NORD/LB
Creating true value.

Merry Xmas and Happy New Year!
Many thanks to our loyal readers
Our next weekly publication
will be released on **11 January 2023**

Covered Bond & SSA View

NORD/LB Markets Strategy & Floor Research

14 December 2022 ♦ 39/2022
Marketing communication (see disclaimer on the last pages)

Agenda

Market overview

- **Covered Bonds** 3
- **SSA/Public Issuers** 6

Our view of the covered bond market heading into 2023 9

SSA outlook 2023: ECB, NGEU and the debt brake in Germany 17

ECB tracker

- **Asset Purchase Programme (APP)** 25
- **Pandemic Emergency Purchase Programme (PEPP)** 30
- **Aggregated purchase activity under APP and PEPP** 33

Charts & Figures

- **Covered Bonds** 34
- **SSA/Public Issuers** 40

Overview of latest Covered Bond & SSA View editions 43

Publication overview 44

Contacts at NORD/LB 45

Floor analysts:

Covered Bonds/Banks
Dr Frederik Kunze
frederik.kunze@nordlb.de
Melanie Kiene, CIIA
melanie.kiene@nordlb.de
Stefan Rahaus
stefan.rahaus@nordlb.de

SSA/Public Issuers
Dr Norman Rudschuck, CIIA
norman.rudschuck@nordlb.de
Jan-Phillipp Hensing
jan-phillipp.hensing@nordlb.de

NORD/LB: Markets Strategy & Floor Research

NORD/LB: Covered Bond Research

NORD/LB: SSA/Public Issuer Research

Bloomberg: RESP NRDR <GO>

Market overview
Covered Bonds

Author: Stefan Rahaus

Primary market: pre-Christmas lull

Issuers now seem to have concluded their funding activities for 2022, with no new covered bond primary market appearances appearing on our radar since the last edition of our weekly publication. Therefore, it would appear that the EUR 200bn barrier in EUR benchmark issuances will not be broken this year, with the total volume of new issuances in 2022 now coming to EUR 198.625bn overall. In this present edition of our weekly publication, we shall use the pre-Christmas lull on the primary market as an opportunity, together with you, to look ahead to 2023 with a preview of the covered bond market in the coming year. To this end, we have summarised the outlooks issued by the three major rating agencies (S&P, Fitch and Moody's) in separate paragraphs on the following pages and go into greater detail regarding our assessments and expectations for the covered bond market next year in the article entitled "Our view of the covered bond market heading into 2023". At this point, we would like extend our sincere thanks to all our readers for the interest you have shown in our publications. We hope that these will continue to provide helpful added value to support you in your day-to-day work next year as well. We are open to any suggestions or feedback, and would also be happy to assist with any queries you may have. As this year draws to a close, we would also like to take this opportunity to wish you and your families a relaxing and peaceful Christmas as well as a healthy and successful new year in 2023.

Issuer	Country	Timing	ISIN	Maturity	Size	Spread	Rating	ESG

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

Secondary market: things are quieter here as well

With the apparent closure of the primary market, the secondary market has also become calmer. Trading activities are focused on the shorter end of up to five years, with customer enquiries and turnover largely restricted to covered bonds with residual terms to maturity of between six months and two years. Liquidity has decreased significantly in the case of longer maturities. Here, we are also seeing occasional selling interest on the part of investors, which is likely to create room for issuers who will seek to test the waters at the long end in the new year. The secondary market spreads of the indicative prices shown against swap are almost unchanged compared with the previous week. However, just how resilient this level is will not become clear until the flood of new issues that we expect to see in the first few weeks of January eventually arrives. The ECB may opt to significantly scale back its interventions on the secondary market in 2023 due to potential quantitative tightening measures. Since fewer covered bonds are "parked" at the ECB, also due to early repayments of TLTRO III funds (see following paragraph), we are hoping for a significant improvement in liquidity over the course of the coming year, even if many of the covered bonds deposited with the ECB are retained bonds. However, we believe it will be a lengthy process as we expect the ECB Governing Council to announce a very cautious exit from its monetary support measures following its meeting on Thursday.

ECB monetary policy: TLTRO III repayments amount to EUR 447.5bn in December

In the previous trading week, the Eurosystem announced the volume of repayments linked to TLTRO III funding that commercial banks in the single currency area plan to undertake. This is the second voluntary repayment date since the conditions for refinancing operations were adjusted. Although the first additional voluntary repayment date was in November, the repayment date in December had been fixed in diaries for much longer. Moreover, the series of interest rate hikes that commenced earlier this year made this date more important, also for the covered bond market. At EUR 447.5bn, the repayment volume was well in excess of the value recorded for November (EUR 296.3bn). As expected, the ECB's balance sheet therefore continues to shrink. These voluntary repayments come as no surprise to us. As such, we have identified a positive (albeit modest) impact in connection with this development as part of our supply forecast (cf. Covered Bonds focus article in this edition of our weekly publication). In particular, our forecast with regard to spread developments also foresees an announcement by the ECB about quantitative tightening (QT), as we also highlighted in our preview of the ECB meeting on 15 December (cf. NORD/LB Covered Bond & SSA View on 07 December).

S&P Covered Bond Outlook 2023: rating outlook - stable

In its Covered Bond Outlook 2023 published on 6 December 2022, the analysts from S&P continue to evaluate the covered bond rating environment as stable. Sufficient overcollateralisation should help to counteract any potential losses arising on account of the rising cost of living and interest rate hikes. Unused notches reduce the risk of downgrades of covered bonds in the event of limited rating downgrades by the issuing banks. In fundamental terms, the familiar risks will rear their heads in the first half of 2023 (flattening economic growth, rising interest rates, persistent inflation), but a robust labour market and public investments should lead to a moderate recovery from mid-2023 onwards. In the housing construction segment, massive increases in mortgage interest rates and lower disposable income are weighing on real estate prices, while private savings and low unemployment are supporting the asset quality of housing construction loans in the cover pools. In the area of commercial real estate, S&P experts see the office and retail sub-sectors as more at risk, but assume that a deterioration in asset quality will not adversely impact the credit quality of the rated debt securities to a significant extent. In the case of new issues, the rating specialists at S&P expect a volume slightly below the level seen in 2022 on account of maturities being down by just over 10 percent in comparison with the current year. Lower customer deposits in relation to credit volume and declining central bank financing will support fresh supply. In terms of Credit Enhancement (CE) at S&P, the average uplift is more than nine times the level needed to maintain current ratings and should cushion the expected deterioration in collateral quality. The ratings of around 74% of covered bond programmes rated by S&P would be unaffected by a one-notch downgrade applied to both the sovereign and issuer rating.

Fitch Covered Bond Outlook 2023: sector outlook - neutral

The rating experts at Fitch assess the sector outlook for covered bonds as neutral. In their Global Covered Bonds Outlook 2023 report, the Fitch analysts are sticking with their previous assessment for the development of the assets despite the deterioration in the outlook. Their reasoning, in particular, is based on the dual recourse of covered bonds, liquidity protection mechanisms, extensive overcollateralisation (OC) and legal requirements for the suitability of assets. More prudent lending and lower mortgage LTVs should also limit asset deterioration. In addition, due to regulatory requirements, credit institutions have built up strong capital and liquidity buffers in recent years, which will help to cushion the impacts of a recession in 2023. Most covered bonds are rated far higher than their respective issuer default rating (IDR) on account of aspects including regulatory monitoring, preferential status in a liquidation scenario and the capacity for continuing payments even after issuer default. In total, 87% of rated programmes have one or more notches buffer against an IDR downgrade, with 96% of issuers either having IDRs with a stable or positive outlook, or which have been designated “rating watch positive”. In the event of changes to sovereign ratings, Fitch also assumes that the impact on the valuation of covered bonds will be limited. The rating specialists at Fitch see the high level of overcollateralisation (OC) as a buffer against falling house prices and increasing arrears due to the higher cost of living. Fitch expects that house prices will fall in 2023 across practically all jurisdictions.

Moody’s Covered Bond Outlook 2023: issuance volume to remain high

Analysts from the rating agency Moody’s expect the issuance volume on the covered bond market to remain high in 2023. Pending maturities, central bank funding repayments and wide spreads to senior bank debt will support the fresh supply, although a decline in mortgage funding and high deposit levels will to some extent act as restricting factors in this context. Like us, the experts at Moody’s assume that maturing or early repayments of TLTRO loans will be replaced, at least in part, by new publicly issued covered bonds. Moody’s estimates that banks have used up to EUR 200bn in TLTRO drawings to refinance covered bonds maturing in 2020 and 2021, particularly from southern European issuers. The amount of TLTRO loans that will be repaid from proceeds of newly issued covered bonds or have already been pre-funded in 2022 is difficult to estimate, although Moody’s does take the view that TLTRO repayments will certainly serve to increase the issuance volume in 2023. In line with both S&P and Fitch, the rating specialists at Moody’s also believe that falling house prices and rising loan default rates will compromise asset quality due to increased financial burdens on borrowers. However, the risks are limited by high levels of OC and low LTV ratios. In addition, the stability of issuers and sovereigns will again underline the continued high credit quality of covered bonds in 2023, with Moody’s offering stable/positive rating outlooks for 90% of the covered bond issuers that it evaluates.

Market overview
SSA/Public Issuers

Authors: Jan-Phillipp Hensing // Dr Norman Rudschuck, CIIA

Outlook 2023

In today's year-end edition of our weekly publication, we present our SSA Outlook for 2023. This includes, among other aspects, the ECB's future policy approach and the potential issuance volumes from the German Laender, key E-supras and large (inter)national agencies. In 2023, the topic of quantitative tightening, i.e. the imminent end of full reinvestments within the framework of the APP purchase programme, will play a major role in particular. We should hopefully learn more tomorrow at the ECB press conference.

PEPP: first line of defence remains inactive

A week ago, the latest figures on PEPP reinvestments were published. PEPP reinvestments are made flexibly to "counter pandemic-related risks to the monetary policy transmission mechanism". While in June/July there was still an increase in net purchases in peripheral countries, this has not been the case since then. On the contrary, holdings in the respective states (exception: Greece) have even decreased in the past two months. Meanwhile, more was invested in German and Dutch securities than matured. In case you are wondering at this point why we are taking such a close look at the respective holding changes: Since July, the ECB has had a new tool at its disposal, the TPI. This can be activated to address unjustified, disorderly market developments. If activated, the Eurosystem could, for example, buy securities from individual countries in order to combat a deterioration in financing conditions - which cannot be justified from a fundamental perspective. The yield gap between Italian government bonds and German bonds is therefore always of particular interest. While the spread (10y) was in a corridor of 185 to 240 basis points in June and July, it has been between 180 and 250 basis points in the past two months, and has even been falling since October. We are firmly convinced that the TPI will never be activated, as the PEPP reinvestments will provide enough supporting influence. This is also supported by the most recent data, as no significant holding changes were made vis-à-vis the periphery.

Public Sector net purchases under the PEPP in selected jurisdictions (EURm)

Country	Net purchases Aug 22 – Sep 22	Net purchases Oct 22 – Nov 22	Cumulative net purchases at end-November 22
Germany	-3,060	2,551	397,704
Netherlands	128	1,689	84,558
Total	**-2,932**	**+4,240**	**482,262**
Spain	-200	-1,418	194,758
Italy	-1,243	-794	287,027
Greece	-888	729	39,607
Portugal	177	-1,068	34,425
Total	**-2,154**	**-2,551**	**555,817**
Supranationals	2	0	145,914

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

26th Meeting of the Stability Council scheduled for 16 December

The Federal Minister of Finance, Christian Lindner, and the Chair of the Conference of Finance Ministers, Doris Ahnen from Rhineland-Palatinate, have convened the 26th meeting of the Stability Council this Friday in Berlin. On the agenda are monitoring compliance with the structural general government deficit ceilings and the debt brake, budgetary surveillance and reviewing impending budgetary emergencies. To recap, it emerged from the press release of the 25th meeting that the Stability Council expects the European ceiling for the structural general government deficit to be exceeded for the years 2022 to 2025. This is permissible in 2022 because the escape clause of the European Stability and Growth Pact remains activated. In the years 2023 to 2026, the structural deficit in the government finances is to be gradually reduced until the medium-term budget target is reached. The Stability Council is also of the opinion that exceeding the structural general government deficit ceiling based on the European Commission's budgetary guidelines until 2025 is also permissible. You can expect a summary of the meeting as part of this publication in mid-January.

Overview of rating changes

As 2022 comes to a close, we have a few more rating changes to report on. The rating agency S&P has revised its outlook for France from “stable” to “negative”. This also has a direct impact on our coverage, as the rating for many public issuers from the French jurisdiction is equated with that of France. This specifically applies to (Bloomberg ticker): AGFRNC, CADES, CDCEPS, SAGESS and SFILFR. Also directly affected is the supranational issuer EFSF, whose outlook has also changed from “stable” to “negative”. Meanwhile, Fitch has revised its outlook for our “Beyond Bundeslaender” issuer MADRID from “stable” to “positive”. At this point we would like to do some advertising on our own behalf. In 2023, you can expect new publications as part of our familiar “Beyond Bundeslaender” series.

KfW: first digital transaction based on the German Electronic Securities Act

A few weeks ago we already reported on the digital transaction of the European Investment Bank (ticker: EIB). It is therefore all the more gratifying that digitalisation is progressing further in the German bond market and that KfW (ticker: KFW) is a new issuer entering the digital stage. The issue was executed by Clearstream on Deutsche Börse's digital post-trading platform “D7”. The bond has a volume of EUR 20m with a two-year maturity and a coupon of 2.381%. By digitalising the issue via the D7 platform, KfW was able to shorten the issuance process, which often takes several days, to just a few minutes. In addition to the time savings, the manual effort and processing costs could also be reduced. The digital transaction was made possible by the promulgation of the German Electronic Securities Act (eWpG). This gives issuers of bearer bonds the right to choose whether to issue the security by means of a traditional document or electronically. Moreover, instead of the issuer presenting a physical certificate, an entry is made in an electronic securities register.

ECB: organisational details

As in previous years, the Eurosystem will temporarily pause APP and PEPP purchases (always referring to reinvestment, not net purchases) towards the end of the year in anticipation of significantly reduced market liquidity. The last trading day before Christmas will be 20 December. Purchases will then resume on 2 January 2023. The Eurosystem's securities lending facilities will continue to be available on all business days in December. To ensure consistency with the publication of the Eurosystem weekly statement (including quarterly revaluation adjustments), the first monthly publication of data pertaining to APP and PEPP holdings in 2023 will be on Wednesday, 4 January at 3.00 pm.

Primary market

This trading week saw the big bang before the turn of the year with the last syndicated transaction from the European Union (ticker: EU) in 2022. A total of EUR 7.048bn was raised overall: firstly, EUR 6.548bn was issued in the form of a 15-year social bond at ms +21bp (guidance: ms +23bp area) under the SURE programme. The order book amounted to a sumptuous EUR 25bn. The proceeds of the bond issue will go into the SURE programmes of Bulgaria, Cyprus, Czech Republic, Greece, Croatia, Lithuania, Latvia, Poland and Portugal. In total, EUR 98.4bn of the EUR 100bn programme has therefore been disbursed. With this issue, the EU Commission has also concluded the SURE programme - which is scheduled to expire on 31 December 2022. In addition to the social bond, the mega-issuer secondly topped up its bond EU 2.5% 10/04/52 by EUR 500m at ms +66bp (guidance: ms +68bp area). With an order book of EUR 10bn, the deal was 20x oversubscribed. The proceeds will be used for the extraordinary MFA programme for Ukraine, which has also been completed with this transaction. In 2022, the European Union has therefore supported Ukraine to the tune of EUR 7.2bn. For 2023, it has already launched another aid package for Ukraine, which is bearing the brunt of the Russian war of aggression (see Issue #35). Commission approval is currently pending. The package comprises EUR 18bn and is to be financed by issuing bonds on the capital market. We would like to end 2022 by wishing you and your families a happy and peaceful Christmas and a healthy and successful 2023.

Issuer	Country	Timing	ISIN	Maturity	Size	Spread	Rating	ESG
EU	SNAT	06.12.	EU000A3K4D09	15.0y	6.55bn	ms +21bp	AAA / Aaa / AA+	X

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

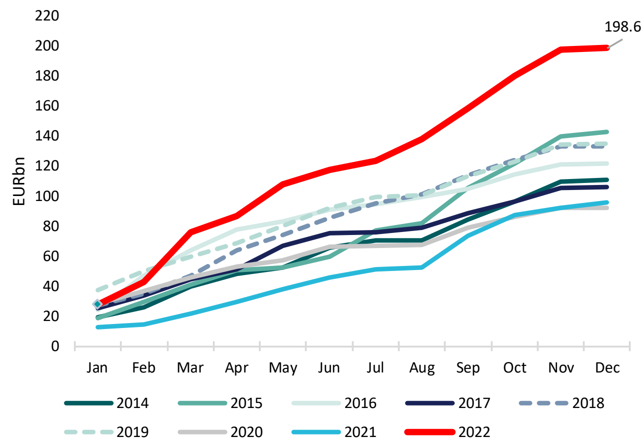
Covered Bonds
Our view of the covered bond market heading into 2023

Author: Dr Frederik Kunze

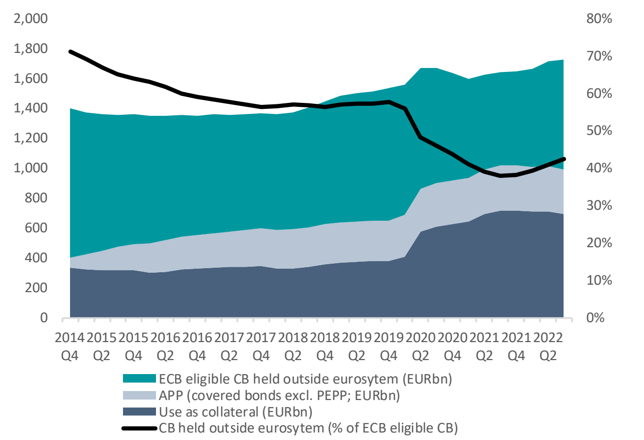
The covered bond market in 2023

In our weekly publication, we have discussed the surprisingly large volume of issues in the EUR benchmark segment in 2022 and the resulting implications for spread movements on several occasions. In this context, some developments in the year which is drawing to close stood out for us as explanatory variables for the dynamics on the primary market. Coming out of a phase where liquidity was plentiful and ECB monetary policy specifically in the covered bond primary market reduced the execution risk of individual deals, we saw a realignment of market forces towards the end of the year. In a broader more generalised sense, we would say there has been a shift in the market dynamics, altering the primary market from a seller's market to a buyer's market in the process. We see this in particular in lower oversubscription ratios and rising new issue premiums. Risk considerations were also again increasingly influencing the investment decisions of the stakeholders involved. On the issuer side, there is and has been a reaction to changing conditions, which was evident not least in the maturities chosen, but also in the frequency of market appearances. While relative value considerations continued to play an important role in investors' purchase decisions, issuers increasingly focused on assessing opportunity costs. Now, in principle, describing the past is not really what an outlook is supposed to do. Nevertheless, we see several of these explanatory variables as indicative of trends in issuance volume and therefore spread development in 2023. Once again, the ECB's monetary policy course will be decisive, but we also attach considerable importance to a number of other factors. In this outlook article, we would therefore like to discuss both the implications of the monetary policy turnaround in the Eurosystem as well as the other driving forces on the covered bond market in 2023.

EUR BMK: issuance history



ECB influence on the covered bond market



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

EUR benchmark segment 2022: continuous loop on the primary market

The primary covered bond market ended 2022 with a record volume of EUR 198.625bn. It is striking that the issuance volume was mainly driven by four jurisdictions (France, Germany, Canada and Austria). The change in the risk propensity of investors due to the interest rate turnaround, the Ukraine war and general recession fears has also resulted in a preponderance of covered bonds with unusually short maturities. What could also be observed in principle, however, was the return of a large number of real money investors to the covered bond segment. This compensated for lower Eurosystem demand, although the combination of deal sizes and order books led to lower oversubscription rates. As a result, we would say that the market power of investors has increased and issuers have had to make more concessions on the spread. We think this market situation will continue, at least into the New Year. We expect a dynamic January, where maturities of “around three years” should dominate. As we see it, issuers from jurisdictions such as Germany or France are likely to get the ball rolling in the first week of trading.

Primary market 2023: impressive net new supply

We expect maturities of EUR 115.5bn in 2023 (2022: EUR 138bn) with new issues in the order of EUR 197.5bn. According to our forecast, this would result in a positive net supply of EUR 82bn in the form of new covered bonds in EUR benchmark format, which is very high by historical standards. In our forecast, we initially assumed that the majority of issuers would refinance their maturing covered bonds. In addition, as explained in more detail below, we have made assumptions about the basic development of the lending business as well as the composition of the funding mix in 2023. The sub-components for our 2023 supply forecast at the level of the individual jurisdictions can be seen in the table below. In our opinion, this strong momentum will again be driven by the four jurisdictions, namely France (net supply 2023: EUR 19.9bn), Germany (EUR 15.3bn), Austria (EUR 12.3bn) and Canada (EUR 10.0bn). However, in terms of volume, some of the smaller jurisdictions should also experience relatively strong growth in 2023. This applies to both established countries such as New Zealand and Singapore and to “growth markets” from the CEE universe, such as Slovakia. In the country analysis, we would like to highlight the United Kingdom at this point. For this jurisdiction, we expect an increased focus on the domestic market. We also see somewhat less momentum for the Nordic countries in the EUR benchmark segment. For issuers from Norway, for example, we believe that the focus in 2023 will still be on striking a sensible balance between funding costs and maintaining the corresponding curve, so we anticipate fewer structural changes compared with the UK. As regards Spain, we actually expect the market to regain some momentum. We foresee a positive net new supply in 2023, not least as a result of the inevitable change in the funding mix. In the previous edition of our weekly publication, we looked in detail at the Spanish covered bond market (see NORD/LB Covered Bond & SSA View from 7 December 2022).

NORD/LB Forecast 2023: issues and maturities by jurisdiction

Jurisdiction	**Issues 2022** as at 14 December 2022 (EURbn)	**Outstanding volume** as at 14 December 2022 (EURbn)	**Maturities 2023** (EURbn)	**Issues 2023e** (EURbn)	**Net supply 2023e** (EURbn)
AT	14.0	43.5	1.8	14.0	12.3
AU	11.5	31.8	3.8	4.5	0.8
BE	2.5	17.0	2.5	3.0	0.5
CA	30.3	83.0	15.0	25.0	10.0
CH	0.8	0.8	0.0	1.0	1.0
CZ	0.5	1.0	0.0	1.0	1.0
DE	42.9	179.8	17.8	33.0	15.3
DK	0.5	5.0	0.8	1.5	0.8
EE	0.5	1.0	0.0	0.5	0.5
ES	5.8	72.5	9.4	10.0	0.7
FI	8.6	33.1	5.8	8.0	2.3
FR	43.5	235.1	22.7	42.5	19.9
GB	3.3	21.4	4.0	4.0	0.0
GR	-	0.5	0.5	0.5	0.0
HU	-	0.0	0.0	0.5	0.5
IE	-	1.8	1.0	0.0	-1.0
IS	-	0.5	0.0	0.5	0.5
IT	3.3	48.8	7.3	9.0	1.8
JP	-	4.9	1.0	1.5	0.5
KR	1.6	7.2	0.5	2.5	2.0
LU	-	1.5	0.5	0.0	-0.5
NL	9.8	68.8	3.8	10.0	6.3
NO	8.3	51.4	10.3	9.0	-1.3
NZ	2.3	10.0	1.5	4.0	2.5
PL	0.5	2.0	0.5	1.0	0.5
PT	-	3.0	0.0	0.0	0.0
SE	5.3	29.8	4.5	6.0	1.5
SG	2.3	8.0	1.0	3.0	2.0
SK	1.5	5.0	0.0	2.0	2.0
Total	**199.0**	**967.8**	**115.5**	**197.5**	**82.0**

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

Basic considerations regarding the framework parameters for our 2023 forecast...

As already mentioned above, the framework parameters from 2022 will also have an impact on the new year. In our opinion, the change in the funding mix will have a significant impact on issuance behaviour in 2023. Accordingly, we expect issuers to continue to focus strongly on covered funding over the next twelve months. The reduced availability or repatriation of cheap long-term central bank liquidity, the uncertainty with regard to the deposit base also due to the increased cost of living for private households as well as the increasing cost of senior unsecured funding clearly show the importance of covered bond deals in our view. In this context, we see a constant to rising refinancing need on the part of commercial banks overall. Lending policy on the part of financial institutions is set to remain dynamic, although the focus will in part be more on business areas outside property financing. Finally, it seems that the property market has also reached a turning point.

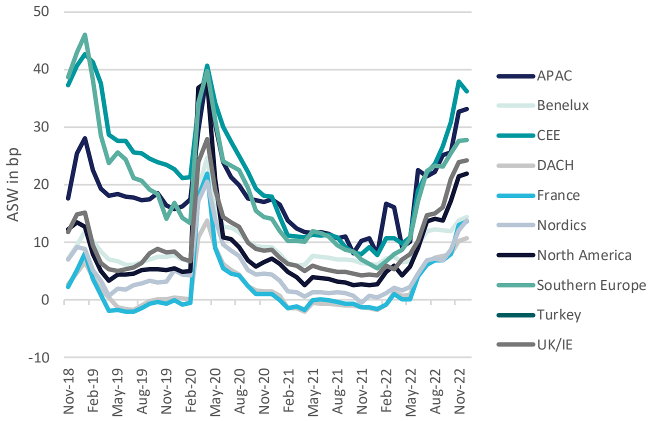
…ECB shift in monetary policy will remain significant, but by no means the sole driver of new issues

The shift in the ECB's monetary policy is making itself felt on both the supply and demand side. On the supply side, we see at least a small proportion of covered bond issues as a substitute for (voluntarily) repaid TLTRO III funds. In this respect, this situation has a negligible impact on our supply forecast for 2023. Another aspect also appears relevant in connection with TLTRO III and covered bonds. For example, retained covered bonds represented a significant portion of the collateral submitted to the central bank. With the reduction of central bank liquidity, the need for this tends to decrease. The cover assets used by retained covered bonds would thus be available for public deals and, in our opinion, allow for dynamic issuance activity in the EUR benchmarks, even if property financing grows much less strongly in 2023 than in previous years.

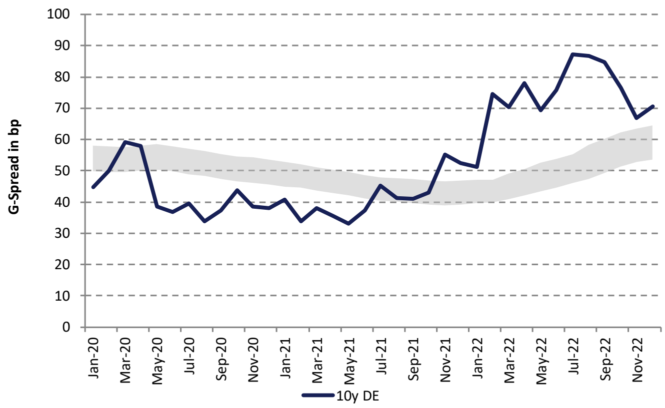
Ratings: agencies paint clear picture on stability of risk assessments

Before we deal with the spread implications in the further course of this article, it seems appropriate to look at the risk perspective at this point. As already described, property markets around the world are facing a turning point. The combination of rising mortgage rates and the general upward trend in consumer prices makes the current price levels in the property markets appear unsustainable, and strong setbacks in property prices should be one of the defining themes for 2023. Although we do not want to play down the dangers at this point, we see no reason to be overly worried about the credit quality of covered bonds. This assessment is also consistent with the picture painted by the rating agencies over a 12-to-18-month period. Covered bond ratings will remain stable even in an expected downturn phase in the property market coupled with fundamental economic weakness (see Covered Bonds Market Overview). From our perspective, one reason for this is the high credit quality of the issuers. The requirements for cover assets laid down in covered bond legislation, which can be described as stringent overall, paired with the valuation standards for property financing, should also provide sufficient support here.

EUR BMK: Spread history (5y, generic)



EUR BMK: relative value using the example of Germany (generic and long-term average)



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

Spread trend: ECB and technical market data trigger widening…

The change in ECB monetary policy, but also in part fundamental risk considerations, can already be seen today in the current spread levels. Unsurprisingly, these influencing factors overlap with other framework parameters such as technical market data (surprisingly large net new supply in 2022). The realignment of the monetary policy control parameters, a significant portion of which has been priced in on the markets, includes the reduction of the ECB's overflowing balance sheet in addition to the interest rate turnaround, which is already underway, as already mentioned. Accordingly, this must be taken into account in the forecasts for spreads, and so we expect, for example, notable but not massive widening by the middle of 2023. We expect the main driver to be technical market data and, in this case, the very large net new supply we are anticipating for 2023 in the EUR benchmark segment. Both in the context of ECB announcements but also in phases of sharply declining risk appetite, we also definitely expect sentiment-driven but rather temporary widening of ASW spreads for covered bonds. Fundamental data also plays a role for us in that there should again be larger spread differences across jurisdictions and maturity bands, although we would rather tend to describe this a "return to normality".

NORD/LB Spread Forecast

Current levels					as of 30/06/2023(e)					Expected spread change				
in bp	3y	5y	7y	10y	*in bp*	3y	5y	7y	10y	*in bp*	3y	5y	7y	10y
AT	13.7	15.6	17.5	21.5	**AT**	14.0	20.0	23.0	28.0	**AT**	0.3	4.4	5.5	6.5
AU	26.0	35.0	37.5	39.3	**AU**	26.0	39.0	43.0	45.0	**AU**	0.0	4.0	5.5	5.7
BE	6.9	9.5	13.8	22.9	**BE**	7.0	13.0	20.0	29.0	**BE**	0.1	3.5	6.2	6.1
CA	17.7	20.4	24.2	27.1	**CA**	18.0	24.0	30.0	33.0	**CA**	0.3	3.6	5.8	5.9
CZ	44.1	44.1			**CZ**	45.0	48.0			**CZ**	0.9	3.9		
DE	2.6	4.0	5.3	8.9	**DE**	3.0	8.0	11.0	15.0	**DE**	0.4	4.0	5.7	6.1
DK	9.2	16.1	20.8		**DK**	10.0	20.0	27.0		**DK**	0.8	3.9	6.2	
EE	31.6	34.0			**EE**	32.0	38.0			**EE**	0.4	4.0		
ES_Multi	32.8	34.8	36.1	36.1	**ES_Multi**	33.0	39.0	42.0	42.0	**ES_Multi**	0.2	4.2	5.9	5.9
ES_Single	18.6	25.1	31.8	40.4	**ES_Single**	21.0	33.0	43.0	50.5	**ES_Single**	2.4	7.9	11.2	10.1
FI	1.9	6.3	9.2	11.2	**FI**	2.0	10.0	15.0	17.0	**FI**	0.1	3.7	5.8	5.8
FR	7.5	12.0	15.1	20.4	**FR**	8.0	16.0	21.0	27.0	**FR**	0.5	4.0	5.9	6.6
GB	19.8	23.2	22.7	26.1	**GB**	22.0	29.5	33.0	37.0	**GB**	2.2	6.3	10.3	10.9
IE	12.3				**IE**	13.0				**IE**	0.7			
IT	24.6	30.9	36.1	48.9	**IT**	26.5	37.0	44.0	59.0	**IT**	1.9	6.1	7.9	10.1
JP	33.5	40.2	41.5	39.7	**JP**	34.0	44.0	47.0	46.0	**JP**	0.5	3.8	5.5	6.3
KR	35.3	36.5	36.6		**KR**	36.0	41.0	42.0		**KR**	0.7	4.5	5.4	
LU	22.9	20.6			**LU**	23.0	25.0			**LU**	0.1	4.4		
NL	7.9	10.9	11.6	15.5	**NL**	8.0	15.0	17.0	22.0	**NL**	0.1	4.1	5.4	6.5
NO	8.1	12.5	16.3	17.5	**NO**	9.0	17.0	22.0	24.0	**NO**	0.9	4.5	5.7	6.5
NZ	31.5	37.2	34.9	32.7	**NZ**	32.0	41.0	41.0	39.0	**NZ**	0.5	3.8	6.1	6.3
PL	36.8				**PL**	38.0				**PL**	1.2			
PT	13.5	17.4			**PT**	14.0	21.0			**PT**	0.5	3.6		
SE	7.6	10.9	15.0	18.7	**SE**	8.0	15.0	21.0	25.0	**SE**	0.4	4.1	6.0	6.3
SG	15.8	18.5	19.9		**SG**	16.0	23.0	26.0		**SG**	0.2	4.5	6.1	
SK	24.8	33.1	39.1		**SK**	25.0	37.0	45.0		**SK**	0.2	3.9	5.9	

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

…with this expected to commence as early as the beginning of 2023

Along with a busy start to the year on the primary market, there should also be significant spread widening. Followed by new issue premiums rising or remaining at an elevated level, the secondary curves are therefore likely to be pushed up in parallel. The continued tightening spread versus bunds, for example in the case of German Pfandbriefe, is likely to dampen the attractiveness of covered bonds somewhat. In connection with the expected abundance of new issues, concessions will definitely have to be made by issuers. However, with the wave of fresh bonds flattening out somewhat after the first few weeks of trading, the curves could move back again somewhat, as we have repeatedly observed in 2022. However, there should no longer be a general narrowing across all jurisdictions. Overall, we maintain that no spread widening is to be expected for covered bonds from a credit quality point of view.

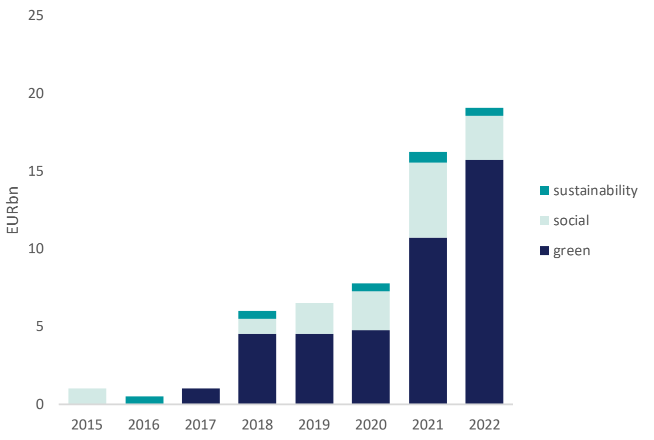
What does 2023 hold in store from a regulatory or structural perspective?

While 2022 was marked by the official start of the new "EU minimum standards" on 8 July 2022, 2023 has very few significant milestones in store for us in this context. The focus is likely to be on the "third-country rule" and therefore greater cohesion of the global covered bond markets. The process of adapting the reporting standards for the Covered Bond Label (HTT), which will henceforth be based on Article 14 of the EU Directive, has already started for issuers outside the scope of the EU Directive and has already been completed in some jurisdictions. We continue to see question marks over UK covered bonds with regard to LCR eligibility, but remain convinced that it can be preserved (see NORD/LB Covered Bond Special from 5 August 2022). Furthermore, 2023 will be a defining year for Basel III finalisation and implementing the requirements in Europe could put a strain on covered bond issuers. From the point of view of Pfandbrief banks operating in Germany, the Association of German Pfandbrief Banks (vdp), for example, has repeatedly criticised the proposals and called in particular for an adjustment to ensure that the institutions are not saddled with an excessively high capital burden for residential or commercial property business. Internationally, the European Covered Bond Council (ECBC) regularly highlights the fundamental importance of the property market as well as the specific benefits of the covered bond sector for Europe, including the relevance of mortgage financing for the green transition. An adequate assessment of the risks and a justifiable capital burden are needed. This should be ensured by making appropriate adjustments to the Basel III finalisation, so that property financiers and covered bond issuers can rise to this challenge.

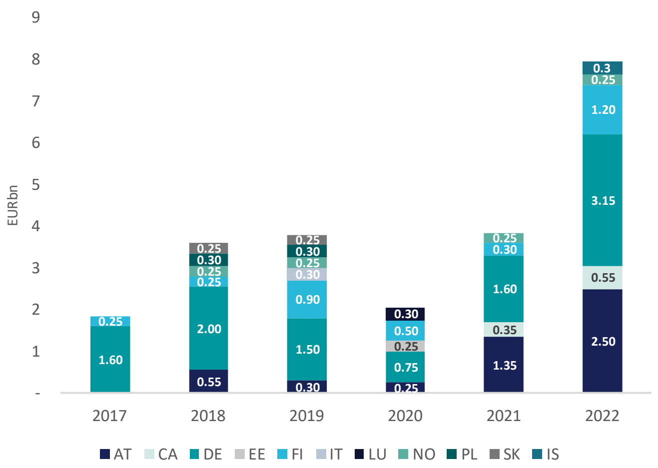
ESG: not just a buzzword for the covered bond market in 2023

The subject of sustainable covered bond benchmarks has taken more of a back seat in this "crisis year" of 2022. This may also be due to the fact that, although we can talk about a record year in terms of the new ESG issuance volume, its share in relation to total new bond placements is somewhat lower. However, this should not detract from the fact that "ESG" remains a growth market. In 2022, we welcomed seven ESG debutants to the EUR benchmark segment. In 2023, we also expect new additions and follow-up deals from the institutions already active on the market. In the market environment we are expecting, characterised by an abundant supply and rising spreads, we would definitely say there will be increasing investor interest in sustainable formats. The proportion of investors with an ESG focus or sustainable mandate continues to rise, while we believe that the supply does not yet meet this growing demand. At the same time, however, the demands on issuers in terms of the required standards are also increasing. In addition, there is a certain amount of uncertainty surrounding the regulatory requirements. In this context, we are thinking in particular of the EU taxonomy and the European Green Bond Standard. Question marks remain in connection with the "social taxonomy", as the project has recently stalled somewhat at EU level. However, we actually foresee an uptick in momentum for both green and social covered bonds in 2023. With a share of more than 10% of the total volume of new issues, fresh ESG deals are likely to pass the EUR 20bn mark over the next twelve months.

EUR BMK: ESG issues



EUR SBMK: Issues



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

Away from EUR benchmarks: sub-benchmark segment to remain dynamic in 2023…
In the past, we have repeatedly pointed to the EUR sub-benchmark segment as a notable niche market. The smaller deal sizes also enable covered bond issuers with lesser funding requirements or smaller cover pools to make regular market appearances. For some investors, the less liquid bonds (following the regulatory interpretation of the LCR regulation) appear to be an interesting investment opportunity due to a spread premium. After a comparatively strong year in 2022, we expect the primary market for EUR sub-benchmarks to remain buoyant over the next twelve months. This can be explained not least by the high level of momentum in the dominant countries Austria and Germany. Similar to activities in the EUR benchmark segment, issuers from these jurisdictions also look set to increasingly approach investors on this “niche market”.

…and non-EUR deals are also a talking point
In 2023, some issuers outside the euro markets will again raise funding from investors. While the Nordic jurisdictions in particular such as Denmark, Sweden and Norway rely on their established home markets and make their actual appearances contingent upon their primary funding needs and opportunistic aspects, we see a continuation of an issuance approach spanning a variety of currencies, especially among Canadian institutions. We expect the same from Australian covered bond issuers, albeit to a lesser extent. As in 2022, especially for these two jurisdictions, an appearance in USD, AUD or GBP should not be to the detriment of the EUR benchmarks. Ultimately, given the high volume of fresh EUR benchmarks from Canada and Australia, the appearances in “foreign currencies” did not really seem to get in the way of euro activity. In our view, the situation is somewhat different in the Nordics. There is definitely a somewhat stronger substitution relationship between the different currency markets. We take this into account in our issuance forecast, among other aspects, by focusing more on maturities and expecting at most very modest growth in the respective EUR markets. Another “special case” is the UK, where we have already observed a high concentration on the domestic market and thus the GBP in 2022, which we also expect to remain the case in 2023 as well.

Conclusion

After a turbulent 2022, we expect covered bonds to continue to live up to their role as a crisis product in the coming twelve months. For issuers, this means a secure and reliable source of stable funding, while investors are offered fundamentally high credit quality. In terms of issuance volume, this is one of the reasons why we could well be heading for another record-breaking year. It is however important to note that covered bonds are not isolated from market events and issuers do not operate in a vacuum. Initially, a very high issuance volume in 2023 is likely to cause spreads to widen due to technical market data alone. The shift from a seller's to a buyer's market took place in 2022 and this new situation will remain at least in the first quarter of 2023. Comparatively lower oversubscription rates and, on average, relatively high new issue premiums are likely to continue to be a consequence of these new power dynamics. On the covered bond market, investors focusing on the short end also impressively demonstrated to us in 2022 how to avoid duration or interest rate risks. In fact, some issuers are likely to test the appetite of investors at the long end just a matter of weeks into the new year. The withdrawal of the Eurosystem will simultaneously be accompanied by lower demand. Entry into the quantitative tightening phase is only partially priced in. However, we also anticipate potentially "exaggerated" widening, so rises driven by market sentiment should tend to be of a temporary nature. In view of the fundamental valuations of covered bonds, we expect credit quality to remain high in 2023 and do not see the current developments on the international property markets as a real danger.

SSA/Public Issuers
SSA outlook 2023: ECB, NGEU and the debt brake in Germany

Authors: Dr Norman Rudschuck, CIIA // Jan-Phillipp Hensing

Public sector issuers dealing with inflation, cycle of rate hikes and war of aggression
In the last edition of our weekly publication (07 Dec. 2022), we shared our outlook for tomorrow's ECB meeting, the last of the year. In this, we projected a baseline scenario in which the ECB would not only hike all three of the relevant interest rates by a minimum of 50bp, but would also ideally set the course in matters of reinvestment. Some market players are currently hankering after information about expiring reinvestments in the context of the central bank's original asset purchase programmes (APP), in which titles from public sector issuers were predominantly purchased (public sector purchase programme; PSPP). The ECB will continue to act as a "hoover" on the SSA secondary market over the course of 2023; this is how we interpret the forward guidance for the pandemic emergency purchase programme (PEPP), which will continue as the first line of defence until (at least) the end of 2024. State financing in a direct way, meaning Eurosystem participation in the purchase programmes on the primary market, will remain forbidden. However, institutional investors are keeping reserves at the ready: certainly not just for investing in the ESG segment (investment criteria: environmental, social, governance), but also for managing their LCR portfolios and engaging in asset and liability management, and consequently reconciling the asset and liability sides of the balance sheet. Diverse real money investors are also returning to the market.

ECB: the more, the better?
In 2023, too, the SSA segment is again likely to be driven primarily by the ECB's monetary policy course. We may be just one day away from an announcement by the central bank that monthly reinvestments will slowly be wound down. Of course, this also harbours a certain potential for disappointment if the ECB remains silent tomorrow. At the very least, we tend to expect gradual spread widening in the bond market to be for technical reasons, although a sentiment-driven widening over the course of the year would also be feasible, depending on the circumstances. This could be the case if politicians in Italy again make inexplicable decisions or if the transmission protection instrument (TPI) has to be utilised contrary to expectations. Detractors in any case claim that the "I" does not stand for instrument, but for Italy. Let us now turn our attention to our asset class for European supranationals and agencies as well as German Bundeslaender on which we focus. However, other regions within the euro area with significantly lower bond supply (such as Belgian and French regions) are also affected by the current market environment of rising interest rates. Members of the ECB Governing Council and the Executive Board chairing the Governing Council have so far avoided making clear statements and postponed landmark decisions with regard to reinvestments until tomorrow's final meeting of 2022. The following provides a structured presentation of our assessments for 2023. Unforeseeable events cannot be ruled out, of course: 2022 developed differently to what had been expected at the beginning of the year. The war of aggression, rather excessive inflation and a gas supply cut-off were not particularly prominent on anyone's agenda, but in their own way became real game changers.

A more differentiated view must be taken of (net) supply than in the past

By now, most issuers have completed their refinancing for the current year or are on the funding home straight. Overall, EUR benchmark issues (from our analysed SSAs) are expected to amount to almost EUR 270bn in 2022. After around EUR 190bn in 2017 and EUR 166bn in 2019, this is a very high figure, albeit lower than in the two key pandemic years (2020: EUR 303bn; 2021: EUR 325bn). After all, German Bundeslaender managed without additional credit authorisations in 2022. In addition, initial acclimatisation effects have set in, although it was not only the ECB that operated and traded with enormous volumes, with the European Union, as a relatively new “mega-issuer”, also acting decisively so far – and it still has a great deal in the pipeline up to 2026. This will continue to have a significant impact on the funding volume in 2023 (and beyond). For the coming year, we therefore expect EUR benchmark issuances of around EUR 250bn, subject to a certain degree of uncertainty. This value would again move above the pre-crisis volume and therefore stabilise at a high level, although the drivers are different from year to year.

Focus: German Bundeslaender

After an initial spread scare, a very high level of action – especially in EUR benchmarks – was observed in 2020 due to the pandemic situation. At one point, even BAYERN and SAXONY returned to the capital market – two real and at the same time rare alternatives in the best rating segment. After a disproportionately high supply was met with huge demand in 2021, we were surprised in 2022: not a single benchmark bond came from BAYERN or BADWUR, despite some enormous credit authorisations. Spreads and maturities will remain the hot topic of 2023, but we do not expect another Methuselah bond with a 100-year maturity from NRW. Estimating the total volume is also more difficult than ever, as it is remains unclear how the debt brake and Laender-specific relief packages will be dealt with.

Credit authorisations of German Bundeslaender: 2022 vs. 2023e (EUR bn)

	2021	2022e
Baden-Wuerttemberg	23,78	4
Bavaria	7,07	3
Berlin	8,20	5
Brandenburg	3,25	1
Bremen	1,98	2
Hamburg	4,39	1
Hesse	7,73	4
Mecklenburg-Western Pomerania	0,42	1
Lower Saxony	5,91	6
North Rhine-Westphalia	13,85	14
Rhineland-Palatinate	4,89	5
Saarland	2,30	1
Saxony	0,41	1
Saxony-Anhalt	1,65	2
Schleswig-Holstein	4,57	3
Thuringia	0,81	1
Total	**91,21**	**54**

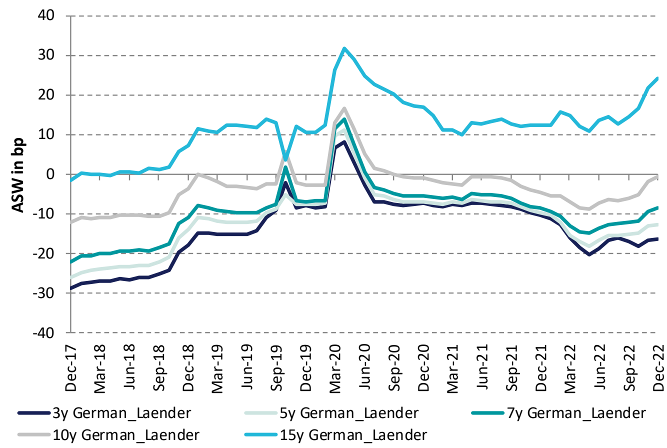
e = estimate

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

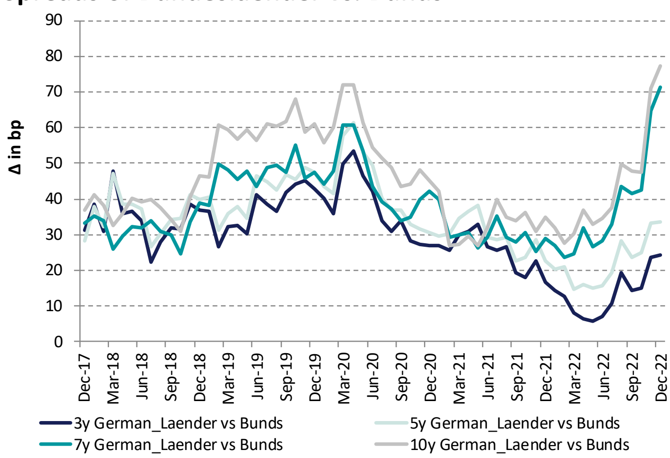
Bundeslaender funding requirements expected to be lower again in 2023

When it comes to regional bonds, those of German Laender continue to be by far the most significant sub-sovereign market – above all in 2020, but also in 2021, the 16 federal states once again extended their lead and consequently their importance. However, there had been a decline in funding volumes for many years prior to this. For 2023, we expect the gross placement of new bonds to be around EUR 50-60bn (assumption: EUR 54bn). In contrast, maturities were just under EUR 52bn. In both cases, these are not only EUR benchmark bonds, but also foreign currencies and borrower's note loans, with the trend of positive net supply of recent years now likely to be a thing of the past. However, in this forecast, everything hinges on the structuring or (non-)suspension of the debt brake. Whatever the volume, it does not detract from the relevance of German sovereign bonds in this important segment. In previous years, the Laender budgets benefited from the sound economic development in Germany. Both pre-pandemic macroeconomic development and the forward-looking sentiment indicators suggest a continuation of the robust macroeconomic environment, which had had a positive effect on the income and expenditure status of public budgets until Covid-19. Against the background of the debt brake that has also been in force at federal state level since 2020, the budgetary discipline of the Laender has already been much more pronounced than in the past. In the year the debt brake was activated, even the greatest pessimists would likely never have imagined it would remain suspended due to the pandemic for not just 2020, but 2021 and 2022 as well. While legally this situation was planned for in advance, there was hope that this option would rarely or never have to be utilised. In our view, the primary market supply we expect for 2023, which is significantly lower than from 2020 to 2022, should lead to spread movement in this segment – once stimulated by central banks and now driven more fundamentally. However, we think this is only likely to emerge over the course of 2023, as there has been a stronger focus on long-term maturities in the refinancing of the Bundeslaender in recent years. As at 12 December 2022, 555 different German bonds have been purchased by the ECB or associated central banks under the PSPP and PEPP since 2015. By contrast, there are 130 ISINs from other European regional issuers (including VDP, IDF, WALLOO, FLEMSH, MADRID).

Spread movement of German Bundeslaender



Spreads of Bundeslaender vs. Bunds



Source: Bloomberg, NORD/LB Markets Strategy & Floor Research; data as at 12 Dec. 2022 eod

Other European regions in the context of the PSPP

While the German Bundeslaender will probably act as described, we now want to take a look at the French regions of Île-de-France (IDF) and Ville de Paris (VDP), the Belgian counterparts (including FLEMSH and WALLOO) and, from overseas, the Canadian provinces (BRCOL, ALTA etc.). We have been calling this segment “Beyond Bundeslaender” since 2021. We are planning to accompany this with further research in 2023, especially updates of our well-known publications. The French, in particular, regularly stand out as ESG issuers. There was also an increase in supply from Madrid, as this region had already been posted to the Eurosystem’s books with 23 different ISINs. For many years, the Generalitat de Catalunya fell through the cracks. The rating of Spain’s Autonomous Community of Catalonia (ticker: GENCAT) has always been outside the investment grade range and was therefore not available for purchase by the Eurosystem for a long time. This has changed over time and a bond has found its way onto the books of the Eurosystem. Conversely, as the table below shows, other Spanish regions have already been purchased to a significant extent. Lesser-known tickers such as the Belgian LCFB and BRUCAP also feature here. In these regions, we expect significant funding activity in 2023, too, as underlined by the benchmark bonds from WALLOO and LCFB in 2022, though GOVMAD and AZORES also reinforced the trend with their sub-benchmarks. It is still interesting that not a single bond has been purchased from an Italian region. In our opinion, the overall market for Italian government bonds is sufficiently large to not have to deviate from BTPs and still be able to comply with the capital key. For a long time, this also applied to Austria (albeit to a much lesser extent).

ECB purchase list for the PSPP – regional European issuers

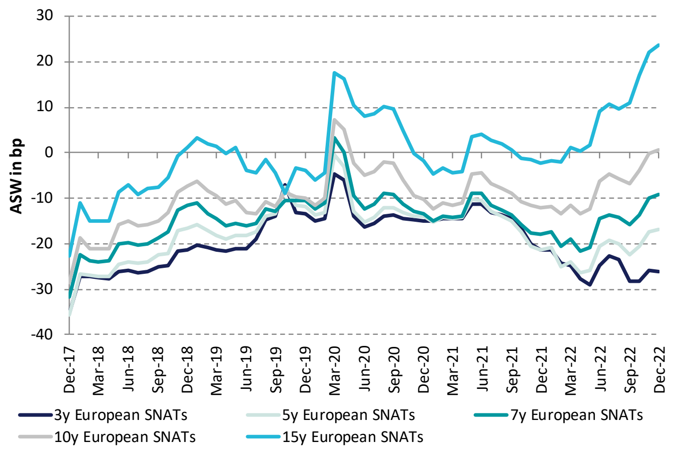
Issuer	Jurisdiction	ISINs already purchased	Issuer	Jurisdiction	ISINs already purchased
BADWUR	DE	24	IDF	FR	5
BAYERN	DE	14	VDP	FR	3
BERGER	DE	55	MADRID	ES	23
BREMEN	DE	53	CASTIL	ES	6
BRABUR	DE	24	BASQUE	ES	11
HESSEN	DE	53	ARAGON	ES	1
HAMBRG	DE	28	ANDAL	ES	67
NIESA	DE	62	BALEAR	ES	1
MECVOR	DE	3	JUNGAL	ES	3
NRW	DE	78	NAVARR	ES	1
RHIPAL	DE	44	GENCAT/CANARY	ES	je 1
SAARLD	DE	11	WALLOO	BE	21
SCHHOL	DE	39	FLEMSH	BE	17
SAXONY	DE	9	LCFB	BE	8
SACHAN	DE	11	BRUCAP	BE	9
THRGN	DE	21	GOVMAD	PT	4
BULABO	DE	1	AZORES	PT	8
LANDER	DE	25	NIEDOE	AT	1
Summe	**∑**	**555**	**Summe**	**∑**	**130**

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

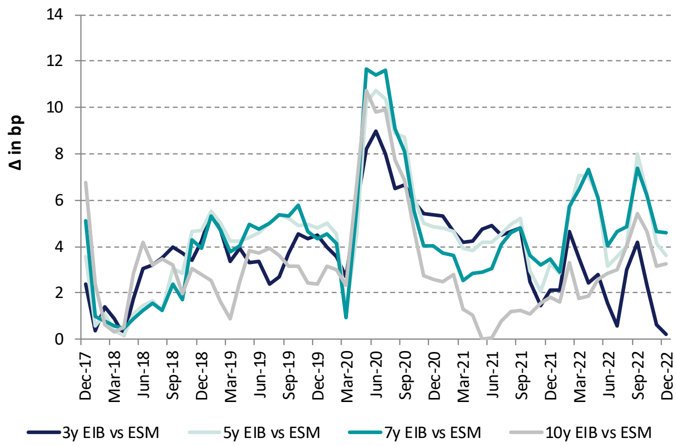
Supranationals under the spell of political pandemic decisions

The (few) E-supranationals continue to represent an important category in the SSA universe and have been larger than all German EUR benchmark issuers combined in our definition of the segment since 2021. A generally very good rating, high liquidity and regulatory preference continue to speak in favour of bonds placed by supranational issuers. Back in 2019, the EIB's governors, Europe's finance ministers, had already unanimously agreed that Brexit would not affect the EIB's funding activities and business model. Subsequently, Romania and Poland contributed additional capital, allowing the EIB to have a higher capital base than before Brexit. Naturally, the EIB will remain a regular player in the primary market in 2023. Here, we expect a funding target of between EUR 60bn and EUR 65bn – again divided between a large number of different currencies. This is set against maturities of around EUR 61.5bn. At European level, the overall picture is dominated by a few big names: the expansion in EUR benchmark issues this year can largely be attributed to the EU's appreciably increased funding needs under its Next Generation EU (NGEU) programme. This will also apply to 2023, and will even increase further, since the previous EUR 170.8bn is likely to be followed by an additional EUR 50bn to EUR 60bn in capital market funding for NGEU in the first half of the year alone (NGEU, the European Union Recovery Instrument, is a Covid-19 economic recovery package). Here, we expect concrete target figures by 20 December at the latest. For the second half of the year, we anticipate at least another EUR 50bn to EUR 60bn, but we would not be surprised by a larger figure. EU bills always supplement these values and are therefore not included. In the course of its actual operations, the EU often had neutral net supply until 2020. The maturities of EUR 3.5bn in 2023 will therefore be extended as usual. In 2022, a great percentage of macro-financial assistance (MFA) went to Ukraine (EUR 7.2bn), while EUR 18bn is currently earmarked for the country in 2023. We therefore expect between EUR 125bn and EUR 135bn in funding from the EU (all EUR benchmarks or taps, some of which green). For the ESM, we expect negative net supply of just under EUR 5bn for the coming year, while EUR 8.0bn of new products will enter the market (maturities: EUR 12.9bn). This applies subject to and with the exclusion of the not yet quantifiable Enhanced Conditions Credit Line (ECCL) and other emergency assistance from the ESM. For the EFSF, we expect new issuances to increase again to EUR 20.0bn, following the total of EUR 19.5bn that was placed in 2022. In the past, new issuances always (significantly) reduced (after fresh supply of e.g. EUR 28.0bn in 2018 and even EUR 49.0bn in 2017). This is set against maturities of EUR 22.5bn in 2023. It corresponds to a negative net supply of EUR 2.5bn for the EFSF. Here, we do not suppose the plan will be changed in any way. In addition, we expect the ESM to reappear on the market with a USD bond next year, which did not happen in 2022. It will also be interesting to see when and how the ongoing topic of the European Monetary Fund (EMF) results in a transformation of the ESM – similar to or as a local counterpart to the IMF. Speaking of transformation and political will: in 2023, we will focus on how the EIB's capital market structure, which is currently undergoing renewal and restructuring, will affect the "green bonds" asset class after Brexit and the (corporate) policy reorientation towards the entire ESG segment. In addition, EU green bonds are expected to total around EUR 225bn by 2026. The role of social bonds for the EU can now be regarded as over for 2022 in the context of SURE activities. The EU is especially dominant in the green segment for EUR benchmarks in the short to medium term with new supply and is becoming the largest green bond issuer in the world.

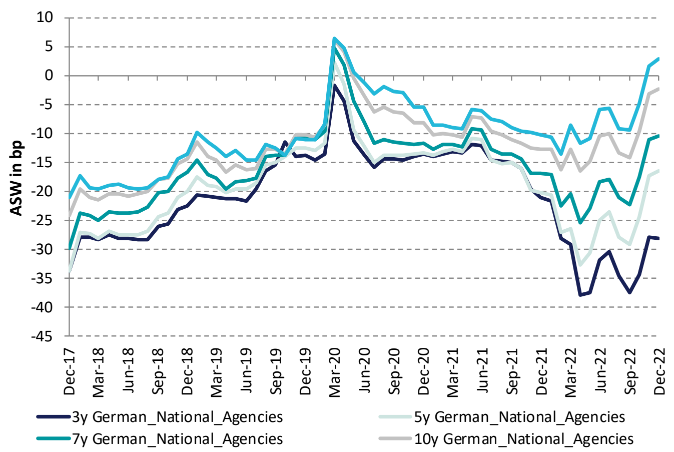
Spread movement of European supranationals



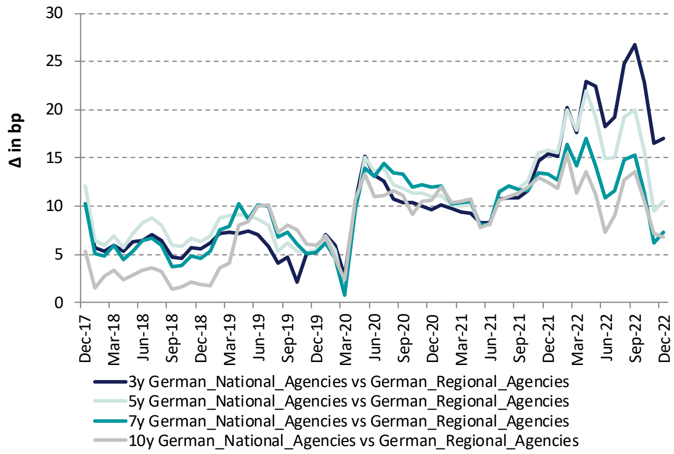
Spread differences: EIB vs. ESM



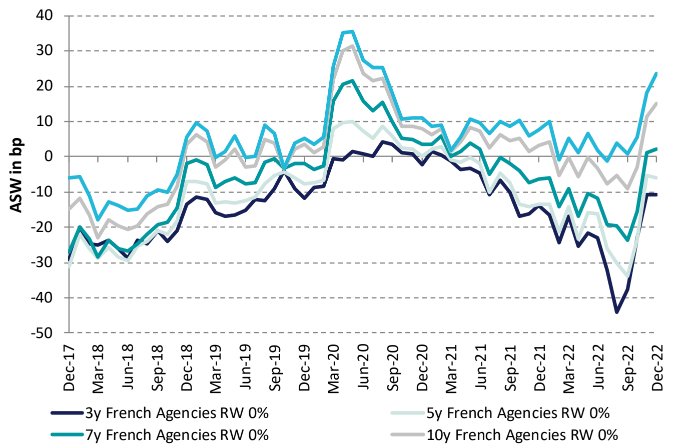
Spread movement of German national agencies



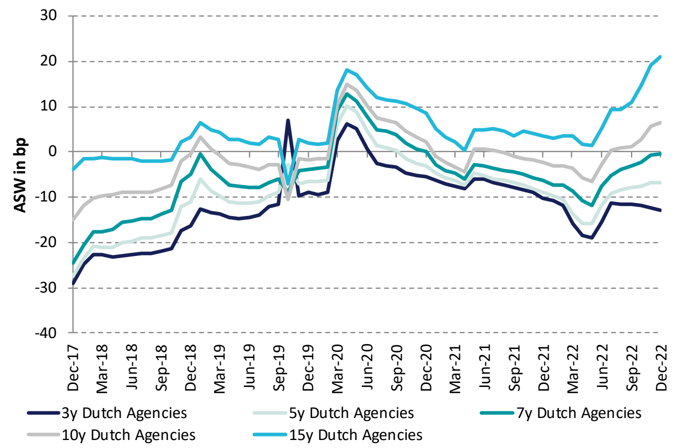
Spread differences: German agencies



Spread movement of French agencies



Spread movement of Dutch agencies



Source: Bloomberg, NORD/LB Markets Strategy & Floor Research; data as at 12 Dec. 2022 eod

German Agencies have stable net supply overall

For the German agency market, we expect net supply to remain stable or even positive overall, with volumes slowly picking up again for traditional funding programmes rather than emergency aid and coronavirus programmes. Much was still overshadowed by the coronavirus in 2022. Nevertheless, we expect a considerable funding volume for the most dominant market player, KfW, although some of the federal government's pots, such as the Economic Stabilisation Fund (ESF), can also be tapped here. In 2022, the Frankfurt bank adjusted its funding target during the year from EUR 80-85bn to EUR 90bn. In our view, total funding is likely to level off again at more than EUR 80bn in 2023. We now expect the exact figures from Frankfurt on a daily basis, though during the Global Investor Broadcast on Monday (19 December) at the latest. This compares with a maturity volume of EUR 72.9bn. Net supply would be correspondingly positive with an expected value of at least EUR 80bn (minimum EUR +7bn). On the other hand, the funding of German agencies (this segment not only includes development banks) has in the past also been driven by winding-up agencies such as FMSWER and ERSTAA, which naturally refinance their wind-down portfolios to an ever-lesser extent. These two issuers are not purchased by the Eurosystem under the PSPP and PEPP purchase programmes and always offer a certain pick-up vis-à-vis promotional banks with a similar rating. As with the German Bundeslaender, we expect spreads for known agency addresses to increase only gradually, as they will continue to be in demand by the Eurosystem as part of reinvestments. Overall, we assume that the fundamental analysis of individual issuers will once again gain in prominence for the German market and that Eurosystem reinvestments will dampen strong spread increases.

France dominates heterogeneous agency market ahead of the Netherlands and Nordics; forecasts barely possible for overseas regions

Let's briefly recall the EU's funding goal for 2020: EUR 800m (this is not a typo). Due to the pandemic, it increased more than fifty-fold (!) to over EUR 41bn for the year as a whole. The same was true for UNEDIC, which started with EUR 3bn, adjusted its funding target several times throughout the year and ultimately ended up at around EUR 20bn. Compared with this hectic activity on the primary market, 2021 was almost a haven of calm at EUR 10bn, as significantly less had to follow. In 2022, it had even dropped to EUR 1bn. We will therefore not take a closer look at French agencies (RW 0% and 20%) at this point, since 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 ESG issuer SOGRPR is also always worth a mention. Conversely, Dutch promotional banks are much more stable and predictable. BNG's funding for 2023 is expected to return to between EUR 12bn and EUR 14bn. In addition, their sustainability and social housing bonds are already well established. It is similar for NWB, which issues the equivalent of EUR 10bn in various currencies each year. Here, ESG criteria appear in the form of water bonds, affordable housing and sustainable development goals. The target for SRI bonds is always above 25%. Both Dutch banks are also strongly diversified via different currencies – only the Nordics are more so in this regard. EUR benchmarks from the Canadian provinces are difficult to predict. All issuers primarily prefer their domestic currency, using the euro only opportunistically when a window opens on the basis of cross-currency swaps.

ESG – far from a purely green segment: environmental, social, governance

The volume of issued green bonds has grown strongly and almost exponentially since the EIB's first green bond issuance in 2007. However, growth in the meantime stagnated at a very high level after 2017. As a result, the growth path seemed to be interrupted at first. Nevertheless, the milestone for an issue volume of over EUR 100bn per annum was exceeded. The ESG segment received an additional boost in terms of both green and social issuances. The EU's SURE programme alone cumulatively consists of almost EUR 100bn in social bonds. From 2021 to 2026, the EU is set to become the world's largest green issuer. The French issuers UNEDIC and CADES are also active in large volumes here. On the whole, countless issuers not only focused on social housing and social inclusion, but also the coronavirus pandemic in order to counter the social consequences and consequential losses. In 2023, it will also be interesting to see 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 and North Rhine-Westphalia have also built up a sustainable or 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 36.4bn has been raised so far.

Digital bonds gaining popularity

Last but not least, it is time to take a look at the general digital transformation in the bond market. The EIB was not just a pioneer for ESG bonds but also for EUR digital bonds in 2021 and 2022. Although these did not even feature sub-benchmark volumes, their promising relevance for the future cannot be denied. KfW also issued its first digital bond last week, paving the way for German issuers. We doubt whether digital bonds will play a significant role in 2023. Nevertheless, the situation continues to develop and is one we will continue to monitor.

Conclusion and outlook

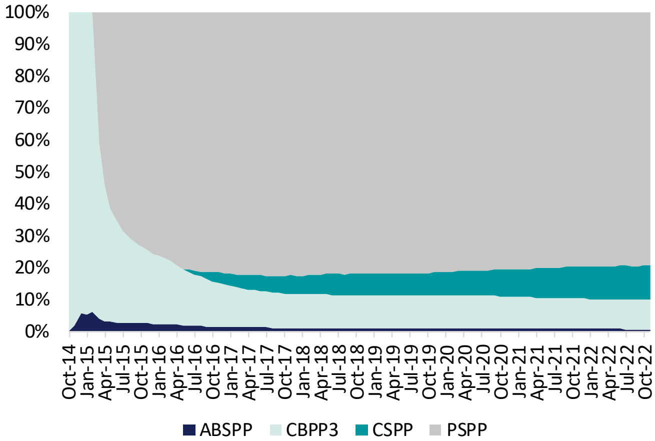
In 2023, we expect the SSA segment to be less dominated by the COVID-19 pandemic, or perhaps more accurately, the measures taken by public issuers to tackle the pandemic. Rather, the declining reinvestments under the ECB's asset purchase programmes will come to the fore instead. The APP should be mentioned here, in particular. We are already hoping for details on the duration and scope of these in the context of the APP and the Eurosystem's tendencies towards tapering from tomorrow's ECB press conference, which will set the tone for monetary policy in 2023. In addition, we do not assume any dramatic movement in the spread landscape in our baseline scenario. In our view, this is prevented by the hundreds of billions of ongoing reinvestments under the PSPP and PEPP. Over a period of 18 months to three years, the spread levels from 2016 could represent a realistic target for most issuers within our coverage. We also await the effect of seasonal patterns, such as how strong January will be (the EU might only return to the market in February). The impact of the current energy crisis remains difficult to predict; further relief packages with additional funding requirements cannot be ruled out. There is also potential for surprises in Laender funding from (not) dealing with the debt brake, which is coming into force again.

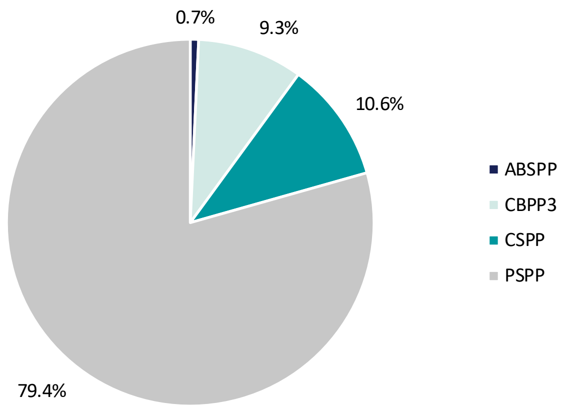
ECB tracker

Asset Purchase Programme (APP)

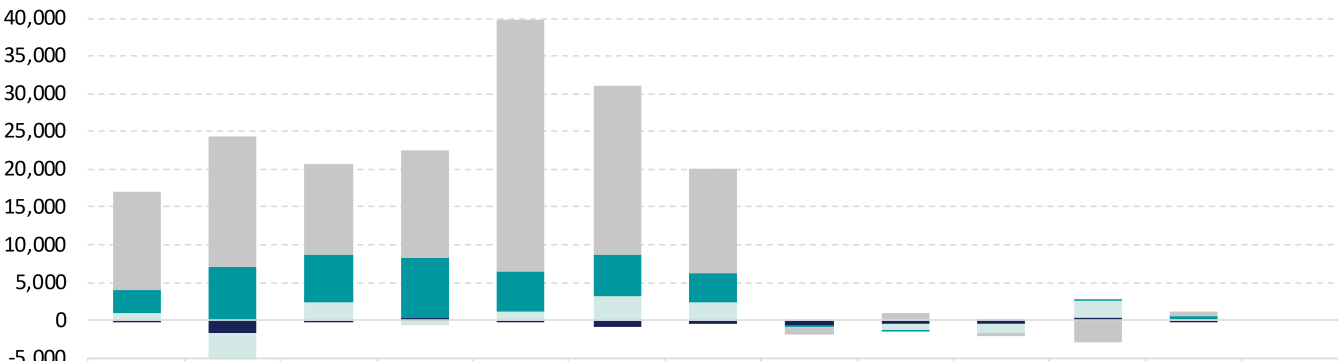
	ABSPP	CBPP3	CSPP	PSPP	APP
Oct-22	23,844	302,385	344,527	2,585,180	3,255,936
Nov-22	23,839	302,482	345,039	2,585,720	3,257,080
Δ	-5	+97	+513	+540	+1,145

Portfolio structure





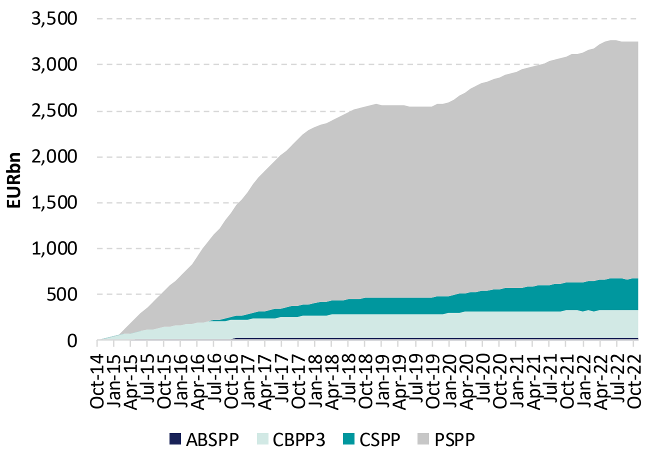
Monthly net purchases (in EURm)



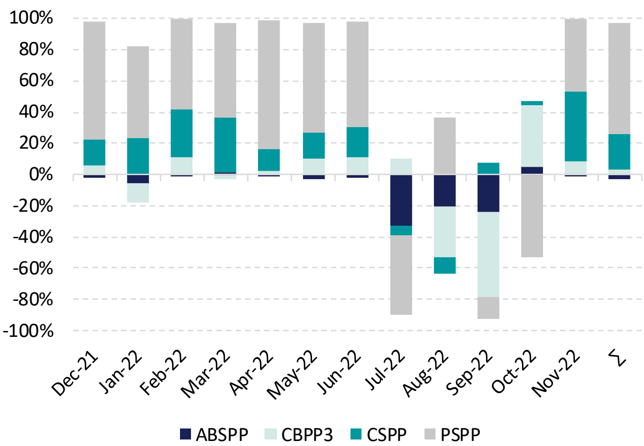
	Dec-21	Jan-22	Feb-22	Mar-22	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	∑
APP	16,596	18,838	20,698	21,929	39,397	30,232	19,722	-1,759	-656	-1,884	-320	1,145	163,938
PSPP	12,989	17,292	12,095	14,172	33,238	22,443	13,924	-1,114	869	-315	-2,938	540	123,195
CSPP	3,007	6,970	6,272	8,042	5,461	5,366	3,858	-141	-253	164	139	513	39,398
CBPP3	942	-3,761	2,376	-606	1,074	3,247	2,339	217	-787	-1,210	2,229	97	6,157
ABSPP	-342	-1,663	-45	321	-376	-824	-399	-721	-485	-523	250	-5	-4,812

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

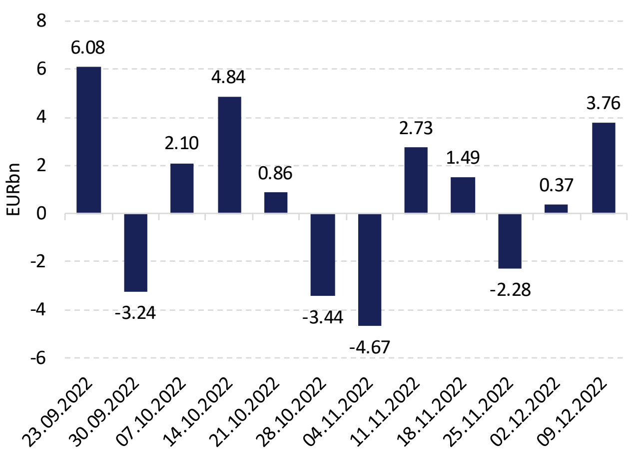
Portfolio development



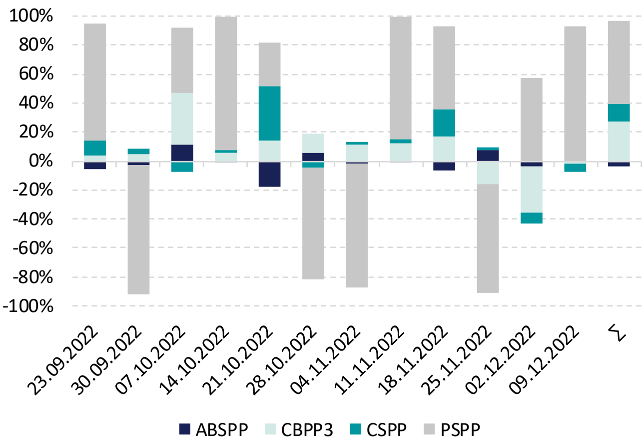
Distribution of monthly purchases



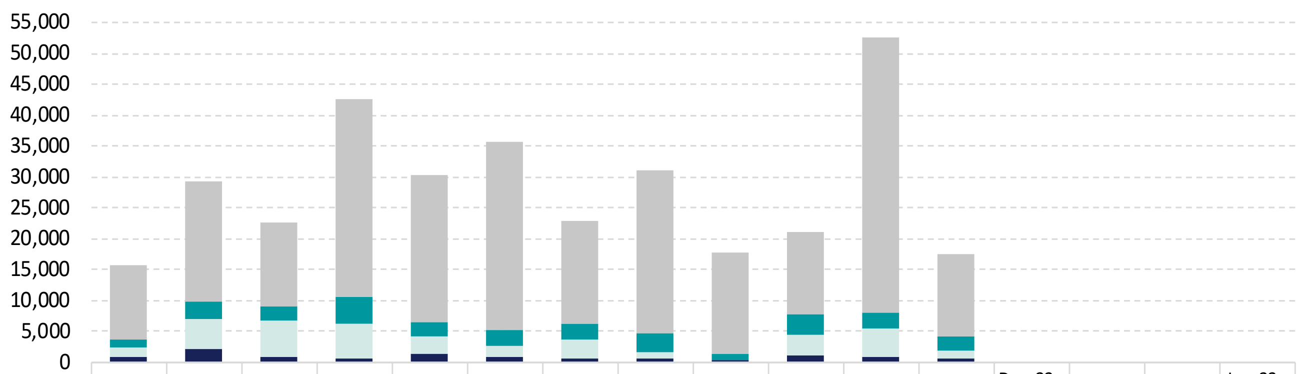
Weekly purchases



Distribution of weekly purchases



Expected monthly redemptions (in EURm)

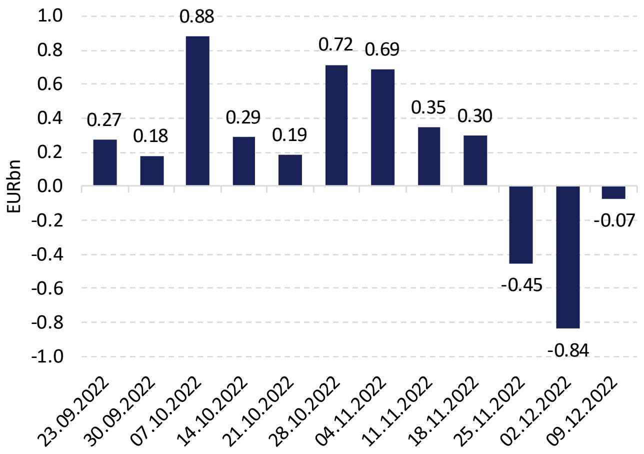


	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23	May-23	Jun-23	Jul-23	Aug-23	Sep-23	Oct-23	Nov-23	Dec-22 - Nov-23	2021	2022	Jan-23 - Nov-23
APP	15,640	29,167	22,577	42,487	30,333	35,805	22,847	30,997	17,821	21,139	52,720	17,404	338,937	247,069	299,107	323,297
PSPP	12,016	19,469	13,624	31,961	23,792	30,556	16,619	26,296	16,445	13,316	44,729	13,245	262,068	188,494	228,585	250,052
CSPP	1,243	2,784	2,182	4,219	2,388	2,579	2,557	3,033	986	3,362	2,616	2,337	30,286	17,134	17,670	29,043
CBPP3	1,487	4,786	6,065	5,631	2,937	1,874	3,112	1,170	0	3,346	4,465	1,351	36,224	30,143	41,244	34,737
ABSPP	894	2,128	706	676	1,216	796	559	498	390	1,115	910	471	10,359	11,298	11,608	9,465

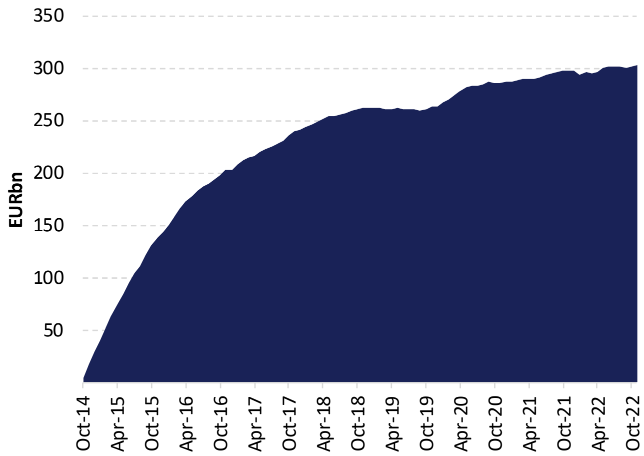
Source: ECB, Bloomberg, NORD/LB Markets Strategy & Floor Research

Covered Bond Purchase Programme 3 (CBPP3)

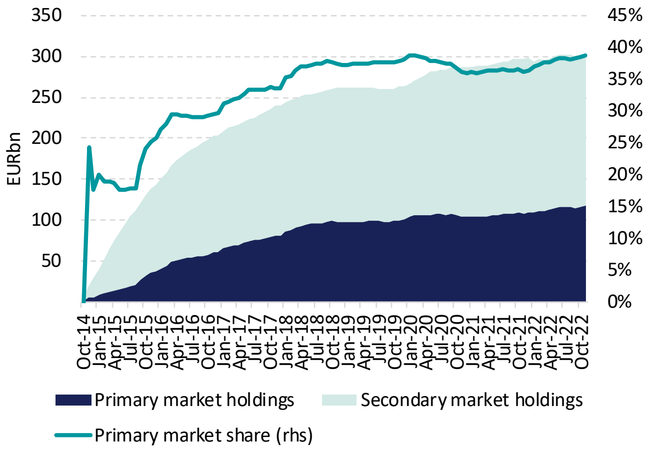
Weekly purchases



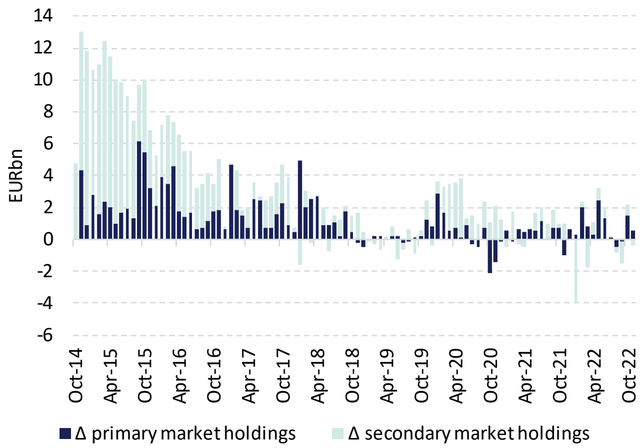
Development of CBPP3 volume



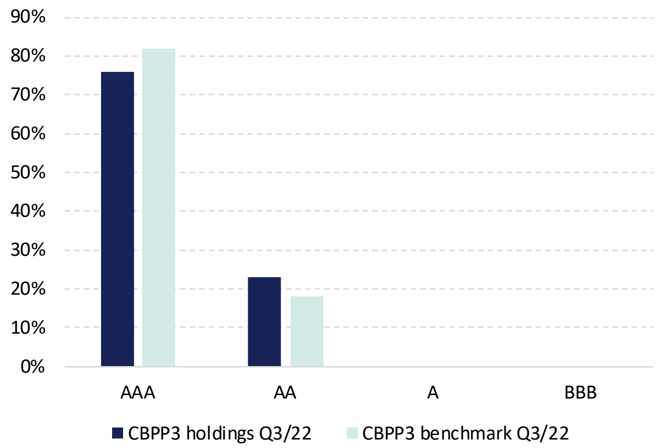
Primary and secondary market holdings



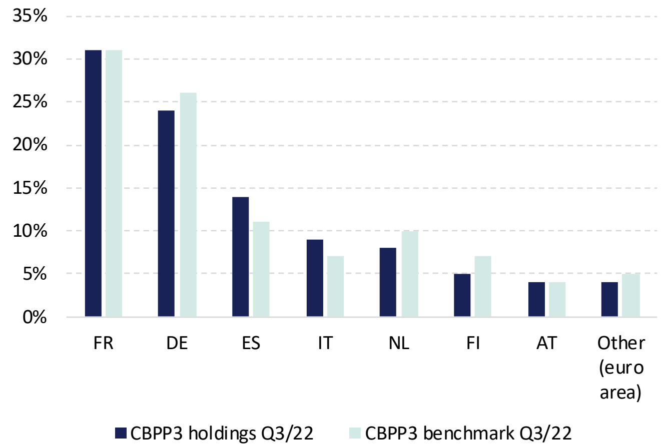
Change of primary and secondary market holdings



Distribution of CBPP3 by credit rating



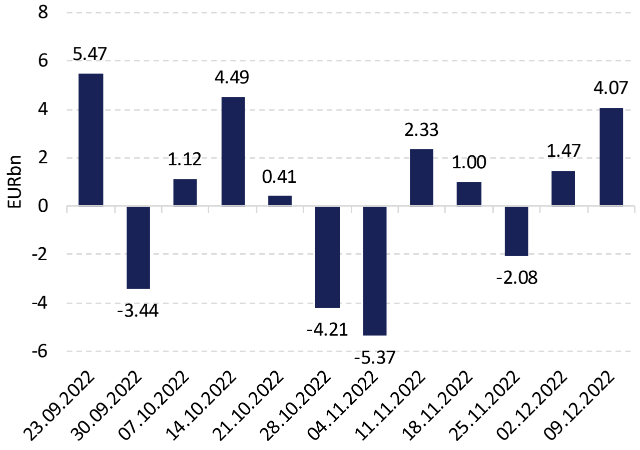
Distribution of CBPP3 by country of risk



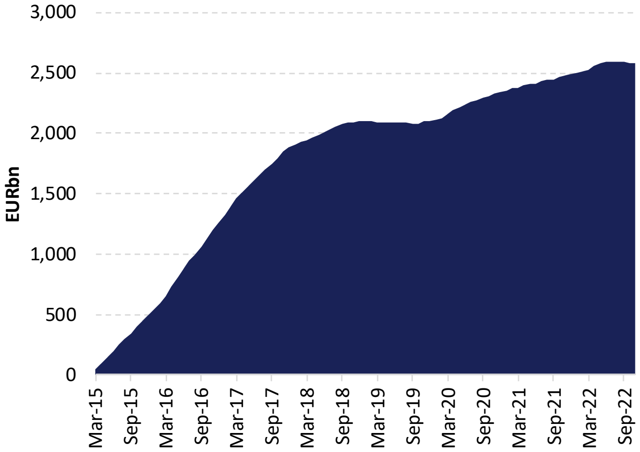
Source: ECB, Bloomberg, NORD/LB Markets Strategy & Floor Research

Public Sector Purchase Programme (PSPP)

Weekly purchases



Development of PSPP volume



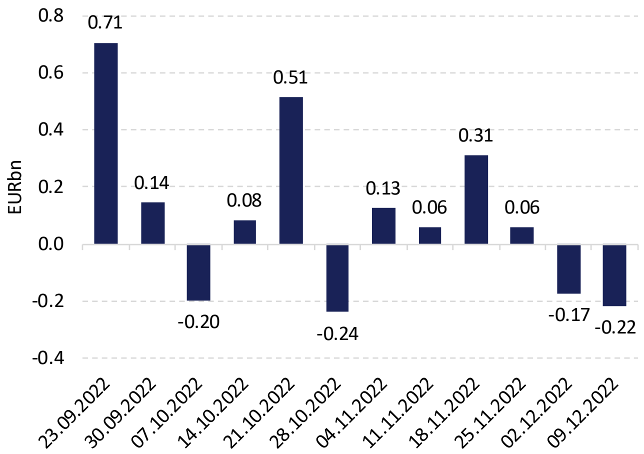
Overall distribution of PSPP buying at month-end

Jurisdiction	Adjusted distribution key[1]	Holdings (EURm)	Expected holdings (EURm)[2]	Difference (EURm)	Current WAM of portfolio[3] (in years)	WAM of eligible universe[4] (in years)	Difference (in years)
AT	2.7%	74,794	74,046	748	7.6	8.4	-0.9
BE	3.4%	94,058	92,168	1,890	7.3	10.4	-3.1
CY	0.2%	4,483	5,444	-961	8.4	8.9	-0.6
DE	24.3%	668,299	666,903	1,396	6.7	8.0	-1.3
EE	0.3%	531	7,126	-6,595	7.9	8.5	-0.6
ES	11.0%	315,704	301,673	14,031	7.7	8.2	-0.5
FI	1.7%	44,102	46,470	-2,368	8.1	8.9	-0.8
FR	18.8%	532,243	516,702	15,541	6.8	8.6	-1.9
GR	0.0%	0	0	0	0.0	0.0	0.0
IE	1.6%	42,708	42,840	-132	8.4	10.2	-1.8
IT	15.7%	445,698	429,782	15,916	7.2	8.0	-0.8
LT	0.5%	5,992	14,642	-8,650	10.1	9.7	0.4
LU	0.3%	3,942	8,333	-4,391	5.7	7.6	-1.9
LV	0.4%	3,900	9,858	-5,958	8.7	8.6	0.1
MT	0.1%	1,432	2,653	-1,221	11.1	9.6	1.5
NL	5.4%	133,747	148,259	-14,512	7.7	9.4	-1.7
PT	2.2%	53,853	59,211	-5,358	7.5	7.9	-0.4
SI	0.4%	11,177	12,181	-1,004	9.3	9.4	-0.1
SK	1.1%	18,570	28,973	-10,403	7.8	8.5	-0.8
SNAT	10.0%	286,168	274,140	12,028	8.2	9.5	-1.3
Total / Avg.	**100.0%**	**2,741,404**	**2,741,404**	**0**	**7.3**	**8.5**	**-1.3**

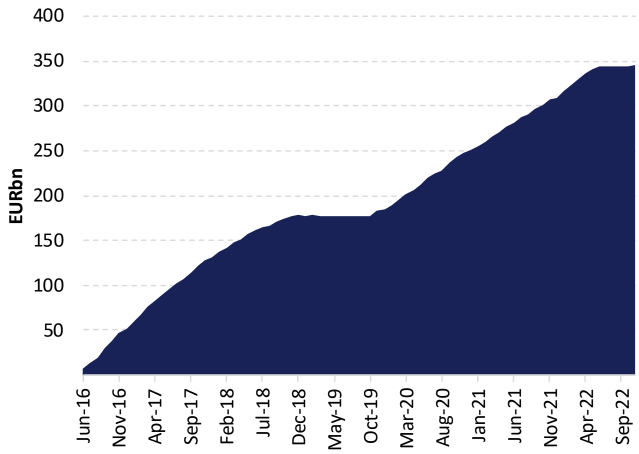
[1] Based on the ECB capital key, adjusted to include supras and the disqualification of Greece
[2] Based on the adjusted distribution key
[3] Weighted average time to maturity of PSPP portfolio holdings
[4] Weighted average time to maturity of the bonds eligible for purchasing under the PSPP
Source: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

Corporate Sector Purchase Programme (CSPP)

Weekly purchases

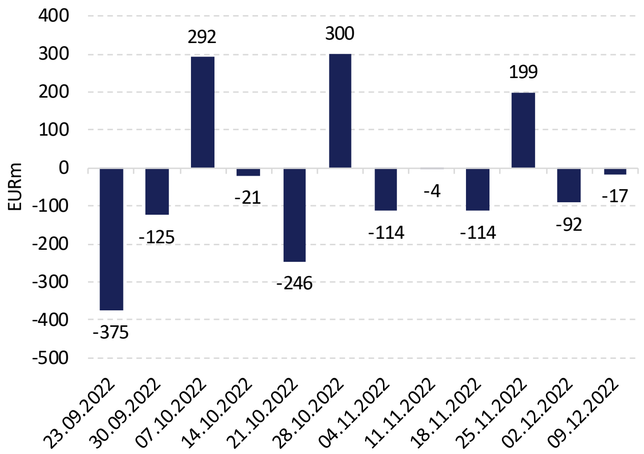


Development of CSPP volume

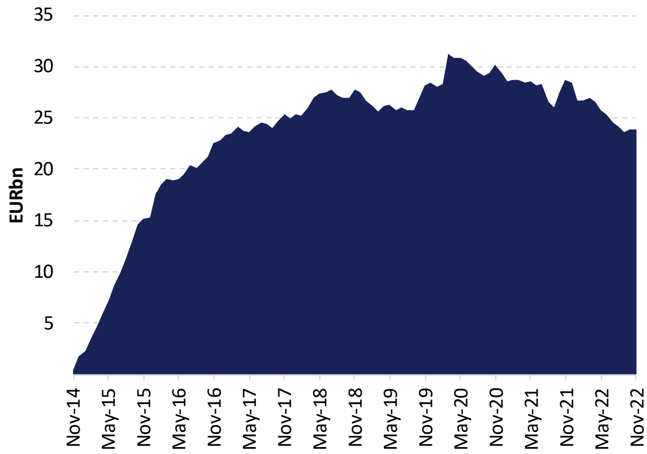


Asset-Backed Securities Purchase Programme (ABSPP)

Weekly purchases



Development of ABSPP volume



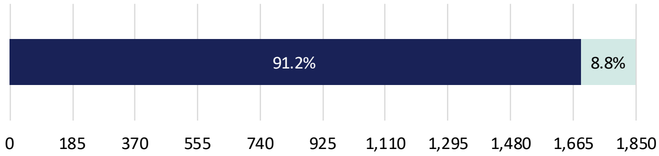
Source: ECB, Bloomberg, NORD/LB Markets Strategy & Floor Research

Pandemic Emergency Purchase Programme (PEPP)

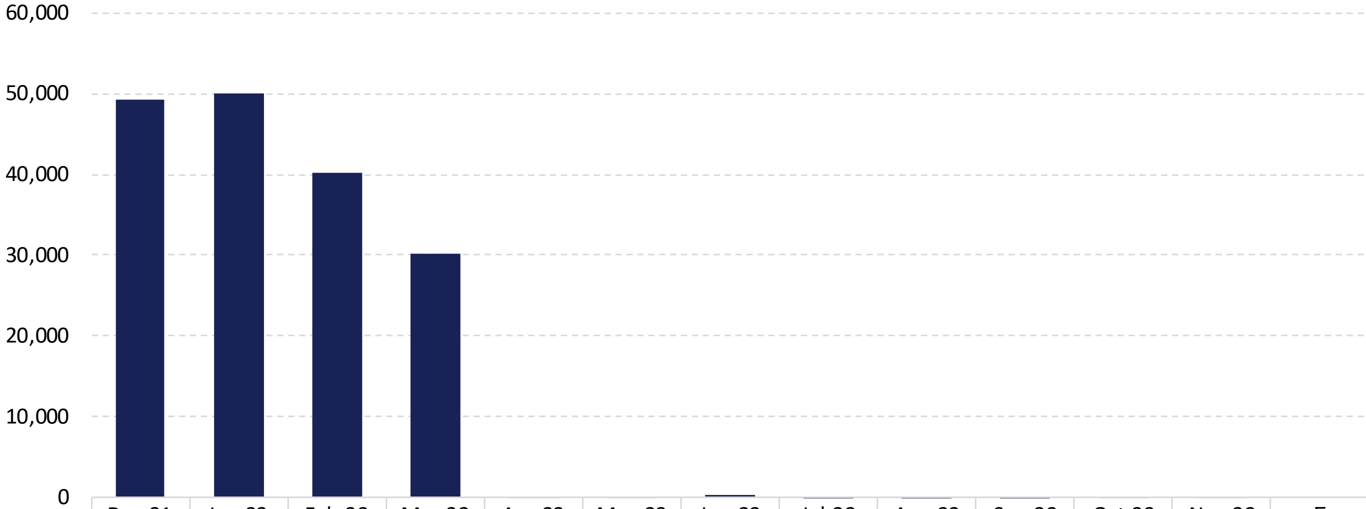
Holdings (in EURm)

	PEPP
Oct-22	1,712,889
Nov-22	1,712,753
Δ (net purchases)	-136

Invested share of PEPP envelope (in EURbn)

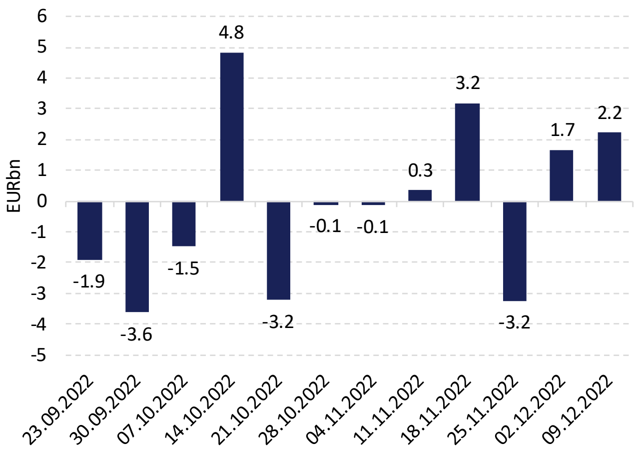


Monthly net purchases (in EURm)

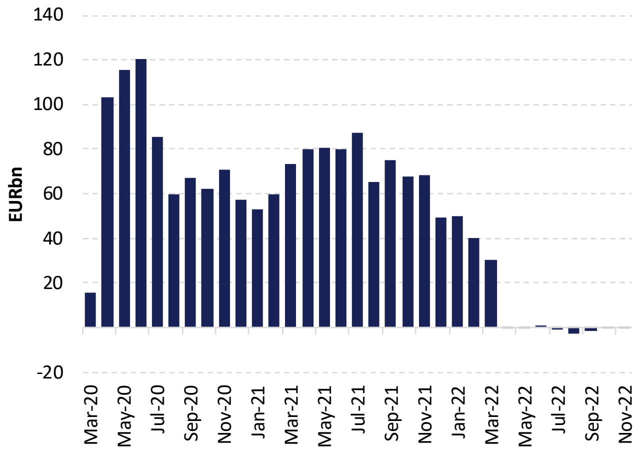


	Dec-21	Jan-22	Feb-22	Mar-22	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	∑
PEPP	49,375	50,113	40,184	30,214	-4	-10	12	-722	-2,813	-1,505	-146	-136	164,562

Weekly purchases



Development of PEPP volume



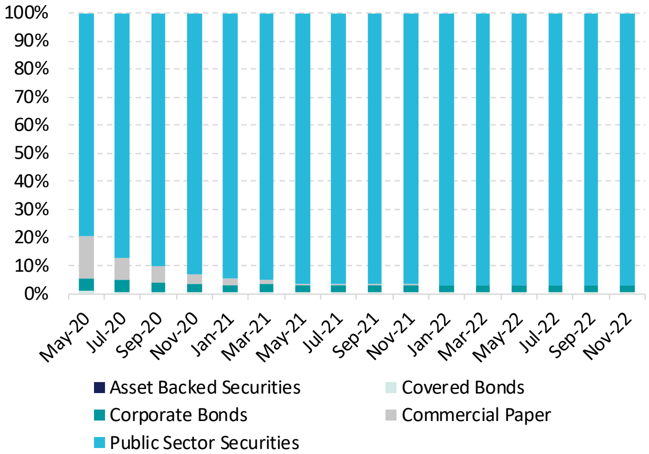
Source: ECB, Bloomberg, NORD/LB Markets Strategy & Floor Research

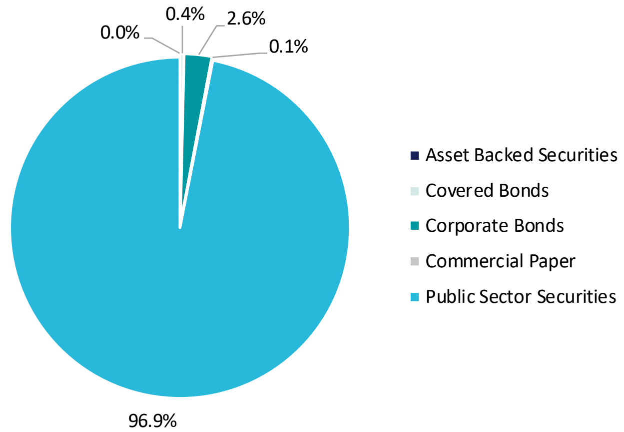
NORD/LB

Holdings under the PEPP (in EURm)

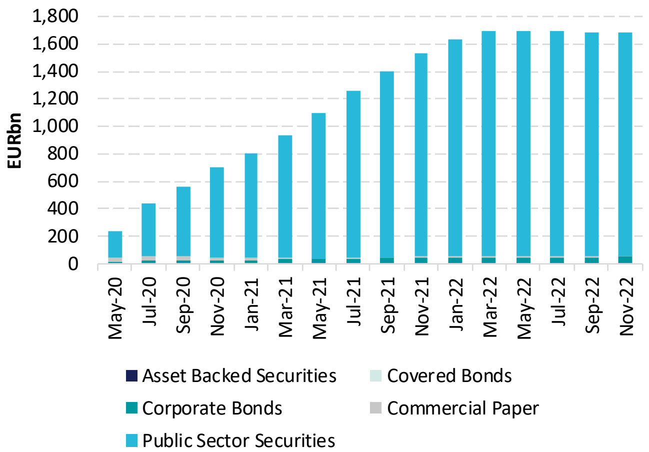
	Asset-backed Securities	Covered Bonds	Corporate Bonds	Commercial Paper	Public Sector Securities	PEPP
Sep-22	0	6,056	43,233	2,871	1,631,176	1,683,336
Nov-22	0	6,056	44,012	2,091	1,630,895	1,683,054
Δ (net purchases)	0	0	+780	-780	-281	-282

Portfolio structure

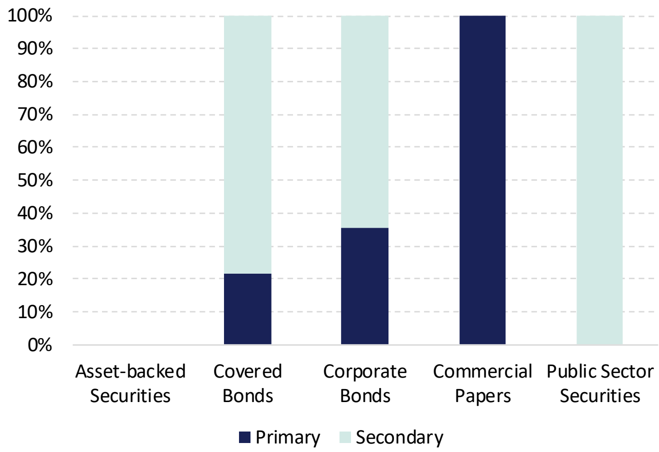




Portfolio development



Share of primary and secondary market holdings



Breakdown of private sector securities under the PEPP

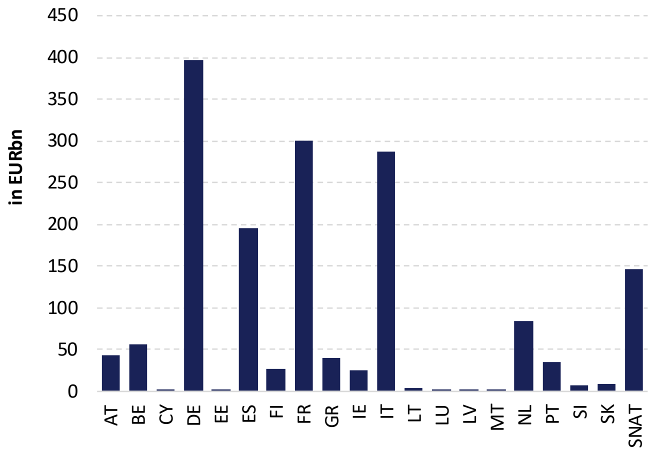
Sep-22	Asset-backed securities		Covered bonds		Corporate bonds		Commercial paper	
	Primary	Secondary	Primary	Secondary	Primary	Secondary	Primary	Secondary
Holdings in EURm	0	0	1,298	4,758	15,407	27,826	2,873	0
Share	0.0%	0.0%	21.4%	78.6%	35.6%	64.4%	100.0%	0.0%

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

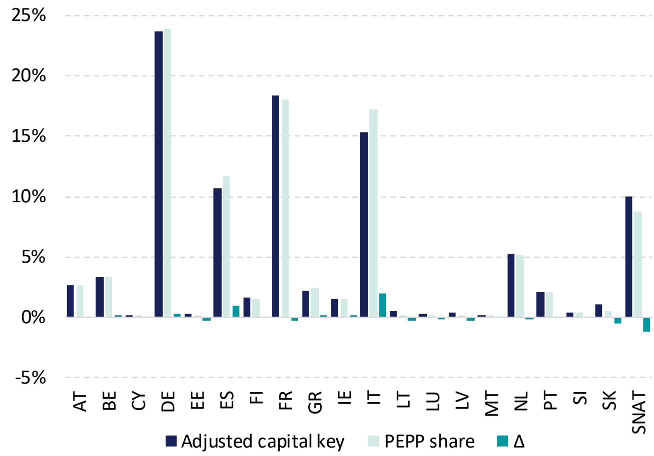
Breakdown of public sector securities under the PEPP

Jurisdiction	Holdings (in EURm)	Adj. distribution key[1]	PEPP share	Deviations from the adj. distribution key[2]	Current WAM[3] (in years)	WAM of eligible universe[4] (in years)	Difference (in years)
AT	43,449	2.6%	2.6%	0.0%	7.7	7.3	0.3
BE	56,175	3.3%	3.4%	0.1%	6.4	9.5	-3.1
CY	2,487	0.2%	0.1%	0.0%	8.4	8.3	0.2
DE	397,704	23.7%	24.0%	0.2%	6.8	6.8	0.0
EE	256	0.3%	0.0%	-0.2%	7.5	7.5	0.1
ES	194,758	10.7%	11.7%	1.0%	7.4	7.4	0.0
FI	26,208	1.7%	1.6%	-0.1%	7.6	7.7	-0.1
FR	299,751	18.4%	18.1%	-0.3%	7.8	7.7	0.0
GR	39,607	2.2%	2.4%	0.2%	8.2	9.6	-1.4
IE	25,825	1.5%	1.6%	0.0%	8.8	9.7	-0.9
IT	287,027	15.3%	17.3%	2.0%	7.2	6.9	0.4
LT	3,222	0.5%	0.2%	-0.3%	9.7	8.9	0.8
LU	1,898	0.3%	0.1%	-0.2%	6.0	6.7	-0.7
LV	1,890	0.4%	0.1%	-0.2%	8.1	7.7	0.4
MT	606	0.1%	0.0%	-0.1%	10.6	8.8	1.8
NL	84,558	5.3%	5.1%	-0.2%	7.7	8.6	-0.9
PT	34,425	2.1%	2.1%	0.0%	6.8	7.2	-0.5
SI	6,586	0.4%	0.4%	0.0%	8.7	9.1	-0.4
SK	7,966	1.0%	0.5%	-0.6%	8.3	7.9	0.4
SNAT	145,915	10.0%	8.8%	-1.2%	10.4	8.8	1.6
Total / Avg.	**1,660,313**	**100.0%**	**100.0%**	**0.0%**	**7.6**	**7.6**	**0.0**

Distribution of public sector assets by jurisdiction



Deviations from the adjusted distribution key



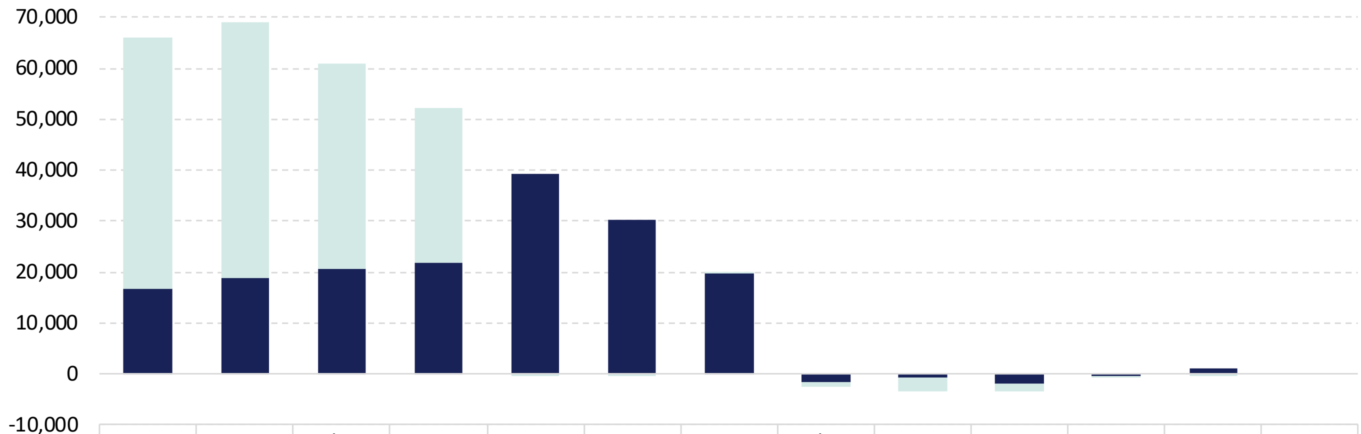
[1] Based on the ECB capital key, adjusted to include supras [2] Based on the adjusted distribution key
[3] Current WAM of public sector securities holdings under the PEPP [4] WAM of eligible universe of public sector securities holdings under the PEPP
Source: ECB, Bloomberg, NORD/LB Markets Strategy & Floor Research

Aggregated purchase activity under APP and PEPP

Holdings (in EURm)

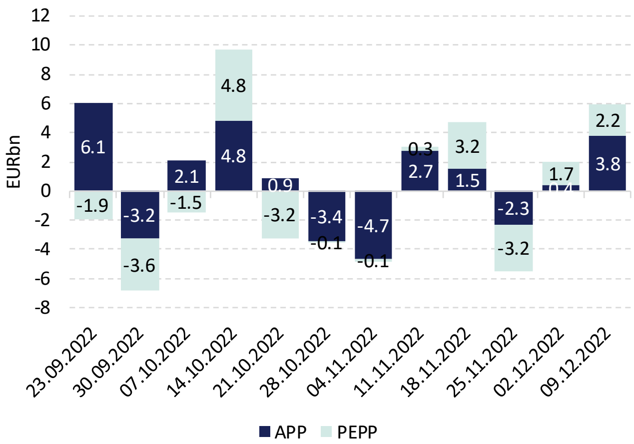
	APP	PEPP	APP & PEPP
Oct-22	3,255,936	1,712,889	4,968,825
Nov-22	3,257,080	1,712,753	4,969,833
Δ	+1,145	-136	+1,009

Monthly net purchases (in EURm)

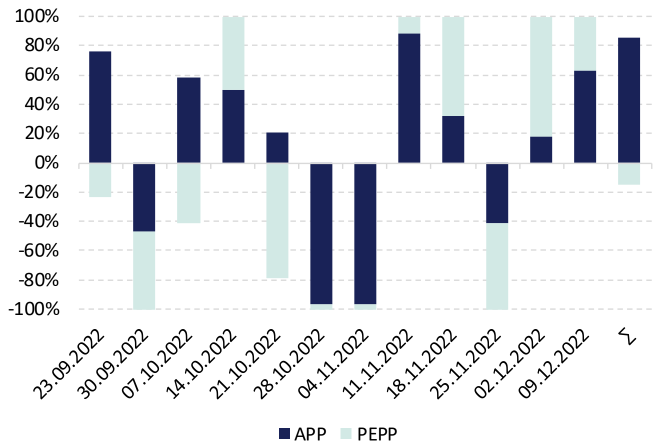


	Dec-21	Jan-22	Feb-22	Mar-22	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	∑
∑	65,971	68,951	60,882	52,143	39,393	30,222	19,734	-2,481	-3,469	-3,389	-466	1,009	328,500
PEPP	49,375	50,113	40,184	30,214	-4	-10	12	-722	-2,813	-1,505	-146	-136	164,562
APP	16,596	18,838	20,698	21,929	39,397	30,232	19,722	-1,759	-656	-1,884	-320	1,145	163,938

Weekly purchases



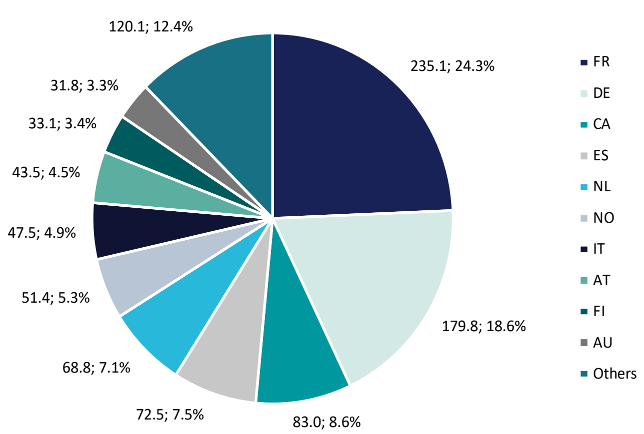
Distribution of weekly purchases



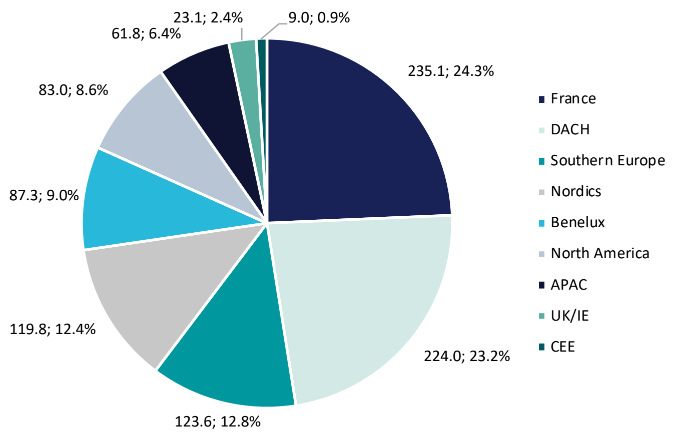
Source: ECB, Bloomberg, NORD/LB Markets Strategy & Floor Research

Charts & Figures
Covered Bonds

EUR benchmark volume by country (in EURbn)



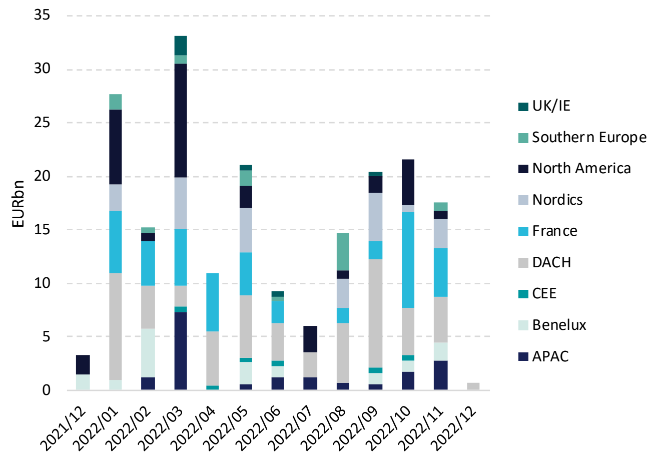
EUR benchmark volume by region (in EURbn)



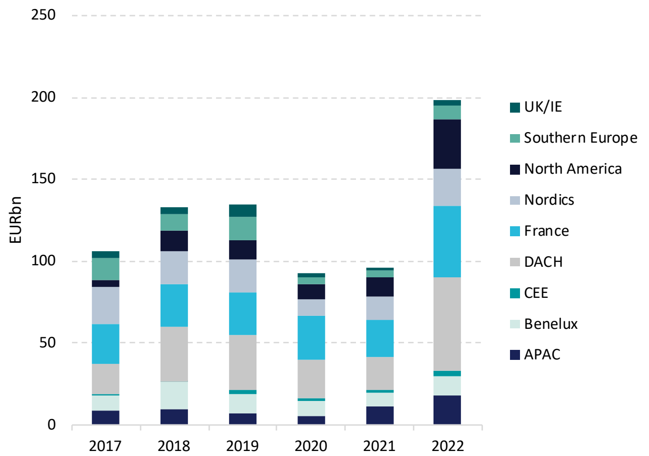
Top-10 jurisdictions

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	235.1	227	15	0.95	9.8	5.3	0.97
2	DE	179.8	256	26	0.65	8.3	4.4	0.68
3	CA	83.0	64	0	1.26	5.6	2.9	0.53
4	ES	72.5	58	5	1.14	11.6	3.6	1.77
5	NL	68.8	70	1	0.92	11.3	7.0	0.81
6	NO	51.4	61	11	0.84	7.2	3.7	0.53
7	IT	47.5	58	2	0.79	9.2	3.8	1.24
8	AT	43.5	77	3	0.56	9.1	5.7	0.83
9	FI	33.1	35	3	0.94	7.3	3.7	0.75
10	AU	31.8	32	0	0.99	7.8	3.9	1.14

EUR benchmark issue volume by month

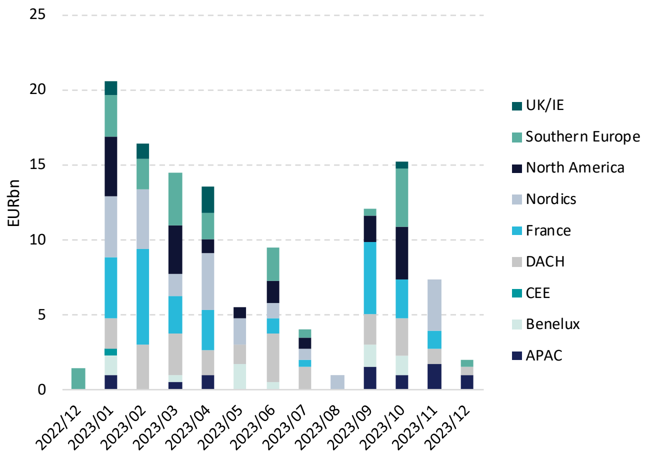


EUR benchmark issue volume by year

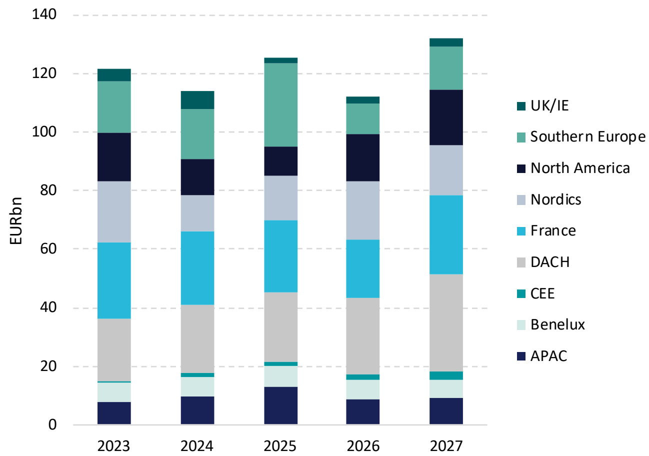


Source: Market data, Bloomberg, NORD/LB Markets Strategy & Floor Research

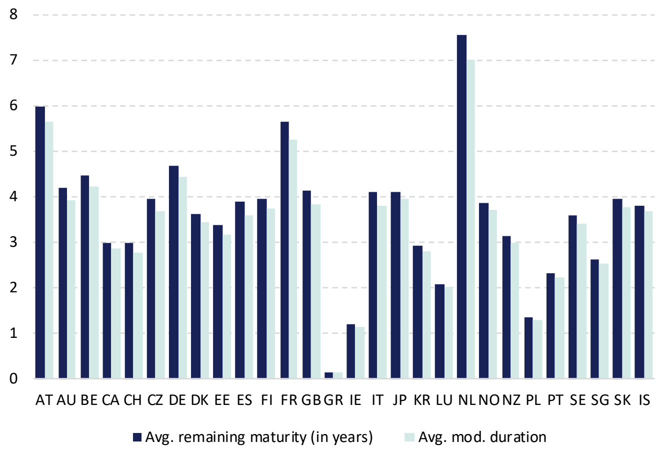
EUR benchmark maturities by month



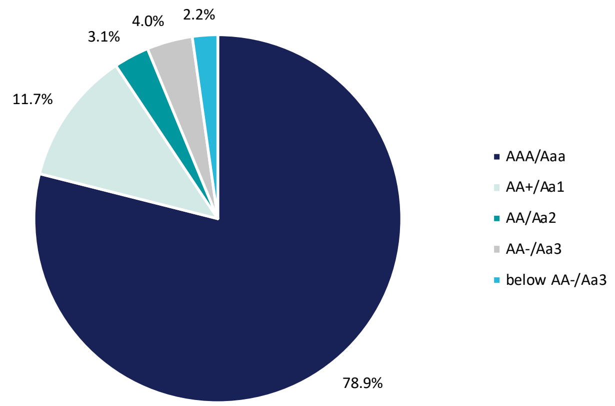
EUR benchmark maturities by year



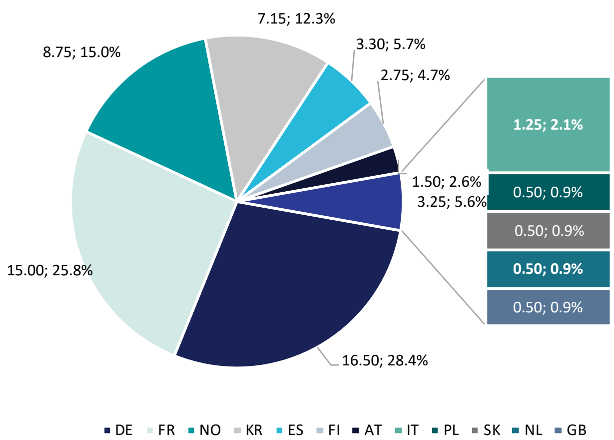
Modified duration and time to maturity by country



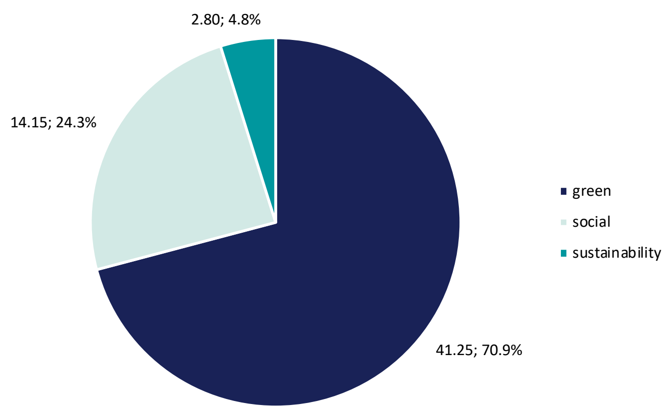
Rating distribution (volume weighted)



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

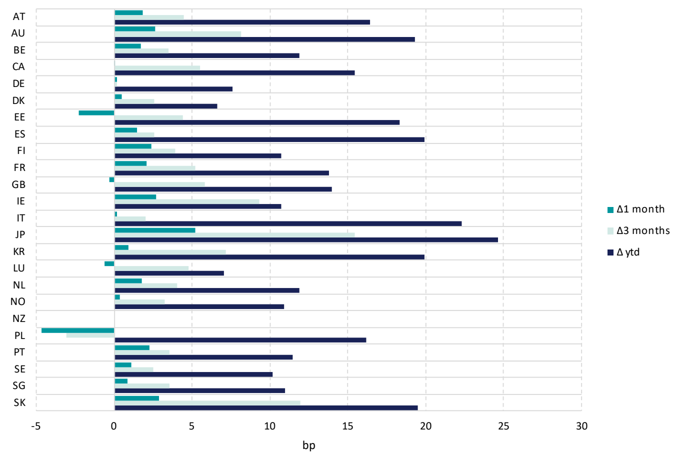


EUR benchmark volume (ESG) by type (in EURbn)

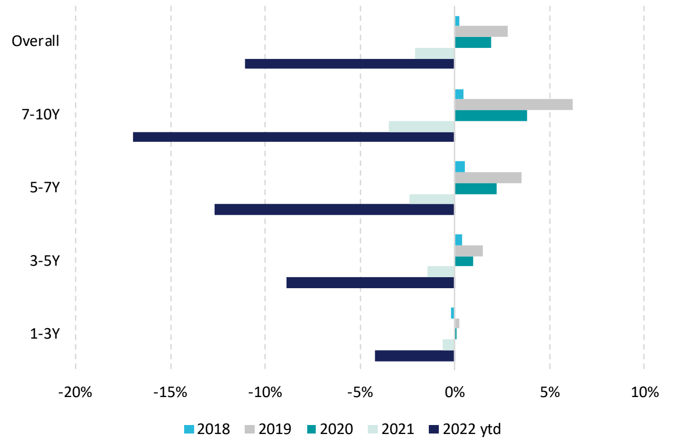


Source: Market data, Bloomberg, NORD/LB Markets Strategy & Floor Research

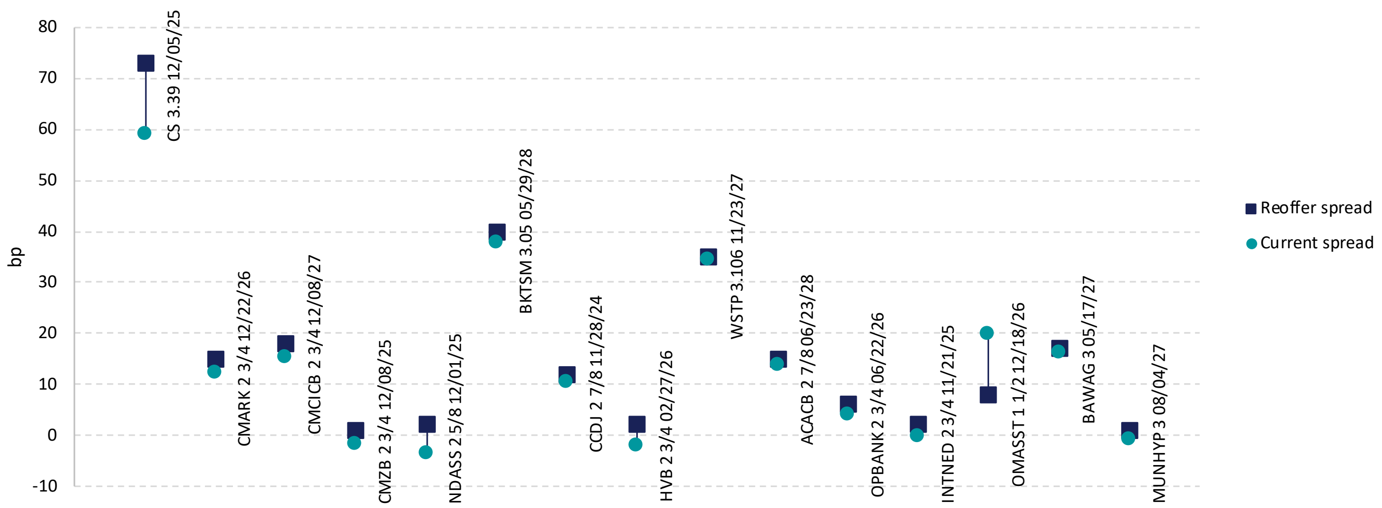
Spread development by country



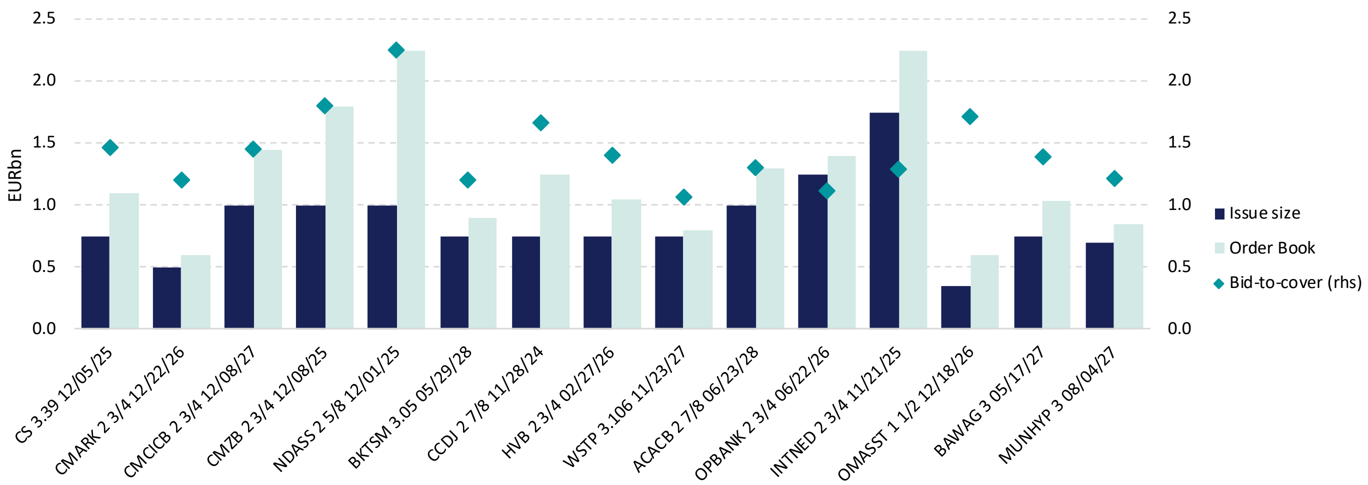
Covered bond performance (Total return)



Spread development (last 15 issues)



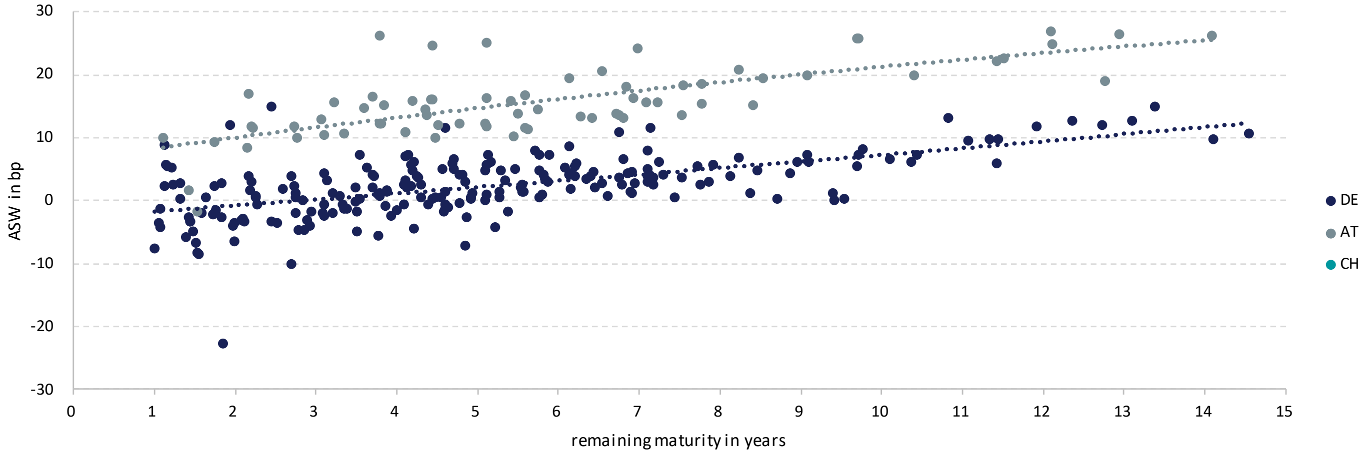
Order books (last 15 issues)



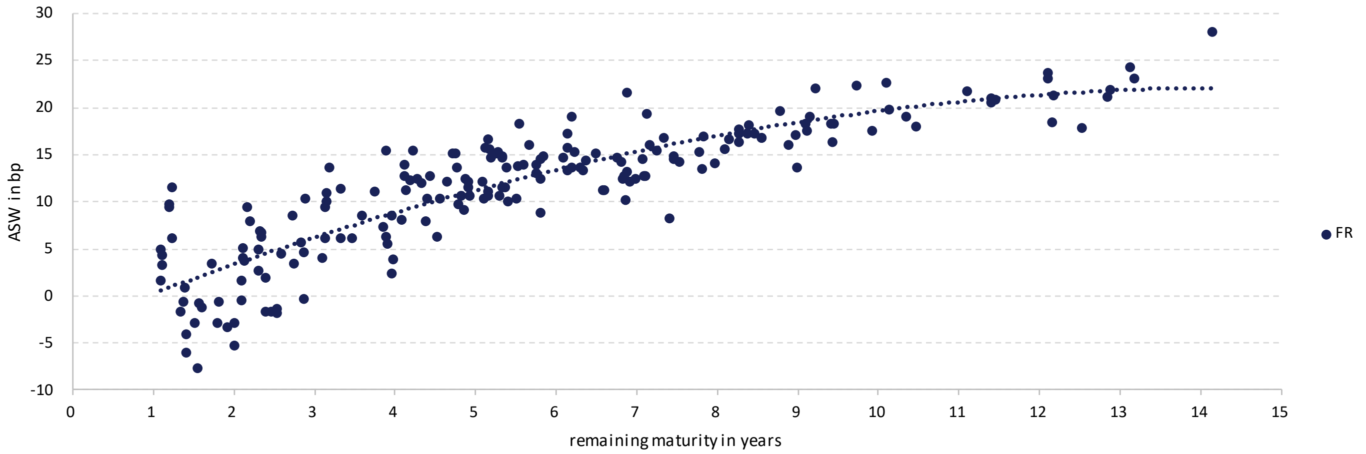
Source: Market data, Bloomberg, NORD/LB Markets Strategy & Floor Research

Spread overview[1]

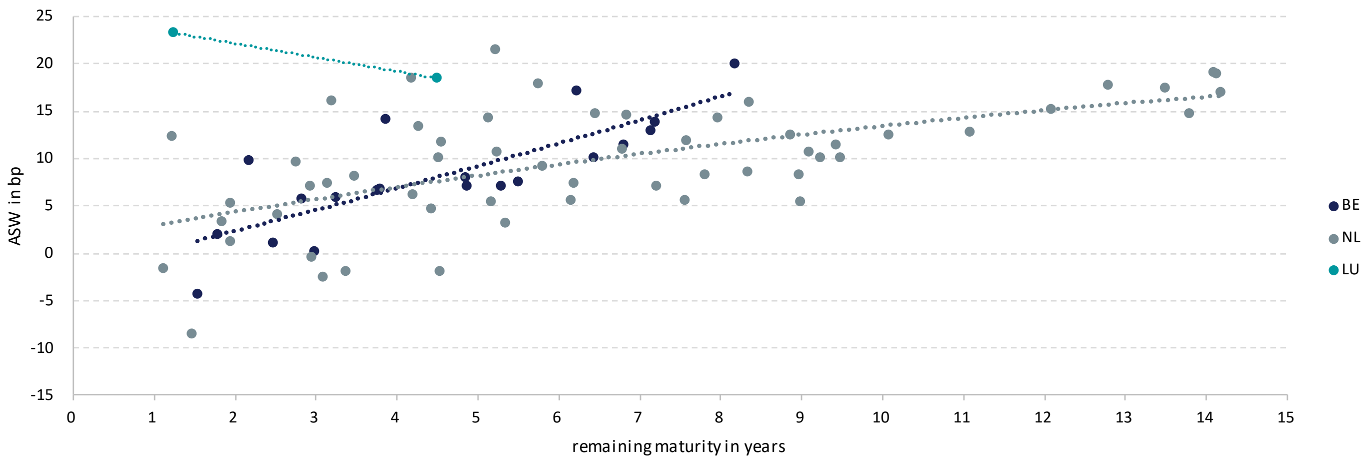
DACH



France

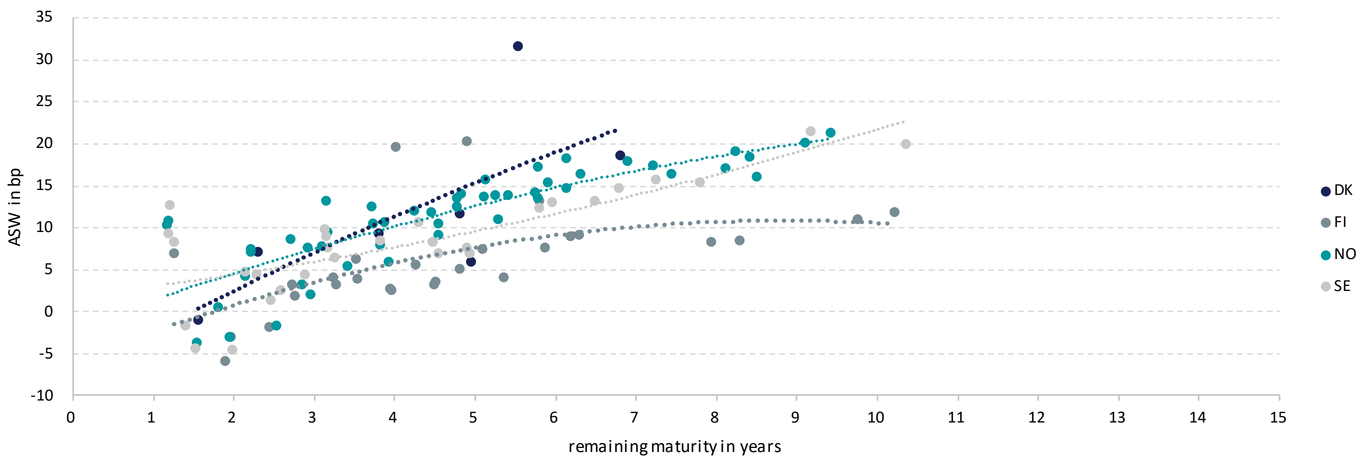


Benelux

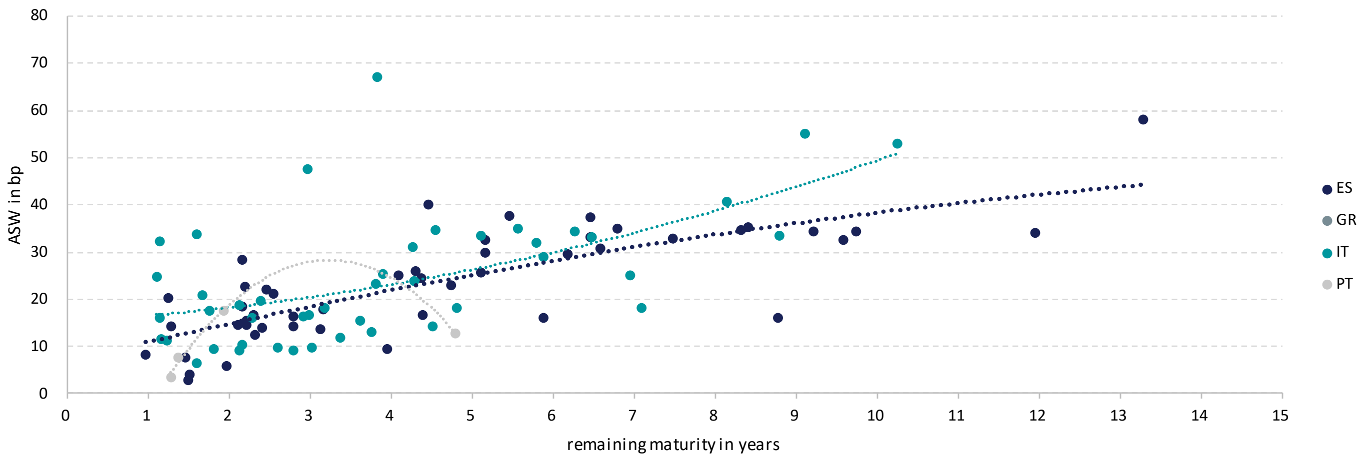


Source: Market data, Bloomberg, NORD/LB Markets Strategy & Floor Research [1]Time to maturity 1 ≤ y ≤ 15

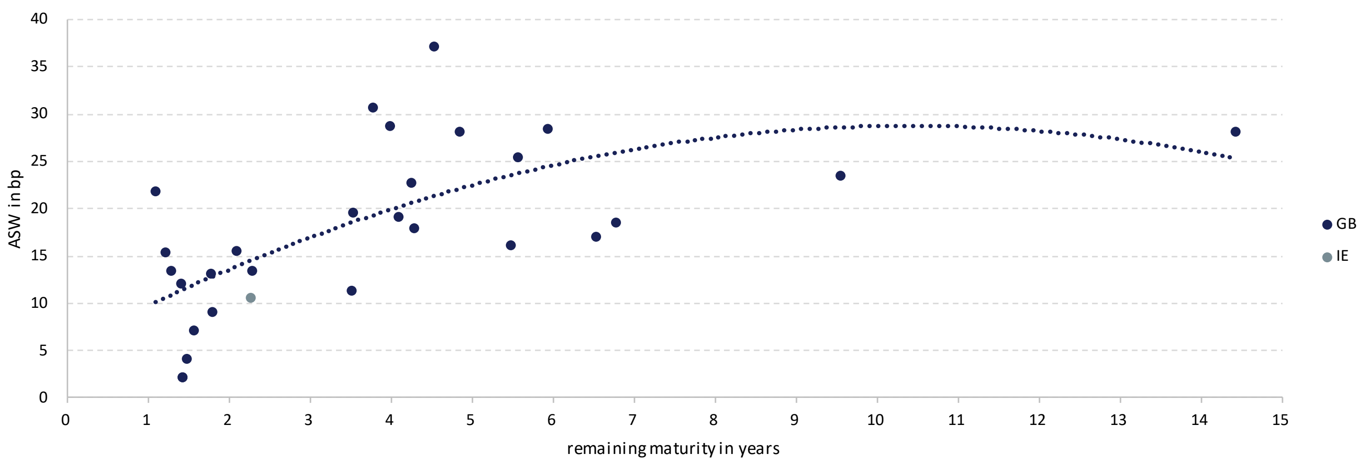
Nordics



Southern Europe

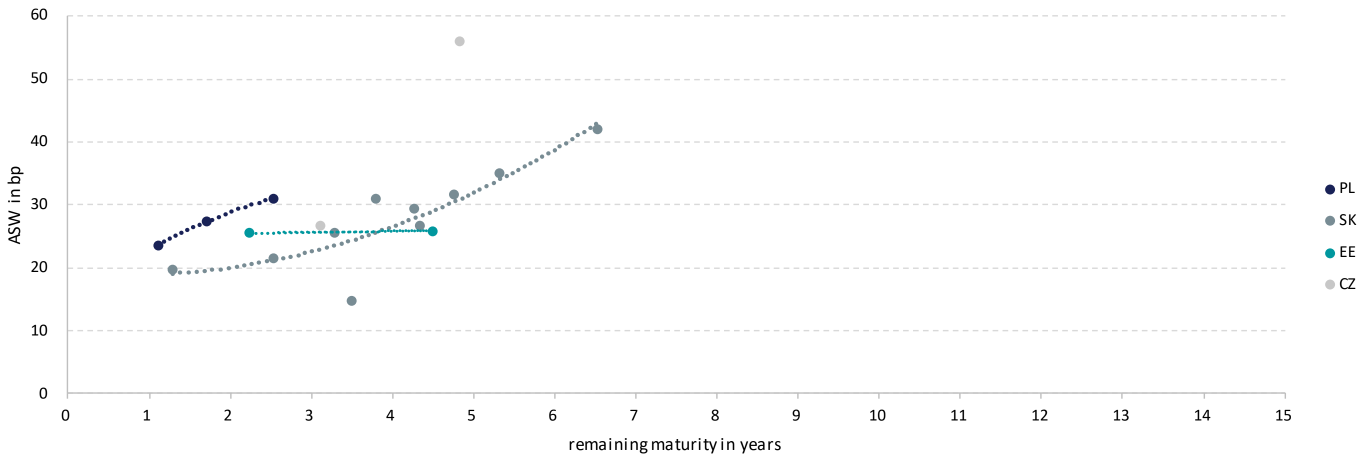


UK/IE

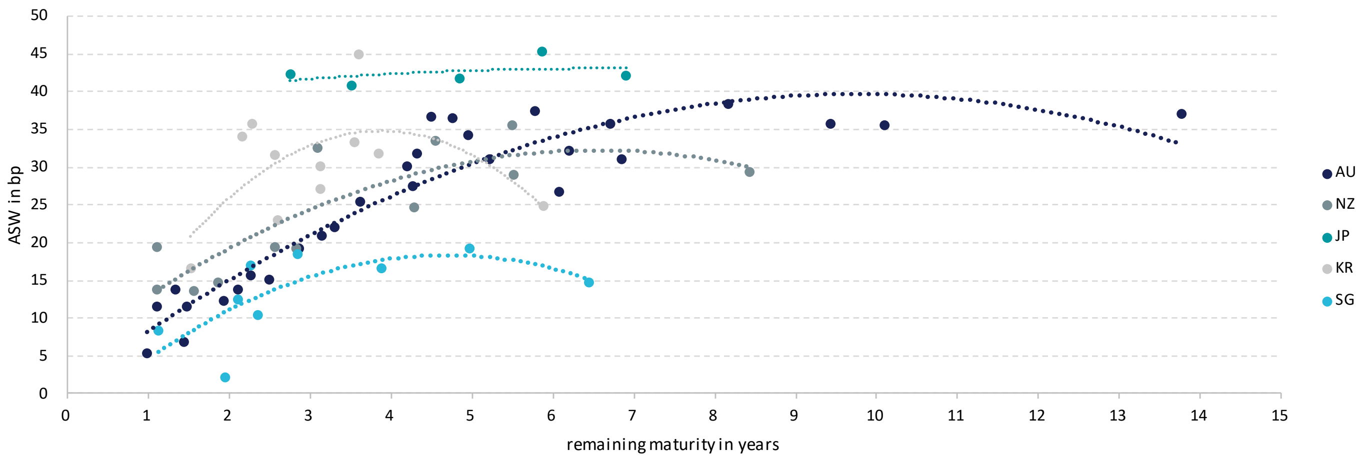


Source: Market data, Bloomberg, NORD/LB Markets Strategy & Floor Research

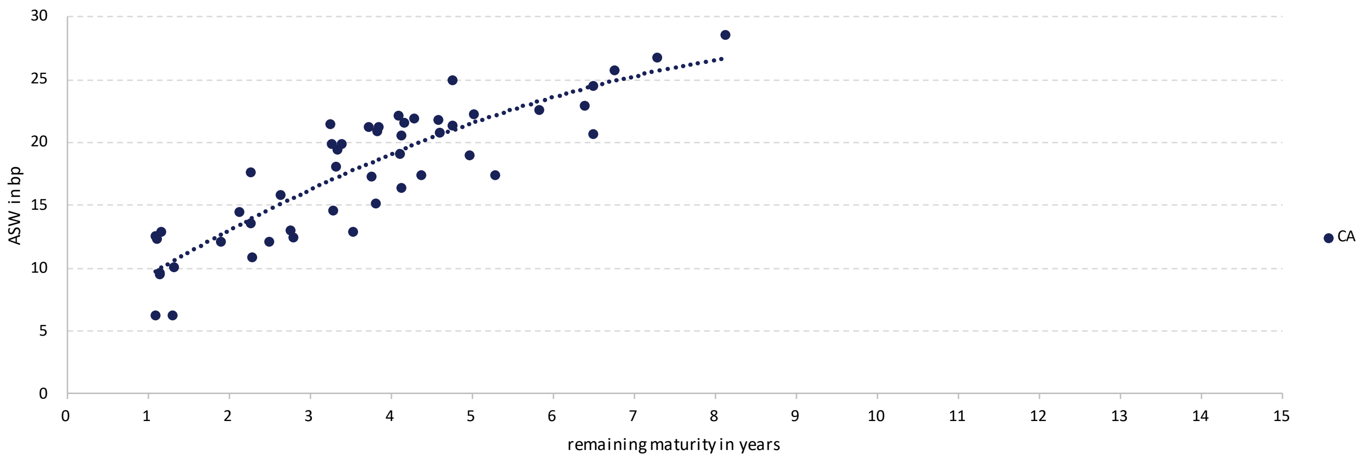
CEE



APAC



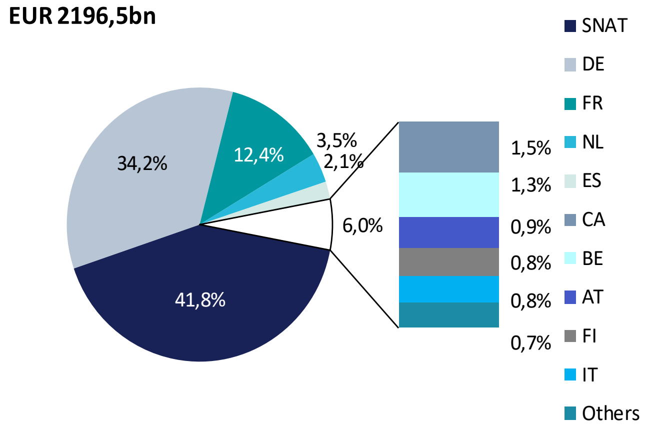
North America



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

Charts & Figures
SSA/Public Issuers

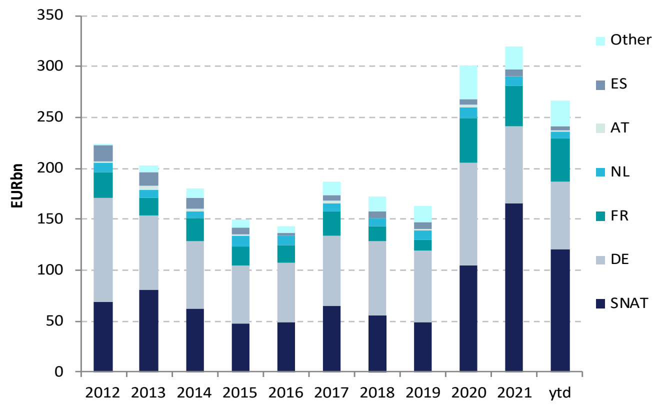
Outstanding volume (bmk)



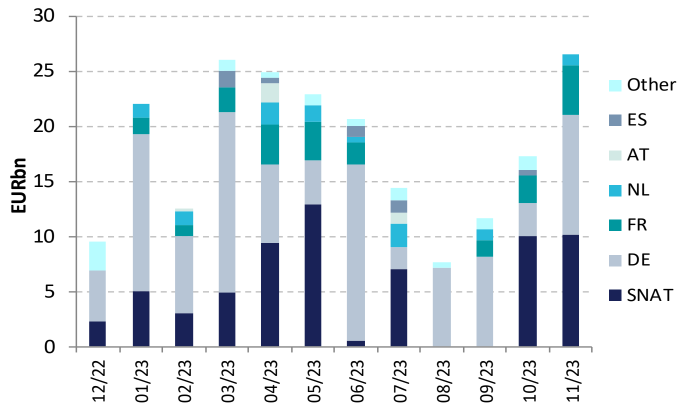
Top 10 countries (bmk)

Country	Vol. (€bn)	No. of bonds	ØVol. (€bn)	Vol. weight. ØMod. Dur.
SNAT	918,5	218	4,2	8,3
DE	751,8	558	1,3	6,4
FR	271,8	180	1,5	6,3
NL	77,2	69	1,1	6,6
ES	45,6	60	0,8	4,8
CA	32,6	23	1,4	4,6
BE	28,0	31	0,9	12,0
AT	19,8	23	0,9	4,6
FI	18,5	22	0,8	5,5
IT	16,8	20	0,8	5,0

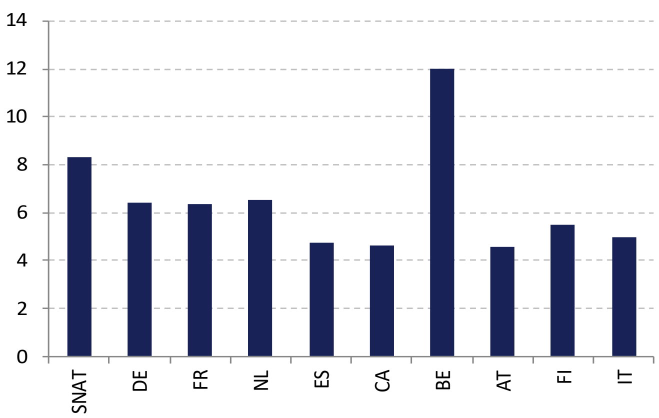
Issue volume by year (bmk)



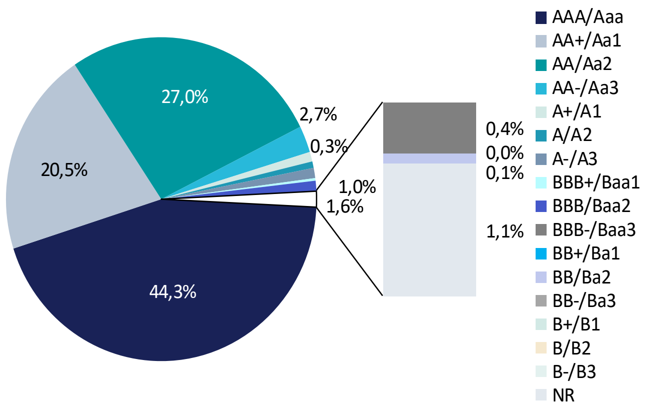
Maturities next 12 months (bmk)



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

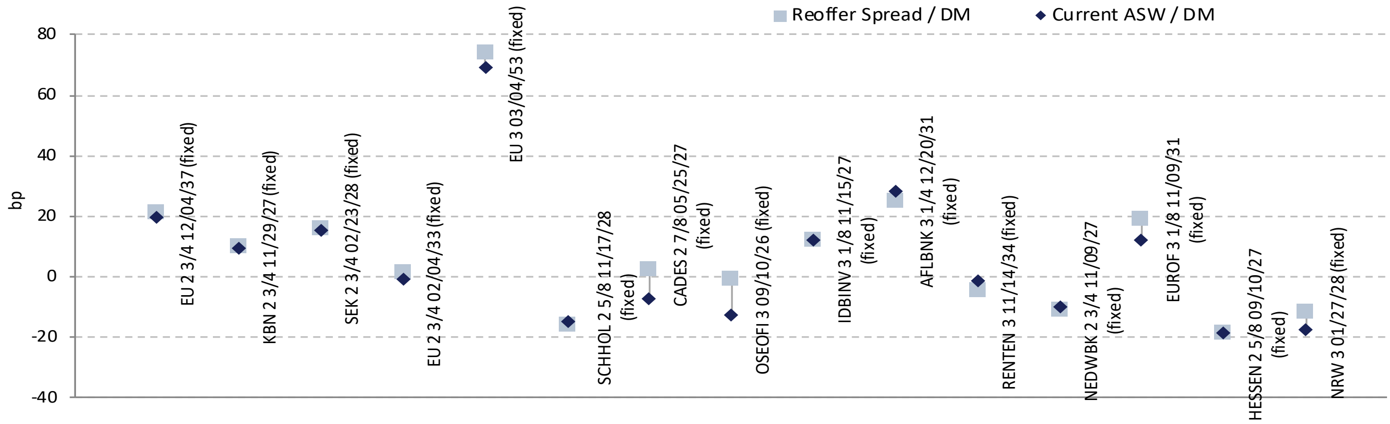


Rating distribution (vol. weighted)

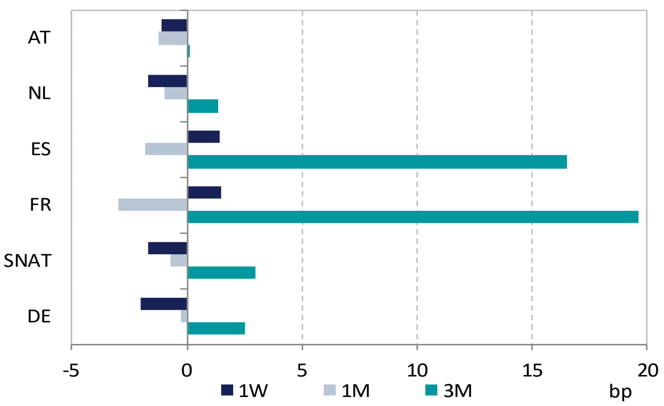


Source: Bloomberg, NORD/LB Markets Strategy & Floor Research

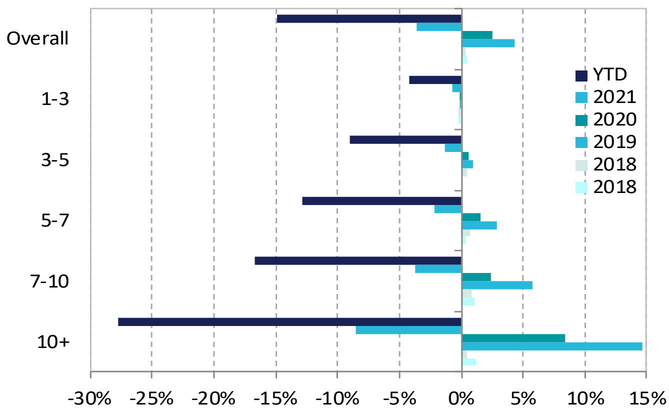
Spread development (last 15 issues)



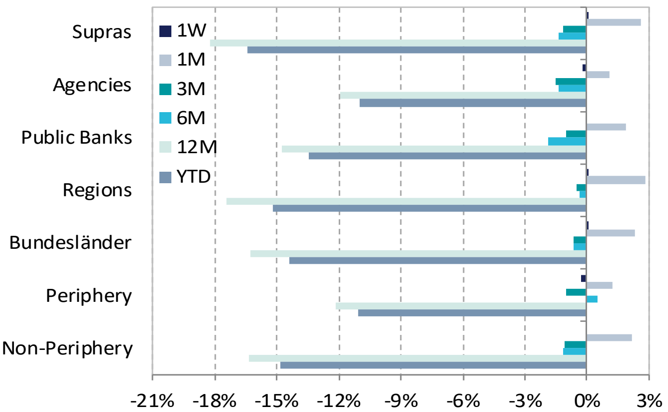
Spread development by country



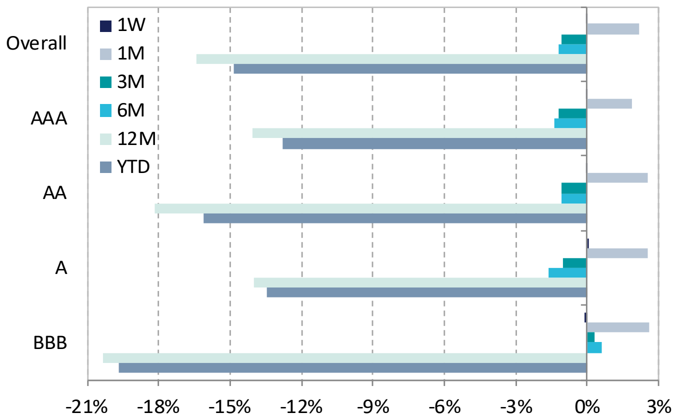
Performance (total return)



Performance (total return) by segments

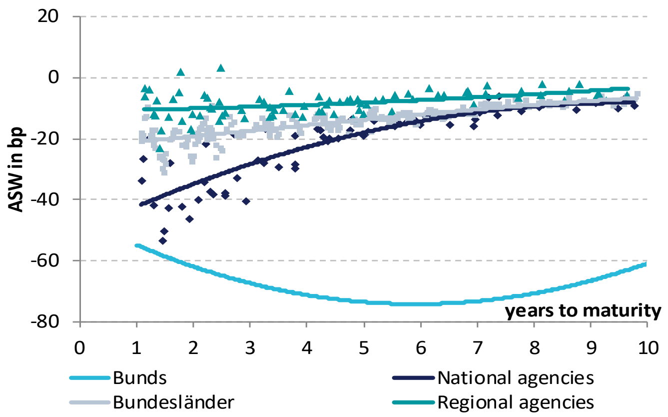


Performance (total return) by rating

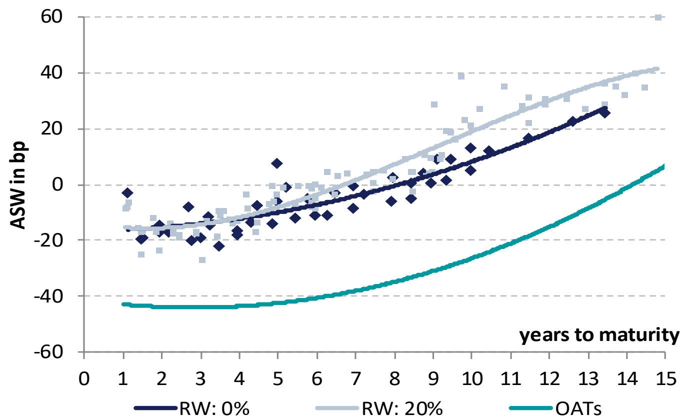


Source: Bloomberg, NORD/LB Markets Strategy & Floor Research

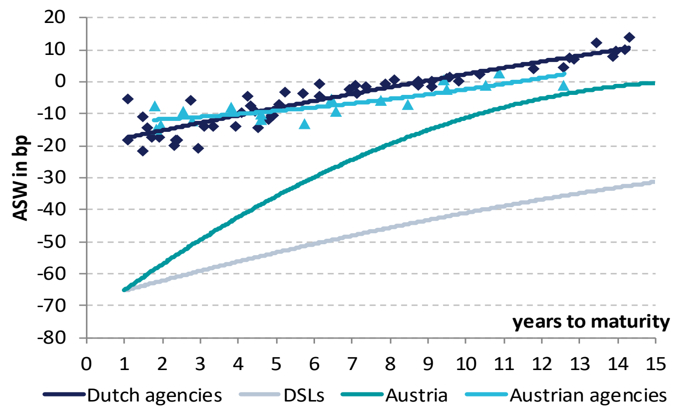
Germany (by segments)



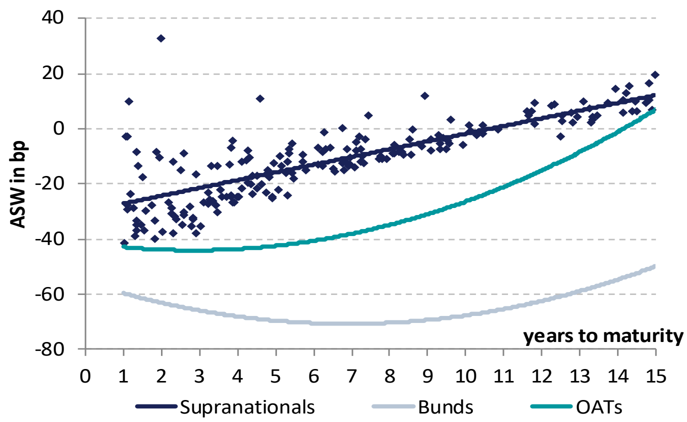
France (by risk weight)



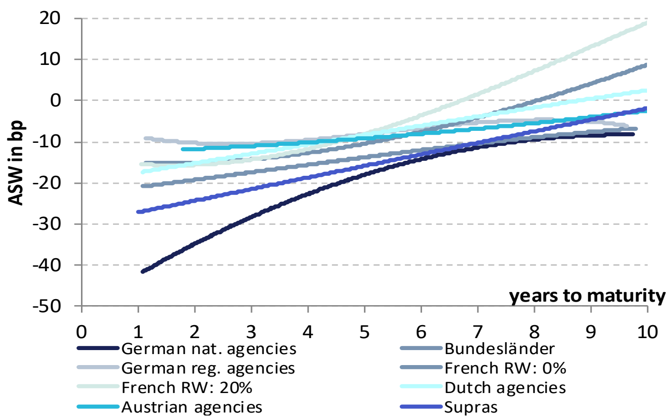
Netherlands & Austria



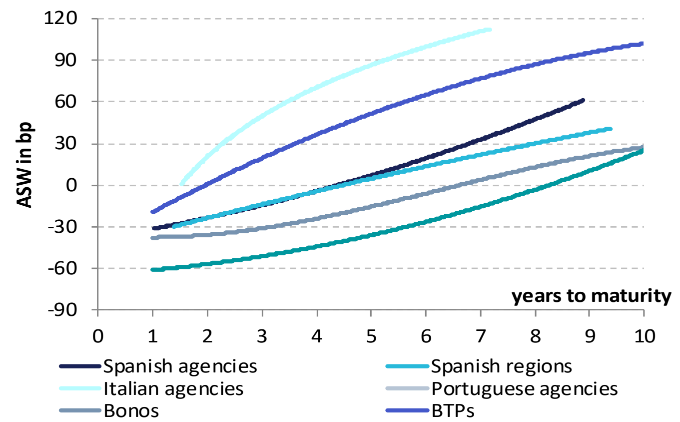
Supranationals



Core



Periphery



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

Appendix
Overview of latest Covered Bond & SSA View editions

Publication	Topics
38/2022 ♦ 07 December	▪ ECB preview – next hike but total assets (finally) reduced?! ▪ Covered bond jurisdictions in the spotlight: a look at Spain
37/2022 ♦ 30 November	▪ Transparency requirements §28 PfandBG Q3 2022 ▪ ECB repo collateral rules and their implications for Supranationals & Agencies
36/2022 ♦ 23 November	▪ ESG covered bonds - another record year ▪ Current LCR classifications for our SSA coverage
35/2022 ♦ 16 November	▪ Covered bond jurisdictions in the spotlight: a look at Austria ▪ Development of the German property market ▪ EIB goes Blockchain… again!
34/2022 ♦ 09 November	▪ Covered bond jurisdictions in the spotlight: a look at Norway ▪ Tenth edition of the NORD/LB Issuer Guide Covered Bonds ▪ SSA primary stats ytd before the final sprint
33/2022 ♦ 26 October	▪ Repayment structures on the covered bond market: EU harmonisation project consigns hard bullets to the shadows ▪ The debt brake at Laender level
32/2022 ♦ 19 October	▪ ECB preview: +75bp and the balance sheet question ▪ EBA Risk Dashboard paints a robust picture in Q2 2022 ▪ An overview of the German Laender
31/2022 ♦ 12 October	▪ The covered bond rating approach of S&P ▪ Benchmark indices for German Laender
30/2022 ♦ 28 September	▪ Focus on covered bond jurisdictions: Singapore in the spotlight ▪ German Laender: more ESG issues on the horizon?
29/2022 ♦ 21 September	▪ ECBC publishes annual statistics for 2021 ▪ Update: Gemeinschaft deutscher Laender (Ticker: LANDER)
28/2022 ♦ 07 September	▪ Primary market: A little more to come! ▪ ECB: PEPP visibly active as first line of defence
27/2022 ♦ 31 August	▪ ECB rate hikes: minimum of +100bp still to come by year-end ▪ Australia: Macquarie returns to the EUR benchmark segment
26/2022 ♦ 24 August	▪ Development of the German property market ▪ Transparency requirements §28 PfandBG Q2/2022
25/2022 ♦ 27 July	▪ ECB likes abbreviations: After OMT and SMP, we now have TPI ▪ Covereds vs. Senior Unsecured Bonds
24/2022 ♦ 20 July	▪ A brief spotlight on the EUR sub-benchmark segment ▪ Deutsche Hypo real estate climate: index falls again
23/2022 ♦ 13 July	▪ ECB preview: might the ECB go slightly further? ▪ EBA Report on Asset Encumbrance: levels increasing

Appendix
Publication overview

Covered Bonds:

Issuer Guide Covered Bonds 2022

Covered Bond Directive: Impact on risk weights and LCR levels

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

Transparency requirements §28 PfandBG Q3/2022 (quarterly update)

Covered bonds as eligible collateral for central banks

SSA/Public Issuers:

Issuer Guide – German Laender 2022

Issuer Guide – German Agencies 2022

Issuer Guide – Dutch Agencies 2022

Beyond Bundeslaender: Greater Paris (IDF/VDP)

Spotlight on Belgian regions

Spotlight on Spanish regions

Fixed Income Specials:

ESG-Update 2022

ECB interest rate decision: delivered as expected?

ECB acts as the 'House of Hikes' - or: Winter is coming!

ECB frontloads rate hike by +50bp and breaches pre-commitment

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

Appendix
Contacts at NORD/LB

Markets Strategy & Floor Research

Dr Frederik Kunze
Covered Bonds/Banks

+49 172 354 8977
frederik.kunze@nordlb.de

Dr Norman Rudschuck
SSA/Public Issuers

+49 152 090 24094
norman.rudschuck@nordlb.de

Melanie Kiene
Covered Bonds/Banks

+49 172 169 2633
melanie.kiene@nordlb.de

Jan-Phillipp Hensing
SSA/Public Issuers

+49 172 425 2877
jan-phillipp.hensing@nordlb.de

Stefan Rahaus
Covered Bonds/Banks

+49 172 6086 438
stefan.rahaus@nordlb.de

Sales

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

Trading

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

Origination & Syndicate

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

Sales Wholesale Customers

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

Treasury

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

Disclaimer

The present report (hereinafter referred to as "information") was drawn up by NORDDEUTSCHE LANDESBANK GIROZENTRALE (NORD/LB). The supervisory authorities responsible for NORD/LB are the European Central Bank (ECB), Sonnemannstraße 20, D-60314 Frankfurt am Main, and the Federal Financial Supervisory Authority in Germany (Bundesanstalt für Finanzdienstleitungsaufsicht; BaFin), Graurheindorfer Str. 108, D-53117 Bonn and Marie-Curie-Str. 24-28, D-60439 Frankfurt am Main. The present report and the products and services described herein have not been reviewed or approved by the relevant supervisory authority.

The present information is addressed exclusively to Recipients in Austria, Belgium, Canada, Cyprus, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Indonesia, Ireland, Italy, Japan, Korea, Luxembourg, the Netherlands, New Zealand, Poland, Portugal, Singapore, Portugal, Spain, Sweden, Switzerland, the Republic of China (Taiwan), Thailand, the United Kingdom and Vietnam (hereinafter referred to as "Relevant Persons" or "Recipients"). The contents of the information are disclosed to the Recipients on a strictly confidential basis and, by accepting such information, the Recipients shall agree that they will not forward it to third parties, copy and/or reproduce this information without the prior written consent of NORD/LB. The present information is addressed solely to the Relevant Persons and any parties other than the Relevant Persons shall not rely on the information contained herein. In particular, neither this information nor any copy thereof shall be forwarded or transmitted to the United States of America or its territories or possessions, or distributed to any employees or affiliates of Recipients resident in these jurisdictions.

The present information does not constitute financial analysis within the meaning of Art. 36 (1) of the Delegate Regulation (EU) 2017/565, but rather represents a marketing communication for your general information **within the meaning of Art. 36 (2) of this Regulation. Against this background, NORD/LB expressly points out that this information has not been prepared in accordance with legal provisions promoting the independence of investment research and is not subject to any prohibition of trading following the dissemination of investment research.** Likewise, this information does not constitute an investment recommendation or investment strategy recommendation within the meaning of the Market Abuse Regulation (EU) No. 596/2014**.**

This report and the information contained herein have been compiled and are provided exclusively for information purposes. The present information is not intended as an investment incentive. It is provided for the Recipient's personal information, subject to the express understanding, which shall be acknowledged by the Recipient, that it does not constitute any direct or indirect offer, recommendation, solicitation to purchase, hold or sell or to subscribe for or acquire any securities or other financial instruments nor any measure by which financial instruments might be offered or sold.

All actual details, information and statements contained herein were derived from sources considered reliable by NORD/LB. For the preparation of this information, NORD/LB uses issuer-specific financial data providers, own estimates, company information and public media. However, since these sources are not verified independently, NORD/LB cannot give any assurance as to or assume responsibility for the accuracy and completeness of the information contained herein. The opinions and prognoses given herein on the basis of these sources constitute a non-binding evaluation of the employees of the Markets Strategy & Floor Research division of NORD/ LB. Any changes in the underlying premises may have a material impact on the developments described herein. Neither NORD/LB nor its governing bodies or employees can give any assurances as to or assume any responsibility or liability for the accuracy, appropriateness and completeness of this information or for any loss of return, any indirect, consequential or other damage which may be suffered by persons relying on the information or any statements or opinions set forth in the present Report (irrespective of whether such losses are incurred due to any negligence on the part of these persons or otherwise).

Past performance is not a reliable indicator of future performance. Exchange rates, price fluctuations of the financial instruments and similar factors may have a negative impact on the value and price of and return on the financial instruments referred to herein or any instruments linked thereto. Fees and commissions apply in relation to securities (purchase, sell, custody), which reduce the return on investment. An evaluation made on the basis of the historical performance of any security does not necessarily provide an indication of its future performance.
The present information neither constitutes any investment, legal, accounting or tax advice nor any assurance that an investment or strategy is suitable or appropriate in the light of the Recipient's individual circumstances, and nothing in this information constitutes a personal recommendation to the Recipient thereof. The securities or other financial instruments referred to herein may not be suitable for the Recipient's personal investment strategies and objectives, financial situation or individual needs.

Moreover, the present report in whole or in part is not a sales or other prospectus. Accordingly, the information contained herein merely constitutes an overview and does not form the basis for any potential decision to buy or sell on the part of an investor. A full description of the details relating to the financial instruments or transactions which may relate to the subject matter of this report is given in the relevant (financing) documentation. To the extent that the financial instruments described herein are NORD/LB's own issues and subject to the requirement to publish a prospectus, the conditions of issue applicable to any individual financial instrument and the relevant prospectus published with respect thereto as well NORD/LB's relevant registration form, all of which are available for download at www.nordlb.de and may be obtained free of charge from NORD/LB, Georgsplatz 1, 30159 Hanover, shall be solely binding. Furthermore, any potential investment decision should be made exclusively on the basis of such (financing) documentation. The present information cannot replace personal advice. Before making an investment decision, each Recipient should consult an independent investment adviser for individual investment advice with respect to the appropriateness of an investment in financial instruments or investment strategies subject to this information as well as for other and more recent information on certain investment opportunities.

Each of the financial instruments referred to herein may involve substantial risks, including capital, interest, index, currency and credit risks in addition to political, fair value, commodity and market risks. The financial instruments could experience a sudden and substantial deterioration in value, including a total loss of the capital invested. Each transaction should only be entered into on the basis of the relevant investor's assessment of his or her individual financial situation as well as of the suitability and risks of the investment.

NORD/LB and its affiliated companies may participate in transactions involving the financial instruments described in the present information or their underlying basis values for their own account or for the account of third parties, may issue other financial instruments with the same or similar features as those of the financial instruments presented in this information and may conduct hedging transactions to hedge positions. These measures may affect the price of the financial instruments described in the present information.

If the financial instruments presented in this information are derivatives, they may, depending on their structure, have an initial negative market value from the customer's perspective at the time the transaction is concluded. NORD/LB further reserves the right to transfer its economic risk from a derivative concluded with it to a third party on the market by means of a mirror-image counter transaction.

More detailed information on any commission payments which may be included in the selling price can be found in the "Customer Information on Securities Business" brochure, which is available to download at www.nordlb.de.

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

NORD/LB is a member of the protection scheme of Deutsche Sparkassen-Finanzgruppe. Further information for the Recipient is indicated in clause 28 of the General Terms and Conditions of NORD/LB or at www.dsgv.de/sicherungssystem.

Additional information for Recipients in Australia:
NORD/LB IS NOT A BANK OR DEPOSIT TAKING INSTITUTION AUTHORISED UNDER THE 1959 BANKING ACT OF AUSTRALIA. IT IS NOT SUPERVISED BY THE AUSTRALIAN PRUDENTIAL REGULATION AUTHORITY. NORD/LB does not provide personal advice with this information and does not take into account the objectives, financial situation or needs of the Recipient (other than for the purpose of combating money laundering).

Additional information for Recipients in Austria:
None of the information contained herein constitutes a solicitation or offer by NORD/LB or its affiliates to buy or sell any securities, futures, options or other financial instruments or to participate in any other strategy. Only the published prospectus pursuant to the Austrian Capital Market Act should be the basis for any investment decision of the Recipient. For regulatory reasons, products mentioned herein may not be on offer in Austria and therefore not available to investors in Austria. Therefore, NORD/LB may not be able to sell or issue these products, nor shall it accept any request to sell or issue these products to investors located in Austria or to intermediaries acting on behalf of any such investors.

Additional information for Recipients in Belgium:
Evaluations of individual financial instruments on the basis of past performance are not necessarily indicative of future results. It should be noted that the reported figures relate to past years.

Additional information for Recipients in Canada:
This report has been prepared solely for information purposes in connection with the products it describes and should not, under any circumstances, be construed as a public offer or any other offer (direct or indirect) to buy or sell securities in any province or territory of Canada. No financial market authority or similar regulatory body in Canada has made any assessment of these securities or reviewed this information and any statement to the contrary constitutes an offence. Potential selling restrictions may be included in the prospectus or other documentation relating to the relevant product.

Additional information for Recipients in Cyprus:
This information constitutes an analysis within the meaning of the section on definitions of the Cyprus Directive D1444-2007-01 (No. 426/07). Furthermore, this information is provided for information and promotional purposes only and does not constitute an individual invitation or offer to sell, buy or subscribe to any investment product.

Additional information for Recipients in the Czech Republic:
There is no guarantee that the invested amount will be recouped. Past returns are no guarantee of future results. The value of the investments may rise or fall. The information contained herein is provided on a non-binding basis only and the author does not guarantee the accuracy of the content.

Additional information for Recipients in Denmark:
This Information does not constitute a prospectus under Danish securities law and consequently is not required to be, nor has been filed with or approved by the Danish Financial Supervisory Authority, as this Information either (i) has not been prepared in the context of a public offering of securities in Denmark or the admission of securities to trading on a regulated market within the meaning of the Danish Securities Trading Act or any executive orders issued pursuant thereto, or (ii) has been prepared in the context of a public offering of securities in Denmark or the admission of securities to trading on a regulated market in reliance on one or more of the exemptions from the requirement to prepare and publish a prospectus in the Danish Securities Trading Act or any executive orders issued pursuant thereto.

Additional information for Recipients in Estonia:
It is advisable to closely examine all the terms and conditions of the services provided by NORD/LB. If necessary, Recipients of this information should consult an expert.

Additional information for Recipients in Finland:
The financial products described herein may not be offered or sold, directly or indirectly, to any resident of the Republic of Finland or in the Republic of Finland, except pursuant to applicable Finnish laws and regulations. Specifically, in the case of shares, such shares may not be offered or sold, directly or indirectly, to the public in the Republic of Finland as defined in the Finnish Securities Market Act (746/2012, as amended). The value of investments may go up or down. There is no guarantee of recouping the amount invested. Past performance is no guarantee of future results.

Additional information for Recipients in France:
NORD/LB is partially regulated by the "Autorité des Marchés Financiers" for the conduct of French business. Details concerning the extent of our regulation by the respective authorities are available from us on request. The present information does not constitute an analysis within the meaning of Article 24 (1) Directive 2006/73/EC, Article L.544-1 and R.621-30-1 of the French Monetary and Financial Code, but does represent a marketing communication and does qualify as a recommendation pursuant to Directive 2003/6/EC and Directive 2003/125/EC.

Additional information for Recipients in Greece:
The information contained herein gives the view of the author at the time of publication and may not be used by its Recipient without first having confirmed that it remains accurate and up to date at the time of its use. Past performance, simulations or forecasts are therefore not a reliable indicator of future results. Investment funds have no guaranteed performance and past returns do not guarantee future performance.

Additional information for Recipients in Indonesia:
This report contains generic information and has not been tailored to the circumstances of any individual or specific Recipient. This information is part of NORD/LB's marketing material.

Additional information for Recipients in the Republic of Ireland:
This information has not been prepared in accordance with Directive (EU) 2017/1129 (as amended) on prospectuses (the "Prospectus Directive") or any measures made under the Prospectus Directive or the laws of any Member State or EEA treaty adherent state that implement the Prospectus Directive or such measures and therefore may not contain all the information required for a document prepared in accordance with the Prospectus Directive or the laws.

Additional information for Recipients in Japan:
This information is provided to you for information purposes only and does not constitute an offer or solicitation of an offer to enter into securities transactions or commodity futures transactions. Although the actual data and information contained herein has been obtained from sources which we believe to be reliable and trustworthy, we are unable to vouch for the accuracy and completeness of this actual data and information.

Additional information for Recipients in South Korea:
This information has been provided to you free of charge for information purposes only. The information contained herein is factual and does not reflect any opinion or judgement of NORD/LB. The information contained herein should not be construed as an offer, marketing, solicitation to submit an offer or investment advice with respect to the financial investment products described herein.

Additional information for Recipients in Luxembourg:
Under no circumstances shall the present information constitute an offer to purchase or issue or the solicitation to submit an offer to buy or subscribe for financial instruments and financial services in Luxembourg.

Additional information for Recipients in New Zealand:
NORD/LB is not a bank registered in New Zealand. This information is for general information only. It does not take into account the Recipient's financial situation or objectives and is not a personalised financial advisory service under the 2008 Financial Advisers Act.

Additional information for Recipients in the Netherlands:
The value of your investment may fluctuate. Past performance is no guarantee for the future.

Additional information for Recipients in Poland:
This information does not constitute a recommendation within the meaning of the Regulation of the Polish Minister of Finance Regarding Information Constituting Recommendations Concerning Financial Instruments or Issuers thereof dated 19 October 2005.

Additional information for Recipients in Portugal:
This information is intended only for institutional clients and may not be (i) used by, (ii) copied by any means or (iii) distributed to any other kind of investor, in particular not to retail clients. The present information does not constitute or form part of an offer to buy or sell any of the securities covered by the report, nor should it be understood as a request to buy or sell securities where that practice may be deemed unlawful. The information contained herein is based on information obtained from sources which we believe to be reliable, but is not guaranteed as to accuracy or completeness. Unless otherwise stated, all views contained herein relate solely to our research and analysis and are subject to change without notice.

Additional information for Recipients in Sweden:
This information does not constitute (or form part of) a prospectus, offering memorandum, any other offer or solicitation to acquire, sell, subscribe for or otherwise trade in shares, subscription rights or other securities, nor shall it or any part of it form the basis of or be relied on in connection with any contract or commitment whatsoever. The present information has not been approved by any regulatory authority. Any offer of securities will only be made pursuant to an applicable prospectus exemption under the EC Prospectus Directive (Directive (EU) 2017/1129), and no offer of securities is being directed to any person or investor in any jurisdiction where such action is wholly or partially subject to legal restrictions or where such action would require additional prospectuses, other offer documentation, registrations or other actions.

Additional information for Recipients in Switzerland:
This information has not been approved by the Federal Banking Commission (merged into the Swiss Financial Market Supervisory Authority (FINMA) on 1 January 2009). NORD/LB will comply with the Directives of the Swiss Bankers Association on the Independence of Financial Research (as amended). The present information does not constitute an issuing prospectus pursuant to article 652a or article 1156 of the Swiss Code of Obligations. The information is published solely for the purpose of information on the products mentioned herein. The products do not qualify as units of a collective investment scheme pursuant to the Federal Act on Collective Investment Schemes (CISA) and are therefore not subject to supervision by FINMA.

Additional information for Recipients in the Republic of China (Taiwan):
This information is provided for general information only and does not take into account the individual interests or requirements, financial status and investment objectives of any specific investor. Nothing herein should be construed as a recommendation or advice for you to subscribe to a particular investment product. You should not rely solely on the information provided herein when making your investment decisions. When considering any investment, you should endeavour to make your own independent assessment and determination on whether the investment is suitable for your needs and seek your own professional financial and legal advice. NORD/LB has taken all reasonable care in producing this report and trusts that the information is reliable and suitable for your situation at the date of publication or delivery. However, no guarantee of accuracy or completeness is given. To the extent that NORD/LB has exercised the due care of a good administrator, we accept no responsibility for any errors, omissions, or misstatements in the information given. NORD/LB does not guarantee any investment results and does not guarantee that the strategies employed will improve investment performance or achieve your investment objectives.

Information for Recipients in the United Kingdom:
NORD/LB is subject to partial regulation by the Financial Conduct Authority (FCA) and the Prudential Regulation Authority (PRA). Details of the scope of regulation by the FCA and the PRA are available from NORD/LB on request. The present information is "financial promotion". Recipients in the United Kingdom should contact the London office of NORD/LB, Investment Banking Department, telephone: 0044 / 2079725400, in the event of any queries. An investment in financial instruments referred to herein may expose the investor to a significant risk of losing all the capital invested.

Time of going to press: Wednesday, 14 December 2022 (08:57)