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Dear readers,

Due to the public holiday at the start of next week, we shall be taking a brief publication break. As such, **no** edition of our weekly publication will be released on 02 November. However, we shall look forward to welcoming you back on **Wednesday, 09 November**, when our Covered Bond & SSA View will be published again via the familiar channels.

Your Markets Strategy & Floor Research Team

Covered Bond & SSA View

NORD/LB Markets Strategy & Floor Research

26 October 2022 ♦ 33/2022

Agenda

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Covered Bonds/Banks

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NORD/LB: Covered Bond Research

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Market overview
Covered Bonds

Author: Dr Frederik Kunze

Primary market: no sign of perpetual motion

The term "perpetual motion" may well have crossed the mind of the odd market observer when looking at the issuance activity on the covered bond primary market. In fact, this asset class cannot achieve what, in theory, could only be made possible by “devices” that contradict at least one of the Laws of Thermodynamics. For example, as we explain below, the high level of issuance activity comes at the expense of the secondary market. Over the past five trading days, a further six issuers approached investors in the EUR benchmark segment. Last Wednesday, Toronto Dominion (TD) added to the already abundant supply from the direction of Canada. The books for this fresh EUR benchmark (3.5y) opened at ms +20bp area. With a volume of EUR 1.25bn (order volume: EUR 1.6bn), the re-offer spread for the deal came in at ms +18bp. Hamburg Commercial Bank (HCOB) started out in the marketing phase with an initial guidance of ms +9bp area for its mortgage Pfandbrief (EUR 500m; 3.7y) issued on Thursday. The re-offer spread for this deal ultimately amounted to ms +8bp. In terms of the allocation, accounts from Germany and Austria were dominant here (85%). In the breakdown by investor type, Banks accounted for a share of 58% of the bond volume, with Central Banks/OI taking a share of 33%. On the same day, France’s Crédit Mutuel Home Loan SFH (CMCICB) ventured onto the market with a longer-term project. The bond featured a final volume of EUR 1.0bn and a term of seven years. It was priced at ms +17bp, two basis points tighter than the initial guidance. In total, 37% of the bond volume went to France, while Germany and Austria accounted for a combined share of 33%. The investor category of Banks snapped up a relatively low share of 28% on this occasion, which is likely down to the term to maturity selected. Further shares of 33% went to Central Banks/OI and 30% to Asset Managers & Funds. These two deals completed the primary market trading for the week, although it should also be pointed out that the marketing phases were pretty sluggish overall. At the start of the new week, the Bank of Nova Scotia (BNS), another issuer from Canada, and Sp Mortgage Bank (SPMTBK) from Finland, opened the primary market. Both banks opted for relatively large volume deals. While the EUR benchmark from BNS featured a volume of EUR 2.0bn (order book: EUR 2.45bn), SPMTBK chose a volume of EUR 750m for its first EUR benchmark in 2022. Looking back at its issuance history, the Finnish issuer had previously restricted itself to benchmarks with a volume of EUR 500m. Yesterday, on Tuesday, AXA Bank Europe SCF (AXASA) became the final issuer in our coverage for this week’s edition to approach investors, placing a deal worth EUR 750m (4.0y) at ms +16 bp (guidance: ms +17bp area) in the process.

Issuer	Country	Timing	ISIN	Maturity	Size	Spread	Rating	ESG
AXA Bank Europe	FR	25.10.	FR001400DNT6	4.0y	0.75bn	ms +16bp	- / Aaa / -	-
Bank of Nova Scotia	CA	24.10.	XS2550897651	2.0y	2.00bn	ms +12bp	AAA / Aaa / -	-
Sp Mortgage Bank	FI	24.10.	XS2550557800	5.0y	0.75bn	ms +20bp	- / - / AAA	-
Crédit Mutuel Home Loan	FR	20.10.	FR001400DKT2	7.0y	1.00bn	ms +17bp	AAA / Aaa / AAA	-
Hamburg Commercial Bank	DE	20.10.	DE000HCB0BP2	3.7y	0.50bn	ms +8bp	- / Aa1 / -	-
Toronto Dominion Bank	CA	19.10.	XS2549702475	3.5y	1.25bn	ms +18bp	- / Aaa / -	-

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

Secondary market: year-end effects in evidence?

The EUR benchmark volume placed on the market in the year to date eclipsed EUR 180bn following the AXA Bank Europe deal, with a total of EUR 180.33bn having now been recorded. The dynamic, sustained momentum on the primary market is also putting pressure on the secondary market, with the narrowing observed in Bund swap spreads also having a negative impact on trading activity and prices. Some market players are now starting to turn their attention towards the end of the year. Against the backdrop of the transformed interest rate landscape, some potential buyers are holding back in the current market environment. Turnover remains correspondingly low, with shorter maturities continuing to be subject to greater demand. While the oversubscription rates do not paint a clear picture owing to the trend towards larger volumes, the new issue premiums remain at an average level of five basis points even in the adjusted interest rate and spread landscape. For us, this is actually proof that the covered bond market is not in a state of perpetual motion either and that potential investors want to be compensated for their interest in fresh supply.

ECB meeting this Thursday: full steam ahead to next major interest rate hike

The next regular interest rate meeting of the European Central Bank (ECB) is scheduled to take place tomorrow (Thursday). As usual, we have focused on this topic in our weekly publication as part of the ECB preview, in which we also touch upon issues such as the reduction of the ECB's balance sheet total and its further approach to dealing with the current TLTRO III tenders. If the ECB Governing Council decides to adopt a "retrospective" approach to conditioning, this could also have implications for covered bond issuers. In particular, this is likely to apply to those institutions for which immediate steps would follow on the funding side – e.g. because they do not have large central bank deposits. In terms of the covered bond market, we would also appreciate a little more clarity with regard to the APP purchase programme. After all, full reinvestments are still being carried out without any announcement of an expiration date. In the case of maturities under the CBPP3 amounting to EUR 28.9bn (January to September 2023), the market definitely needs more information. As far as the expected interest rate decision is concerned, we also expect an increase of 75 basis points.

New issuer from Down Under: Bendigo and Adelaide Bank plans debut deal in AUD

As part of our weekly publication, we placed a spotlight on the Australian covered bond market at the end of August (cf. edition from 31 August 2022). The reappearance of Macquarie as an active issuer in the EUR benchmark segment provided the motivation for us to take a look at the market Down Under in greater detail. Bendigo and Adelaide Bank, which is headquartered in Victoria and has total assets of around AUD 95bn as at 30 June 2022, is now planning to expand the group of Australian issuers active in this covered bond jurisdiction. According to the mandate as reported by Bloomberg, the bank is seeking to issue a bond in its domestic currency, the Australian dollar, for its inaugural deal. The bonds issued under the covered bond programme worth AUD 6bn are based on the Australian covered bond legislation. According to the Moody's pre-sale report, the bank had a cover pool volume of AUD 1.772bn as at 13 September 2022, which is made up of residential mortgages. The agency has (provisionally) awarded the programme its top rating of Aaa. The risk experts at Fitch have also offered a top rating (AAA) to the covered bonds issued by Bendigo and Adelaide Bank. In a press release dated 23 October 2022, Fitch states that it anticipates a deal with a volume of AUD 500m to be placed in soft bullet format.

Deutsche Hypo real estate climate: "Gloomy autumn mood"

Based on the survey of around 1,200 real estate experts, the Deutsch Hypo Real Estate Climate delivers valuable insights into the mood of the German property market. A negative atmosphere or "gloomy autumn mood" persisted in the reporting month of October 2022 as well. The highly regarded real estate climate – which covers a period of 178 months now – recently suffered a marked decline, having fallen by 13.1% to 64.8 points in the latest composition. The decline in the investment climate to 48 points (-17.2%) was not least decisive here, with the earnings climate also underlining the fundamentally negative mood (-10.3% to 82.7 points). In terms of asset class, the sharpest fall was attributable to the retail property market, where the decline amounted to 28.0% (down to 37.1 points). As before, the highest value goes to the logistics real estate market (114.4 points; -5.2%), while the residential climate (-3.8%) has now slipped to below 90 points for the first time since January 2009 (as at October 2022: 89.6 points). The combination of geopolitical uncertainties and fears of recession are above all cited as challenges for the real estate market. These are the factors said to be primarily responsible for the substantial caution identified on the part of investors. The issue of ESG is another task that the property market needs to deal with, and was the focus topic of a Real Estate Special published by Deutsche Hypo in September 2022.

Singapore: Moody's comments on affordability of residential property assets

The risk experts from Moody's also opted to focus on the real estate market as part of a recently published sector report. In specific terms, the authors of the report discussed the deteriorating affordability of residential property for households in Singapore and, in relation to this, delve deeper into the implications for covered bonds. According to Moody's, the triggers for the continuation of the negative trend in housing affordability include further increases in real estate prices and rising mortgage interest rates. The expected increase in household incomes will not sufficiently offset these increases overall, meaning that, on balance, Moody's views the implications for covered bonds from this jurisdiction as "credit negative". For example, the authors point out that around half of the loans in the cover pools feature variable interest rates, which should lead to rising rates for these mortgage loans. Risks in relation to new loans or financing newly included in the cover pool also look set to rise. The rating agency does, however, point out that no rating changes will be forthcoming on the back of the sector report. The three issuers from Singapore active in the EUR benchmark segment all boast top ratings from Moody's, S&P and/or Fitch, and together account for a cover pool volume of approximately EUR 32bn, while the total volume of outstanding covered bonds placed by the issuers here comes to around EUR 14bn. As part of our weekly publication, we recently covered the market in Singapore in greater detail with a dedicated article included in the edition from 28 September 2022.

ECB purchase programmes as at 21 October 2022

Last Thursday, the ECB presented its usual weekly updates on the asset purchase programmes (cf. press release from 25 October). As at the reporting date, holdings under the purchase programmes that we regularly focus on totalled EUR 1,683.5bn (PEPP), EUR 2,594.1bn (PSPP) and EUR 301.5bn (CBPP3). As the data presented in the ECB's detailed breakdown on the purchase programmes, published on the usual ECB webpage, still referenced a reporting date of 14 October 2022 at the editorial deadline for our weekly publication, the ECB Tracker section in this edition also refers to this date in presenting the weekly data.

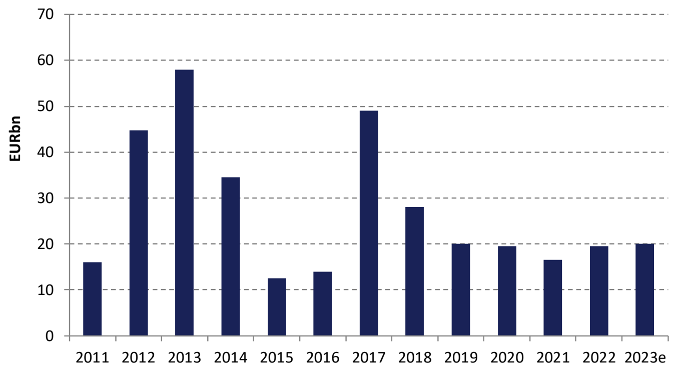
Market overview
SSA/Public Issuers

Author: Jan-Phillipp Hensing

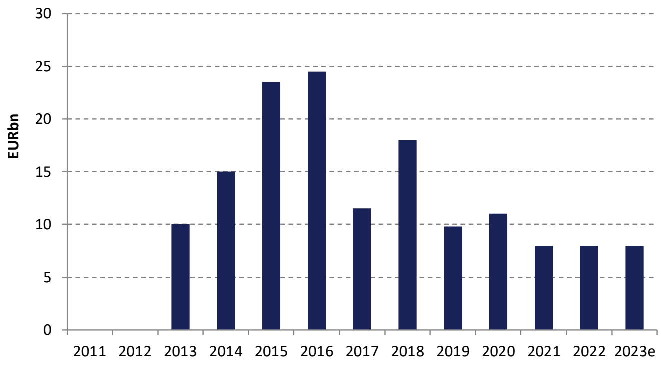
ESM and EFSF hit funding target for 2022

Last week the European Stability Mechanism hit its long-term funding target for 2022 in record time, to use its own description. To recap: last week on Monday the ESM issued a EUR 2bn tap (WNG) at ms -21bp for its bond ESM 1% 06/23/27. With an order book of EUR 4.2bn, investor interest was strong and the bond tightened by one basis point versus the guidance. At EUR 8bn, the funding target for 2022 was the same as in the previous year. Although there were no issues in USD this year, it will remain a strategic currency for future issues. Two weeks prior to this, the ESM's predecessor, the European Financial Stability Facility (ticker: EFSF), achieved its funding target of EUR 19.5bn. Unlike the ESM, the EFSF can no longer grant any new lending, but continues to issue bonds to refinance existing loans. For the coming year, the funding targets for the EMS and EFSF are EUR 8bn and EUR 20bn respectively. Let's take a quick look at the funding activities of the EFSF and ESM in 2022: there are four capital market appearances by ESM in our database, three of which are tap issues, through which the ESM raised EUR 6bn overall. The only fresh bond was placed in May. Over the course of the year, the ESM has been active in the capital market in each quarter with an issue amounting to EUR 2bn. The EFSF, on the other hand, has been seen on the screens of market players seven times: six times in the form of a bond issue, with just one tap this year. The EFSF garnered the largest amount in the first quarter of the year (EUR 8.5bn), followed by the third quarter (EUR 5.5bn). The bid-to-cover ratio amounted on average to 3.7x, with the deal dated 10 January recording the highest figure as it was more than six-times oversubscribed (issuance volume: EUR 3bn; order book: EUR 19bn). The issues from ESM attracted even greater interest with an average bid-to-cover ratio of 10.0x.

EFSF: issuance volume by year



ESM: issuance volume by year



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

NRW.BANK-ifo Business Climate deteriorates again in September

Sentiment in the economy of North Rhine-Westphalia fell for the fourth time in a row in September, according to the findings of the NRW.BANK-ifo-Business Climate survey. The downturn is due to the fact that inflation is not only eroding real purchasing power, but also making production less profitable. With a fall of 7.7 points, the business climate stands at -15.5 points, with a decline recorded across all areas of the economy. The slide in business climate in the construction industry is particularly significant. Construction companies have never been so pessimistic about the future. The industry is under pressure from both the rise in prices of materials and the hike in interest rates, which means higher borrowing costs. The outlook for the future in the services sector in North Rhine-Westphalia is also bleak and those in the hospitality sector above all fear difficult times ahead due to the loss of purchasing power. Sentiment is similar in the logistics industry, where high fuel prices are causing problems. Retail firms have also been hard hit by inflation and for the first time in two years, the majority of wholesalers and retailers rated the overall situation as negative. As a result, many are even planning to reduce their workforce. Sentiment has additionally declined in the manufacturing industry, where the decline in orders means companies are looking at the next six months with concern. There has been a downturn in sentiment in nearly all industrial sectors, most notably in the chemicals industry, where the climate is at its lowest level for over ten years. The industry is heavily reliant on gas and therefore plans record curbs in production in the next few months. However, sentiment improved slightly in the electrical industry, where production recently picked up noticeably.

KfW SME Panel 2022: coronavirus concerns largely overcome

Despite coronavirus concerns, SMEs had a very good year in 2021, according to the current findings of the KfW SME Panel 2022. Turnover and workforce numbers in 2021 returned to the levels of 2019. The number of people employed by small and medium sized companies even reached a record high at 71.9% of the total workforce. The turnover increase in 2021 of EUR 242bn to EUR 4,580bn largely made up for the sharp falls seen in the first pandemic year. Higher turnovers also led to higher profits and the average profit margin for SMEs rose slightly in 2021 from 7.3% to 7.4%. New investments by SMEs increased by 6% to EUR 183bn. Credit finance for investments was up 13% in 2021, but only 38% of SMEs carried out investments. There are already signs for 2022 that monetary policy tightening and more cautious lending by the banks will result in more expensive credit financing. Despite the good figures for 2021, the SME sector had no time to pause for breath, as the war in Ukraine and resultant rise in energy costs caused problems for businesses. Since the start of the crisis, sentiment among businesses has deteriorated considerably. In a follow-up survey to the KfW SME Panel in September 2022, 62% of SMEs stated that energy prices were a burden for their business. Perhaps surprisingly, however, 53% of those surveyed said they could cope with higher energy prices. Only 13% viewed them as a considerable additional burden. For another 13%, energy prices were barely a factor at all.

Primary market

In light of the forthcoming ECB meeting on Thursday, the primary market was comparatively quiet compared with preceding weeks. Overall, alongside the scheduled EU auction, we only saw one new issue after the deal from the French Community of Belgium was postponed during the marketing phase. The only bond issued in the trading week under review came from North Rhine-Westphalia (ticker: NRW). The Bundesland raised EUR 2.5bn with a 5-year deal offering a coupon of 3%. The order book totalled EUR 8.4bn in the marketing phase and the deal tightened by two basis points to ms -12bp versus guidance of ms -10bp area. For the statisticians among you, we have a few numbers ready: in the regional breakdown, the lion's share went to investors from Germany (47%), followed by Southern Europe (14%) and the UK (13%). In terms of investor groups, 54% was attributable to Banks & Bank Treasuries, followed by Central Banks/Official Institutions with 22%. The scheduled EU auction then took place on Monday, with increases for two existing bonds. There was a EUR 2.45bn tap issue for EU 0% 07/06/26 (order book: EUR 3.337bn) and a EUR 1.45bn tap for EU 0.4% 02/04/37 (order book: EUR 2.671bn). Consequently, the bid-to-cover ratios stood at 1.4x and 1.8x respectively. Last Tuesday, the French Community of Belgium (ticker: LCFB) had planned to issue a 17-year social bond, with BGB 1.9% 06/22/38 and BGB 0.4% 06/22/40 set to serve as benchmarks here. The guidance for the deal stood at OLO +49bp area. The issuer withdrew the deal during the marketing phase and has postponed it to a later date. Last Thursday we learned that Agence France Locale (ticker: AFLBNK) is planning to issue a bond, with a mandate already in place here. It intends to issue a 10-year bond with a volume of EUR 500m (WNG).

Issuer	Country	Timing	ISIN	Maturity	Size	Spread	Rating	ESG
NRW	DE	19.10.	DE000NRW0NP7	5.3y	2.50bn	ms -12bp	AAA / Aa1 / AAA	-

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

Covered Bonds
Repayment structures on the covered bond market: EU harmonisation project consigns hard bullets to the shadows

Authors: Melanie Kiene, CIIA // Dr Frederik Kunze

Repayment structures for covered bonds

Market players were preoccupied with the various options for designing a covered bond's repayment structure long before the transposition of the Covered Bond Directive into national legislation, but there has since been an increased here. From a fundamental perspective, investors tend to focus on the latest possible date for repayment of their investment, while issuers often focus on the fact that rating agencies view extendable maturity structures positively when rating their bonds. Although hard bullet structures tended to be chosen most frequently in the past, the soft bullet structure has now become the most popular form for EUR benchmarks. Occasionally, bonds also appear on the market with the conditional pass-through structure (CPT) introduced by NIBC in the Netherlands in 2013. Until now, the option of postponing the maturity date in connection with specific trigger events was usually anchored in the programme documentation for the bonds or issuance programmes concerned. In the course of the EU covered bond harmonisation, however, the Covered Bond Directive formulated concrete requirements for legislators if they wish to allow maturity deferrals. The amendment to the German Pfandbrief Act therefore put an end to hard bullet Pfandbriefe when it came into force. Due to the size of the Pfandbrief market alone, this will lead to a lasting shift in how repayment structures are viewed on the covered bond market, both in terms of global volume and with regard to the iBoxx EUR Covered as a benchmark index. In total, 26 of the 27 Member States have already fully implemented the Covered Bond Directive. However, the current and prospective impact from implementing the directive will be less significant here. In this issue of our weekly publication, we provide an overview of the currently valid repayment structures.

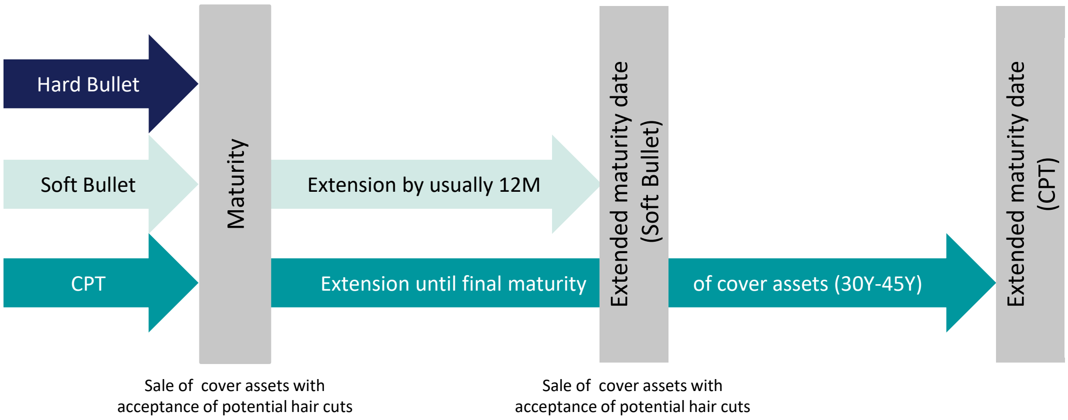
Hard bullet structures: no option for extending the maturity

Until a few years ago, hard bullet structures were regarded as standard market practice when it came to structuring the repayment arrangements for a covered bond. If a covered bond issuer is not able to comply with their outstanding payment obligations, investors will obtain access to the respective covered bond programme's cover pool – regardless of the repayment structure chosen – via the trustee or administrator because of the dual recourse mechanism. If redemption of an issue is pending and the liquid funds available are not sufficient to redeem the bond and liquidity cannot be generated by another means, the collateral in the pool will be sold if the bond has a hard bullet structure. Investors can expect prompt repayment on the one hand, but on the other hand this carries the risk that due to market turbulence the market values of the assets may be reduced and, in extreme cases, the full repayment amount will not be covered by the sale proceeds.

Soft bullet structures: maturity extended through trigger events

Soft bullet structures and, more rarely, CPT structures exist to counter this risk. If investors' claims can be serviced when they originally fall due, there are no differences between the three payment structures as far as investors are concerned. Since no uniform trigger events have so far become established on the market to activate an extension, different variants are currently possible, which lead to the repayment date originally agreed under a soft bullet structure being postponed. Examples of various models within the soft bullet variant include (i) the issuer's insolvency and postponement of redemption to a later repayment date by an independent trustee or (ii) the postponement of the original repayment date by the issuer. With regard to possible extension periods, a postponement of maturity by twelve months has become established in most cases under soft bullet structures. Interest payments during the extended maturity are largely based on 1-month or 3-month Euribor plus a premium or discount, but in some cases are also defined as a fixed coupon. Only now with the national implementation of the Covered Bond Directive have the trigger events been legally anchored in the European Member States, although noticeable differences remain.

Comparison of the various maturity structures



Source: NORD/LB Markets Strategy & Floor Research

Conditional pass-through structures: final maturity is actually uncertain

The original repayment date can be postponed for far longer in the case of bonds which feature a CPT (conditional pass-through) structure. This also reduces the refinancing risk to a minimum at the same time. In contrast to the soft bullet structure, once the pass-through structure is triggered (for which, like soft bullet structures, there are no uniform trigger events), the outstanding covered bond issues are redeemed firstly from the inflows generated from the assets associated with them and also from the sale of assets, if they can be sold at adequate market prices. However, in contrast to the soft bullet structure, the date at which investors can expect the outstanding claims to be serviced cannot be determined ex ante. Rather, in the worst-case scenario, it can only be determined upon maturity of the assets with the longest term. Rating agencies view soft bullet, and even more so CPT structures, as positive factors in assessing their ratings because the refinancing risk is lower.

Special case Poland: soft bullet with conversion option to CPT

Polish legislation can be considered a special case as regards the maturity structure of covered bonds. Covered bonds that cannot be serviced on their maturity date are initially extended by twelve months. During this extension period, a test is carried out at six-month intervals to determine whether sufficient assets are available to service the investor claims and whether sufficient liquidity is also available to service these claims on time. If the two tests are not passed during the extension period, transition to a CPT structure takes place at the end of the twelve-month period. The repayment date is thus postponed to the latest maturity date of the cover assets plus three years. However, such an extension can be prevented by a 2/3 majority of the investors. Thus, Polish covered bonds are initially soft bullet bonds whose final maturity cannot be clearly determined in advance due to the possible conversion to a CPT structure, meaning that their repayment structure cannot be clearly assigned to one of the three repayment forms. This means we do not take into account the EUR benchmarks of PKO Bank Hipoteczny contained in the iBoxx EUR Covered in the following analysis.

Overview of possible triggers for maturity postponement

Country	Trigger event
Australia	Insolvency, issuer insolvency
Belgium	Insolvency, issuer insolvency
Denmark	RO: Refinancing CBs not guaranteed, interest rate rises by 5% or more; SDO: depends on issuer; SDRO: Refinancing CBs not guaranteed, interest rate rises by 5% or more
Germany	Issuer insolvency/liquidation
Finland	Issuer insolvency
France	OF: Insolvency, liquidation, default, lack of liquidity OH: Insolvency, liquidation, issuer default, lack of liquidity CRH: Insolvency, liquidation, issuer default, lack of liquidity
Greece	Lack of liquidity, breach of liquidity rules
Ireland	Default, instruction by authorities or administrator
Iceland	-
Italy	Insolvency, issuer insolvency
Canada	Insolvency, issuer default, other events
Luxembourg	-
New Zealand	-
Netherlands	Insolvency/issuer‘s liquidation, issuer default
Norway	Insolvency/issuer‘s liquidation
Austria	Insolvency/issuer‘s liquidation
Poland	Issuer insolvency
Portugal	Default, withdrawal of banking licence
Sweden	Permission needed from FSA
Singapore	Contractually regulated
Slovakia	Insolvency, issuer default, cancellation of covered bond programme
Spain	Insolvency, liquidation, lack of liquidity, violation of liquidity rules
South Korea	South Korean covered bonds: Issuer default KHFC covered bonds: -
Czech Republic	Insolvency, issuer default, lack of liquidity
Turkey	-
Hungary	Depends on the programme structure
United Kingdom	Insolvency, liquidation, issuer default

Source: National legislation, NORD/LB Markets Strategy & Floor Research

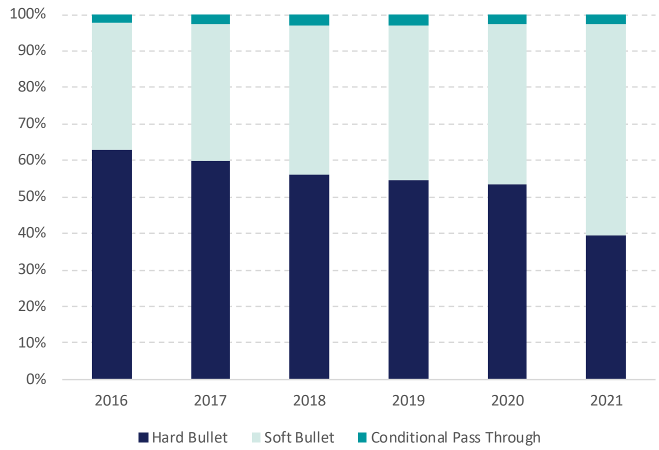
Special case Slovakia: soft bullet with a possible second extension of maturity
Slovakia also deviates to a certain extent from current market standards as far as maturity-extending structures are concerned, which is due to a change in legislation that came into effect on 1 January 2018. Accordingly, in the event of an institution becoming insolvent, the new legislative framework initially provides for postponing the due date by twelve months. Should there be no sign that investors' claims will be serviced when the extension period expires, the programme may be transferred to one or more other Slovakian banks. If such a transfer is not possible within the first extension period, a further postponement of the due date by another twelve months may be approved by the regulator. The renewed extension of maturity will affect both those bonds that were extended because of the first postponement and those whose due dates fall within the second 12-month period. The Slovakian EUR benchmark covered bonds included in the iBoxx EUR Covered are therefore soft bullet issues, whose structures differ, however, from other soft bullet issues in the index because their due dates may be postponed twice. Unlike Polish issues, Slovakian issues may, in our opinion, clearly be assigned to the soft bullet bond segment, albeit with a maximum extension of 24 months.

Soft bullet and CPT bonds under CBPP3 and for repo transactions
Given that their maturities may, under certain circumstances, be very long, covered bonds with a conditional pass-through structure are subject to special requirements. The ECB currently purchases no covered bonds with this (CPT) structure under the CBPP3, and, as we understand it, also justifies this decision by pointing to the relatively modest size of the CPT market. CPT bonds also have a particular feature in the context of repo transactions with the ECB. Adjustments to valuation discounts are relevant for own-use soft bullet or CPT covered bonds. In the course of recognition, it is the extended not the originally envisaged maturity that is used to determine the discount. In the case of a soft bullet, the maturity would have to be extended by a year as a rule, while all CPT structures fall into the maturity range of ">10 years" when determining any haircut because of their theoretically very long extension period.

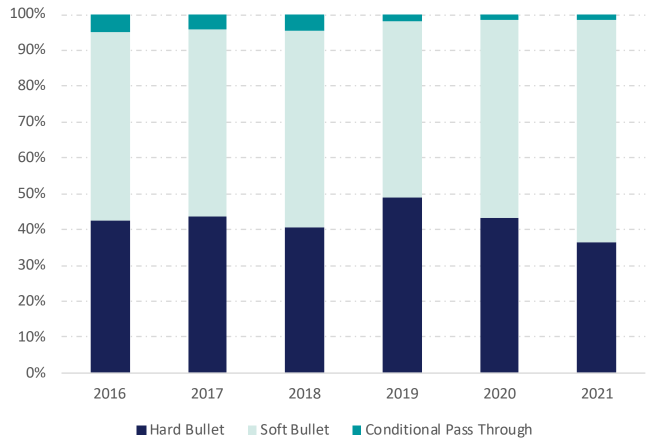
Maturity extension also an issue for harmonisation efforts

As mentioned above, extendable maturity structures were also discussed as part of the harmonisation of the European covered bond market. The aim is to create opportunities to counter risks resulting from mismatching maturities and potential liquidity shortages. In this context, the Covered Bond Directive envisages in the form of Article 17 that it will be left to the responsible national supervisory authorities whether to allow extendable maturity structures. If they are approved, the event that triggers the extension or postponement of maturity is critical for such structures. This trigger event must be included in the national framework and may not be left to the issuer's discretion. Bond investors must be provided with detailed information regarding the trigger, the effects on the maturity structure in the event of insolvency and the role of the supervisory authority and the trustee following any extension to maturity. It is already clear from the above that the refinancing risk can be significantly reduced by means of a soft bullet or CPT structure compared with a hard bullet structure. The aforementioned table "Overview of possible triggers for maturity postponement" contains the trigger events for the European Member States (provided that the jurisdictions have a bond in the iBoxx EUR Covered) as well as for selected third countries. Investing in such a covered bond requires prior, detailed examination of the terms of the bond in question since the Covered Bond Directive does not apply to all countries and it has not been implemented uniformly either. As such, it is still necessary to check what happens to the interest payments in the extension period when the trigger event occurs. With regard to the refinancing risk following the issuer's insolvency, it must be mentioned that, in the case of hard bullet structures, issuers are already obliged by law in some cases to reduce this risk by maintaining a liquidity buffer. In the wake of the harmonisation efforts, Article 16 CBD also envisages the mandatory introduction of a liquidity buffer to cover net liquidity outflows for 180 calendar days for all jurisdictions subject to the regulation.

Covered bond volume (global) - breakdown



Covered bond issues (global) - breakdown



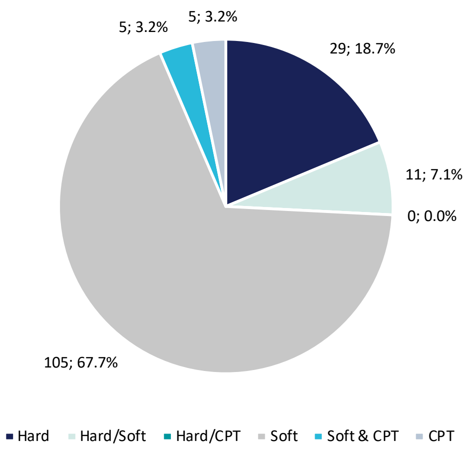
Source: ECBC, NORD/LB Markets Strategy & Floor Research

ECBC - Repayment structures: soft bullets accounted for largest share of issues in 2021
Based on the ECBC annual statistics as at the reference date of 31 December 2021, the market for all outstanding and newly issued covered bonds can be subdivided in terms of the maturity structure. For the first time since this data was recorded for 2016, soft bullet structures account for the largest share of the volume of bonds outstanding in this database at 58% (2020: 44%). This essentially shows that, as a result of the amendment of Pfandbrief Act in Germany, all hard bullet structures (2020: EUR 371,947m) have been changed to soft bullet structures (2020: - ; 2021: EUR 391,366m). With regard to newly issued covered bonds in 2021, 62% were soft bullets and 36% (2020: 44%) hard bullets. The CPT bond category accounts for only comparatively small shares, at 3% (outstanding volume) and 1% (new issues 2021).

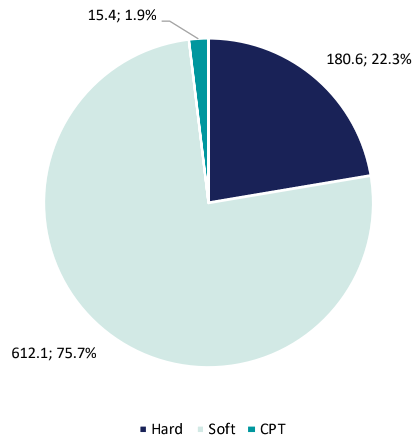
iBoxx EUR Covered: influence of EU harmonisation on repayment structures
While the shifts with regard to the weightings of the maturity structures in the iBoxx EUR Covered have been rather generic - as an example, the switch of some issuers in the Netherlands from CPT to soft bullet - a significant driver has been added with the harmonisation of the European covered bond market. This can be clearly seen in the example of the German Pfandbrief market, although an increased number of soft bullets can also be expected in other jurisdictions due to the legislative adjustments. None of the national legislators have opted for a “big bank” solution in line with the adjustments to the Pfandbrief Act and relied heavily on extendable structures. This is currently particularly true for those countries that have active issuers with both hard bullets and extendable structures. Below we refer to the iBoxx composition October 2022.

iBoxx dominated by purely soft bullet issuers
With 106 out of 152 issuers (69.7%), most of the issuers (excl. Spanish multi-cedulas) listed in the iBoxx EUR Covered currently only have outstanding benchmarks with soft bullet structures. Due in particular to the new soft bullet heavyweight Germany, only 15.0% (23 issuers) is attributable to institutions that only have hard bullet bonds and 2.0% (three issuers) to those which only use CPT structures. Consequently, a clear maturity model can be assigned to 86.7% of institutions with outstanding EUR benchmarks. However, the remaining 13.3% is attributable to issuers that have outstanding benchmarks with two differing maturity structures. The most frequent combination (9.2% or fourteen issuers) is hard and soft bullet bonds. In addition to the Italian UniCredit and the NIBC Bank from the Netherlands, the issuers Achmea Bank, Aegon Bank, Van Lanschot Kempen (all three NL) and Deutsche Bank (DE) have EUR benchmarks with a soft bullet and CPT structure. In addition to Pfandbriefe placed in accordance with the Pfandbrief Act (previously “hard bullet”, now, by law, with a maturity extension option), Deutsche Bank also has a CPT benchmark on a contractual basis. This is a unique feature in the market for EUR benchmarks. The EUR benchmarks issued by Poland’s PKO Bank Hipoteczny are not taken into account at this point because of their hybrid maturity structure model (soft bullet with option to switch to CPT) to avoid confusing them with those issuers that have both soft bullet and CPT bonds outstanding.

Repayment structures by volume



EUR benchmark volume by structure

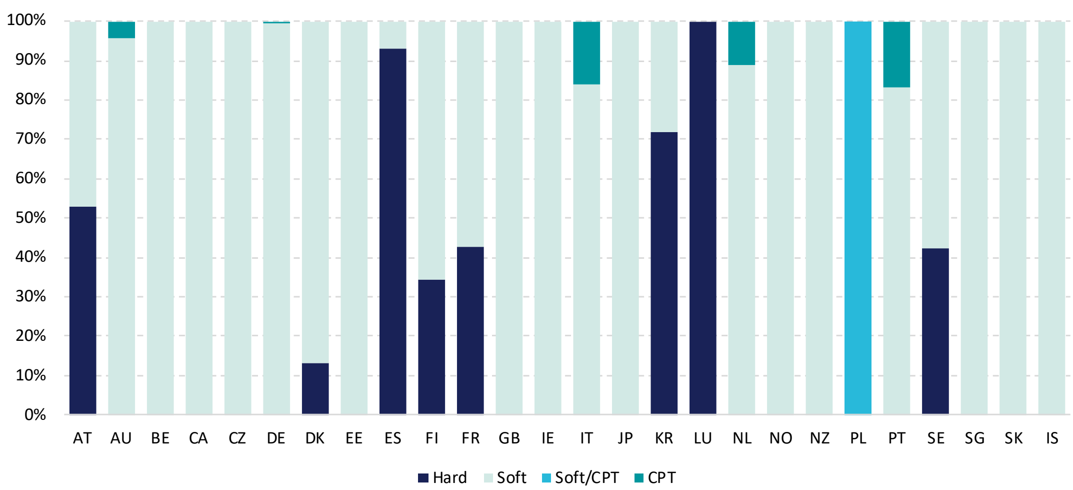


Source: Market data, NORD/LB Markets Strategy & Floor Research

Soft bullet EUR benchmarks with largest outstanding volume

At 75.7% (EUR 612.1bn), covered bonds with a soft bullet structure now account for the largest share by far of the volume of bonds in the iBoxx with a clear maturity structure (i.e. excluding Poland, see above and the following table, as well as Spanish multi-cedulas). In most cases this provides for a maturity extension of 12 months if a trigger event occurs. EUR benchmarks with a CPT structure continue to represent a niche in the benchmark segment as they only account for 1.9% of the volume of bonds in the iBoxx index. Traditional hard bullet covered bonds with no option for maturity extension account for the remaining 23.3%. Hard bullet issues with a volume of EUR 85.05bn originated in France, while Spain (EUR 47.89bn), Austria (EUR 21.5bn) and Sweden (EUR 10.75bn) accounted for the next-highest volumes. In our view, it is worth mentioning in this context that France (EUR 114.12bn) and also Austria (EUR 19.00bn) and Sweden (EUR 14.58bn) already have significant volumes of soft bullets.

Repayment structures by jurisdiction



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

Numerous jurisdictions feature a range of repayment structures

Looking at the spread of the three repayment structures at jurisdiction level, it is also apparent that only EUR benchmarks from Luxembourg are exclusively represented in the iBoxx with hard bullet structures. Conversely, with Belgium, Canada, Czech Republic, Estonia, the UK, Ireland, Japan, Norway, New Zealand, Singapore and Slovakia, there are 11 jurisdictions with only soft bullet EUR benchmarks in the iBoxx. Poland's EUR benchmarks also have a standard (hybrid) maturity structure. CPT bonds were issued as well in Australia, Germany, Italy, the Netherlands and Portugal. There is more than one repayment model in 12 out of the 26 EUR benchmark jurisdictions represented in the iBoxx index. In the following, we provide a tabular overview of the individual issuers and the maturity models they use for these jurisdictions. It should be noted that under certain circumstances, repayment structures can be used in the respective jurisdictions, and by the listed issuers, that differ from those of the EUR benchmarks or are no longer listed in the iBoxx due to their residual maturity. For reasons of simplicity, this article is based exclusively on EUR benchmarks in the iBoxx EUR Covered index (excluding Spanish multi-cedulas).

Repayment structures in Austria

	Hard	Soft
BAWAG PSK	X	X
Erste Group Bank	X	X
HYPO NOE		X
Hypo Tirol Bank		X
Hypo Vorarlberg Bank	X	
Raiffeisen Bank International		X
Raiffeisenlandesbank Niederoesterreich-Wien	X	X
Raiffeisenlandesbank Oberoesterreich	X	X
Raiffeisen-Landesbank Steiermark	X	
Raiffeisenlandesbank Vorarlberg	X	
UniCredit Bank Austria	X	X
Volksbank Wien	X	

Repayment structures in Italy

	Soft	CPT
Banca Monte dei Paschi di Siena		X
Banco BPM	X	
Banca Carige	X	
Banco di Desio e della Brianza	X	
BPER	X	
Credit Agricole Italia	X	
Credito Emiliano	X	
Intesa Sanpaolo	X	
Mediobanca Banca di Credito Finanziario	X	
Iccrea Banca	X	
UniCredit	X	X

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

Repayment structures in Austria

Although EUR benchmarks with a hard bullet structure continue to dominate in Austria (EUR 21.5bn), there has recently been a certain trend towards soft bullet bonds. Consequently, eight out of the total of 12 Austrian issuers have outstanding EUR benchmarks with a maturity extension option (EUR 19.0bn). Due to maturities, Raiffeisen Bank International, HYPO NOE and Hypo Vorarlberg only have soft bullet issues.

Repayment structures in Italy

Italy is one of the jurisdictions that has outstanding covered bonds with CPT structures (EUR 6.3bn), even though such bonds play only a rather minor role in the Italian market for publicly placed EUR benchmarks compared with soft bullet bonds (EUR 33.43bn). While the EUR benchmarks from Banca Monte dei Paschi are exclusively CPT bonds, UniCredit has outstanding soft bullet bonds as well as issues in CPT format.

Repayment structures in Denmark

With regard to the Danish market, we would like to highlight the bonds issued by Danish Ship Finance (Danmarks Skibskredit), which differ not just because of their cover assets (ship mortgages) but also because of the repayment structure in that the bonds are issued as hard bullets. Danske Bank and Jyske Realkredit, on the other hand, have each placed their EUR benchmarks on the market with soft bullet structures (extension by up to twelve months). For soft bullet structures, there are now legal triggers for maturity postponements in Denmark, although we understand that these adjustments (in contrast to the changes for Pfandbriefe) only took effect on 8 July 2022 and will apply to bonds placed from this date onwards.

Repayment structures in Denmark

	Hard	Soft
Danmarks Skibskredit	X	
Danske Bank		X
Jyske Realkredit		X

Repayment structures in Finland

	Hard	Soft
Aktia Bank		X
Danske Mortgage Bank		X
Nordea Kiinnitysluottopankki	X	X
OP Mortgage Bank		X
SP-Kiinnitysluottopankki		X

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

Repayment structures in Finland

Of the outstanding EUR benchmarks from Finnish issuers currently on the market, only eight bonds from Nordea Mortgage Bank have a hard bullet structure. In contrast, the four other issuers have 17 outstanding EUR benchmarks with a soft bullet structure, each with the option to extend maturity by 12 months. Nordea Mortgage Bank also issued its first soft bullet bond in 2022, so that all five Finnish issuers have now issued bonds with this structure.

Repayment structures in France

There are a total of sixteen issuers in France, seven of which have structured their bonds with a uniform maturity structure, i.e. exclusively hard or soft bullet bonds. The majority of these issuers (nine banks) have chosen extendable maturities. Only CRH, CAFFIL and CFF exclusively have outstanding hard bullet bonds. A further six issuers have placed EUR benchmarks in the past with both hard and soft bullet structures. The hard bullet bonds of Société Générale SCF are not included in the iBoxx EUR Covered due to maturities or the remaining term of less than one year.

Repayment structures in France

	Hard	Soft
Arkea Home Loans SFH		X
Arkea Public Sector SCF		X
AXA Bank Europe SCF		X
AXA Home Loan SFH		X
BNP Paribas Home Loan SFH	X	X
BPCE SFH	X	X
Caisse de Refinancement de l'Habitat	X	
Caisse Francaise de Financement Local	X	
Cie de Financement Foncier	X	
Credit Agricole Home Loan SFH		X
Credit Agricole Public Sector SCF		X
Credit Mutuel Home Loan SFH	X	X
HSBC SFH France	X	X
La Banque Postale Home Loan SFH	X	X
MMB SCF	X	X
Societe Generale SFH	X	X

Repayment structures in Germany

	Hard	CPT
Aareal Bank	X	
Bausparkasse Schwaebisch Hall	X	
Bayerische Landesbank	X	
Berlin Hyp	X	
Commerzbank	X	
Deutsche Apotheker-und Aerztebank	X	
Deutsche Bank	X	X
Deutsche Hypothekenbank	X	
Deutsche Kreditbank	X	
Deutsche Pfandbriefbank	X	
DZ HYP	X	
Hamburg Commercial Bank	X	
Hamburger Sparkasse	X	
ING-DiBa	X	
Landesbank Baden-Wuerttemberg	X	
Landesbank Hessen-Thueringen Girozentrale	X	
Muenchener Hypothekenbank	X	
Norddeutsche Landesbank-Girozentrale	X	
Santander Consumer Bank	X	
Sparkasse KoelnBonn	X	
UniCredit Bank	X	
Wuestenrot Bausparkasse	X	

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

Repayment structures in Germany

The adjustment of the legal basis for issuing Pfandbriefe in Germany has implemented maturity extensions for all outstanding and newly issued Pfandbriefe, which we understand as soft bullets. Moreover, since November 2019 Deutsche Bank has had one bond with a CPT structure. To achieve this, Deutsch Bank used a contractual covered bond, which therefore does not constitute a bond pursuant to the German Pfandbrief Act and consequently does not constitute a Pfandbrief.

Repayment structures in Sweden

In Sweden, three of the five issuers use covered bonds with no maturity extension. While SCBC and Stadshypotek are exclusively represented with soft bullet bonds in the iBoxx EUR Covered, LF Hypothek, which placed its first soft bullet issue in May 2022, is now the first issuer in the market with both repayment structures outstanding. In terms of volume, hard bullets (EUR 10.75bn) are now lagging behind Swedish soft bullets with a volume of EUR 14.58bn in the iBoxx.

Repayment structures in Sweden

	Hard	Soft
Lansforsakringar Hypotek	X	X
Skandinaviska Enskilda Banken	X	
Stadshypotek		X
Sveriges Sakerstallda Obligationer		X
Swedbank Hypotek	X	

Repayment structures in Portugal

	Soft	CPT
Banco BPI	X	
Banco Santander Totta	X	
Caixa Economica Montepio		X

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

Repayment structures in Portugal

Alongside Australia, Germany, Italy and the Netherlands, Portugal is the fifth national market with EUR benchmarks featuring CPT structures. Two out of the three Portuguese EUR benchmark issuers still represented in the iBoxx exclusively use soft bullet structures. Only the bond issued by Montepio has a maturity extension option in CPT form, which in this specific instance provides for a maturity extension of up to 45 years.

Repayment structures in the Netherlands

The introduction of the CPT repayment structure by NIBC Bank in 2013 was followed by four more issuers in the shape of Achmea Bank, Van Lanschot, Aegon Bank and NN Bank issuing bonds in CPT format. Currently, there are only four banks featuring CPT structures, nevertheless the Netherlands still not only has the most CPT EUR benchmark issuers, but also the most outstanding CPT benchmarks (14 deals) in the world by far. NN Bank organised a bondholder meeting in April 2022, which voted to convert its outstanding CPT bonds into soft bullet structures. At EUR 56.35bn, the volume of soft bullet bonds is more than eight times higher than that of the CPT bonds (EUR 7.00bn). However, the gap is smaller when it comes to the number of issues: 51 soft bullet deals versus 14 bonds in CPT format. NN Bank made its soft bullet debut in the Netherlands in June 2020, followed by Achmea Bank and Aegon Bank, although only these two institutions in the Netherlands still have outstanding EUR benchmarks with two different maturity structures.

Repayment structures in the Netherlands

	Soft	CPT
ABN AMRO Bank	X	
Achmea Bank	X	X
Aegon Bank	X	X
Cooperatieve Rabobank	X	
de Volksbank	X	
ING Bank	X	
Nationale-Nederlanden Bank	X	
NIBC Bank		X
Van Lanschot Kempen		X

Repayment structures in Australia

	Soft	CPT
Australia & New Zealand Banking Group	X	
Bank of Queensland		X
Commonwealth Bank of Australia	X	
National Australia Bank	X	
Westpac Banking Corp	X	
Macquarie Bank	X	

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

Repayment structures in Australia

Before ANZ Banking Group's hard bullet covered bond (matured in July 2022) disappeared from the iBoxx due to its residual maturity or later maturity, Australia was for a time the only jurisdiction to have all three maturity structures in the index. Currently the Bank of Queensland has bonds outstanding in CPT format (outstanding volume EUR 500m). Soft bullet issues account for by far the largest share of the volume at EUR 24.95bn.

Repayment structures in Spain

Since Banco Santander's soft bullet debut (dual tranche) in September 2022, the heavyweight jurisdiction of Spain (EUR 51.4bn in EUR benchmark covered bonds) has also been among those jurisdictions where covered bonds have different maturity structures. Nationwide, there are twelve EUR-covered bond issuers with outstanding hard bullet bonds - 42 bonds in total - including Banco Santander. There are currently only two bonds with a soft bullet structure.

Repayment structures in Spain

	Hard	Soft
Abanca Corp Bancaria	X	
BBVA	X	
Banco de Sabadell	X	
Banco Santander	X	X
Bankinter	X	
CaixaBank	X	
Caja Rural de Navarra	X	
Deutsche Bank SA Espanola	X	
Eurocaja Rural	X	
Ibercaja Banco	X	
Kutxabank	X	
Liberbank	X	

Repayment structures in South Korea

	Hard	Soft
Kookmin Bank		X
Korea Housing Finance Corp	X	
KEB Hana Bank		X

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

Repayment structures in South Korea

Since the inaugural EUR benchmark bond from Kookmin Bank, South Korea has been part of the group of jurisdictions with covered bonds featuring different maturity structures. While the eight EUR benchmarks from KHFC do not include any maturity extension option and are therefore hard bullet bonds, Kookmin Bank issued its debut EUR benchmark in soft bullet format and now has three bonds outstanding. The market entry of KEB Hana Bank saw another institution join the ranks of South Korean soft bullet bond issuers.

Conclusion

Looking at the iBoxx EUR Covered index reveals that bonds with soft bullet structures have now clearly overtaken the previously dominant form of hard bullet bonds. One of the reasons for this is that many issuers in France and Austria in particular have already switched to this form of maturity structure for their covered bonds. The "big bang" of the Pfandbrief Act, which, according to our classification, also pushed the Pfandbrief market into the soft bullet segment, is even more significant. In principle, other jurisdictions in which hard bullet bonds were still predominantly issued in the first half of 2022 (e.g. France or Spain in particular) could also increasingly turn to soft bullets after the implementation of the European Covered Bond Directive and thus further reduce the share of hard bullets in the future. With regard to the covered bonds issued since 9 July 2022 (issue volume up to 21 October 2022: EUR 58.1bn), only EUR 4.0bn was placed with a hard bullet structure, with the rest attributable to soft bullets. In terms of the niche market for CPT bonds, it should also be noted that some or all of the CPT issuers in the Netherlands are turning to the soft bullet segment. For example, four former CPT issuers have already placed their last EUR benchmarks in the soft bullet format and NN Bank has even converted its CPT issues to soft bullet structures.

SSA/Public Issuers
The debt brake at Laender level

Author: Jan-Phillipp Hensing

Introduction

The debt brake has applied in principle to the German Laender since budget year 2020. The legal basis is Article 109 (3) of Germany's Basic Law, which reads "The budgets of the Federation and the Laender shall, in principle, be balanced without revenue from credits." At the same time, the Basic Law allows some leeway with regard to how this is implemented as well as some exceptions: "The Federation and Laender may introduce rules intended to take into account, symmetrically in times of upswing and downswing, the effects of market developments that deviate from normal conditions, as well as exceptions for natural disasters or unusual emergency situations beyond governmental control and substantially harmful to the state's financial capacity. For such exceptional regimes, a corresponding amortisation plan must be adopted." All of the Laender have implemented the debt brake in their regional legislation, through their federal state constitution or simply by legislation – and have taken the permissible leeway into account in different ways. For example, the structuring of cyclical adjustment, adjustment of balances for financial transactions as well as the exception rules for emergency situations and taking account of extra budgets have all been regulated differently, resulting in a heterogeneous implementation of the debt brake overall. While the Federation can continue to carry out net new borrowing amounting to 0.35% of the gross domestic product for the year before the budget was prepared, the same does not apply for the Laender. They are subject to a deficit threshold of 0% of GDP. In the article below, we refer to a Study by the German Trade Union Confederation from 2021, which provides a detailed overview of the implementation of the debt brake at Laender level.

Emergency situation declared during pandemic years

Unsurprisingly, and often commented upon by us in past, the debt brake was suspended in 2020, 2021 and 2022 as the Federation and all of the Laender invoked the exception rule in the event of natural disasters and unusual emergency situations. As a result, the credit authorisations of the Laender were revised sharply upwards and the Laender appeared as regular issuers in the capital market. The routes adopted in the budgets to finance measures to counter the coronavirus pandemic varied considerably and ranged from using the core budget through to using reserves or special funds. The use of multi-year models by means of credit-financed allocations to reserves and special funds is not uncontroversial constitutionally speaking. The same is true of the volume of emergency loans and the length of time for which they may be used.

Taking account of financial transactions

When calculating the structural deficit, expenses that arise for the acquisition of shareholdings, repayments to the public sector and for lending are also deemed to be financial transactions. Where the inclusion of financial transactions is not expressly excluded in the constitution, these can be taken into account at a simple legal level, as is the case for the Laender of Bremen and Brandenburg.

Cyclical adjustment

Cyclical adjustment is reflected in Article 109 of the Basic Law in the following wording: "The Federation and Laender may introduce rules intended to take into account, symmetrically in times of upswing and downswing, the effects of market developments that deviate from normal conditions…". The impact of the economy on tax revenue is therefore set to be taken into account. How the cyclical adjustment is carried out varies. The Bund (or Federation), for example, uses the European Union's output gap procedure. The cyclical component here is the product of the estimated output gap and budget semi-elasticity. At Laender level, all apart from Bavaria use a cyclical adjustment procedure. Most use the Bund's procedure with small adaptations, including supplementing the ex-ante cyclical component with a tax deviation component. Hamburg and Rhineland-Palatinate use a tax trend procedure which determines the normal economic situation using tax revenue trends derived from tax revenue from the previous year and the average growth rate of tax revenue for a defined number of preceding years. Saxony, Thuringia and Mecklenburg-Western Pomerania have chosen to use a tax level procedure which determines a normal economic situation from a rolling average of tax revenue for a defined number of preceding years. If there is an imbalance in one of the procedures above, this can be offset in whole or in part.

Limitation of amortisation period

If an emergency is declared as a result of a natural disaster or emergency situation, an amortisation plan must be in place for the additional debt taken on. A total of three Laender have opted to enshrine the maximum length of the amortisation period in law. Thuringia is the strictest, with a maximum period of five years, followed by Hessen (seven years) and Saxony (eight years).

Inclusion of legally independent state and market sector supplementary budgets

The inclusion of legally independent supplementary budgets is handled in a variety of ways. Most of the Laender do not include supplementary budgets in the debt brake. Only a few, such as Bremen and Rhineland-Palatinate, include extra budgets and also other public funds, institutions and (economic) enterprises which belong to the market sector, where they meet specific criteria. Berlin is the only federal state to include debt taken on by private companies in the context of public private partnerships (PPP), and is therefore aligned with the practice adopted by statistical offices which include PPP debt as part of the national accounts calculation.

Implementation of debt brake at Laender level

	Inclusion of financial transactions	Cyclical adjustment	Natural disasters and emergencies	Limitation of amortisation period	Inclusion of legally independent state and market sector supplementary budgets
BW	Yes	Yes	Yes	No	Yes, if debt servicing is to come from federal state budget
BY	No	No	Yes	No	No
BE	Yes	Yes	Yes	No	No
BB	Yes	Yes	Yes	No	No
HB	Yes	Yes	Yes	No	Yes, if debt servicing to come from federal state budget
HH	Yes, but loans only with secured repayment	Yes	Yes	No	No, exception: universities
HE	Yes, but loan defaults included	Yes	Yes	No (since 2020, before: 7 years)	No, exception: universities
MV	No	Yes	Yes	No	No
NI	No	Yes	Yes	No	No, unless the debt brake is somehow “circumvented”
NW	No	Yes	Yes	No	No. In addition, existing borrowing authorisations for special funds before 31 Dec. 2010 remain untouched
RP	No	Yes	Yes	No	Yes, if borrowing takes place on behalf of the Bundesland
SL	Yes	Yes	Yes	No	No
SN	No	Yes	Yes	Yes, within 8 years	No
ST	No	Yes	Yes	No	Yes, where part of the state sector
SH	Yes	Yes	Yes	No	No
TH	No	Yes	Yes	Yes, within 5 years	No

Source: DGB, Laender constitutions, NORD/LB Markets Strategy & Floor Research

Comment

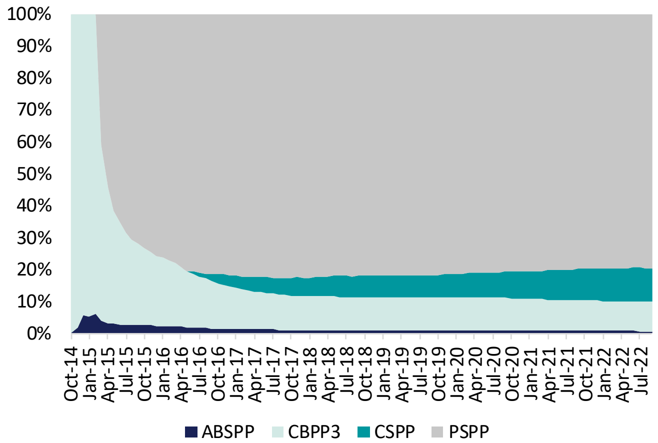
As the above table shows, there are great variations in how the debt brake is implemented at Laender level. This is because the Laender have utilised the discretionary leeway in different ways. The varying treatment approaches are becoming more important in light of the challenging economic environment in 2023 in particular. The debt brake debate is already in full swing for the coming year. For instance, last week the German government approved the use of the Economic Stabilisation Fund for its EUR 200bn ‘protective shield’ against the energy crisis. The trick here: the additional borrowing will be included in the 2022 budget year. Some Laender are planning further relief measures for their citizens and businesses in addition to the government’s ‘protective shield’. This aid has to be financed. Last week we reported on the planned declaration of an emergency situation in the federal state of Brandenburg, although other Laender are now also pondering how to go about financing additional support.

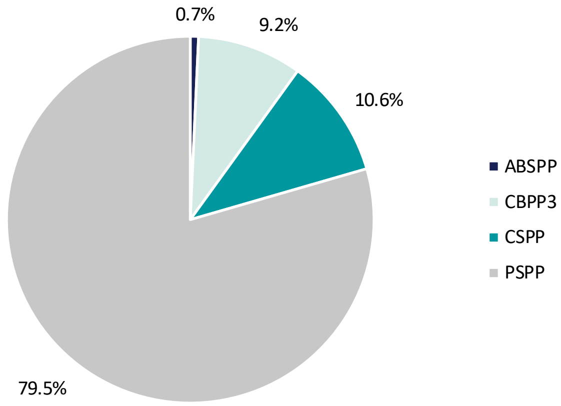
ECB tracker

Asset Purchase Programme (APP)

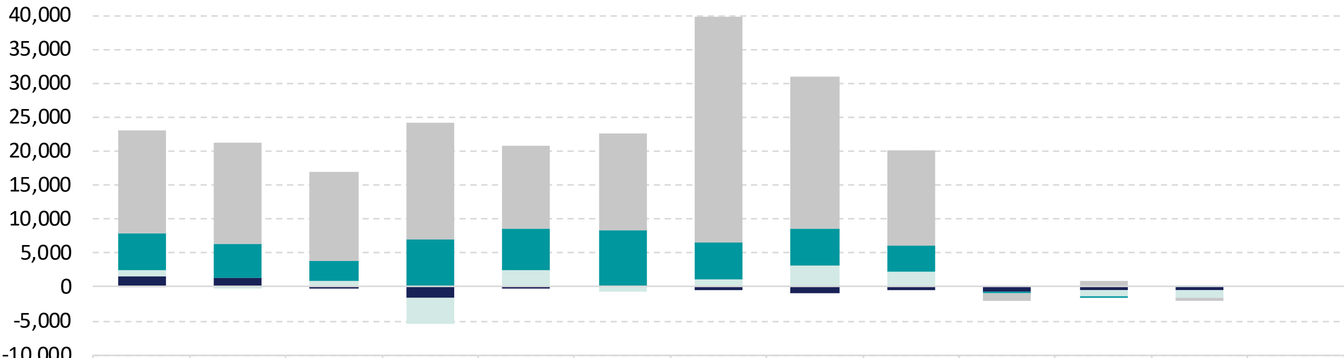
	ABSPP	CBPP3	CSPP	PSPP	APP
Aug-22	24,131	301,640	344,558	2,592,400	3,262,729
Sep-22	23,639	300,157	344,388	2,588,118	3,256,302
Δ	-477	-1,210	+164	-315	-1,838

Portfolio structure





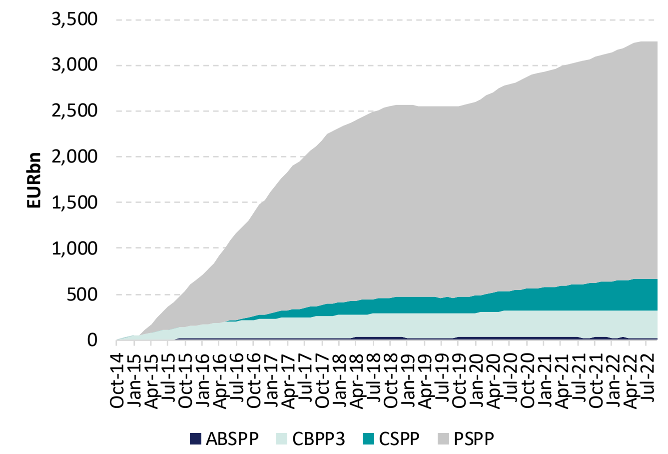
Monthly net purchases (in EURm)



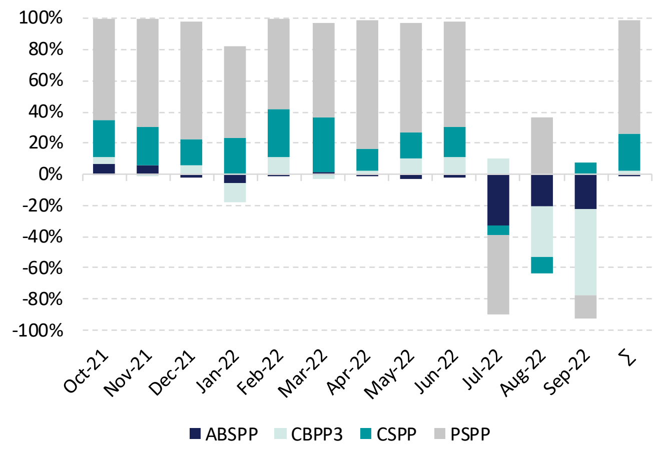
	Oct-21	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	∑
APP	23,017	21,200	16,596	18,838	20,698	21,929	39,397	30,232	19,722	-1,759	-656	-1,838	207,376
PSPP	15,038	14,815	12,989	17,292	12,095	14,172	33,238	22,443	13,924	-1,114	869	-315	155,446
CSPP	5,481	5,142	3,007	6,970	6,272	8,042	5,461	5,366	3,858	-141	-253	164	49,369
CBPP3	1,008	-12	942	-3,761	2,376	-606	1,074	3,247	2,339	217	-787	-1,210	4,827
ABSPP	1,490	1,255	-342	-1,663	-45	321	-376	-824	-399	-721	-485	-477	-2,266

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

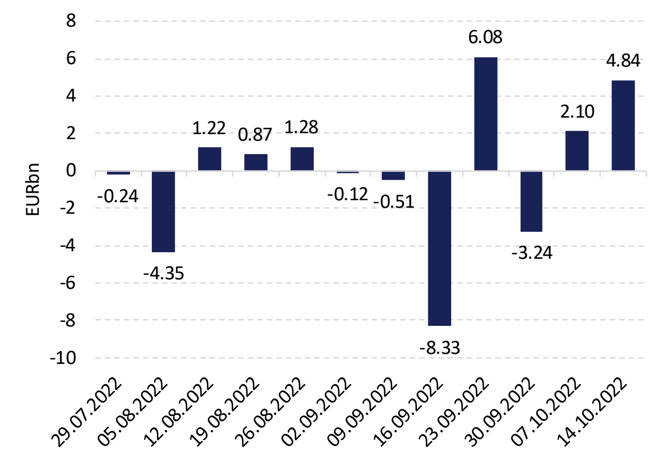
Portfolio development



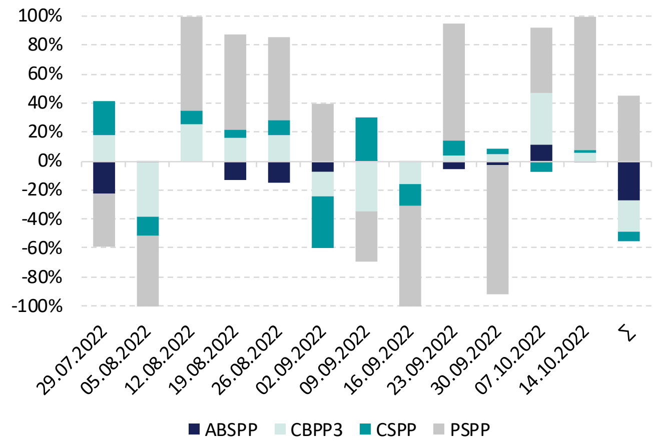
Distribution of monthly purchases



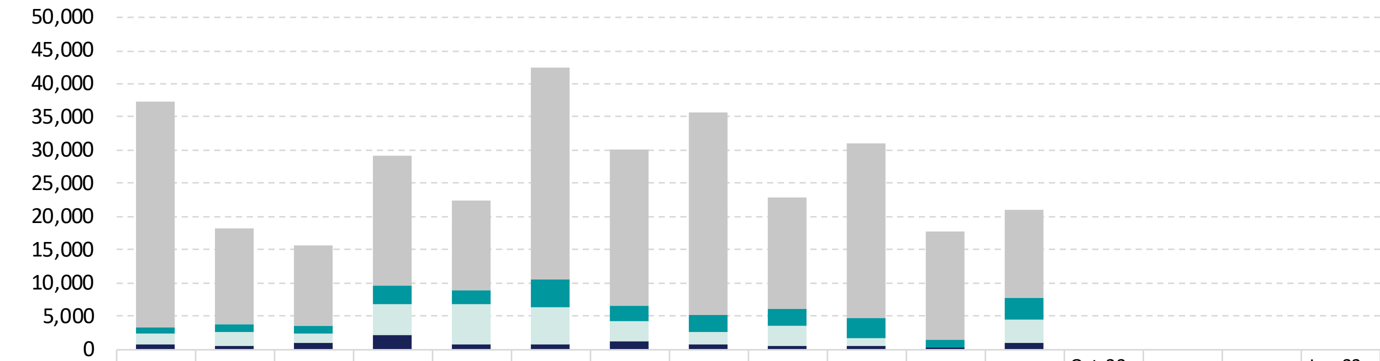
Weekly purchases



Distribution of weekly purchases



Expected monthly redemptions (in EURm)

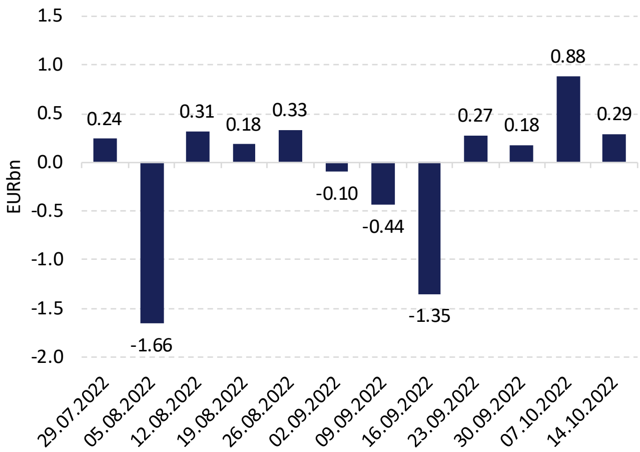


	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23	May-23	Jun-23	Jul-23	Aug-23	Sep-23	Oct-22 - Sep-23	2021	2022	Jan-23 - Sep-23
APP	37,313	18,338	15,622	29,181	22,528	42,525	30,201	35,785	22,813	31,072	17,802	21,023	324,203	247,069	298,981	252,930
PSPP	33,927	14,669	12,016	19,469	13,624	32,033	23,674	30,553	16,619	26,391	16,445	13,252	252,672	188,494	228,585	192,060
CSPP	1,034	1,031	1,243	2,810	2,182	4,219	2,388	2,579	2,557	3,027	986	3,347	27,403	17,134	17,615	24,095
CBPP3	1,651	2,167	1,487	4,786	6,031	5,631	2,937	1,874	3,112	1,170	0	3,346	34,192	30,143	41,244	28,887
ABSPP	701	471	876	2,116	691	642	1,202	779	525	484	371	1,078	9,936	11,298	11,537	7,888

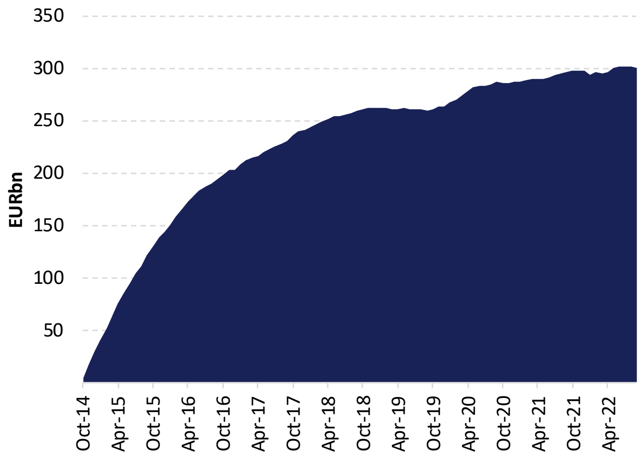
Source: ECB, Bloomberg, NORD/LB Markets Strategy & Floor Research

Covered Bond Purchase Programme 3 (CBPP3)

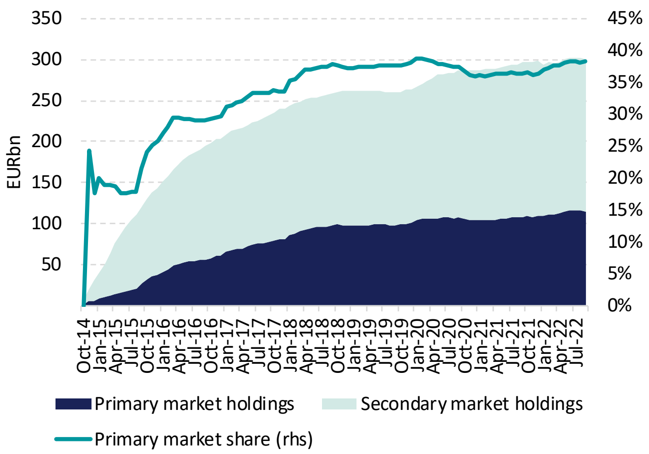
Weekly purchases



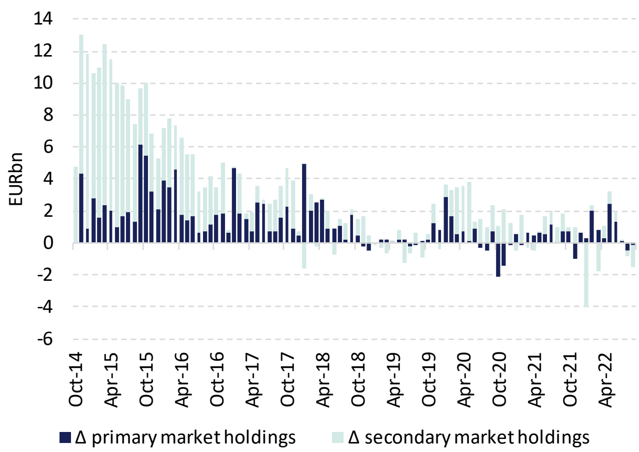
Development of CBPP3 volume



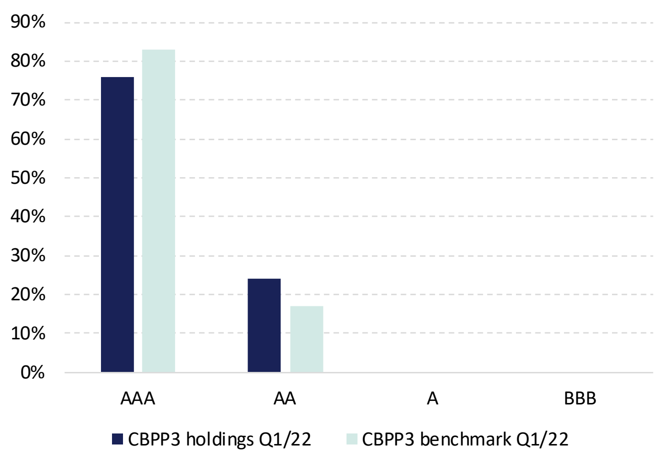
Primary and secondary market holdings



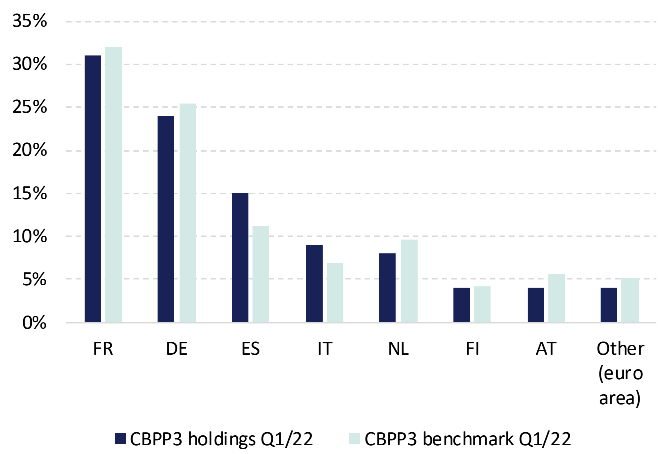
Change of primary and secondary market holdings



Distribution of CBPP3 by credit rating



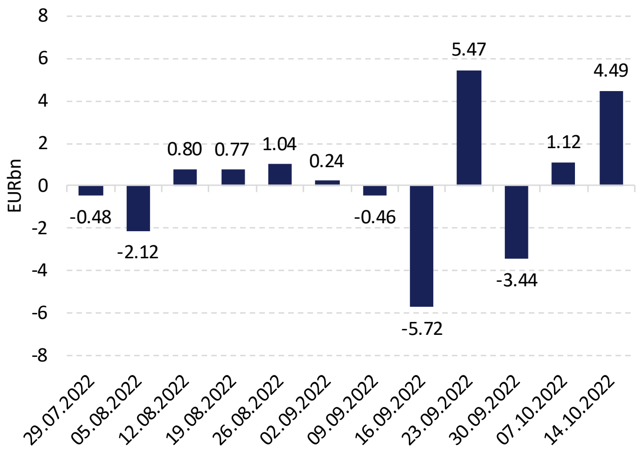
Distribution of CBPP3 by country of risk



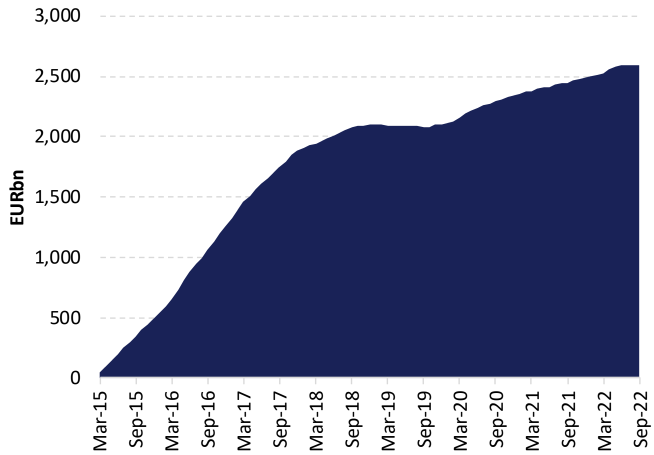
Source: ECB, Bloomberg, NORD/LB Markets Strategy & Floor Research

Public Sector Purchase Programme (PSPP)

Weekly purchases



Development of PSPP volume



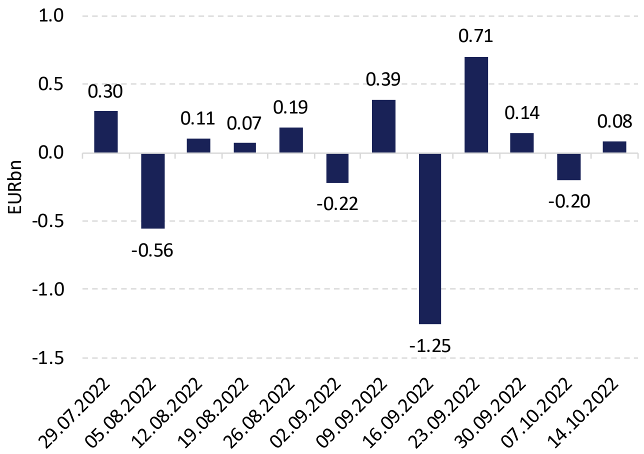
Overall distribution of PSPP buying at month-end

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%	76,849	74,108	2,741	7.3	8.2	-0.9
BE	3.4%	92,985	92,246	739	7.5	10.3	-2.8
CY	0.2%	4,398	5,448	-1,050	8.6	9.1	-0.5
DE	24.3%	662,326	667,464	-5,138	6.7	8.0	-1.3
EE	0.3%	445	7,132	-6,687	7.7	7.7	0.0
ES	11.0%	318,672	301,927	16,745	7.7	8.2	-0.5
FI	1.7%	43,279	46,509	-3,230	8.2	8.9	-0.7
FR	18.8%	537,438	517,137	20,301	6.7	8.6	-1.9
GR	0.0%	0	0	0	0.0	0.0	0.0
IE	1.6%	43,582	42,876	706	8.2	10.5	-2.4
IT	15.7%	443,160	430,143	13,017	7.2	7.9	-0.7
LT	0.5%	5,915	14,654	-8,739	10.4	10.2	0.2
LU	0.3%	3,901	8,340	-4,439	5.8	7.8	-2.0
LV	0.4%	3,863	9,866	-6,003	8.9	9.0	-0.1
MT	0.1%	1,417	2,656	-1,239	11.2	9.6	1.6
NL	5.4%	131,597	148,384	-16,787	7.8	9.6	-1.8
PT	2.2%	55,924	59,261	-3,337	7.2	7.5	-0.3
SI	0.4%	11,052	12,192	-1,140	9.4	9.5	-0.1
SK	1.1%	18,418	28,997	-10,579	7.9	8.4	-0.5
SNAT	10.0%	288,489	274,371	14,118	8.1	9.4	-1.4
Total / Avg.	**100.0%**	**2,743,710**	**2,743,710**	**0**	**7.2**	**8.5**	**-1.2**

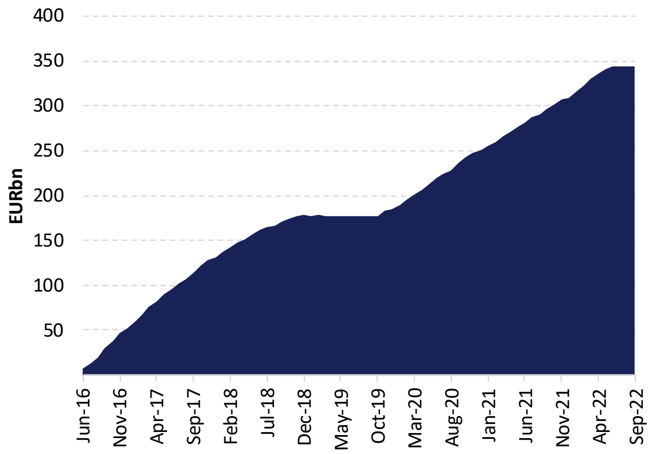
[1] Based on the ECB capital key, adjusted to include supras and the disqualification of Greece
[2] Based on the adjusted distribution key
[3] Weighted average time to maturity of PSPP portfolio holdings
[4] Weighted average time to maturity of the bonds eligible for purchasing under the PSPP
Source: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

Corporate Sector Purchase Programme (CSPP)

Weekly purchases

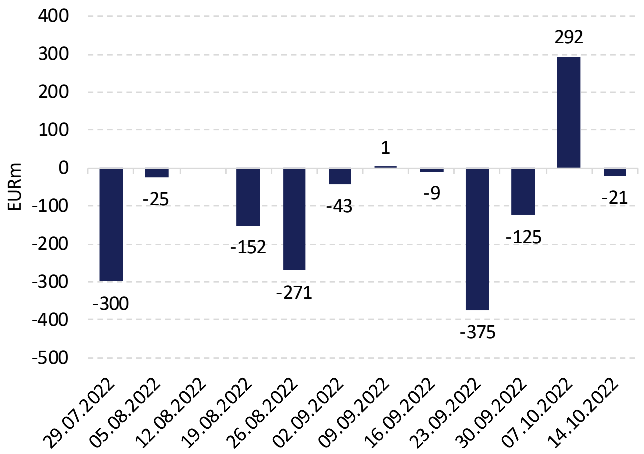


Development of CSPP volume

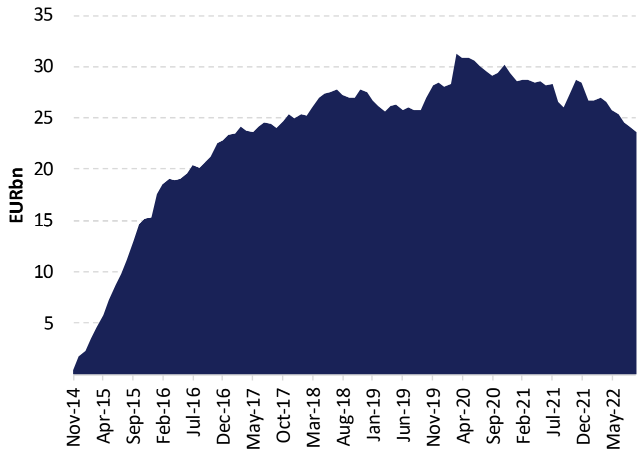


Asset-Backed Securities Purchase Programme (ABSPP)

Weekly purchases



Development of ABSPP volume



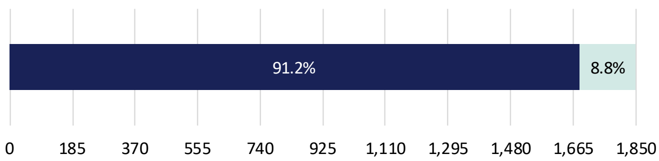
Source: ECB, Bloomberg, NORD/LB Markets Strategy & Floor Research

Pandemic Emergency Purchase Programme (PEPP)

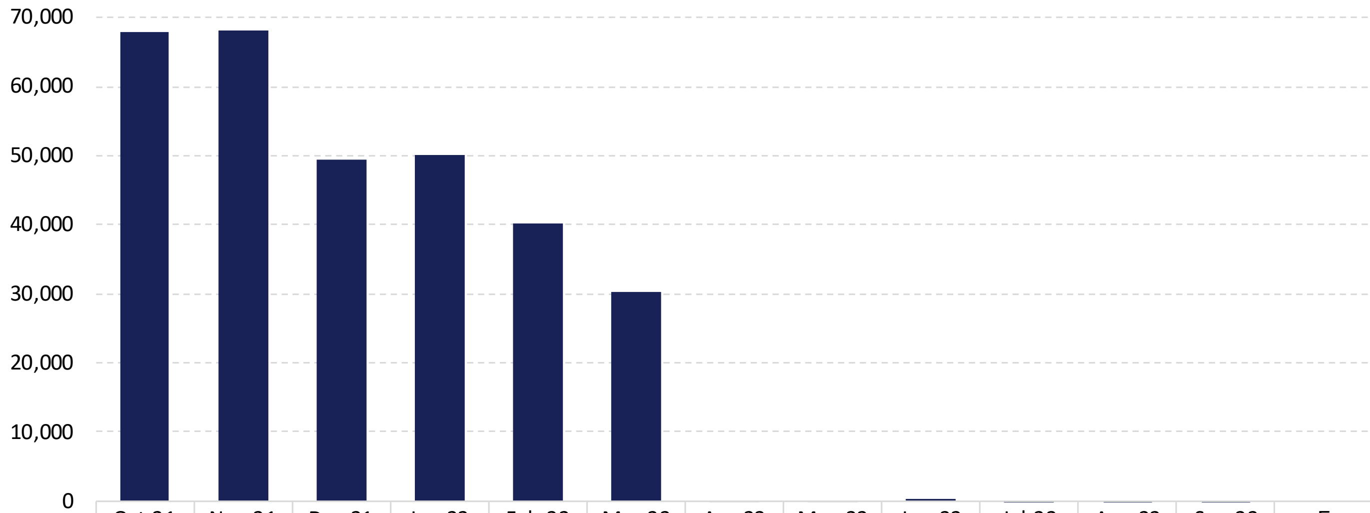
Holdings (in EURm)

	PEPP
Aug-22	1,714,539
Sep-22	1,713,035
Δ (net purchases)	-1,505

Invested share of PEPP envelope (in EURbn)

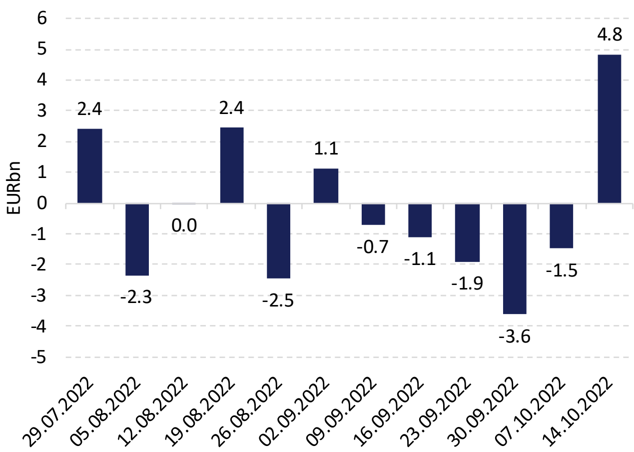


Monthly net purchases (in EURm)

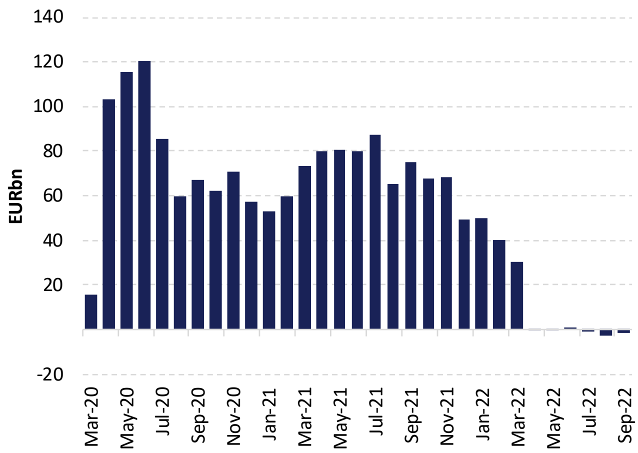


	Oct-21	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	∑
PEPP	67,855	68,045	49,375	50,113	40,184	30,214	-4	-10	12	-722	-2,813	-1,505	300,744

Weekly purchases



Development of PEPP volume

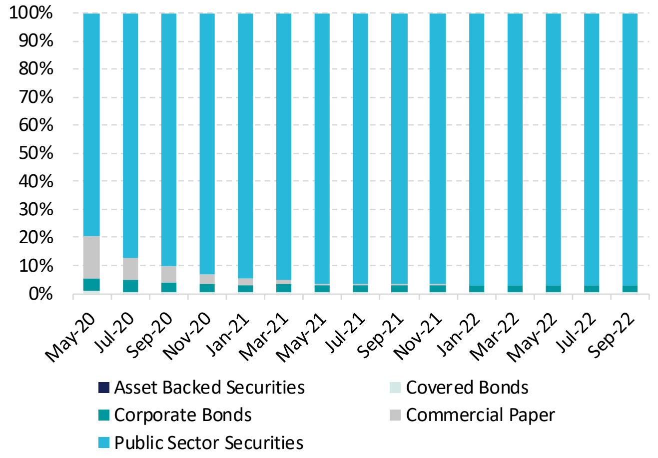


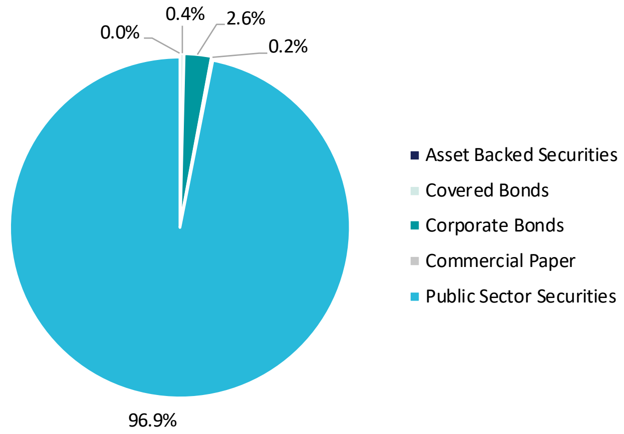
Source: ECB, Bloomberg, NORD/LB Markets Strategy & Floor Research

Holdings under the PEPP (in EURm)

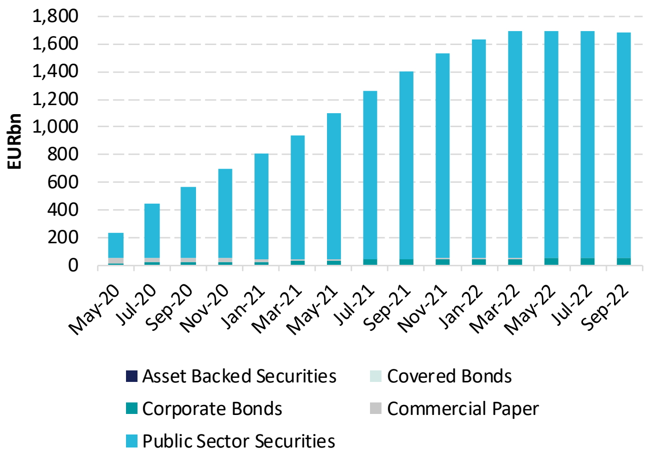
	Asset-backed Securities	Covered Bonds	Corporate Bonds	Commercial Paper	Public Sector Securities	PEPP
Jul-22	0	6,062	42,814	3,322	1,639,774	1,691,971
Sep-22	0	6,056	43,233	2,871	1,631,176	1,683,336
Δ (net purchases)	0	0	+453	-450	-4,320	-4,317

Portfolio structure

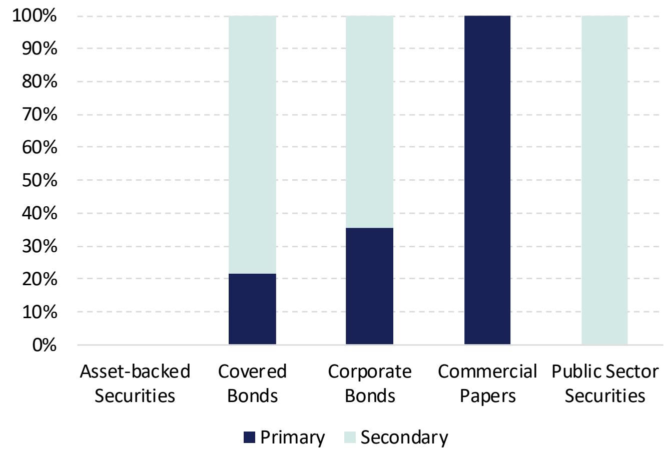




Portfolio development



Share of primary and secondary market holdings



Breakdown of private sector securities under the PEPP

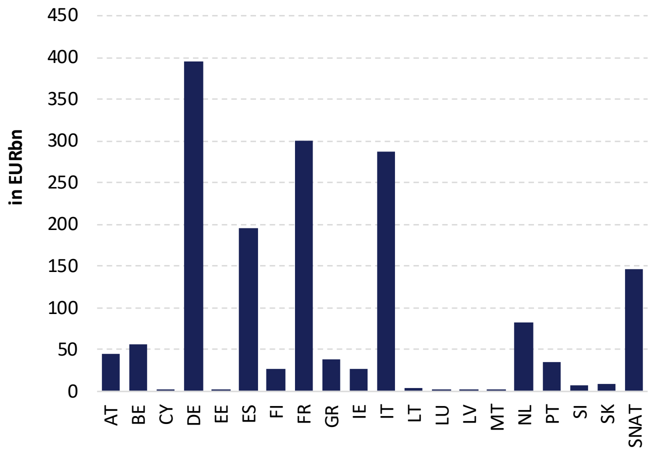
Sep-22	Asset-backed securities		Covered bonds		Corporate bonds		Commercial paper	
	Primary	Secondary	Primary	Secondary	Primary	Secondary	Primary	Secondary
Holdings in EURm	0	0	1,298	4,758	15,407	27,826	2,873	0
Share	0.0%	0.0%	21.4%	78.6%	35.6%	64.4%	100.0%	0.0%

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

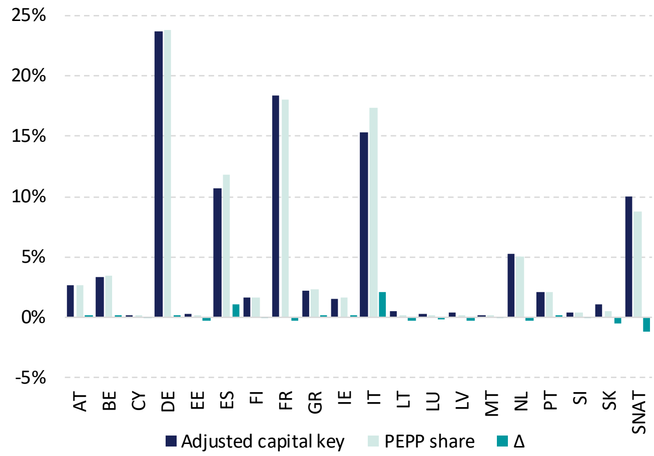
Breakdown of public sector securities under the PEPP

Jurisdiction	Holdings (in EURm)	Adj. distribution key[1]	PEPP share	Deviations from the adj. distribution key[2]	Current WAM[3] (in years)	WAM of eligible universe[4] (in years)	Difference (in years)
AT	44,120	2.6%	2.7%	0.0%	7.6	7.4	0.3
BE	56,872	3.3%	3.4%	0.1%	6.4	9.5	-3.2
CY	2,483	0.2%	0.1%	0.0%	8.6	8.0	0.6
DE	395,153	23.7%	23.8%	0.1%	6.8	6.9	-0.1
EE	256	0.3%	0.0%	-0.2%	7.7	6.3	1.4
ES	196,176	10.7%	11.8%	1.1%	7.4	7.4	0.0
FI	26,381	1.7%	1.6%	-0.1%	7.5	7.9	-0.4
FR	299,737	18.4%	18.0%	-0.3%	7.8	7.8	0.0
GR	38,877	2.2%	2.3%	0.1%	8.5	9.3	-0.8
IE	26,328	1.5%	1.6%	0.1%	8.6	10.0	-1.3
IT	287,821	15.3%	17.3%	2.0%	7.2	7.0	0.3
LT	3,208	0.5%	0.2%	-0.3%	9.9	9.3	0.6
LU	1,879	0.3%	0.1%	-0.2%	6.1	6.9	-0.7
LV	1,890	0.4%	0.1%	-0.2%	8.2	8.1	0.1
MT	605	0.1%	0.0%	-0.1%	10.8	8.8	2.0
NL	82,869	5.3%	5.0%	-0.3%	7.9	8.6	-0.7
PT	35,492	2.1%	2.1%	0.0%	6.5	7.2	-0.7
SI	6,567	0.4%	0.4%	0.0%	8.8	9.1	-0.3
SK	7,966	1.0%	0.5%	-0.6%	8.4	8.0	0.5
SNAT	145,914	10.0%	8.8%	-1.2%	10.5	8.7	1.8
Total / Avg.	**1,660,594**	**100.0%**	**100.0%**	**0.0%**	**7.6**	**7.6**	**0.0**

Distribution of public sector assets by jurisdiction



Deviations from the adjusted distribution key



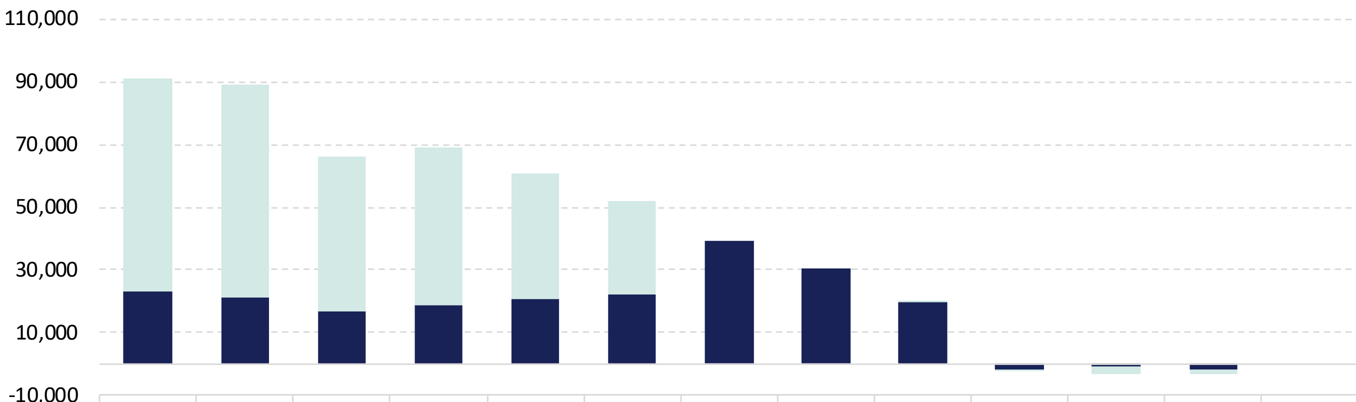
[1] Based on the ECB capital key, adjusted to include supras [2] Based on the adjusted distribution key
[3] Current WAM of public sector securities holdings under the PEPP [4] WAM of eligible universe of public sector securities holdings under the PEPP
Source: ECB, Bloomberg, NORD/LB Markets Strategy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

Aggregated purchase activity under APP and PEPP

Holdings (in EURm)

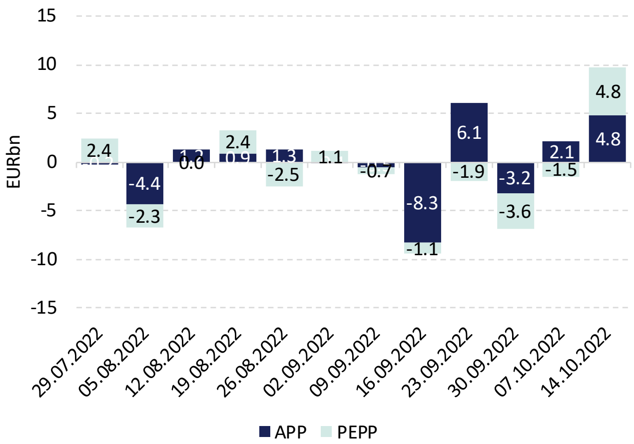
	APP	PEPP	APP & PEPP
Aug-22	3,262,729	1,714,539	4,977,268
Sep-22	3,256,302	1,713,035	4,969,337
Δ	-1,838	-1,505	-3,343

Monthly net purchases (in EURm)

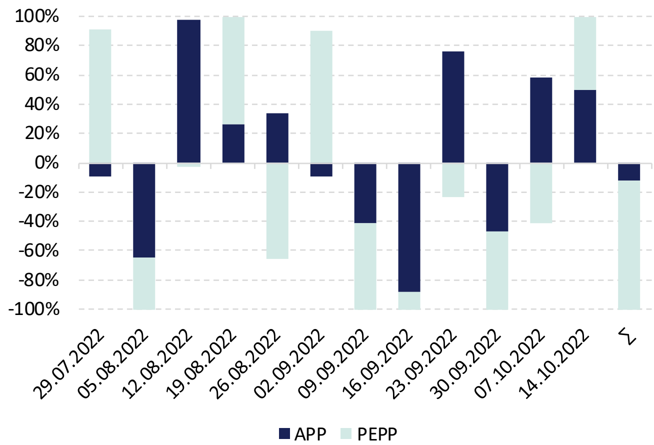


	Oct-21	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	∑
∑	90,872	89,245	65,971	68,951	60,882	52,143	39,393	30,222	19,734	-2,481	-3,469	-3,343	508,120
PEPP	67,855	68,045	49,375	50,113	40,184	30,214	-4	-10	12	-722	-2,813	-1,505	300,744
APP	23,017	21,200	16,596	18,838	20,698	21,929	39,397	30,232	19,722	-1,759	-656	-1,838	207,376

Weekly purchases



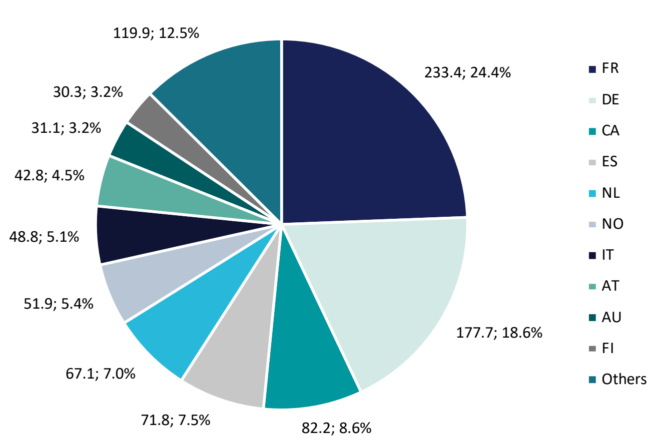
Distribution of weekly purchases



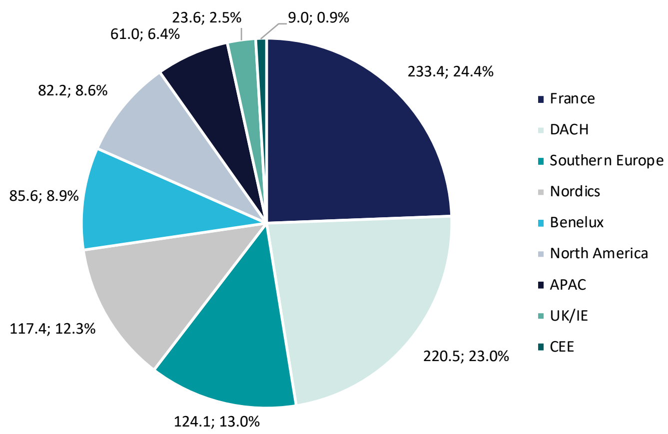
Source: ECB, Bloomberg, NORD/LB Markets Strategy & Floor Research

Charts & Figures
Covered Bonds

EUR benchmark volume by country (in EURbn)



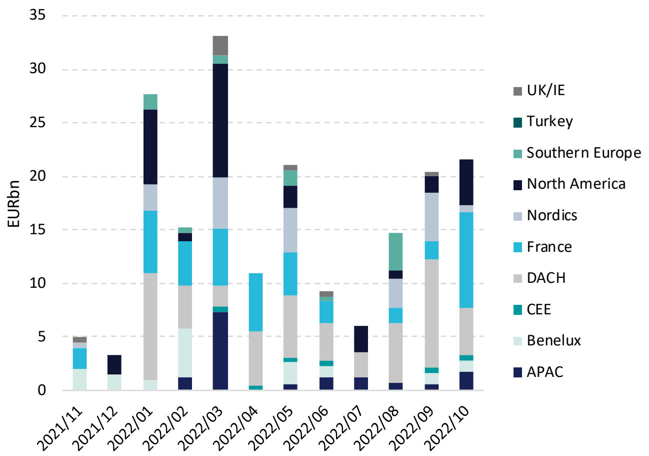
EUR benchmark volume by region (in EURbn)



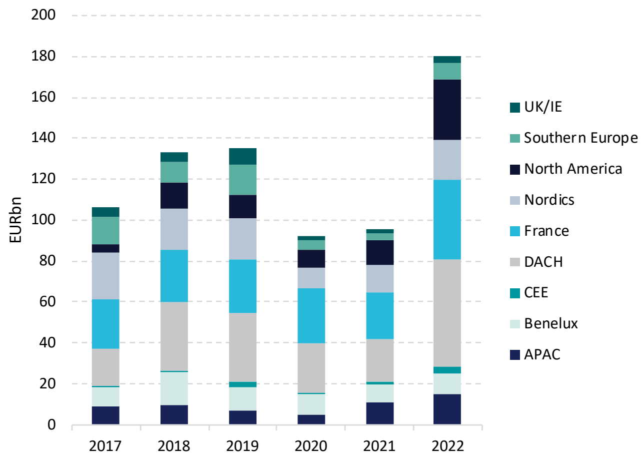
Top-10 jurisdictions

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	233.4	224	14	0.95	9.9	5.3	0.93
2	DE	177.7	254	26	0.64	8.3	4.5	0.64
3	CA	82.2	63	0	1.27	5.6	3.0	0.49
4	ES	71.8	57	5	1.15	11.7	3.7	1.74
5	NL	67.1	69	1	0.91	11.4	7.2	0.78
6	NO	51.9	61	10	0.85	7.3	3.8	0.51
7	IT	48.8	59	2	0.79	9.2	3.9	1.28
8	AT	42.8	76	3	0.56	9.2	5.8	0.80
9	AU	31.1	32	0	0.97	7.9	3.9	0.98
10	FI	30.3	32	2	0.95	7.6	3.9	0.60

EUR benchmark issue volume by month

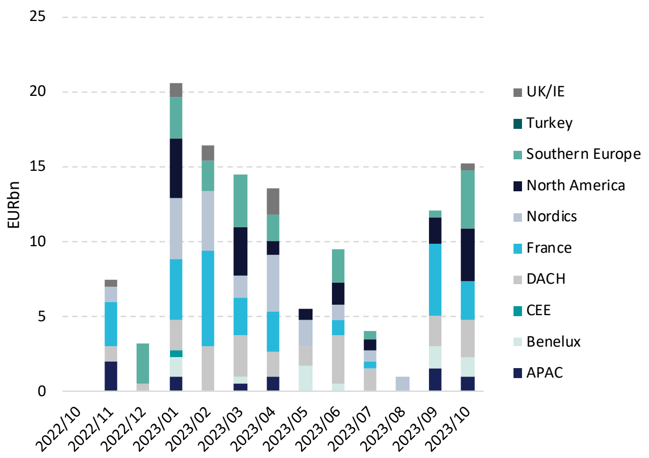


EUR benchmark issue volume by year

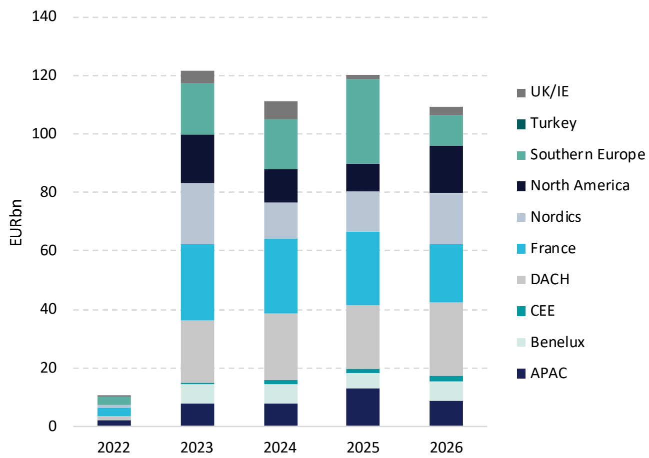


Source: Market data, Bloomberg, NORD/LB Markets Strategy & Floor Research

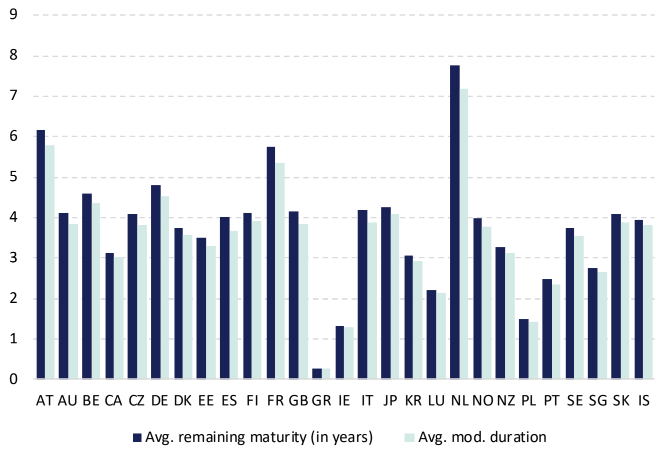
EUR benchmark maturities by month



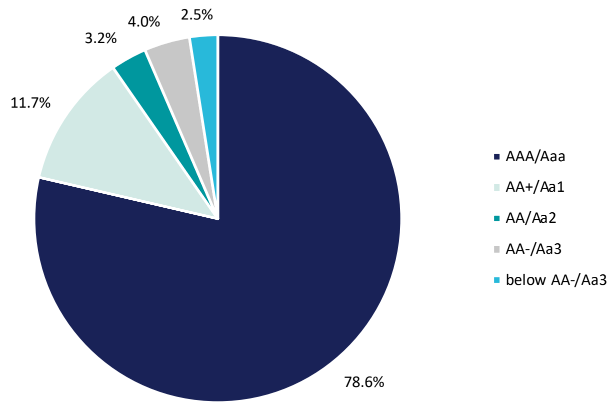
EUR benchmark maturities by year



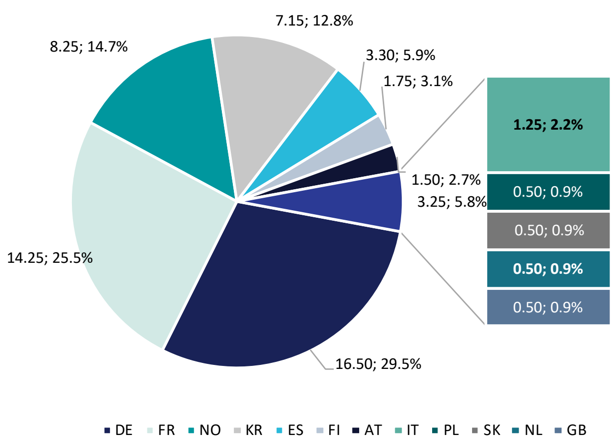
Modified duration and time to maturity by country



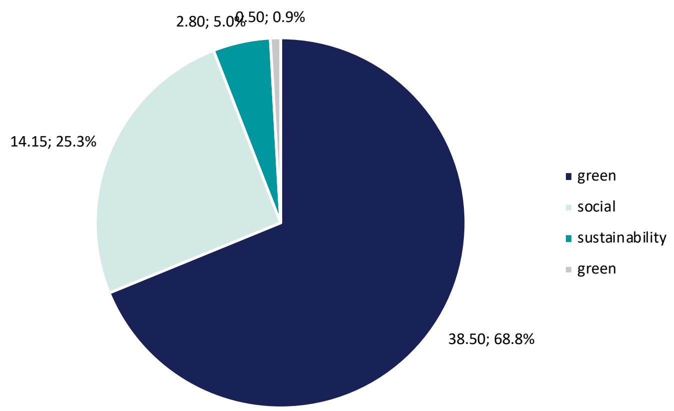
Rating distribution (volume weighted)



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

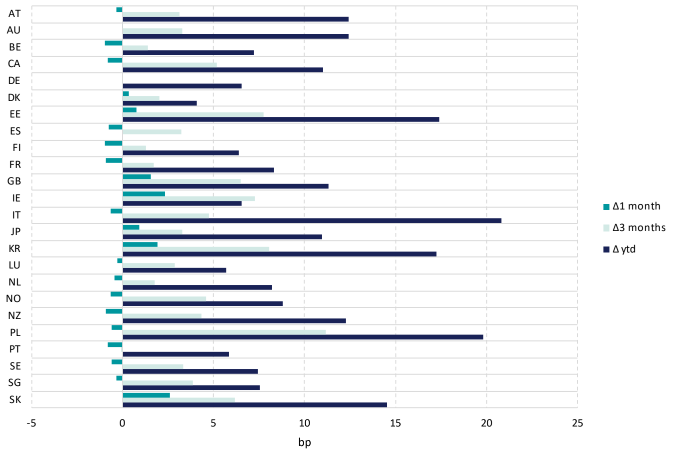


EUR benchmark volume (ESG) by type (in EURbn)

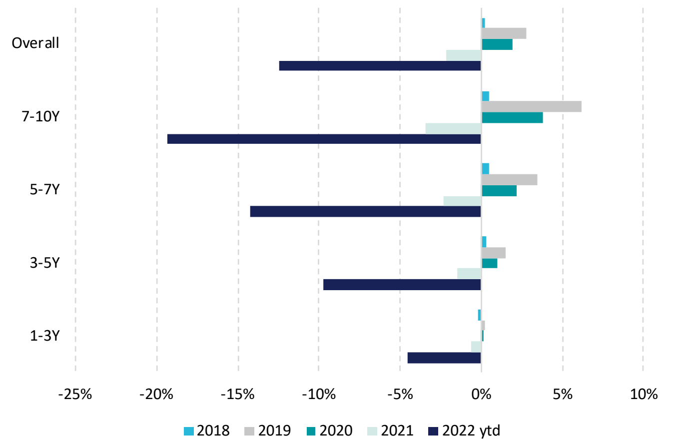


Source: Market data, Bloomberg, NORD/LB Markets Strategy & Floor Research

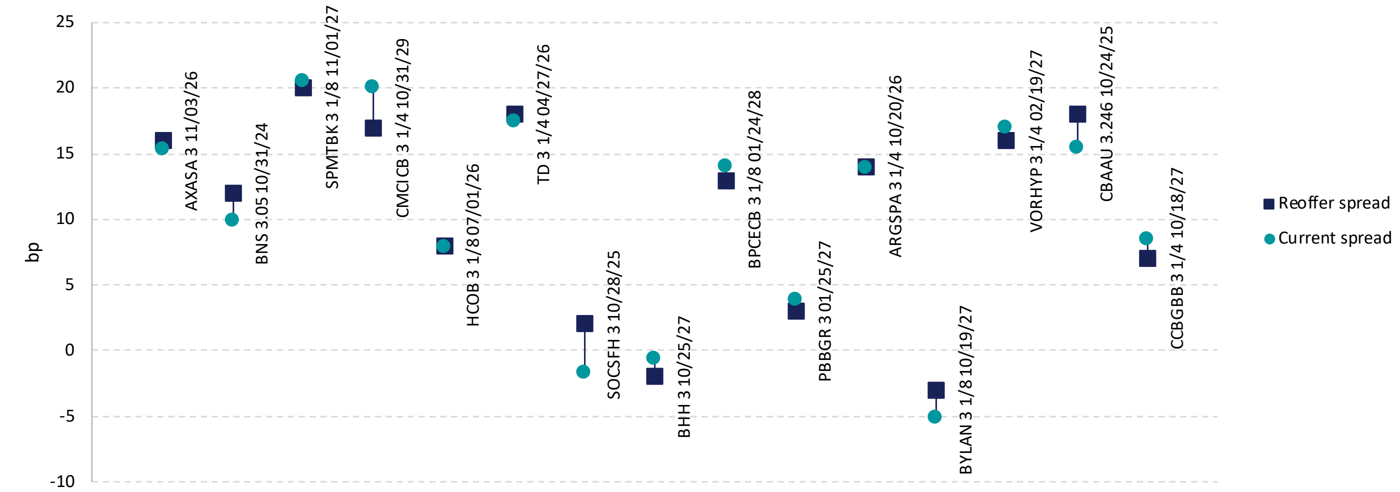
Spread development by country



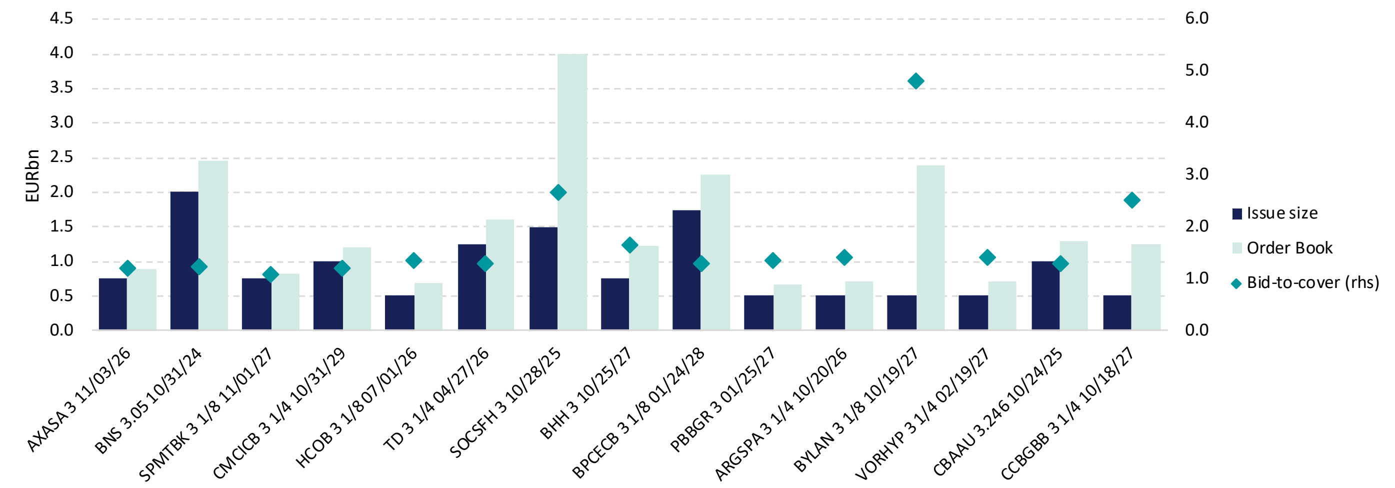
Covered bond performance (Total return)



Spread development (last 15 issues)



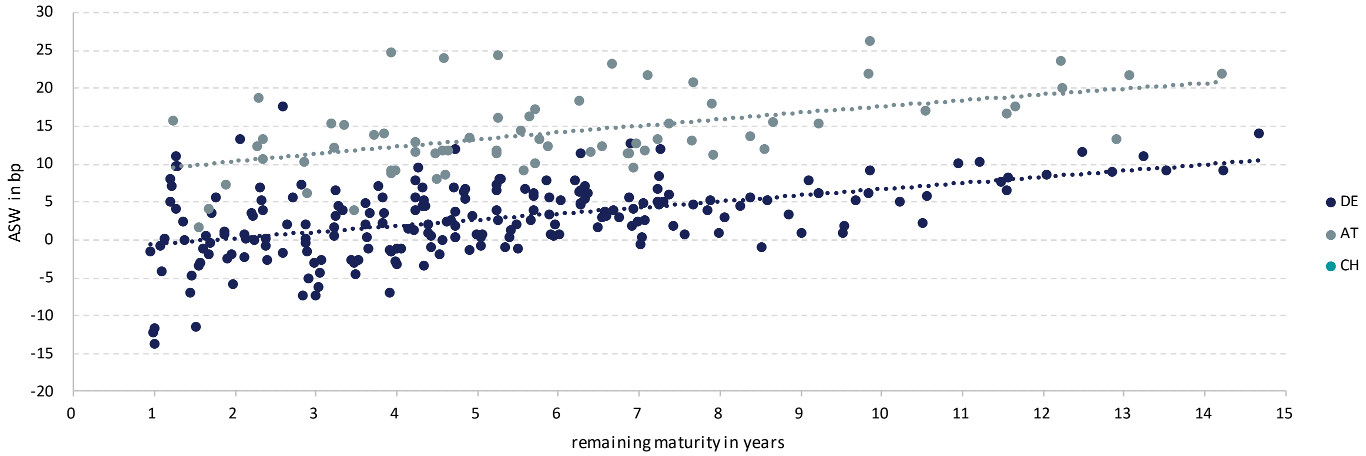
Order books (last 15 issues)



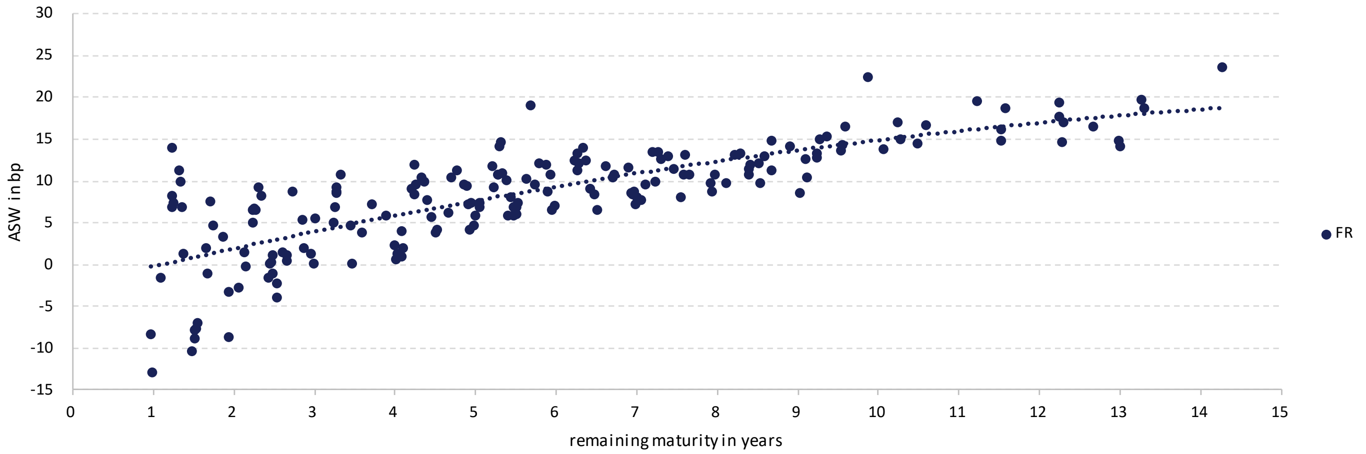
Source: Market data, Bloomberg, NORD/LB Markets Strategy & Floor Research

Spread overview[1]

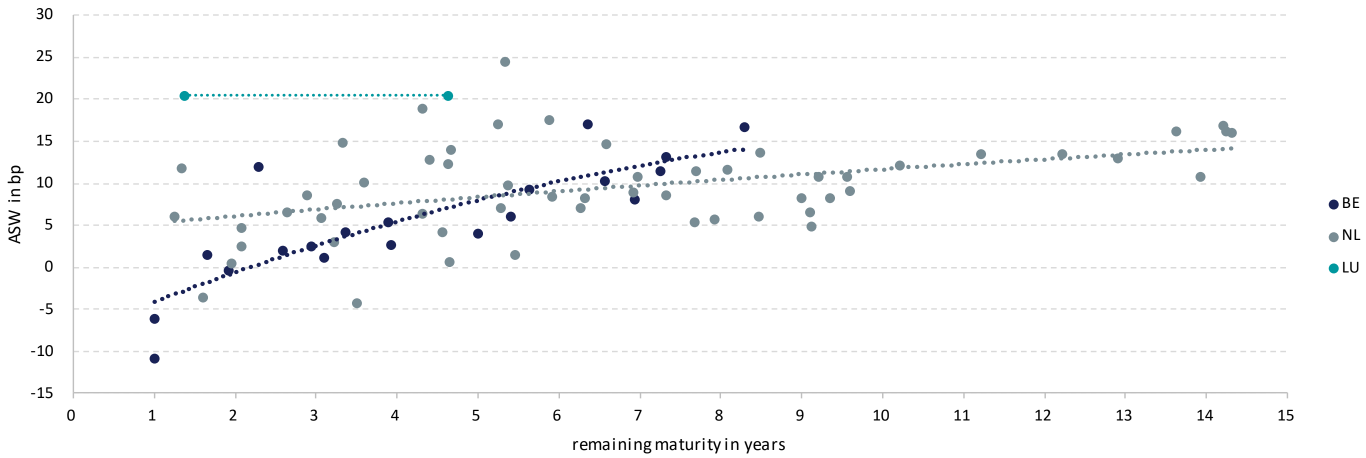
DACH



France

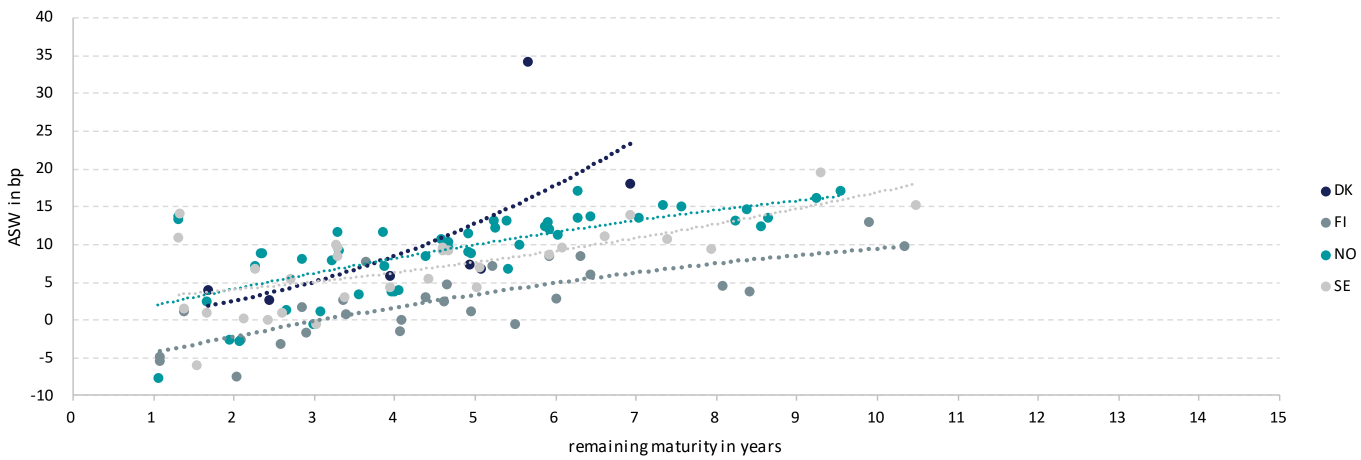


Benelux

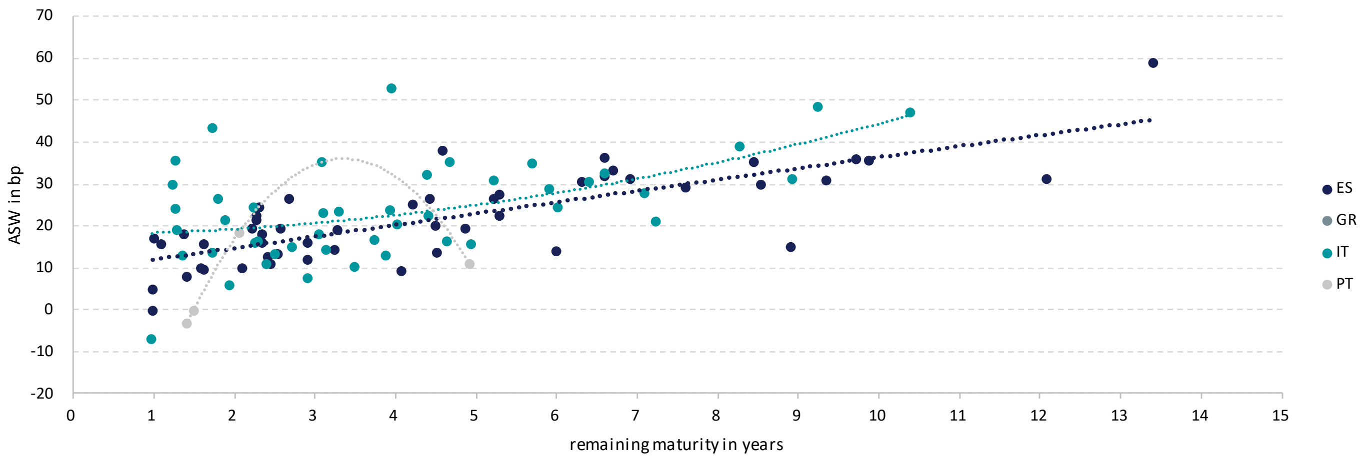


Source: Market data, Bloomberg, NORD/LB Markets Strategy & Floor Research [1]Time to maturity 1 ≤ y ≤ 15

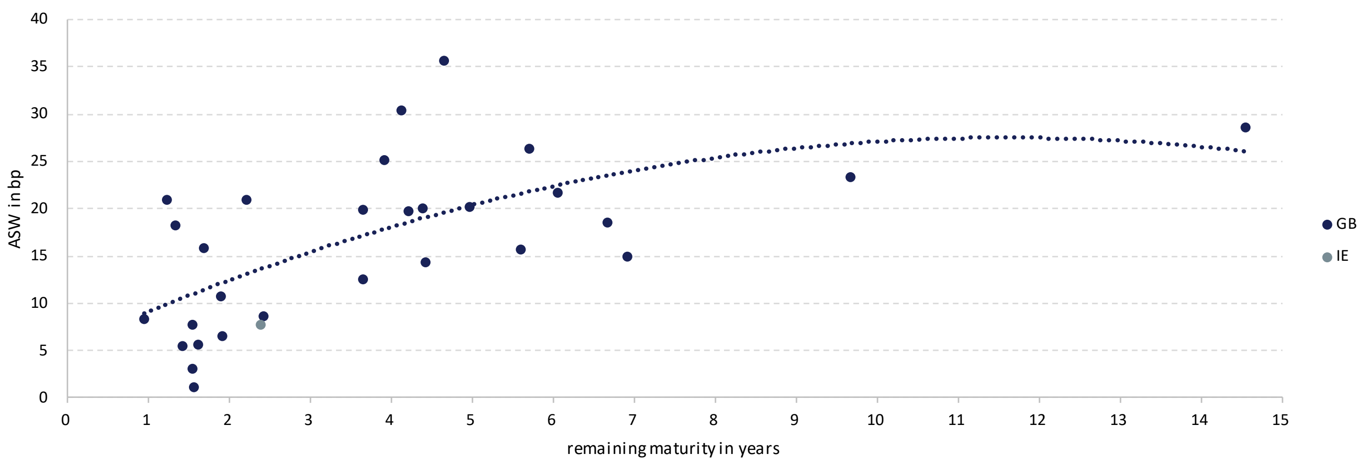
Nordics



Southern Europe

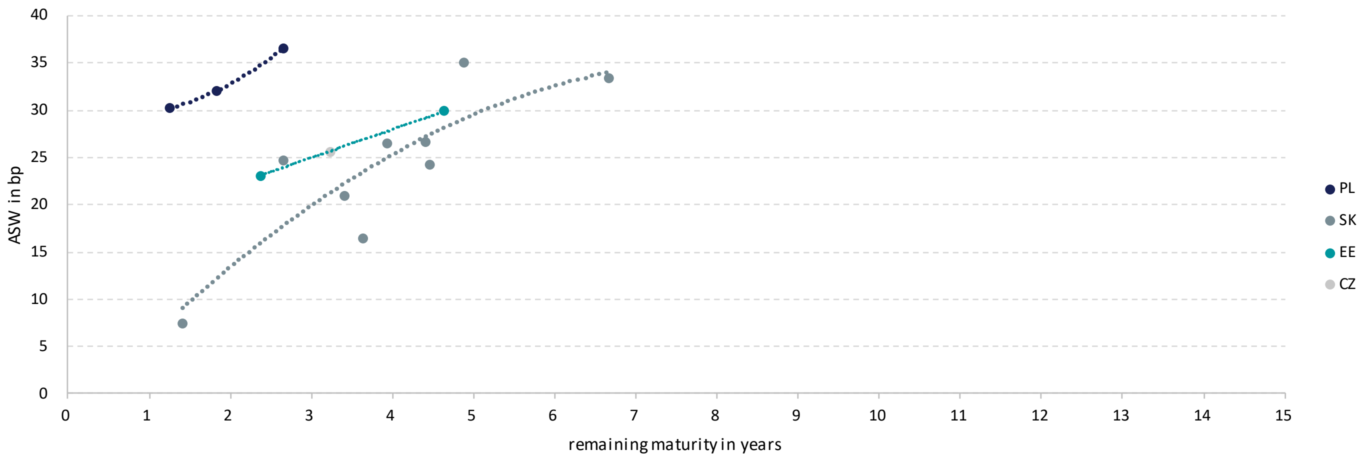


UK/IE

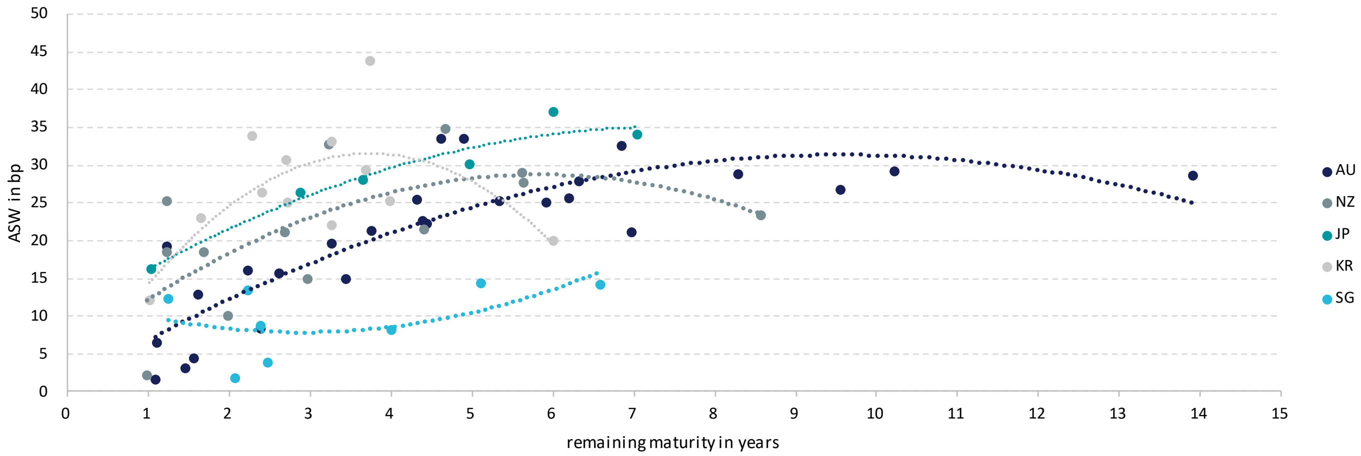


Source: Market data, Bloomberg, NORD/LB Markets Strategy & Floor Research

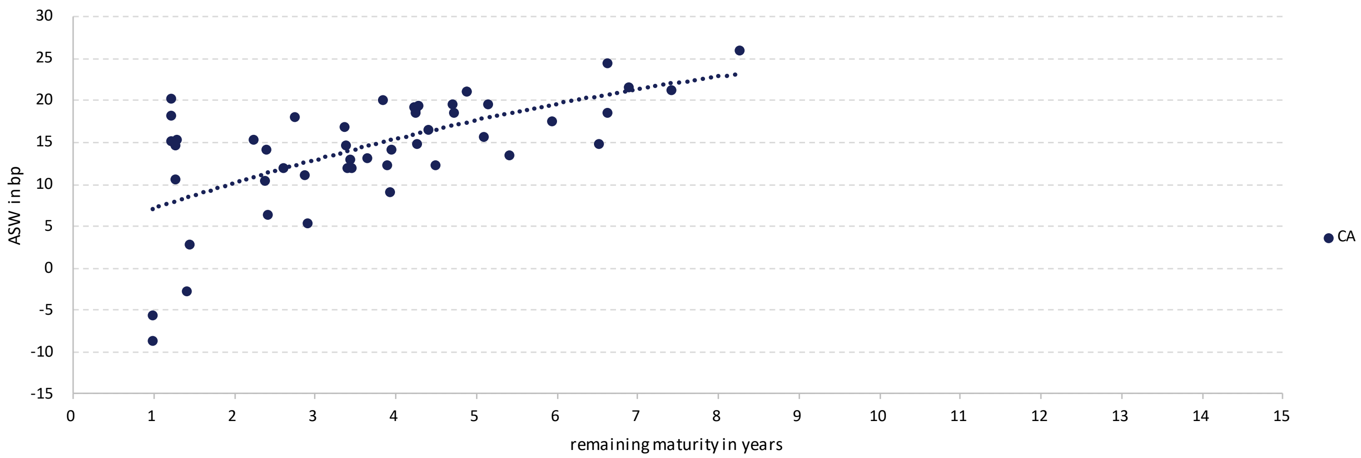
CEE



APAC



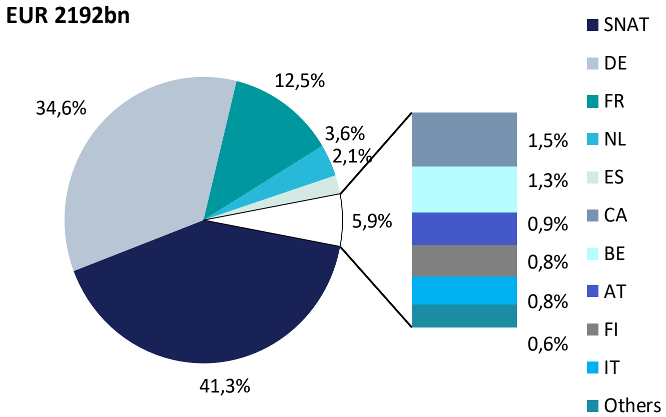
North America



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

Charts & Figures
SSA/Public Issuers

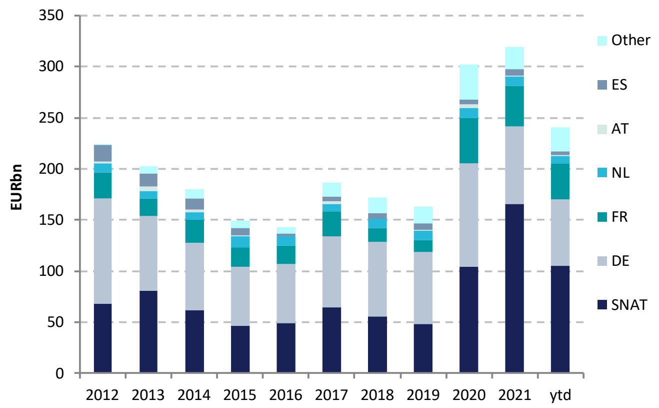
Outstanding volume (bmk)



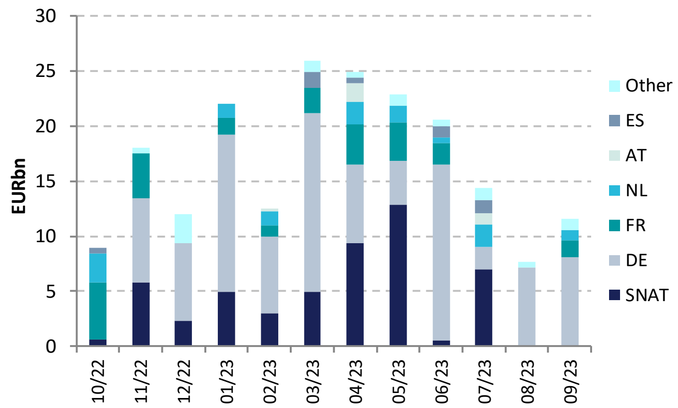
Top 10 countries (bmk)

Country	Vol. (€bn)	No. of bonds	ØVol. (€bn)	Vol. weight. ØMod. Dur.
SNAT	904,5	216	4,2	8,2
DE	758,7	564	1,3	6,3
FR	273,9	184	1,5	6,2
NL	79,4	69	1,2	6,4
ES	46,1	61	0,8	4,8
CA	32,6	23	1,4	4,7
BE	27,5	31	0,9	12,1
AT	19,8	23	0,9	4,7
FI	18,4	22	0,8	5,6
IT	17,3	21	0,8	4,9

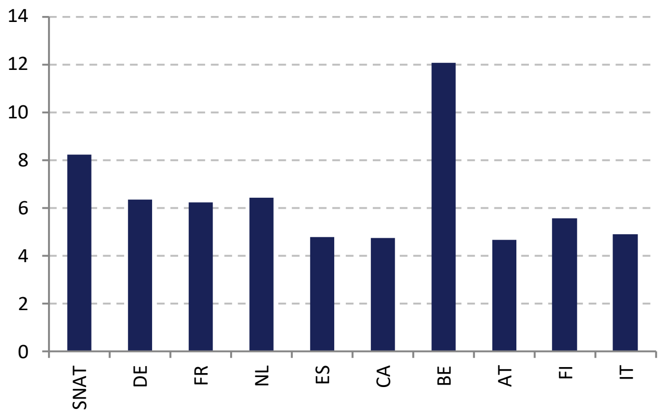
Issue volume by year (bmk)



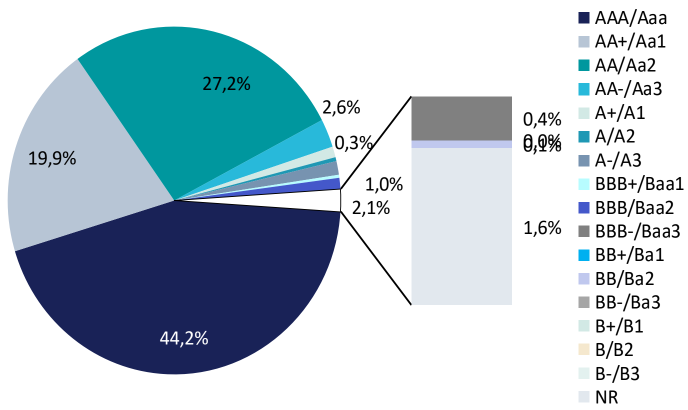
Maturities next 12 months (bmk)



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

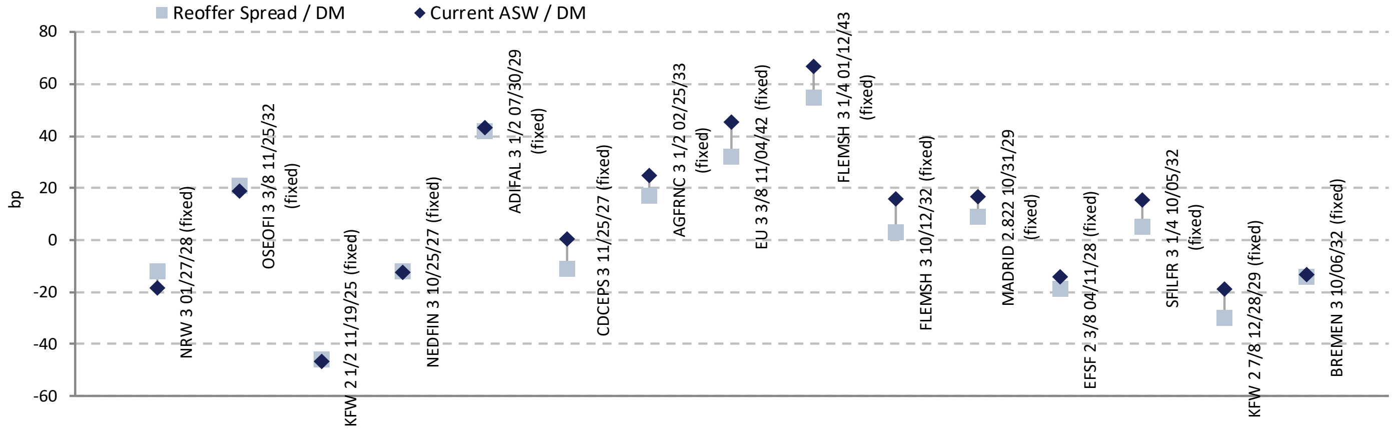


Rating distribution (vol. weighted)

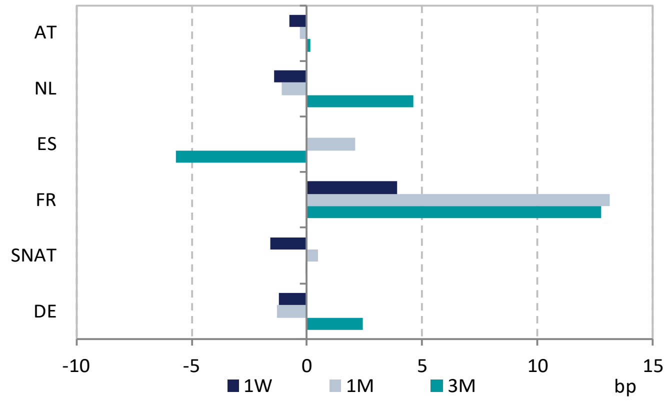


Source: Bloomberg, NORD/LB Markets Strategy & Floor Research

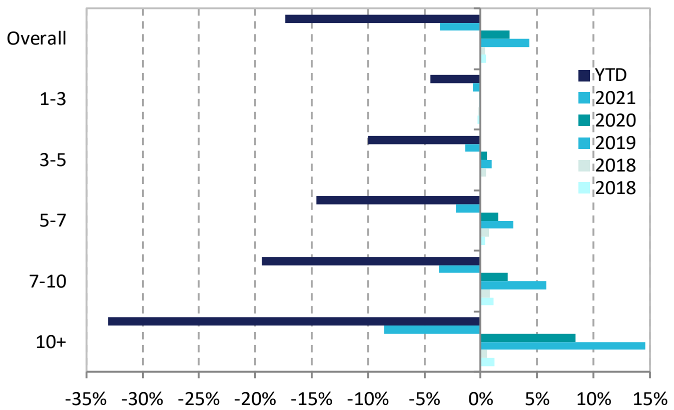
Spread development (last 15 issues)



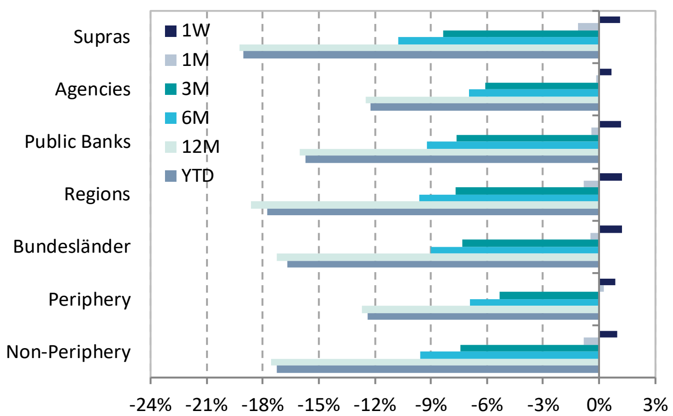
Spread development by country



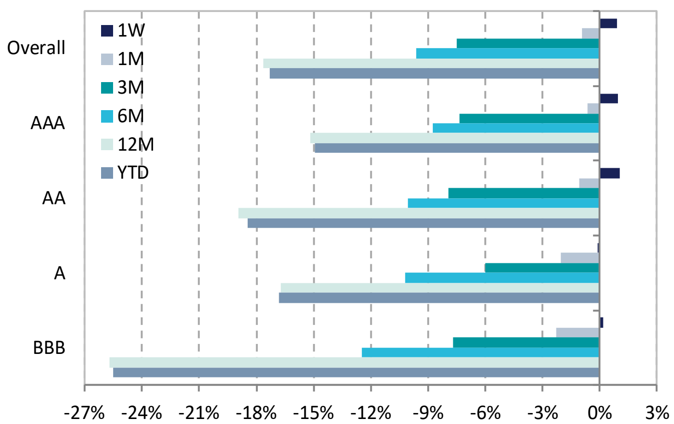
Performance (total return)



Performance (total return) by segments

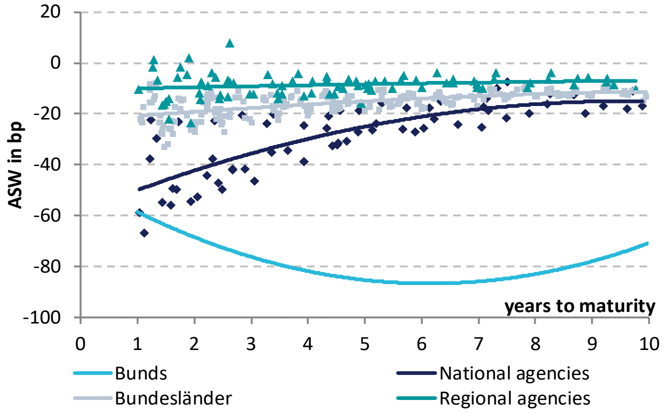


Performance (total return) by rating

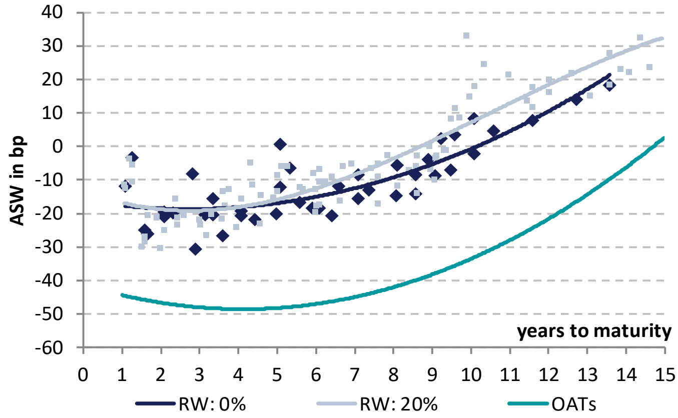


Source: Bloomberg, NORD/LB Markets Strategy & Floor Research

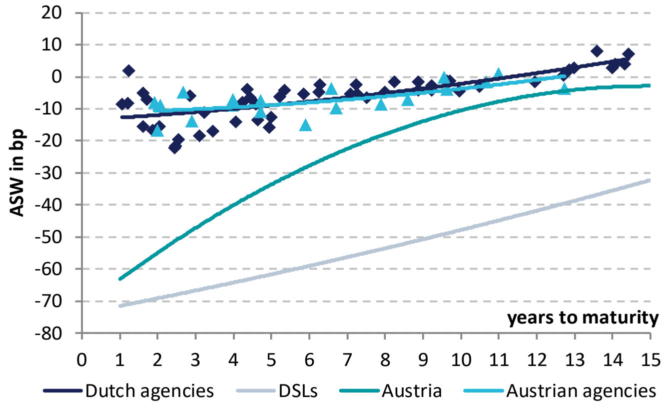
Germany (by segments)



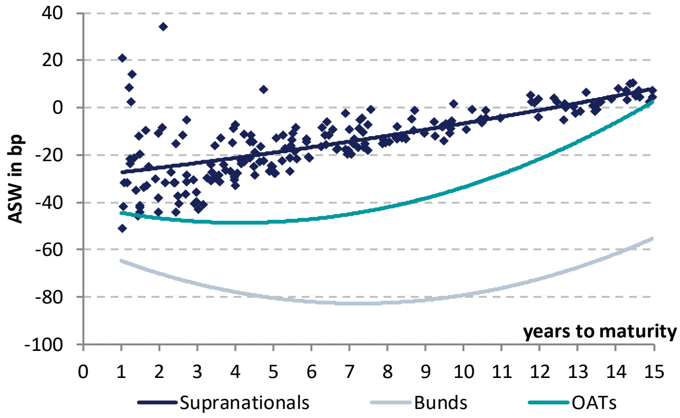
France (by risk weight)



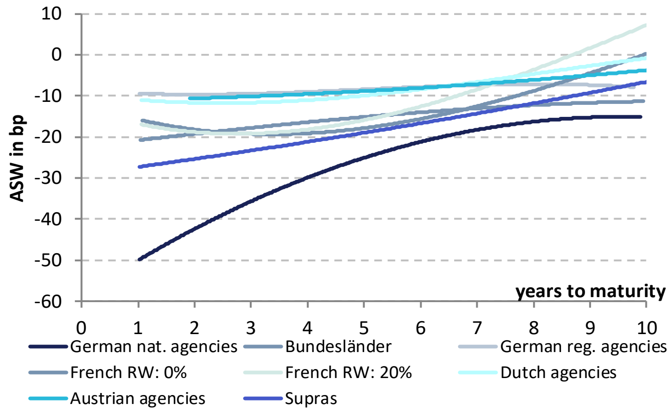
Netherlands & Austria



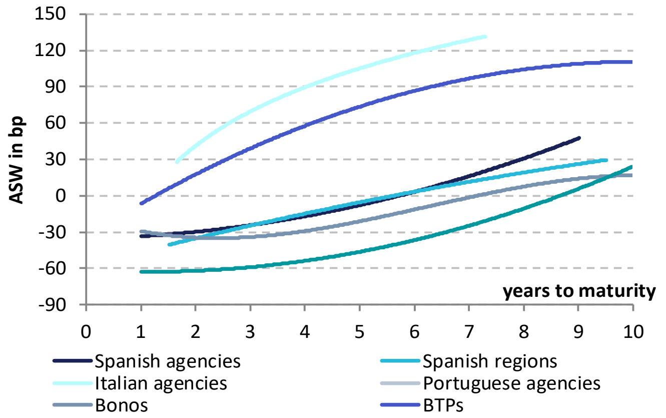
Supranationals



Core



Periphery



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

Appendix
Overview of latest Covered Bond & SSA View editions

Publication	Topics
32/2022 ♦ 19 October	▪ ECB preview: +75bp and the balance sheet question ▪ EBA Risk Dashboard paints a robust picture in Q2 2022 ▪ An overview of the German Laender
31/2022 ♦ 12 October	▪ The covered bond rating approach of S&P ▪ Benchmark indices for German Laender
30/2022 ♦ 28 September	▪ Focus on covered bond jurisdictions: Singapore in the spotlight ▪ German Laender: more ESG issues on the horizon?
29/2022 ♦ 21 September	▪ ECBC publishes annual statistics for 2021 ▪ Update: Gemeinschaft deutscher Laender (Ticker: LANDER)
28/2022 ♦ 07 September	▪ Primary market: A little more to come! ▪ ECB: PEPP visibly active as first line of defence
27/2022 ♦ 31 August	▪ ECB rate hikes: minimum of +100bp still to come by year-end ▪ Australia: Macquarie returns to the EUR benchmark segment
26/2022 ♦ 24 August	▪ Development of the German property market ▪ Transparency requirements §28 PfandBG Q2/2022
25/2022 ♦ 27 July	▪ ECB likes abbreviations: After OMT and SMP, we now have TPI ▪ Covereds vs. Senior Unsecured Bonds
24/2022 ♦ 20 July	▪ A brief spotlight on the EUR sub-benchmark segment ▪ Deutsche Hypo real estate climate: index falls again
23/2022 ♦ 13 July	▪ ECB preview: might the ECB go slightly further? ▪ EBA Report on Asset Encumbrance: levels increasing
22/2022 ♦ 06 July	▪ H1 review and outlook for H2 2022 ▪ Half time in the 2022 SSA year – taking stock
21/2022 ♦ 22 June	▪ Focus on ESG covered bonds: BayernLB's "green rail" public sector Pfandbrief ▪ Stability Council convenes for 25th meeting
20/2022 ♦ 15 June	▪ Covered bond jurisdictions in focus: a look at Australia and New Zealand ▪ NGEU: Green Bond Dashboard
19/2022 ♦ 01 June	▪ ECB: 3, 2, 1 – lift-off! Decisive June, active summer ahead ▪ The covered bond universe of Moody's: an overview ▪ ECB Financial Stability Review identifies increasing risks in the eurozone: a brief overview of covered bonds
18/2022 ♦ 25 May	▪ Transparency requirements §28 PfandBG Q1 2022 ▪ ESG: EUR-benchmarks 2022 in the SSA segment (ytd)
17/2022 ♦ 18 May	▪ Development of the German property market ▪ The SSA market in 2022 a review of the first four months

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:

Covered Bond Directive: Impact on risk weights and LCR levels

Issuer Guide Covered Bonds 2021

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

Transparency requirements §28 PfandBG **(quarterly update)**

Covered bonds as eligible collateral for central banks

SSA/Public Issuers:

Issuer Guide – German Laender 2021 **(updated annually)**

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 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

Face-saving ECB decision: Hawks have won – for now

Appendix
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Time of going to press: Wednesday, 26 October 2022 (08:53h)