Covered Bond & SSA View

NORD/LB Markets Strategy & Floor Research

15 November 2023 ♦ 33/2023

Marketing communication (see disclaimer on the last pages)

Agenda

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Market overview Covered Bonds

Author: Dr Frederik Kunze

Primary market: covered bond market not out of the woods yet

In the last edition of our weekly publication, we could not bring ourselves to revise our issuance forecast for 2023 downwards. However, having observed trading in the primary and secondary markets for EUR benchmark bond issues for another week and following an active discussion on the situation with some issuers, we feel compelled to make the relevant downward revision. We now expect a total volume of EUR 191bn (previously: EUR 202bn). In particular, we have revised our expectations for the APAC region downwards. As a result, we expect no further bond issues from Australia, Japan, New Zealand, Singapore and South Korea between now and the end of this year. This is partly due to the rather comfortable positioning of issuers in those countries. Unlike in some European jurisdictions, there is no acute funding requirement based on covered bonds in EUR benchmark format. In the past five trading days, five issuers from five different jurisdictions were active on the market. Three financial institutions approached investors last Wednesday, ING-DiBa (DE), Oma Savings Bank (FI) and Sparebanken Vest (NO). ING-DiBa opened the books for its green benchmark (4.25y) with guidance in the ms +24bp area. The final size of this mortgage covered bond issue was EUR 1.0bn (order book: EUR 1.3bn) at ms +22bp. Both Oma Savings Bank and Sparebanken Vest communicated the size of their respective deals to the market in advance, both announcing EUR 500m (WNG). The Finnish covered bond (5.2y) was priced one basis point below the initial guidance at ms +49bp, while the Norwegian issue achieved tightening of five basis points to ms +34bp. Substantial oversubscription of the Sparebanken Vest bond (bid-to-cover ratio: 3.3x) was striking, partly also as a result of a slight shortage in the market. At +4bp, the new issue premium (NIP) was comparatively low on this trading day (ING-DiBa: +8bp, Oma Savings Bank: +11bp). The start to the new trading week was marked by a fresh EUR benchmark bond issue from France. The last bond issue from this jurisdiction goes as far back as 2 October 2023 (CFF 3 5/8 01/16/29, 5.3y at ms +32bp). For its fourth placement in 2023, Caisse Française de Financement Local (CAFFIL) also opted for EUR 500m (WNG). The book for this deal (5.3y) opened in the ms +39bp area. As part of the marketing, tightening of five basis points was achieved. In total, the order book amounted to EUR 1.3bn and the new issue premium of +3bp was below the average recorded in recent trading weeks. Yesterday, Deutsche Bank Espanola (ES) mandated a banking syndicate with a bond issue worth EUR 500m (WNG). Marketing of the deal (3.0y) started with an initial guidance in the ms +45bp area, and the transaction was ultimately priced at ms +40bp. This means that the issuance volume from Spain totals EUR 8.25bn in the year to date. With regard to the EUR benchmark segment, bond issues amounting to EUR 180.65bn in total were recorded for 2023 (ytd) at the time of going to print. Consequently, we expect further deals worth a combined total of EUR 10.35bn in the remaining weeks of this year.

Issuer	Country	Timing	ISIN	Maturity	Size	Spread	Rating	ESG
Deutsche Bank SA	ES	14.11.	ES0413320153	3.0y	0.50bn	ms +40bp	- / Aa1 / -	-
CAFFIL	FR	13.11.	FR001400M1S9	5.3y	0.50bn	ms +34bp	- / Aaa /AA+	X
Sparebanken Vest	NO	08.11.	XS2717426576	5.0y	0.50bn	ms +34bp	- / Aaa / -	-
Oma Saastopankki	FI	08.11.	FI4000562095	5.2y	0.50bn	ms +49bp	- / - / AAA	-
ING-DiBa	DE	08.11.	DE000A2YNWC7	4.3y	1.00bn	ms +22bp	- / Aaa / -	-

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

Secondary market demand for new bond issues

With regard to secondary market activities, we can state that demand exists for the new deals. In view of demand from investors, the new benchmark bond issues may well tighten noticeably. At the same time, secondary market curves overall have widened slightly. The underperformance versus swaps was somewhat more marked at the longer end, although the low issuance volume in terms of long maturities has so far persistently prevented massive repricing in some jurisdictions. Overall, we expect to see spreads widen in the mid single-digit range across all maturities and jurisdictions up until the end of the year. In certain jurisdictions, the increase is likely to be slightly greater for the long end. We continue to be of the opinion that technical market analysis represents a decisive factor for ongoing repricing. Although the primary market has recently been slightly less dynamic, it is already evident today that 2023 will go down as one of the stronger issuance years. A high level of supply is met with caving demand – partly in the wake of the change in the ECB's policy direction. Investors are becoming increasingly selective and demand higher spread concessions. We would also put the considerable weight of EUR 500m (WNG) formats in the context of a buyers' market. In 2024, repricing is set to continue, at least until March, although less marked than in the fourth quarter of 2023 to date.

Rating agency Scope attains significant milestone with ECAF authorisation

Scope Rating GmbH (Scope) is the first European rating agency to advance to the group of external credit assessment institutions (ECAI), which can be used under the Eurosystem's credit assessment framework (ECAF). To date, only Moody's, S&P, Fitch and DBRS were in the group of ECAIs that had ECAF authorisation. Scope had already been listed by the European Securities and Markets Authority (ESMA) as an ECAI since 2011 and can therefore also be used to derive credit quality steps (CQS) in the context of CRR. The ECB's press release dated 10 November 2023 undoubtedly also marks a success for Scope (cf. Scope press release). The decision taken on 2 November 2023 will now be followed by technological implementation in the Eurosystem's IT architecture, which according to information from the ECB may take several months. Once this has been finalised, ratings for the asset classes 'corporate', 'banks', 'covered bonds' as well as 'Laender and public sector' can be used in the context of ECAF. However, Scope's ABS ratings will continue to be excluded. As at June 2023, Scope rated a total of 41 covered bond programmes from eleven countries (cf. Scope Covered Bond Quarterly). According to Scope, the relevant volume outstanding amounted to EUR 659bn (or 1,145 bonds). A summary of Scope's methodology for assessing covered bonds is available in the current issue of the NORD/LB Issuer Guide Covered Bonds.

Vdp property price index – a glance at the German property market

A sustained phase of price adjustments is happening in the global property markets. The factors influencing pricing in the markets for both residential and commercial property are wide-ranging. The interest rate environment remains an essential – although certainly not the only – factor. In the current edition of our weekly publication, we consider the vdp property price index and accordingly the German property market (cf. Covered Bond focus article).

Italy: Fitch comments on OBG programmes

As part of our weekly publication, we have also repeatedly addressed the implications of the ECB's changed monetary policy for the covered bond segment. It was always necessary to consider that the new interest rate environment would only materialise in certain aspects of risk assessment with a time delay. The risk experts at Fitch recently commented on this matter in relation to Italian covered bonds (Obbligazioni Bancarie Garantite, OBG). According to the information, most of the mortgage loans now included in the cover pools of OBG programmes for the first time still relate to the period of low interest rates. The majority have a fixed rate and therefore generate a considerably lower cash flow than the bulk of the financing previously included in the cover pools. Fitch explained that this is at the expense of the available excess spread, which would be available for payments, additionally to the cover assets if required. According to Fitch, this effect is accentuated if the relevant issuers were present in the market in the second half of 2023 with new deals to which the new interest rate regime applied. The rating experts also highlighted that more substantial losses may occur as a result of asset and liability mismatches (ALM losses), because the asset side, which largely comprises low-interest fixed-rate loans, is having to absorb significant losses in market value. However, to be more precise, Fitch referred to a temporary phenomenon, both with regard to the effect on the excess spread and in view of the implications in terms of ALM losses. The risk experts at Fitch attributed this, in particular, to the fact that the share of mortgage financing with higher interest is likely to increase gradually.

Market overview
SSA/Public Issuers

Authors: Dr Norman Rudschuck, CIIA // Christian Ilchmann

Hamburg: Autumn tax estimate makes prospects for financial planning difficult

The autumn tax estimate for the Free and Hanseatic City of Hamburg (ticker: HAMBRG) was presented on 7 November. According to the tax authority's forecast based on the results of the "Tax Estimates" working group, slight tax revenue increases are expected for the current year and the coming years compared with the May 2023 tax estimate. Taking into account earmarked or ongoing proposed federal legislation, this leaves an increase of EUR 353m in the current 2023/24 biennial budget compared with the last tax estimate. In the medium-term period 2025-2027, which is relevant for the upcoming budgets, there is a minus of around EUR 120m. This is due to earmarked measures (e.g. costs for the "Good Day Care Act") as well as current and planned legislative proposals (e.g. Growth Opportunities Act) with cumulative additional costs between 2023 and 2027 totalling EUR 1.1bn, resulting in a deterioration of EUR 120m for 2025-2027. Finance Minister Dr Andreas Dressel explains: "The tax estimate confirms our very cautious assumptions in this challenging economic and fiscal environment. There is no need for changes to the current budget, but the outlook for the 2025/26 budget is unfortunately becoming even gloomier. The tax trend, which is decisive for the expenditure framework, will clearly not improve to such an extent that we will be able to offset all cost and tariff increases in the municipal sector [...] As the federal government [...] has unfortunately largely abandoned the previous solidarity in Bund-Laender fiscal relations, we are now facing very difficult times in terms of fiscal policy."

NRW: Cabinet approves supplementary bill to the 2024 draft budget

On 7 November, the cabinet of North Rhine-Westphalia (ticker: NRW) approved a supplementary bill to the draft budget for 2024. This implements the results of the October tax estimate and further adjustments in the 2024 draft budget. The state government is rigidly pursuing a return to fiscal normality where all budgetary pressures are funded within the framework of the supplementary bill. The 2024 budget still manages not to incur any net new debt. The priorities expressed by the state government for children, education and security are met. The October tax estimate results in a reduction in tax revenue of EUR 150m compared with the estimate in the draft budget for 2024. The reasons for the lower estimated tax revenue compared with the May tax estimate are mainly due to the weak economic environment and the resulting weaker economic output. Minister of Finance Dr Marcus Optendrenk: "The declining forecasts show how important forward-looking and sound financial planning with good judgement and clear priorities is. However, it also sends a clear signal to Berlin: Continuously passing on costs to the Laender – recently around EUR 4bn a year for us alone – is uncreative, unfair and cannot be the right solution." As a result of the tax relief measures initiated by the federal government in 2022, the state budget of North Rhine-Westphalia will see a permanent deterioration of around EUR 4bn (due to the Inflation Equalisation Act, the Annual Tax Act 2022 and Relief Package III, among other aspects).

KfW: strong growth in export financing in the first nine months
On 9 November, Kreditanstalt für Wiederaufbau (ticker: KFW) presented its figures for the first three quarters of 2023. We briefly summarise the key points in the following section: Consolidated profit from January to September amounted to EUR 1.2bn (same period of the previous year: EUR 993m), which is slightly above the average for the past five years of around EUR 1.1bn. The promotional business volume amounted to EUR 80.8bn and was thus – after the record year of 2022 (Q1-Q3 2022: EUR 127.9bn) – slightly above the level of the years before the outbreak of the war in Ukraine (Q1-Q3 2021: EUR 73.1bn). Domestic promotion accounted for around 72% of this (EUR 57.9bn). However, new business in export and project finance almost doubled and amounted to EUR 20.7bn (Q1-Q3 2022: EUR 11.7bn). KfW Capital's commitment volume increased by around 200% in the reference period to roughly EUR 1.8bn (Q1-Q3 2022: around EUR 0.6bn). This development is due, among other things, to the doubling of the commitments of the "ERP-VC Fund Investments" programme, the new "Green Transition Facility" and new commitments for the equity components of the Future Fund. Stefan Wintels, Chief Executive Officer of KfW: "The German economy is facing enormous challenges during the present decade. Without additional capital to invest in innovation, the transformation will not succeed. At KfW, we are supporting change at many levels – for example as a venture capitalist, but also as an anchor investor or financier in the sectors that are important for the future of our country." KfW has by no means been inactive on the capital market either: It raised funds of EUR 75.1bn to fund its promotional business during the period under review. Green bond issues have contributed around EUR 8.5bn to funding to date. In addition to the euro (57%), the US dollar in particular makes an important contribution of 26% once again. KfW also issues bonds in seven other currencies. At the end of September, KfW increased its originally planned funding volume for 2023 by EUR 5bn to around EUR 90bn due to good business development and increased liquidity requirements. We therefore expect KfW to make a few more appearances on the capital markets before the end of the year.

Global Finance "Safest Bank Awards 2023": Four German agencies among the top 10
For the 32nd time, Global Finance has published the annual rankings of the 50 safest banks in the world. As in previous years, European institutions dominate the list in 2023, occupying a total of 29 of the 50 places. Kreditanstalt für Wiederaufbau (ticker: KFW) topped the rankings for the 15th year in a row. Joseph Giarraputo, founder and Editorial Director of Global Finance, emphasised the importance of solid banks: "Given the rise in inflation [...] in the US and Europe, the solidity of banks remains the cornerstone of global trade in these difficult times." What is particularly remarkable for us is that with Landwirtschaftliche Rentenbank (ticker: RENTEN; 4th place), L-Bank (ticker: LBANK; 5th place) and NRW.BANK (ticker: NRWBK; 8th place), a total of four German agencies are among the top 10 safest banks worldwide. Other positions in the top 10 that are relevant to our coverage: BNG in 3rd place, NEDWBK in 6th place, KBN in 7th place and SEK in 9th place. The background to this is that the annual "World's Safest Banks" ranking list by Global Finance has been the recognised standard for more than three decades when it comes to the security of financial counterparties. The ranking is based, among other aspects, on an evaluation of the long-term foreign currency ratings of Moody's, Standard & Poor's and Fitch. The 500 largest banks worldwide are analysed.

SEK: Interim report for Q1-Q3 2023

Svensk Exportkredit (ticker: SEK), mentioned above, has presented its report for the first nine months of 2023. The positive trends of the second quarter were confirmed once again in the third quarter: the strong net interest income from customer transactions and the continued strong demand for corporate loans from Swedish exporters. Net interest income for the period January to September totalled around SEK 2.1bn (approximately EUR 181m). Meanwhile, the loan portfolio recorded historically strong growth of 7%, with green and sustainability-related loans now accounting for around 14% of the loan portfolio. Net profit increased by 33% year on year to just over SEK 1.0bn (around EUR 86m). Also noteworthy was the placement of a seven-year USD benchmark bond - the longest term of a USD transaction that SEK has issued since 2007. “This is of course very pleasing, as longer maturities are important to us and part of our bond strategy. It is important for our contribution to climate change that we are able to finance long-term projects that are important from a climate and sustainability perspective”, says Magnus Montan, CEO of SEK.

Primary market

The renewed activity on the primary market at the beginning of last week continued as the week progressed. This means that today we can report on three fresh benchmarks, three taps and two new mandates, as usual in chronological order. Österreichische Kontrollbank (ticker: OKB) kicked things off with a sustainable five-year bond amounting to EUR 500m (WNG). The deal was closed at a spread of ms +2bp (guidance: ms +2bp area); the order book totalled EUR 365m. After this, a new visitor to the primary market appeared in the shape of the Magyar Export-Import Bank (ticker: MAEXIM) from Hungary. On its debut, the bank sought to raise EUR 1bn at a remarkable (for the SSA segment) guidance of ms +325bp area. The bid-to-cover ratio was 3.0x, so that the final price was 25bp tighter. The European Union (ticker: EU) brought the benchmark segment to a close with its final syndicated issue of the year. A total of EUR 5bn was raised as part of a deal with a term of five years guided at ms +6bp area. With the deal featuring an oversubscription ratio of 10.0x, narrowing of two basis points was ultimately achieved. Agence France Locale (ticker: AFLBNK) got things started in terms of the taps this week, increasing its 2030 bond by EUR 250m (WNG). This was achieved in line with the guidance, only without the “area”, namely at OAT +52bp. FRTR 0% 11/25/29 and FRTR 0% 11/25/30 served as references for this deal. The taps continued with the two-city state of Bremen, which increased its 2023 floater by EUR 400m. With a precision landing (bid-to-cover ratio: 1.0x), the deal was eventually finalised in line with the guidance (3mE flat). Finally, the EU increased its 2048 green bond by EUR 3bn. With a guidance of ms +74bp area, the order books filled to a record EUR 60bn, which enabled a narrowing of two basis points. Due to the new mandates that have been issued, we expect to see the following transactions on screens in the next few days: NRW intends to issue a EUR benchmark with a three-year term. Similarly, a rare guest, Eurofima (ticker: EUROF), is in talks about a USD benchmark with the same maturity.

Issuer	Country	Timing	ISIN	Maturity	Size	Spread	Rating	ESG
EU	SNAT	14.11.	EU000A3K4EN5	5.0y	5.00bn	ms +4bp	AAA / Aaa / AA+	-
MAEXIM	HU	08.11.	XS2719137965	5.5y	1.00bn	ms +300bp	BBB / - / BBB-	-
OKB	AT	08.11.	XS2719102746	5.0y	0.50bn	ms +2bp	- / Aa1 / AA+	x

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

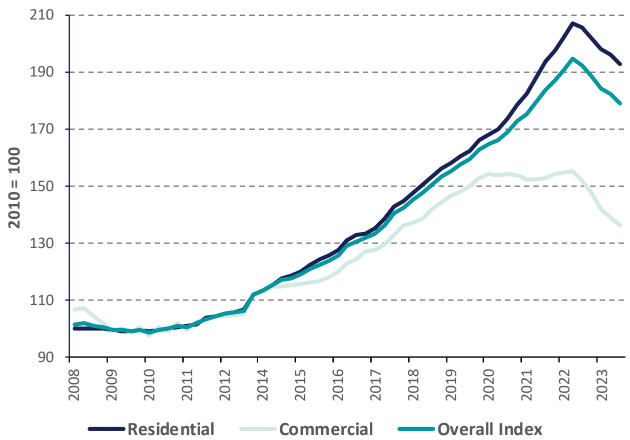
Covered Bonds
Development of the German property market

Author: Dr Frederik Kunze

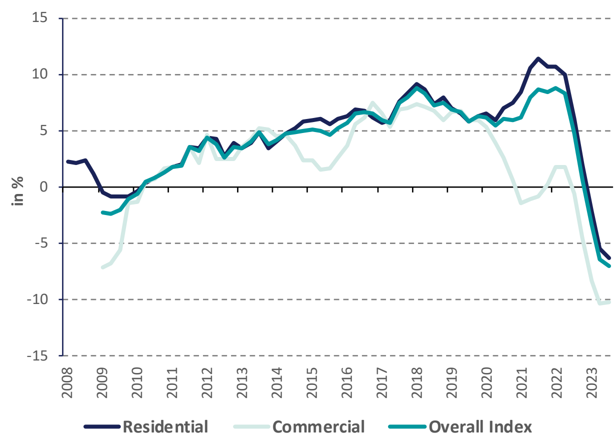
vdp property price index – sharp downturn continues in Q3 2023

The nosedive of prices in the German property market has continued. This is what the latest information on the widely recognised vdp property price index indicates. The overall index was down by 3.2 points in the third quarter of 2023, or 1.7% quarter on quarter. Following this fifth decrease in a row, the overall index now stands at 179.2 points and is therefore at the level last recorded in the second quarter of 2021 (179.7 points). One year on from that quarter, the vdp index was at an all-time high of 194.8 points by mid-year 2022. In July 2022, the ECB heralded the reversal in interest rates with a first cut. Higher interest rates have meanwhile filtered through to the German property market for more than a year, although the dynamic specific to the various sub-markets has varied. In our view, the quarterly dataset presented, which is based on transaction data supplied by more than 700 financial institutions, provides a valuable overview of price trends in the sub-segments of residential property, multi-family properties, office space, retail and logistics as well as the more generic sub-division into commercial versus residential use. Irrespective of this, a downward price trend was evident in all sub-segments and sub-markets. Jens Tolckmitt, Chief Executive of the vdp, is certain that "a price adjustment is continuing in all asset classes, with a market recovery still waiting to happen."

Index level – overall, residential and commercial



Y/Y change – overall, residential and commercial



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

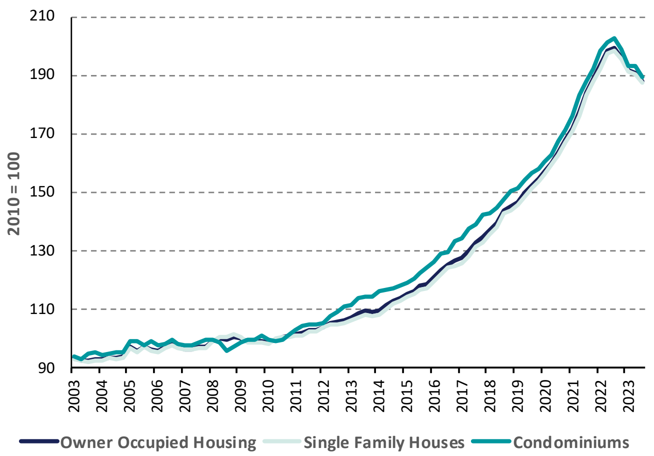
Residential property – price decrease of 1.7% quarter on quarter

Prices in the segment of residential property decreased by 1.7% quarter on quarter (-6.3% Y/Y). With regard to owner-occupied housing, the price decline of -1.6% quarter on quarter and -5.8% year on year respectively was slightly less marked. In the sub-category of owner-occupied homes, a decrease of -1.5% quarter on quarter and -5.6% year on year respectively was reported for houses as well as -2.0% quarter on quarter and -6.6% year on year respectively for flats. This means that the price adjustment has continued to encompass the residential market. The long-term trend reflects a high price level in terms of the sub-index for owner-occupied homes, down only around ten points on the peak at 198.3 points.

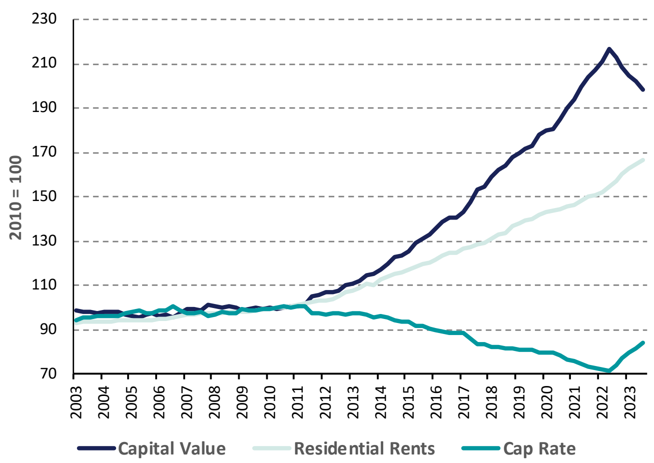
Residential property – rent continues to rise

The vdp's Chief Executive, Jens Tolckmitt, addressed a topic that is also increasingly being discussed in the wider public. Within the context of the latest press release, he went on record stating that the housing shortage is becoming ever greater. According to Tolckmitt, this is the result of weak construction activities. The shortage is also fuelling rent under new contracts in multi-family dwellings, which saw similar growth to the previous quarter of 5.8% Y/Y (+6.2% Y/Y). A downward trend in capital value continues at a current score of 198.4 points (-1.7% Q/Q and -6.8% Y/Y). Consequently, the property yield as a measure for the yield on investments in multi-family dwellings has continued to increase to 84.0 index points (+13.5% Y/Y). The time series last reached this level in the second half of 2017.

Owner-occupied homes



Multi-family dwellings



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

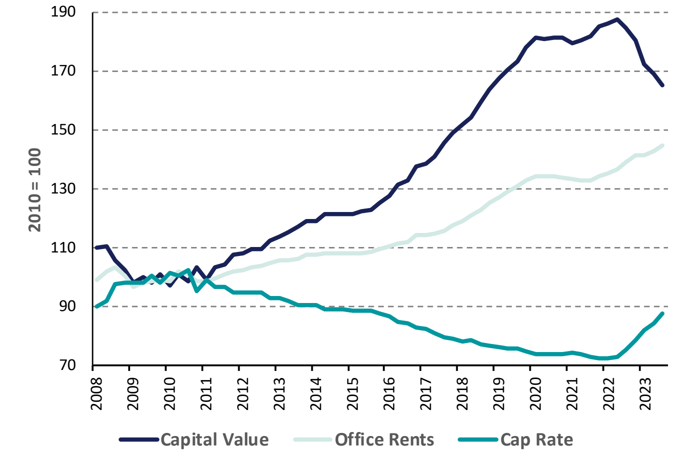
Decrease slightly less pronounced in top 7 housing markets

The separate index reflecting the trend in the housing markets of the top 7 cities was also down (-5.7% Y/Y and -1.3% Q/Q). However, the vdp clarified that this decrease in the price of housing in the top 7 cities during the third quarter of this year was slightly less marked compared with the trend for Germany as a whole. Frankfurt/Main faced the most substantial reduction (-9.1% Y/Y) and Berlin the smallest (-4.7% Y/Y). The highest growth rates in terms of rent under new contracts and property yield was reported for the cities of Berlin (rent: +8.7% Y/Y and yield: +13.9% Y/Y) and Munich (+5.2% Y/Y and +12.9% Y/Y).

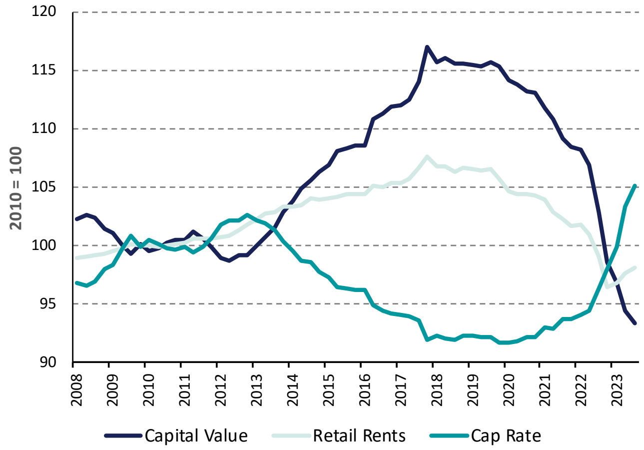
Office vs retail – first more marked price decline for offices since 2009

In the third quarter of 2023, the sub-index for commercial property was down by 10.3% Y/Y (and 2.2% Q/Q). The decline in the value of office property of 10.6% year on year (and 2.5% Q/Q) was striking. In its press release, the vdp highlighted that, for the first time since 2009, the decline in the price of office property was greater than that for retail (-9.3% Y/Y and -1.2% Q/Q). While the rent under new contracts in the segment of retail property continued to decrease year on year (-1.0% Y/Y), the third consecutive quarter-on-quarter increase occurred with a rise of 0.4%. The upward trend for renting office space remained steady (3.9% Y/Y and 1.1% Q/Q), resulting in a significant increase in the rate of property yields (16.2% Y/Y and 3.7% Q/Q).

Office property



Retail property



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

Conclusion

The nosedive of Germany's property markets has continued. Decreases varied across the full breadth of sub-markets and sub-indices. In terms of the respective decline in prices, some differences were obvious. With regard to the sub-segment of commercial property, onto which the focus has recently shifted, the decrease in the capital value of office property was striking in that it was more marked than that for retail property. Yet, this is not really all that surprising, in our opinion. A price adjustment started as early as year-end 2017 for retail property, and it resulted from very specific factors. Structural disruption, such as the global pandemic and the ECB's reversal of its interest rate policy, played no part in the property markets at that time. In particular with regard to the office property market and certain properties in this sub-segment, higher and continually more stringent requirements in terms of sustainability will apply, with a new reality also emerging in terms of how people work – office vs working from home. It is not yet clear today how these trends will impact the office property market. As a matter of fact, some properties are likely to benefit from a structural change in demand, whereas other properties can be expected to face significantly lower demand from tenants and/or investors. According to the vdp, the future outlook is very uncertain and unpredictable. In this context, Jens Tolckmitt stated the following: "Adjusting to changed yield conditions will be a crucial prerequisite in terms of increasing investor demand for office and retail property again." The vdp's view is that a further decline in prices should be expected for the German property market as a whole. Long-term, weak construction activity should turn out to be more important as market support. However, we are still far away from achieving a resultant new equilibrium. Accordingly, the vdp expects further index decreases in the coming quarters. With regard to the residential property market, the vdp is somewhat more relaxed. Tolckmitt summarised the vdp's slant as follows: "The residential property market is about to enter calmer waters. No sharp decline in prices has occurred to date, and based on what we know today, is unlikely to happen in the immediate future."

NORD/LB

SSA/Public Issuers
ECB repo collateral rules and their implications for Supranationals & Agencies

Authors: Dr Norman Rudschuck, CIIA // Christian Ilchmann

General framework and Temporary framework define collateral rules

Within the scope of its statutes, access to ECB liquidity is only possible on a collateralised basis. The ECB defines the assets that are eligible as collateral in its General framework and Temporary framework. There are some significant differences in the criteria for acceptance as collateral, especially for quasi-government issuers. For this reason, we devote the following section to a more detailed look at the ECB repo rules.

Eligibility criteria	Marketable assets	Non-marketable assets	
Type of asset	ECB debt certificates, other marketable debt instruments	Credit claims and Schuldscheindarlehen (SSDs)	Retail mortgage-debt instruments (RMBDs)
Credit standards	The asset must meet high credit quality standards. These are assessed using ECAF (Eurosystem credit assessment framework) rules for marketable assets	The credit quality is assessed on the basis of the credit quality of the debtor or guarantor. The relevant debtor or guarantor shall comply with the Eurosystems credit quality requirements as specified in the ECAF rules for credit quality	The RMBDs shall comply with the Eurosystems credit quality requirements specified in the ECAF rules for RMBDs.
Place of issue	Debt instruments shall be issued in the EEA with a central bank or with an eligible securities settlement system (SSS)	-	-
Settlement/ handling procedures	Debt instruments shall be transferable in book-entry form and shall be held and settled in Member States whose currency is the euro through an account with a national central bank (NCB) or with an eligible SSS, so that the perfection and realisation of collateral is subject to the law of a Member State whose currency is the euro	Eurosystem procedures laid down in the relevant national documentation of the NCBs	Eurosystem procedures as defined in the national documentation of the home NCB
Type of issuer/ debtor/guarantor	NCBs, public sector entities, agencies, credit institutions, financial corporations other than financial institutions, non-financial corporations, multilateral development banks or international organisations	Non-financial corporations, public sector entities (excluding public financial corporations), multilateral development banks or International organisations	Credit institutions that are eligible counterparties
Place of establishment of the issuer/debtor/ guarantor	Issuer: EEA or non-EEA G-10 country; Debtor: EEA; Guarantor: EEA	Eurozone	Eurozone
Acceptable markets	Regulated markets as defined in Directive 2014/65/EU, unregulated markets assessed acceptable by the ECB based on the principles of safety, transparency and accessibility	-	-
Currency	Euro	Euro	Euro

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

Overview of collateral regulations (in accordance with General framework) (continued)

Minimum amount	-	Minimum amount at the time of submitting the credit claim: - domestic use: EUR 0 or any higher amount set by NCB; - cross-border use: minimum amount of EUR 0.5m	-
Legal basis	For asset-backed securities (ABS), the acquisition of the cash-flow generating assets by the SPV shall be governed by the law of a Member State. The law governing the cash-flow generating assets shall be the law of an EEA country.	Governing law for credit claim agreement and mobilisation: law of a Member State whose currency is the euro. There shall be no more than two governing laws in total that apply to: a) the counterparty, b) the creditor, c) the debtor, d) the guarantor (if relevant), e) the credit claim agreement, f) and the mobilisation agreement	-
Cross-border use	Yes	Yes	Yes

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

Precise differentiation of possible collateral through respective definitions

In accordance with Part 4, Title II, Chapter 1, Articles 62 and 63 of the General Framework, the ECB accepts bonds with fixed, unconditional nominal volume as collateral (in contrast to convertible bonds, for example) as well as bonds for which the capital amount is generally linked to an inflation index in the eurozone at a certain date and do not have any other complex features. Collateral that includes warrants or similar rights is expressly not eligible. In addition to fixed coupons, zero coupon bonds or those with floating coupons based on a reference interest rate such as the EURSTR or Euribor, or bonds that depend on sustainability performance targets verified by independent third parties, are also eligible. Bonds where the coupon payment is based on the return of a sovereign bond or an index of several sovereign bonds in the eurozone with a maturity of not more than one year or the interest payments are linked to inflation (eurozone) are possible for collateral purposes. As far as ABS are concerned, special rules apply with regard to the first condition (fixed, unconditional nominal amount). The ECB generally distinguishes between two groups of collateral: marketable and non-marketable assets, which differ in particular with regard to their eligibility criteria.

Temporary Framework extends collateral rules

Apart from assets that meet these acceptance criteria, the Temporary Framework extends the criteria to some extent. Under certain conditions and subject to valuation adjustments pursuant to Guideline 2014/528, certain bonds that are denominated in GBP, JPY or USD may be accepted for collateral purposes, while the credit threshold limits may be waived for debt securities that were issued or are guaranteed by IMF/EU programme states, provided that the relevant Member States meet the requirements associated with the financial support and/or the macroeconomic programme in the opinion of the ECB's Governing Council.

Valuation discount (haircut) for collateral is derived from allocation to a haircut category
ECB-compliant collateral (marketable) is divided into five haircut categories, which differ with regard to issuer classification and type of collateral. The haircut category is the key factor in determining haircuts to which certain debt securities are subject. The haircuts also differ on the basis of residual term to maturity and coupon structure. Haircuts for bonds with variable coupons correspond to those of fixed-interest bonds (of the respective category).

Haircut categories – an overview

Category I	Category II	Category III	Category IV	Category V
Debt instruments issued by central governments	Debt instruments issued by local and regional governments	Debt instruments issued by non-financial corporations, corporations in the government sector and agencies which are non-credit institutions that do not meet the quantitative criteria set out in Annex XIIa to Directive (EU) 2015/510 (ECB/2014/60)	Unsecured debt instruments issued by credit institutions and agencies which are credit institutions that do not meet the quantitative criteria set out in Annex XIIa to Directive (EU) 2015/510 (ECB/2014/60)	Asset-backed securities
Debt instruments issued by the European Union	Debt instruments issued by entities (credit institutions or non-credit institutions) classified by the Eurosystem as agencies and which meet the quantitative criteria set out in Annex XIIa to Directive (EU) 2015/510 (ECB/2014/60)		Unsecured debt instruments issued by financial corporations other than credit institutions	
ECB debt certificates	Debt instruments issued by multilateral development banks and international organisations other than the European Union			
Debt certificates issued by national central banks (NCBs) prior to the date of adoption of the euro in their respective Member State	Legislative covered bonds			
	Multi cédulas			

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

Haircuts by haircut category and rating – an overview

		Haircut category								
Credit quality	Residual maturity (years)(*)	Category I		Category II		Category III		Category IV		Category V
		Fixed/floating coupon	Zero coupon	Fixed/floating coupon	Zero coupon	Fixed/floating coupon	Zero coupon	Fixed/floating coupon	Zero coupon	
AAA to A-	0-1	0.5%	0.5%	1.0%	1.0%	1.0%	1.0%	7.5%	7.5%	4.0%
	1-3	1.0%	2.0%	1.5%	2.5%	2.0%	3.0%	10.0%	11.5%	5.0%
	3-5	1.5%	2.5%	2.5%	3.5%	3.0%	4.5%	12.0%	13.0%	7.0%
	5-7	2.0%	3.0%	3.5%	4.5%	4.5%	6.0%	14.0%	15.0%	9.0%
	7-10	3.0%	4.0%	4.5%	6.5%	6.0%	8.0%	16.0%	17.5%	12.0%
	10-15	4.0%	5.0%	6.5%	8.5%	7.5%	10.0%	18.0%	22.5%	18.0%
	15-30	5.0%	6.0%	8.0%	11.5%	9.0%	13.0%	21.0%	25.0%	20.0%
	>30	6.0%	9.0%	10.0%	13.0%	11.0%	16.0%	24.0%	31.5%	22.0%
BBB+ to BBB-	0-1	5.0%	5.0%	5.5%	5.5%	6.5%	6.5%	11.5%	11.5%	**Not** permissible
	1-3	6.0%	7.0%	7.5%	10.5%	9.5%	12.0%	18.5%	20.0%	
	3-5	8.5%	10.0%	11.0%	16.0%	13.0%	18.0%	23.0%	27.0%	
	5-7	10.0%	11.5%	12.5%	17.0%	15.0%	21.5%	25.5%	29.5%	
	7-10	11.5%	13.0%	14.0%	21.0%	17.0%	23.5%	26.5%	31.5%	
	10-15	12.5%	14.0%	17.0%	25.5%	19.5%	28.0%	28.5%	35.0%	
	15-30	13.5%	15.0%	20.0%	28.5%	22.0%	31.0%	31.5%	39.0%	
	>30	14.0%	17.0%	22.0%	32.5%	25.0%	35.5%	34.5%	43.0%	

(*), i.e. [0-1) residual maturity less than 1 year, [1-3] residual maturity equal to or greater than 1 year and less than 3 years, etc.
Source: ECB, NORD/LB Markets Strategy & Floor Research

Far more agencies classified as eligible collateral

The revised Directive ECB/2019/11, which includes some European agencies in the list of assets eligible as collateral for the first time, has been in force since 5 August 2019. Since then, all agencies recognised by the ECB, which – in addition to being eligible for purchase under the PSPP and PEPP – possibly qualify for Category II if they meet both quantitative criteria, have been listed on the ECB's website: outstanding volume of marketable assets EUR ≥10bn and nominal value of EUR benchmarks average ≥50% of the outstanding volume. These criteria are re-evaluated every year over an observation period of one year (1 August through to 31 July).

Consequences of different classifications

After we last looked at the allocations of supranationals and agencies to the specific haircut categories in our coverage a year ago in November 2022, below we will briefly discuss the changes that have taken place since then. We take a detailed look at the "List of eligible preferred issuers" published by the ECB. For example, LfA Förderbank Bayern and SFIL S.A. have switched from haircut category IV to II, as they had not previously been assigned a "Yes" by the ECB. This results in a lower valuation discount for longer terms (e.g. AAA – A- rating, six-year term: Category II 3.5%; Category IV: 14.0%). In addition to these beneficiaries, two agencies were deleted or no longer assigned a "Yes" and are therefore no longer classified in Category II. Our understanding is that FADE and ÖBB have therefore since fallen into haircut categories III/IV. However, the respective guarantee structure is likely to be far more significant for the valuation of bonds, which is why no significantly negative effects were expected for either issuer.

List of eligible preferred issuers

Name of agency recognised by the ECB	Compliance with quantitative criteria
Action Logement Services (ALS)	
ADIF-Alta Velocidad	
Agence centrale des organismes de sécurité sociale (ACOSS)	
Agence de Promotion Immobilière du Brabant wallon (APIBW)	
Agence Française de Développement (AFD)	yes
Agence France Locale (AFL)	
Agenzia nazionale per l'attrazione degli investimenti e lo sviluppo d'impresa S.p.A. (Invitalia)	
Alliade Habitat	
Assistance Publique-Hôpitaux de Paris (AP-HP)	
Autobahnen- und Schnellstraßen-Finanzierungs-Aktiengesellschaft (ASFINAG)	
Batigère	
BNG Bank N.V.	yes
Bayerischen Landesbodenkreditanstalt (BayernLabo)	
Bpifrance Financement	yes
Bremer Aufbau-Bank	
Caisse d'Amortissement de la dette sociale (CADES)	yes
Caisse des dépôts et consignations (CDC)	
Cassa del Trentino S.p.A.	
Cassa Depositi e prestiti S.p.A. (CDP)	yes
Caisse Nationale des Autoroutes (CNA)	
CDC Habitat	
Clairsienne	
Clesence	
Družba za avtoceste v Republiki Sloveniji, d.d. (DARS)	
Finlombarda S.p.A.	
Finnvera PLC	
Fondo de Amortización del Déficit Eléctrico, Fondo de Titulización de Activos (FADE)	
Fonds Du Logement Des Familles Nombreuses De Wallonie Scrl (FLW)	
Fonds régional bruxellois de refinancement des trésoreries communales (FRTC)	
Grand Delta Habitat	
Groupement des Centres Hospitaliers Universitaires (CHU) / Centres Hospitaliers Régionaux (CHR)	
Halpades Societe Anonyme HLM	
Hamburgische Investitions- und Förderbank (IFB Hamburg)	
Housing Finance Agency plc (HFA)	
Île-de-France Mobilités (previously STIF)	
Infrabel SA	
Infraestruturas de Portugal S.A. (IP)	
IN'LI	
Instituto Catalán De Finanzas (ICF)	
Instituto de Crédito Oficial (ICO)	
Instituto de Finanzas de Cantabria (ICAF)	
Investitions und Strukturbank Rheinland-Pfalz	
Investitionsbank Berlin (IBB)	
Investitionsbank des Landes Brandenburg	

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

NORD/LB

List of eligible preferred issuers (continued)

Name of agency recognised by the ECB	Compliance with quantitative criteria
Investitionsbank Schleswig-Holstein (IB.SH)	
Investitionsbank Sachsen-Anhalt	
Attistibas finanšu institucija Altum	
Kreditanstalt für Wiederaufbau (KfW)	yes
Kuntarahoitus Oyj/ Municipality Finance PLC (MuniFin)	yes
Landesförderinstitut Mecklenburg-Vorpommern	
Landeskreditbank Baden-Württemberg - Förderbank (L-Bank)	yes
Landwirtschaftliche Rentenbank	yes
LfA Förderbank Bayern	yes
Maisons et cites Soginorpa	
Malta Development Bank	
NBank	
Nederlandse Financierings-Maatschappij voor Ontwikkelingslanden N.V. (FMO)	
Nederlandse Waterschapsbank N.V. (NWB Bank)	yes
Néolia	
NRW.BANK	yes
ÖBB-Infrastruktur A.G.	
Oesterreichische Kontrollbank A.G. (OeKB)	yes
PARPÚBLICA - Participações Públicas S.A. (SGPS)	
Saarländische Investitions-kreditbank AG	
Sächsische Aufbaubank – Förderbank (SAB)	
SFIL S.A.	yes
SID – Slovenska izvozna in razvojna banka, d.d., Ljubljana (SID banka)	
Slovenská záručná a rozvojová banka, a.s. (SZRB)	
Slovenski državni holding, d.d. (SDH)	
SNCF Réseau	yes
Société du Grand Paris (SGP)	yes
Société wallonne du crédit social SA (SWCS)	
Société Wallonne du Logement SA (SWL)	
Thüringer Aufbaubank	
Työllisyysrahasto (previously Työttömyysvakuutusrahasto (TVR))	
UAB Valstybės investicinis kapitalas (VIK)	
Unédic	yes
Valloire Habitat	
Vilogia	
Wirtschafts- und Infrastrukturbank Hessen (WIBank)	
Wohnbau Burgenland GmbH	

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

Issuers classified as supranationals by the ECB

Institution (Bloomberg ticker)	Region
Council of Europe Development Bank (COE)	Europe
European Atomic Energy Community (EURAT)	Europe
European Bank for Reconstruction and Development (EBRD)	Europe
European Financial Stability Facility (EFSF)	Europe
European Investment Bank (EIB)	Europe
European Investment Fund	Europe
European Stability Mechanism (ESM)	Europe
European Union (EU)	Europe
Nordic Investment Bank (NIB)	Europe
African Development Bank (AFDB)	Non-Europe
Asian Development Bank (ASIA)	Non-Europe
Asian Infrastructure Investment Bank (AIIB)	Non-Europe
Bank for International Settlements (BIS)	Non-Europe
Caribbean Development Bank (CARDEV)	Non-Europe
Inter-American Development Bank (IADB)	Non-Europe
International Bank for Reconstruction and Development (IBRD)	Non-Europe
International Development Association (IDAWBG)	Non-Europe
International Finance Corporation (IFC)	Non-Europe
International Finance Facility for Immunisation (IFFIM)	Non-Europe
International Monetary Fund	Non-Europe
Islamic Development Bank (ISDB)	Non-Europe
Multilateral Investment Guarantee Agency	Non-Europe

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

Haircut category classification of agencies and supranationals

Bloomberg ticker	Country/type	Haircut category	Rating (Fitch/Moody's/S&P)
EFSF	Supranational	II	AA-/Aaa/AA
ESM	Supranational	II	AAA/Aaa/AAA
EU	Supranational	II	AAA/Aaa/AA+
EIB	Supranational	II	AAA/Aaa/AAA
EBRD	Supranational	II	AAA/Aaa/AAA
NIB	Supranational	II	-/Aaa/AAA
COE	Supranational	II	AAA/Aaa/AAA
EUROF	Supranational	-	AA/Aa2/AA
IBRD	Supranational	II	AAAu/Aaa/AAA
IADB	Supranational	II	AAAu/Aaa/AAA
ASIA	Supranational	II	AAA/Aaa/AAA
IFC	Supranational	II	-/Aaa/AAA
AFDB	Supranational	II	AAA/Aaa/AAA
CAF	Supranational	-	AA-/Aa3/AA
ISDB	Supranational	II	AAA/Aaa/AAA
KFW	Germany	II	AAAu/Aaa/AAA
RENTEN	Germany	II	AAA/Aaa/AAA
FMSWER	Germany	III	-/Aaa/AAA
ERSTAA	Germany	III	AAA/Aa1/AA
NRWBK	Germany	II	AAA/Aa1/AA
LBANK	Germany	II	AAAu/Aaa/AA+
WIBANK	Germany	IV	-/-/AA+
BAYLAN	Germany	II	-/Aaa/-
IBBSH	Germany	IV	AAA/-/-
BYLABO	Germany	IV	-/Aaa/-
IBB	Germany	IV	AAA/-/-
ILBB	Germany	IV	AAA/-/-
SABFOE	Germany	IV	-/-/AAA
ISBRLP	Germany	IV	AAA/-/-
IFBHH	Germany	IV	AAA/-/-
CADES	France	II	AA-u/Aa2/AA
AGFRNC	France	II	AA/-/AA
UNEDIC	France	II	AA-/Aa2/-
CDCEPS	France	IV	AA-/Aa2/AA
BPIFRA (formerly OSEOFI)	France	II	AA-/Aa2/-
SAGESS	France	III	-/-/AA
AFLBNK	France	IV	-/Aa3/AA-
SFILFR	France	II	-/Aa2/AA
SOGRPR	France	II	AA-/Aa2/-
CCCI	France	IV	AA-u/Aa2/AAu (guaranteed) A/Baa2/- (not guaranteed)

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

Haircut category classification of agencies and supranationals (continued)

Bloomberg ticker	Country/type	Haircut category	Rating (Fitch/Moody's/S&P)
BNG	The Netherlands	II	AAA/Aaa/AAA
NEDWBK	The Netherlands	II	-/Aaa/AAA
NEDFIN	The Netherlands	IV	AAA/-/AAA
OKB	Austria	II	-/Aa1/AA+
OBND	Austria	III	-/Aa1/AA+
ASFING	Austria	III	-/Aa1/AA+
KBN	Norway	IV	-/Aaa/AAA
SEK	Sweden	IV	-/Aa1/AA+
KOMINS	Sweden	IV	-/Aaa/AAA
KUNTA	Finland	II	-/Aa1/AA+
KOMMUN	Denmark	IV	-/Aaa/AAA
FINNVE	Finland	IV	AA+/Aa1/-
ICO	Spain	IV	A-/Baa1/A
FADE*	Spain	III	-/-/-
ADIFAL	Spain	III	A-/Baa2/-
CORES	Spain	III	A-/-/A
CDEP	Italy	II	BBB/Baa3/BBB
REFER	Portugal	III	-/Baa2/-
BGOSK	Poland	IV	A-/(P)A2/-
DEXGRP	Belgium/France	IV	AA-/Aa3/AA (guaranteed) BBB+/Baa3/BBB *- (not guaranteed)
MAEXIM	Hungary	IV	BBB/-/BBB-
JFM	Japan	IV	-/A1/A+
KDB	South Korea	-	AA-/Aa2/AA
EIBKOR	South Korea	-	AA-/Aa2/AA
DBJJP	Japan	IV	-/A1/A+ (guaranteed) -/A1/A (not guaranteed)
INDKOR	South Korea	-	AA-/Aa2/AA-
EDC	Canada	IV	-/Aaa/AAA
SDBC	China	-	-/A1/A+

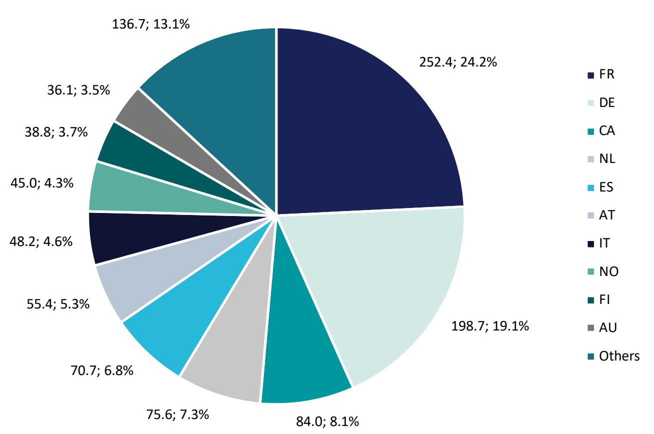
* No issuer ratings available, although bonds are rated as in the case of Spain.
Source: ECB, Bloomberg, NORD/LB Markets Strategy & Floor Research

Conclusion and comment

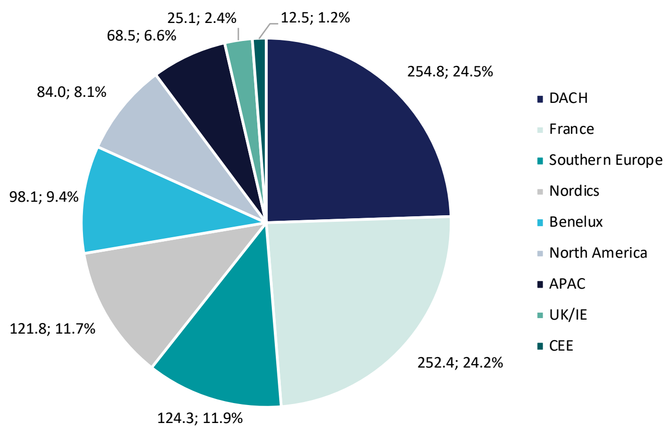
We regard the allocation of quasi-government issuers to the ECB's liquidity categories as a minor factor influencing the attractiveness and therefore the risk premiums of the individual institutions. Especially in the case of agencies, we see the liquidity category as an aspect that can contribute to a differentiated relative classification. In particular, we consider the differences between institutions in category II or IV to be relevant when assessing the relative attractiveness of the issuers. From our perspective, this is similar to supranational issuers, where some bonds issued by Supras are not eligible as collateral for ECB repo transactions. Moreover, the classification of bonds placed by public sector issuers has changed with regard to haircut categories. Preferential treatment of or discrimination against individual issuers' bonds is decided by quantitative criteria, which are reviewed on an annual basis. Generally speaking, the choice of criteria means that larger agencies are preferred, because the focus is on the liquidity of the issuer's bonds.

Charts & Figures
Covered Bonds

EUR benchmark volume by country (in EURbn)



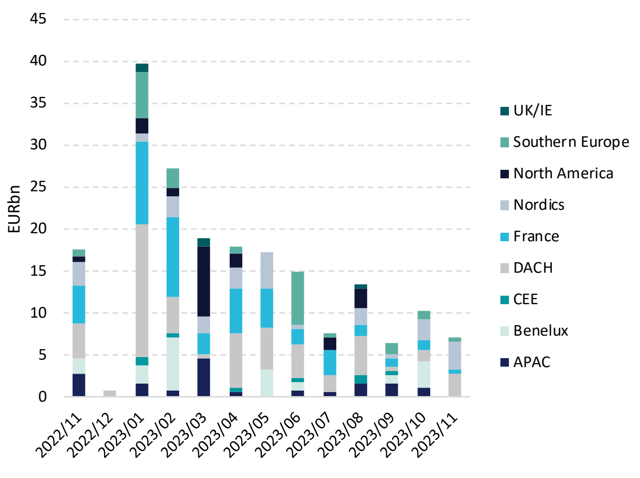
EUR benchmark volume by region (in EURbn)



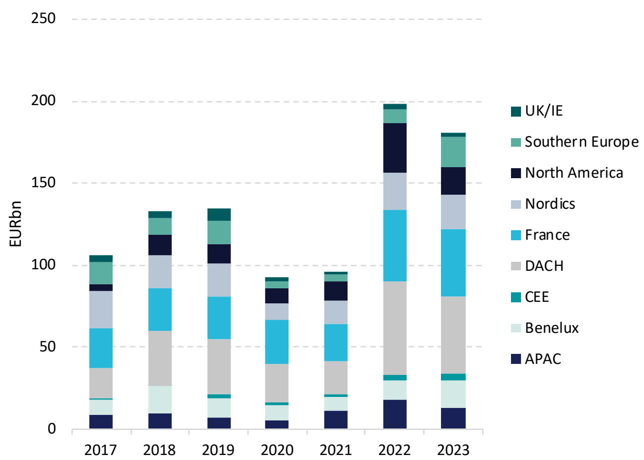
Top-10 jurisdictions

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	252.4	244	22	0.96	9.4	4.9	1.27
2	DE	198.7	282	35	0.65	7.9	4.1	1.19
3	CA	84.0	62	0	1.33	5.5	2.8	1.12
4	NL	75.6	77	2	0.92	10.6	6.3	1.13
5	ES	70.7	56	6	1.15	11.1	3.4	2.00
6	AT	55.4	94	4	0.58	8.2	4.7	1.37
7	IT	48.2	58	2	0.80	8.8	3.6	1.56
8	NO	45.0	55	12	0.82	7.3	3.7	0.78
9	FI	38.8	43	4	0.89	6.8	3.5	1.44
10	AU	36.1	35	0	1.03	7.1	3.1	1.49

EUR benchmark issue volume by month

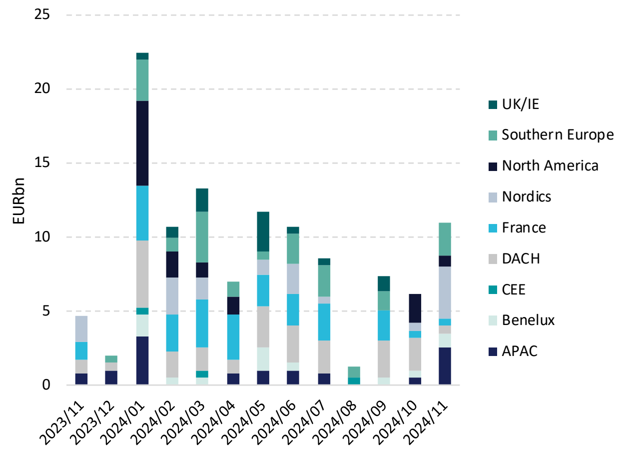


EUR benchmark issue volume by year

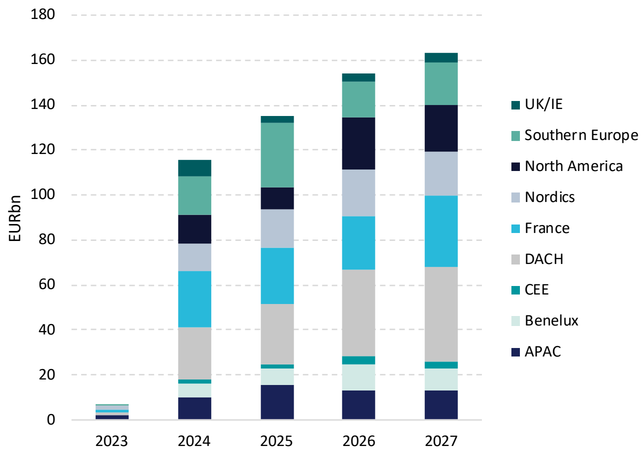


Source: market data, Bloomberg, NORD/LB Markets Strategy & Floor Research

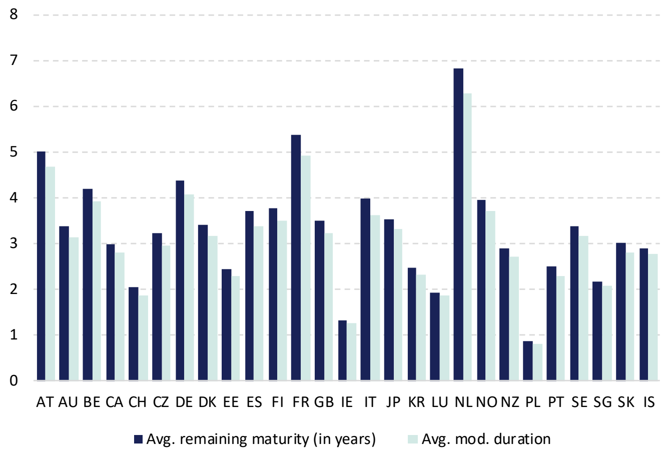
EUR benchmark maturities by month



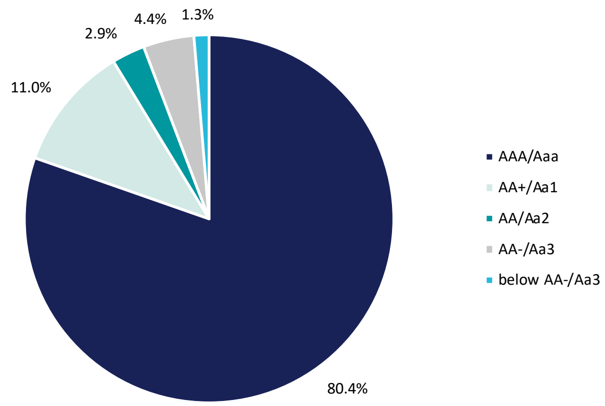
EUR benchmark maturities by year



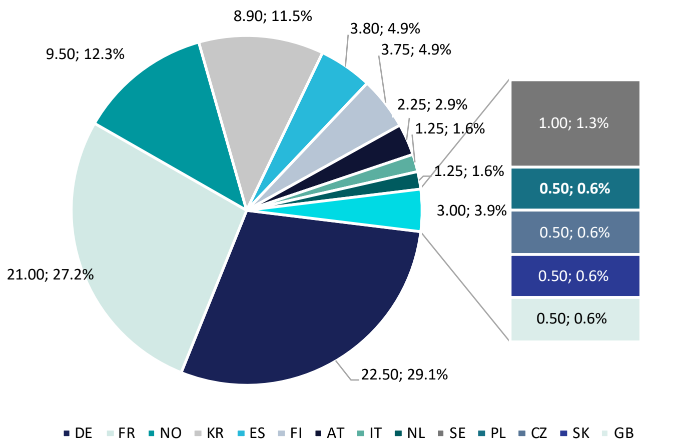
Modified duration and time to maturity by country



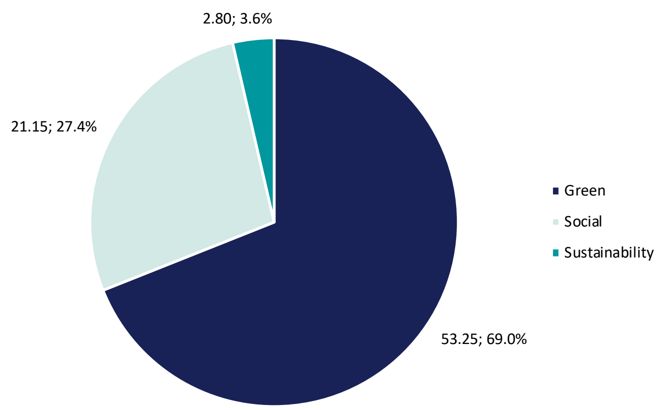
Rating distribution (volume weighted)



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

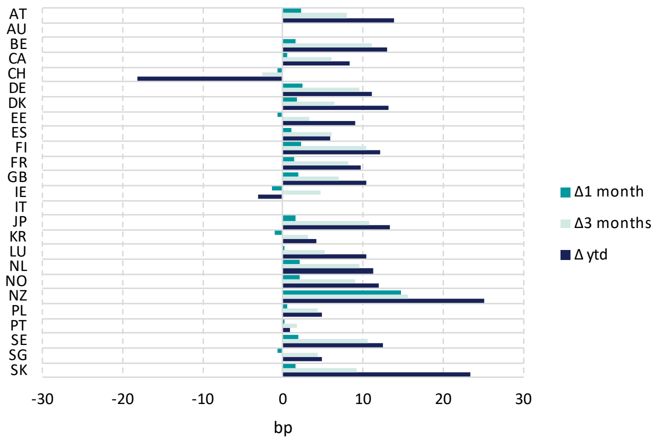


EUR benchmark volume (ESG) by type (in EURbn)

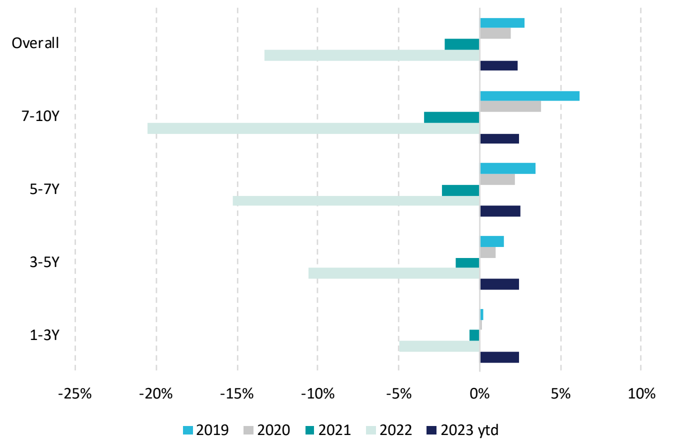


Source: market data, Bloomberg, NORD/LB Markets Strategy & Floor Research

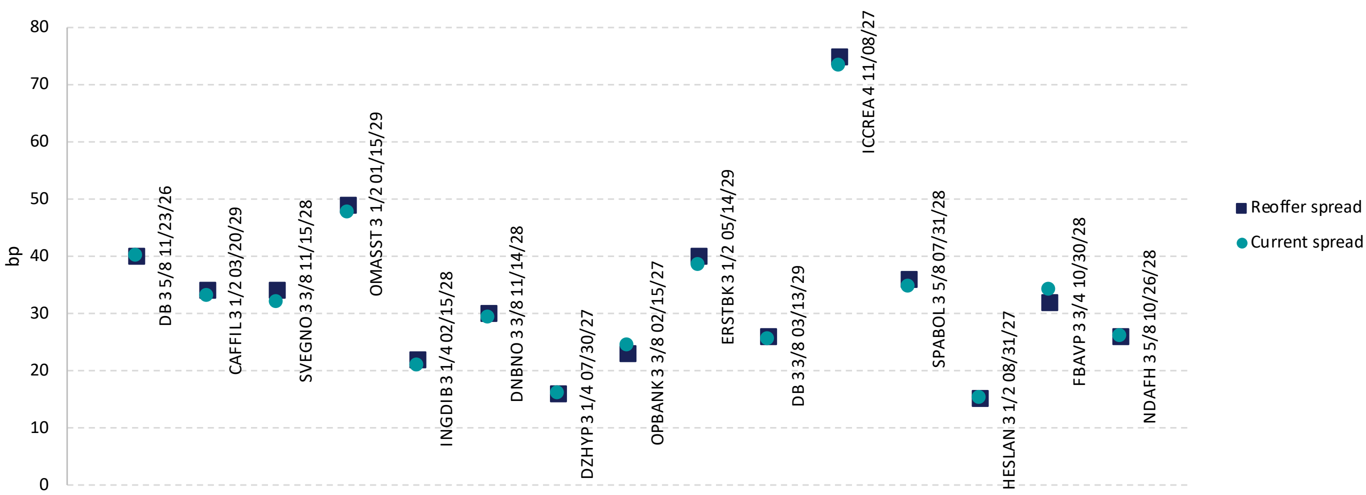
Spread development by country



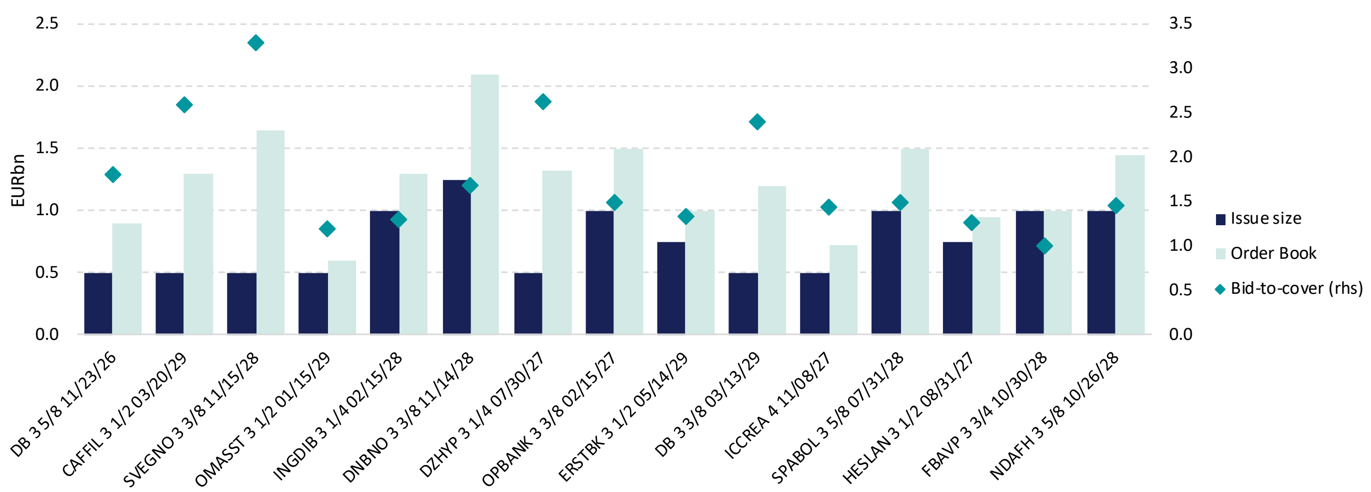
Covered bond performance (Total return)



Spread development (last 15 issues)



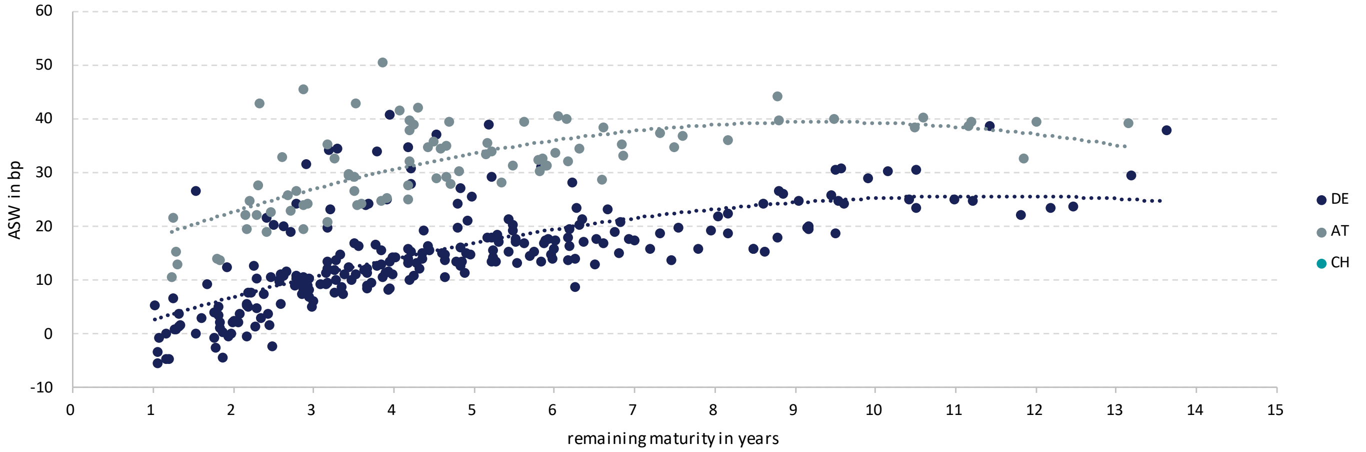
Order books (last 15 issues)



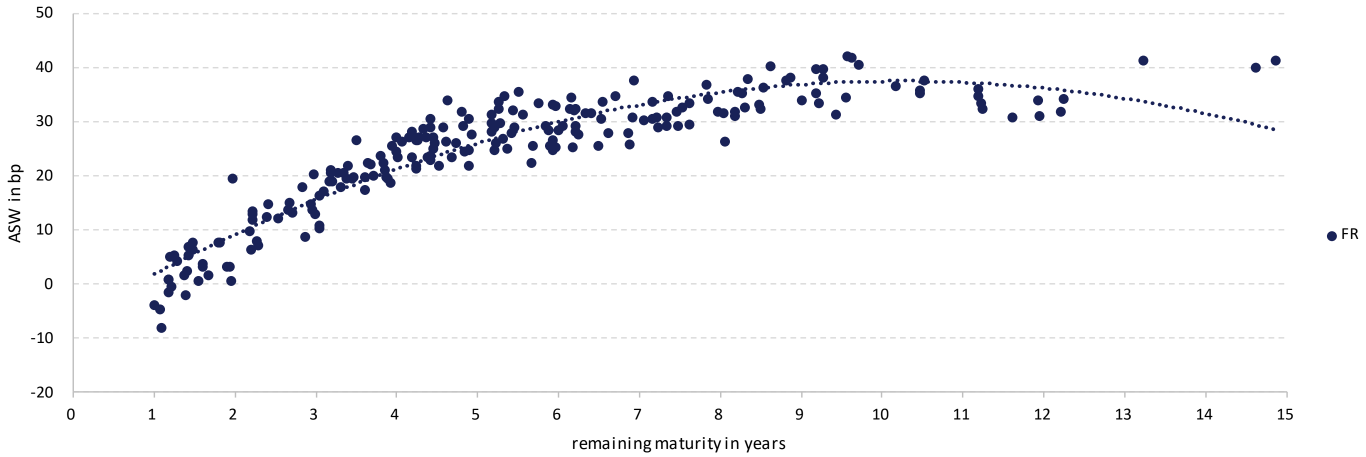
Source: market data, Bloomberg, NORD/LB Markets Strategy & Floor Research

Spread overview[1]

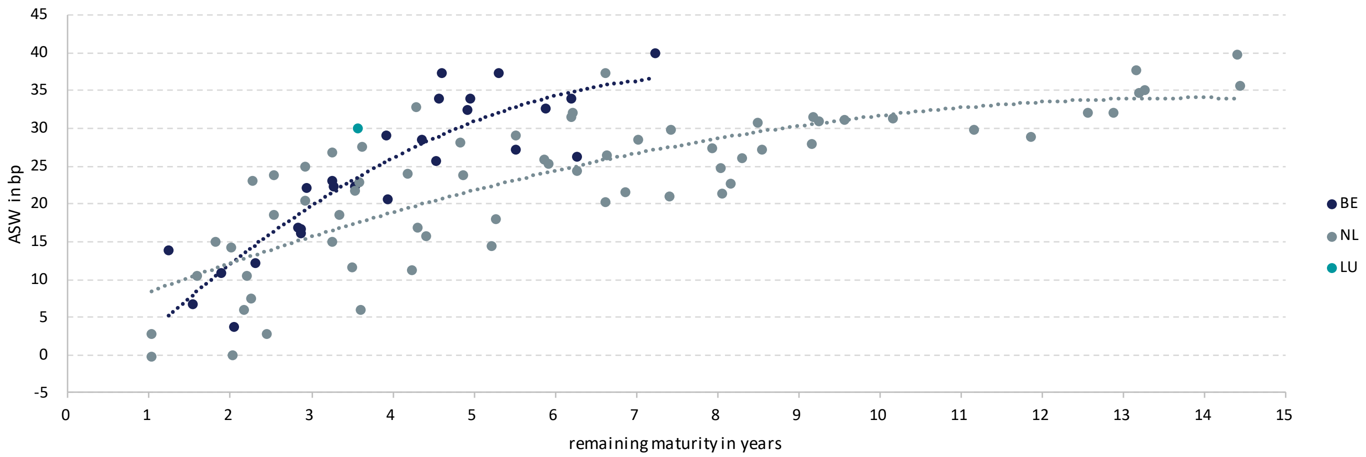
DACH



France

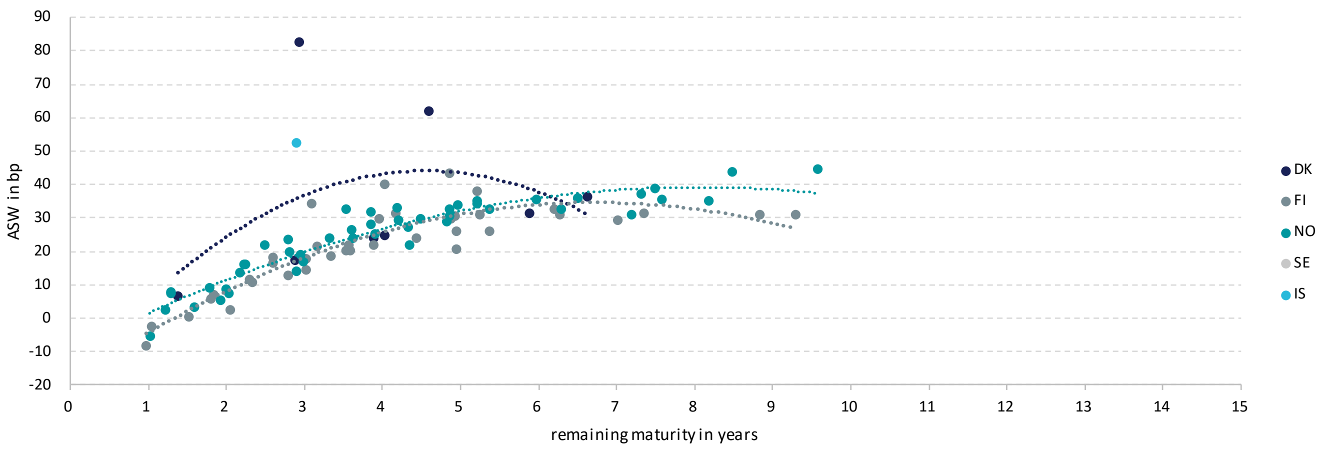


Benelux

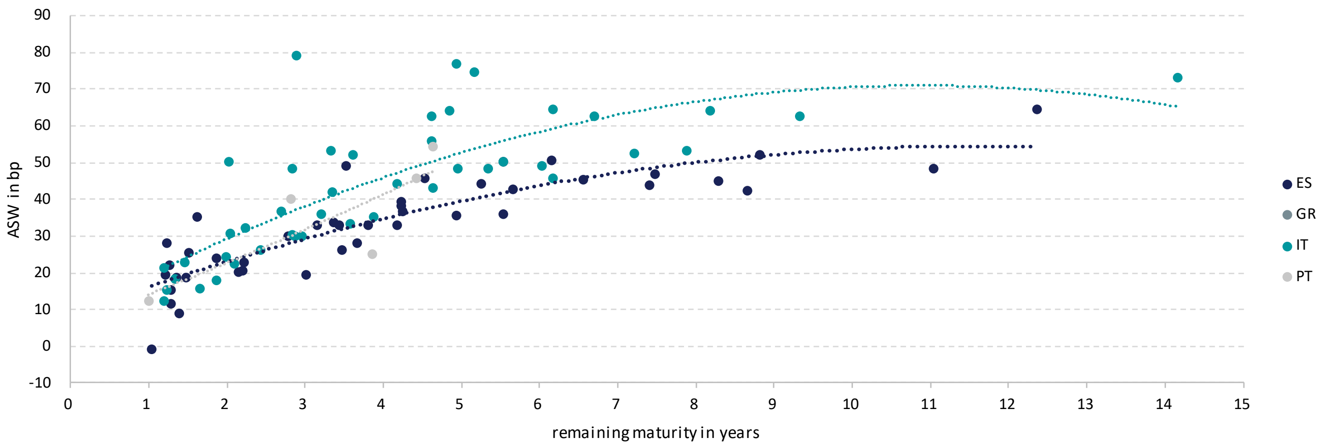


Source: market data, Bloomberg, NORD/LB Markets Strategy & Floor Research [1]Time to maturity 1 ≤ y ≤ 15

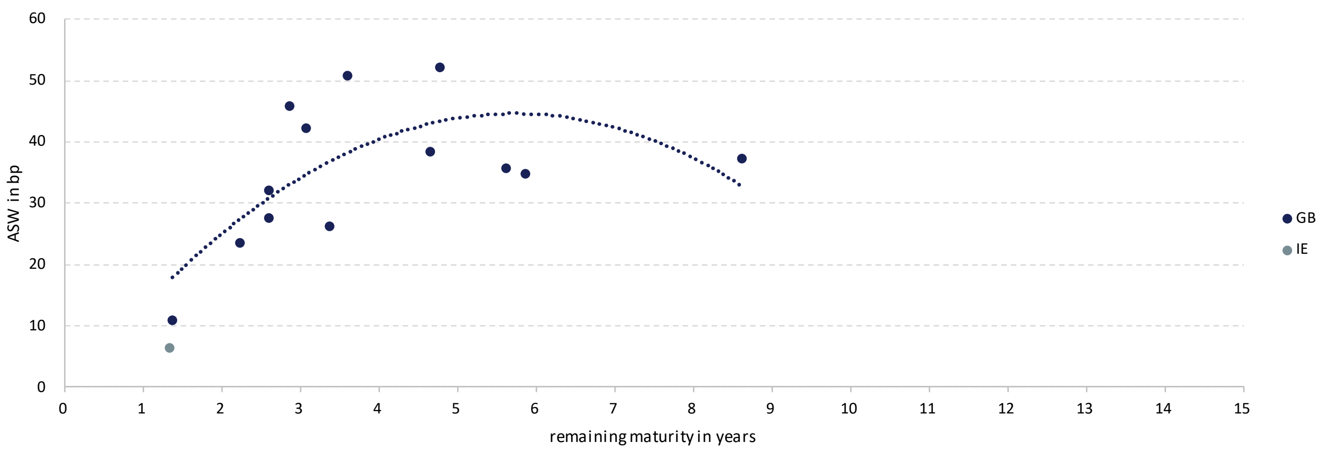
Nordics



Southern Europe

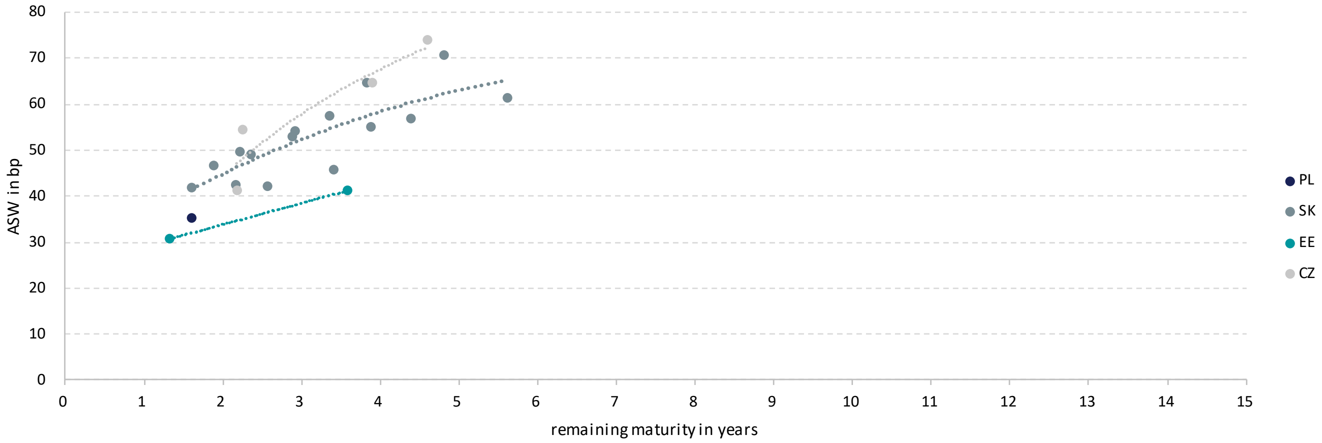


UK/IE

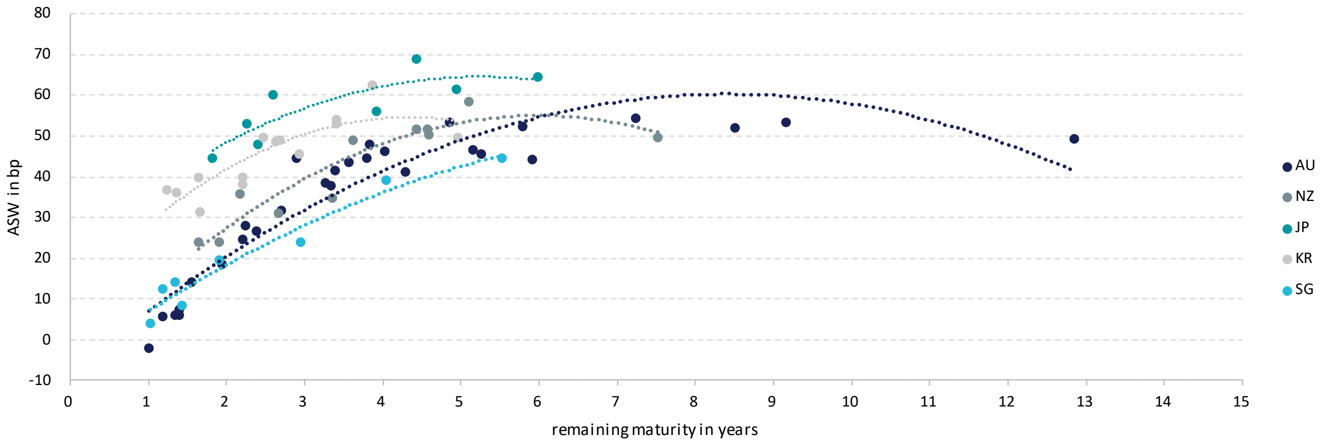


Source: market data, Bloomberg, NORD/LB Markets Strategy & Floor Research

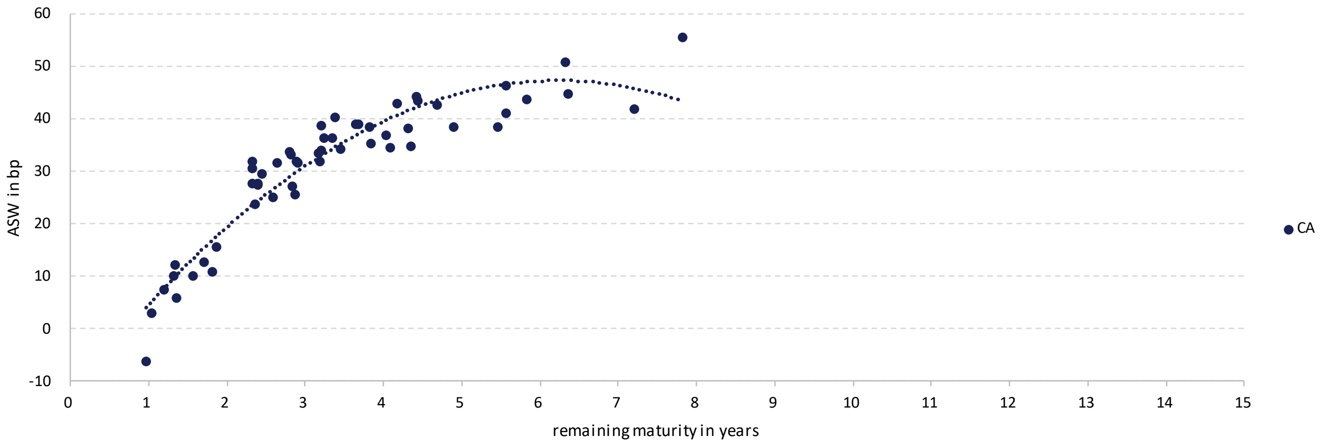
CEE



APAC



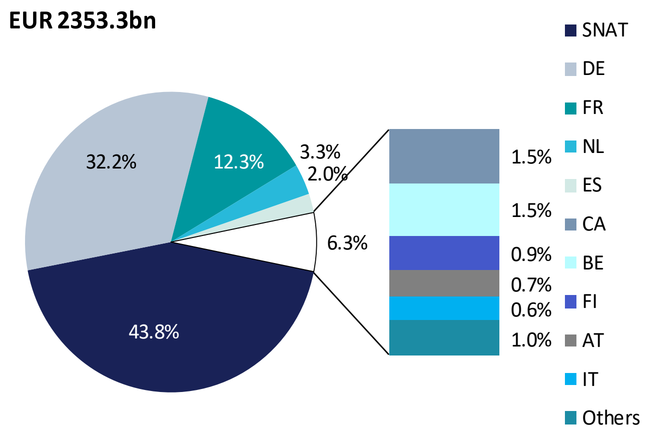
North America



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

Charts & Figures
SSA/Public Issuers

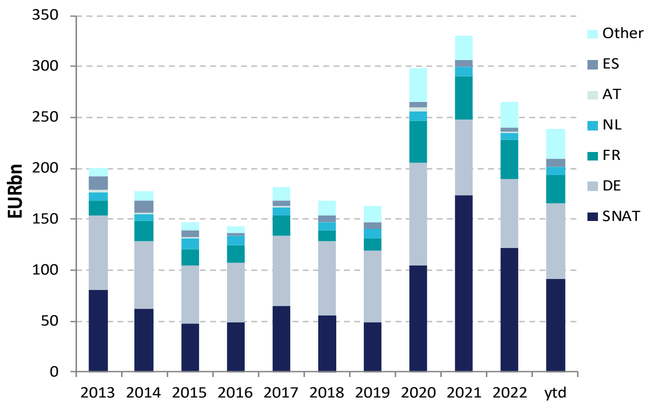
Outstanding volume (bmk)



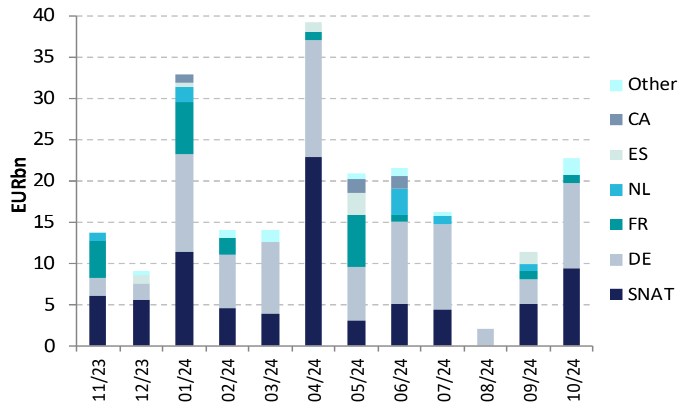
Top 10 countries (bmk)

Country	Vol. (€bn)	No. of bonds	ØVol. (€bn)	Vol. weight. ØMod. Dur.
SNAT	1,031.5	230	4.5	8.0
DE	757.0	568	1.3	6.2
FR	290.0	198	1.5	5.9
NL	78.3	68	1.2	6.6
ES	48.0	66	0.7	4.6
CA	35.6	25	1.4	4.1
BE	35.2	38	0.9	10.7
FI	22.3	24	0.9	4.8
AT	17.3	21	0.8	4.6
IT	15.0	19	0.8	4.6

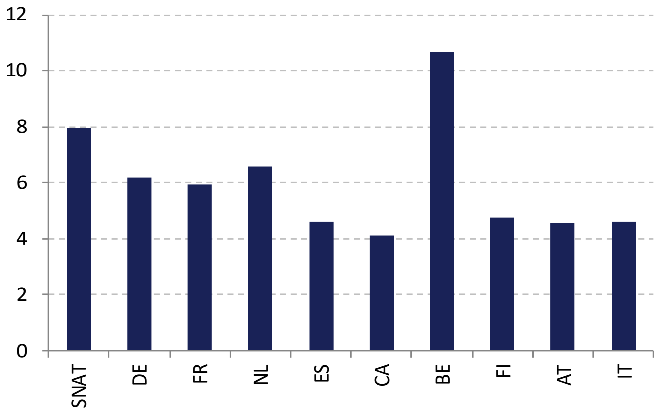
Issue volume by year (bmk)



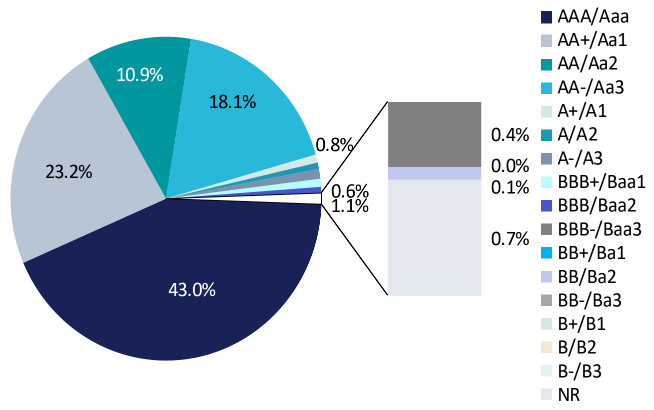
Maturities next 12 months (bmk)



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

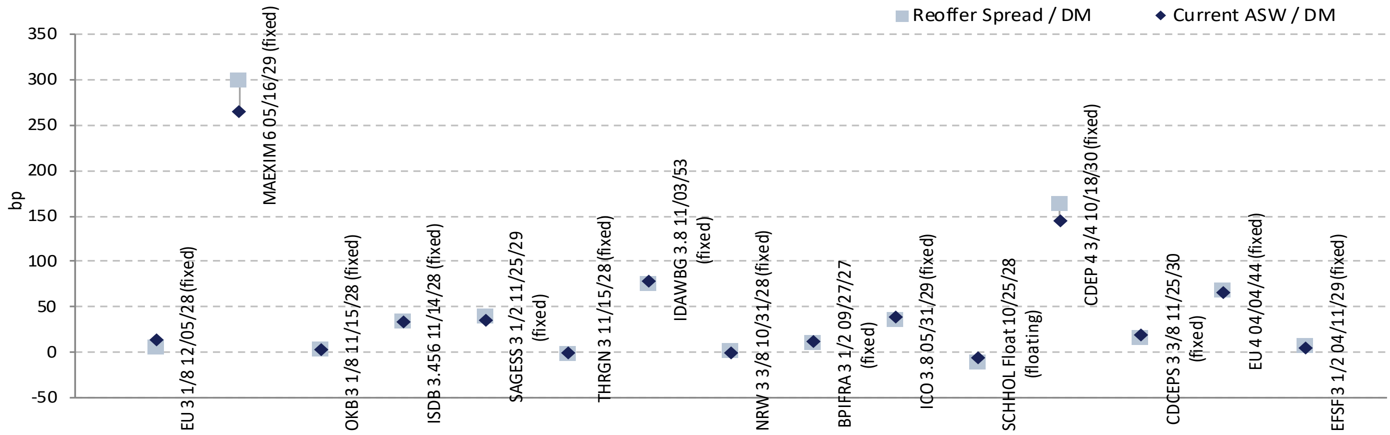


Rating distribution (vol. weighted)

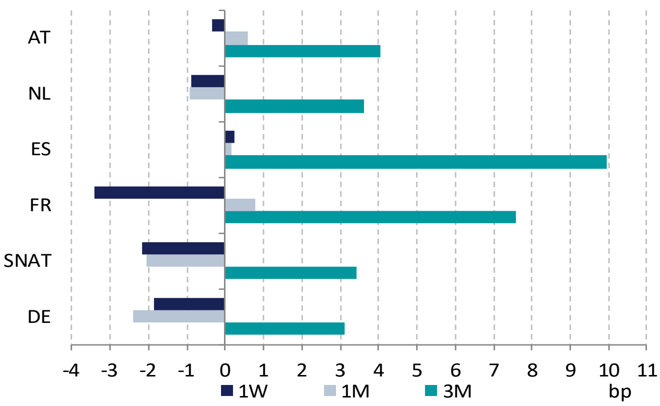


Source: Bloomberg, NORD/LB Markets Strategy & Floor Research

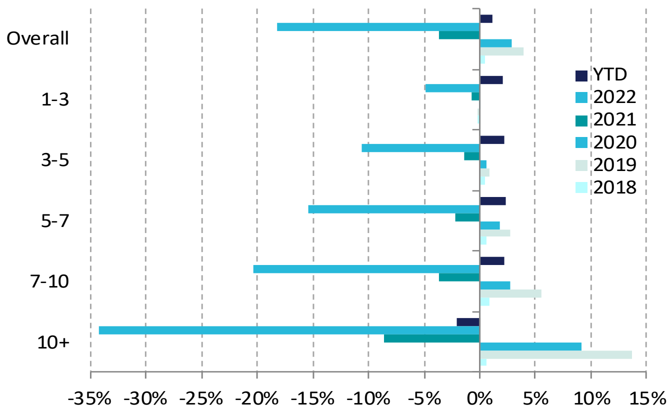
Spread development (last 15 issues)



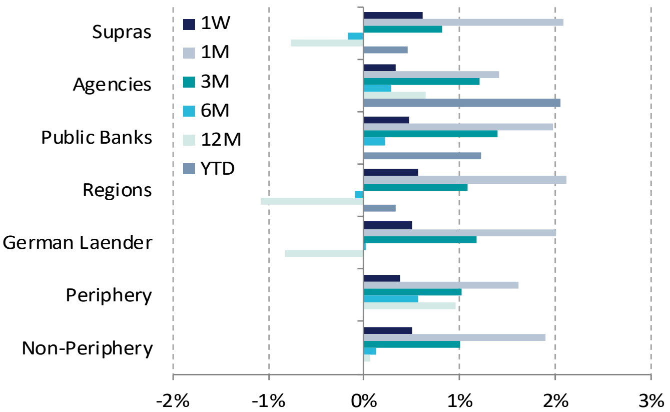
Spread development by country



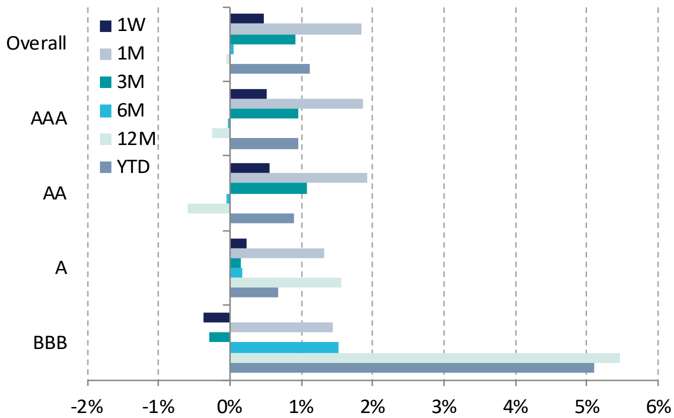
Performance (total return)



Performance (total return) by segments

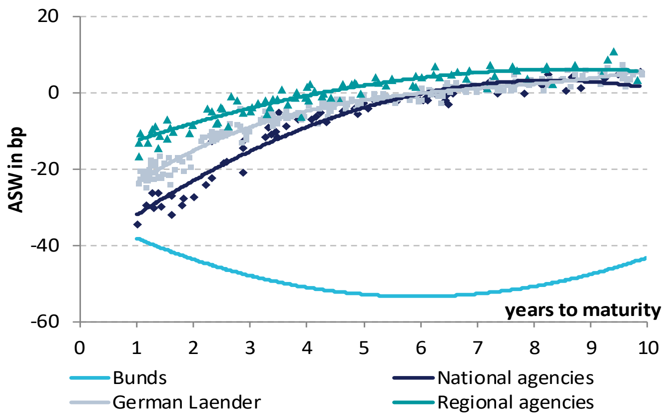


Performance (total return) by rating

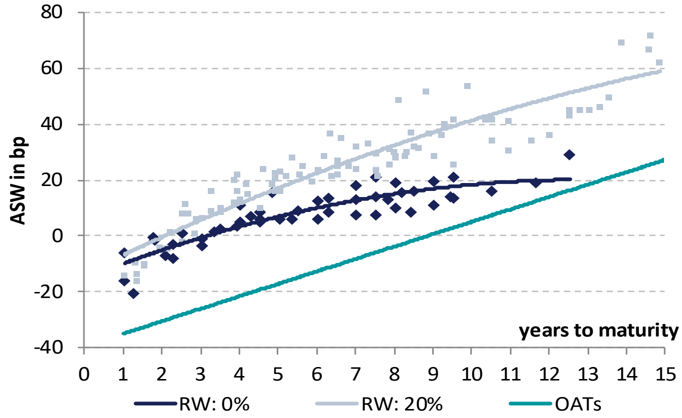


Source: Bloomberg, NORD/LB Markets Strategy & Floor Research

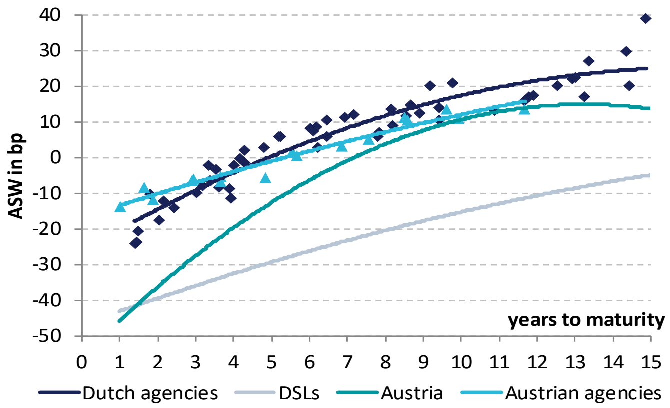
Germany (by segments)



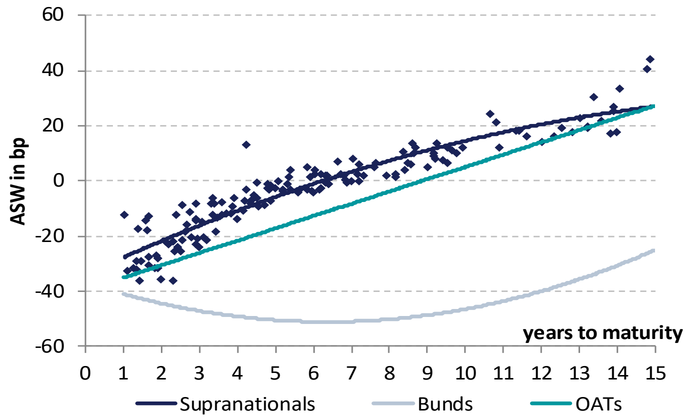
France (by risk weight)



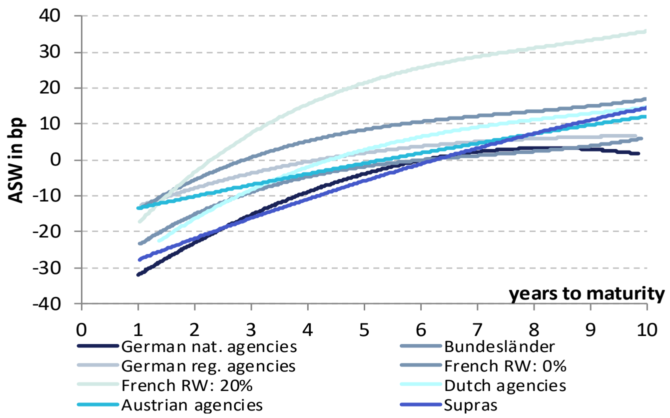
Netherlands & Austria



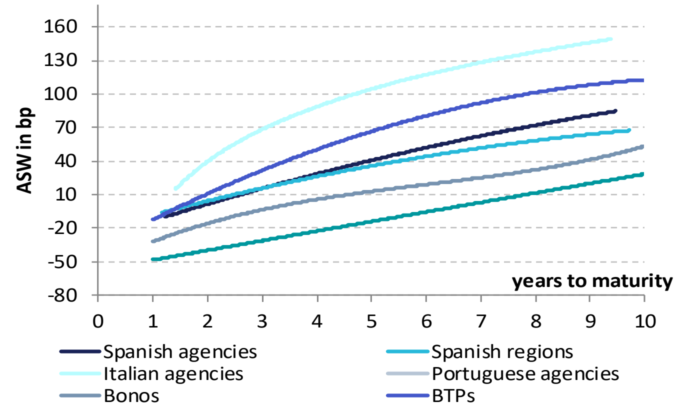
Supranationals



Core



Periphery



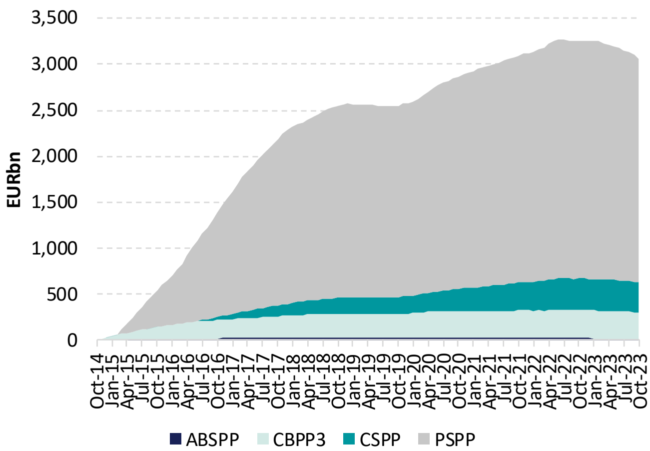
Source: Bloomberg, NORD/LB Markets Strategy & Floor Research

ECB tracker

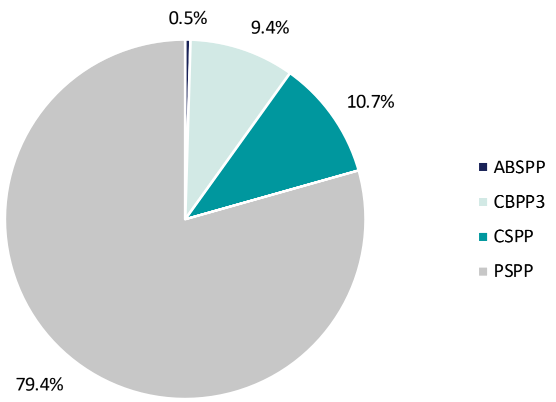
Asset Purchase Programme (APP)

	ABSPP	CBPP3	CSPP	PSPP	APP
Aug-23	15,312	291,992	331,155	2,470,598	3,109,057
Sep-23	14,350	287,525	328,193	2,426,355	3,056,423
Δ	-962	-4,467	-2,962	-44,243	-52,634

Portfolio development

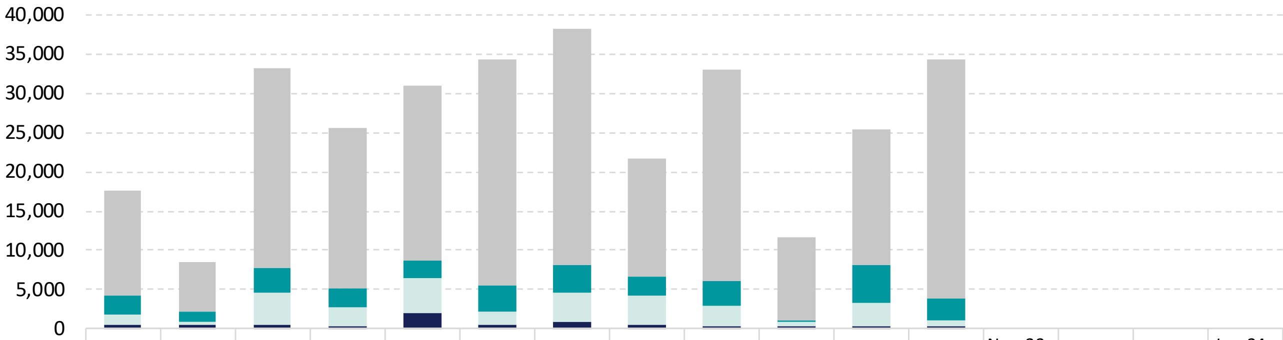


Portfolio structure



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

Expected monthly redemptions (in EURm)

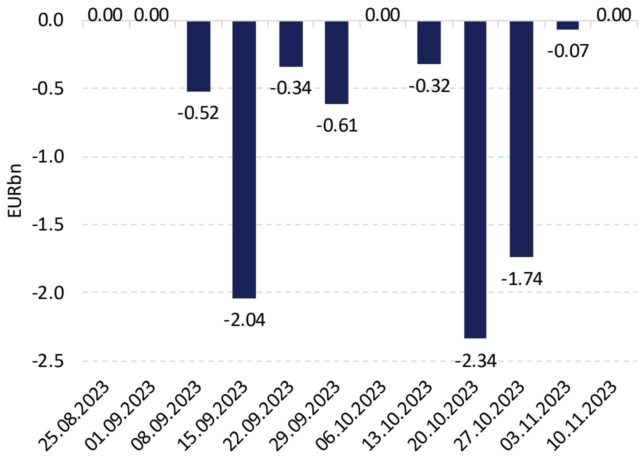


	Nov-23	Dec-23	Jan-24	Feb-24	Mar-24	Apr-24	May-24	Jun-24	Jul-24	Aug-24	Sep-24	Oct-24	Nov-23 - Oct-24	2022	2023	Jan-24 - Oct-24
APP	17,560	8,548	33,226	25,570	31,041	34,259	38,283	21,633	33,011	11,587	25,504	34,440	314,662	299,142	331,493	288,554
PSPP	13,282	6,336	25,524	20,445	22,413	28,712	30,194	14,974	26,910	10,533	17,424	30,578	247,325	228,585	255,022	227,707
CSPP	2,393	1,336	3,101	2,325	2,188	3,316	3,463	2,462	3,204	244	4,738	2,720	31,490	17,670	31,170	27,761
CBPP3	1,351	408	4,109	2,449	4,434	1,814	3,836	3,777	2,558	541	2,993	736	29,006	41,244	35,147	27,247
ABSPP	534	468	492	351	2,006	417	790	420	339	269	349	406	6,841	11,643	10,154	5,839

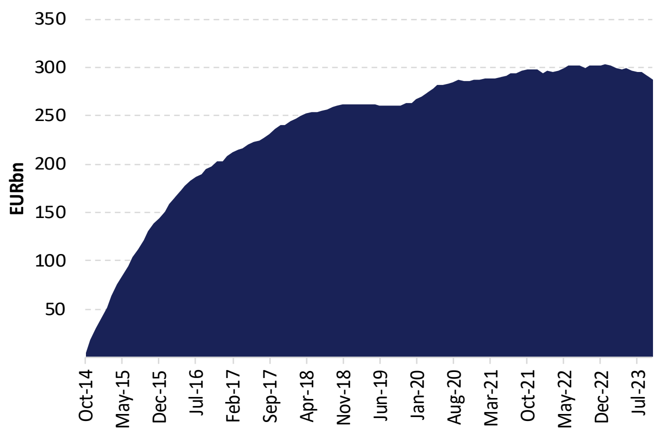
Source: ECB, Bloomberg, NORD/LB Markets Strategy & Floor Research

Covered Bond Purchase Programme 3 (CBPP3)

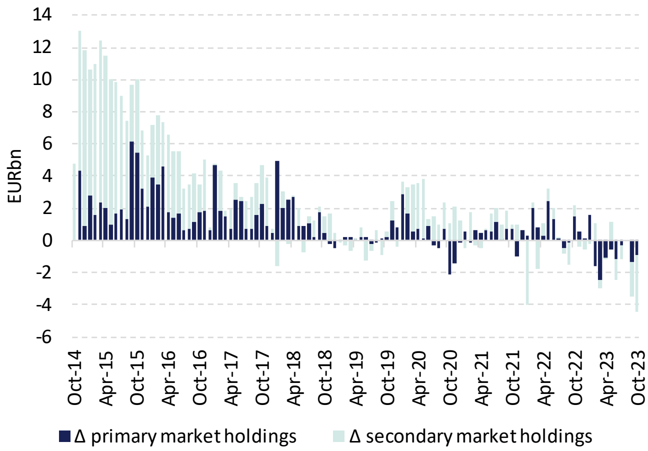
Weekly purchases



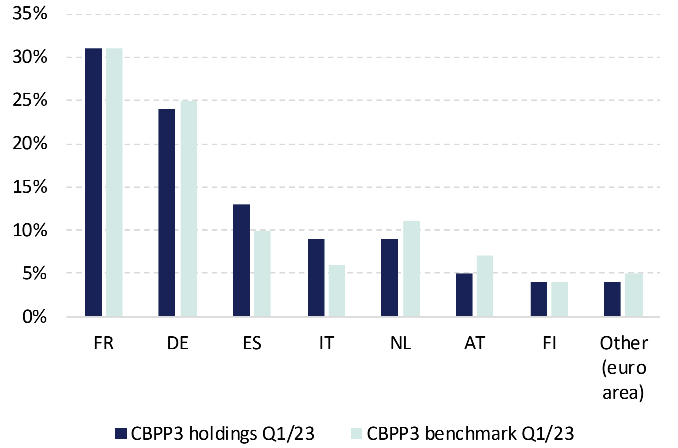
Development of CBPP3 volume



Change of primary and secondary market holdings

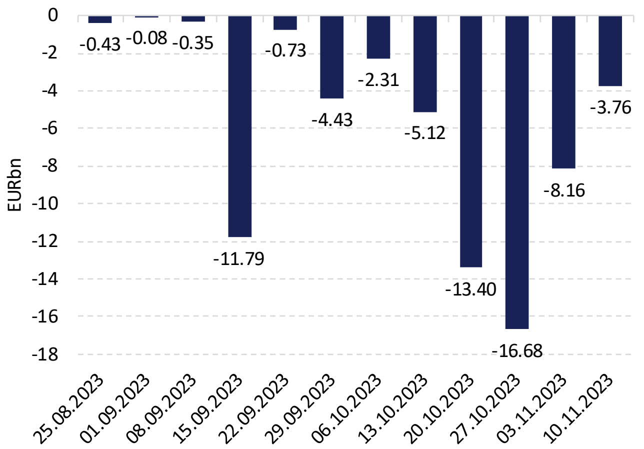


Distribution of CBPP3 by country of risk

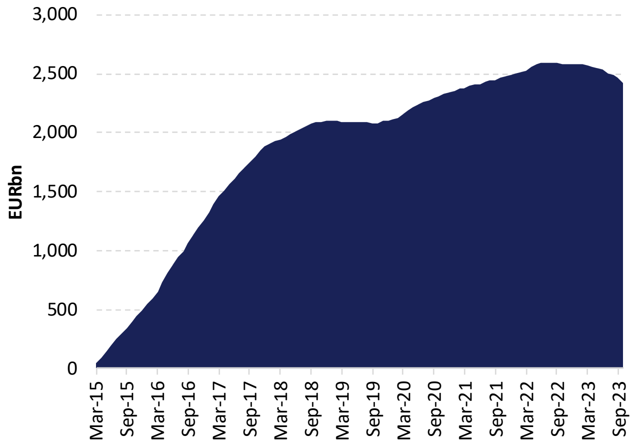


Public Sector Purchase Programme (PSPP)

Weekly purchases



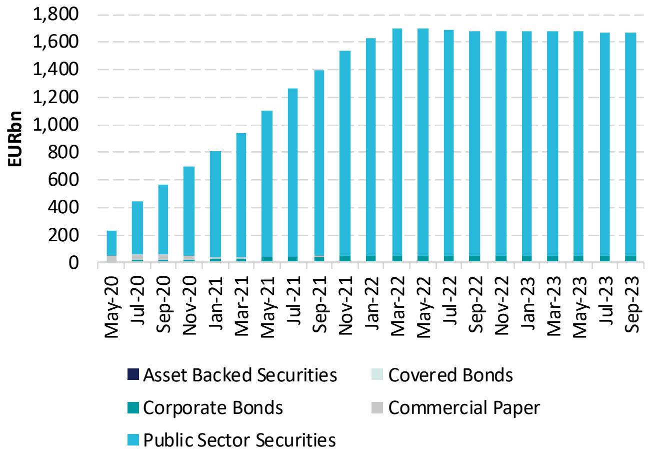
Development of PSPP volume



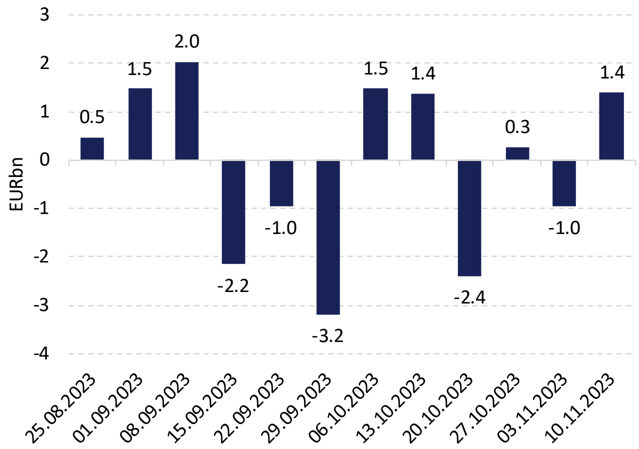
Source: ECB, Bloomberg, NORD/LB Markets Strategy & Floor Research

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	44,129	-1,028	2.6%	2.7%	0.0%	7.2	7.8
BE	56,941	-610	3.3%	3.4%	0.2%	6.0	9.4
CY	2,423	-156	0.2%	0.1%	0.0%	8.4	8.2
DE	393,313	1,135	23.7%	23.7%	0.0%	6.7	7.0
EE	256	0	0.3%	0.0%	-0.2%	6.7	6.5
ES	193,041	-2,722	10.7%	11.6%	0.9%	7.2	7.4
FI	25,953	565	1.7%	1.6%	-0.1%	7.5	7.7
FR	298,322	1,717	18.4%	18.0%	-0.4%	7.3	7.8
GR	38,260	-172	2.2%	2.3%	0.1%	8.5	9.1
IE	25,541	133	1.5%	1.5%	0.0%	8.8	9.2
IT	292,198	938	15.3%	17.6%	2.3%	7.0	6.9
LT	3,145	-2	0.5%	0.2%	-0.3%	9.3	8.6
LU	1,858	-110	0.3%	0.1%	-0.2%	6.0	8.3
LV	1,843	23	0.4%	0.1%	-0.2%	7.9	7.5
MT	604	-4	0.1%	0.0%	-0.1%	9.8	8.5
NL	80,598	-2,269	5.3%	4.9%	-0.4%	7.6	8.9
PT	33,921	127	2.1%	2.0%	-0.1%	7.0	7.7
SI	6,493	44	0.4%	0.4%	0.0%	8.4	8.8
SK	8,040	65	1.0%	0.5%	-0.5%	7.9	8.3
SNAT	153,089	2,000	10.0%	9.2%	-0.8%	9.9	9.0
Total / Avg.	**1,659,970**	**-327**	**100.0%**	**100.0%**	**0.0%**	**7.4**	**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
31/2023 ♦ 08 November	▪ Norway: creation of SpareBank 1 Sor-Norge ▪ ECB: PEPP versus TPI – or: (re)investing where others like to go on holiday
31/2023 ♦ 25 October	▪ Banks in Europe: the EBA Risk Dashboard in Q2 2023 ▪ Teaser: Issuer Guide – Spanish Agencies 2023
30/2023 ♦ 18 October	▪ Focus on covered bond jurisdictions: Canada in the spotlight ▪ A closer look at Newfoundland and Labrador
29/2023 ♦ 11 October	▪ A covered bond view of Belgium ▪ Funding of Canadian provinces – an overview
28/2023 ♦ 27 September	▪ The covered bond universe of Moody's: an overview ▪ Update on DEUSTD – Joint German cities (bond No. 1)
27/2023 ♦ 20 September	▪ Newcomer to the EUR benchmark segment: Bendigo and Adelaide Bank set to expand issuer base in Australia ▪ Teaser: Issuer Guide – Austrian Agencies 2023
26/2023 ♦ 13 September	▪ ECBC publishes annual statistics for 2022 ▪ Teaser: Issuer Guide – Dutch Agencies 2023
25/2023 ♦ 06 September	▪ Covered bond market on the growth path: OLB looks set to join the ranks of EUR benchmark issuers ▪ NORD/LB Issuer Guide German Laender 2023 published
24/2023 ♦ 19 July	▪ Banks in Europe: EBA Risk Dashboard in Q1 2023 ▪ ECB repo collateral rules and German Laender
23/2023 ♦ 12 July	▪ Covereds: Half-year review and outlook for the second half of 2023
22/2023 ♦ 28 June	▪ Special publication on LCR classification and risk weights: a (regulatory) overview of the EUR benchmark segment ▪ ESG bonds of German Laender – significant further development
21/2023 ♦ 21 June	▪ ESG covered bonds: a look at the supply side ▪ Increasing exposure of E-supras to Ukraine
20/2023 ♦ 14 June	▪ Moody's covered bond universe – an overview ▪ Beyond Bundeslaender: Spanish regions
19/2023 ♦ 07 June	▪ ECB Preview: ECB's 25th anniversary and is still going strong ▪ Focus on legal requirements for covered bonds
18/2023 ♦ 24 May	▪ Repayment structures on the covered bond market: an update ▪ Stability Council convenes for 27th meeting
17/2023 ♦ 17 May	▪ ESG update 2023 in the spotlight ▪ Development of the German property market ▪ Transparency requirements §28 PfandBG Q1/2023
16/2023 ♦ 10 May	▪ The ECB and the covered bond market: influences old and new ▪ Update: Joint Laender (Ticker: LANDER)
15/2023 ♦ 26 April	▪ ECB preview: caught in two minds? ▪ EBA Risk Dashboard paints solid picture of Q4 2022

Appendix
Publication overview

Covered Bonds:

- **Issuer Guide Covered Bonds 2023**
- **Covered Bond Laws**
- **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 Q2/2023** (quarterly update)
- **Covered bonds as eligible collateral for central banks**

SSA/Public Issuers:

- **Issuer Guide – German Laender 2023**
- **Issuer Guide – European Supranationals 2023**
- **Issuer Guide – French Agencies 2023**
- **Issuer Guide – Dutch Agencies 2023**
- **Issuer Guide – German Agencies 2022**
- **Beyond Bundeslaender: Belgium**
- **Beyond Bundeslaender: Greater Paris (IDF/VDP)**
- **Beyond Bundeslaender: Spanish regions**

Fixed Income Specials:

- **ESG-Update 2023**
- **ECB: Now is not the time for forward guidance!**
- **ECB preview: Wait and see without calling it a pause**
- **ECB: This rate terminates here – 99.9% sure**

Appendix
Contacts at NORD/LB

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Sales Sparkassen & Regionalbanken	+49 511 9818-9400
Sales MM/FX	+49 511 9818-9460
Fixed Income Relationship Management Europe	+352 452211-515

Trading

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

Origination & Syndicate

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

Sales Wholesale Customers

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

Treasury

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

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Time of going to press: Wednesday, 15 November 2023 (08:47)