NORD/LB
Creating true value.

Capital Markets Spotlight
Outloook H2/2025
45-minute session via Microsoft Teams
14 August | 15:00 CEST
event-markets@nordlb.de

Covered Bond & SSA View

NORD/LB Floor Research

06 August 2025 ♦ 26/2025
Marketing communication (see disclaimer on the last pages)

Agenda

Floor analysts:

Head of Desk

Dr Norman Rudschuck, CIIA
norman.rudschuck@nordlb.de

Covered Bonds/Banks

Lukas Kühne
lukas.kuehne@nordlb.de

Alexander Grenner
alexander.grenner@nordlb.de

SSA/Public Issuers

Lukas-Finn Frese
lukas-finn.frese@nordlb.de

Tobias Cordes, CIIA
tobias.cordes@nordlb.de

NORD/LB

Market overview Covered Bonds

Authors: Alexander Grenner // Lukas Kühne

Primary market: end to the summer break now in sight?

Since our last weekly publication, when we reported on the dual tranche placed by Banco Santander (maturities of 4y and 8y), the primary market has gone into the summer break. On average over the past three years, issuance activities on the primary market have ceased for around 30 days. The period covered by the summer break has remained largely constant over the previous three years: for example, the break began at some point between 16 and 20 July before coming to an end 16-20 August. The timing of the final primary market transaction prior to the summer break from issuance activities (07 July) suggests that the fallow period arrived early this year. This should not really come as a surprise, especially given the record level of deals seen in June. Issuers were evidently keen to take advantage of the favourable issuance window on the primary market to cover their funding requirements before the 90-day tariff exemption announced by the Trump administration expired on 09 July. Despite the summer break getting underway earlier this year, we do not expect a premature return to issuance activities. In fact, we anticipate that primary market business will resume at around the same time as in previous years. We take this view in particular due to the fact that the market for SSA/Public Issuers is also in the midst of its summer issuance break. Issuers active in this segment are often the first to break cover again to bring the market back to life, allowing covered bond issuers to follow suit. In the past two years, two covered bond issuers, namely Commerzbank in 2024 and Berlin Hyp in 2023, set the first price points after the summer break. This year, too, it is reasonable to assume that an issuer from one of the two largest EUR benchmark jurisdictions, Germany and France, might once again reopen the market. To start with, second-tier issuers are likely to adopt a wait-and-see approach, remaining on the sidelines until market activity has picked up speed again. In contrast to the market for SSA/Public Issuers and Covered Bonds, UBS was able to place the first senior EUR benchmark after the summer break on Tuesday (05 August) in the form of a dual tranche (6NC5 and 11NC10). This was an impressive example of how new issues can be well received even at the start of August. However, despite the successful UBS transaction, we are not seeing any concrete signs that the covered bond market is ready to end its summer break at a significantly earlier date.

Issuer	Country	Timing	ISIN	Maturity	Size	Spread	Rating	ESG
-	-	-	-	-	-	-	-	-

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

Secondary market: summer blues reflected in low transaction volume

Similar to the primary market, things have become quiet on the secondary market too, which is attributable not least to the lack of fresh supply. In this respect, the transaction volume is languishing at a low level. At times, the buy side has dominated clearly, with demand concentrated both on the medium and long-term maturity segments. Looking at secondary market spreads, the most recent movement in the Bund-swap-spread is to be seen as supportive.

EBA publishes results of Covered Bond Directive review

In September 2023, the European Commission requested the European Banking Authority (EBA) to review the Covered Bond Directive in a Call for Advice. To this end, the EBA was tasked with evaluating the implementation of the Covered Bond Directive into national law and the efficacy of the directive in relation to the aim for greater market harmonisation. On this basis, the EBA would develop recommendations for the European Commission to highlight where adjustments may still need to be made by the legislator. In June, the EBA presented the results of the Call for Advice. In this, it emphasised the relevance of covered bonds as a key refinancing instrument for European banks. At the same time, the supervisory authority highlights the fact that, at times, overcollateralisation ratios and the underlying cover assets vary considerably between individual member states. Against this backdrop, the EBA has developed six recommendations for the European Commission to achieve greater harmonisation of the European covered bond market. First, the Covered Bond Directive should align the criteria for eligible cover assets. Second, the EBA envisages the introduction of a third country regulation based on reciprocity, which is particularly relevant with regard to the eligibility of non-EU covered bonds under the LCR. Third, the EBA recommends a cautious approach with regard to the introduction of European Secured Notes and makes reference in particular to the limited capital mobility for SME loans in this context. Fourth, the EBA advocates for greater involvement of national supervisory authorities in relation to the process of potentially extending the maturity of covered bonds. These authorities should ensure the objectivity of trigger events for maturity extensions in addition to scrutinising the role of the issuer prior to the onset of such an event. Fifth, the EBA recommends that general disclosures of climate-related risks for mortgage cover assets should be introduced. And last but not least, its sixth recommendation calls for the harmonisation of assets in the Covered Bond Directive with the general CRR III. In our view, the EBA's recommendations constitute more than just a first step towards greater harmonisation of national covered bond legislation. Nevertheless, it remains to be seen to what extent the European Commission will actually follow and adopt the EBA's recommendations.

UK: PRA abandons planned changes to the LCR-eligibility of non-UK covered bonds

As we reported in our weekly publication on 30 April, the Prudential Regulation Authority (PRA) of the Bank of England recently announced a suspension of the planned changes in relation to the current issue surrounding the LCR eligibility of non-UK covered bonds in the United Kingdom. Following these changes, overseas covered bonds issued by UK banks would no longer have been eligible for treatment as Level 2A High Quality Liquid Assets (HQLA). Having had time to clarify its approach and consider the questions and comments raised by market participants, the PRA issued a follow-up statement concerning this matter on 15 July. Ultimately, the decision was made to abandon the planned changes and to restore the status quo as it existed prior to 17 April. Instead, the PRA now plans to work closely with HM Treasury to introduce an Overseas Prudential Requirements Regime (OPRR). Until this is set up, non-UK covered bonds can continue to be included in the LCR. HM Treasury has clarified that its aim is to ensure that there are no "cliff edges" in the treatment of overseas covered bonds, irrespective of whether they are issued before or after the date that the planned regime takes effect. We welcome the PRA's new approach and consider HM Treasury's communications in particular to be helpful with respect to avoiding any potential uncertainty among market players.

Scope: ESG data should be integrated in HTT

On 16 July, the rating experts from Scope published their quarterly Covered Bond Report. In this, the authors discuss, among other aspects, the risks of a shock to interest rate adjustments for borrowers who agreed real estate financing during the low-interest rate environment and are confronted by a new interest rate reality once the fixed-rate period comes to an end. Against this backdrop, the European Systemic Risk Board (ESRB) is urging for further harmonisation of borrower-based macroprudential measures (BBM) in order to increase financial stability. According to Mathias Pleissner (Deputy Head of Covered Bonds at Scope), these measures have proven effective in mitigating systemic risks in an overheated real estate market. The only three eurozone countries that are not aligned with the BBM are Germany, Spain and Italy, which instead prefer to rely on internal banking practices and supervisory requirements. The ESRB fears that these markets could be more vulnerable to credit-driven real estate booms and sharp corrections, which underlines the need for a consistent regulatory framework across the EU. While there is evidence that real estate prices are rising sharply in Southern Europe, the markets in Northern and Central Europe have stabilised again in the wake of marked price declines. According to Scope, there is significant regional divergence in European real estate markets following the sharp correction as a result of rising interest rates. Moreover, the rating experts are calling for the inclusion of ESG information in the reporting standards of the Harmonised Transparency Template (HTT), in accordance with Article 14 of the Covered Bond Directive, rather than including this data in Pillar 3 reporting, which is the preference of issuers. In this context, Karlo Fuchs (Head of Covered Bonds at Scope) states that this solution would also be the preferred option for investors, as the HTT would provide comparable information on a more regular basis. In terms of the issuance volume on the covered bond market, the rating experts point to a “blockbuster” June, when issuances totalled EUR 20.4bn in the EUR benchmark segment. Across the full calendar year, the rating agency is forecasting issuances in the amount of EUR 155bn.

Scope: resilient earnings expected at European banks despite downside risks

In its Mid-Year European Banking Outlook, the experts at the rating agency Scope expect European banks to report resilient earnings, although net interest margins are likely to decline. To some extent, an increase in the lending volume on account of lower financing costs is helping to mitigate the impact of shrinking margins in the mortgage sector and represents a bit of a tailwind for banks. Scope also anticipates that the M&A market will see brisk activities, offering additional opportunities for banks to create value through cost synergies in sales and central functions. The rating experts evaluate the asset quality as solid, also in view of aggregated NPL ratios (below 3%) in major EU states. Nevertheless, the prevailing uncertainties in relation to US tariff policies are expected to have a slightly negative impact. However, the authors rule out the possibility of huge waves of payment defaults on account of the reduced strain from lower interest rates. While the efficiency metrics of the banks do appear to have deteriorated slightly, reflected for example in the form of increased cost-income ratios, these had previously been reported at historically low levels. According to Scope, cost pressures, which are expected to rise by 1% in 2026, could be partially offset by cutting jobs and implementing digitalisation measures. The banks have sufficient capital at their disposal, although buffers fell to a four-year low in the first quarter of 2025. This development came about primarily due to increasing shareholder dividends and the impact of the finalisation of Basel III.

S&P: revised covered bond rating methodology with highly marginal impact

At the end of July, the rating experts from S&P published a revised covered bond rating approach. While the methodology's basic structure remains unchanged, there are a few relevant detailed adjustments that we shall outline below. For example, as a general rule the maximum uplift (three notches) determined as part of the jurisdictional support analysis is limited by the foreign currency rating (FCR) of the respective country in which the issuer is domiciled. However, this FCR limitation can now be exceeded by one notch provided that the issuer is based in a country that is a member of a monetary union. In addition, when rating a covered bond solely on the basis of jurisdictional support, S&P only takes the legally defined minimum OC ratio into account and does not factor in voluntary OC. In exceptional cases, particularly those where S&P identifies specific risk factors in the issuer's cover pool, voluntary OC may also be considered. In addition, the rating experts are making adjustments to the counterparty risk assessment and the asset spread levels used to model refinancing costs. According to information from S&P, the adjustment to the rating approach will result in a one-notch uplift for just a single covered bond programme, while no rating downgrades are expected among the 100 covered bond programmes rated by S&P either. In actual fact, the OC ratio required to maintain a covered bond rating is expected to decrease by an average of 5% for 70 programmes and settle at a more stable level in the future. As such, the impact on the rating of the covered bonds that we focus on in the EUR benchmark segment appears to be extremely limited and entails no negative rating impact. We intend to look in more detail at the S&P rating approach as part of a focus article in our weekly publication over the coming weeks.

Market overview
SSA/Public Issuers

Authors: Dr Norman Rudschuck, CIIA // Lukas-Finn Frese // Tobias Cordes, CIIA

Interest rates on hold: just a pause for breath or has the ECB run out of steam?

At its fifth meeting of the year, the members of the ECB Governing Council were unanimous that the monetary policy "fiesta" is over (for now). Consequently, after seven consecutive rate cuts, on 24 July the ECB Governing Council left the three key interest rates unchanged. In turn, this "siesta" is likely to give the central bankers enough time to analyse and assess the movement in inflation and the economy in the single currency area along with the geopolitical drivers. The ECB has bought itself time and market players are bidding farewell to thoughts of a probable rate cut in September. Although the accompanying statement was unusually unforthcoming, the central bankers did offer more precise details on certain points. For instance, the ECB noted that inflation is currently at the medium-term target and no longer just "close to". If the prevailing market opinion immediately before the meeting still suggested a cut in September, such a move is now no longer "guaranteed". On the contrary, the December meeting appears to be an equally suitable candidate for a final cut and a scenario with as many as two rate cuts before the end of the year is off the table completely. At July's meeting, the ECB is likely to have wanted to preserve its monetary policy flexibility and keep enough powder dry over the summer break in order to react appropriately to the situation in September. Even if a rate cut in September is now less likely, we still assume that the ECB's rate-cutting series will finish with a final cut at the end of the year at the latest.

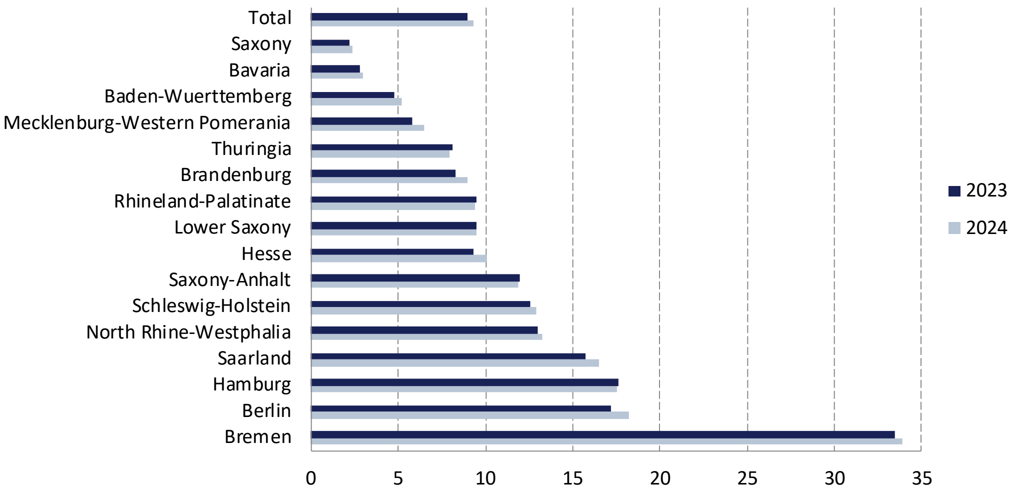
Commission presents proposal for EUR 2,000bn Multiannual Financial Framework (MFF)

In mid-July, the European Commission presented its proposal for the next Multiannual Financial Framework (MFF). The proposed budget covers the years 2028 to 2034 inclusive and stands at a considerable EUR 2,000bn. To obtain the necessary funds, the Commission proposes modernising the income sources. For instance, EUR 9.6bn per year should flow into the budget from the EU's Emissions Trading System. There are also plans for European companies with annual minimum turnover of EUR 100m to pay a lump sum. The Commission believes this measure will raise EUR 6.8bn a year. Another cornerstone of the budget is the establishment of a EUR 400bn crisis fund through which loans can be disbursed to Member States in acute stress situations. This instrument is set to be secured through joint borrowing. However, this step is likely to meet considerable resistance, especially from northern Europe. Germany, the Netherlands and Sweden, among others, have already voiced their criticism of the Commission's plans. The resolution on the future MFF and income system will now be debated by the Member States in the Council. Adoption of the MFF Regulation requires unanimity, following the consent of the European Parliament. Some elements of the revenue side (notably the new own resources) require unanimity in the Council and approval by the Member States in accordance with their respective constitutional requirements.

Federal Government Cabinet adopts draft German budget for 2026

Last week, the Cabinet adopted the draft German budget for 2026 presented by Finance Minister Lars Klingbeil as well as the financial plans up to 2029. Both of these are set to be funded to a considerable degree through new borrowing. The government draft 2026 budget includes expenditure totalling EUR 520.5bn, with new borrowing, excluding special funds, set to rise to around EUR 89.9bn next year. Including special funds, the forecast new borrowing in 2026 stands at around EUR 174.3bn, a forecast rise of EUR +31.0bn versus 2025. The forecast tax revenue in 2026 now amounts to EUR 383.3bn (2024: EUR 386.8bbn). While both expenditure (EUR 507.5bn) and net borrowing (EUR 88.1bn) in 2027 are set to be below the figures for 2026, expiry of the Bundeswehr special fund means the financial plans forecast considerably higher expenditure coupled with higher net borrowing from 2028 onwards. As a result, expenditure to 2029 is set to climb to EUR 572.1bn, of which EUR 126.9bn is to be financed through new borrowing. This is likely to also lead to a further increase in per capita debt in Germany. In this context, the Federal Statistical Office recently presented the figures for 2024 which show that debt in the total budget (Bund, Laender, municipalities and municipal associations as well as social security including all extra budgets) was up EUR +63.4bn on the previous year (+2.6% Y/Y) at EUR 2,510.5bn. This corresponds to per capita debt of EUR 30,062 (2023: EUR 29,393). Debt at the level of both Bund and Laender increased versus 2023 by +2.1% year on year in each case to EUR 1,731.7bn and EUR 607.3bn respectively. In terms of population numbers, central government debt therefore amounted to EUR 20,748 per capita (2023: EUR 20,391) and at federal state level (excluding municipalities) it averaged EUR 7,273 (2023: EUR 7,145). Per capita debt for the city states of Bremen (EUR 33,934), Berlin (EUR 18,173) and Hamburg (EUR 17,571) was the highest, although it should be noted that unlike the non-city states these figures include municipal expenditure. Of the non-city states, Saarland again had the highest per capita debt at EUR 13,697 (2023: EUR 12,934) excluding municipalities. The level was lowest in Bavaria (2024: EUR 1,353; 2023: EUR 1,321). The debt level for municipalities and municipal associations increased versus 2023 by +10.3% year on year to EUR 170.5bn (per capita debt: EUR 2,206).

Per capita debt at Laender level incl. municipalities (TEUR)



Source: Federal Statistical Office, NORD/LB Floor Research

LfA Förderbank presents half-year report – increased demand for promotional credit

LfA Förderbank Bayern (Ticker: BAYLAN) presented its results for H1/2025 on 24 July and reported a pleasing trend in its promotional funding figures. As stated in the press release, LfA supported the economy in Bavaria in the first half of the year with loans totalling EUR 990m, a rise of around +40% on the same period in the previous year. Of this, more than EUR 910m was committed as part of programme loans. As a result, the volume was not only up by +60% on H1/2024 but also outstripped the levels in the two preceding quarters of 2024 when demand for promotional funding was particularly high. There was particularly strong demand for promotional loans for start-ups, growth and innovation, especially start-up and growth loans. While promotional funding for start-ups was up by around +66% year on year versus H1/2024 at over EUR 260m, growth loans increased by around +25% year on year to over EUR 190m. “Innovation loan 4.0” which has meanwhile been replaced by the new innovation loan and digitalisation loan, recorded an even bigger jump in demand. In this segment, the volume of promotional credit quadrupled versus the first half of 2024 to stand at over EUR 265m at the end of the first six months. To further promote targeted investment in growth and innovation and drive forward the digital transformation, the Bavarian state government resolved last year to expand LfA’s lending and risk capital financing offering. In this context, the maximum loan amounts were adjusted in nearly all credit programmes and individual loan programmes opened for larger SMEs. Given the bank’s performance in the first half of the year, Dr Bernhard Schwab, CEO of LfA, was correspondingly pleased with the changes and said: “With its flexible promotional offering, LfA makes a major contribution to investments in modernisation and growth in the Bavarian economy. The increase in demand for our significantly extended promotional offering in the first half of the year shows that we are on the right track with our new promotional range.”

SEK presents half-year report – strong growth in new lending

The Swedish export financier Svensk Exportkredit (Ticker: SEK) published its half-year report on 18 July. According to the press release, new loans amounting to SEK 57.0bn (EUR equivalent: EUR 5.1bn) were extended in the reporting period January to June 2025, of which SEK 45.0bn was attributable to Q2/2025 alone. New lending therefore surpassed the previous year’s level (H1/2024: SEK 52.1bn). As a key part of its business model, SEK continues to support its clients in the transition towards greater climate protection and sustainability. ESG-compliant lending increased in the first half of the year by +3.3% to SEK 55.2bn, compared with SEK 53.4bn as at the reporting date in 2024. It was also up +1.6% versus Q1/2025. Although the volume of the credit portfolio dropped by -4.4% year on year in comparison with year-end 2024 to SEK 272.2bn due to the strengthening of the Swedish krona against the US dollar as well as planned repayments, and net interest income of SEK 1,372bn was also down on H1/2024 (SEK 1,536bn) due to the lower interest rate levels, the export financier increased its profitability in the period under review thanks to higher operating income. Net profit was up on H1/2024 by SEK +107m to SEK 737m. On the refinancing side, the Swedish issuer was active in the primary market in H1/2005 with benchmark issues denominated in EUR (10y) and USD (3y), raising capital equivalent to EUR 2.5bn (H1/2024: EUR 6.0bn).

Primary market

Summer break: we start our review with the EUR 750m floater from Baden-Wuerttemberg (ticker: BADWUR), which was issued with an unusual maturity of 3.5 years in line with guidance at +10bp versus the 6M Euribor. No information has been provided about the order book. This was followed by Brandenburg (ticker: BRABUR) with its second EUR benchmark in 2025 with a volume of EUR 500m (6y). This was placed at ms +22bp. The order book amounting to EUR 3bn provided some leeway and the reoffer spread tightened by two basis points versus guidance. Across the Atlantic, the issuance vehicle of the Public Sector Pension Investment Boards – a Canadian pension fund – approached investors in the form of PSP Capital (ticker: PSPCAP) with a EUR 1.25bn deal (7y), which was finally placed at ms +51bp. The bid-to-cover ratio for the bond was 4.9x (guidance: ms +54bp area). Supply in the ESG segment came from the International Bank for Reconstruction and Development (ticker: IBRD): the MDB, which is part of the World Bank Group, issued a EUR 3bn sustainability bond (10y). Final pricing for the bond stood at ms +38bp (order book: EUR 11bn; guidance: ms +40bp area). There were also three deals in the sub-benchmark segment. NRW.BANK (ticker: NRWBK), kicked things off with its first blockchain-based bond (2y), which raised EUR 100m at ms +15bp. Italy's Invitalia (ticker: INVITA) – the national agency for foreign investment and economic development – ventured onto the market with a social bond (5y) amounting to EUR 350m. Pricing closed at BTPS +48bp (corresponds roughly to ms +92bp). The order book amounted to EUR 1.45bn. From the other side of the Adriatic, a new face appeared on screens in the form of the Federation of Bosnia and Herzegovina (ticker: FEDBH); one of two entities that make up the federal state of Bosnia and Herzegovina, it was active in the EUR segment for the first time. In our opinion this regional authority is a sub-sovereign entity and is therefore relevant for our SSA coverage. The Bosnians raised EUR 350m (5y). The bond was ultimately placed with a notable spread of ms +222bp. The final order book totalled EUR 1.7bn, making the deal nearly five times oversubscribed. The European Union (ticker: EU) was very active in its first bond auction in H2/2025 (cf. funding plan). The EU 2.625% 04/07/2028 and EU 3.25% 04/07/2034 were each increased by around EUR 1.8bn, while EU 3.375% 05/10/2054 was topped up by EUR 1.6bn. The bid-to-cover ratios amounted to 1.6x, 1.4x and 1.7x respectively. Against the backdrop of the ongoing summer lull, the primary market pipeline has currently dried up. As such, there are no forthcoming mandates of interest to report on at present. However, we assume that as of the coming week the first issuers are likely to be taking a closer look at the market again.

Issuer	Country	Timing	ISIN	Maturity	Size	Spread	Rating	ESG
BRABUR	DE	17.07.	DE000A351UQ1	6.0y	0.50bn	ms +22bp	- / Aaa / -	-
IBRD	SNAT	16.07.	XS3129375732	10.0y	3.00bn	ms +38bp	AAA / Aaa / AAA	X
PSPCAP	CA	16.07.	XS3124429492	7.0y	1.25bn	ms +51bp	AAA / Aaa / -	-
BADWUR	DE	15.07.	DE000A3H2549	3.5y	0.75bn	6mE +10bp	- / Aaa / AA+	-

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

Covered Bonds
Repayment structures on the covered bond market: an update

Authors: Alexander Grenner // Lukas Kühne

Repayment structures for covered bonds

Deferring maturity, i.e. the option of deferring repayment of the amounts owed under a bond beyond the original maturity date under certain conditions, has been an integral part of a large number of covered bond programmes for several years now. The implementation of the Covered Bond Directive has also left its mark on the covered bond market with regard to the repayment structures coming into effect. The Directive has ultimately given national legislators in the EEA the option of including the deferment of maturity in the official framework for covered bonds. If the option of deferring maturity were included in the context of the standardisation process, this would also be associated with the requirement to define objective triggers for the deferment of maturity in the legal framework. Since no standard approach was chosen by the respective national legislators when implementing the relevant article in the Directive in national legislation, the European covered bond market remains distinctly heterogeneous here. In our opinion, implementation of the Directive provides investors, who focus on the latest possible repayment date for their investment as a fundamental consideration, with the clear benefit that the statutory incorporation of triggers for deferring maturity delivers a greater degree of objectivity, although national implementation varies. In most cases, the option for deferring the maturity date in conjunction with specific triggers was previously included in the programme documentation of the bonds in question or issuance programmes. Implementation of the requirements laid down in the Directive favours a continuation of the trend whereby the hard bullet structures usually relied on in the past are less popular, with soft bullet structures now becoming even more established as the form most frequently chosen for EUR benchmarks. Bonds with a conditional pass-through structure (CPT) also continue to feature on the market occasionally.

Basic considerations on deferring maturity

The aim of deferring maturity is to create opportunities to counteract risks resulting from maturity mismatches and potential shortages of liquidity. To create this option for mitigation in principle, the Covered Bond Directive also stipulates that the responsible national entities are free to permit extendable maturity structures, as mentioned at the beginning. If these are permitted, the event that triggers the extension or deferral of maturity is crucial for these structures. This trigger event was already of relevance before the Directive was implemented, albeit not enshrined in law (see following paragraph on soft bullet structures). As a rule, bond investors are provided with detailed information regarding the trigger, the effects on the maturity structure if the debtor is unable to pay and the role of the supervisory authority and the trustee in the wake of maturity being deferred. Starting from the “old market standard” of hard bullet bonds, we present the different approaches below.

Hard bullet structures: no option for extending maturity

Until a few years ago, hard bullet structures were regarded as market practice as far as repayment arrangements for covered bonds were concerned. If the issuer is unable to comply with their outstanding payment obligations, the dual recourse mechanism means that investors have access to the covered bond programme's cover pool via the trustee or administrator – regardless of the repayment structure chosen. If repayment of an issue is imminent and the available cash is not sufficient to service this obligation and liquidity cannot be generated by other means, the collateral in the pool will be sold under a hard bullet structure. As a result, investors can firstly expect prompt repayments, while secondly this structure is associated with the risk that discounts on the market values of the cover assets have to be accepted and in the worst case the complete amount to be repaid will not be covered by the proceeds of the sale.

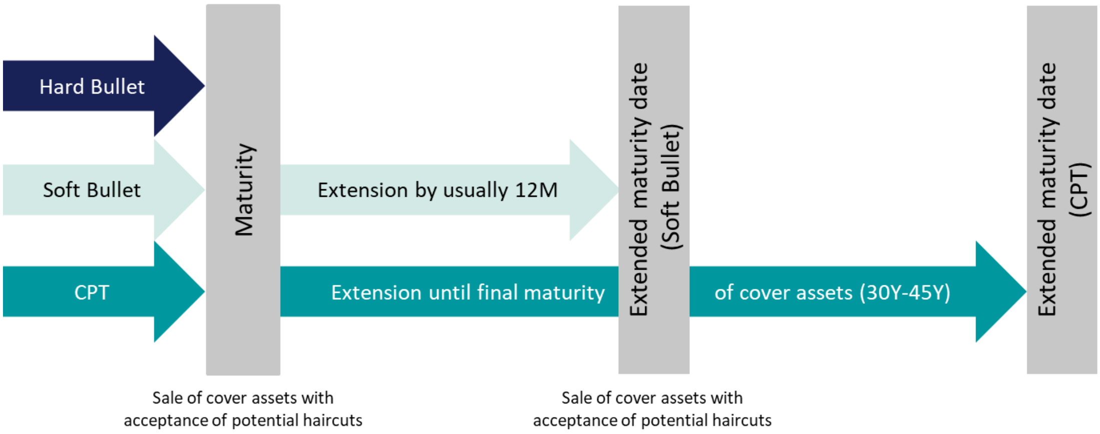
Soft bullet structures: maturity deferred through trigger events

Soft bullet bonds, and in rare cases CPT structures, exist to counter this risk. If investors' claims can be met at the original maturity date, there are no differences between the three repayment structures for investors. Since there were no fundamental requirements regarding the events needed to trigger any deferral of maturity without the Directive, specific information was regularly to be found in the programme documentation and final terms of issuers from those jurisdictions that had not ruled out any deferral of maturity. Various approaches for these triggers took shape on the market. Examples of different models within the soft bullet variant are (i) the issuer becoming insolvent, and redemption being deferred to a later repayment date by an independent trustee or (ii) deferral of the original repayment date by the issuer. With regard to the possible deferral period, a deferral of maturity of twelve months has become established in most cases among the soft bullet structures. Interest payments during the deferral period are largely based on the 1M or 3M-Euribor plus a premium or discount which is, however, also partly defined as a fixed coupon. Trigger events in European Member States will only now be enshrined in law with the implementation of the Covered Bond Directive in national legislation. However, significant differences can be identified in this instance as well. We list the trigger events in the table below.

Conditional pass-through structures: actual final maturity is uncertain

A significantly longer deferral of the original repayment date may occur with bonds that have a CPT structure. At the same time, the refinancing risk is reduced to a minimum as a result. In contrast to the soft bullet structure, the repayments of outstanding covered bond issues will be made firstly depending on the inflows generated from the associated cover assets, but secondly also from the sale of cover assets if this can be effected at adequate market prices following the triggering of the pass-through structure (for which, similarly to soft bullets, there are no standard trigger events). However, unlike the soft bullet structure, the date on which investors can expect the outstanding claims to be met cannot be determined ex ante – in the worst case not until the cover assets with the longest maturity fall due. Rating agencies see a positive influence in the wake of the credit assessment in soft bullet and even more so CPT structures due to the lower refinancing risk.

Comparison of the different maturity structures



Source: NORD/LB Floor Research

Poland – an exception: soft bullet with the option to convert to CPT
With regard to the maturity structure, Poland can be considered an exception. Covered bonds which cannot be serviced when they mature are initially extended for twelve months. During this extension period, a test is carried out at six-month intervals to determine whether there are sufficient assets to service investors' claims and also sufficient liquidity to service these claims on time. If the tests are not passed, the bond will be transferred to a CPT structure at the end of the twelve-month period. The repayment date will therefore be postponed to the latest date on which the cover assets mature plus three years. However, such an extension can be prevented with a 2/3 majority of the investors. Polish covered bonds are therefore initially soft bullet bonds, for which the final maturity cannot be unequivocally determined in advance because of the possible conversion to a CPT structure, meaning that their repayment structure cannot be clearly assigned to one of the three repayment forms.

Slovakia – an exception: soft bullet with potential second maturity deferral
Slovakia also differs somewhat from the market standards that came into force as a result of a change in the law on 01 January 2018. Accordingly, the new legal framework initially envisages deferring the maturity by twelve months in the event of insolvency. Should any servicing of investors' claims not be foreseeable at the end of the extension period, the programme can be transferred to one or more other Slovakian banks. If such a transfer is not possible within the first extension period, a further deferral of maturity by another twelve months may be approved by the regulator. Both those bonds that were extended because of the first deferral and those where the maturity dates occur in the second 12-month period will be affected by the renewed extension. The Slovakian EUR benchmark covered bonds in the iBoxx EUR Covered are therefore soft bullet issues where the structure differs, however, because of the option to defer maturity twice. In our opinion, Slovakian issues can be clearly assigned to the soft bullet segment (in contrast to issues from Poland), albeit with a maximum extension of 24 months.

Overview of possible triggers for deferring maturity: global covered bond market

Country	Trigger Event
Australia	Insolvency, inability to pay by the issuer
Austria	Bankruptcy, resolution of the issuer
Belgium	Bankruptcy, resolution, inability to pay by the issuer
Canada	Insolvency, payment default issuer, additional events
Czechia	Bankruptcy, resolution, inability to pay by the issuer, breach of liquidity provisions
Denmark	RO: Refinancing of CB not guaranteed, interest rate increases by 5% or more; SDO: Refinancing of CB not guaranteed, interest rate increases by 5% or more SDRO: Refinancing of CB not guaranteed, interest rate increases by 5% or more
Finland	Payment default, lack of liquidity
France	OF: Bankruptcy, resolution, payment default, lack of liquidity OH: Bankruptcy, resolution, payment default, lack of liquidity CRH: Bankruptcy, resolution, payment default, lack of liquidity
Germany	Bankruptcy, resolution of the issuer, breach of liquidity provisions
Hungary	Depends on the design of the programme, lack of liquidity
Iceland	Resolution, prevention of forced sales, payment default issuer or administrator
Ireland	Payment default, instruction from the supervisory authority or administrator
Italy	Bankruptcy, inability to pay, resolution issuer, measures by Banca d'Italia
Luxembourg	-
Netherlands	Bankruptcy, resolution, inability to pay by the issuer
New Zealand	-
Norway	Bankruptcy, resolution of the issuer
Poland	Bankruptcy, resolution of the issuer
Portugal	Inability to pay, withdrawal of banking licence
Singapore	Contractually regulated
Slovakia	Bankruptcy, resolution, insolvency, payment default issuer, cancellation of the covered bond programme
South Korea	South Korean covered bonds: payment default issuer KHFC's covered bonds: -
Spain	Bankruptcy, resolution, lack of liquidity, breach of liquidity provisions
Sweden	FSA permission to avoid bankruptcy
United Kingdom	Bankruptcy, resolution, inability to pay by the issuer

Source: Respective national legislation, market data, NORD/LB Floor Research

Soft bullet and CPT bonds in the case of repo transactions

Covered bonds with a CPT structure are subject to special requirements because of their maturity, which can be very long under certain circumstances. CPT bonds also have an additional unique feature in the context of repo transactions with the ECB. Adjustments to the valuation discounts are of relevance for own-use soft bullet or CPT covered bonds. Accordingly, it is not the originally envisaged maturity but the extended one that is used to determine the haircut. Following this approach, the maturity would have to be extended by one year as a rule for a soft bullet structure, while all CPT structures would fall within the maturity range of ">10 years" because of the theoretically very long extension period when calculating the haircut.

iBoxx EUR Covered: influence of EU harmonisation on repayment structures

It is already clear from the comments above that the refinancing risk can be significantly reduced by means of a soft bullet or CPT structure compared with a hard bullet structure. In this respect it is not surprising that soft bullet structures are also especially common in third countries, as the Covered Bond Directive refers to them. Here, in particular, investment in such a covered bond requires detailed analysis of the relevant bond conditions in advance, as the Covered Bond Directive does not apply to "all countries" and was not implemented uniformly either. Therefore, investors must continue checking what happens to interest payments in the extension period when a trigger event occurs. With regard to the refinancing risk following insolvency on the part of the issuer, it must, however, be mentioned that issuers were already in some cases obliged by law to reduce this risk by maintaining a liquidity buffer for hard bullet structures. In the wake of harmonisation, article 16 of the Covered Bond Directive also provides for the fact that the introduction of a liquidity buffer to cover the net liquidity outflows for 180 calendar days was mandatory for all jurisdictions subject to the regulation.

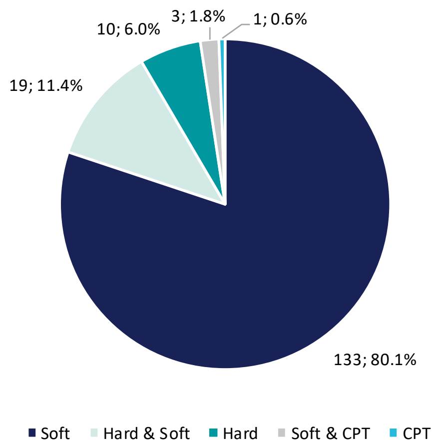
Composition of the iBoxx EUR Covered: maturity structures

While the shifts with regard to the weightings of maturity structures in the iBoxx EUR Covered initially took place generically if anything – the pivot by some issuers in the Netherlands from CPT to soft bullet must be cited as an example – the harmonisation of the European covered bond market added a significant driver. This is clearly recognisable from the example of the German Pfandbrief market. However, the adjustments to the legislation mean that more soft bullet issues are to be expected in other jurisdictions as well. Furthermore, no national legislator has preferred a "big bang" solution along the lines of the adjustments to the Pfandbrief Act and pivoted hard to extendable structures. This is currently the case, in particular, for those countries that have active issuers with both hard bullets and extendable structures. We refer to the composition of the iBoxx in August 2025 below.

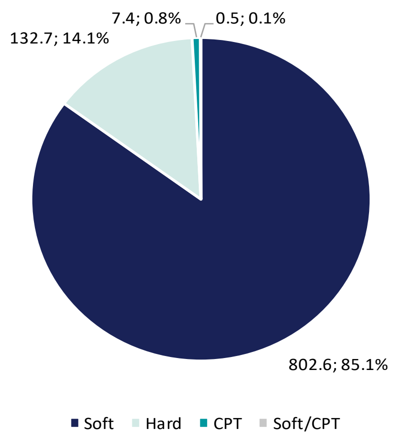
Pure soft bullet issuers dominate the iBoxx EUR Covered

With 133 of 166 issuers (80.1%), the majority of the issuers listed in the iBoxx EUR Covered (excl. Spanish multi-cedulas) are those that currently only have outstanding benchmarks with a soft bullet structure. At present, only 6% (eleven issuers) is attributable to institutions that have exclusively hard bullets. Only one issuer, Banca Monte dei Paschi di Siena, is still a purely CPT institution. As a result, a clear model can be assigned to 86% of the institutions with outstanding EUR benchmarks. In contrast, the remaining 14% is attributable to issuers that have outstanding benchmarks with two different maturity structures. Here, the combination of hard and soft bullets is the most frequent case, at 11.4% (19 issuers). Knab (formerly Aegon) and NIBC Bank from the Netherlands have EUR benchmarks with soft bullet and CPT structures. As a result of the conversion of their covered bond programme to soft bullets, Australia's Bank of Queensland has also been active as an issuer of covered bonds in the EUR benchmark segment since May 2024. The EUR benchmark of Poland's PKO Bank Hipoteczny, which is characterised by a hybrid maturity structure, illustrates the special case in Poland described above. This bond is initially a soft bullet bond, for which the final maturity cannot be unequivocally determined in advance because of the possible conversion to a CPT structure.

iBoxx EUR Covered: issuers by structure



iBoxx EUR Covered: volume by structure

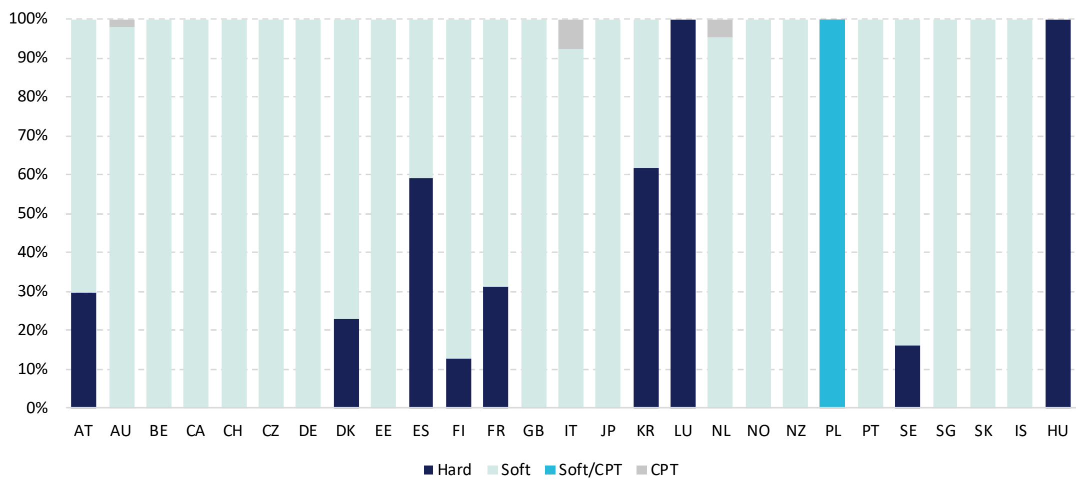


Source: Market data, NORD/LB Floor Research

Largest outstanding volume attributable to soft bullet EUR benchmarks

At EUR 802.6bn (around 85%), the largest share of the volume contained in the iBoxx (i.e. excluding Spanish multi-cedulas) by far is now attributable to soft bullet covered bonds. EUR benchmarks with a CPT structure still constitute a niche within the primary market, since only 0.8% (EUR 7.4bn) of the iBoxx volume is attributable to bonds with this structure. Traditional hard bullets account for EUR 132.7bn or around 14%, respectively. Hard bullet issues with a volume of EUR 79.0bn originated in France, while Spain (EUR 23.2bn), Austria (EUR 16.0bn), South Korea (EUR 4.1bn) and Sweden (EUR 3.8bn) accounted for the next-highest volumes. In our opinion, it is worth mentioning in this context that both France (August 2025: EUR 172.8bn; September 2024: EUR 159.6bn) and Sweden (EUR 19.4bn; EUR 18.6bn) have recorded dynamic growth in their respective volumes of soft bullets.

Repayment structures by jurisdiction (iBoxx EUR Covered)



Source: Market data, NORD/LB Floor Research

Numerous jurisdictions with different repayment structures

With regard to the distribution of the three repayment structures at jurisdiction level, it is also apparent that only Luxembourg and Hungary have EUR benchmarks with solely hard bullet structures represented in the iBoxx. On the other hand, there are numerous jurisdictions, namely Belgium, Canada, Czechia, Germany, Estonia, the United Kingdom, Japan, Norway, New Zealand, Singapore, Slovakia, Iceland and Switzerland, from which only soft bullet benchmarks are included. CPT bonds were also issued from Australia, Italy and the Netherlands. For the majority of the listed countries, we provide a tabular overview of the individual issuers and the maturity models they use below. Here, the fact that, under certain circumstances, repayment structures are also used in the respective jurisdictions – and even by the listed issuers – that may differ from those of EUR benchmarks or are no longer listed in the iBoxx because of their residual term to maturity, must be taken into account.

Repayment structures Austria

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

Repayment structures Italy

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

Source: Market data, NORD/LB Floor Research

Repayment structures in Austria

In Austria, EUR benchmarks with a soft bullet structure (EUR 37.6bn) are now dominant. In total, all of the 13 Austrian issuers now have outstanding EUR benchmarks with an option to extend the maturity. The volume of hard bullets stands at EUR 16bn.

Repayment structures in Italy

Italy is one of the jurisdictions that has outstanding covered bonds with CPT structures (EUR 3.3bn), even though such bonds play only a minor role in the Italian market for publicly placed EUR benchmarks compared with soft bullet bonds (EUR 38.5bn).

Repayment structures in Denmark

With regard to the Danish market, we would like to highlight the issues by Danish Ship Finance (Danmarks Skibskredit), since they differ not only because of their cover assets (shipping mortgages) but also the repayment structure (hard bullet). In contrast, Danske Bank and Jyske Realkredit have each placed their EUR benchmarks on the market with soft bullet structures (extension of up to twelve months).

Repayment structures Denmark

	Hard	Soft
Danmarks Skibskredit	X	
Danske Bank		X
Jyske Realkredit		X

Repayment structures Finland

	Hard	Soft
Aktia Bank		X
Danske Mortgage Bank		X
Nordea Kiinnitysluottopankki	X	X
OP Mortgage Bank		X
Oma Saastopankki		X
SP-Kiinnitysluottopankki		X
S-Pankki		X

Source: Market data, NORD/LB Floor Research

Repayment structures in Finland

Of the currently outstanding EUR benchmarks placed on the market by Finnish issuers, only the four issues by Nordea Mortgage Bank are bonds with a hard bullet structure. In contrast, the seven other issuers only have EUR benchmarks with a soft bullet structure giving the option to extend maturity by twelve months in each case. All seven Finnish covered bond issuers in the EUR benchmark segment now issue bonds based on a soft bullet structure.

Repayment structures in France

There are sixteen issuers in total in France, of which there are fourteen that have designed their bonds with a uniform maturity structure, i.e., they have issued solely hard or soft bullet bonds. The majority, namely twelve institutions, are issuers that have the option of extending the maturity of their bonds. Only two institutions are now represented in the index with both hard bullets and soft bullets.

Repayment structures in Germany

The adjustment to the legal basis for issuing Pfandbriefe in Germany implemented maturity extensions for all Pfandbriefe that we consider to be soft bullets. Deutsche Bank also had a bond with a CPT structure that matured in November 2024, meaning that Germany is currently one of the jurisdictions with only one maturity structure in the benchmark index.

Repayment structures in Sweden

In Sweden, all five issuers now rely on covered bonds with the option to extend maturity. While SCBC and Stadshypotek are solely represented in the iBoxx EUR Covered with soft bullet bonds, after LF Hypothek, which placed its first soft bullet issue in May 2022, SEB and Swedbank now also have outstanding EUR benchmarks with both repayment structures. In terms of volume, it is apparent that hard bullet bonds (EUR 3.8bn) have fallen further behind Swedish soft bullet bonds, which have a volume of EUR 19.4bn in the iBoxx.

Repayment structures France

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

Repayment structures Germany

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

Source: Market data, NORD/LB Floor Research

Repayment structures Sweden

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

Source: Market data, NORD/LB Floor Research

Repayment structures Portugal

	Soft	CPT
Banco BPI	X	
Banco Santander Totta	X	
Novo Banco	X	

Repayment structures in Portugal

In addition to Australia, Germany, Italy and the Netherlands, Portugal was also one of the markets to feature CPT structures. The covered bonds of Caixa Economica Montepio Gera had an option to extend maturity in CPT format, which specifically allowed for a maturity extension of up to 45 years. However, this issuer is no longer represented in the iBoxx EUR Covered. Portugal is currently one of the jurisdictions represented by a single maturity structure in the benchmark index.

Repayment structures in the Netherlands

Following the introduction of the CPT repayment structure by NIBC Bank in 2013, it was followed by four further issuers with bonds in CPT format, namely Achmea Bank, Van Lanschot, Aegon Bank (now Knab) and NN Bank. In the last few years Dutch issuers have increasingly preferred soft bullet structures and many issuers have adapted their programmes or changed the maturity structure of existing CPT bonds to soft bullets. For example, in April 2022, NN Bank held a meeting of bondholders, at which it was decided to convert outstanding CPT bonds to soft bullet structures. Achmea Bank then followed suit. Nevertheless, the Netherlands still boasts not only the most CPT issuers but also the most outstanding CPT benchmarks (7 deals). At EUR 71.7bn, the volume of soft bullet bonds is many times higher than that of CPT bonds (EUR 3.5bn). The fact that all four issuers that used CPT structures in the past now issue bonds in soft bullet format means that the preponderance of soft bullets compared with CPT deals will increase further and the CPT format will be a thing of the past for the foreseeable future. The bond with the longest duration is due to mature in September 2031.

Repayment structures Netherlands

	Soft	CPT
ABN AMRO Bank	X	
Achmea Bank	X	
Knab	X	X
Cooperatieve Rabobank	X	
ASN Bank (formerly de Volksbank)	X	
ING Bank	X	
Nationale-Nederlanden Bank	X	
NIBC Bank	X	X
Van Lanschot Kempen	X	

Repayment structures Australia

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

Source: Market data, NORD/LB Floor Research

Repayment structures in Australia

Before the hard bullet covered bond issued by the ANZ Banking Group was repaid some time ago, Australia was the only jurisdiction to periodically have all three maturity structures in the index. At present, one issuer, namely the Bank of Queensland, has bonds in CPT format as well as soft bullet bonds outstanding. The Bank of Queensland made its debut in soft bullet format in May 2024. The last Australian CPT deal is due to mature in June 2027.

Repayment structures in Spain

Since the first soft bullet (dual tranche) issued by Banco Santander in September 2022, Spain has also ranked among those jurisdictions in which covered bonds have various maturity structures. Nationwide, there are nine covered bond issuers in the index that have hard bullet bonds outstanding – in total 20 bonds (EUR 23.2bn) – including Banco Santander. Soft bullet structures are clearly gaining ground as a result of the new legislation. The 20 hard bullets in the iBoxx EUR Covered compare with fifteen soft bullet covered bonds (EUR 16.1bn).

Repayment structures Spain

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

Repayment structures South Korea

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

Repayment structures in Hungary

	Hard	Soft
OTP Mortgage Bank	X	

Source: Market data, NORD/LB Floor Research

Repayment structures in South Korea

Since the first EUR benchmark issued by Kookmin Bank, South Korea has been one of those jurisdictions in which covered bonds have various maturity structures. While the eight EUR benchmarks issued by KHFC do not include the option to extend maturity and are therefore hard bullet bonds, Kookmin Bank issued its first EUR benchmark in soft bullet format and now has three bonds outstanding. Following the market entry of KEB Hana Bank (soft bullet), another South Korean issuer emerged as a newcomer to the market for bonds with extendable maturities. Shinhan Bank also issues soft bullet bonds, with the result that there are now six soft bullet bonds from South Korea in the iBoxx.

Repayment structures in Hungary

With the comeback of OTP Mortgage Bank in June, we are also pleased to welcome Hungary back to the EUR benchmark segment. The last covered bond in this format already matured in 2014 (also by the same issuer). The current new issue employs the hard bullet format, which is therefore the only maturity structure used for covered bonds in this jurisdiction. It remains to be seen whether future issues will follow this pattern or whether issuers will choose to align themselves more closely with standard market practice in the form of soft bullets.

Conclusion and outlook

A glance at the iBoxx EUR Covered index reveals that bonds with soft bullet structures have now clearly overtaken the former dominant form of hard bullet bonds. One of the reasons for this is that many issuers in France and Austria in particular have already switched to this form of maturity structure for their covered bonds. However, this year saw the return of a Hungarian issuer to the EUR benchmark segment in the form of OTP Mortgage Bank, whose covered bonds have a hard bullet structure. In our view, this does not change the general trend for issuers to increasingly resort to soft bullets. The implementation of the European Covered Bond Directive has also facilitated the change from conditions based on programme descriptions to a legal framework. From a supervisory perspective, the focus remains on extendable maturities. Both market developments and opportunities as well as risks for covered bonds with extendable maturities are part of the Call for Advice which were recently presented by the EBA.

SSA/Public Issuers
Teaser: Issuer Guide – German Agencies 2025

Authors: Dr Norman Rudschuck, CIIA // Lukas-Finn Frese

Promotional banks shape the German agency market

The German agency market is the largest of its kind in Europe. As at the reporting date, an outstanding volume of EUR 646bn is distributed over 1,500 bonds. The issuers can essentially be divided into three categories: national promotional banks (e.g. KfW) and regional institutions (e.g. NRW.BANK), as well as winding-up agencies (e.g. EAA). While the promotional banks have traditionally played a highly significant role in the direction of economic policy at the level of both federal government (Bund) and the individual Laender, the winding-up agencies only came into existence a matter of years ago. Founded in the wake of the global financial crisis, the role of these institutions has been to systematically reduce assets that were hived off as part of state-backed support measures. Regional promotional banks round off this market, although in some cases they differ considerably regarding their primary market activities. As the largest of the 17 regional promotional banks, NRW.BANK is one of the most important bond issuers on the German agency market.

German agencies – an overview

Institution	Type	Owner(s)	Guarantee	Risk weight
Kreditanstalt für Wiederaufbau (KfW)	Promotional bank	80% Germany, 20% Laender	Explicit guarantee & institutional liability	0%
Landwirtschaftliche Rentenbank	Promotional bank	-	Explicit guarantee & institutional liability	0%
FMS Wertmanagement (FMS-WM)	Winding-up vehicle	100% Sonderfonds Finanzmarktstabilisierung (SoFFin)	Explicit guarantee & loss absorption mechanism	0%
Erste Abwicklungsanstalt (EAA)	Winding-up vehicle	~48.2% Federal State of NRW, ~25% RSGV, ~25% SVWL, ~0.9% LVR, ~0.9% LWL	Loss absorption mechanism	0%
NRW.BANK	Promotional bank	100% Federal State of North Rhine-Westphalia	Explicit guarantee, institutional liability & guarantor liability	0%
Landeskreditbank Baden-Württemberg – Förderbank (L-Bank)	Promotional bank	100% Federal State of Baden-Wuerttemberg	Explicit guarantee, institutional liability & guarantor liability	0%
Wirtschafts- und Infrastrukturbank Hessen (WIBank)	Promotional bank	100% Helaba	Explicit guarantee & guarantor liability	0%
LfA Förderbank Bayern (LfA)	Promotional bank	100% Free State of Bavaria	Explicit guarantee, institutional liability & guarantor liability	0%
Investitionsbank Schleswig-Holstein (IB.SH)	Promotional bank	100% Federal State of Schleswig-Holstein	Explicit guarantee, institutional liability & guarantor liability	0%
Bayerische Landesbodenkreditanstalt (BayernLabo)	Promotional bank	100% BayernLB Holding AG	Explicit guarantee & guarantor liability	0%
Investitionsbank Berlin (IBB)	Promotional bank	100% Federal State of Berlin	Explicit guarantee & institutional liability	0%
Investitionsbank des Landes Brandenburg (ILB)	Promotional bank	50% Federal State of Brandenburg, 50% NRW.BANK	Explicit guarantee, institutional liability & guarantor liability	0%
Sächsische Aufbaubank (SAB)	Promotional bank	100% Free State of Saxony	Explicit guarantee, institutional liability & guarantor liability	0%
Investitions- und Strukturbank Rheinland-Pfalz (ISB)	Promotional bank	100% Federal State of Rhineland-Palatinate	Explicit guarantee, institutional liability & guarantor liability	0%
Hamburgische Investitions- und Förderbank (IFBHH)	Promotional bank	100% Free and Hanseatic City of Hamburg	Explicit guarantee, institutional liability & guarantor liability	0%

Source: Issuers, NORD/LB Floor Research

Institutional liability (Anstaltslast)
Institutional liability is a special feature of the German agency market. It comprises the legal obligation on the part of the guarantor to secure the financial basis for the institution. Furthermore, functionality must be maintained. In this respect, any financial shortfalls must be settled through subsidies or by some other means. Specifically, institutional liability represents an obligation on the guarantor to provide the institution with the resources it needs to function properly. This means that, de facto, it is equivalent to a liquidity guarantee, although the institution does not have to bear any costs in this regard. The legal commitment between institution and guarantor is governed by the institutional liability as far as their internal relationship is concerned. As a result, if there are any liquidity shortfalls, only the institution can assert a claim against the guarantor. Investors do not have the right to claim against the guarantor. The institutional liability is limited neither in amount nor time and is regarded as a general principle of law. However, it is only relevant for investors under certain circumstances: all German agencies with institutional liability also have an explicit guarantee.

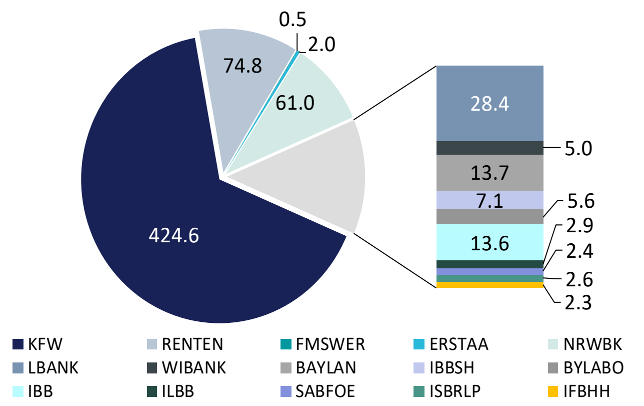
Guarantor liability (Gewährträgerhaftung)
Guarantor liability is another special feature of the German agency market and implies an obligation on the part of the guarantor to step in should the institution become insolvent. It comprises the guarantor's unlimited legal liability for the institution's liabilities in the event of insolvency or liquidation. The creditors therefore have a direct claim against the guarantor if the institution's assets are insufficient to service the claims. Liquidation and the occurrence of liability are not necessarily closely linked in terms of time. Guarantor liability is not limited in either amount or time, and as in the case of institutional liability, it is not associated with any costs. Unlike institutional liability, however, it is not regarded as a general principle of law. Instead, it requires a legal basis, such as legislation or a regulation. Again, guarantor liability is only relevant for investors under certain circumstances: all agencies with guarantor liability also feature an explicit guarantee.

Explicit guarantee
An explicit guarantee is expressly laid down in the relevant laws establishing the particular agencies and, as a consequence, it can only be revoked by an amendment to the law. If an agency runs into payment difficulties, this form of guarantee offers investors a direct and unconditional claim against the guarantor. As such, it is the strongest form of state support. Consequently, the explicit guarantee represents the ultimate criterion for a risk weighting of 0% under CRR and Basel III.

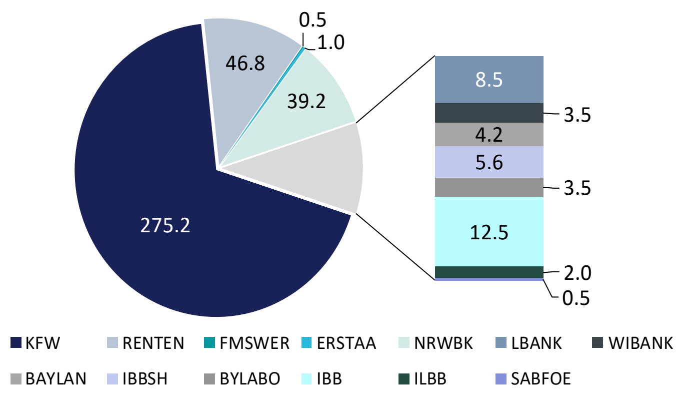
Loss absorption mechanism
With the creation of winding-up agencies around 2009/10, a new form of liability was added to the existing guarantee frameworks of German agencies. This form of liability is regulated under §7 of the statutes of FMS Wertmanagement and Erste Abwicklungsanstalt and contains an obligation on the part of the liable parties to offset all losses. The liable parties are also required to provide the institution with the funding needed to settle its liabilities (liquidity guarantee) at any time. Ultimately, the loss absorption mechanism therefore equates to an implicit guarantee.

Strong liability mechanisms result in a 0% risk weight and LCR eligibility as Level 1 assets
Strong support from the respective guarantors, which is inherent in all forms of liability, means that a risk weight of 0% is applicable under CRR/Basel III to all bonds issued by agencies of this kind. On this basis, classification as Level 1 assets under the LCR Regulation is ensured.

Outstanding equivalent bond volumes (EURbn)



Outstanding EUR benchmarks (EURbn)



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

German agencies – an overview (EURbn/EUR equivalent)

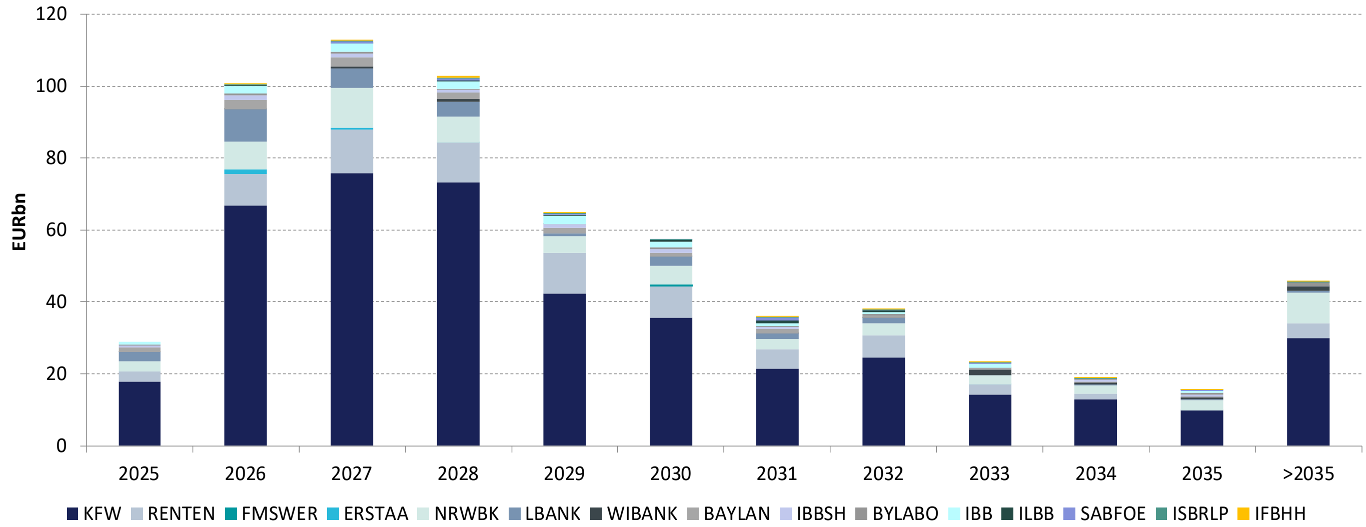
Name	Ticker	Rating (Fitch/Moody's/S&P)	Outstanding volume	Of which in EUR	Funding target 2025	Maturities 2025	Net Supply 2025	Number of ESG bonds	ESG volume
KfW	KFW	AAAu / Aaa / AAA	424.6	289.7	67.5	74.9	-7.4	47	73.4
Rentenbank	RENTEN	AAA / Aaa / AAA	74.8	48.0	10.0	10.8	-0.8	11	6.6
FMS-WM	FMSWER	- / Aaa / AAA	0.5	0.5	3.0	0.6	2.4	0	0.0
EAA	ERSTAA	AAA / Aa1 / AA	2.0	1.1	1.0	0.1	0.9	0	0.0
NRW.BANK	NRWBK	AAA / Aa1 / AA	61.0	49.8	12.0	9.9	2.1	25	16.4
L-Bank	LBANK	AAAu / Aaa / AA+	28.4	12.9	7.0	4.7	2.3	0	0.0
WIBank	WIBANK	- / - / AA+	5.0	5.0	1.5	0.0	1.5	0	0.0
LfA	BAYLAN	- / Aaa / -	13.7	13.7	3.3	2.6	0.7	0	0.0
IB.SH	IBBSH	AAA / - / -	7.1	7.1	1.9	1.2	0.7	0	0.0
BayernLabo	BYLABO	- / Aaa / -	5.6	5.6	1.5	0.8	0.7	5	2.0
IBB	IBB	AAA / Aa1 / -	13.6	13.6	2.8	1.9	0.9	3	1.5
ILB	ILBB	AAA / - / -	2.9	2.9	1.5	0.1	1.4	0	0.0
SAB	SABFOE	- / - / AAA	2.4	2.4	0.8	0.1	0.7	0	0.0
ISB	ISBRLP	AAA / - / -	2.6	2.6	0.7	0.1	0.6	0	0.0
IFBHH	IFBHH	AAA / - / -	2.3	2.3	0.6	0.5	0.1	1	0.3
Total			**646.3**	**457.1**	**115.1**	**108.3**	**6.8**	**92**	**100.2**

NB: Foreign currencies are converted into EUR at rates as at 05 August 2025.
On account of the issuer's individual funding mix, the values for "funding target" and "net supply" in particular may deviate from reality.
Source: Bloomberg, issuers, NORD/LB Floor Research

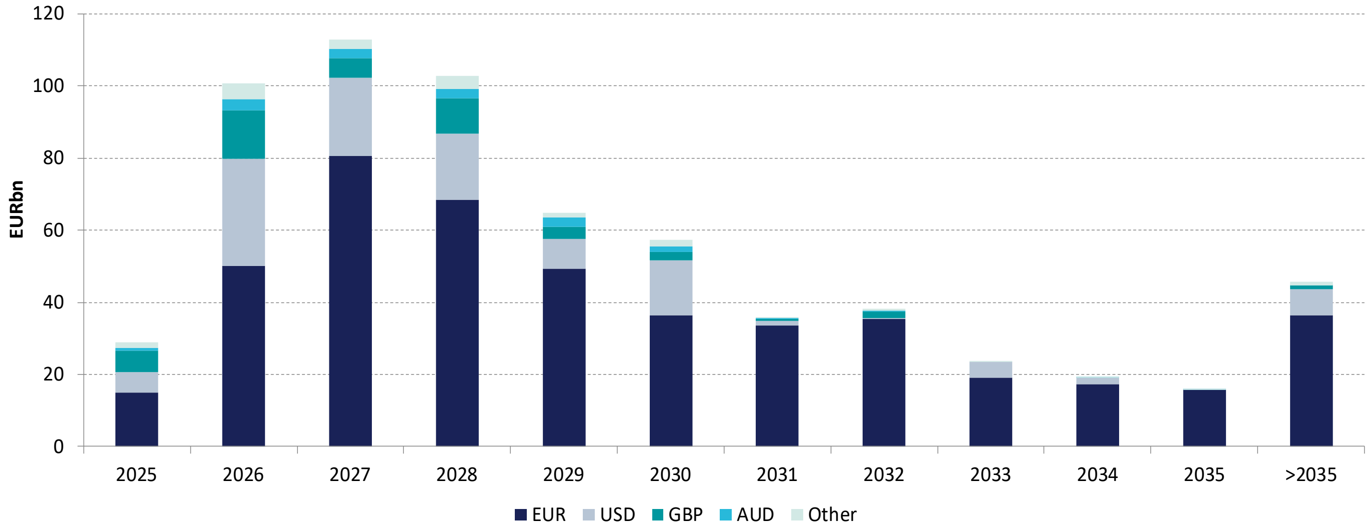
Comment

The German agency market offers a very wide range of bonds, especially in the maturity segment up to 2028. There is a substantial volume of outstanding bonds (EUR 457.1bn in total distributed over 1,096 separate bond deals), of which a large number are benchmarks, particularly in EUR. Moreover, a total of EUR 189.2bn of the outstanding volume is denominated in 13 foreign currencies (404 bonds), with the USD clearly at the forefront of the FX offering. On account of this broad supply, the German agency market is the largest of its kind in Europe. The supply, which is shaped to a significant extent by the issuance of EUR benchmarks, is likewise at a high level.

German agencies: outstanding bonds by issuer



German agencies: outstanding bonds by currency



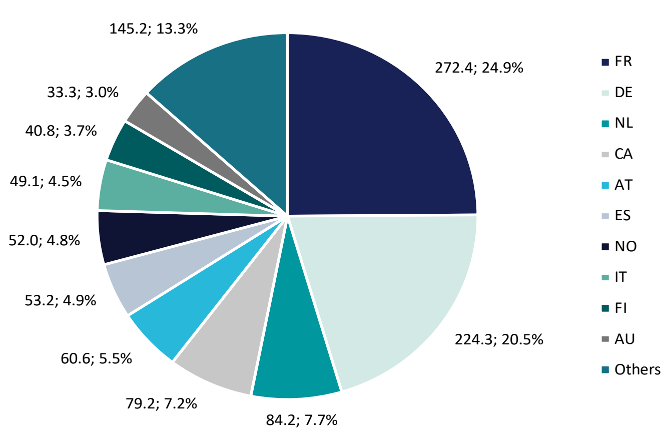
NB: Foreign currencies are converted into EUR at rates as at 05 August 2025.
Source: Bloomberg, NORD/LB Floor Research

Conclusion

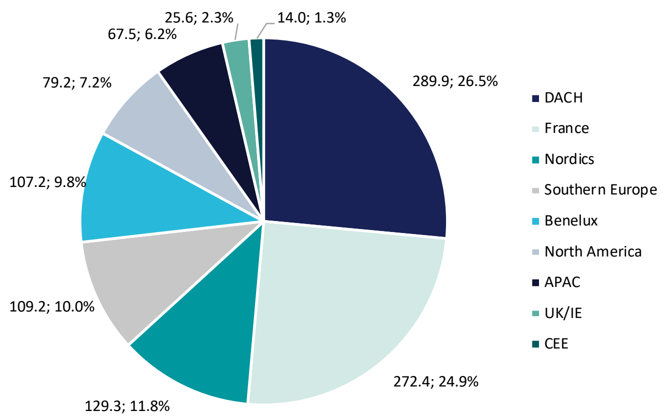
Alongside the German Laender, the promotional banks and winding-up vehicles based in Germany rank among the most important issuers in the European and global SSA universe. With a broad range of outstanding securities denominated in various currencies and allocated to a range of maturity segments, sustained high levels of new issuance activities, a continued strong credit profile and excellent regulatory treatment, we take the view that the German agency segment will continue to be attractive to a wide range of investors. For full details on the market, the economic framework conditions and all issuers in our coverage, please refer to our upcoming Issuer Guide, which is set for publication in the near future.

Charts & Figures
Covered Bonds

EUR benchmark volume by country (in EURbn)



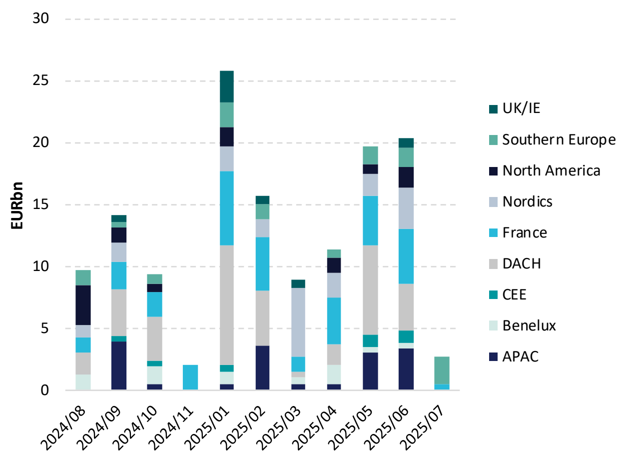
EUR benchmark volume by region (in EURbn)



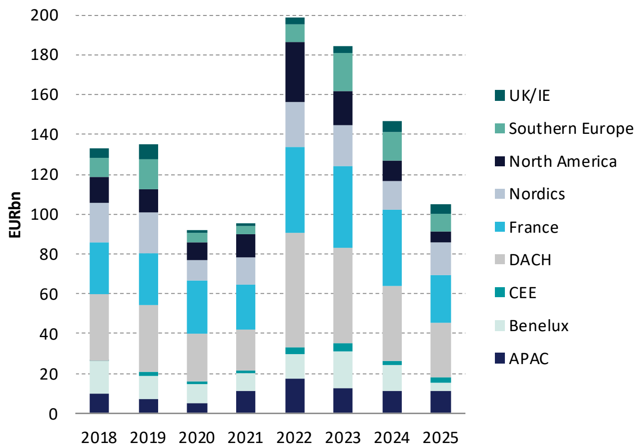
Top-10 jurisdictions

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	272.4	264	34	0.97	9.1	4.6	1.68
2	DE	224.3	313	49	0.67	7.7	3.6	1.70
3	NL	84.2	85	4	0.93	10.3	5.3	1.48
4	CA	79.2	59	1	1.32	5.5	2.4	1.60
5	AT	60.6	100	5	0.60	8.0	3.7	1.65
6	ES	53.2	46	5	1.05	10.1	3.4	2.24
7	NO	52.0	63	11	0.83	7.0	3.3	1.37
8	IT	49.1	64	6	0.74	8.2	3.8	2.13
9	FI	40.8	47	5	0.85	6.6	2.9	1.84
10	AU	33.3	33	0	1.01	7.2	3.4	1.92

EUR benchmark issue volume by month

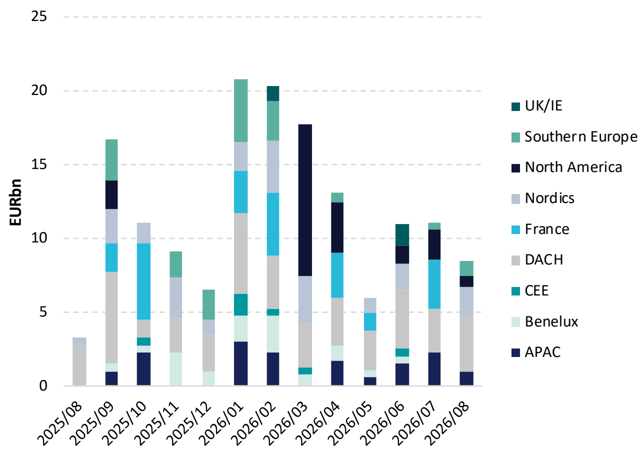


EUR benchmark issue volume by year

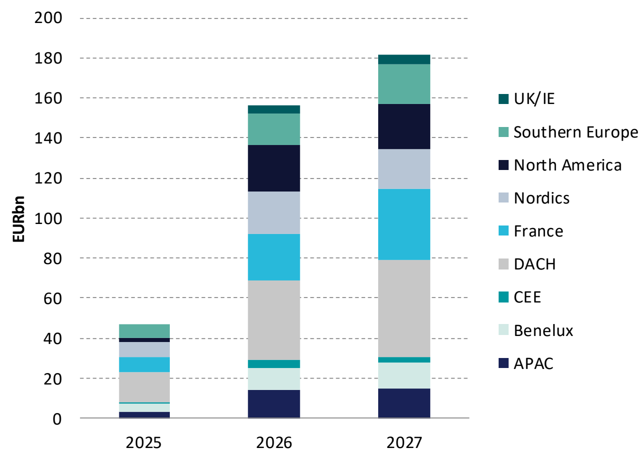


Source: Market data, Bloomberg, NORD/LB Floor Research

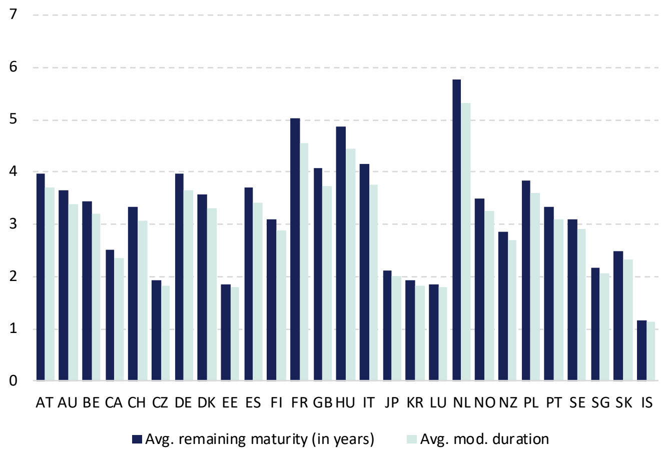
EUR benchmark maturities by month



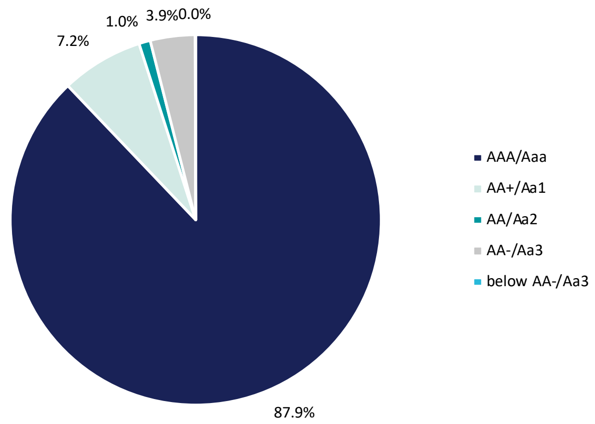
EUR benchmark maturities by year



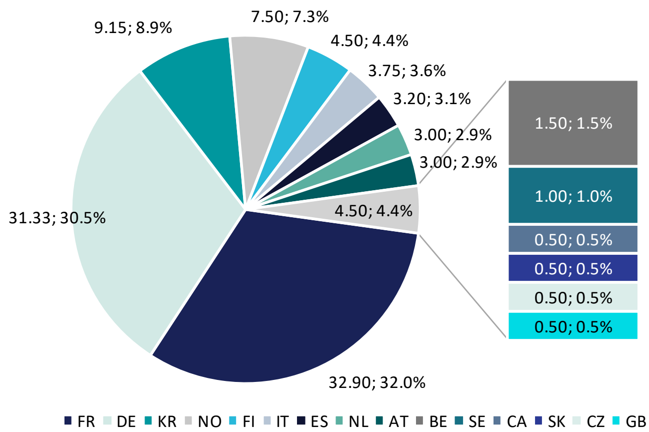
Modified duration and time to maturity by country



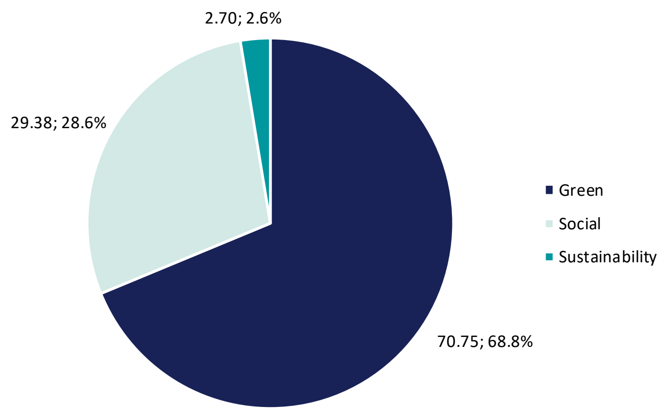
Rating distribution (volume weighted)



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

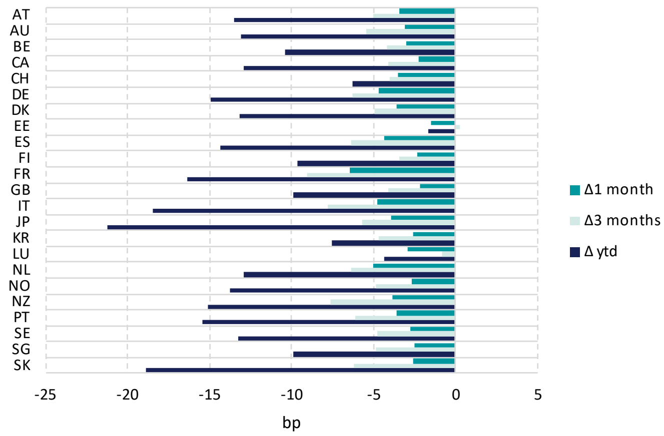


EUR benchmark volume (ESG) by type (in EURbn)

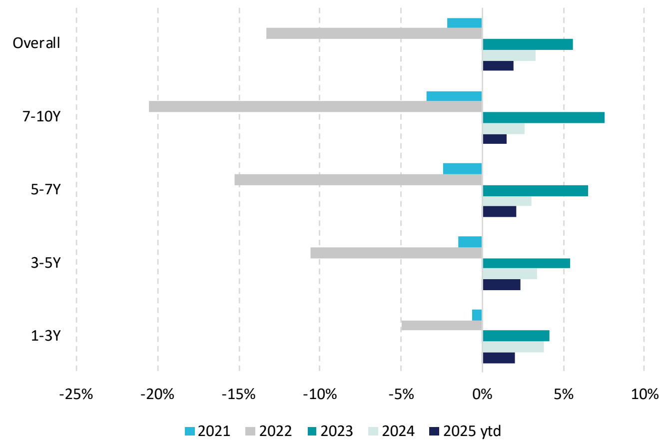


Source: Market data, Bloomberg, NORD/LB Floor Research

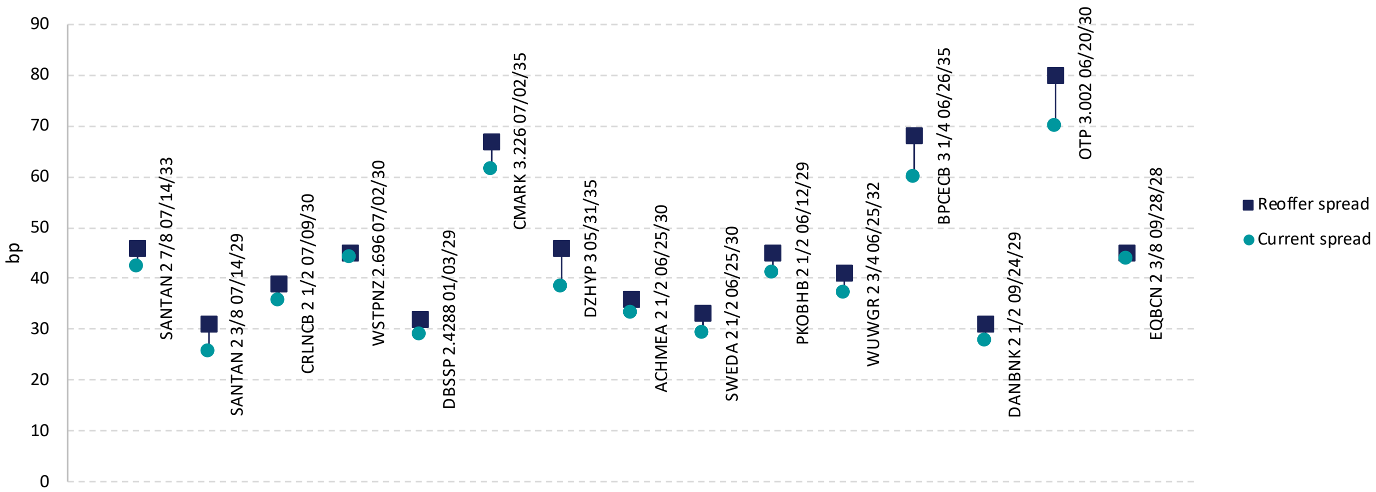
EUR benchmark emission pattern



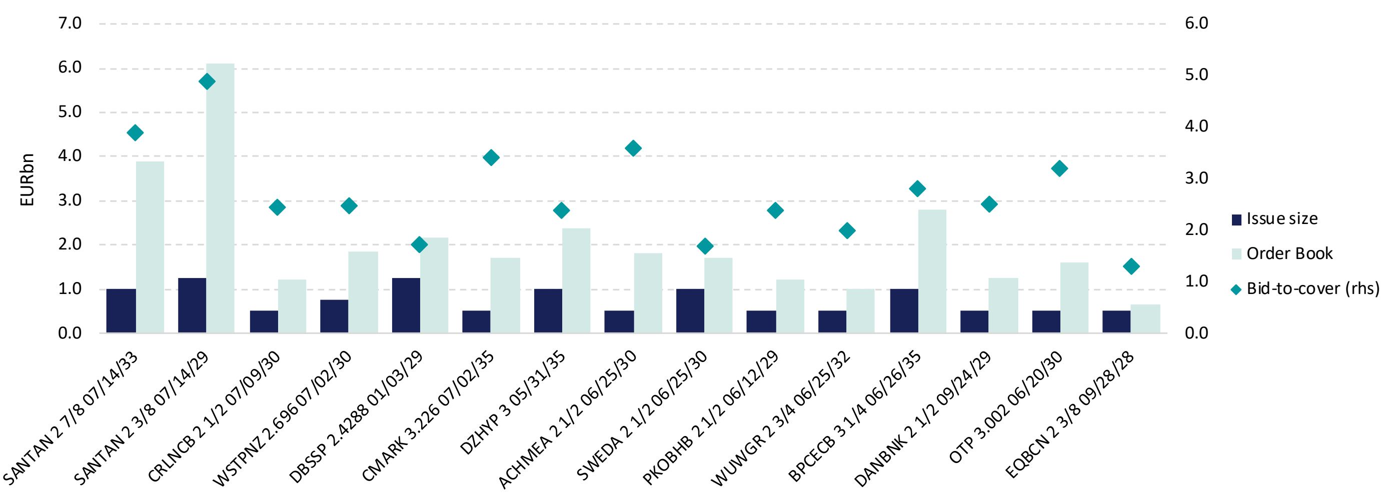
Covered bond performance (Total return)



Spread development (last 15 issues)



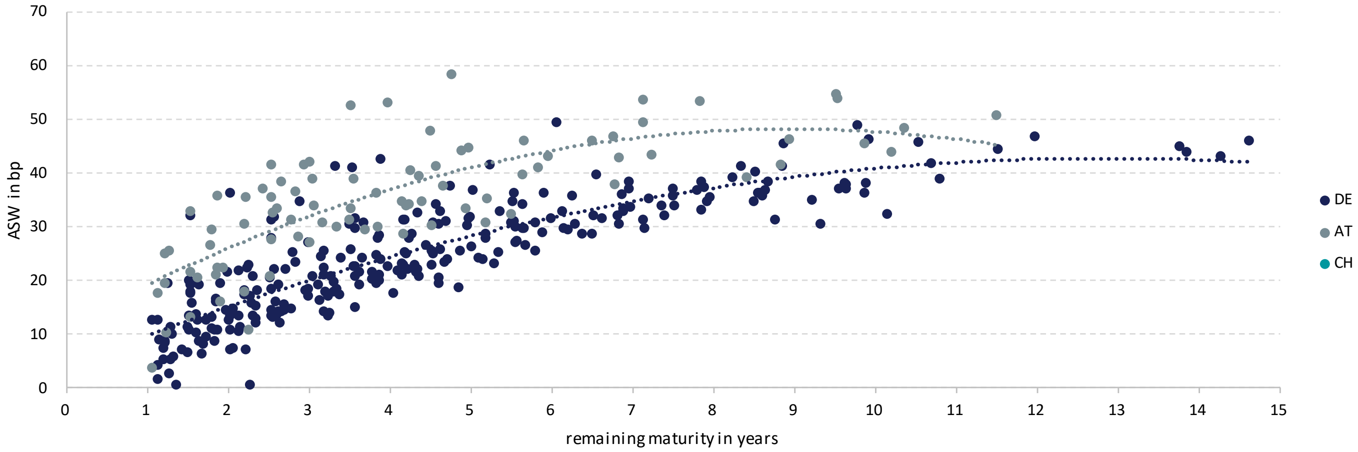
Order books (last 15 issues)



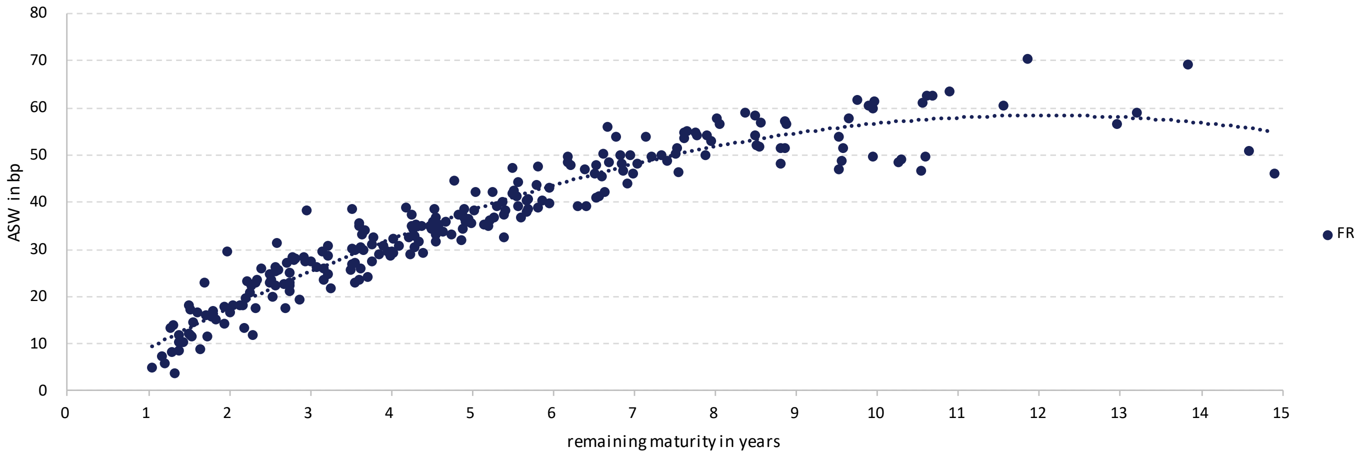
Source: Market data, Bloomberg, NORD/LB Floor Research

Spread overview[1]

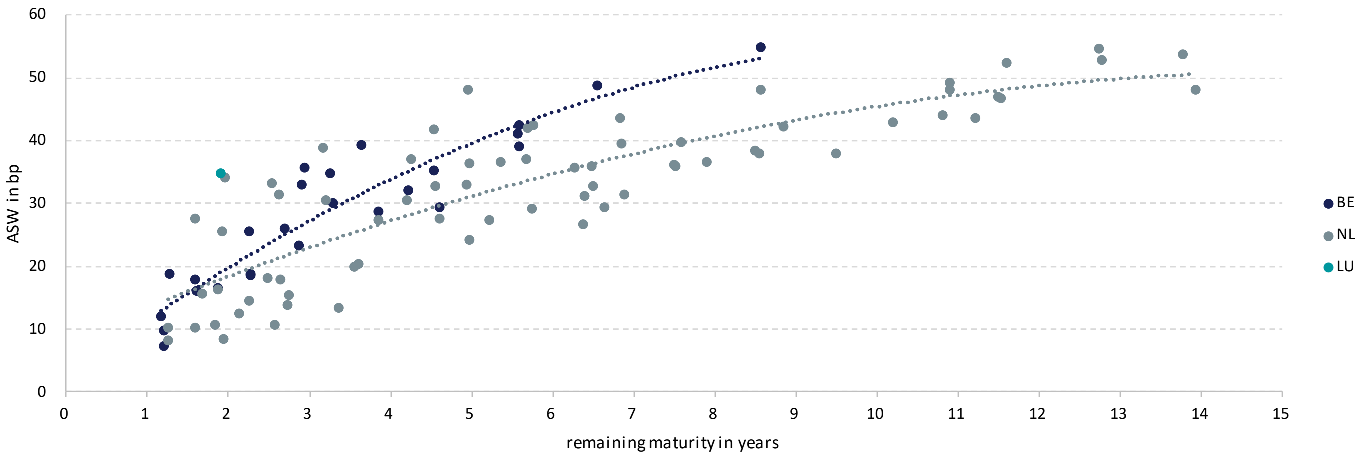
DACH



France



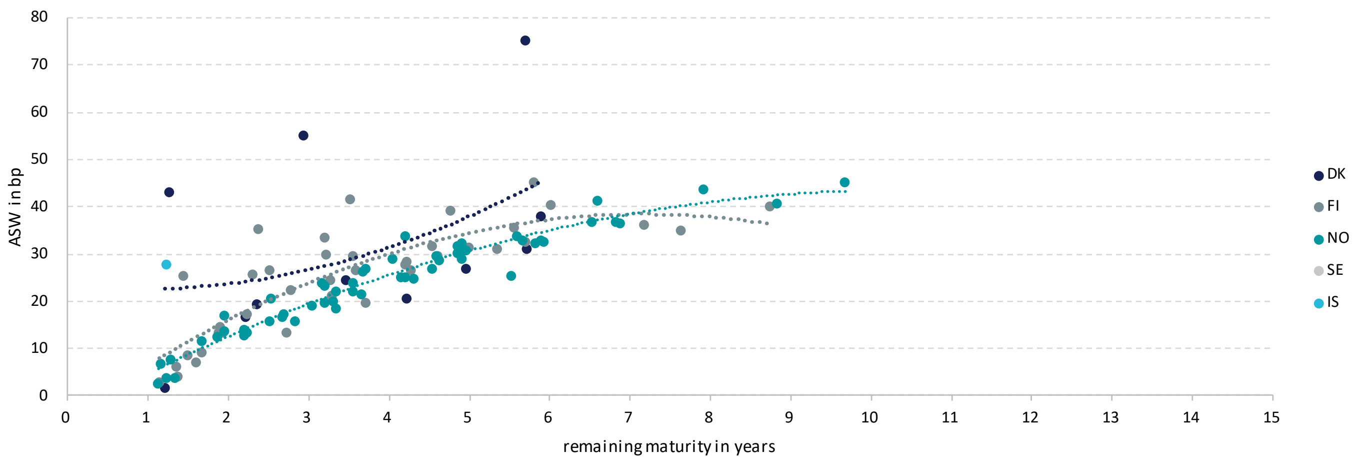
Benelux



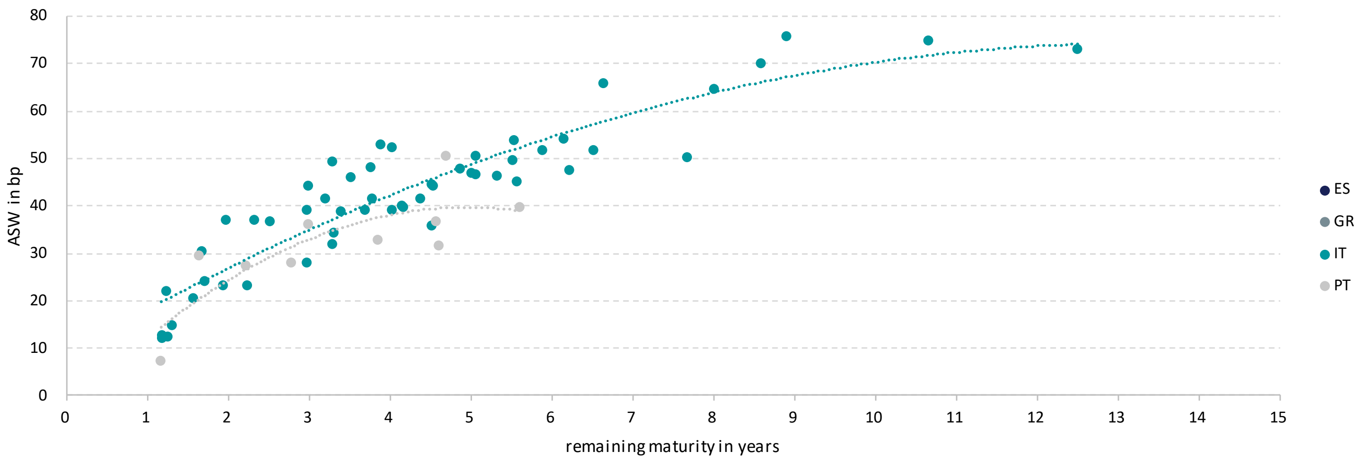
Source: Market data, Bloomberg, NORD/LB Floor Research [1]Time to maturity 1 ≤ y ≤ 15

NORD/LB

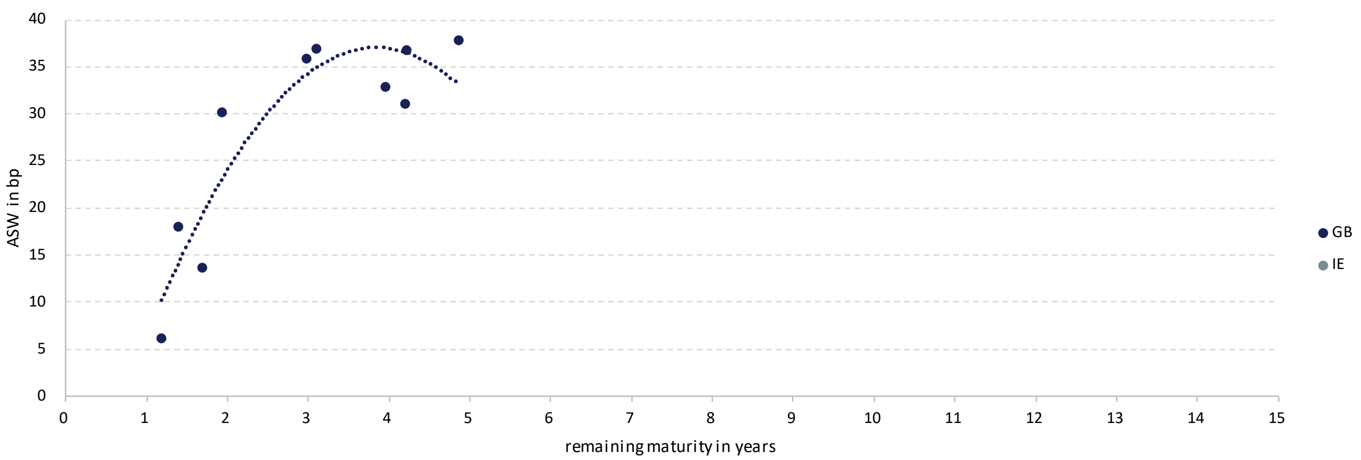
Nordics



Southern Europe

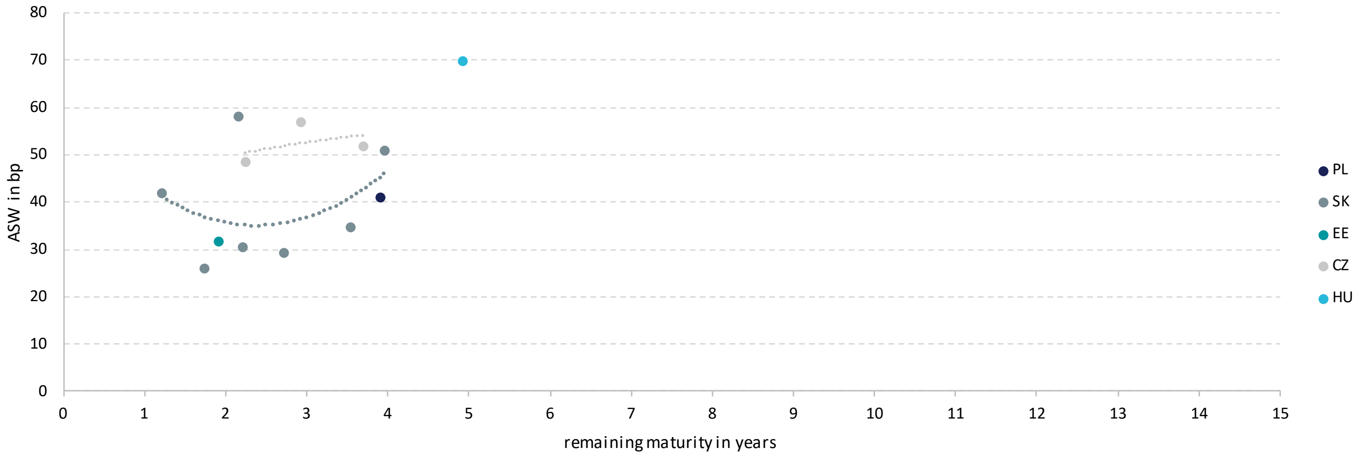


UK/IE

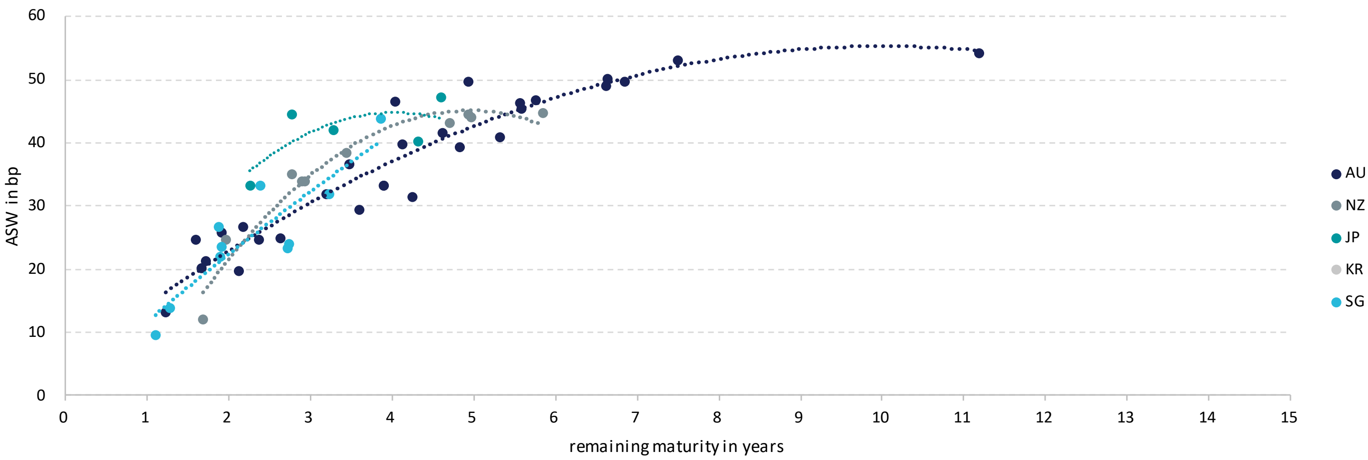


Source: Market data, Bloomberg, NORD/LB Floor Research

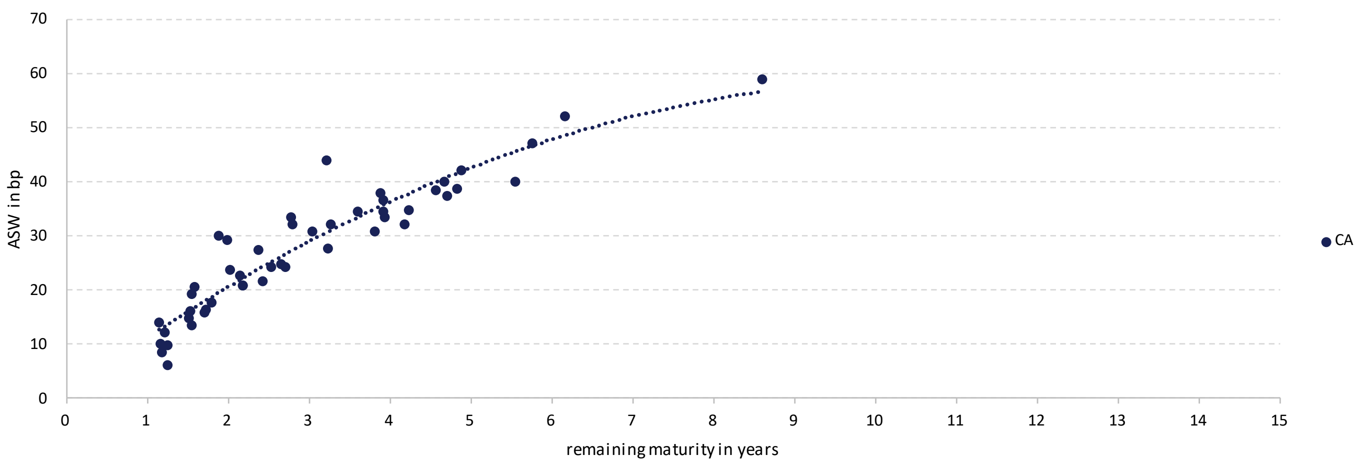
CEE



APAC



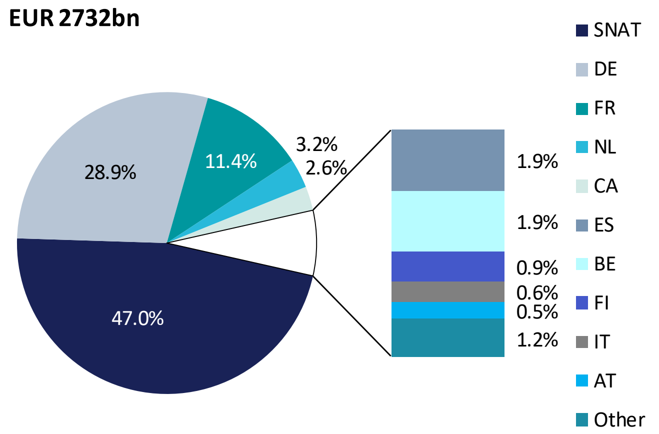
North America



Source: Market data, Bloomberg, NORD/LB Floor Research

Charts & Figures
SSA/Public Issuers

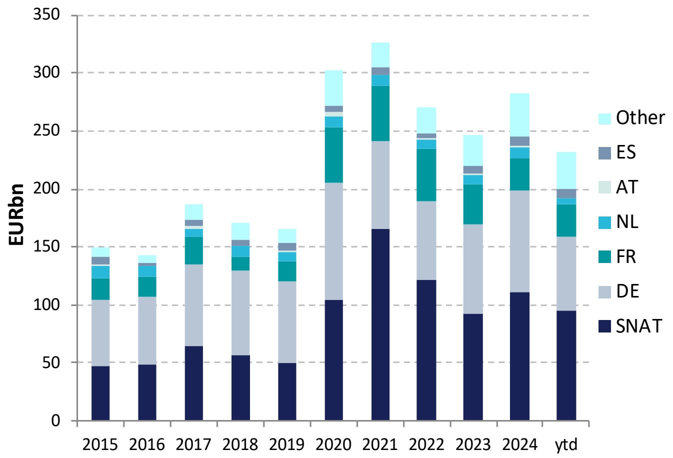
Outstanding volume (bmk)



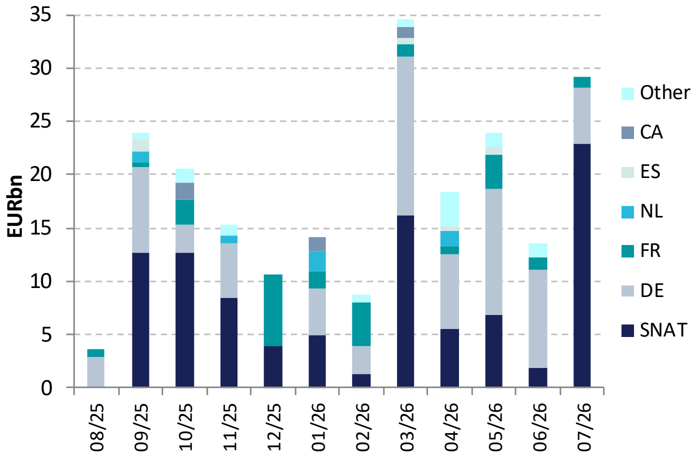
Top 10 countries (bmk)

Country	Vol. (EURbn)	No. of bonds	ØVol. (EURbn)	Vol. weight. ØMod. Dur.
SNAT	1,283.9	261	4.9	7.6
DE	790.3	598	1.3	5.9
FR	310.2	207	1.5	5.4
NL	86.1	68	1.3	6.1
CA	70.2	64	1.1	6.0
ES	52.1	75	0.7	4.9
BE	51.3	49	1.0	9.9
FI	25.0	26	1.0	4.2
IT	16.6	21	0.8	4.2
AT	14.5	20	0.7	4.7

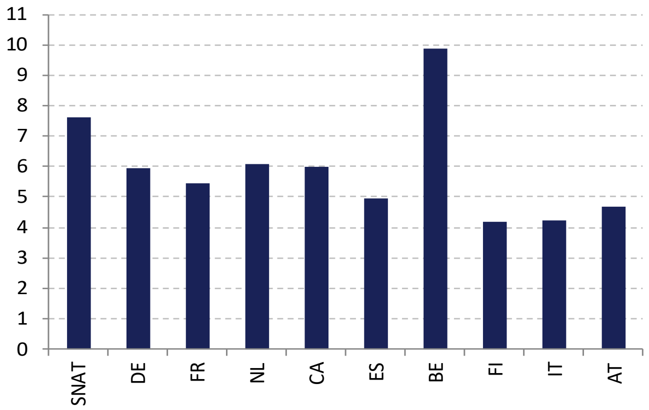
Issue volume by year (bmk)



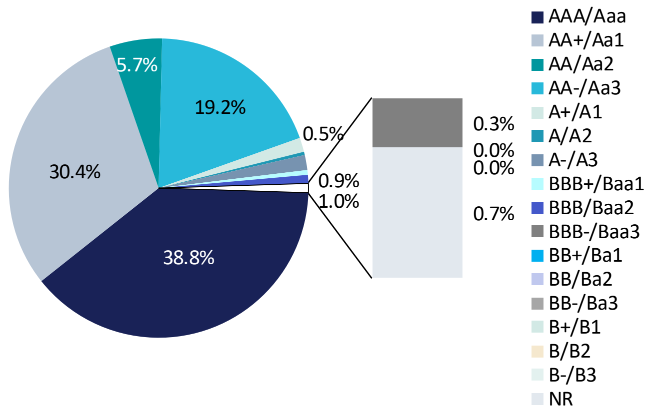
Maturities next 12 months (bmk)



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

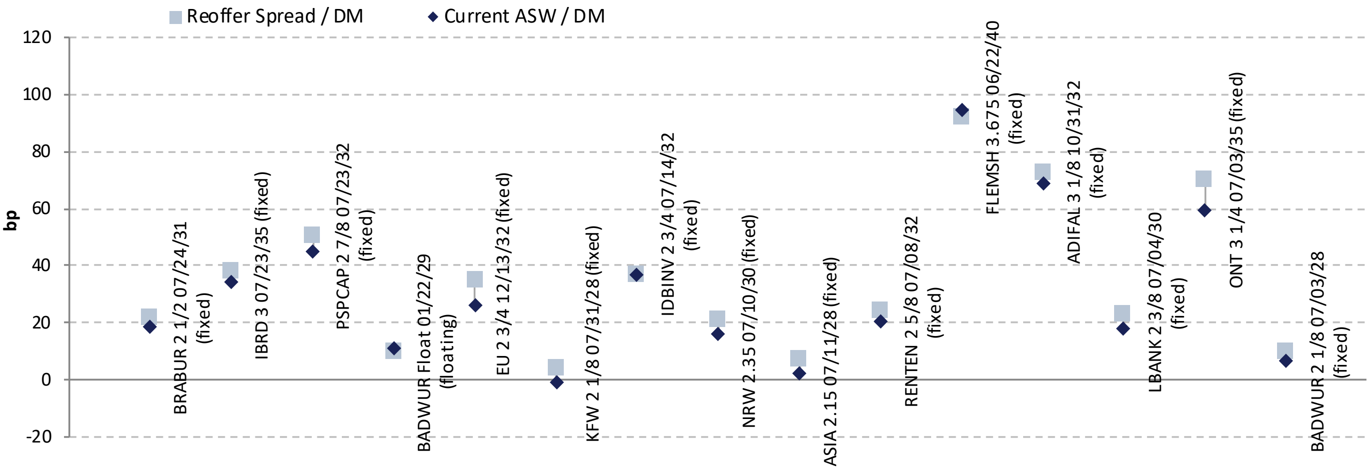


Rating distribution (vol. weighted)

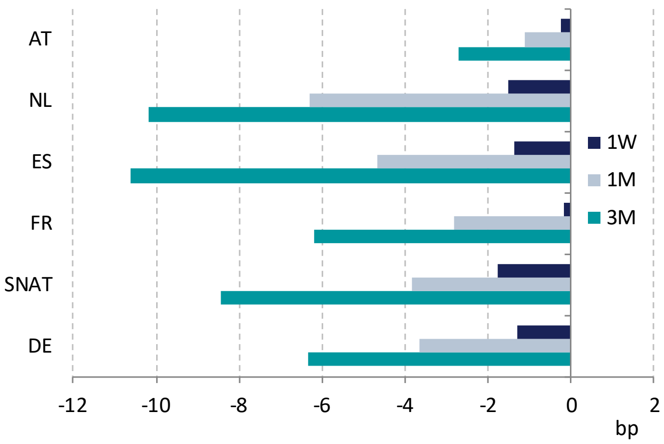


Source: Bloomberg, NORD/LB Floor Research

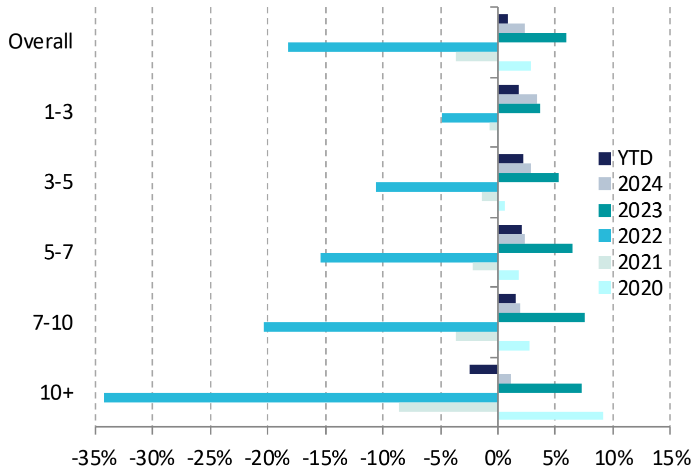
Spread development (last 15 issues)



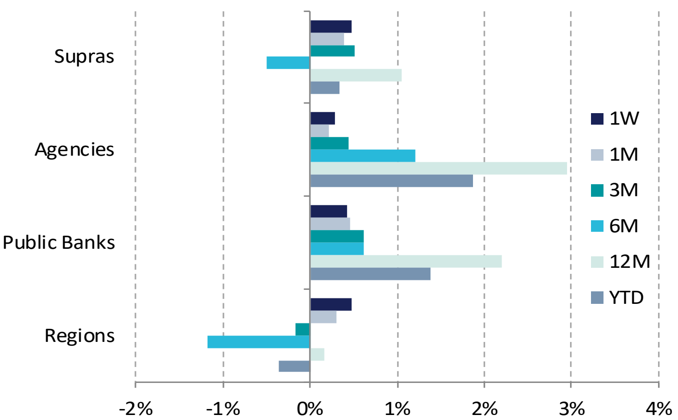
Spread development by country



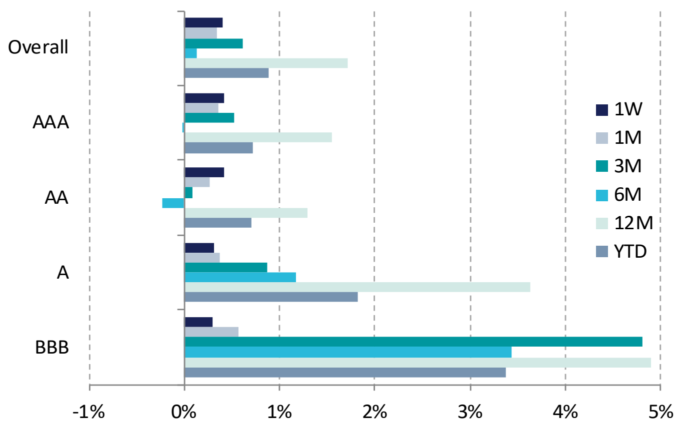
Performance (total return)



Performance (total return) by segments



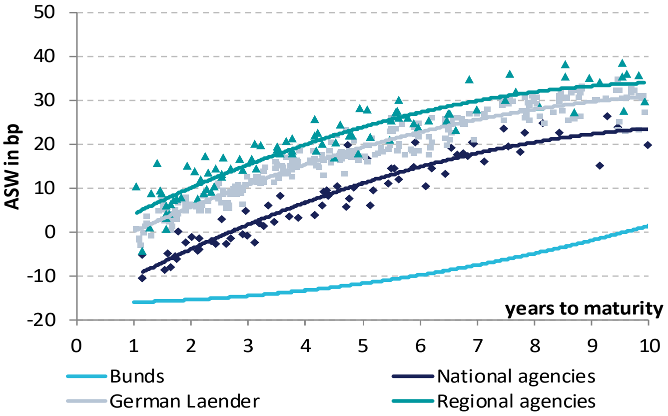
Performance (total return) by rating



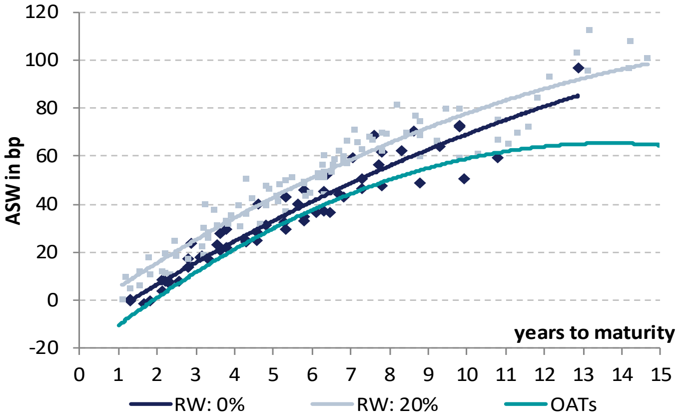
Source: Bloomberg, NORD/LB Floor Research

NORD/LB

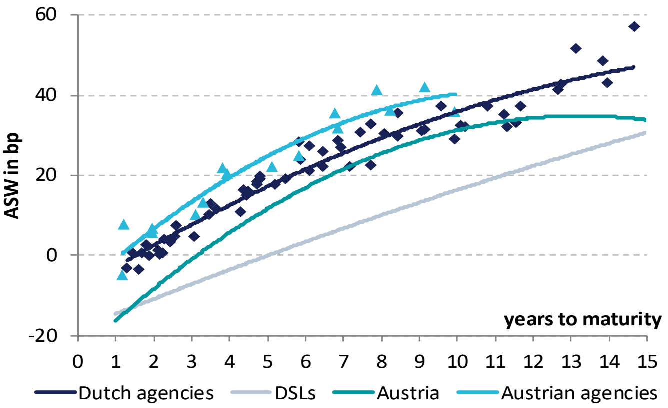
Germany (by segments)



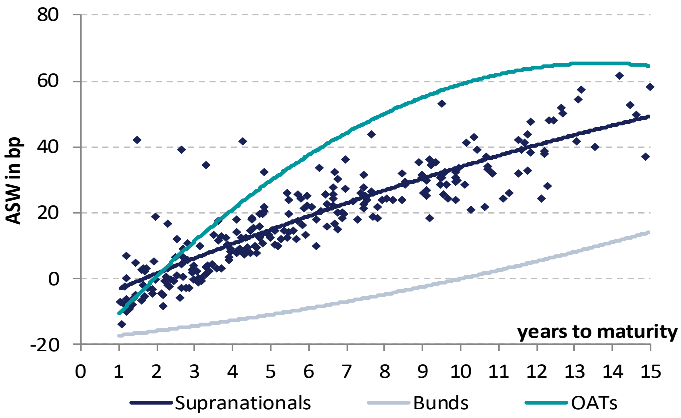
France (by risk weight)



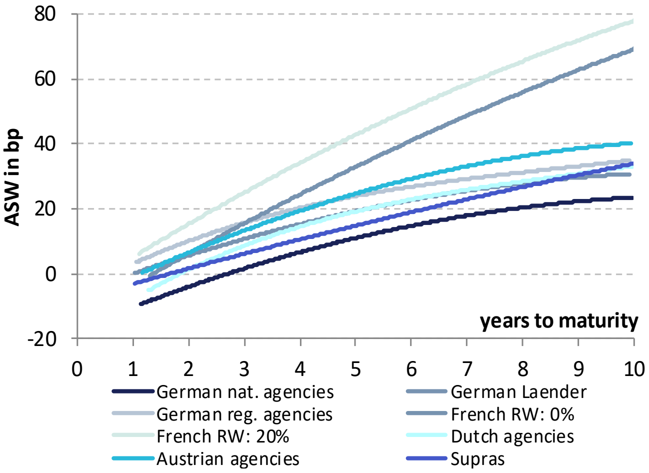
Netherlands & Austria



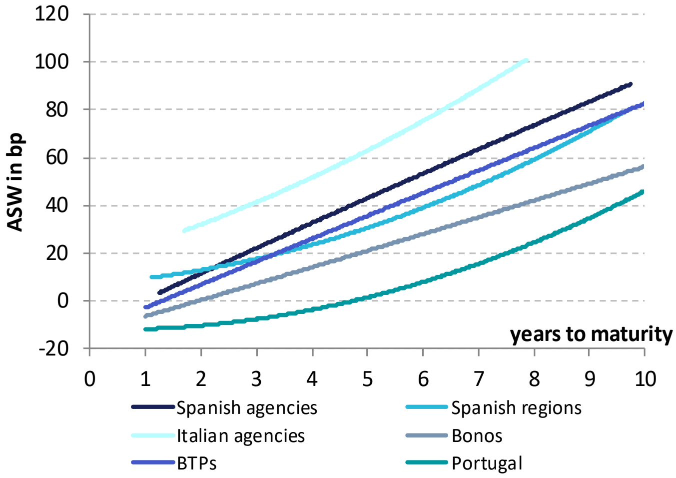
Supranationals



Core



Periphery

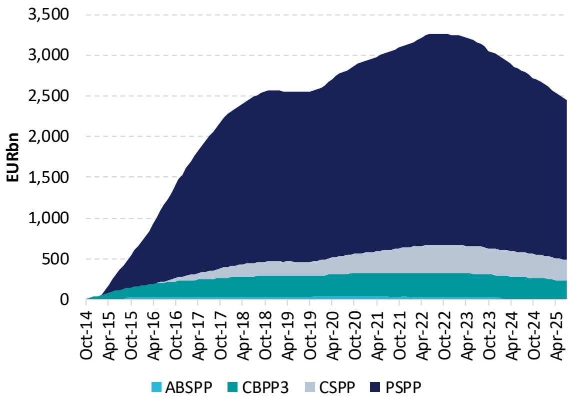


Source: Bloomberg, NORD/LB Floor Research

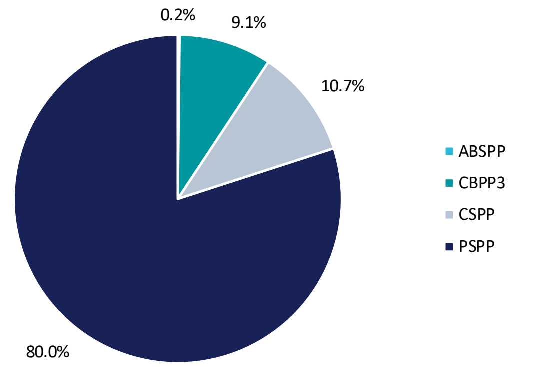
Charts & Figures
ECB tracker

Asset Purchase Programme (APP)

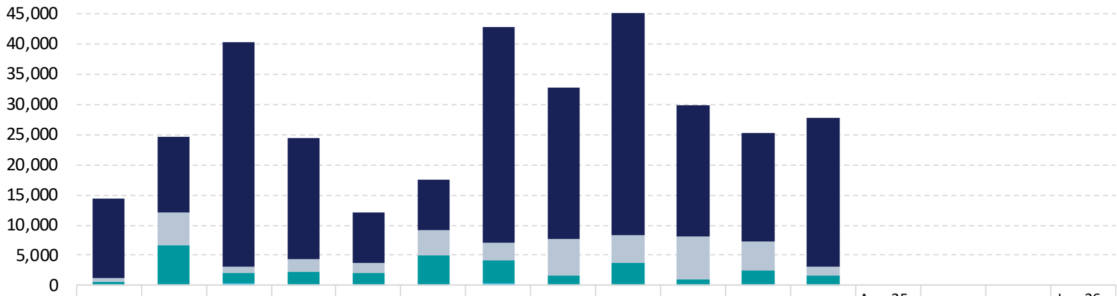
APP: Portfolio development



APP: Portfolio structure

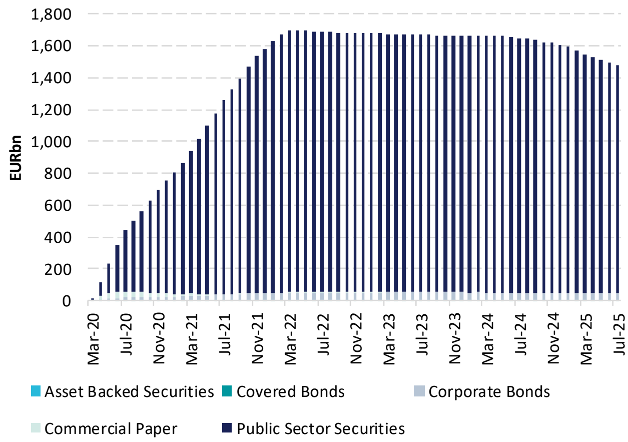


Expected monthly redemptions (in EURm)

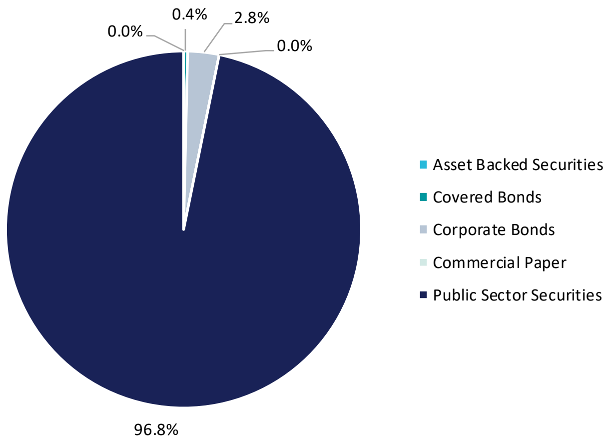


	Aug-25	Sep-25	Oct-25	Nov-25	Dec-25	Jan-26	Feb-26	Mar-26	Apr-26	May-26	Jun-26	Jul-26	Aug-25 - Jul-26	2024	2025	Jan-26 - Jul-26
APP	14,310	24,596	40,249	24,445	12,017	17,538	42,791	32,768	50,965	29,919	25,356	27,692	342,646	334,302	334,255	27,692
PSPP	13,114	12,568	37,073	20,060	8,274	8,318	35,650	25,077	42,520	21,748	17,964	24,590	266,956	264,480	253,586	24,590
CSPP	562	5,259	1,005	2,008	1,693	4,212	2,926	5,946	4,673	7,111	4,937	1,467	41,799	31,380	34,499	1,467
CBPP3	468	6,492	1,864	2,106	1,903	4,740	3,911	1,575	3,685	1,003	2,317	1,554	31,618	32,173	42,332	1,554
ABSPP	166	277	307	271	147	268	304	170	87	57	138	81	2,273	6,269	3,838	81

PEPP: Portfolio development



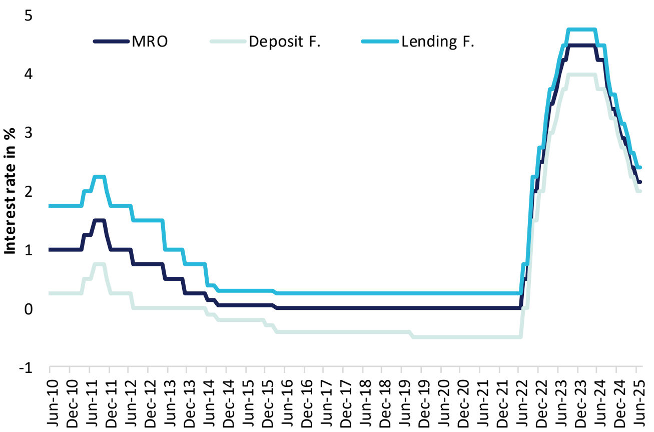
PEPP: Portfolio structure



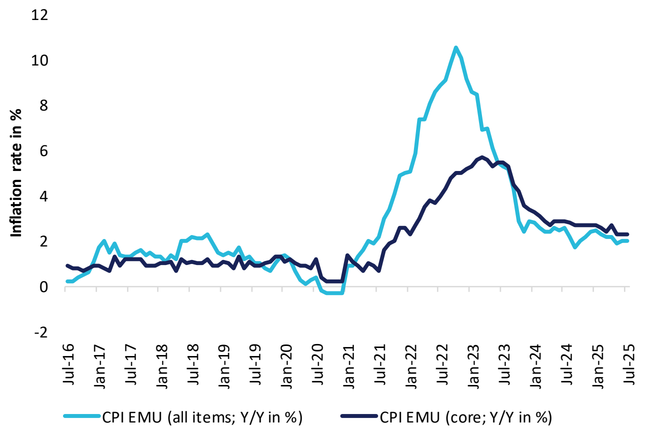
Source: ECB, NORD/LB Floor Research

Charts & Figures
Cross Asset

ECB key interest rates

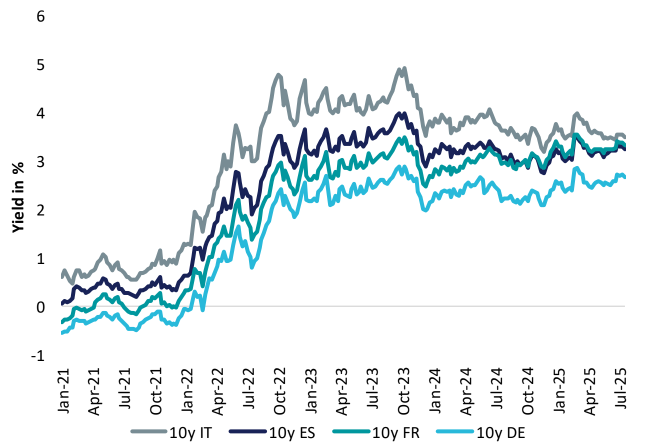


Inflation development in the euro area

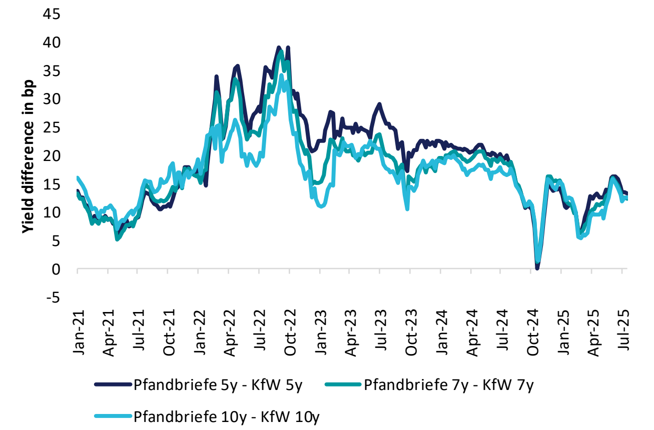


Bund-swap-spread

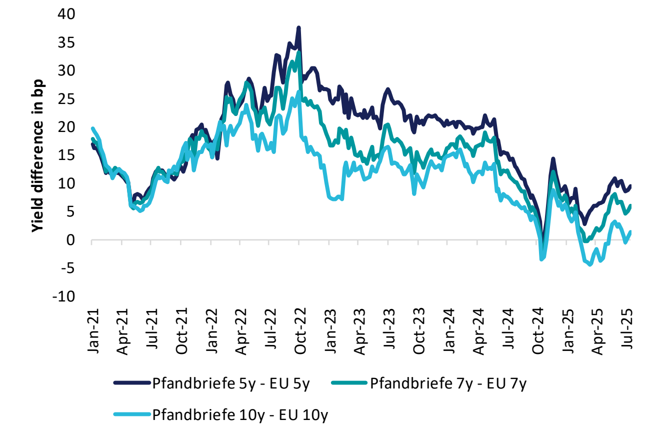
Selected yield developments (sovereigns)



Pfandbriefe vs. KfW



Pfandbriefe vs. EU



Source: ECB, Bloomberg, NORD/LB Floor Research

Appendix
Overview of latest Covered Bond & SSA View editions

Publication	Topics
25/2025 ♦ 09 July	▪ The covered bond universe of Moody's: an overview ▪ Spotlight on the EU as a mega issuer
24/2025 ♦ 02 July	▪ Covereds: Half-year review and outlook for second half of 2025 ▪ SSA half-year review 2025 and outlook
23/2025 ♦ 25 June	▪ The ratings approach of Scope ▪ Classification of Supranationals and Agencies under Solvency II
22/2025 ♦ 18 June	▪ The UK covered bond market ▪ Stability Council convenes for 31st meeting
21/2025 ♦ 11 June	▪ Moody's: rating approach Covered Bonds ▪ Teaser: Issuer Guide – Austrian Agencies 2025
20/2025 ♦ 28 May	▪ Cross Asset // Teaser: ESG update 2025 – Focus on greenium and socium+
19/2025 ♦ 21 May	▪ Development of the German property market (vdp index) ▪ Teaser: Issuer Guide – Nordic Agencies 2025
18/2025 ♦ 14 May	▪ Transparency requirements §28 PfandBG Q1/2025 ▪ Current LCR classification for our SSA coverage
17/2025 ♦ 07 May	▪ Fitch: rating approach covered bonds ▪ Credit authorisations of the German Laender for 2025
16/2025 ♦ 30 April	▪ Special report on LCR classification and risk weights: a (regulatory) look at the EUR benchmark segment ▪ Teaser: Issuer Guide – Dutch Agencies 2025
15/2025 ♦ 16 April	▪ Cross Asset: Relative value – What is the state of play?
14/2025 ♦ 09 April	▪ The covered bond universe of Moody's: an overview ▪ SSA review: EUR-ESG benchmarks in Q1/2025
13/2025 ♦ 02 April	▪ Review of the first quarter in the covered bond segment ▪ A review of Q1/2025 in the SSA segment
12/2025 ♦ 26 March	▪ A look at the Danish covered bond market ▪ Teaser: Issuer Guide – Non-European Supras (MDBs) 2025
11/2025 ♦ 19 March	▪ Eligibility of covered bonds for repo transactions ▪ Current risk weight of supranationals & agencies
10/2025 ♦ 12 March	▪ Covereds vs. sovereign bonds: A question of attractiveness ▪ NGEU: Green Bond Dashboard
09/2025 ♦ 05 March	▪ Transparency requirements §28 PfandBG ▪ Teaser: Issuer Guide – Non-European Agencies 2025
08/2025 ♦ 26 February	▪ Overseas Covered Bonds – A Brave New Spread World? ▪ Update: Joint Laender – Laender jumbos
07/2025 ♦ 19 February	▪ An overview of the EUR sub-benchmark segment ▪ Export Development Canada – spotlight on EDC

NORD/LB:
Floor Research

NORD/LB:
Covered Bond Research

NORD/LB:
SSA/Public Issuers Research

Bloomberg:
Weekly: DS NDB <GO>

Appendix
Publication overview

Covered Bonds:

[Issuer Guide – Covered Bonds 2024]

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

[Transparency requirements §28 PfandBG Q1/2025] (quarterly update)

[Transparency requirements §28 PfandBG Q1/2025 Sparkassen] (quarterly update)

[Covered bonds as eligible collateral for central banks]

SSA/Public Issuers:

[Issuer Guide – German Laender 2024]

[Issuer Guide – Canadian Provinces & Territories 2024]

[Issuer Guide – Down Under 2024]

[Issuer Guide – European Supranationals 2024]

[Issuer Guide – Non-European Supranationals (MDBs) 2025]

[Issuer Guide – German Agencies 2024]

[Issuer Guide – French Agencies 2024]

[Issuer Guide – Nordic Agencies 2025]

[Issuer Guide – Dutch Agencies 2025]

[Issuer Guide – Austrian Agencies 2025]

[Beyond Bundeslaender: Belgium]

[Beyond Bundeslaender: Greater Paris (IDF/VDP)]

[Beyond Bundeslaender: Spanish regions]

Fixed Income Specials:

[ESG-Update 2025]

[Summer break: Just a deep breath or ECB running out of steam?]

NORD/LB:
Floor Research

NORD/LB:
Covered Bond Research

NORD/LB:
SSA/Public Issuers Research

Bloomberg:
Weekly: DS NDB <GO>

Appendix
Contacts at NORD/LB

Floor Research

Dr Norman Rudschuck, CIIA
Head of Desk

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

Lukas Kühne
Covered Bonds/Banks

+49 176 152 90932
lukas.kuehne@nordlb.de

Lukas-Finn Frese
SSA/Public Issuers

+49 176 152 89759
lukas-finn.frese@nordlb.de

Alexander Grenner
Covered Bonds/Banks

+49 157 851 65070
alexander.grenner@nordlb.de

Tobias Cordes, CIIA
SSA/Public Issuers

+49 162 760 6673
tobias.cordes@nordlb.de

Sales

Institutional Sales	+49 511 9818-9440
Sales Sparkassen & Regionalbanken	+49 511 9818-9400
Institutional 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 9818-9660
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

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

Relationship Management

Institutionelle Kunden	rm-vs@nordlb.de
Öffentliche Kunden	rm-oek@nordlb.de

Disclaimer

The present report (hereinafter referred to as "information") was drawn up by NORDDEUTSCHE LANDESBANK GIROZENTRALE (NORD/LB). The supervisory authorities responsible for NORD/LB are the European Central Bank (ECB), Sonnemannstraße 20, D-60314 Frankfurt am Main, and the Federal Financial Supervisory Authority in Germany (Bundesanstalt für Finanzdienstleitungsaufsicht; BaFin), Graurheindorfer Str. 108, D-53117 Bonn and Marie-Curie-Str. 24-28, D-60439 Frankfurt am Main. The present report and the products and services described herein have not been reviewed or approved by the relevant supervisory authority.

The present information is addressed exclusively to Recipients in Austria, Belgium, Canada, Cyprus, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Indonesia, Ireland, Italy, Japan, Korea, Luxembourg, the Netherlands, New Zealand, Poland, Portugal, Singapore, Portugal, Spain, Sweden, Switzerland, the Republic of China (Taiwan), Thailand, the United Kingdom and Vietnam (hereinafter referred to as "Relevant Persons" or "Recipients"). The contents of the information are disclosed to the Recipients on a strictly confidential basis and, by accepting such information, the Recipients shall agree that they will not forward it to third parties, copy and/or reproduce this information without the prior written consent of NORD/LB. The present information is addressed solely to the Relevant Persons and any parties other than the Relevant Persons shall not rely on the information contained herein. In particular, neither this information nor any copy thereof shall be forwarded or transmitted to the United States of America or its territories or possessions, or distributed to any employees or affiliates of Recipients resident in these jurisdictions.

The present information does not constitute financial analysis within the meaning of Art. 36 (1) of the Delegate Regulation (EU) 2017/565, but rather represents a marketing communication for your general information **within the meaning of Art. 36 (2) of this Regulation. Against this background, NORD/LB expressly points out that this information has not been prepared in accordance with legal provisions promoting the independence of investment research and is not subject to any prohibition of trading following the dissemination of investment research.** Likewise, this information does not constitute an investment recommendation or investment strategy recommendation within the meaning of the Market Abuse Regulation (EU) No. 596/2014**.**

This report and the information contained herein have been compiled and are provided exclusively for information purposes. The present information is not intended as an investment incentive. It is provided for the Recipient's personal information, subject to the express understanding, which shall be acknowledged by the Recipient, that it does not constitute any direct or indirect offer, recommendation, solicitation to purchase, hold or sell or to subscribe for or acquire any securities or other financial instruments nor any measure by which financial instruments might be offered or sold.

All actual details, information and statements contained herein were derived from sources considered reliable by NORD/LB. For the preparation of this information, NORD/LB uses issuer-specific financial data providers, own estimates, company information and public media. However, since these sources are not verified independently, NORD/LB cannot give any assurance as to or assume responsibility for the accuracy and completeness of the information contained herein. The opinions and prognoses given herein on the basis of these sources constitute a non-binding evaluation of the employees of the Floor Research division of NORD/LB. Any changes in the underlying premises may have a material impact on the developments described herein. Neither NORD/LB nor its governing bodies or employees can give any assurances as to or assume any responsibility or liability for the accuracy, appropriateness and completeness of this information or for any loss of return, any indirect, consequential or other damage which may be suffered by persons relying on the information or any statements or opinions set forth in the present Report (irrespective of whether such losses are incurred due to any negligence on the part of these persons or otherwise).

Past performance is not a reliable indicator of future performance. Exchange rates, price fluctuations of the financial instruments and similar factors may have a negative impact on the value and price of and return on the financial instruments referred to herein or any instruments linked thereto. Fees and commissions apply in relation to securities (purchase, sell, custody), which reduce the return on investment. An evaluation made on the basis of the historical performance of any security does not necessarily provide an indication of its future performance.
The present information neither constitutes any investment, legal, accounting or tax advice nor any assurance that an investment or strategy is suitable or appropriate in the light of the Recipient's individual circumstances, and nothing in this information constitutes a personal recommendation to the Recipient thereof. The securities or other financial instruments referred to herein may not be suitable for the Recipient's personal investment strategies and objectives, financial situation or individual needs.

Moreover, the present report in whole or in part is not a sales or other prospectus. Accordingly, the information contained herein merely constitutes an overview and does not form the basis for any potential decision to buy or sell on the part of an investor. A full description of the details relating to the financial instruments or transactions which may relate to the subject matter of this report is given in the relevant (financing) documentation. To the extent that the financial instruments described herein are NORD/LB's own issues and subject to the requirement to publish a prospectus, the conditions of issue applicable to any individual financial instrument and the relevant prospectus published with respect thereto as well NORD/LB's relevant registration form, all of which are available for download at www.nordlb.de and may be obtained free of charge from NORD/LB, Georgsplatz 1, 30159 Hanover, shall be solely binding. Furthermore, any potential investment decision should be made exclusively on the basis of such (financing) documentation. The present information cannot replace personal advice. Before making an investment decision, each Recipient should consult an independent investment adviser for individual investment advice with respect to the appropriateness of an investment in financial instruments or investment strategies subject to this information as well as for other and more recent information on certain investment opportunities.

Each of the financial instruments referred to herein may involve substantial risks, including capital, interest, index, currency and credit risks in addition to political, fair value, commodity and market risks. The financial instruments could experience a sudden and substantial deterioration in value, including a total loss of the capital invested. Each transaction should only be entered into on the basis of the relevant investor's assessment of his or her individual financial situation as well as of the suitability and risks of the investment.

NORD/LB and its affiliated companies may participate in transactions involving the financial instruments described in the present information or their underlying basis values for their own account or for the account of third parties, may issue other financial instruments with the same or similar features as those of the financial instruments presented in this information and may conduct hedging transactions to hedge positions. These measures may affect the price of the financial instruments described in the present information.

If the financial instruments presented in this information are derivatives, they may, depending on their structure, have an initial negative market value from the customer's perspective at the time the transaction is concluded. NORD/LB further reserves the right to transfer its economic risk from a derivative concluded with it to a third party on the market by means of a mirror-image counter transaction.

More detailed information on any commission payments which may be included in the selling price can be found in the "Customer Information on Securities Business" brochure, which is available to download at www.nordlb.de.

The information contained in the present report replaces all previous versions of corresponding information and refers exclusively to the time of preparation of the information. Future versions of this information will replace this version. NORD/LB is under no obligation to update and/or regularly review the data contained in such information. No guarantee can therefore be given that the information is up-to-date and continues to be correct.
By making use of this information, the Recipient shall accept the terms and conditions outlined above.

NORD/LB is a member of the protection scheme of Deutsche Sparkassen-Finanzgruppe. Further information for the Recipient is indicated in clause 28 of the General Terms and Conditions of NORD/LB or at www.dsgv.de/sicherungssystem.

Additional information for Recipients in Australia:
NORD/LB IS NOT A BANK OR DEPOSIT TAKING INSTITUTION AUTHORISED UNDER THE 1959 BANKING ACT OF AUSTRALIA. IT IS NOT SUPERVISED BY THE AUSTRALIAN PRUDENTIAL REGULATION AUTHORITY. NORD/LB does not provide personal advice with this information and does not take into account the objectives, financial situation or needs of the Recipient (other than for the purpose of combating money laundering).

Additional information for Recipients in Austria:
None of the information contained herein constitutes a solicitation or offer by NORD/LB or its affiliates to buy or sell any securities, futures, options or other financial instruments or to participate in any other strategy. Only the published prospectus pursuant to the Austrian Capital Market Act should be the basis for any investment decision of the Recipient. For regulatory reasons, products mentioned herein may not be on offer in Austria and therefore not available to investors in Austria. Therefore, NORD/LB may not be able to sell or issue these products, nor shall it accept any request to sell or issue these products to investors located in Austria or to intermediaries acting on behalf of any such investors.

Additional information for Recipients in Belgium:
Evaluations of individual financial instruments on the basis of past performance are not necessarily indicative of future results. It should be noted that the reported figures relate to past years.

Additional information for Recipients in Canada:
This report has been prepared solely for information purposes in connection with the products it describes and should not, under any circumstances, be construed as a public offer or any other offer (direct or indirect) to buy or sell securities in any province or territory of Canada. No financial market authority or similar regulatory body in Canada has made any assessment of these securities or reviewed this information and any statement to the contrary constitutes an offence. Potential selling restrictions may be included in the prospectus or other documentation relating to the relevant product.

Additional information for Recipients in Cyprus:
This information constitutes an analysis within the meaning of the section on definitions of the Cyprus Directive D1444-2007-01 (No. 426/07). Furthermore, this information is provided for information and promotional purposes only and does not constitute an individual invitation or offer to sell, buy or subscribe to any investment product.

Additional information for Recipients in the Czech Republic:
There is no guarantee that the invested amount will be recouped. Past returns are no guarantee of future results. The value of the investments may rise or fall. The information contained herein is provided on a non-binding basis only and the author does not guarantee the accuracy of the content.

Additional information for Recipients in Denmark:
This Information does not constitute a prospectus under Danish securities law and consequently is not required to be, nor has been filed with or approved by the Danish Financial Supervisory Authority, as this Information either (i) has not been prepared in the context of a public offering of securities in Denmark or the admission of securities to trading on a regulated market within the meaning of the Danish Securities Trading Act or any executive orders issued pursuant thereto, or (ii) has been prepared in the context of a public offering of securities in Denmark or the admission of securities to trading on a regulated market in reliance on one or more of the exemptions from the requirement to prepare and publish a prospectus in the Danish Securities Trading Act or any executive orders issued pursuant thereto.

Additional information for Recipients in Estonia:
It is advisable to closely examine all the terms and conditions of the services provided by NORD/LB. If necessary, Recipients of this information should consult an expert.

Additional information for Recipients in Finland:
The financial products described herein may not be offered or sold, directly or indirectly, to any resident of the Republic of Finland or in the Republic of Finland, except pursuant to applicable Finnish laws and regulations. Specifically, in the case of shares, such shares may not be offered or sold, directly or indirectly, to the public in the Republic of Finland as defined in the Finnish Securities Market Act (746/2012, as amended). The value of investments may go up or down. There is no guarantee of recouping the amount invested. Past performance is no guarantee of future results.

Additional information for Recipients in France:
NORD/LB is partially regulated by the "Autorité des Marchés Financiers" for the conduct of French business. Details concerning the extent of our regulation by the respective authorities are available from us on request. The present information does not constitute an analysis within the meaning of Article 24 (1) Directive 2006/73/EC, Article L.544-1 and R.621-30-1 of the French Monetary and Financial Code, but does represent a marketing communication and does qualify as a recommendation pursuant to Directive 2003/6/EC and Directive 2003/125/EC.

Additional information for Recipients in Greece:
The information contained herein gives the view of the author at the time of publication and may not be used by its Recipient without first having confirmed that it remains accurate and up to date at the time of its use. Past performance, simulations or forecasts are therefore not a reliable indicator of future results. Investment funds have no guaranteed performance and past returns do not guarantee future performance.

Additional information for Recipients in Indonesia:
This report contains generic information and has not been tailored to the circumstances of any individual or specific Recipient. This information is part of NORD/LB's marketing material.

Additional information for Recipients in the Republic of Ireland:
This information has not been prepared in accordance with Directive (EU) 2017/1129 (as amended) on prospectuses (the "Prospectus Directive") or any measures made under the Prospectus Directive or the laws of any Member State or EEA treaty adherent state that implement the Prospectus Directive or such measures and therefore may not contain all the information required for a document prepared in accordance with the Prospectus Directive or the laws.

Additional information for Recipients in Japan:
This information is provided to you for information purposes only and does not constitute an offer or solicitation of an offer to enter into securities transactions or commodity futures transactions. Although the actual data and information contained herein has been obtained from sources which we believe to be reliable and trustworthy, we are unable to vouch for the accuracy and completeness of this actual data and information.

Additional information for Recipients in South Korea:
This information has been provided to you free of charge for information purposes only. The information contained herein is factual and does not reflect any opinion or judgement of NORD/LB. The information contained herein should not be construed as an offer, marketing, solicitation to submit an offer or investment advice with respect to the financial investment products described herein.

Additional information for Recipients in Luxembourg:
Under no circumstances shall the present information constitute an offer to purchase or issue or the solicitation to submit an offer to buy or subscribe for financial instruments and financial services in Luxembourg.

Additional information for Recipients in New Zealand:
NORD/LB is not a bank registered in New Zealand. This information is for general information only. It does not take into account the Recipient's financial situation or objectives and is not a personalised financial advisory service under the 2008 Financial Advisers Act.

Additional information for Recipients in the Netherlands:
The value of your investment may fluctuate. Past performance is no guarantee for the future.

Additional information for Recipients in Poland:
This information does not constitute a recommendation within the meaning of the Regulation of the Polish Minister of Finance Regarding Information Constituting Recommendations Concerning Financial Instruments or Issuers thereof dated 19 October 2005.

Additional information for Recipients in Portugal:
This information is intended only for institutional clients and may not be (i) used by, (ii) copied by any means or (iii) distributed to any other kind of investor, in particular not to retail clients. The present information does not constitute or form part of an offer to buy or sell any of the securities covered by the report, nor should it be understood as a request to buy or sell securities where that practice may be deemed unlawful. The information contained herein is based on information obtained from sources which we believe to be reliable, but is not guaranteed as to accuracy or completeness. Unless otherwise stated, all views contained herein relate solely to our research and analysis and are subject to change without notice.

Additional information for Recipients in Sweden:
This information does not constitute (or form part of) a prospectus, offering memorandum, any other offer or solicitation to acquire, sell, subscribe for or otherwise trade in shares, subscription rights or other securities, nor shall it or any part of it form the basis of or be relied on in connection with any contract or commitment whatsoever. The present information has not been approved by any regulatory authority. Any offer of securities will only be made pursuant to an applicable prospectus exemption under the EC Prospectus Directive (Directive (EU) 2017/1129), and no offer of securities is being directed to any person or investor in any jurisdiction where such action is wholly or partially subject to legal restrictions or where such action would require additional prospectuses, other offer documentation, registrations or other actions.

Additional information for Recipients in Switzerland:
This information has not been approved by the Federal Banking Commission (merged into the Swiss Financial Market Supervisory Authority (FINMA) on 1 January 2009). NORD/LB will comply with the Directives of the Swiss Bankers Association on the Independence of Financial Research (as amended). The present information does not constitute an issuing prospectus pursuant to article 652a or article 1156 of the Swiss Code of Obligations. The information is published solely for the purpose of information on the products mentioned herein. The products do not qualify as units of a collective investment scheme pursuant to the Federal Act on Collective Investment Schemes (CISA) and are therefore not subject to supervision by FINMA.

Additional information for Recipients in the Republic of China (Taiwan):
This information is provided for general information only and does not take into account the individual interests or requirements, financial status and investment objectives of any specific investor. Nothing herein should be construed as a recommendation or advice for you to subscribe to a particular investment product. You should not rely solely on the information provided herein when making your investment decisions. When considering any investment, you should endeavour to make your own independent assessment and determination on whether the investment is suitable for your needs and seek your own professional financial and legal advice. NORD/LB has taken all reasonable care in producing this report and trusts that the information is reliable and suitable for your situation at the date of publication or delivery. However, no guarantee of accuracy or completeness is given. To the extent that NORD/LB has exercised the due care of a good administrator, we accept no responsibility for any errors, omissions, or misstatements in the information given. NORD/LB does not guarantee any investment results and does not guarantee that the strategies employed will improve investment performance or achieve your investment objectives.

Information for Recipients in the United Kingdom:
NORD/LB is subject to partial regulation by the Financial Conduct Authority (FCA) and the Prudential Regulation Authority (PRA). Details of the scope of regulation by the FCA and the PRA are available from NORD/LB on request. The present information is "financial promotion". Recipients in the United Kingdom should contact the London office of NORD/LB, Investment Banking Department, telephone: 0044 / 2079725400, in the event of any queries. An investment in financial instruments referred to herein may expose the investor to a significant risk of losing all the capital invested.

Time of going to press: 06 August 2025 (08:50)