Covered Bond & SSA View

NORD/LB Markets Strategy & Floor Research

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Marketing communication (see disclaimer on the last pages)

Agenda

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Market overview
Covered Bonds

Authors: Dr Frederik Kunze // Stefan Rahaus

Primary market: Expect the unexpected!

In our view, there have been at least two surprising developments in relation to the covered bond segment over the past few trading days. Initially, the Eurosystem was very resolute in terms of moving away from primary market purchases and focusing on the secondary market. Clearly, the ECB has limited itself to an order share of just 10% of the deal size after just a few February trading days. Admittedly, this has come as a surprise to us. However, the wording of the parameterisation of APP reinvestments is now slightly clearer, with a figure of 0% now a distinct possibility for March. But something that is at least as surprising, if not a little more, is the receptiveness of the primary market. Apparently unaffected by the "ECB withdrawal", there have been a number of successful placements over the past five trading days, which have again even been issued close to fair value, i.e. with very marginal new issue premiums. Even at the long end, new issue premiums have tended to be lower than in January, so that the market is receptive here too, despite the high volume of deals. The extreme preponderance of EMU deals is also striking. Of the 16 EUR benchmarks placed over the past five trading days, only one (UNICZ) did not come from issuers from the common currency area. The anticipatory effects we expected to see in order to benefit from the ECB order have certainly materialised. Non-euro countries initially seem to be waiting for this wave to pass by.

Issuer	Country	Timing	ISIN	Maturity	Size	Spread	Rating	ESG
UniCredit Bank Austria	AT	14.02.	AT000B049945	6.6y	0.75bn	ms +26bp	- / Aaa / -	X
KBC Bank	BE	14.02.	BE0002924059	4.0y	1.00bn	ms +6bp	AAA / Aaa / -	-
Norddeutsche LB	DE	14.02.	DE000NLB4RJ4	3.0y	0.50bn	ms -1bp	- / Aa1 / -	-
UniCredit Bank	DE	13.02.	DE000HV2AZG5	2.5y	1.25bn	ms -7bp	- / Aaa / -	-
Credit Mutuel SFH	FR	13.02.	FR001400FZ24	4.3y	1.75bn	ms +15bp	AAA/Aaa/AAA	-
Credit Mutuel SFH	FR	13.02.	FR001400FZ32	10.0y	0.75bn	ms +32bp	AAA/Aaa/AAA	-
Societe Generale SFH	FR	13.02.	FR001400FZ73	3.0y	0.75bn	ms -1bp	AAA / Aaa / -	-
Societe Generale SFH	FR	13.02.	FR001400FZ81	9.0y	1.50bn	ms +27bp	AAA / Aaa / -	-
Nordea Kiinnitysluottop.	FI	13.02.	XS2589317697	7.0y	1.00bn	ms +16bp	- / Aaa / -	-
CRH	FR	10.02.	FR001400FXU8	10.0y	1.25bn	ms +28bp	AAA / Aaa / -	-
Cajamar Caja Rural	ES	09.02.	ES0422714172	5.0y	0.75bn	ms +50bp	- / - / AA	-
BPCE SFH	FR	09.02.	FR001400FWP0	6.7y	1.50bn	ms +23bp	- / Aaa / AAA	-
ING Bank	NL	08.02.	XS2585966505	10.0y	2.00bn	ms +19bp	AAA/Aaa/AAA	-
ING Bank	NL	08.02.	XS2585966257	3.0y	2.00bn	ms -2bp	AAA/Aaa/AAA	-
UniCredit Bank Czech&Sl	CZ	08.02.	XS2585977882	3.0y	0.50bn	ms +60bp	- / Aa2 / -	-
Aareal Bank	DE	08.02.	DE000AAR0389	3.0y	0.75bn	ms +3bp	- / Aaa / -	-

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

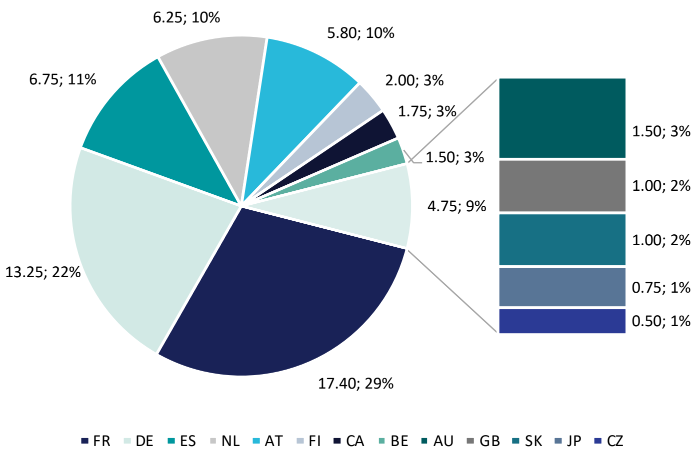
Past five trading days generate issuance activity totalling EUR 18.0bn in 16 deals

The expected high levels of dynamic momentum on the primary market continued over the past week. In total, EUR 18.0bn split across 16 separate transactions was successfully placed with investors, including three dual tranches (INTNED, SOCSFH and CMCICB) and the first green covered bond in the month of February (BACA). Deals with terms to maturity of 9-10y also generated sizeable order books and were, in some cases, even able to achieve bid-to-cover ratios in excess of 2.0x (CRH). With regard to oversubscription, the UNICZ issue was the most successful deal with a bid-to-cover ratio of 5.0x, followed by the new 3y NDB Pfandbrief with a value of 4.0x. One noteworthy aspect of the past five trading days was the average issue size, which at EUR 1.13bn was well above the average volume seen so far in 2023 (EUR 850m).

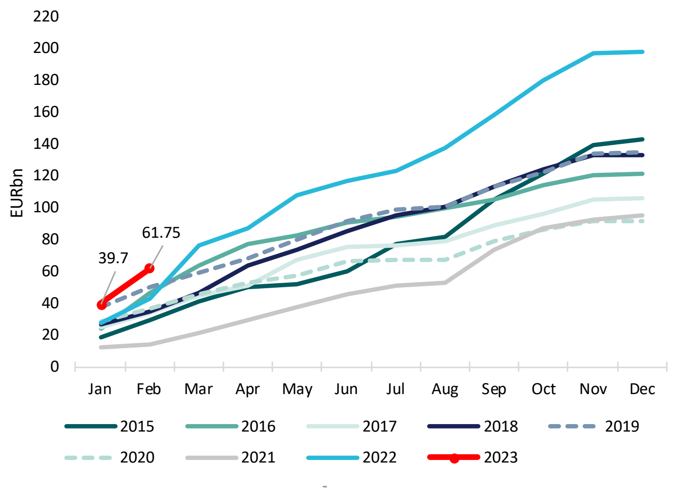
Despite the record volume, we have revised our issuance forecast downwards

On the EUR benchmark primary market, we have recorded 65 transactions with a total volume of EUR 61.75bn from 13 separate jurisdictions so far in 2023. Despite the record-breaking momentum at the start of the year, it is striking that some regions have been under-represented in the market for new issuances compared with previous years, with a particular emphasis here on banks from the Nordics (in fact, Norwegian issuers have not been active at all so far in 2023), from the APAC region and from Canada, for example. We had expected a higher issue volume from Canadian issuers in particular and are therefore revising our forecast for Canada downwards from EUR 25.0bn to EUR 17.0bn. Issuance activity in 2022, which was well above average in Canada, has evidently ensured a sufficient degree of pre-funding into the new year, while demand for residential mortgage loans has recently fallen significantly due to higher interest rates. We are now forecasting an issue volume for EUR benchmarks of EUR 189.5bn in 2023, which would result in positive net supply of EUR 74.0bn on the basis of maturities falling due totalling EUR 115.5bn. With a new issue volume of EUR 61.75bn in the year to date (ytd), in total 32.6% of our updated issuance forecast has therefore already been placed with investors. Over the next few days in particular, we expect to see continued lively primary market activities. In view of the ECB's quantitative tightening policy, things should calm down significantly in the second half of 2023.

EUR BMK primary market: Issues in 2023 (EUR bn)



EUR BMK primary market: Trend 2015-2023 ytd



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

Secondary market: Clicking into gear

The combination of an active primary market and the Eurosystem's more pronounced focus on the secondary market makes for more lively activity here. Recently, spreads have been gradually narrowing. Investors are increasingly concentrating on the secondary market, not least due to the fact that some of the new issues are significantly oversub-scribed, while holdings in the trading books appear to still be on the low side. Overall, however, the focus remains on shorter maturities, which is reflected, among other as-pects, by the trend towards improved performance after the issue compared with long maturities. It is also worth noting the development of new issues from “second tier” ju-risdictions, which were placed on the market with comparatively high new issue premi-ums. Covered bonds from SUMIBK, UNICZ, and from the Spanish issuers SANTAN and CAJAMA, for example, which had a fairly high new issue premium, narrowed in secondary market trading – in some cases by double digit amounts. Despite the strikingly positive trend, we do not yet see any sustained trend reversal in secondary spreads and expect that the ongoing flood of issues will continue to impair the spread level until the middle of the year at least.

Market overview
SSA/Public Issuers

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

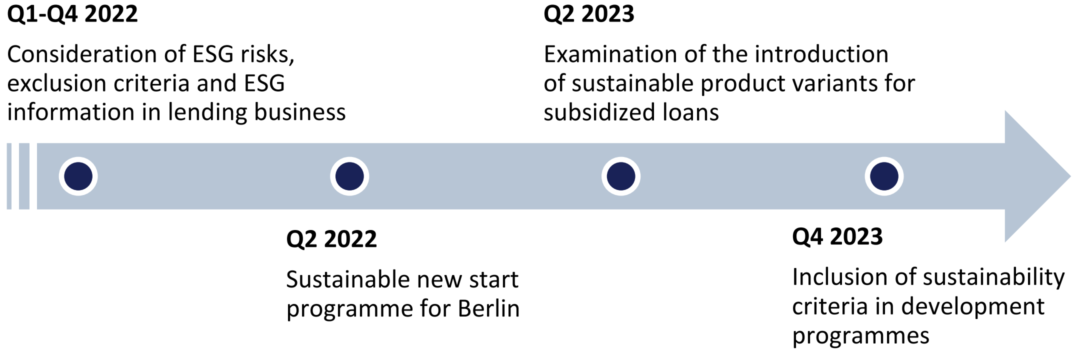
Berlin issues first sustainability bond

On 3 February, Berlin became the fourth member of the group of German Laender to have issued ESG bonds. We had mentioned this imminent development at the beginning of January against the backdrop of discussions with investors – during which the new sustainable finance strategy framework was presented – and we finally commented on this deal in the previous edition of our weekly publication. The press release referred to the particularly strong demand, which exceeded the amount offered [EUR 750m (WNG)] by seven times at its peak. When it came to allocation, institutional investors regarded as active in the ESG sectors fared particularly well, accounting for two thirds of the funds available for investment. According to Daniel Wesener, the Senator for Finance, further ESG issues can be expected in future; these are also likely to appeal to retail investors because of their denomination of EUR 1,000 each. "The phenomenal success of Berlin's first sustainability bond on the market shows that we have adopted the right course", Wesener added. The issuance proceeds will be applied to a total of 36 projects from budget years 2020 to 2022 which make a relevant contribution to at least one of the UN's 17 Sustainable Development Goals. The Sustainability Bond Framework, which was finalised at the end of 2022, is based on the established ICMA Principles and Guidelines. The paramount goal is the sustainable transformation of the capital city in the context of Agenda 2030.

Investitionsbank Berlin will support the sustainable transformation

The above-mentioned framework developed by the State of Berlin also refers to the future focus of the state-owned investment bank, which is expected to play a constructive role by providing sustainable financing, under the item "Finance sustainable transformation". For instance, it envisages financial resources for sustainable housing and high-quality jobs in future-oriented sectors and additional investment on the road to a carbon-neutral city. A figure of EUR 15bn worth of sustainable funding is to be provided for this purpose up to 2030. The inclusion of sustainability criteria in the funding programmes (funds to support property, economic development and the labour market) is to be finalised by Q4 2023.

Timescale for the implementation of ESG in the IBB's promotional and lending business



Source: Federal State of Berlin, Investitionsbank Berlin, NORD/LB Markets Strategy & Floor Research

KfW revises sector guidelines for carbon-intensive sectors

At the end of January, KfW's press office announced the revision of its six in-house sector guidelines to ensure that its new commitments are managed in compliance with the Paris Agreement to the public. Specifically, this entails Group-wide minimum requirements for new commitments in promotional business and lending that are consistent with the Paris Climate Agreement. Having been implemented in house, these requirements are already effective. Work on developing the guidelines started in 2021 on the basis of the internationally accepted "Sustainable Development Scenario" produced by the International Energy Agency (IEA), which originally aimed to limit the increase in global temperatures to 1.65°C. The KfW Group subsequently adopted a more stringent approach and amended its benchmarks in the sector guidelines to the Paris-compliant 1.5°C climate goal a year later. In doing so, it was guided by the IEA's "Net Zero by 2050" scenario and the Poseidon Principles, an internationally recognised framework for responsible ship financing developed by the Global Maritime Forum in the area of shipping (guideline six). Specifically, the new guidelines comprise six selected carbon-intensive economic sectors that account for a significant share of KfW's total commitments. For each guideline, the associated documentation contains individual qualitative and quantitative requirements that become more stringent in some cases up to 2050. They also make a distinction between transformative and transitional technologies. For example, according to guideline three, the building sector, funding for new buildings that comply with an efficiency rating of 55 (% primary energy requirement) is to be provided up to 2024, while more stringent standards will apply from 2025 to 2050. In the electricity generation sector (guideline four), natural gas and oil/diesel power stations are to be eligible for promotional funding until the end of 2024, but such funding will only be provided for energy generation from sustainable sources such as solar or wind power (and storage of these) from 2025. A brief overview of the new guidelines and their scope is provided below.

Overview of the KfW's new sector guidelines and their scope

Sector	Scope
1. Automotive sector	New financing for drive train-related parts in automotive production as well as research and development in the area of transformative and transitional technologies (in vehicle segments <3.5t.).
2. Iron and steel production	New financing in the area of crude steel production technologies in iron and steel production. General corporate financing for iron and steel producers is excluded.
3. Building sector	New construction, refurbishment and acquisition of residential and non-residential buildings within the European Union, application of the guideline also applies to individual parts of buildings/extensions.
4. Electricity generation sector	Global commitments in the electricity generation sector if the power stations for which funding is provided are designed for feeding into the public integrated grid and power grid and for power stores.
5. Aviation sector	Global commitments for the financing of aircraft for passenger and cargo transportation in aviation including portfolio financing and lease financing.
6. Shipping sector	Specific efficiency requirements must be met for financing the purchase or leasing of new ships in certain "ship type" categories, this applies to "retrofits".

Source: KfW Banking Group, NORD/LB Markets Strategy & Floor Research

Primary market

With a total of 13 new issues, fresh supply and investment opportunities were abundant on the market. We reported on mandates being issued for five deals, for which the books were opened shortly thereafter, in the last issue: Saxony-Anhalt (ticker: SACHAN) raised EUR 500m (WNG) with a ten-year maturity at ms -2bp. Caisse des Dépôts et Consignations (ticker: CDCEPS) also chose a ten-year maturity. The bond in the amount of EUR 1bn was more than eight times oversubscribed with a spread of OAT +29bp. In contrast, the EIB provided a green bond EIB (EUR 5bn) with a five-year maturity at ms -9bp. The spread even tightened by two basis points compared with the guidance of ms -7bp area in response to the high levels of interest (order book: EUR 30.5bn). The Basque Country (autonomous community) (ticker: BASQUE) also opted for a sustainable bond. A total of EUR 700m changed hands at SPGB +21bp (guidance: SPGB +27bp area) for a ten-year maturity. France's Action Logement Services (ticker: ALSFR) also featured on the market with a sustainability bond, raising EUR 1.2bn at OAT +56bp for a 20-year maturity. In the previous edition of our weekly publication, we also looked at the imminent deal from the Japan Bank for International Cooperation (ticker: JBIC). This deal went ahead last Wednesday when the bond worth EUR 1bn was placed on the market at ms +20bp for a 5y maturity; the order book came to EUR 1.8bn. L-Bank (ticker: LBANK) also ventured onto the primary market with an issue worth EUR 1.25bn at ms -7bp for a 5y maturity. Let's stay with the German promotional banks: Rentenbank (ticker: RENTEN) approached investors too, issuing a total of EUR 500m with a 9y maturity at ms -4bp (order book: EUR 800m) in the process. NRW.BANK was also active and raised EUR 500m (6Y) at ms -8bp. Furthermore, the trading week included a sustainable dual tranche: the Belgian region Wallonia (ticker: WALLOO) used this format to raise a total of EUR 1.5bn. The deal included a ten-year tranche (EUR 1bn) at OLO +44bp and a 20-year maturity (EUR 500m) at OLO +45bp. In addition, Lower Saxony issued its third benchmark bond this year: EUR 1.5bn changed hands at ms -9bp over a term of five years. The order book amounted to EUR 2.2bn. Yesterday (Tuesday) the autonomous community of Madrid (ticker: MADRID) followed with a 10y sustainability bond worth EUR 1bn at SPGB +22bp. The second syndicated transaction from the EU was also lined up. Here, two bonds (maturing in 2029 and 2042) were increased by EUR 7bn in total. The combined order books totalled EUR 93bn. Mandates were additionally issued by KUNTA (5Y; green), JFM (5Y, green; EUR 500m WNG; IPT: ms +35bp area) and BGOSK (10Y).

Issuer	Country	Timing	ISIN	Maturity	Size	Spread	Rating	ESG
MADRID	ES	13.02.	ES00001010K8	10.2y	1.00bn	ms +63bp	- / Baa1 / A	X
NRWBK	DE	13.02.	DE000NWB1W36	6.0y	0.50bn	ms -8bp	AAA / Aa1 / AA	-
NIESA	DE	10.02.	DE000A30V877	5.2y	1.50bn	ms -9bp	AAA / - / -	-
WALLOO	BE	08.02.	BE0002923044	20.1y	0.50bn	ms +88bp	- / A3 / -	X
WALLOO	BE	08.02.	BE0002922038	10.3y	1.00bn	ms +49bp	- / A3 / -	X
LBANK	DE	08.02.	DE000A3MQUF0	5.0y	1.25bn	ms -7bp	- / Aaa / AA+	-
RENTEN	DE	08.02.	XS2587748174	9.0y	0.50bn	ms -4bp	AAA / Aaa / AAA	-
JBIC	Other	08.02.	XS2570364138	5.0y	1.00bn	ms +20bp	- / A1 / A+	-
CDCEPS	FR	08.02.	FR001400FTZ5	10.3y	1.00bn	ms +15bp	- / Aa2 / AA	-
ALSFR	FR	07.02.	FR001400FTI1	20.3y	1.20bn	ms +94bp	AA / Aa2 / -	X
BASQUE	ES	07.02.	ES0000106742	10.2y	0.70bn	ms +59bp	A / A3 / -	X
EIB	SNAT	07.02.	XS2587298204	5.4y	5.00bn	ms -9bp	AAA / Aaa / AAA	X
SACHAN	DE	07.02.	DE000A30V9A9	10.0y	0.50bn	ms -2bp	AAA / Aa1 / AA	-

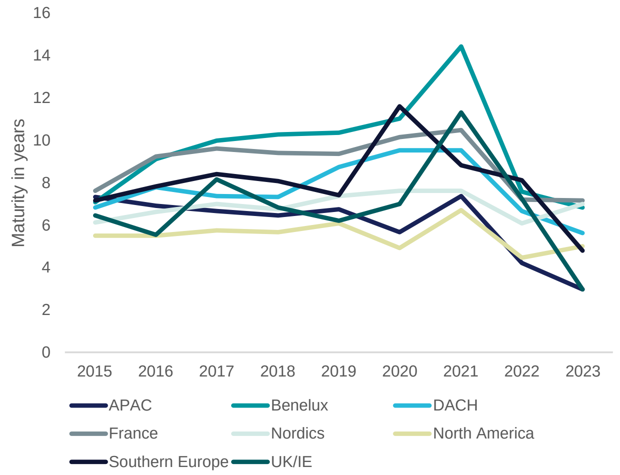
Source: Bloomberg, NORD/LB Markets Strategy & Floor Research (Ratings: Fitch / Moody's / S&P)

Covered Bonds
Maturity premiums on covered bonds
Author: Dr Frederik Kunze

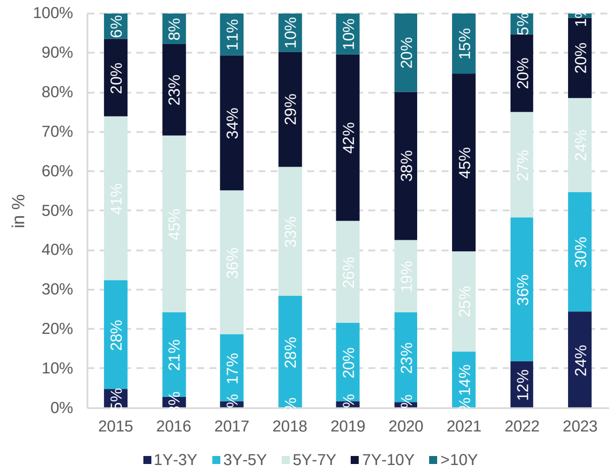
Focus on short maturities on the primary market persists

Within our weekly publication we have already focused several times on the dominance of short maturities among new issues. Looking at the deals placed to date on the market, this "phenomenon" is still apparent across the entire range of regions and jurisdictions. The average terms to maturity of new bonds in 2023 is therefore well below the level of previous years. In this context, however, it must also be noted that the trend towards shorter maturities had already started in 2022. In this respect, the structural change is by no means new and there is no shortage in the first place of reasons for the preponderance of "shorter" maturity segments. Higher yields, uncertainties regarding the ECB's future interest rate hikes and (associated with this) the inverse structure of the EUR swap curve, which constitutes the reference curve for pricing, must be seen as driving forces here. We have also pointed to the fact that a new balance of power must be assumed on the primary market at another point. In this context, issuers are following the preferences of investors with regard to the initial term to maturity. At the same time, it is not the case that there is no demand at all for longer-dated deals. Nevertheless, it is also evident that the price premiums on the secondary market for longer maturities are far higher compared with the short end (e.g. 3y). These market prices characterised by maturity premiums are consequently also having an impact on the primary market and are accordingly reflected in the market parameters for initial guidance, the final reoffer spread and the new issue premiums for longer-dated deals. Subsequently, we would like to examine the subject of term spreads for the EUR benchmark segment in more detail and, in doing so, look at it from the perspective of the issuers.

EUR BMK primary market: maturities (average)



EUR BMK primary market: maturity segments

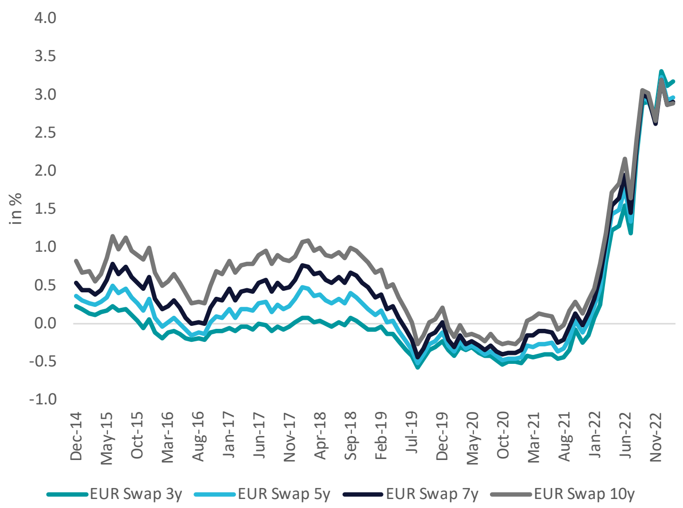


Source: Market data, Bloomberg, NORD/LB Markets Strategy & Floor Research

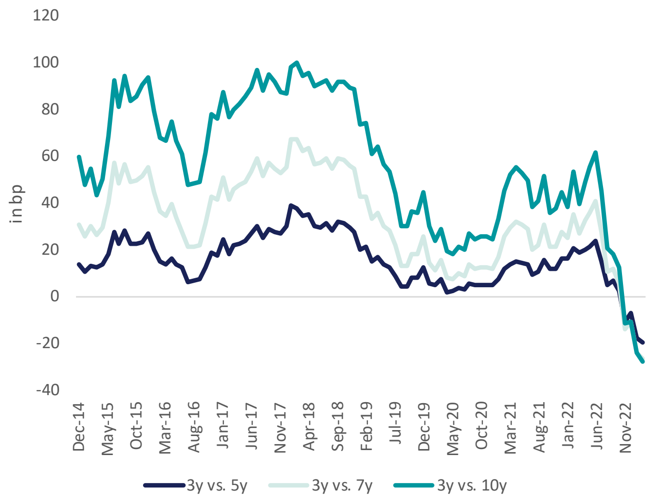
Inverse structure of the EUR swap curve is bothering issuers

The covered bond market does not operate in a vacuum by any means. These days, this is reflected, in particular, by the influence of capital market interest rates on primary market activities. Accordingly, the trend towards shorter maturities can also be explained by the maturity-yield structure for the EUR benchmark sector, for which the EUR swap curve forms the basis as the reference curve in turn. And it can be stated, on a somewhat generalised basis, that investors are demanding compensation for the comparatively low swap rates in the long maturity segment. Any issuer that places a longer-dated bond will pay the higher price in the form of the maturity premium. Here, generic secondary market prices, which indicate a term spread of 13 basis points between Pfandbriefe in the 3y maturity segment and the 10y segment according to our calculations, serve as a benchmark. This premium is of significance in as much as the underlying points on the EUR swap curve are actually not especially relevant for the "pricing success" of the deal for issuers compared with the ASW spread.

EUR swap rates



EUR swaps: maturity premiums



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

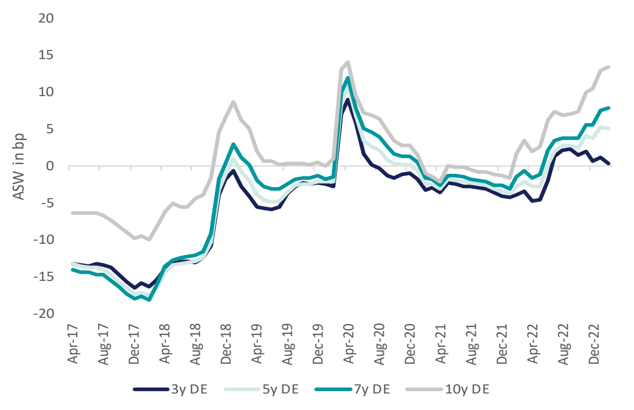
No "one size fits all" policy: neither among issuers nor investors

However, there is certainly no uniform pattern as far as the preference for shorter maturities or the shunning of the longer maturity segment is concerned by either investors or from the perspective of issuers. This is reflected not least by the fact that even longer-dated deals can be placed successfully on the market. However, in line with the arguments expressed above, the price in the form of the reoffer spread is far higher on average than for shorter-dated deals. Yet, even at financial institutions, the complex factors determining the choice of maturity are regularly weighted differently in the decision-making. For some institutions, there is even "no alternative" to a long maturity in individual cases. Yet if the choice of maturity is made dependent on the price, this may also be a question of timing. And whenever decisions relate to the future, the moment of uncertainty plays a significant role, which puts the focus on the forecast for capital market rates. But what is the significance of expectations with regard to EUR swap rates?

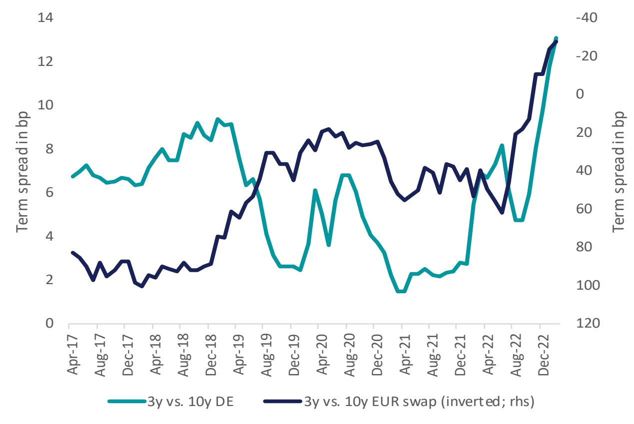
Term spreads in the EUR benchmark segment exemplified by German Pfandbriefe

We would now like to look at the more marked widening in the covered bond spread in the long maturity segment in more detail using German Pfandbriefe as an example. We have combined the 3y vs. 10y term spreads for Pfandbriefe and EUR swaps within the framework of the diagram below right. Here, the term spread is shown for the swaps on the right inverted scale. For us, this graphical analysis suggests that the extent of the inverse character of the swap curve has a positive effect on the maturity premium for Pfandbriefe. By implication, a still more inverse curve would increase the maturity premium, while an easing of the inverse character would militate in favour of the term spread for Pfandbriefe narrowing. For those issuers for whom it is only a matter of the timing of a Pfandbrief with a ten-year maturity in a generalising scenario analysis, their own expectations with regard to the development of the swap curve are therefore relevant. At the same time, it is important in our opinion that we highlight once more the fact that the term spread is not the result of lending-related considerations here. Rather, this would lead to (largely maturity-independent) spread differences between Pfandbrief issuers. If the term spread for swaps is therefore expected to shift further into negative territory, this would be an argument for placing the bond promptly. If the term spread is expected to narrow, a wait-and-see approach would be the dominant strategy, since, according to our assumptions, the term spread premium (3y vs. 10y) is also expected to fall.

EUR BMK spread trend: DE



Term premiums: EUR BMK DE vs. EUR swaps



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

NORD/LB opinion: inverse swap curve will last into Q4 2023

In the current environment, uncertainty regarding the future trend in interest rates and therefore with respect to the form and position of the EUR swap curve remains at an unusually high level. For example, the NORD/LB Macro Research Team expects an upward movement in both short and long swap rates up to the middle of the year and does not forecast a largely flat curve until the end of the year, which is then expected to evolve into a “normal” structure in the course of 2024. Following our considerations shown above, issuers that share this view could then strive to conclude issues promptly if a short-term tightening of term spreads would not be tolerated and postponement of the placement to the second half of the year or the choice of another maturity would be ruled out. For other issuers, however, "wait and see” could prove to be the dominant strategy, if there is no alternative to a 10y-maturity from an ALM perspective, for example. We present the forecasts of NORD/LB Research for illustrative purposes below.

NORD/LB Macro Research: Euroland interest rate forecast

	ECB	Money market rates		Swaps				
Period	**Tender rate**	**€STR**	**3M**	**1y**	**2y**	**5y**	**10y**	**30y**
31.03.23	3.50	2.90	3.10	3.70	3.60	3.30	3.10	2.45
30.06.23	3.75	3.15	3.30	3.75	3.70	3.40	3.20	2.55
30.09.23	3.75	3.15	3.30	3.40	3.35	3.15	2.95	2.45
31.12.23	3.75	3.15	3.10	2.65	2.80	2.85	2.85	2.35
31.03.24	3.50	2.90	2.90	2.35	2.45	2.45	2.55	2.25
30.06.24	3.25	2.65	2.60	2.30	2.40	2.55	2.60	2.35
30.09.24	3.00	2.45	2.50	2.30	2.50	2.65	2.70	2.45
31.12.24	3.00	2.45	2.50	2.30	2.50	2.65	2.80	2.55

Source: NORD/LB Macro Research; forecast date: 09.02.23; the forecasts shown represent an extract from the range of forecasts produced by NORD/LB Macro Research (cf. NORD/LB Macro Research).

Conclusion

For covered bond issuers, ASW spreads qualify as the relevant variable for assessing the advantageousness of a deal. For longer-dated new issues, in particular, the inverse structure of the EUR swap curve has for some time confronted banks with the challenge of an extraordinary maturity premium, which is also apparent on the secondary market. We therefore see this as one cause for the comparatively low volume of new covered bond issues with a maturity of ten or more years. We have looked at this issue in somewhat more detail using the price difference between Pfandbriefe with a three-year maturity and those with a ten-year maturity as an example, and were able to trace the linear connection between the inverse character of the EUR swap curve and the 3y vs. 10y Pfandbrief term spread using a graphical analysis. This in turn reveals the great significance of swap forecasts for issuance behaviour in the covered bond segment. Especially for those institutions that are under a certain pressure to issue longer-dated deals, this poses the question of advantageous timing. Nevertheless, the fact that this consideration is only suitable as a scenario analysis for one aspect when deciding on an issue must be taken into account at this point. At least our view that the “credit” component is not responsible for the high term spreads has been confirmed. Another way of putting this is that, on the basis of our previous considerations, not too much significance should be attached to higher risk premiums, which could at least be used theoretically to explain the expansion in term spreads.

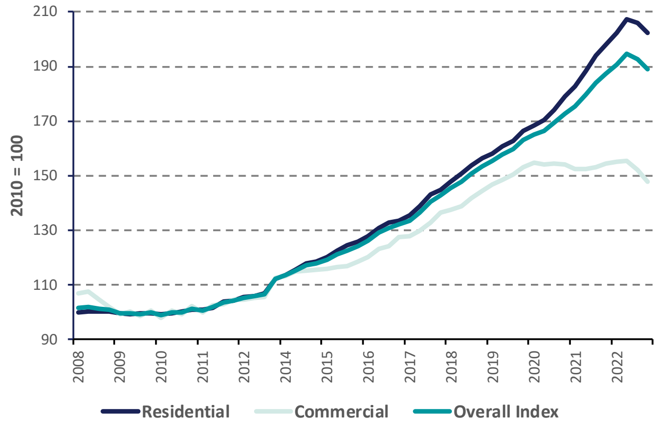
Covered Bonds
Development of the German property market

Author: Dr Frederik Kunze

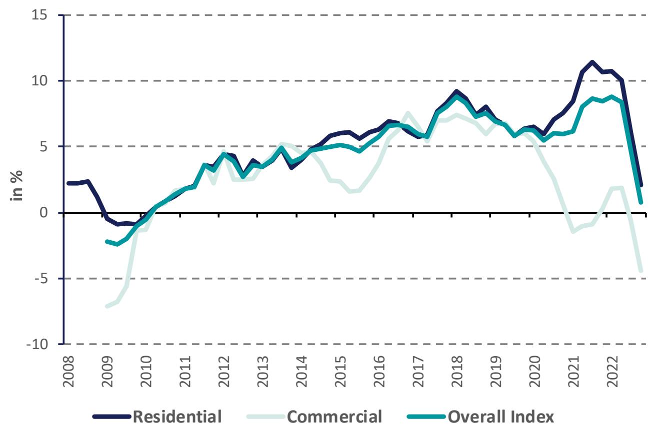
vdp property price index: expected decline confirmed for Q4 2022 as well

On 10 February, the Association of German Pfandbrief Banks (vdp) published the latest data on its property price indices based on an evaluation of property transaction data from more than 700 credit institutions (cf. vdp press release dated 10 February). The reporting period is the fourth quarter of 2022. The data basis therefore also includes the development of prices over the whole of 2022. The past reporting year is significant not least due to the obvious trend reversal seen on the German property market in recent months. This is demonstrated by the fact that the annual average value for the overall index in 2022 was given as 191.8 points. Not only does this figure mark an all-time high, it also well and truly eclipses the previous years of 2021 (181.6), 2020 (168.4) and 2019 (159.0). However, the figures for the fourth quarter of 2022 also show that not only has this momentum started to lose pace, it has even reversed in the long term. Therefore, the overall index rose by a mere 0.8% compared with the same quarter in the previous year. Accordingly, the year-end score stands at 188.9 points (base year 2010 = 100 points). The "vdp index" thus suffered another setback over the previous quarter (by -2.0% Q/Q; this follows a decline of -1.0% Q/Q in the previous quarter). To recap, for the first time since 2011, the overall index fell in the third quarter of 2022 and the long-lasting trend of rising property prices in Germany came to an abrupt end. Compared with the prior year, the residential property price sub-index grew by 2.1%, despite a drop of 1.8% quarter on quarter. The "commercial" sector also posted negative figures of -4.6% Y/Y and -2.9% Q/Q. The figures recently reported by the vdp clearly reflect the current situation, which is fuelled in particular by rising interest rates and persistently high inflation rates. While the associated general economic uncertainty and declining growth rates have a more direct influence on commercial property prices, we believe that the general affordability of residential property will continue to have an impact on demand in the future. However, this development is not unexpected, as vdp CEO Jens Tolckmitt made clear in a press release: "The numerous crises of 2022 left their mark on the property market at the end of the year, as we predicted. Prices are now consistently decreasing compared with previous quarters and we expect declines in the coming quarters - albeit still at a moderate level overall. The overall healthy state of the German property market should help it to cope well with the current price correction phase. Even if prices were to fall by 15% in total over a longer period, we would still be at the price level of early 2020 in terms of the development of the overall index."

Index level: Total, residential and commercial



Change vs. prior year: Total, residential and commercial

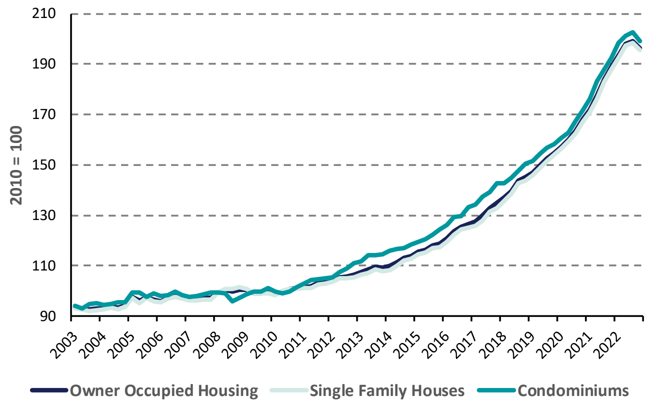


Source: vdp, NORD/LB Markets Strategy & Floor Research

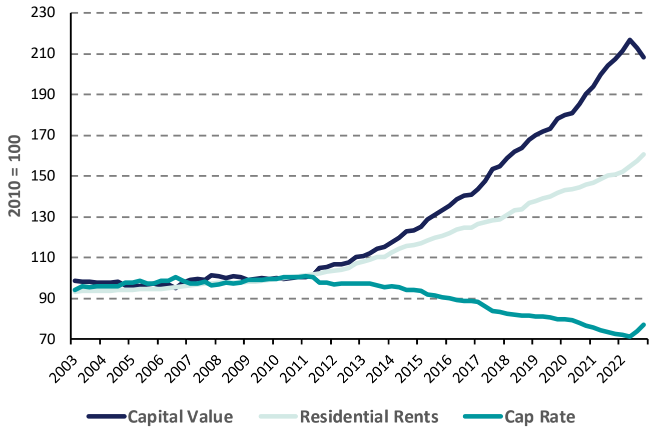
Details on the development of residential property prices: Owner-occupied residential property performing better than multi-family dwellings

In the residential property sub-index, the segment "owner-occupied residential property overall" has now also seen a quarter-on-quarter decline. As such, the index value for the category, which was still able to increase by 0.5% Q/Q in the third quarter, fell from 199.3 to 196.3 points (-1.5% Q/Q). The declines occurred in both owner-occupied homes (-1.4%) and privately owned apartments (-1.8%). In our view, though, the change in momentum is particularly reflected in the prices of multi-family dwellings. The index now stands at 208.3 points for the latest reporting period, which indicates a quarter-on-quarter decline of -2.1% (previous quarter: -1.9% Q/Q). This means that the owner-occupied housing segment is still performing better in terms of price stability than the category of multi-family dwellings. In our view, however, the current figures for property rates and new rental contracts are also noteworthy. For multi-family dwellings, property rates increased by 4.1% compared with the previous quarter (or +6.0% Y/Y), with new rental contracts continuing to rise markedly by 1.9% Q/Q or 6.5% Y/Y.

Owner-occupied residential property



Multi-family dwellings



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

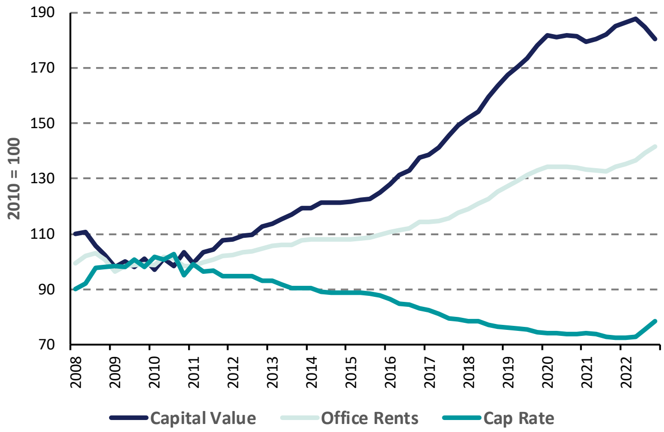
Top 7 housing market: Weakened growth in prices

The separate index for the development of the residential property market in the top 7 cities continues to move away from its all-time high (266.5 points in the second quarter of 2022) with a further decline (from 264.7 to 259.4 points). For the category of "owner-occupied residential property", a score of 229.5 points was recorded after 235.6 points in the third quarter. The index levels for both owner-occupied homes (220.0) and privately owned apartments (238.6) were below the respective levels recorded in the previous quarter. New rental contracts continued to rise compared with Q3 2022, while the "new" ROI expectations in the form of property rates is also reflected here by a significant increase (+3.9% Q/Q).

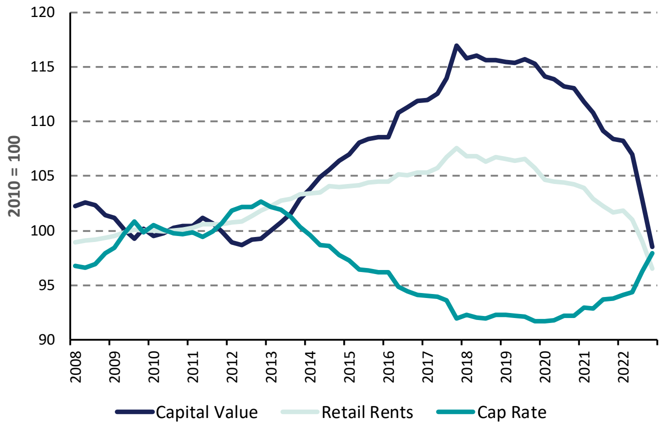
vdp: "Dampened purchasing sentiment weighs on retail property prices"

The figures presented for Q4 2022 do not reveal a uniform picture for the commercial property segment. However, we do notice certain similarities in the development of prices. Both office and retail properties saw corresponding declines in capital values, both year on year and quarter on quarter. Jens Tolckmitt remarked accordingly: "The structural change to the detriment of brick-and-mortar retail which gained momentum due to the lockdowns during the COVID-19 pandemic is persisting. In the meantime, however, it is not only the increasing market share of e-commerce that is causing problems for over-the-counter retail trade. In addition, the numerous challenges and inflation are hampering purchasing sentiment among consumers and are having a negative impact on retail property prices." Prices here fell accordingly by 9.1% Y/Y and 4.2% Q/Q. On the other hand, the vdp CEO assesses the market for office properties differently: "Demand for office property in Germany is likely to remain strong. This is supported, for example, by the continued significant increase in office rents - the user market evidently remains intact." Prices for office properties fell in the same period by 2.6% Y/Y and 2.4% Q/Q respectively.

Office properties



Retail properties



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

Conclusion and outlook

Overall, the figures for the vdp property price index in Q4 2022 paint a disparate picture. In terms of the annual average, but also in terms of the changes compared with the same quarter of the previous year, some index categories are still recording growth. However, comparison with the previous quarter, which reflects the short-term price trend, indicates a further quarter of cooling on the German property market. The declining demand for residential property is in particular a result of rising mortgage rates and rising construction costs. Nevertheless, the supporting element of the high demand for owner-occupied housing, which should also persist due to a significant reluctance to initiate construction projects, remains in place. For the vdp, this is one reason, for example, why it does not expect prices for owner-occupied housing to fall significantly. In the meantime, the fundamentally high demand for housing is also driving up prices for new rental con-tracts. The situation on the commercial property market, on the other hand, is more challenging. Nevertheless, the vdp sees a stabilising effect here for new rental contracts, at least for office properties. Having said that, investors have exercised notable restraint, which is also reflected in the rising property rates. Retail properties are confronted by greater challenges. For example, the vdp believes that increased heating and energy costs are also weighing on this segment – as is the dampened purchasing sentiment on the part of private households. In terms of prices, the trend reversal on the German property market has now affected all sub-segments. Nevertheless, it is important to assess the different framework conditions in the forecast. The development of new rental contracts is likely to continue to be a stabilising factor for prices on the markets for residential and office properties in the future.

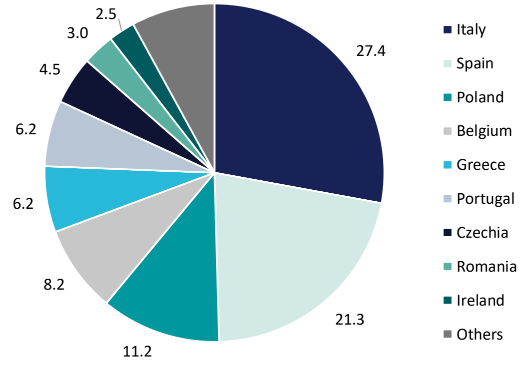
SSA/Public Issuers
Spotlight on the EU: a mega issuer spawned by the crisis

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

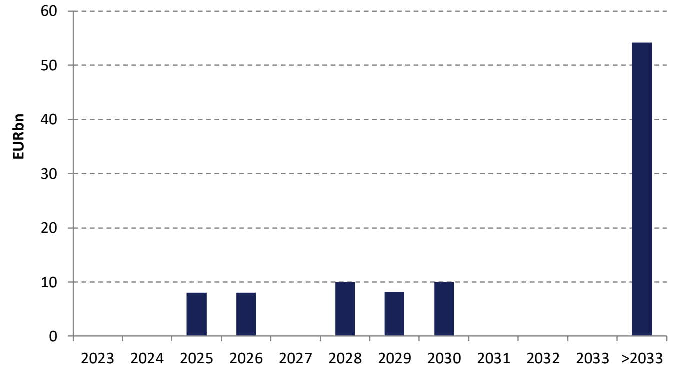
SURE: Protection for workers and jobs

The European Commission's "Instrument for Temporary Support to mitigate Unemployment Risks in an Emergency" (commonly referred to as SURE), activated in September 2020, offers support to EU member states for dealing with the consequences arising from the Covid-19 pandemic. The focus is mainly on stabilising the labour market. The funds were primarily used to finance short-time work or similar measures. Of the EUR 100bn made available for this purpose, a total of EUR 98.4bn had been drawn down in the form of loans with favourable terms by the scheduled end of the programme on 31 December 2022. The EU member states affected had to apply for this financial aid from the European Commission, which then discussed the extent of the expenditure incurred with the respective country and determined the conditions of the loan. The commitments to member states were serviced in tranches. With disbursed loans amounting to EUR 27.4bn, Italy received the largest share from the SURE programme. It was one of the countries hardest hit by Covid-19 in Europe. Spain, which saw a record number of short-time workers as a result of the pandemic, received EUR 21.3bn, putting it in second place. In order to ensure minimal impact for future generations, a repayment period of a maximum of 30 years was set from 2028. The repayments of the loans taken out are to be returned to the EU budget. The programme is backed by a system of voluntary guarantees, in which EU member states could participate by providing at least 25% of the maximum programme volume (EUR 100bn). To finance the programme, the European Commission has issued bonds on behalf of the European Union with a maximum term until 2050 (back-to-back lending). In this way, EU member states can benefit from the EU's creditworthiness. For issuances under the SURE programme, the EU set up an ICMA-compliant social bond framework, and all bonds were also issued in the social bond format. Newly issued bonds have an identical status to bonds issued in the past.

Loans disbursed by member (EURbn)



SURE bond maturities

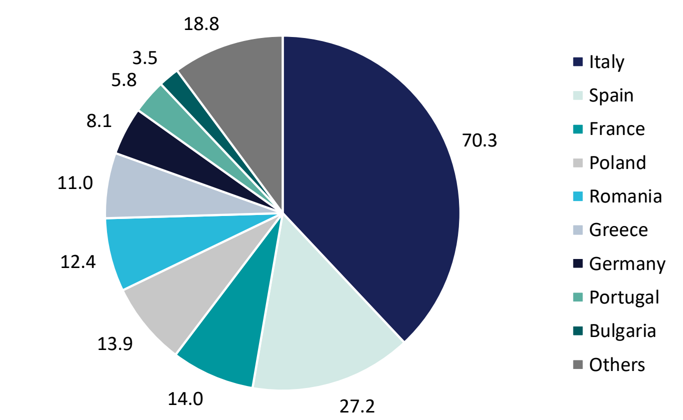


Source: Bloomberg, European Commission, NORD/LB Markets Strategy & Floor Research

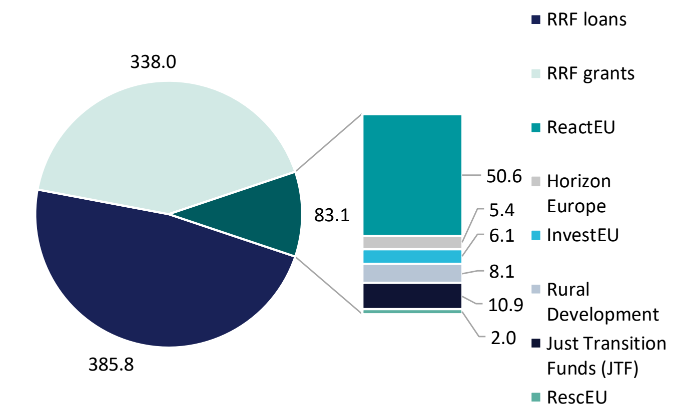
NGEU: facing the future with increased strength

Another measure to support the economy weakened by the Covid-19 pandemic is the NextGenerationEU (NGEU) programme from the EU, which was formally adopted by the European Council in December 2020. The temporary stimulus instrument has a volume of EUR 750bn in 2018 prices, or EUR 806.9bn in current prices. The aim here is to support the economic recovery of EU member states so that they can emerge stronger from the pandemic. It also aims to build a greener, more digital and more resilient future across the EU. The core of NGEU is the Reconstruction and Resilience Facility (RRF), which provides grants and loans for investments and reforms in EU member states. The volume of this programme amounts to EUR 723.8bn and is split into EUR 385.8bn for loans and EUR 338bn for grants (both at current prices). Only the loans are repaid by the member states. To receive support from the ARF, EU member states must submit detailed reconstruction and resilience plans (RRPs), outlining how the funding would be used to achieve climate neutrality and digital transformation goals by 2026. An allocation is then made according to a predetermined distribution key. The remaining EUR 83.1bn from the NGEU funds will be distributed among the ReactEU, Horizon Europe, InvestEU, Rural Development, Just Transition Fund and RescEU programmes. This is intended to promote research, renewable energies and medical equipment, for example. In order to finance the expenditure for the NGEU programme, the European Commission raises funds on the capital market on behalf of the EU for the maximum programme volume of EUR 806.9bn. Although the EU budget must be financed entirely from its own resources according to Art. 311 (2) TFEU, Council Decision (EU, Euratom) 2020/2053 of 14 December 2020 on the European Union's own resources system classifies the loans taken out for NGEU as other revenue, which is why it is possible for debt to be incurred in this context as an exception. Financing instruments are medium and long-term bonds, of which at least 30% should be green bonds. Borrowing will take place from mid-2021 to the end of 2026 with an estimated annual issuance of EUR 150-200bn. To secure this, the EU will use its own budget as well as its own resources ceiling. The latter was temporarily increased for the NGEU programme up to 2058. Repayment of the issued bonds must therefore take place by this point in time.

Green bond-eligible investments (acc. RRPs; EURbn)



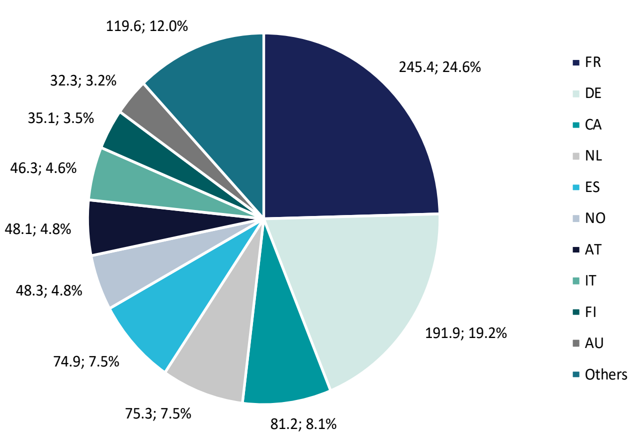
Distribution of NGEU funding (EURbn)



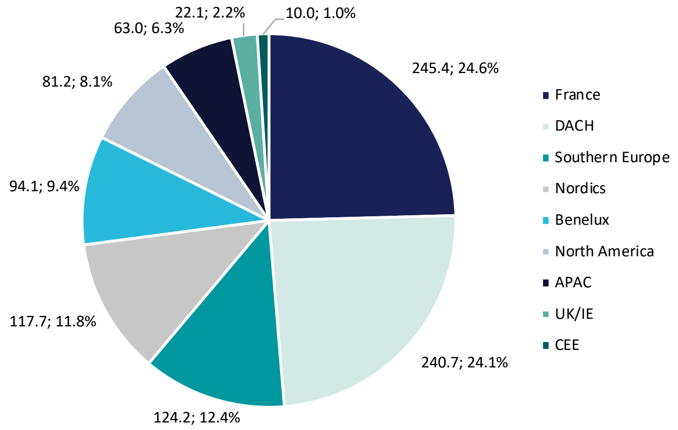
Source: European Commission, NORD/LB Markets Strategy & Floor Research

Charts & Figures
Covered Bonds

EUR benchmark volume by country (in EURbn)



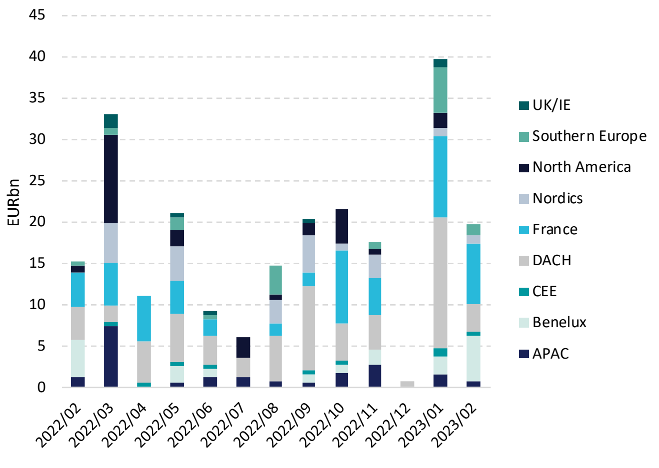
EUR benchmark volume by region (in EURbn)



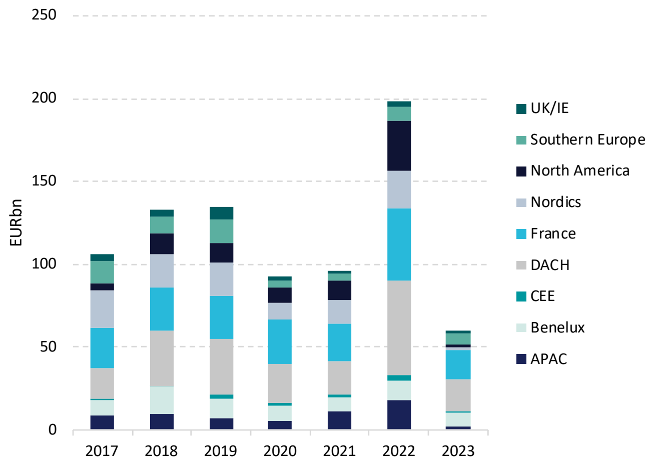
Top-10 jurisdictions

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	245.4	235	16	0.96	9.6	5.3	1.09
2	DE	191.9	274	31	0.65	8.1	4.3	0.85
3	CA	81.2	62	0	1.26	5.6	2.9	0.59
4	NL	75.3	75	1	0.94	11.0	6.8	0.95
5	ES	74.9	60	6	1.14	11.0	3.7	1.87
6	NO	48.3	58	11	0.83	7.2	3.7	0.50
7	AT	48.1	83	4	0.58	8.8	5.5	1.06
8	IT	46.3	57	2	0.79	9.2	3.7	1.24
9	FI	35.1	37	3	0.94	7.3	3.7	0.86
10	AU	32.3	32	0	1.01	7.6	3.9	1.19

EUR benchmark issue volume by month



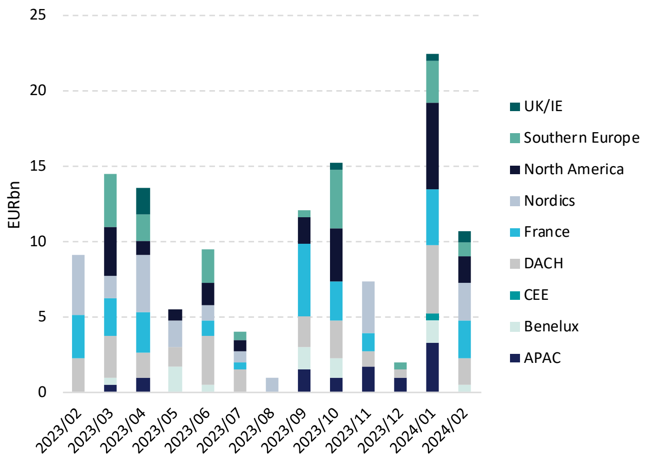
EUR benchmark issue volume by year



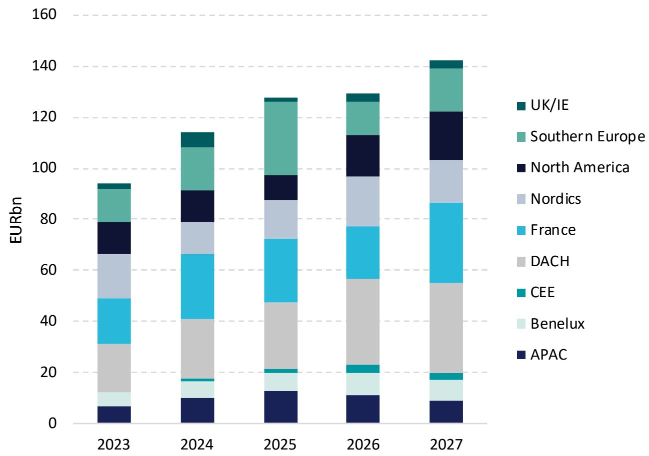
Source: market data, Bloomberg, NORD/LB Markets Strategy & Floor Research

NORD/LB

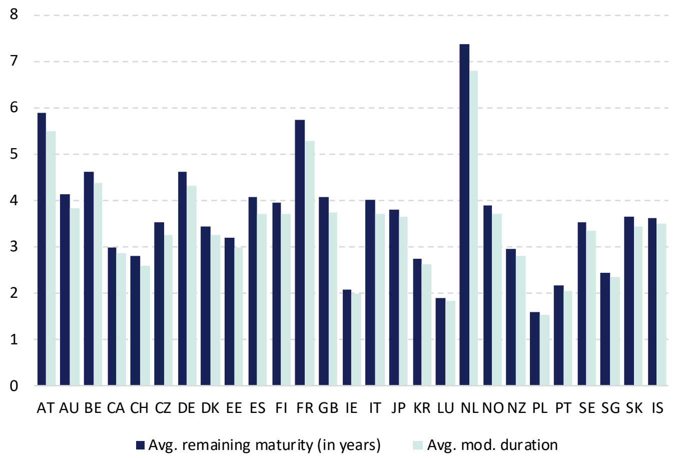
EUR benchmark maturities by month



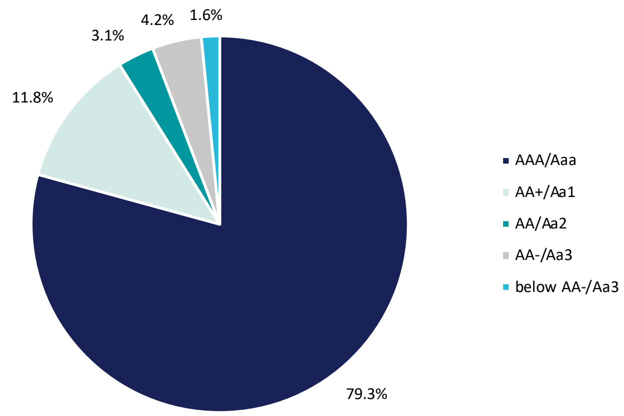
EUR benchmark maturities by year



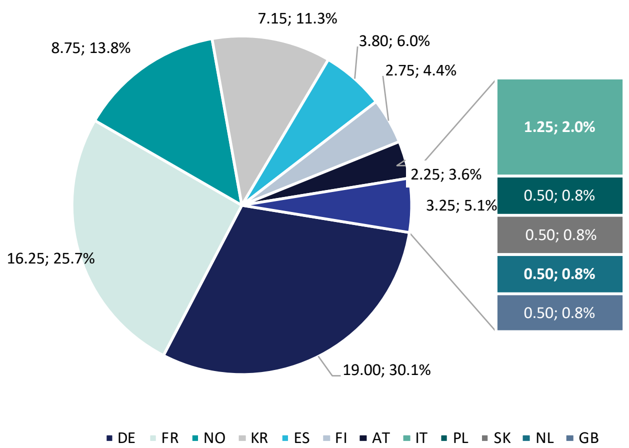
Modified duration and time to maturity by country



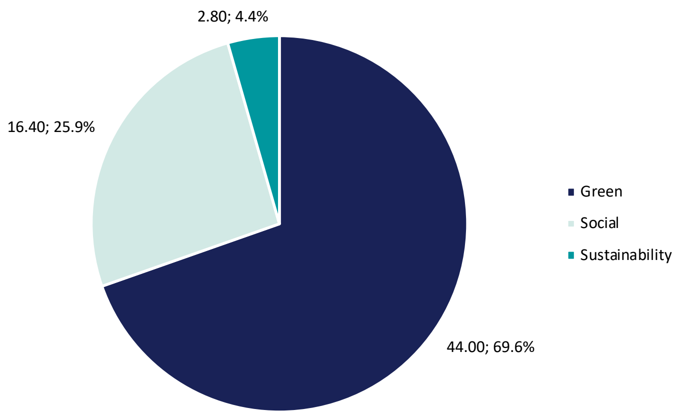
Rating distribution (volume weighted)



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

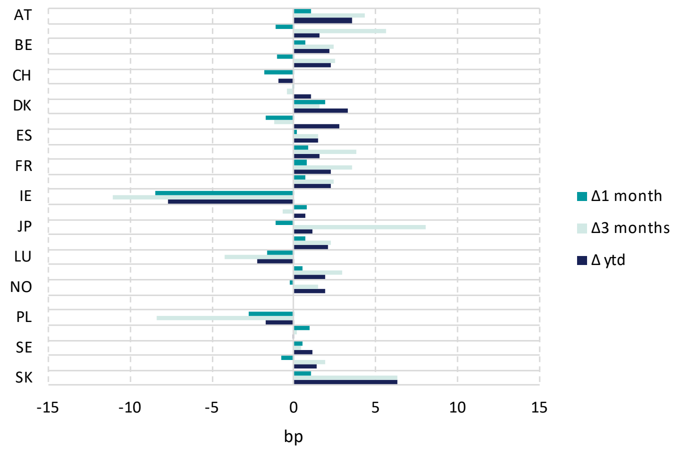


EUR benchmark volume (ESG) by type (in EURbn)

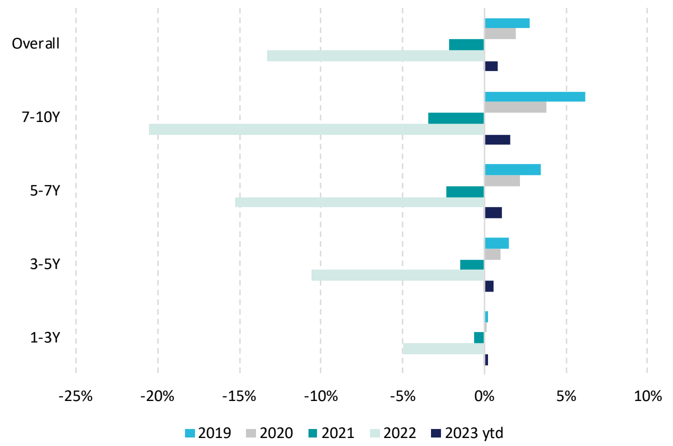


Source: market data, Bloomberg, NORD/LB Markets Strategy & Floor Research

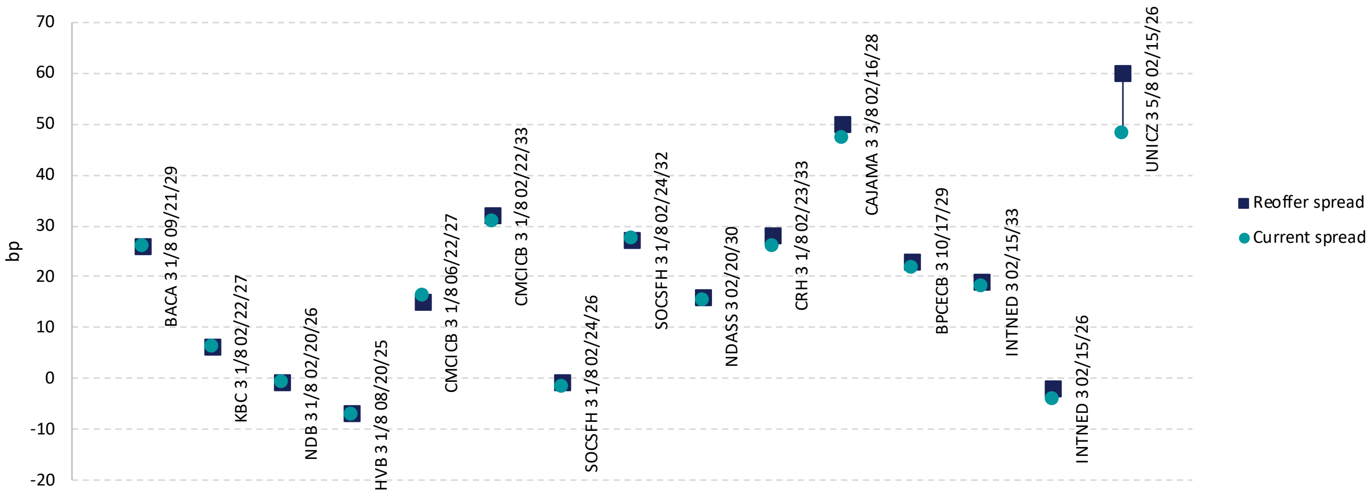
Spread development by country



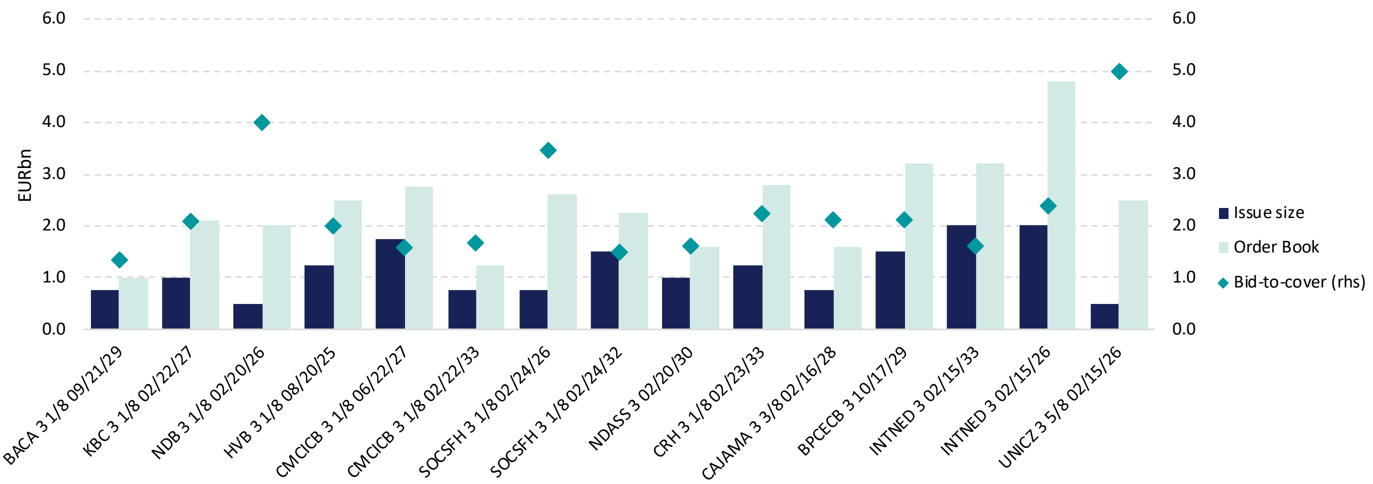
Covered bond performance (Total return)



Spread development (last 15 issues)



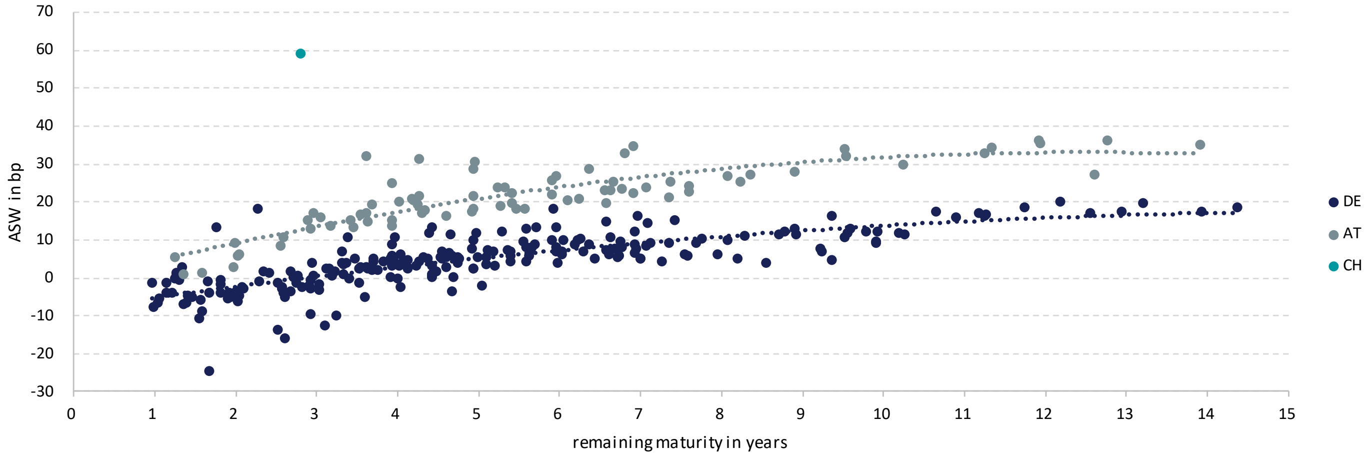
Order books (last 15 issues)



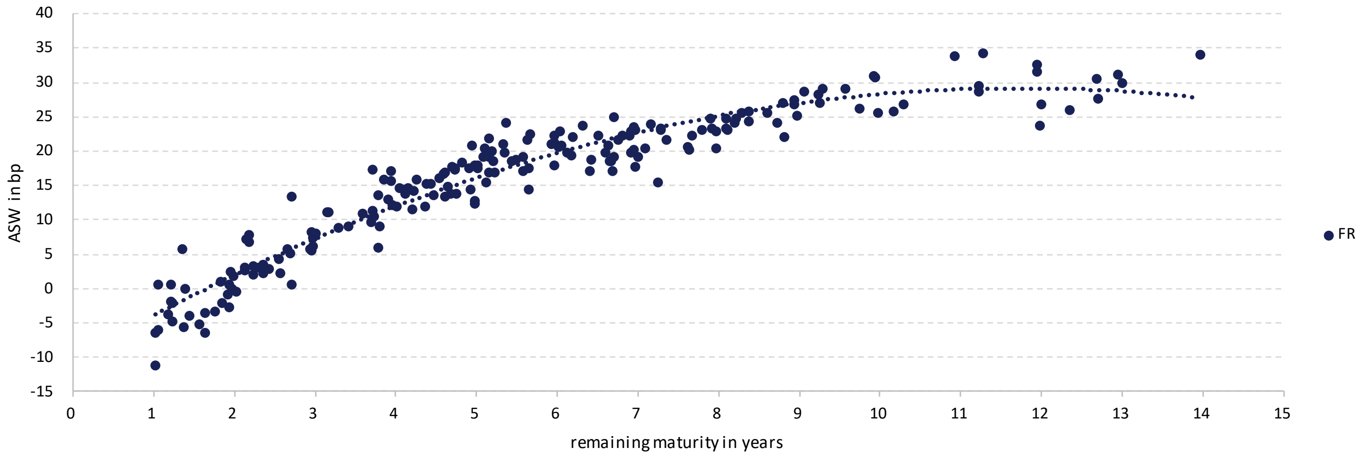
Source: market data, Bloomberg, NORD/LB Markets Strategy & Floor Research

Spread overview[1]

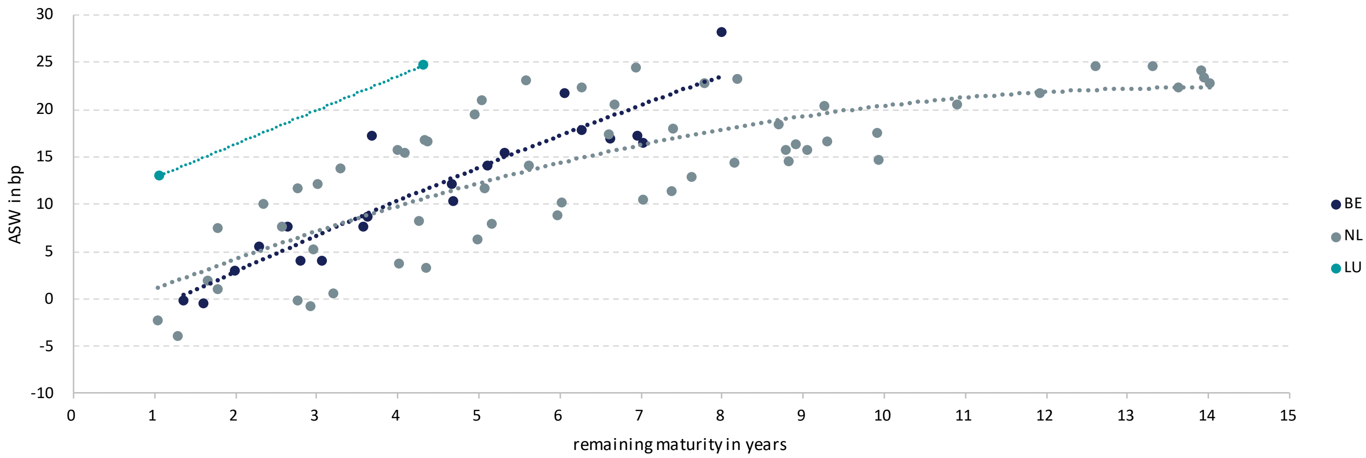
DACH



France



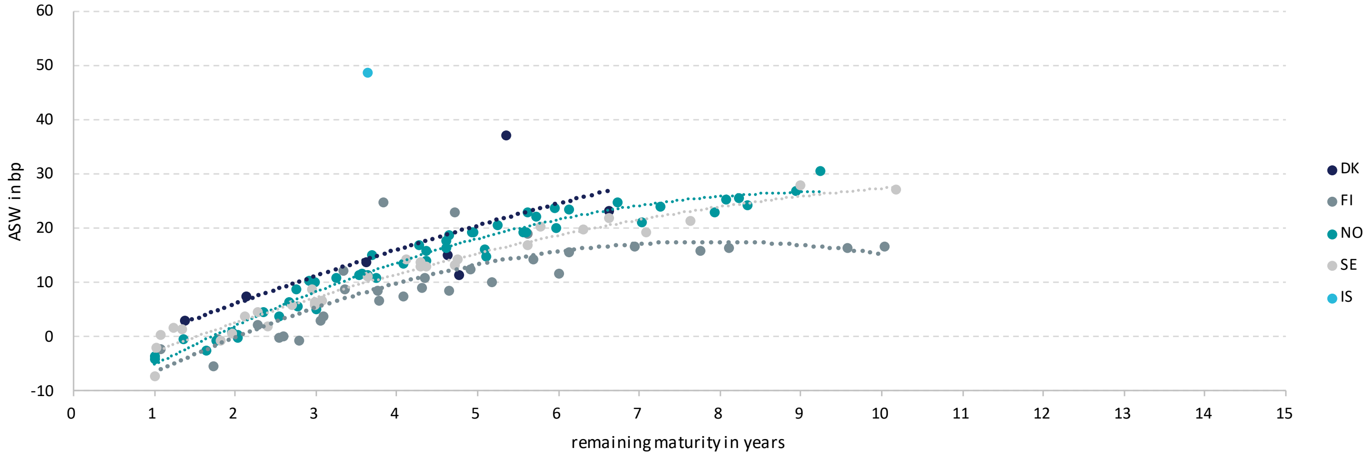
Benelux



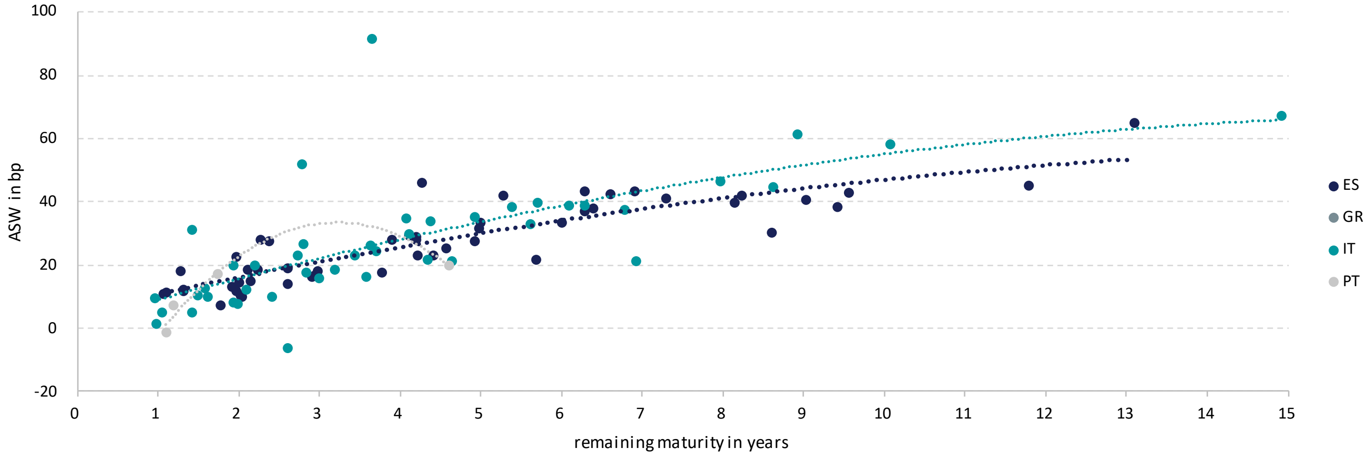
Source: market data, Bloomberg, NORD/LB Markets Strategy & Floor Research [1]Time to maturity 1 ≤ y ≤ 15

NORD/LB

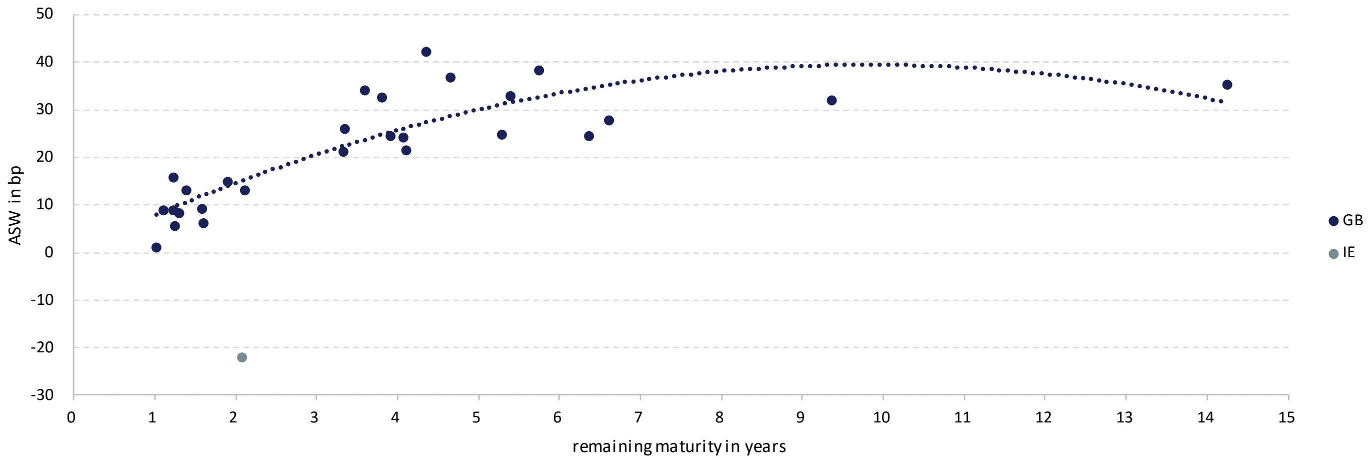
Nordics



Southern Europe

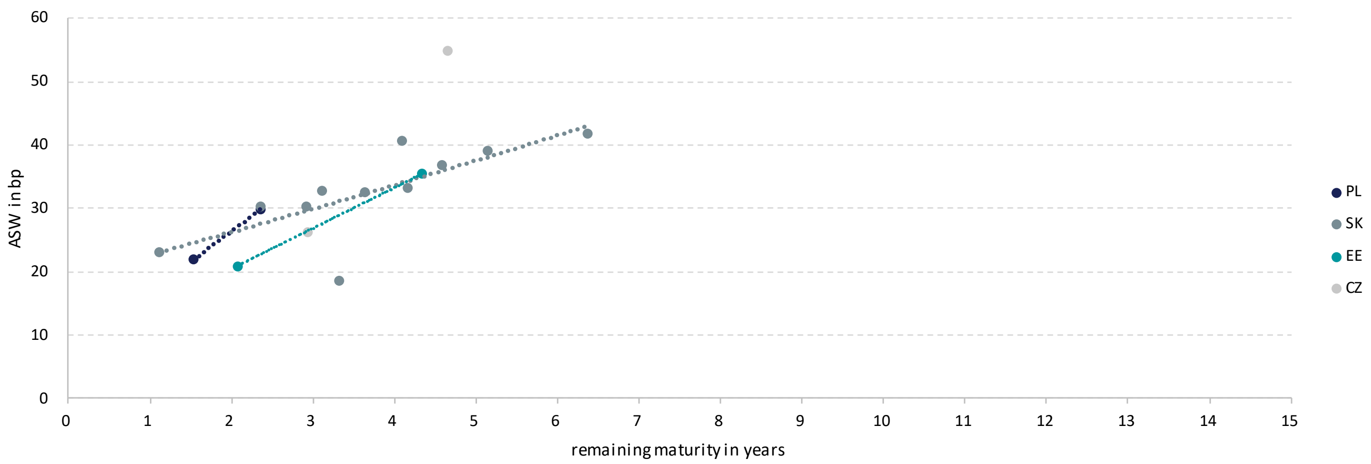


UK/IE

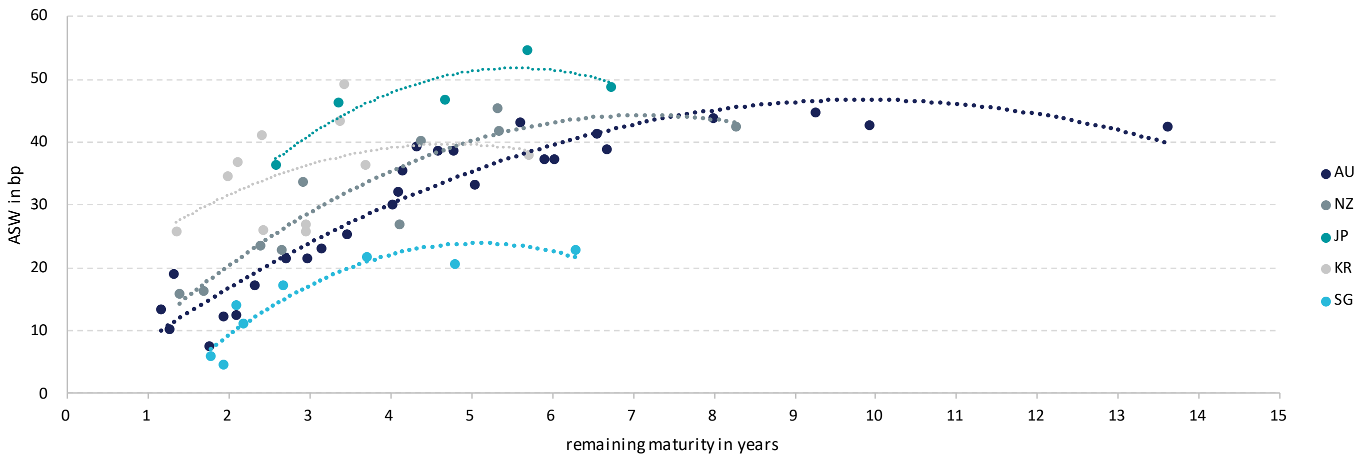


Source: market data, Bloomberg, NORD/LB Markets Strategy & Floor Research

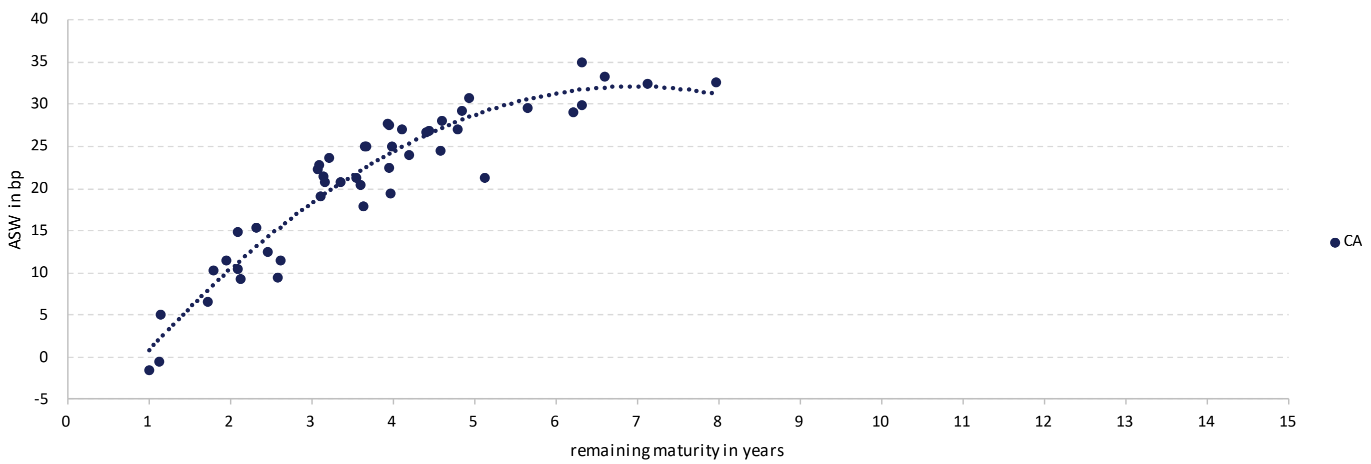
CEE



APAC



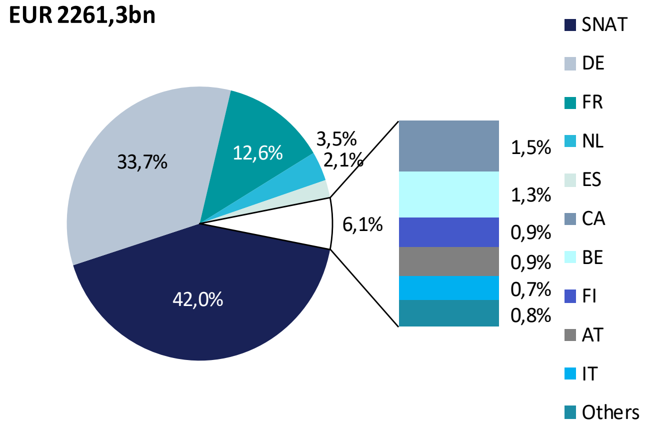
North America



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

Charts & Figures
SSA/Public Issuers

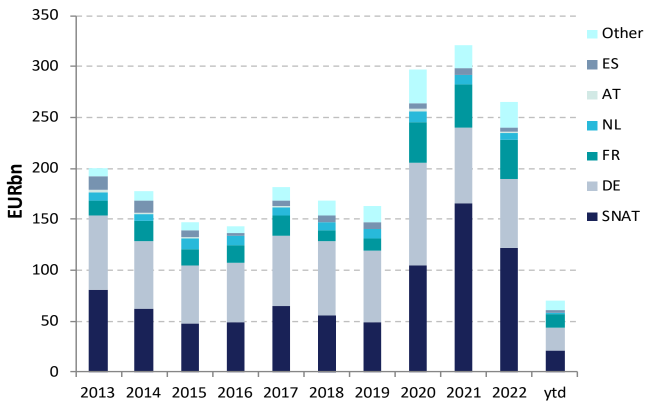
Outstanding volume (bmk)



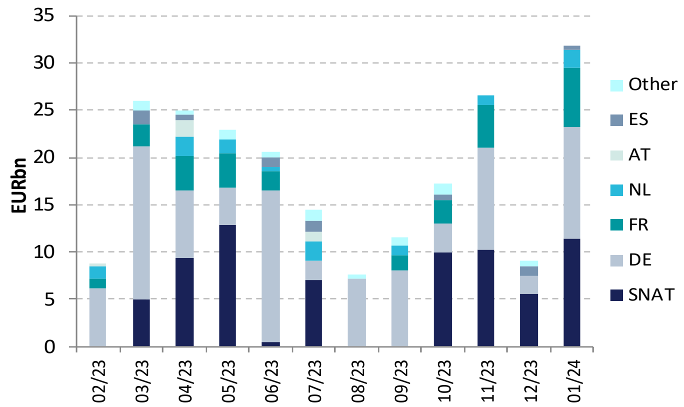
Top 10 countries (bmk)

Country	Vol. (€bn)	No. of bonds	ØVol. (€bn)	Vol. weight. ØMod. Dur.
SNAT	950,8	223	4,3	8,1
DE	762,1	562	1,4	6,3
FR	284,9	189	1,5	6,2
NL	78,4	70	1,1	6,5
ES	47,8	63	0,8	4,7
CA	34,6	25	1,4	4,4
BE	29,5	33	0,9	11,6
FI	20,0	23	0,9	5,2
AT	19,8	23	0,9	4,4
IT	15,5	20	0,8	4,8

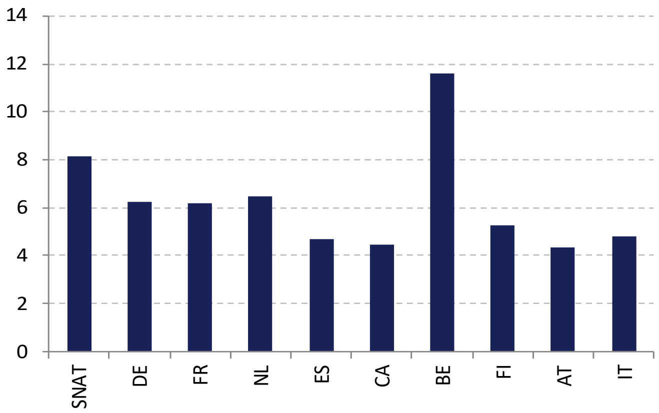
Issue volume by year (bmk)



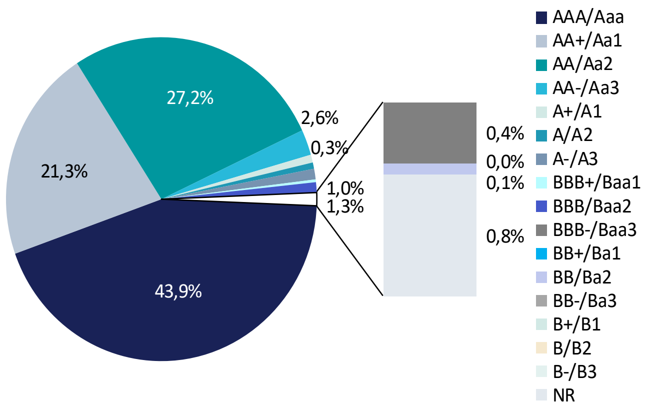
Maturities next 12 months (bmk)



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



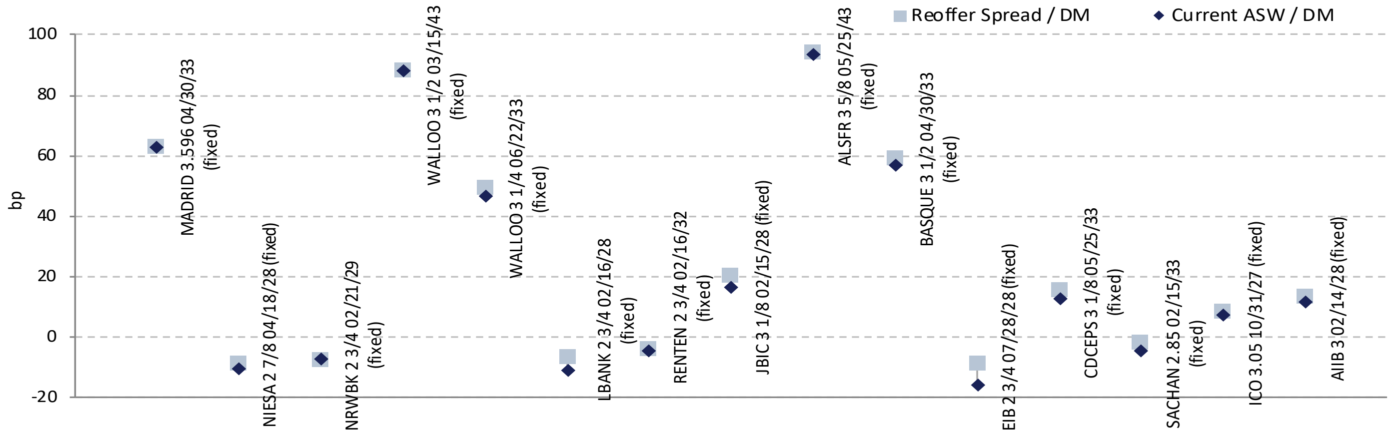
Rating distribution (vol. weighted)



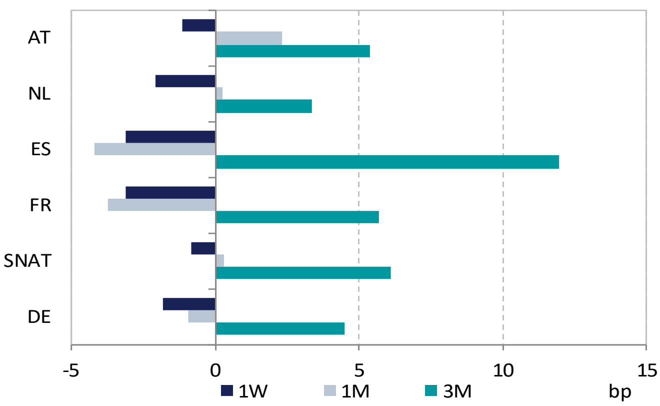
Source: Bloomberg, NORD/LB Markets Strategy & Floor Research

NORD/LB

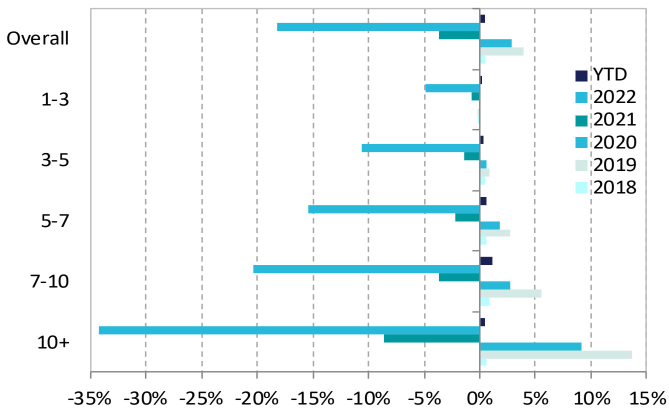
Spread development (last 15 issues)



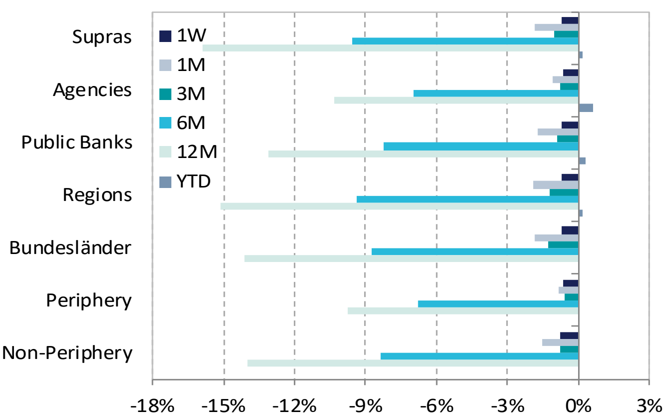
Spread development by country



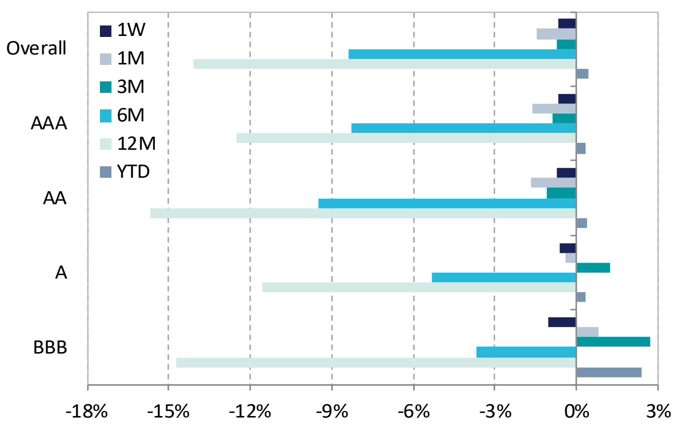
Performance (total return)



Performance (total return) by segments

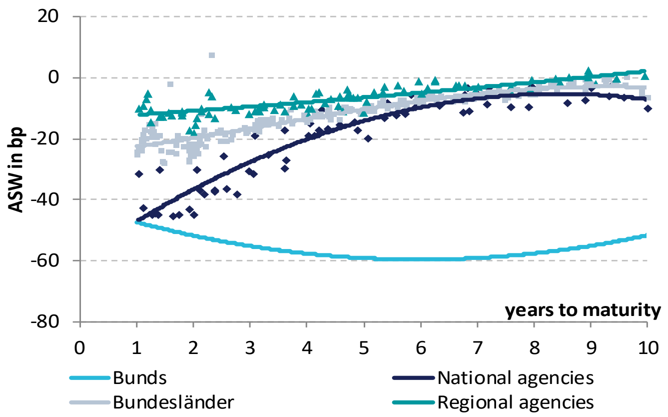


Performance (total return) by rating

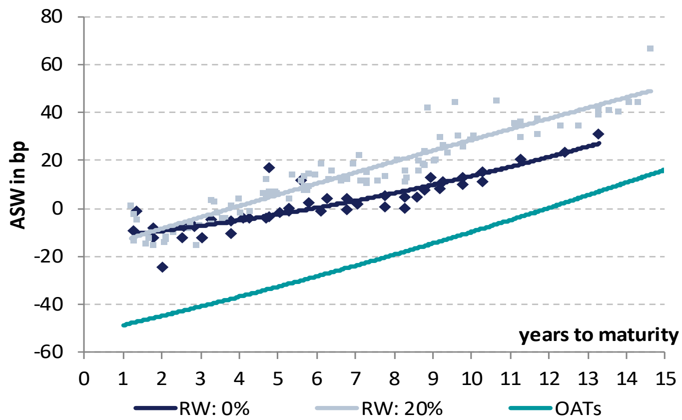


Source: Bloomberg, NORD/LB Markets Strategy & Floor Research

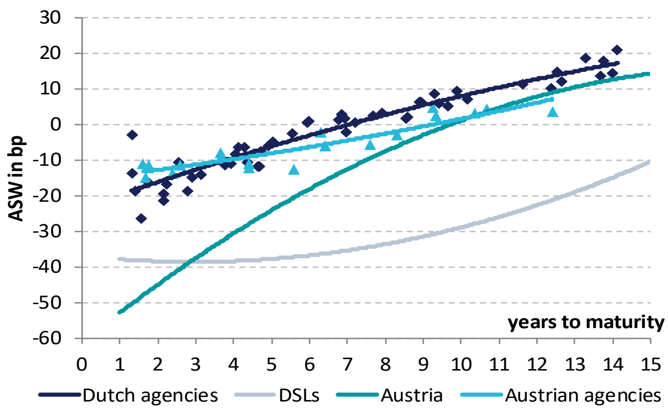
Germany (by segments)



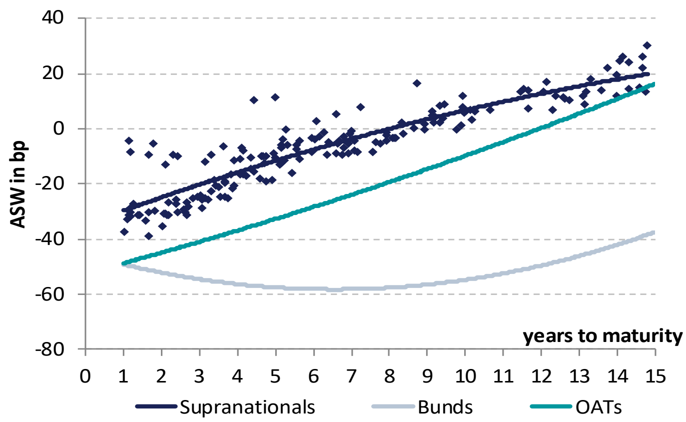
France (by risk weight)



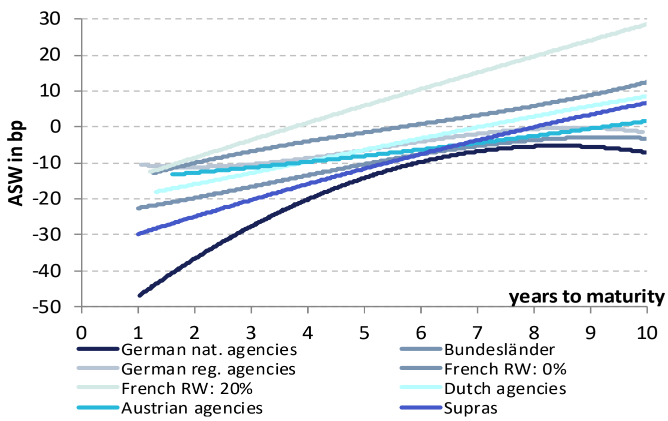
Netherlands & Austria



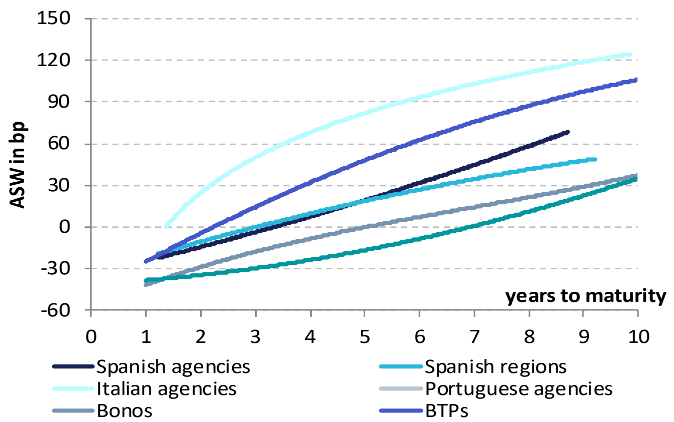
Supranationals



Core



Periphery



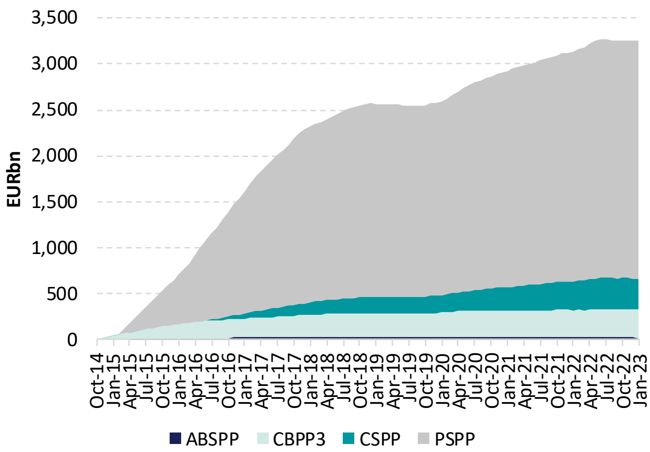
Source: Bloomberg, NORD/LB Markets Strategy & Floor Research

ECB tracker

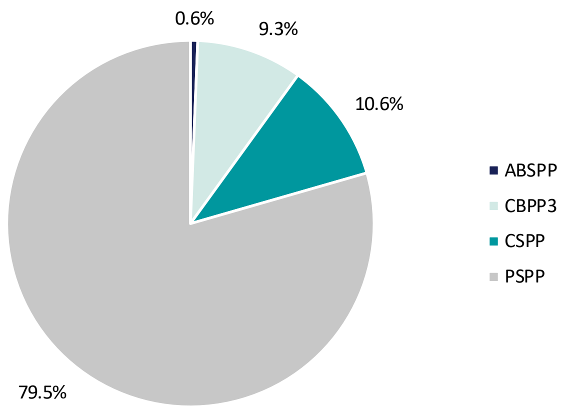
Asset Purchase Programme (APP)

	ABSPP	CBPP3	CSPP	PSPP	APP
Dec-22	22,895	301,973	344,119	2,584,666	3,253,653
Jan-23	20,835	303,269	344,010	2,584,798	3,252,912
Δ	-2,060	+1,296	-109	+132	-741

Portfolio development

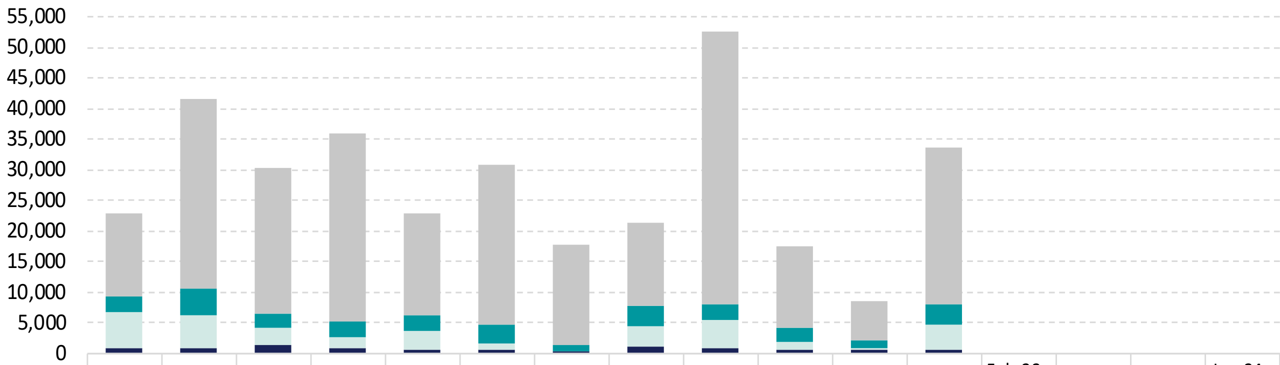


Portfolio structure



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

Expected monthly redemptions (in EURm)



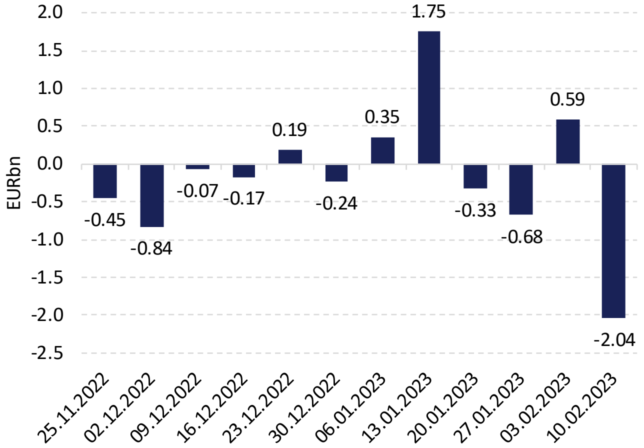
	Feb-23	Mar-23	Apr-23	May-23	Jun-23	Jul-23	Aug-23	Sep-23	Oct-23	Nov-23	Dec-23	Jan-24	Feb-23 - Jan-24	2022	2023	Jan-24 - Jan-24
APP	22,809	41,620	30,245	35,856	22,878	30,890	17,855	21,218	52,641	17,511	8,558	33,570	335,651	299,142	331,410	331,410
PSPP	13,625	31,072	23,883	30,559	16,619	26,133	16,445	13,364	44,611	13,258	6,336	25,524	261,429	228,585	255,374	255,374
CSPP	2,352	4,219	2,162	2,579	2,557	3,038	986	3,366	2,616	2,393	1,336	3,464	31,068	17,670	30,614	30,614
CBPP3	6,065	5,631	2,937	1,874	3,112	1,170	0	3,346	4,465	1,351	408	4,109	34,468	41,244	35,145	35,145
ABSPP	767	698	1,263	844	590	549	424	1,142	949	509	478	473	8,686	11,643	10,277	10,277

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

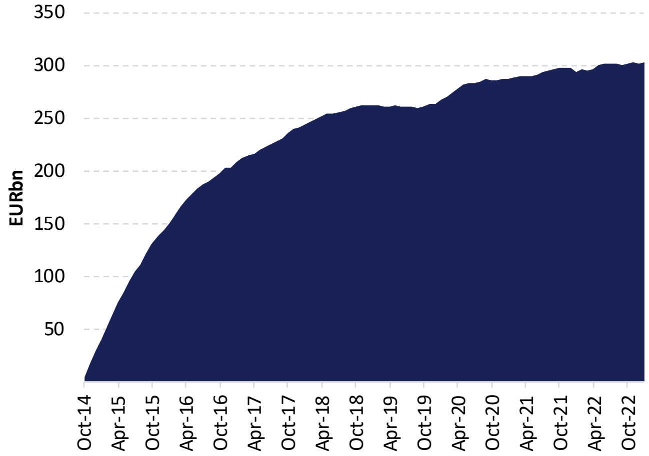
NORD/LB

Covered Bond Purchase Programme 3 (CBPP3)

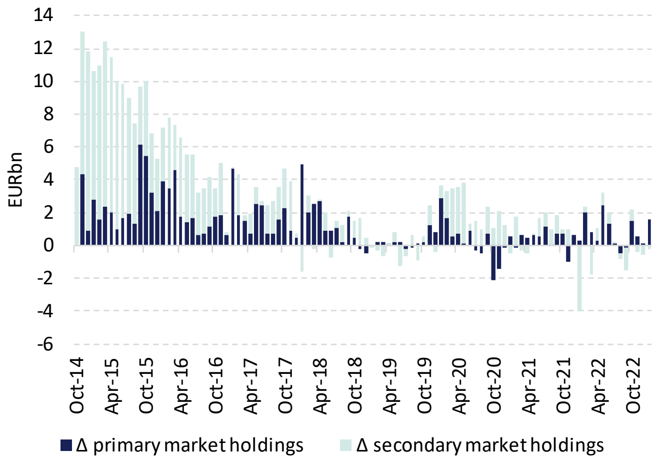
Weekly purchases



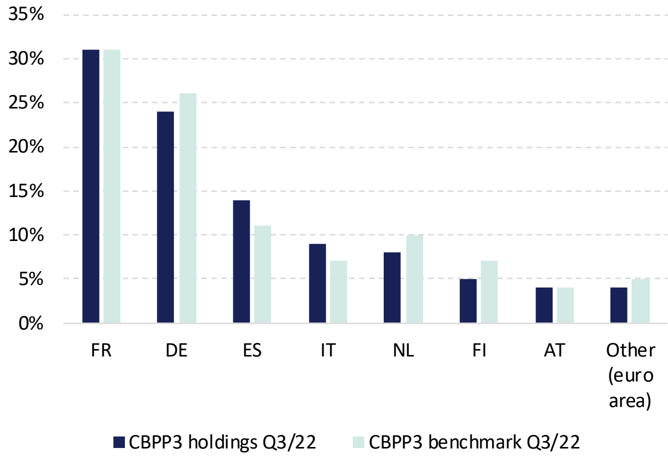
Development of CBPP3 volume



Change of primary and secondary market holdings

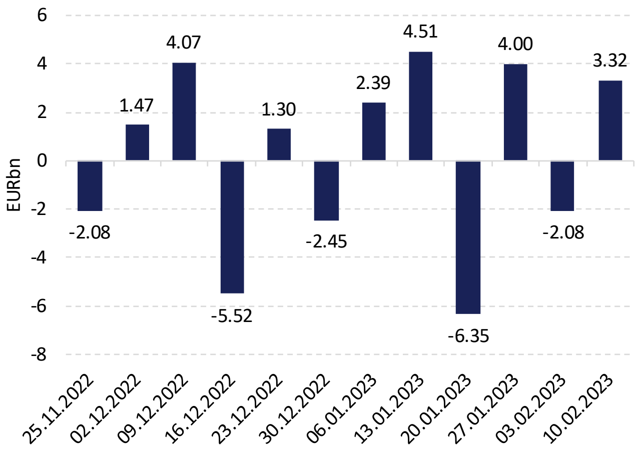


Distribution of CBPP3 by country of risk

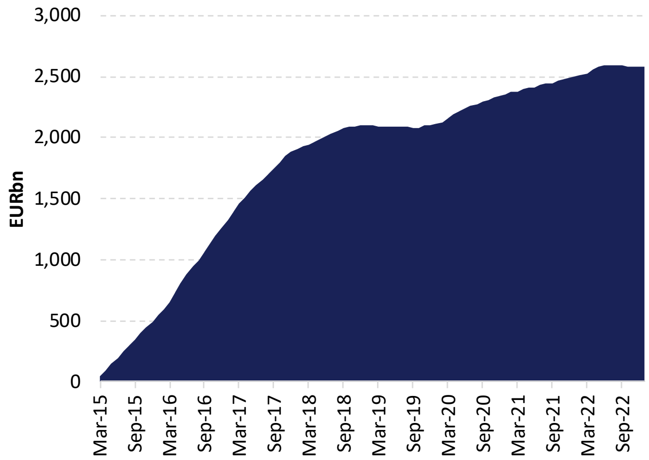


Public Sector Purchase Programme (PSPP)

Weekly purchases



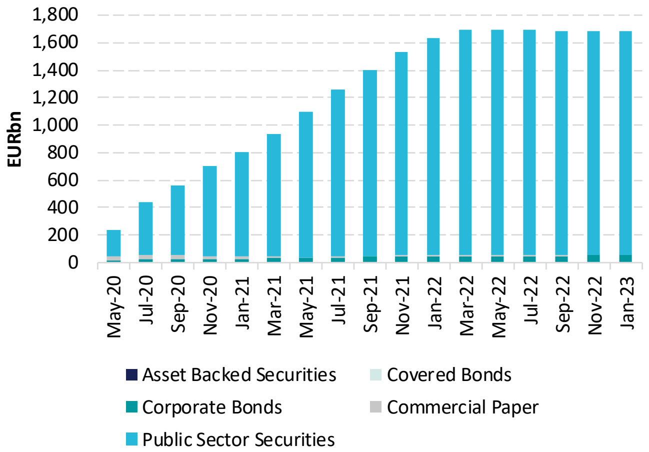
Development of PSPP volume



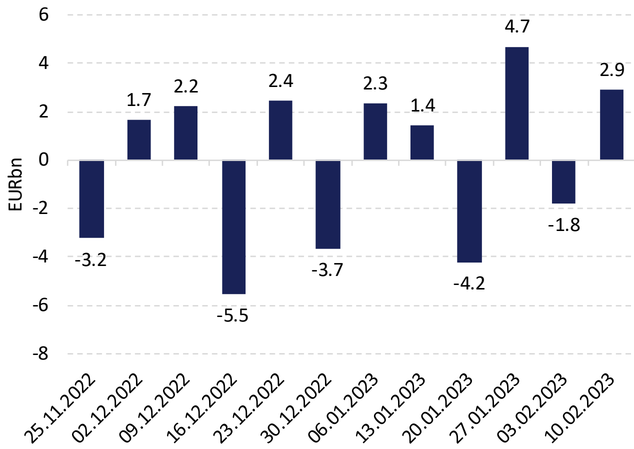
Source: ECB, Bloomberg, NORD/LB Markets Strategy & Floor Research

Pandemic Emergency Purchase Programme (PEPP)

Portfolio development



Weekly purchases



Breakdown of public sector securities under the PEPP

Jurisdiction	Holdings (in EURm)	Δ Holdings previous period	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)
AT	44,037	-671	2.6%	2.7%	0.0%	7.5	7.4
BE	55,795	-698	3.3%	3.4%	0.1%	6.3	9.3
CY	2,493	4	0.2%	0.2%	0.0%	8.3	8.1
DE	398,297	2,551	23.7%	24.0%	0.3%	6.7	6.9
EE	256	0	0.3%	0.0%	-0.2%	7.4	8.0
ES	193,376	-1,418	10.7%	11.6%	0.9%	7.4	7.3
FI	26,953	-173	1.7%	1.6%	0.0%	7.4	7.5
FR	301,844	14	18.4%	18.2%	-0.2%	7.6	7.8
GR	37,760	729	2.2%	2.3%	0.0%	8.5	9.4
IE	25,998	-503	1.5%	1.6%	0.0%	8.8	10.2
IT	287,658	-794	15.3%	17.3%	2.0%	7.2	6.9
LT	3,256	14	0.5%	0.2%	-0.3%	9.5	9.1
LU	1,922	19	0.3%	0.1%	-0.2%	5.9	6.5
LV	1,911	0	0.4%	0.1%	-0.2%	7.9	7.4
MT	607	1	0.1%	0.0%	-0.1%	10.4	8.6
NL	83,388	1,689	5.3%	5.0%	-0.3%	7.7	8.7
PT	33,909	-1,068	2.1%	2.0%	-0.1%	6.8	7.3
SI	6,627	19	0.4%	0.4%	0.0%	8.5	9.4
SK	8,031	0	1.0%	0.5%	-0.5%	8.1	8.2
SNAT	147,088	0	10.0%	8.9%	-1.1%	10.2	8.8
Total / Avg.	**1,661,205**	**-281**	**100.0%**	**100.0%**	**0.0%**	**7.5**	**7.6**

[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

Appendix
Overview of latest Covered Bond & SSA View editions

Publication	Topics
05/2023 ♦ 08 February	▪ January 2023: record start to the new covered bond year ▪ SSA monthly review: dynamic issuance activity to kick off the new year
04/2023 ♦ 01 February	▪ Focus on covered bond jurisdictions: Canada in the spotlight ▪ Focus on covered bond jurisdictions: Slovakia and Czech Republic in the spotlight ▪ 26th meeting of the Stability Council (December 2022)
03/2023 ♦ 25 January	▪ ECB preview: all eyes and ears on the press conference ▪ Successful start to the year for EUR sub-benchmarks as well ▪ ESG covered bonds from France: La Banque Postale SFH issues inaugural social covered bond
02/2023 ♦ 18 January	▪ Focus on covered bond jurisdictions: Belgium in the spotlight ▪ The Moody's covered bond universe: an overview ▪ Beyond Bundeslaender: focus on Belgian issuers
01/2023 ♦ 11 January	▪ ECB review: 2022 entailed all manner of monetary policy action ▪ Covered Bonds Annual Review 2022 ▪ SSA: Annual review of 2022
39/2022 ♦ 14 December	▪ Our view of the covered bond market heading into 2023 ▪ SSA outlook 2023: ECB, NGEU and the debt brake in Germany
38/2022 ♦ 07 December	▪ ECB preview – next hike but total assets (finally) reduced?! ▪ Covered bond jurisdictions in the spotlight: a look at Spain
37/2022 ♦ 30 November	▪ Transparency requirements §28 PfandBG Q3 2022 ▪ ECB repo collateral rules and their implications for Supranationals & Agencies
36/2022 ♦ 23 November	▪ ESG covered bonds - another record year ▪ Current LCR classifications for our SSA coverage
35/2022 ♦ 16 November	▪ Covered bond jurisdictions in the spotlight: a look at Austria ▪ Development of the German property market ▪ EIB goes Blockchain… again!
34/2022 ♦ 09 November	▪ Covered bond jurisdictions in the spotlight: a look at Norway ▪ Tenth edition of the NORD/LB Issuer Guide Covered Bonds ▪ SSA primary stats ytd before the final sprint
33/2022 ♦ 26 October	▪ Repayment structures on the covered bond market: EU harmonisation project consigns hard bullets to the shadows ▪ The debt brake at Laender level
32/2022 ♦ 19 October	▪ ECB preview: +75bp and the balance sheet question ▪ EBA Risk Dashboard paints a robust picture in Q2 2022 ▪ An overview of the German Laender
31/2022 ♦ 12 October	▪ The covered bond rating approach of S&P ▪ Benchmark indices for German Laender
30/2022 ♦ 28 September	▪ Focus on covered bond jurisdictions: Singapore in the spotlight ▪ German Laender: more ESG issues on the horizon?

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Appendix
Publication overview

Covered Bonds:

Issuer Guide Covered Bonds 2022

Covered Bond Directive: Impact on risk weights and LCR levels

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

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

Covered bonds as eligible collateral for central banks

SSA/Public Issuers:

Issuer Guide – German Laender 2022

Issuer Guide – German Agencies 2022

Issuer Guide – Dutch Agencies 2022

Beyond Bundeslaender: Belgium

Beyond Bundeslaender: Greater Paris (IDF/VDP) (Update planned in 2023)

Spotlight on Spanish regions (Update planned in 2023)

Fixed Income Specials:

ESG-Update 2022

ECB interest rate decision: Roadmap to QT

ECB: The Wishing-Table, the Gold-Ass, and the Cudgel in the Sack

ECB interest rate decision: delivered as expected?

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

Appendix
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Sales MM/FX	+49 511 9818-9460
Sales Europe	+352 452211-515

Trading

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

Origination & Syndicate

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

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

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