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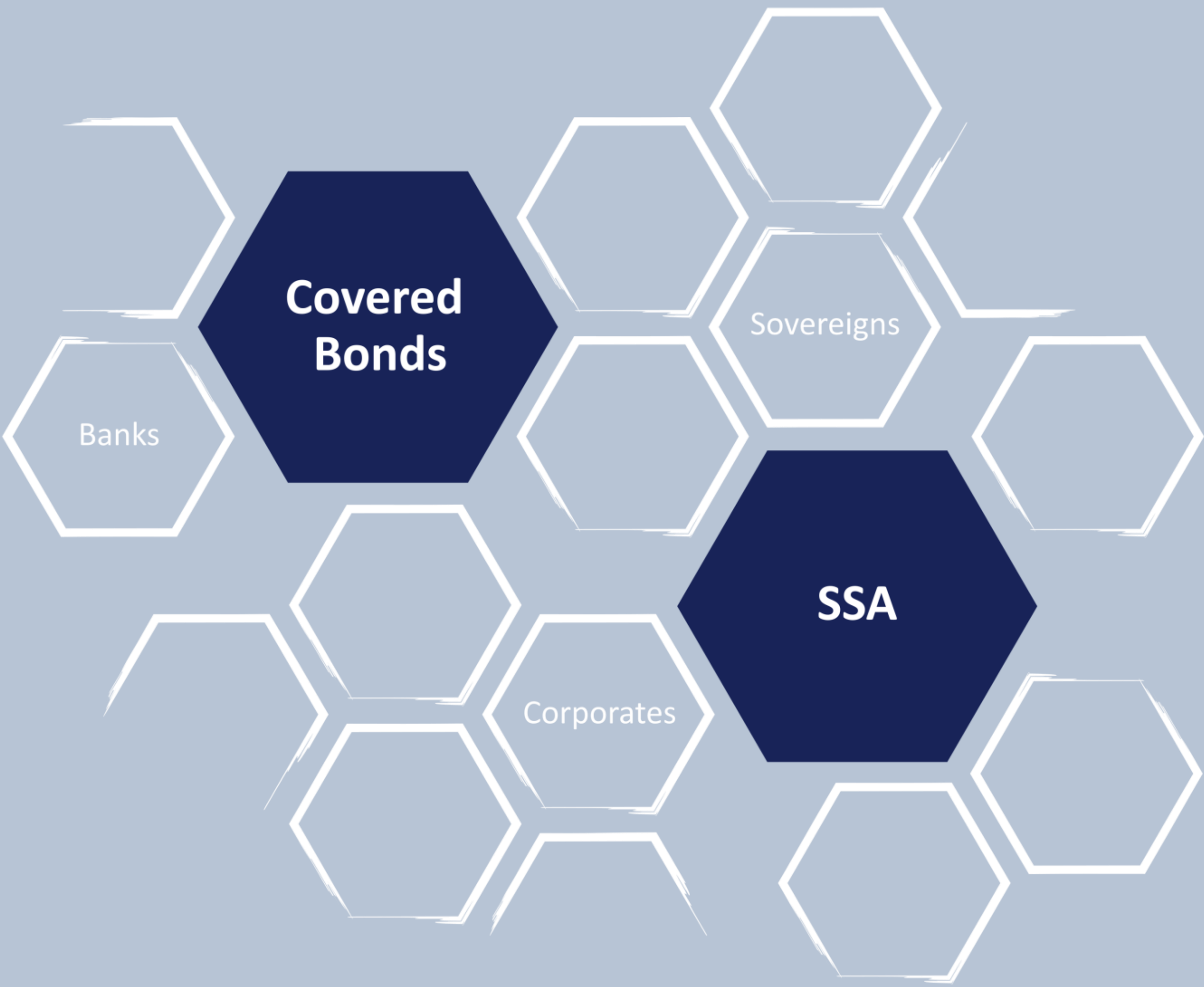

As this is the last edition of this publication in 2021, we would like to take this opportunity to thank all our readers and wish you and your families a very Merry Christmas and Happy New Year in 2022.

The next edition of the Covered Bond & SSA View will be published on **12 January 2022.**

The Covered Bond & SSA Team

NORD/LB Markets Strategy & Floor Research

Covered Bond & SSA View

NORD/LB Markets Strategy & Floor Research

15 December 2021 ♦ 40/2021

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

Finanzgruppe

Agenda

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Market overview Covered Bonds

Author: Dr Frederik Kunze

Bank of Nova Scotia bestows the primary market with the largest EUR benchmark of 2021 and generates huge investor interest

We have been repeating in this section for weeks now that although 2021 is coming to a close, there is evidently still life in the primary market. In this regard, it is not unusual for issuers to carry out potential pre-funding activities in December. With adequate timing and taking into account the specific situation of the respective institute, this path can be crowned with success. In any case, a Canadian bank, namely the Bank of Nova Scotia (BNS) has bestowed the primary market with a successful placement in the run-up to Christmas. In actual fact, with a term to maturity of 6 years and a volume of EUR 1.75bn, this EUR benchmark is the largest transaction of 2021. The last high-volume deals in the EUR benchmark segment date back to spring 2020, which was already being shaped by events linked to the coronavirus pandemic. At this time, two French issuers – Credit Agricole Home Loan SFH (01 April 2020; EUR 2.0bn) and Credit Mutuel Home Loan SFH (02 April 2020; EUR 1.75bn) – approached investors during an exceptional market phase characterised by extreme uncertainty. The most recent high-volume EUR benchmark from Canada was placed by Toronto Dominion (EUR 1.75bn on 27 Nov. 2019). The BNS deal from the previous trading week is actually this issuer's second covered bond placement in the current year, following on from a bond deal issued in September (BNS 0.01 09/14/29; EUR 1.5bn; 8y). Initial guidance of ms +10bp was selected for the start of the marketing phase for its most recent primary market activity. The re-offer spread was eventually fixed at ms +6bp, resulting in a modest premium of a single basis point above fair value (yield at issue: -0.004%). In the end, the order book totalled EUR 2.4bn (76 investors). In terms of the allocation breakdown, 41% went to accounts based in Germany and Austria, followed by the UK and Nordics (18% in each case), the Benelux countries (17%) and France (4%). Banks were the dominant investor type (43%), with Asset Managers (40%) and Central Banks/OI (17%) also claiming notable shares. Accordingly, BNS joins the ranks of issuers to have benefited from a receptive market environment in recent months by realising their preferences both in terms of the spread and the issuance volume.

Issuer	Country	Timing	ISIN	Maturity	Size	Spread	Rating	ESG
BNS	CA	08.12	XS2421186268	6.0y	1.75bn	ms +6bp	AAA / Aaa / -	-

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

GBP deal from BayernLB: GBP 250m (WNG) turns into GBP 300m

Demand has also been more than merely robust for benchmarks denominated in currencies other than EUR recently. The most recent example of this is a GBP deal placed by BayernLB. A volume of GBP 250m (WNG) was originally announced for this public sector Pfandbrief at the beginning of the marketing phase (3y; IPT: UKT +72bp area). Over the course of the book-building process, however, the deal attracted a great deal of investor interest. A spread of UKT +68bp was eventually announced as part of the final terms for this transaction, while a final order book of GBP 750m was also determined. As such, the issuer communicated that it was increasing the deal size by GBP 50m to GBP 300m.

S&P presents covered bond outlook for 2022

The ratings experts from S&P presented their outlook for the covered bond market in 2022 a few days ago. In the analysis, S&P outlines its expectation of stronger issuance activity in 2022, among other market aspects. How dynamic this development will ultimately turn out to be, is, in the opinion of the rating agency, closely linked to the monetary policy course adopted by the ECB. In this respect, the rating experts do not expect any adjustments to be made too hastily, also in connection with key interest rates. S&P does not expect a key rate hike to be implemented following a reduction in bond purchases until 2024 at the earliest. In relation to the risk assessment of the covered bond programmes rates by S&P, the outlook paints a picture of stability both in terms of residential mortgage financing and commercial real estate assets. According to S&P, the delayed implementation of minimum standards for European covered bonds in some jurisdictions will not entail any negative rating implications for the stragglers. However, countries that have already implemented these minimum standards in full could well stand to benefit in respect of the risk assessment.

EU Taxonomy: Go-ahead for first delegated act on 01 January 2022

With the end of the formal review period by national legislators for the delegated act of the EU Taxonomy (EU Taxonomy Delegated Act), the formal entry into force of this regulation has been a done deal since 9 December 2021. The delegated act of the EU climate taxonomy defines the technical screening criteria (TSC) for economic activities through which a significant contribution to climate protection or climate change adaptation can be made. The regulation will be applied from 01 January 2022. Creating incentives for investors to get involved in relevant projects classified as "green" by the EU Taxonomy is at the forefront of the motives behind the legal act. Looking at the covered bond market and the mortgage financing on which this segment is largely based, the European Mortgage Federation (EMF) European Covered Bond Council (ECBC) commented favourably on the formal legal act. In a press release issued on the same day, the representatives of the EMF-ECBC referred to the relevance and importance of the real estate sector in the context of the EU Taxonomy. In this context, Luca Bertalot, Secretary General EMF-ECBC, highlighted the guiding function of the EU Taxonomy for the banking sector as well. Here, he sees an essential role for the classification of assets that comply with the criteria of the EU Taxonomy. With a view to the covered bond market, this development is particularly important in connection with a European standard for green bonds and is likely to result in adjustments to the market in the short term. This also ties in with the assessment of our Origination team. For example, in his role as Head of Sustainable Bond Origination at NORD/LB, Philipp Bank expects that, as a result of the EU Taxonomy, some issuers will adapt their green bond frameworks in respect of the selection criteria as early as 2022. In our view, this development is to be welcomed on the grounds of transparency and clarity alone. Nevertheless, it is still likely to be a long process before all issuers active in the green covered bond universe have fully adapted their green frameworks and issuances to comply with the technical requirements of the EU Taxonomy.

Fitch Global Housing Market Outlook: waning dynamic

A few days ago, the rating agency Fitch presented its internal assessment regarding price development expectations on the globally relevant real estate markets. Overall, the study anticipates positive growth in 2022, albeit with a more moderate dynamic in comparison with 2021. Key factors will remain sustained demand, limited supply and general financing conditions. However, according to Fitch, interest rates for mortgages will start to rise in 2022 in some sub-segments, which could have a partial curbing effect on rising prices. In this context, debt ratios must also be taken into account alongside high price levels, which could also provoke regulatory intervention. Fitch sees declining price increases for covered bond jurisdictions including the Netherlands, Canada, Denmark, Italy, France and Germany, among others. In terms of reasons for this, Fitch identifies imbalances in supply and demand as a key factor influencing inflation, but at the same time points to the dampening effects of rising interest rates and regulatory measures. For Germany, for example, Fitch anticipates a rise of between 7% and 9% in 2022 (following the estimated 13% for 2021). Fitch sees the buyer side as more limited than in 2021 due to high prices, ancillary costs when purchasing property and customary market equity shares. Affordability is at the centre of the Fitch assessment for France, among other aspects. Here, the report outlines expected growth of 2% to 4% in 2022 (2021 expectation: 6%). In the view of the Fitch analysts behind this report, a much stronger dynamic can be expected in the Netherlands. The agency expects growth of between 10% and 12% in 2022, although this can certainly also be regarded as a trend towards a slowdown in comparison with the previous year (2021e: 20%). Scarcity of supply continues to drive developments in this regard in the Netherlands. For Italy, Fitch has identified signs of an improved macroeconomic environment as well as limited potential for loans in arrears. House price developments here should be kept in check within a range of 1% to 3%, with Fitch having estimated 3% for 2021.

EMF presents Quarterly Review of European Mortgage Markets for Q2 2021

The European Mortgage Federation looked back at the second quarter of 2021 as part of its latest Quarterly Review of European Mortgage Markets, in which it again affirmed a sustained dynamic in the area of residential mortgage financing. In Q2 2021, the mortgage lending volumes for the countries included in the coverage increased by 6.2% Y/Y (previous quarter: 5.7%). Gross lending increased by EUR 388bn, which equates to growth of 31% Y/Y (previous quarter: 14%). A sustained increase in property prices can also be observed, which is due, among other aspects, to financing conditions and the general trend in demand. Similarly to the Fitch analysis of the global housing market, however, the EMF has also identified that certain differences in relation to dynamics can be seen in the national European real estate markets that it includes in its coverage. This also applies to the financing conditions relevant to general price trends. In this context, the report points to subtle interest rate rises for mortgage loans in Italy, for example, as well as some northern European jurisdictions (such as Denmark). Declines were reported for the Netherlands, among others, while the downward trend also continued in France.

NORD/LB

Market overview SSA/Public Issuers

Author: Dr Norman Rudschuck, CIIA

Outlook for 2022

In today's issue we present our SSA Outlook for 2022. For the SSA segment, this will be largely determined by the coronavirus measures of public issuers and the upcoming monetary policy adjustments at tomorrow's ECB meeting on 16 December. For a variety of reasons, we consider these to be decisive for the coming year and therefore for yield levels and spreads, in particular. To elaborate on this, we have written a separate Cross Asset article on expectations for the ECB meeting ahead of our outlook.

All change in 2022 – at least for the ESM, EFSF and EU from an investor perspective

From 2022, the crowd of investors will lose a cherished planning detail: the ESM and the EFSF will stop planning the funding time windows on a weekly basis. Since 2012, this element had ensured a certain planning capability and predictability for the entire market. In future, only the funding volumes for the past (2021), current (2022) and subsequent year (2023) will be communicated and a forecast for the funding windows of the bill auctions for the upcoming half-year will be given (see below). We have therefore adapted our tables and made relevant additions. In 2022, the EFSF has a funding target of EUR 19.5bn while that of the ESM is EUR 8.0bn. For 2023, the respective figures are EUR 20.0bn and EUR 8.0bn once again. A disadvantage now is that other issuers can no longer align themselves with these two major supranational players. Another important consideration: once the ratification process for the amended ESM Treaty is concluded, the ESM will become a backstop for the Single Resolution Fund (SRF) and therefore a double safety net. The loans provided will be based on the size of the SRF, up to a nominal cap of EUR 68bn. What has proven successful for nine years with the ESM and the EFSF is now being introduced in the European Union (EU): five possible time windows for EU bond deals have been announced for the first half of 2022 (see below). However, all three issuers refrain from providing detailed quarterly information on their funding.

Long-term funding plan incl. 2023 (EUR bn)

	2021	2022	2023	∑
EFSF	16.5	19.5	20.0	**56.0**
ESM	8.0	8.0	8.0	**24.0**
∑	**24.5**	**27.5**	**28.0**	**80.0**

Time windows for...

…ESM Bill auctions (3M / 12M / 6M)				…ESM Bill auctions (3M / 12M / 6M)			
January	Tues 04	Tues 11	Tues 18	**April**	Tues 05	Tues 12	Tues 19
February	Tues 01	Tues 08	Tues 15	**May**	Tues 03	Tues 10	Tues 17
March	Tues 01	Tues 08	Tues 15	**June**	Tues 07	Tues 14	Tues 21

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

EU planning to raise EUR 50bn in H1 2022

The EU is expected to raise a total of EUR 50bn in the first half of 2022 in five syndications. We were surprised that this figure is so low and expect a figure of at least EUR 70bn in the second half of the year, if not more in the direction of EUR 100bn. A stream of EU bills is also expected and not included in these figures.

Time windows for...

…EU bond issuances		**…EU bond issuances**	
CW 06	07–11 February	**CW 19**	09–13 May
CW 12	21–25 March	**CW 25**	20–24 June
CW 14	04–08 April		

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

Newsletter of the International Investment Bank (IIB) – Serbia joins as 10th shareholder

The fourth meeting of the most senior decision-making body of the International Investment Bank (IIB), the Board of Governors, took place in Budapest on 8 December. More than a year sooner than planned, the bank has exceeded the target of EUR 1.2bn for its loan portfolio. The portfolio is highly diverse in terms of funding instruments, geographical areas and sectors, since it covers the interests of all IIB member states. European investment accounts for over 55% of the total volume of the portfolio. The strategy it has adopted of cutting ties with Russia is reflected time and again in its communication strategy. We are told that the current year has also been a milestone for the IIB in relation to its capital market activities. In addition to the continuous trend towards extending and diversifying its investor base, the bank has raised funds at a negative interest rate for the first time in its history under its MTN programme and was able to build on this success several times in the course of the year. The IIB also issued bonds with the longest maturity to date of 20 years in 2021. The qualitative growth of its treasury assets is also noteworthy: more than 67% of the treasury portfolio is earmarked for highly rated ESG instruments. However, the most important item on the agenda was the application by the Republic of Serbia to be included in the IIB. An accession candidate was discussed again for the first time over half a century. Consequently, it was decided unanimously to include the Republic of Serbia as a shareholder state. The representatives of the member states stressed that it was entirely consistent with the interests of all the countries to expand the base by including Serbia. It will allow the IIB to expand its activities in Europe and, as a result, continue the "European" strategic course it has pursued in recent years, to increase its capital resources, to improve its financial stability and to promote geographical diversification through access to markets in the Balkans. Serbia's membership will also provide additional impetus for expanding its trade and economic relationships with IIB countries on a bilateral and multilateral level by implementing projects that include an integration component. If one summarises the interim results of the last nine years since the bank was restarted in 2012, the following key achievements can be highlighted. The total amount of investments in the national economies of member states came to EUR 3.1bn. The loan portfolio has increased by a factor of 13 from EUR 95.6m to more than the above-mentioned EUR 1.2bn. The assets have increased almost five-fold from EUR 367m to EUR 1.8bn. The total amount of financing awarded by the bank comes to EUR 2.5bn. The proportion of non-performing loans fell from 75.3% (not a typo!) of the total portfolio to 2.3%.

Primary market

Many thanks for your patience in recent weeks, we are now able to report once more and have a few transactions to work through: the first countries are now publishing their funding targets for the coming year, including France (EUR 260bn) and Belgium (EUR 41.2bn), for example. France again intends to include green bonds in its funding mix and is looking at the rather niche “green linker” (inflation-indexed green bond) segment. This will provide additional supply to the funding figures of the ESM, EFSF and EU discussed above. Looking back, we can see a mixed bag of transactions rounding off the 2021 trading year. MADRID raised EUR 500m in a seven-year green bond (WNG) at +11bp above the sovereign reference bond (SPGB 1.4% 07/30/28). The order books were filled with orders worth more than EUR 1.2bn. The Spanish capital and its activities in 2022 are also a focus of our “Beyond Bundeslaender” publications. However, deals from the second or even third rank also appear repeatedly. Of these, Galicia and the Canaries, which had attractive mandates out there at the end of the year, should be mentioned in particular. Galicia opted for a six-year sustainability bond accompanied by investor calls, with an ultimate target volume of EUR 500m (WNG). This was achieved at SPGB +19bp above the identical reference bond to that used by MADRID (SPGB 1.4% 07/30/28). The JUNGAL ticker will definitely also feature regularly in 2022, as evidenced by the order book of EUR 800m and the pick-up compared with other regions within Spain and outside it. The Canaries, which had issued mandates for EUR 300m (10y), opted for a longer maturity and placed its WNG transaction at +23bp above the Spanish reference bond (SPGB 0.5% 10/31/31). The books closed at EUR 460m. The segment beyond German Bundeslaender was completed by Ville de Paris. VDP opted for EUR 300m (WNG) in a sustainability bond with a long maturity (20y). The books reached EUR 490m and the deal materialised at OAT +22bp (interpolated between FRTR 0.5% 05/25/40 and FRTR 0.5% 06/25/44). Here, too, we are preparing a special report for 2022 to highlight the issuers from the Parisian region (VDP and IDF) accordingly. Sticking with the regions albeit pivoting towards Germany, we alight at Thuringia: EUR 500m for 30 years was announced. This deal came in at ms +8bp, whereas Bremen opted for a tap (EUR 250m) in its 2041 maturity. The deal came in at ms +5bp. SCHHOL also opted for a tap, which increased its 2026 maturity by EUR 300m but did not provide any other information. The EIB also had two deals ready: EUR 350m in a tap at ms -21bp (SAB, sustainability bond) and EUR 750m at ms -20bp (CAB, climate awareness bond). While no further details were disclosed for the SAB deal, the CAB deal achieved an order book of EUR 5.75bn. Guidance started at ms -18bp area. Today’s review is expected to be completed by the rarely seen French SFIL with its green bond: EUR 500m (WNG) was announced for ten years and came in at OAT +19bp (FRTR 0% 11/25/31). ESG investors have been waiting for issuers such as this. All the remains to be said at this point is: Merry Christmas!

Issuer	Country	Timing	ISIN	Maturity	Size	Spread	Rating	ESG
EIB	SNAT	01.12.	XS2419364653	5.9y	0.75bn	ms -20bp	- / - / AAA	X
JUNGAL	ES	24.11.	ES0001352618	6.7y	0.50bn	ms +19bp	- / - / -	X
SFILFR	FR	22.11.	FR0014006V25	10.0y	0.50bn	ms +6bp	- / Aa3 / AA	X
THRGN	DE	22.11.	DE000A3H3G17	30.0y	0.50bn	ms +8bp	AAA / - / -	-
MADRID	ES	16.11.	ES00001010G6	6.7y	0.50bn	ms +11bp	- / - / A-	X

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

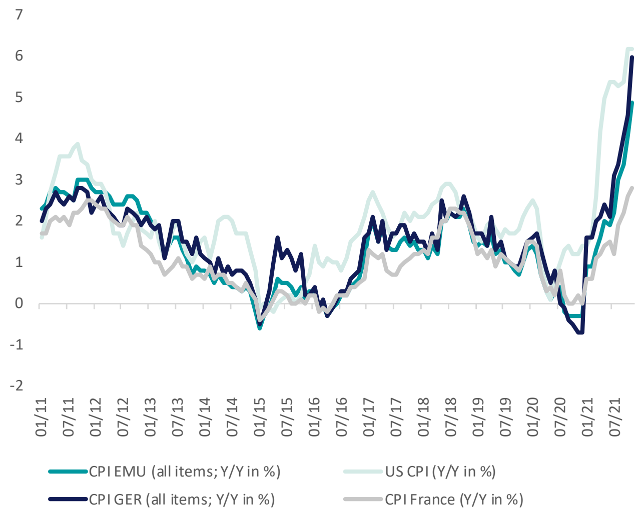
Cross Asset
ECB preview: End of PEPP, booster for APP?!

Authors: Dr Norman Rudschuck, CIIA // Dr Frederik Kunze

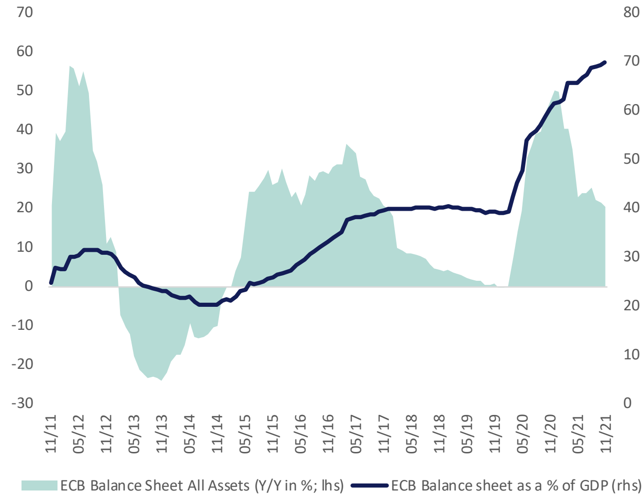
ECB meeting: remaining flexible in the face of uncertainty and despite inflation concerns
Tomorrow, the final regular – and very probably most important – ECB meeting this year will take place. In line with the current situation, the meeting will be held virtually, as the central bank recently announced. A return to what was commonly referred to as "normality" before the outbreak of the pandemic may take some time, as in many other areas of life. In our view, this also applies to the monetary policy course of the ECB Governing Council, even though key instruments currently in use date back to pre-pandemic times. Purchase programmes and longer-term refinancing operations have undergone a significant realignment in the wake of the COVID-19 outbreak. Moreover, the worsening of the pandemic situation due to the Omicron variant does not make it any easier for the ECB to adequately weigh up the dangers emanating from a rising inflation rate against the cyclical risks of an insufficiently accommodative monetary policy – or insufficiently favourable financing conditions – when determining its own course. With all these factors in play, tomorrow's central bank meeting has plenty in store. With the anticipated revision of the inflation forecasts for 2022 and 2023 and initial communication of expectations for 2024, market participants will firstly gain important insights into the basic economic assumptions underpinning the future stance on monetary policy. In addition, there will undoubtedly be a focus on the direction and specific design of the ECB's purchase programmes beyond March 2022. The Governing Council has already largely prepared for the "end" of the Pandemic Emergency Purchase Programme (PEPP) in terms of presentation to the outside world. We also expect adjustments in the pace of purchases in the run-up to March 2022. Likewise, the APP is likely to be given a makeover by the ECB, while we expect fewer changes regarding other monetary policy management parameters. Accordingly, the key interest rate should remain unchanged, as should the parameterisation of the graduated interest rate system. With regard to TLTRO, we also no longer expect any notable announcements in 2021. Within the framework of our ECB Outlook, we would like to discuss these and other aspects and also address specific implications for the asset classes we are looking at.

Inflation trend: the end of "temporary"?
In our previous ECB previews we repeatedly asked ourselves how long one can actually talk about a transitory price increase. The debate on how long the ECB Governing Council can continue referring to a "temporary" upward pressure on prices is now coming to a head at a time when new downside risks are looming from the new virus variant and the pandemic situation. If these are misjudged, there is a risk of significant slowdowns in the recovery process. In the event of an excessive reduction in purchasing activities, the risk potential also includes the possibility of significant increases in yields on the public issues (and in particular government bonds) that are the focus of the purchasing programmes.

Price trend: EMU, US, GER, FR



ECB: balance sheet trend



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

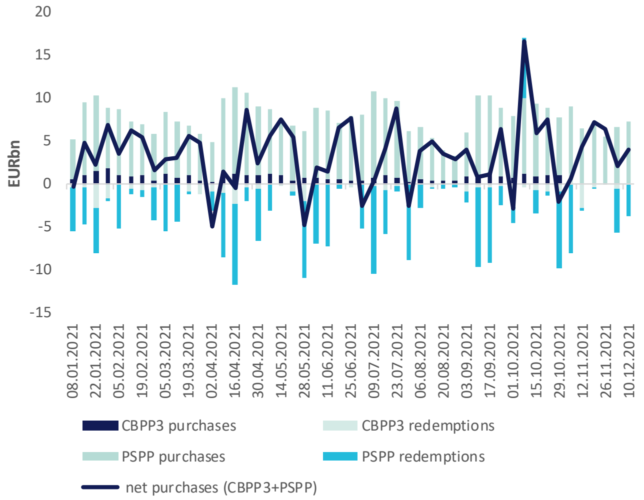
Inflation trend: danger of second-round effects

If, on the other hand, there is not a sufficient response to runaway inflation, a much more drastic reaction will be required in the not-too-distant future. Especially in the event that the financial and capital markets further consolidate an expectation that the ECB will stick with the term "temporary" upward pressure on prices for too long, this expectation could be confirmed economically by second-round effects. In this respect, it remains for the ECB Governing Council to strike a balance between two risky paths. We would currently assume that it should become clear, especially at the December meeting, that the central bank will continue to move along its chosen path. This means that the end of the PEPP in March 2022, which has already been hinted at by ECB chief Christine Lagarde, is likely to be communicated without neglecting to top up the APP while at the same time sticking to the notion of "transitory inflation". But we would not be at all surprised by a certain linguistic flanking or relativisation of the term.

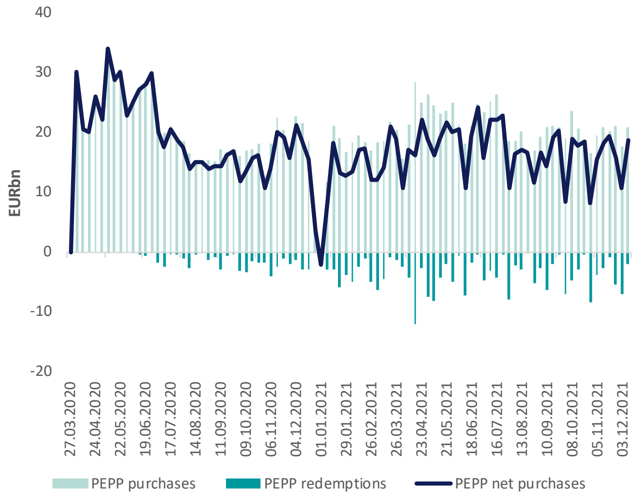
Revision of inflation forecasts: things are moving in only one direction – at least for 2022

Also given the expectation of maintaining the mantra of transitory inflation, there will have to be a notable adjustment of the ECB's previous inflation expectations (September projections: 2021: 2.2%; 2022: 1.7%), especially for the years 2021 and 2022. For 2022, the new ECB projections will most likely be significantly higher than the September forecast, while for 2023 the 2% inflation target is still not expected to be overshot, which in turn would fit in with the assessment of transitory upward pressure on prices. However, looking ahead to 2023, we would not rule out an – albeit more subtle – upward revision of the current projection (1.5%). For the initial forecast for 2024, the ECB is again likely to move closer to the 2% mark, but without exceeding it in the projection. All in all, we do not expect the Governing Council to decide on interest rate hikes in 2022 as a whole, which would ultimately be in line with the framework parameters of the forward guidance with regard to the interaction with inflation projections.

Purchases under the PSPP and CBPP3 (2021 ytd)



Purchases under the PEPP (since inception)

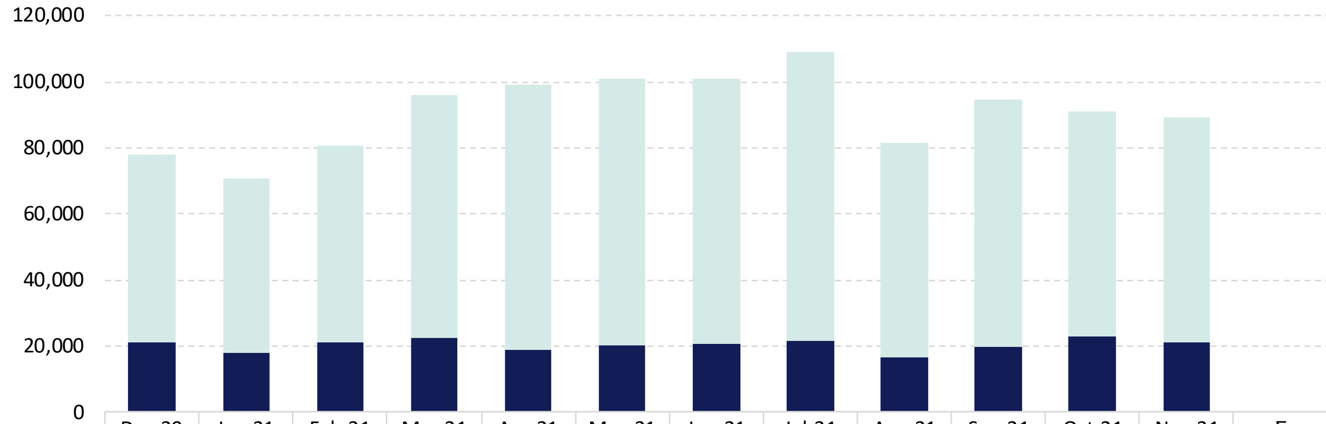


Source: ECB, NORD/LB Markets Strategy & Floor Research

Termination of the PEPP before the end of the pandemic

We expect net purchases under the PEPP to end in March 2022. In fact, we also believe the emergence of the new virus variant will certainly make decision-making for the Governing Council more complex. The central bank's pandemic emergency programme dates back to the outbreak of the coronavirus in 2020 and was intended to help avert the negative shock. This pandemic emergency can by no means be regarded as over today. Nevertheless, the situation is currently quite different to what it was like in March 2020, so a current worsening of the infection situation need not influence the decision to end the PEPP in just over three months. Recent waves have shown that the dramatic simultaneous supply and demand shock of 2020 has not been repeated globally. And although we do not intend to play down the possible dangers, with the vaccination campaigns and booster initiatives there are certainly tools for fighting the fourth and, in some places, probably fifth wave, which do not have to be of a monetary nature. And finally, it should not be forgotten that the current price trend has significantly shifted the basic conditions. As recently as March 2021, Lagarde pointed out in the ECB's blog on the pandemic that "the PEPP could provide sufficient support to the euro area economy to help offset the pandemic-related downward shift in the projected path of inflation." At present, this stimulus is certainly no longer needed from the PEPP. However, since it can by no means be fully ruled out that the pandemic situation will worsen to such an extent that the central bank will have to focus more on the downside risks again, a conditional exit from the PEPP is not unrealistic. By communicating the possibility of revoking the PEPP end date if needs be, the Governing Council could also communicate the provision of a specific emergency framework. One conceivable scenario in which the emergency programme could have a dampening effect on inflation, contrary to its original implementation, would be the avoidance of renewed bottleneck recessions due to the collapse of value chains or supply chains. Finally, the supportive element of monetary policy could – at least in theory – literally keep real economic activity going even in these critical sectors or areas.

Monthly net purchases (EUR m)



	Dec-20	Jan-21	Feb-21	Mar-21	Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Nov-21	∑
∑	78,092	70,892	80,829	96,082	99,036	100,841	100,808	109,154	81,799	94,710	90,872	89,273	1,092,38
PEPP	57,163	53,046	59,914	73,521	80,118	80,700	80,168	87,557	65,050	75,051	67,855	68,085	848,228
APP	20,929	17,846	20,915	22,561	18,918	20,141	20,640	21,597	16,749	19,659	23,017	21,188	244,160

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

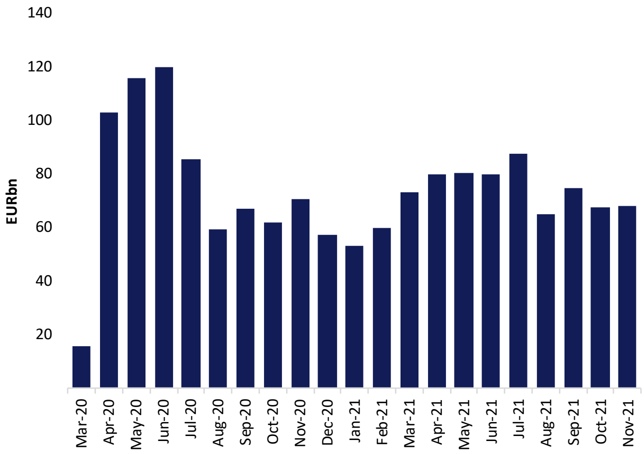
What's next for the PEPP and the APP?

For the baseline scenario that pandemic situation does not worsen and continued prevailing upward pressure on prices, we expect the ECB to continue making purchases under the PEPP at its moderate pace for now and as such will therefore not utilise the EUR 1,850bn limit in full. While full utilisation would result in purchases averaging around EUR 75bn per month from December 2021 to March 2022, we continue to expect a much more moderate pace of purchases here, averaging EUR 50bn-55bn (see e.g. also our ECB Preview from November). Nevertheless, other use of the unused part of the "envelope" does not seem out of the question, as the programme provides for greater purchasing freedom than the APP. The ECB will also continue to reinvest the maturities of the PEPP – probably until the end of 2023 – and could again display a significant degree of flexibility here. In addition, we expect APP purchase volumes to increase temporarily. In our baseline scenario, we expect net monthly purchases to roughly double from April 2022 to August 2022 (EUR 40bn) and to gradually decline by EUR 5bn to the starting level (EUR 20bn per month) by year-end 2022. This would correspond to an additional purchase volume of EUR 130bn in 2022.

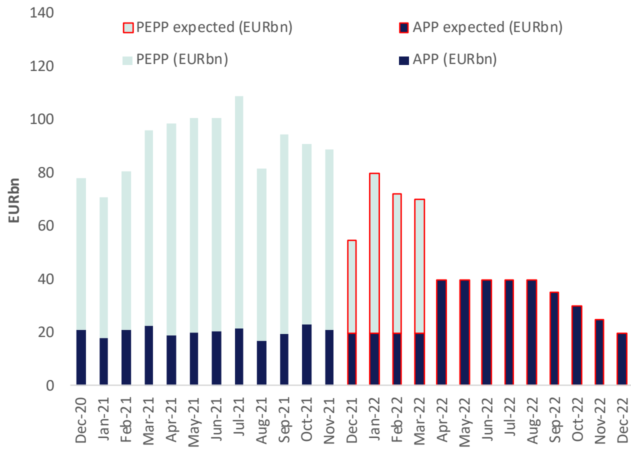
Technical details and forthcoming adjustment of the ISIN limit?

For the period from April 2022, there is also the question of the extent to which the ECB could make adjustments to the APP rules. As mentioned above, we see a higher degree of flexibility in the pace of purchases or weekly transactions as very likely. Current Bloomberg surveys also indicate a certain ambivalence among market observers. At 39%, more than a third of the ECB watchers surveyed do not expect any changes to the APP rules in the coming months. Notwithstanding the above, it is quite likely that possible adjustments to ISIN limits or capital keys (increase in supra share) will be the subject of intense discussions at the December meeting. However, we do not see any temporal necessity here, as the Eurosystem is capable of acting even on the basis of the current requirements.

PEPP: monthly purchases



APP and PEPP: monthly purchases and scenario



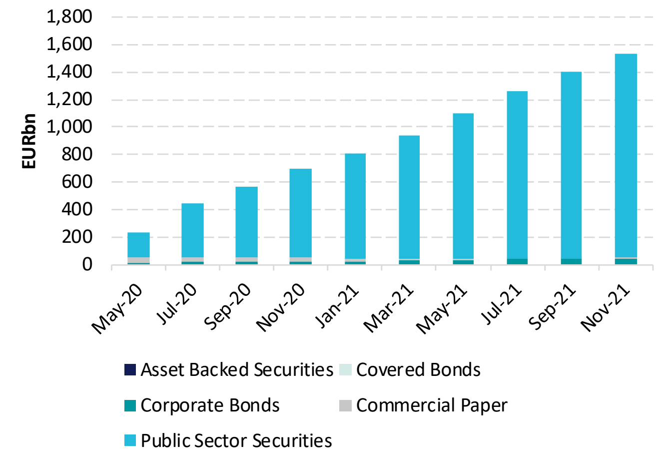
Source: ECB, Bloomberg, NORD/LB Markets Strategy & Floor Research

No TLTRO decision expected

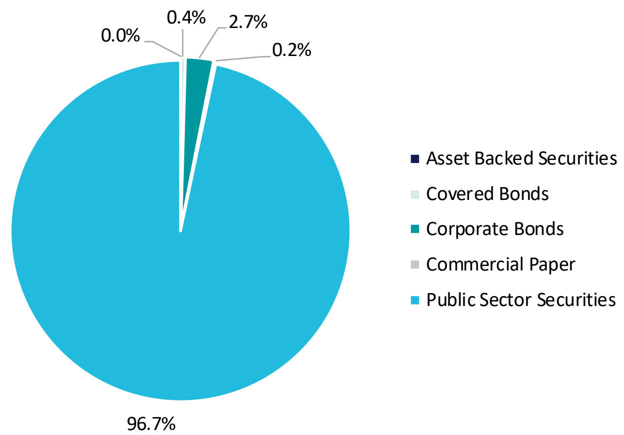
With regard to the ECB's TLTRO tenders, we do not expect any concrete decisions at tomorrow's meeting not least due to the current timetable for the ongoing TLTRO III programme. The last allocation here will be made in December with TLTRO III.10. Moreover, in terms of maturities the first deadline is not due until September 2022. Nevertheless, the ECB’s Governing Council might already have mid-2022 in mind, as the best possible interest rate expires then based on the current configuration of the conditions, thereby potentially weakening the accommodative effect of TLTRO III. Currently, more than EUR 2,200bn in liquidity has been made available to commercial banks through TLTRO III. Here, too, the ECB’s Governing Council will try to mitigate possible cliff-edge effects and possibly announce new tenders under close surveillance and inclusion of the pandemic situation. Given the current timetable, this will only be an issue for the first quarter of 2022, even assuming the need for a sufficient lead time. Irrespective of this, we do not foresee such attractive conditions in our baseline scenario. Like with the PEPP, the initial situation here is also different to how it was at the beginning of the pandemic. The ECB is also likely to want to ease the burden on commercial banks by adjusting the tiering factor in the context of the graduated interest rate, meaning commercial banks will no longer be focusing on a compensating P&L effect, which was seen in the context of TLTRO III. In our view, a possible adjustment of the tiering factor will only take place in the new year and will be communicated in the context of an expected “TLTRO IV”. In fact, we believe that tactical considerations may increasingly play a role in the current cycle of uncertainty about the future course of the pandemic. Ultimately the decisions not taken today or tomorrow may, to some extent, preserve the flexibility of the Governing Council in the future. Again, we see a certain charm in the “sequencing” of monetary policy announcements.

What are the implications of the ECB meeting for our asset classes?
The December meeting could have a number of possible implications, both in terms of the SSA/public issuers segment and the covered bond market. Based on our expectations, the focus is undoubtedly on the upcoming termination of the PEPP and the adjustments to the APP volume. However, we would also not underestimate the relevance of indications that could potentially shed light on how the ECB will get to grips with the ongoing pandemic situation and the associated uncertainty.

Monthly PEPP purchasing volume



Development of PEPP volume



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

SSA segment: high supply levels still matched by strong demand
For the public sector and the prolonged period of low interest rates, the Eurosystem's purchase programmes were worth their weight in gold. In the PEPP in particular, 96.7% of the purchased volume now comes from the public sector. In this respect, even the EU's fresh borrowing did not result in an oversupply of receptive material. For the SSA segment, it will be particularly relevant how the EU and the German Bundeslaender go about their funding plans in 2022. The EU is expected to raise around EUR 120-150bn in 2022 to refinance its NGEU programme. This issuer alone would therefore exceed the entire market for EUR-covered bonds. The German Bundeslaender are also likely to have a positive net supply, although the Laender are still holding back on providing details of their borrowing authorisations and we do not expect any precise information before mid-January. Therefore, especially in Q1, a high supply will coincide with an unchanged high demand. Even though demand from the Eurosystem will be somewhat reduced depending on the ECB's criteria, asset managers and bank treasuries in particular still have sufficient dry powder for the upcoming new issues. In addition, we firmly expect reinvestment of maturing Eurosystem bonds by the end of 2023. All this suggests sideways-trending spreads. TLTRO III and IV are discussed in more detail in the following paragraph, as this instrument only plays a role for promotional banks and was used in the past, but did not have an excessive impact on the submarket as a whole. We do not foresee funding volumes returning to pre-pandemic levels in 2022, as the coronavirus burdens on the budgets, which are the main constitutional reason for the renewed suspension of the debt brake in Germany at all levels of government, will weigh too heavily. The rating agencies will also do their homework in 2022 and outline which European regions can still sustainably shoulder the consequences of the pandemic.

Covered bonds: end of the PEPP will bring changes, but the covered bond market is more focused on meetings in Q1 2022

In our weekly publication we have regularly referred to the distorting effects of the APP and CBPP3 on the covered bond market, while at the same time pointing out the quantitative insignificance of covered bonds in the context of the PEPP. In this respect, the direct implications of an end to the PEPP for this segment remain manageable. Provided that the APP continues in the form we have outlined, we do foresee a significant increase in covered bond purchases under the CBPP3. This alone would have a certain spread-supporting effect. Nevertheless, we do not expect that a doubling of the APP volume in the months after the end of the PEPP will necessarily lead to doubling of purchases under the CBPP3. The mantra of flexibility should also apply here. In 2021, demand from the Eurosystem in relation to the covered bond market was down on previous years. While the CBPP3 accounts for 9.6% of total APP, covered bonds come in at just 5.2% in 2021 ytd (January to November 2021). In any case, the greater danger – at least theoretically – comes from the decisions we expect in 2022. New TLTRO rounds could once again reduce the supply of publicly placed covered bonds over the long term. However, we explicitly see this as our baseline scenario. Rather, a TLTRO IV could exist additionally on the market without causing such distortions again due to conditions that are more in line with market customs.

Conclusion and comments

The German Christmas carol “Morgen, Kinder, wird’s was geben”, which roughly translates to “Tomorrow, children, there will be something for you”, could also have been the festive title of our ECB preview. In the end, we opted for the distinctly less Christmassy line “end of PEPP, booster for APP?”, as boosting in particular is on everyone's lips at the moment and holds almost more promise than the upcoming festive season. While an end to the pandemic purchase programme at least gives us hope that other topics will again dominate market events in 2022, the APP in particular should act as a kind of booster in its new incarnation. The focus is likely to switch more to the ECB's inflation target and the fight against the pandemic should recede into the background. The Eurosystem nevertheless remains dominant, as maturities alone are likely to be reinvested by the end of 2023. This suggests a sideways movement for yields and spreads in the public sector in particular, as this asset class dominates all others in terms of volume within the framework of the purchasing programmes. Also due to the general focus on the essentials, ECB Governing Council members are most likely to be feeling slightly giddy; hard nuts will be discussed or even cracked. Jens Weidmann will leave a gap at the Bundesbank at the end of the year – six years before the normal end of his term. We hope he enjoys positive discussions tomorrow and a successful final vote, which should come down to the facts outlined above: PEPP to be brought to a close at the end of March 2022, adjustment of the APP, no decisions on TLTRO IV and no interest rate turnaround in 2022. To borrow from the Christmas carol again: Once we wake up, we will know what ECB President Lagarde has in store for us. We also wish ECB Vice-President Luis de Guindos, who is ill with coronavirus at present, a speedy and full recovery.

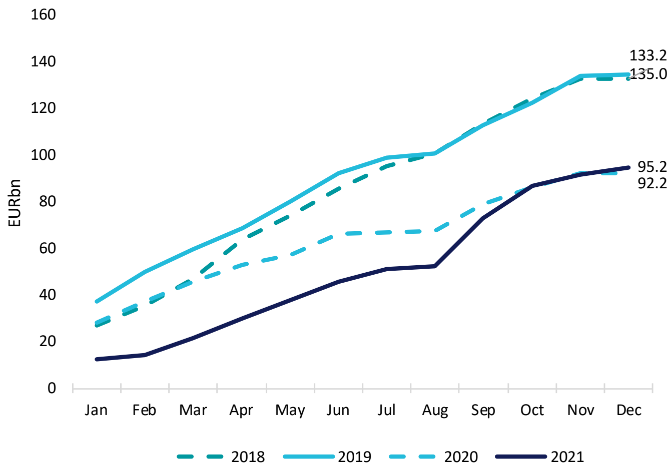
Covered Bonds
Our view of the covered bond market in 2022

Author: Dr Frederik Kunze

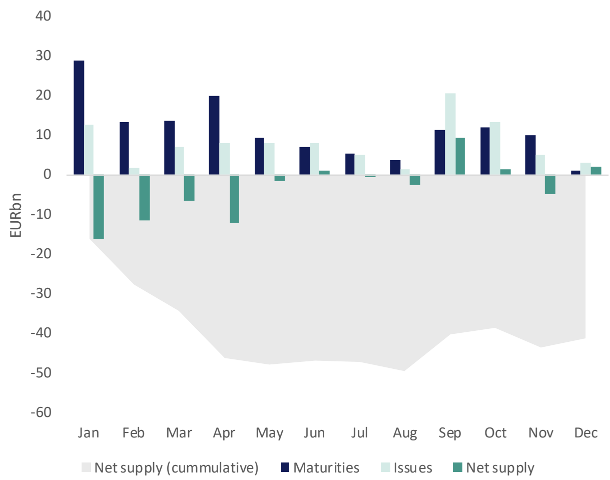
The covered bond market in 2022: not only shaped by the ECB

In the context of our weekly publication, recently we have often commented on our estimates for the covered bond market in the coming year. For example, we anticipate a noticeable upturn in the issue volume in the EUR benchmark segment and expect new issues of EUR 119bn (see NORD/LB Covered Bond & SSA View dated 17 November). With regard to the influence of the ECB's monetary policy on the covered bond market in 2022, we also outlined a possible picture in the previous issue of our weekly publication, and will also discuss this further in today's ECB preview. However, despite the influence of monetary policy on the covered bond market, a 2022 outlook that only concentrated on the ECB would be too narrow a focus. After all, the next 12 months will bring further developments and milestones. In this article, we would like to concentrate on these and also discuss the short, medium and longer-term determining factors of the issue volumes as well as possible spread developments.

EUR BMK: issuing activity



EUR BMK: net supply 2021 (ytd)



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

A brief spotlight on the current situation

With 2021 coming to an end, there has still been the occasional sign of life in recent trading weeks, which has resulted in issuance activity over the last three to four months of the year that can be described as quite buoyant given the external circumstances. In fact, covered bond issuances in December, but also intermittent senior unsecured deals, suggest that some issuers are also pre-funding in order to avoid potentially strong issuance activity in the first trading weeks of the new year – a consideration that we will take up later.

Primary market for 2022: maturities driving issue volume more strongly again

With maturities in the volume of EUR 138bn and new issues amounting to EUR 119bn for 2022, we again expect the EUR benchmark segment to shrink, but with a negative net supply of EUR 19bn, we forecast a significantly lower figure in terms of amount than in 2021 (EUR -41bn). In addition, looking at jurisdictions, we see a more heterogeneous landscape in terms of net supply for 2022. We also anticipate dynamic growth in the APAC region and overseas markets but also – due to newcomers – in the CEE region. We again expect pronounced reductions for Spain, which should not least come as a consequence of the ongoing bank consolidation process. The finalisation of EU covered bond harmonisation is in our view clearly a stabilising element, whereas the ESG trend will tend to be neutral or slightly sustaining. Factors of uncertainty remain with regard to the further course of the pandemic, but also the expectations placed on the financial and capital markets in relation to monetary policy in the eurozone.

NORD/LB forecast 2022: Issuances and maturities by jurisdiction

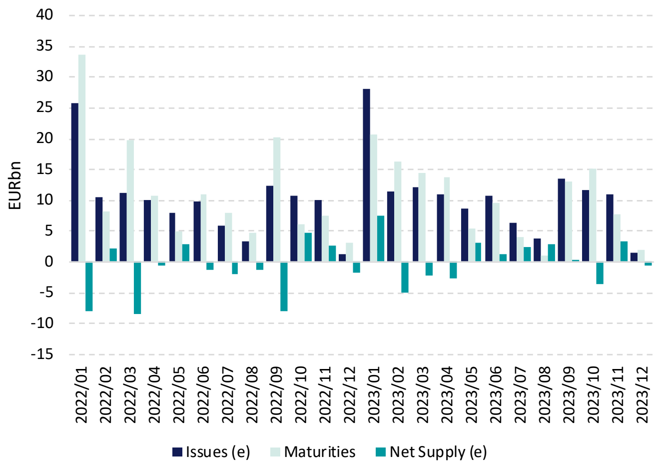
Jurisdiction	Issues 2021 as at 14 December 2021	Outstanding volume as at 14 December 2021	Maturities 2022	Issues 2022e	Net supply 2022e
AT	5.5	32.5	3.0	5.5	2.5
AU	6.0	27.9	7.5	6.0	-1.5
BE	2.5	17.3	2.8	2.5	-0.3
CA	9.0	60.0	8.0	9.0	1.0
CH	0.0	1.3	1.3	0.0	-1.3
CZ	0.5	0.5	0.0	0.5	0.5
DE	21.0	157.2	21.1	21.0	-0.1
DK	1.5	7.0	2.5	1.5	-1.0
EE	0.5	0.5	0.0	0.5	0.5
ES	4.0	80.0	13.7	4.0	-9.7
FI	4.5	29.0	4.8	4.5	-0.3
FR	30.0	221.0	30.8	30.0	-0.8
GB	4.0	30.9	8.3	4.0	-4.3
GR	0.0	0.5	0.0	0.0	0.0
HU	0.5	0.0	0.0	0.5	0.5
IE	0.0	3.5	1.8	0.0	-1.8
IT	4.5	51.9	7.8	4.5	-3.3
JP	1.5	4.9	0.0	1.5	1.5
KR	2.0	5.6	0.0	2.0	2.0
LU	0.0	1.5	0.0	0.0	0.0
NL	5.0	63.3	5.3	5.0	-0.3
NO	7.0	51.0	8.0	7.0	-1.0
NZ	2.5	9.5	1.8	2.5	0.8
PL	0.5	2.1	0.6	0.5	-0.1
PT	0.0	5.8	2.8	0.0	-2.8
SE	3.0	29.6	5.0	3.0	-2.0
SG	1.5	7.3	1.5	1.5	0.0
SK	2.0	3.5	0.0	2.0	2.0
Total	**95.2**	**904.8**	**138.0**	**119.0**	**-19.0**

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

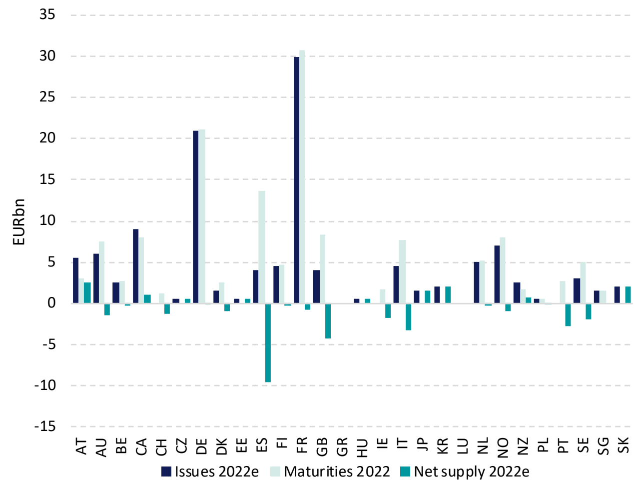
Basic considerations regarding the prognostic framework parameters for 2022

In deriving our supply forecast of EUR 119bn, we took into account a large number of framework parameters and made assumptions that adequately reflect the issuing behaviour at jurisdiction level. Thinking logically about this approach, uncertainty with regard to our supply forecast is also a decisive determining factor for forecast uncertainty in relation to spreads. This might mean an ECB monetary policy that deviates from our preview, which could affect the primary market and bring about what we consider to be an unwanted renaissance of retained covered bonds. Conversely, growth markets such as the CEE region and issuers from Canada and the Asia-Pacific region could be more dynamic than we assume today. More pronounced growth in real estate markets and greater momentum in public sector covered bonds – strengthened by activity in the ESG segment, among other aspects – could theoretically be responsible for unexpected upward movement in 2022. With regard to anticipated spread development, as mentioned in the introduction, the supply forecast forms the basis for the market-related analysis in which we compare maturities to derive the net supply for 2022 (expected: EUR -19bn). In conjunction with the demand side – here the ECB will once again be a major player, dominating the market in 2022 through reinvestment and net purchases – we can ultimately determine possible triggers for spreads. Spreads might also be stimulated by fundamental factors (e.g. credit quality of the issuers or the recoverability of cover assets), though we would not expect any significant changes in the coming 12 months. In the short term, market sentiment is above all likely to be a driving factor for spread movements. Any major surprises at tomorrow's ECB meeting or the first meeting of 2022 could, for example, specifically lead to widening if the purchase programmes were scaled back faster than expected or if this was announced.

Net supply forecast for 2022/23



Net supply forecast for 2022 by jurisdiction



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

ECB demand will remain significant, but will not be the sole determining factor
In 2022, the covered bond market will continue to be accompanied by the Eurosystem as a price-insensitive buyer. Nevertheless, we assume that there will also be a little more room for investors in 2022. While the ECB has held back on APP purchases with a covered bond share of 5.2%, also due to the lower supply in 2021, we do not think the Eurosystem will be forced to reach the past APP share of just under 10% for purchases in 2022. Similarly, an increase in the APP (see [ECB preview]) does not have to lead to a pro rata increase in purchases under the CBPP3. As the signs for pre-funding in 2021 mentioned at the start indicate, a high volume of issues on the covered bond market is likely to be expected in the first weeks of trading. This should also tend to result in a return of significantly positive new issue premiums. In a corresponding market phase, we also deem it very likely that secondary market prices would emulate new issues, which could – at least temporarily – lead to modest spread increases.

Ratings: fundamental data for covered bonds expected to be extremely robust in 2022
In view of the fundamental development of the market, an extremely robust picture can be assumed. We derive this assessment not least from the recently published rating outlooks of the ratings agencies. Both with regard to issuer ratings and covered bond programmes, the signs point to stability. The agencies are inclined to see improvements in credit quality as a result of covered bond harmonisation. The real estate markets in the covered bond jurisdictions will also be characterised by stability in 2022 to a significant degree, although the pace of growth is likely to weaken noticeably in some regions. However, the fact that price developments of recent years are likely to have resulted in a significant build-up of setback potential for some markets for the period after 2023 must not be overlooked. In this context, we consider the mitigating effect of the requirements for the quality of the cover assets, loan-to-value ratios and overcollateralisation ratios to be sufficient to shield covered bonds from these distortions.

NORD/LB spread forecast for 2022

Current levels

in bp	3y	5y	7y	10y
AT	-0.4	0.5	0.9	2.6
AU	1.8	5.1	8.5	12.5
BE	-2.2	-1.3	-0.1	3.5
CA	0.9	2.7	4.7	5.7
CZ	8.8	8.8		
DE	-3.5	-3.1	-2.6	-1.1
DK	0.9	1.9	2.1	
EE	7.5	7.5		
ES_Multi	11.7	15.8	15.2	11.4
ES_Single	5.5	4.5	4.8	5.5
FI	-5.2	-4.3	-3.2	-1.5
FR	-2.1	-1.2	-0.2	2.8
GB	5.5	6.6	6.0	6.7
IE	-0.2	1.9		
IT	4.4	3.9	3.8	6.5
JP	14.2	19.1	19.9	16.9
KR	12.2	12.5		
LU	14.2	17.6	17.6	
NL	1.4	3.1	2.3	2.2
NO	-1.3	0.8	2.0	2.5
NZ	4.1	8.7	13.3	15.0
PL	11.9			
PT	4.6	3.8	-1.2	
SE	-2.3	-0.4	1.4	4.1
SG	3.7	5.7	7.6	7.8
SK	6.9	7.6	7.9	8.0

as of 30/06/2022(e)

in bp	3y	5y	7y	10y
AT	4.0	5.0	4.5	6.0
AU	10.0	9.0	12.5	16.0
BE	2.0	3.0	4.5	7.0
CA	7.0	7.0	8.5	9.0
CZ		13.0		
DE	0.0	1.0	1.5	2.0
DK	9.0	6.0	6.5	
EE		12.0		
ES_Multi	18.0	20.0	19.5	14.0
ES_Single	11.0	9.0	8.5	9.0
FI	-1.0	0.0	0.5	2.0
FR	1.0	3.0	3.5	6.0
GB	11.0	11.0	10.5	10.0
IE	2.0	6.0		
IT	25.0	8.0	7.5	10.0
JP	21.0	23.0	23.5	20.0
KR	28.0	17.0		
LU	17.0	22.0	21.5	
NL	4.0	7.0	6.5	5.0
NO	4.0	5.0	6.5	6.0
NZ	11.0	13.0	17.5	18.0
PL	26.0			
PT	21.0	8.0	2.5	
SE	2.0	4.0	5.5	7.0
SG	12.0	10.0	11.5	11.0
SK		12.0	12.5	11.0

Expected spread change

in bp	3y	5y	7y	10y
AT	4.4	4.5	3.6	3.4
AU	8.2	3.9	4.0	3.5
BE	4.2	4.3	4.6	3.5
CA	6.1	4.3	3.8	3.3
CZ		4.2		
DE	3.5	4.1	4.1	3.1
DK	8.1	4.1	4.4	
EE		4.5		
ES_Multi	6.3	4.2	4.3	2.6
ES_Single	5.5	4.5	3.7	3.5
FI	4.2	4.3	3.7	3.5
FR	3.1	4.2	3.7	3.2
GB	5.5	4.4	4.5	3.3
IE	2.2	4.1		
IT	20.6	4.1	3.7	3.5
JP	6.8	3.9	3.6	3.1
KR	15.8	4.5		
LU	2.8	4.4	3.9	
NL	2.6	3.9	4.2	2.8
NO	5.3	4.2	4.5	3.5
NZ	6.9	4.3	4.2	3.0
PL	14.1			
PT	16.4	4.2	3.7	
SE	4.3	4.4	4.1	2.9
SG	8.3	4.3	3.9	3.2
SK		4.4	4.6	3.0

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

Spread expectations for 2022: slightly upwards

On the whole, we see a subtle upside potential in spreads across all maturities and jurisdictions under consideration. We expect this development primarily as a result of the slightly changed market conditions, but also anticipate temporary spread widening until the middle of 2022, driven by the general market mood. Lateral movements largely familiar from the previous year will also remain beyond this period.

What are the benefits of covered bond harmonisation?

With the mandatory application of the new national legal framework – implemented on the basis of the Covered Bond Directive – as of 8 July 2022, EU harmonisation is on the home straight. As already indicated, the amendments have a positive overall effect on the credit quality of the covered bonds in all jurisdictions. The risk potential in the event of implementation not being on time or complete is limited by far-reaching grandfathering regulations. In addition to improving credit, we believe that EU harmonisation should also be a conducive factor to the segment's growth. We think this will inspire new issuers and new jurisdictions. Beyond 2022, interesting developments in our view include key projects such as the recognition of third countries and the development of a market for European Secured Notes (ESN) as a further dual recourse class.

ESG – a buzzword for the covered bond market in 2022 as well

The delegated act on the EU taxonomy entering into force (see Market section for covered bonds) is a significant milestone for green financing and therefore ultimately also for green covered bonds. Accordingly, 2022 should also be marked by a far-reaching revision of green or sustainable frameworks for the placement of covered bonds. We also consider the ESG segment to still be on its growth trajectory in the covered bond universe. Green covered bonds should continue to occupy a dominant position in terms of issue volume. With the generic further development of market standards and specifications, the covered bond market will also (have to) develop further. This not least also applies to the underlying assets. In the case of some mortgage cover values, for instance, it must be assumed that there will be a deterioration in impairment even against the trend of general price increases. In addition to the non-existent possibility of use as a cover value for green covered bonds, an excessive deviation from energy standards but also higher management costs must be considered in this context. Both can put a strain on credit quality. However, we see a high probability that homeowners will initiate measures for renovation, modernisation or energy-efficient renovation to a greater extent in the future. Conversely, the EU taxonomy would therefore achieve a key objective of the plan. Apart from green assets and green covered bonds, we also see significant potential for social bonds and social cover assets. In our opinion, the increased public debt in the wake of the coronavirus crisis can also be drawn on in this argumentation. In many places, local governments in Europe are taking on tasks that could be compatible with the requirements for social covered bonds. In France, Germany and Spain, in particular, there is also general talk of well-developed public sector sub-markets. With regard to mortgage-backed social covered bonds, the United Kingdom has recently drawn attention to itself with the deal from the Yorkshire Building Society.

Issues that are not EUR benchmarks: also a hot topic in 2022

Even though the EUR benchmark segment is the most important part of the covered bond market for us, we believe that it is always worth taking a look at the EUR sub-benchmark segment as well as the benchmark sub-markets outside the euro. This also applies to the coming year. With regard to the EUR sub-benchmark segment, we would justify this to the extent that this sub-market opens up the possibility for some issuers to regularly approach investors even with comparatively small cover pools. Especially for inaugural issuers, this can be a prudent choice if the goal is to build both their own curve and an investor base. Also with regard to the public placement of green covered bonds, the EUR sub-benchmark segment is likely to have a certain charm for some issuers in 2022. In terms of covered bond benchmarks, 2022 will also have some deals in store. In particular, we expect deals from the Asia-Pacific region (especially Australia but also South Korea) and from Canada. Some German Pfandbrief banks should also target the currencies of US dollar and pound sterling, in particular. Depending on the issuer and currency, we also expect an ambiguous mix of issues outside the euro for 2022 that are driven by possible pricing advantages and the actual need for FX funding. Jurisdictions such as Norway, Sweden and especially Denmark and the United Kingdom will certainly play a special role in this, as the use of the domestic currency is not uncommon for covered bonds.

Conclusion

Monetary policy will remain the most important factor influencing the covered bond market in 2022. Above all, the CBPP3 purchase programme will have a significant impact on spread development and keep the level low overall. In fact, despite the apparent dominance of this topic, we would not want to downplay the importance of other developments and trends. Here, 2022 has a lot in store as well. The home stretch of covered bond harmonisation and the closely related starting signal for follow-up projects is just one topic. Consequently, a new covered bond law can also serve as a cradle for new or returning issuers. Likewise, the relevance of the ESG segment should not be underestimated. After all, covered bond issuer can both meet increasing investor interest and support their own ESG goals, while including the entire value chain. The fact that ESG issues in covered bonds are not to the detriment of EUR benchmarks is also shown by the issues of green EUR sub benchmarks in 2021. However, this is not the only reason why we consider the EUR sub-benchmark segment to be on a growth course and expect further growth overall in this increasingly relevant niche market.

SSA/Public Issuers
SSA Outlook 2022: Public sector caught between ECB & COVID

Author: Dr Norman Rudschuck, CIIA

Public sector caught between pandemic and ECB purchase programmes

Prefacing our outlook for the final ECB meeting of the year tomorrow, we assume in the baseline scenario that the ECB will not only rethink its toolbox but also act in a pioneering way. It looks as though it will phase out the Pandemic Emergency Purchase Programme (PEPP) by the end of March 2022, despite high case numbers in many countries coupled with the Omicron variant (see separate article). After that, the focus will shift back to whether and how the original Asset Purchase Programme (APP), in which securities of public issuers are also primarily acquired (Public Sector Purchase Programme; PSPP), will be expanded and/or extended. This would mean that the bulk of the demand side would be covered by a single player. The ECB will continue to act as a "hoover" in the SSA secondary market beyond 2021. Public sector financing through the front door, as in on the primary market, will continue to be prohibited. However, institutional investors also have a lot of dry powder ready. Certainly not only to invest in the ESG segment (investment criteria: environment, social, governance), but also to manage their LCR portfolios or to carry out asset liability management and thus to reconcile the asset and liability sides of the balance sheet. Therein lies the continuing investment emergency facing institutional investors, when even after years of low interest rates, bonds with clearly negative yields and/or spreads are (have to be) subscribed to.

ECB: The more the better?

In 2022 too, the SSA segment is therefore likely to be dominated by the ECB's expansionary monetary policy stance. From April 2022 at the latest, a case distinction will then apply. Whereas under the PEPP, reinvestment in maturities would then only be possible until the end of 2023, fresh money would come into the market on a monthly basis via the APP or PSPP. According to our analysis, we are still some way off the ECB announcing a suspension of monthly securities purchases. The ECB is thus paving the way for sideways-trending spreads for the whole of 2022. At least we do not expect a technically driven widening of spreads in the bond market, although a sentiment-driven widening would be possible (vaccination breakthroughs and further covid variants). This applies in particular to the European supranationals and agencies we focus on as well as German Laender. However, other regions within the Eurozone with a significantly lower supply of bonds (such as Belgian or French regions) are also affected. Overseas regions such as Canada or Down Under are also benefiting from the low-interest environment for their refinancing, but are in some cases also affected differently by the pandemic than Germany. This also applies to natural disasters that cannot be predicted such as forest fires, as a result of which in the past the issuance volume already increased several times during the course of a year. The members of the ECB's Governing Council and the Executive Board presiding over the Council have so far avoided clear statements and postponed ground-breaking decisions until tomorrow's final meeting in 2021. In the following, we shall present our predictions for 2022.

The (net) supply must be viewed in an even more differentiated way than previously

Most issuers have now completed their refinancing for the current year or are on the funding home stretch. All in all, EUR benchmark issues (of the SSAs we analysed) are likely to be more than EUR 324bn in 2021. After, for example, around EUR 190bn in 2017 or EUR 166bn in 2019, this is a renewed increase due to the pandemic (2020: EUR 303bn). After all, German Bundeslaender got through the pandemic year in 2021 without supplementary budgets. In addition, everyone in the market was excited that not only the ECB would be operating with and handling unimaginable sums of money; the European Union has also acted decisively to date and still has a lot on its to-do list up to 2026. This will also have a significant impact on the funding volume in 2022 (and beyond). In the coming year we therefore expect – subject to a certain degree of uncertainty – EUR benchmark issues of once again over EUR 300bn. In retrospect, this would again correspond to the pre-crisis volume of two years cumulatively.

Focus: German Bundeslaender

Owing to the pandemic situation, after an initial spread shock, a very high level of action was observed, especially in EUR benchmarks. Even BAVARIA and SAXONY returned to the capital market – two genuine and, at the same time, rare alternatives in the best rating segment. In 2021 too, a disproportionately high supply came up against huge demand. Now, with a view to the PEPP, the start of the exit from the ECB's first quantitative measures seems imminent. Depending on vaccine progress and variants, the spreads could even narrow further before stabilising at around the current level and moving sideways in a rather narrow channel until the end of 2022.

Credit authorisations of German Bundeslaender: 2021 vs. 2022e (EUR bn)

	2021	2022e
Baden-Wuerttemberg	21.39	9
Bavaria	11.96	1
Berlin	6.61	6
Brandenburg	4.55	2
Bremen	2.79	3
Hamburg	4.57	2
Hesse	8.04	7
Mecklenburg-Western Pomerania	3.20	1
Lower Saxony	7.64	7
North Rhine-Westphalia	29.20	14
Rhineland-Palatinate	7.88	6
Saarland	2.20	2
Saxony	2.80	1
Saxony-Anhalt	1.75	2
Schleswig-Holstein	3.78	3
Thuringia	1.00	1
Total	**119.36**	**67**

e = estimate

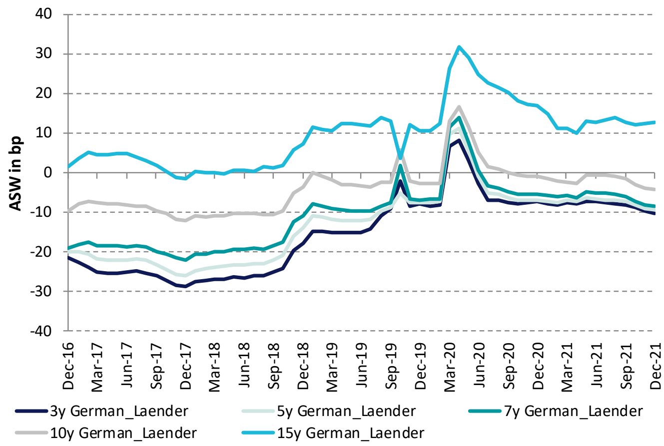
Source: Bloomberg, NORD/LB Markets Strategy & Floor Research

NORD/LB

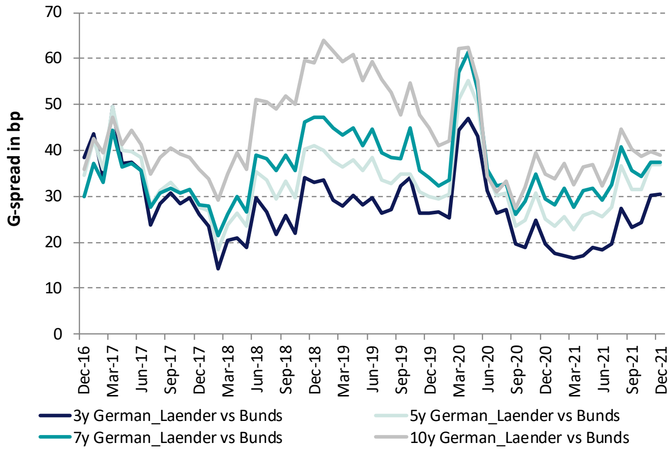
Lower funding requirements expected for German Laender in 2022

In the area of regional bonds, German Laender bonds still represent by far the most important sub-sovereign market – in 2020 in particular, but also in 2021, the 16 Laender again increased their lead and thus their importance. Before that, however, a decline in funding volumes had been observed for years. For 2022, we expect new bonds worth EUR 65bn-85bn to be placed in gross terms. This compares with maturities of just under EUR 57bn. In both cases, these are not only benchmark bonds, but also foreign currencies and SSDs, pointing to a positive net supply trend and once again underlining the relevance of German Laender bonds in this segment. In previous years, the budgets of the Bundeslaender benefited from the solid economic development in Germany. Both the pre-pandemic macroeconomic development and the forward-looking sentiment indicators pointed to a continuation of the robust macroeconomic environment, which, until the onset of the coronavirus crisis, had had a positive impact on the revenue and expenditure situation of public budgets. On the other hand, in light of the debt brake that has been in force at Laender level since 2020, the budgetary discipline of the Bundeslaender is already much more pronounced than in the past. In the year when the debt brake was activated, even the greatest pessimists would not have dreamed that it would have to be suspended immediately due to an emergency situation and would remain suspended for 2021 and 2022. This was planned in advance by law, in the hope that this clause would never or rarely have to be used, and if so, then more likely due to a “normal” recession. The primary market supply that we expect for 2022 and which, although lower compared to 2020 and 2021, is still high historically, should in our view mean that ECB-induced spread movements in this segment will remain very limited. Since a stronger focus on long maturities has been evident in recent years in regard to the refinancing of the Bundeslaender, we believe that this will continue in the coming year. As of 10 December 2021, over 524 different German bonds had been purchased since 2015. This compares with 107 ISINs from other European regional issuers (including e.g. VDP, IDF, WALLOO, FLEMSH, MADRID).

Spread movements of German Bundeslaender



Spreads: Bundeslaender vs. Bunds



Source: Bloomberg, NORD/LB Markets Strategy & Floor Research; data from 13.12.2021 eod

Other European regions within the PSPP

While the German Bundeslaender will probably act as described above, we also like to keep a regular eye on the French regions of Île-de-France (IDF) and Ville de Paris (VDP) and even their Belgian counterparts (including FLEMSH and WALLOO) as well as overseas Canadian provinces (BRCOL, ALTA etc.). We have called this segment "Beyond Bundeslaender" since 2021. The French, in particular, have also repeatedly excelled as ESG issuers. Madrid was also a major source of supply, with 21 different ISINs having been entered in the Eurosystem's books from this region. The Generalitat de Catalunya has fallen through the cracks for a long time. The rating of the Autonomous Community of Catalonia in Spain (ticker: GENCAT) was consistently not investment grade and was therefore not eligible for purchase by the Eurosystem for an extended period. This has now changed and a bond has found its way onto the books of the Eurosystem. In contrast, significant purchases have already been made in other Spanish regions, as shown in the table below. Moreover, less known tickers like the Belgian LCFB and BRUCAP appear here too. We expect funding activity to pick up in these regions in 2022, as recently underlined by the benchmark bonds from JUNGAL, NIEDOE, WALLOO and LCFB. However, GOVMAD and AZORES also strengthened the trend with their sub-benchmark deals. It remains interesting to note that not a single bond from an Italian region was acquired. We believe the overall market for Italian government bonds is sufficiently large not to have to deviate from BTPs and still be able to comply with the capital key. For a long time, this also applied to Austria on a much smaller scale.

ECB purchase list for the PSPP – regional European issuers

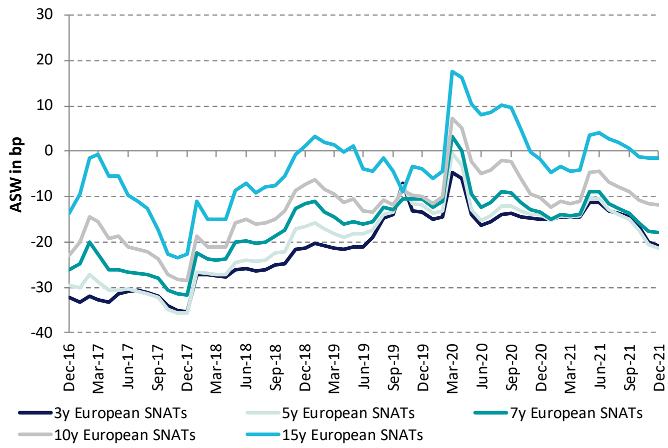
Issuer	Jurisdiction	ISINs already purchased	Issuer	Jurisdiction	ISINs already purchased
BADWUR	DE	23	IDF	FR	5
BAYERN	DE	13	VDP	FR	3
BERGER	DE	52	MADRID	ES	21
BREMEN	DE	51	CASTIL	ES	6
BRABUR	DE	22	BASQUE	ES	10
HESSE	DE	50	ARAGON	ES	1
HAMBRG	DE	28	ANDAL	ES	6
NIESA	DE	58	BALEAR	ES	1
MECVOR	DE	3	JUNGAL	ES	2
NRW	DE	75	NAVARR	ES	1
RHIPAL	DE	40	GENCAT	ES	1
SAARLD	DE	10	WALLOO	BE	16
SCHHOL	DE	36	FLEMSH	BE	14
SAXONY	DE	8	LCFB	BE	7
SACHAN	DE	10	BRUCAP	BE	4
THRGN	DE	20	GOVMAD	PT	3
BULABO	DE	1	AZORES	PT	5
LANDER	DE	24	NIEDOE	AT	1
Total	∑	**524**	**Total**	∑	**107**

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

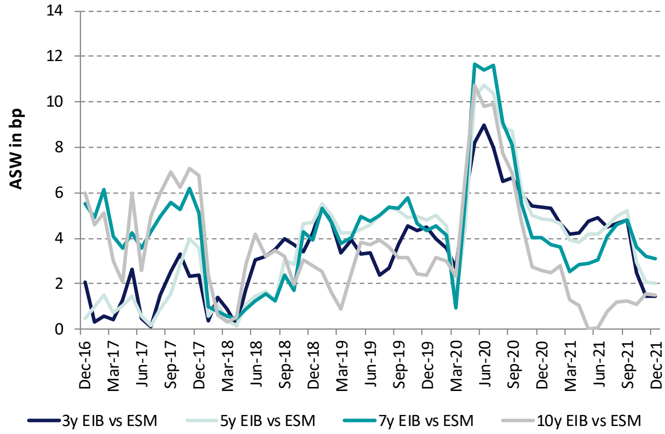
Supranationals in the grip of political-pandemic decisions

The supranationals still represent an important category in the SSA universe and since 2021 have been larger than all German EUR benchmark issuers combined in our differentiated analysis. A generally very good rating, high liquidity and regulatory advantages continue to favour bonds from supranational issuers. The Governors of the EIB, Europe's Finance Ministers, unanimously agreed in 2019 that Brexit would not affect the EIB's lending activities and business model. Recently Romania and Poland contributed additional capital, giving the EIB a higher capital base than before Brexit. The EIB will of course remain a regular player on the primary market in 2022. We expect it to reach a funding target of EUR 60bn-70bn, again spread over a wide range of currencies. In contrast, maturities amount to "only" EUR 48.7bn. At European level, the overall picture is dominated by a few big names: for example, the increase in EUR benchmark issues this year can be attributed in large part to the noticeably increased funding needs of the EU under its NGEU programme. This also applies to 2022, and will even be increased further, as the current EUR 71bn will be followed by EUR 50bn of capital market funding for NGEU in the first half of the year alone (Next Generation EU: Covid-19 development package). For the second half of the year, we expect at least another EUR 70bn, but would not be surprised by figures in the region of EUR 100bn. EU-Bills always complement these values and are therefore not included. As part of its actual activities, the EU has often had a neutral net supply in the past. Maturities in 2022 in the amount of EUR 2.7bn will be extended as before. We therefore expect up to EUR 150bn in EU funding (all EUR benchmarks, some green). For the ESM we expect a negative net supply of around EUR -4bn for next year, while EUR 8bn of new goods are entering the market (maturities: EUR 12.1bn). This applies subject to and with the exclusion of the previously unquantifiable ECCL and coronavirus emergency aid of the ESM. For the EFSF, we expect new issuance activity to increase for the first time in years to EUR 19.5bn, up from EUR 16.5bn in 2021. In the past, there was always a (significant) reduction in new issues (e.g. EUR 28.0bn of fresh supply in 2018 after EUR 49.0bn in 2017). This contrasts with maturities of EUR 17.5bn, corresponding to a positive net supply of EUR 2bn for the EFSF. We do not expect any changes to the plan here either. In addition, we expect the ESM to continue to come to market with at least one USD bond in the coming year and also plan on a social bond. It will also be interesting to see when and how quickly the ESM will really be transformed into a European Monetary Fund (EMF) – along the lines of the IMF. Speaking of transformation and political will: It will be interesting to see how the EIB's capital market structure, which is currently being renewed and restructured after Brexit, and the (corporate) political reorientation towards the entire ESG segment will affect the "green bonds" asset class. In addition, the EU will issue around EUR 225bn in green bonds by 2026. The EU's participation in social bonds seems to be over again for the time being within the framework of the SURE activities in 2021. The EU in particular is dominating the green segment in EUR benchmarks in the short to medium term with fresh material, setting itself up as the world's largest green bond issuer in the process.

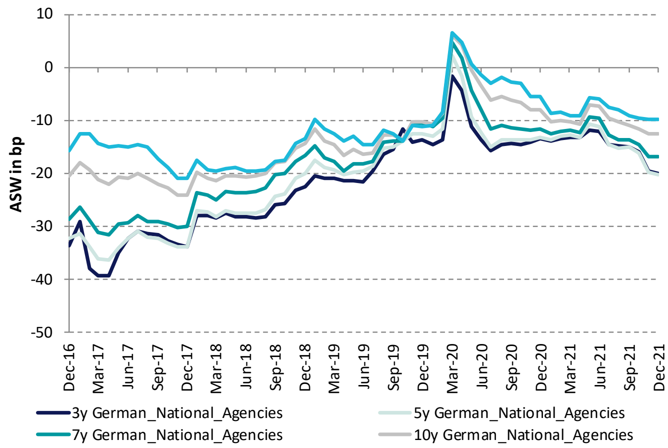
Spread movements of European supras



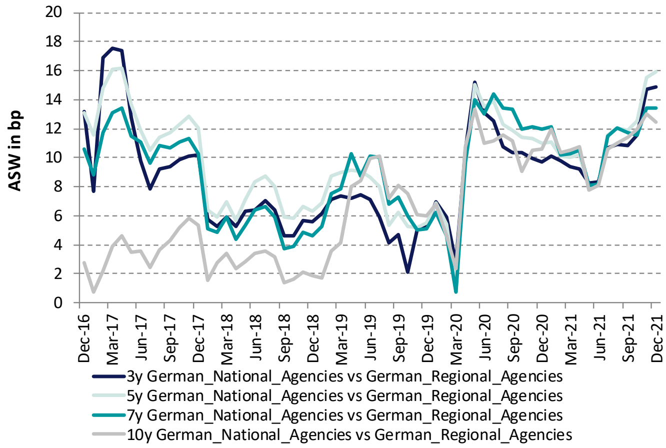
Spread differences: EIB vs. ESM



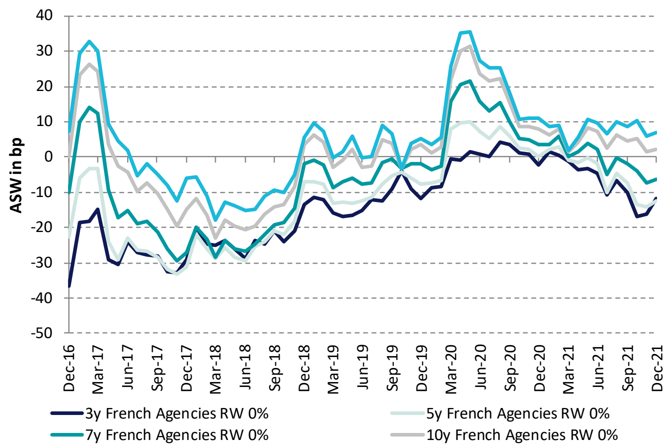
Spread movements of German national agencies



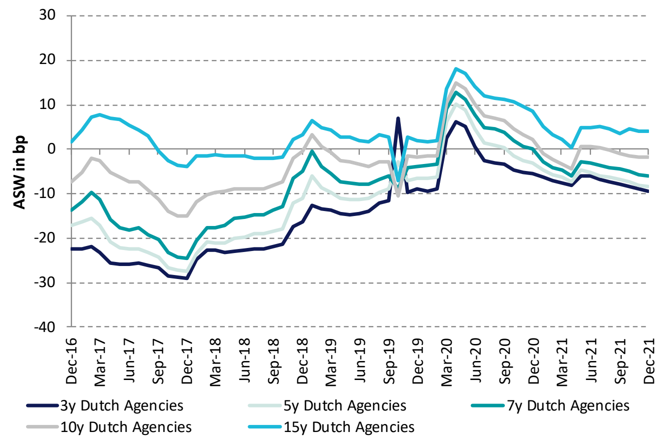
Spreads differences: German agencies



Spread movements of French agencies (0%)



Spread movements of Dutch agencies



Source: Bloomberg, NORD/LB Markets Strategy & Floor Research; data from 13.12.2021 eod

German agencies with stable net supply overall

For the German agency market, we expect net supply to remain stable overall, with a slow recovery of volumes for classic promotional programmes instead of emergency aid and coronavirus programmes. Much was also overshadowed by corona in 2021. Nevertheless, we expect a considerable funding volume from the most dominant market participant, KfW, although Federal Government funds such as the Economic Stabilisation Fund (ESF) can also be tapped here. In KfW's case, the funding volume fluctuated considerably in 2020 and was adjusted downwards over the course of the year. Whereas the demand in 2019 was still over EUR 80bn, the figure for 2020 was even reduced from EUR 75bn to EUR 65bn. By the end of November 2021, EUR 82.6bn had already been recorded. In our view, total funding should again settle at over EUR 80bn in 2022. We are now expecting the exact figures from Frankfurt on a daily basis. This contrasts with a maturity volume of EUR 69.5bn. With an expected value of at least EUR 80bn, net supply would accordingly be positive (EUR +10.5bn at least). On the other hand, the funding of German agencies (this segment includes not only promotional banks) has in the past also been driven by winding-down agencies such as FMSWER or ERSTAA, which naturally refinance their wind-down portfolios to an ever-decreasing volume. These two issuers are not purchased by the Eurosystem under the PSPP and PEPP and always offer a certain pick-up compared to promotional banks with a similar rating. As is already the case with the German Laender, we do not expect spreads to widen here in the case of the well-known agencies, as they continue to be in demand by the Eurosystem within the framework of quantitative easing. All in all, we assume that fundamental analysis for individual issuers will come to the fore again for the German market and that, in addition to net investment, Eurosystem reinvestment will dampen any widening of spreads.

France dominates heterogeneous agency market ahead of the Netherlands and Nordics, overseas regions almost impossible to predict

Let us briefly remind ourselves of the EU's funding target for 2020: EUR 800m. Due to the pandemic, it increased by a factor of more than 50 (!) to over EUR 41bn for 2020. The similar was true for UNEDIC, which started with EUR 3bn, readjusted its funding target several times during the year and ended up with more than EUR 20.5bn. However, 2021 was almost a haven of peace compared to the hustle and bustle on the primary market, as there was much less need for topping up. We will therefore not look at French agencies in detail at this juncture (RW 0% and 20%), as this picture of uncertainty also applies to CADES. It is clear that players in this segment will continue to have considerable funding volumes to place on the primary market and will also be active in the ESG segment. The presidential election on 10 April 2022 is likely to come into focus here, which five years ago certainly led to notable volatility in spreads. By contrast, the Dutch promotional banks are much more stable and predictable. BNG's funding for 2022, for example, is expected to total EUR 14bn again. Moreover, its sustainability bonds and social housing bonds are already very well established. The same goes for the NWB: It issues EUR 8bn-10bn every year, with a focus on ESG criteria in the form of water bonds, affordable housing and social development goals. Both Dutch companies also diversify strongly across currencies – only the Nordics diversify to an even greater extent. EUR benchmarks of the Canadian provinces are difficult to predict. All issuers tend to prefer their domestic currency, only opting for the euro opportunistically when a window opens up based on cross currency swaps.

ESG, not just a purely green segment: environmental, social, governance

The volume of green bonds issued has increased strongly and almost exponentially since the first such deal in 2007. In the meantime, however, growth after 2017 has stagnated at a very high level. As a result, the growth path initially seemed to be interrupted. Nevertheless, the milestone of over EUR 100bn in issuance volume per annum was surpassed. The ESG segment received an additional boost from both the green issue side and social bonds. The EU's SURE programme alone consists of almost EUR 100bn in social bonds. From 2021 to 2026, the EU will become the world's largest green issuer. The French issuers UNEDIC and CADES are also represented here in large volumes. It was not only social housing or social inclusion that were the focus here; rather the coronavirus pandemic was seized on by scores of issuers to counteract the social consequences and consequential damage. It will also be interesting to see in 2022 how the EIB's capital market structure, which is currently being renewed and restructured, will affect the green bond segment. Ursula von der Leyen is not the only one who wants to and will make the EIB greener. The transformation process is in full swing and the path of the inventor of green bonds can still be described as pioneering. However, KfW or NRW have meanwhile also built up a sustainable, green and at the same time liquid curve. Added to this is the EU's plan to issue at least EUR 225bn as green bonds under its NGEU programme by 2026, of which “only” EUR 12bn has been raised yet.

Conclusion and outlook

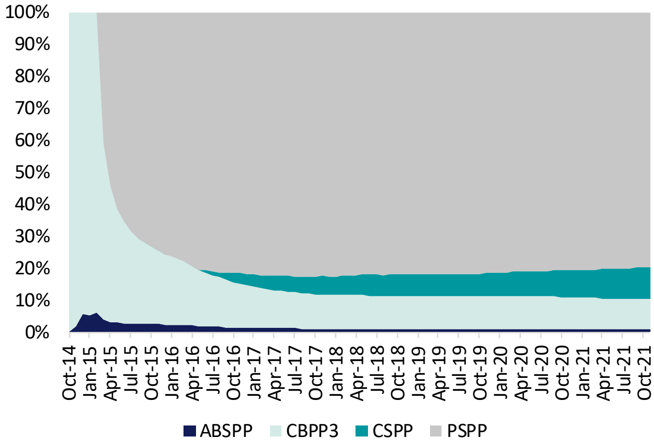
We expect the SSA segment in 2022 to be dominated somewhat less by the coronavirus crisis, measures implemented by public issuers to combat the pandemic and the ECB's purchasing programmes. Details of declining net investments (regardless of whether PSPP or PEPP) or signs that the Eurosystem is heading towards a reduction will be revealed at tomorrow's ECB press conference, which will set the tone for monetary policy in 2022. Moreover, we do not expect any drastic movement in the spread landscape in the baseline scenario. In our opinion, this is prevented not only by the fresh billions of net purchases under PSPP and PEPP, which are still ongoing but winding down, but also by the billions of euros of reinvestment in both programme branches. Over the next three to five years, spread levels from 2016 could be a realistic target for most issuers within our coverage. We are also curious with regard to the seasonal patterns, for example how strong January will turn out to be (the EU will only come to market in February). Unaffected by this are political discussions and economic developments that could be induced, for example, by a trade war, various elections (most notably in France) and/or the pandemic situation. In this context, the green transformation of the EIB, the EU and the ESM into a European Monetary Fund are almost marginal issues – albeit of a seminal nature.

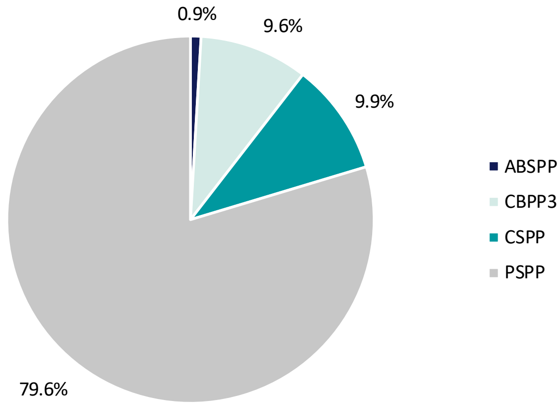
ECB tracker

Asset Purchase Programme (APP)

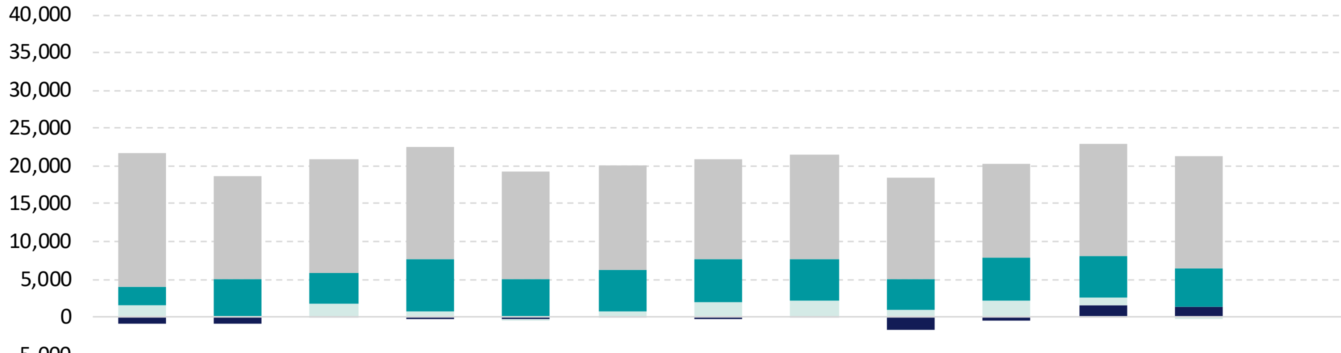
	ABSPP	CBPP3	CSPP	PSPP	APP
Oct-21	27,502	297,598	301,885	2,464,316	3,091,301
Nov-21	28,786	297,586	307,026	2,479,090	3,112,488
Δ	+1,284	-12	+5,142	+14,774	+21,188

Portfolio structure





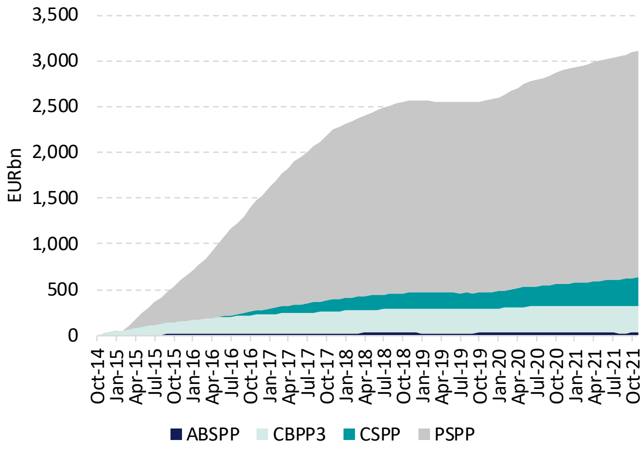
Monthly net purchases (in EURm)



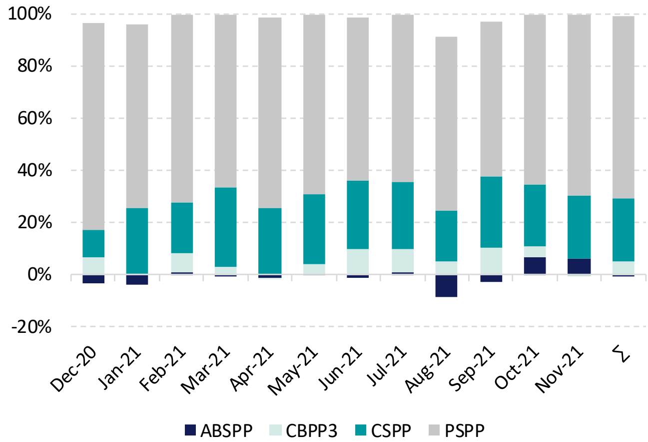
	Dec-20	Jan-21	Feb-21	Mar-21	Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Nov-21	∑
APP	20,929	17,846	20,915	22,561	18,918	20,141	20,640	21,597	16,749	19,659	23,017	21,188	244,160
PSPP	17,822	13,655	15,129	14,955	14,186	13,973	13,320	13,943	13,563	12,423	15,038	14,774	172,781
CSPP	2,378	4,924	4,064	6,929	5,015	5,394	5,602	5,502	3,936	5,590	5,481	5,142	59,957
CBPP3	1,529	74	1,539	684	-5	686	2,037	2,011	999	2,184	1,008	-12	12,734
ABSPP	-800	-807	183	-7	-278	88	-319	141	-1,749	-538	1,490	1,284	-1,312

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

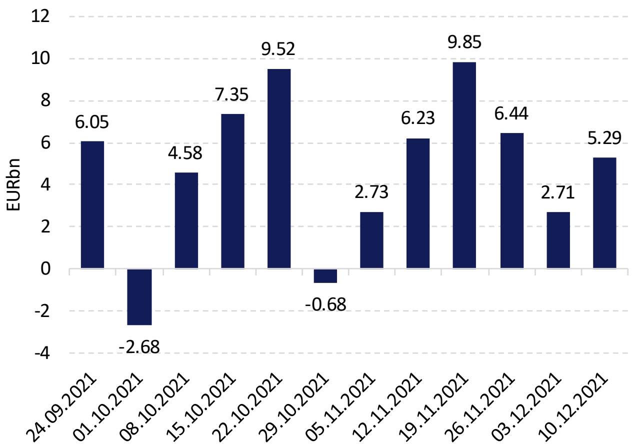
Portfolio development



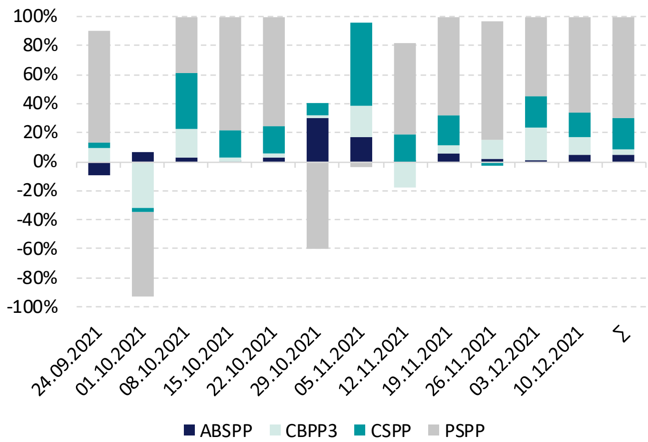
Distribution of monthly purchases



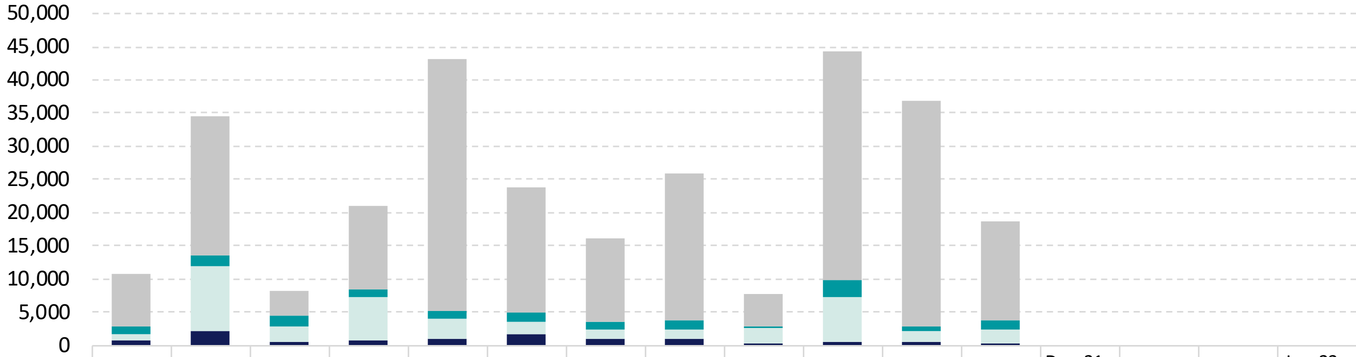
Weekly purchases



Distribution of weekly purchases



Expected monthly redemptions (in EURm)

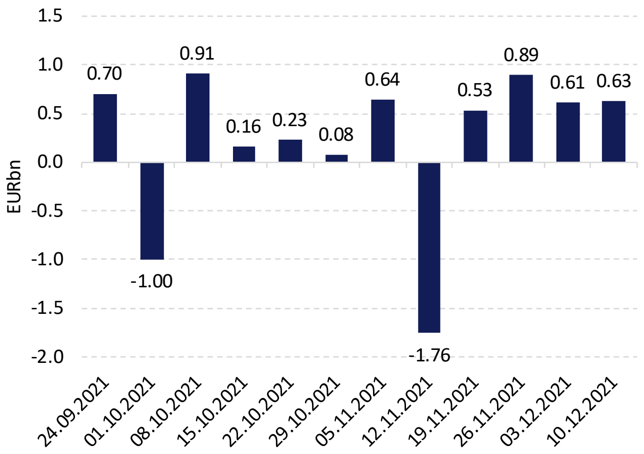


	Dec-21	Jan-22	Feb-22	Mar-22	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-21 - Nov-22	2020	2021	Jan-22 - Nov-22
APP	10,665	34,550	8,171	21,026	43,162	23,879	16,202	25,844	7,731	44,354	36,770	18,751	291,105	262,253	246,877	280,440
PSPP	7,811	20,906	3,625	12,603	38,018	18,999	12,714	22,158	4,841	34,554	34,003	14,945	225,177	201,482	188,494	217,366
CSPP	1,208	1,768	1,590	1,220	1,125	1,341	1,017	1,198	280	2,426	588	1,332	15,093	18,267	17,056	13,885
CBPP3	937	9,800	2,524	6,419	3,018	1,866	1,560	1,613	2,227	6,866	1,611	2,150	40,591	33,236	30,143	39,654
ABSPP	709	2,076	432	784	1,001	1,673	911	875	383	508	568	324	10,244	9,268	11,184	9,535

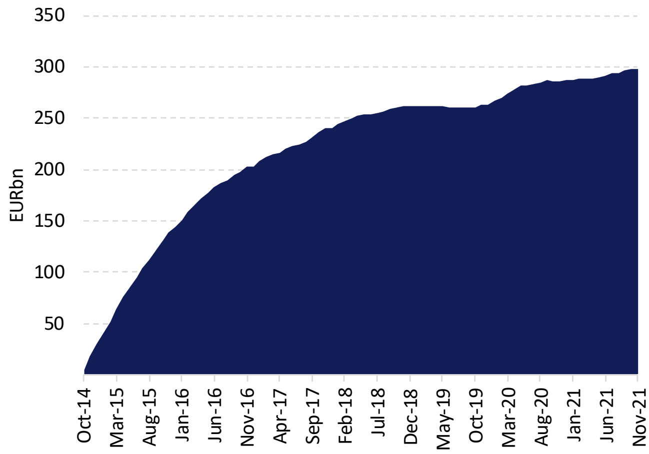
Source: ECB, Bloomberg, NORD/LB Markets Strategy & Floor Research

Covered Bond Purchase Programme 3 (CBPP3)

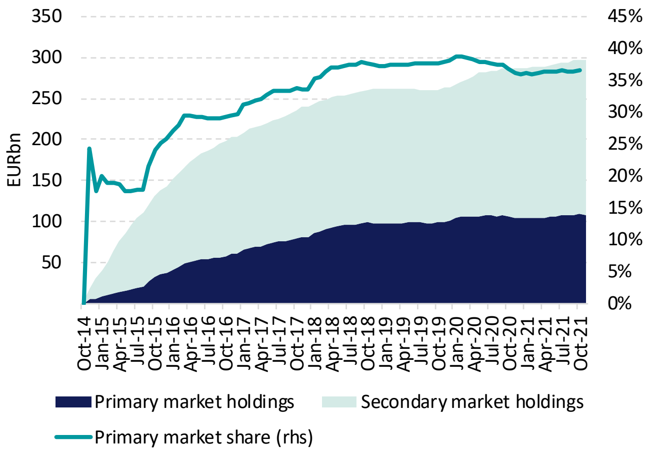
Weekly purchases



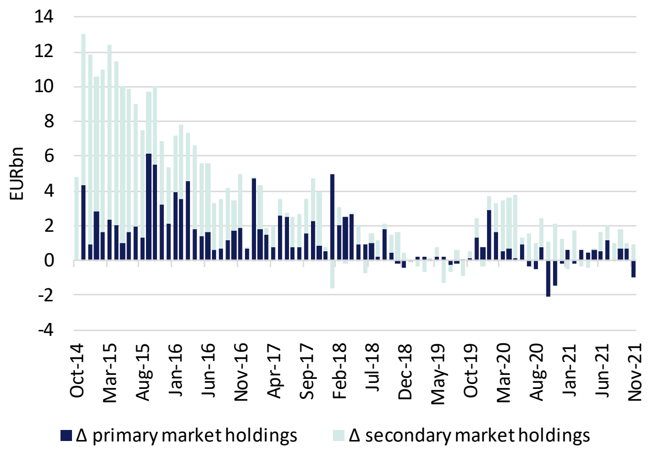
Development of CBPP3 volume



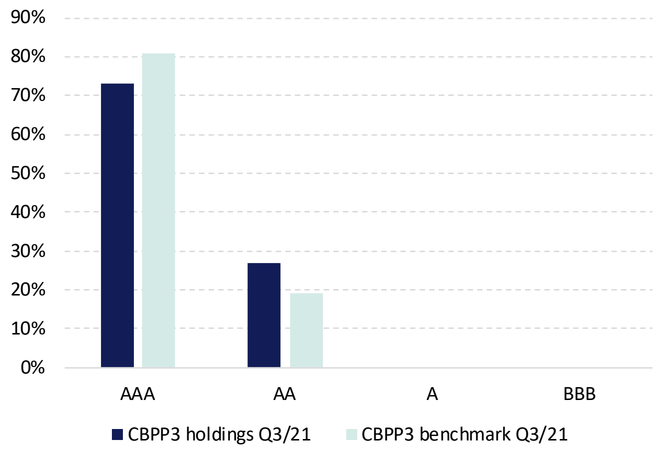
Primary and secondary market holdings



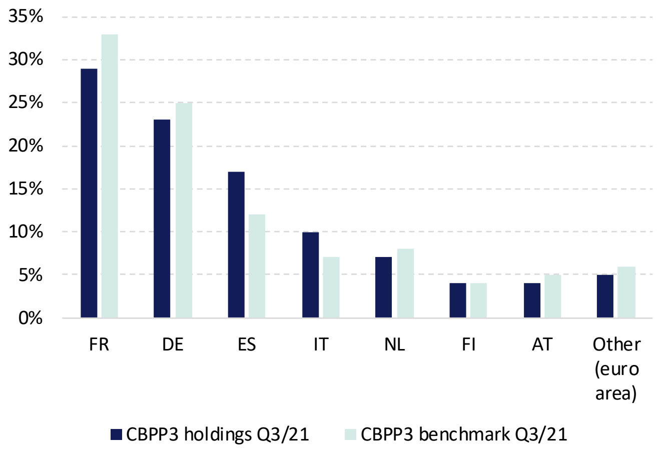
Change of primary and secondary market holdings



Distribution of CBPP3 by credit rating



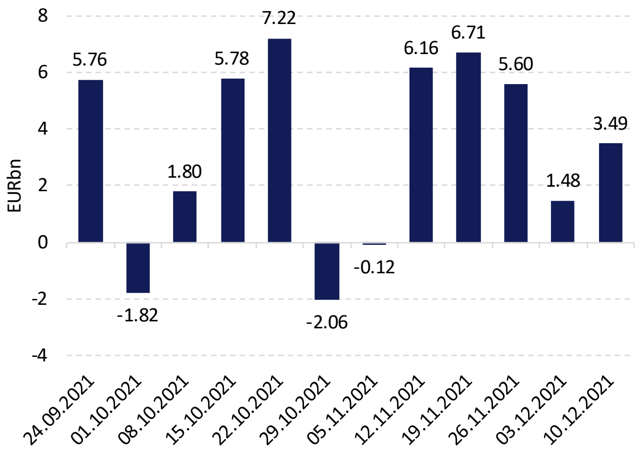
Distribution of CBPP3 by country of risk



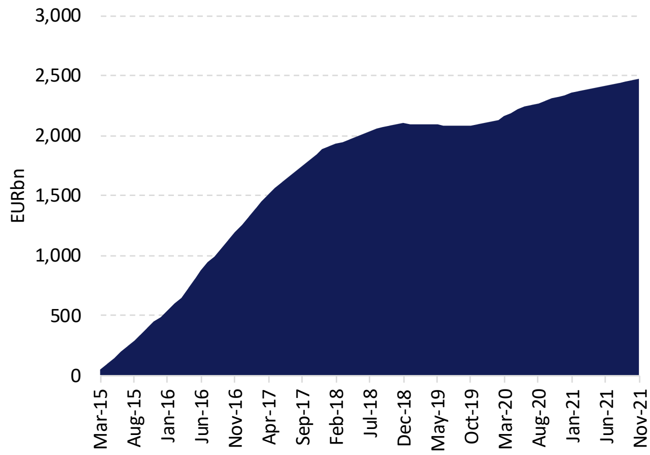
Source: ECB, Bloomberg, NORD/LB Markets Strategy & Floor Research

Public Sector Purchase Programme (PSPP)

Weekly purchases



Development of PSPP volume



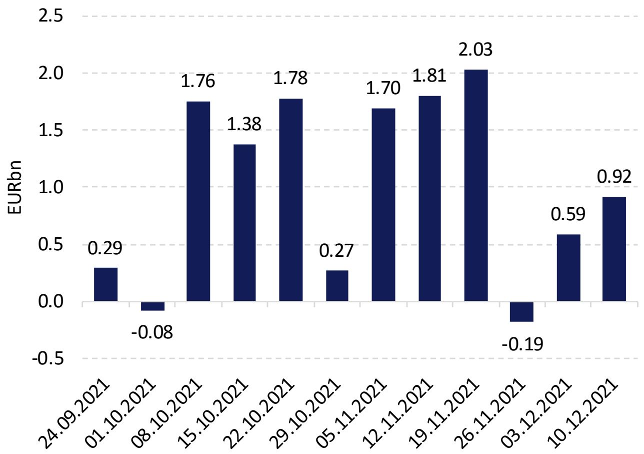
Overall distribution of PSPP buying at month-end

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%	71,973	70,715	1,258	7.5	7.6	-0.1
BE	3.4%	90,539	88,022	2,517	8.0	10.2	-2.2
CY	0.2%	4,093	5,199	-1,106	9.9	8.8	1.1
DE	24.3%	632,164	636,901	-4,737	6.6	7.6	-1.0
EE	0.3%	408	6,806	-6,398	9.2	7.5	1.7
ES	11.0%	303,516	288,102	15,414	8.0	8.4	-0.4
FI	1.7%	40,616	44,379	-3,763	6.9	7.7	-0.8
FR	18.8%	512,340	493,457	18,883	7.2	8.1	-0.9
GR	0.0%	0	0	0	0.0	0.0	0.0
IE	1.6%	40,771	40,913	-142	8.5	10.1	-1.6
IT	15.7%	429,794	410,447	19,347	7.1	7.9	-0.8
LT	0.5%	5,422	13,983	-8,561	10.2	10.6	-0.4
LU	0.3%	3,815	7,959	-4,144	5.6	7.2	-1.7
LV	0.4%	3,281	9,414	-6,133	11.3	10.4	0.9
MT	0.1%	1,311	2,534	-1,223	9.5	9.2	0.3
NL	5.4%	125,899	141,590	-15,691	7.7	9.0	-1.4
PT	2.2%	50,457	56,547	-6,090	7.0	7.2	-0.2
SI	0.4%	10,233	11,633	-1,400	9.9	10.2	-0.3
SK	1.1%	16,912	27,669	-10,757	8.2	8.3	-0.1
SNAT	10.0%	274,533	261,808	12,725	7.7	8.9	-1.2
Total / Avg.	**100.0%**	**2,618,077**	**2,618,077**	**0**	**7.3**	**8.2**	**-0.9**

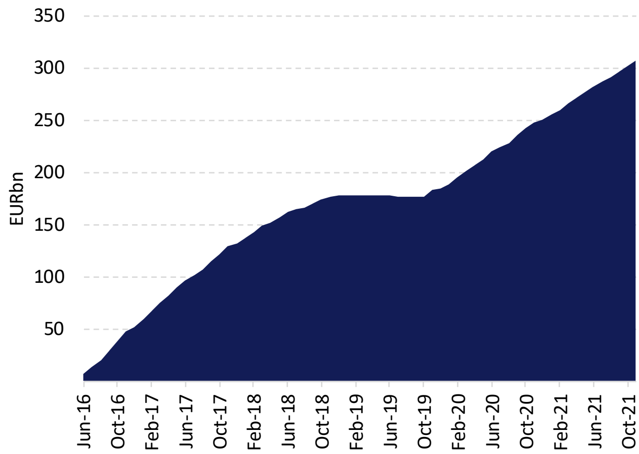
[1] Based on the ECB capital key, adjusted to include supras and the disqualification of Greece
[2] Based on the adjusted distribution key
[3] Weighted average time to maturity of the bonds eligible for purchasing under the PSPP (semi-annual data, Q1/2021)
Source: ECB, NORD/LB Markets Strategy & Floor Research

Corporate Sector Purchase Programme (CSPP)

Weekly purchases

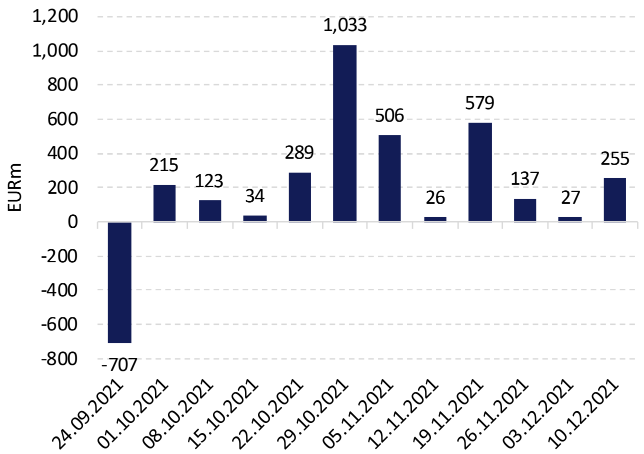


Development of CSPP volume

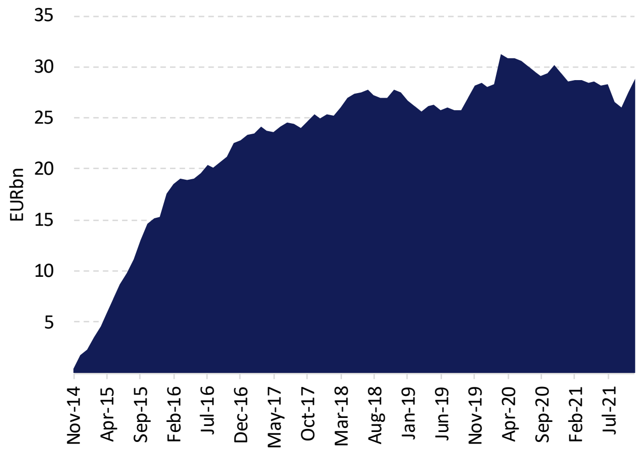


Asset-Backed Securities Purchase Programme (ABSPP)

Weekly purchases



Development of ABSPP volume



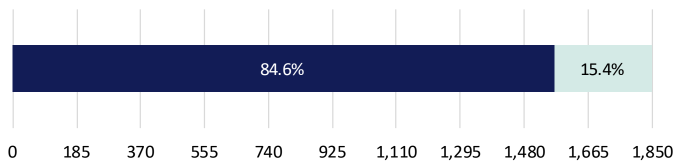
Source: ECB, Bloomberg, NORD/LB Markets Strategy & Floor Research

Pandemic Emergency Purchase Programme (PEPP)

Holdings (in EURm)

	PEPP
Oct-21	1,480,146
Nov-21	1,548,231
Δ	+68,085

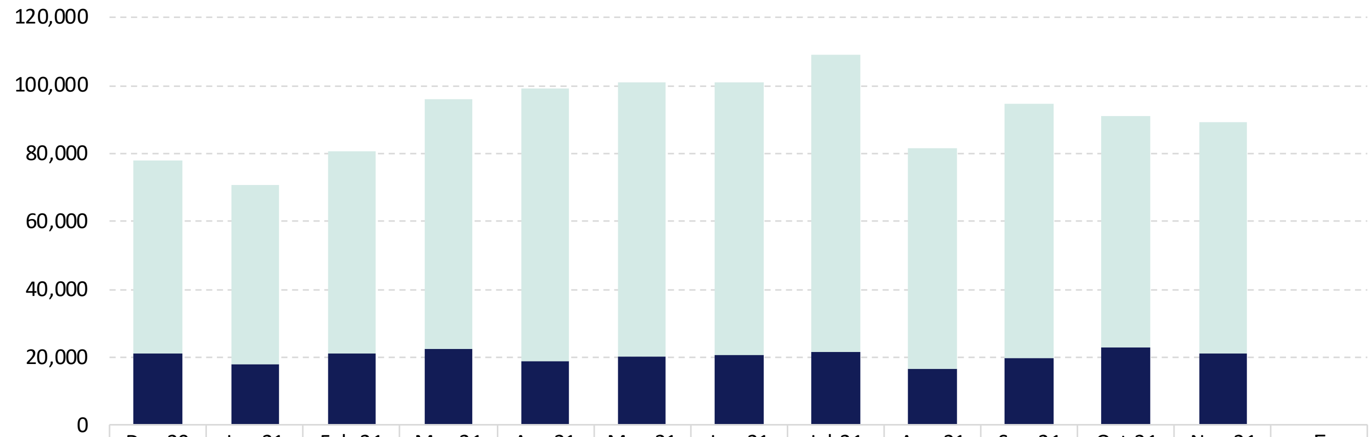
Volume already invested (in EURbn)



Estimated portfolio development

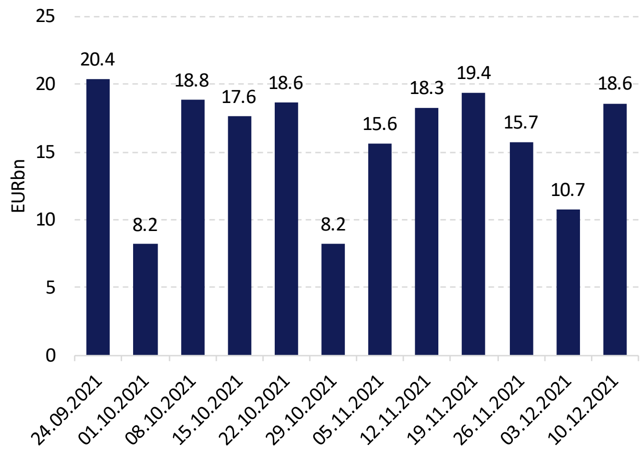
Assumed pace of purchases	Weekly net purchase volume	PEPP limit hit in ...
Average weekly net purchase volume so far	EUR 17.6bn	16 weeks (01.04.2022)

Monthly net purchases (in EURm)

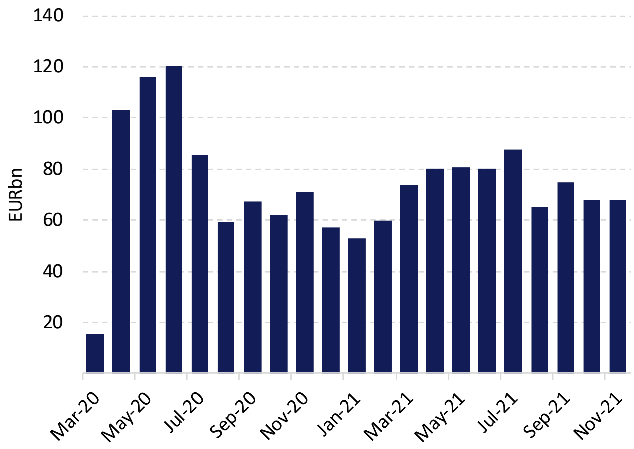


	Dec-20	Jan-21	Feb-21	Mar-21	Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Nov-21	∑
∑	78,092	70,892	80,829	96,082	99,036	100,841	100,808	109,154	81,799	94,710	90,872	89,273	1,092,38
PEPP	57,163	53,046	59,914	73,521	80,118	80,700	80,168	87,557	65,050	75,051	67,855	68,085	848,228
APP	20,929	17,846	20,915	22,561	18,918	20,141	20,640	21,597	16,749	19,659	23,017	21,188	244,160

Weekly purchases



Development of PEPP volume

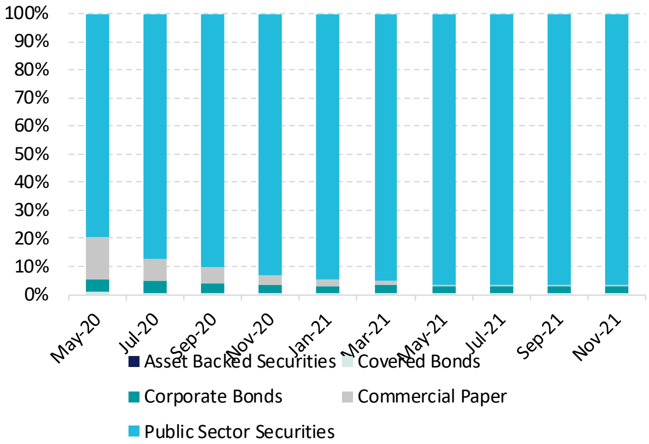


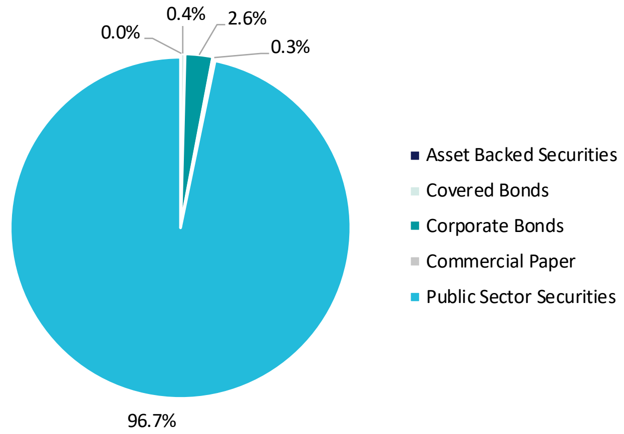
Source: ECB, Bloomberg, NORD/LB Markets Strategy & Floor Research

Holdings under the PEPP (in EURm)

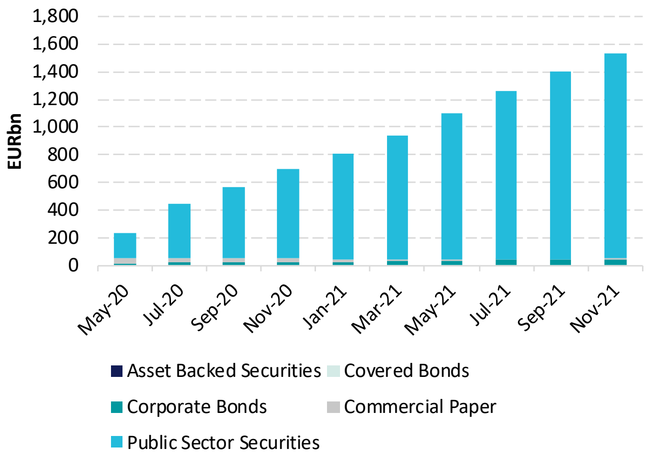
	Asset-backed Securities	Covered Bonds	Corporate Bonds	Commercial Paper	Public Sector Securities	PEPP
Sep-21	0	6,079	37,139	3,314	1,353,076	1,399,609
Nov-21	0	6,079	39,871	4,032	1,485,567	1,535,549
Δ	0	0	+2,732	+717	+132,491	+135,940

Portfolio structure

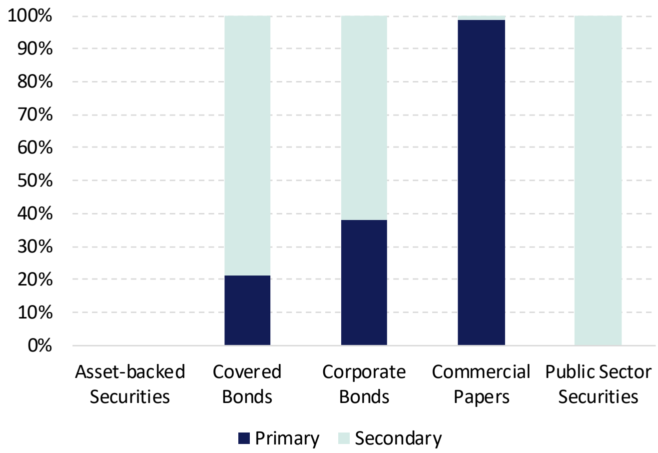




Portfolio development



Share of primary and secondary market holdings



Breakdown of private sector securities under the PEPP

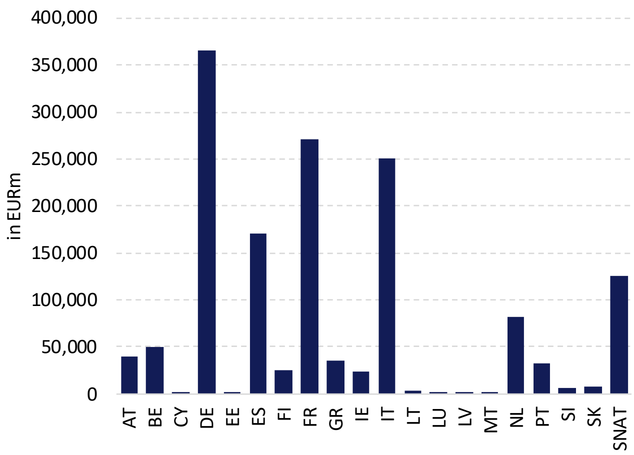
Nov-21	Asset-backed securities		Covered bonds		Corporate bonds		Commercial paper	
	Primary	Secondary	Primary	Secondary	Primary	Secondary	Primary	Secondary
Holdings in EURm	0	0	1,298	4,781	15,101	24,770	3,989	43
Share	0.0%	0.0%	21.4%	78.7%	37.9%	62.1%	98.9%	1.1%

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

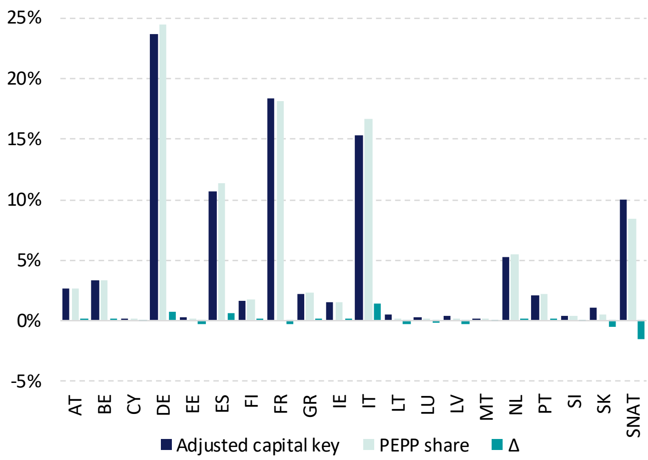
Breakdown of public sector securities under the PEPP

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	40,331	2.6%	2.7%	0.1%	8.4	7.0	1.3
BE	50,666	3.3%	3.4%	0.1%	6.7	9.1	-2.4
CY	2,418	0.2%	0.2%	0.0%	8.7	8.1	0.6
DE	366,630	23.7%	24.5%	0.7%	6.2	6.8	-0.6
EE	256	0.3%	0.0%	-0.2%	8.5	6.8	1.7
ES	170,306	10.7%	11.4%	0.6%	8.0	7.6	0.4
FI	25,499	1.7%	1.7%	0.0%	7.1	7.4	-0.3
FR	271,410	18.4%	18.1%	-0.3%	8.2	7.5	0.7
GR	34,935	2.2%	2.3%	0.1%	8.9	9.6	-0.7
IE	23,549	1.5%	1.6%	0.0%	8.8	9.1	-0.3
IT	250,889	15.3%	16.7%	1.5%	7.1	6.9	0.2
LT	2,939	0.5%	0.2%	-0.3%	11.0	10.1	0.9
LU	1,904	0.3%	0.1%	-0.2%	6.5	6.1	0.4
LV	1,625	0.4%	0.1%	-0.2%	9.5	9.2	0.3
MT	480	0.1%	0.0%	-0.1%	10.8	9.1	1.7
NL	81,494	5.3%	5.4%	0.2%	7.4	8.6	-1.2
PT	33,097	2.1%	2.2%	0.1%	6.8	7.2	-0.4
SI	6,143	0.4%	0.4%	0.0%	9.4	9.2	0.1
SK	7,262	1.0%	0.5%	-0.5%	7.5	8.5	-1.0
SNAT	126,308	10.0%	8.4%	-1.6%	10.5	8.5	2.0
Total / Avg.	**1,498,141**	**100.0%**	**100.0%**	**0.0%**	**7.6**	**7.5**	**0.1**

Distribution of public sector assets by jurisdiction



Deviations from the adjusted distribution key



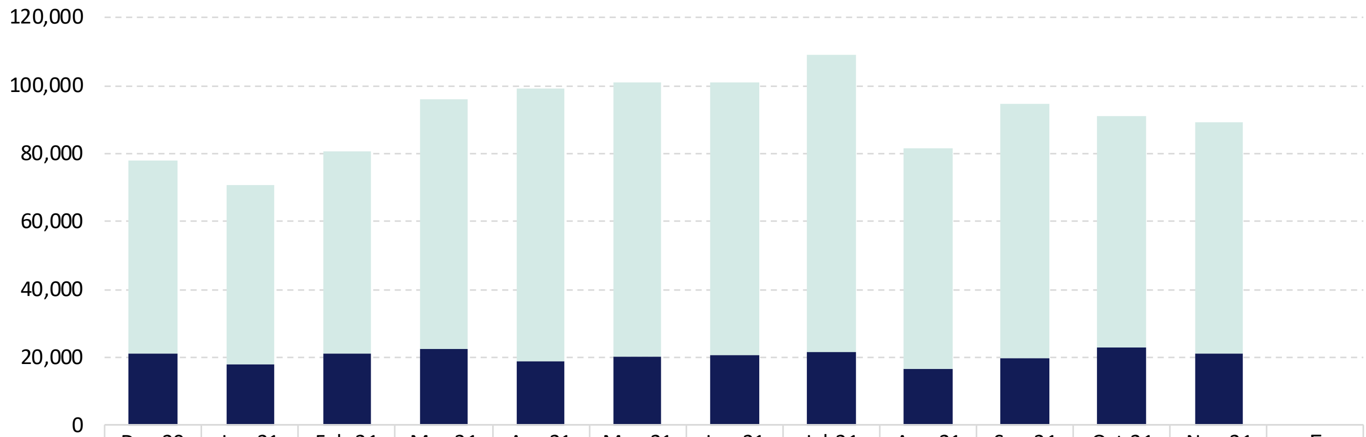
[1] Based on the ECB capital key, adjusted to include supras [2] Based on the adjusted distribution key
[3] Weighted average time to maturity of the bonds eligible for purchasing under the PEPP
Source: ECB, Bloomberg, NORD/LB Markets Strategy & Floor Research

Aggregated purchase activity under APP and PEPP

Holdings (in EURm)

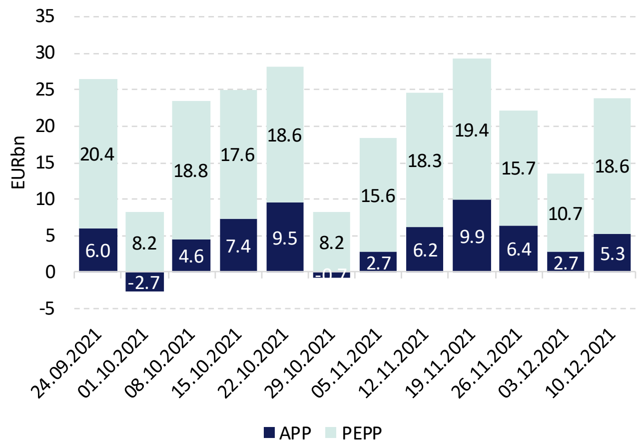
	APP	PEPP	APP & PEPP
Oct-21	3,091,301	1,480,146	4,571,447
Nov-21	3,112,488	1,548,231	4,660,719
Δ	+21,188	+68,085	+89,273

Monthly net purchases (in EURm)

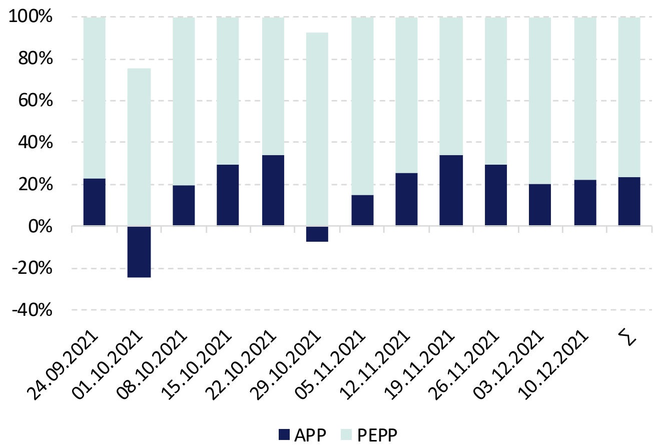


	Dec-20	Jan-21	Feb-21	Mar-21	Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Nov-21	∑
∑	78,092	70,892	80,829	96,082	99,036	100,841	100,808	109,154	81,799	94,710	90,872	89,273	1,092,38
PEPP	57,163	53,046	59,914	73,521	80,118	80,700	80,168	87,557	65,050	75,051	67,855	68,085	848,228
APP	20,929	17,846	20,915	22,561	18,918	20,141	20,640	21,597	16,749	19,659	23,017	21,188	244,160

Weekly purchases



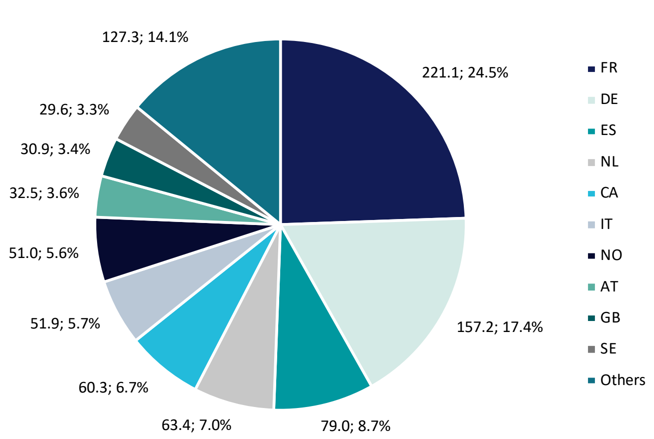
Distribution of weekly purchases



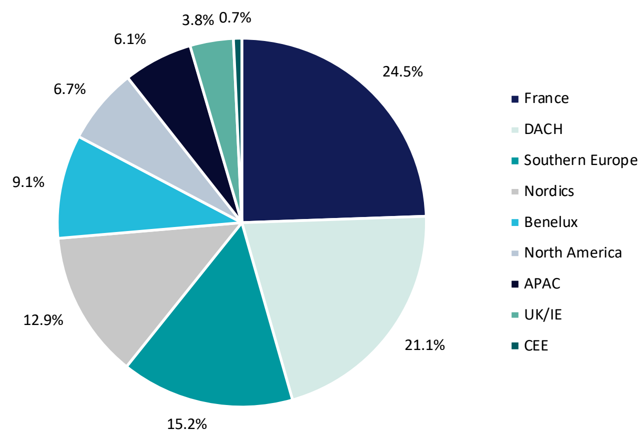
Source: ECB, Bloomberg, NORD/LB Markets Strategy & Floor Research

Charts & Figures
Covered Bonds

EUR benchmark volume by country (in EURbn)



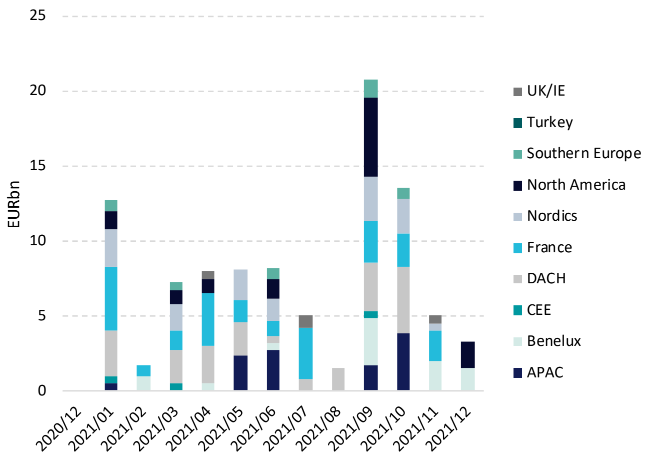
EUR benchmark volume by region (in EURbn)



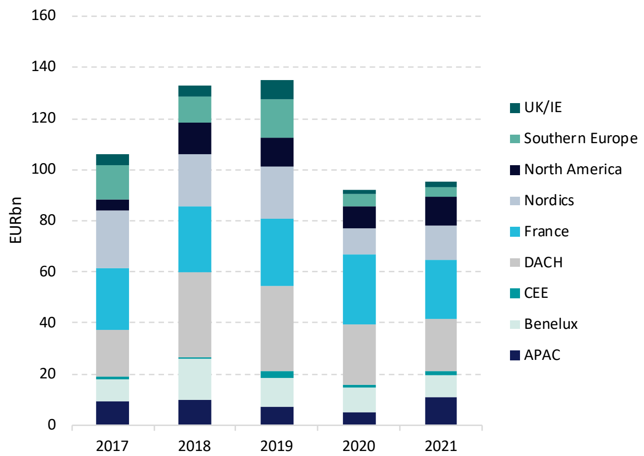
Top-10 jurisdictions

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	221.1	210	11	0.94	10.1	5.5	0.94
2	DE	157.2	232	16	0.61	8.4	4.6	0.42
3	ES	79.0	64	4	1.13	11.7	3.7	1.82
4	NL	63.4	65	0	0.92	11.6	7.6	0.79
5	CA	60.3	52	0	1.12	6.1	3.2	0.22
6	IT	51.9	61	1	0.82	9.0	4.0	1.30
7	NO	51.0	58	9	0.88	7.3	3.9	0.37
8	AT	32.5	60	2	0.54	9.9	6.2	0.60
9	GB	30.9	37	1	0.86	8.5	3.6	0.91
10	SE	29.6	36	0	0.82	7.6	3.5	0.41

EUR benchmark issue volume by month

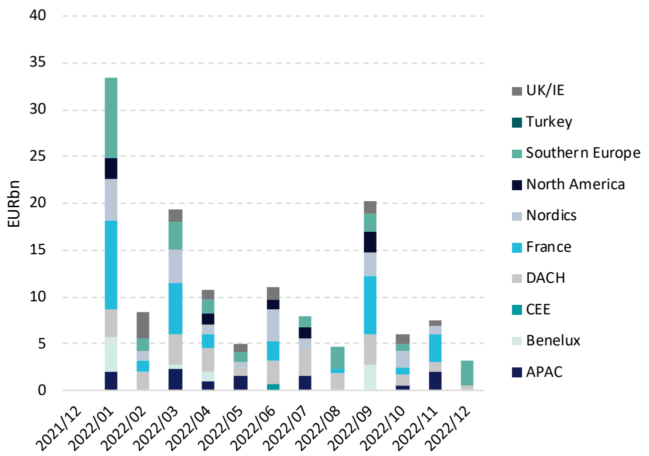


EUR benchmark issue volume by year

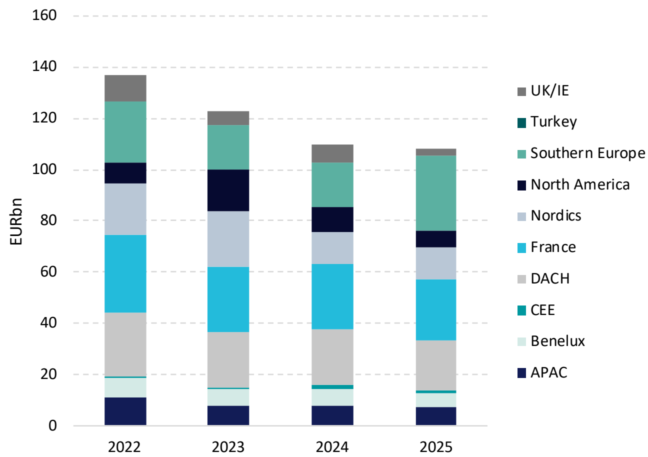


Source: Market data, Bloomberg, NORD/LB Markets Strategy & Floor Research

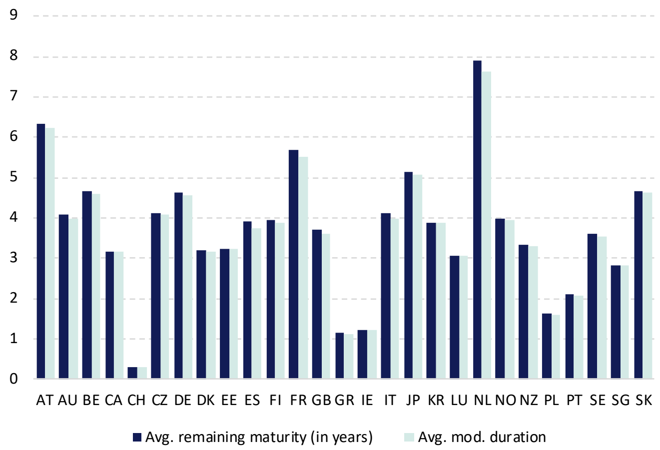
EUR benchmark maturities by month



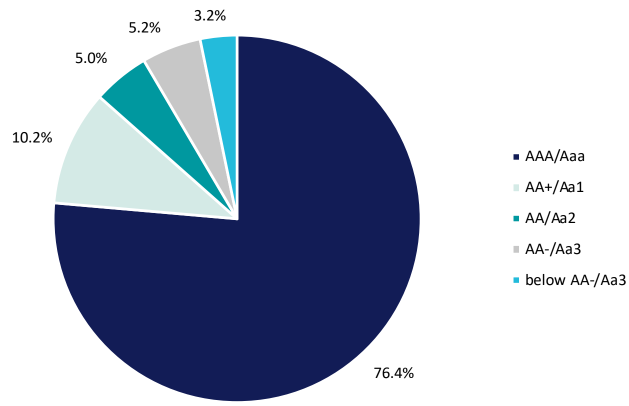
EUR benchmark maturities by year



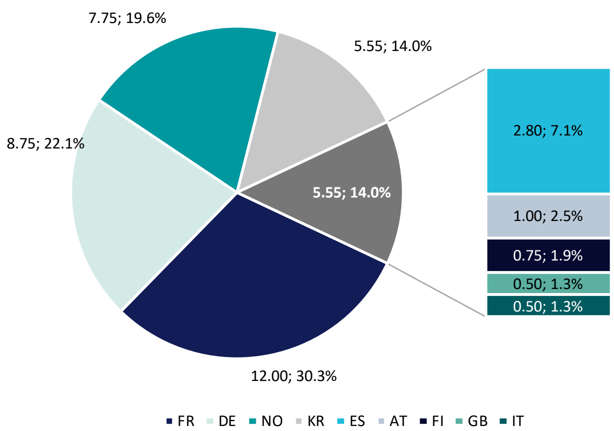
Modified duration and time to maturity by country



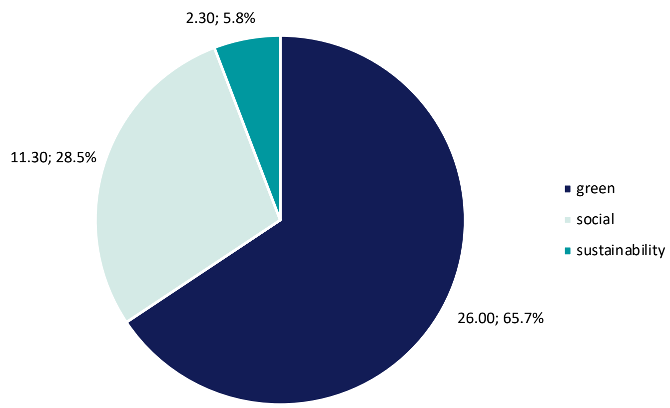
Rating distribution (volume weighted)



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

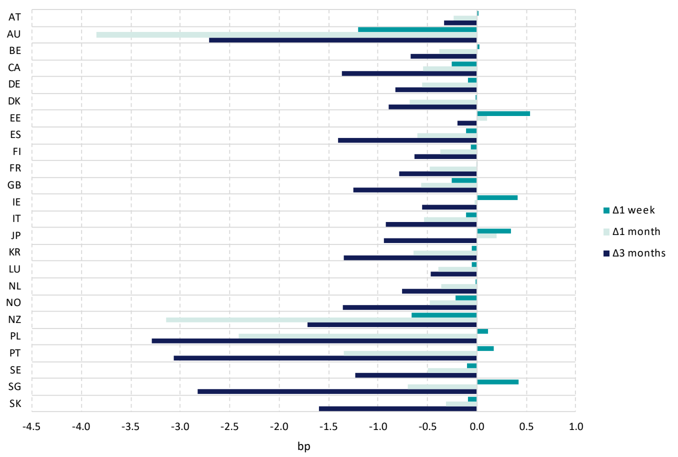


EUR benchmark volume (ESG) by type (in EURbn)

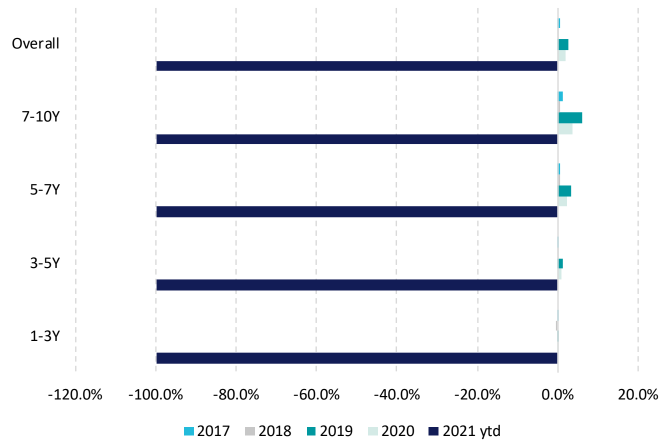


Source: Market data, Bloomberg, NORD/LB Markets Strategy & Floor Research

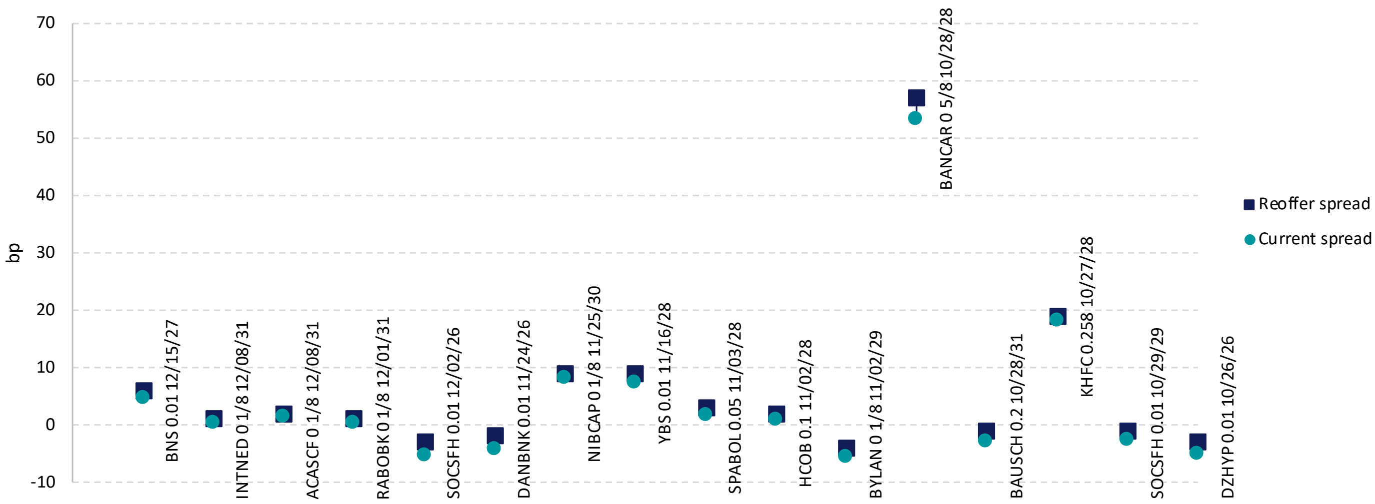
Spread development by country



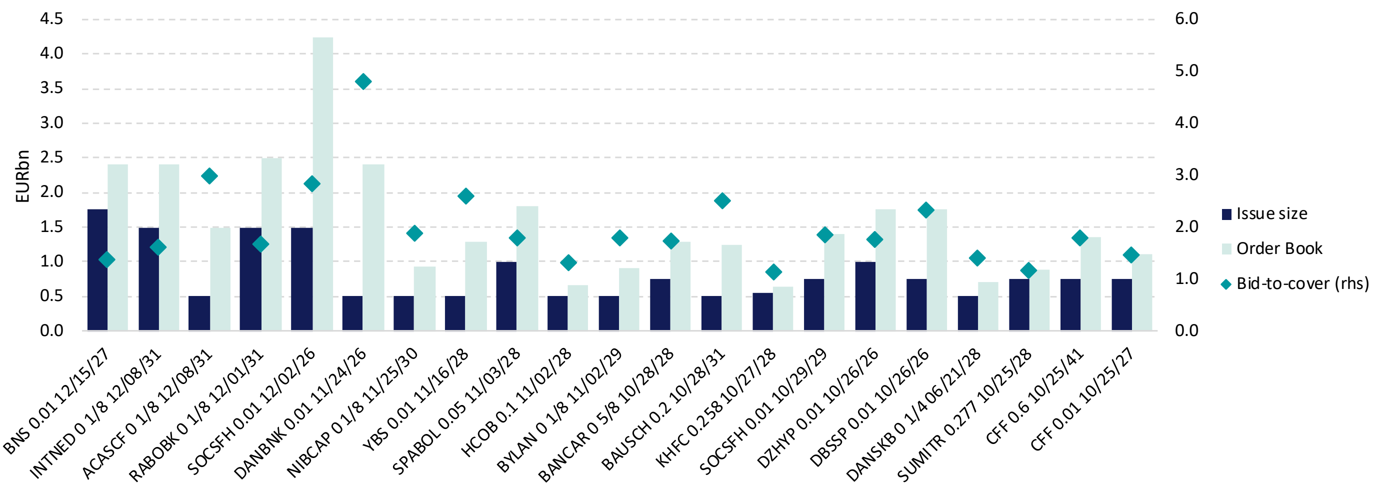
Covered bond performance (Total return)



Spread development (last 15 issues)



Order books (last 15 issues)

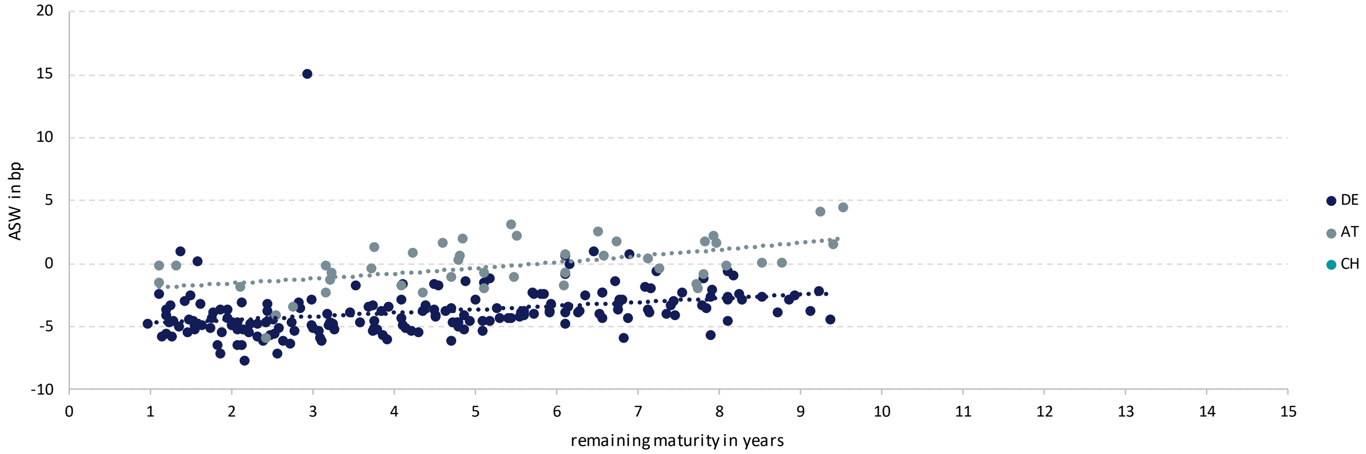


Source: Market data, Bloomberg, NORD/LB Markets Strategy & Floor Research

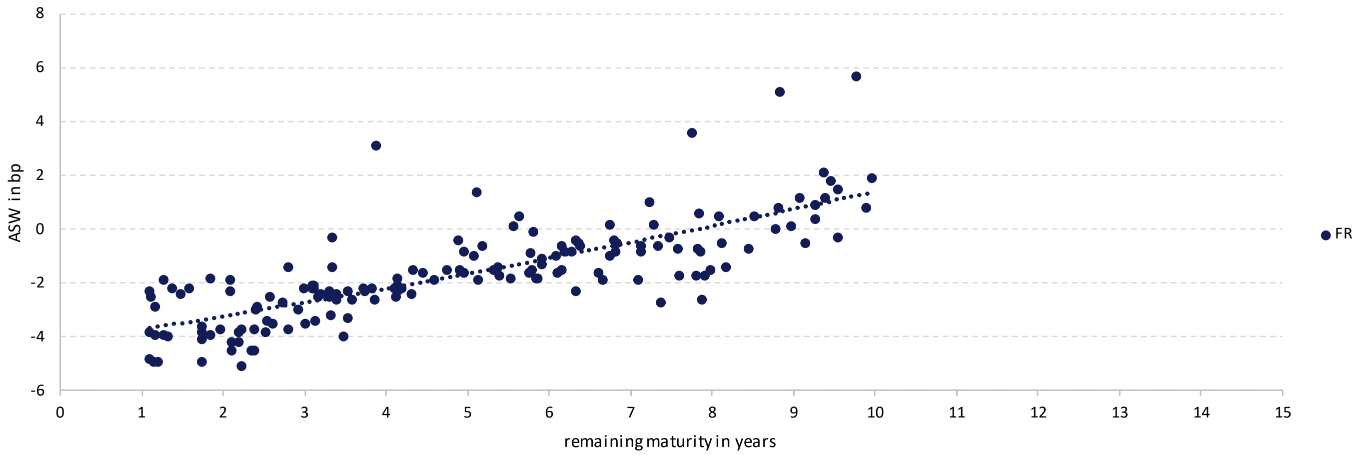
NORD/LB

Spread overview[1]

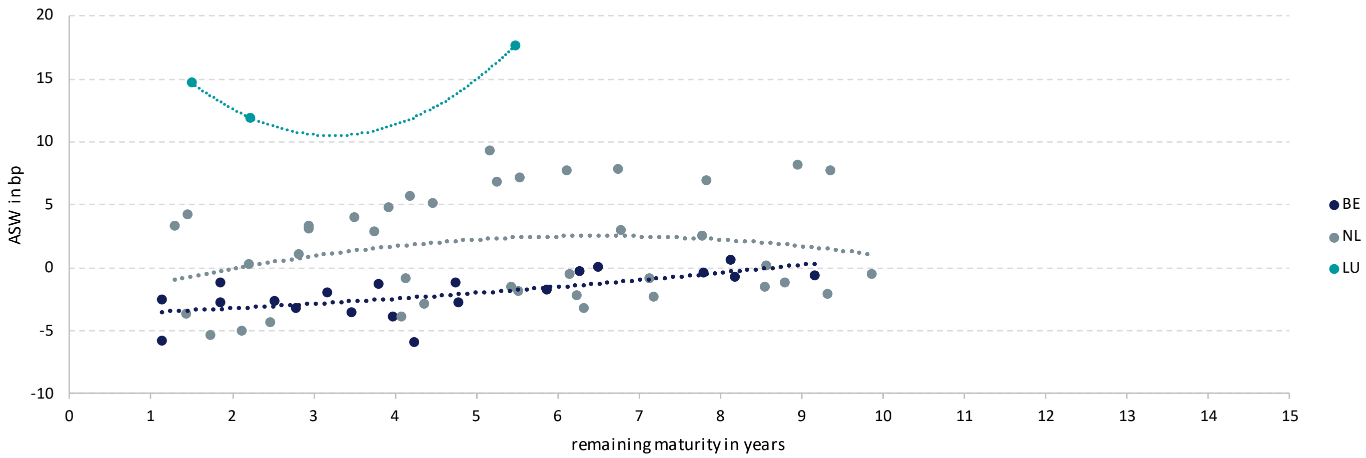
DACH



France

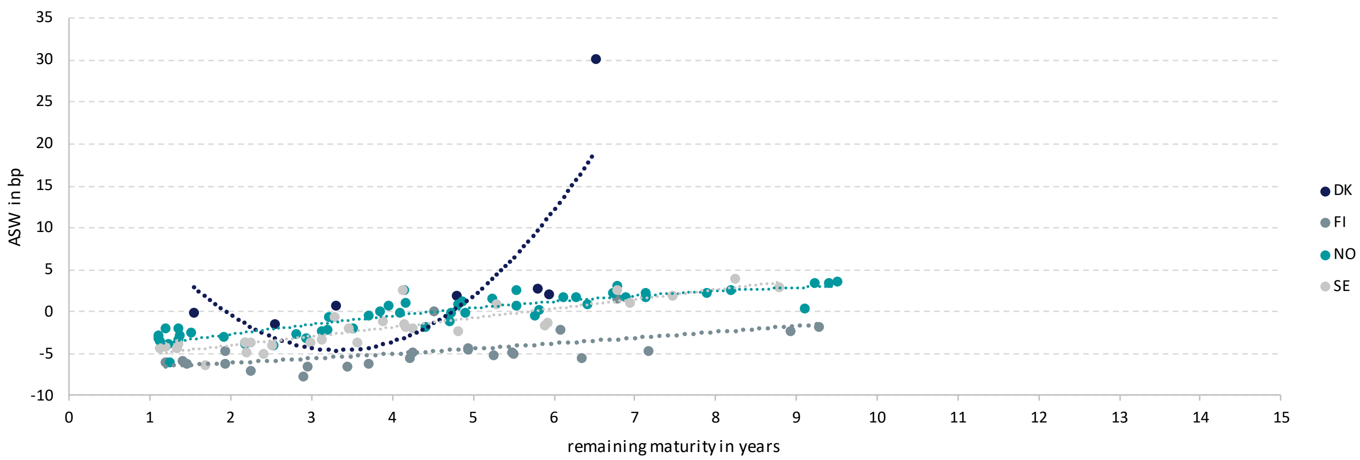


Benelux

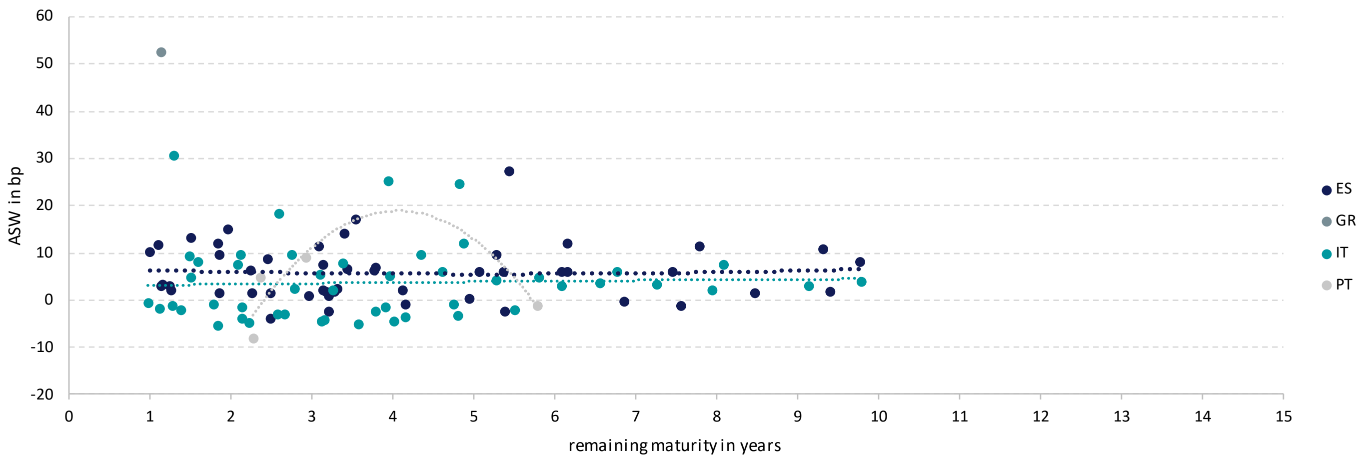


Source: Market data, Bloomberg, NORD/LB Markets Strategy & Floor Research [1]Time to maturity 1 ≤ y ≤ 15

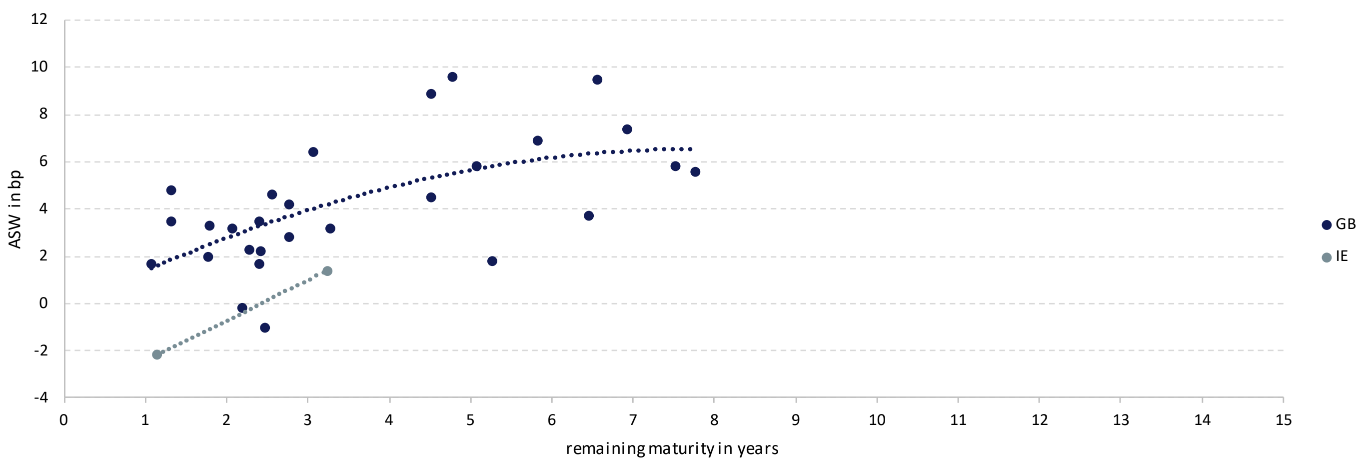
Nordics



Southern Europe

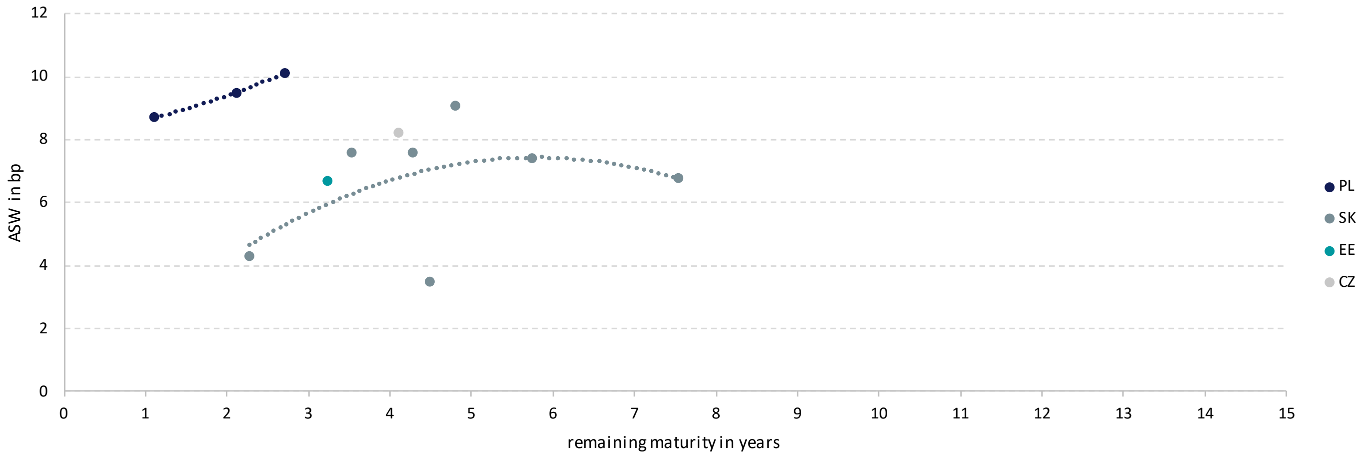


UK/IE

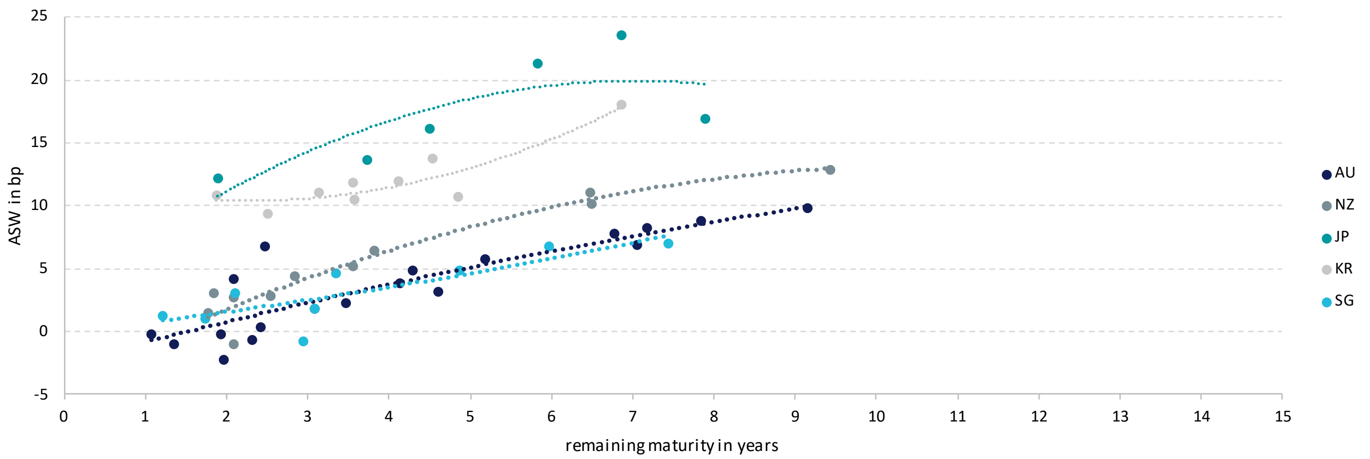


Source: Market data, Bloomberg, NORD/LB Markets Strategy & Floor Research

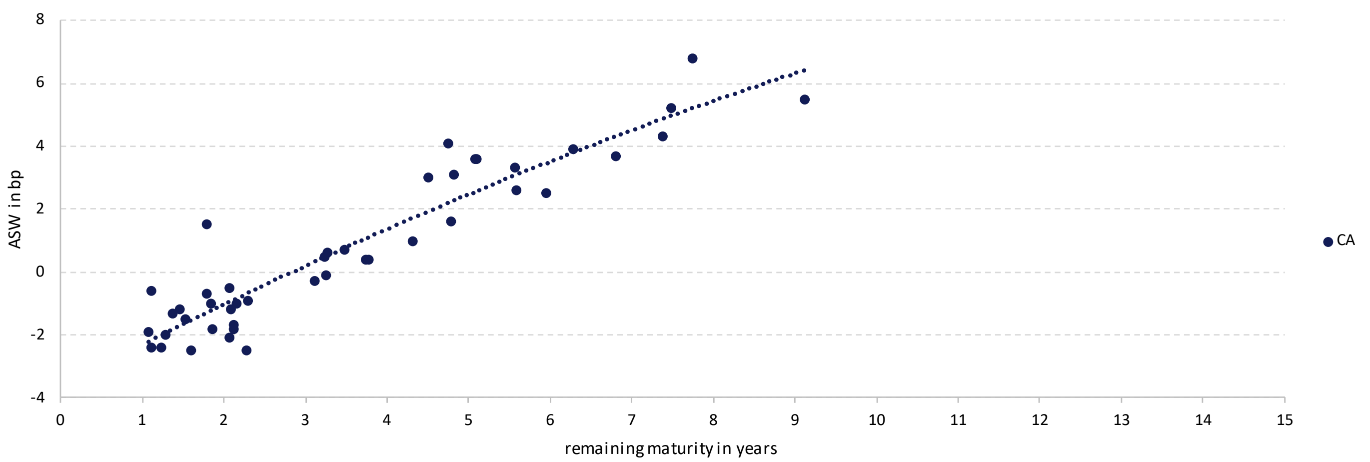
CEE



APAC



North America

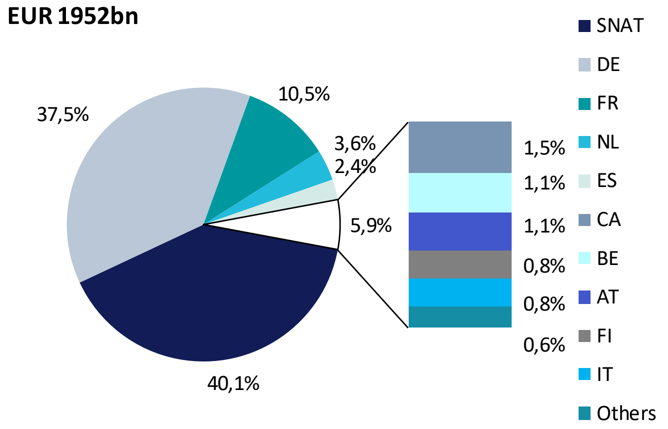


Source: Market data, Bloomberg, NORD/LB Markets Strategy & Floor Research

NORD/LB

Charts & Figures
SSA/Public Issuers

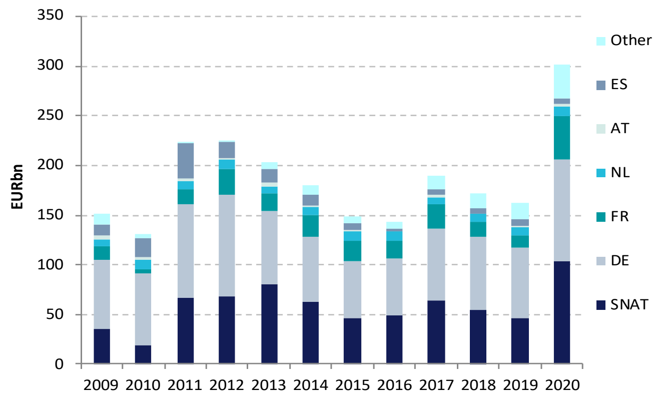
Outstanding volume (bmk)



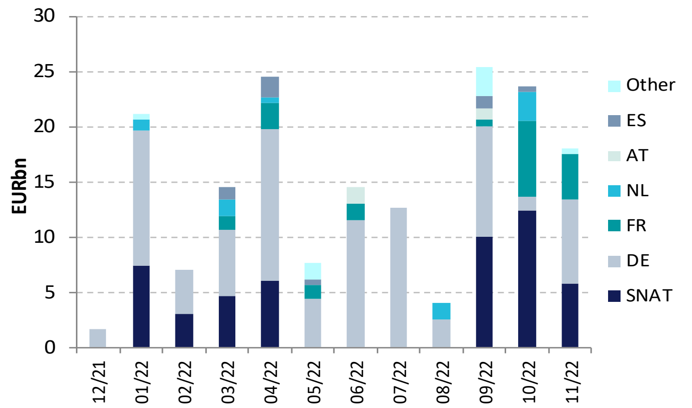
Top 10 countries (bmk)

Country	Vol. (€bn)	No. of bonds	ØVol. (€bn)	Vol. weight. ØMod. Dur.
SNAT	782,9	194	4,0	8,6
DE	732,1	573	1,3	6,8
FR	205,0	145	1,4	5,7
NL	70,9	68	1,0	6,6
ES	46,8	59	0,8	5,1
CA	28,5	20	1,4	5,3
BE	21,7	25	0,9	13,9
AT	21,2	23	0,9	5,0
FI	16,0	20	0,8	6,1
IT	15,0	19	0,8	5,7

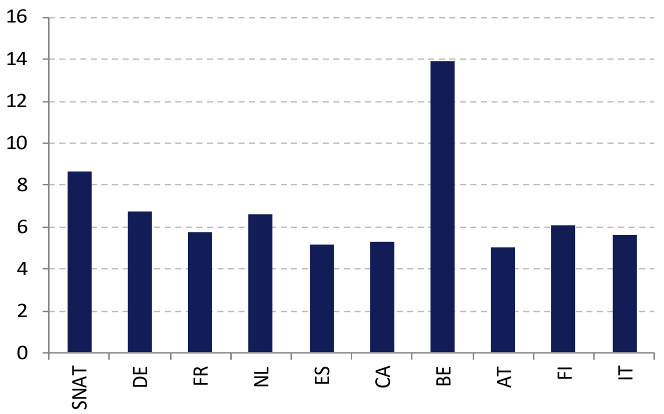
Issue volume by year (bmk)



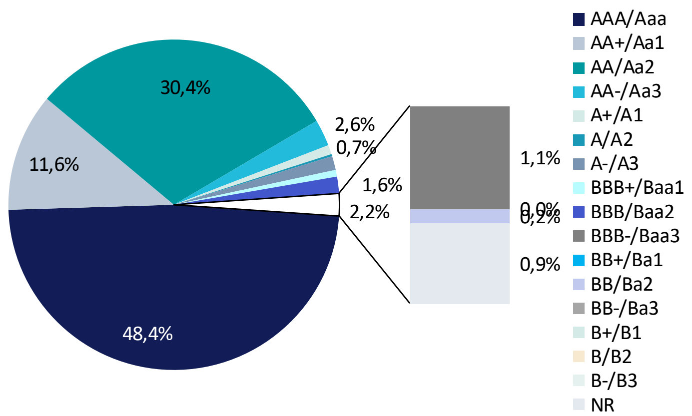
Maturities next 12 months (bmk)



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

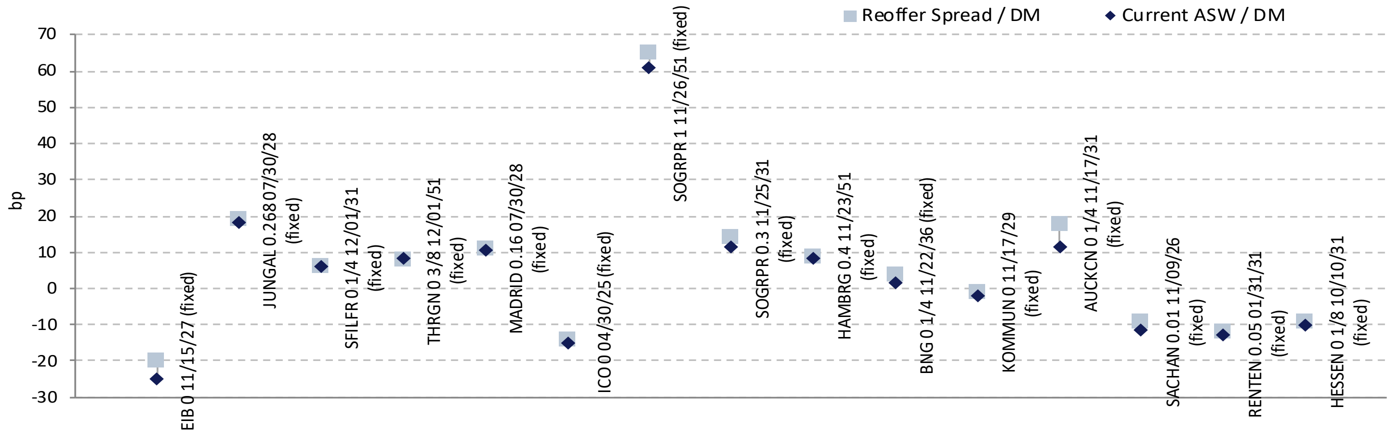


Rating distribution (vol. weighted)

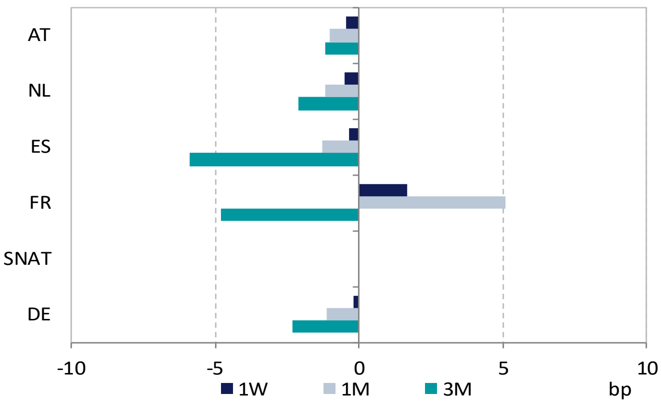


Source: Bloomberg, NORD/LB Markets Strategy & Floor Research

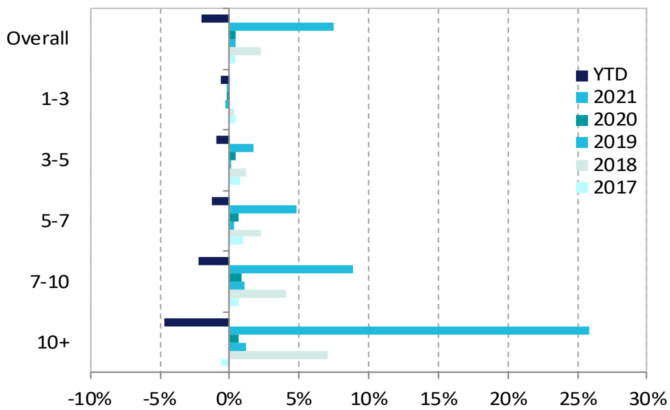
Spread development (last 15 issues)



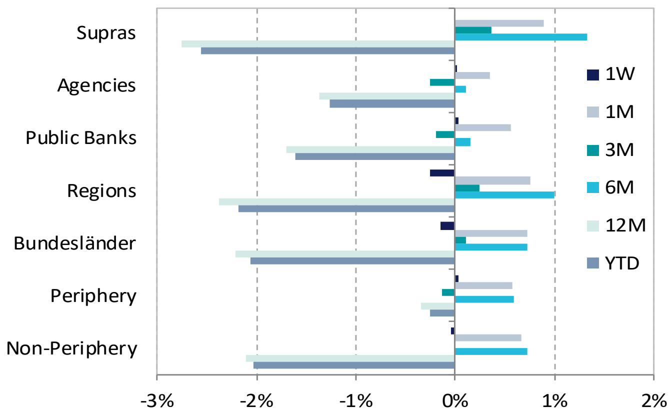
Spread development by country



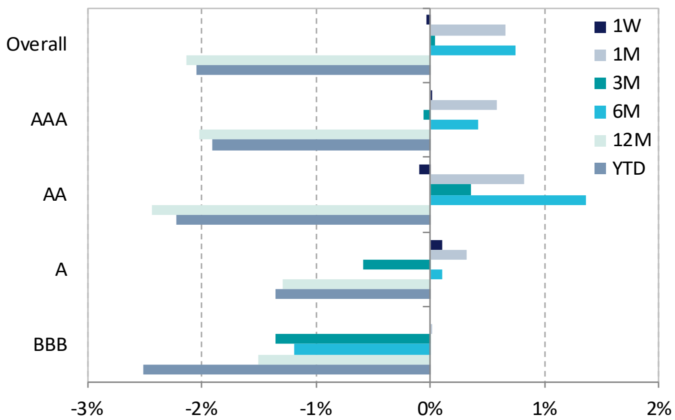
Performance (total return)



Performance (total return) by regions

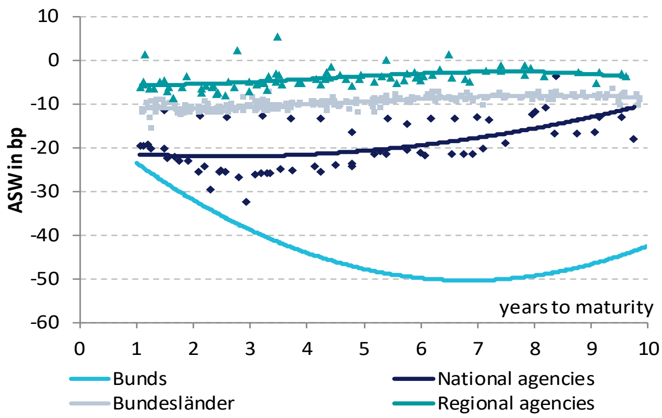


Performance (total return) by rating

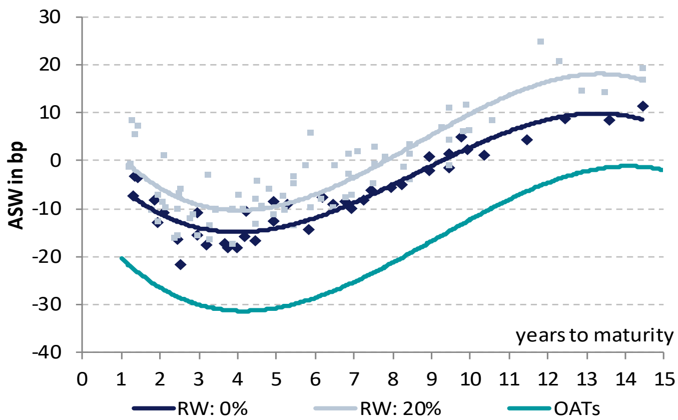


Source: Bloomberg, NORD/LB Markets Strategy & Floor Research

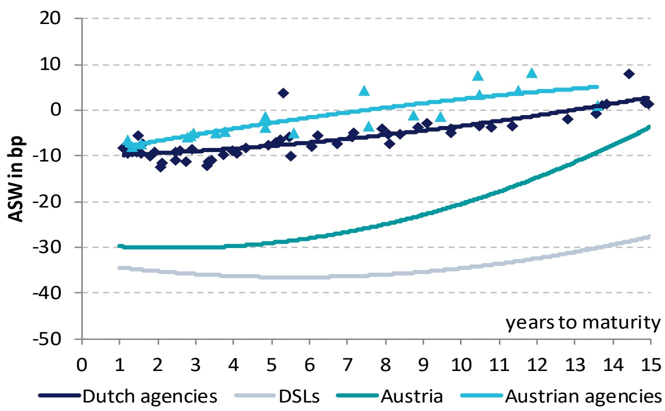
Germany (by segments)



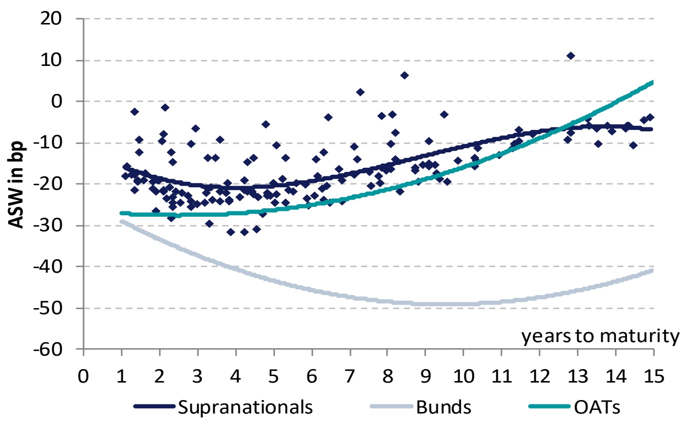
France (by risk weight)



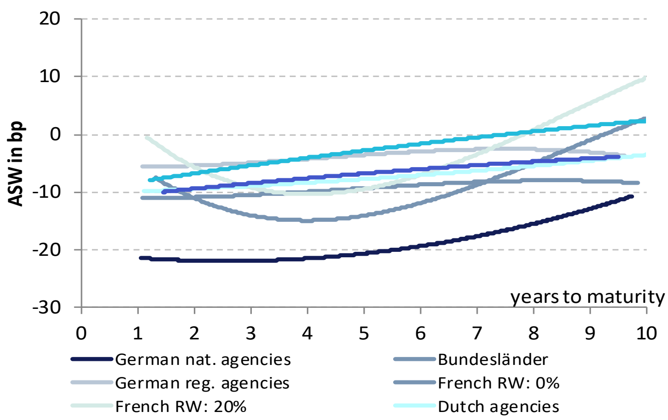
Netherlands & Austria



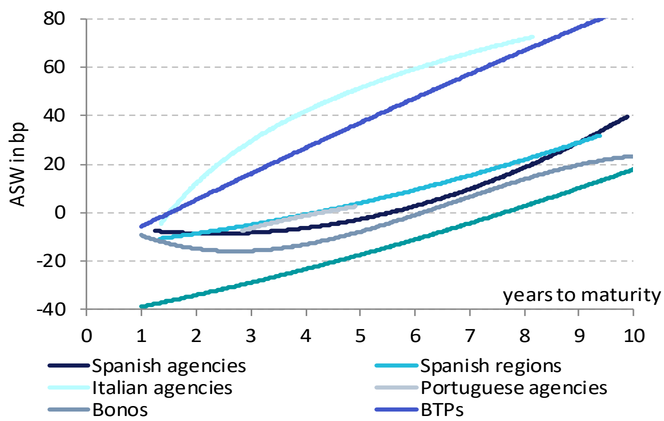
Supranationals



Core



Periphery



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

Appendix
Overview of latest Covered Bond & SSA View editions

Publication	Topics
39/2021 ♦ 08 December	▪ The ECB, monetary policy and covered bond market: Hypothetical "What if...?" considerations ▪ The Moody's rating approach
38/2021 ♦ 01 December	▪ United Kingdom: Spotlight on the EUR benchmark segment ▪ Beyond Bundeslaender: Region Pays de la Loire (PDLL)
37/2021 ♦ 24 November	▪ Benchmark deals outside the euro: momentum has returned! ▪ Transparency regulations under Section 28 of the Pfandbriefgesetz (PfandBG - German Pfandbrief Act) Q3 2021 ▪ Beyond Bundeslaender: Auvergne-Rhône-Alpes Region (ARA)
36/2021 ♦ 17 November	▪ Primary market forecast 2022: time for a comeback? ▪ Development of the German property market ▪ Beyond Bundeslaender: Spotlight on Belgian regions
35/2021 ♦ 10 November	▪ PEPP approaching notional end – will the APP be pepped up? ▪ Spain's major move – will the amended covered bond legislation breathe new life into the market?
34/2021 ♦ 03 November	▪ Repayment structures on the covered bond market: EU harmonisation is already leaving its mark ▪ Beyond Bundeslaender: Spanish regions in the spotlight
33/2021 ♦ 27 October	▪ Insurance firms as covered bond investors: A look at Solvency II and EIOPA statistics ▪ The Scope rating approach
32/2021 ♦ 20 October	▪ ECB preview: interim step before a landmark December? ▪ ECBC publishes annual statistics for 2020 ▪ Covered bonds in the context of the ECB collateral framework
31/2021 ♦ 22 September	▪ Covered bond primary market: a September to remember ▪ Announcement: Issuer Guide German Laender 2021
30/2021 ♦ 15 September	▪ Transparency requirements § 28 PfandBG Q2 2021 ▪ Fitch: rating approach covered bonds ▪ Update: Joint Laender (Ticker: LANDER)
29/2021 ♦ 08 September	▪ New dynamic on the Canadian covered bond market: Two debut EUR issuers ▪ Development of the German property market ▪ NGEU in the starting blocks: 3, 2, 1 … EU auctions!
28/2021 ♦ 01 September	▪ ECB preview: focus on the pace of PEPP purchases? ▪ France – largest jurisdiction in EUR benchmark bond segment: a covered bond overview of the "Grande Nation"
27/2021 ♦ 28 July	▪ NORD/LB Issuer Guide Covered Bonds 2021: A constant during turbulent times ▪ Beyond Bundeslaender: Madeira and the Azores
26/2021 ♦ 21 July	▪ Summer break just around the corner – a glance at covered bonds in USD and GBP
25/2021 ♦ 14 July	▪ New ECB strategy – communication remains the be-all and end-all ▪ ECB preview: the first meeting under the "new" regime

NORD/LB:	**NORD/LB:**	**NORD/LB:**	**Bloomberg:**
Markets Strategy & Floor Research	Covered Bond Research	SSA/Public Issuer Research	RESP NRDR <GO>

Appendix
Publication overview

Covered Bonds:

Issuer Guide Covered Bonds 2021

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 2021

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 MM/FX	+49 511 9818-9460
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Financials	+49 511 9818-9490
Governments	+49 511 9818-9660
Laender/Regionen	+49 511 9818-9550
Frequent Issuers	+49 511 9818-9640

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Asset Finance	+49 511 361-8150

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

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Additional information
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None

Sources and price details
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Breakdown of recommendations (12 months)

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Issuer / security	Date	Recommendation	Bond type	Cause

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