Covered Bond & SSA View

NORD/LB Markets Strategy & Floor Research

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Marketing communication (see disclaimer on the last pages)

Agenda

Floor analysts:

Covered Bonds/Banks

Dr Frederik Kunze
frederik.kunze@nordlb.de

Melanie Kiene, CIIA
melanie.kiene@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: Stefan Rahaus // Dr Frederik Kunze

Primary market: wave of issuance activity continues...

Since the last issue of our weekly publication on 28 September, a total of ten issuers with a total volume of EUR 8.85bn have approached investors in the EUR benchmark segment. They were distributed regionally around the globe. At the end of the third quarter, Slovenská Sporiteľňa (ticker: SLOSPO; cf. NORD/LB Issuer View) placed its second EUR benchmark this year (EUR 500m) at ms +35bp (guidance: ms +35bp area) with a maturity of 5.5 years and opted for a green ESG format. The bid-to-cover ratio was 1.1x and we saw a double-digit new issue premium (NIP). Right at the beginning of the fourth quarter, on 4 October, UniCredit Bank Czech Republic & Slovakia (ticker: UNICZ) also made its debut as an Eastern European issuer. The five-year bond in the amount of EUR 500m was marketed at a guidance of ms +55bp area, where it was also finally priced, with a bid-to-cover ratio of 1.0x. On the same day, two more non-EEA banks appeared on the market: DBS Bank (ticker: DBSSP; cf. NORD/LB Issuer View) from Singapore issued a EUR 750m bond with a maturity of three years that seems to be popular with investors at the moment at ms +17bp (guidance: ms +19 area; bid-to-cover ratio: 1.3x) and was thus the only issuer on this day to narrow its final spread during the marketing process. Having said that, we also noted a rather generous new issue premium of around 8bp. Thereafter, the Bank of Montreal (ticker: BMO) from Canada left the final spread for a new four-year bond at the guidance level (ms +17bp area) and, with a volume of EUR 1.0bn, evidently opted for “volume over price” (new issue premium: approx. 6bp) and has therefore already raised EUR 5.5bn from investors in 2022. Investors focusing on core European names had to wait their turn, but were finally able to make their move on 5 and 6 October. On Wednesday, France's Caisse de Refinancement de l'Habitat (ticker: CRH) issued its first covered bond since April 2020, generating an order book of EUR 2.1bn for the EUR 1.85bn deal (maturity: 5.5 years) at a spread of ms +10bp (guidance: ms +12bp area). Last Thursday, Commerzbank from Germany showed up with a new mortgage Pfandbrief (EUR 750m; 6.0y). The issue started at an initial guidance of ms +8bp area and was finally priced at ms +6bp (order book: EUR 1.5bn; bid-to-cover ratio: 1.5x). We identified a new issue premium of 4-5bp for this deal. We saw the first publicly-backed covered bond this quarter from France on Monday, when Caisse Française de Financement Local (ticker CAFFIL) brought EUR 1.0bn to market with a maturity of just over six years at ms +11bp (guidance: ms +13bp area; order book: EUR 1.3bn; new issue premium: 3-4bp). The bond is only the third European issue with a hard bullet maturity structure since the new EU Covered Bond Directive came into force on 8 July 2022. Yesterday, Landesbank Baden-Württemberg (ticker: LBBW) issued another publicly backed bond with a two-year maturity that clearly found favour with investors. With an initial guidance of ms -6bp area, the final issuance spread for the EUR 1.0bn Pfandbrief with an order book of EUR 5.2bn was fixed at ms -12bp.

…and short maturities remain in demand

In addition to LBBW, Belfius Bank from Belgium (ticker: CCBGBB) and Banque Postale from France (ticker: LBPSFH) came to market yesterday, offering covered bonds with terms of five years and just over seven years respectively. CCBGBB was able to place its covered bond (EUR 500m; WNG; guidance: ms +10bp area) with an order book of EUR 1.25bn at final price of ms +7bp (bid-to-cover ratio: 2.5x). Investors' preference for shorter maturities was again evident yesterday in the bid-to-cover ratio of the LBPSFH deal with a term of just over seven years. An issuance volume of EUR 1.0bn produced an order book totalling EUR 1.5bn, thereby generating the weakest bid-to-cover ratio (1.5x) seen yesterday. The final issue spread was ms +13bp after an initial guidance of ms +15bp area.

Issuer	Country	Timing	ISIN	Maturity	Size	Spread	Rating	ESG
Belfius Bank	BE	11.10.	BE0002892736	5.0y	0.50bn	ms +7bp	AAA/ - /AAA	-
La Banque Postale	FR	11.10.	FR001400DC98	7.3y	1.00bn	ms +13bp	- / - / AAA	-
LBBW	DE	11.10.	DE000LB381U7	2.0y	1.00bn	ms -12bp	- / Aaa / -	-
CAFFIL	FR	10.10.	FR001400DAI6	6.3y	1.00bn	ms +11bp	- / Aaa / AA+	-
Commerzbank	DE	06.10.	DE000CZ43ZF4	6.0y	0.75bn	ms +6bp	- / Aaa / -	-
CRH	FR	05.10.	FR001400D5T9	5.5y	1.85bn	ms +10bp	AAA / Aaa / -	-
Bank of Montreal	CA	04.10.	XS2544624112	4.0y	1.00bn	ms +17bp	AAA / Aaa / -	-
DBS Bank	SG	04.10.	XS2541853532	3.0y	0.75bn	ms +17bp	AAA / Aaa / -	-
UniCredit CZ & SK	CZ	04.10.	XS2541314584	5.0y	0.50bn	ms +55bp	- / Aa2 / -	-
Slovenska Sporitelna	SK	28.09.	SK4000021820	5.5y	0.50bn	ms +35bp	- / Aaa / -	X

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

EUR benchmark segment: issuance volume comes to EUR 167.1bn

So far in 2022, a total of EUR 167.1bn in EUR benchmarks have been issued in 2022, and we expect a significant volume of additional new bonds. As a result, we should eventually have a total volume of at least EUR 184bn on the books in 2022. In retrospect, the primary market activities in the third quarter of 2022 have provided a real boost to the primary market in 2022. A total of EUR 41.2bn was placed in this time frame. This figure is also remarkable because the period from 1 July to 30 September 2022 includes the summer recess, which was admittedly short this year. August in particular stood out from the seasonal pattern, producing a record EUR 14.75bn. The environment on the primary and secondary markets was also characterised by notable volatility for covered bank bonds. Nevertheless, the covered bond segment was comparatively robust in terms of spread widening on the secondary market and in terms of required new issue premiums on the primary market side. Widening spreads were not least a consequence of high supply, although - at least at times - an increased level of uncertainty was also responsible for widening movements. The presence of the Eurosystem in the primary market (ECB order rate has recently remained constant at 20%) and in the secondary market also provided a certain degree of stability. The reinvestment requirements in the context of the CBPP3 were also an important support. In the period from January to September 2022 alone, maturities amounted to almost EUR 36bn. Looking back on the past two trading weeks, it can certainly be said that the environment has worsened perceptibly compared with the first few weeks of September. In some cases, this is also reflected in aspects such as the order book size, oversubscription rate, narrowing between guidance and final pricing as well as the size of the new issue premium.

Secondary market: investors operating more selectively here too
The assessment that investors are operating more selectively also applies to the secondary market. For example, short maturities up to 2026 remain in demand. The general sentiment is also marred by general uncertainty. This includes the developments in the UK, for example. In this context, we would also highlight official statements on financial stability risks due to higher interest rates, such as those recently made by the Reserve Bank of Australia. In particular, based on the technical market data in the primary market, we expect more widening pressure for the secondary market towards the end of the year.

HSBC considering sale of HSBC Bank Canada
As reported by the news agency Bloomberg, among others, the HSBC Group is considering selling its Canadian subsidiary HSBC Bank Canada. In line with the sale of the French HSBC France SA, the move is intended to contribute to optimising and realigning the HSBC Banking Group, but is at a very early stage. HSBC Bank Canada currently has two EUR benchmark bonds outstanding, rated Aaa by Moody's and AAA by Fitch. In fact, Fitch only recently confirmed its rating on 6 October 2022. The spread development of the two outstanding bonds will also depend on the details of the credit quality and the strategy of the acquiring institution behind the takeover of HSBC Bank Canada.

EBA report sees downside risks for banks from overheating property markets
The European Banking Authority (EBA) on Monday published a thematic comment on EU banks' exposures to residential property. As a result, EU banks reported more than EUR 4,100bn in loans and advances secured by residential property. This corresponds to one third of all loans to households and non-financial corporations. The high growth rates of property prices in recent years are now causing the EBA to worry about overheating and significant price declines due to higher interest rates and slower economic growth. These concerns are based on the massive deterioration in the macroeconomic environment, which could pose challenges especially for low-income households with high levels of debt, including in servicing their mortgage debt. The EBA does not currently see any risks that have materialised, as banks have applied prudent lending standards within an improved regulatory framework. However, the level of downside risks is increasing and the EBA urges banks to closely monitor market developments and their property portfolios in order to identify upcoming defaults at an early stage and to make timely and adequate provision for credit losses.

Moody’s: increased probability of a property market downturn…
In a current Sector Report on the European housing market, the rating agency Moody's also highlights the increasing danger of a decline in property prices after several years of growth. Sharply rising interest rates and the economic downturn could also lead to a large-scale repricing of residential property prices, according to Moody’s. Interest rates for housing loans have more than doubled in some countries since the beginning of the year, which Moody’s claims is leading to reduced demand for residential property and a decline in prices.

…and focus on financial solvency of households

Owing to the rising cost of living and declining household savings, housing affordability and deteriorating household debt servicing capacity are likely to remain a challenge despite a decline in house prices. High price-to-rent and price-to-income ratios, especially in the Netherlands, Germany and Portugal, are also a problem. Countries with a high proportion of variable or only short-term fixed interest rates, such as Sweden or the UK, could also face the risk of a major correction. However, due to the significantly improved capitalisation of European banks since 2008, Moody’s rating experts see European banks as being quite capable of coping with even a sharp decline in property prices. We would also share this view with regard to covered bonds or the underlying cover pools. Sufficient valuation reserves due to the increases in value in recent years as well as regulatory requirements with regard to mortgage lending value and valuation regulations should offer substantial protection to the pools in the event of significant declines in the market prices of property. In our opinion, this point of view is also justifiable in connection with the comments made by the EBA. Nevertheless, the EBA’s reference to close monitoring and appropriate provision does not seem any more out of place than Moody’s mentioning risk factors in the European property markets.

(Second) debut of UniCredit Bank Czech Republic and Slovakia (ticker: UNICZ)

Prague-based UniCredit Bank Czech Republic and Slovakia is a wholly owned subsidiary of the UniCredit Group SpA, a globally systemically important bank (G-SIB) that previously issued a covered bond worth EUR 800m in 2013, which matured in 2018. In this respect, the issue of EUR 500m with a term of five years on 4 October can certainly be described as a second debut. The medium-sized universal bank is the fourth-largest bank in the Czech Republic with total assets of EUR 38.6bn as at 30 June 2022. Due to amendments to the Covered Bond Act of the Czech Republic, UNICZ's covered bond programme was only upgraded by Moody’s by one notch from Aa3 to Aa2 on 19 September 2022. Implementation of the Covered Bond Directive in the Czech Republic allows licensed banks to issue “European Covered Bonds (Premium)”. Czech covered bonds are in principle ECB repo-eligible, but cannot be purchased under the CBPP3 programme, as the Czech Republic is not a member of the eurozone. UNICZ covered bonds also benefit from a risk weight of 10% according to CRR and are, in our view, eligible as Level 1 assets in the context of LCR management. According to the investor presentation, the cover pool comprises assets of CZK 156.5bn (approx. EUR 6.3bn) and consists of residential and commercial loans in the Czech Republic and Slovakia, which are consequently also denominated in both EUR and CZK. UNICZ has committed to an overcollateralisation rate of 10%. Once again, the benefits of implementing the provisions of the Covered Bond Directive are evident and we welcome the broadening of investment opportunities for investors. We expect other issuers to follow the example of UNICZ with public placements, especially if those parts of the respective cover pools that are currently used for retained bonds (e.g. to collateralise TLTRO III refinancing) are freed up.

vdp welcomes amendment to the Regulation on the Determination of the Mortgage Lending Value (BelWertV)

On Friday last week, BaFin published the amendment to the Regulation on the Determination of the Mortgage Lending Value. It is part of BaFin's Pfandbrief Amendment Ordinance of 4 October 2022, which also includes a new Pfandbrief Reporting Ordinance and a new Pfandbrief Net Present Value Ordinance. The new regulations serve to aid the (further) implementation of the Covered Bond Directive and the adjustment to the amended Article 129 of the Capital Adequacy Regulation (CRR) as well as an adjustment to current market developments. The adjusted Regulation on the Determination of the Mortgage Lending Value includes, among other things, an increase in the small loan limit from EUR 400,000 to EUR 600,000, up to which procedural relief pursuant to section 24 BelWertV can be claimed in the determination of the mortgage lending value, thus taking into account the general development of property prices. Furthermore, the use of computer-assisted statistical methods when determining value is permitted and thus anchored in the regulations. The video surveying permitted during the COVID-19 pandemic as a substitute for an on-site survey is permanently enshrined in the amendment, but a 5% discount must be taken into account and the remaining useful life of the property must be at least 40 years. The minimum capitalisation interest rates are dynamic and therefore linked to the current interest rate development, after a rigid model of 5% for residential properties and 6% for commercial properties was previously specified. In future, upper and lower limits will apply, which are based on the interest rate of the 30-year Bund on a stated reference date plus a risk premium. Currently, the interest rate range is between 3.5% and 5.5% for residential properties and 4.5% and 6.5% for commercial properties. If the yield of the 30-year Bund changes by more than 0.5 percentage points as of 30 November in a given year compared with the last fixing, the minimum capitalisation interest rate is accordingly adjusted as of 1 January of the following year. In addition, for the purpose of adapting to Article 129 (3) CRR, a minimum annual frequency for the monitoring obligation pursuant to §26 BelWertV is introduced. The Association of German Pfandbrief Banks (vdp) welcomes the changes, but also sees a need for optimisation. The fact that the BelWertV amendment does not provide for any transitional periods is viewed critically, as IT migrations cannot be guaranteed from one day to the next. Furthermore, the reporting date principle is criticised for determining the minimum capitalisation rate, as volatile jumps in interest rates can lead to inappropriate findings. The vdp would have liked to see a longer-term average consideration at this point and also sees the ten-year Bund as being better correlated with the credit terms of property financing. The relief from increasing the small loan limit and the now permanently established possibility of video surveys are seen as positive aspects. The option of using statistical procedures is also expressly welcomed, but vdp Managing Director Jens Tolckmitt does not consider the implemented random inspection through the real value method to be appropriate. He believes that a data-based determination of the comparative value is methodically far superior to the determination of the real value.

Market overview SSA/Public Issuers

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

PEPP reinvestment – TPI rather in the distant future?

The ECB publishes data on reinvestments under the Pandemic Emergency Purchase Programme (PEPP) every two months. Having already dealt with reinvestment in detail in a previous issue, we do not want to deprive you of the latest facts and figures. To recap, in June and July, the ECB reinvested maturing securities from Germany and the Netherlands (altogether EUR 17.7bn) almost entirely in Spain, Italy, Greece and Portugal (altogether EUR 17.3bn). From this, we concluded that the "first line of defence" - as the ECB itself calls the PEPP reinvestments - was recognisably active. In view of the tensions before and after the election in Italy and the resulting market reactions to Italian government bonds, one or two market participants would certainly have expected the ECB to be actively working in the background to keep the all-important spread versus German government bonds in check. Since then, the spread of ten-year papers has been quoted around 250bp - a level that in fact precipitated a special meeting of the ECB in June. However, the recently published data tells a very different story: from this, it is clear that the ECB is currently not taking advantage of the full flexibility of reinvestment to support the yields of highly indebted countries. In total, there were even portfolio reductions in peripheral countries (EUR -2.2bn). Only in the direction of Portugal were there positive net purchases of just EUR 177m. The portfolio of German bonds, however, decreased by a further EUR -3.1bn. So was the portfolio simply "breathing" in the months June and July? Possibly. With the small amount of data, it is difficult for us to claim otherwise. One thing is certain, if it wanted to, the ECB could have reinvested significantly more in the periphery than it did. In any case, we see the activation of the Transmission Protection Instrument (TPI) as a long way off if the flexibility of the PEPP reinvestments is not used or does not have to be used. On the contrary, maturing bonds from the peripheral countries are not even fully reinvested there. The reason could be the simultaneous fight against inflation. This stood at 10.0% year on year in the Eurozone in September, putting further pressure on central bankers.

Public Sector Net purchases under the PEPP in selected countries (EURm)

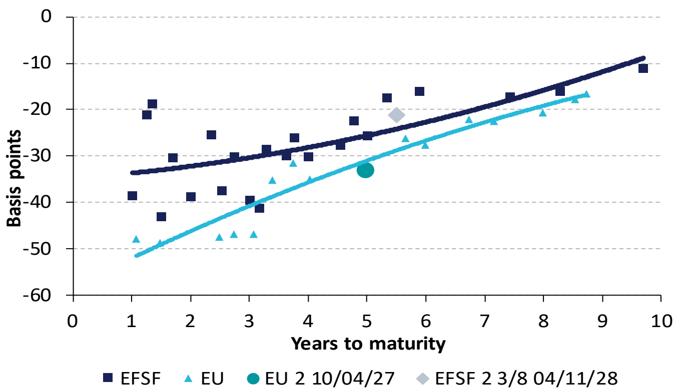
Country	Net purchases Aug 22 – Sep 22	Net purchases June 22 – July 22	Cumulative net purchases at end of September 22
Germany	-3,060	-14,279	395,153
Netherlands	128	-3,383	82,869
Spain	-200	5,914	196,176
Italy	-1,243	9,762	287,821
Greece	-888	1,089	38,877
Portugal	177	514	35,492

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

Spotlight on bonds: EFSF vs. EU

In this section, we shall take a detailed look at the recently issued bonds of two e-supras: EU 2 10/04/27 and EFSF 2 3/8 04/11/28. The European Union issued the bond on 13 September 2022 with a volume of EUR 7bn at ms -28bp. The coupon is 2% and the bond matures on 4 October 2027. As is usual for transactions from this issuer, investor interest was very high and was reflected in an order book of EUR 60bn. The EFSF bond came in at ms -19bp last week on 4 October 2022. The outstanding volume is EUR 3.5bn and the coupon is 2.375%. The final maturity date is 11 April 2028. This bond was also oversubscribed many times during the marketing phase. The order book totalled EUR 15bn. The current ASW spread is interesting: while the European Union bond is trading at a spread of -33bp, the EFSF's ASW spread is at -21bp (data as at: 10 October 2022). This also reflects the current curves of the respective issuers. The curve of the European Union is below the curve of the EFSF. The reasons for this are, on the one hand, the different ratings and, on the other hand, different forms of liability. The EU has top ratings from both Fitch and Moody's, while S&P has awarded an AA+ rating. The EFSF, on the other hand, has an Aaa rating from Moody's, whereas Fitch and S&P give it an AA rating. The liability of the EFSF requires explanation. It has existed in its current form since 28 June 2013 (EFSF v2.2). If a member uses aid from the EFSF, the latter was released from liability for future issues. The guarantees from each member amount to up to 165% of their respective shares, determined by the amount of the ECB deposit and according to the discharge from liability of Greece, Ireland and Portugal. There is no longer a need for a liquidity reserve. Instead, liquidity tests are carried out before upcoming debt servicing. The key aspect here is that each state is liable for its own share. The EU, on the other hand, has a maintenance obligation. In doing so, the European Parliament, European Council and European Commission ensure that "financial means are made available to allow the Union to fulfil its legal obligations in respect of third parties" (Art. 323, Treaty on the Functioning of the EU [TFEU]). Since the European Council is also explicitly named here as the body in which the heads of state and government meet, in our opinion, there is an implicit obligation on the part of the Member States.

ASW-Spreads*



* Residual term to maturity > 1 year and < 10 years; outstanding volume at least EUR 0.5bn.
Source: Bloomberg, NORD/LB Markets Strategy & Floor Research
* data as at 10 Oct. 2022

Bonds in detail

	EU 2 10/04/27	EFSF 2 3/8 04/11/28
Issue date	13 Sept. 2022	04 Oct. 2022
Volume	EUR 7bn	EUR 3.5bn
Order book	EUR 60bn	EUR 15bn
Maturity	04 Oct. 2027	11 April 2028
Coupon	2%	2.375%
Issue spread	ms -28bp	ms -19bp
ASW spread*	-33bp	-21bp

Primary market

After our short publishing break, we have some catching up to do: starting with Bremen (ticker: BREMEN), where a total of EUR 500m changed hands for 10 years at ms -14bp. The guidance was ms -13bp area, but narrowed by one basis point during the marketing phase. The order book amounted to EUR 1bn. KfW (ticker: KFW) was also active on the capital market again. A seven-year bond successfully raised EUR 4bn at ms -30bp. At EUR 12.5bn, the order book was several times oversubscribed, with narrowing of one basis point subsequently possible versus the guidance. Next up, the French SFIL (ticker: SFILFR). The bond has a term of ten years and a volume of EUR 500m. In view of the order book of EUR 460m, no tightening compared with the OAT +40bp guidance was possible. The Inter-American Investment Corporation (ticker: IDBINV) announced that investor talks are currently taking place. It is expected that a sustainability bond in EUR benchmark format will follow in the near future. Next came the European Financial Stabilisation Facility (ticker: EFSF), after an RfP was sent to a select group of banks in advance. Details of the issue can be found on the previous page. The Autonomous Community of Madrid (ticker: MADRID) approached investors with the prospect of a 7y green bond. In total, EUR 500m changed hands at SPGB +23bp. This was also in line with the guidance. Staying with our "Beyond Bundeslaender" issuers: the Flemish Community (ticker: FLEMSH) also made an appearance on the primary market. A total of EUR 2bn was raised through a dual tranche. This comprised a ten-year bond and a volume of EUR 750m (guidance: OLO +40bp area; order book: EUR 1.2bn) at OLO +40bp and a 20-year sustainability bond (guidance: OLO +37bp area; order book: EUR 1.75bn) at OLO +36bp. The European Investment Bank, on the other hand, opted for a tap. EIB 3% 10/14/33 was increased by EUR 1bn at ms -5bp. Remaining in Europe: the European Union (ticker: EU) raised new funds under its Macro-Financial Assistance (MFA) and NGEU programmes after sending out an RfP. To this end, EU 1.625% 12/04/29 was tapped by EUR 5bn (guidance: ms -20bp area, order book: EUR 13.9bn) at ms -21bp and a new 20-year bond was issued in the amount of EUR 6bn at ms +32bp (guidance: ms +34bp area; order book: EUR 26bn). Interesting detail: EUR 2bn from the 20-year bond will be used for the MFA, with the remaining amounts flowing entirely into the NGEU programme. Mandates also came from the French agencies AFD (10y sustainability bond) and CDC (5y sustainability bond) in addition to ADIF-Alta Velocidad (green bond, 7/10Y) from Spain.

Issuer	Country	Timing	ISIN	Maturity	Size	Spread	Rating	ESG
EU	SNAT	10.10.	EU000A3K4DV0	20.0y	6.00bn	ms +32bp	AAA / Aaa / AA+	-
FLEMSH	BE	04.10.	BE0002889716	20.3y	1.25bn	ms +55bp	AA / - / -	X
FLEMSH	BE	04.10.	BE0002890722	10.0y	0.75bn	ms +3bp	AA / - / -	-
MADRID	ES	03.10.	ES00001010J0	7.0y	0.50bn	ms +9bp	BBB / - / A-	X
EFSF	SNAT	03.10.	EU000A2SCAE8	5.5y	3.50bn	ms -19bp	AA / Aaa / AA	-
SFILFR	FR	28.09.	FR001400D211	10.0y	0.50bn	ms +5bp	- / Aa3 / AA	-
KFW	DE	27.09.	DE000A30VM78	7.3y	4.00bn	ms -30bp	- / Aaa / AAA	-
BREMEN	DE	27.09.	DE000A3E5V96	10.0y	0.50bn	ms -14bp	AAA / - / -	-

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

Covered Bonds
The covered bond rating approach of S&P

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

The ratings approach of S&P

This article in our weekly publication provides a schematic presentation of the rating approach used by Standard & Poor's (S&P) to rate covered bonds. Together with DBRS, Fitch and Moody's, S&P is one of the four "External Credit Assessment Institutions" (ECAI) listed in the "Eurosystem Credit Assessment Framework" (ECAF).

Four-stage process

S&P's rating process will be split into four phases:

i) Analysis of issuer-specific factors (e.g. legislative, regulatory, operational and administrative risks) → can the covered bond rating be higher than the issuer credit rating (Issuer Credit Rating, ICR)?
ii) Establishing the RRL (Reference Rating Level) based on the applicable resolution mechanisms → bail-in yes/no?
iii) Calculation of maximum possible rating based on the jurisdiction and cover pool → external probability of support (ex. state, central bank)? Quality of cover pool (expected loss, overcollateralisation, liquidity)?
iv) Combination of results and influence of additional factors (e.g. counterparty and country risk) → final rating?

ICR forms rating floor

The issuer's credit worthiness remains an essential factor in the analysis since the respective institution is both the primary source for payments to the covered bond creditors and also manager of the cover pool, and can therefore have a significant influence on ALMM risks, credit quality and overcollateralisation. The issuer rating is therefore seen as the floor for the covered bond rating. On this basis, S&P first calculates whether an uplift above the ICR can be awarded in principle. Among other things, this requires legislative or contractual arrangements which guarantee the separation of the cover assets to the benefit of the covered bond holders.

Resolution mechanisms define RRL

If an uplift is fundamentally possible, the next step involves setting the RRL. To this end, the agency checks whether the Bank Recovery and Resolution Directive (BRRD) or similar legislation is applicable, allowing the issuer to continue to make payments to covered bond holders, even though senior unsecured paper has defaulted. In such cases, the RRL is defined as the greater of:

i) the ICR/Resolution Counterparty Rating (RCR; where applicable)
ii) the adjusted ICR + 1 to 2 notches (depending on the systemic importance of the covered bonds).

In jurisdictions where there is no corresponding resolution mechanism, the RRL equals the ICR.

Likelihood of external support

The next step will involve assessing the probability of public support in the respective jurisdiction, which aims to avoid the liquidation of cover assets in an extreme case. Such support can come from the government, from the central bank or from indirect intervention. The probability of support shall be assessed by evaluating: i) the covered bond legislation, ii) the systemic importance of the covered bonds in their market and iii) the credit worthiness of the state with marks ranging from "weak" to "very strong", whereby the overall score is based on the weakest individual assessment of the three criteria. Subsequently, an uplift of 0 to 3 notches over the RRL can be assigned, which defines the jurisdiction-supported rating level (JRL).

Cover pool factors

Based on the JRL, a further notching is then undertaken which takes into account overcollateralisation in the cover pool and analyses the extent to which it covers credit risks and refinancing costs. This factors in not only the level of overcollateralisation, but also liquidity conditions. There can be an uplift of up to four notches for assets with an active secondary market; programmes with less liquid assets get two notches at most.

Deduction of notches for liquidity risks and voluntary overcollateralisation

The form of commitment to maintaining overcollateralisation plays an important role. Overcollateralisation which is maintained purely voluntarily attracts a basic deduction of one notch. A public statement also leads to a deduction by one notch if the support in the jurisdiction in question is merely rated as "weak". In the case of a legal and contractual commitment, there is generally no deduction. A further deduction of one notch can be applied if there is no liquidity reserve of at least six months. Such as reserve can consist of liquidity lines or structural measures (e.g. soft bullet or CPT). Issuers from the eurozone with covered bonds which have a rating which is above the relevant country's foreign currency rating, are exempt from the liquidity deduction since the liquidity risk is taken into account in the cap above the country rating.

Consideration of other factors

The last step combines the previous results and further factors are taken into account in order to determine the final covered bond rating. These mainly include counterparty and country risks. As regards the country risk (for programmes with assets from just one jurisdiction), unlike in the case of other agencies, there is no general country ceiling; instead a notching above the foreign currency rating of the respective state is carried out, which is dependent on the sensitivity of the cover assets to the sovereign default. If this risk is rated as "high", then a maximum uplift of two notches is possible. If the risk is rated as "moderate", then the maximum uplift is four notches, while “Low” can be up to six notches, if additional criteria are met (e.g. there cannot be any refinance risk). Covered bonds with a refinancing risk arising from sovereign default risks which cannot be fully mitigated are subject to a specific restriction. In this case, the maximum uplift which can be assigned is four notches, whereby a further distinction is made between issuers from inside and outside the eurozone.

Total uplift of up to 7 notches possible

Overall therefore, the new S&P methodology allows a maximum uplift of seven notches above the RRL starting point. In order to achieve this, the four criteria must be met as a minimum:

i) systemic support must be rated as "very strong"

ii) overcollateralisation must completely cover credit risks in the AAA scenario and all refinancing risks

iii) 180 days liquidity need must be covered (could also be by ex.maturity extensions)

iv) overcollateralisation will be contractually or legally assured or there will be a public assurance

In addition, the rating may not be limited by other factors such as country or counterparty risks.

Notching above starting point

	Factor	No. of notches
	Reference rating level	
+	Jurisdictional support	0 – 3
+	Credit enhancement	1 – 4
-	Type of commitment	0 – 1
-	Liquidity scheme	0 – 1
=	Maximum CB rating	

Source: Standard & Poor's, NORD/LB Fixed Income & Macro Research

De-linking only without ALMM risk

Contrary to the prescribed method, a covered bond rating can be completely decoupled from the RRL, so that it can be calculated without a maximum rating uplift. However, for this to happen, the covered bond programme must be protected structurally from an asset-liability mismatch (ALMM) and there must be a legal or contractual commitment to maintain overcollateralisation.

ESG Credit Indicator Report Card: Covered Bonds

The growing importance of ESG factors is also taken into account by the rating experts at S&P.In November 2020 S&P published its first "ESG Credit Indicator Report Card: Covered Bonds" and updated this in April 2022. S&P's ESG credit factors are intended to increase the level of transparency with regard to the relevance of ESG factors for the rated covered bond programmes. This applies in particular with regard to the influence on the credit rating analysis. Within the scope of the analysis presented in April this year, S&P stated an overall limited influence of ESG factors on the rating analysis of covered bonds. According to the agency, the "governance" factor has the greatest influence. In contrast, the influence of "environmental" factors is "very limited".

SSA/Public Issuers
Benchmark indices for German Laender

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

Update on internal project

With the previous edition published just over 12 months ago now, some of our most devoted readers are already looking forward to the Issuer Guide – German Laender 2022, which is set to be released in the near future. As usual, the ninth edition of this publication will seek to facilitate a relative comparison of the German Laender against the backdrop of constitutional and regulatory framework conditions. In particular, we highlight the differences relating to spreads and issuance volumes in light of the fundamental financial and economic development of the Laender. This differentiated analysis also includes a look at the Gemeinschaft deutscher Laender (Ticker: LANDER) as an issuer of Laender jumbos with a minimum volume of EUR 1bn. As was previously the case, the 16 German Bundeslaender continue to represent by far the largest sub-sovereign market in Europe. The outstanding volumes and annual issuance volumes of the Laender segment in Germany are higher than at any other sub-national level. Traditionally characterised by a steady supply of new bonds and (high) relative attractiveness versus Bunds, the Laender segment has always represented an interesting alternative to sovereign bonds. As a result, this sub-segment is among the most liquid, albeit not necessarily the most complex, markets in the European segment for supranationals, sub-sovereigns and agencies (SSA). In future – and above all after the coronavirus pandemic – issuance volumes are, however, likely to decline following the (re)application of the debt brake from 2023 at the earliest.

iBoxx € Regions as a benchmark for German Laender?

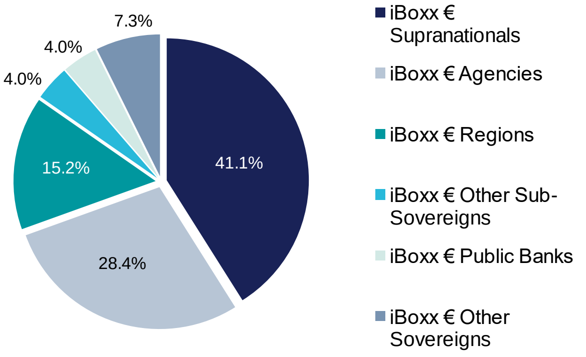
When looking for a benchmark index for bonds issued by the German Laender, the iBoxx € Regions from data provider Markit always stands out. Containing a total of 203 bonds (data as at: September 2022), the sub-index of the iBoxx € Sub-Sovereigns maps the universe of EUR-denominated bonds issued by regional authorities. With an index weighting of 78.1% (157 bonds), German bonds dominate the index. For various reasons, however, we do not consider the index to be the ideal benchmark for bonds issued by German Bundeslaender.

Criteria for classifying issuers into iBoxx € Sub-Sovereigns sub-indices

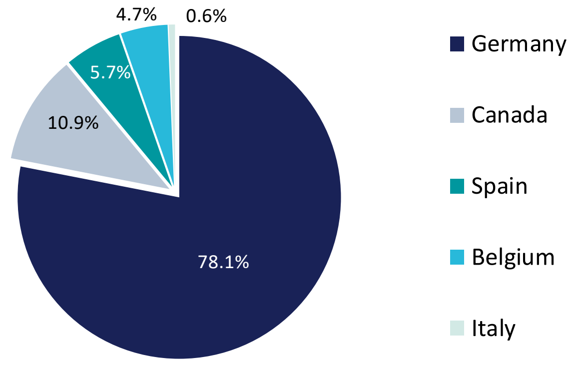
Agencies	Issuers whose main business activity is carrying out a task which is funded by a local authority and which is neutral in relation to competition (e.g. KfW).
Supranationals	Issuers owned by more than one country (e.g. EIB).
Public banks	Issuers which are publicly owned and funded but who offer commercial bank services (e.g. BNG)
Regions	*Issuers that represent regional or local governments (e.g. Bundeslaender) – with either implicit or explicit guarantee and strong relationship to or ownership by the government.*
Other sub-sovereigns	All other bonds that are regarded as sub-national. A distinction is made between three groups: 1. Non-financials: state-funded issuers from a non-financial sector with an explicit or strongly implicit guarantee, whose rating is closely correlated with the central state and no more than 2 notches below its credit rating. A strongly implicit guarantee is defined by Markit as an issuer that is 100% owned by the government or public sector and its debt is consolidated into government debt, or the issuer already has access to government financing/tax revenue funding 2. Guaranteed financials: private sector issuers guaranteed by regional municipalities. 3. State-guaranteed bonds by non-guaranteed institutions

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

Sub-indices of the iBoxx € Sub-Sovereigns by outstanding volume



Laender weighting within the iBoxx € Regions



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

Criteria for bond selection in the iBoxx € Sub-Sovereigns sub-indices

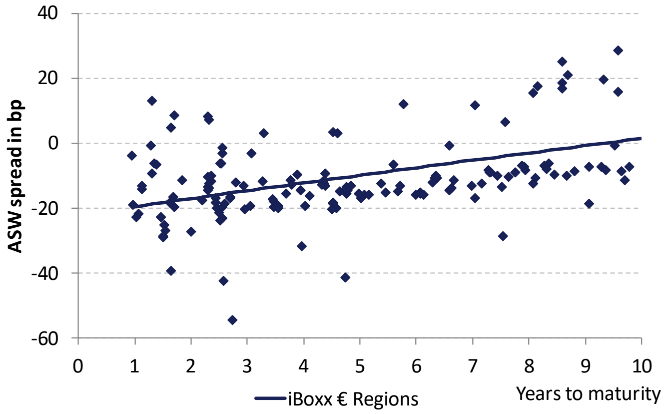
Bond type	Only those bonds whose cash flows can always be determined in advance are taken into consideration in the Markit iBoxx € indices. T-bills and other money market instruments are not included; the only currency permitted is the euro. The origin of the issuer is irrelevant.
Rating	All bonds in the Markit iBoxx € indices must have an investment grade Markit iBoxx rating. The rating approach used by the Markit iBoxx indices is based on the average of the ratings awarded by the three rating agencies Fitch, Moody's and S&P.
Residual term to maturity	Each bond included in an iBoxx € Index must have a minimum residual term to maturity of one year on the day the composition of the Index is specified.
Outstanding volume	Minimum volume outstanding EUR 1.0bn

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

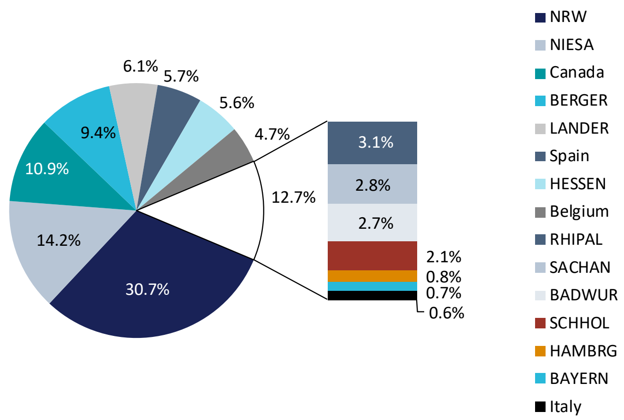
Risk premia vary due to periphery issuers

From our perspective, the inclusion of Canadian provinces as well as municipalities and regions from Belgium, Spain and Italy does not ideally replicate the Bundeslaender segment. In fact, due to issuers originating from periphery countries in particular, the ASW spreads can, in part, differ significantly from those of the German sub-sovereigns. As a result of ratings and collateral mechanisms as well as differences in fundamental analysis, the spread level of Bundeslaender is considerably lower than that of peripheral issuers, which in turn reduces the comparability of the index.

ASW spreads of the iBoxx € Regions*



iBoxx € Regions by issuer



* Residual term to maturity > 1 year and < 10 years.
Source: Bloomberg, Markit, NORD/LB Markets Strategy & Floor Research

Weighting of Bundeslaender does not reflect the actual Laender bond market

The weighting of the Bundeslaender in the iBoxx € Regions does not truly depict the actual Laender market either. This is primarily due to the criteria for bond selection used by Markit for the iBoxx € Sub-Sovereigns indices. The criteria, in particular the specification of minimum issue volumes of EUR 1.0bn and fixed-interest bonds, cause a distorted weighting of the Bundeslaender in relation to one other. As a result, there is a large supply of bonds with lower volumes, while Saarland, for example, was not rated until October 2016 and Bremen exclusively issued floaters up to 2014. In general, the specification of the iBoxx € Regions means there is no benchmark for the performance and risk premiums of Laender floaters. Nevertheless, after excluding the periphery issuers, the iBoxx € Regions almost exactly replicates the ASW spread levels of bonds issued by the Bundeslaender.

Comment

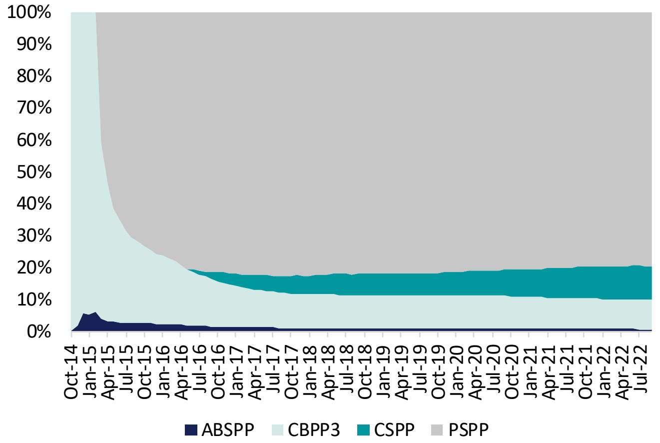
Given the inherent weaknesses of the iBoxx € Regions, as usual we shall use the total number of Laender bonds in circulation to produce a relative view of each of the Bundeslaender as part of our Issuer Guide. For this reason, we always analyse fixed-interest bonds in relation to all Laender bonds with an outstanding volume of at least EUR 500m. Similarly, where no fixed-interest bonds are available for analysis, where appropriate we look at floating rate notes issued by a Bundesland in relation to all the Laender floaters with an outstanding volume of at least EUR 500m as well. We are looking forward to again offering you added value on the market this year in the form of our forthcoming compendium.

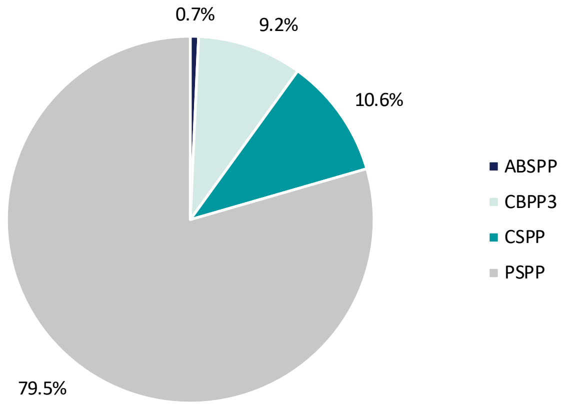
ECB tracker

Asset Purchase Programme (APP)

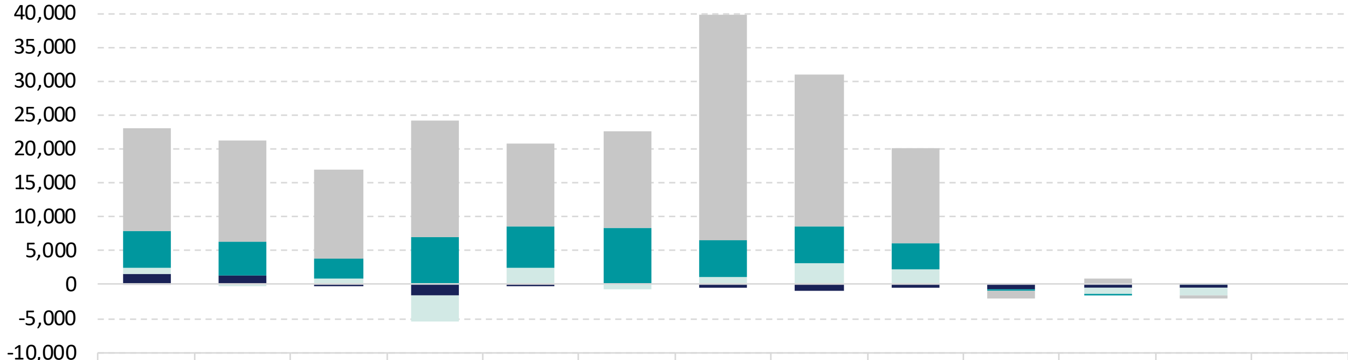
	ABSPP	CBPP3	CSPP	PSPP	APP
Aug-22	24,131	301,640	344,558	2,592,400	3,262,729
Sep-22	23,639	300,157	344,388	2,588,118	3,256,302
Δ	-477	-1,210	+164	-315	-1,838

Portfolio structure





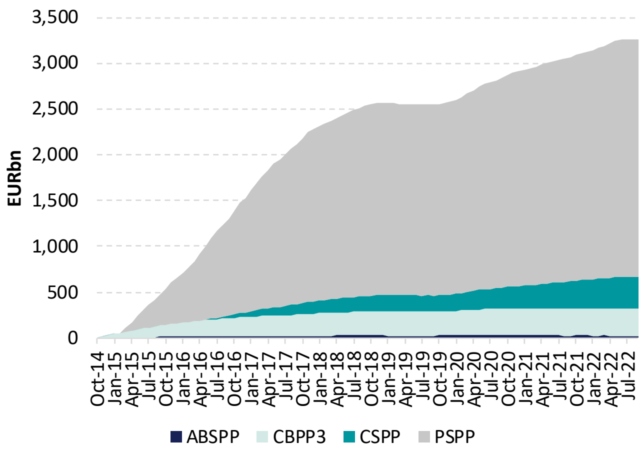
Monthly net purchases (in EURm)



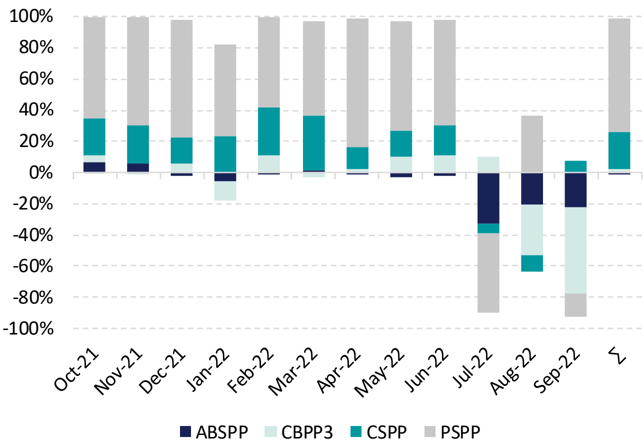
	Oct-21	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	∑
APP	23,017	21,200	16,596	18,838	20,698	21,929	39,397	30,232	19,722	-1,759	-656	-1,838	207,376
PSPP	15,038	14,815	12,989	17,292	12,095	14,172	33,238	22,443	13,924	-1,114	869	-315	155,446
CSPP	5,481	5,142	3,007	6,970	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

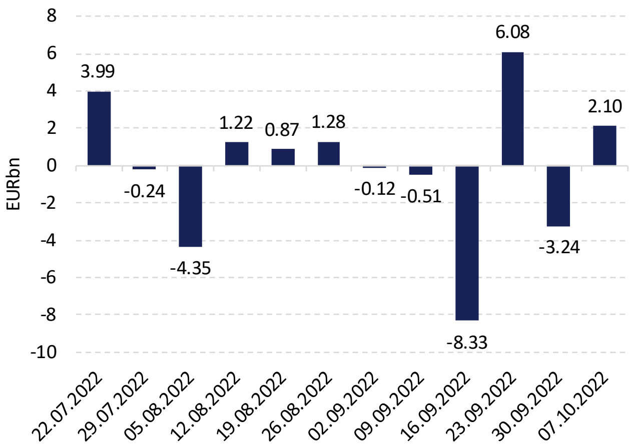
Portfolio development



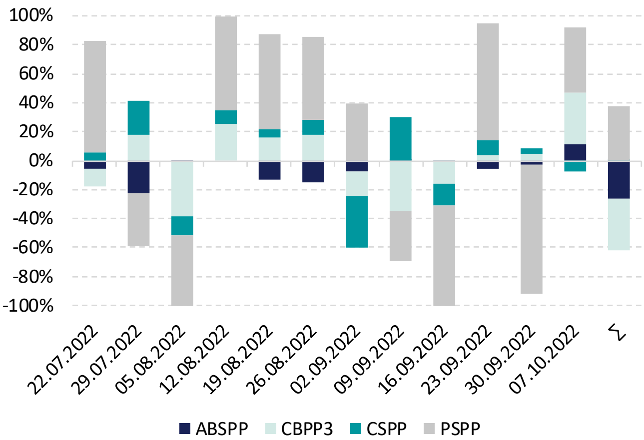
Distribution of monthly purchases



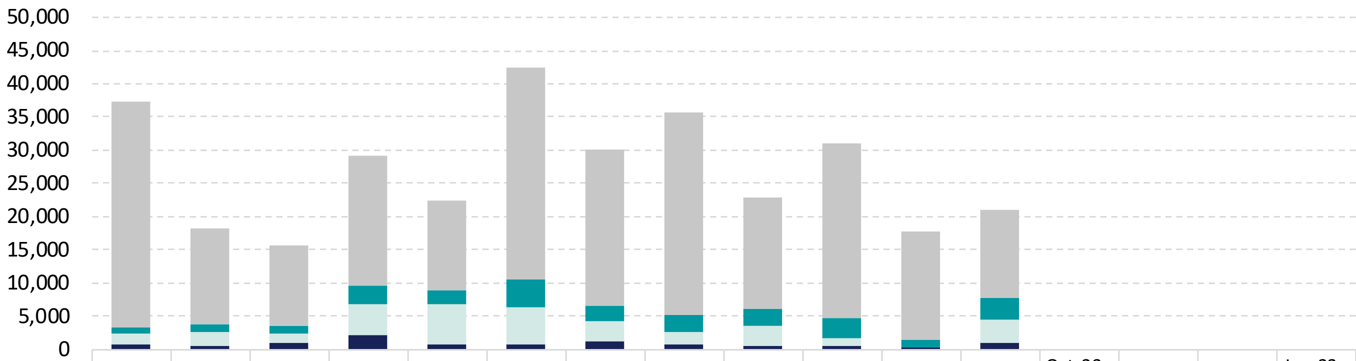
Weekly purchases



Distribution of weekly purchases



Expected monthly redemptions (in EURm)



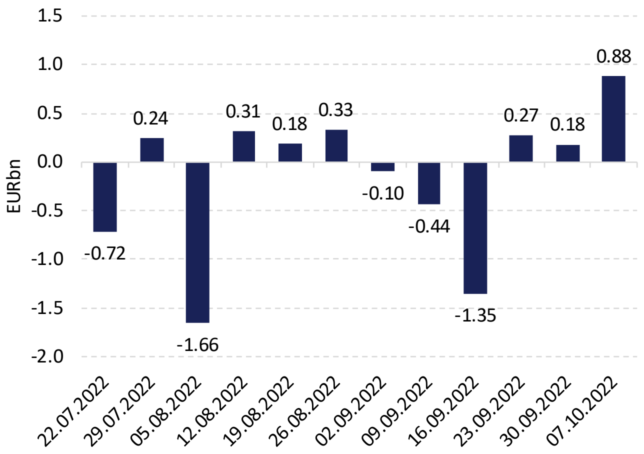
	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23	May-23	Jun-23	Jul-23	Aug-23	Sep-23	Oct-22 - Sep-23	2021	2022	Jan-23 - Sep-23
APP	37,313	18,338	15,622	29,181	22,528	42,525	30,201	35,785	22,813	31,072	17,802	21,023	324,203	247,069	298,981	252,930
PSPP	33,927	14,669	12,016	19,469	13,624	32,033	23,674	30,553	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

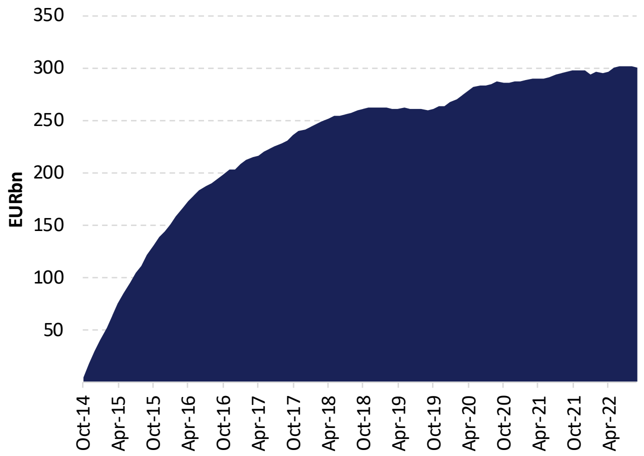
NORD/LB

Covered Bond Purchase Programme 3 (CBPP3)

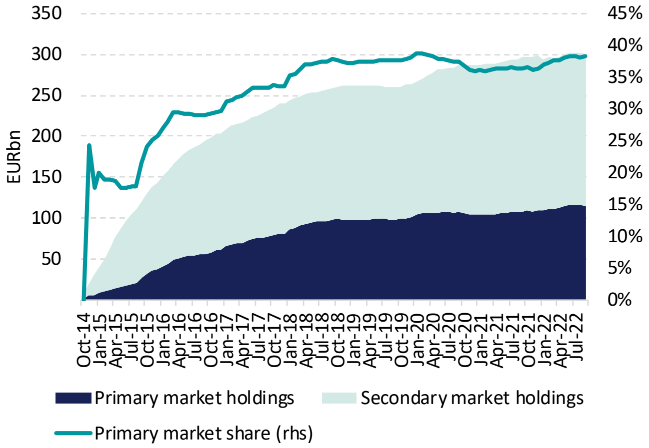
Weekly purchases



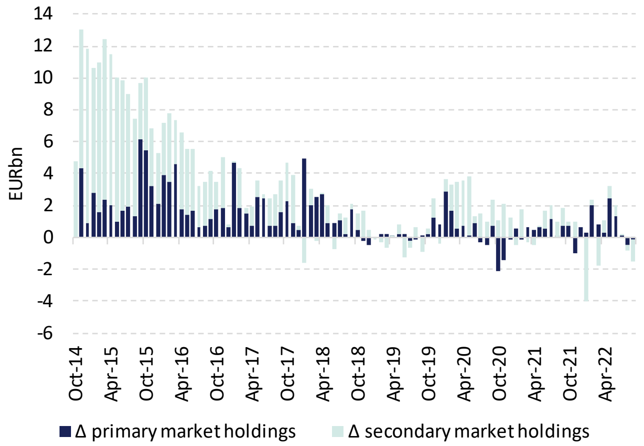
Development of CBPP3 volume



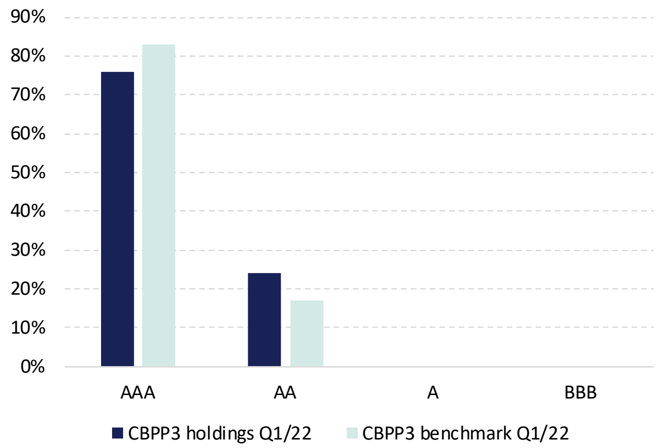
Primary and secondary market holdings



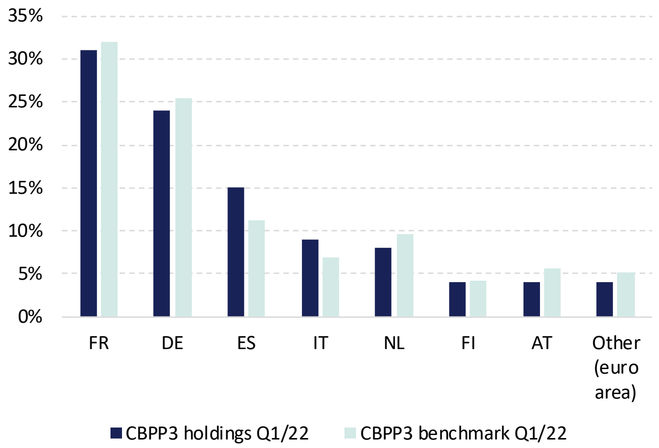
Change of primary and secondary market holdings



Distribution of CBPP3 by credit rating



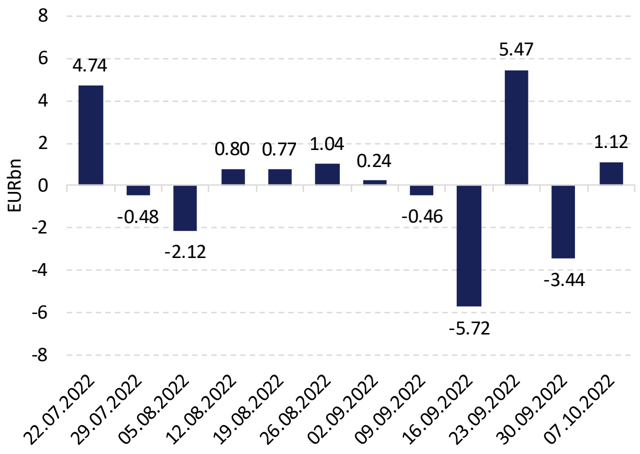
Distribution of CBPP3 by country of risk



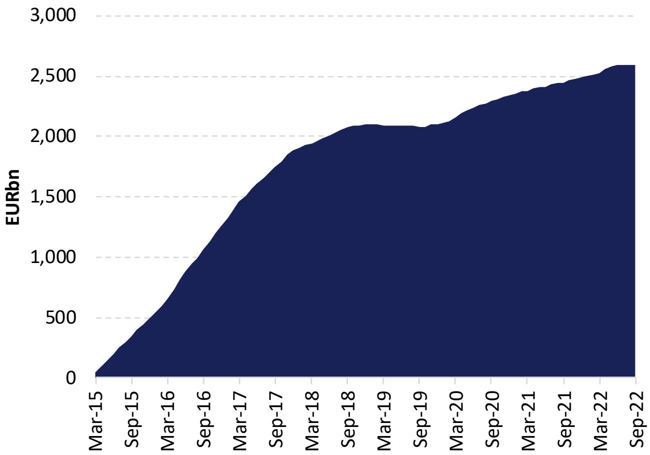
Source: ECB, Bloomberg, NORD/LB Markets Strategy & Floor Research

Public Sector Purchase Programme (PSPP)

Weekly purchases



Development of PSPP volume



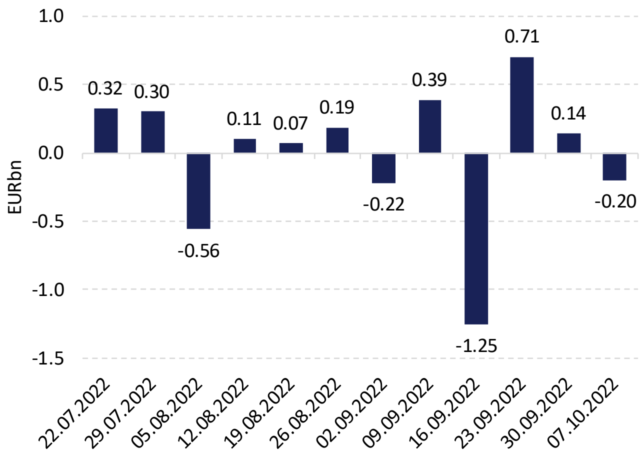
Overall distribution of PSPP buying at month-end

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**

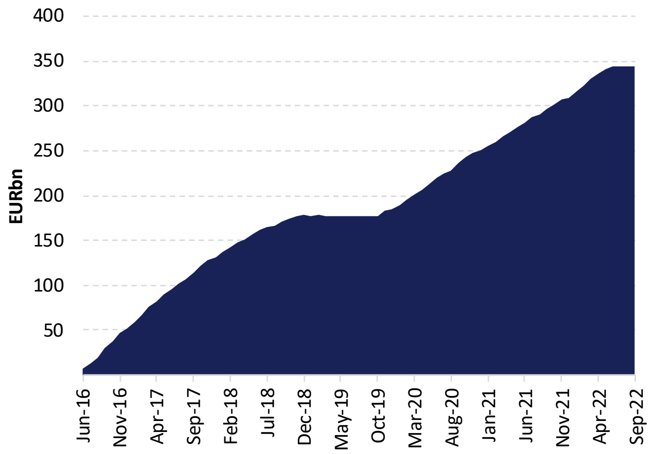
[1] Based on the ECB capital key, adjusted to include supras and the disqualification of Greece
[2] Based on the adjusted distribution key
[3] Weighted average time to maturity of PSPP portfolio holdings
[4] Weighted average time to maturity of the bonds eligible for purchasing under the PSPP
Source: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

Corporate Sector Purchase Programme (CSPP)

Weekly purchases

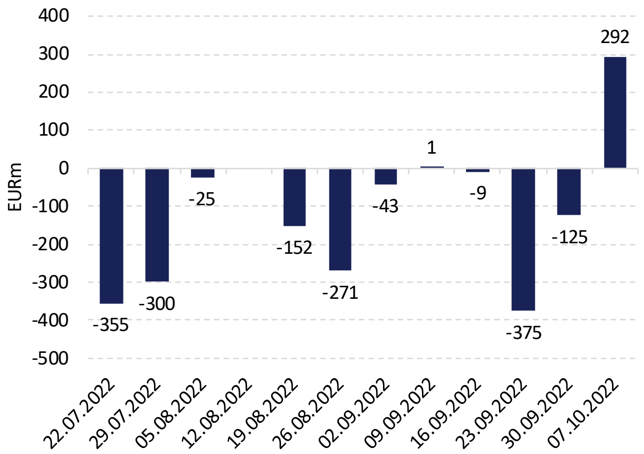


Development of CSPP volume

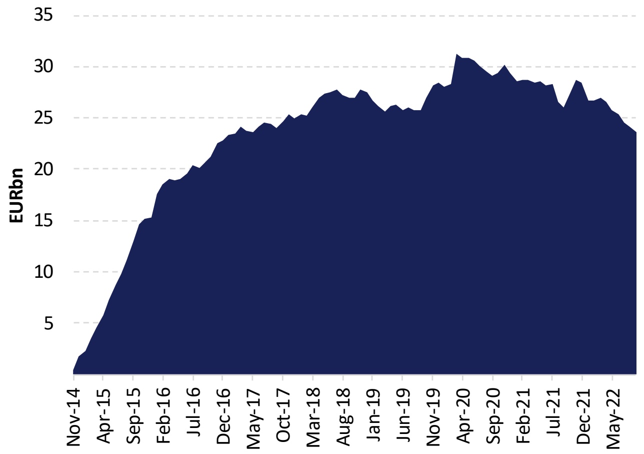


Asset-Backed Securities Purchase Programme (ABSPP)

Weekly purchases



Development of ABSPP volume



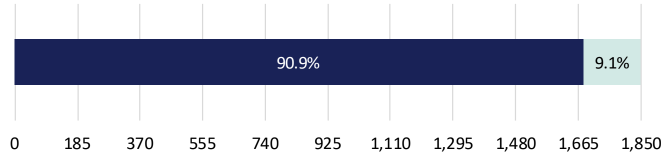
Source: ECB, Bloomberg, NORD/LB Markets Strategy & Floor Research

Pandemic Emergency Purchase Programme (PEPP)

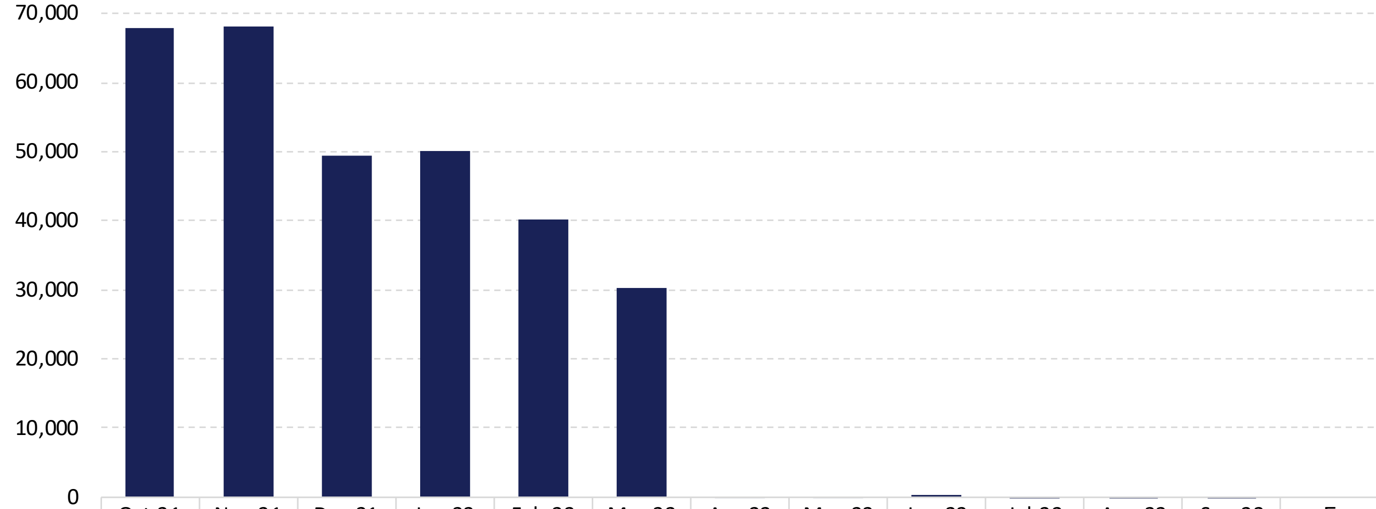
Holdings (in EURm)

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

Invested share of PEPP envelope (in EURbn)

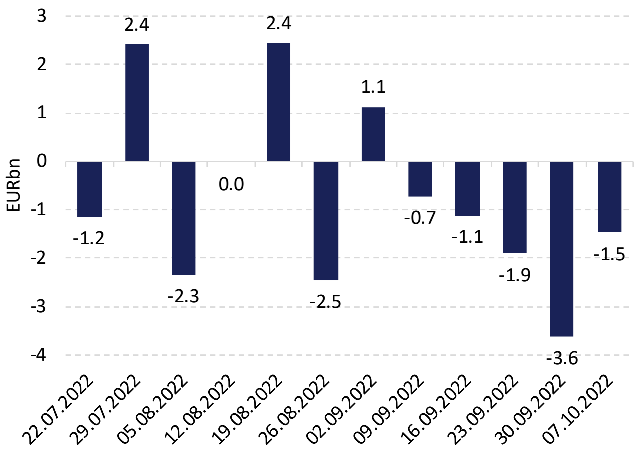


Monthly net purchases (in EURm)

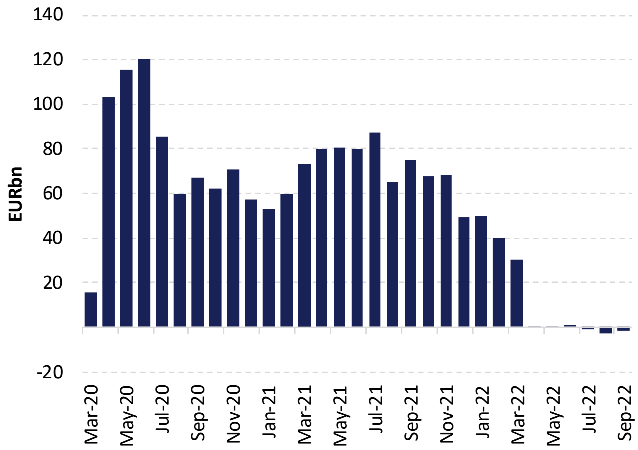


	Oct-21	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	∑
PEPP	67,855	68,045	49,375	50,113	40,184	30,214	-4	-10	12	-722	-2,813	-1,505	300,744

Weekly purchases



Development of PEPP volume

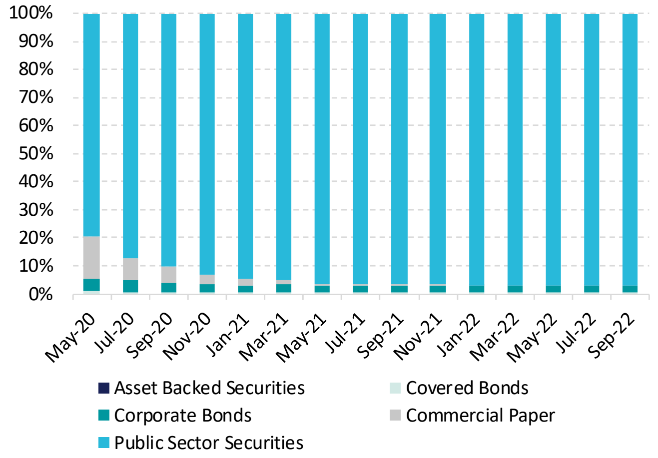


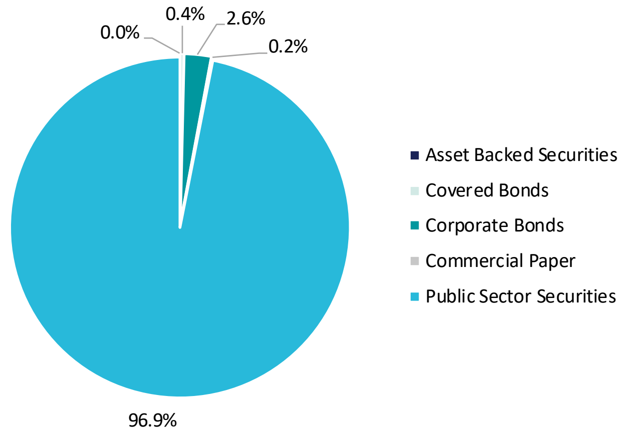
Source: ECB, Bloomberg, NORD/LB Markets Strategy & Floor Research

Holdings under the PEPP (in EURm)

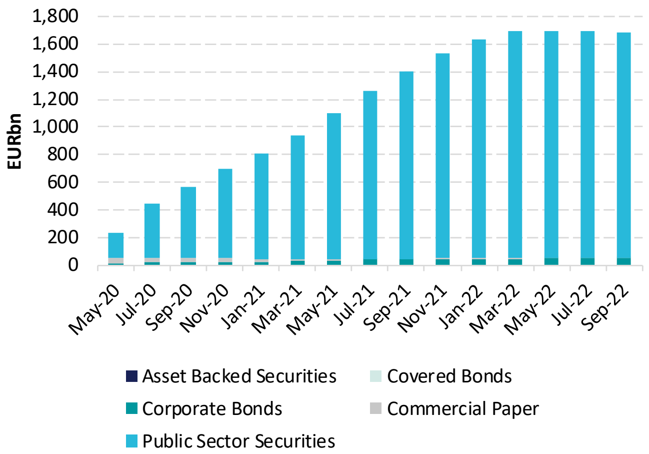
	Asset-backed Securities	Covered Bonds	Corporate Bonds	Commercial Paper	Public Sector Securities	PEPP
Jul-22	0	6,062	42,814	3,322	1,639,774	1,691,971
Sep-22	0	6,056	43,233	2,871	1,631,176	1,683,336
Δ (net purchases)	0	0	+453	-450	-4,320	-4,317

Portfolio structure

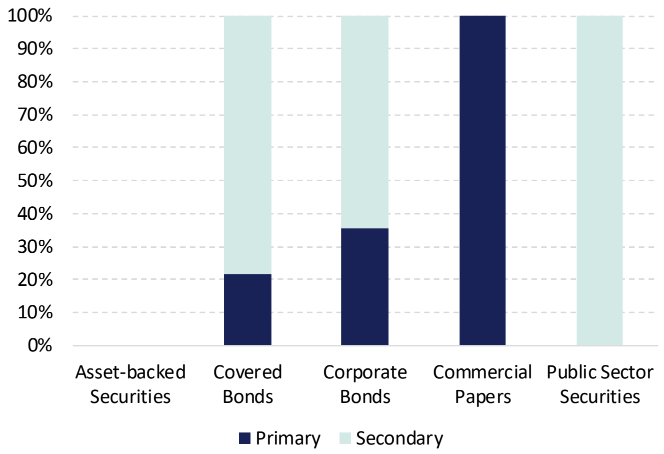




Portfolio development



Share of primary and secondary market holdings



Breakdown of private sector securities under the PEPP

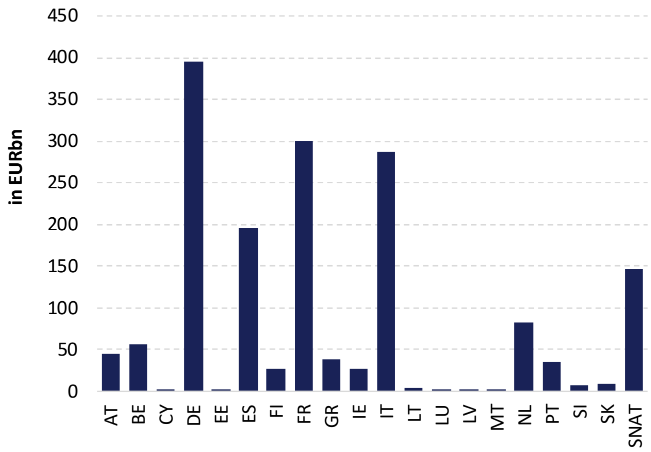
Sep-22	Asset-backed securities		Covered bonds		Corporate bonds		Commercial paper	
	Primary	Secondary	Primary	Secondary	Primary	Secondary	Primary	Secondary
Holdings in EURm	0	0	1,298	4,758	15,407	27,826	2,873	0
Share	0.0%	0.0%	21.4%	78.6%	35.6%	64.4%	100.0%	0.0%

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

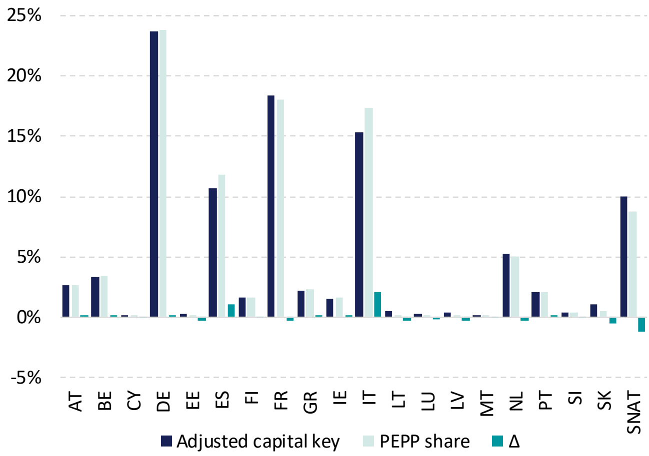
Breakdown of public sector securities under the PEPP

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



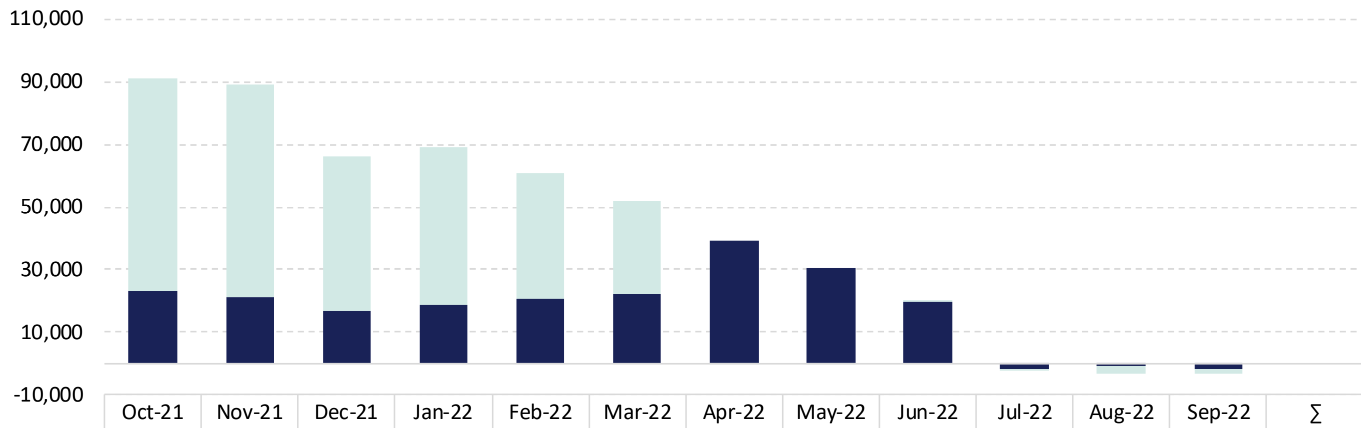
[1] Based on the ECB capital key, adjusted to include supras [2] Based on the adjusted distribution key
[3] Current WAM of public sector securities holdings under the PEPP [4] WAM of eligible universe of public sector securities holdings under the PEPP
Source: ECB, Bloomberg, NORD/LB Markets Strategy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

Aggregated purchase activity under APP and PEPP

Holdings (in EURm)

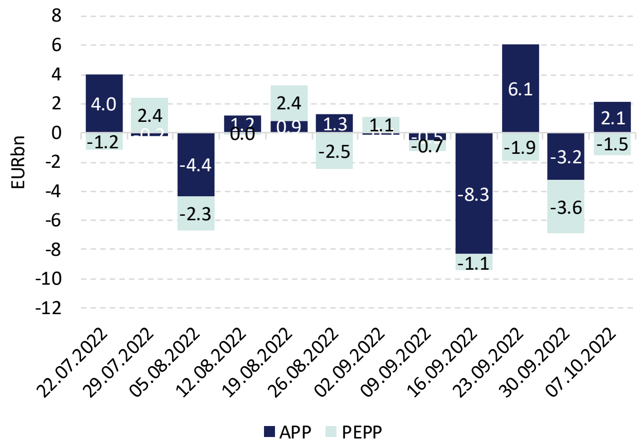
	APP	PEPP	APP & PEPP
Aug-22	3,262,729	1,714,539	4,977,268
Sep-22	3,256,302	1,713,035	4,969,337
Δ	-1,838	-1,505	-3,343

Monthly net purchases (in EURm)

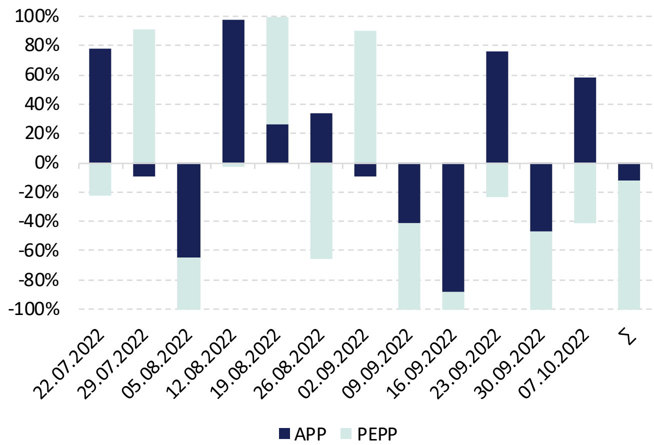


	Oct-21	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	∑
∑	90,872	89,245	65,971	68,951	60,882	52,143	39,393	30,222	19,734	-2,481	-3,469	-3,343	508,120
PEPP	67,855	68,045	49,375	50,113	40,184	30,214	-4	-10	12	-722	-2,813	-1,505	300,744
APP	23,017	21,200	16,596	18,838	20,698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

Weekly purchases



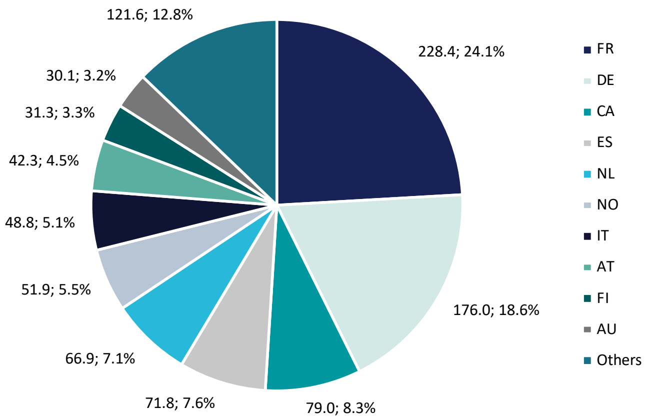
Distribution of weekly purchases



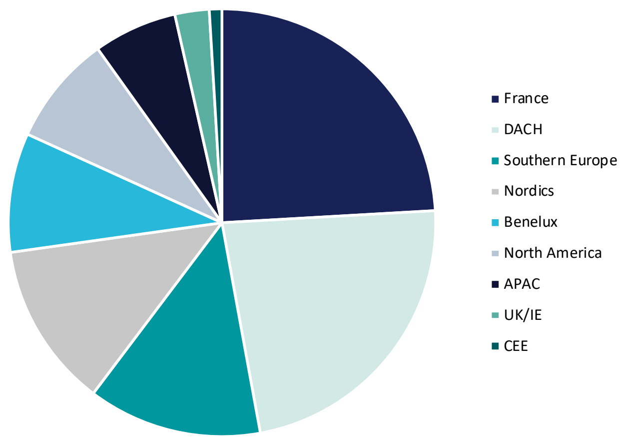
Source: ECB, Bloomberg, NORD/LB Markets Strategy & Floor Research

Charts & Figures
Covered Bonds

EUR benchmark volume by country (in EURbn)



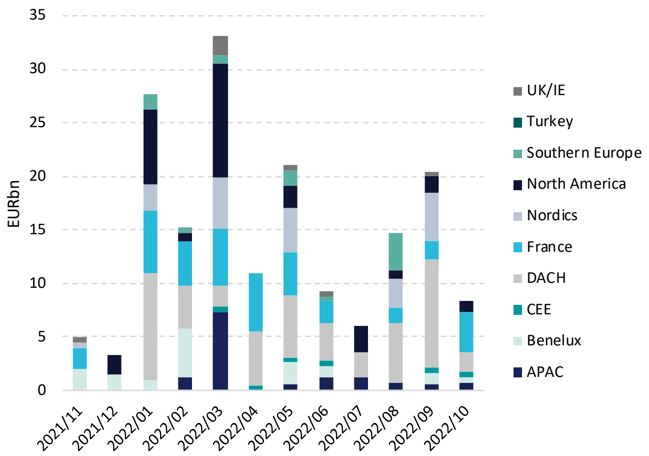
EUR benchmark volume by region (in EURbn)



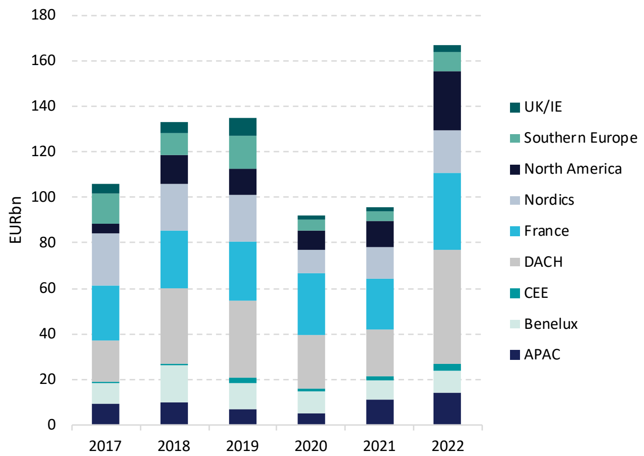
Top-10 jurisdictions

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	228.4	220	14	0.95	10.0	5.4	0.89
2	DE	176.0	251	25	0.64	8.4	4.5	0.60
3	CA	79.0	61	0	1.25	5.7	3.1	0.41
4	ES	71.8	57	5	1.15	11.7	3.7	1.74
5	NL	66.9	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	42.3	75	3	0.56	9.2	5.8	0.77
9	FI	31.3	33	2	0.95	7.6	3.7	0.51
10	AU	30.1	31	0	0.97	8.1	3.9	0.91

EUR benchmark issue volume by month

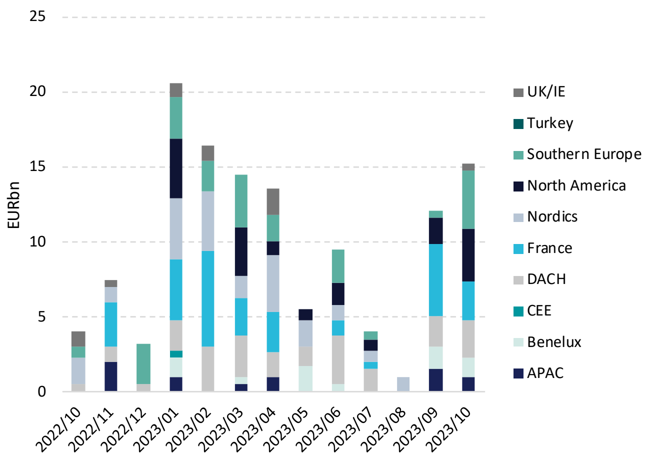


EUR benchmark issue volume by year

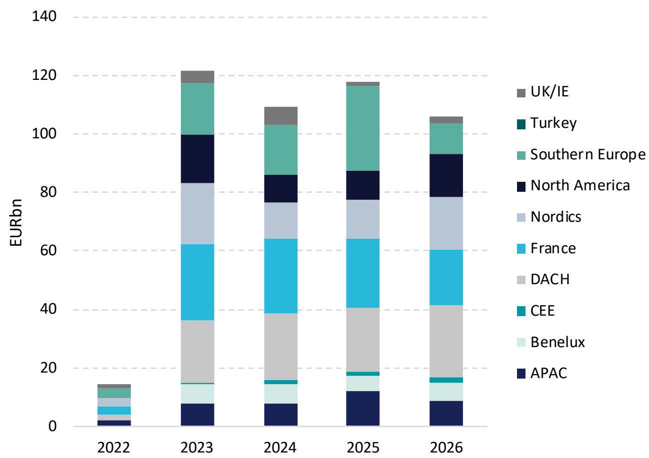


Source: Market data, Bloomberg, NORD/LB Markets Strategy & Floor Research

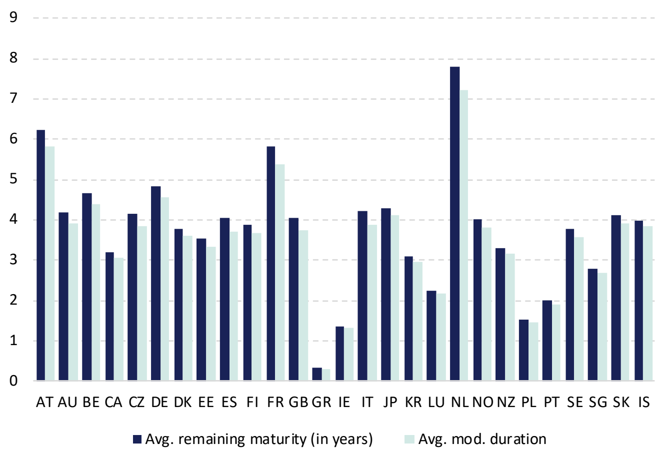
EUR benchmark maturities by month



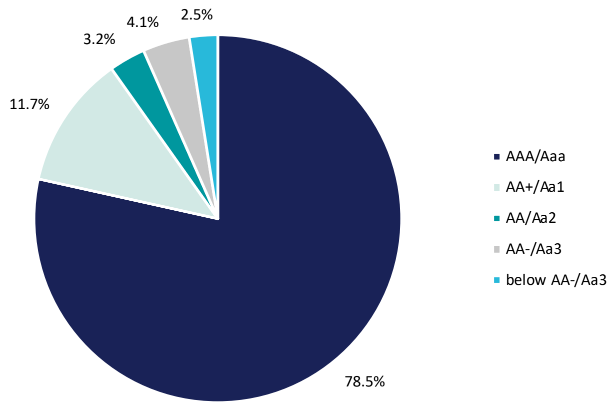
EUR benchmark maturities by year



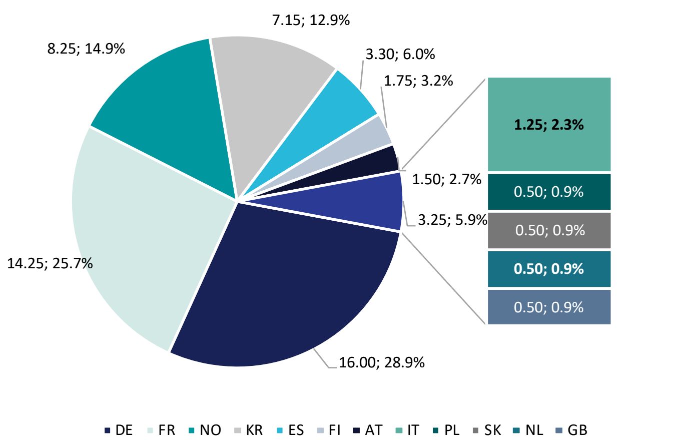
Modified duration and time to maturity by country



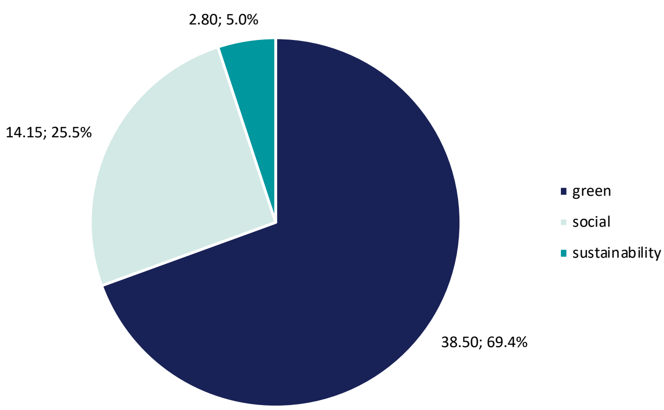
Rating distribution (volume weighted)



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

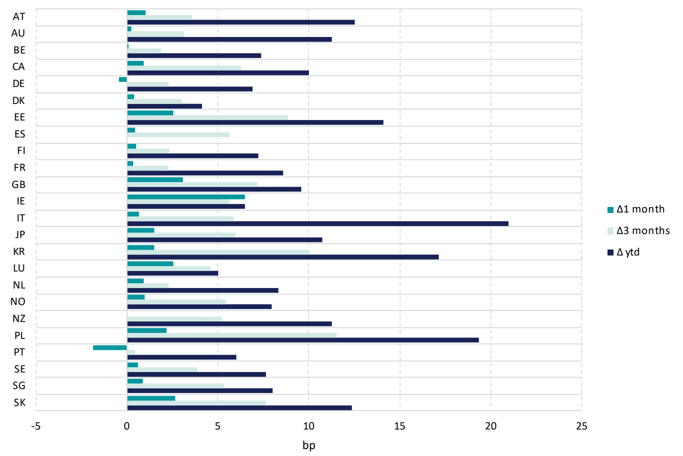


EUR benchmark volume (ESG) by type (in EURbn)

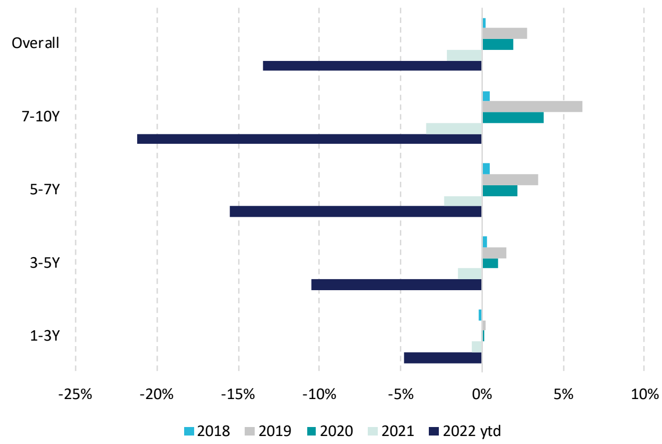


Source: Market data, Bloomberg, NORD/LB Markets Strategy & Floor Research

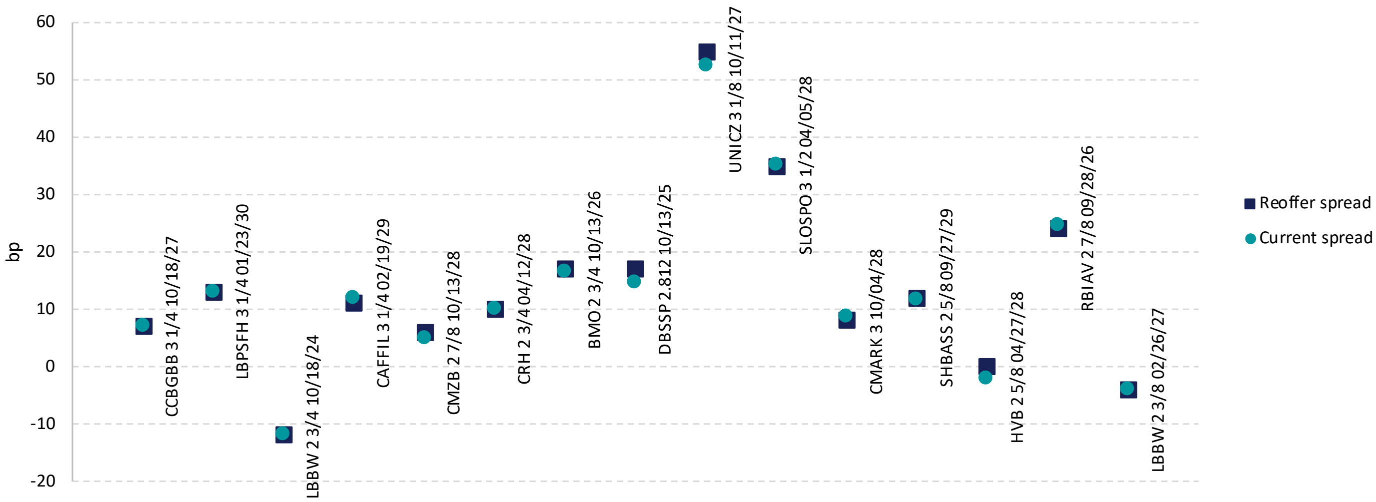
Spread development by country



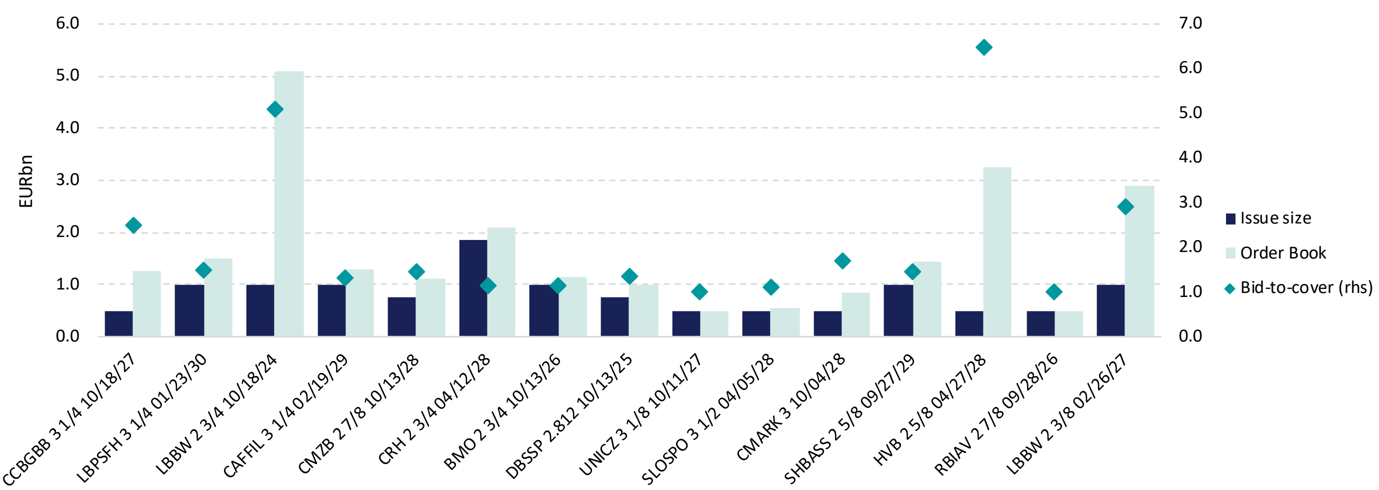
Covered bond performance (Total return)



Spread development (last 15 issues)



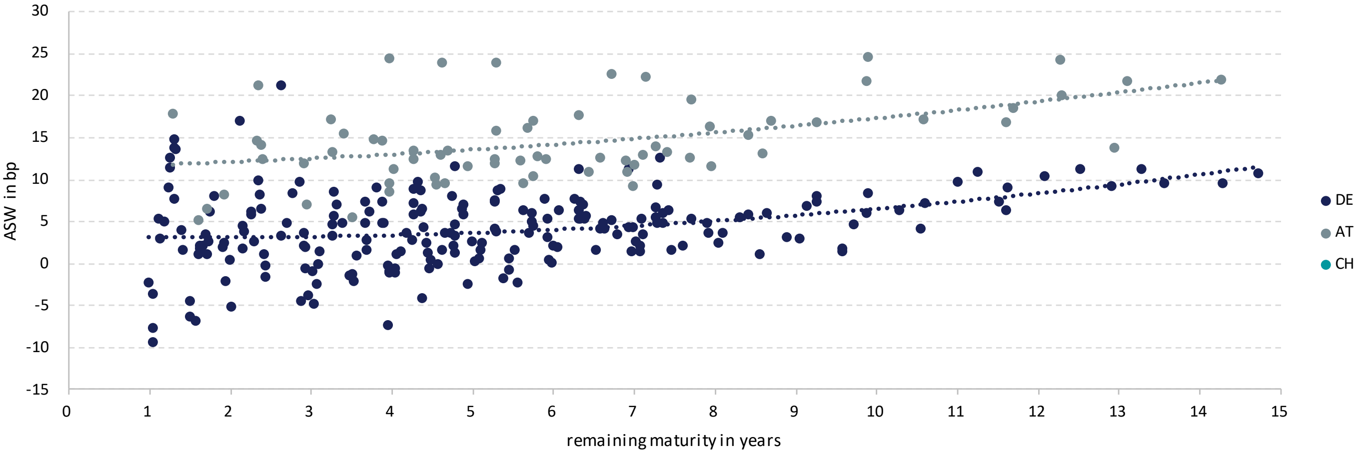
Order books (last 15 issues)



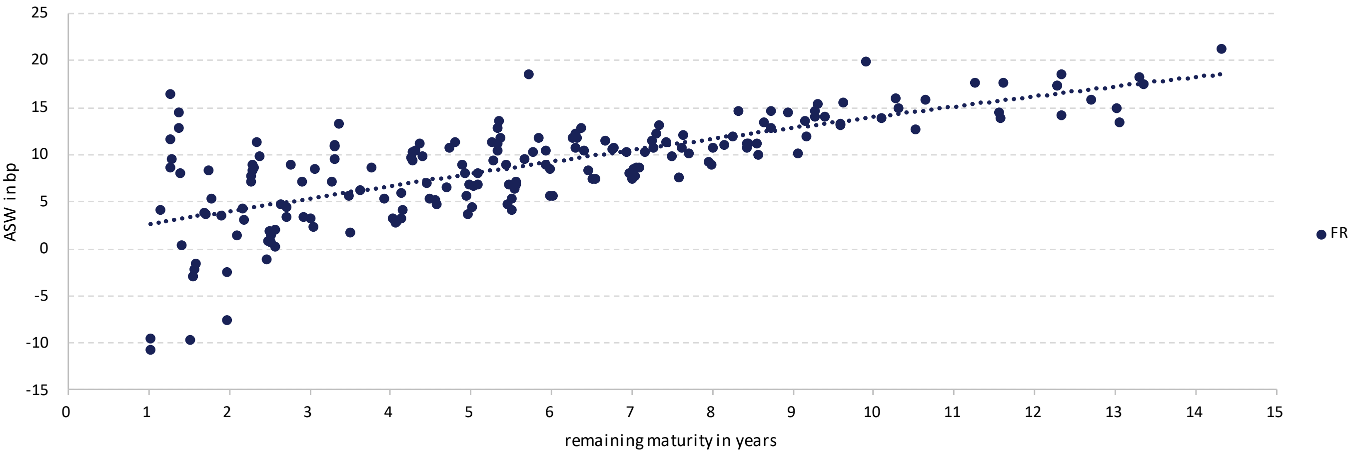
Source: Market data, Bloomberg, NORD/LB Markets Strategy & Floor Research

Spread overview[1]

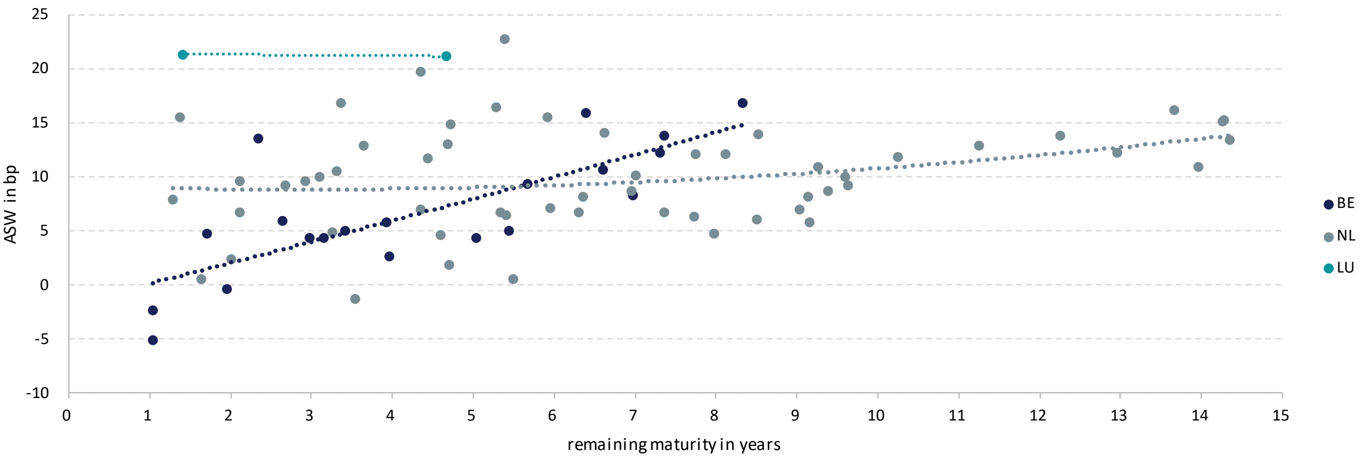
DACH



France

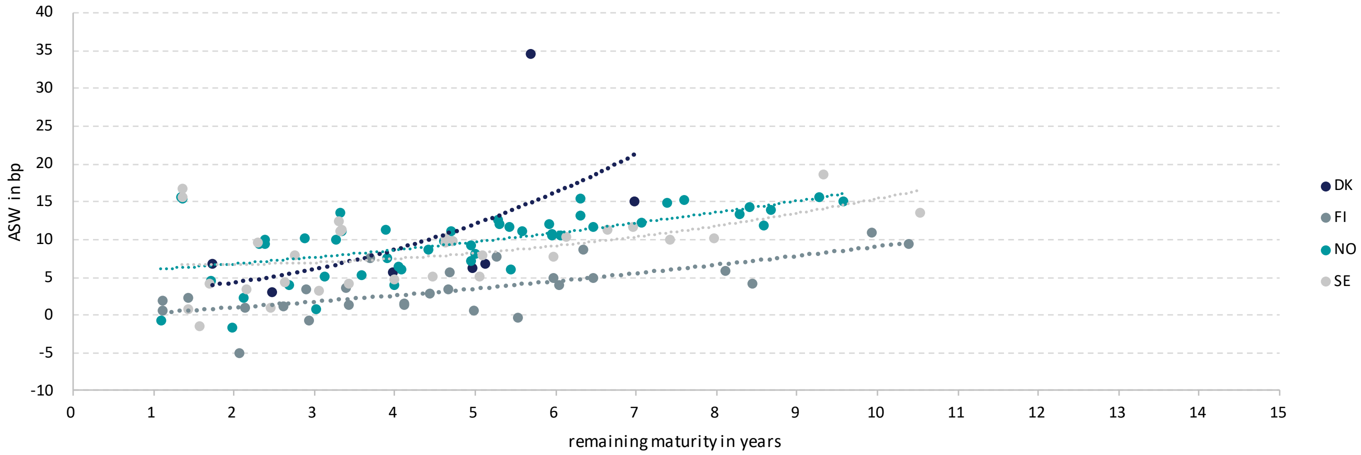


Benelux

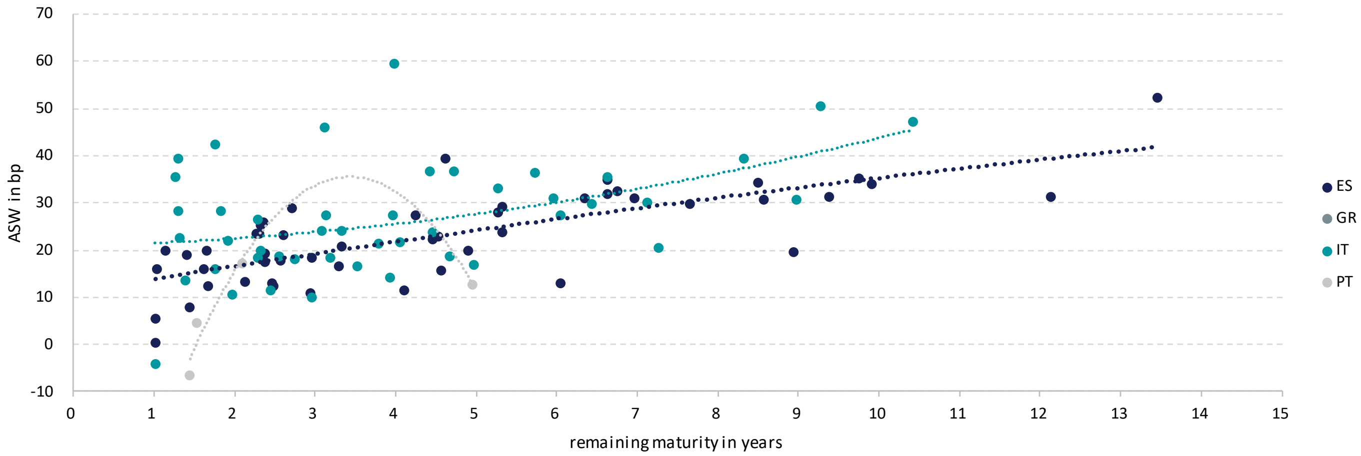


Source: Market data, Bloomberg, NORD/LB Markets Strategy & Floor Research [1]Time to maturity 1 ≤ y ≤ 15

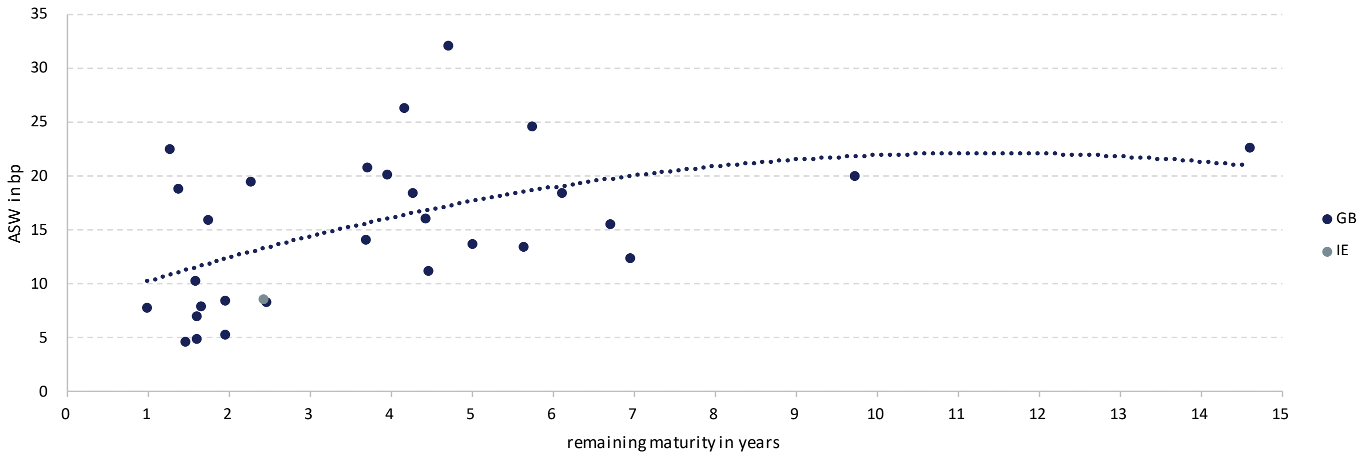
Nordics



Southern Europe

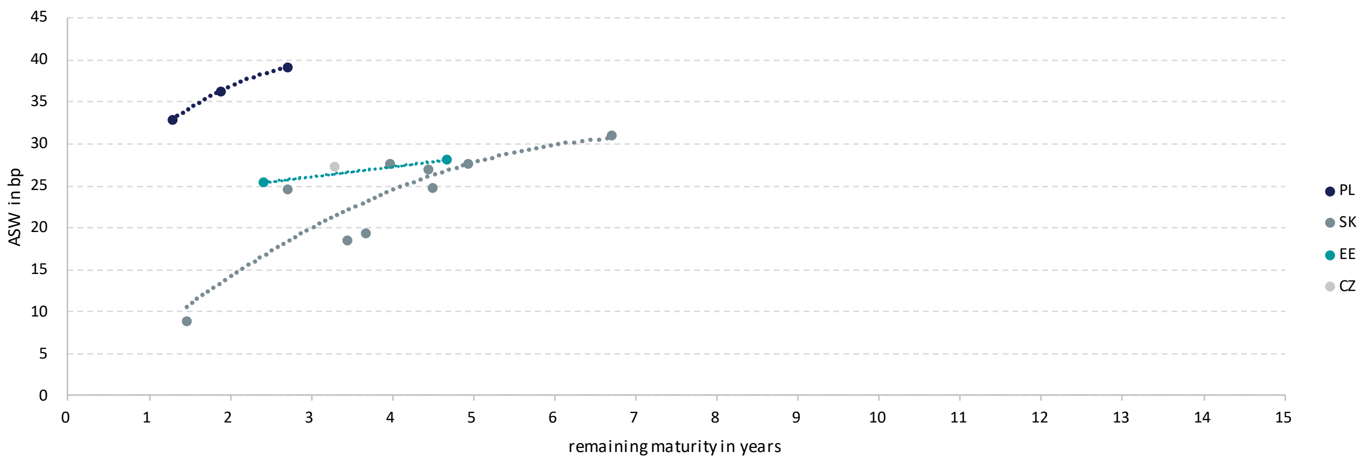


UK/IE

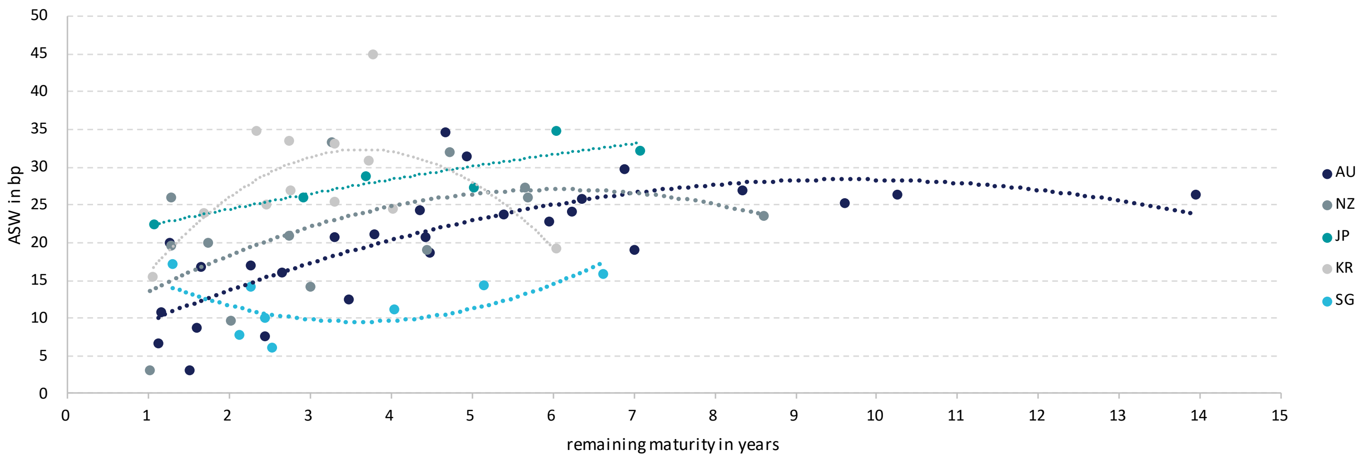


Source: Market data, Bloomberg, NORD/LB Markets Strategy & Floor Research

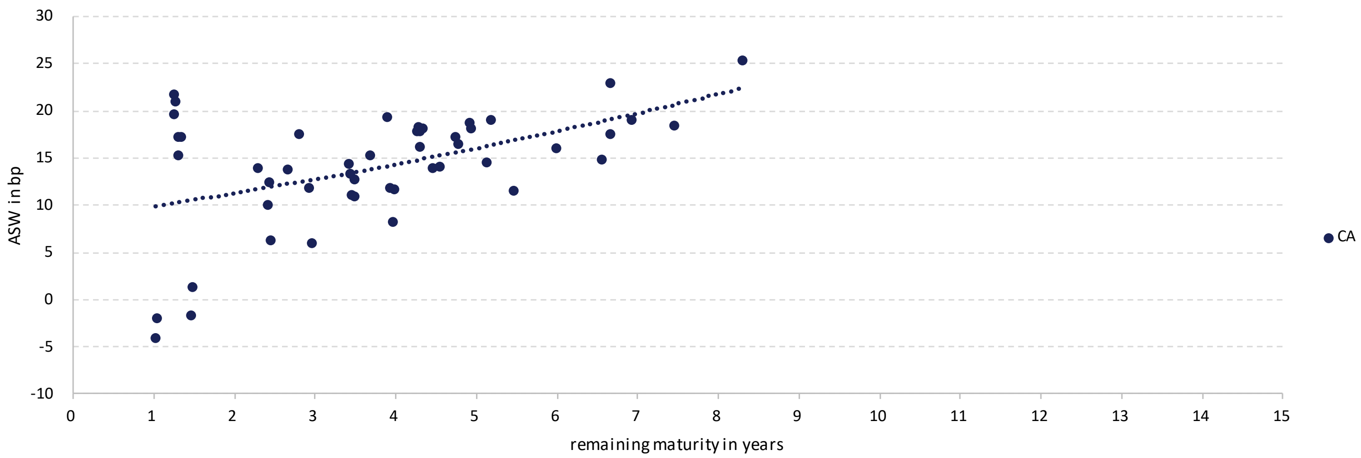
CEE



APAC



North America

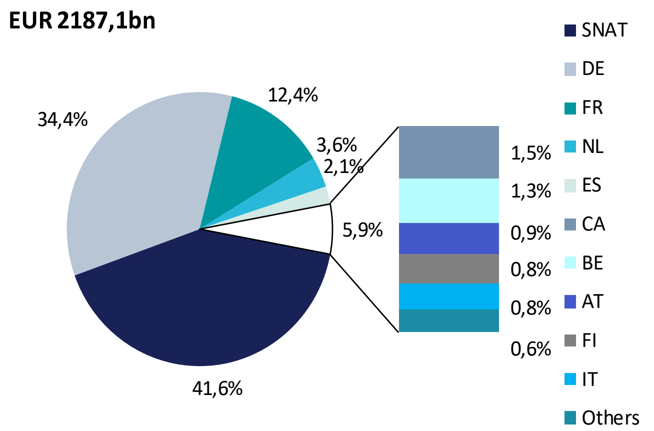


Source: Market data, Bloomberg, NORD/LB Markets Strategy & Floor Research

NORD/LB

Charts & Figures
SSA/Public Issuers

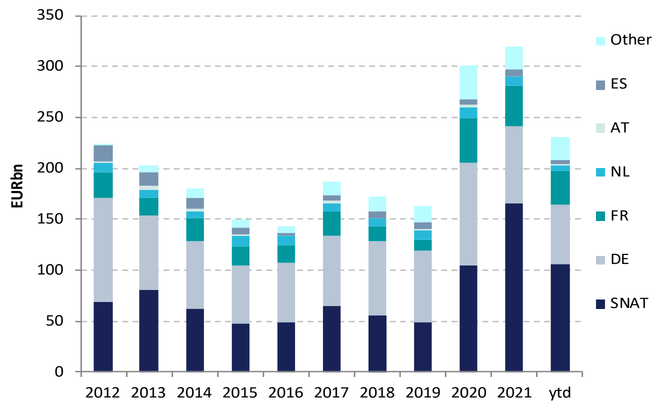
Outstanding volume (bmk)



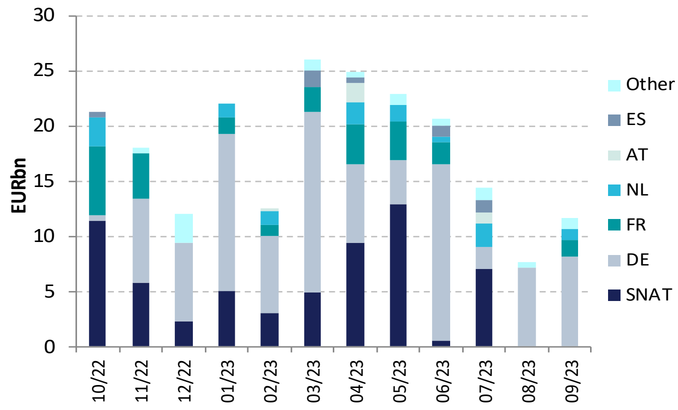
Top 10 countries (bmk)

Country	Vol. (€bn)	No. of bonds	ØVol. (€bn)	Vol. weight. ØMod. Dur.
SNAT	909,2	218	4,2	8,1
DE	752,7	562	1,3	6,3
FR	272,0	183	1,5	6,2
NL	78,8	68	1,2	6,5
ES	45,6	60	0,8	4,8
CA	32,6	23	1,4	4,8
BE	27,5	31	0,9	12,0
AT	19,8	23	0,9	4,7
FI	18,2	22	0,8	5,6
IT	16,8	20	0,8	5,0

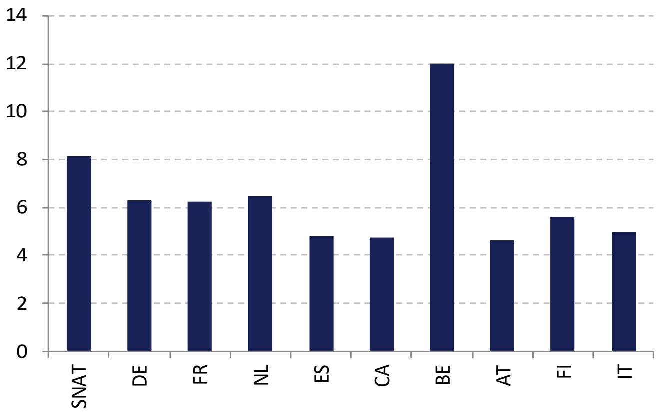
Issue volume by year (bmk)



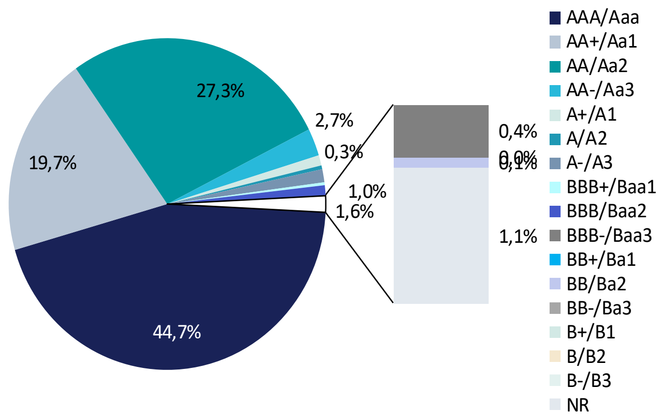
Maturities next 12 months (bmk)



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

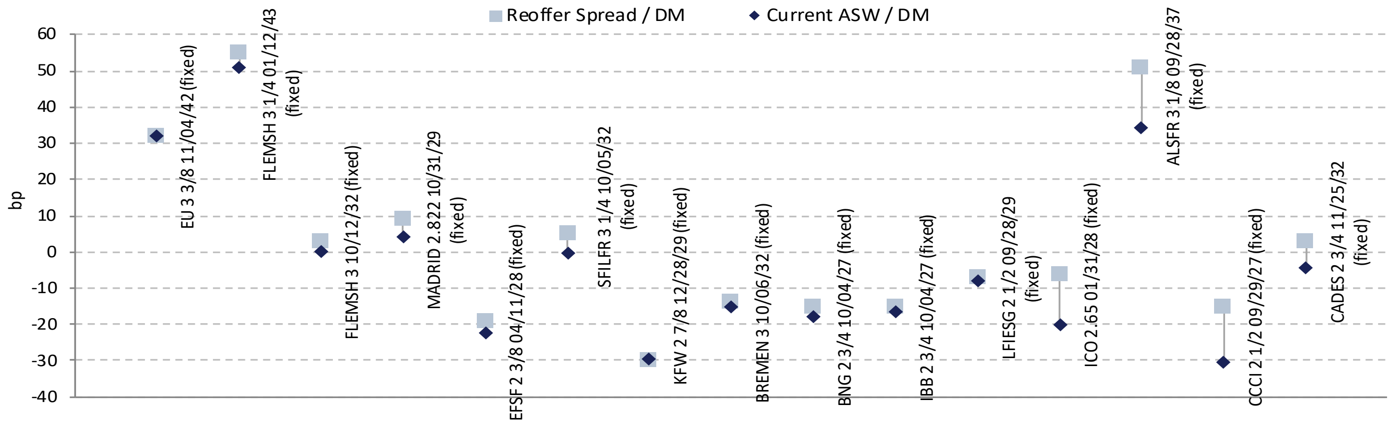


Rating distribution (vol. weighted)

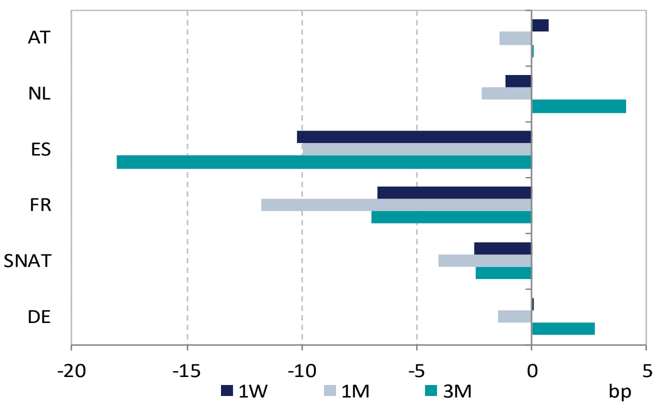


Source: Bloomberg, NORD/LB Markets Strategy & Floor Research

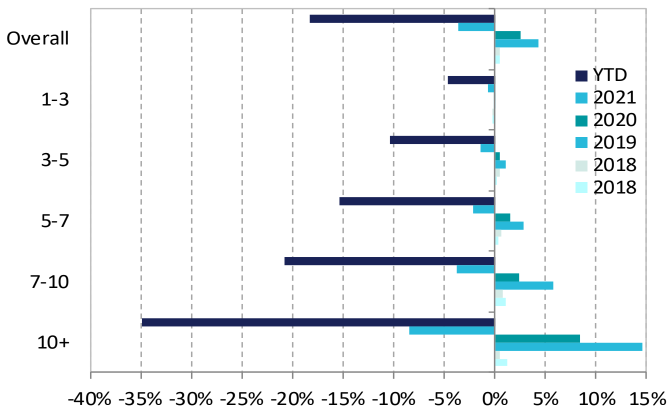
Spread development (last 15 issues)



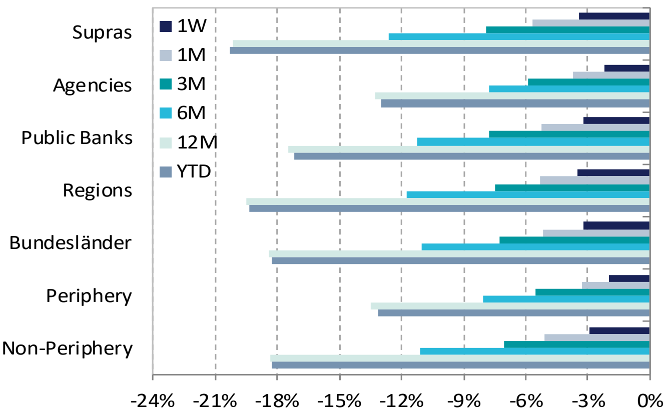
Spread development by country



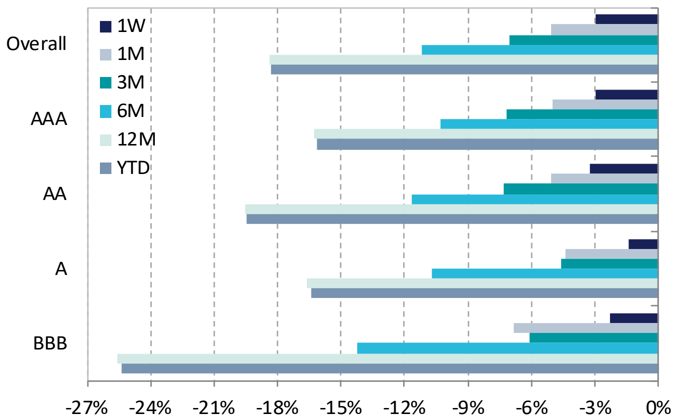
Performance (total return)



Performance (total return) by segments

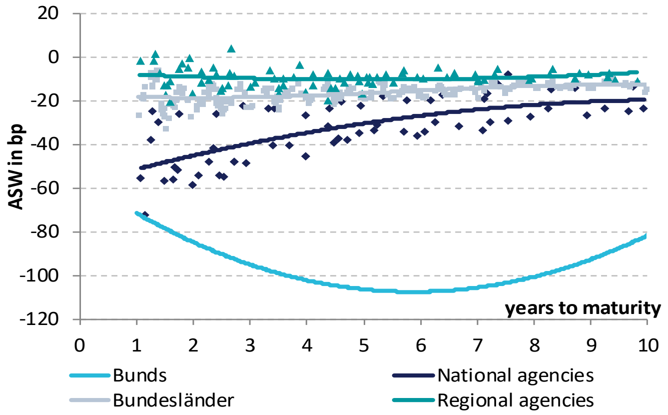


Performance (total return) by rating

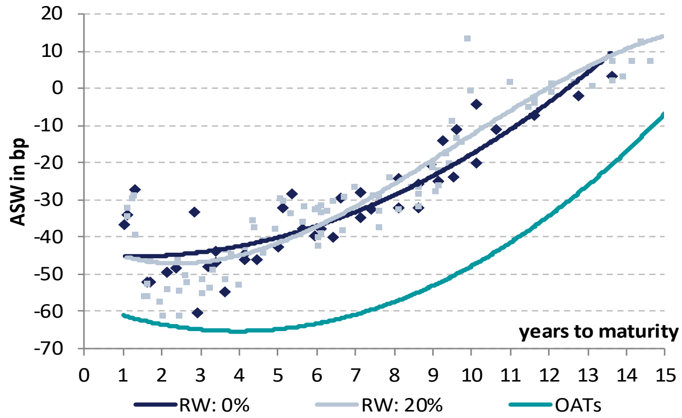


Source: Bloomberg, NORD/LB Markets Strategy & Floor Research

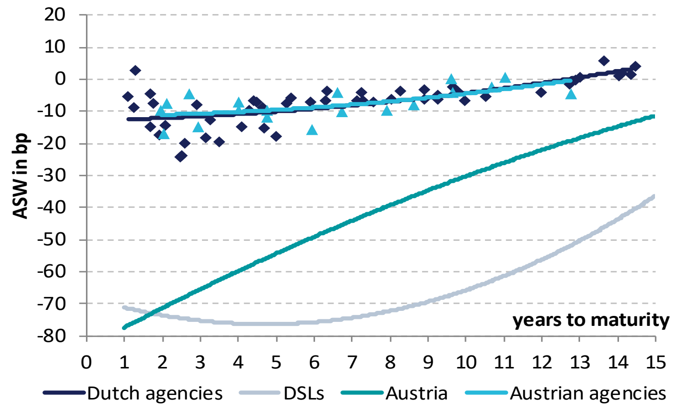
Germany (by segments)



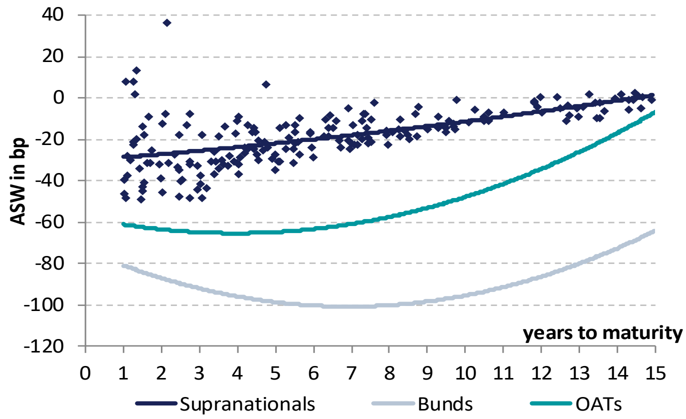
France (by risk weight)



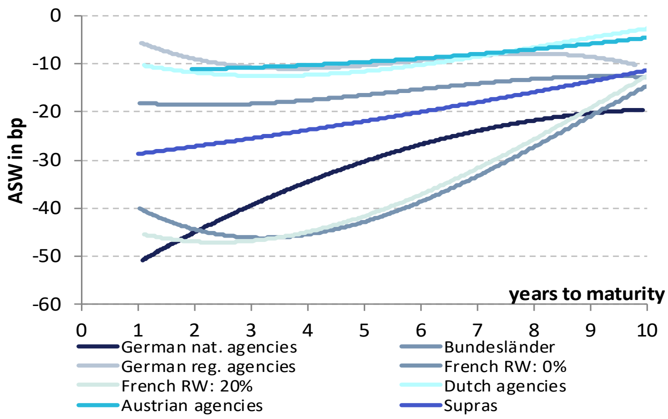
Netherlands & Austria



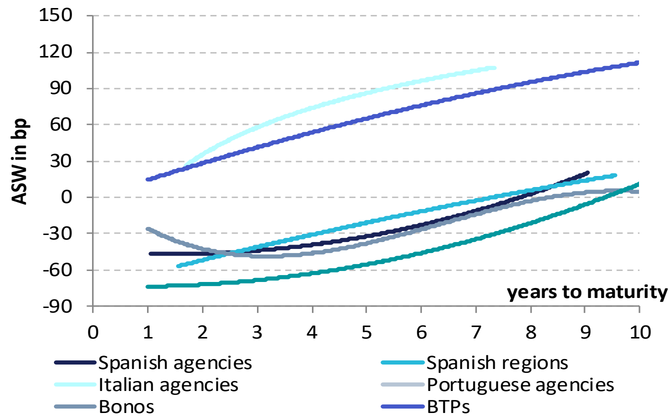
Supranationals



Core



Periphery



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

NORD/LB

Appendix
Overview of latest Covered Bond & SSA View editions

Publication	Topics
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
16/2022 ♦ 11 May	▪ Focus on covered bond jurisdictions: a look at Austria ▪ Update on DEUSTD – Joint German cities (bond No. 1)
15/2022 ♦ 04 May	▪ Focus on covered bond jurisdictions: Spotlight on Sweden ▪ ESG covered bonds from Germany: DKB issues social Pfandbrief in the form of a "Berlin Social Housing Bond" ▪ Issuer Guide SSA 2022: The Spanish agency market

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
Contacts at NORD/LB

Markets Strategy & Floor Research

Jan-Phillipp Hensing
SSA/Public Issuers

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

Dr Frederik Kunze
Covered Bonds/Banks

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

Melanie Kiene, CIIA
Covered Bonds/Banks

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

Dr Norman Rudschuck, CIIA
SSA/Public Issuers

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

Sales

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

Trading

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

Origination & Syndicate

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

Sales Wholesale Customers

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

Treasury

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

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