



Covered Bond & SSA View

NORD/LB Floor Research

17 April 2024 ♦ 14/2024

Marketing communication (see disclaimer on the last pages)

Agenda

Market overview	
Covered Bonds	3
SSA/Public Issuers	7
Moody's covered bond universe: An overview	11
SSA review: EUR-ESG benchmarks in Q1/2024	16
Charts & Figures	
Covered Bonds	22
SSA/Public Issuers	28
ECB tracker	
Asset Purchase Programme (APP)	31
Pandemic Emergency Purchase Programme (PEPP)	32
Overview of latest Covered Bond & SSA View editions	33
Publication overview	34
Contacts at NORD/LB	35

Floor analysts:

Covered Bonds/Banks

Dr Frederik Kunze
frederik.kunze@nordlb.de

Lukas Kühne
lukas.kuehne@nordlb.de

SSA/Public Issuers

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

Christian Ilchmann
christian.ilchmann@nordlb.de

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

Market overview

Covered Bonds

Authors: Dr Frederik Kunze // Lukas Kühne

Primary market: the end of the gold rush mood?

The market environment has gradually started to adapt slightly to the new framework conditions. First of all, we should note that the central bank meeting last week (cf. [Fixed Income Special](#) and [SSA Market Overview](#)) certainly dampened primary market activities to a significant extent. We see the ECB's monetary policy as having an impact particularly through the channel of forming expectations with regard to the absolute yield levels, which goes some way to explaining the robust demand we are seeing. Despite the plethora of concerns that they provoke, uncertainty factors such as the latest geopolitical developments should not be overestimated in terms of the impact on the covered bond primary market. Last Wednesday, Hypo NOE (AT) opened books for a public sector covered bond (EUR 500m; WNG; 8.0y) at a guidance of ms +55bp area. With a re-offer spread of ms +47bp, the order book ultimately amounted to EUR 2.6bn. The calculated fair value (ms +48bp) once again indicates pricing within the curve. After issuers paused for breath around the ECB meeting, the French issuer CFF (cf. [Issuer View](#)) injected some life back into the primary market on Monday with a dual tranche (EUR 1.25bn; 3.0y & EUR 750m; 8.0y). The bonds were priced at ms +16bp (3.0y) and ms +36bp (8.0y). For both deals, this corresponds to narrowing of eight basis points compared with the initial pricing thoughts and pricing on (8.0y; new issue premium: 0bp) or just within the curve (3.0y; new issue premium: -1bp). Yesterday (Tuesday 16.04.), was certainly one of the more dynamic trading days on the primary market. Ultimately, four fresh benchmarks were successfully placed with investors. From Germany, LBBW issued the second dual tranche (EUR 500m; WNG; 3.0y & EUR 750m; 7.4y) on the market this week, with the mortgage Pfandbriefe priced at ms +13bp (3.0y) and ms +30bp (7.4y). In our opinion, the most recent deal from Italy shows that even "more complicated" issuers can enjoy open market access. Although the CPT structure chosen by Banca Monte dei Paschi di Siena (ticker: MONTE) may technically have put off the odd investor, the pricing at ms +68bp (final order book: EUR 2.3bn) indicates a very low new issue premium for the fresh benchmark (EUR 500m; WNG; 5.0y). MONTE last approached investors with a benchmark deal back in 2019. On this occasion, following such an extended absence, it did not have to pay a premium on the basis of the secondary market curve, but did offer a significant pick-up in comparison with its peers. We anticipate substantial demand on the issuer's domestic market, which also happens to be more of a rule than an exception for other jurisdictions too. Pricing the inaugural EUR benchmark offered by Equitable Bank from Canada (EUR 500m; WNG; 3.0y) was evidently something of a Herculean task. The social bond was initially guided at ms +70bp area, which was – with the benefit of hindsight – too "wide". However, when we consider the final order book (EUR 4.0bn), the final spread (ms +58bp) and the new issue premium (+8bp), we are forced to conclude that this was not necessarily to the detriment of investors. In this case, one could definitely still speak of a gold rush mood. With regard to the price concessions of other deals, we would tend to err on the side of caution in our choice of words. In the year to date, the issuance volume for EUR benchmarks now stands at EUR 82.4bn. From our point of view, this and other figures would suggest that new issue premiums might start to rise in the coming trading days.

Issuer	Country	Timing	ISIN	Maturity	Size	Spread	Rating	ESG
Equitable Bank	CA	16.04.	XS2808183649	3.1y	0.50bn	ms +58bp	AA / - / -	X
LBBW	DE	16.04.	DE000LB39DQ8	7.4y	0.75bn	ms +30bp	- / Aaa / -	-
LBBW	DE	16.04.	DE000LB39DP0	3.0y	0.50bn	ms +13bp	- / Aaa / -	-
Banca Monte dei Paschi	IT	16.04.	IT0005593212	5.0y	0.75bn	ms +68bp	AA- / Aa3 / -	-
CFF	FR	15.04.	FR001400PMS4	8.0y	0.75bn	ms +36bp	- / Aaa / AAA	-
CFF	FR	15.04.	FR001400PMU0	3.0y	1.25bn	ms +16bp	- / Aaa / AAA	-
HYPO NOE	AT	10.04.	AT0000A3C6F5	8.0y	0.50bn	ms +47bp	- / Aa1 / -	-

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

Secondary market: Keeping the powder dry?

First things first: In terms of trading activities in the secondary market, it seems that the covered bond segment here also remained rather indifferent to the dramatic developments in the Middle East. The general impression remains that investors are concentrating more on primary market events. It should therefore come as little surprise to learn that the supply is being well absorbed there. New deals also continue to be in demand, although sales are becoming thinner on the ground. We are sticking to our assessment that, broadly speaking, secondary market flows are likely to initially remain more reserved in the shadow of primary market activities. However, in the medium to long term, the tide should start to turn somewhat back towards the secondary market.

EUR sub-benchmark segment: Landesbank Berlin places EUR 250m (WNG)

The primary market for EUR sub-benchmarks also saw new deals, with the second deal in the trading month of April placed in this sub-segment by Landesbank Berlin (Ticker: LBBER; cf. [Issuer View](#)). LBBER opted for a term to maturity of ten years for its deal worth EUR 250m (WNG). This was the first time that an issuer in the EUR sub-benchmark segment has been active at the “long end” for nearly two years. The most recent deal of this kind was placed by DekaBank in the form of a dual tranche back in July 2022. The LBBER deal started out in the marketing phase at ms +42bp area, before finally settling at a price of ms +36bp. The issuance volume in the EUR sub-benchmark volume in the current year now stands at EUR 2.2bn (previous year: EUR 5.0bn). Additional activity is expected in this sub-segment across 2024, with the current issuance volume far from suggesting that the value from 2023 cannot be replicated. After all, the sub-benchmark segment tends to be more of a “late bloomer”.

In this edition: The covered bond universe of Moody's

In this present edition of our weekly publication, we are providing you with a [current overview](#) of the Moody's covered bond universe. The rating agency's coverage extends to 237 programmes spread across 30 jurisdictions. In their quarterly update, the risk experts come to the conclusion that the credit quality in the covered bond segment is likely to be stable and issuance activities should remain robust. In particular, Moody's emphasises the strength of the covered supply – despite the taxing CRE environment. Nevertheless, it should also be noted that the outlook for the global banking landscape has deteriorated somewhat, which is due in particular to the challenging economic environment. The tight monetary policy is therefore taking its toll. However, the negative effects are mitigated (at least temporarily) by increased profitability, according to the rating agency. Moody's also predicts a very high degree of rating stability for institutions that issue covered bonds.

Internal matters: the Pfandbrief Act as the “gold standard”?

Another event in our NORD/LB Capital Markets Spotlight series took place last Thursday. In the online session entitled “The gold standard under the microscope – a (double) look at the risk side of the Pfandbrief Act” we looked at the Pfandbrief Act together with risk experts Patrick Widmayer (Moody’s) and Casper Rahbek Andersen (S&P). In so doing, we also sought to respond to the numerous questions that we have recently received about the risk potential of Pfandbriefe. The high levels of interest and lively discussions across the two sessions in German and English were particularly gratifying for us. The discussion focused on the specific aspects for which the Pfandbrief Act (PfandBG) defines stricter requirements than the majority of covered bond laws in other jurisdictions. Among other aspects, the rating experts highlighted the more conservative approach to defining mortgage lending values in accordance with Section 16 PfandBG, in addition to the 60% limit on LTV ratios for residential and commercial assets, which is considered low by international standards. In addition, according to Section 5 (1a) PfandBG, only mortgages up to the maximum LTV ratio may be included in the cover pool register, while in other jurisdictions it is also possible to be included in the cover pool register over and above the respective legally prescribed limits. Aside from this main topic, we also received a few questions regarding the 180-day liquidity buffer in the Pfandbrief Act during the event. This is codified in Section 4 (1a) PfandBG and in Germany is to be treated “separately” from potential maturity deferrals in the event of an issuer default, which stands in marked contrast to the requirements in some other jurisdictions. Another focus of our event was on the different requirements for overcollateralisation (OC) ratios. Under the CRR, this must be at least 5%, but can be reduced to a maximum of 2% if the valuation of the cover assets is determined on the basis of the mortgage lending value. In our opinion, the CRR therefore takes into account the quality of the coverage or, as the case may be, overcollateralisation based on the mortgage lending value method. In summary, with the aforementioned requirements, the PfandBG not only mitigates comparatively strong potential liquidity risks in times of crisis, but also ensures that the cover assets offer high credit quality. At the same time, the legal framework limits the issuance potential for Pfandbrief banks.

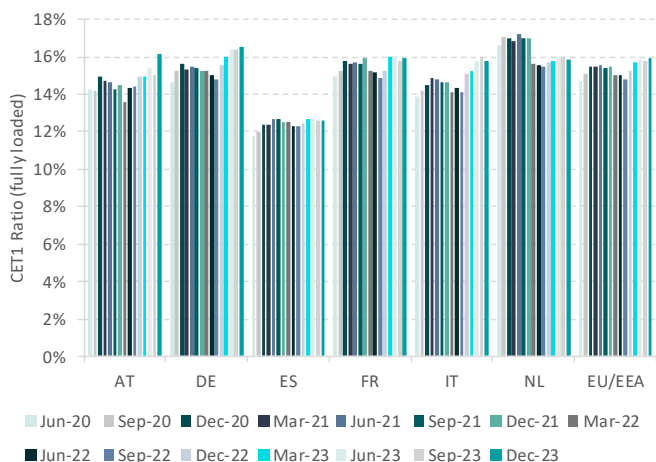
Scope Real Estate Insight April 2024: A look at the CRE risks in Germany

The risk experts at Scope recently looked at the commercial real estate (CRE) financing sub-market as well, highlighting the risks for German banks linked to the developments in the USA in the process. With regard to the German cover pools, some of which have a high proportion of CRE financing, it should be emphasised that, in the opinion of Scope, there are significant buffers in place. This applies with regard to the distinction between the cover values assessed on the basis of market values or LTV ratios in particular. Nevertheless, the risk experts state that banks are having to cope with increased credit defaults in the CRE segment. Conversely, banks are posting improved profitability, which is not least due to increased cost efficiency. With regard to the capitalisation of banks and the equity at their disposal to absorb losses, Scope again gives the all-clear. Based on our own expectations that developments on the CRE market in Germany and across Europe are unlikely to reflect those in the USA, we can conclude that a dramatic increase in default rates is not to be expected.

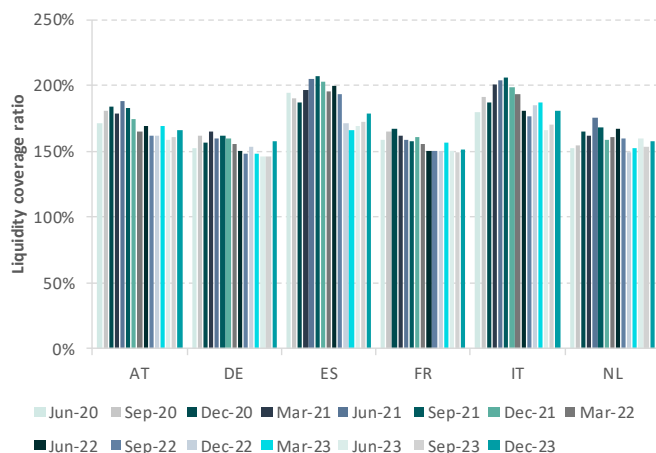
EBA Risk Dashboard: All that glitters is not gold

A few days ago, the European Banking Authority (EBA) presented the most recent figures from its Risk Dashboard. The reporting period for this data is Q4 2023. For us, the data offers (as always) a valuable health check for credit quality within the European banking sector. However, it must be assessed against the background of retrospective considerations and strong aggregation at jurisdiction level. In the corresponding [press release](#), the EBA points to the fundamental solidity of EU banks and justifies this assessment by highlighting record levels of capitalisation, among other aspects. Accordingly, the weighted average CET1 ratio (fully loaded) stands at 15.9%, which is 50 basis points higher than at year-end 2022. In contrast, a higher NPL ratio was also reported, although the levels are still incredibly low. In this case, too, the EBA is concentrating on the CRE segment, which is the focus of the capital markets. As a result, the NPL ratio for CRE-related loan claims comes in at 4.3% (EUR 57.6bn) and is therefore at the highest level since March 2022 (4.1% or EUR 60.0bn). At the overall level (EU/EEA), the EBA puts the CRE volume at EUR 1,352bn, which corresponds to a share of 6.9% of the total loan volume. The EBA data reveals that France (EUR 287bn), Germany (EUR 283bn) and the Netherlands (EUR 175bn) account for the largest CRE holdings.

Risk Dashboard: CET1-Ratio (fully loaded)



Risk Dashboard: LCR (in %)



Source: EBA, NORD/LB Floor Research

Market overview

SSA/Public Issuers

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

Between interest rate-Scylla and inflation-Charybdis: [Our analysis](#) of the ECB meeting

As expected, the decision-makers at the European Central Bank once again made no adjustments to the three key interest rates last Thursday. Accordingly, the rate for the main refinancing operations was left unchanged at 4.50%; the interest rate for the marginal lending facility (4.75%) and the deposit facility (4.00%) also remained untouched. In the press release issued after the meeting, the ECB pointed out that interest rates are at levels that are making a substantial contribution to the ongoing process of reducing inflation. The ECB was keeping its cards close to its chest in its statement with regards to any potential rate move in June. The ECB Governing Council must feel these days like a brave sailor from ancient times who wanted to pass through the Strait of Messina: On the one hand, Scylla with six heads and a triple row of fangs, symbolizing the ongoing danger that the “monster” inflation is woken up again by sharply rising service and real estate prices. On the other hand, Charybdis, whose pull could cause real wages to continue to rise in the future, even though, according to Lagarde, the tension in the labour market continues to decrease (in the form of fewer vacancies, but not in high unemployment). This should help reduce concerns about excessive wage pressure. The ECB has already navigated through the strait of the first three interest rate meetings of 2024. It now remains to be seen who has the upper hand in June. As a forecast, we stick to our opinion that there is a certain probability of an interest rate cut in June. However, the majority of activity will shift to the second half of the year and we expect small and slow steps. In concrete terms, this means that we expect steps of 25 basis points and that these will not take place at every upcoming meeting in the second half of the year. The first interest rate cut could well take place on 06 June. The chances of “only” three interest rate cuts in total by the end of the year have increased again in the last few days.

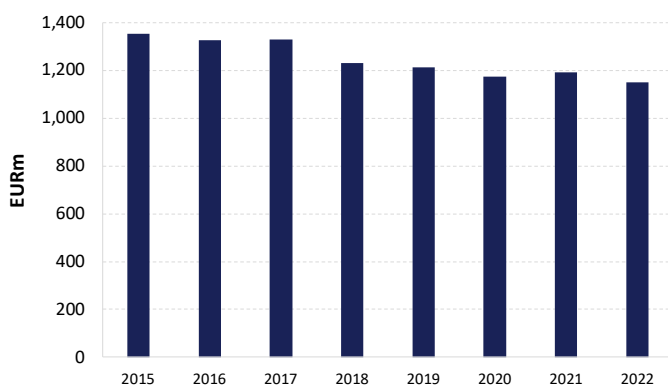
LfA publishes financial results for 2023

The Free State of Bavaria’s promotional bank – LfA Förderbank Bayern (ticker: BAYLAN) – presented its financial results for last year on 11 April. The bank can look back on a generally solid year. Loans amounting to a total of EUR 1.6bn were approved in its core business involving programme loans for SMEs and municipalities. SMEs and the self-employed living in Bavaria were therefore able to realise investments of around EUR 2.2bn. In all, lending in 2023 reached a figure of EUR 2.3bn, which is roughly the same as in 2019. Taking into account risks taken over by LfA, this led to a total promotional volume of EUR 2.5bn. The strongest demand was for financing offers for start-ups and company succession (EUR 466m) as well as for modernisation and growth investment (EUR 1.1bn). There was a marked increase in lending under LfA’s Innovationskredit 4.0 scheme, which finances the entire range of investment and digitalisation plans: lending approved under this banner increased by more than 33% year on year to EUR 185m. Apart from companies, 80 Bavarian municipalities were also able to invest EUR 179m in local infrastructure thanks to promotional loans.

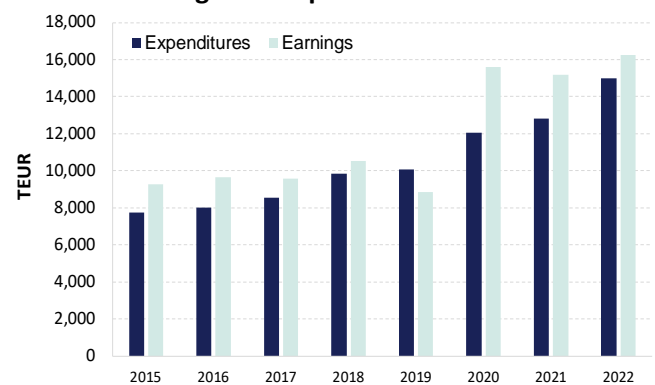
Bremer Aufbau-Bank: The two-city state's promotional bank

Bremer Aufbau-Bank GmbH (BAB) has been the promotional bank for Bremen and Bremerhaven since 2001. BAB supports the economic goals of the two-city state as a legally independent subsidiary of WFB Wirtschaftsförderung Bremen GmbH, especially in relation to the development of the federal state in terms of structural, economic and housing promotion. Key challenges in this respect are primarily demographic change, the environment and climate protection. Starthaus Bremen & Bremerhaven (which supports start-ups) has been a segment of BAB since 2018. Starthaus is the main point of contact for all budding entrepreneurs and start-ups in Bremen and Bremerhaven. It provides advice on all aspects of setting up a business from brainstorming to the first growth phase, involving coaching, qualifications, financing, and it also gives feedback regarding the start-up idea. At the same time, BAB works closely together with the departments of Bremen's state parliament ("Bürgerschaft"), namely economy, ports and transformation, in addition to environment, climate and science, construction, mobility and urban development. To this end, BAB provides funding for companies, public bodies, infrastructure and housing projects as well as for energy efficient and sustainable projects. One example is the "Growth and Additional Financing" programme. In the case of SMEs founded and based in Bremen, BAB supports the companies in all their phases, from start-up to consolidation. In addition, BAB supports investments in tangible/intangible goods and economic activities in the interest of Bremen. The loans and guarantees provided by BAB can be combined with KfW programmes, and BAB also works together with house banks on a non-competitive basis. Another current programme is aimed at commercial enterprises and Bremen-based facilities for research, development and innovation. This promotional activity includes project costs for the development of innovative products, processes and services which are also important for the region. Some of the guarantees and loans for these purposes are sourced from the European Regional Development Fund (ERDF). For other financing purposes, BAB works together with other banks and regional savings banks. The promotional bank has a guarantee from the city state of Bremen, in accordance with which it is legally bound to guarantee liabilities. BAB does not have a rating of its own, although we do analyse its guarantor Bremen (AAA/ - / -) as part of our [Issuer Guide – German Laender 2023](#). In 2022, BAB had total assets of EUR 990.6m (2021: EUR 1,040.8m). The reduction mainly reflects the end of the COVID-19 aid programmes. In future, BAB is already planning new promotional programmes in order to remain an "effective and reliable partner" in Bremen and Bremerhaven.

Trend in business volume



Trend in earnings and expenditures



Source: Issuer, NORD/LB Floor Research

CEB presents financial statement and Social Inclusion Bond report for 2023

The Council of Europe Development Bank (CEB, ticker: COE) presented its official financial statement for 2023 on 09 April. The results certified by the auditors and presented in accordance with International Financial Reporting Standards (IFRS) showed a net profit standing at EUR 109.2m. This equated to an increase of +37.1% Y/Y, mostly reflecting the high interest rate environment. Excluding IFRS provisions and the valuation of financial instruments, core earnings rose by +39.1% Y/Y to stand at EUR 116.2m at year end. As regards its financing activity, the CEB supported 48 projects with loans amounting to a total of EUR 4.1bn in 2023 (2022: EUR 4.2bn for 36 projects). Moreover, the bank authorised its first loan operation in Ukraine to the tune of EUR 100m. This took place just a few months after the country had joined the CEB on 15 June 2023. The capital will be used to restore healthcare infrastructure damaged by the war and access to essential health services. The credit portfolio amounted to a total of EUR 21.5bn at the end of 2023, which equates to an increase of +8.3% Y/Y. Total assets rose by +9.2% Y/Y to EUR 34.4bn. One especially pleasing factor is that for the first time in over a decade, the CEB has regained its triple-A status from the three big rating agencies Fitch, Moody's and S&P. On the funding side, CEB issued bonds amounting to EUR 7.0bn, a large part of which in the form of Social Inclusion Bonds (SIBs). On the subject of SIBs: The CEB published its [Social Inclusion Bond Report](#) for 2023 on 28 March of this year. As the report indicates, the CEB raised EUR 2.3bn last year from the issue of SIBs. This corresponds to around one third of the total funding target for 2023. In line with the [Social Inclusion Bond Framework](#), issuance proceeds were spread between the four categories "social housing for low-income persons", "health and social care", "education and vocational training" and "supporting micro, small and medium-sized enterprises (MSMEs) for the creation and preservation of viable jobs". The CEB's Governor, Carlo Monticelli, said on the subject: "The CEB's Social Inclusion Bonds (SIBs) are a valuable tool to raise money in capital markets to fund projects with high social benefits. I am proud that the CEB has been a pioneer and continues to lead the way in this market." As Europe's oldest European multilateral development bank, the CEB is also an established institution as an issuer in the EUR benchmark segment. Most recently, in the trading week under consideration in our [Covered Bonds & SSA View of 10 April](#), CEB decided to issue its first SIB of 2024 in the EUR benchmark format. The seven-year bond worth EUR 1.25bn came with a 2.75% coupon. It had attracted orders of EUR 3.3bn by the end of the marketing phase, resulting in a bid-to-cover ratio of 2.64x. Final pricing was two basis points tighter than the guidance at ms +13bp. As the [press release](#) published after the issue indicates, 23% of investors came from the Benelux states and a further 21.5% came from the UK and Ireland. As regards the type of institution involved, banks accounted for the bulk of demand at 47.5%, followed by insurance companies and pension funds at 27%. The CEB has again announced a funding target of EUR 7.0bn for this year.

BRCOL: Rating (again) downgraded by S&P

On 8 April, S&P further downgraded the rating for the Canadian province of British Columbia (ticker: BRCOL) to AA- (negative outlook) from AA (negative outlook), especially in light of further extensive investments for operations and record level of capital spending as part of budget plans for 2024. Over the next three years, there was therefore the threat of a sharp rise in debt levels and in the budget deficit. According to S&P, the negative outlook reflects very low levels of internal liquidity, at least in the next two years and a further rise in the level of debt, as mentioned previously. The rating agency said there was at least a "one-in-three chance" that the rating would be further downgraded in the next two years if the province did not make credible efforts to continue with budget consolidation. In contrast, the outlook might be adjusted from negative to stable in the event of a reversal in the fiscal trajectory towards a reduction in the debt and improved liquidity. According to S&P, the province's commitment to fiscal discipline had wavered significantly. Measured in relation to the province's operating revenues, an increase in debt of up to 182% is expected by the end of the fiscal year 2027 (end as per 31 March). For further information about the budget position of Canadian sub-sovereigns, we would refer our readers to our [Issuer Guide – Canadian Provinces & Territories 2024](#).

Primary market

Our analysis of the SSA primary market last week showed a marked downturn in issuance activity. In our view, this reflects not only the recent escalation in the geopolitical situation but also the fact that uncertainties have emerged in connection with the future course of monetary policy. Obviously, these uncertainties were also felt in the capital markets and enhanced by the odd surprise here and there on the inflation front in relation to figures on real economic activity. Hardly surprisingly, the latest meeting of the ECB Council was therefore the focus of attention of some market participants (see [Fixed Income Special of 11 April](#)). This week, as a result of these general conditions, we are only able to report one sub-benchmark and one tap. In the sub-benchmark segment, the German federal state of Baden-Württemberg (ticker: BADWUR) went to the market with a EUR 250m floater with a two-year term to maturity. Pricing was in line with the guidance at -7bp against the six-month Euribor. This was BADWUR's fourth floater this year and the second in sub-benchmark format. In addition, German promotional bank Kreditanstalt für Wiederaufbau (ticker: KFW) tapped its KFW 2.875% 05/29/26 by EUR 1.0bn. The EU also sent an RfP to the relevant banking groups. The EU's fourth syndicated transaction is scheduled for the coming week (cf. [Funding plan for H1/2024](#)). Finally, we still want to mention two mandates of interest for the near future: the Spanish rail network operator ADIF-AV (ticker: ADIFAL) is planning to issue a green EUR benchmark with a term of eight years in the amount of EUR 500m on the basis of its [Green Financing Framework](#). For its part, the Asian Infrastructure Investment Bank (ticker: AIIB) is planning to issue a short EUR or USD-denominated digitally native note via Euroclear's [Digital Financial Market Infrastructure](#) (D-FMI) platform. To this end, AIIB is organising a series in investor meetings in the coming weeks.

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

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

Covered Bonds

Moody's covered bond universe: An overview

Authors: Dr Frederik Kunze // Lukas Kühne

Moody's provides ratings for 237 covered bond programmes worldwide

The rating agency Moody's recently published the latest edition of its quarterly Covered Bond Sector Update. The data within the Q1/2024 issue was based on the corresponding information for all covered bonds that Moody's rated in the third quarter of 2023. In total, ratings and detailed key figures were presented for 237 covered bond programmes from 30 countries. The agency's coverage therefore includes a significant proportion of the overall global covered bond universe. With regard to number of programmes, the most originated in Germany (40), followed by Austria (25) and Spain (22). Ten countries accounting for eight or more programmes each made up 73.0% (173 programmes) of the total. The remaining 27.0% (64 programmes) was distributed across 20 jurisdictions, each accounting for seven or fewer programmes. As expected, mortgage-backed programmes totalling 198 (83.5%) made up the majority share of the programmes rated by Moody's. In addition, Moody's rated 37 public sector programmes (15.6%) from nine countries. In terms of jurisdiction, these are predominantly concentrated in Germany (12 programmes), Austria (9), Spain (5) and France (4). Lastly, one ship Pfandbrief programme and one in the Other category (both from Germany) completed the 237 ratings. As usual, we will present individual key figures in this article of our weekly publication.

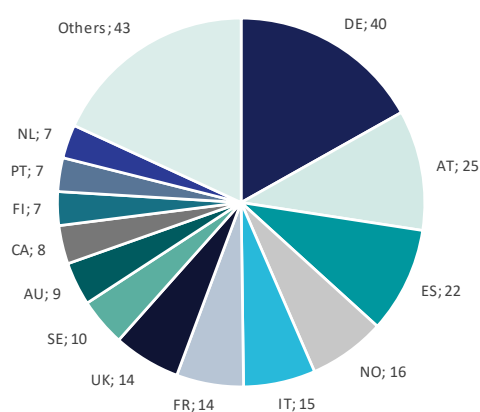
Focus on mortgage programmes from EUR benchmark jurisdictions

The focus of Moody's rating universe is clearly on mortgage programmes. Almost all of these originate in EUR benchmark jurisdictions. Greece (3 programmes), Hungary (2), Romania (1), Türkiye (1) and Cyprus (1) do not currently have any outstanding covered bonds in a EUR benchmark format. We will be focusing on those mortgage-backed programmes that were established in EUR benchmark jurisdictions in our following analysis. In this context, it should be noted that EUR benchmarks were not necessarily issued through these programmes.

Mortgage programmes are predominantly residential

With regard to the classification of cover assets in the individual programmes carried out by Moody's, it can be ascertained that, on average, 84.1% of bond coverage consists of residential assets. However, the share of commercial assets was comparatively high in Germany (36.9%), Austria (29.5%), Czechia (12.2%) and Spain (9.3%). At the same time, the proportion of multi-family assets was notable for Germany (15.5%), Switzerland (13.6%) and Austria (10.7%), as well as Sweden (8.0%). With the exception of the above-mentioned countries plus France (84.7%) and Norway (84.7%), the share of residential assets in the cover pools of the programmes from all other jurisdictions ranged from 93.3% to 100%. Neither of the cover pools for the two programmes from Luxembourg comprised mortgage assets.

Number of programmes with a Moody's rating



Structure of cover pools (mortgage programmes)



Source: Moody's, NORD/LB Floor Research

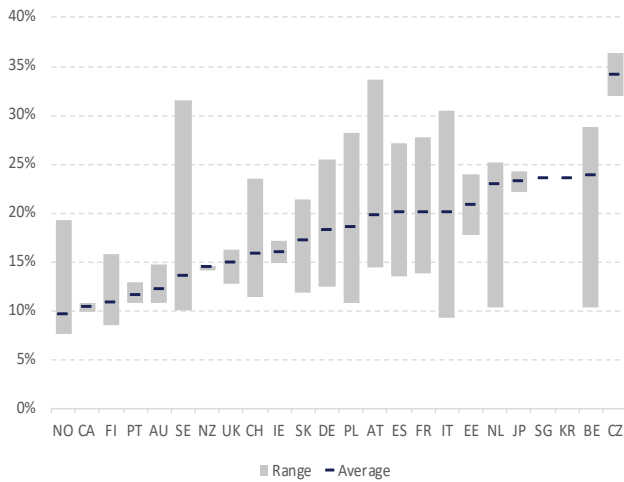
The collateral score as an indicator of cover pool quality

We regard the collateral score as a key metric in Moody's covered bond universe. This is used by the ratings agency to assess the quality of cover assets, with a low value indicating that the credit quality of the cover pool is high. The collateral score measures the level of credit deterioration of the assets in the cover pool that is consistent with the theoretical highest rating achievable in the jurisdiction. In principle, we consider it appropriate to compare collateral scores across programmes and jurisdictions. Nevertheless, some specific features must be taken into account. For example, Moody's provides for between 4.0% and 5.0% as a lower limit for the collateral score of most mortgage-based programmes. The lower limits for collateral scores are higher for programmes in "smaller" covered bond jurisdictions, including Cyprus (27.0%) and Greece (14.3%). In Japan, collateral scores are set at 0.0% due to the RMBS structure of the relevant programmes. Six jurisdictions always have a score of 4.0%, namely the UK, Australia, Canada, New Zealand, Poland and Singapore. Issuers in Romania (11.4%), Germany (11.7%), Greece (15.1%) and Cyprus (27.0%) had the highest average collateral scores. Meanwhile, a wide range of scores was recorded in Germany and Norway (22.8 and 13.9 percentage points, respectively). As outlined above, issuers from Austria and Germany feature a comparatively high share of commercial assets in their respective cover pools. Evidently, a high proportion of commercial cover assets is associated with a higher collateral score.

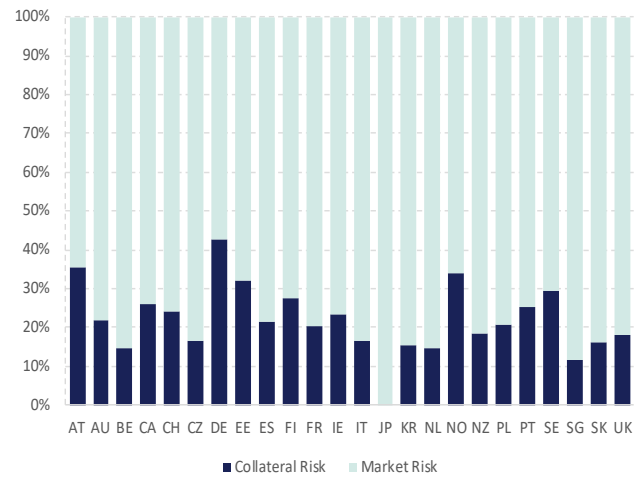
Cover pool losses – an indicator for expected losses

Moody's uses cover pool losses (CPL) as an indicator to reflect the losses expected in the cover pool following issuer default (covered bond anchor event). The risk comprises two components, market risk (cover pool losses as a result of funding, interest rate and currency risks) and collateral risk (cover pool losses resulting from a deterioration in the credit quality of cover assets). Similar to the collateral score, a high degree of heterogeneity was evident in this respect in a global comparison of cover pool losses. This is reflected not only in the average losses, but also with regard to the range of national variation. Cover pool losses are particularly low in Norway, Canada, Finland and Portugal, while they are relatively high in Czechia.

Cover pool losses by country (mortgage programmes)



CP losses: Market and collateral risk by country (mortgage programmes)

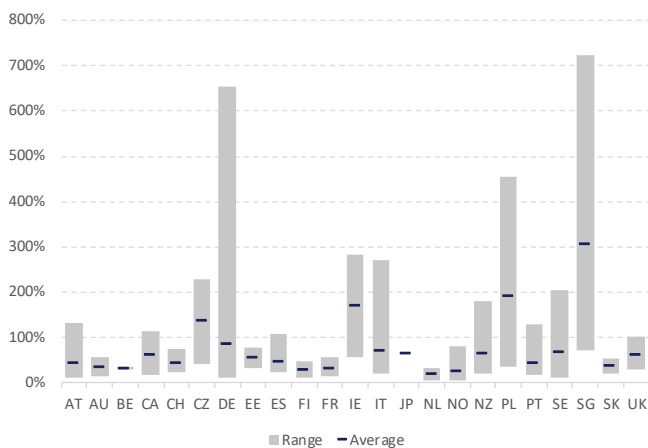


Source: Moody's, NORD/LB Floor Research

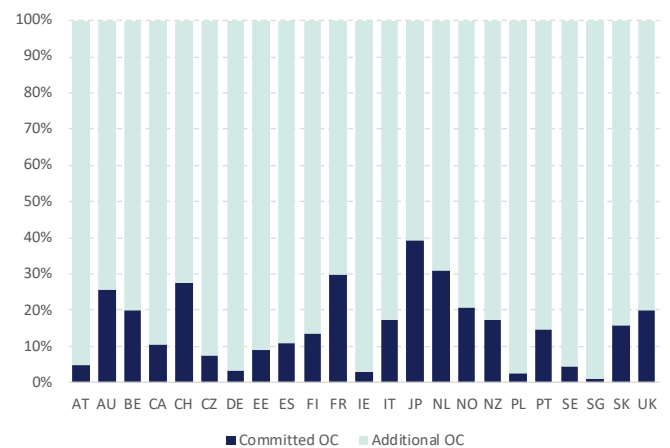
Funding, interest rate and currency risk determine expected losses

The chart above on the right illustrates that the contribution of the two components (collateral risk and market risk) varied considerably at national level. The two programmes from Japan again had a separate role: In view of their cover pool structure (exclusively RMBS transactions used as cover assets), there is no collateral risk. In principle, it is possible to derive that the majority of cover pool losses are impacted by the market risk, i.e. losses in the event of issuer insolvency can be ascribed to the categories of funding risk, interest rate risk and currency risk rather than resulting from the quality of cover assets.

Overcollateralisation by country (mortgage programmes)



Composition of overcollateralisation (mortgage programmes)



Source: Moody's, NORD/LB Floor Research

Wide range of overcollateralisation levels

With regard to the overcollateralisation levels of the programmes that Moody's rates, unsurprisingly, there are significant differences in an international comparison. High average overcollateralisation ratios (>100%) were evident in the comparatively small covered bond jurisdictions of Singapore, Poland, Ireland, and Switzerland. At the same time, a wide range of levels was recorded for Singapore and Poland, as well as Germany. Narrower ranges are often due to a smaller number of issuers in the relevant jurisdiction.

Committed OC as lower limit for overcollateralisation

Overcollateralisation (OC) can also be divided into sub-components. OC may have been committed vis-à-vis the rating agency, in order to maintain a specific rating, or it may be based on legal requirements. Committed OC may therefore be understood to be a kind of lower limit for overcollateralisation, where the programme cannot readily fall below this limit, or where falling below this limit is not permitted at all. In contrast, actual overcollateralisation is only temporary in certain circumstances and may be subject to a certain level of volatility as a result of new bond issues or maturities. Overall, it can be stated that the higher share of overcollateralisation continues to be made available by issuers on a voluntary basis, although this could certainly be due to low levels of committed OC. Furthermore, a high share of committed OC by no means also results in high overcollateralisation.

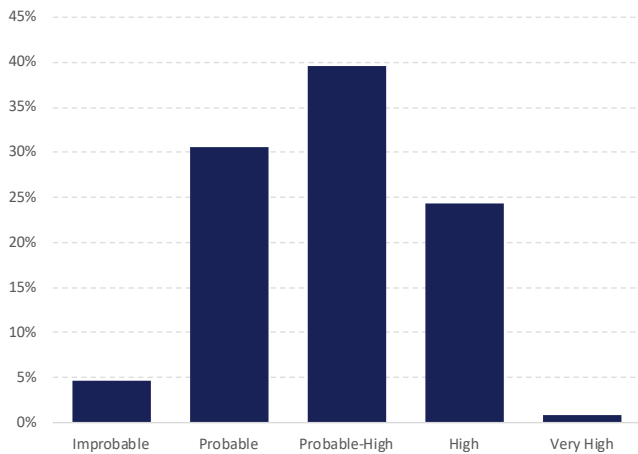
TPI restricts potential rating upgrade of covered bonds in relation to issuer rating

TPI rules restrict the potential covered bond rating to a specific number of notches above the issuer rating. The timely payment indicator (TPI) is a key figure Moody's makes available. This provides information about the probability of timely servicing of payment obligations following issuer default. It is differentiated in six levels, ranging from very high to very improbable. At 70.2%, the bulk of the mortgage programmes rated by Moody's are in the "probable" or "probable-high" categories. In contrast, the outer limits are less represented, with shares of 4.7% (improbable) and 0.9% (very high) respectively. In a total of six EUR benchmark jurisdictions, there are programmes that all have one and the same timely payment indicator (chart: TPI by country). Italy and Portugal each have one programme with a TPI of very high. In Germany (38 of 40 programmes) and Norway (9 of 16 programmes), the majority of the programmes rated are allocated to the category "high".

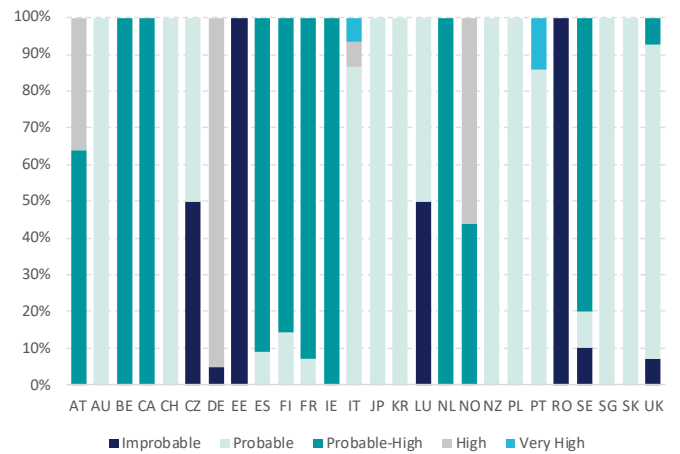
Sufficient buffer with regard to downgrades

In addition to the TPI, the TPI leeway indicates the number of notches by which the relevant covered bond anchor point can be downgraded without this entailing a downgrade of the rating for the covered bond programme, as laid down in the TPI framework. Accordingly, a total of six (2.9%) of the covered bond programmes rated by Moody's had no such buffer. This means that in the event of the covered bond anchor being downgraded, the direct consequence would be the downgrading of the programme. The highest incidence was a TPI leeway of four notches (56 programmes, or 26.4%). Five programmes (2.4%), all of which originate in Germany, had a buffer of seven notches. A further six out of the ten programmes in total with a TPI leeway of six notches are also attributable to the covered bond programmes of German issuers.

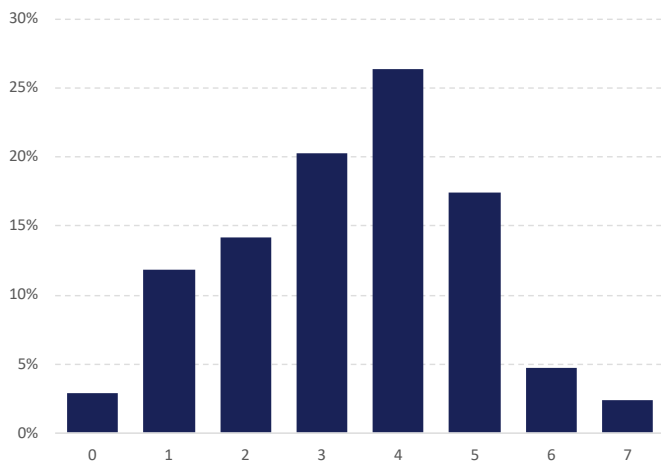
**Timely Payment Indicator (TPI)
(mortgage programmes)**



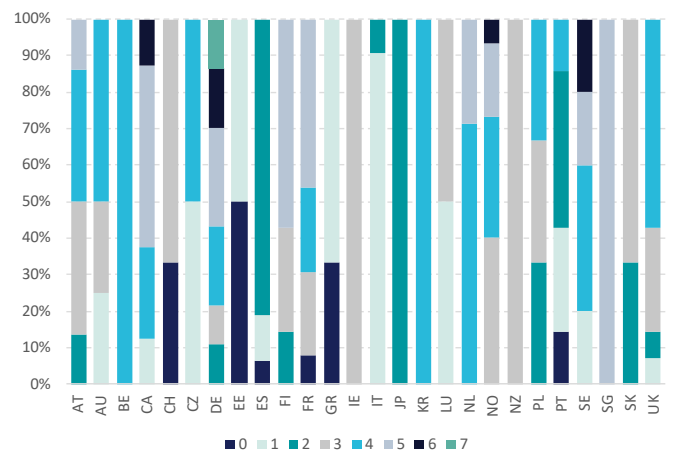
**TPIs by country
(mortgage programmes)**



**TPI leeway in notches
(mortgage programmes)**



**TPI leeway in notches by country
(mortgage programmes)**



Source: Moody's, NORD/LB Floor Research

Conclusion

Moody's current Global Sector Report as well as the data on which it is based reflect the heterogeneity that exists in the covered bond market at jurisdiction level. For several years now, Moody's aggregated parameters have delivered important insights into the relevant countries, particularly regarding the occurrence of a credit event on the issuer side. However, differentiation within each jurisdiction is also necessary, as the case of Germany highlights. At the same time, other factors that play a part in determining covered bond ratings but which are not included in this dataset are also highly relevant when assessing what potentially influences spreads. For Italian covered bond programmes, for example, a sovereign downgrade would also have implications for the covered bond ratings of some issuers. With regard to deriving the risk weight and the LCR level, and depending on the availability of ratings from other rating agencies, this may in turn result in a reassessment that then causes a change in the rating.

SSA/Public Issuers

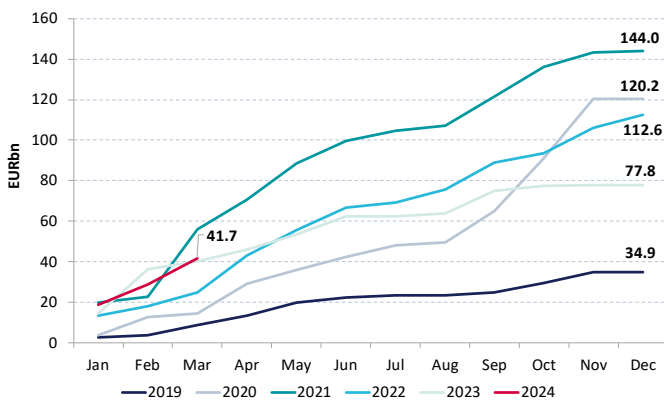
SSA review: EUR-ESG benchmarks in Q1/2024

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

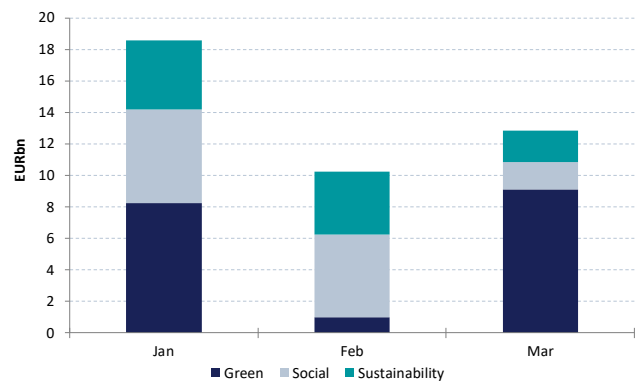
Introduction

Having looked at the aggregated issuance volume in the first quarter of the year in our [Covered Bond & SSA View of 10 April](#), we shall focus separately on the ESG segment in our definition of SSAs (i.e., excluding sovereigns) in this publication in order to give the topic the attention it requires. We last published a report that relates equally to the global ESG bond market in May 2023 (see [NORD/LB Fixed Income Special – ESG Update](#); an update is planned for this year). In principle, we shall look at the ESG topic more frequently over the course of this year and present current market developments on a regular basis. The data on which this issue is based is provided by our inhouse database, where we record every new EUR benchmark issue in the SSA segment. To identify ESG bonds, we refer to data fields provided by the financial data provider Bloomberg, which also allow us to differentiate between green, social and sustainability bonds. In Q1/2024, we recorded a total of EUR 41.7bn worth of issues with ESG characteristics. If this figure is compared with issuance trends in recent years, it is only exceeded by the volume in Q1/2021 (EUR 56.0bn). Compared with the period under review in the previous year (EUR 40.1bn), Q1/2024 constitutes a slight increase. According to our interpretation, the significance and relevance of the ESG segment therefore remains substantial both on the part of issuers and investors. At EUR 18.6bn, January was clearly predominant in terms of issues compared with the other two months in the first quarter. We recorded a total of 24 new ESG-related issues from 22 different issuers in our database. In terms of volume, the EU carried out the largest individual issue with a new green bond of EUR 7bn. The order book for the bond, which has a 25-year maturity, came to a considerable EUR 86.5bn, meaning that the deal was just under 12-times oversubscribed. It was the EU’s first new green bond since November 2022.

Primary market: EUR-ESG benchmark issuance trend

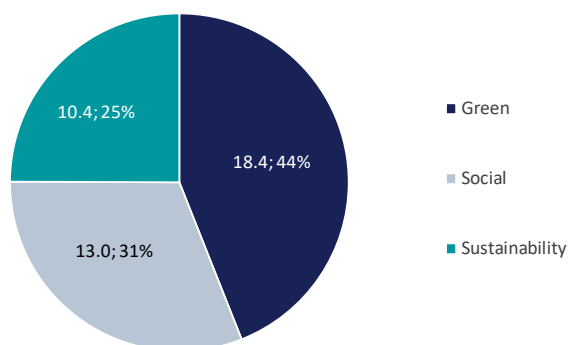


Primary market: EUR-ESG benchmark issues in Q1

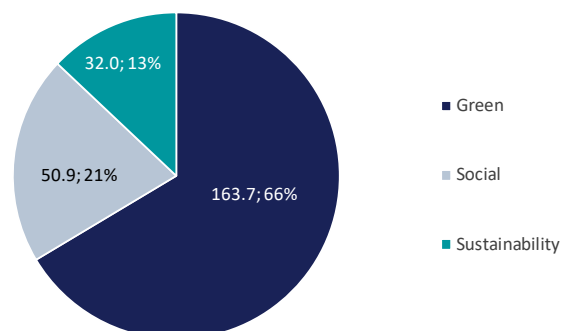


Source: Bloomberg, NORD/LB Floor Research

Breakdown by ESG category (EURbn)



Order books by ESG category (EURbn)

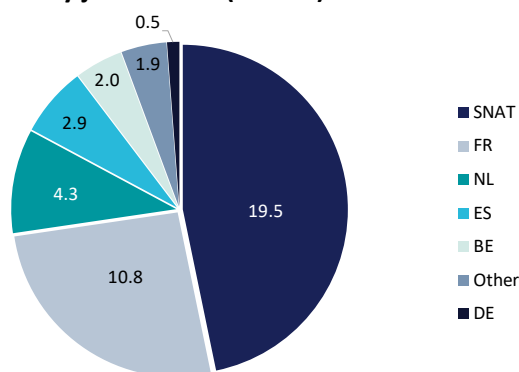


Source: Bloomberg, NORD/LB Floor Research

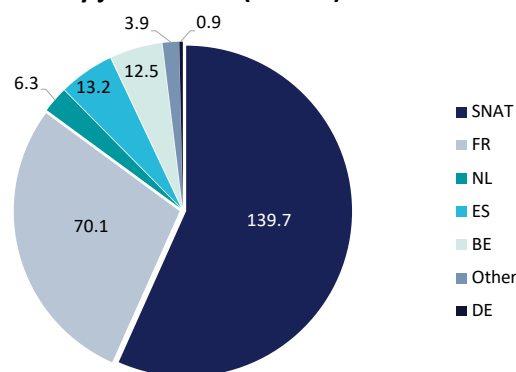
Green bonds clearly dominant – supras and the French stand out

Let us look at the ESG issuance volume to date in greater detail: Overall, green bonds were ahead at the end of Q1/2024. Their share of total volume amounted to 44% or EUR 18.4bn, social bonds accounted for a somewhat smaller share, at 31% (EUR 13.0bn). Meanwhile sustainability bonds amounted to EUR 10.4bn (25%). Compared with the first quarter in the previous year, the share of sustainability bonds in the total mix therefore declined by five percentage points, while green bonds increased by eight percentage points. Social bonds also posted a slight fall of three percentage points. If one looks at the demand side in the form of aggregated order books, there is an even clearer distribution in favour of green bonds: At EUR 163.7bn and a share of 66%, they are clearly in the lead, followed by social bonds (EUR 50.9bn; 21%). In contrast, sustainability bonds only generated order book volumes of EUR 32.0bn in total (13%). Obviously, the comparison of order books is also always driven by ratings and the general popularity of issuers and is therefore difficult to assess. On top of this, the period under review is relatively short, meaning that individual issuers can influence the overall picture even more. For example, of the total of EUR 163.7bn attributable to green bonds, EUR 86.5bn was accounted for by the single EU transaction in this segment (cf. [Covered Bond & SSA View of 20 March](#)). There is a similar situation with social bonds: EUR 41.1bn of the EUR 50.9bn was attributable to the order books for two new issues by the French CADES. Consequently, there is an equally unambiguous picture with regard to the breakdown by jurisdictions: with an issuance volume of EUR 19.5bn in total, issuers from the supras segment are clearly ahead. We registered six new ESG bonds within this group of issuers in the first quarter. The order books for these transactions totalled EUR 139.7bn meanwhile. To put this in perspective, supras only issued a volume of EUR 10.0bn spread across four deals in the same period in the previous year. The order books were also far smaller, totalling EUR 37.7bn. This comparison makes the influence that the EU exercises in this segment as an issuer more than clear. Besides supras, issuers from France provided new impetus in the ESG segment: EUR 10.8bn was successfully placed on the market by means of five bonds. At EUR 70.1bn, the aggregate order books were almost only half as large as those for the supras. The roles were reversed in the previous year: The French jurisdiction was ahead of the supras with an issuance volume of EUR 15.3bn.

Breakdown by jurisdiction (EURbn)



Order books by jurisdiction (EURbn)



Source: Bloomberg, NORD/LB Floor Research

Overview: Top 5 benchmark issuers by ESG category and EUR volume

Issuer	Green (EURbn)	Issuer	Social (EURbn)	Issuer	Sustainability (EURbn)
EU	7.0	CADES	8.0	IBRD	3.0
EIB	6.0	BNG	3.0	IDAWBG	1.8
ASIA	1.3	CDEP	0.8	NEDWBK	1.3
IDFMOB	1.0	WALLOO	0.7	FLEMSH	1.3
SOGRPR	1.0	BYLABO	0.5	MADRID	1.0

Source: Bloomberg, NORD/LB Floor Research

Few major players dominate issuance activities

Having now looked at issuance activity principally from a bird's eye perspective, we wish to focus on individual issuers and their primary market activities in the following sections. Given the relatively short period under review, the majority of the issuance volume is concentrated on a few issuers, as the above table illustrates. Here, [CADES](#), which we have mentioned previously, stands out, having issued EUR 8.0bn in total spread across two ISINs, making it the most active issuer in the ESG segment in the first quarter of the year. The bonds concerned were solely social bonds. The order books totalled EUR 41.1bn; both deals were therefore at least five-times oversubscribed. In addition to CADES, only the Dutch [BNG Bank](#) (ticker: BNG) issued more than one EUR benchmark in ESG format. The municipal financier also issued two new social bonds with an aggregate volume of EUR 3.0bn. In the sustainable segment, the World Bank Group in the form of the [International Bank for Reconstruction and Development](#) (ticker: IBRD) and the [International Development Association](#) (IDA; ticker: IDAWBG) was the source of the largest supply. The IBRD issued a new bond of EUR 3.0bn with a maturity of ten years at ms +23bp (cf. [Covered Bond & SSA View of 7 February](#)) at the beginning of February. Meanwhile, the IDA raised EUR 1.75bn at the beginning of January, which went through at a spread of ms +61bp for a far longer maturity of 20 years (cf. [Covered Bond & SSA View of 17 January](#)). With regard to green bonds, we shall look at the EU in greater detail on the following page. As such, we will look briefly at the next largest deal, which emanated from the EIB as part of an EARN transaction: with a volume of EUR 6.0bn, the [Climate Awareness Bond](#) was priced at ms +18bp in the ten-year maturity segment. The order book reached EUR 42.5bn, resulting in a bid-to-cover ratio of 7.1x.

Mega issuer EU celebrates a successful comeback

We would like to mention the European Union separately as an ESG issuer. The EU did not issue any new bonds in this segment of the market in the past year, as business was dominated throughout by taps of previously issued bonds. This March, the point was reached where the EU decided to issue its first, long awaited, [green bond](#) since November 2022 as part of its third syndicated transaction in 2024 (cf. [funding plan for H1/2024](#)). As expected, interest from investors was substantial, resulting in an impressive order book of EUR 86.5bn, meaning that the deal was more than 12.0x oversubscribed. The EU capitalised on this favourable situation and increased the original issuance volume of EUR 6.0bn by a further one billion euros in the course of the marketing phase. Ultimately, it was finally priced two basis points lower than the guidance at ms +80bp. The green bond features a coupon of 3.25% and a long maturity of 25 years. The issuance proceeds will be used to finance green projects and climate-relevant measures from EU Member States' Recovery and Resilience Plans (RRP) within the framework of the NextGenerationEU (NGEU) programme, which were in turn drawn up in the context of the Recovery and Resilience Facility (RRF). The RRF encompasses a total amount of EUR 723.8bn and is responsible for the provision of loans (up to EUR 385.8bn, to be repaid by the respective Member States) and grants (up to EUR 338bn). Among others, the nine categories of expenditure, into which the proceeds of the green bonds are to be channelled, include energy efficiency, clean energy and adaptation to climate change. According to information provided by the European Commission, by the end of Q1/2024, the EU has raised approximately EUR 35.5bn of its funding target for the first half of 2024 of EUR 75bn. The newly issued green bond also increased the total amount of green bonds issued within the framework of NGEU to just under EUR 55.9bn. In relation to the total amount of EUR 494.9bn, these bonds therefore account for a share of 11.3% of the outstanding volume. The EU also still has a fair amount to do in the future: in the context of the NGEU programme, which is worth EUR 806.9bn in total (at current prices), the EU expects an annual funding target of EUR 150bn on average up to the end of 2026. In this context, it intends to raise approximately 30% of its funding from green bonds (up to EUR 250bn in total). This would make the EU the world's largest issuer of green bonds. We did not register any taps of previously issued ESG bonds by the EU in the first quarter. To ensure that the proceeds from the green bonds issued can each be traced by recipient country and intended use, the European Commission has provided a tool for this purpose, the [NGEU Green Bond Dashboard](#), since 2022. We recently discussed this in detail in a separate article as part of our [Covered Bond & SSA View of 13 March](#). We also subjected the RRF and the national RRP, especially the German RRP, to critical analysis. To create an additional measure of transparency, the [NGEU Green Bonds Allocation and Impact Report](#), which is designed to provide information on the allocation of green bond proceeds as at the reporting date of 01 August 2023 and present the impact of investments financed via green bonds, was published for the first time in December 2023. As a key issuer and, in terms of volume, the key issuer of bonds (both conventional and green bonds) in our SSA coverage, we believe that this is the right course to maintain their appeal for investors on the capital market.

Focus on sub-sovereigns

In our review of 2023, we discussed last year's developments on the EUR-ESG market for [German Laender bonds](#) thoroughly at this point. Admittedly, however, stagnation has been the order of the day here in the last three months. Accordingly, we have seen neither a new federal state presenting an ESG bond framework nor an established issuer placing a new ESG bond on the market in the first quarter. As a result, [North Rhine-Westphalia](#) (ticker: NRW), [Baden-Württemberg](#) (ticker: BADWUR), [Hesse](#) (ticker: HESSEN), [Berlin](#) (ticker: BERGER) and [Saxony-Anhalt](#) (ticker: SACHAN) remained the sole representatives of their fraternity in the EUR ESG segment at the end of Q1/2024. However, other issuers from our sub-sovereign coverage have attracted attention since the beginning of the year and we would like to look at them in greater detail below. This year, the French region of [Île-de-France](#) (ticker: IDF), which has issued an ESG bond on the market every year with the exception of 2019, got the ball rolling. In January, the French issuer carried out its largest transaction to date, raising EUR 800m with a ten-year maturity at OAT +36bp (equivalent to circa ms +46bp). The order book for this sustainability bond ultimately reached EUR 2.5bn. Let us take a look at the more western reaches of southern Europe: the Spanish regions of [Madrid](#) (ticker: MADRID), [Andalusia](#) (ticker: ANDAL) and the [Basque Country](#) (ticker: BASQUE) issued EUR 2.4bn worth of ESG bonds overall in the first quarter, all opting for sustainability bonds. The maturities were virtually congruent in the ten-year segment. As the largest Spanish ESG issuer, the Madrilenians also offered the largest amount, EUR 1.0bn, in February. The final bid-to-cover ratio was 4.2x and it was priced at a re-offer spread of SPGB +16bp (circa ms +70bp). Meanwhile, the Basque country only raised EUR 600m, which was finally priced at a similar spread of SPGB +14bp (circa ms +69bp). Andalusia was somewhat bolder with an issuance volume of EUR 750m and successfully placed its sustainability bond on the market at SPGB +27bp (circa ms +79bp). Over the coming months, we expect Spanish regions to provide further fresh impetus in the ESG segment. In addition to sustainability bonds, the Madrilenians have invariably issued green bonds as well in recent years and we expect this pattern to continue this year. Furthermore, there has been no sign yet of two regions, namely [Castille and León](#) (ticker: CASTIL) and [Galicia](#) (ticker: JUNGAL), which also attracted attention with EUR-ESG benchmarks last year. We therefore wait with anticipation to see what else Spain will bring to the table this year. Let us turn our thoughts towards Central Europe and look at Germany's neighbour Belgium. The [Belgian regions](#) also feature regularly on the EUR-ESG market. In Q1/2024, we recorded transactions of this kind from [Wallonia](#) (ticker: WALLOO) and [Flanders](#) – represented by Ministeries van de Vlaamse Gemeenschap (ticker: FLEMISH). In total, a volume of EUR 1.75bn was issued here. The majority of this was attributable to the Flemish region's sustainability bond, which raised EUR 1.25bn over ten years at a spread of OLO +26bp (circa ms +90bp). In contrast, Wallonia opted for a social bond worth EUR 700m with a term in excess of six years, which was finally completed at OLO +45bp (circa ms +44bp). In recent years, the [French Community of Belgium](#) (ticker: LCFB) also regularly issued social bonds, meaning that we definitely see further potential here. Finally, [Auckland Council](#) (New Zealand) surprised us by making a rare appearance with a new green bond of EUR 600m, which was issued with a term of ten years at ms +50bp in mid-March.

Taps of previously issued ESG bonds

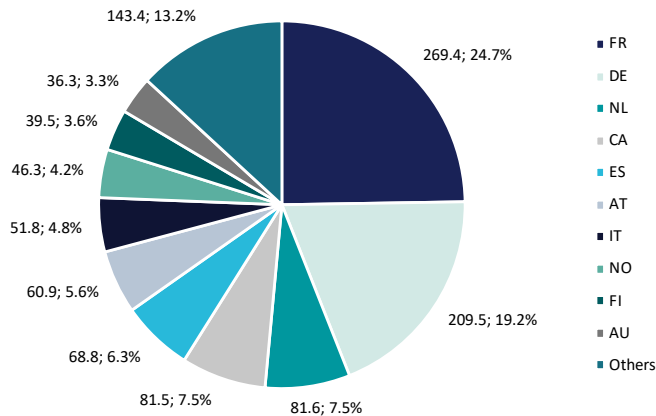
Taps are not included in the data up to now since we consciously differentiate between new issues and taps. There were four ESG bonds among the 20 taps carried out to date in our SSA coverage. Here, WALLOO and BNG opted to increase the amount of existing social bonds. In contrast, [Eurofima](#) (ticker: EUROF) increased a green bond. Meanwhile, IDAWBG has tapped a sustainability bond. The aggregated tap volume totalled EUR 1.8bn.

Conclusion and outlook

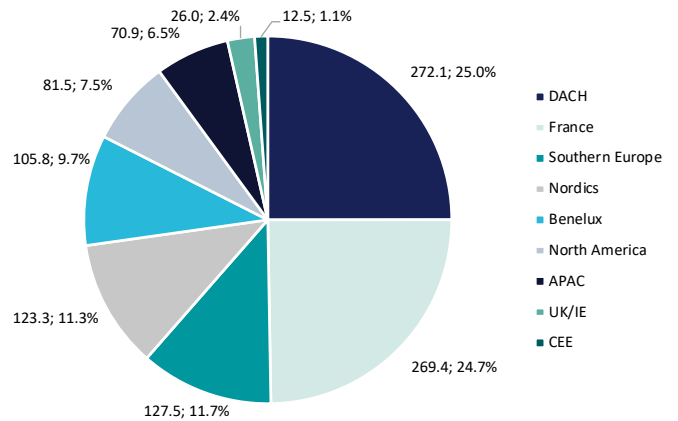
The market for ESG bonds in our SSA definition is still strongly driven by individual issuers. Unsurprisingly, this impression is strengthened by a review period of less than one year. Despite this, Q1/2024 provided a fair amount of material for discussion, as the previous pages emphasise. At EUR 41.7bn in total, the new issuance volume has risen slightly compared with Q1/2023 (EUR 40.1bn), while, in terms of numbers, fewer new ESG bonds were issued at 24 (2023: 30 bonds). The proportion of ESG bonds in all new issues in the last quarter (81 bonds) was therefore just under 30%. This figure is below the equivalent values from the first quarters of 2023 (40%) and 2022 (31%). Despite this, in our opinion, the data definitely justifies talk of a strong first quarter in the EUR-ESG segment. Without doubt, there is still headroom in terms of the diversity of EUR issues, since yet it has not even been possible to list the top 10 issuers of green, social and sustainability bonds. This state of affairs will naturally be automatically adjusted over the course of the year when other issuers break cover. In 2023 as a whole, we recorded 43 different issuers on the EUR-ESG market, while this figure stood at 22 in total across Q1/2024 (Q1/2023: 26). We traditionally follow developments in the segment of the German Laender, which did not appear on the EUR-ESG segment in the first three months of the year, with heightened interest. Here, we would not only welcome new ESG bonds but equally some newly developed frameworks from those German Laender that were previously absent to drive the market segment further forward. BERGER and SACHAN showed the way in 2023. We therefore wait with anticipation to see what might be in the pipeline in this respect in 2024. The new green bond from the EU can already be characterised as one of the highlights this year. The EU ventured onto the primary market with a new issue in this format for the first time since November 2022 and, in doing so, celebrated a successful comeback of sorts. An order book of EUR 86.5bn speaks for itself and we would entirely support further activities by the EU in this context. It remains to be seen whether we will welcome new issuers apart from the familiar players to the EUR-ESG market over the next few months. For smaller issuers, in particular, the stringent reporting requirements still constitute a significant obstacle. As announced at the beginning, we shall look at the ESG topic more frequently over the course of the year. But, as things stand, we can look back on a successful start to 2024.

Charts & Figures Covered Bonds

EUR benchmark volume by country (in EURbn)



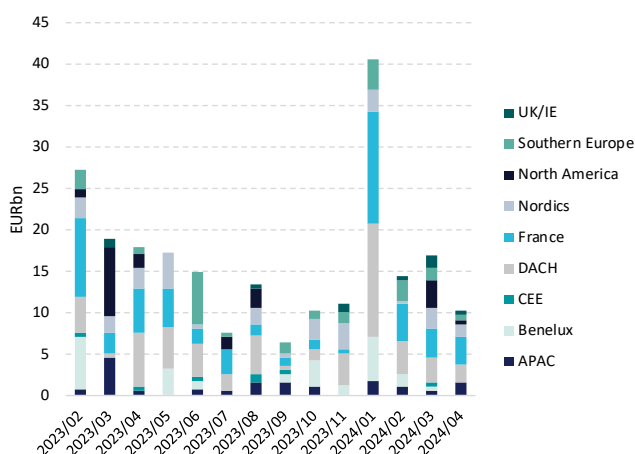
EUR benchmark volume by region (in EURbn)



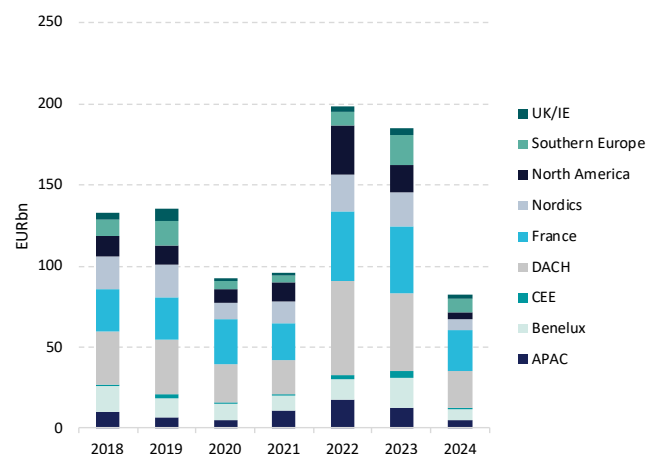
Top-10 jurisdictions

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	269.4	260	25	0.97	9.3	4.8	1.42
2	DE	209.5	298	41	0.65	7.8	4.0	1.38
3	NL	81.6	82	3	0.93	10.4	6.0	1.27
4	CA	81.5	60	0	1.33	5.6	2.8	1.31
5	ES	68.8	54	5	1.15	11.2	3.2	2.07
6	AT	60.9	102	5	0.59	8.1	4.4	1.50
7	IT	51.8	65	4	0.77	8.5	3.8	1.82
8	NO	46.3	56	12	0.83	7.3	3.6	0.91
9	FI	39.5	44	4	0.88	6.9	3.7	1.66
10	AU	36.3	34	0	1.07	7.2	3.3	1.68

EUR benchmark issue volume by month

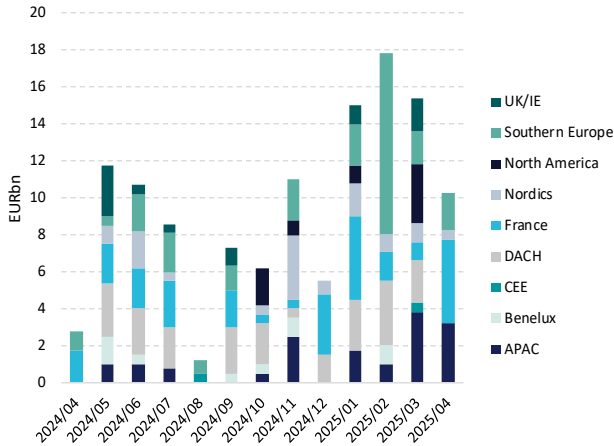


EUR benchmark issue volume by year

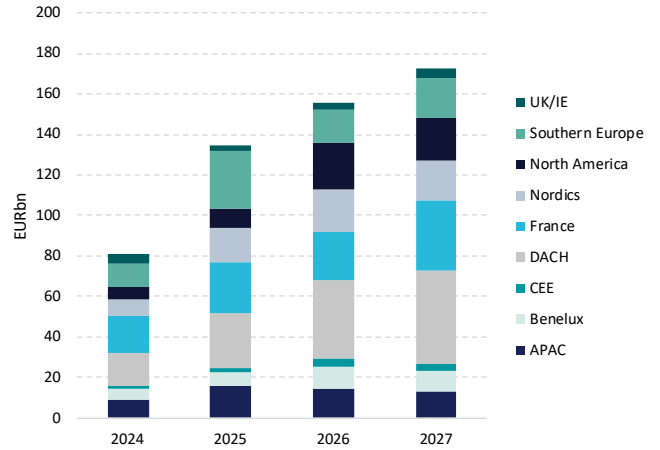


Source: market data, Bloomberg, NORD/LB Floor Research

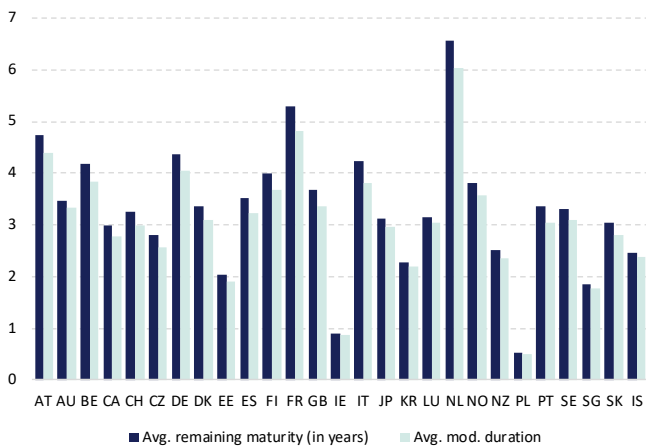
EUR benchmark maturities by month



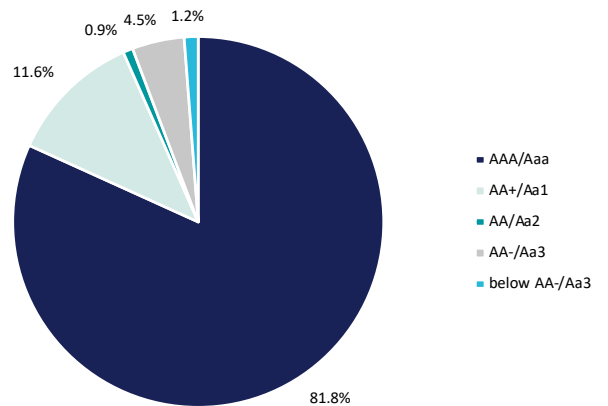
EUR benchmark maturities by year



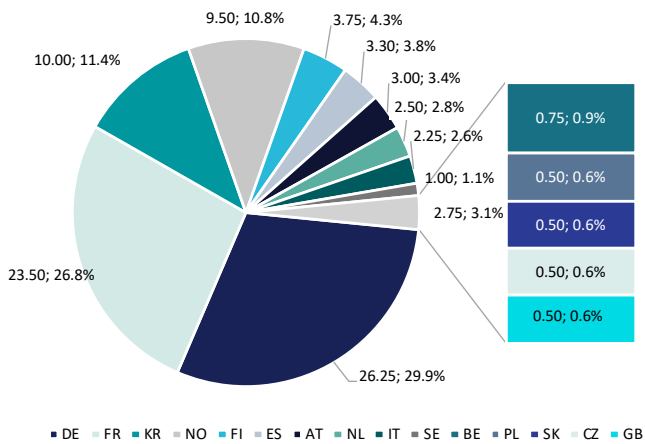
Modified duration and time to maturity by country



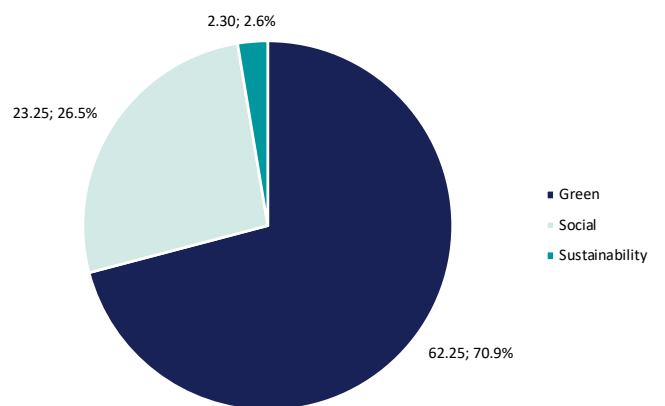
Rating distribution (volume weighted)



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

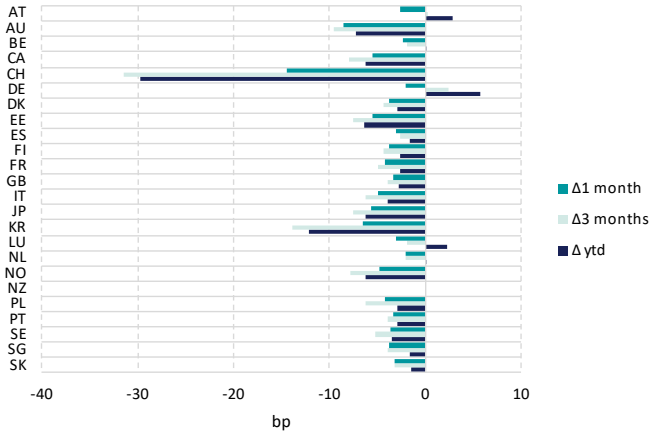


EUR benchmark volume (ESG) by type (in EURbn)

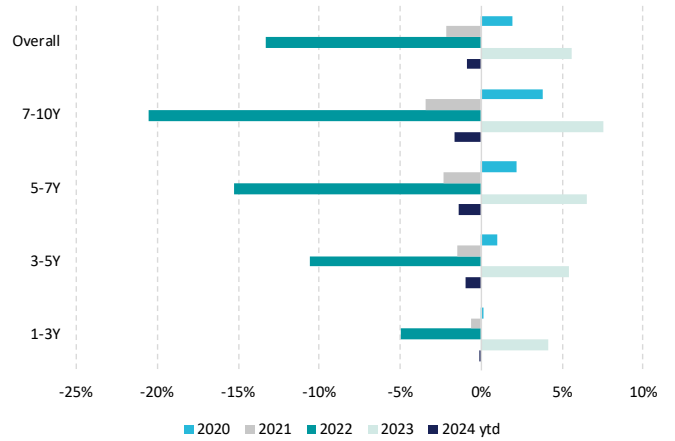


Source: market data, Bloomberg, NORD/LB Floor Research

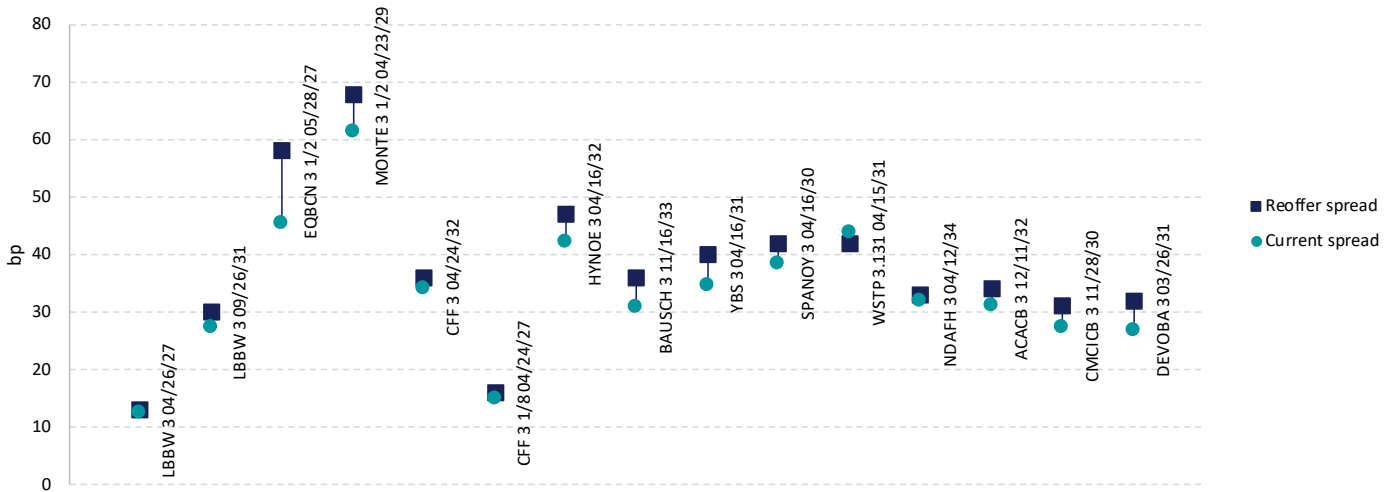
Spread development by country



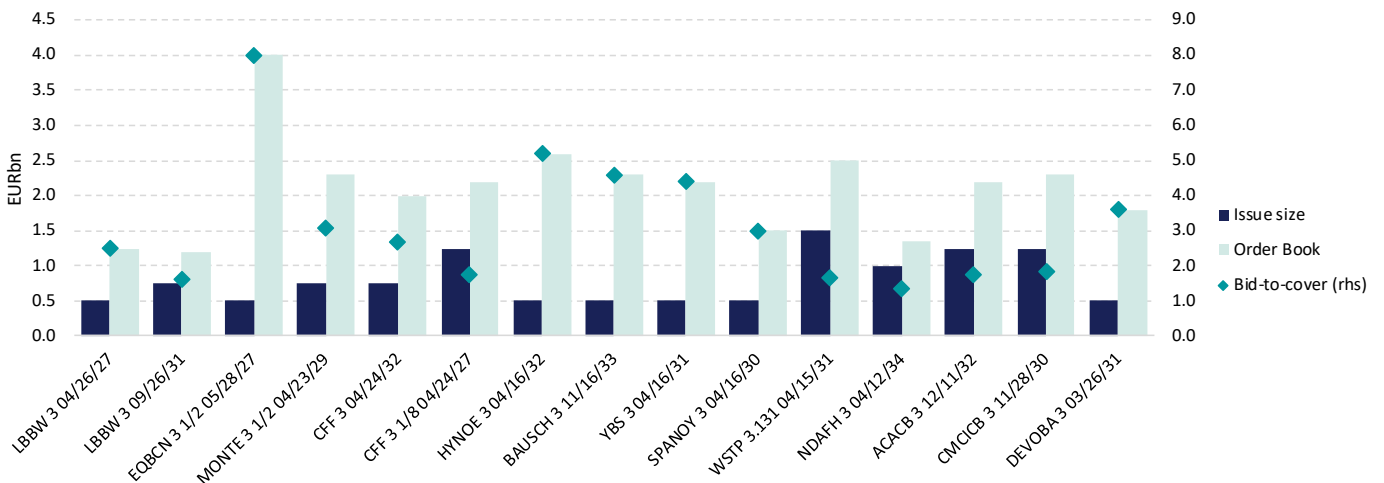
Covered bond performance (Total return)



Spread development (last 15 issues)

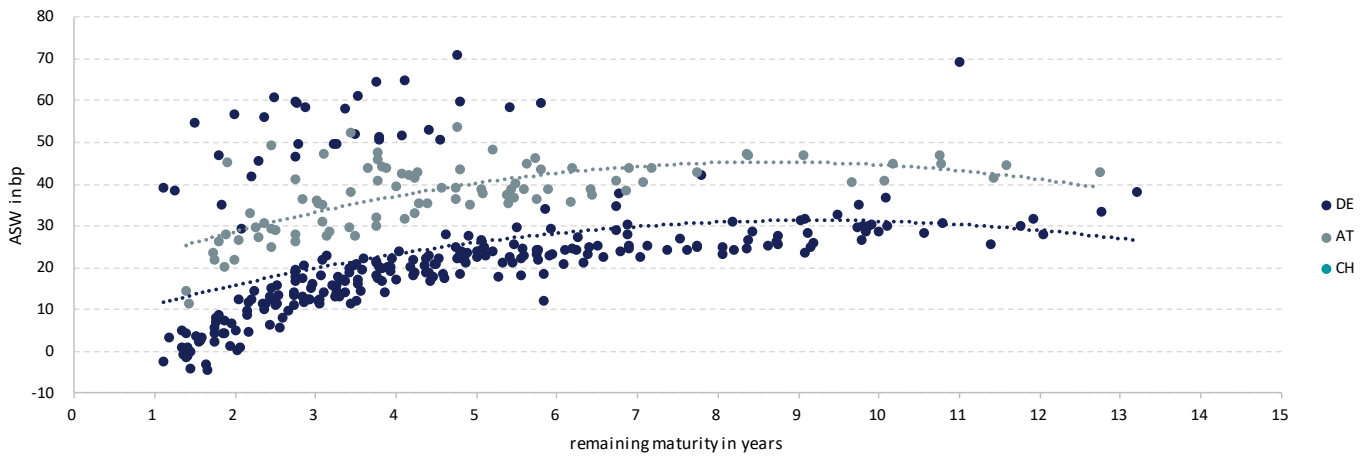


Order books (last 15 issues)

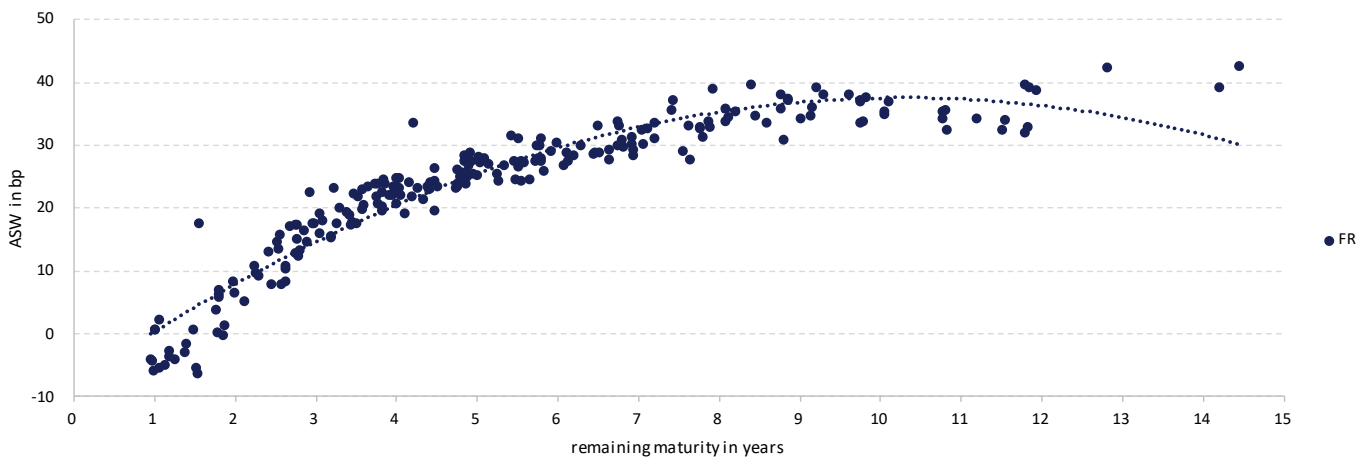


Spread overview¹

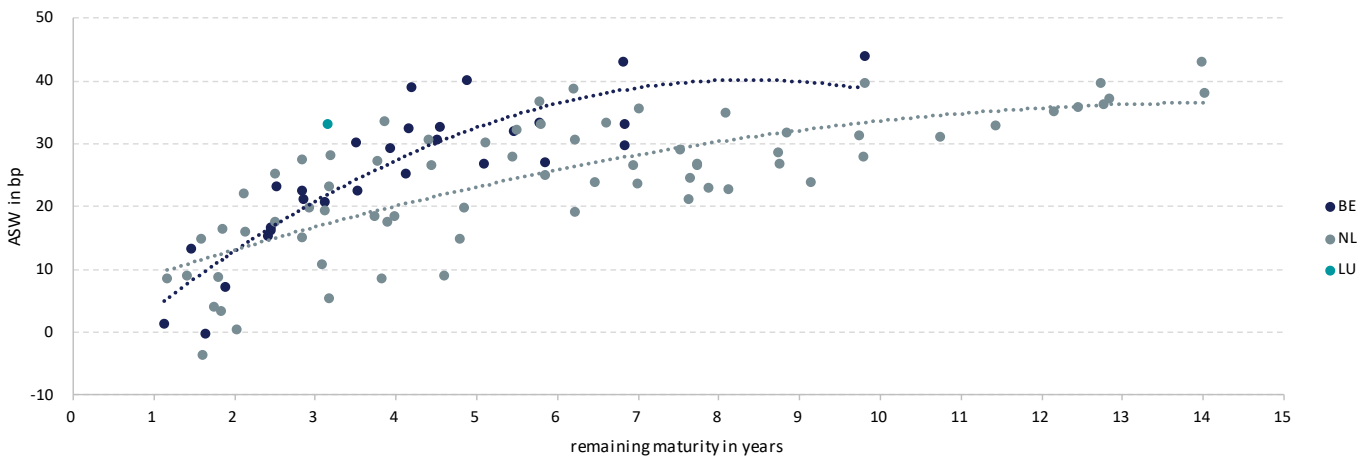
DACH 



France 

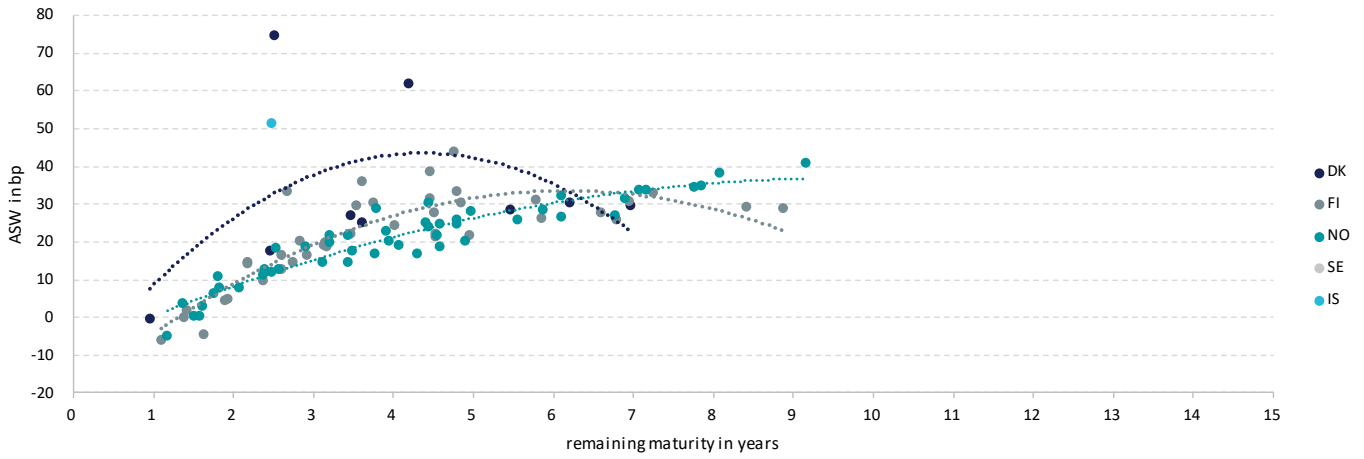


Benelux 

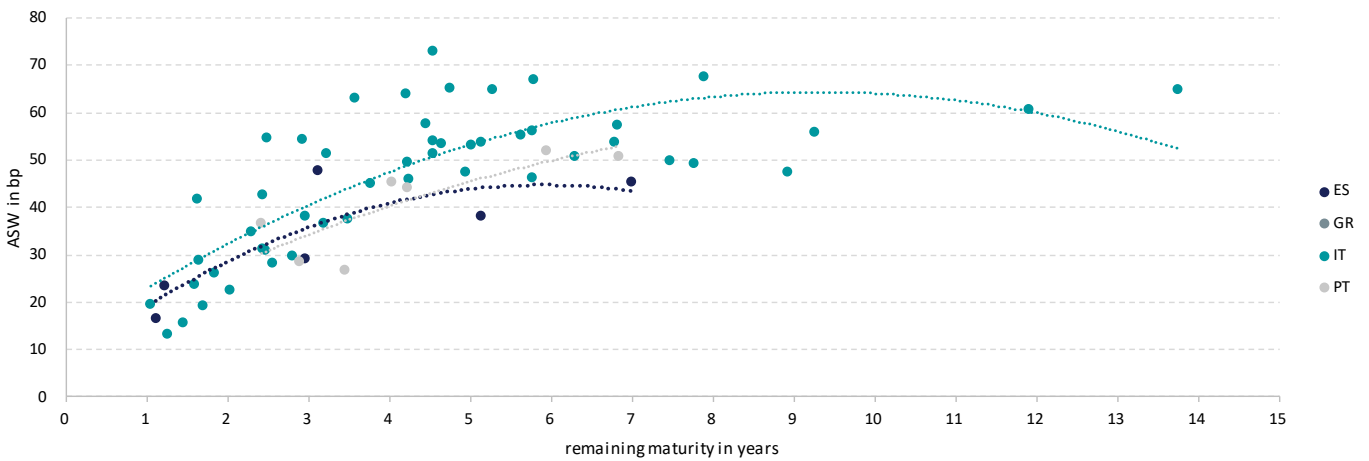


Source: market data, Bloomberg, NORD/LB Floor Research ¹Time to maturity 1 ≤ y ≤ 15

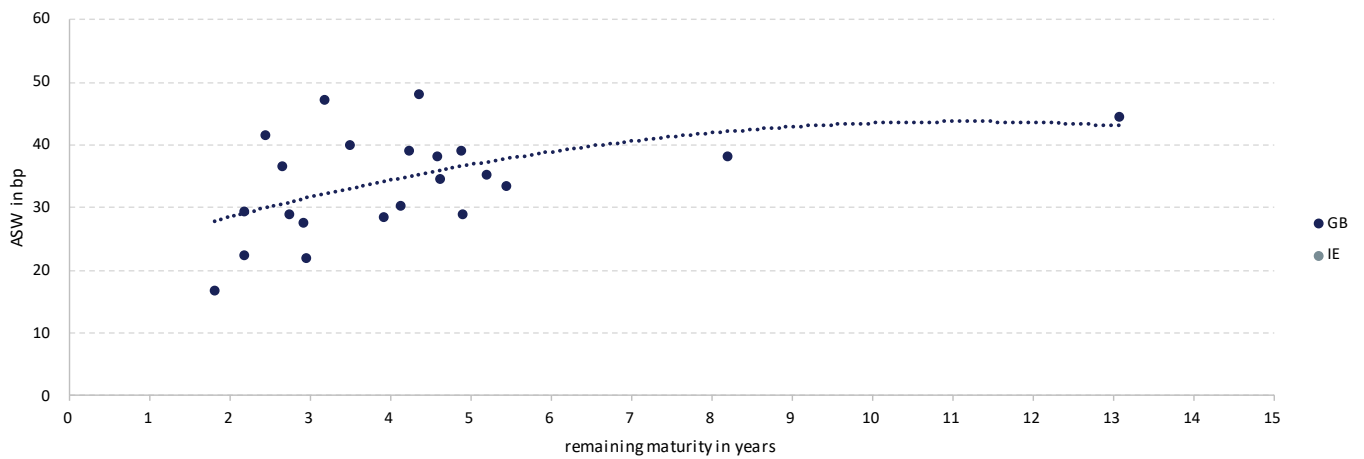
Nordics 🇩🇰 🇸🇪 🇫🇮 🇳🇴 🇮🇸



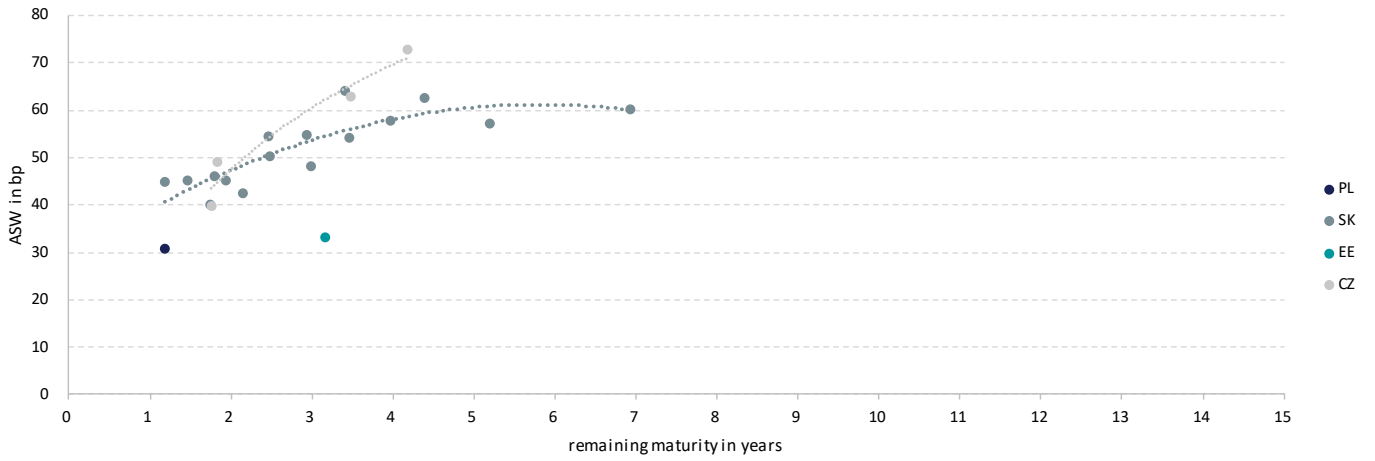
Southern Europe 🇪🇸 🇬🇷 🇮🇹 🇵🇹



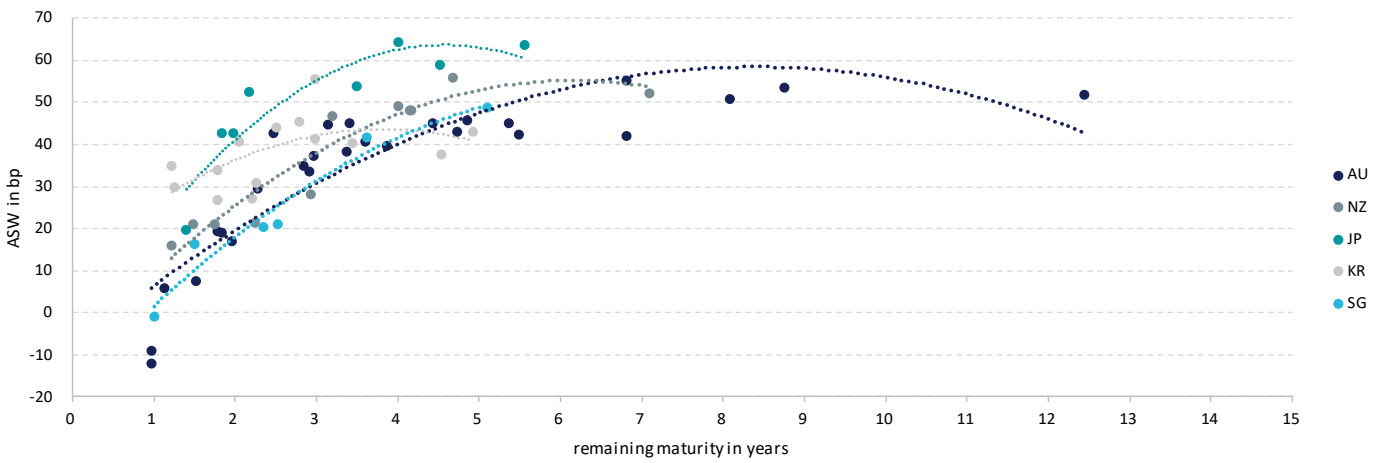
UK/IE 🇬🇧 🇮🇪



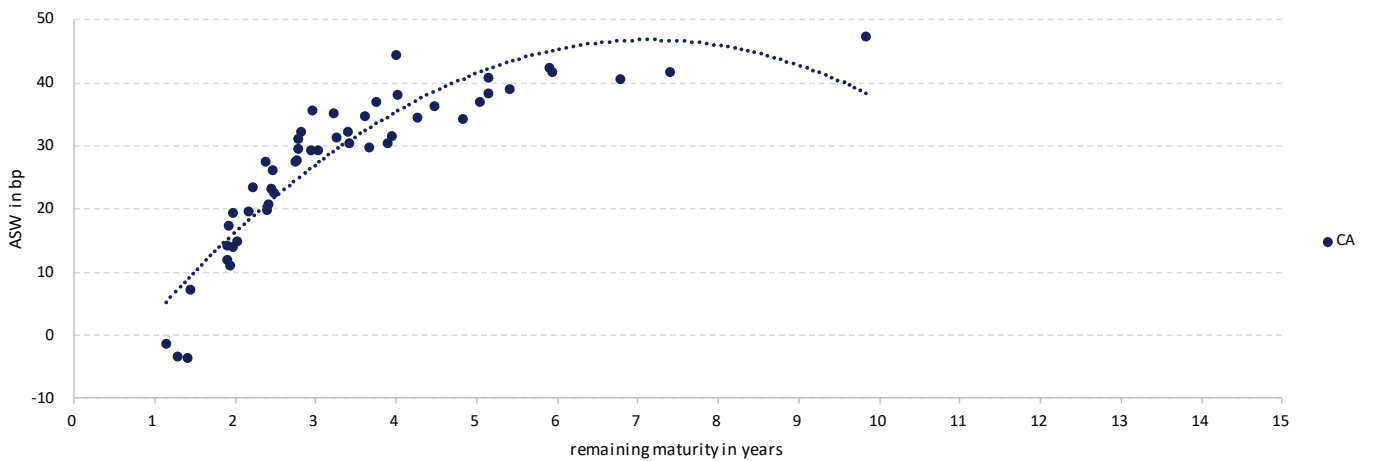
CEE 



APAC 



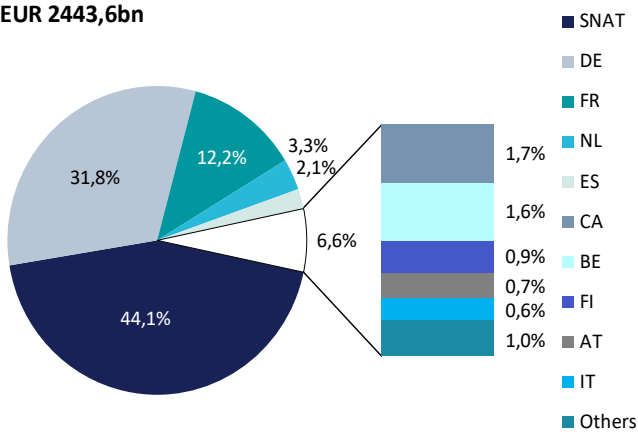
North America 



Charts & Figures SSA/Public Issuers

Outstanding volume (bmk)

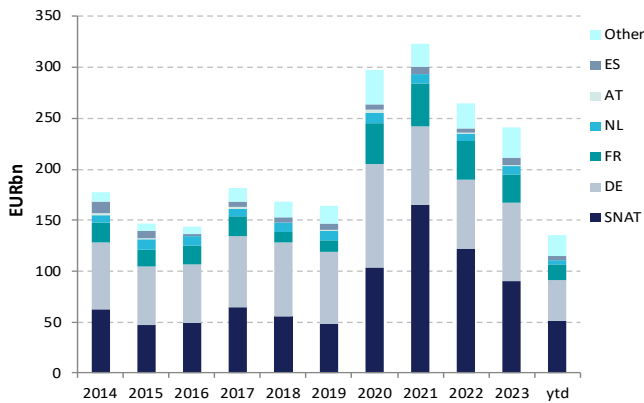
EUR 2443,6bn



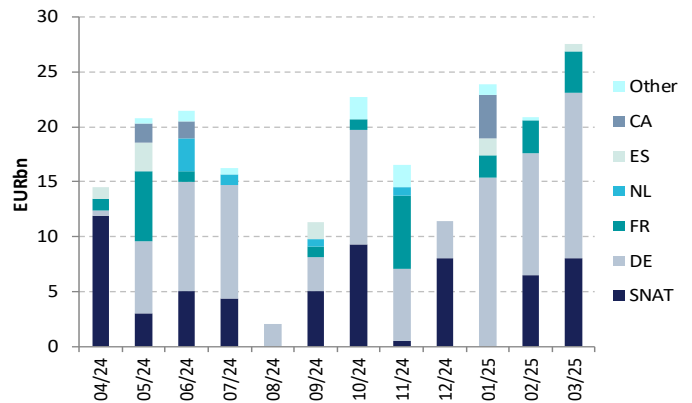
Top 10 countries (bmk)

Country	Vol. (€bn)	No. of bonds	ØVol. (€bn)	Vol. weight. ØMod. Dur.
SNAT	1.077,7	233	4,6	8,0
DE	775,9	578	1,3	6,2
FR	297,4	200	1,5	5,9
NL	80,1	68	1,2	6,5
ES	51,0	69	0,7	4,7
CA	40,3	28	1,4	4,6
BE	40,3	43	0,9	10,6
FI	22,9	24	1,0	4,7
AT	17,8	22	0,8	4,2
IT	15,2	19	0,8	4,3

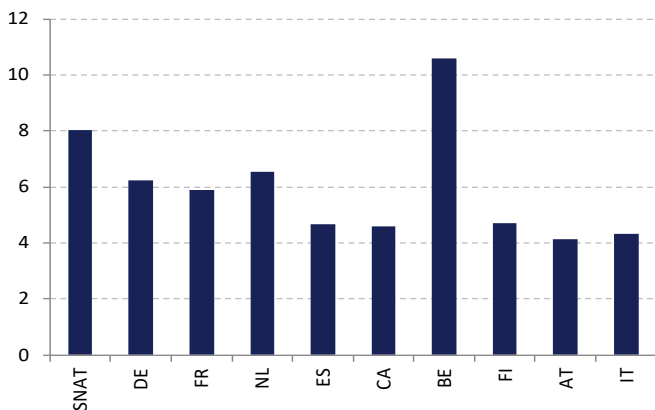
Issue volume by year (bmk)



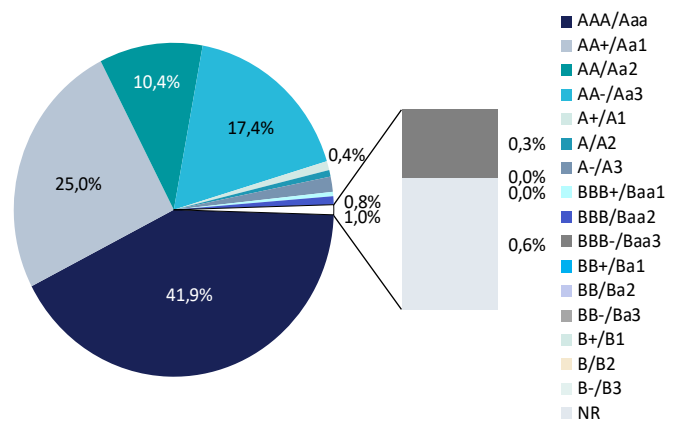
Maturities next 12 months (bmk)



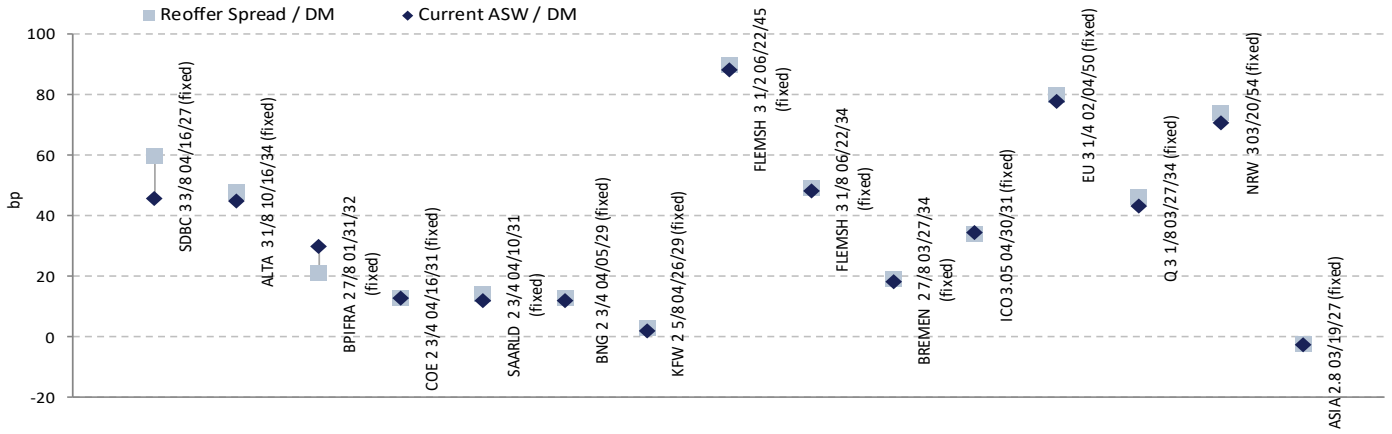
Avg. mod. duration by country (vol. weighted)



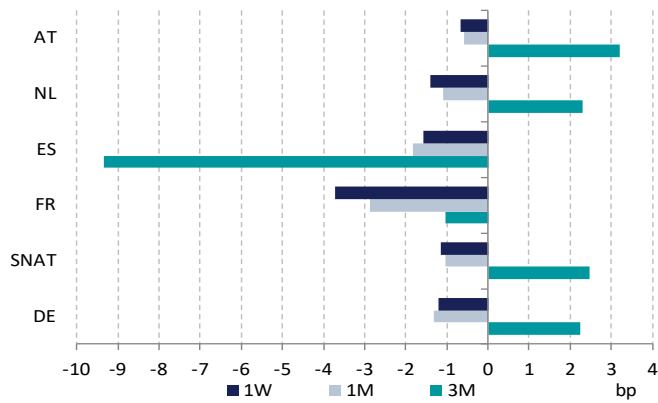
Rating distribution (vol. weighted)



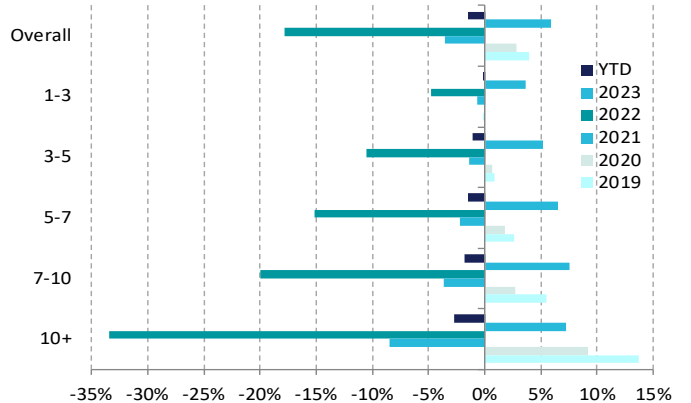
Spread development (last 15 issues)



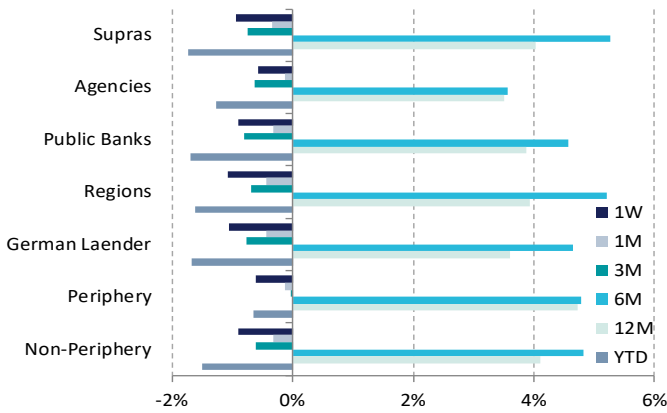
Spread development by country



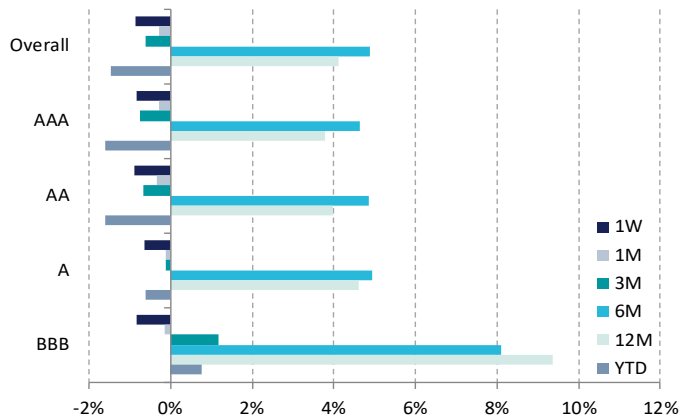
Performance (total return)



Performance (total return) by segments

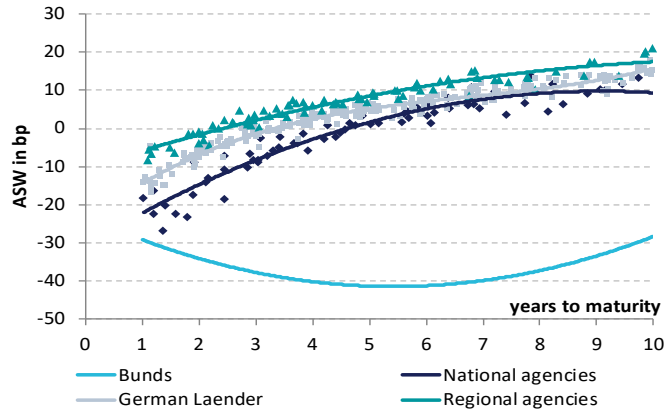


Performance (total return) by rating

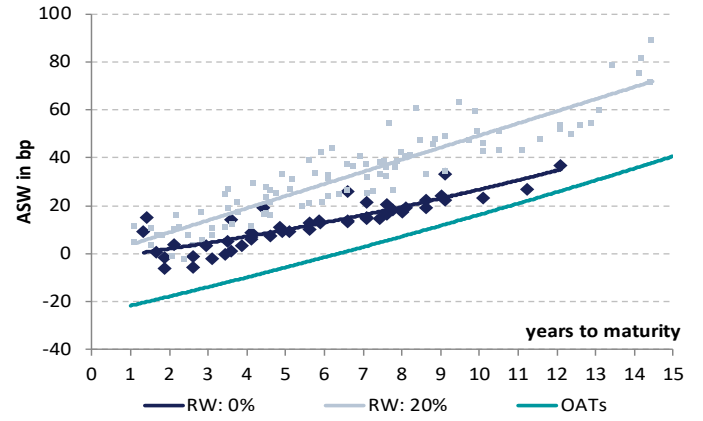


Source: Bloomberg, NORD/LB Floor Research

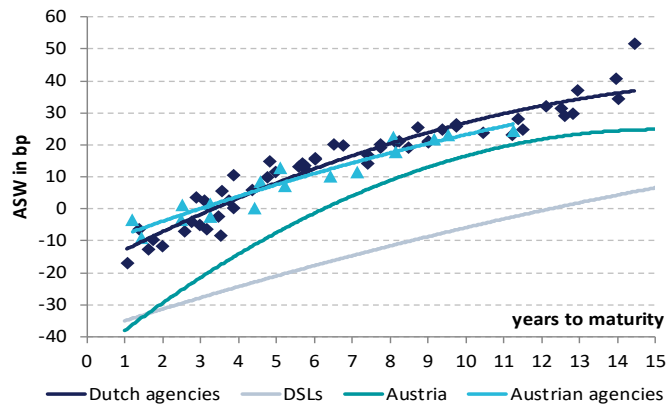
Germany (by segments)



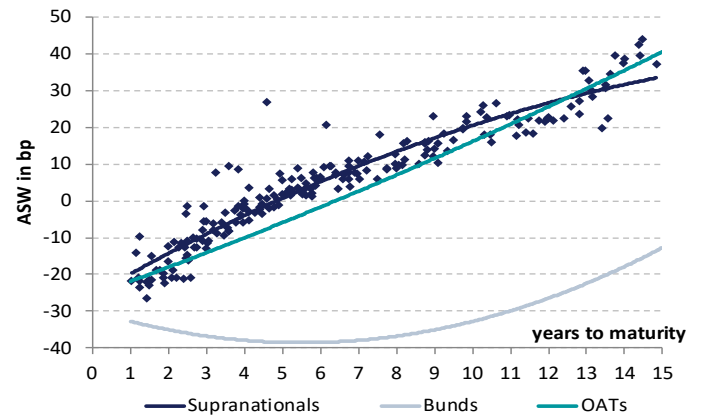
France (by risk weight)



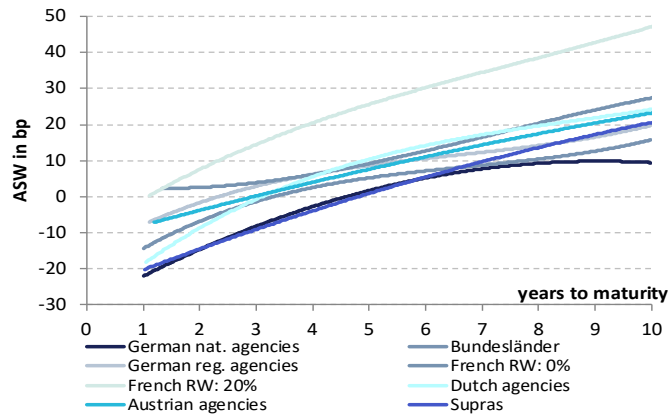
Netherlands & Austria



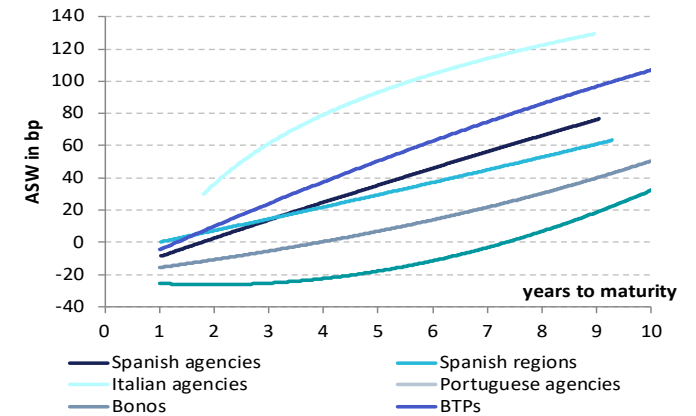
Supranationals



Core



Periphery



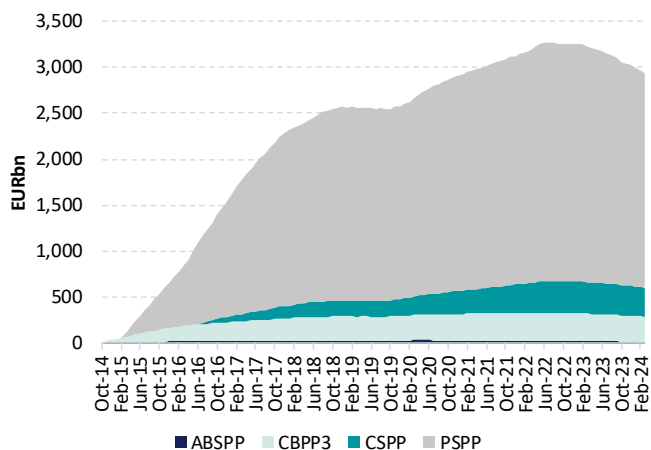
Source: Bloomberg, NORD/LB Floor Research

ECB tracker

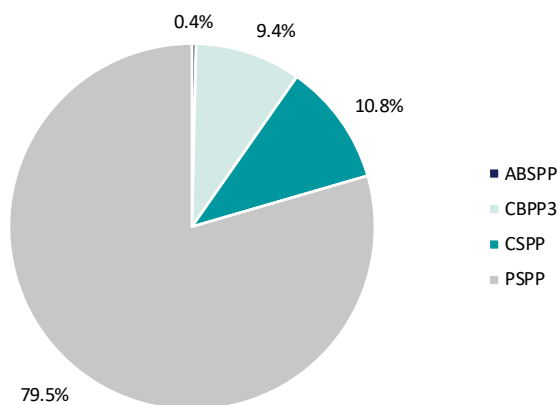
Asset Purchase Programme (APP)

	ABSPP	CBPP3	CSPP	PSPP	APP
Feb-24	12,546	279,061	318,688	2,356,971	2,967,266
Mar-24	10,539	274,499	316,207	2,330,298	2,931,543
Δ	-1,978	-4,434	-2,295	-22,455	-31,162

Portfolio development

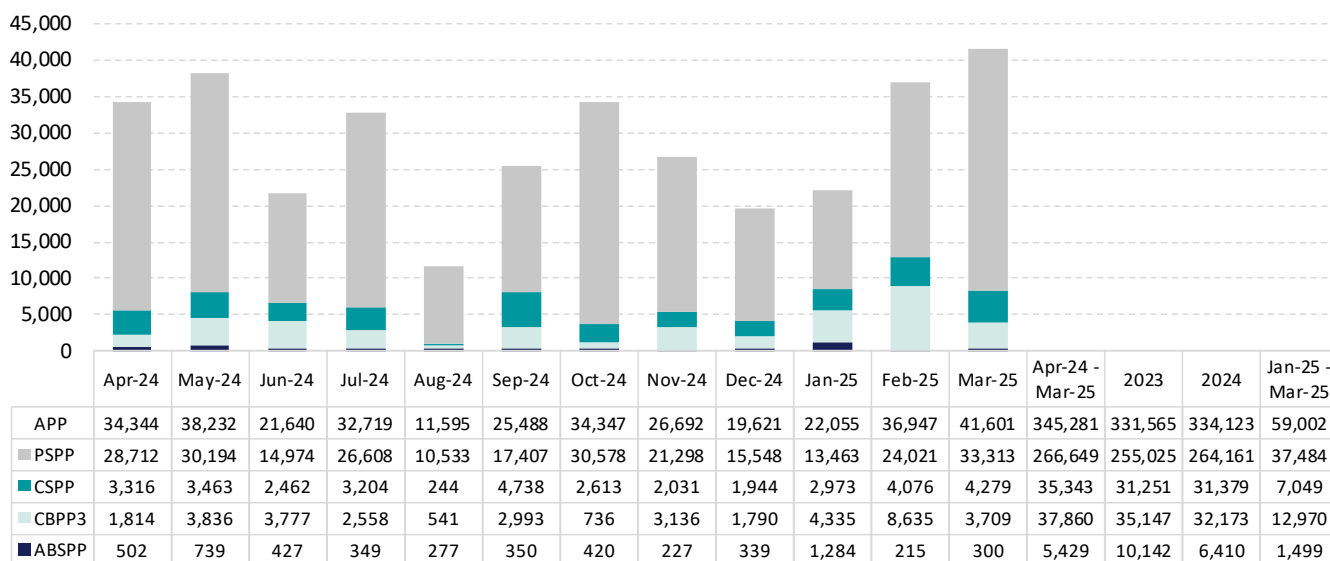


Portfolio structure



Source: ECB, NORD/LB Floor Research

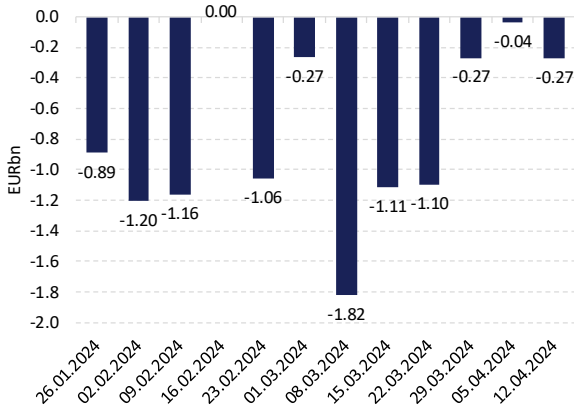
Expected monthly redemptions (in EURm)



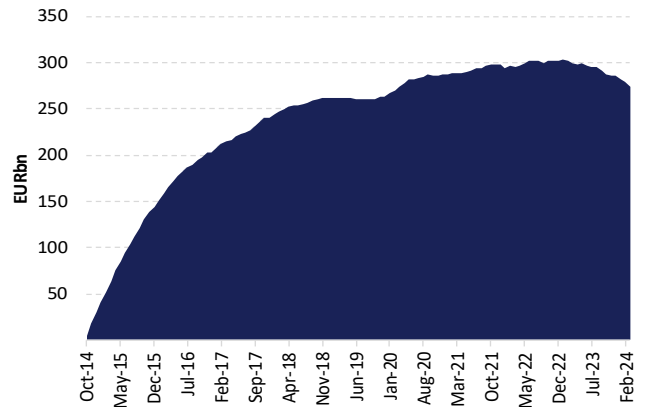
Source: ECB, Bloomberg, NORD/LB Floor Research

Covered Bond Purchase Programme 3 (CBPP3)

Weekly purchases

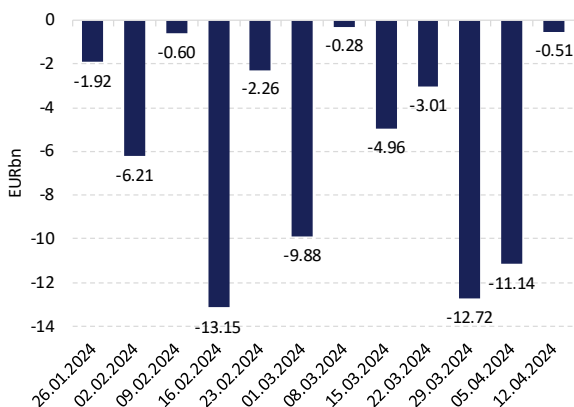


Development of CBPP3 volume

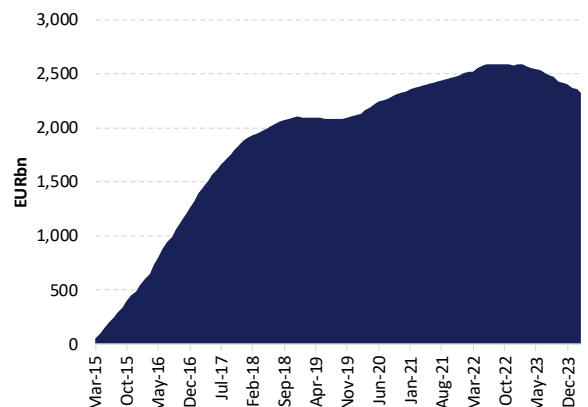


Public Sector Purchase Programme (PSPP)

Weekly purchases



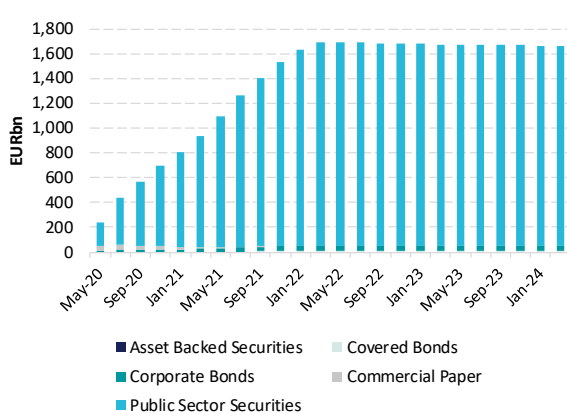
Development of PSPP volume



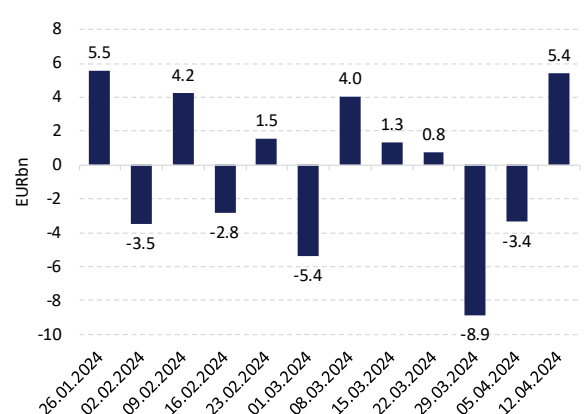
Source: ECB, Bloomberg, NORD/LB Floor Research

Pandemic Emergency Purchase Programme (PEPP)

Portfolio development



Weekly purchases



Source: ECB, Bloomberg, NORD/LB Floor Research

Appendix

Overview of latest Covered Bond & SSA View editions

Publication	Topics
13/2024 ♦ 10 April	<ul style="list-style-type: none"> A review of Q1 in the Covered Bond segment A review of Q1 in the SSA segment
12/2024 ♦ 27 March	<ul style="list-style-type: none"> Maybank: New covered bond issuer from Singapore A closer look at Export Development Canada (Ticker: EDC)
11/2024 ♦ 20 March	<ul style="list-style-type: none"> Covered bond jurisdictions “Down Under” in the spotlight Collective Action Clauses (CACs) – An (Italian) update
10/2024 ♦ 13 March	<ul style="list-style-type: none"> Spotlight on Pfandbrief issuers in the savings bank sector NGEU: Green Bond Dashboard
09/2024 ♦ 06 March	<ul style="list-style-type: none"> Transparency requirements §28 PfandBG Q4/2023 Current LCR classification for our SSA coverage
08/2024 ♦ 28 February	<ul style="list-style-type: none"> New UK player on the EUR covered bond market Teaser: Issuer Guide – Non-European supras (MDBs) 2024
07/2024 ♦ 21 February	<ul style="list-style-type: none"> Covered bond jurisdictions in the spotlight: A look at Austria Hope for hybrids? New SSA sub-asset class for MDBs
06/2024 ♦ 14 February	<ul style="list-style-type: none"> Development of the German property market (vdp Index) Update: Joint Laender (Ticker: LANDER)
05/2024 ♦ 07 February	<ul style="list-style-type: none"> January 2024: Record start to the new covered bond year SSA January recap: issuance volume at record level
04/2024 ♦ 31 January	<ul style="list-style-type: none"> The Pfandbrief market at the start of 2024: caution thrown to the wind Teaser: Issuer Guide – Other European Agencies 2024
03/2024 ♦ 24 January	<ul style="list-style-type: none"> The “V” in the LTV calculation: Differing approaches persist despite EU Directive 28th meeting of the Stability Council (December 2023)
02/2024 ♦ 17 January	<ul style="list-style-type: none"> Pfandbrief market: potential newcomer Evangelische Bank Review: EUR-ESG benchmarks 2023 in the SSA segment
01/2024 ♦ 10 January	<ul style="list-style-type: none"> ECB: Annual review of 2023 – no end to high rates? Covered Bonds: Annual review of 2023 SSA: Annual review of 2023
37/2023 ♦ 13 December	<ul style="list-style-type: none"> Our view of the covered bond market heading into 2024 SSA outlook 2024: ECB, NGEU and the debt brake in Germany
36/2023 ♦ 06 December	<ul style="list-style-type: none"> The covered bond universe of Moodys: an overview Teaser: Issuer Guide – Nordic Agencies 2023
35/2023 ♦ 29 November	<ul style="list-style-type: none"> ESG covered bonds: a look at the supply side Current risk weight of supranationals & agencies
34/2023 ♦ 22 November	<ul style="list-style-type: none"> Transparency requirements §28 PfandBG Q3/2023 Teaser: Issuer Guide – German Agencies 2023

Appendix Publication overview

Covered Bonds:

[Issuer Guide – Covered Bonds 2023](#)

[Covered Bond Laws](#)

[Covered Bond Directive: Impact on risk weights and LCR levels](#)

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

[Transparency requirements §28 PfandBG Q4/2023](#) (quarterly update)

[Transparency requirements §28 PfandBG Q4/2023 Sparkassen](#) (quarterly update)

SSA/Public Issuers:

[Issuer Guide – German Laender 2023](#)

[Issuer Guide – German Agencies 2023](#)

[Issuer Guide – Canadian Provinces & Territories 2024](#)

[Issuer Guide – European Supranationals 2023](#)

[Issuer Guide – French Agencies 2023](#)

[Issuer Guide – Dutch Agencies 2023](#)

[Issuer Guide – Non-European Supranationals \(MDBs\) 2024](#)

[Beyond Bundeslaender: Belgium](#)

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

[Beyond Bundeslaender: Spanish regions](#)

Fixed Income Specials:

[ESG-Update 2023](#)

[ECB decision: Between interest rate-Scylla and inflation-Charybdis](#)

Appendix

Contacts at NORD/LB

Floor Research



Dr Frederik Kunze

Covered Bonds/Banks

+49 172 354 8977

frederik.kunze@nordlb.de



Dr Norman Rudschuck, CIAA

SSA/Public Issuers

+49 152 090 24094

norman.rudschuck@nordlb.de



Lukas Kühne

Covered Bonds/Banks

+49 176 152 90932

lukas.kuehne@nordlb.de



Christian Ilchmann

SSA/Public Issuers

+49 157 851 64976

christian.ilchmann@nordlb.de



Lukas-Finn Frese

SSA/Public Issuers

+49 176 152 89759

lukas-finn.frese@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

Origination & Syndicate

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

Treasury

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

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

Sales Wholesale Customers

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

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 NORDEUTSCHE 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 Finanzdienstleistungsaufsicht; 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: 17 April 2024 (08:45)