond segment and recorded an order book of EUR 1.8bn. The bond was placed in the market at the equivalent of about ms +44bp. Apart from this latest issue, the Spanish region only has one other EUR benchmark outstanding at the moment (JUNGAL 2.95 04/10/21). At the start of the current trading week, BERGER launched another tap issue. At EUR 400m, the volume was significantly larger than the previous tap deal carried out on 17 September (EUR 250m). The deal was placed at ms +23bp and increased BERGER 0.35 09/09/50 (EUR 600m; 30y; ms +27bp) which was only issued at the start of the month. Interest on the part of investors amounted to EUR 675m. BNG Bank from the Netherlands was also active on Monday, placing a EUR 1.0bn benchmark bond in the market. The 12-year deal was priced at ms +8bp, after amassing an order book totalling EUR 1.5bn. As with the deal from JUNGAL, this deal was issued as a sustainable bond. Another tap from KfW followed on Tuesday, increasing its green bond from July (EUR 3.0bn; 8.1y; ms -13bp) by EUR 1.0bn at ms -12bp. The final order book amounted to EUR 2.4bn. CADES from France also approached investors yesterday and issued a EUR 5.0bn social bond with a maturity of 7 years. The deal, which went to the market at around ms +8bp, met with strong demand of EUR 12bn and was therefore more than two times oversubscribed. The Bundesland of North Rhine-Westphalia is also about to issue a deal in the form of a sustainable bond and is holding an investor call this Wednesday, following which a deal is expected to be placed in EUR benchmark format.

Issuer	Country	Timing	ISIN	Maturity	Volume	Spread	Rating
CADES	FR	29.09.	FR00140002P5	7.4y	5.00bn	ms +8bp	AA / Aa2 / -
BNG	NL	28.09.	XS2240278692	12.0y	1.00bn	ms +8bp	AAA / Aaa / AAA
JUNGAL	ES	24.09.	ES0001352592	7.0y	0.50bn	ms +44bp	-/-/-

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



Covered Bonds Cover pool characteristics – international comparison

Analyst: Henning Walten, CIIA

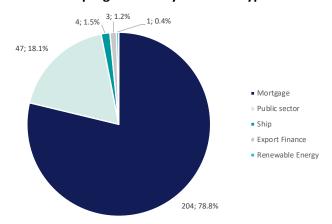
Market overview on the basis of cover pool data collated for the Issuer Guide

In the following article, we shall provide an overview of cover pool data based on extensive data which we collated when preparing the <u>Issuer Guide Covered Bonds 2020</u>. The starting point for our analysis is the cover pool report compiled by those issuers who had at least one outstanding EUR-denominated benchmark or sub-benchmark bond as at 31 July 2020. In individual cases, we have chosen not to include every single one of an issuer's cover pools in our Issuer Guide; in such cases, we have chosen instead to focus on the cover pools which we deemed to be relevant. The cover pool data in question always relates to the cover pool report available at the time of writing the Issuer Guide, which can in some cases lead to differences in reporting dates. Overall, the insights into the covered bond market below are based on data relating to 259 cover pools from 27 jurisdictions amounting to the equivalent of around EUR 3,200bn, which is offset by outstanding covered bonds amounting to EUR 2,200bn.

Bulk of the programmes are mortgage cover pools

Around 80% (204) of the programmes analysed are defined as being mortgage cover pools. Roughly a further 20% are cover pools backing public sector covered bonds. Ship covered bonds in contrast are still a niche market. Moreover, programmes consisting exclusively of loans which come under the export finance heading were only found in the case of three issuers in Spain. Luxembourg is another exception since the legal framework in this jurisdiction expressly stipulates that cover pools can be created to secure green covered bonds, whereas there is no such distinction in the remaining jurisdictions and ESG deals are backed by the original cover pool, which also forms the cover pool for traditional issues.

Breakdown of programmes by collateral type



Distribution of programme types by country



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



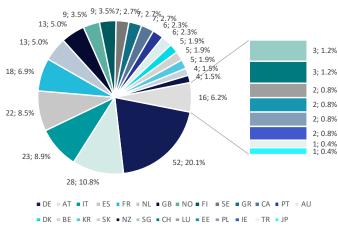
Overall, 17 jurisdictions exclusively feature mortgage cover pools

An analysis of the type of cover in the covered bond programmes shows that the majority of jurisdictions (17) have mortgage covered bond programmes only. Of the remaining ten jurisdictions, as many as eight have both mortgage and public sector covered bonds, whereby Germany also has programmes for the issue of ship Pfandbriefe and Spain has export finance programmes launched separately, as already mentioned. Other special cases are Denmark, which, apart from mortgage programmes, is the only jurisdiction along with Germany to have a ship programme, and Luxembourg, which not only has a public sector pool but also a renewable energy pool, as outlined above as well.

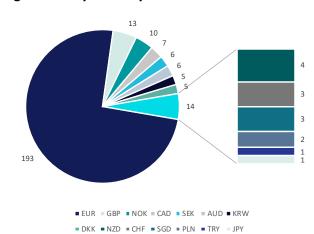
A total of 20% of programmes based in Germany

Since the graph above of existing programme types by country shows the relative distribution within the respective country, it also makes sense to look at the absolute number of programmes per jurisdiction. From the left-hand side graph below, it appears that Germany (52) and Austria (28) have the largest number of programmes, reflecting the fact that many issuers in these two countries are active in the market for EUR benchmark and subbenchmark bonds and that these issuers often have both programmes for the issuance of mortgage covered bonds and for public sector covered bonds. Together with Italy, Spain and France, these jurisdictions account for more than half of all the cover pools included in our Issuer Guide. It is hardly surprising, therefore, that covered bonds are a product with a strong European focus.

Share of programmes by country



Programmes by currency area



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

Reporting currency is the euro in 75% of cases

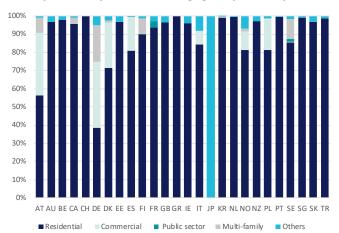
The European focus is even clearer if the currency used in the cover pool report is taken into account: 75% of cover pool reports are based on the euro. At the same time, it is important to bear in mind that the figure does not allow any conclusions to be drawn on the denomination of the underlying assets or on the outstanding bonds, even if eurozone issuers often have a large proportion of EUR-denominated assets and EUR bonds.



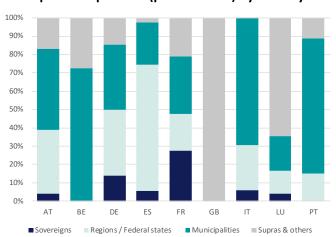
Mortgage programmes with a strong bias towards residential mortgages

As mentioned before, the majority of programmes are mortgage programmes. In view of differences in national legal frameworks regarding which assets are eligible as cover assets, it is worth taking a look at the cover assets included in these programmes. Once again, there is a clear focus. The average share of residential assets in 18 jurisdictions stands at over 90%. Japan, which is currently represented by just one issuer, is a special case in this respect: although the assets in question are residential, they are included in the cover pool in the form of RMBS. In contrast, in the 18 jurisdictions, cover is provided by mortgage loans. In the cases where the residential cover average is below 90%, this reflects a significant proportion of commercial real estate financings or multi-family assets.

Cover pool composition (mortgage) by country



Cover pool composition (public sector) by country



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

Public sector: high proportion of claims on local authorities

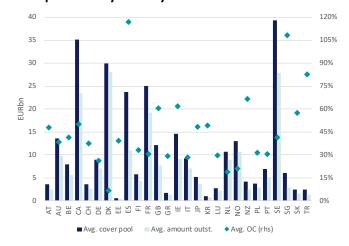
In the case of the nine jurisdictions with public sector programmes, our analysis shows that most cover assets involve claims against local authorities (municipalities), followed by loans to regional authorities. In contrast, claims against other public debtors and sovereigns play a secondary role in the major covered bond jurisdictions.

Large cover pools in Sweden, Canada, Denmark, France and Spain

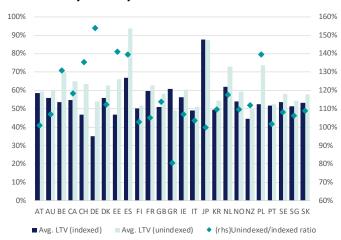
With regard to the size of cover pools, it is fair to say that there mostly tends to be huge variation. Whereas the average cover pool size in Sweden is the equivalent of EUR 39.4bn, the figure in Estonia – a young market with just one benchmark and one sub-benchmark issuer – stands at a mere EUR 522m. There are also fairly large cover pools in Canada, Denmark, France and Spain, while Estonia, South Korea and Greece show small cover pools. In the case of South Korea, this reflects the fact that each EUR benchmark bond issued by KHFC is secured by its own cover pool, among other factors. As regards average overcollateralisation, programmes based in Spain and Singapore stand out. This is due to the fact that the OC ratio in these cases is on average more than double, whereas the average OC of the five Danish programmes is only 6.4%.



Cover pool size by country



LTV ratios by country



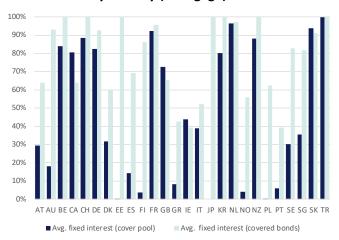
Source: Issuers, NORD/LB Markets Strategy & Floor Research

Indexed LTV as indicator of price trend

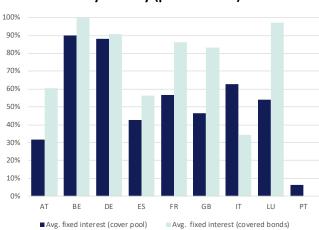
LTV ratios are also a basic component of cover pool reports and therefore also suitable in an international comparison. First of all, it is important to make a distinction between the unindexed LTV, which is calculated when a loan is granted, and the indexed LTV, which aims to reflect the price trend in the property market. It is also important to take into account the fact that LTV limits depend on the respective national legislation which means not only that the concept to calculate the value of a property will vary from one jurisdiction to another (e.g. using market values or mortgage lending values), but also that the issue of eligibility of cover assets with regard to LTV limits will vary. Under certain circumstances, loans with an LTV in excess of the LTV limit can still be included in full in the cover pool, but then only contribute to the cover up to the corresponding limit or they may only be eligible as cover up to a certain percentage (up to the LTV limit), and they contribute in full to the cover. Another problem in the analysis of LTV ratios in the form of indexed LTVs is the time at which the LTV was first determined. The change in the indexed LTV in relation to the unindexed LTV can fundamentally be used as an indicator of the evolution of market prices. In this instance, differences in the dating of the unindexed LTVs hamper a comparison across country and in some cases also impedes pool limits. Even so, we believe that the data is indicative enough to provide an overview of LTV levels. For example, relatively low ratios in Germany reflect the conservative valuation approach using the mortgage lending value. Conversely, the high ratio between the two ratios is a reflection of the rise in property prices in Germany over the last few years. In contrast, LTV ratios are relatively high in Spain, the Netherlands and Japan, among other countries (in the case of Japan, the unusual feature of RMBS as cover has to be taken into account). Polish and Belgian programmes also have average unindexed LTVs of just over 70%. Moreover, only two jurisdictions, Greece and Japan, have an indexed to unindexed LTV ratio of under 100%.



Fixed interest by country (mortgage)



Fixed interest by country (public sector)

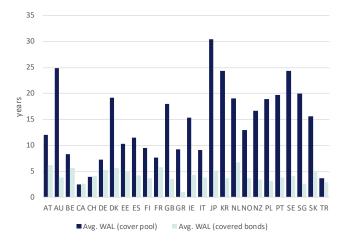


Source: Issuers, NORD/LB Markets Strategy & Floor Research

Varied levels of fixed-interest loans in the cover pools

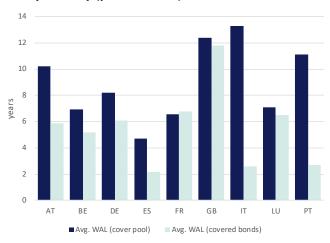
A look at the percentage of fixed-rate assets in the cover pool/the proportion of fixed-rate issues also provides key insights into the covered bond market. In this analysis, it is worth remembering that EUR benchmark/sub-benchmark transactions are almost exclusively issued at a fixed rate, whereas retained covered bond issues, which are used, for example as collateral in the context of repo transactions, frequently have a variable rate. A high proportion of fixed-rate issues can therefore often hint at a high proportion of benchmark deals in the volume outstanding, but could also be a reflection of other investor preferences, e.g. in foreign currencies. In New Zealand, for example, all outstanding covered bonds have a fixed coupon since they involve almost exclusively EUR benchmark transactions. In contrast, a small proportion of fixed-rate cover assets for example in Poland, Norway and Estonia points to the preferred format of loans of the national market.

WAL by country (mortgage)



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

WAL by country (public sector)





Residual maturity of assets frequently exceeds covered bond maturity clearly

Together with an analysis of the proportion of fixed-rate assets and issues within a programme, a comparison of the weighted average life (WAL) can throw up potential mismatches and hence potential risks within a programme arising from changes in interest rates. It is immediately obvious that cover assets in Japan, Australia and Sweden have comparatively high residual maturities, whereas both assets and issues especially in Canada, Switzerland and Turkey have short residual maturities. Moreover, in most jurisdictions, the average residual maturity of assets exceeds that of covered bonds by a long way – a fact which has to be seen as positive from the point of view of investors, since it means that, in the event of recourse to the cover pool, there would be sufficient assets exceeding the maturity of the covered bond issues. An analysis of public sector programmes shows a similar picture, even though in this case, the differences are often less pronounced.

Conclusion

Although the above insight into the characteristics of cover pools was based on an average view, meaning that there could therefore certainly be significant deviations in the case of some individual cover pools, we are of the opinion that, in spite of this fact, it is definitely possible to make out national characteristics in relation to cover pool features and this can provide added value in the assessment of covered bond programmes. Although the available data is incomplete and issuers outside the EUR benchmark/sub-benchmark segment have not been taken into account, the analysis still covers a large part of the covered bond market with a total of 259 programmes amounting to the equivalent of EUR 3,200bn. At the same time, it is worth bearing in mind that the underlying cover pool reports date from the first half of 2020 and therefore that, in certain circumstances, they may only partly reflect the latest market developments for example in the form of a massive issue of retained bonds for the purpose of generating collateral for liquidity transactions with central banks (especially the ECB).



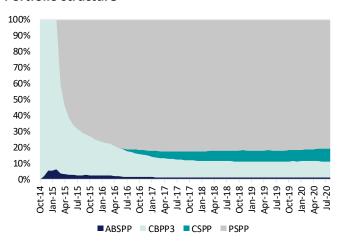
ECB tracker

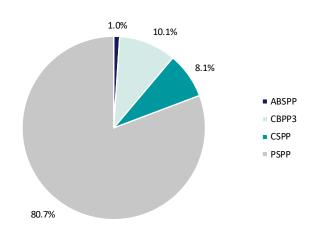
Asset Purchase Programme (APP)

Holdings (in EURm)

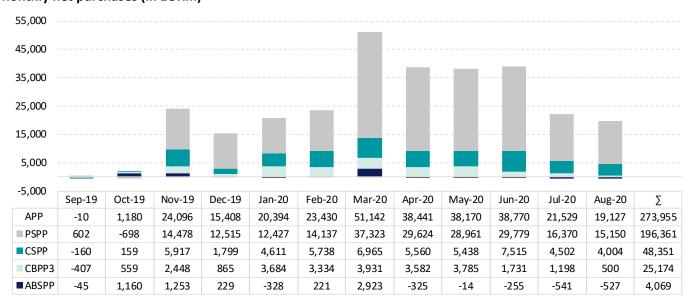
	ABSPP	СВРР3	CSPP	PSPP	APP
Jul-20	30,069	283,964	224,220	2,258,438	2,796,691
Aug-20	29,542	284,464	228,224	2,273,588	2,815,819
Δ	-527	500	4,004	15,150	19,128

Portfolio structure





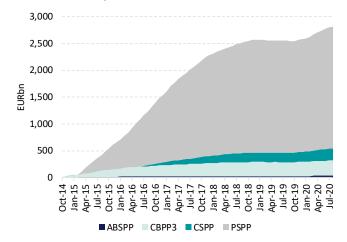
Monthly net purchases (in EURm)



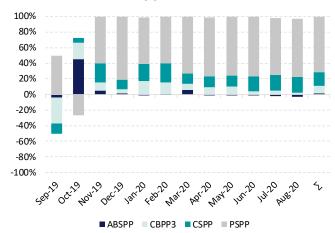
Source: ECB, NORD/LB Markets Strategy & Floor Research



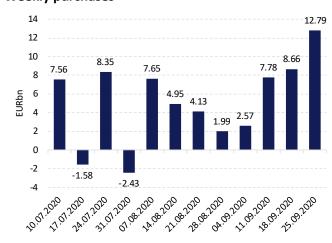
Portfolio development



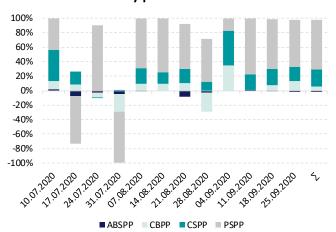
Distribution of monthly purchases



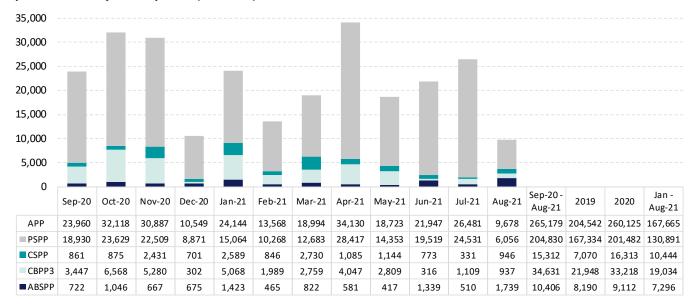
Weekly purchases



Distribution of weekly purchases



Expected monthly redemptions (in EURm)

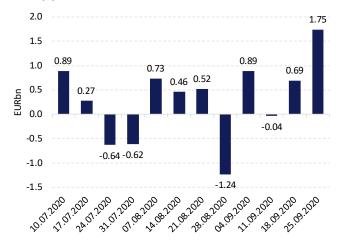


Source: ECB, Bloomberg, NORD/LB Markets Strategy & Floor Research

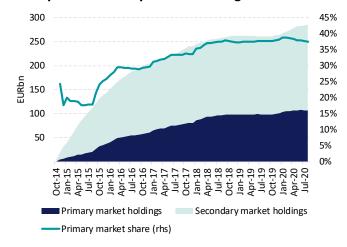


Covered Bond Purchase Programme 3 (CBPP3)

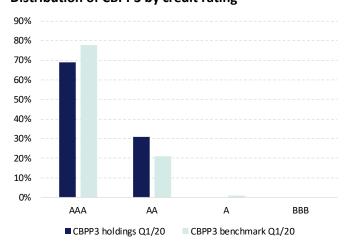
Weekly purchases



Primary and secondary market holdings

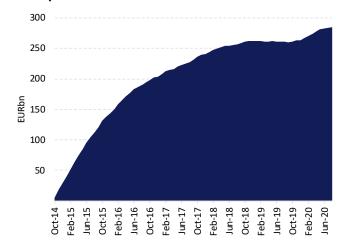


Distribution of CBPP3 by credit rating



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

Development of CBPP3 volume



Change of primary and secondary market holdings



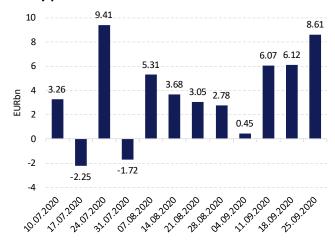
Distribution of CBPP3 by country of risk



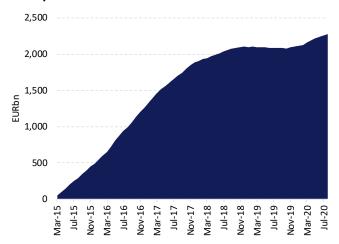


Public Sector Purchase Programme (PSPP)

Weekly purchases



Development of PSPP volume



Overall distribution of PSPP buying at month-end

Country	Adjusted distribution key ¹	Purchases (EURm)	Expected purchases (EURm) ²	Difference (EURm)	Average time to maturity in years	Market average in years ³	Difference in years
AT	2.701%	64,923	63,923	1,000	7.94	7.69	0.2
BE	3.362%	85,071	79,568	5,503	8.28	9.92	-1.6
CY	0.199%	2,641	4,699	-2,058	9.76	9.42	0.3
DE	24.327%	546,660	575,729	-29,069	6.47	7.51	-1.0
EE	0.260%	147	6,152	-6,005	9.85	9.85	0.0
ES	11.004%	279,515	260,431	19,084	8.27	8.34	-0.1
FI	1.695%	35,198	40,117	-4,919	6.86	8.04	-1.2
FR	18.848%	473,597	446,063	27,534	7.11	8.24	-1.1
IE	1.563%	34,971	36,983	-2,012	8.74	10.14	-1.4
IT	15.677%	406,436	371,025	35,411	7.15	7.56	-0.4
LT	0.360%	4,081	8,510	-4,429	8.98	11.45	-2.5
LU	0.304%	2,461	7,194	-4,733	4.95	5.91	-1.0
LV	0.534%	2,725	12,640	-9,915	10.30	10.68	-0.4
MT	0.097%	1,189	2,291	-1,102	10.06	8.71	1.3
NL	5.408%	112,520	127,990	-15,470	7.58	8.31	-0.7
PT	2.160%	43,851	51,116	-7,265	7.26	7.48	-0.2
SI	0.444%	8,381	10,516	-2,135	9.62	9.85	-0.2
SK	1.057%	12,932	25,012	-12,080	8.55	8.75	-0.2
GR	0.00%	0	0	0	0.00	16.38	0.0
SNAT	10.00%	249,323	236,662	12,661	7.33	8.23	-0.9
Total / Avg.	100.0%	2,366,620	-	-	7.26	8.16	-0.9

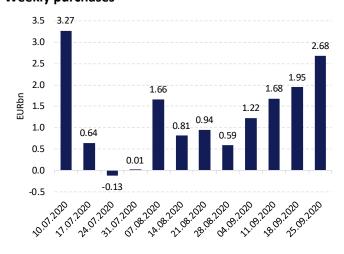
 $^{^{\}mathrm{1}}$ Based on the ECB capital key, adjusted to include supras and the disqualification of Greece

² Based on the adjusted distribution key ³ Weighted average time to maturity of the bonds eligible for purchasing under the PSPP Source: ECB, Bloomberg, NORD/LB Markets Strategy & Floor Research

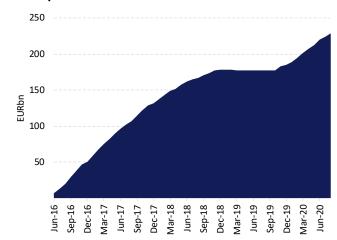


Corporate Sector Purchase Programme (CSPP)

Weekly purchases

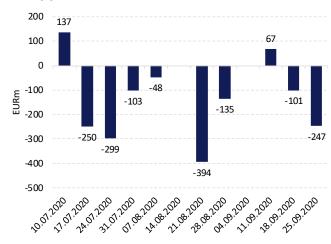


Development of CSPP volume



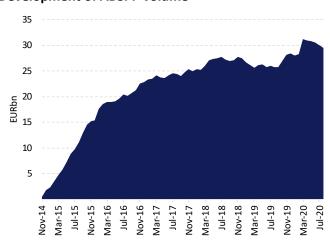
Asset-Backed Securities Purchase Programme (ABSPP)

Weekly purchases



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

Development of ABSPP volume



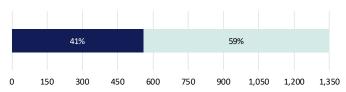


Pandemic Emergency Purchase Programme (PEPP)

Holdings (in EURm)

Volume already invested (in EURbn)





Estimated portfolio development

Assumed pace of purchases

Weekly net purchase volume

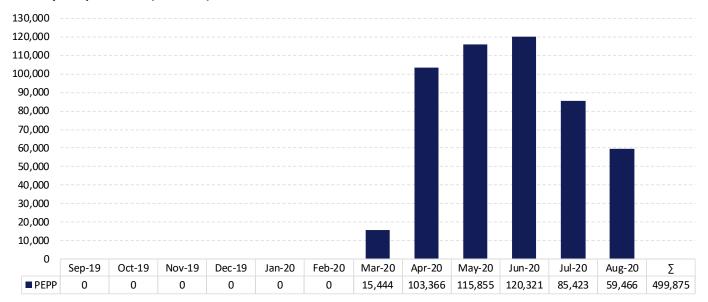
PEPP limit hit in ...

Average weekly net purchase volume so far

EUR 21.5bn

37 weeks (11.06.2021)

Monthly net purchases (in EURm)

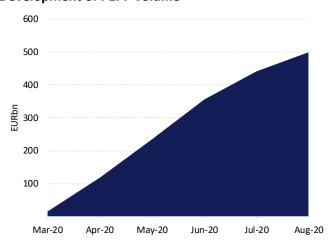


Weekly purchases

25 18.8 20 17.5 17.5 14.0 14.4 14.4 15 10 5 31.07.2020 24.07.2020 01.08.2020 14.08.2010 21.08.2020 28.08.2020 04.09.2020 11.09.2020 18.09.2020

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

Development of PEPP volume

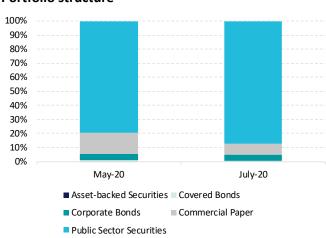


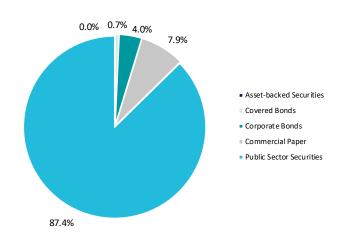


Holdings under the PEPP (in EURm)

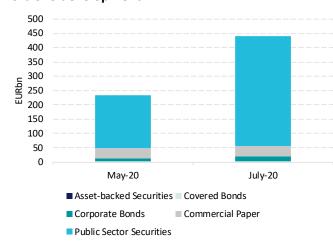
	Asset-backed securities	Covered bonds	Corporate bonds	Commercial paper	Public sector securities	PEPP
May-20	0	2,099	10,579	35,384	186,603	234,665
Jul-20	0	3,128	17,620	34,845	384,464	440,057
Δ	0	1.029	7,041	-539	197,861	205.392

Portfolio structure

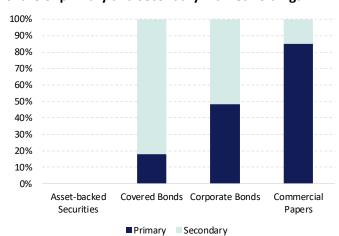




Portfolio development



Share of primary and secondary market holdings



Breakdown of private sector securities under the PEPP as of July 2020

	Asset-backed securities		Covered bonds		Corporate bonds		Commercial papers	
	Primary	Secondary	Primary	Secondary	Primary	Secondary	Primary	Secondary
Holdings in EURm	0	0	557	2,571	8,489	9,131	29,646	5,199
Share	0.0%	0.0%	17.81%	82.19%	48.18%	51.82%	85.08%	14.92%

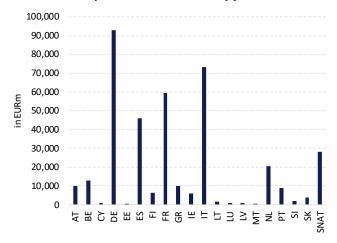
Source: ECB, Bloomberg, NORD/LB Markets Strategy & Floor Research



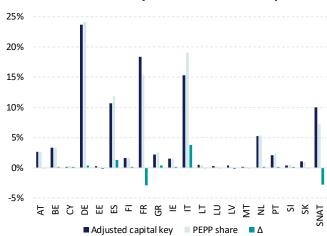
Breakdown of public sector securities under the PEPP

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	10,056	2.6%	2.6%	0.0%	10.0	7.3	2.7
BE	12,853	3.3%	3.3%	0.1%	5.8	9.3	-3.4
CY	936	0.2%	0.2%	0.0%	11.8	8.3	3.5
DE	93,015	23.7%	24.2%	0.4%	4.0	6.6	-2.6
EE	163	0.3%	0.0%	-0.2%	9.3	7.3	2.0
ES	46,111	10.7%	12.0%	1.3%	8.2	7.4	0.8
FI	6,457	1.7%	1.7%	0.0%	7.6	7.1	0.5
FR	59,420	18.4%	15.4%	-2.9%	9.1	7.1	2.0
GR	9,946	2.2%	2.6%	0.4%	8.6	9.1	-0.5
ΙE	5,972	1.5%	1.6%	0.0%	8.3	9.3	-1.0
IT	73,432	15.3%	19.1%	3.8%	7.0	6.7	0.3
LT	1,594	0.5%	0.4%	-0.1%	9.2	10.9	-1.7
LU	807	0.3%	0.2%	-0.1%	6.6	5.7	0.8
LV	787	0.4%	0.2%	-0.1%	9.9	9.1	0.8
MT	123	0.1%	0.0%	-0.1%	6.3	8.0	-1.7
NL	20,674	5.3%	5.4%	0.1%	3.6	7.4	-3.8
PT	8,805	2.1%	2.3%	0.2%	7.1	6.8	0.3
SI	1,896	0.4%	0.5%	0.1%	6.8	8.7	-1.9
SK	3,790	1.0%	1.0%	0.0%	7.2	8.1	-1.0
SNAT	27,980	10.0%	7.3%	-2.7%	8.2	7.2	1.0
Total / Avg.	384,817	100.0%	100.0%	-	6.7	7.1	-0.4

Distribution of public sector assets by jurisdiction



Deviations from the adjusted distribution key



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

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

 $^{^{\}rm 3}$ Weighted average time to maturity of the bonds eligible for purchasing under the PEPP

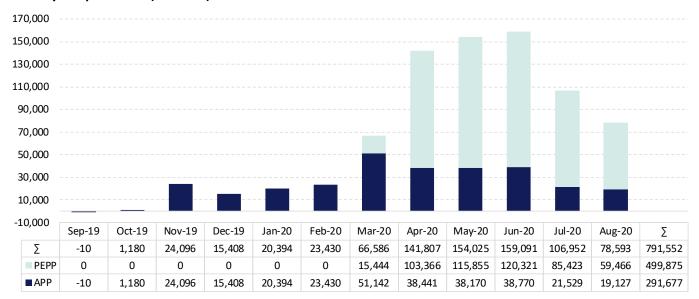


Aggregated purchase activity under APP and PEPP

Holdings (in EURm)

	APP	PEPP	APP & PEPP
Jul-20	2,796,691	440,409	3,237,100
Aug-20	2,815,819	499,876	3,315,695
Δ	19,128	205,392	224,520

Monthly net purchases (in EURm)

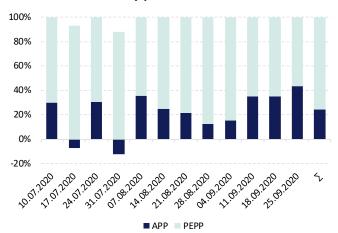


Weekly purchases



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

Distribution of weekly purchases



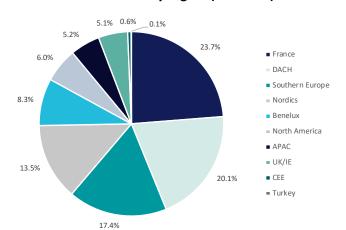


Charts & Figures Covered Bonds

EUR benchmark volume by country (in EURbn)

136.1; 14.2% 227.6; 23.7% = DE 34.5; 3.6% ES 38.8; 4.1% = NL CA 44.1; 4.6% = IT ■ NO 50.2; 5.2% ■ GB 153.5; 16.0% ■ SE 57.3; 6.0% = AT Others 57.8; 6.0% 100.8; 10.5% 57.8; 6.0%

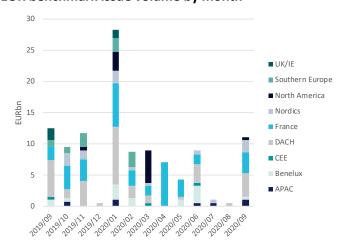
EUR benchmark volume by region (in EURbn)



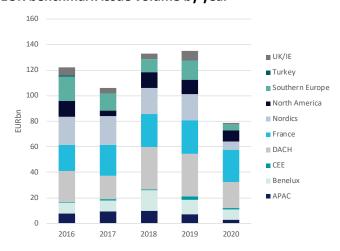
Top-10 jurisdictions

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	227.6	205	7	0.97	10.0	5.4	1.30
2	DE	153.5	228	12	0.61	8.1	4.6	0.52
3	ES	100.8	81	3	1.15	11.1	3.8	1.84
4	NL	57.8	56	0	0.98	10.8	7.0	1.02
5	CA	57.8	49	0	1.15	5.9	3.0	0.32
6	IT	57.3	65	0	0.85	8.8	4.2	1.61
7	NO	50.2	57	6	0.88	7.1	3.7	0.63
8	GB	44.1	46	0	0.97	8.3	3.1	1.32
9	SE	38.8	44	0	0.88	7.2	3.2	0.62
10	AT	34.5	62	0	0.55	9.1	5.4	0.86

EUR benchmark issue volume by month

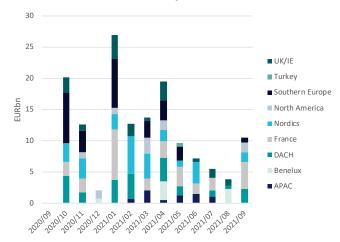


EUR benchmark issue volume by year

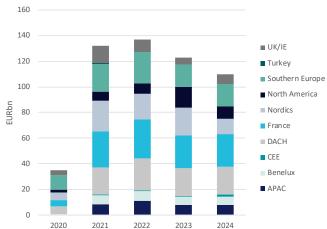




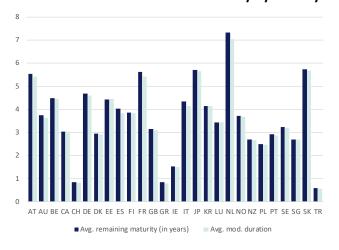
EUR benchmark maturities by month



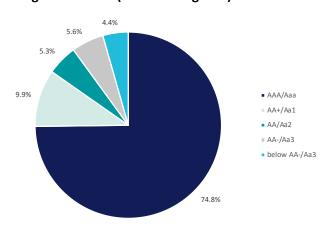
EUR benchmark maturities by year



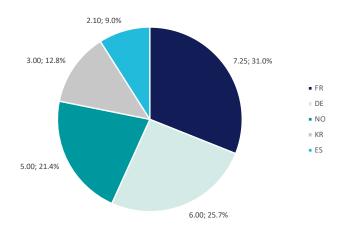
Modified duration and time to maturity by country



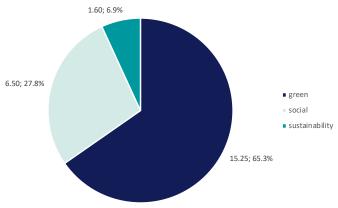
Rating distribution (volume weighted)



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

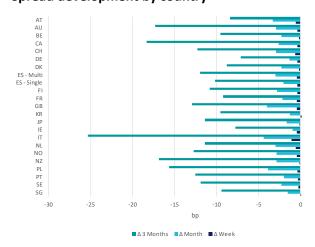


EUR benchmark volume (ESG) by type (in EURbn)

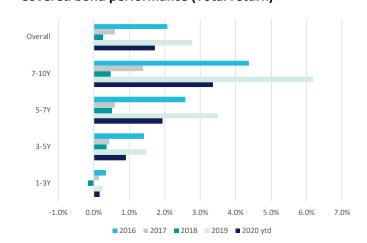




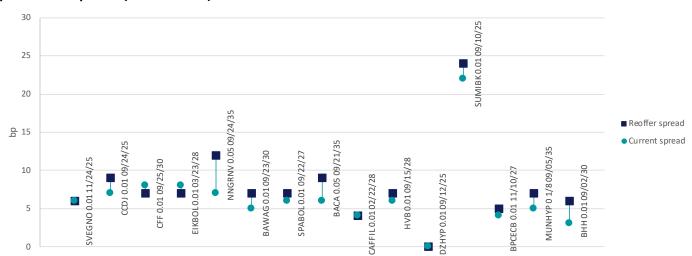
Spread development by country



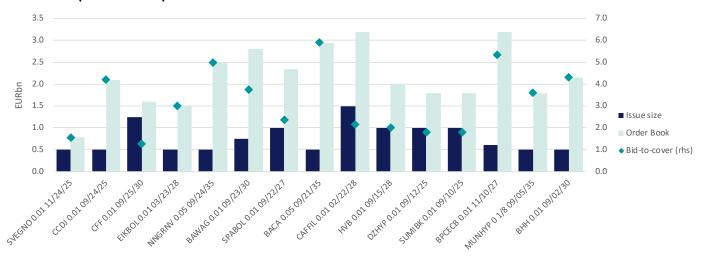
Covered bond performance (Total return)



Spread development (last 15 issues)

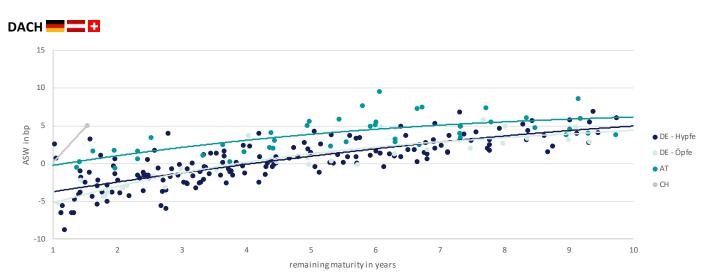


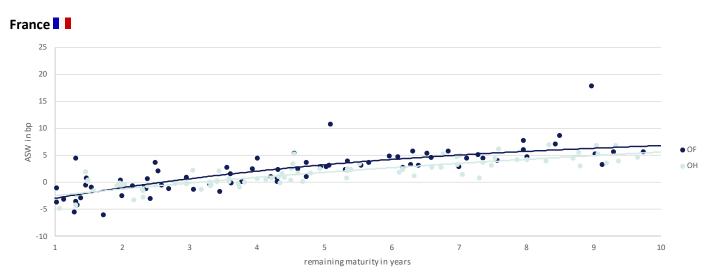
Order books (last 15 issues)

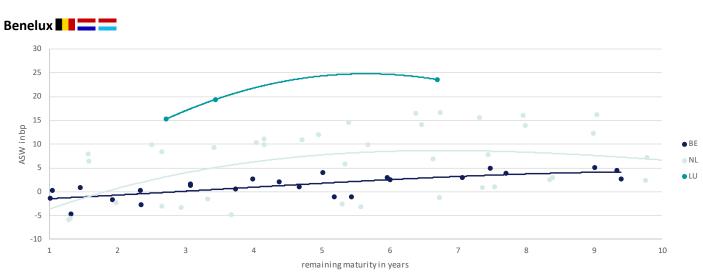




Spread overview¹

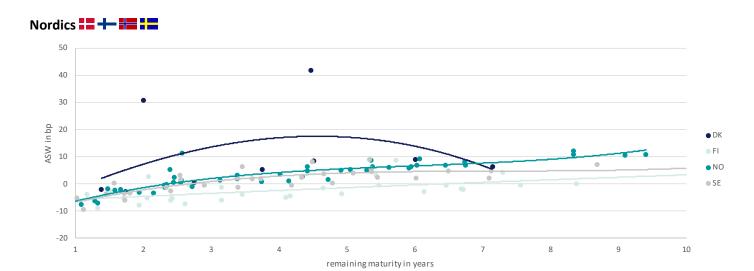


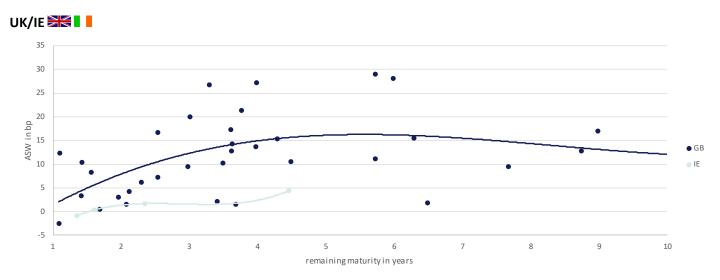




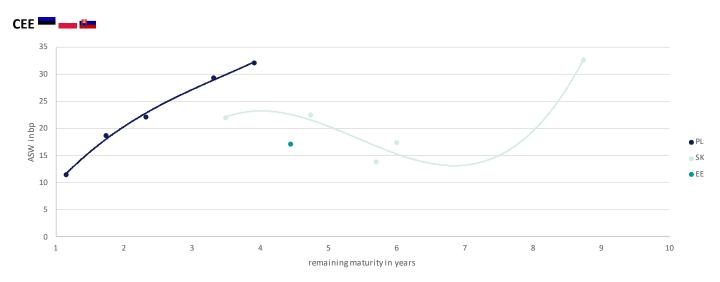
Source: Market data, Bloomberg, NORD/LB Markets Strategy & Floor Research ¹Time to maturity >1y

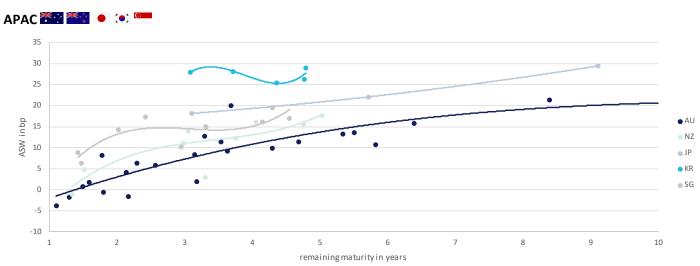


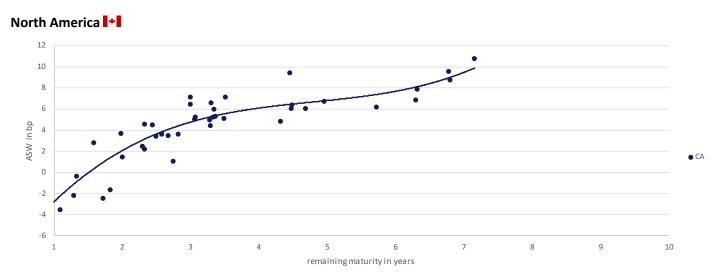








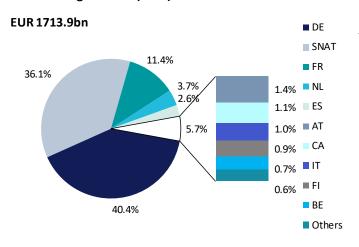






Charts & Figures SSA/Public Issuers

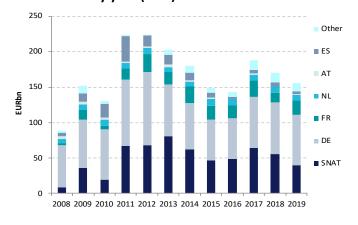
Outstanding volume (bmk)



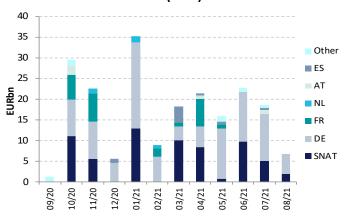
Top 10 countries (bmk)

Country	Vol. (€bn)	No. of	ØVol.	Vol. weight.
		bonds	(€bn)	ØMod. Dur.
DE	693.0	537	1.3	6.2
SNAT	619.3	168	3.7	6.7
FR	195.5	134	1.5	4.8
NL	62.9	66	1.0	6.3
ES	45.0	52	0.9	4.6
AT	24.3	25	1.0	4.9
CA	19.5	15	1.3	4.6
IT	16.5	21	0.8	5.9
FI	15.0	19	0.8	6.1
BE	12.4	16	0.8	12.8

Issue volume by year (bmk)



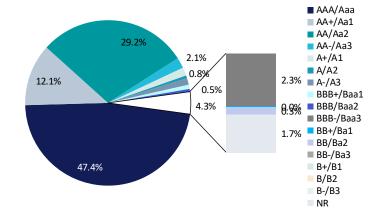
Maturities next 12 months (bmk)



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

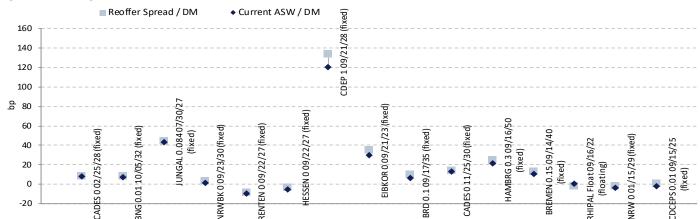


Rating distribution (vol. weighted)

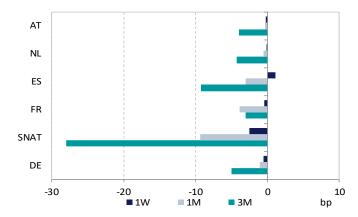




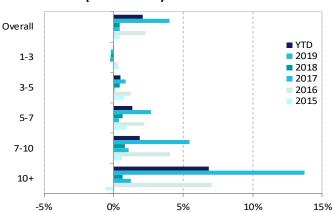
Spread development (last 15 issues)



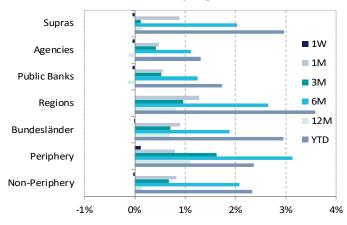
Spread development by country



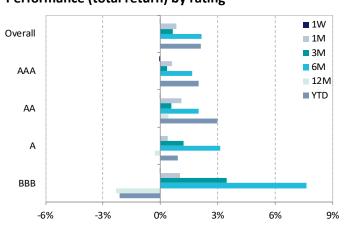
Performance (total return)



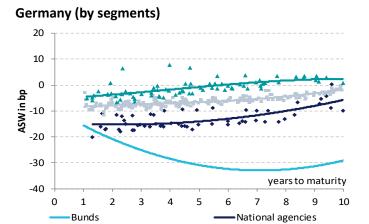
Performance (total return) by regions



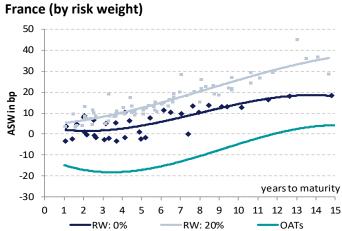
Performance (total return) by rating







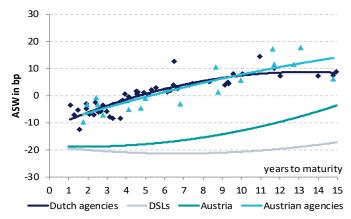
Regional agencies

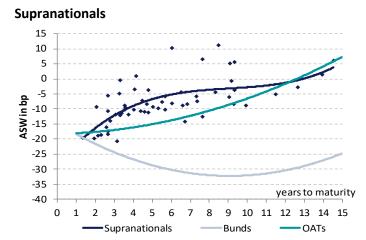


Netherlands & Austria

Core

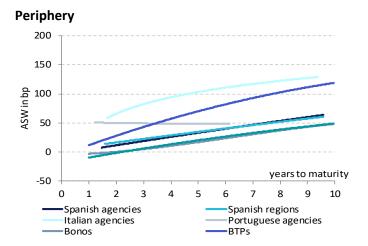
Bundesländer





40 30 20 ASW in bp 10 0 -10 -20 years to maturity -30 0 8 10 2 German nat. agencies Bundesländer French RW: 0% German reg. agencies

Dutch agencies



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

French RW: 20%



Appendix

Overview of latest Covered Bond & SSA View editions

Publication	Topics
36/2020 ♦ 23 September	■ Bausparkasse Schwäbisch Hall plans inaugural EUR benchmark
	Update: Auckland Council – Investment alternative in Down Under
35/2020 ♦ 16 September	 Moody's covered bond universe: an overview
	■ Update Down Under: Victoria (TCV)
34/2020 ♦ 26 August	 Covered bonds as central bank-eligible collateral – European Central Bank presents Q2 2020 figures
	■ Update: New South Wales (NSWTC)
33/2020 ♦ 19 August	 German Pfandbrief savings banks in Q2 2020
	■ ECBC publishes annual statistics for 2019
32/2020 ♦ 12 August	■ Transparency requirements §28 PfandBG in Q2 2020
	 Development of the German property market
	European Atomic Energy Community (Euratom)
31/2020 ♦ 05 August	PEPP: Second round of reporting again provides valuable insights
30/2020 ♦ 29 July	 LCR levels and risk weights of EUR benchmarks
	 Update: Funding of German Bundeslaender (ytd)
29/2020 ♦ 22 July	■ iBoxx Covered indices: current status and criteria
	 Update: Joint Laender jumbos (LANDER)
28/2020 ♦ 15 July	 Repayment structures on the covered bond market
	21st meeting of the Stability Council
27/2020 ♦ 08 July	 Sparebanken Vest issues first EUR benchmark in ESG format
	Second issuer from South Korea: Kookmin Bank to shortly make its debut in the EUR benchmark segment
	 KfW reduces 2020 funding target to EUR 65bn
26/2020 ♦ 01 July	 Half-year review and outlook for the second half of 2020
	■ The German debt brake in 2020
25/2020 ♦ 24 June	 EUR benchmark covered bonds in ESG format – an overview
	■ BULABO falling due – R.I.P.
24/2020 ♦ 17 June	TLTRO-III.4 vs. covered bonds: are bond repurchases worth it?
	TLTRO-III now of increased interest for promotional banks too?
23/2020 ♦ 10 June	■ The adjustment follows the reporting: insights into the PEPP
22/2020 ♦ 03 June	■ Moody's covered bond universe – an overview
21/2020 ♦ 27 May	■ BPCE issues inaugural green covered bond
	France: retained issuances and benchmark deals
	■ The federal financial equalisation system (LFA)
20/2020 ♦ 20 May	■ German Pfandbrief savings banks in Q1 2020
	 EIOPA and BaFin see insurers as prepared for the coronavirus crisis: SCR calculation for covered bonds under Solvency II

NORD/LB:NORD/LB:NORD/LB:Bloomberg:Markets Strategy & Floor ResearchCovered Bond ResearchSSA ResearchRESP NRDR < GO>



Anhang 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 & Agenices 2019

<u>Issuer Guide - Canadian Provinces & Territories 2020</u>

<u>Issuer Guide - German Bundeslaender 2020</u>

<u>Issuer Guide - Down Under 2019</u>

Fixed Income:

ESG update

Analysis of ESG reporting

ECB launches corona pandemic emergency

ECB responds to corona risks



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Sales		Trading	
Institutional Sales	+49 511 9818-9440	Covereds/SSA	+49 511 9818-8040
Sales Sparkassen & Regionalbanken	+49 511 9818-9400	Financials	+49 511 9818-9490
Sales MM/FX	+49 511 9818-9460	Governments	+49 511 9818-9660
Sales Europe	+352 452211-515	Länder/Regionen	+49 511 9818-9550
		Frequent Issuers	+49 511 9818-9640
Origination & Syndicate		Corporate Sales	
Origination & Syndicate		Corporate Sales	
Origination & Syndicate Origination FI	+49 511 9818-6600	Corporate Sales Schiffe/Flugzeuge	+49 511 9818-9440
	+49 511 9818-6600 +49 511 361-2911	-	+49 511 9818-9440 +49 511 9818-8150
Origination FI		Schiffe/Flugzeuge Immobilien/Strukturierte	
Origination FI		Schiffe/Flugzeuge Immobilien/Strukturierte Finanzierung	+49 511 9818-8150



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Past performance is not a reliable indicator of future performance. Exchange rates, price fluctuations of the financial instruments and similar factors may have a negative impact on the value and price of and return on the financial instruments referred to herein or any instruments linked thereto. Fees and commissions apply in relation to securities (purchase, sell, custody), which reduce the return on investment. An evaluation made on the basis of the historical performance of any security does not necessarily give an indication of its future performance.

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The information contained in the present report replaces all previous versions of corresponding information and refers exclusively to the time of preparation of the information. Future versions of this information will replace this version. NORD/LB is under no obligation to update and/or regularly review the data contained in such information. No guarantee can therefore be given that the information is up-to-date and continues to be correct.

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Additional information

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Disclosure of possible conflicts of interest at NORD/LB in accordance with Section 85 (1) of the German Securities Trading Act (WpHG) in conjunction with Article 20 of the Market Abuse Regulation (EU) No. 596/2014 and Articles 5 and 6 of Regulation (EU) 2016/958.

None

Sources and price details

For the preparation of investment recommendations, we use issuer-specific financial data providers, our own estimates, company information and publicly available media. Unless otherwise stated in the information, price information refers to the closing price of the previous day. Fees and commissions are incurred in connection with securities (purchase, sale, custody), which reduce the return on the investment.

Basis of valuation and frequency of updates

For the preparation of investment recommendations, we use company-specific methods from fundamental securities' analysis, quantitative / statistical methods and models as well as from technical information processes. It should be noted that the results of the information are snapshots and past performance is not a reliable indicator of future returns. The basis of valuation may change at any time and in an unforeseeable manner, which may lead to divergent assessments. The recommendation horizon is 6 to 12 months. The above information is prepared on a weekly basis. Recipients have no right to publish updated information. For more detailed information on our assessment bases, check under: www.nordlb-pib.de/Bewertungsverfahren.

Recommendation system

 $\textbf{Positive:} \ \textbf{Positive expectations for the issuer, a bond type or a bond placed by the}$

issuer.

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

 $\textbf{Negative:} \ \textbf{Negative expectations for the issuer, a type of bond or a bond placed by the issuer.}$

Relative Value (RV): Relative recommendation to a market segment, an individual issuer or a

range of maturities.

Breakdown of recommendations

(12 months)

Positive: 35%

Neutral: 52%

Negative: 13%

Recommendation record (12 months)

For an overview of our overall pension recommendations for the past 12 months, please visit www.nordlb-pib.de/empfehlungsuebersicht_renten. The password is "renten/Liste3".

Issuer / security Date Recommendation Bond type Cause

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