Covered Bond & SSA View

NORD/LB Markets Strategy & Floor Research

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Marketing communication (see disclaimer on the last pages)

NORD/LB

Agenda

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

Authors: Melanie Kiene // Dr Frederik Kunze // Stefan Rahaus

Primary market: potential for a record new issuance volume

Despite the public holidays around the New Year in some parts of Europe, issuers wasted no time in getting their market activities started for 2023 on Monday last week: the Austrian issuer Erste Group Bank AG, which was also first out of the blocks in 2022, issued a mortgage Pfandbrief (ERSTBK; 6y; bid-to-cover: 1.4x), while on the same day we also saw an Obligation Foncières placed by Crédit Mutuel Arkéa (CMARK; bid-to-cover: 1.4x) from France. The first week of trading subsequently developed into a frenzy of new issues. In total, 11 different issuers approached investors with 13 tranches and a total volume of EUR 12.2bn was placed on the market. By way of comparison, totals of EUR 3.75bn and EUR 500m were respectively placed across the first four days of trading in 2022 and 2021. The issuers involved in the first trading week of 2023 included Berlin Hyp, which placed an ESG dual tranche (BHH; 3.3y; social; bid-to-cover: 5.0x and 10y; green; bid-to-cover 2.2x), Raiffeisenlandesbank Niederösterreich-Wien (RFLBNI; bid-to-cover: 1.4x), Banco Santander (SANTAN, bid-to-cover: 1.8x (3y) and 1.4x (7y)), CRH (CRH, bid-to-cover: 1.2x), BAWAG (BAWAG, bid-to-cover: 1.2x), BayernLB (BYLAN; bid-to-cover: 1.6x) and Aareal Bank (AARB; bid-to-cover: 1.3x), UniCredit Bank (HVB; bid-to-cover: 2.3x) and Crédit Agricole Home Loan SFH (ACACB; bid-to-cover: 1.9x). In terms of cover assets, with the exception of BayernLB's public Pfandbrief and the CMARK transaction, which, according to Bloomberg, has 100% public loans in its cover pool, all other covered bonds are mortgage-backed. This wave of issuance activity has continued in the current trading week: on Monday, DZ Hyp (Issuer View) added to the ESG segment by placing a green dual tranche (DZHYP; 3y and 9.8y), for which a noteworthy bid-to-cover ratio of 8.0x was registered for the short maturity. The longer-dated deal produced an equivalent value of 2.6x. The first EUR benchmark of 2023 from a non-eurozone country was also placed on Monday by Bank of Nova Scotia (Issuer View) (BNS; 5y; bid-to-cover 1.1x). Yesterday, on Tuesday, two dual tranches were recorded: Deutsche Bank issued two tranches of EUR 500m for 4y and 7.5y, while BPCE SFH approached investors with a volume of EUR 1.75bn in a deal with a term of just over 4y and EUR 1.0bn for 10 years. Furthermore, Sparkasse Pforzheim Calw (SKPPFO) issued a 4y mortgage Pfandbrief at ms +8bp. In the first seven trading days of 2023, a total of 21 EUR benchmark covered bonds with a volume of EUR 19.2bn were issued. All in all, it can be stated that the primary market is intact and the high issue volumes have been well absorbed so far. Deals placed during the first few trading days come from the jurisdictions that we had been expecting, and we assume that the flood of new issues will continue unabated, including from jurisdictions that have not yet been active. Measured by order books and oversubscription ratios, short maturities continue to be more popular among investors, although in contrast to the fourth quarter of 2022, issues with maturities longer than seven years are also possible again. Looking at the bid-to-cover ratios, BHH (5.0x for a social bond with a term of just over three years) and DZHYP (8.0x for a 3y green covered bond) both stand out from the crowd.

Issuer	Country	Timing	ISIN	Maturity	Size	Spread	Rating	ESG
BPCE SFH SA	FR	10.01.	FR001400F5R1	4.5y	1.75bn	ms +19bp	- / Aaa / AAA	-
BPCE SFH SA	FR	09.01.	FR001400F5S9	10.0y	1.00bn	ms +34bp	- / Aaa / AAA	-
Deutsche Bank AG	DE	10.01.	DE000A30VG92	4.0y	0.50bn	ms +5bp	- / Aaa / -	-
Deutsche Bank AG	DE	10.01.	DE000A30V5F6	7.5y	0.50bn	ms +16bp	- / Aaa / -	-
Sparkasse Pforzheim	DE	10.01.	DE000A30V5G4	4.0y	0.50bn	ms +8bp	AAA / - / -	-
Bank of Nova Scotia	CA	09.01.	XS2576390459	5.0y	1.75bn	ms +35bp	AAA / Aaa / -	-
DZ HYP	DE	09.01.	DE000A3MQUY1	3.0y	0.50bn	ms -4bp	- / Aaa / AAA	X
DZ HYP	DE	09.01.	DE000A3MQUZ8	9.8y	0.50bn	ms +13bp	- / Aaa / AAA	X
Credit Agricole SFH	FR	05.01.	FR001400F091	6.6y	1.00bn	ms +24bp	AAA/Aaa/AAA	-
UniCredit Bank	DE	05.01.	DE000HV2AZC4	3.5y	1.00bn	ms +3bp	- / Aaa / -	-
CRH	FR	04.01.	FR001400F281	7.0y	1.65bn	ms +24bp	AAA / Aaa / -	-
BAWAG PSK	AT	04.01.	XS2570759154	6.0y	0.80bn	ms +25bp	- / Aaa / -	-
Aareal Bank AG	DE	04.01.	DE000AAR0371	4.8y	0.75bn	ms +14bp	- / Aaa / -	-
Bayerische Landesbank	DE	04.01.	DE000BLB6JR3	10.0y	0.50bn	ms +10bp	- / Aaa / -	-
Banco Santander SA	ES	03.01.	ES0413900905	3.0y	2.50bn	ms +22bp	- / Aa1 / -	-
Banco Santander SA	ES	03.01.	ES0413900913	7.0y	1.00bn	ms +47bp	- / Aa1 / -	-
RaiffeisenLB Niederöster	AT	03.01.	XS2572298409	7.0y	0.50bn	ms +33bp	- / Aaa / -	-
Berlin Hyp	DE	03.01.	DE000BHY0GM2	10.0y	0.50bn	ms +11bp	- / Aaa / -	X
Berlin Hyp	DE	03.01.	DE000BHY0SP0	3.3y	0.50bn	ms -4bp	- / Aaa / -	X
Arkea Public Sector SCF	FR	02.01.	FR001400EZL5	8.0y	0.50bn	ms +29bp	- / Aaa / -	-
Erste Group Bank AG	AT	02.01.	AT0000A324F5	6.0y	1.00bn	ms +20bp	- / Aaa / -	-

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

Secondary market: elevated new issue premiums only hamper spreads slightly

The secondary market is displaying slight widening tendencies on account of the high new issuance volume and elevated new issuance premiums. Due to the attractive pricing, bonds at the short end from Germany especially, but also those from other jurisdictions and in longer maturities too, continue to be subject to demand after issuance and have tightened by two to six basis points against the re-offer spread. The demand here is not only based on what appears to be cheap pricing compared with older bonds. In fact, investors also have a preference for covered bonds with a more current coupon. Deals from the low/negative interest rate phase without a coupon and with prices well below 100 are at a disadvantage and, in our opinion, will gradually adjust to the new issue spreads. The current spread levels on the secondary market and the iBoxx are not yet fully reflecting this development. Therefore, in anticipation of further new issues, bid prices in the secondary market are not very resilient in our opinion. We are still sticking to the assumptions in our Outlook 2023, and we are continuing to see increasing differentiation between countries and individual issuers, high volumes in the first quarter that are weighing on spread levels and issuers keen to issue more at the long end, something which had only been possible to a limited extent in 2022. Subdued investor interest in long maturities, compared with shorter maturities reflected in the order books or the bid-to-cover ratio, is indicative of steeper curves, so that concessions on the part of issuers at the long end should ultimately be larger. We continue to see solid demand in the 1-3y segment, which is being supported by attractive all-in yields that are practically at the same level as long-dated covered bonds due to the inverse interest rate structure.

ECB announces changes to haircuts for repo collateral from June 2023

The ECB announced another step in the direction of a return to pre-pandemic normality in a press release issued on 20 December 2022. After the Governing Council published its decision on 24 March 2022 to gradually phase out the pandemic easing measures for collateral, the results of the latest review of the risk control framework for secured lending have now been presented. Accordingly, from 29 June 2023, one day after the June 2020 TLTRO tranche expires, the haircuts applied to collateral for monetary policy operations will be raised back to the ECB's pre-pandemic risk tolerance level. The haircut, originally reduced by 20%, had already been reduced to 10% in July 2022. For covered bonds, there will no longer be a distinction made between jumbo bonds and other covered bonds. All covered securities including Spanish multi-cédulas will then be allocated to haircut category II. Debt securities of EU bonds will be reclassified to haircut category I (from II), the same level as bonds issued by central governments. Further changes result from the harmonisation of haircuts for securities with fixed and variable coupons and from splitting up the longest maturity category into three new categories (10 to 15 years, 15 to 30 years and longer than 30 years). The amendments to Directives ECB/2014/60, ECB/2015/35 and ECB/2014/31 reflecting the above measures will be made available on the ECB website, before being published in all official EU languages via the Official Journal of the European Union in April 2023. In March 2024, the remaining pandemic measures implemented by the ECB will then also expire.

vdp issuance climate: situation on the capital market to remain challenging in 2023

According to the first survey of capital market experts at vdp member institutes on the issuance climate carried out by the Association of German Pfandbrief Banks (vdp), the situation on the capital market is set to remain challenging in 2023. Rampant inflation paired with simultaneous concerns about a recession, in addition to the war in Ukraine, will continue to ensure high levels of volatility and uncertainty. The survey, which from now on is to be carried out twice a year, shows the issuance climate as a mood indicator in a range from -100 to +100 points, with a score of zero representing a stable capital market environment in which issuance plans can be implemented without any trouble. Based on the evaluations, a score for Pfandbriefe and unsecured bank bonds as well as an overall score will be presented. The overall score currently shows a value of -17 points, with a score of -10 points offering a slightly more optimistic view of the situation for Pfandbriefe than the score of -26 points for unsecured bank bonds. Overall, a slight headwind is therefore expected on the primary market for the first half of 2023. In the case of Pfandbriefe, the experts surveyed expect a lower Pfandbrief issue volume due to a significant decline in the lending business to be refinanced. The demand side is viewed as solid. With the ECB beating a retreat, purchase interest from traditional investors, who are now finding adequate yields on covered bonds again, should be the replacement. The Pfandbrief banks grouped together in the vdp, which represent a market share of almost 96% of outstanding Pfandbriefe, expect turnover from new mortgage Pfandbriefe in the amount of just under EUR 41bn. With maturities of almost EUR 28bn, this corresponds to net new issues of nearly EUR 13bn. In the public-sector Pfandbrief segment, maturities (just over EUR 15.2bn) should again exceed planned turnover (around EUR 9bn) in 2023. Demand for unsecured bank bonds is expected to be rather restrained, a situation which is also reflected in the significantly lower score of -26 points.

Scope Ratings anticipates positive development for European banks

Last week, the rating agency Scope commented on the European banking market in 2023 and expressed an expectation of positive development despite a significant deterioration in the macroeconomic environment. The key messages can be summarised as follows: the agency expects profitability to be at a similar level to 2022, although the underlying factors will be different. Margins in the banking business should benefit from the rising interest rate level and be less influenced by artificial TLTRO carry-trade earnings. Rising funding costs in the wholesale area paired with partially increased issuance activity for MREL-eligible bonds (final MREL quotas valid from January 2024) are likely to adversely impact the earnings situation. Asset quality will deteriorate slightly, leading to rising NPL ratios again for the first time in a while, although the risk costs for the banks should remain manageable. Furthermore, Scope expects liquidity ratios to deteriorate, with a decline to the pre-Covid level expected and sees the high ratios distorted by an extremely loose monetary policy. In terms of capitalization, Scope expects regulators to exercise greater scrutiny over capital distribution, although capital strength will be maintained. In addition, some supervisory authorities have already called for additional capital buffers on real estate portfolios, for example.

Market overview
SSA/Public Issuers

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

Review of 2022

In the last issue of 2022, we presented our Outlook for 2023. In the SSA segment, this outlook is significantly determined by the funding activities of the big players (EU, KfW, EIB and German Laender), the large number of small and medium-sized public sector issuers and further pending monetary policy changes on the part of the ECB. We therefore consider both the supply and demand side to be influential in the coming year for a range of reasons. This is also particularly true of further rises in interest rates. See our NORD/LB Fixed Income Special for details of the latest ECB decision as well as the dedicated article in this edition of our weekly publication.

Selected German funding figures for 2023

It's still very early in the year which makes it even more worthwhile to look at the planned funding figures available in the public domain to date. After another extremely successful year for KfW in 2022 with a record funding volume of EUR 90bn raised through 204 deals in 13 different currencies, the promotional bank is planning a figure of EUR 80-85bn for 2023. KfW raised the equivalent of EUR 10.6bn (almost 12%) with 19 green transactions in 9 different currencies, including its first green bond in Danish krone. Moreover, "Green Bonds – Made by KfW" have now exceeded the EUR 50bn mark. "The promotional bank's green bond framework, which was expanded at the beginning of the year, was very well received by global investors," says KfW. It is also planning to issue green bonds amounting to at least EUR 10bn in 2023. EUR and USD benchmark bonds will account for the majority of funding, with the initial issuance volume potentially reaching up to EUR/USD 6bn in the future. There are also plans to increase selected outstanding EUR benchmarks by up to EUR 7bn. In addition, Landwirtschaftliche Rentenbank is again expecting a funding volume of EUR 11bn for 2023 with bond maturities of over two years. The figure for 2022 was EUR 11.8bn. The average maturity for issues increased to 7.0 years (2021: 6.5 years). As before, it plans to raise up to 50% of its medium and long-term financing volume through benchmarks in EUR and USD respectively. "The further expansion of renewable energy is an indispensable prerequisite for making energy supplies in Germany more sustainable and independent. And agribusiness in particular has a key role to play in this regard. The necessary increase in the investment needs of this sector is fuelling the growth of our sustainable promotional lending activities and enlarging the loan portfolio of our Green Bond Framework. Moreover, we are currently seeking to incorporate biogas plants into the Green Bond Framework, in addition to wind power and photovoltaic plants," explains Nikola Steinbock, Management Board spokesperson for Rentenbank. In 2021, the bank raised funding in seven currencies. USD deals accounted for 19%, while EUR issues made up 65%. For NRW.BANK we are planning EUR 11-13bn for 2023. The breakdown for 2022 was very interesting here, with investor presentations highlighting the categories of EUR (62%), EUR Green (14%) and EUR Social (9%). The duration across all currencies was cited at 6.0 years (basis: EUR 9.7bn).

Supranationals also big market players

Alongside the German agencies are the four big Luxembourg-based institutions, the EU and EIB as well as the ESM and EFSF. The respective funding targets of the two latter institutions – EUR 8.0bn (ESM) and EUR 20.0bn (EFSF) – have been in place for months. In fact, the two issuers have already stated their figures for 2024! (EUR 6.0bn and EUR 19.0bn respectively). The windows with concrete calendar weeks no longer apply for ESM and EFSF since 2022. Given maturities of EUR 12.9bn, we expect a negative net supply of around EUR -5bn for the ESM. In contrast, at the EFSF the maturities stand at EUR 22.5bn, producing a negative net supply of EUR -3bn. We are not expecting any plan changes here either. We also expect the ESM to bring a USD bond to the market in 2023 and it is also welcoming Croatia as a new member. Meanwhile, from 2023 onwards the EU will be pursuing a new funding concept: instead of the procedure to date of allocating bonds to different individual programmes, deals will in future be bundled as EU bonds. Only green bonds under the NGEU programme will keep their existing designation. The new approach is primarily set to enhance bond liquidity and simplify buying and purchasing by investors. In the past we had often pointed out this opportunity for investors to potentially submit orders by programme. In the first half of the year, the “mega issuer” plans to raise funds of EUR 80bn. Of this, EUR 70bn will be attributable to the NGEU programme and EUR 10bn to the new support programme for the Ukraine (MFA+). For the second half of the year, we expect at least another EUR 50-60bn, but again we would not be surprised if the figure were higher. In total, the volume for the year as a whole is likely to come to EUR 130bn at least. EU bills supplement these figures and are therefore not included. To recap: up to 2020 the EU often had a neutral net supply in the context of its own activities; bonds maturing in 2023 (EUR 3.5bn) will be extended as usual. Now we come to the European Investment Bank. According to an EIB press release, in its December meeting the Management Board approved the procurement of up to EUR 45-50bn, which affords the bank a certain amount of headroom. In 2023, the EIB will probably redeem maturing bonds totalling EUR 61bn, creating a negative net supply of at least EUR -11bn, which is significantly higher than in the past two years, and this will even hit EUR -16bn if the lower funding limit is sufficient for business purposes.

Long-term funding plan incl. 2024 (EURbn)

	2022	2023	2024	∑
EFSF	19.5	20.0	19.0	**58.5**
ESM	8.0	8.0	6.0	**22.0**
∑	**27.5**	**28.0**	**25.0**	**80.5**

Time window for...

…EU bond issuances		…EU bond issuances	
CW 04	23-27 January	**CW 17**	24-28 April
CW 07	13-17 February	**CW 19**	08-12 May
CW 10	06-10 March	**CW 23**	05-09 June
CW 13	27-31 March		

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

German federal government published planning just after our previous edition

Even though we do not examine the German federal government in detail as an issuer in our Floor Research which is tailored to covering supranationals, sub-sovereigns and agencies (i.e. no states) as well as covered bonds, the government's curve is the reference for the majority of our institutional clients. We therefore take an appropriate look at the supply from the German Finance Agency. To finance the government budget and its special funds, the federal government (Bund) is planning to issue securities totalling some EUR 539bn through auctions in 2023. Of this, EUR 274bn is allocated to the capital market and EUR 242bn to the money market. On top of this are green government securities of EUR 15-17bn and there are plans to issue inflation-linked government securities with a volume of EUR 6-8bn. As well as auctions, the government securities will also be issued via four syndicates, with the issuance volume in each case determined during the procedure. As well as two syndicates in the green segment, the Finance Agency states that there are plans to issue two conventional government securities in the longer dated maturity segment using the syndicate procedure. These could either replace or be carried out alongside the auctions announced (15 or 30 years). From January 2023 onwards, new German government securities will carry alphanumeric identification codes (German WKN & ISIN), which will replace the purely numerical identification codes. The Bund will use the issuer abbreviation "BU". Following the effective introduction of one stage debt rescheduling clauses for all state issuers in the Eurozone, it is not just the identification codes that will change but also the issuance terms and conditions for German government securities. The new issuance terms and conditions will be used for new deals as of the first day of the second month after the ESM amendment contract comes into force and will mean that the standard maturity dates for Bundesanleihen (German federal government bonds) will be adjusted from the 15th to the 16th of the months of February, May, August and November. The exact maturity dates for new German federal government bonds will be announced with the corresponding quarterly press releases regarding the issuance calendar. The German government's special funds also financed in this way include the Economic Stabilisation Fund (WSF) set up in 2020 to counter the impact of the pandemic on the economy (WSF) as well as the Financial Market Stabilisation Fund (FMS) which was established in the wake of the financial market crisis in 2008. Both are managed by the Finance Agency. And this brings the agencies in our coverage full circle, as the KfW can utilise the Economic Stabilisation Fund and the winding-up agencies are guaranteed by the FMS. The issuance planning for 2023 provides for an increased total volume of green German government securities as outlined above (EUR 15-17bn). With the issue of a green German government bond, the conventional twin security is increased by the same amount at the same time. The increase in the outstanding volume takes place in the German government's own portfolio.

ECB: EU bonds allocated to haircut category I as of 29 June 2023

In the latest review of the risk control framework for secured lending operations, the European Central Bank has adopted a new allocation for debt securities issued by the European Union (ticker: EU). As a result of the higher liquidity of EU bonds following issues under the NextGenerationEU and SURE programmes, from 29 June 2023 onwards they will be treated as debt securities issued by central governments. Consequently the bonds no longer come under haircut category II but category I as of the end of the first half of the year. This means that the haircuts applicable to date versus bonds issued by central governments no longer apply.

Latest press releases on German public sector debt

Public sector debt in Q3 2022 was once again higher than at the end of 2021. At the end of the quarter, the debt owed by the overall public budget (federal government, Laender, municipalities and municipal associations as well as social security funds including all extra budgets) to the non-public sector (credit institutions as well as the remaining domestic and non-domestic sector, e.g. private business in Germany and abroad) amounted to EUR 2,325.0bn. The Federal Statistical Office (Destatis) also reported, on the basis of preliminary results, that public sector debt at the end of the third quarter rose by 0.2%, or EUR 3.9bn, versus year-end 2021. Compared with the second quarter, the debt level was down by 0.8%, or EUR -19.0bn. The biggest increase versus year-end 2021 was in federal government debt which climbed 1.7%, or EUR 25.8bn, to EUR 1,574.2bn. At the end of Q3, Laender debt stood at EUR 613.7bn, which equates to a drop of 3.9%, or EUR 24.8bn versus the end of 2021. Only three Laender saw debt levels rise (Berlin [+1.7%], Saxony-Anhalt [+1.2%] and NRW [+0.7%]). According to Destatis, the increases in all three Laender resulted from greater issuance activity. The reason for the increased issuance activity in BERGER and SACHAN, their respective tickers, was to lock in favourable interest rates ahead of the expected rate rises in the capital market. In NRW, the rise was mainly due to pre-financing. According to the press release, the biggest percentage decreases in debt versus the end of 2021 were recorded by Bremen (-38.5%), Saxony (-11.7%) and Hesse (-10.1%). In Bremen the decline versus year-end 2021 was due to lower borrowings for the provision of cash collateral for derivatives, while in Saxony existing Kassenkredite loans were repaid at the end of 2021. The decrease in Hesse was due to the redemption of securities which did not require follow-on financing. The debt level in municipalities and municipal associations increased in Q3 versus year-end 2021 by 2.2%, or EUR 2.9bn, to EUR 137.0bn. As is often the case, developments varied from region to region: according to Destatis data, the increases in percentage terms were highest in the municipalities and municipal associations in Bavaria at 7.7%, followed by Baden-Württemberg (+7.0%) and Saxony-Anhalt (+6.2%). In contrast, debt levels were down in Thuringia (-3.9%) and in Saarland (-3.7%) in particular. For information purposes, social security funds reported a debt level of EUR 36m in Q3 2021, a fall of EUR 8m compared with the end of 2021. Interestingly, the Economic Stabilisation Fund (WSF) had debt of EUR 34.8bn, down 8.5%, or EUR 3.3bn, on year-end 2021. If you recall, the WSF was established by the German government in March 2020 to counter the economic and social impact of the coronavirus pandemic on the economy. In October 2022, the WSF was reactivated with a new direction as part of the economic shield against the consequences of the Russian war of aggression in Ukraine. The gas price brake, for instance, is to be financed via the WSF. No borrowing had yet been carried out for this and other purposes by the end of Q3 2022. The newly established Bundeswehr (armed forces) special fund did not report any debt yet in the third quarter and no funds have yet been raised. However, in contrast, borrowing by the Financial Market Stabilisation Fund was up 6.6% on year-end 2021 to EUR 82.8bn and the debt level reported by the Investment and Repayment Fund increased by 0.5% to EUR 16.2bn.

Primary market

Same procedure as every year: on 29 December 2022, Lower Saxony (ticker: NIESA) mandated for a ten-year bond to open the primary market on the first day of trading in Europe in the new year. This was priced straight away on 2 January. The terms for the bond were given as ms -2bp (EUR 750m; order book: EUR 900m) which was six basis points more than a year ago. The spread tightened by two basis points during the marketing phase. KfW opted for half the maturity (5y) and considerably more volume at EUR 6bn, which changed hands at ms -11bp. Guidance for the deal stood at ms -9bp area and the order book overflowed at EUR 19.5bn. In contrast, the first ESG bond of the year came from the Netherlands. The EUR 1.5bn social bond issued by BNG was placed with investors at ms +11bp (guidance: ms +12bp area). Meanwhile, Rentenbank (ticker: RENTEN) appeared on the screens with two taps worth EUR 325m and EUR 500m for bonds maturing in 2029 and 2028 respectively. The European Investment Bank (ticker: EIB) had a large volume deal to kick off the year. Its EUR 5bn bond was priced at ms +6bp (guidance: ms +8bp area) over 10 years. Like KfW, the deal was heavily oversubscribed with an order book of EUR 22.5bn. Staying with the supras, the EFSF (ticker: EFSF) started off with a dual tranche having sent out RfPs in advance. A bond with a 3y (EUR 2bn) and 10yr (EUR 4bn) maturity was issued. Both deals tightened by two basis points versus the original guidance and were ultimately priced at ms -24bp (3y) and ms +6bp (10y) respectively. The issuers in our coverage were particularly busy yesterday (Tuesday): the Council of Europe Development Bank (ticker: COE) went to investors with a 10-year bond in the amount of EUR 1bn (WNG). The guidance stood at ms +8bp area and the deal was priced at ms +7bp with an order book of EUR 1.25bn. Two French names also joined the issuers yesterday in the shape of CADES and Société du Grand Paris (ticker: SOGRPR). CADES naturally issued a social bond (5y) with a volume of EUR 5.0bn and was priced at OAT +42bp (equates to around ms +6bp). SOGRPR meanwhile provided fresh supply at the long end. Its 20-year green bond (EUR 1.0bn) changed hands at OAT +51bp, which equates to around ms +81bp. Several mandates were also announced yesterday: Agence France Locale (ticker: AFLBNK) plans to issue a 7-year bond shortly. Mandates for 5-year deals were issued by MuniFin (ticker: KUNTA), Export Development Canada (ticker: EDC), and SFIL (ticker: SFILFR). The International Bank for Reconstruction & Development (ticker: IBRD), on the other hand, intends to issue a 10-year sustainability bond, while Saarland (ticker: SAARLD) plans to issue a 7-year deal (EUR 500m).

Issuer	Country	Timing	ISIN	Maturity	Size	Spread	Rating	ESG
SOGRPR	FR	09.01.	FR001400F6X7	20.3	1.00bn	ms +81bp	- / Aa2 / -	X
CADES	FR	09.01.	FR001400F5U5	5.3y	5.00bn	ms +6bp	- / Aa2 / AA	X
COE	SNAT	09.01.	XS2576298991	10.0y	1.00bn	ms +7bp	AA+ / Aa1 / AAA	-
EFSF	SNAT	09.01.	EU000A2SCAG3	10.1y	4.00bn	ms +6bp	AA / Aaa / AA	-
EFSF	SNAT	09.01.	EU000A2SCAF5	3.6y	2.00bn	ms -24bp	AA / Aaa / AA	-
EIB	SNAT	04.01.	XS2574388646	10.0y	5.00bn	ms +6bp	AAA / Aaa / AAA	-
BNG	NL	03.01.	XS2573952517	10.0y	1.50bn	ms +11bp	AAA / Aaa / AAA	X
KFW	DE	03.01.	DE000A30VUK5	5.2y	6.00bn	ms -11bp	- / Aaa / AAA	-
NIESA	DE	02.01.	DE000A30V5D1	10.0y	0.75bn	ms -2bp	AAA / - / -	-

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

Cross Asset
ECB review: 2022 entailed all manner of monetary policy action

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

Just one thing was clear at the start of 2022: the turnaround in interest rates was coming
Rising inflation projections, declining economic growth, Russia's war of aggression in Europe and disrupted or even interrupted supply chains: there continued to be great uncertainties in the past year, because neither we nor the European Central Bank (ECB) had a blueprint in the drawer of how to adequately counter the prevailing geopolitical and monetary policy situation. A conflict situation of this kind is not to be found in any textbook. The ECB wanted – and wants – to dispel the spectre of inflation. That is understandable. But have fears of stagflation taken its place? Back in March, Christine Lagarde highlighted two further issues: financial market stability and price stability. Over the course of the year, questions on real economic activity were asked ever more frequently. Let's begin with a brief review of events that took place last year.

Face-saving ECB decision: hawkish backward roll in March
At its regular meeting in March, the ECB had confirmed it would end net purchases under the pandemic emergency purchase programme (PEPP) at the end of the first quarter of 2022. Before then, it had already been reducing its purchase rate over a longer period of time. In return, the conventional asset purchase programme (APP) was increased in size, as had been decided back in December 2021. We saw something of a game changer in March, however, when the amounts were identical to the previously communicated figures but the time horizon for these purchases was altered from quarterly to monthly. What did this mean exactly? The APP purchase rate was initially doubled to EUR 40bn for April (previously target for the whole of Q2), before being reduced to EUR 30bn again for May (previously: whole of Q3). In June, the ECB resumed its baseline rate of EUR 20bn per month under the APP (previously: whole of Q4). As a result, the central bank reduced its purchases even more swiftly than we thought possible. However, by March we had still been given no end date for the APP, which caused us some headaches. In other words, the new cards on the table at that time should at least be valid beyond June 2022 into the second half of the year. An end to the APP in the third quarter was therefore the most likely scenario, although the ECB recently made this dependent on the data. In addition, the ECB Governing Council stated that it no longer expected net purchases to only end shortly before the start in key interest rate hikes, but just "before" – we thought this was splitting hairs somewhat as regards the timeline. APP reinvestments were to continue beyond that date and will be maintained for as long as necessary to maintain favourable liquidity conditions and an ample degree of monetary accommodation.

New ECB path for net purchases
- End of Q1: discontinuation of the PEPP, envelope of EUR 1,850bn not used
- Q1 2022: APP at EUR 20bn per month
- April: APP doubles to EUR 40bn each month
- May: APP reduced to EUR 30bn per month
- June: APP returns to EUR 20bn (no end date until just before)

Total for APP in 2022: EUR 150bn

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

ECB heralds an interest rate turnaround in June: a journey not a step

At its regular June meeting, the European Central Bank confirmed that it would also end its net purchases under the conventional APP after ending net purchases under the PEPP (end of March 2022). We only saw a game changer for the latter at the March meeting (see above). The ECB scaled back its purchases, even faster than we once thought possible. There was no end date for the APP until the June meeting. While the most likely scenario was an end to the APP in Q3, the ECB made this decision dependent on data. The ECB therefore withdrew as early as 1 July, which finally gave us and all market players certainty. This cleared the way for the first rate hike at the meeting on 21 July. APP reinvestments were still to continue beyond that date and be maintained for as long as necessary to maintain favourable liquidity conditions and an ample degree of monetary accommodation. This reinvestment for the PEPP shall continue until at least the end of 2024. The ECB Governing Council again did not commit itself to the APP.

New questions arise as a result: how many rate hikes and by how much?

The inflation data had long justified an interest rate hike. However, opinions remain divided into 2023 on the final number of hikes and, above all, the respective magnitude. The ECB President committed herself early on to +25bp in July and more likely to +50 basis points at the following meeting. As we now know, things turned out differently.

The ECB off to a kick-start: sprint or marathon to the "new normal"?

Acting in the spirit of sequencing (first all net purchases end, then key interest rates are raised), the ECB took action at its regular July meeting – and nevertheless contradicted itself: although it raised all three key interest rates, the hike was twice what had been announced at the June meeting. In doing so, the ECB went against its prior decision. This led to a mixed response on the market, because the negative interest rate was now a thing of the past. However, the focus of market players was by no means solely on interest rates, which – as we predicted at the time – continued to rise in September, October and December. There was also much discussion in advance about the scope (concrete or unlimited?) and conditionality (unconditional or partial loss of sovereignty?) of the new ECB crisis tool, which we will discuss below.

From Draghi's resignation in Italy to EUR/USD parity

It could perhaps be claimed that the problems created, to some extent, by the ECB itself made the environment for its decision-makers even more challenging. Mario Draghi's resignation on the same day as the interest rate meeting on 21 July 2022 and the yield movements directly associated with this certainly came at a more than inopportune moment. The geopolitical upheavals and resultant fears with regard to lasting economic setbacks could not and cannot be ignored either. In addition, some market players were concerned about exchange rate developments. A weak euro may in principle be seen as an economic aid, but it also fuels the rate of inflation. Even if the meeting was not expected to have a direct impact on the EUR/USD exchange rate, for example, the ECB Governing Council has been more concerned about the exchange rate impact of its own decisions and communications, which resulted in a step of +50bp. Lagarde spoke her mind as she reported on this.

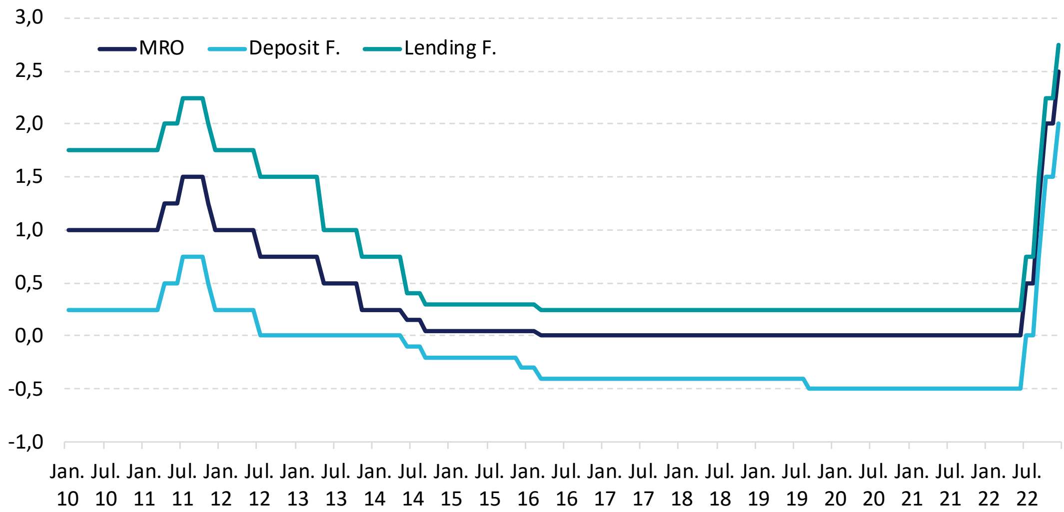
The new ECB tool: the Transmission Protection Instrument – TPI

In particular, public debate in 2022 on the further pace of monetary policy in the euro area focused on the ECB's crisis tool. A special meeting of the ECB took place specifically for the – as yet unnamed and undefined – programme, details of which would scarcely have filled a Post-It note afterwards. Ahead of the meeting, the trade-off between the effectiveness and efficiency perceived by financial market players on the one hand and legal concerns regarding compliance with the mandate of the central bank on the other was regularly the focus of attention. Rather unsurprisingly and quite reasonably given the history of the ECB's unconventional monetary policy, the focus was on the Bundesbank, in particular, though not exclusively. In this respect, Joachim Nagel somewhat set the course with his reflections on the limits of the crisis tool, which had already been announced in the run-up to the July meeting. The President of the Deutsche Bundesbank pointed out that spreads must be proven to be unjustified and that the monetary policy transmission mechanism must be impaired, which would ultimately hinder the ECB in fulfilling its mandate with regard to maintaining price stability. In the event of a deployment, the tool should not change the monetary policy orientation. In addition, Nagel clearly stated his view that it would be crucial for this measure to be used solely on monetary policy grounds and exclude state financing. It is crucial member states continue to have sufficient incentives to conduct their fiscal and economic policies in a sustainable manner. However, what the ECB delivered cannot be compared to the requirements. While the interest rate hike outlined above is not very dovish, the crisis tool can nonetheless by no means be described as hawkish. So, the ECB opted for low conditionality and an unlimited scope (cf. ECB: the Transmission Protection Instrument). The Transmission Protection Instrument (TPI) approved by the Governing Council was linked directly with the interest rate steps in the statement, which we think clearly shows the *quid pro quo* between the hawks (increase by 50bp) and the doves (extensive and not strictly defined TPI). During the press conference, Lagarde never tired of emphasising that its concern is the transmission of monetary policy throughout the area and the goal is not to deal with impending redenomination risks. She also underlined how pleased she was that the decision on the TPI was clear. Furthermore, during the press conference, she repeatedly assured that the Governing Council would rather not use the instrument. Here, she clearly sees the reinvestment of the PEPP as a "first line of defence" in the fight against escalating spreads and unwanted yield rises. Also noteworthy was the de facto end of forward guidance, with the ECB switching to making decisions on a monthly basis or from meeting to meeting, depending on the data situation.

September was the time for a record interest rate hike: making the move

Ahead of the September meeting, it appeared that the hawks had gained the upper hand in the ECB Governing Council. The announcement from the monetary watchdogs in Frankfurt therefore by no means came as a surprise. The historic interest rate hike of +75bp had certainly been expected by capital market players, even though forward guidance was no longer a strategic component of the ECB Governing Council's communication (see above). The Governing Council had once again decided to raise all three key ECB interest rates, speaking in this context of frontloading "the transition from the prevailing highly accommodative level of policy rates towards levels that will ensure the timely return of inflation to the ECB's 2% medium-term target". In fact, however, the numerous statements emanating from the Governing Council suggest there was a high probability of a "very big step" in the context of the ECB's interest rate decision at the time. The 75bp step was therefore far from being a foregone conclusion. Reservations were also expressed – in particular by ECB Chief Economist Philip R. Lane – with regard to the ability of such large interest rate hikes to be absorbed by the financial markets and the additional uncertainty that may accompany this. With this decision, it seems that once again the hawks had their beaks in front. This particularly applies given the wording of the statement, according to which the Council expects to raise interest rates further in order to (further) dampen demand. However, looking from another perspective, the "biggest move" could also have come about – at least in part – from the desire to frontload for winter to a certain degree.

ECB key interest rates (in %)



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

Did they deliver as expected in October?

As anticipated, the ECB Governing Council decided to raise the three key ECB interest rates by 75bp each at its regular meeting. In its press release, the central bankers at the same time highlighted that the ECB expected to raise interest rates further. Inflation in consumer prices therefore "remains far too high and is projected to stay above the target for too long". The ECB Governing Council's future policy rate decisions will continue to follow a meeting-by-meeting approach and be based on the inflation and economic outlook. As part of their monetary policy stance, the central bankers on the whole focus on supporting demand and therefore guarding "against the risk of a persistent upward shift in inflation expectations".

Recalibration of TLTRO III

While the interest rate hike was delivered as expected and ordered, questions remained as to whether and how the ECB Governing Council would specifically address the other monetary policy instruments at the meeting. With regard to the matter of changes in the rate of the APP and PEPP purchase programmes, the ECB stayed the course and did not make any adjustments in its statement. However, for the TLTRO III tenders, which have recently also been the focus of public debate, and the remuneration of minimum reserves, the ECB Governing Council agreed on changes to the applicable terms and conditions and interest rates. The central bankers clearly contextualise the need for recalibration of TLTRO III "in view of the unexpected and extraordinary rise in inflation". This is also necessary to ensure that it is consistent with the broader monetary policy normalisation process and to reinforce the transmission of policy rate increases to bank lending conditions. The Governing Council therefore decided to adjust the interest rates applicable to TLTRO III from 23 November 2022 and to offer banks three additional voluntary early repayment dates. At the end of 2022, the eight remaining tenders still had a total volume of EUR 1,321bn, with the largest share of EUR 631bn accounted for by the TLTRO III.4 tender, which expires on 28 June 2023. This is not least because of the additional voluntary repayment date on 23 November 2022. Here, EUR 212bn was repaid in this tranche alone. A total of EUR 296bn was returned to the Eurosystem on that date. A further EUR 447bn followed in December, which we feel demonstrated the effectiveness of the new conditions.

ECB sets out its stall for 2023

At its final meeting of last year, the ECB Governing Council once again decided to raise all three key interest rates. In contrast to the two previous (historically high) interest rate hikes of 75bp, an increase of 50bp was announced. Accordingly, the interest rate on the main refinancing operations as well as the interest rates on the marginal lending facility and the deposit facility will be increased to 2.50%, 2.75% and 2.00% respectively, with effect from 21 December 2022. The ECB Governing Council continues to assume that further interest rate hikes will be necessary – above all to guard against the risk of a persistent upward shift in inflation expectations. It is therefore not surprising that the meeting-by-meeting approach continues to be followed for future policy rate decisions. The new projections on the inflation trend also provide an insight into the decision-making basis of the monetary watchdogs. For 2022, inflation is now expected to average 8.4%, while the projections for 2023 (6.3%), 2024 (3.4%) and finally 2025 (2.3%) envisage a moderate rate of inflation.

New ECB projections for growth and inflation in the eurozone*

	2021	2022	2023	2024	2025
HCPI	2.6	8.4	6.3	3.4	2.3
Real GDP	5.2	3.4	0.5	1.9	1.8

* Change versus previous year in %
NB: real GDP figures refer to seasonally and working-day adjusted data. Historical data may differ from the most recent Eurostat publications due to data publication after the projection deadline.
Source: ECB, NORD/LB Markets Strategy & Floor Research

End of full reinvestments under the APP from March 2023

The press release was interesting with regard to reinvestments, since we had also hoped for information on the further handling of the asset purchase programme (APP) and were not disappointed. Full reinvestments will reportedly run until the end of February 2023. From March 2023, the APP portfolio will decline at “a measured and predictable pace”. The ECB Governing Council announced a monthly decline amounting to EUR 15bn per month on average until the second quarter of 2023, leaving the rate thereafter open to discussion. For the PEPP, full reinvestments are expected to continue until at least the end of 2024. The ECB plans to announce the detailed parameters for reducing the APP holdings at its first meeting of 2023 (2 February). In principle, the Council reserves the right to “regularly reassess” the pace of the APP portfolio reduction.

We were astonished on at least two occasions last year

The ECB opted to follow the mantra of President Lagarde’s predecessor Jean-Claude Trichet “we never pre-commit” and take a meeting-by-meeting approach. Nevertheless, in June, she and the ECB Governing Council prepared market players for a hike of 25bp in July – as we know, things turned out differently. A major move in July was ruled out even when asked about at the press conference in June. In December, this game was repeated (just a little differently) when, disregarding the statement during the press conference, the impression was suddenly given that there would be another 50bp hike not only in February 2023, but also at further meetings later in the year. So we remain curious as to what might lie ahead.

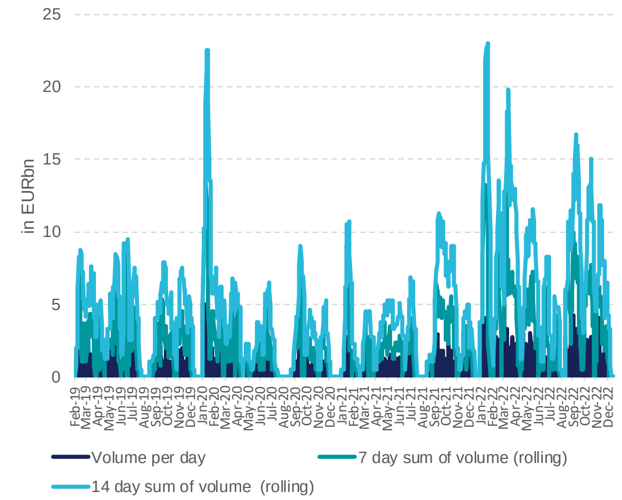
Conclusion and outlook

A lesson that can be learned from 2022 with regard to the ECB might be summarised as: don’t praise the statement released before the press conference. In the past 12 months, Christine Lagarde had repeatedly delivered significant news to the markets only once stood in front of the cameras and microphones. It was regularly and unsurprisingly those statements with a hawkish tongue that had the greater impact on sentiment. What may come from the ECB in 2023 remains uncertain, though not entirely unknown. Further rate hikes are certainly to be expected. This is initially likely to continue impacting the asset classes we examine, although this will gradually dissipate. Accordingly, “ECB action” also lies in store for 2023. As is so often the case, it will depend on the details and nuances, although the central bank’s line should remain clear and the fight against inflation is initially expected to take centre stage.

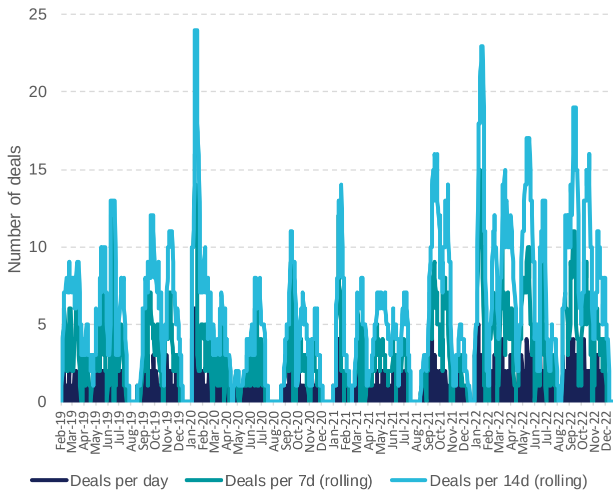
Covered Bonds
Covered Bonds Annual Review 2022
Author: Dr Frederik Kunze

A review of 2022: surge in issuance activity of an unexpected (by us) magnitude
At the start of 2023, it would be remiss of us not to use the first edition of our weekly publication to look back at the events of 2022. As in previous years, the EUR benchmark segment for covered bonds was dominated by ECB monetary policy, in particular, over the past twelve months, but this factor alone does not explain the renewed departure from seasonal patterns on the primary market. In this respect, 2022 was once again a dramatic exception, even eclipsing the "pandemic years" of 2020 and 2021 in our opinion. At the beginning of the year, it still looked as though we would see a return to the normal seasonal pattern in terms of primary market activity but, contrary to the associated expectation that momentum would slow as a consequence of the strong start to the year, there was no abatement in the flow of new deals. Even though a certain degree of caution is advisable with regard to attributing developments to monocausalities, we do place this development in the context of Russia's war of aggression against Ukraine, which started in February. Ultimately, this geopolitical escalation also correlated with a significant change in risk sentiment, which gave covered financing a significant boost. However, in the run-up to this attack, another significant risk factor also materialised on the covered bond market. Sustained, rampant inflation across the single currency area and the monetary policy approach of other relevant central banks increased pressure on the ECB to act. The anticipated interest rate hikes and the increased risk of a change in interest rates led, for example, to issuers focusing heavily on the short end to satisfy investor demand. We shall look more closely at these conditions and others on the covered bond market in 2022 below.

EUR BMK: daily issuance volume (EUR bn)



EUR BMK: daily number of issues

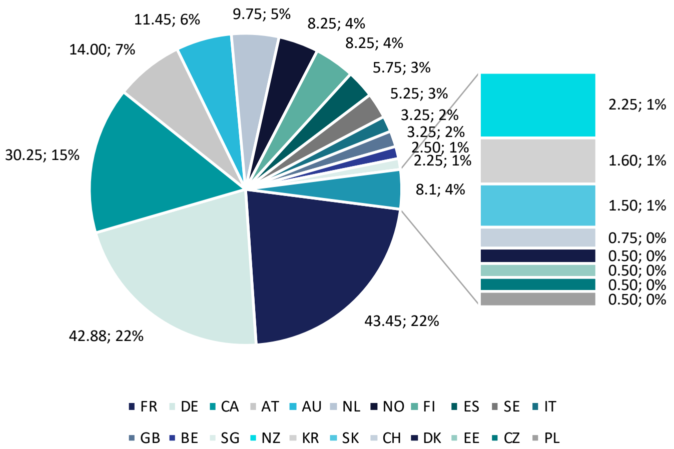


Source: market data, NORD/LB Markets Strategy & Floor Research

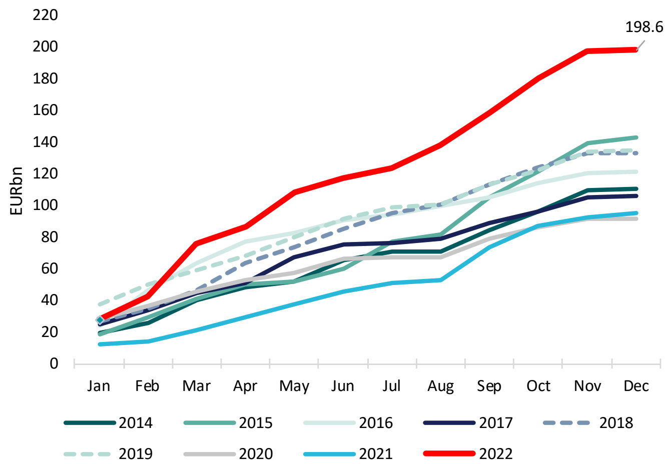
New issuance volume falls only just short of the EUR 200bn mark

The trend in issues compared year-on-year clearly demonstrates issuance volume as the distinguishing feature of the covered bond primary market in 2022. Accordingly, newly placed bonds amounting to EUR 198.6bn (215 deals) were recorded in the EUR benchmark segment as at year-end. This historic peak is by no means diminished as an incredible feat by the fact that the new issuance volume did not quite manage to creep past the EUR 200bn mark. The two covered bond heavyweights, France (21.9% or EUR 43.5bn) and Germany (21.6% or EUR 42.9bn), accounted for the largest share of this issuance volume. They were followed in third and fourth place by Canada (15.2% or EUR 30.3bn) and Austria (7.1% or EUR 14bn), two jurisdictions that we would rank among the major surprises of the last twelve months in terms of primary market activities.

Issuance volume EUR BMK in 2022 (EUR 198.6bn)



EUR BMK: Y/Y comparison of issuance volumes



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

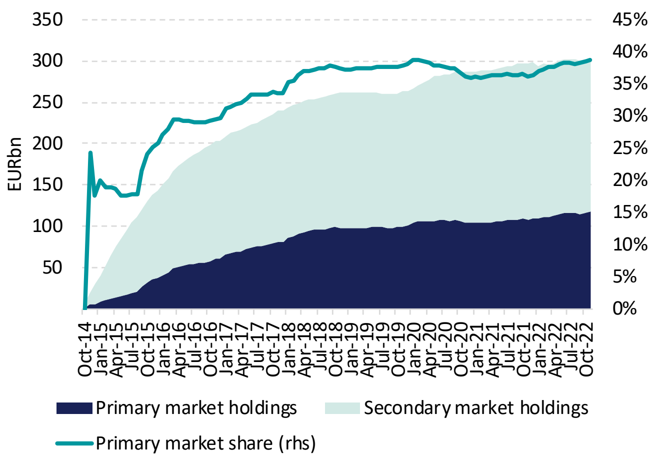
Positive net supply totalled EUR 68.8bn in 2022

With regard to net supply in 2022, it was precisely these four jurisdictions that drove the abundant net supply of EUR 68.8bn. Accordingly, Germany and Canada reported an increase of EUR 22.5bn after maturities while gains for the covered bond markets for France (EUR 15.4bn) and Austria (EUR 10.5bn) were also remarkable. In contrast, new issuance volumes well below maturities in 2022 were reported by Spain (net decline: EUR 8.7bn), the United Kingdom (EUR -4bn), Italy (EUR -4bn) and Portugal (EUR -2.8bn). Portugal actually ranked among those covered bond countries that issued no new covered bonds in 2022.

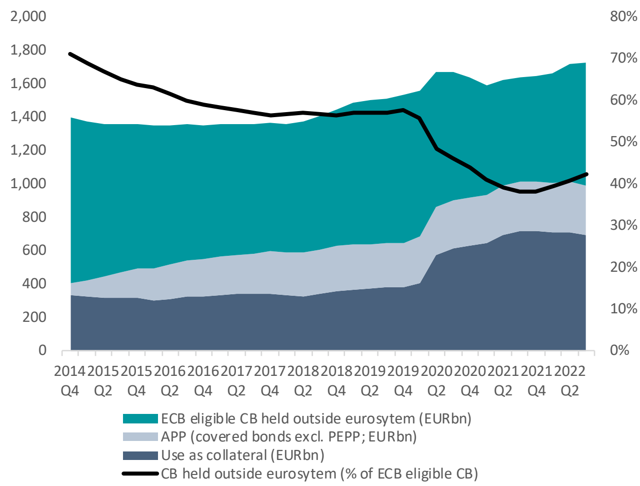
Primary market in 2022 and monetary policy: adjustment to the ECB purchase rate

The substantial issuance volume was once again supported by strong demand from the Eurosystem. Even the reduction in its purchase rate, which was cut in two 10% steps from 40% to 30% (in Q1) and to 20% (at the end of Q2) in the last twelve months, cannot disguise this fact by any means. At EUR 132bn, the CBPP3-relevant issuance volume in 2022 was still well above the total volume in the EUR benchmark segment in 2021. In absolute figures, this therefore results in a larger purchase volume on the primary market for 2022 than for 2021 in purely mathematical terms at least.

ECB: CBPP3 holdings



ECB: covered bonds in the Eurosystem

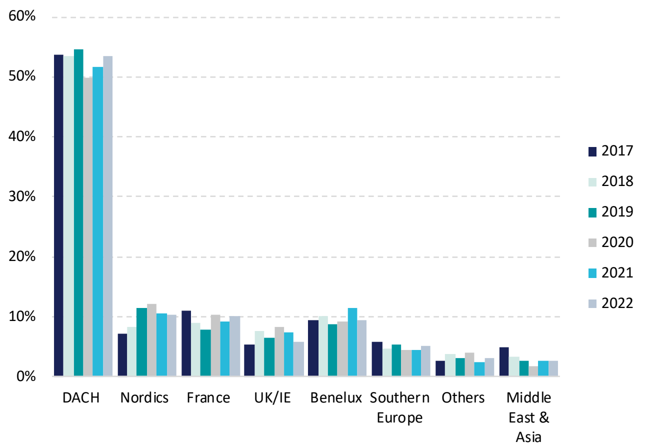


Source: market data, ECB, Moody's, Bloomberg, NORD/LB Markets Strategy & Floor Research

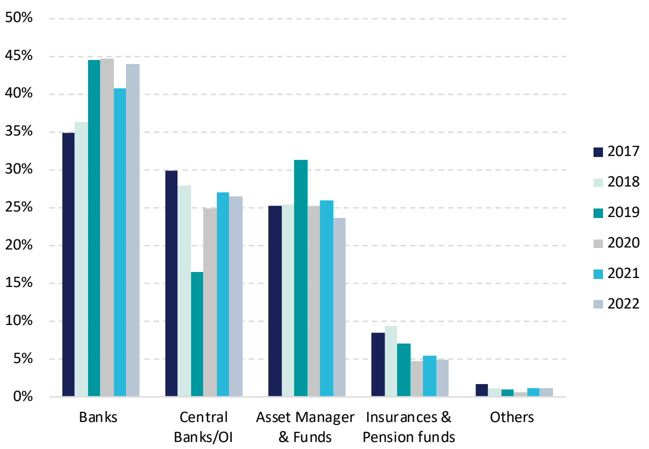
ECB monetary policy also remains a key factor determining supply and demand for other reasons…

But the influence of ECB monetary policy was not restricted to the primary market or demand in the last twelve months either. The abandonment of net purchases under the APP, which followed the phase of reinvesting the entire CBPP3 portfolio of around EUR 300bn, was undoubtedly a significant paradigm shift. However, the changes announced in relation to the recalibration of the TLTRO III tenders brought the focus back to publicly placed deals – away from retained bonds, the majority of which served to furnish collateral to the ECB. As mentioned initially, in conjunction with the changes in risk sentiment, which were also a consequence of the reversal in interest rates associated with geopolitical upheavals and economic downside risks, covered financing experienced a veritable renaissance – even to the detriment of new issues in the form of senior unsecured bonds. Monetary policy – or its reorientation – was accordingly a key factor in setting the pace for the covered bond market.

Primary market distribution by investor country



Primary market distribution by investor

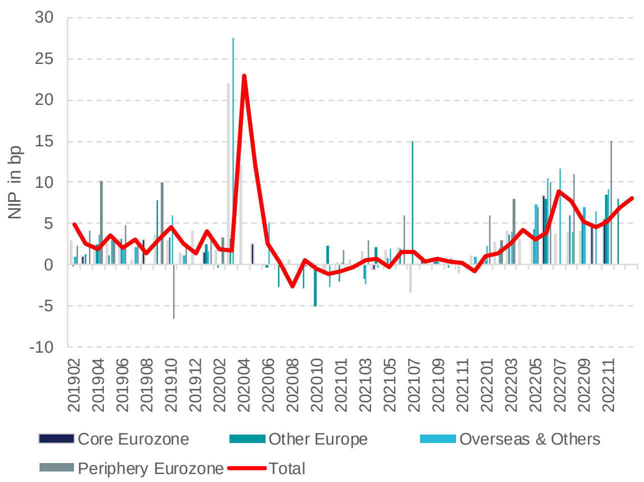


Source: market data, NORD/LB Markets Strategy & Floor Research

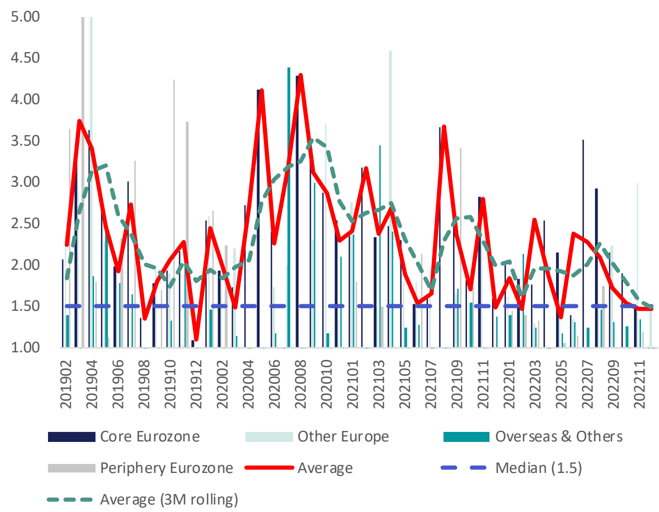
…but real money investors are back on the scene

The ECB's withdrawal therefore became apparent in 2022 and will continue to be felt in the next twelve months. The relative share of the covered bond market held by the Eurosystem has decreased accordingly in recent quarters. The outstanding volume of covered bonds (approximated through being deposited as collateral in the case of covered issues that meet the ECB's eligibility criteria) has accordingly increased significantly in absolute terms, while on the other hand, the volumes of covered bonds actually used as collateral by the ECB or acquired under the purchase programmes trended sideways or even slightly downwards (c.f. chart above: "ECB: covered bonds in the Eurosystem"). Possible additional repayments associated with extensive TLTRO III redemptions (c.f. Cross Asset article in this edition of our weekly publication) have not yet been taken into account in the database, which covers the period up to the third quarter of 2022. However, it was already clear at the beginning of the year that the gap left by the ECB was being filled to a remarkable extent by real money investors (c.f. ECBC Factbook 2022 – Covered Bond Investor View: Private Buyers Return as the ECB steps back). High oversubscription ratios and still comparatively low new issue premiums in the first few months of 2022 by and large indicated more than merely robust investor demand, especially against the backdrop of buoyant primary market activity. Particularly with regard to the oversubscription ratios, from our point of view it must also be taken into account that issuers generally placed larger deals and made greater use of order books when stipulating the size of any deals than was the case in previous years. In actual fact, a perceptible power shift took place in the second half of the year especially, ensuring that the seller's market became a buyer's market. Consequently, new issue premiums also rose. Our view is that these increases were initially episodic in character but became more established over time, especially after the very short summer break. These developments were also reflected – initially temporarily – in spreads in the secondary market.

New issue premiums



Bid-to-cover ratios

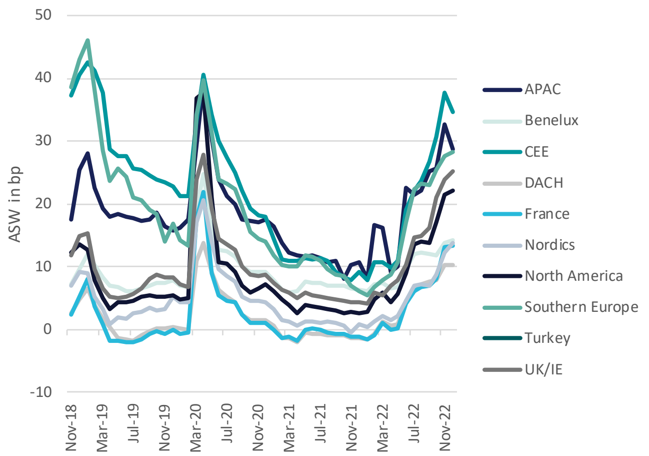


Source: market data, NORD/LB Markets Strategy & Floor Research

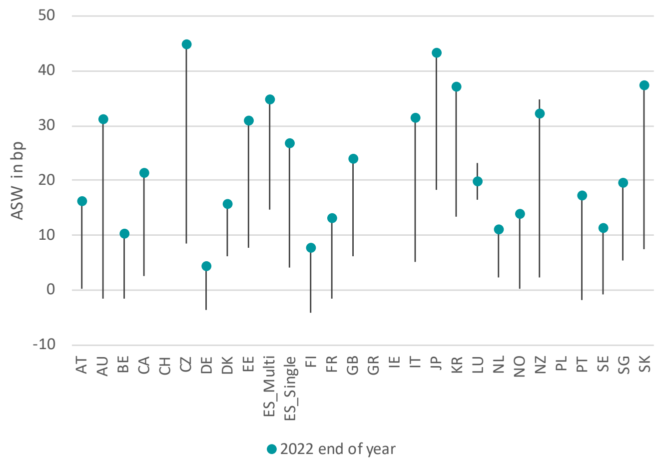
Spread trend on the secondary market

From a fundamental perspective, the covered bond market and the EUR benchmark segment, in particular, remained robust across all jurisdictions in 2022. In our opinion, this is still the case even against the backdrop of nascent concerns about the anticipated downturn in property prices resulting from a general increase in interest rates. In this respect, the increases in spreads in the last twelve months were more attributable to general sentiment and market technicals, whereby high net supply on the covered bond market, in particular, is responsible for the new spread levels. However, the situation is also exacerbated by a reassessment of the fundamental distinctions between the jurisdictions. This must not, however, be confused with a fundamental deterioration in credit quality but rather a return to normality. The ECB's ultra-expansionary monetary policy has, in this context, ultimately suppressed the usual heterogeneity across the covered bond jurisdictions for a long time.

Trend in ASW spread by region (5Y)



Spread range by country in 2022 (5Y)

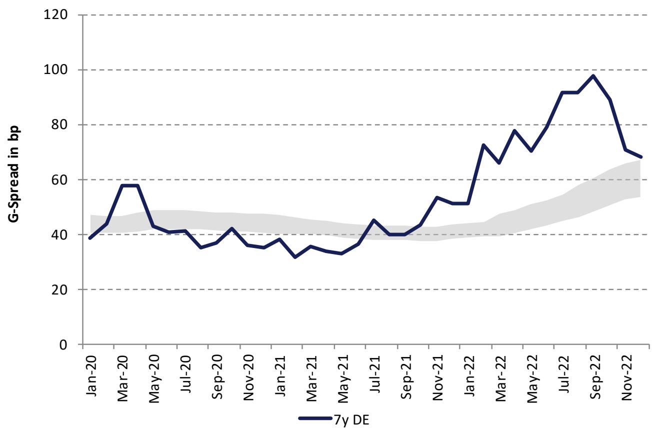


Source: market data, Bloomberg, NORD/LB Markets Strategy & Floor Research

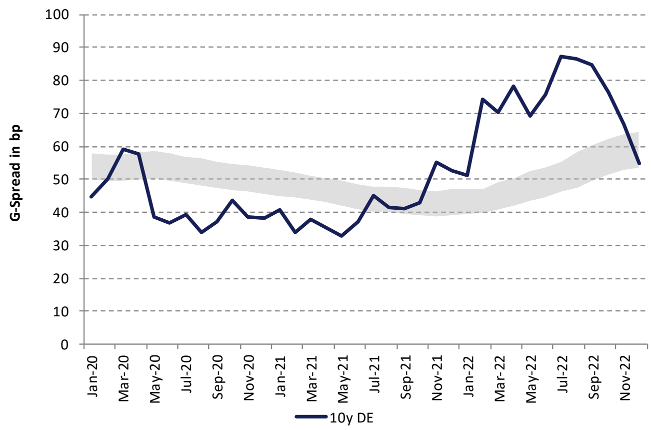
Relative value: Pfandbriefe at times highly attractive compared with Bunds

The fact that the covered bond segment benefited from strong investor interest must also be explained in a broader market context. This is clearly illustrated by the example of the relative appeal of Pfandbriefe compared with Bunds (see following charts). As a consequence of a significant spread between EUR swap rates and the return on Bunds with the same maturity, among other aspects, the relative value consideration indicated significant tightening potential for Pfandbriefe over a long period in 2022. In expectation of a mean reversion (return to long-term average) – also as a consequence of a normalisation of the Bund asset swap spread – this was seen by a large number of investors as a buy signal in our opinion. Wider spreads on the part of covered bonds but also a reversal of the swaps' premium compared with Bunds now paint a different picture at year-end in purely mathematical terms. For example, on the basis of generic calculations, Pfandbriefe with seven or ten-year maturities traded at the level of their longer-term range with regard to the difference in spreads compared with Bunds (36 months; sliding).

Spread difference: Pfandbriefe vs. Bunds (7Y generic)



Spread difference: Pfandbriefe vs. Bunds (10Y generic)

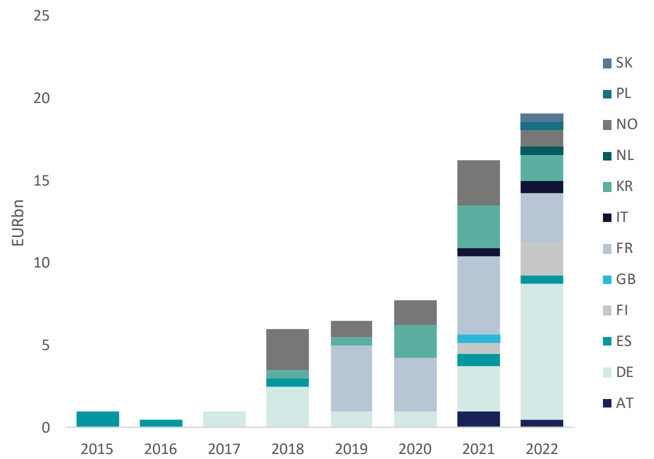


Source: market data, Bloomberg, NORD/LB Markets Strategy & Floor Research

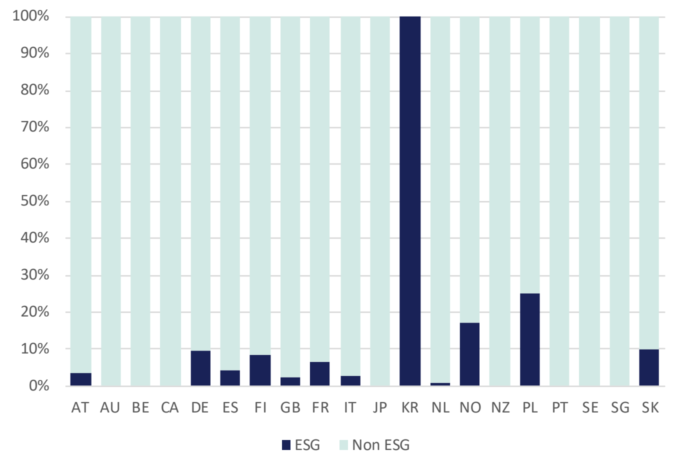
ESG segment continued its growth trajectory in 2022 with an issuance volume of EUR 19.1bn

In purely numerical terms, 2022 was another record year for the ESG submarket of the EUR benchmark segment. Accordingly, covered bonds totalling EUR 19.1bn (spread across 28 issues) were placed on the market in sustainable formats (green, social and sustainability). Although this figure exceeds that of the previous year (EUR 16.25bn), it must be put in context against the backdrop of the high issuance volume in 2022. Once again, issues in green format predominated, with EUR 15.75bn being attributable to the green segment (previous year: EUR 10.75bn), while volumes of EUR 2.85bn (social; previous year: EUR 4.8bn) and EUR 0.5bn (sustainability; previous year: EUR 0.7bn) were attributable to the other two classifications. The fact that the generic growth of the ESG segment is continuing among EUR benchmarks is also clear from the first-time issuers in 2022. Accordingly, Caja Rural de Navarra (EUR 500m; previously: sustainability), DZ HYP (EUR 1bn) and Banco BPM (EUR 750m) placed their first green bonds at the beginning of the year. They were subsequently followed by UniCredit Bank Austria (EUR 500m), Bayern LB (EUR 500m), PKO Bank Hipoteczny (EUR 500m) and Nordea Kiinnitysluottopankki (EUR 1.0bn) in placing their first green bonds. For Bayern LB, the inaugural green public sector Pfandbrief came with a "green rail" focus. The bank's first green mortgage Pfandbrief followed in October 2022 (EUR 500m). The placement by PKO Bank also marked the first EUR benchmark in green format from Poland. Berlin Hyp approached investors with its first social Pfandbrief and placed EUR 750m at the beginning of May. In principle, we would attribute strong investor demand to the ESG segment, including with covered bonds, compared with the market as a whole. The high average oversubscription ratios also point to this. Nevertheless, the fact that issuance sizes are somewhat smaller on average than for "conventional" deals cannot be disregarded here. Overall, we see considerable potential for sustainable covered bonds to catch up and, even against the backdrop of a more marked difference in spreads in 2023, expect even stronger arguments for issuing bonds in green, social and sustainability formats over the next twelve months.

EUR benchmarks (ESG): issuance volume



EUR benchmarks (ESG): shares of the market as a whole

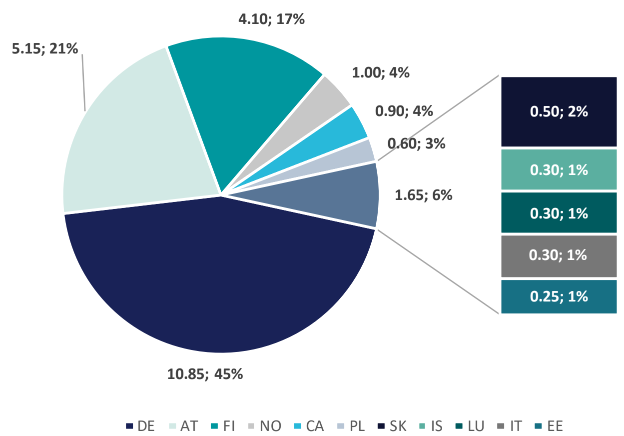


Source: market data, Bloomberg, NORD/LB Markets Strategy & Floor Research

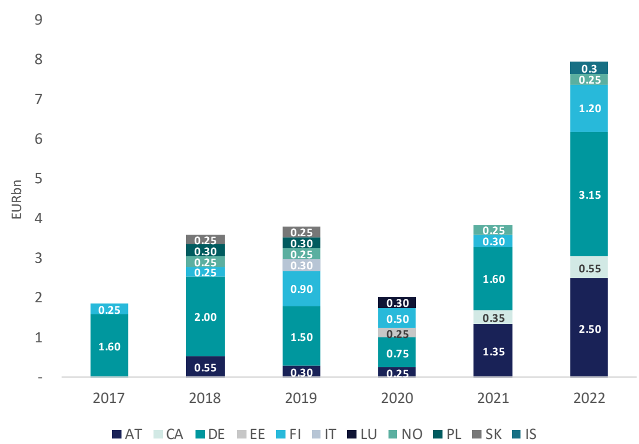
EUR sub-benchmark segment continues its dynamic growth

The EUR sub-benchmark segment was also more than a footnote in 2022. The market for deals equal to or greater than EUR 250m, but less than EUR 500m fared very well in the last twelve months, with issues totalling EUR 7.95bn (spread across six jurisdictions). In particular, the market was supported by issuers from Germany (EUR 3.15bn; twelve issues) and Austria (EUR 2.5bn; nine issues). These two jurisdictions also account for the largest share of the total market for EUR sub-benchmarks. Looking forward to 2023 and beyond, we definitely see signs of this sub-segment becoming more broadly based. We attribute this assessment not least to the implications of the EU Covered Bond Directive. As a result of the introduction of minimum standards and the amendment of covered bond legislation even in the less "traditional" jurisdictions with regard to covered funding by the banking sector, the sub-benchmark sector, in particular, could experience an influx.

EUR sub-benchmark volume by country (EUR bn)



EUR sub-benchmarks: issuance volume



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

NORD/LB Issuer Guide 2022 as a reference work for the covered bond market

We published the tenth issue of our NORD/LB Issuer Guide Covered Bonds in November 2022. As usual, the publication provides an extensive overview of the covered bond market. The Issuer Guide focuses on issuers of covered bonds and the corresponding cover pools. In 2022, the guide contains information on a total of 181 financial institutions, each of which has outstanding EUR benchmark and/or sub-benchmark issues. Following the evaluation, the data from well in excess of 200 cover pools in 27 jurisdictions were collated. We also regularly addressed specific data publications and regulatory aspects in the context of the standard publications "Transparency Requirements §28 PfandBG" (issue Q3 2022) and "Risk Weights and LCR Level of Covered Bonds" (issue 02/2022) over the past twelve months. These and other publications can be found here: NORD/LB Floor Research. If you don't want to miss out on any new information, we are happy to include you on our Floor Research Newsletter distribution list. We also focused on specific covered bond markets in the course of the "Nordic Covered Bond Roundtable 2022" and the "Austrian Covered Bond Round Table 2022".

Conclusion

One exceptional year follows the next. This is undoubtedly true for the covered bond market as well. In January last year, it was widely assumed that the year ahead would become known as "the year after the pandemic". As it turned out, a better term for the year just ended might be "the year of the paradigm shift". Forced by external circumstances, central banks also ultimately accelerated a move away from the covered bond market. At the same time, in a market characterised by accumulating elements of uncertainty, market players opted to focus on covered bonds as an important funding tool in times of crisis.

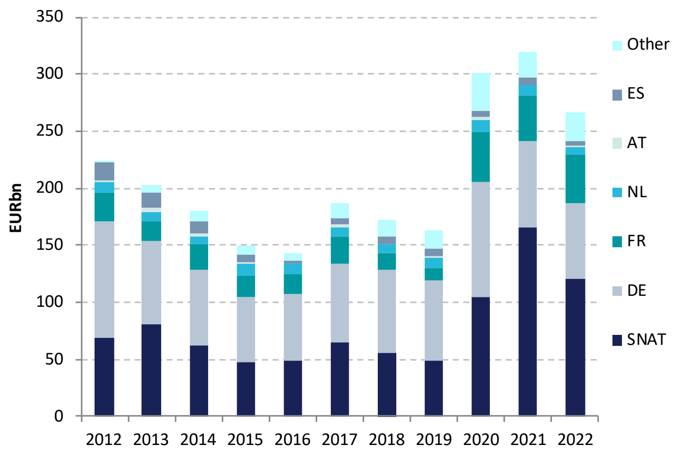
SSA/Public Issuers
SSA: Annual review of 2022

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

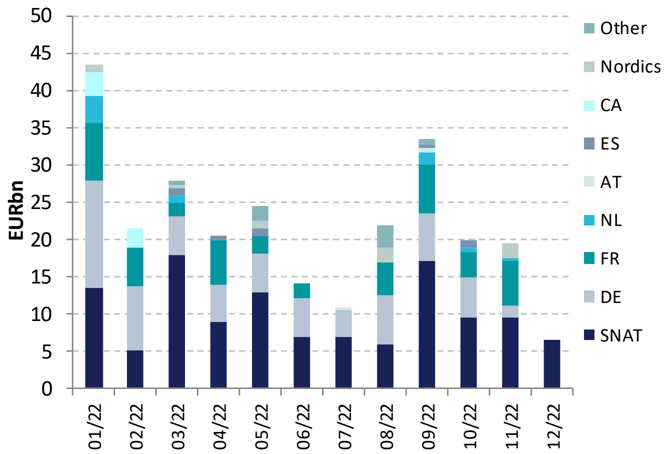
Introduction

As part of our first edition of the new year, we would like to look back and take stock of EUR benchmark activities on the SSA market in 2022 with the necessary distance despite geopolitical upheavals. Overall, the past year was still characterised as far as possible by favourable refinancing conditions for the issuers included in our coverage. Since the ECB has, as expected, ushered in a monetary policy turnaround, we shall focus on the turbulent events in a separate article within this issue. Following the end of net purchases by the Eurosystem (PSPP and PEPP), in particular, and the historic reversal in interest rates involving many significant rate hikes, investors are now receiving an appreciable rate of interest once more. We shall attempt to classify this demand and the continuing significant supply of new bonds across the following pages.

EUR benchmark issuance volumes



EUR benchmark issuance volumes 2022



NB: Benchmarks are defined as bonds with a minimum volume of EUR 0.5bn.
Source: Bloomberg, NORD/LB Markets Strategy & Floor Research

Issuance volume remains at a high level

At EUR 270.4bn, issuance volume remained at a very high level in 2022. Although it was slightly lower in comparison with 2020 and 2021, it is still around 63% higher than before the pandemic. With regard to the pandemic, last year it gradually faded more and more into the background. Instead, new items suddenly appeared on the agenda: following Russia's war of aggression against Ukraine and the associated energy crisis, the economic situation was characterised by uncertainty. The German government and Laender agreed on a rescue package to help households and companies deal with horrendous energy costs. To this end, for example, promotional banks agreed special programmes to provide speedy financial support. Nevertheless, this did not translate into lavish issuance volumes on the part of the Laender. Their tax revenues were higher than expected, meaning that the Laender tended to be only rarely active on the primary market.

Pronounced focus on the first half of the year

In 2022, the long-established issuance pattern was repeated again, as was the case in 2021: once again, January was the busiest month with EUR benchmarks of over EUR 44bn. In 2020, the figure was around EUR 30bn, and it was only sufficient to rank fourth in terms of the number of deals per month. In 2022, September climbed to a figure of EUR 34bn, occupying second place. Third place went – as it did in 2021 – to March with around EUR 29bn. Fourth place went to May with almost EUR 25bn. True to the seasonal pattern, the months of July and December were the two least active. Not surprisingly, the months of June and November did not offer particularly many new deals either. Activities in the past year therefore exceeded the previous (pre-pandemic) strongest years, 2011 and 2012, by far. However, another record following 2021 was not possible. All told, a strong issuance volume (benchmark) of EUR 270.4bn (previous year: EUR 324.2bn) was achieved. The average from 2008 to 2019 amounts to EUR 172.5bn as a comparative yardstick. As described, the previous record years were 2011 and 2012 with an issuance volume of around EUR 224bn. At 154, the number of EUR benchmarks in 2022 was below the 176 bonds we recorded in 2021. This was largely due to the high-volume bonds issued by Luxembourg-based E-supras, first and foremost the EU. Here, the long-term average stands at 130 bonds, with the previous peaks in 2011 (153 bonds) and 2012 (157), respectively.

Publications in 2022

Besides our ad hoc publications on market-moving events, such as the landmark decision by the ECB for 2023 in December, we stuck to what we do best in 2022 too: the latest edition of the Issuer Guide – German Bundeslaender 2022 appeared in October and proved – not without a certain degree of pride on our part – to be very popular. It is also always a source of interest to us to see your growing interest in niche products. In the meantime, we are expanding the "Beyond Bundeslaender" segment ever further: we were already able to examine regions from Portugal, Spain and Belgium in more detail here. Last year, we considered a new concept for our Issuer Guide "Supranationals & Agencies", which otherwise appeared annually (most recently in 2019) and always served as a reference work providing a comprehensive overview of the EUR benchmark segment: instead of one publication, it was divided according to the individual sub-markets. To date, we have published German, Dutch, Austrian, Scandinavian and Spanish Agencies. These annual publications were accompanied by a total of 39 issues of our weekly publication as well as digital capital market conferences and spotlights on selected topics. We were also delighted that, in addition to the option of hybrid participation, the capital market conference could take place predominantly on a face-to-face basis for the first time since the pandemic started last year.

Brief summary of key topics in 2022

Topically speaking, in addition to the transition to an endemic situation, we found ourselves in new waters last year. A war in Europe had long been considered inconceivable and the reversal in interest rates finally came far more rapidly than most market participants anticipated. Furthermore, most people were probably only familiar with double-digit inflation figures in Germany from hearsay. The EU is still setting itself up as the new super issuer and even a rock solid KfW achieved record funding volume, at approximately EUR 90bn, consisting of 180 transactions spread across 12 currencies (see Market Overview section of this issue). In the rest of this article, we shall examine the topics that moved us and/or the market last year.

EU: SURE ended, NGEU proceeding apace, emergency aid for Ukraine, REPowerEU

We expected the European Union to outdo all other issuers in 2022 with around EUR 110-130bn in new funding. In purely mathematical terms, this would have been around EUR 2.3bn per full calendar week. We then had certainty with the publication of the second funding calendar on 24 June: contrary to our expectation that the EU would approach investors in the second half for more than the EUR 50bn planned in the first half, we were, however, surprised to a certain extent that likewise "only" EUR 50bn was announced. At the same time, however, this figure of EUR 50bn only applied to the NextGenerationEU programme, with the funding for SURE and MFA not included in the forecast. Therefore, our estimate was accurate to a certain extent. While the NGEU programme continues to gather momentum, we had to say farewell to the SURE programme and the supply of new social bonds associated with this funding programme at the end of the year. Following the last issue in December, the programme, which was set at EUR 100bn, therefore had a total volume of EUR 98.4bn. Italy was by far the largest recipient of the aid package with commitments of EUR 27.4bn, followed by Spain on EUR 21.3bn. It was replaced (for anything but positive reasons) by a new programme: in view of the war of aggression in breach of international law in Ukraine, the EU provided the government with support worth EUR 7.2bn in total through an extraordinary MFA programme. A further package worth EUR 18bn is already planned for 2023. On top of this, there was the "usual" NGEU funding. Around EUR 806.9bn is to be raised for this purpose up to 2026 – at the end of 2022, the pot already stood at EUR 171bn. Of this figure, around 30% in total is to be raised through green bonds, which more than illustrates the significance of ESG bonds. In the wake of this, the European Union also made available a new tool last year with which the green bond proceeds can be tracked by each recipient country. Of the development and resilience plans approved to date, the expected expenses come to EUR 494.7bn in total, of which EUR 184.9bn is eligible for financing through green bonds. The European Commission also intends to be climate-neutral by 2050 through the REPowerEU programme. The transformation of Europe's energy system is urgently needed in two respects: firstly, this would help to end the EU's dependence on fossil fuels from Russia, which are used as an economic and political weapon and, according to the European Commission, cost European taxpayers just under EUR 100bn per year. Secondly, this would also help to combat the climate crisis.

SURE: Approved financial support in 19 member states (EUR 98.4bn)

Belgium	EUR 8,197m	**Latvia**	EUR 472m
Bulgaria	EUR 971m	**Lithuania**	EUR 1,100m
Croatia	EUR 1,600m	**Malta**	EUR 420m
Cyprus	EUR 632m	**Poland**	EUR 11,236m
Czech Republic	EUR 4,500m	**Portugal**	EUR 6,200m
Estonia	EUR 230m	**Romania**	EUR 3,000m
Greece	EUR 6,200m	**Slovakia**	EUR 630m
Hungary	EUR 651m	**Slovenia**	EUR 1,113m
Ireland	EUR 2,473m	**Spain**	EUR 21,324m
Italy	EUR 27,438m		

Source: European Commission, NORD/LB Markets Strategy & Floor Research

Transformation process underway at ESM

The Investor Relations team at the ESM highlighted the institution's ability to reinvent itself and develop in an investor newsletter. From the establishment of the EFSF in the midst of the Eurozone crisis, it has evolved into a fully developed ESM, which completed the country programme with Greece in 2018 and created the instrument to provide support in pandemics that helped the healthcare sector in the context of Covid-19. To this end, the ESM has developed a framework for social bonds, which builds on the four core components of the ICMA Social Bond Principles. Furthermore, the participants are now preparing a change to its mandate, which will make the ESM the backstop for the SRF (Single Resolution Fund). Ratification of the amendment agreement for this purpose is currently not yet complete. The need for innovation and development is ubiquitous not only in difficult market phases. In the past, the EMF (European Monetary Fund) was often mentioned as a counterpart to the IMF, although this claim has not been heard for some time. Let us look at the capital market: the ESM planned EUR 8bn worth of bonds in 2022, while the EFSF envisaged EUR 19.5bn. Both institutions had already completed their funding in October. The ESM is also changing in terms of its members: in December, the institution approved Croatia's application for membership.

Rating changes: EU, Euratom and ESM/EFSF

Significant rating changes also took place last year. For example, the rating agency S&P raised the long-term issuer rating for the EU and Euratom from "AA" to "AA+" (outlook: stable). The reason for this is that, following the internal revision of their method for rating the European Union (EU), the rating now reflects S&P's assessment that all 27 Member States evince a sustained ability and willingness to support the EU budget. The rating agency Moody's also gave the European Stability Mechanism (ESM) and the European Financial Stability Facility (EFSF) its top rating Aaa (previously: Aa1) and a stable outlook. Moody's justified the step firstly with the increased resilience of European crisis management systems and secondly with the reform of the ESM agreement.

International Investment Bank: rift triggered by the war

Established in 1970, the International Investment Bank (IIB) is a multilateral development bank (MDB) registered with the United Nations with the aim of promoting social and economic development as well as cooperation in its member states. Due to the ownership structure of the IIB, it is backed by an implicit guarantee from the state-owned operators. To date this has been borne by the member states. Around 19% of the current capital is available in paid-in form. The remaining sum can be called for immediately from the shareholders. The IIB moved its headquarters from Moscow to Budapest, and therefore to the EU, in 2019. However, a previously unsuspected problem emerged with the outbreak of war in Ukraine: four EU countries wish to terminate their share in the IIB. To this end, the finance ministries of the Czech Republic, Romania, Slovakia, Bulgaria and Poland have issued a joint press statement. In their joint statement, they refer not only to the IIB, which Poland had left in 2000, but also to the IBEC (International Bank for Economic Cooperation), which is roughly half the size. Poland is still a member of this organisation and all the EU states mentioned wish to withdraw from both the IIB and the IBEC. The newspapers *Die Welt* and the *Frankfurter Allgemeine* (FAZ) called the IIB the "bank of spies" and an "extended arm of Putin". Their withdrawals, which are still to be completed, could signify the economic end for the IBEC in particular.

Our coverage: issuers come and go

The moment we had been waiting for finally arrived on 31 August: the scheduled termination of the settlement vehicle hsh finanzfonds AöR, which was announced well in advance, was completed. As a result, the issuer disappeared from our coverage. On the day of its dissolution, HSHFF (its ticker) had outstanding bonds of EUR 3bn. These were transferred – divided according to maturity – to the two owner states (Hamburg und Schleswig-Holstein). Take care, hsh finanzfonds AöR, we shall remember you fondly! We have also removed International Investment Bank, which was mentioned above, from our coverage. In return, these departures have been replaced by the following new institutions: IDB Invest (ticker: IDBINV) – a member of the Inter-American Development Bank Group (ticker: IADB) – is a multilateral development bank and promotes economic development through the private sector in its member states in Latin America and the Caribbean in this role. The largest regional shareholders include Argentina (12.1%), Brazil (10.9%) and Mexico (7.7%). Overall, the United States is the largest shareholder with a stake of 14.9%. The "Emissionskonsortium der gemeinsamen Landesförderinstitute" (translates like "Joint German agencies"; ticker: LFIESG) has now also been included in our coverage (further details on this available below). Île-de-France Mobilités (ticker: IDFMOB) has also been added. It is the authority responsible for planning and providing local public transport in the Greater Paris region.

German Laender: agonising about the debt brake

It sounded like a dilemma: the 16 Laender argued virtually unanimously for the debt brake to be suspended for 2023. The reason being that many Laender do not see themselves able to tackle the third relief package without a state of emergency being declared. However, there is one person who saw the whole situation differently: the federal minister of finance Christian Lindner. He took the view that, according to the state constitution, the Laender themselves should announce a state of emergency. Ultimately some, such as Brandenburg or NRW, did so. Nevertheless, the Laender were by and large rarely seen on the primary market in 2022. Higher than expected tax revenues meant that many Laender needed to borrow less than they had originally planned.

German promotional banks: end-of-year review

We saw an inaugural deal in 2022 when the regional promotional banks IFB Hamburg (ticker: IFBHH), ISB Rheinland-Pfalz (ticker: ISBRLP) and ILB Brandenburg (ticker: ILBB) issued a joint social bond under a joint name ("Emissionskonsortium der gemeinsamen Landesförderinstitute" [ticker: LFIESG]). With a maturity of seven years and an amount of EUR 500m, the guidance for the social bond was specified at ms -7bp area. No information was provided as to the volume of the order book, while no tightening compared with the guidance was observed either. Investitionsbank Berlin also issued its first social bond: with a volume of EUR 500m (WNG), the bond came in at ms -15bp (guidance: ms -13bp area). With an order book of EUR 1.7bn, a bid-to-cover ratio of 3.4x was achieved. Meanwhile, KfW hurried from record to record. As you can see from today's Market Overview, the funding volume amounted to an unbelievable EUR 90bn in 2022. The figures on KfW's third quarter also point to an extraordinary funding year: its promotional volume came to EUR 127.9bn in the first nine months of 2022. This is significant growth compared with EUR 73.1bn in the same period in the previous year. Its support for the German economy in combating the effects of the war of aggression against Ukraine is a key driver for this extraordinary promotional volume.

German promotional banks: end-of-year review (continued)

Which noteworthy events otherwise shaped 2022 for German promotional banks? Above all, the focus was on the war in Ukraine and the economic and social consequences resulting from this conflict. For example, KfW helped accommodate Ukrainian refugees through the "Refugee Facilities special programme", with which KfW helped local authorities that wished to create, modernise and/or equip accommodation for refugees. Originally, KfW provided EUR 250m of its own funds for this purpose. Due to strong demand for these soft loans, which carried a rate of -0.75% when they were introduced, the promotional volume was almost immediately increased to EUR 500m overall. The subject of the energy supply was also more present last year than it had been for a long time. For example, NRW.BANK started a special programme to strengthen municipal energy suppliers, which has funds of EUR 5bn at its disposal. The fact that Investitions- und Strukturbank Rheinland-Pfalz (ISB) was given a credit rating for the first time is also worth mentioning. The rating agency Fitch gave ISBRLP (its ticker) the top rating of AAA with a stable outlook.

7th joint NRW Cities bond

NRWGK #7 was the first joint NRW bond for four and a half years. In the seventh edition, Essen (44%), Hagen (32%) and Remscheid (24%) joined forces for a ten-year maturity. The three municipalities needed to raise EUR 125m. The books totalled EUR 150m and therefore the spread did not move during the book-building process. The IPT and guidance announced were ms +25bp in each case, which was ultimately also the final spread. The bond carries a coupon of 1.95%.

Digitalisation on the bond market proceeding at speed

The European Investment Bank (ticker: EIB) had attracted attention as early as 2021 when it issued its first digital bond on a public blockchain (smart bond). In the process, it used distributed ledger technology (DLT) for registration and settlement. In 2022, the EIB doubled down: in addition to another digital bond denominated in EUR, it issued its first digital bond in GBP. In contrast to the 2021 issue, however, it did not use a public blockchain but a private one with restricted access. KfW also opted for a digital format last year: the issue was executed by Clearstream on the German Stock Exchange's digital post-trade platform "D7". The bond has a volume of EUR 20m with a two-year maturity and a coupon of 2.381%. The digital transaction was made possible by the passing of the German Electronic Securities Act (eWpG).

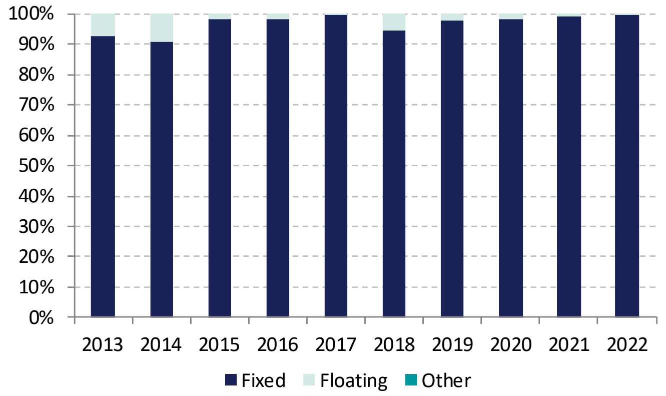
PSPP: Infrabel SA now on the purchase list

The ECB purchased a bond issued by Belgium's Infrabel SA (ticker: INFBEL) for the first time under the PSPP in 2022. INFBEL is an infrastructure company that emerged from the privatisation of the Belgian railway in 2005 and is part of the NMBS/SNCB Group (National Company of Belgian Railways). The purchased bond (INFBEL 4% 04/19/27) was issued in 2012 and is worth EUR 75m.

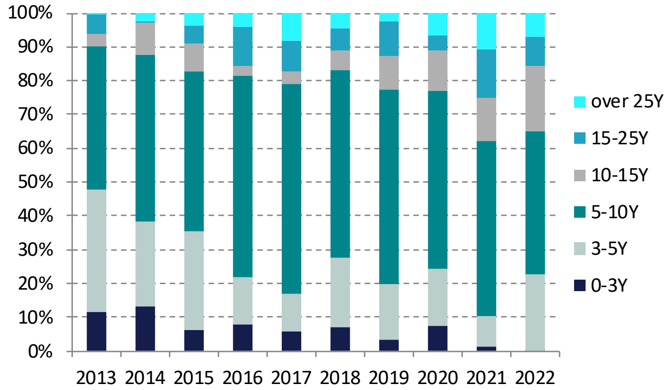
Once again, proportionally fewer EUR benchmarks issued as floaters

The significance of fixed coupon bonds has increased continuously as interest rates have fallen steadily since 2008 and the proportion of these bonds recently stabilised at an extremely high level. There were brief signs of a minimal reversal in this trend in 2018: FRN issues increased once more for the first time since 2014 but this development (almost) ground to a halt again the following year. The proportion of FRNs in the market then stood at 5.4% and consequently remained at a low level. In 2019, this share then fell from 2.2% through 1.9% (2020) and 0.8% (2021) to 0.4% in 2022. They never accounted for a really significant share in the past either. Only a genuine normalisation of monetary policy combined with diverging expectations regarding the medium to long-term trend in the general level of interest rates could result in a more significant increase in the proportion of floaters, as was apparent from 2011-2014. However, we are still in the cycle of interest rate rises. Consequently, we do not expect any significant expansion in the proportion of floaters for the moment. In terms of volume, only EUR 1.1bn of the entire EUR benchmark market volume (EUR 270.4bn) were floaters, meaning that the figure is lower than in 2020 and 2021 both in absolute and relative terms.

EUR benchmark issues by coupon type



EUR benchmark issues by maturity range

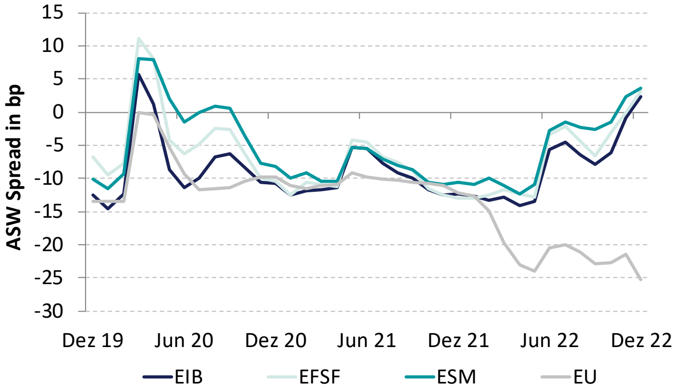


NB: Benchmarks are defined as bonds with a minimum volume of EUR 0.5bn.
Source: Bloomberg, NORD/LB Markets Strategy & Floor Research

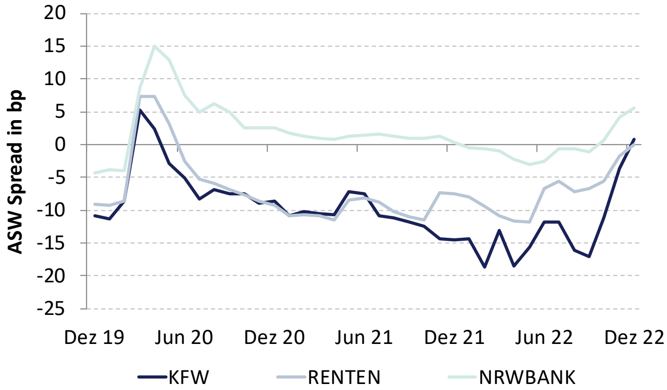
Maturity buckets are suddenly tending to be shorter

Having risen in recent years, the percentage share of longer maturity buckets reversed during 2022 in response to changes in the market environment. With one exception: while the 0-3Y share was over 20% up to 2012, it was only 7.3% in 2020 and 1.2% in 2021. A new low of 0.2% resulted in 2022. However, as is clear from the above chart, the relative share in the 3-5Y maturity range increased significantly. While the share still amounted to 8.9% in 2021, it more than doubled to 22.3% in 2022, whereas the share in the next-largest bucket (5-10Y) has fallen from 52.0% to 42.5%. According to our records, the maturity range from ten to 15 years even reached a new all-time high: 19.5% of issues were attributable to this bucket in 2022 (previous year: 12.8%). In 2016, this cluster was still at 3%. Maturities of 15-25Y and over 25Y were less present than in 2021, at 8.4% (previous year: 14.6%) and 7.0% (previous year: 10.5%) respectively. There are therefore two clear winners in terms of the maturity buckets, with the 3-5Y and 10-15Y segments posting significant gains. The shares for all other maturity ranges are lower than in 2021.

European supras: ASW spreads 10y



German agencies: ASW spreads 10y

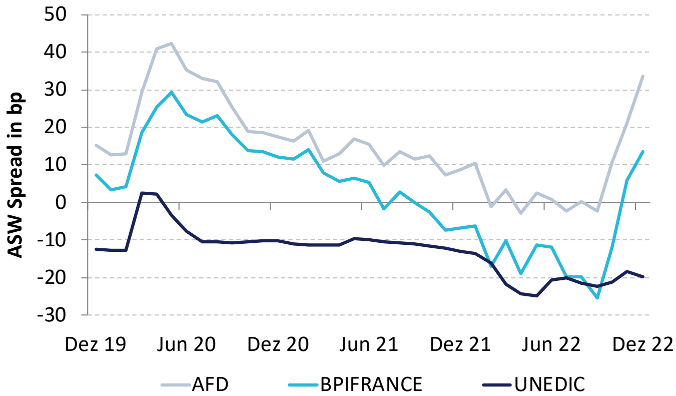


Source: Bloomberg, NORD/LB Markets Strategy & Floor Research

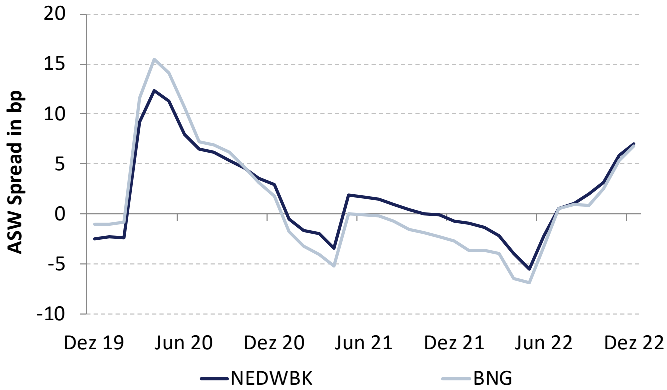
Repricing on all fronts but EU stands out

The changes in spreads on all sub-asset classes can be described in very few words: spreads have widened since the middle of the year – therefore since the reversal in interest rates and since the ECB stopped its net purchases. With one exception: the European Union's ASW spreads have only trended in one direction since the beginning of the year – downwards. Due to its enormous funding requirement, the EU is moving ever closer to being classified as a sovereign, the rating upgrade described above has certainly also made a contribution. In the ten-year range, the other E-supras now feature positive ASW spreads at the end of 2022 for the first time since the shock triggered by Covid-19. The same is true of German agencies, although NRW.BANK has been moving between positive and negative spreads for some time because it is guaranteed by state of North Rhine-Westphalia (and not by the German government, as is the case for KfW and Rentenbank).

French agencies: ASW spreads 10y



Dutch agencies: ASW spreads 10y



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

Similar pattern for French and Dutch issuers

It is clear that spreads have also widened for French and Dutch issuers. It is striking that there are no signs of any widening for UNEDIC, with the regulatory advantage (risk weighting: 0%) compared with Bpifrance and AFD playing a role in this context. Significant movement before and after the French elections was not apparent on a monthly basis. A similar pattern emerges with the Dutch agencies: since the middle of the year and therefore the end of net purchases and the beginning of the reversal in interest rates, ASW spreads have headed upwards in parallel.

Conclusion

The past year was once again extraordinary and can only be squeezed into an end-of-year review with difficulty. In addition, a great deal of what went on aside from the war, pandemic and the energy crisis is forgotten too rapidly. The issuance volume of EUR benchmarks was, at EUR 270.4bn, admittedly down on the levels recorded in 2020 and 2021, but is still far above the level from before the pandemic. From some perspectives, trends have changed, for instance there were proportionally still fewer floaters and there was more demand for shorter maturities in place of ultra-long maturities once more. Due to the ECB's decisions on interest rates and the changes to the APP and PEPP purchase programmes of particular relevance for our sub-segment, spreads continued their gradual upward trend this year.

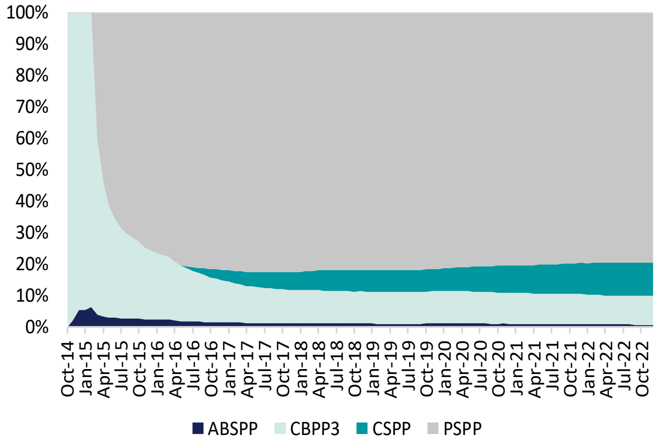
NORD/LB

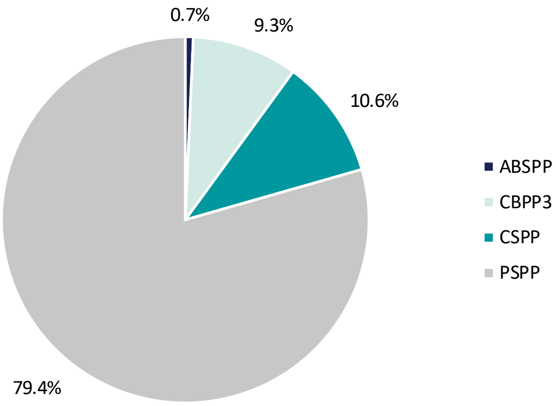
ECB tracker

Asset Purchase Programme (APP)

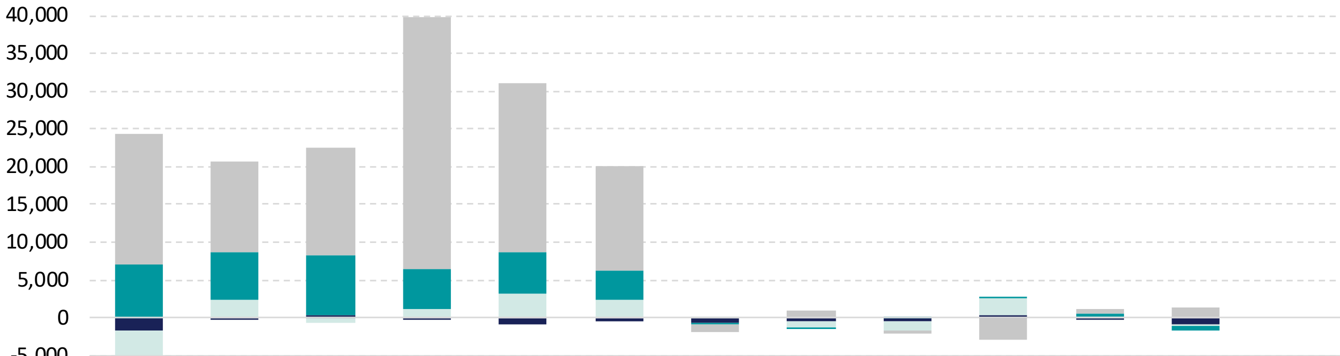
	ABSPP	CBPP3	CSPP	PSPP	APP
Nov-22	23,822	302,482	345,039	2,585,720	3,257,063
Dec-22	22,915	301,973	344,119	2,584,666	3,253,673
Δ	-893	-269	-609	+1,398	-373

Portfolio structure





Monthly net purchases (in EURm)

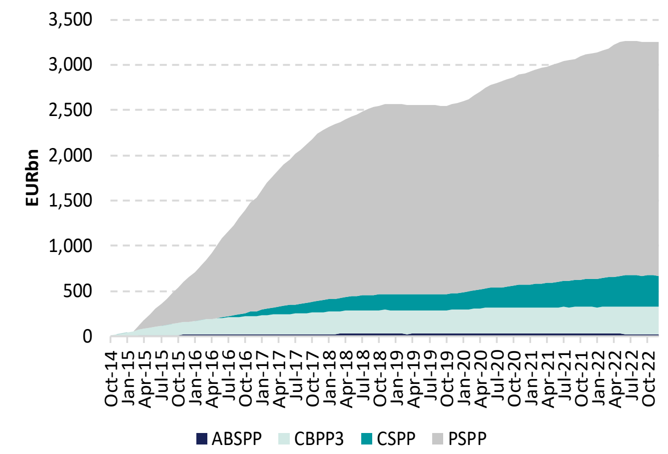


	Jan-22	Feb-22	Mar-22	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22	∑
APP	18,838	20,698	21,929	39,397	30,232	19,722	-1,759	-656	-1,884	-320	1,128	-373	146,952
PSPP	17,292	12,095	14,172	33,238	22,443	13,924	-1,114	869	-315	-2,938	540	1,398	111,604
CSPP	6,970	6,272	8,042	5,461	5,366	3,858	-141	-253	164	139	513	-609	35,782
CBPP3	-3,761	2,376	-606	1,074	3,247	2,339	217	-787	-1,210	2,229	97	-269	4,946
ABSPP	-1,663	-45	321	-376	-824	-399	-721	-485	-523	250	-22	-893	-5,380

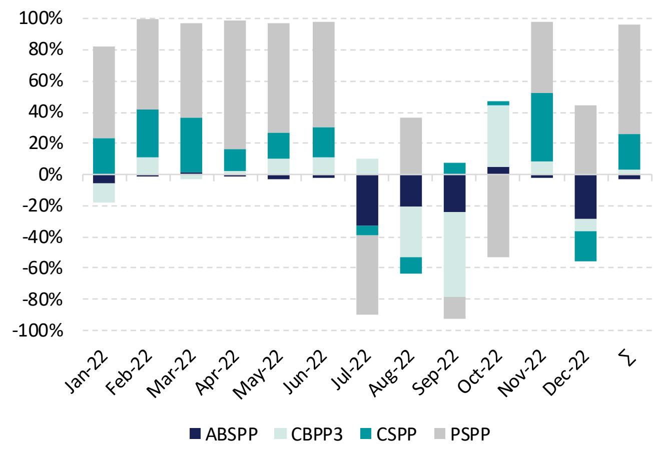
Source: ECB, NORD/LB Markets Strategy & Floor Research

NORD/LB

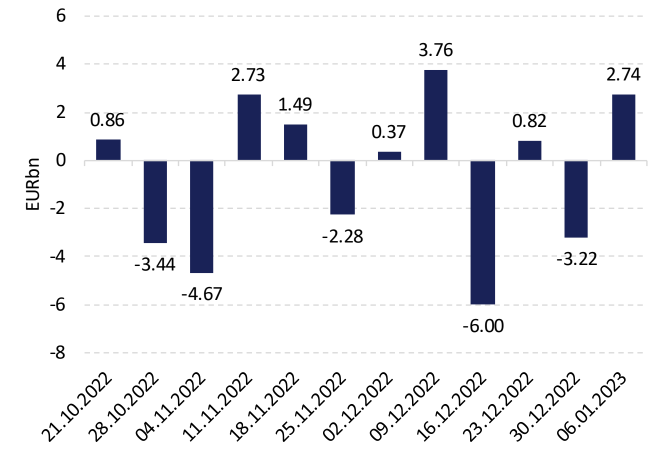
Portfolio development



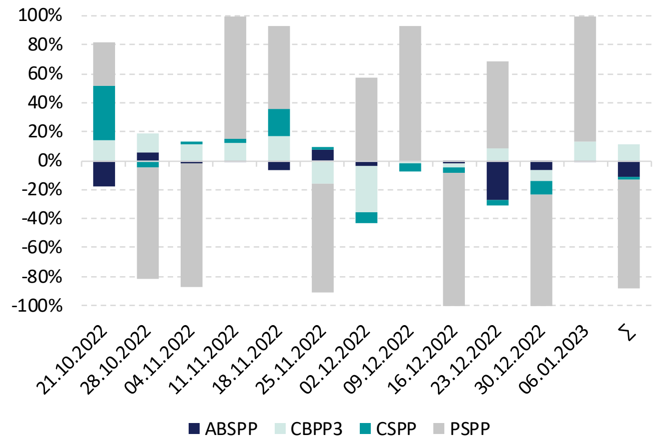
Distribution of monthly purchases



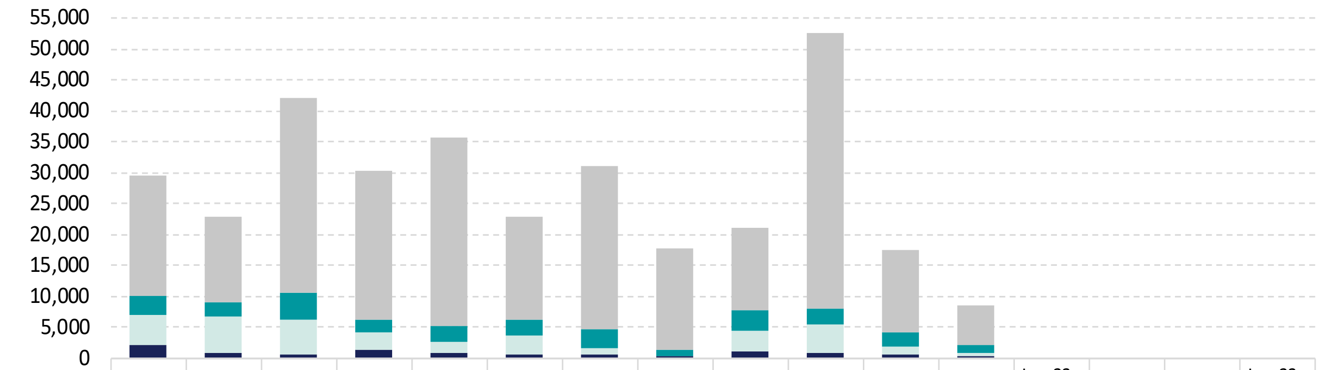
Weekly purchases



Distribution of weekly purchases



Expected monthly redemptions (in EURm)

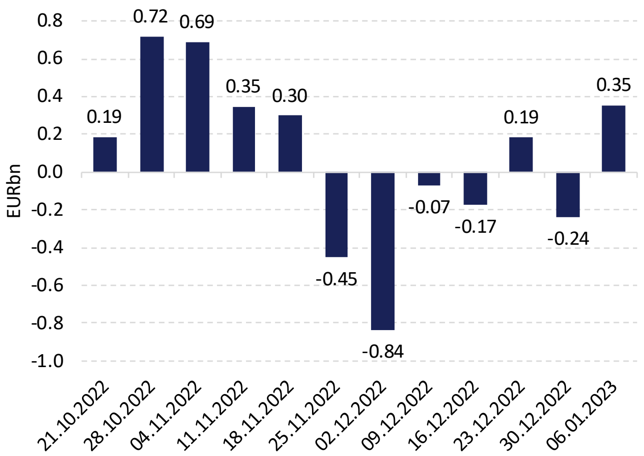


	Jan-23	Feb-23	Mar-23	Apr-23	May-23	Jun-23	Jul-23	Aug-23	Sep-23	Oct-23	Nov-23	Dec-23	Jan-23 - Dec-23	2021	2022	Jan-23 - Dec-23
APP	29,406	22,745	42,019	30,201	35,807	22,842	30,999	17,811	21,185	52,718	17,421	8,512	331,666	247,069	299,122	331,666
PSPP	19,469	13,625	31,494	23,889	30,559	16,619	26,287	16,445	13,367	44,729	13,259	6,336	256,078	188,494	228,585	256,078
CSPP	3,010	2,352	4,219	2,162	2,579	2,557	3,038	986	3,362	2,616	2,342	1,336	30,559	17,134	17,670	30,559
CBPP3	4,786	6,065	5,631	2,937	1,874	3,112	1,170	0	3,346	4,465	1,351	408	35,145	30,143	41,244	35,145
ABSPP	2,141	703	675	1,213	795	554	504	380	1,110	908	469	432	9,884	11,298	11,623	9,884

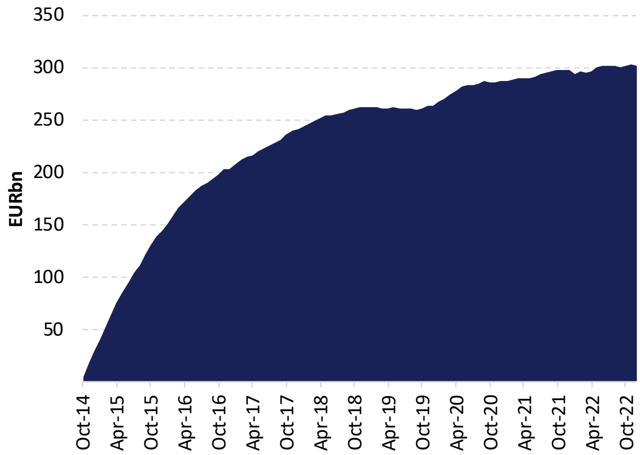
Source: ECB, Bloomberg, NORD/LB Markets Strategy & Floor Research

Covered Bond Purchase Programme 3 (CBPP3)

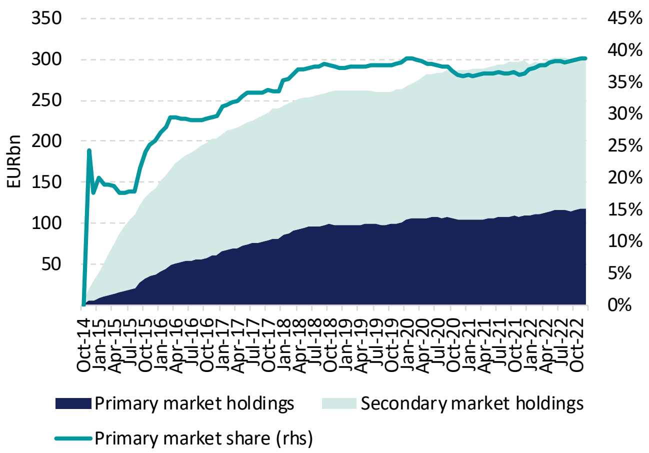
Weekly purchases



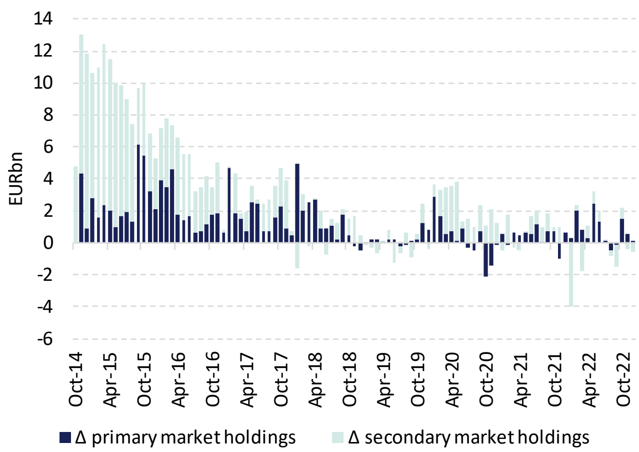
Development of CBPP3 volume



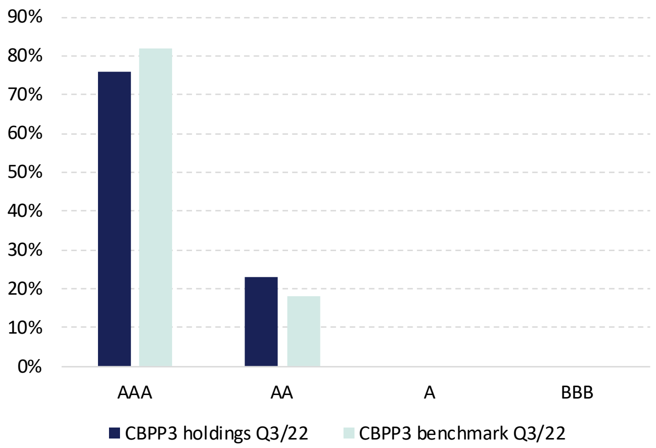
Primary and secondary market holdings



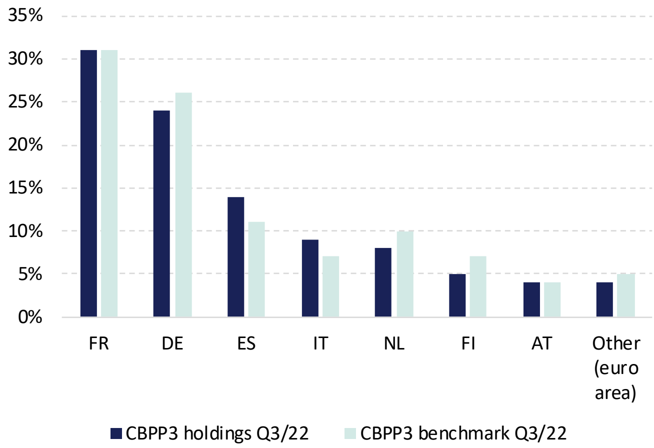
Change of primary and secondary market holdings



Distribution of CBPP3 by credit rating



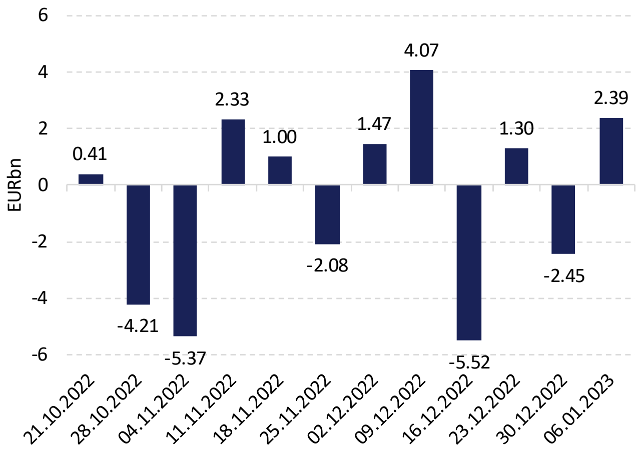
Distribution of CBPP3 by country of risk



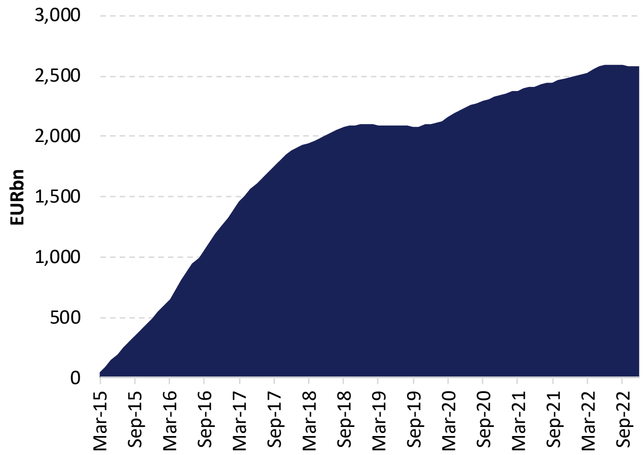
Source: ECB, Bloomberg, NORD/LB Markets Strategy & Floor Research

Public Sector Purchase Programme (PSPP)

Weekly purchases



Development of PSPP volume



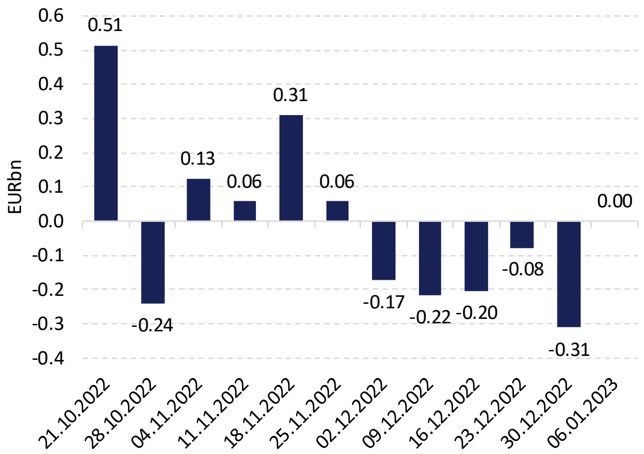
Overall distribution of PSPP buying at month-end

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%	75,137	74,083	1,054	7.5	8.4	-0.9
BE	3.4%	94,346	92,215	2,131	7.2	10.4	-3.1
CY	0.2%	4,507	5,446	-939	8.3	8.8	-0.6
DE	24.3%	665,594	667,243	-1,649	6.7	7.9	-1.3
EE	0.3%	564	7,130	-6,566	7.9	8.4	-0.5
ES	11.0%	316,322	301,827	14,495	7.7	8.2	-0.5
FI	1.7%	44,368	46,494	-2,126	8.0	8.8	-0.8
FR	18.8%	533,975	516,966	17,009	6.7	8.6	-1.9
GR	0.0%	0	0	0	0.0	0.0	0.0
IE	1.6%	42,925	42,862	63	8.3	10.1	-1.8
IT	15.7%	443,559	430,001	13,558	7.2	7.9	-0.7
LT	0.5%	6,021	14,649	-8,628	10.0	9.6	0.4
LU	0.3%	3,947	8,338	-4,391	5.6	7.5	-1.9
LV	0.4%	3,934	9,863	-5,929	8.6	8.6	0.0
MT	0.1%	1,435	2,655	-1,220	11.0	9.4	1.5
NL	5.4%	134,573	148,335	-13,762	7.6	9.3	-1.7
PT	2.2%	53,694	59,241	-5,547	7.5	7.8	-0.4
SI	0.4%	11,226	12,187	-961	9.3	9.5	-0.2
SK	1.1%	18,646	28,987	-10,341	7.7	8.5	-0.7
SNAT	10.0%	288,028	274,280	13,748	8.2	9.6	-1.4
Total / Avg.	**100.0%**	**2,742,802**	**2,742,802**	**0**	**7.2**	**8.5**	**-1.3**

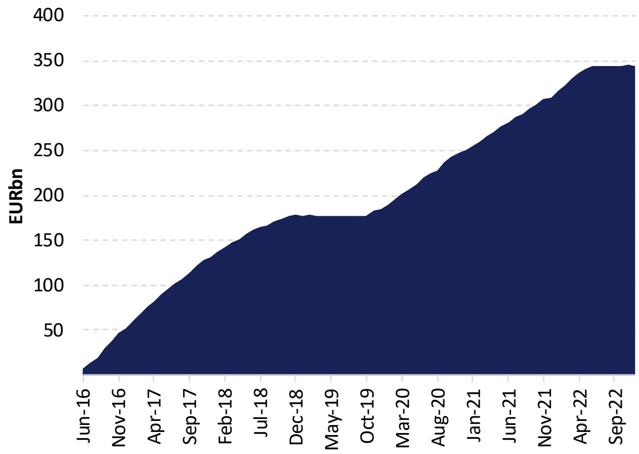
[1] Based on the ECB capital key, adjusted to include supras and the disqualification of Greece
[2] Based on the adjusted distribution key
[3] Weighted average time to maturity of PSPP portfolio holdings
[4] Weighted average time to maturity of the bonds eligible for purchasing under the PSPP
Source: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

Corporate Sector Purchase Programme (CSPP)

Weekly purchases

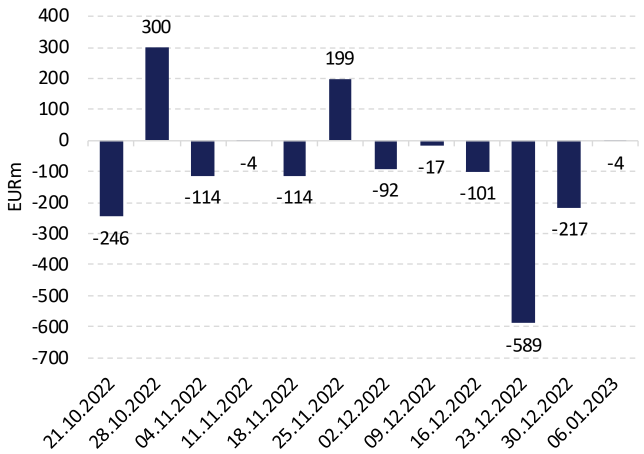


Development of CSPP volume

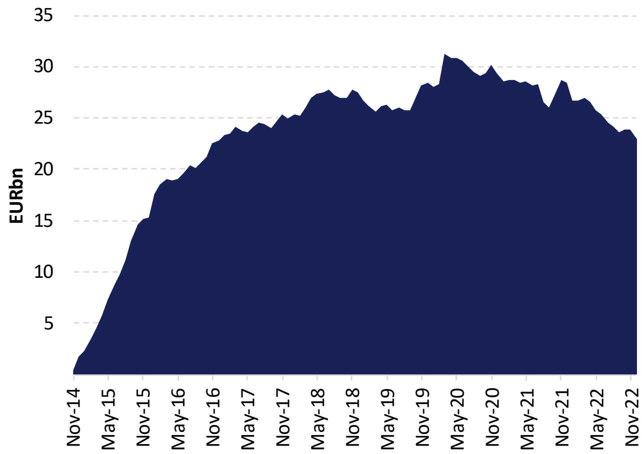


Asset-Backed Securities Purchase Programme (ABSPP)

Weekly purchases



Development of ABSPP volume



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

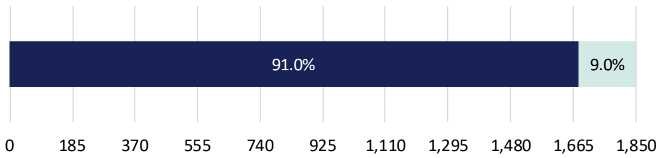
NORD/LB

Pandemic Emergency Purchase Programme (PEPP)

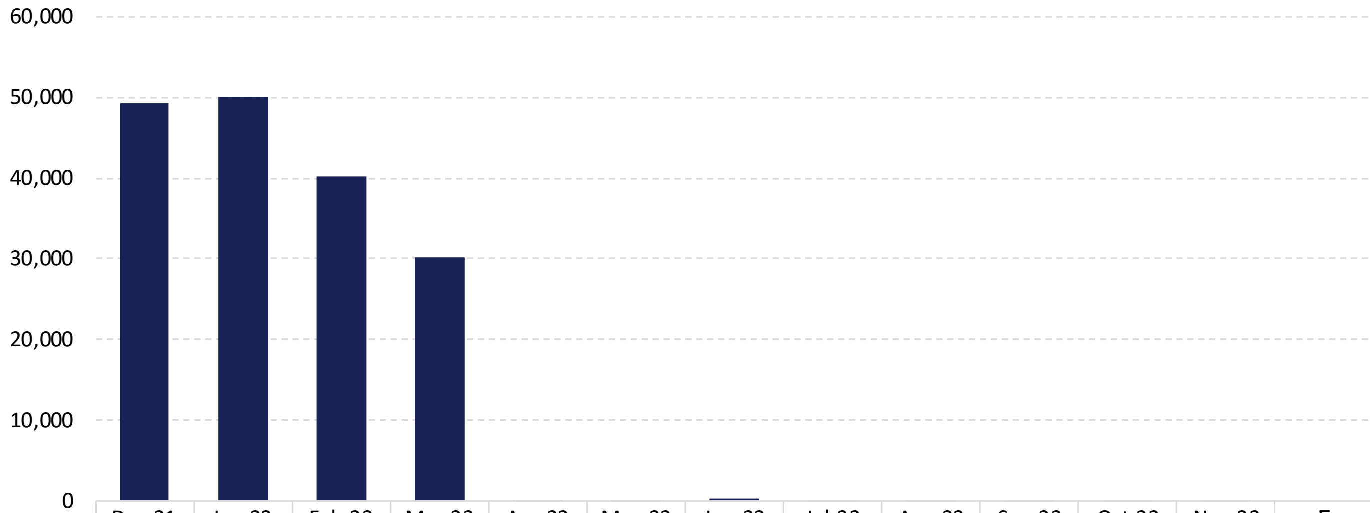
Holdings (in EURm)

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

Invested share of PEPP envelope (in EURbn)

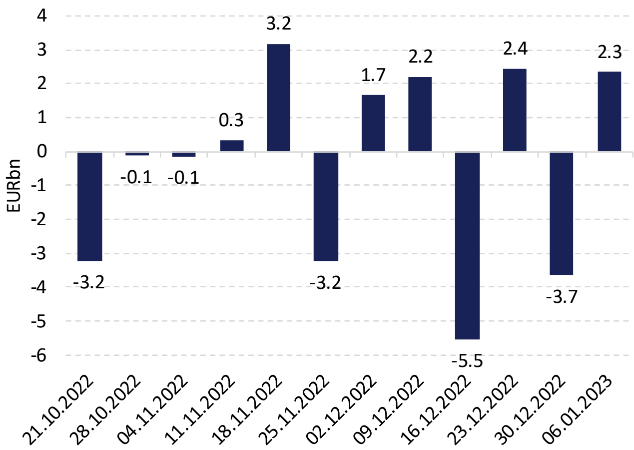


Monthly net purchases (in EURm)

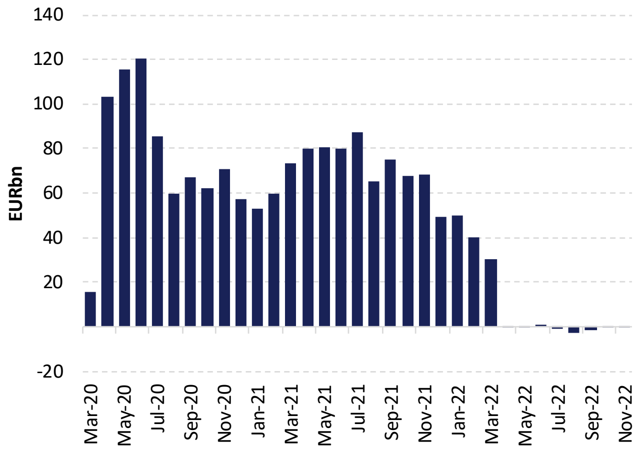


	Dec-21	Jan-22	Feb-22	Mar-22	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	∑
PEPP	49,375	50,113	40,184	30,214	-4	-10	12	-722	-2,813	-1,505	-146	-136	164,562

Weekly purchases



Development of PEPP volume

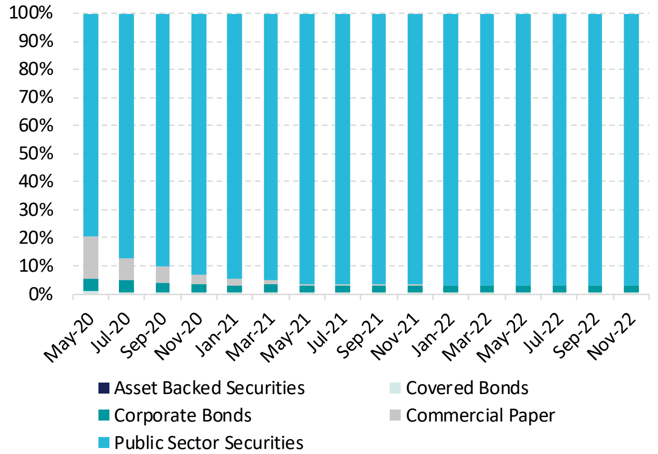


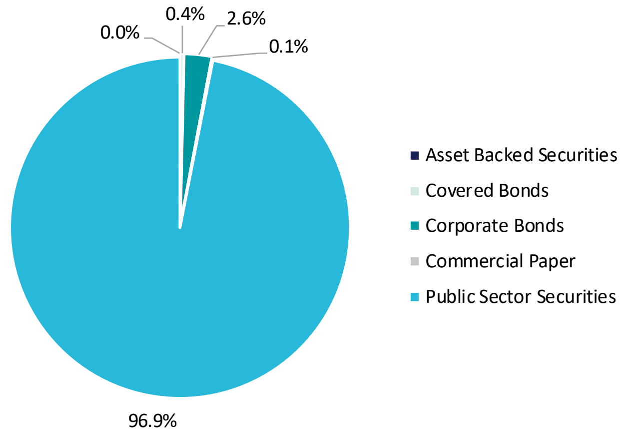
Source: ECB, Bloomberg, NORD/LB Markets Strategy & Floor Research

Holdings under the PEPP (in EURm)

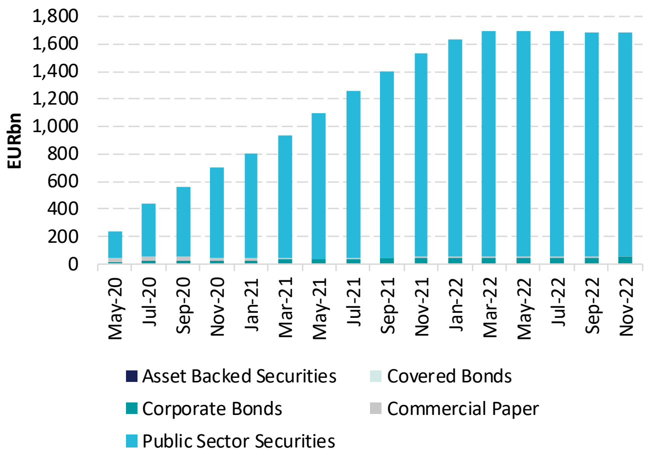
	Asset-backed Securities	Covered Bonds	Corporate Bonds	Commercial Paper	Public Sector Securities	PEPP
Sep-22	0	6,056	43,233	2,871	1,631,176	1,683,336
Nov-22	0	6,056	44,012	2,091	1,630,895	1,683,054
Δ (net purchases)	0	0	+780	-780	-281	-282

Portfolio structure

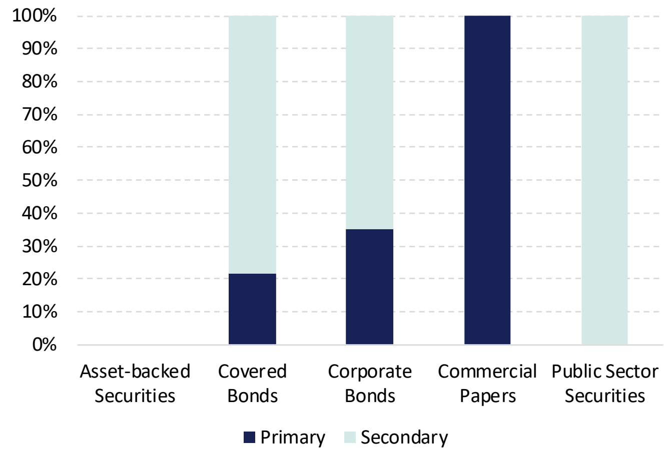




Portfolio development



Share of primary and secondary market holdings



Breakdown of private sector securities under the PEPP

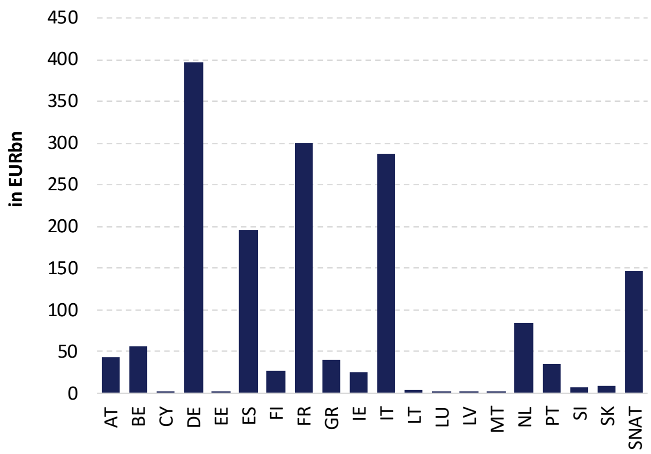
Nov-22	Asset-backed securities		Covered bonds		Corporate bonds		Commercial paper	
	Primary	Secondary	Primary	Secondary	Primary	Secondary	Primary	Secondary
Holdings in EURm	0	0	1,299	4,757	15,481	28,531	2,091	0
Share	0.0%	0.0%	21.4%	78.6%	35.2%	64.8%	100.0%	0.0%

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

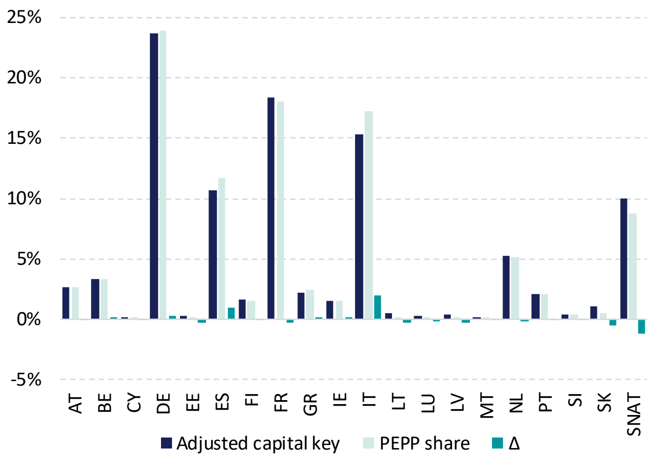
Breakdown of public sector securities under the PEPP

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

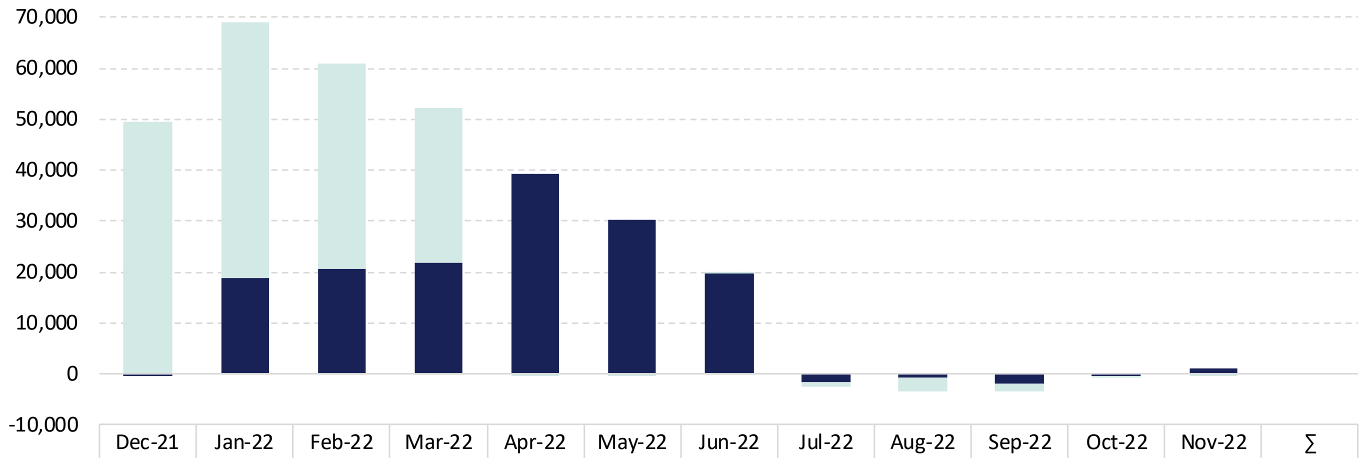
NORD/LB

Aggregated purchase activity under APP and PEPP

Holdings (in EURm)

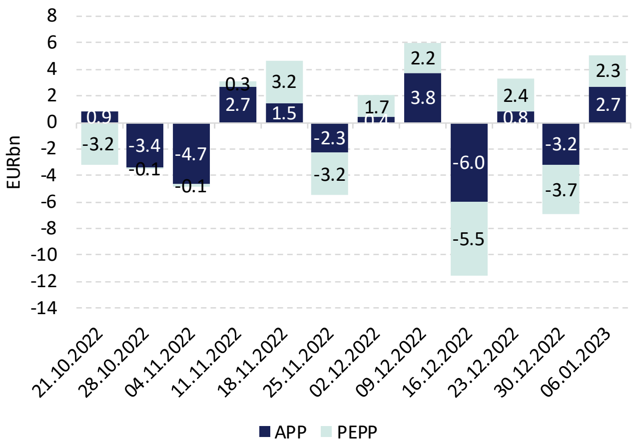
	APP	PEPP	APP & PEPP
Oct-22	3,257,063	1,712,889	4,969,952
Nov-22	3,253,673	1,712,753	4,966,426
Δ	-373	-136	-509

Monthly net purchases (in EURm)

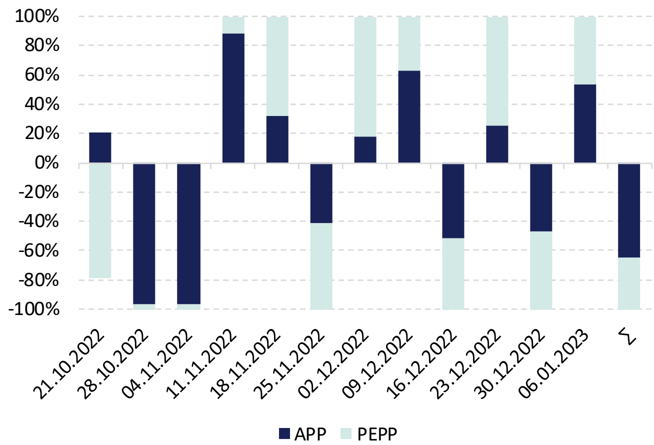


	Dec-21	Jan-22	Feb-22	Mar-22	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	∑
∑	49,363	68,951	60,882	52,143	39,393	30,222	19,734	-2,481	-3,469	-3,389	-466	992	311,875
PEPP	49,375	50,113	40,184	30,214	-4	-10	12	-722	-2,813	-1,505	-146	-136	164,562
APP	-12	18,838	20,698	21,929	39,397	30,232	19,722	-1,759	-656	-1,884	-320	1,128	147,313

Weekly purchases



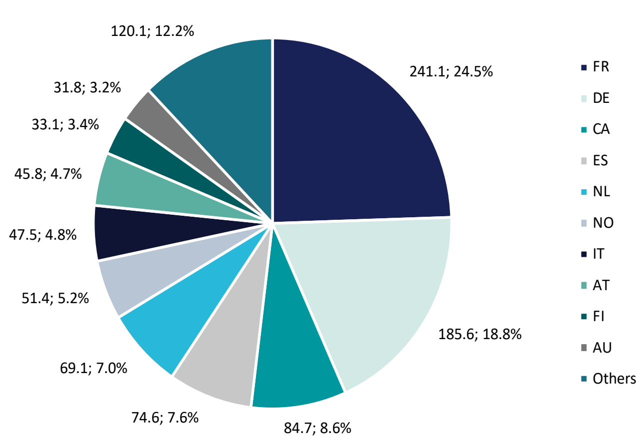
Distribution of weekly purchases



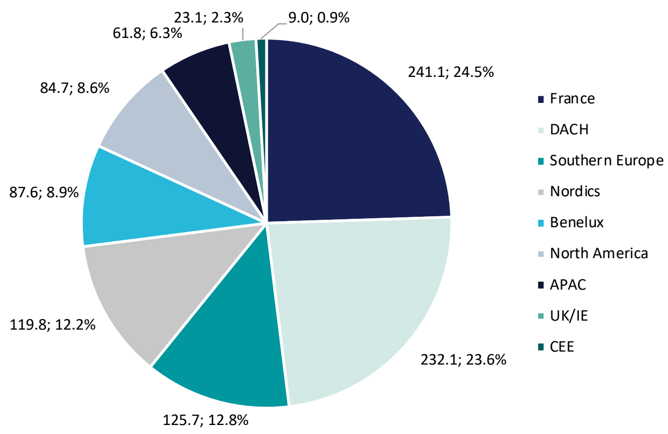
Source: ECB, Bloomberg, NORD/LB Markets Strategy & Floor Research

Charts & Figures
Covered Bonds

EUR benchmark volume by country (in EURbn)



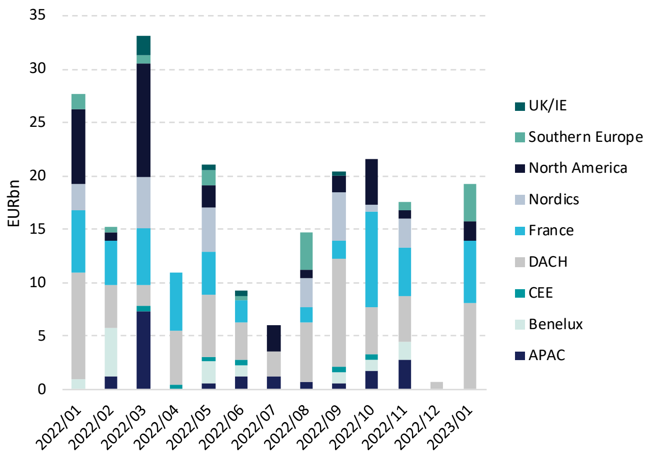
EUR benchmark volume by region (in EURbn)



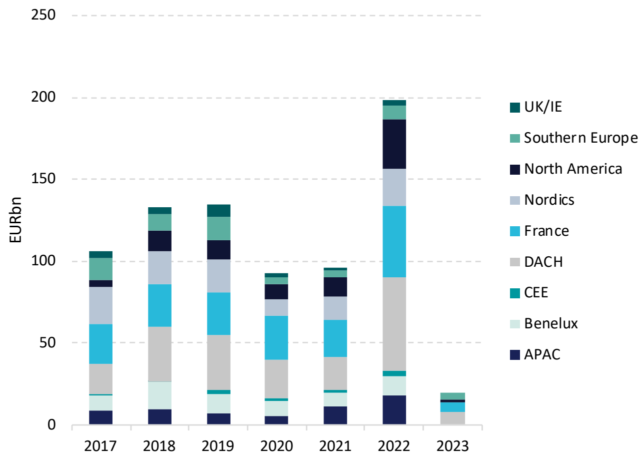
Top-10 jurisdictions

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	241.1	232	15	0.96	9.7	5.2	1.02
2	DE	185.6	266	30	0.64	8.2	4.4	0.77
3	CA	84.7	65	0	1.27	5.6	2.8	0.57
4	ES	74.6	59	5	1.16	11.3	3.6	1.79
5	NL	69.1	70	1	0.92	11.3	6.9	0.81
6	NO	51.4	61	11	0.84	7.2	3.6	0.53
7	IT	47.5	58	2	0.79	9.2	3.7	1.24
8	AT	45.8	80	3	0.57	9.0	5.6	0.92
9	FI	33.1	35	3	0.94	7.3	3.7	0.75
10	AU	31.8	32	0	0.99	7.8	3.8	1.14

EUR benchmark issue volume by month

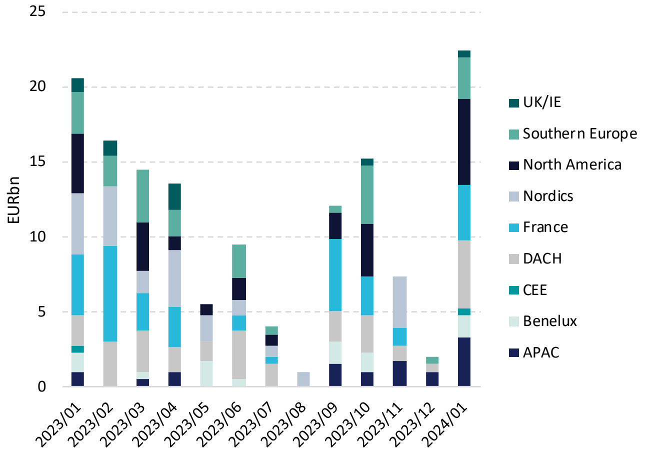


EUR benchmark issue volume by year

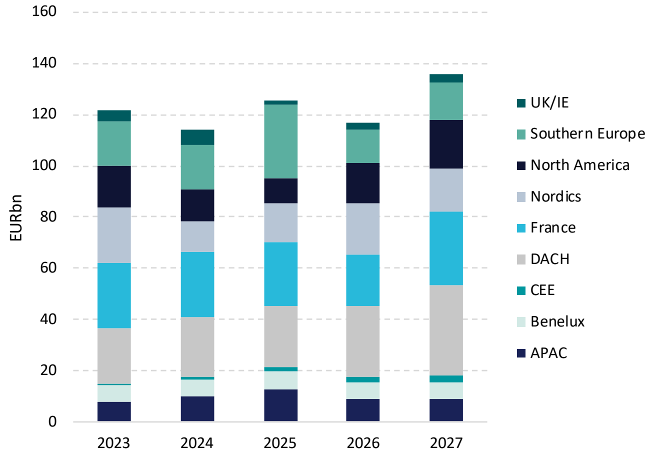


Source: Market data, Bloomberg, NORD/LB Markets Strategy & Floor Research

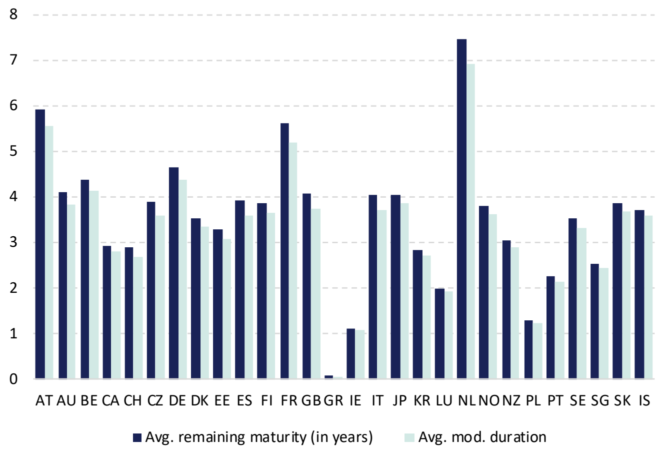
EUR benchmark maturities by month



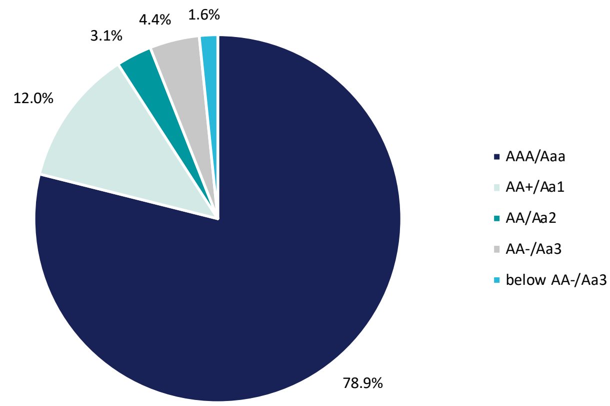
EUR benchmark maturities by year



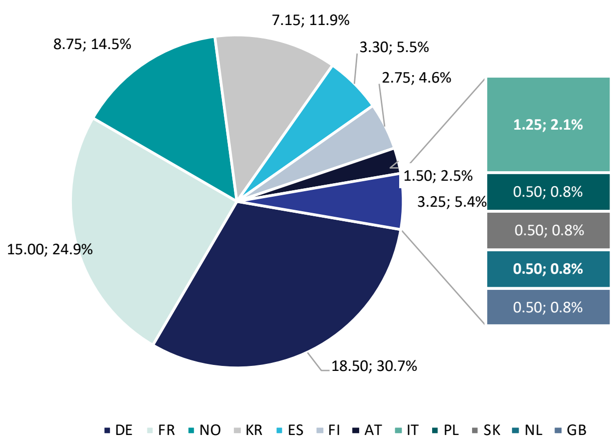
Modified duration and time to maturity by country



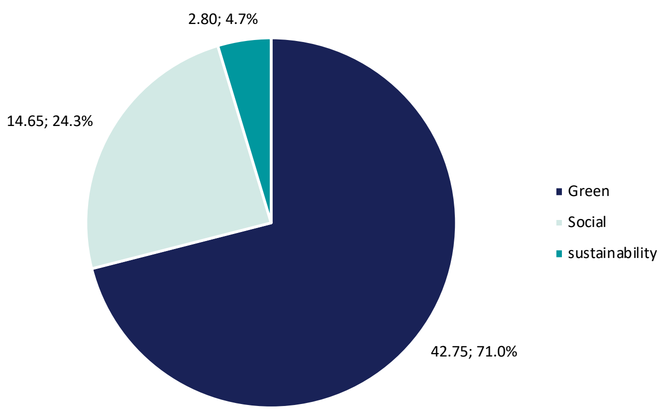
Rating distribution (volume weighted)



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

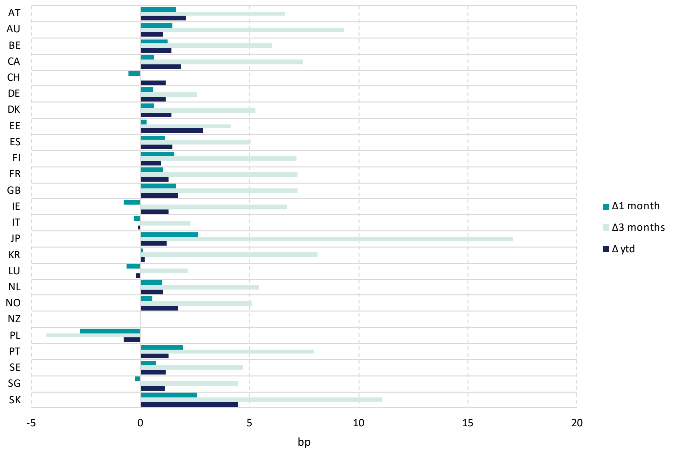


EUR benchmark volume (ESG) by type (in EURbn)

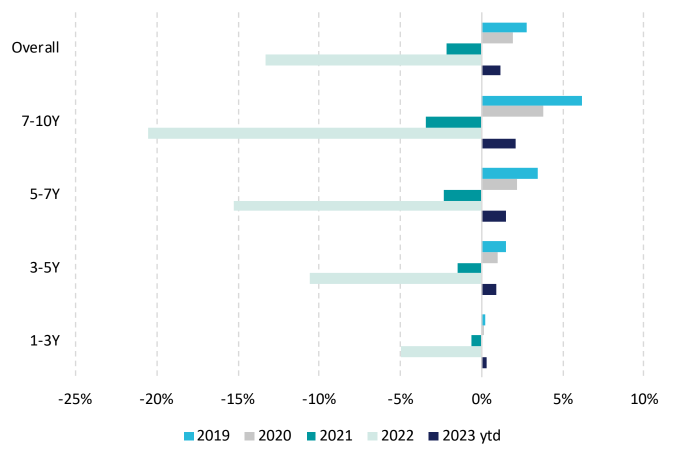


Source: Market data, Bloomberg, NORD/LB Markets Strategy & Floor Research

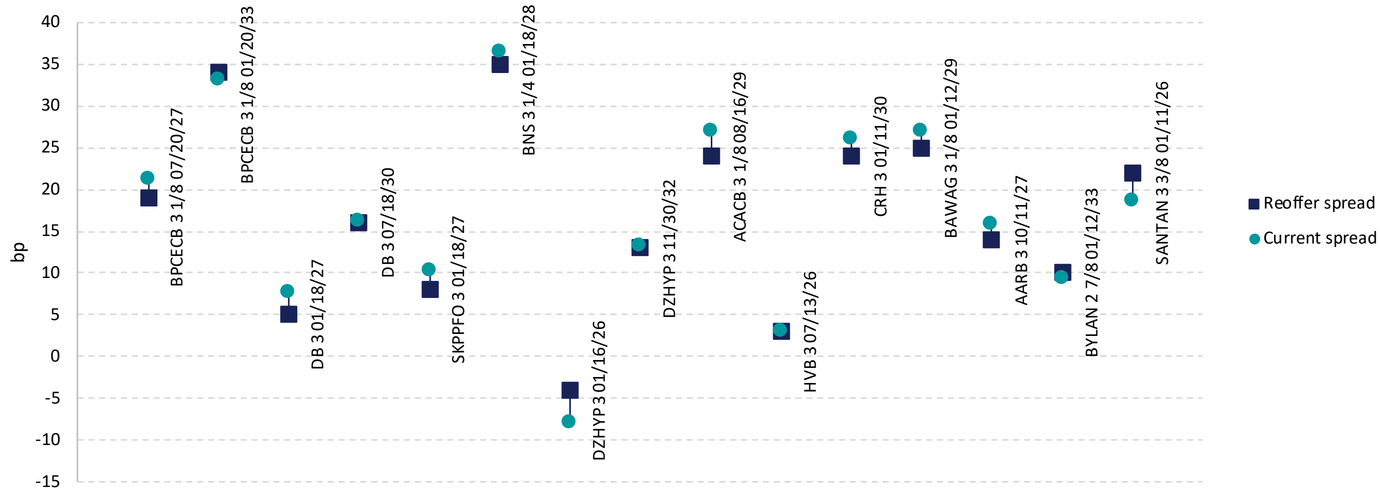
Spread development by country



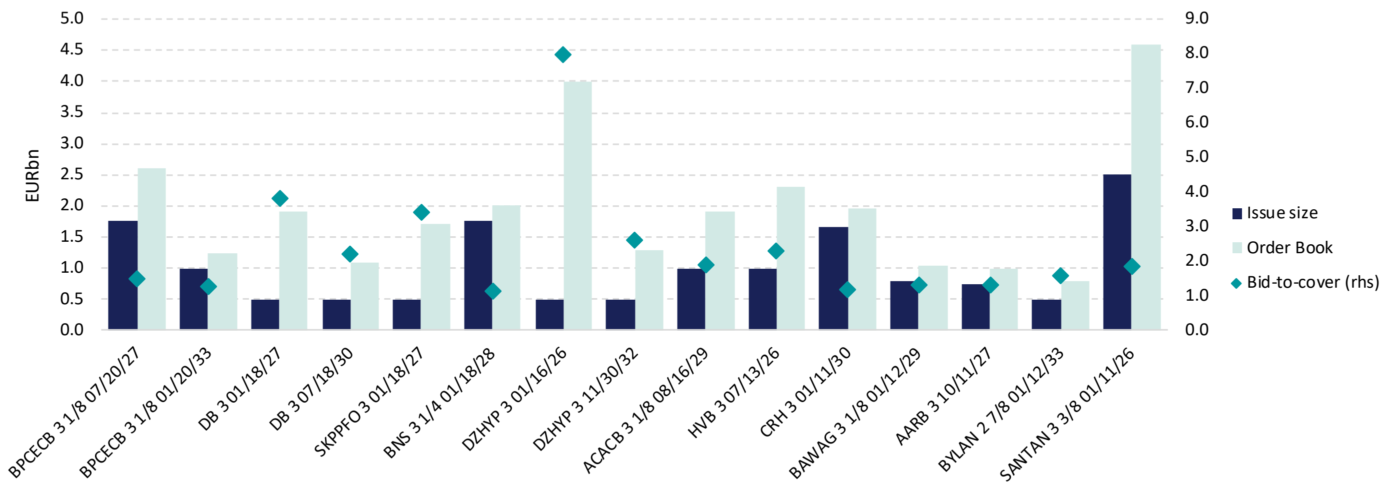
Covered bond performance (Total return)



Spread development (last 15 issues)



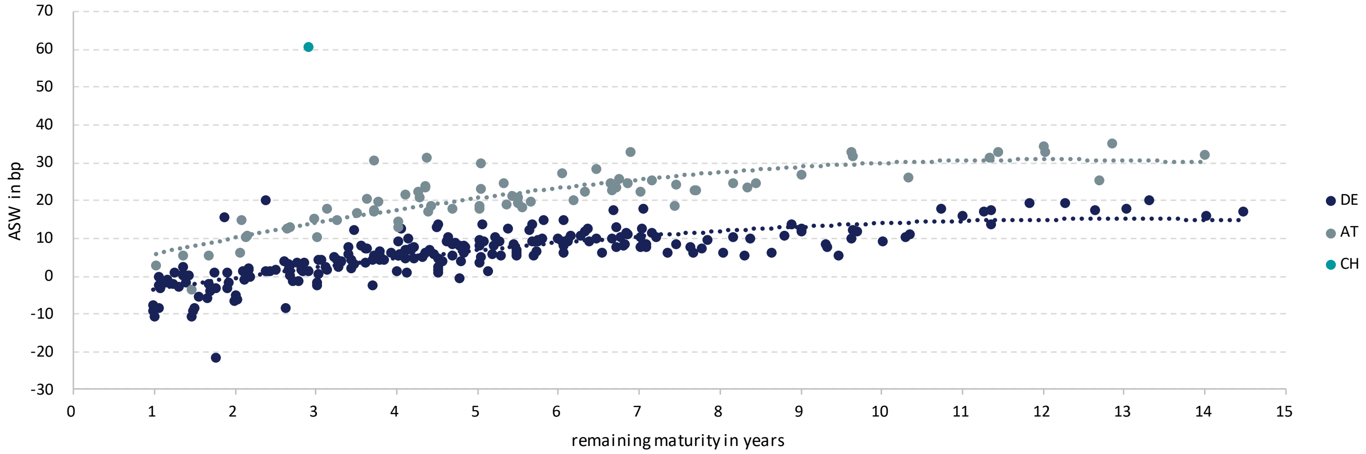
Order books (last 15 issues)



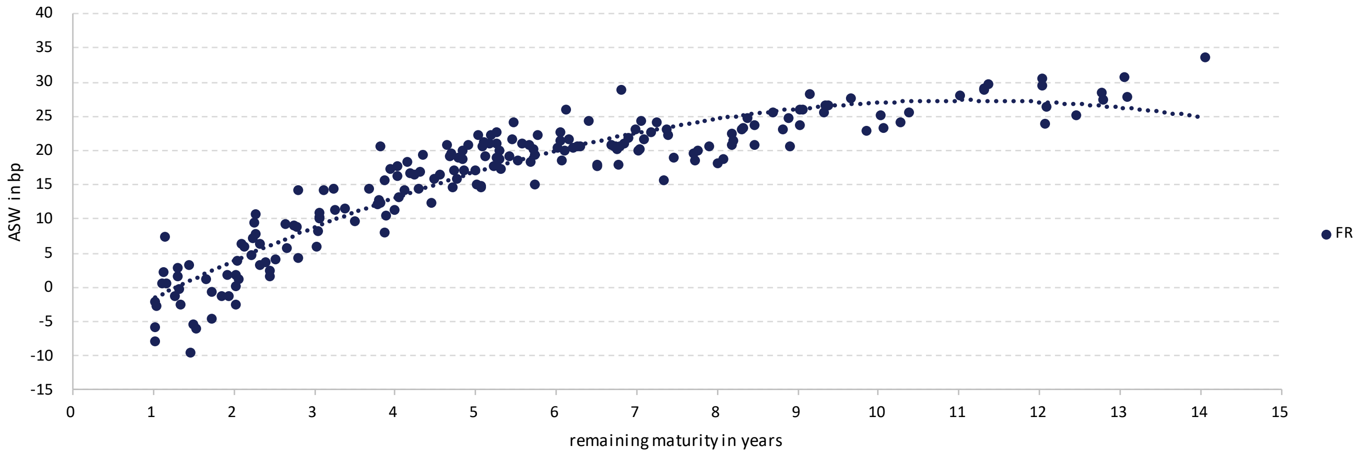
Source: Market data, Bloomberg, NORD/LB Markets Strategy & Floor Research

Spread overview[1]

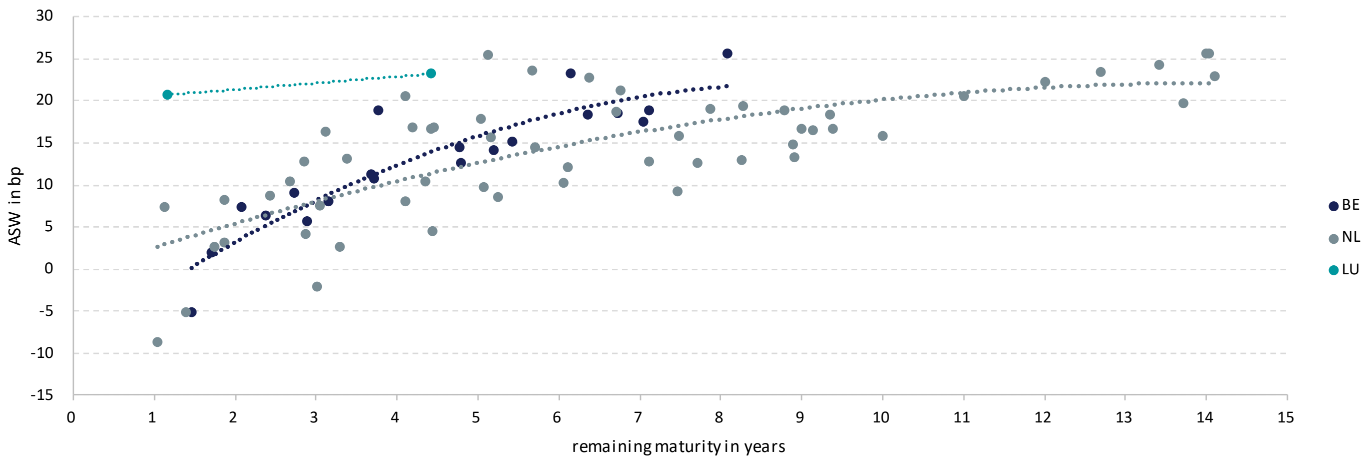
DACH



France

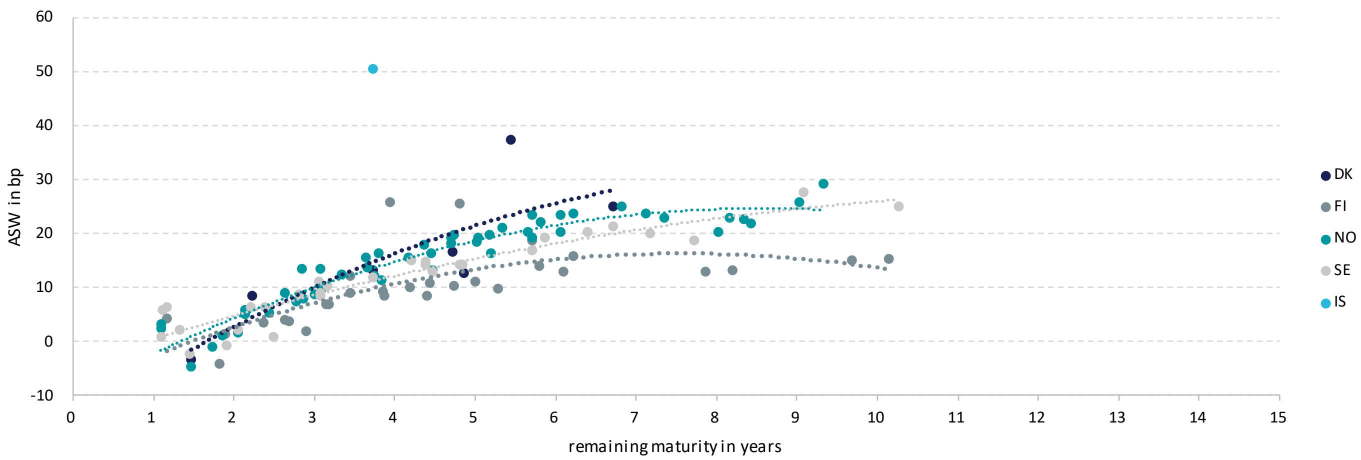


Benelux

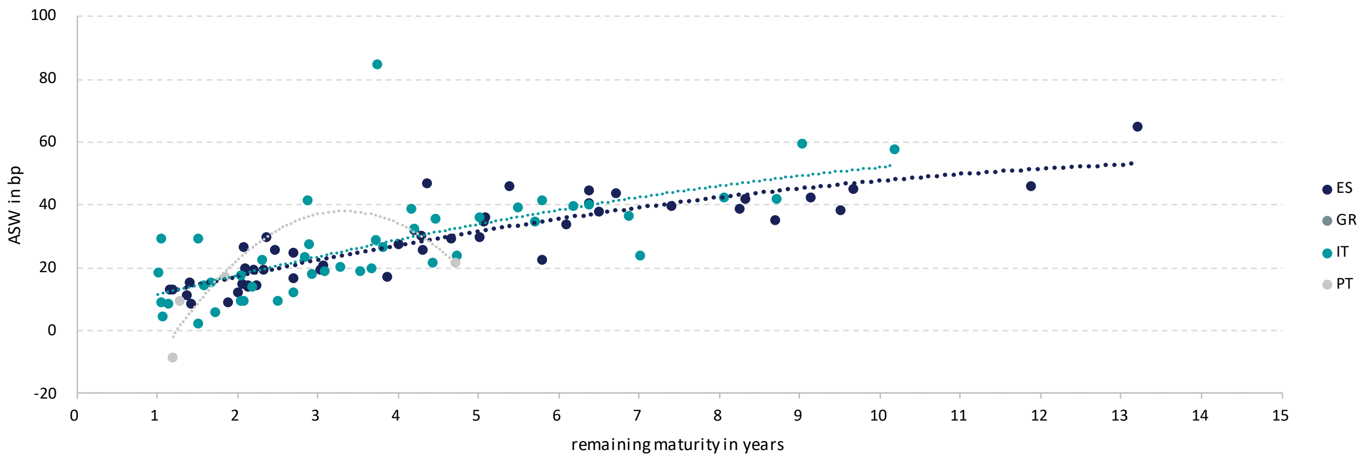


Source: Market data, Bloomberg, NORD/LB Markets Strategy & Floor Research [1]Time to maturity 1 ≤ y ≤ 15

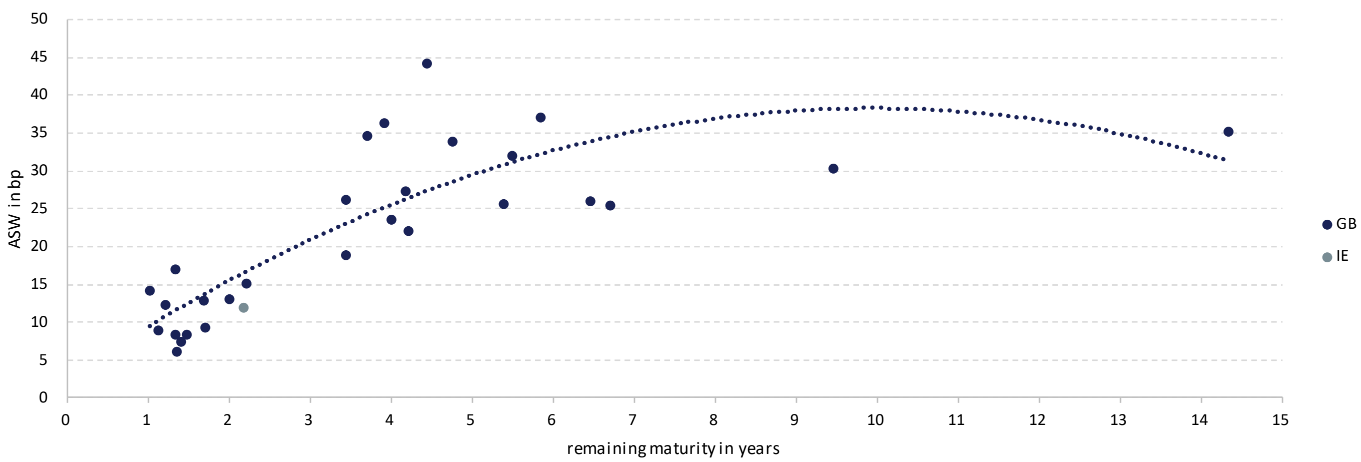
Nordics



Southern Europe

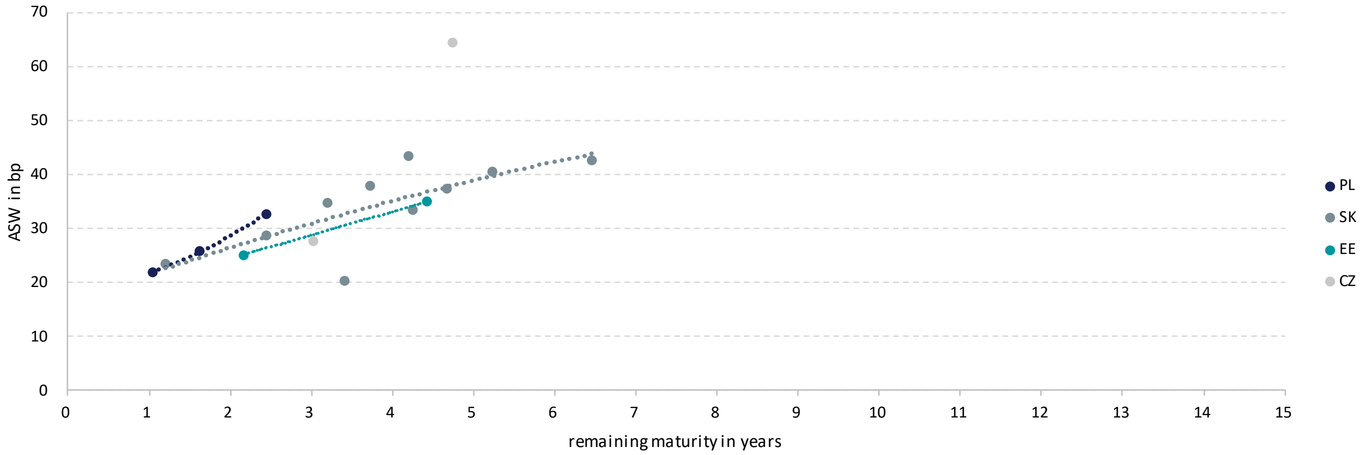


UK/IE

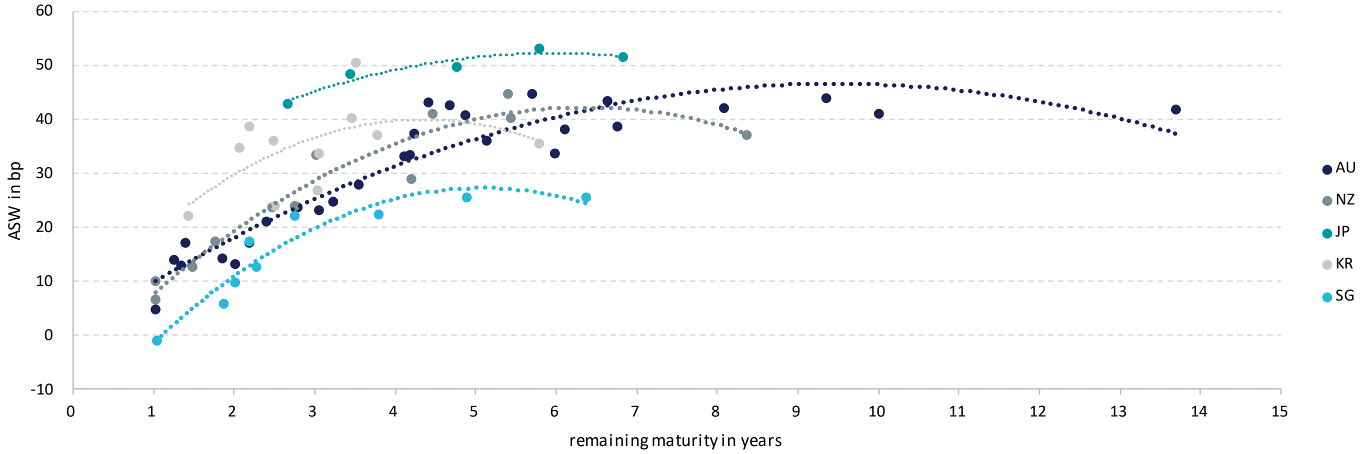


Source: Market data, Bloomberg, NORD/LB Markets Strategy & Floor Research

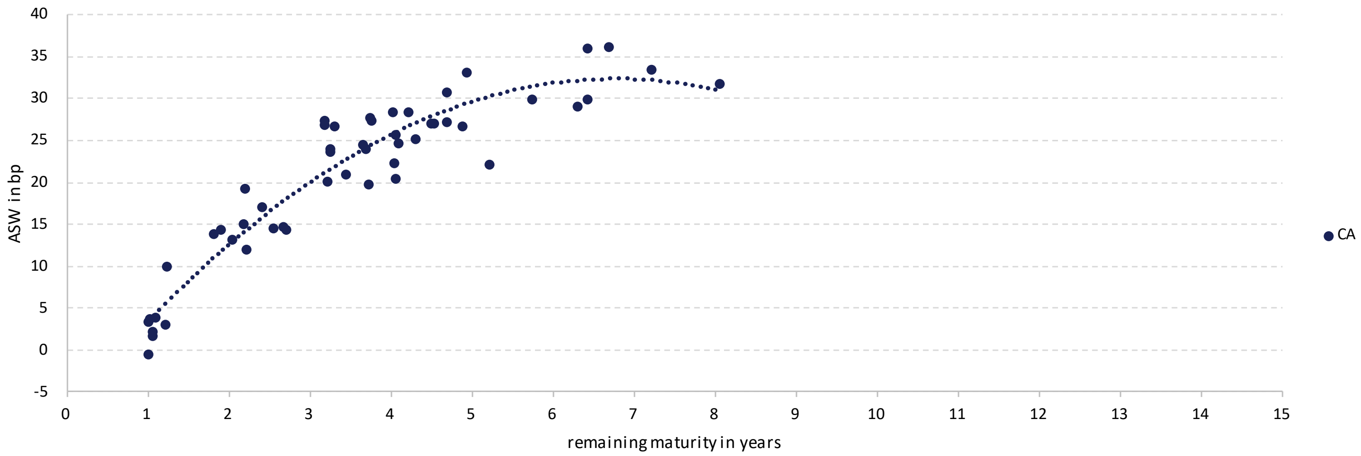
CEE



APAC



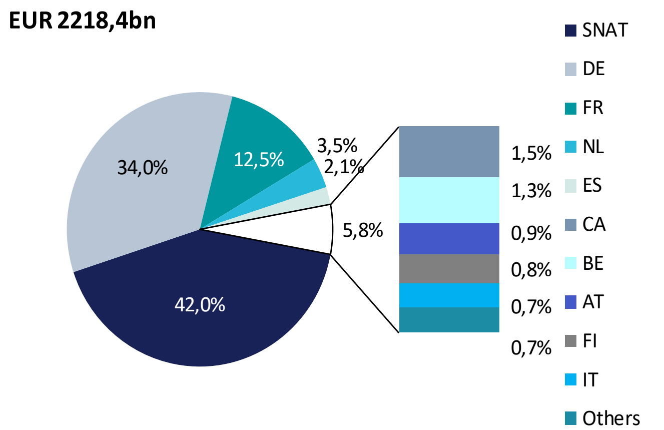
North America



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

Charts & Figures
SSA/Public Issuers

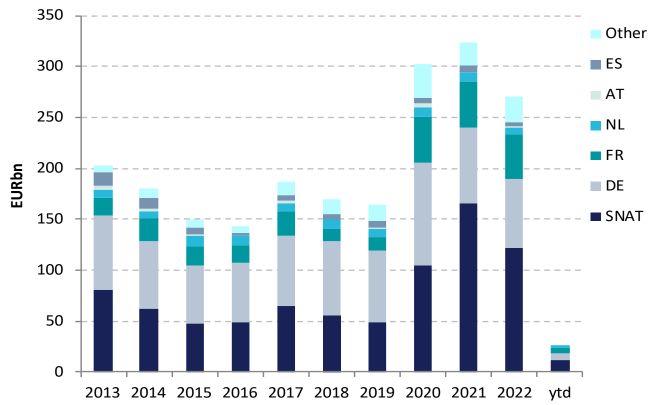
Outstanding volume (bmk)



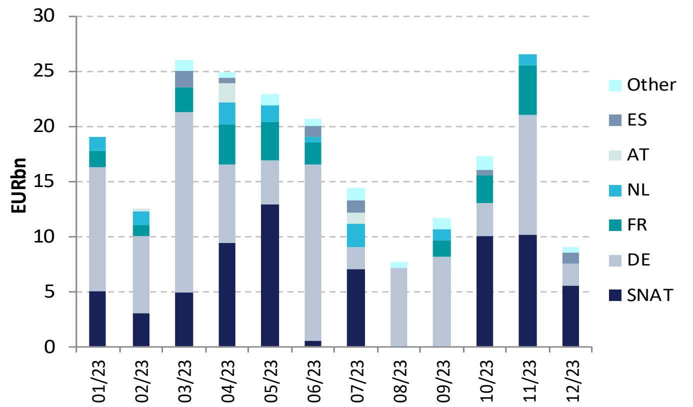
Top 10 countries (bmk)

Country	Vol. (€bn)	No. of bonds	ØVol. (€bn)	Vol. weight. ØMod. Dur.
SNAT	932,4	220	4,2	8,2
DE	754,1	560	1,3	6,3
FR	277,8	182	1,5	6,2
NL	78,7	70	1,1	6,5
ES	45,6	60	0,8	4,6
CA	32,6	23	1,4	4,5
BE	28,0	31	0,9	11,8
AT	19,8	23	0,9	4,5
FI	18,5	22	0,8	5,4
IT	15,0	19	0,8	4,9

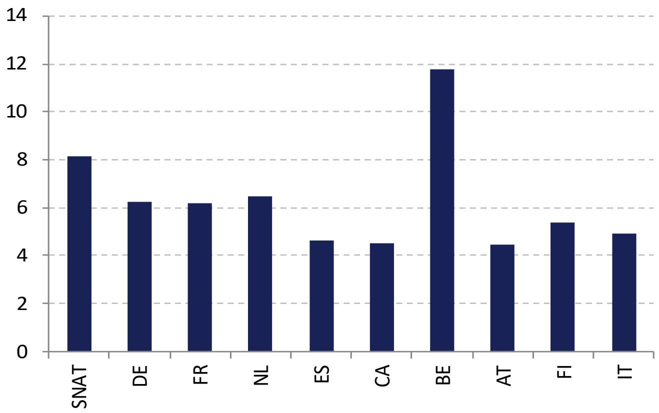
Issue volume by year (bmk)



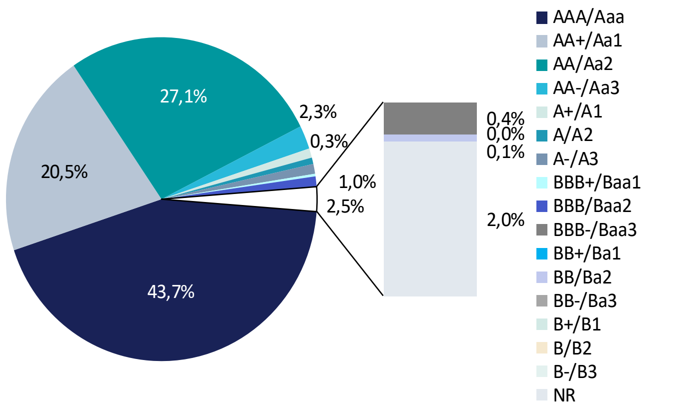
Maturities next 12 months (bmk)



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

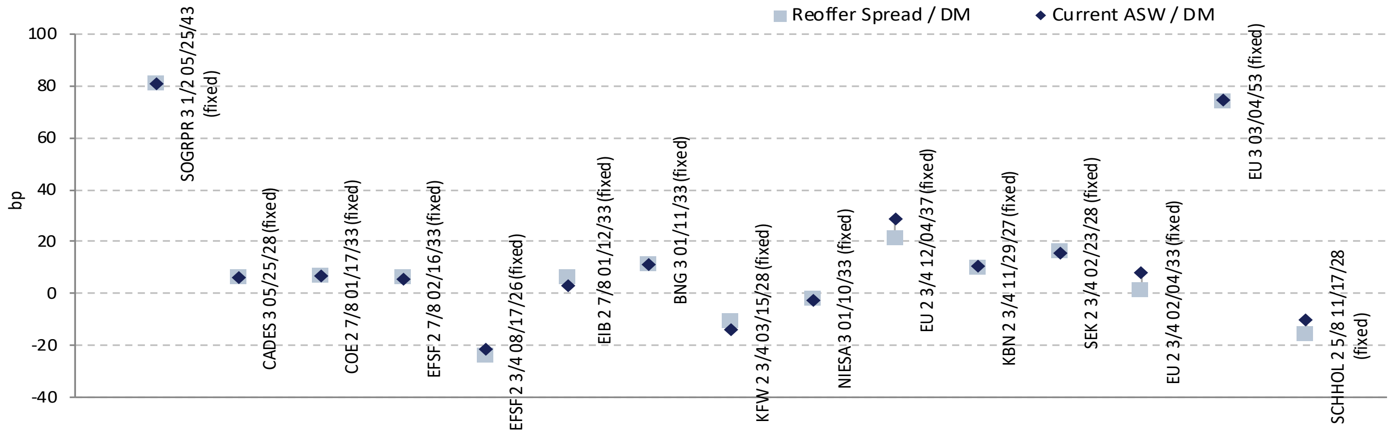


Rating distribution (vol. weighted)

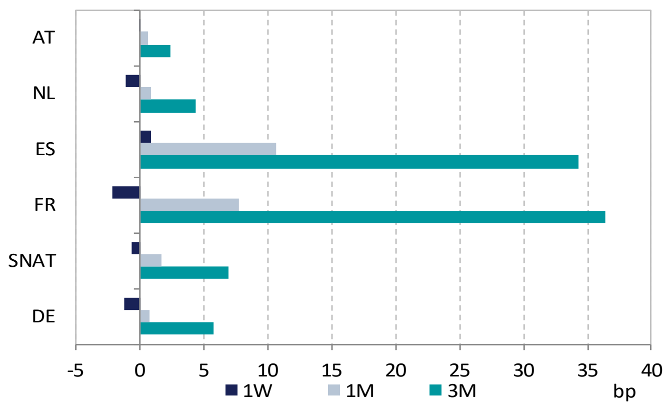


Source: Bloomberg, NORD/LB Markets Strategy & Floor Research

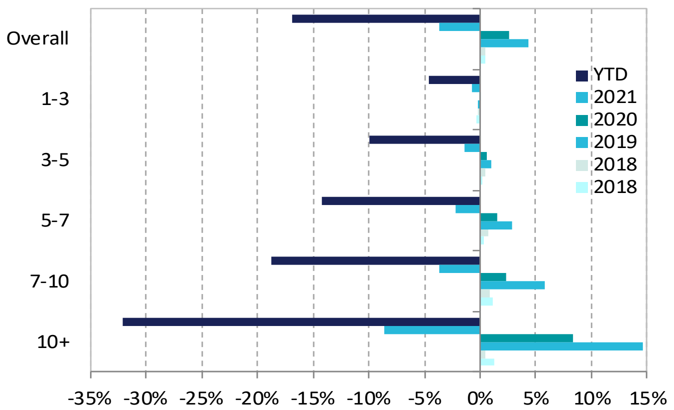
Spread development (last 15 issues)



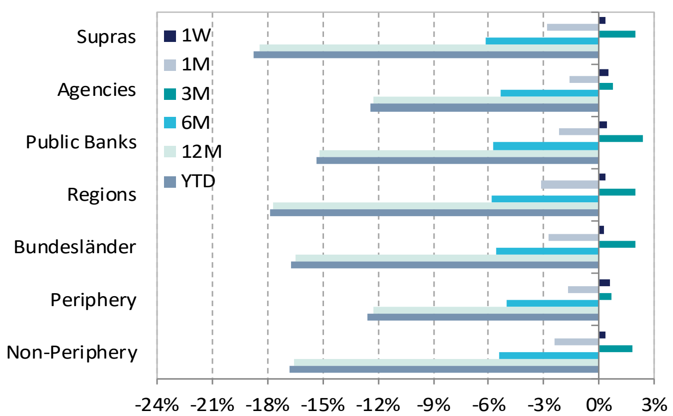
Spread development by country



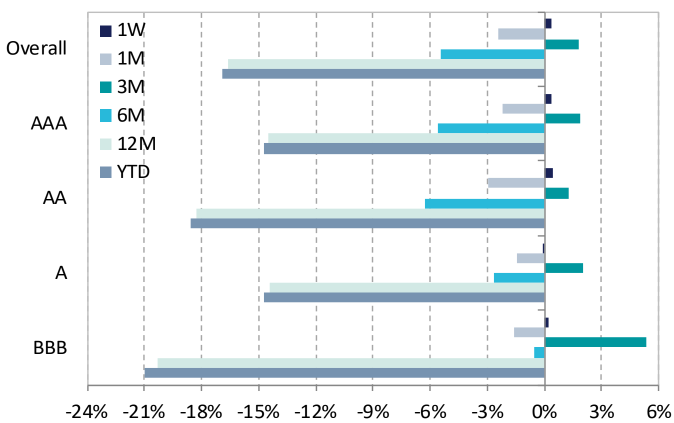
Performance (total return)



Performance (total return) by segments



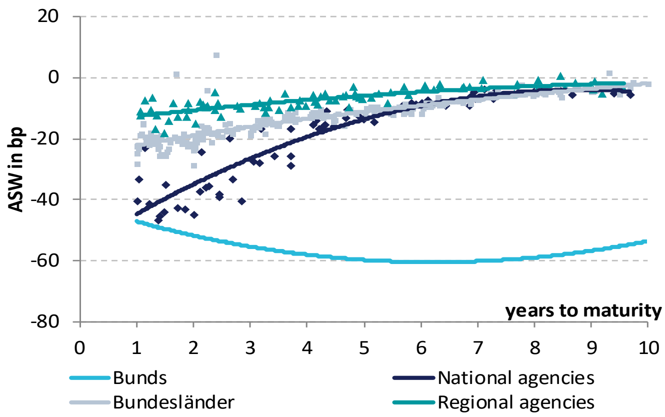
Performance (total return) by rating



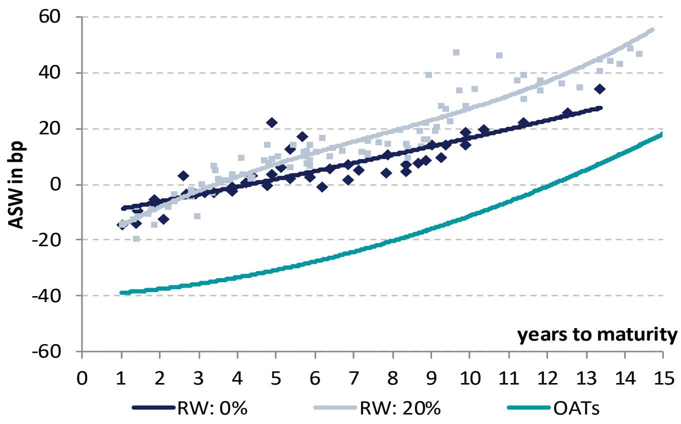
Source: Bloomberg, NORD/LB Markets Strategy & Floor Research

NORD/LB

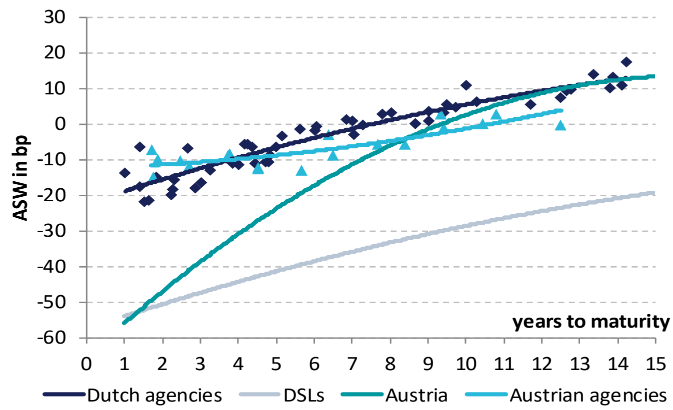
Germany (by segments)



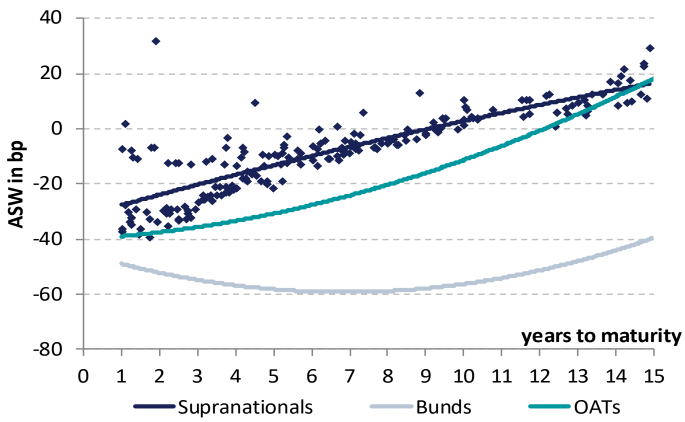
France (by risk weight)



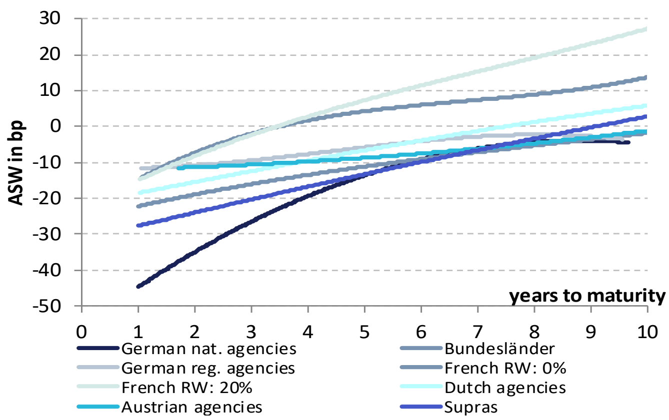
Netherlands & Austria



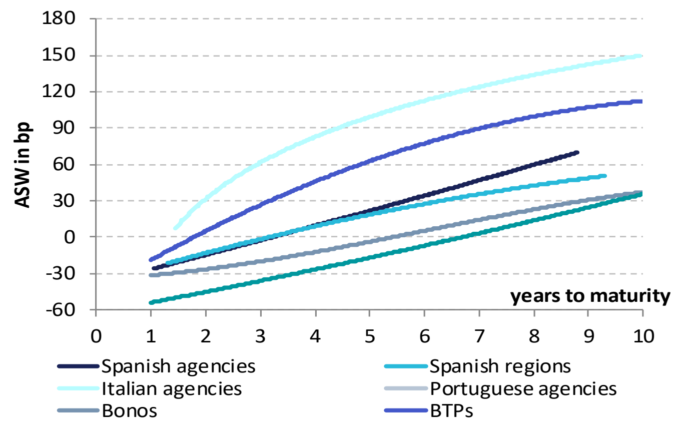
Supranationals



Core



Periphery



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

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Appendix
Overview of latest Covered Bond & SSA View editions

Publication	Topics
39/2022 ♦ 14 December	▪ Our view of the covered bond market heading into 2023 ▪ SSA outlook 2023: ECB, NGEU and the debt brake in Germany
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

NORD/LB:
Markets Strategy & Floor Research

NORD/LB:
Covered Bond Research

NORD/LB:
SSA/Public Issuer Research

Bloomberg:
RESP NRDR <GO>

Appendix
Publication overview

Covered Bonds:

Issuer Guide Covered Bonds 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

Melanie Kiene
Covered Bonds/Banks

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

Stefan Rahaus
Covered Bonds/Banks

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

Dr Norman Rudschuck
SSA/Public Issuers

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

Jan-Phillipp Hensing
SSA/Public Issuers

+49 172 425 2877
jan-phillipp.hensing@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

Origination & Syndicate

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

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

Trading

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

Sales Wholesale Customers

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Asset Finance	+49 511 361-8150

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