NORD/LB

Covered Bond & SSA View

NORD/LB Markets Strategy & Floor Research

24 February 2021 ♦ 07/2021

Investment strategy recommendation and marketing communication
(see disclaimer on the last pages)

Finanzgruppe

Agenda

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Market overview
Covered Bonds

Authors: Henning Walten, CIIA // Dr Frederik Kunze

NN Bank issues first 20y bond in 2021

After no new issuance activity on the market for EUR benchmarks for two consecutive weeks, NN Bank from the Netherlands brought this drought to an end yesterday on Tuesday. The former CPT bond issuer offered its third EUR benchmark in soft bullet format – although there are still five outstanding CPT benchmarks – with a volume of EUR 500m and a term to maturity of 20 years. This was the first deal in the current year to feature a maturity of this length. The order book of EUR 1.9bn and resultant oversubscription ratio of 3.8x again reflected the situation on the covered bond market characterised by high demand and low supply. In line with the high demand, the deal tightened by five basis points overall during the book-building process and was ultimately priced at ms +2bp. On average, the 18 deals placed previously in 2021 tightened by 3.7 basis points versus the guidance. Given the long term to maturity and noticeably increased swap rates seen since the beginning of the year – the 20y swap rate has risen by 37 basis points since the turn of the year – the issuance yield stood at +0.388%. The NN Bank transaction was additionally the first EUR benchmark from the Netherlands this year. As a former issuer of EUR benchmarks with a CPT structure, the most recent transaction could be used as an argument for other CPT issuers switching their focus to the soft bullet segment. We have already reported on Achmea Bank, which at the start of February confirmed it was preparing to establish a programme of this kind for the issuance of EUR benchmarks. AEGON Bank is also considering setting up its own soft bullet programmes for the issuance of bonds with the aim, according to information from the bank itself, of profiting from longer terms to maturity and/or improved ALM matching, more attractive spreads and a broader investor basis. However, we are not aware of any final decision being made on this.

Issuer	Country	Timing	ISIN	Maturity	Size	Spread	Rating	ESG
NN Bank	NL	23.02.	NL00150008B6	20.0y	0.50bn	ms +2bp	- / - / AAA	-

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

Two mandates in the sub-benchmark segment

In addition to the transaction observed in the EUR benchmark segment, there were two notable announcements in the EUR sub-benchmark segment as well. Here, the Mortgage Society of Finland held investor meetings with a view to placing a bond with a volume of EUR 300m and a term to maturity of 7-10y in the second half of March. Raiffeisenlandesbank Vorarlberg has likewise signalled its intention to make use of the market for sub-benchmark bonds. In this case, too, a bond volume of EUR 300m is on the cards. However, the term of 15 years would be far longer. We expect pricing to be confirmed over the course of today (Wednesday). The only issuer active in the EUR sub-benchmark segment so far in 2021 has been Landesbank Berlin, which placed a 10y deal in mid-January with a volume of EUR 250m. Due to the recent announcements in the area of sub-benchmarks, we are using today's edition of the Covered Bond & SSA View to delve deeper into the market for EUR bonds in sub-benchmark format.

NORD/LB – ESG Update

As part of our NORD/LB Fixed Income Special – ESG Update, we took the time to look in some detail at the segment for ESG bonds, providing an overview of the current market landscape in addition to summarising the implications of the EU Taxonomy and other developments related to the establishment and further development of ESG standards. The market for ESG bonds recorded significant growth last year. After a cumulative new issuance volume of EUR 266bn across all three asset classes (green, social and sustainable), the new issuance volume for all bonds in this segment rose to approximately EUR 425bn in 2020. Green bonds again formed the largest sub-segment, with a volume of EUR 244bn (previous year: EUR 211bn). However, social bonds accounted for the strongest growth in comparison with the previous calendar year, rising from EUR 16bn in 2019 to a total of EUR 138bn as at the end of December 2020. The new issuance volume of sustainable bonds increased to EUR 63bn, which equates to substantial growth of 62% year on year. Due to the strong growth in the social bonds sub-segment, there were changes in the relative market shares. At 53% (previous year: 79%), green bonds continue to make up the largest share here. Social bonds are now in second place, accounting for an increased share of 33% (previous year: 6%). Although the relative market share of sustainable bonds remained constant at around 15%, this asset class has now slipped to third place overall. In the segment of EUR benchmark covered bonds, green bonds again account for the largest share of sustainable bonds, at 66%. The share of social bonds comes to 28%, while at just 6% sustainable covered bonds account for the smallest share here. In the current year, one issuer has tapped the green and social bond segments in each case. While the South Korean Hana Bank successfully placed a social covered bond worth EUR 500m on the market, DNB Boligkreditt from Norway opted to approach investors with a green deal (EUR 1.5bn). In fundamental terms, we also see good framework conditions for further growth of covered bonds in the ESG segment, although factors such as the EU Taxonomy or the influence of the ECB on issuance dynamics in the covered bond segment must be considered as obstacles.

Market overview
SSA/Public Issuers

Author: Dr Norman Rudschuck, CIIA

NRW: general budget has no new debt again

Even though all the Bundeslaender are still making a fuss with their credit authorisations for 2021, they are not only in the throes of the planning process for the current year but are also taking stock of 2020, which was a particularly challenging year. Accordingly, North Rhine-Westphalia reported that implementation of the general budget in 2020 closed with improvements in the budget of around EUR 1.1bn. These improvements were used in their entirety to compensate for the shortfall in tax revenues and consequently to finance the direct and indirect consequences of the coronavirus pandemic. Had tax revenues not been reduced by the coronavirus, the state would have achieved a budget surplus identical to that achieved in 2019. The improvements in the budget will reduce utilisation of the NRW rescue package in the same amount. As planned, were it not for the one-off effects of the coronavirus, the general budget has managed to avoid having to raise any new borrowing once more. This development is to be welcomed, and not only in the context of the debt brake. "In the last year, we have again demonstrated that we are adhering to our plans for the development of our state, namely a reliable budget policy involving targeted investment in the rising star that is the state of North Rhine-Westphalia. In good education, in security, in new roads. Despite COVID-19. For our future," comments Lutz Lienenkämper, Minister of Finance. Tax revenues fared better than had been predicted by the working group for tax estimation in September and November 2020. In September, tax estimators had assumed that there would be a shortfall in tax revenue of EUR 6.1bn and in November, a shortfall of EUR 4.8bn was still expected. Having implemented the budget, the shortfall in revenue of EUR 4.1bn was not quite as bad as originally feared. Following compensation by the improvements from implementation of the budget, the remaining tax deficit of approximately EUR 3bn was financed from the NRW rescue package. NRW provided additional background information as a reminder: the state separates the charges resulting from coronavirus cleanly and transparently from the general budget net of the one-off effects of the virus. The NRW rescue package worth up to EUR 25bn financed from the credit market, which was approved unanimously by parliament in March 2020, was arranged for this purpose and is now providing financing for all measures to deal with the direct and indirect consequences of the coronavirus crisis.

NRW: budget plan for 2021

The actual basic budget of approximately EUR 81.9bn plus transitory or budget neutral items of around EUR 2.2bn envisages extensive future investment in core areas such as children and families, internal security, schools and education, digitalisation and infrastructure, science and research, the healthcare system as well as the Rhineland mining area. The budget also takes account of the particular concerns of the municipalities. Despite the sharp fall in tax revenues, the municipalities will be credited as much as they would have been entitled to via the revenue sharing scheme according to the previous financial planning before COVID-19. The state will credit the municipalities with around EUR 943m via the NRW rescue package. It can be repaid subsequently from the improvement sums available under the Gemeindefinanzierungsgesetz (German Community Financing Act).

Outlook for NRW

The 2021 budget illustrates the current shortfall in tax revenues of around EUR 5bn forecast on the basis of the November tax estimation compared with the financial planning from 2019 to 2023. The November tax estimate also forecasts a further shortfall in taxes compared with the planning figures of EUR 7.9bn for 2022 and 2023. Overall, therefore, the shortfall in tax revenues for 2021 to 2023 caused by the coronavirus pandemic is expected to total EUR 12.9bn. These shortfalls in tax revenues are caused both by the German government's decision to offer tax relief during the pandemic and the economic collapse in the crisis. These shortfalls will be compensated not just by funds from the NRW rescue package but also by withdrawals from the general reserve that has been saved since 2018. The general reserve will be liquidated in full up to 2023. The current assumption is that the negative fiscal consequences of the coronavirus crisis will decline significantly from 2023 and that the extraordinary emergency situation will be over. The new financial planning for 2023 therefore envisages a budget that will not require withdrawals from the rescue package. Assuming that economic circumstances allow it, the state government plans to start repaying its borrowings in 2024. According to the government, the surplus of EUR 200m will be used in its entirety to repay the loans raised for the NRW rescue package. "Our task, as the state government, is to bring NRW through the crisis safely and to retain as many structures and jobs as possible. We will be helped here by our budgetary discipline and the foresight adopted since the change of government," says minister Lutz Lienenkämper. "Despite this, we are now spending more, as we wish to return to the policy of balanced budgets and surpluses as fast as possible. You could say that we are investing in the tax revenues of the future now. These will allow us to repay the debts caused by the pandemic promptly and without putting more strain on the economy. This is prudent and will spread the burden equitably across all generations." The 2021 budget and the extension of the NRW rescue package will ensure, firstly, that NRW can react rapidly and flexibly to the challenges of the pandemic in 2021/22 too, in addition to financing the direct and indirect consequences. At the same time, the state government is bearing the state's long-term development in mind and intends to waive withdrawals from the rescue package as early as 2023.

ESG section

In line with the plans of the state of Baden-Wuerttemberg, in which the elections to the 17th Landtag (state parliament) are to take place on 14 March, the first green bond from a German federal state is also to be issued from here, according to the first elected Green Minister-President (Winfried Kretschmann). This will surprise informed investors in that NRW has already issued six sustainability bonds – but not a pure green bond. The banking syndicate was commissioned yesterday, with global investor calls to take place for this purpose on 25 and 26 February. In total, around 7.7 million people are entitled to vote in Baden-Wuerttemberg, of whom approximately 500,000 will be first-time voters. The 16th legislative period will end on 30 April 2021. The newly elected Landtag will therefore assemble for the first time for its inaugural meeting in May 2021. We do not expect the second green bond from BADWUR until 2022. Until then, investors will continue to look towards the EU with its social bonds from the SURE programme or the partial green programme "Next Generation EU" (NGEU). Alternatively, our readers may wish to use this time to take in our latest publication "ESG Update 2021" , which was published yesterday.

Eurasian Development Bank (EDB)

In the next few weeks, an issuer that we cannot include in our coverage long-term is planning an EUR benchmark deal with a maturity of five years: Eurasian Development Bank (EDB) is a multinational development bank established by the Russian Federation in 2006. Russia holds 65.97% of the capital in the EDB, while Kazakhstan holds 32.99% and Belarus 0.99%. The remaining 0.05% is divided between Tajikistan, Kyrgyzstan and Armenia. With the exception of Tajikistan, the countries involved are congruent with the member states of the Eurasian Economic Union, which constitutes a merger of the five states to form an internal market with a customs union. The EDB is headquartered in Almaty, the largest city in Kazakhstan. The bank's objective is to boost economic growth in the member states and to promote trade and economic relations within the member states. The EDB's portfolio has grown strongly in recent years: having amounted to USD 2.3bn at the end of 2017, by year-end 2019 it reached USD 4.3bn. In 2019, the bank invested a total of USD 1.4bn, of which a majority (54%) was focused on projects aimed at promoting the integration of member states of the Eurasian Economic Union. The bank promotes projects in various sectors: in 2019, the largest share was attributable to projects in the energy industry (21.1%), followed by transport (18.9%) and the financial sector (18.7%). At 14.2% and 12% of the portfolio respectively, infrastructure and mining are also key components of the portfolio. It invests principally in Russia (45.7%) and Kazakhstan (40.1%), although Belarus, at 10.4%, also accounts for a significant share of the EDB's portfolio. Projects in the other member states such as Armenia (2.2%), Kyrgyzstan (1.5%) and Tajikistan (0.1%) play a more minor role. In terms of currencies, the portfolio is relatively heavily diversified: 37.8% of the projects were financed in RUB, 22.4% in USD, 21.4% in EUR and 18.4% in KZT. The shares of the national currencies RUB (Russia) and KZT (Kazakhstan) have increased significantly in recent years as a result of the policy of "dedollarisation" in response to the deterioration in relations with the USA. For example, the proportion of projects financed in dollars was still 73% in 2017. In contrast to other development banks with a clear countercyclical mandate, the EDB did not announce a plan in response to the coronavirus pandemic, which is why the global crisis will have scarcely any impact on the bank's long-term plan.

EDB ratings

The EDB has ratings from Moody's (05/2019: Baa1 [stable]), S&P (03/2020: BBB [negative]) and Fitch (11/2020: BBB+ [stable]). Fitch recently confirmed its rating due, among other factors, to the assumption that the lack of any reaction to the pandemic means that debt will not increase over the next few years. This is justified on the basis that Russia and Kazakhstan, which account for almost 99% of the EDB's capital basis, have been relatively unscathed by the crisis economically speaking. Only the rating for Belarus and the outlook for Armenia were previously cut, which is almost irrelevant here given the minor stakes held by both countries. S&P cut the outlook from stable to negative before the pandemic started in March 2020 because it had concerns that the volatile economic environment posed risks for the EDB.

Previous bonds and new issue (ticker: EURDEV)

EURDEV, the bank's Bloomberg ticker, has 15 bonds outstanding at present. Ten in RUB, three in KZT and two in USD. The total volume comprises the equivalent of EUR 1.3bn. The planned bonds of EUR 500m would tap an entirely new group of investors, as we have already registered in the case of well-known IIB.

International Investment Bank (IIB)

The aforesaid IIB finally changed its legal address from Moscow to Budapest on 15 February 2021, having partially moved into its new office building in the Hungarian capital in 2019. On 4 February 2021, the International Investment Bank (IIB) published audited IFRS financial statements for 2020. Despite the global financial crisis, caused by the coronavirus crisis, the bank again demonstrates a high degree of financial stability and success in achieving its strategic objectives thanks to its highly effective corporate governance system, the prompt adoption of measures to combat the crisis, increasing trust among the international financial and business community and support from member states. At the end of 2020, the bank reported a record net profit in its recent history (EUR 7.3m; +28%). Its total assets increased to EUR 1.621bn (+19%). This momentum is primarily attributable to growth in loan and investment support, which the bank makes available to its member states to deal with the negative consequences of the pandemic, among other aspects, and to growth in the volume of highly liquid treasury assets, which were accumulated to reinforce the liquidity buffer in a period of significant turbulence in the global economy. The year of 2020 marked the beginning of a new IIB capitalisation programme. At the end of the reporting period, the bank's paid-in capital reached EUR 378.7m (+11%). Active support by the IIB member states again strengthens its financial stability and opens up new opportunities for continually expanding its investment activities.

Primary market

There is rarely a week in which there are no taps, which is why we are focusing solely on new benchmarks on the primary market: the longest bond came from Bremen (30y). It proved exceedingly popular at ms +12bp; the order books amounted to more than EUR 1.55bn. However, only EUR 500m was allocated meaning that the bond tightened by two basis points compared with guidance (ms +14bp area). BREMEN was joined by RHIPAL: the federal state, which also has elections in March like BADWUR, raised EUR 500m for seven years at ms -6bp. We have no details about the order books. EUR 100m were retained by the issuer. KUNTA opted for the ten-year maturity that is otherwise universally popular. The Finnish local authority financier MuniFin raised EUR 1bn at ms -3bp. The bond enjoyed strong demand, with order books for this deal reaching EUR 3.7bn, meaning that tightening of two basis points compared with guidance was also possible here. Due to leverage(d) deals, our coverage does not include Canada's CPPIB. However, this issuer should not be left out completely (EUR 1bn for ten years at ms +9bp). Looking forward, the EIB mandated under its EARN programme (EUR 3bn; WNG for 15 years) and KommuneKredit for ten years (EUR 1bn WNG) to provide very rapid pricing. Baden-Wuerttemberg's specific plans for its first green bond were also reported on the ticker yesterday (see above).

Issuer	Country	Timing	ISIN	Maturity	Size	Spread	Rating	ESG
KUNTA	Other	23.02.	XS2307854062	10.0y	1.00bn	ms -3bp	- / Aa1 / AA+	-
RHIPAL	DE	18.02.	DE000RLP1262	7.0y	0.50bn	ms -6bp	AAA / - / -	-
CPPIB	CA	17.02.	XS2305736543	10.0y	1.00bn	ms +9bp	- / Aaa / AAA	-
BREMEN	DE	17.02.	DE000A3H2YF9	30.0y	0.50bn	ms +12bp	AAA / - / -	-

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

Covered Bonds
An overview of the EUR sub-benchmark segment

Author: Henning Walten, CIIA

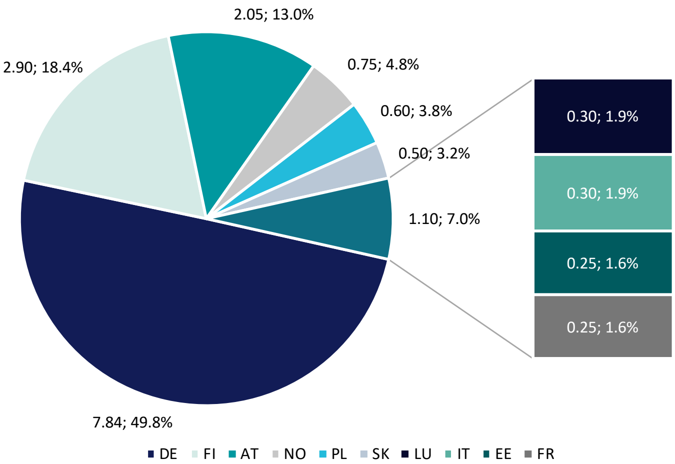
Sub-benchmarks: the little brothers of benchmark bonds
News about primary market activities for publicly placed EUR bonds only included three significant transactions in the last five days' trading. While NN Bank placed an EUR benchmark on the market yesterday (Tuesday) (see Market Overview), it was the sub-benchmark segment where two deals were promised. The Mortgage Society of Finland held investor calls and promised a deal worth EUR 300m and a maturity of seven to ten years for the second half of March, while Raiffeisenlandesbank Vorarlberg issued mandates yesterday for a deal worth EUR 300m and a maturity of 15 years. We expect pricing today (Wednesday). In the current year, only Landesbank Berlin has featured on the EUR sub-benchmark segment so far; it placed a bond worth EUR 250m with a maturity of ten years on the market on 18 January. Although the prefix "sub" already indicates that the bonds in the sub-benchmark segment are bonds with a volume of less than the EUR 500m of relevance for the benchmark segment, this market segment is also limited in terms of the minimum volume. Accordingly, our understanding is that the market for sub-benchmarks contains bonds that cannot be assigned to the benchmark segment because of their volume but have a minimum volume of EUR 250m. As a result, this segment represents the second arm of the market for publicly placed EUR bonds, which is why issuers with outstanding EUR benchmarks are also included in our Issuer Guide Covered Bonds. For these reasons and the fact that this market receives far less attention than the EUR benchmark segment, we provide a brief overview of the niche market for sub-benchmark bonds below and, in addition to looking at the issuers, also examine spread and regulatory differences compared with the EUR benchmark segment.

Outstanding volume of EUR 15.7bn in the sub-benchmark segment
With outstanding bonds amounting to EUR 15.74bn, the market for EUR sub-benchmarks can unequivocally be described as a niche market and equates roughly to the size of the Belgium market for EUR benchmarks. At the same time, the share on the market for publicly placed EUR covered bonds compared with the benchmark segment (EUR 915.75bn) is only 1.7%. At present, the market consists of 58 outstanding sub-benchmarks from 27 banks in ten jurisdictions. Approximately 50% of the outstanding volume is attributable to issuers from Germany (30 sub-benchmarks), followed by banks from Finland with a share of 18.4% (10 bonds) and Austrian institutions (13.0%; 7 bonds). Therefore, more than 80% (EUR 12.8bn) of the market is attributable to these three jurisdictions. Traditionally, the deals are placed on the market in the amount of EUR 250m (approximately 60% of new issues) and EUR 300m (approximately 20%).

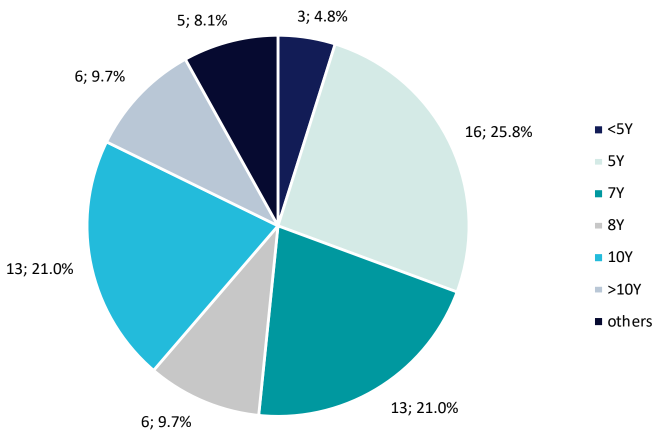
Switch between sub-segments certainly possible

Just as in the EUR benchmark segment, sub-benchmarks are also available for possible taps. In the past, twelve of the outstanding ISINs were increased by means of taps. For six bonds, the taps were of such a size that the bonds previously issued as sub-benchmarks are now attributable to the EUR benchmark segment and with the exception of one bond (for reasons that are not apparent to us) can be found in the iBoxx EUR Covered. At this point, we must also point out that there is no corresponding index for the sub-benchmark segment. Besides switching from the sub-benchmark to the benchmark segment, switching in the other direction is possible although this happens far less frequently. We are currently aware of a bond issued by Hamburg Commercial Bank, which fell below the limit of EUR 500m because of buybacks and is consequently now attributable to the sub-benchmark segment as a former EUR benchmark bond.

EUR SBMK: outstanding volume



Maturity buckets by number of bonds issued

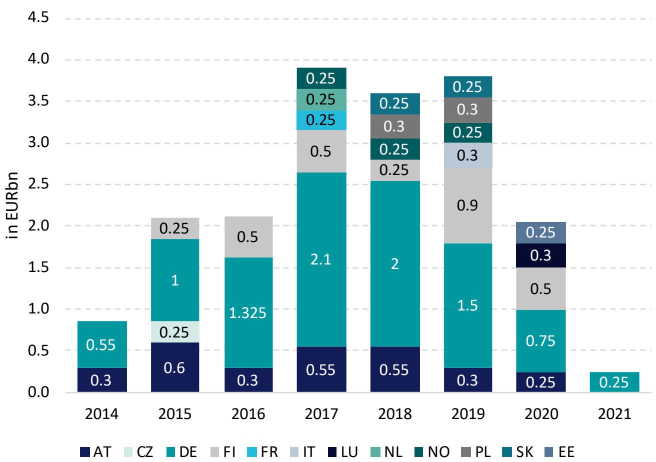


Source: Bloomberg, NORD/LB Markets Strategy & Floor Research

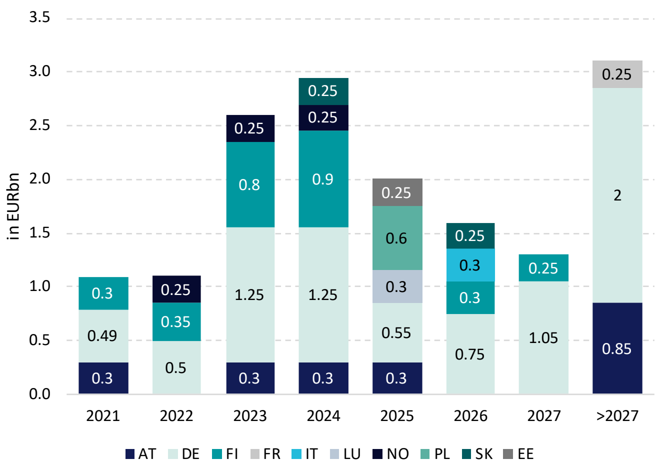
Issuance volume affected by the pandemic in 2020

Based on past issuance volumes since 2014, it is clear that the coronavirus pandemic also had a perceptible impact on the market for sub-benchmark bonds. While the amounts issued in 2017 to 2019 were between EUR 3.5bn and EUR 4.0bn in each case, the EUR 2.05bn placed in 2020 signifies a fall of 46%. In 2019 and 2020, a stream of new issuers joined the market. While Banca Popolare dell'Alto Adige (Volksbank Südtirol) from Italy, Raiffeisenlandesbank Vorarlberg from Austria and Tatra Banka from Slovakia issued their first sub-benchmarks in 2019, it was Landesbank Saar (DE), LHV Pank (EE) and NORD/LB Luxembourg (LU) that opted to raise funds via a sub-benchmark in 2020. The majority of the issues are from the eurozone. The only exceptions here are issues from Poland and Norway, which are members of the EU or the European Economic Area anyway.

EUR SBMK: issues since 2014



EUR SBMK: maturities



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

Some issuers with outstanding benchmarks and sub-benchmarks

We identify those institutions that have outstanding sub-benchmarks but are not simultaneously engaged in the benchmark segment as sub-benchmark issuers. Accordingly, we would classify eight of the 27 institutions in total that have outstanding sub-benchmark bonds as EUR benchmark issuers, although they also have outstanding EUR bonds in sub-benchmark format. Here, Hypo Tirol Bank (AT), Raiffeisenlandesbank Vorarlberg (AT), DZ HYP (DE), Hamburg Commercial Bank (DE), as a previously described special case, Wüstenrot Bausparkasse (DE), AXA Bank Europe SCF (FR), NORD/LB Luxembourg Covered Bond Bank (LU) and Slovenska Sporitelna (SK) must be mentioned in particular. Statements regarding the regulatory treatment of these issuers' covered bonds must, as presented below, be treated with particular attention. Hypo Vorarlberg Bank (AT), Berlin Hyp (DE), DZ HYP (DE), Santander Consumer Bank (DE) and ABN AMRO Bank (NL) have issued sub-benchmark bonds but subsequently tapped them to benchmark size. The following table shows those 19 issuers that currently only have EUR sub-benchmarks outstanding, albeit no EUR benchmark bonds, and are therefore identified as sub-benchmark issuers by us.

RLB Vorarlberg and Mortgage Society of Finland

While we identify the Mortgage Society of Finland as a sub-benchmark issuer in line with our comments above, this is not the case for Raiffeisenlandesbank Vorarlberg. While the Austrian issuer has an outstanding sub-benchmark bond from November 2019 (EUR 300m; 15y), it also has an older EUR benchmark, which was placed on the market in September 2018 in the amount of EUR 500m and a maturity of seven years. The bond's characteristics are such that the benchmark is also part of the EUR iBoxx Covered. Hypo Vorarlberg is therefore part of the group of eight covered bond issuers that currently have both outstanding EUR benchmarks and EUR sub-benchmarks and is therefore not included in the following table in line with our understanding of sub-benchmark issuers.

EUR sub-benchmark issuers

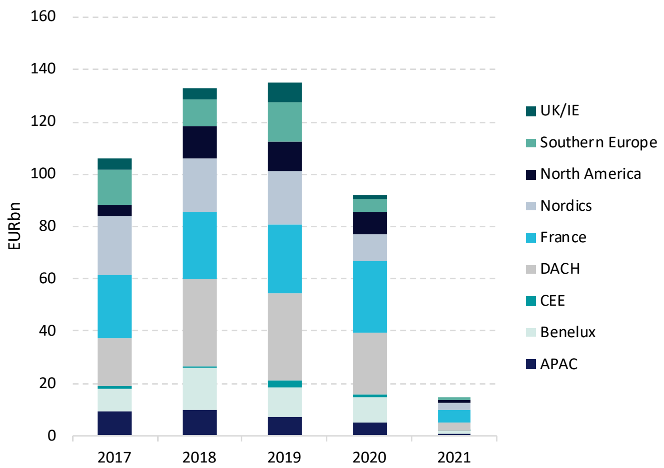
Issuer	Country	BBG Ticker	Cover Pool[1] (EUR m)	Amount outst. (EUR m)	OC	Ratings	Type	Last SBMK
Kommunalkredit Austria	AT	KA	1,012.2	900.0	12.5%	- / - / A	P	04.07.17
Oberbank	AT	OBERBK	3,138.0	737.0	190.3%	- / - / AAA	M	21.01.20
Oberoesterreichische Landesbank	AT	OBLB	2,719.3	1,921.4	41.5%	- / - / AA+	M	08.05.18
DekaBank	DE	DEKA	4,291.0	3,463.8	23.9%	- / Aaa / -	PS	21.01.20
Kreissparkasse Koeln	DE	KRSKOE	5,211.5	1,548.3	236.6%	- / Aaa / -	M	28.01.16
Landesbank Berlin	DE	LBBER	3,475.0	5,609.4	61.4%	- / Aaa / -	M	18.01.21
Landesbank Saar	DE	SAARLB	3,319.0	2,233.0	48.6%	AAA / - / -	PS	17.09.20
Natixis Pfandbriefbank	DE	KNFP	1,477.7	1,257.5	17.5%	- / Aaa / -	M	13.11.19
Sparkasse Hannover	DE	SSPHAN	1,761.9	1,257.6	40.1%	AAA / - / -	M	17.10.19
			924.5	738.1	25.3%	- / - / -	PS	26.11.14
Sparkasse Pforzheim Calw	DE	SKPPFO	2,276.1	1,510.1	50.7%	AAA / - / -	M	29.01.20
Stadtsparkasse Muenchen	DE	SSPMUE	1,451.9	710.0	104.5%	AA+ / - / -	M	06.06.18
LHV Pank	EE	LHVGRP	466.8	350.0	33.4%	- / Aa1 / -	M	02.06.20
Alandsbanken	FI	AABHFH	698.2	650.0	49.0%	- / - / AAA	M	12.03.19
Mortgage Society of Finland	FI	SUOHYP	1,930.1	1,450.0	33.1%	- / - / AAA	M	06.03.19
Oma Savings Bank	FI	OMASST	1,500.1	1,150.0	30.4%	- / - / AAA	M	18.11.20
Banca Popolare dell'Alto Adige	IT	BPOPAA	462.0	300.0	54.0%	AA- / - / -	M	17.10.19
Moere Boligkreditt	NO	MOREBO	2,919.9	2,284.2	27.9%	- / Aaa / -	M	02.10.19
mBank Hipoteczny	PL	MBKHIP	2,068.6	1,656.4	24.9%	- / Aa2 / -	M	05.11.19
Tatra Banka	SK	TATSK	1,397.2	993.8	40.4%	- / Aaa / -	M	24.06.19

[1] Data based on the latest available cover pool report in each case
Source: issuers, rating agencies, Bloomberg, NORD/LB Markets Strategy & Floor Research (Rating: Fitch / Moody's / S&P)

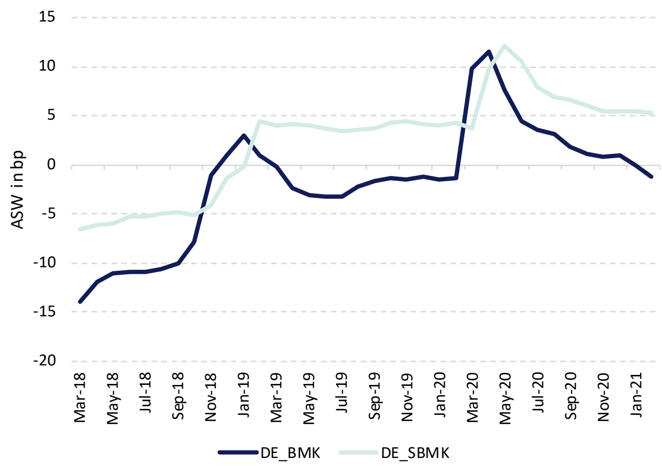
Regulatory framework: 10% risk weight but maximum LCR Level 2A

While EUR benchmarks can benefit from the best possible preferential treatment, this is only true of EUR sub-benchmarks in some respects. Since the outstanding volume is not of relevance for determining the risk weight of a covered bond, sub-benchmarks that fulfil the relevant requirements of article 52(4) of the UCITS Directive (it must accordingly be an EMU issue among other criteria) and article 129 CRR, can benefit from a preferential risk weight of 10% similarly to benchmark issues. To qualify, they must be classified in Credit Quality Step 1 (AAA to AA-). However, the situation is different with regard to the LCR Level of an EUR sub-benchmark bond, since here the categorisation depends on the outstanding volume among other criteria. Accordingly, because they fall below the EUR 500m threshold, they cannot qualify as Level 1 assets whereas classification as a Level 2A or 2B asset is possible depending on the rating. The proportion of Level 2 assets in the LCR portfolio is limited to 40% whereby Level 2B assets may not exceed 15% of the total portfolio. More detailed information on determining the risk weight and the LCR Level can be found in our NORD/LB Covered Bond Special – Risk Weights and LCR Level of Covered Bonds.

Spread overview: EUR sub-benchmarks



Spread trend DE: BMK vs. SBMK

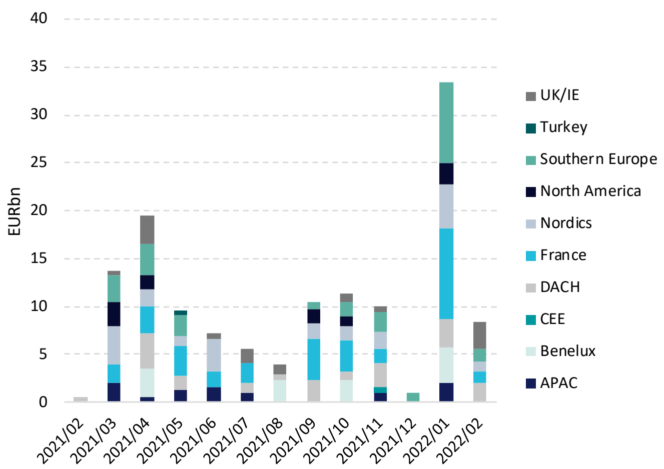


Source: Bloomberg, NORD/LB Markets Strategy & Floor Research

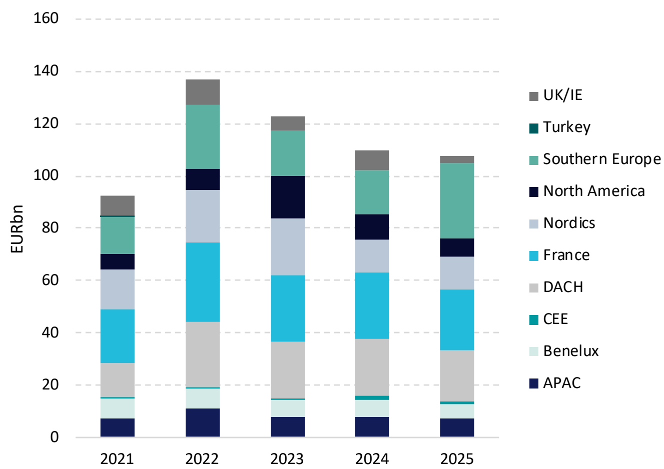
Bonds offer a pickup to EUR benchmarks

Compared with the EUR benchmark segment, spreads on EUR sub-benchmarks are wider. We attribute this circumstance to the fact, among other factors, that they are treated differently in terms of the LCR Level, while the lower outstanding volume means they are less liquid. Another factor may also be the fact that in many cases EUR sub-benchmark issuers are smaller institutions and accordingly issuer-specific factors are reflected in the spreads. We have prepared a comparison of the current spread levels for the two largest markets for EUR sub-benchmarks (Germany and Finland), which shows the difference in spreads described very clearly. Accordingly, the curve for EUR sub-benchmarks in Germany is on average around seven basis points above the corresponding curve for EUR benchmarks. The picture is similar in Finland, although here sub-benchmarks tend to be grouped more frequently at the short and medium end.

Germany: spread overview BMK vs. SBMK



Finland: spread overview BMK vs. SBMK



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

Conclusion

With the EUR sub-benchmark bond in the amount of EUR 300m promised by the Mortgage Society of Finland for the second half of March and the bond to be issued by RLB Vorarlberg, the volume of the sub-benchmarks issued in 2021 will increase and is expected to reach around 40% of the issuance volume from the previous year. Bonds in the sub-benchmark segment are increasingly issued by institutions with smaller cover pools, although there are also issuers with smaller cover pools in the benchmark segment. By and large, the segment for sub-benchmarks only represents a fraction of the volume of the market for EUR benchmarks because of the usual issuance volumes and the comparatively small group of issuers, however, looking at the current spread or yield environment, it offers the possibility of generating a pickup. This is not the only reason why the issuers involved in this sub-market have been a fixed component of our Issuer Guides Covered Bonds for several years. All outstanding sub-benchmarks are from issuers in the EEA, although we have certainly identified opportunities for institutions outside the EEA (such as Canada) getting involved in this market.

Covered Bonds
ECB: crowding-out effects take hold

Author: Dr Frederik Kunze

Eurosystem monetary policy still having a major impact on covered bond market

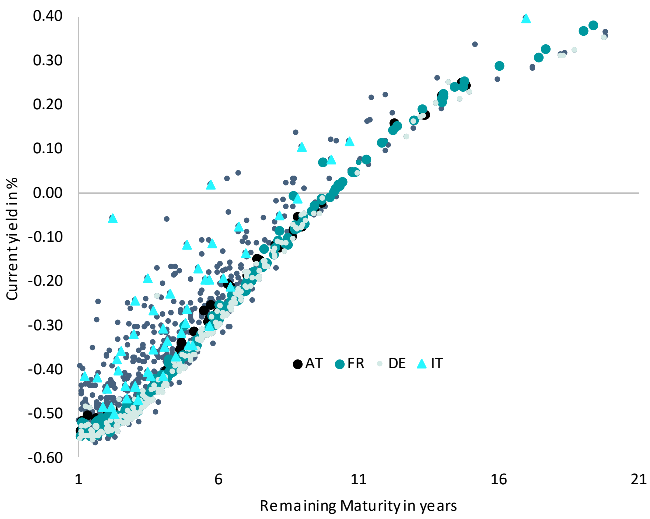
The latest interest rate decisions by the central bankers in Frankfurt were just under five weeks ago. In less than three weeks' time (on 11 March 2021), it will be time for the next scheduled ECB decision. After the last meeting delivered little that was new by way of direct impetus for the covered bond market, we are not expecting any ground-breaking decisions at all from the next meeting either in relation to covered issuances. Even so, the fact remains that the ECB's monetary policy direction of travel and the matching approach being adopted by the Eurosystem are still exerting an influence on the covered bond market, and it would hardly be an exaggeration in our view to say that this influence amounts to lasting paralysis. The implications of the ECB's monetary policy both in relation to the funding considerations of issuers and in relation to investor behaviour are becoming increasingly obvious – although this hardly comes as any surprise. In this section, we propose to focus on the investor front and look in more detail at possible crowding-out effects from the ECB's monetary policy.

Simultaneous influence of the ECB in figures...

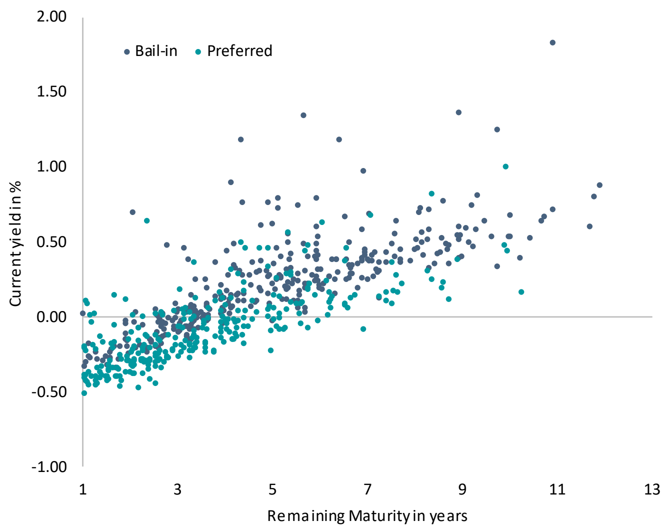
The starting point for the analysis outlined above is once again the ECB's monetary policy, which so far as we understand, is leading to a dampened supply through the current TLTRO III programme and at the same time siphoning off a large part of the issue volume through its own purchase programme (CBPP3). Apart from these direct effects, the surplus liquidity which is in evidence in the market and related yield levels are leading to further evasive actions. It is possible that, in the more recent past, the relative attraction of senior unsecured issues has also led to a greater focus on unsecured issues on the part of some issuers. In addition, the regulatory framework is creating incentives for the placement of bonds in the bail-inable sub-market of senior non-preferred bonds. The ECB's simultaneous influence outlined in the present can be expressed in figures for the year 2021 – at least as an estimate. The relevant reference value for us for the moment is net supply, which should give us an indication of what (additional) material is available in the market and how that is evolving. Based on expected maturities of EUR 136.4bn and our projection of EUR 105bn in covered bond new issues at the beginning of 2021, this leads to a negative net supply of EUR 31.4bn, which already illustrates influences on the supply side to a large extent. In order to factor in the impact of ECB purchases under CBPP3, the Eurosystem's primary market purchases also have to be taken into account. The share of covered bonds purchased in the primary market in CBPP3 holdings currently stands at around 36%. The reference figure for this percentage is the overall (i.e. primary as well as secondary) purchase volume, which we estimate at EUR 54bn in 2021 (i.e. EUR 2bn of new purchases per month plus the reinvestment of maturities amounting to EUR 30bn). Accordingly, we can expect an additional reduction in net supply (for market participants) of EUR 19.4bn (36% of estimated ECB purchases of EUR 54bn), which would mean negative net supply of EUR 50.4bn.

…with actual purchase behaviour and actual issuance volumes as uncertainty factors
Nevertheless, this figure should be seen as the result of a scenario analysis. In relation to the actual bonds eligible for purchase under CBPP3 specifications (forecast: EUR 67bn in 2021), the ECB accounts for 29% of expected issues. Based on the Eurosystem's historical allocation, however, the share is more likely to be of the order of 20%. This would then mean negative net supply of EUR 44.9bn after ECB purchases in the primary market. In fact, we do regard the 29% figure as too high and would lean more towards an assumption of 20%. In this context, however, it is also important to bear in mind that forecasts in relation to issue volumes in the benchmark segment are subject to greater forecast risks, above all in view of the latest developments in the market and activities in the primary market.

Yield landscape: iBoxx EUR Covered



Yield landscape: iBoxx EUR Banks Senior



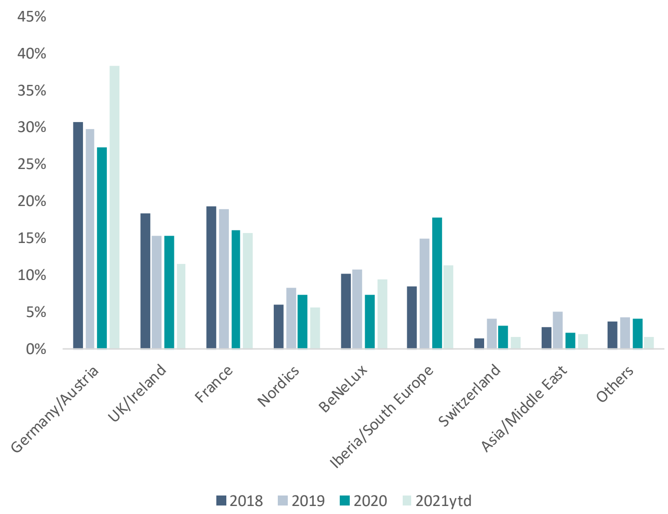
Source: Bloomberg, NORD/LB Markets Strategy & Floor Research

Investors forced to search for alternatives
All in all, this scenario nevertheless highlights the dilemma facing covered bond investors who are faced with a shrinking market with strong ECB competition and a generally low level of yields. The imponderables in relation to the attraction of the current spread/yield level combine to come into play with challenges in the primary and secondary market anyway. The above charts contrast current yield levels in the iBoxx EUR Covered vs. iBoxx EUR Banks Senior. It is important to bear in mind that the most recent increases in EUR swap rates have definitely exerted an impact. Even so, it is clear that the bulk of issues in the covered bond benchmark segment currently have negative yields. Even though there is evidence of a similar trend in the iBoxx EUR Banks Senior, the yield level is generally higher (in view of a lower level of collateralisation). If one assumes, among other things, that, when analysing yields, the zero line is more than just a psychological barrier, then it would be entirely possible to establish the hypothesis of a crowding-out of covered bonds in the senior unsecured bond segment based on the different yield levels and on the assumption of an ongoing investment emergency for investors.

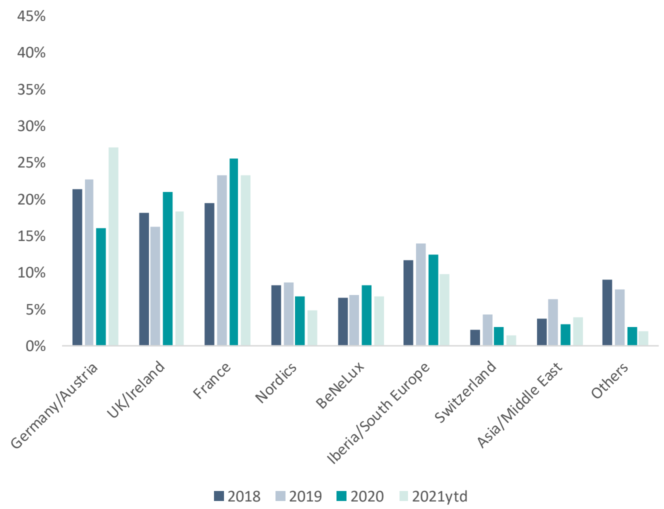
Deal sheets provide clues re: crowding-out

For quite some time now and based on observable swap levels and tightening ASW spreads, there have been signs that investors and issuers are now also focusing more on longer maturities in the covered bond segment. In the wake of this, market participants are likely also to have turned gradually to other – neighbouring – sub-segments. In this respect, it definitely makes sense in our view to describe the covered bond and financials segment as neighbouring. The explanations above on the net supply trend and fundamental shortage of covered bonds in the secondary market factor in not only the yield dimension, but also another aspect in these considerations. Following this reasoning, the latest shifts in investor breakdown in the primary market hardly come as any surprise. The average allocation of bonds to German and Austrian investors is obvious, especially in the case of senior preferred issues. The evaluation is based on investor allocations in the deal sheets. The respective data for this year for senior non-preferred bonds, which are less advantaged in the liability cascade, also show that investors from Germany and Austria represent a greater share. Even though we would caution against assuming that this trend will continue unchanged in future, we do regard the entries as proof of a move into the financials segment, which can be ascribed in particular to the crowding-out of traditional covered bond investors.

Investor breakdown: Senior Preferred



Investor breakdown: Senior Non-preferred



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

Summary

The simultaneous influence of the ECB on the covered bond market is becoming increasingly clear also from the point of view of investors. At least, we regard the country allocations which can be observed this year as proof of crowding-out. In this context, both the yield and general availability of covered bonds in the secondary market play an important role. As regards the spread performance of covered bonds, we really see nothing to indicate that we should move away from the expectation of further modest tightening of ASW spreads. Any potential increase in yields would therefore be the result of rising swap rates.

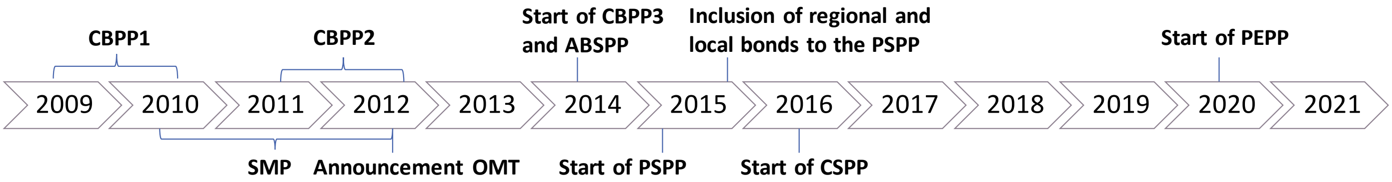
SSA/Public Issuers
PEPP vs. PSPP: Similarities and differences

Author: Dr Norman Rudschuck, CIIA

Review of the ECB's purchase programmes

Since we regularly receive questions about the tangled issue of ECB purchase programmes, we propose to bring our readers up to date quickly and give a brief survey of the purchasing terms and conditions that apply to the PSPP and PEPP. The ECB had already launched its first bond purchase programme back in July 2009 with the Covered Bond Purchase Programme (CBPP) in response to the financial crisis and related funding problems facings banks. The programme ran until June of the following year and reached the target volume of EUR 60bn. It was followed from May 2010 onwards by the Securities Markets Programme (SMP) amounting to around EUR 210bn as part of euro crisis purchases of sovereign and corporate bonds in the secondary market. At the beginning, in order to avoid the threat of inflation, SMP transactions took place on a "sterilised" basis; in other words, they had no impact on money supply. In 2014, however, the ECB decided to go for retrospective quantitative easing by suspending sterilisation, and the remaining EUR 165bn was then left in the market. Purchases under the SMP were brought to a close in September 2012 with the launch of the Outright Monetary Transactions (OMTs). Bond holdings amounting to EUR 16.4bn were accumulated with a second covered bond purchase programme (CBPP2) amounting to EUR 40bn which kicked off in November 2011. A third purchase programme for covered bonds started in 2014 with the CBPP3, and a purchase programme for ABS was launched with the Asset-Backed Securities Purchase Programme (ABSPP). In January 2015, the ECB launched its Expanded Asset Purchase Programme (EAPP), which extended asset purchases to include bonds issued by euro area central governments, agencies and European supranational institutions; these bonds were bought in the secondary market (Public Sector Purchase Programme, PSPP). In December 2015, the ECB Council decided to extend the PSPP to include regional and local issuers. The (E)APP also includes the CBPP3 and ABSPP, which were introduced in 2014 and which also continue to date. As part of its unconventional monetary policy measures, the ECB therefore purchased assets from commercial banks for the first time. The purchase of assets via the programme, also referred to as quantitative easing (QE), was aimed at supporting economic growth in the euro currency area and helping or at least trying to bring back inflation to a level under but close to 2%. At the beginning of 2016, moreover, the decision was taken to extend the APP to include the Corporate Sector Purchase Programme (CSPP), aimed at the purchase of corporate bonds. At the end of January, the APP amounted to a volume of around EUR 2,926.8bn, of which the PSPP accounted for 80.5%. Shortly after the first coronavirus lockdown came into force in Europe in March 2020, the ECB announced that it was launching the Pandemic Emergency Purchase Programme (PEPP) on top of the existing APP in response to exceptional market conditions. Initially, a maximum volume of EUR 750bn was envisaged for the PEPP. In view of the progression of the pandemic, this was first increased to EUR 1,350bn in June 2020, and then to the present figure of EUR 1,850bn in December 2020. Moreover, in December 2020, the ECB extended the minimum term of the programme − initially set to run to June 2021 − by nine months to March 2022.

Purchase programmes over time



Current volume of individual purchase programmes in the APP

	ABSPP	CBPP3	CSPP	PSPP	APP total
Volume in EUR m	28,631	287,619	255,327	2,355,262	2,926,840
Percentage of APP	1.0%	9.8%	8.7%	80.5%	

Monthly APP purchase volume over time

Period	Average monthly APP purchase targets
March 2015 to March 2016	EUR 60bn
April 2016 to March 2017	EUR 80bn
April 2017 to December 2017	EUR 60bn
January 2018 to September 2018	EUR 30bn
October 2018 to December 2018	EUR 15bn
January 2019 to October 2019	Reinvestment phase, no net purchases
November 2019 to probably shortly before increase in key rate	EUR 20bn

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

Basic facts (and figures) on the PSPP

At the time of its launch, the PSPP only included bonds issued by central governments, agencies and European supranational institutions located in the eurozone. They were followed by sub-sovereigns (mainly German Bundeslaender plus other European regions) in December 2015. The Eurosystem is sticking to the fundamental principle of market neutrality in its implementation of the APP. The PSPP bond portfolio is divided based on the capital keys of the national central banks and their share in the ECB capital; the capital keys are calculated based on the respective country's population and GDP. Accordingly, German sovereign bonds make up the biggest share in the portfolio (24.3%), followed by French (18.8%) and Italian paper (15.7%). The country ratios are one of the major differences in the APP in relation to OMTs which are the object of a legal dispute and have not yet been used. In addition, in the case of the PSPP and in contrast to the now closed SMP and possible OMTs, the national central banks of the Eurosystem may only purchase sovereign bonds and sub-sovereigns of their own country in order to obviate any concerns regarding monetary public sector financing. Under the APP, the Eurosystem only purchases EUR-denominated bonds. At present, the ECB assumes that net purchases under the APP will come to an end as soon as an interest rate hike is on the horizon. In contrast, reinvestments through repayments are still planned beyond that date and are expected to continue for as long as is necessary in order to maintain favourable liquidity conditions. Coupon and interest payments will not be reinvested. Reinvestments are also geared to the capital keys and are carried out via the national central bank in the bonds of the respective jurisdiction in each case. Here also, the principle of market neutrality applies, and reinvestment in each case should take place over one year. Supras are reinvested in the month of maturity or in the two months either side if this is justified by liquidity conditions in the market.

Legal disputes

On 5 May 2020, the Federal Constitutional Court mostly granted several complaints directed against the PSPP. Among the group who brought the legal challenge were the former CSU Vice President Peter Gauweiler and AfD founder, Bernd Lucke. In essence, the ECB was accused of overstepping its competences and of violating the rule against the monetary financing of states. In their ruling, the judges came to the conclusion that the ECB had possibly overstepped its competences. They doubted that the central bank had weighed up the "considerable economic policy effects" for instance on interest risks for savers and of rising real estate prices in the individual Member States. The German Government and Bundestag should work towards ensuring that the ECB retrospectively verifies whether purchases satisfy the principle of proportionality. After the ruling, the central bankers ascertained the proportionality of the programme in a fresh review. Corresponding documents thought to demonstrate this have been submitted to the Bundestag, although these are partly subject to confidentiality. Gauweiler and Lucke then applied to the Federal Constitutional Court for an enforcement order to be issued in order to be able to see the files. The dispute then entered into another round. Further complaints could follow the decision about the inspection of files.

PSPP purchase terms and conditions

Many of the purchase terms and conditions for the PSPP were gradually eased during the course of the programme. At the beginning of the programme, the purchase limit for the Eurosystem per issue (issue limit) was 25%, but was quickly raised to 33% in September 2015. The issuer ceiling, i.e. the cap on the purchased share per issuer was initially set at 33% and still applies in this amount in the case of sub-national and national issuers. However, both the issue and issuer ceiling for **Supras** were raised to **50%** in April 2016 and were related to the nominal value of the bonds. The Eurosystem initially only purchased securities with a minimum residual maturity of two years and a maximum duration of under 31 years under the PSPP. Terms and conditions were also relaxed in relation to maturity. The requirement that bonds eligible for purchase should not yield at below the deposit facility interest rate (currently -0.5%) was also scrapped at the time. However, this type of paper should only be purchased if otherwise the target volume could not be met. For other programmes under the APP, the rule applicable until 12 September 2019 was that the yield should not be below the deposit rate. In view of rating requirements (investment-grade rating mandatory), Greek bonds have not been eligible for purchase under the PSPP since the programme was launched. For a time, Cypriot sovereign bonds were also affected by the rule; however, since they are back in investment grade, the exclusion no longer applies. Green bonds are also eligible as part of the PSPP, provided they also meet the other conditions. **Supranationals** specifically named by the ECB are:

- Council of Europe Development Bank (CEB)
- European Atomic Energy Community (EURATOM)
- European Financial Stability Facility (EFSF)
- European Stability Mechanism (ESM)
- European Investment Bank (EIB)
- European Union (EU)
- Nordic Investment Bank (NIB)

Technical data on the PSPP

In total, bonds issued by sovereigns, sub-sovereigns and agencies should make up 90% of the Eurosystem's entire PSPP portfolio, while paper issued by supranationals should account for the remaining 10%. The latter are only purchased by the national central banks, and not by the ECB. Unlike other purchase programmes under the APP, purchases under the PSPP only take place via the secondary market since Article 123 of the Treaty on the Functioning of the European Union (TFEU) forbids the purchase of such paper through the primary market (direct state financing). In less liquid markets, national central banks purchase the bonds to some extent through reverse auctions. Apart from bonds issued by supras, paper purchased by the ECB (10% of total PSPP purchases) is also subject to risk sharing in the event of a loss. Therefore, 20% of purchases under the PSPP are subject to risk sharing. The sale of bonds purchased under the PSPP is theoretically possible but by no means a regular occurrence, although this is not ruled out. If, however, sales do take place, then this happens for technical reasons. Any such sales would in any case be offset by additional gross purchases of the same jurisdiction. Bonds eligible for purchase include conventional nominal bonds as well as inflation-indexed bonds and floaters. Although theoretically, STRIPS (Separate Trading of Registered Interest and Principal Securities) are eligible through the PSPP, they are left out for operational reasons.

ECB purchase list for the PSPP – regional European issuers (sub-sovereigns)

Issuer	Jurisdiction	ISINs already purchased	Issuer	Jurisdiction	ISINs already purchased
BADWUR	DE	21	IDF	FR	4
BAYERN	DE	10	VDP	FR	3
BERGER	DE	49	MADRID	ES	20
BREMEN	DE	39	CASTIL	ES	5
BRABUR	DE	19	BASQUE	ES	10
HESSEN	DE	44	ARAGON	ES	1
HAMBRG	DE	25	ANDAL	ES	4
NIESA	DE	55	BALEAR	ES	1
MECVOR	DE	3	JUNGAL	ES	2
NRW	DE	71	NAVARR	ES	1
RHIPAL	DE	33	WALLOO	BE	12
SAARLD	DE	8	FLEMSH	BE	12
SCHHOL	DE	32	LCFB	BE	6
SAXONY	DE	6	BRUCAP	BE	3
SACHAN	DE	6	GOVMAD	PT	3
THRGN	DE	17	AZORES	PT	4
BULABO	DE	1			
LANDER	DE	23			
	Total	**463**		**Total**	**91**

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

ECB purchase list for PSPP – supranationals and agencies

Issuer	Jurisdiction	ISINs already purchased	Issuer	Jurisdiction	ISINs already purchased
EIB	SNAT	90	OBND	AT	14
EFSF	SNAT	58	ASFING	AT	12
ESM	SNAT	26	FINNVE	FI	9
EU	SNAT	31	TVRFIN	FI	4
COE	SNAT	16	ICO	ES	21
NIB	SNAT	6	ADIFAL	ES	7
EURAT	SNAT	-	CDEP	IT	17
KFW	DE	85	IP (REFER / ESTPOR)	PT	2
RENTEN	DE	32	SEDABI	SI	4
NRWBK	DE	81	DARSDD	SI	-
LBANK	DE	17	FADE	ES	15
BAYLAN	DE	26	KUNTA	FI	14
IBB	DE	12	PARPUB	PT	3
BYLABO	DE	9	CASDEL	IT	-
IBBSH	DE	8	AFLBNK	FR	7
WIBANK	DE	6	APHP	FR	3
SABFOE	DE	3	GDCHU	FR	2
IFBHH	DE	5	SPABSS	FR	-
CADES	FR	23	SFILFR	FR	5
RESFER	FR	24	SOGRPR	FR	5
UNEDIC	FR	30	HSGFIN	IE	-
AGFRNC	FR	28	FRBRTC	BE	1
OSEOFI	FR	23	SOCWAL	BE	3
CDCEPS	FR	7	FONWAL	BE	-
CNA	FR	2	SWLBEL	BE	-
ACOSS	FR	-			
BNG	NL	49			
NEDWBK	NL	39			
NEDFIN	NL	5			
	Total	**741**		**Total**	**148**

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

PEPP: the basics

In the case of the PEPP, the ECB has much greater freedom of action when it comes to the allocation to individual asset classes. In their first press conference on the PEPP, Eurosystem central bankers indicated that they did not want to be limited by self-imposed limits or rules. Although there are rules, such as a capital key, if necessary, their aim is not to restrict the freedom of action of central bankers and they should be treated with flexibility. As in the case of the APP, which is already up and running for years now, the central bankers specified that temporary and transient "fluctuations in the distribution of purchases over time, across the different asset classes and between jurisdictions" were possible. Moreover, there is no pace under the PEPP in the form of monthly purchases, unlike in the case of the APP. The increase in the PEPP to EUR 1,850bn and extension of the programme to March 2022 mentioned earlier also meant the extension of reinvestments from the programme by one year to the end of 2023. Regrettably, the ECB still does not publish any guidance regarding reinvestments under the PEPP, even though, in our view, such guidance and a corresponding transparency could provide very interesting insights.

PEPP purchase terms and conditions

The extent to which the Eurosystem conducts its purchases via the primary and/or secondary market remains unchanged, and therefore the requirements applicable to the four subprogrammes of the APP are also applicable for purchases under the PEPP. Purchases within the asset classes are therefore still subject to different criteria to some extent. Whereas bonds purchased under the CBPP3 and the ABSPP are purchased in both the primary and secondary market, the purchase of public sector assets under the PEPP is restricted exclusively to the secondary market. As regards the corporate sector, a distinction must be made between corporate bonds and public sector corporate bonds, which means bonds issued by a company or 'public undertaking', defined as “any undertaking over which the State or other regional or local authorities may directly or indirectly exercise a dominant influence by virtue of their ownership of it" within the meaning of Article 8 of Council Regulation (EC) no. 3603/93. Similarly to the public assets in the PSPP, these bonds can only be purchased in the secondary market. Financial sector bonds such as senior bonds, for example, are still excluded from all purchase programmes with the exception of covered bonds for which there is a separate purchase programme. For public sector asset purchases under the PEPP, the minimum eligible remaining maturity is reduced to 70 days, while the maximum eligible remaining maturity for public sector asset purchases under the PEPP is set at 30 years and 364 days, in line with the PSPP. In contrast to the APP, securities issued by the Greek Government are also eligible for purchase under the PEPP. The capital key under the PEPP differs from that under the PSPP through the inclusion of the latter. In the wake of the introduction of the PEPP, eligible maturities for paper purchased under the CSPP were immediately extended. For example, from then on, bonds with a remaining maturity of at least 28 days were eligible for purchase under both the PEPP (and CSPP). Prior to that, bonds from issuers from the corporate sector were only eligible for purchase under the CSPP if they had a minimum remaining maturity of six months. As regards risk sharing, the same terms and conditions apply under the PEPP as under the APP: as with the CSPP, in the case of the PEPP, 100% of corporate sector assets purchased are also subject to risk sharing. As in the case of the PSPP, 20% of public sector bonds purchased under the PEPP are subject to risk sharing.

NORD/LB

Purchase programmes at a glance

	Asset Purchase Programme (APP)	Pandemic Emergency Purchase Programme (PEPP)
Volume	EUR 2,926.8bn	EUR 806.8bn
Purchase volume	EUR 20bn per month	EUR 1,850bn (to March 2022)
Reinvestment of redemptions	Yes, fully	Yes, fully
Maturity	Net purchases: up to shortly before interest rate hike Reinvestment: beyond increase in key interest rate	Net purchases: up to the end of the coronavirus crisis, but at least until March 2022 Reinvestment: at least until end 2023
Eligible assets	PSPP, CBPP3, CSPP, ABSPP	PSPP, CBPP3, CSPP, ABSPP, enhanced by rules applying to PSPP assets
Rating terms and conditions	Investment Grade (Greek govies not eligible for purchase, among others)	Investment Grade (exception for Greek govies)
Reporting	Weekly (reference date: generally Fridays; reporting on subsequent Monday) and at the end of the month	Weekly (reference date: generally Fridays; reporting on subsequent Monday) and at the end of the month

Specifications for the purchase of securities

	Purchases via…		Purchases per ISIN	
	Primary Market	**Secondary Market**	**APP**	**PEPP**
Public Sector	No	Yes	Supras 50% Rest 33%	Not specified
Covered Bonds	Yes	Yes	max. 70%	max. 70%
Corporate Sector				
Corporate Bonds	Yes	Yes	max. 70%	max. 70%
Public Sector Corporate Bonds	No	Yes	max. 70%	max. 70%
Financials	No	No	0%	0%
Asset Backed Securities	Yes	Yes	max. 70%	max. 70%

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

Critique and summary

Although legal challenges submitted to the Federal Constitutional Court only applied to the PSPP, the PEPP is also alleged to breach rules relating to monetary public sector financing. Peter Gauweiler described the Pandemic Emergency Purchase Programme, which is designed as a short-term programme, as "even more problematic" than the PSPP and he has indicated that any legal challenge against the PEPP will depend on the progress of PSPP disputes. Others mounting challenges against the PSPP have issued similar statements about the PEPP, especially in relation to the ECB's greater flexibility in implementation. We would criticise the PEPP's lack of transparency in relation to the programme's reporting – a point which has already been raised frequently. Unfortunately, even after almost one year, the ECB has not given any information about whether, as in the case of the APP, there are also issuer and issue limits with public sector paper in the context of the PEPP. Even beyond that, the PEPP is akin to a "black box": the ECB only began in June 2020 to publish detailed reporting on portfolio structure and, to date, no separate lists of ISINs purchased under the respective programmes have been published. Moreover PEPP reports only come out every two months. In the case of the APP, reports are published on a monthly basis. As ever, therefore, the devil with the purchase terms and conditions is in the detail. Our article today should therefore shed a little light on the subject.

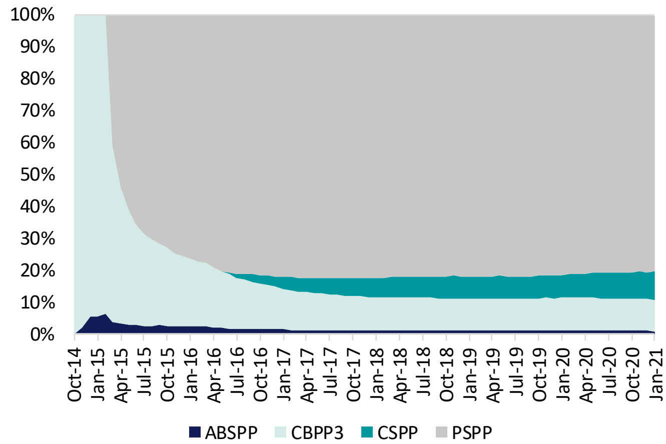
ECB tracker

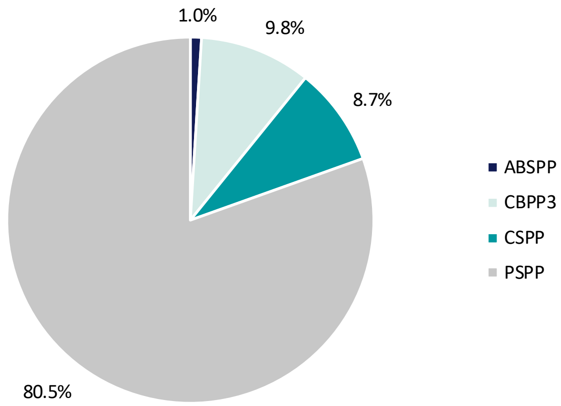
Asset Purchase Programme (APP)

Holdings (in EURm)

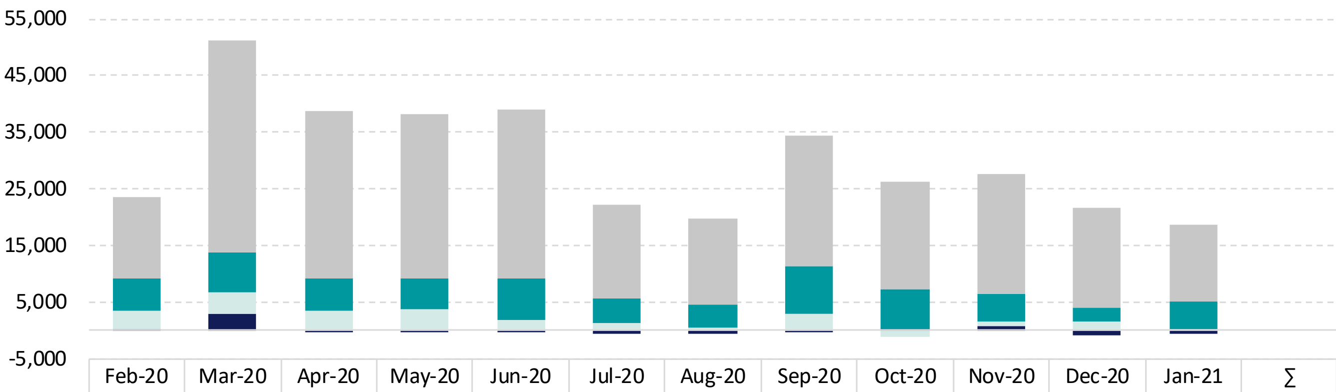
	ABSPP	CBPP3	CSPP	PSPP	APP
Dec-20	29,352	287,545	250,403	2,341,607	2,908,908
Jan-21	28,631	287,619	255,327	2,355,262	2,926,840
Δ	-721	+74	+4,924	+13,655	+17,932

Portfolio structure





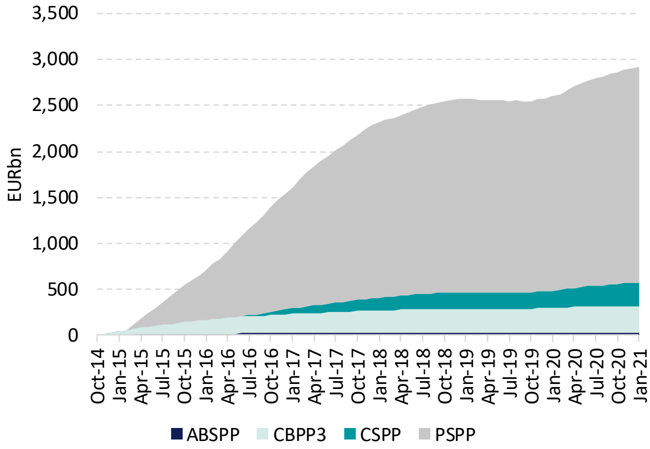
Monthly net purchases (in EURm)



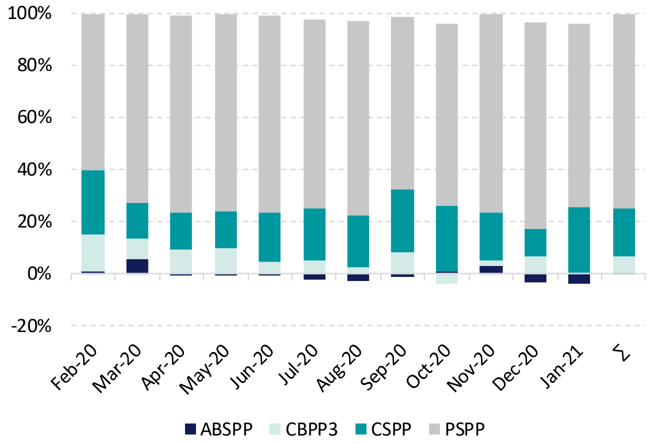
	Feb-20	Mar-20	Apr-20	May-20	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20	Jan-21	∑
APP	23,430	51,142	38,441	38,170	38,770	21,529	19,127	34,014	25,349	27,720	20,929	17,932	356,553
PSPP	14,137	37,323	29,624	28,961	29,779	16,370	15,150	23,102	19,182	21,241	17,822	13,655	266,346
CSPP	5,738	6,965	5,560	5,438	7,515	4,502	4,004	8,496	6,983	5,009	2,378	4,924	67,512
CBPP3	3,334	3,931	3,582	3,785	1,731	1,198	500	2,839	-1,041	646	1,529	74	22,108
ABSPP	221	2,923	-325	-14	-255	-541	-527	-423	225	824	-800	-721	587

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

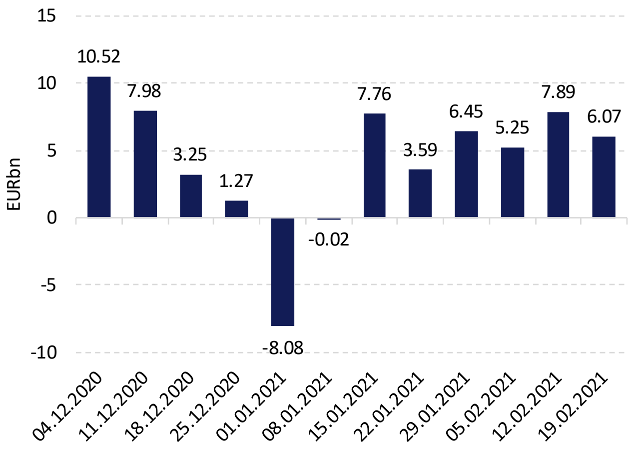
Portfolio development



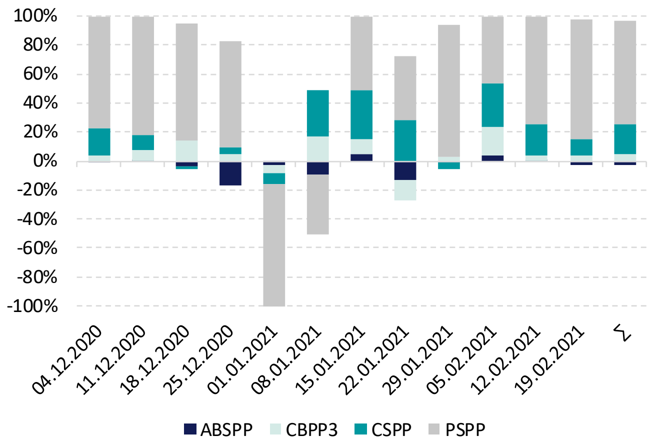
Distribution of monthly purchases



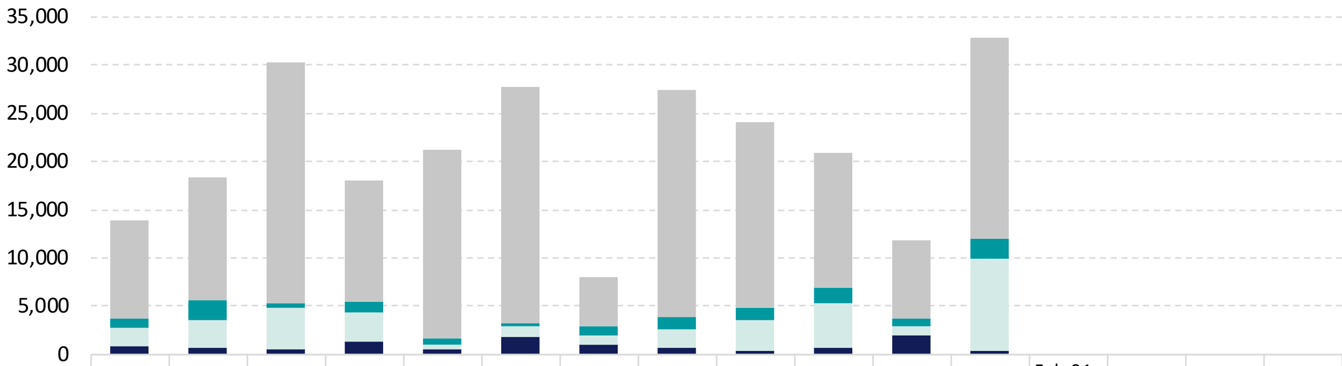
Weekly purchases



Distribution of weekly purchases



Expected monthly redemptions (in EURm)

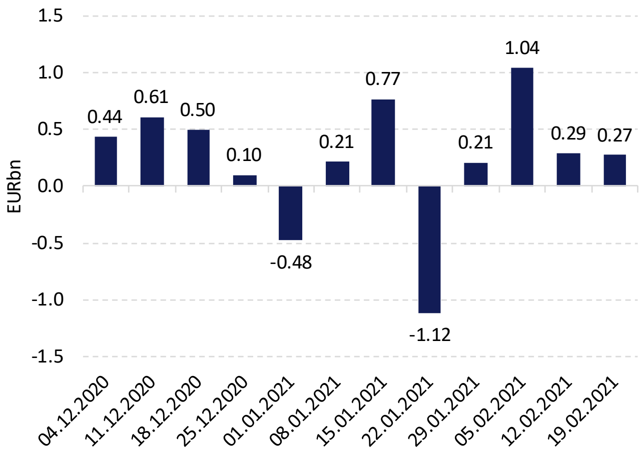


	Feb-21	Mar-21	Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Nov-21	Dec-21	Jan-22	Feb-21 - Jan-22	2020	2021	Jan 22
APP	13,919	18,343	30,273	18,048	21,158	27,791	8,044	27,433	24,071	20,912	11,895	32,843	254,730	262,253	247,423	32,843
PSPP	10,268	12,668	24,947	12,637	19,519	24,528	5,118	23,636	19,227	13,987	8,177	20,906	195,618	201,482	189,753	20,906
CSPP	960	2,209	578	1,144	686	334	966	1,272	1,309	1,673	826	1,981	13,938	18,267	15,942	1,981
CBPP3	1,824	2,818	4,278	2,894	367	1,132	1,002	1,902	3,123	4,625	937	9,605	34,507	33,236	30,050	9,605
ABSPP	867	648	470	1,373	586	1,797	958	623	412	627	1,955	351	10,667	9,268	11,678	351

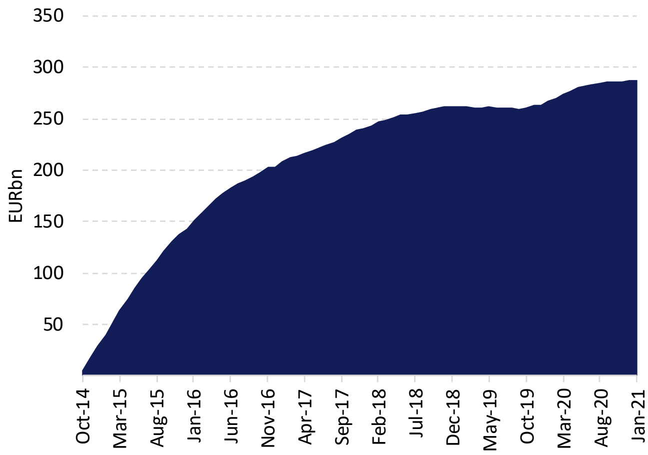
Source: ECB, Bloomberg, NORD/LB Markets Strategy & Floor Research

Covered Bond Purchase Programme 3 (CBPP3)

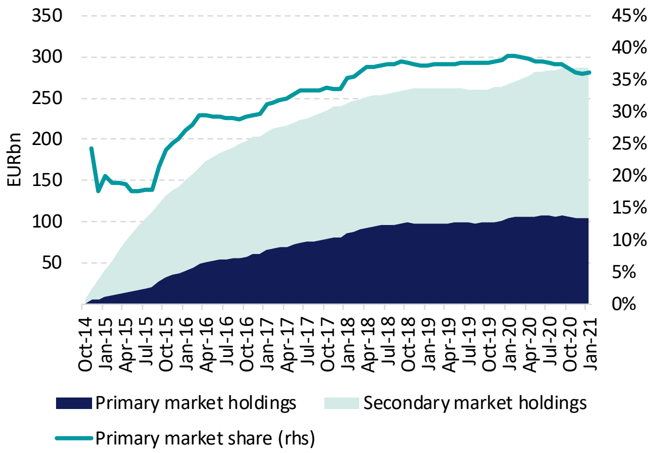
Weekly purchases



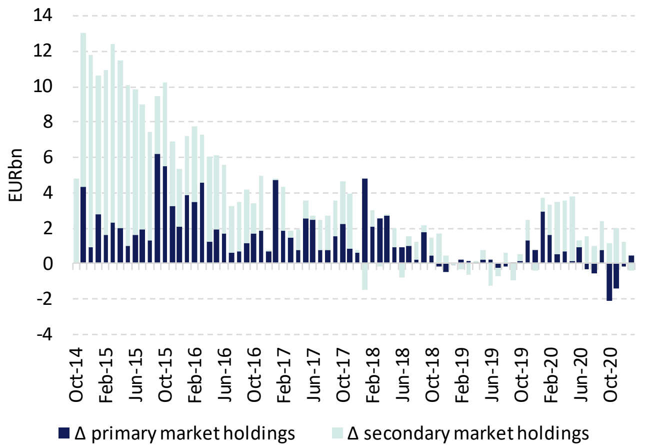
Development of CBPP3 volume



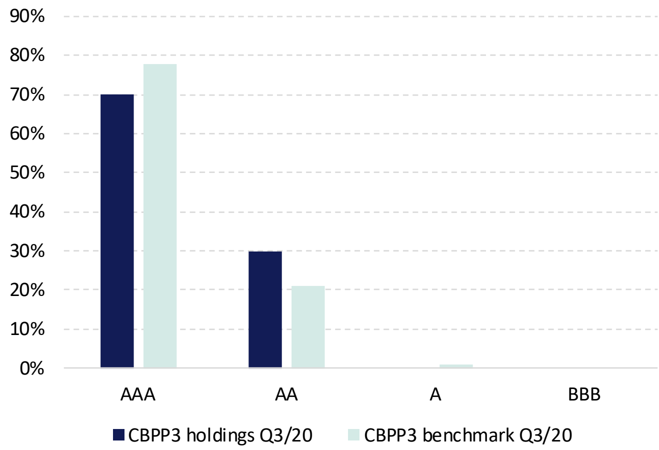
Primary and secondary market holdings



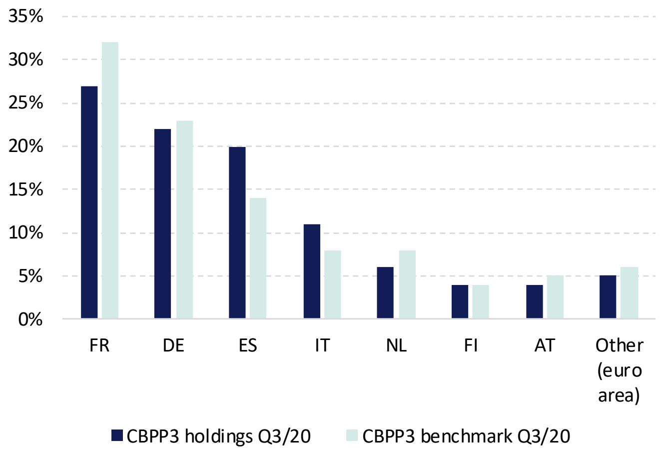
Change of primary and secondary market holdings



Distribution of CBPP3 by credit rating



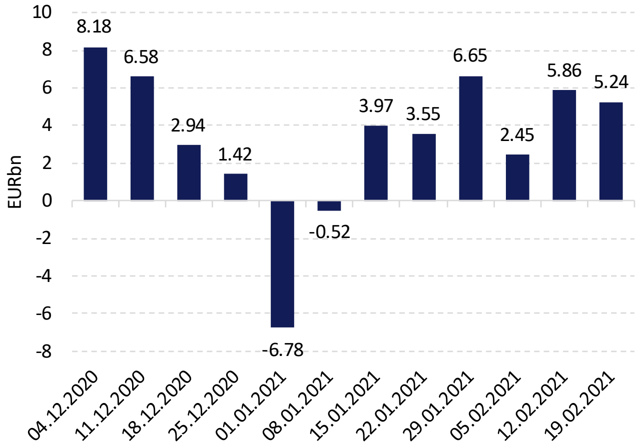
Distribution of CBPP3 by country of risk



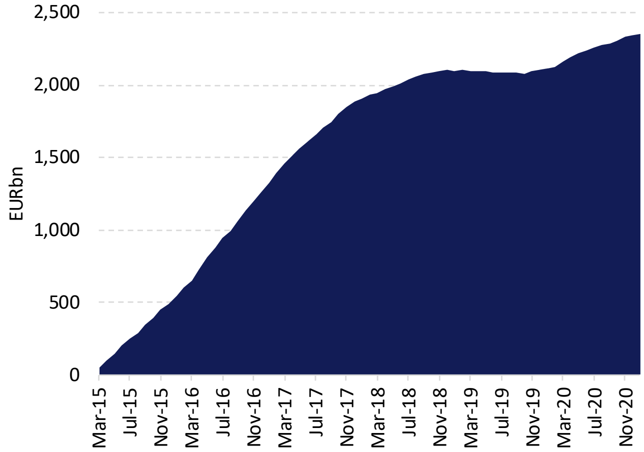
Source: ECB, Bloomberg, NORD/LB Markets Strategy & Floor Research

Public Sector Purchase Programme (PSPP)

Weekly purchases



Development of PSPP volume



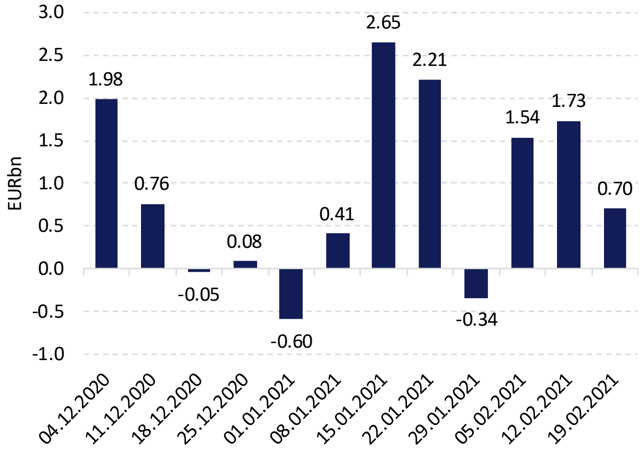
Overall distribution of PSPP buying at month-end

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%	68,774	66,898	1,876	7.8	7.8	0.0
BE	3.4%	87,044	83,271	3,773	8.4	10.2	-1.8
CY	0.2%	3,362	4,918	-1,556	10.0	9.3	0.7
DE	24.3%	579,970	602,526	-22,556	6.5	7.6	-1.1
EE	0.3%	302	6,439	-6,137	9.7	9.7	0.0
ES	11.0%	294,999	272,552	22,447	8.2	8.5	-0.3
FI	1.7%	36,359	41,984	-5,625	7.2	7.9	-0.7
FR	18.8%	493,134	466,824	26,310	7.0	8.1	-1.1
GR	0.0%	0	0	0	0.0	0.0	0.0
IE	1.6%	37,857	38,704	-847	8.6	9.9	-1.3
IT	15.7%	414,990	388,294	26,696	7.1	7.8	-0.7
LT	0.5%	4,689	13,228	-8,539	9.5	11.3	-1.8
LU	0.3%	3,091	7,529	-4,438	5.0	6.5	-1.5
LV	0.4%	2,524	8,906	-6,382	10.1	10.5	-0.4
MT	0.1%	1,215	2,397	-1,182	10.1	9.2	0.9
NL	5.4%	119,059	133,948	-14,889	7.5	8.4	-0.9
PT	2.2%	46,415	53,495	-7,080	7.2	7.6	-0.4
SI	0.4%	8,896	11,005	-2,109	9.4	9.3	0.1
SK	1.1%	14,884	26,176	-11,292	8.4	8.6	-0.2
SNAT	10.0%	259,209	247,677	11,532	7.2	8.3	-1.1
Total / Avg.	**100.0%**	**2,476,772**	**2,476,772**	**0**	**7.2**	**8.1**	**-0.9**

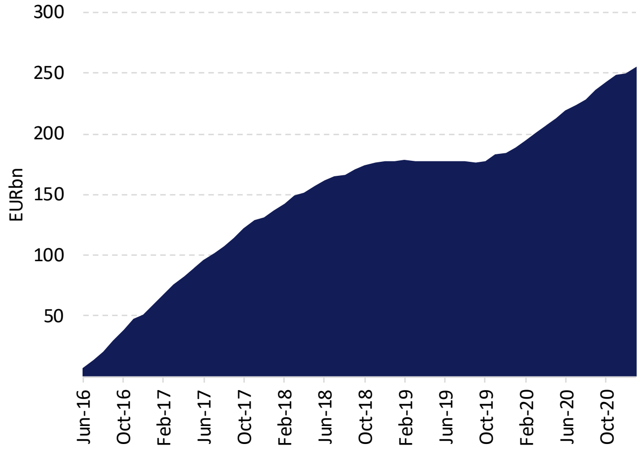
[1] Based on the ECB capital key, adjusted to include supras and the disqualification of Greece
[2] Based on the adjusted distribution key
[3] Weighted average time to maturity of the bonds eligible for purchasing under the PSPP (semi-annual data, Q3/2020)
Source: ECB, NORD/LB Markets Strategy & Floor Research

Corporate Sector Purchase Programme (CSPP)

Weekly purchases

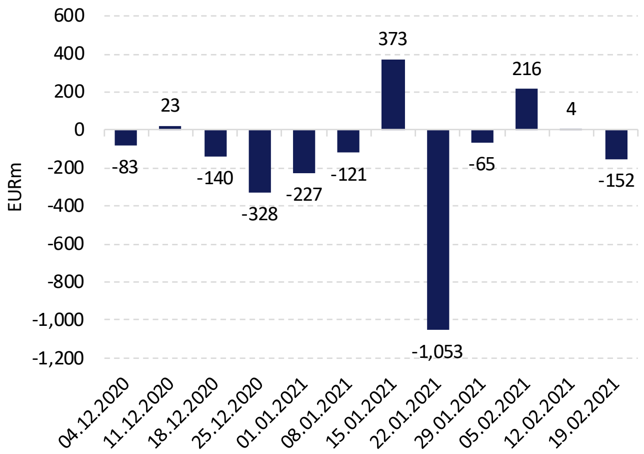


Development of CSPP volume

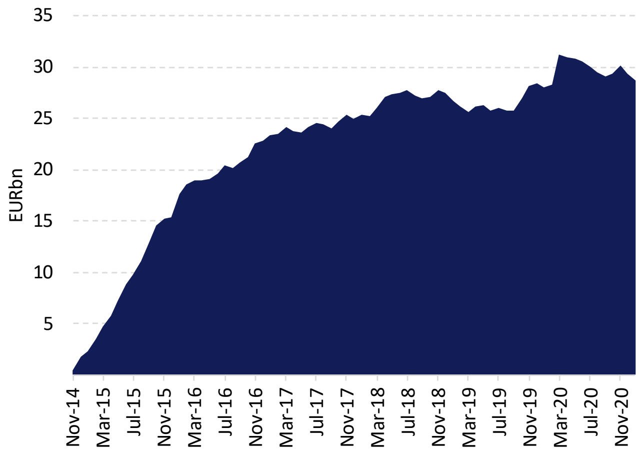


Asset-Backed Securities Purchase Programme (ABSPP)

Weekly purchases



Development of ABSPP volume



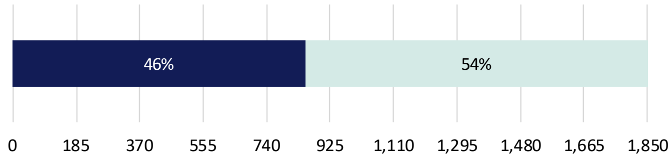
Source: ECB, Bloomberg, NORD/LB Markets Strategy & Floor Research

Pandemic Emergency Purchase Programme (PEPP)

Holdings (in EURm)

	PEPP
Dec-20	757,166
Jan-21	810,212
Δ	+53,046

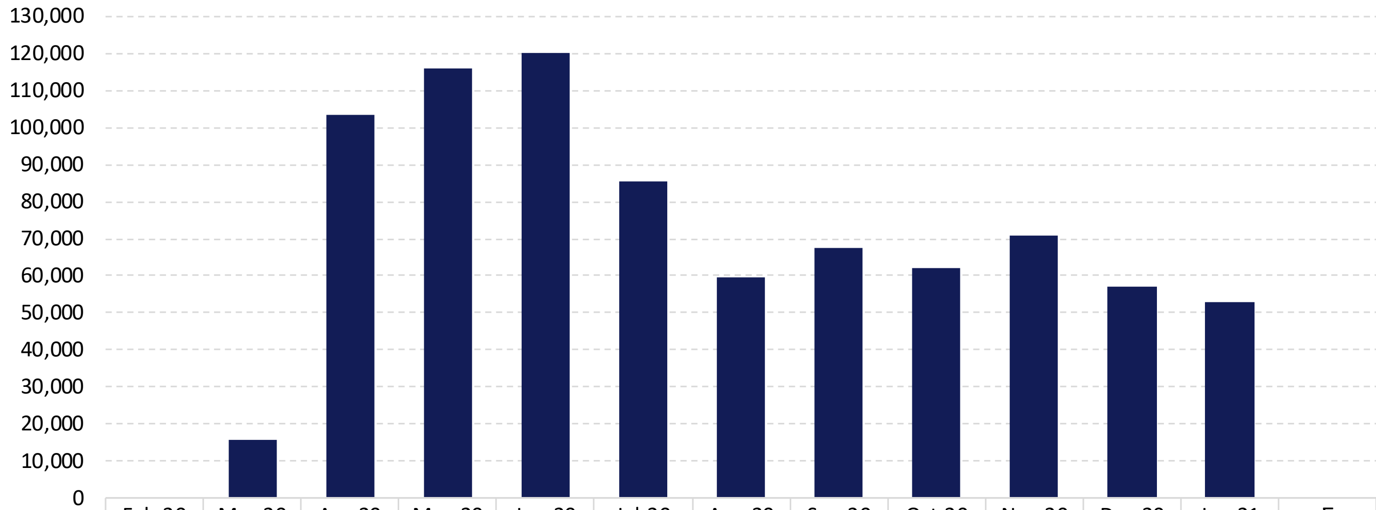
Volume already invested (in EURbn)



Estimated portfolio development

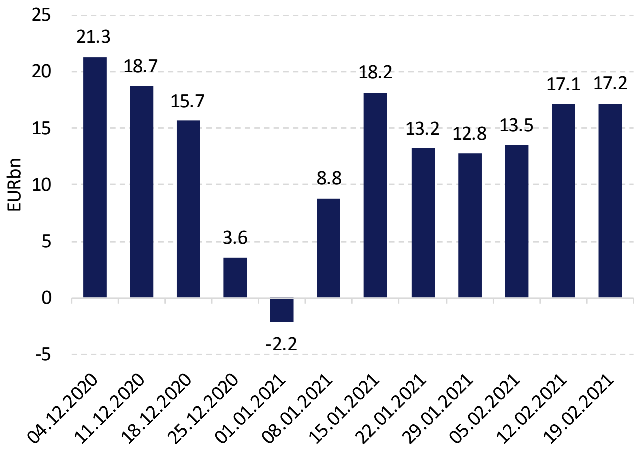
Assumed pace of purchases	Weekly net purchase volume	PEPP limit hit in …
Average weekly net purchase volume so far	EUR 18.2bn	55 weeks (11.03.2022)

Monthly net purchases (in EURm)

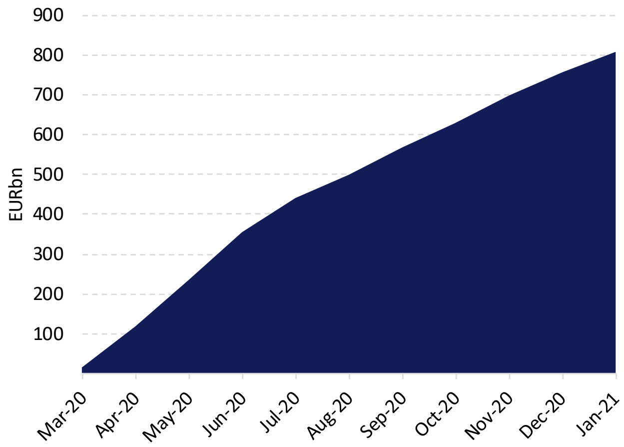


	Feb-20	Mar-20	Apr-20	May-20	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20	Jan-21	∑
PEPP	0	15,444	103,366	115,855	120,321	85,423	59,466	67,308	61,985	70,835	57,163	53,046	810,212

Weekly purchases



Development of PEPP volume

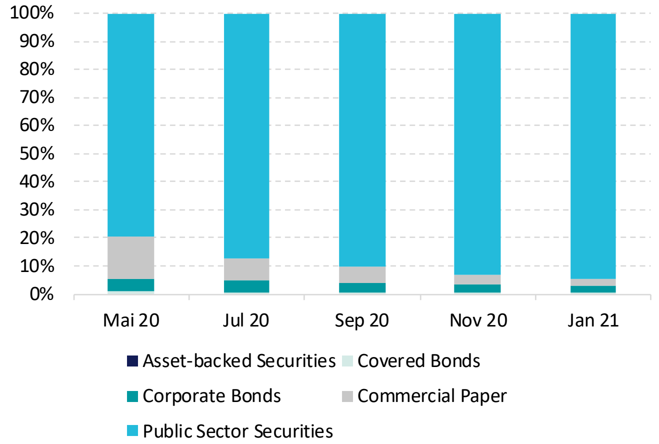


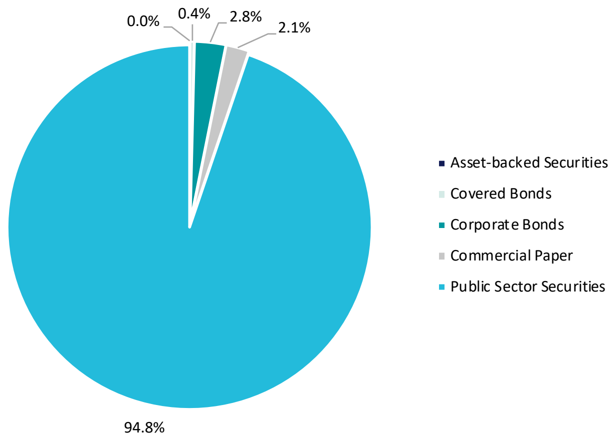
Source: ECB, Bloomberg, NORD/LB Markets Strategy & Floor Research

Holdings under the PEPP (in EURm)

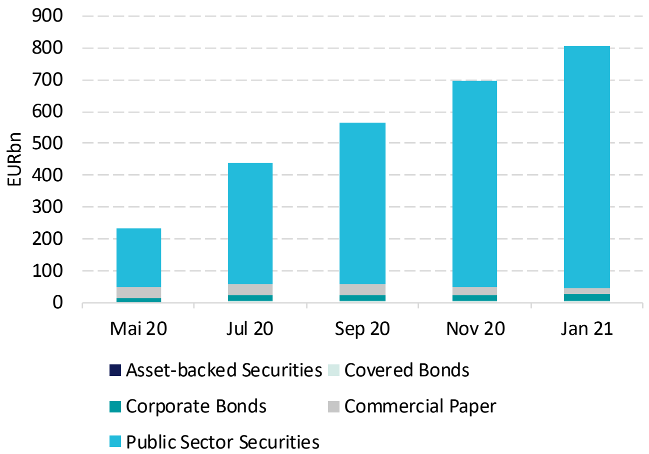
	Asset-backed Securities	Covered Bonds	Corporate Bonds	Commercial Paper	Public Sector Securities	PEPP
Nov-20	0	3,123	20,760	24,306	650,272	698,461
Jan-21	0	3,120	22,315	16,611	764,710	806,756
Δ	0	-3	+1,555	-7,695	+114,438	+108,295

Portfolio structure

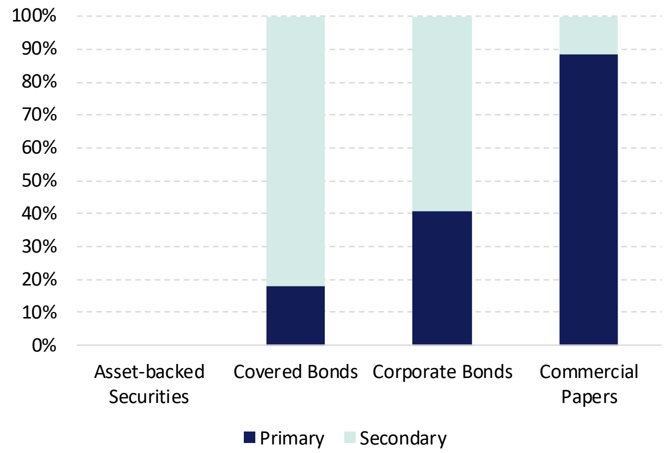




Portfolio development



Share of primary and secondary market holdings



Breakdown of private sector securities under the PEPP as of January 2021

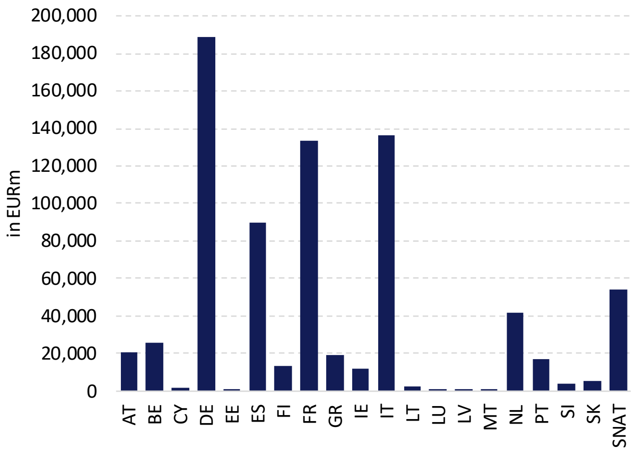
	Asset-backed securities		Covered bonds		Corporate bonds		Commercial papers	
	Primary	Secondary	Primary	Secondary	Primary	Secondary	Primary	Secondary
Holdings in EURm	0	0	557	2,563	9,092	13,223	14,663	1,948
Share	0.0%	0.0%	17.9%	82.2%	40.7%	59.3%	88.3%	11.7%

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

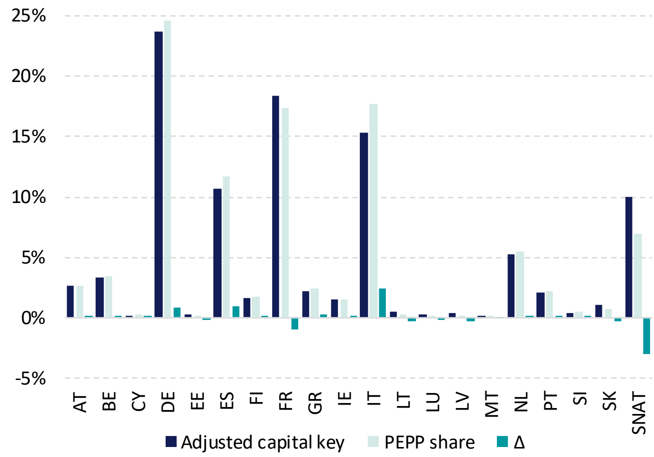
Breakdown of public sector securities under the PEPP

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	20,692	2.6%	2.7%	0.1%	10.0	7.1	3.0
BE	26,084	3.3%	3.4%	0.1%	6.5	9.3	-2.8
CY	1,712	0.2%	0.2%	0.0%	10.4	8.2	2.3
DE	188,751	23.7%	24.6%	0.8%	5.1	6.7	-1.6
EE	211	0.3%	0.0%	-0.2%	8.9	8.2	0.8
ES	89,846	10.7%	11.7%	1.0%	8.5	7.4	1.0
FI	13,103	1.7%	1.7%	0.1%	7.1	6.9	0.2
FR	133,594	18.4%	17.4%	-1.0%	8.4	7.3	1.1
GR	18,950	2.2%	2.5%	0.2%	8.6	9.5	-0.8
IE	12,123	1.5%	1.6%	0.1%	9.0	9.4	-0.5
IT	136,310	15.3%	17.7%	2.5%	6.8	6.9	-0.1
LT	2,183	0.5%	0.3%	-0.2%	11.5	10.3	1.2
LU	1,301	0.3%	0.2%	-0.1%	6.9	6.2	0.6
LV	888	0.4%	0.1%	-0.2%	9.7	10.1	-0.4
MT	266	0.1%	0.0%	-0.1%	7.2	8.0	-0.8
NL	41,956	5.3%	5.5%	0.2%	4.4	7.8	-3.3
PT	17,304	2.1%	2.3%	0.1%	6.6	6.6	0.0
SI	3,644	0.4%	0.5%	0.0%	9.3	9.8	-0.5
SK	5,381	1.0%	0.7%	-0.3%	8.6	8.2	0.4
SNAT	53,849	10.0%	7.0%	-3.0%	9.8	7.9	1.9
Total / Avg.	**768,148**	**100.0%**	**100.0%**	**0.0%**	**7.1**	**7.3**	**-0.2**

Distribution of public sector assets by jurisdiction



Deviations from the adjusted distribution key



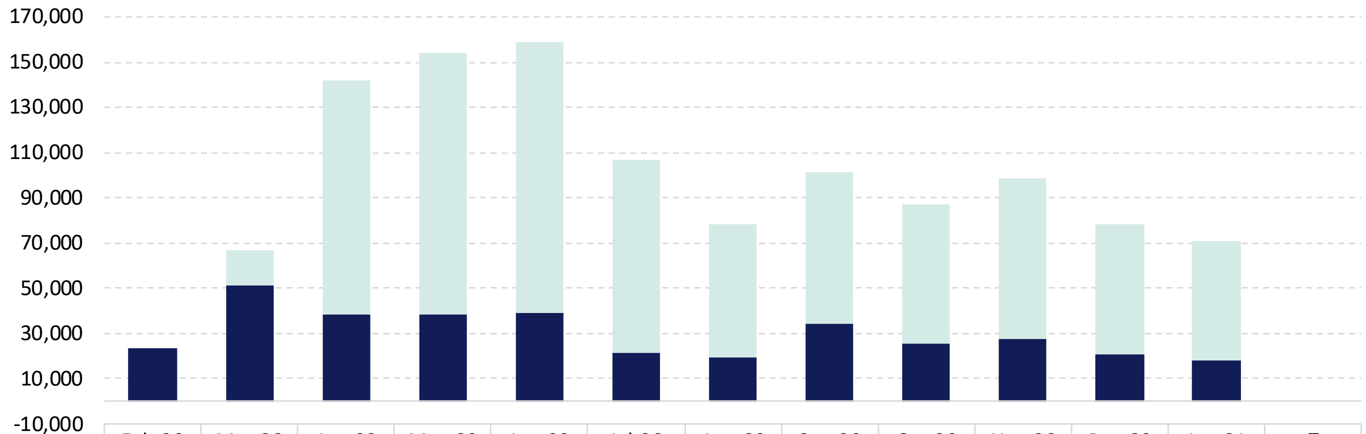
[1] Based on the ECB capital key, adjusted to include supras [2] Based on the adjusted distribution key
[3] Weighted average time to maturity of the bonds eligible for purchasing under the PEPP
Source: ECB, Bloomberg, NORD/LB Markets Strategy & Floor Research

Aggregated purchase activity under APP and PEPP

Holdings (in EURm)

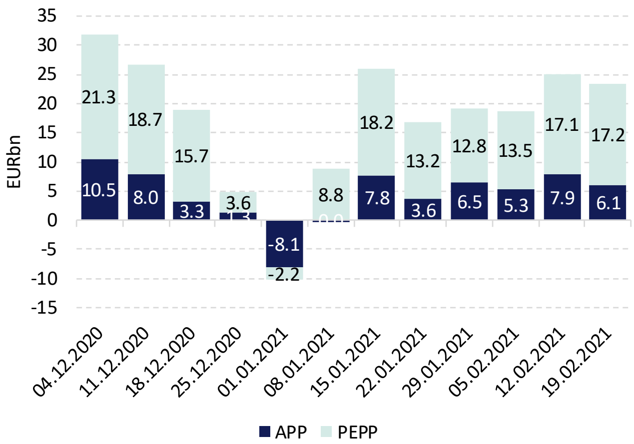
	APP	PEPP	APP & PEPP
Dec-20	2,908,908	757,166	3,666,074
Jan-21	2,926,840	810,212	3,737,052
Δ	+17,932	+53,046	+70,978

Monthly net purchases (in EURm)

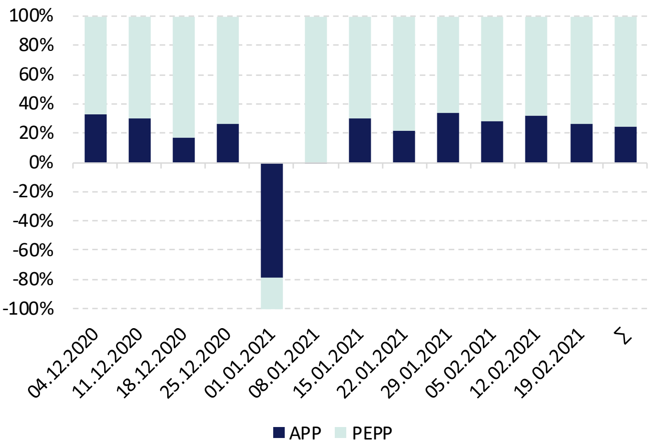


	Feb-20	Mar-20	Apr-20	May-20	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20	Jan-21	∑
∑	23,430	66,586	141,807	154,025	159,091	106,952	78,593	101,322	87,334	98,555	78,092	70,978	1,166,76
PEPP	0	15,444	103,366	115,855	120,321	85,423	59,466	67,308	61,985	70,835	57,163	53,046	810,212
APP	23,430	51,142	38,441	38,170	38,770	21,529	19,127	34,014	25,349	27,720	20,929	17,932	356,553

Weekly purchases



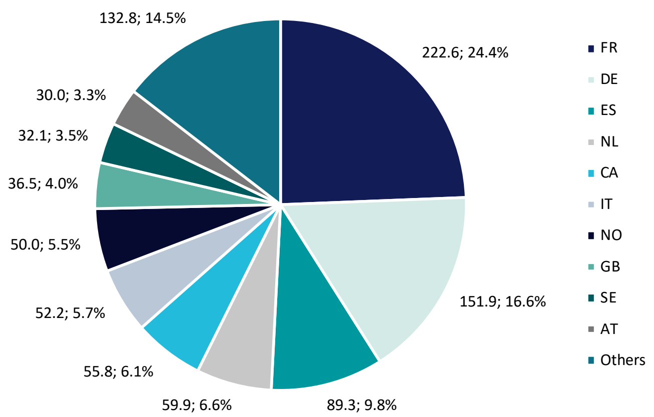
Distribution of weekly purchases



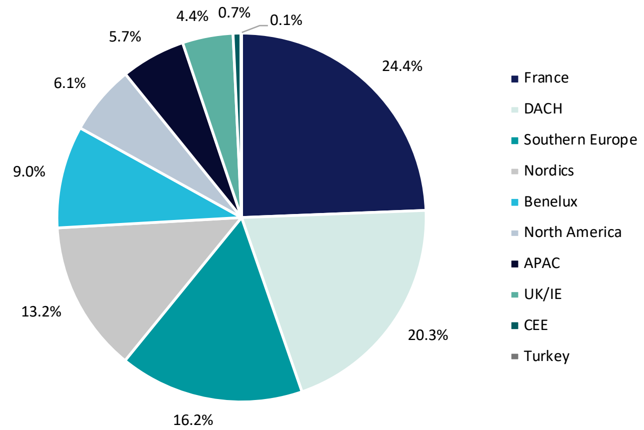
Source: ECB, Bloomberg, NORD/LB Markets Strategy & Floor Research

Charts & Figures
Covered Bonds

EUR benchmark volume by country (in EURbn)



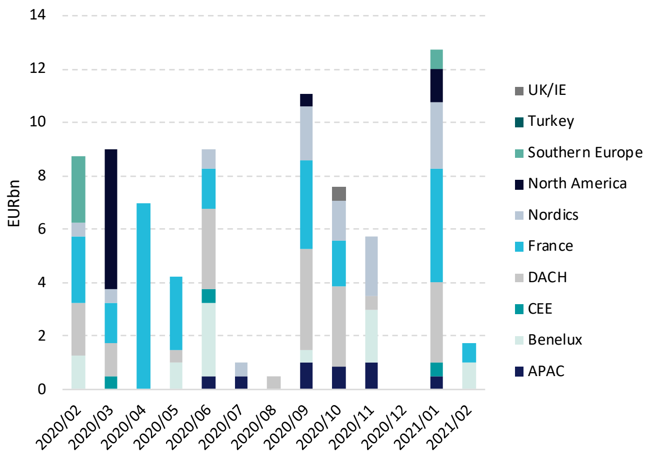
EUR benchmark volume by region (in EURbn)



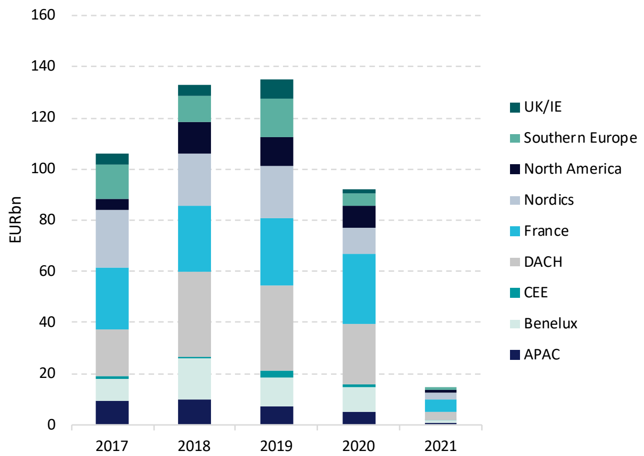
Top-10 jurisdictions

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	222.6	204	7	0.96	10.1	5.5	1.17
2	DE	151.9	227	12	0.60	8.3	4.7	0.47
3	ES	89.3	72	3	1.13	11.4	3.9	1.86
4	NL	59.9	59	0	0.96	11.2	7.4	0.97
5	CA	55.8	47	0	1.16	6.0	3.0	0.30
6	IT	52.2	60	0	0.84	9.0	4.3	1.45
7	NO	50.0	57	7	0.88	7.2	3.7	0.55
8	GB	36.5	41	0	0.90	8.4	3.2	1.12
9	SE	32.1	38	0	0.84	7.5	3.5	0.60
10	AT	30.0	55	0	0.54	9.5	6.0	0.68

EUR benchmark issue volume by month

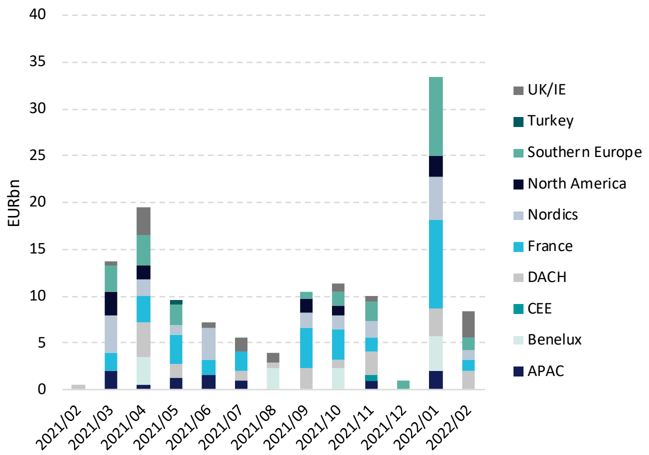


EUR benchmark issue volume by year

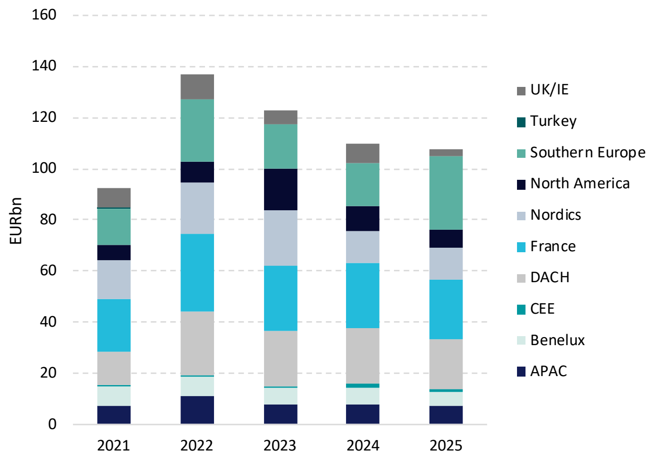


Source: Market data, Bloomberg, NORD/LB Markets Strategy & Floor Research

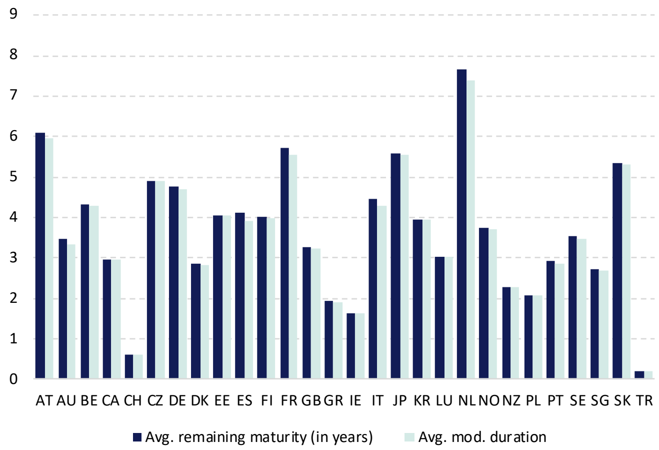
EUR benchmark maturities by month



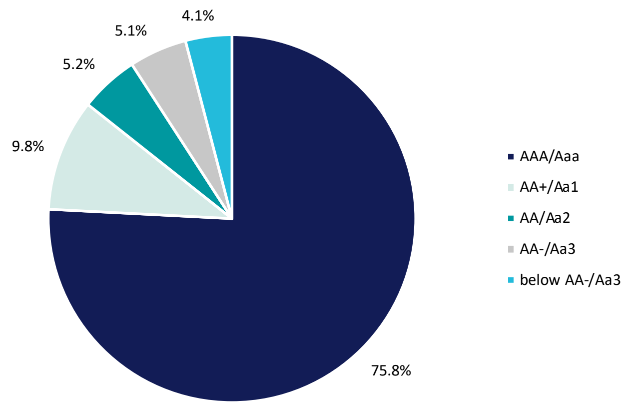
EUR benchmark maturities by year



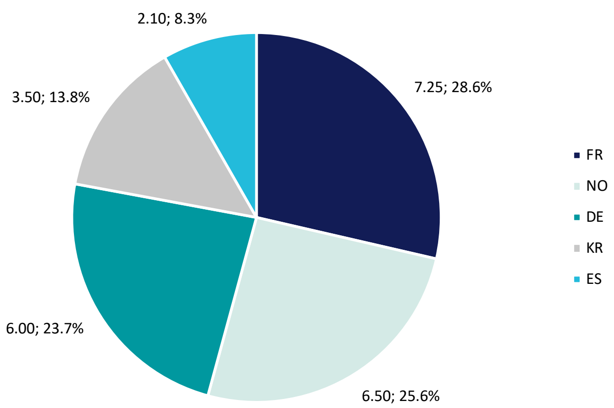
Modified duration and time to maturity by country



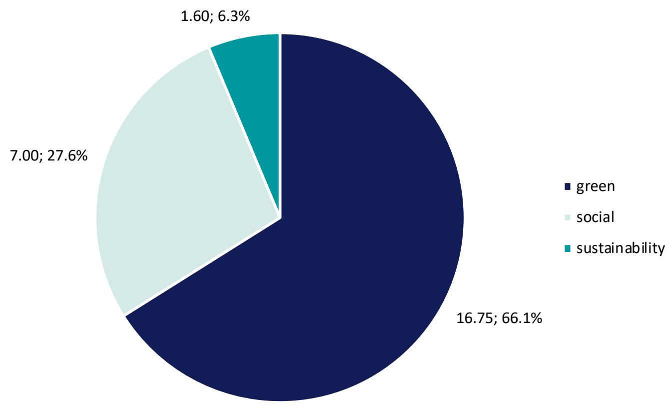
Rating distribution (volume weighted)



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

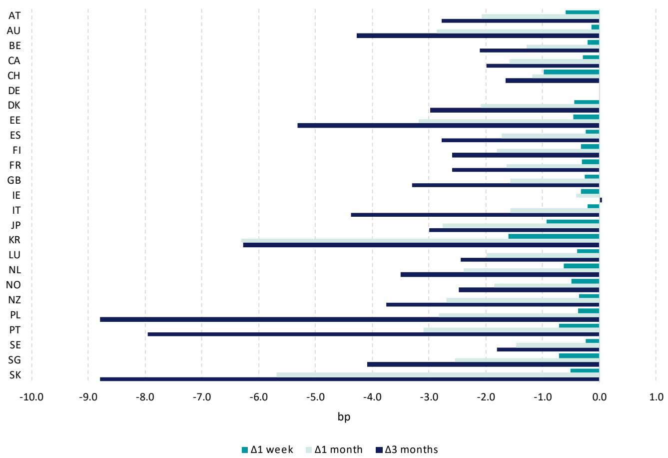


EUR benchmark volume (ESG) by type (in EURbn)

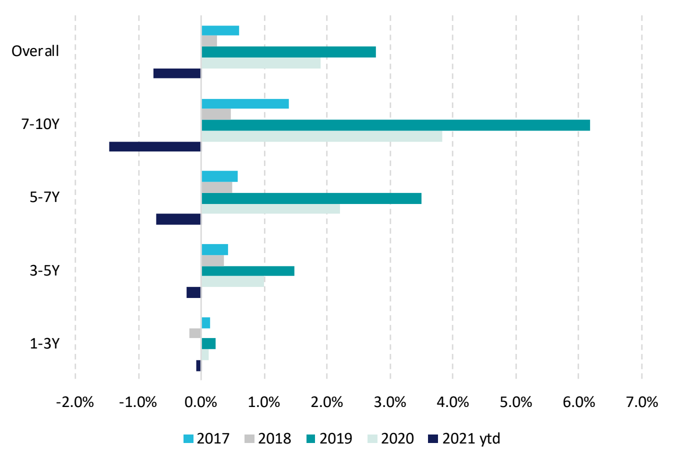


Source: Market data, Bloomberg, NORD/LB Markets Strategy & Floor Research

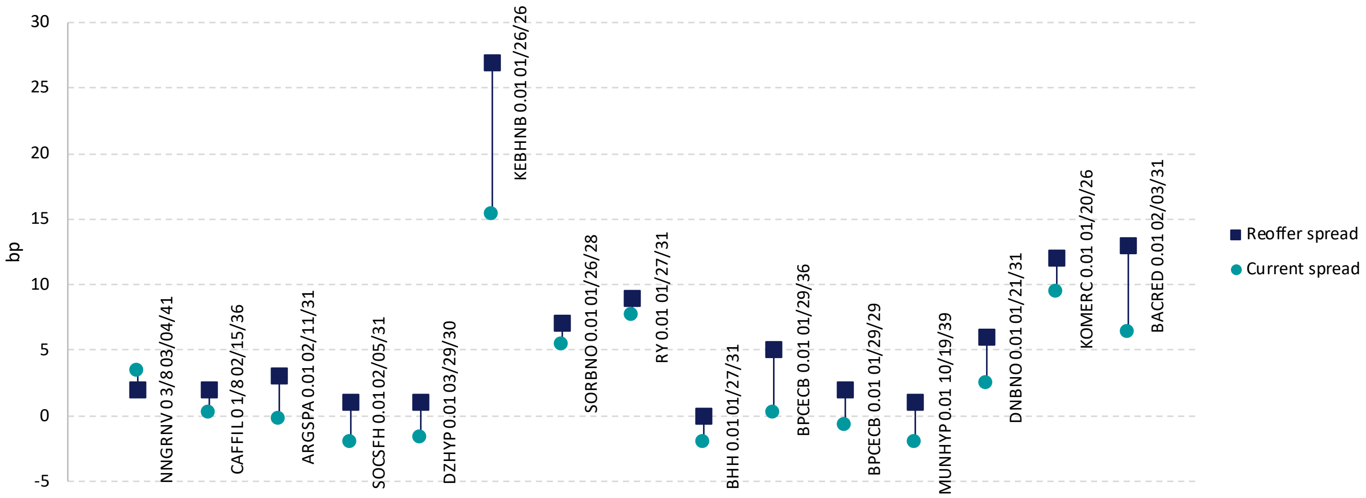
Spread development by country



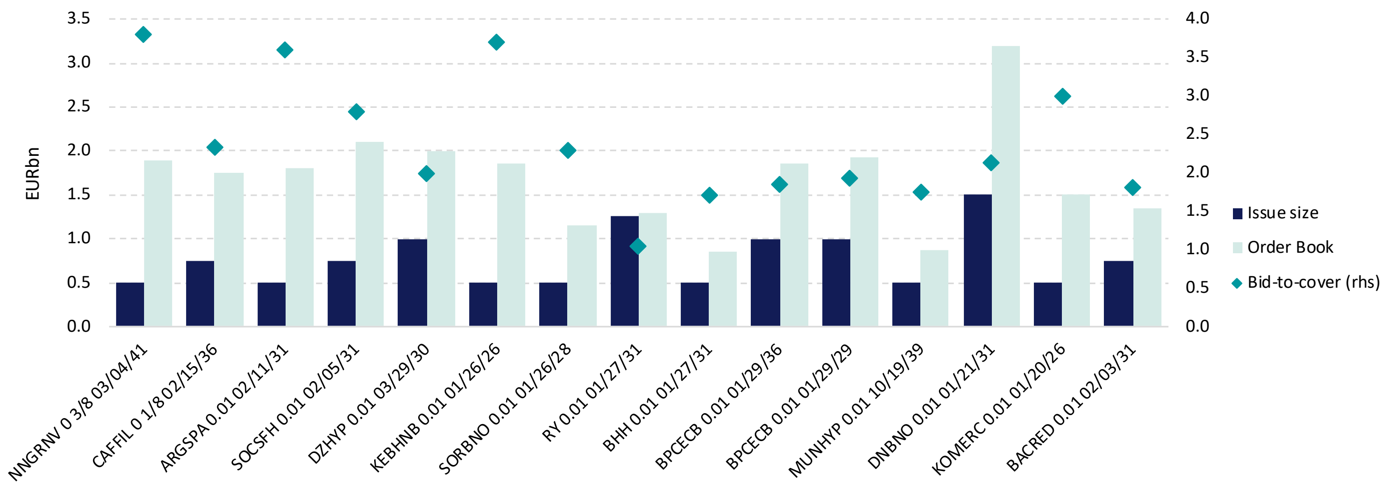
Covered bond performance (Total return)



Spread development (last 15 issues)



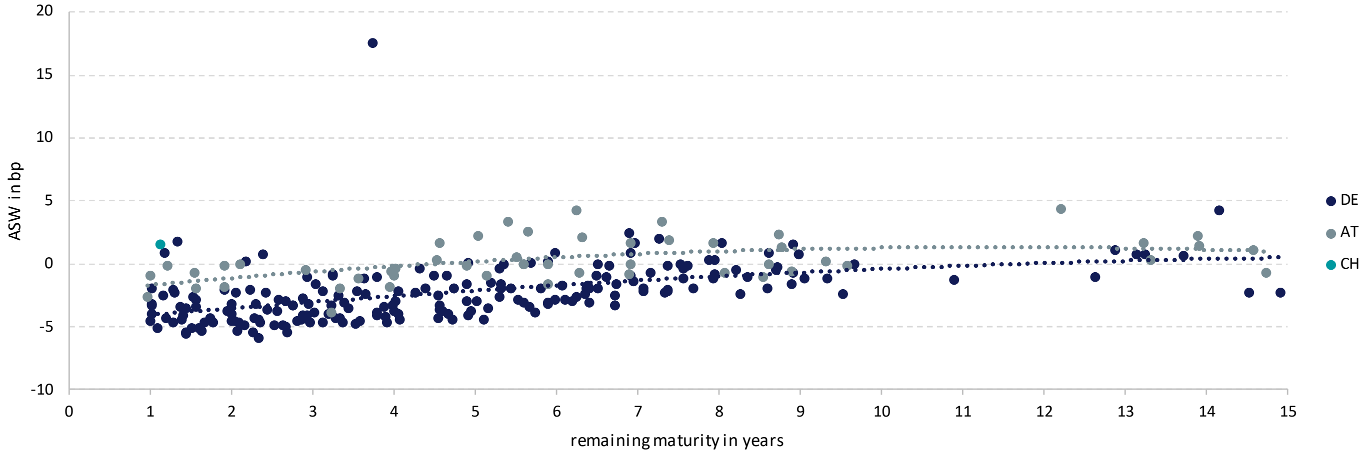
Order books (last 15 issues)



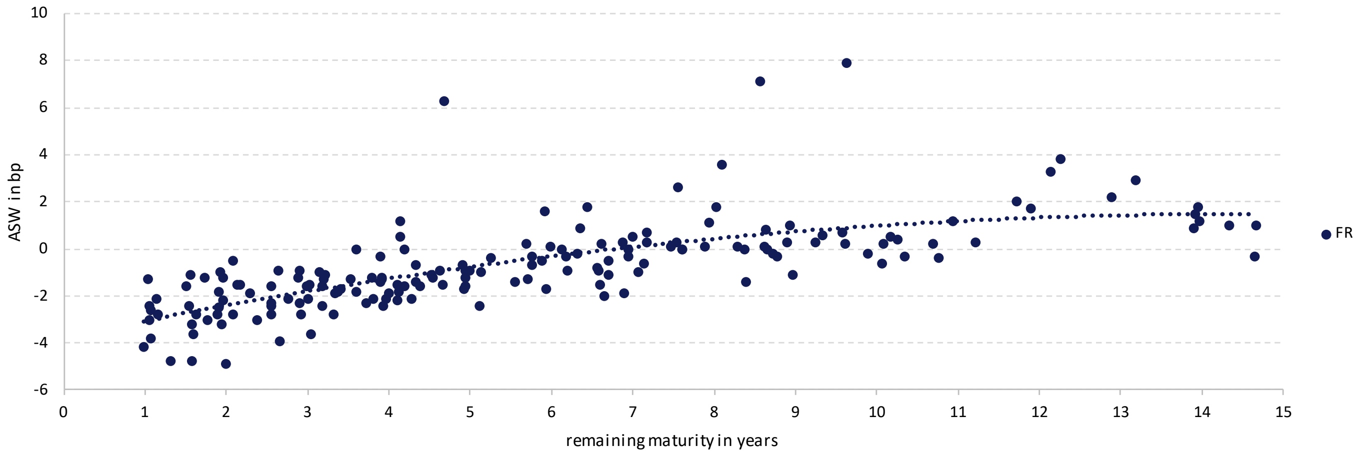
Source: Market data, Bloomberg, NORD/LB Markets Strategy & Floor Research

Spread overview[1]

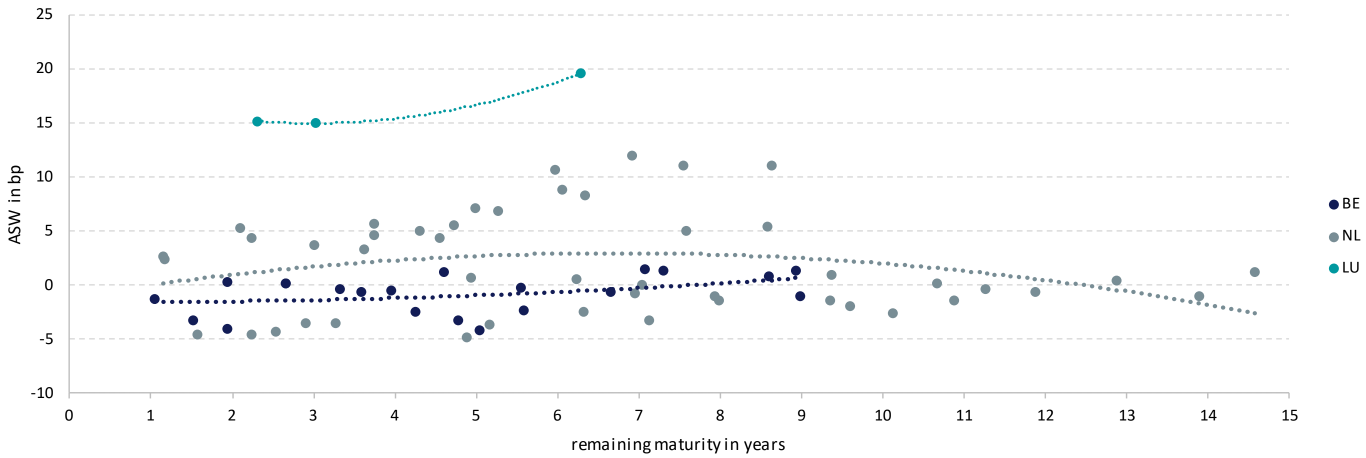
DACH



France

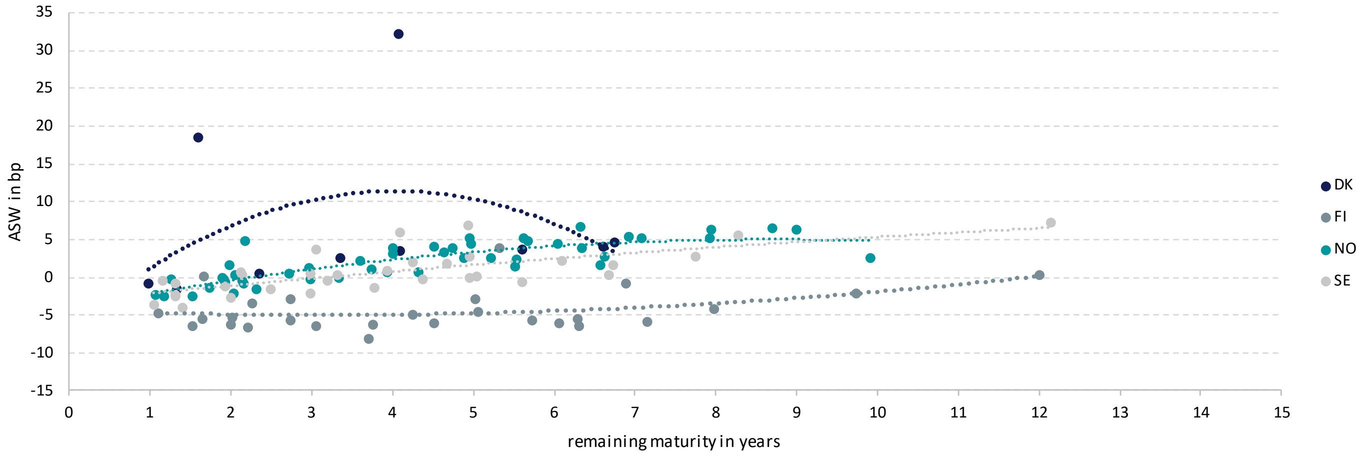


Benelux

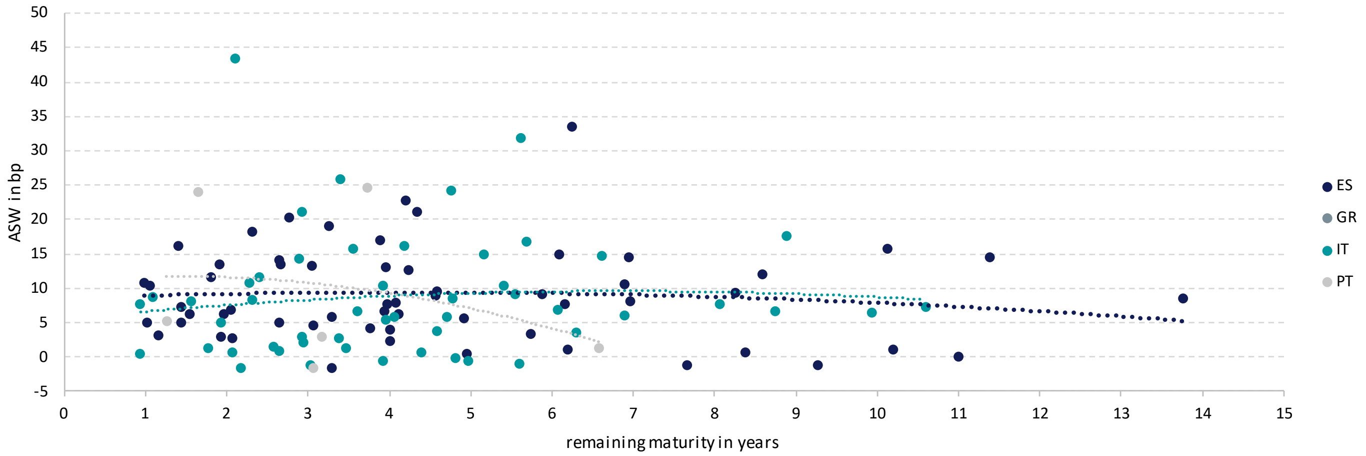


Source: Market data, Bloomberg, NORD/LB Markets Strategy & Floor Research [1]Time to maturity 1 ≤ y ≤ 15

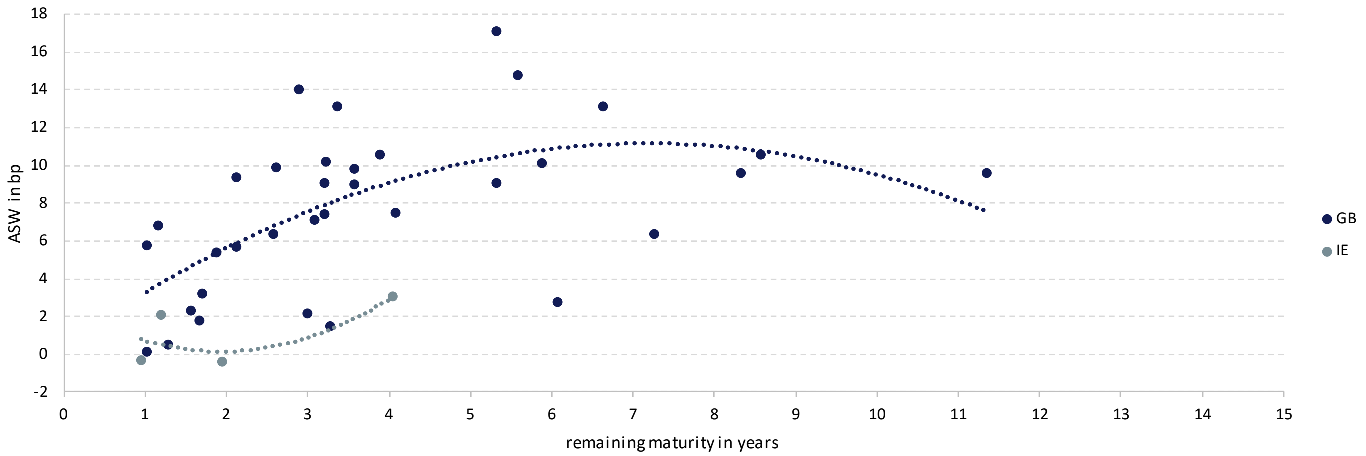
Nordics



Southern Europe

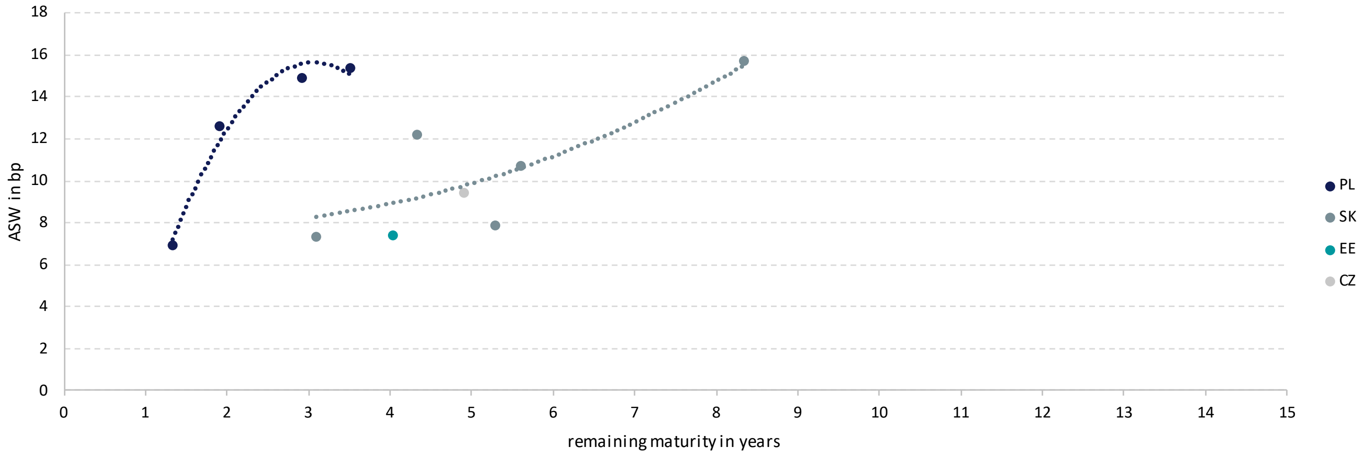


UK/IE

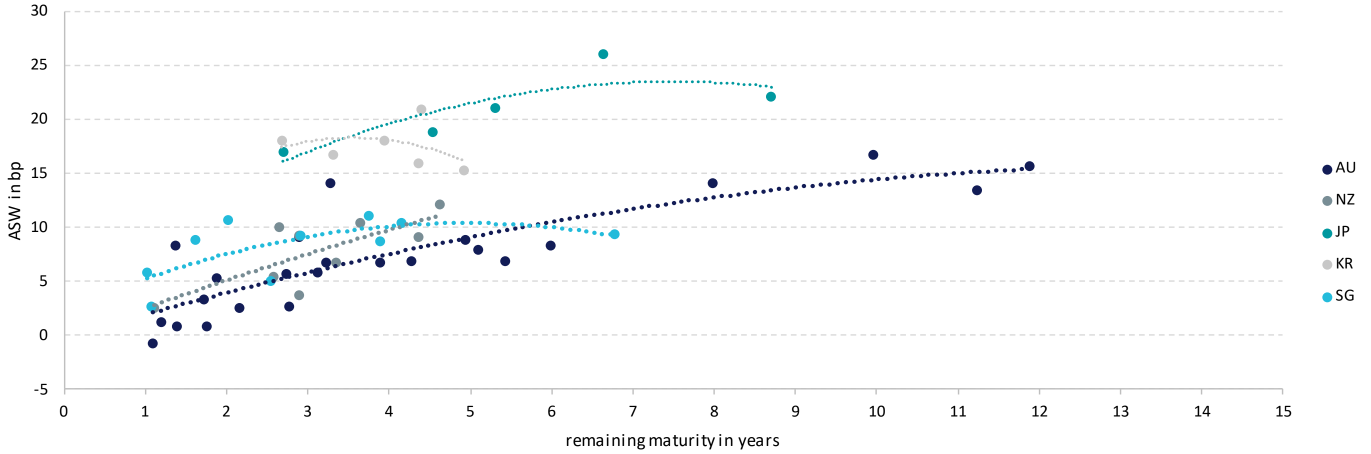


Source: Market data, Bloomberg, NORD/LB Markets Strategy & Floor Research

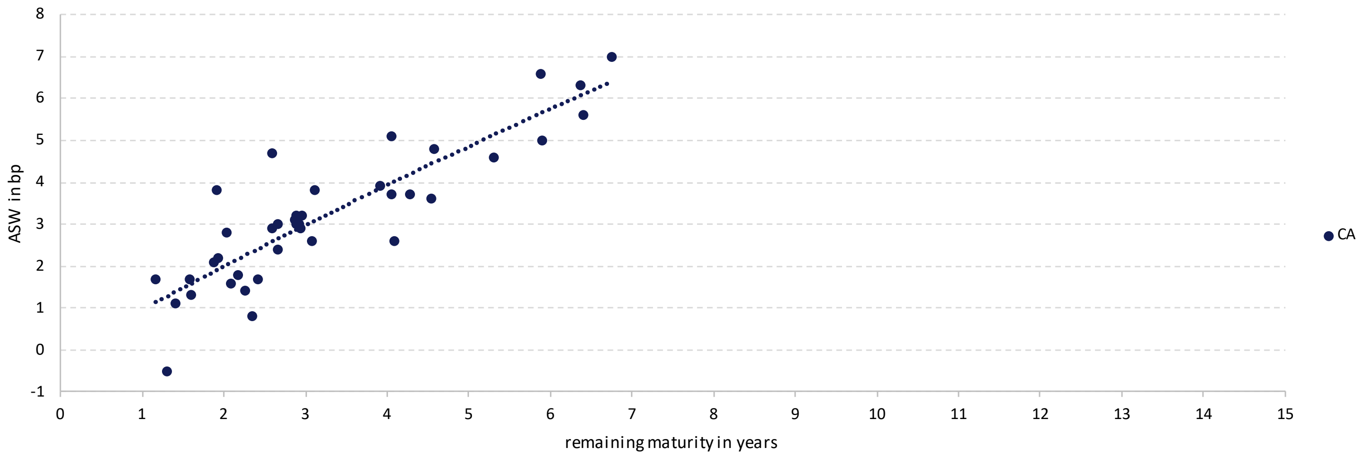
CEE



APAC



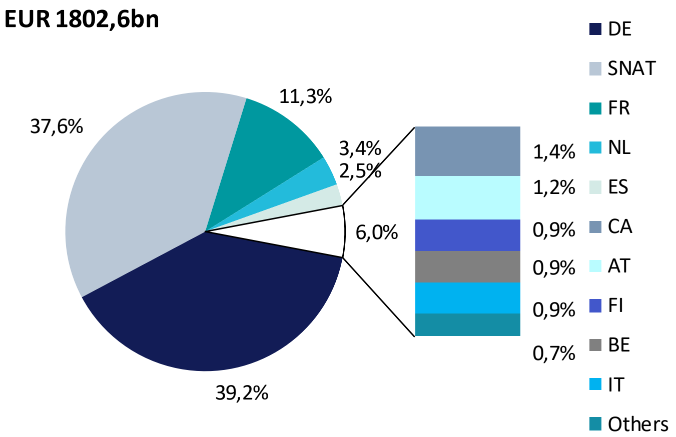
North America



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

Charts & Figures
SSA/Public Issuers

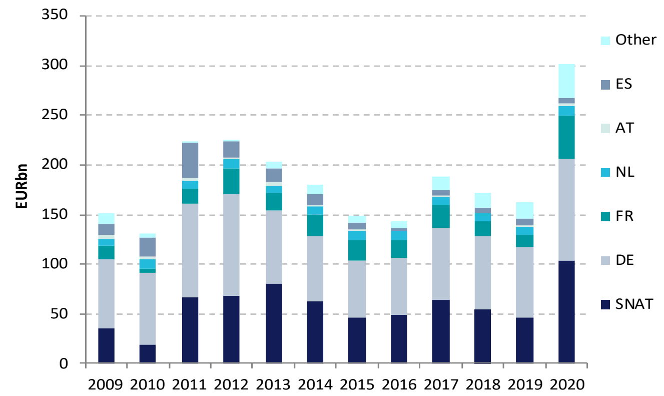
Outstanding volume (bmk)



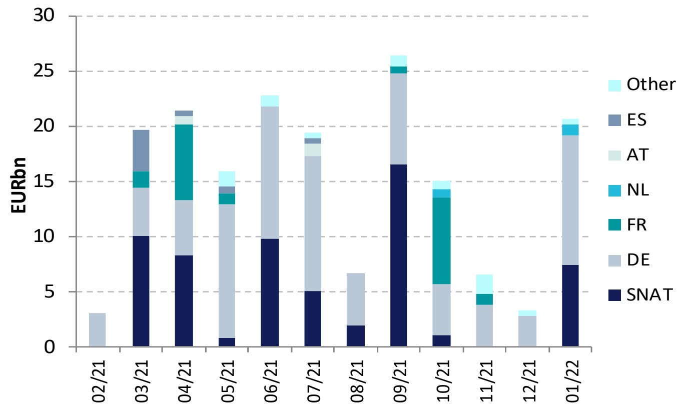
Top 10 countries (bmk)

Country	Vol. (€bn)	No. of bonds	ØVol. (€bn)	Vol. weight. ØMod. Dur.
DE	707,0	555	1,3	6,7
SNAT	677,1	178	3,8	7,8
FR	203,8	143	1,4	5,3
NL	61,7	63	1,0	6,5
ES	45,1	53	0,9	4,4
CA	25,0	18	1,4	5,5
AT	22,5	24	0,9	5,2
FI	16,5	21	0,8	6,1
BE	16,3	19	0,9	14,0
FI	15,5	20	0,8	5,9

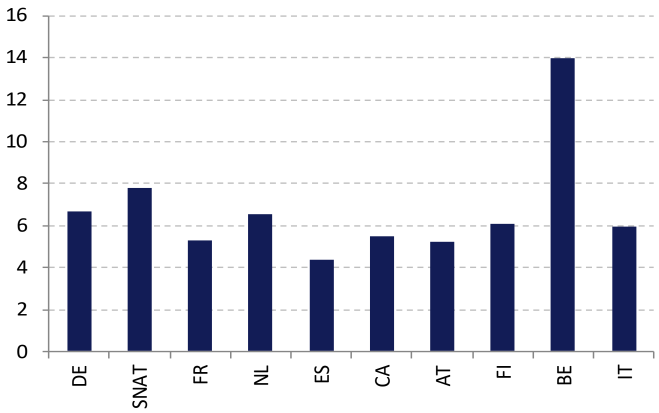
Issue volume by year (bmk)



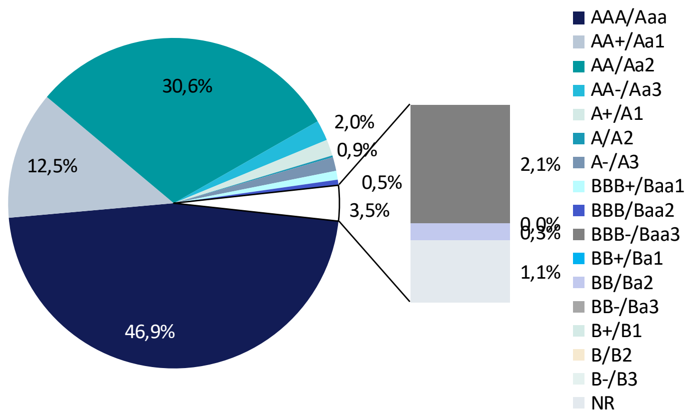
Maturities next 12 months (bmk)



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

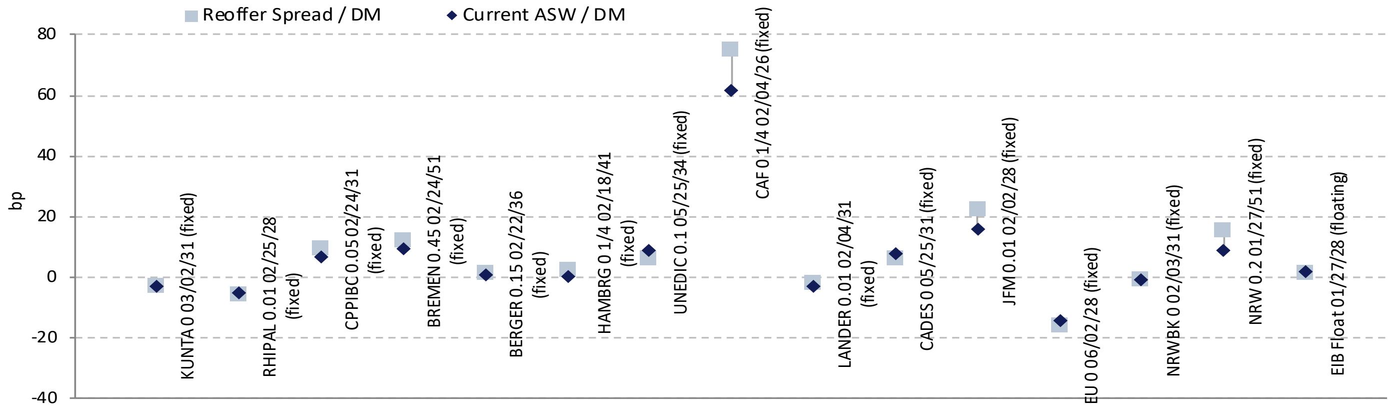


Rating distribution (vol. weighted)

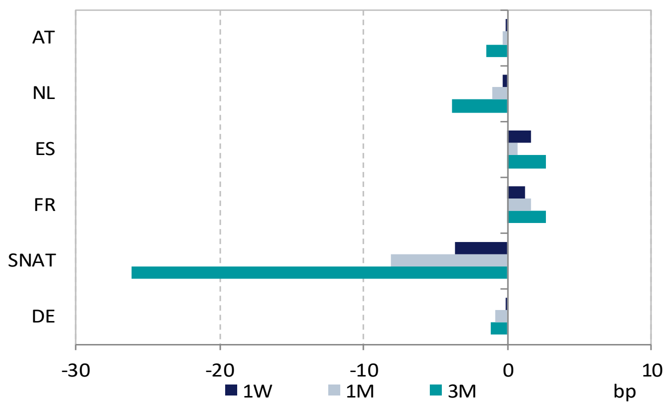


Source: Bloomberg, NORD/LB Markets Strategy & Floor Research

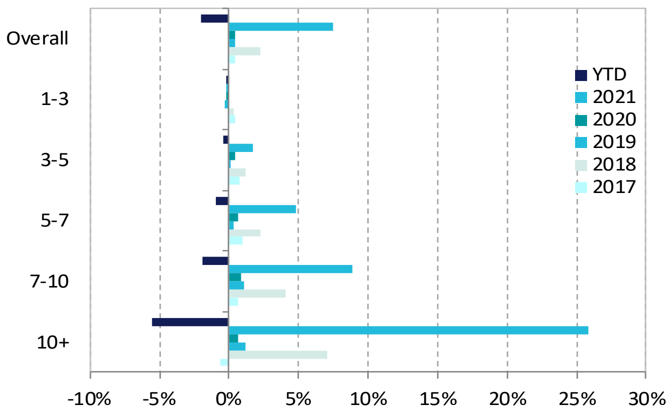
Spread development (last 15 issues)



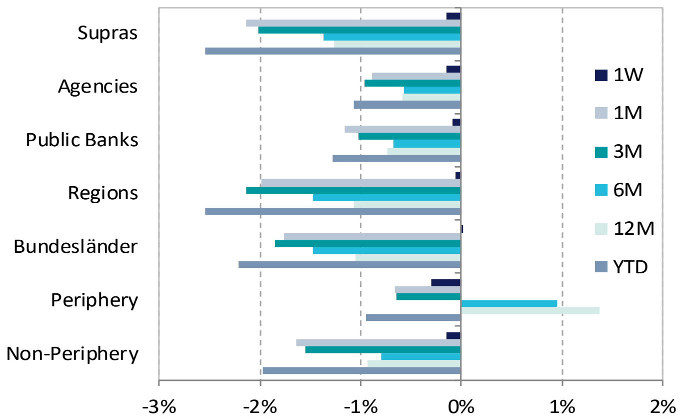
Spread development by country



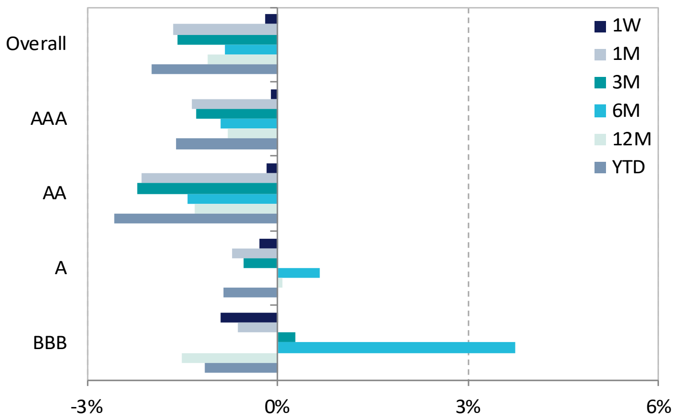
Performance (total return)



Performance (total return) by regions

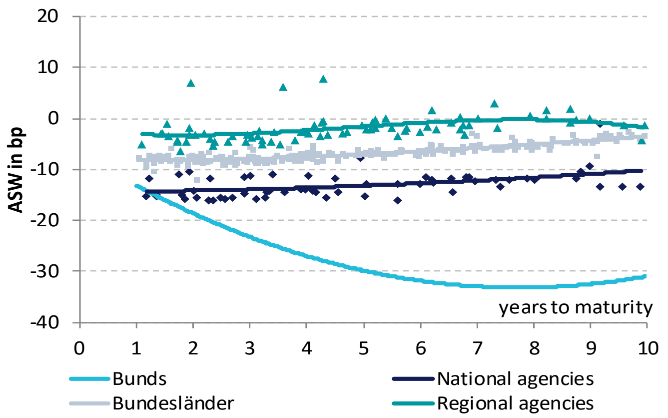


Performance (total return) by rating

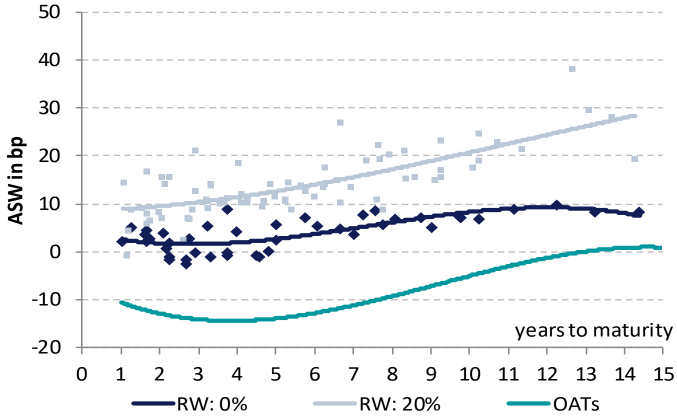


Source: Bloomberg, NORD/LB Markets Strategy & Floor Research

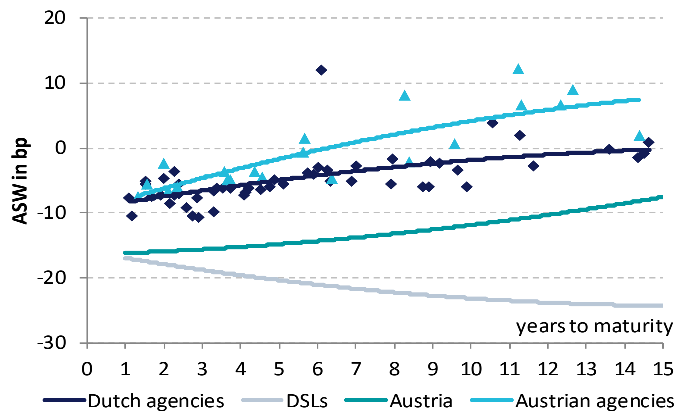
Germany (by segments)



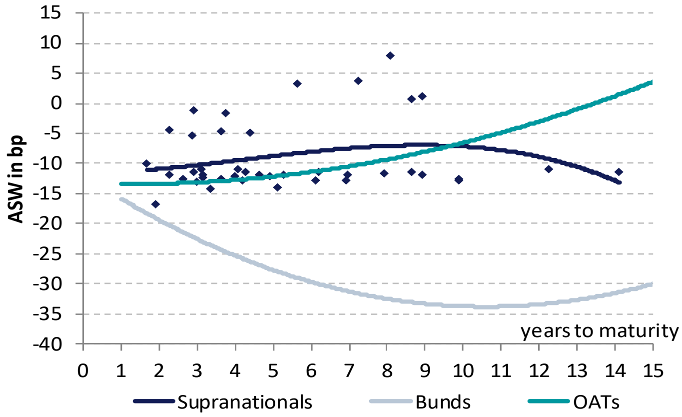
France (by risk weight)



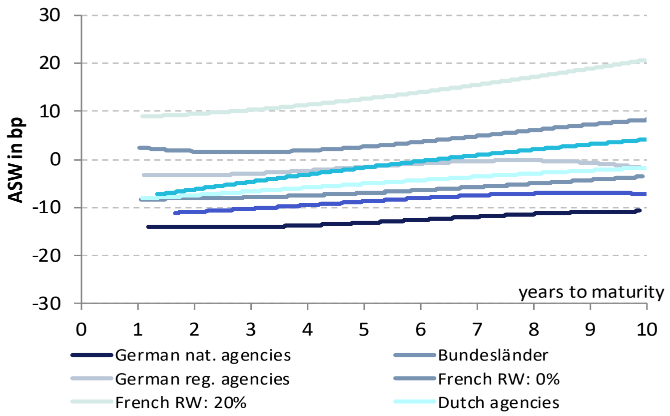
Netherlands & Austria



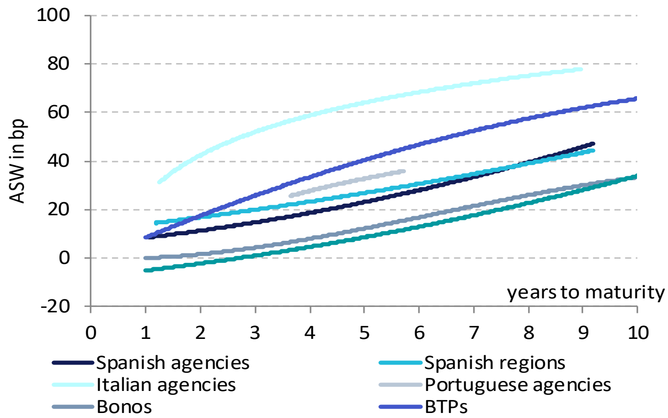
Supranationals



Core



Periphery



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

Appendix
Overview of latest Covered Bond & SSA View editions

Publication	Topics
06/2021 ♦ 17 February	▪ Insights into the iBoxx EUR Covered ▪ Development of the German property market
05/2021 ♦ 10 February	▪ PEPP reporting: upswing in public sector assets continues; covered bonds inconsequential
04/2021 ♦ 03 February	▪ Argenta Spaarbank expands Belgian market for EUR benchmarks ▪ An overview of the Fitch covered bond universe ▪ January 2021 packs a punch to kick off the new year
03/2021 ♦ 27 January	▪ An unusual – albeit expected – start to the year? ▪ A look at USD benchmarks ▪ ESM reform – restructuring continues
02/2021 ♦ 20 January	▪ Spread considerations – APAC covered bonds riding the wave of ECB purchase programmes? ▪ Return of the Danish market for EUR benchmark bond issues ▪ 22nd meeting of the Stability Council (Dec. 2020)
01/2021 ♦ 13 January	▪ EUR benchmark from the Czech Republic: Komerční Banka launches a new covered bond programme ▪ New covered bond programme from South Korea: Hana Bank ▪ Annual review of 2020 – covered bonds ▪ Annual review of 2020 – SSA
48/2020 ♦ 16 December	▪ TLTRO III: ECB extends tender and also raises the threshold
47/2020 ♦ 09 December	▪ Fourth and final round of PEPP reporting in 2020 ▪ Investment alternative: Paris metropolitan area (IDF and VDP)
46/2020 ♦ 02 December	▪ The ECB ahead of its course-setting meeting for 2021 ▪ Covered Bonds – Outlook 2021: Waiting for the game changer? ▪ SSA – Outlook 2021: Coronavirus and ECB dominate public-sector segment
45/2020 ♦ 25 November	▪ UOB ends the state of hibernation on Singapore's primary market ▪ The covered bond universe of Moody's: an overview ▪ Update: Belgium regions as investment alternatives
44/2020 ♦ 18 November	▪ Primary market 2021: real prospect of Hungarian EUR benchmarks? ▪ German Pfandbrief savings banks in Q3 2020 ▪ Development of the German property market
43/2020 ♦ 11 November	▪ Newcomer to the benchmark segment: HSBC Bank Canada sets sights on EUR debut ▪ OP Mortgage Bank: First green covered bond from Finland ▪ Transparency requirements §28 PfandBG Q3/2020
42/2020 ♦ 04 November	▪ Covered Bond Framework and Liquidity Coverage Ratio: European Commission presents draft version of amendments to LCR regulation ▪ An overview of the Fitch covered bond universe
41/2020 ♦ 28 October	▪ ECB: The year of the owl – review and outlook ▪ Yield developments on the covered bond market

NORD/LB: Markets Strategy & Floor Research

NORD/LB: Covered Bond Research

NORD/LB: SSA/Public Issuer Research

Bloomberg: RESP NRDR <GO>

Appendix
Publication overview

Covered Bonds:

[Issuer Guide Covered Bonds 2020]

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

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

Trading

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

Origination & Syndicate

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

Sales Wholesale Customers

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

Treasury

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Liquidity Management	+49 511 9818-9620 +49 511 9818-9650

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Additional information
Time of going to press: 24 February 2021 08:53h (CET)

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None

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Issuer / security	Date	Recommendation	Bond type	Cause