



Covered Bond & SSA View

NORD/LB Floor Research

6 March 2024 ♦ 09/2024

Marketing communication (see disclaimer on the last pages)

Agenda

Market overview	
Covered Bonds	3
SSA/Public Issuers	6
Transparency requirements §28 PfandBG Q4/2023	10
Current LCR classification for our SSA coverage	14
Charts & Figures	
Covered Bonds	26
SSA/Public Issuers	32
ECB tracker	
Asset Purchase Programme (APP)	35
Pandemic Emergency Purchase Programme (PEPP)	36
Overview of latest Covered Bond & SSA View editions	37
Publication overview	38
Contacts at NORD/LB	39

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

NORD/LB:
[Floor Research](#)

NORD/LB:
[Covered Bond Research](#)

NORD/LB:
[SSA/Public Issuers Research](#)

Bloomberg:
[RESP NRDR <GO>](#)

Market overview

Covered Bonds

Authors: Dr Frederik Kunze // Lukas Kühne

Primary market: A promising start to March!

After a highly active February, in which a wide range of issuers from various jurisdictions appeared on the market, we have now moved on to March. However, just before the end of the month, DZ HYP slipped in one final deal in February, approaching investors with a fresh benchmark worth EUR 500m (10.0y; WNG) in the process. Following initial guidance in the area of ms +41bp, the final spread ultimately came in at ms +35bp. At the start of the new trading week, it was another Italian issuer who made the first appearance of the new month of March. After Iccrea Banca last week (cf. [Issuer View](#)), Credit Agricole Italia came to the market with a fresh bond in the amount of EUR 1.0bn, which was allocated to the “long” maturity segment (12.0y). The deal generated a final order book of EUR 4.6bn and a final spread of ms +85bp (-5bp versus original guidance). The same evening, we were able to finally celebrate the long-awaited arrival of the first Canadian issuer to the EUR benchmark segment in 2024. And this in several respects: Toronto-Dominion Bank (TD Bank) chose a triple tranche deal made up of a floater (EUR 2.0bn; 3.0y) and two bonds with fixed coupons (EUR 2.5bn; 5.0y; and EUR 1.0bn; 10.0y). Further below, we have included a paragraph covering the Canadian EUR Covered Bond market in this article, in which we announce a slight adjustment to our supply forecast for this jurisdiction in the issuance year 2024. On the second trading day of the week, we welcomed three new EUR benchmarks in one fell swoop. The first of these new deals was issued by BayernLB (EUR 500m; 4.7y; WNG), followed by DNB Boligkreditt from Norway (EUR 1.25bn; 5.0y). The final issuer in this trio to approach investors was Erste Group Bank from Austria with a Covered Bond in the amount of EUR 1.0bn and a term to maturity of short 10 years.

Issuer	Country	Timing	ISIN	Maturity	Size	Spread	Rating	ESG
Erste Group Bank	AT	05.03.	AT0000A3B0X2	9.8y	1.00bn	ms +55bp	- / Aaa / -	-
DNB Boligkreditt	NO	05.03.	XS2782809938	5.0y	1.25bn	ms +27bp	- / Aaa / AAA	-
Bayerische Landesbank	DE	05.03.	XS2782184902	4.7y	0.50bn	ms +22bp	- / Aaa / -	-
Toronto-Dominion Bank	CA	04.03.	XS2782119916	9.9y	1.00bn	ms +56bp	AAA / Aaa / -	-
Toronto-Dominion Bank	CA	04.03.	XS2782117464	4.9y	2.50bn	ms +43bp	AAA / Aaa / -	-
Credit Agricole Italia	IT	04.03.	IT0005585622	12.0y	1.00bn	ms +85bp	- / Aa3 / -	-
DZ HYP	DE	28.02.	DE000A351XV5	10.0y	0.50bn	ms +35bp	- / Aaa / AAA	-

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

Secondary market: Market environment ensures continued good performance

The secondary market continued to perform strongly over recent trading days, meaning that newly placed deals tightened further. This development was driven by high demand on the primary market, manifesting in significant oversubscription ratios and the occasional negative new issue premium. In our view, the spread trend will continue to be primarily driven by investors from the real money segment, in addition to the demand from “fast money accounts”. With the current market situation, there is no expectation of a change to the positive mood on the Covered Bond market at the moment. On balance, we certainly see potential for spreads to narrow in the medium and long term.

Fitch I: Loan losses on commercial properties remain high for German banks

In their latest report on the commercial real estate (CRE) market in Germany, the rating experts at Fitch have outlined their expectations that loan losses from CRE business will be a cause for concern on the part of German banks in both 2024 and 2025. However, Fitch also emphasises that the viability ratings of banks have a certain amount of leeway to withstand weaker asset quality. At the same time, the expected credit losses can be better cushioned by a structurally improved profitability of the banks. However, it is also expected that this leeway will be increasingly constricted due to the fact that German banks have a high CRE exposure (loans in the amount of EUR 567bn) in comparison with other countries. This development has been in evidence since 2015 in particular, when German banks increasingly turned to CRE lending in search of alternative income opportunities at a time when net interest margins were in decline on account of the low interest rate environment. However, Fitch emphasises that German banks will not exceed the thresholds that could lead to downgraded viability ratings in 2024. This is primarily the case because many banks have refinanced a large proportion of their CRE loans by issuing Covered Bonds, which offer cheaper refinancing options compared with many foreign competitors and also mitigate refinancing risks compared with short-term financing. As a further positive point, Fitch notes that the asset quality of German banks outside of the CRE segment is likely to deteriorate only marginally, as the German labour market is still considered to be robust despite the challenging economic landscape.

Fitch II: Leading UK banks benefit from increased profitability

The profitability of leading British banks will remain stable in 2024 and therefore serve as a kind of buffer against risks, as the experts at Fitch have explained in a recently published report. For example, after publication of the annual results for 2023, higher interest rates, low loan impairments and only moderately increased costs are the main reasons for a strong net interest income (NII). However, according to the rating experts' estimates, NII will be lower in the first half of 2024, which can be attributed to higher deposit costs as well as narrower margins on mortgage loans and the prospect of interest rates being cut. Asset quality has so far remained stable despite significantly higher interest rates and weak macroeconomic framework conditions. In this context, Fitch is forecasting a slight deterioration in 2024, as elevated interest rates have a negative impact on the repayment ability of borrowers. However, there are positives to mention as well. For example, UK banks have only a small proportion of CRE exposures across the board. In addition, the strong ratio of profit to risk-weighted assets (RWAs) at British banks (2023: 2.9%, improved from 2.5% in 2022) will again come in at over 2.5% for 2024, according to Fitch. In our opinion, this speaks to the continued high quality of the cover pools of UK Covered Bonds. In the [previous edition](#) of our weekly publication, we published a special article introducing TSB Bank, the newest player in the EUR benchmark segment, in more detail, with the aim of evaluating the EUR Covered Bond market in the UK.

Canada: Adjusted issuance forecast to take account of the “weak” start to the year

With Canadian issuers having been extremely active in the market for EUR benchmarks with new bond deals in recent years, we have been surprised by the lack of activity from this jurisdiction so far in the current year. In fact, until the day before yesterday, we had not recorded a single benchmark issue from Canada in 2024. Toronto-Dominion Bank then got the ball rolling by approaching investors with a triple tranche and placed bonds with a volume of EUR 5.5bn on the market. This deal included two bonds with a fixed coupon and one with a variable coupon. In line with the rules of our coverage, we will only be including the two deals with a fixed coupon in our database. These featured issuance volumes of EUR 2.5bn (5.0y) and EUR 1.0bn (10.0y) respectively. The order books appeared to be well filled, meaning that the 5y Covered Bond could be placed at a re-offer spread of ms +43bp and the 10y deal was priced at ms +56bp. We saw a similarly high issuance volume from Canada in August last year, when it was again Toronto-Dominion Bank that took centre stage to place two Covered Bonds with a volume of EUR 2.5bn with investors. Overall, the average issuance volume in 2023 was around EUR 1.5bn, from which it is clear that Canadian issuers tended to place higher-volume deals. In addition to the EUR benchmark segment, Canadian issuers are also active in the Covered Bond market in various other currencies (including the AUD, CAD and USD). Despite the strong start to 2024 on the primary market as a whole, we are now forced to adjust our supply forecast for Canada due to the low level of primary market activities from this jurisdiction so far in 2024. Overall, we now forecast new net supply from Canada in the amount of EUR 12.0bn, which will lead to a negative net supply of EUR -0.5bn when taking into account the pending maturities of EUR 12.5bn. Another aspect informing our decision to revise the fresh supply forecast from Canadian issuers downwards was what we believe to be the restrained development in new mortgage business in Canada.

Market overview

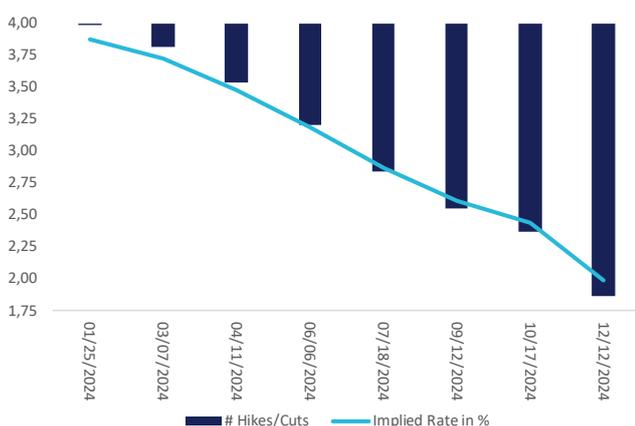
SSA/Public Issuers

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

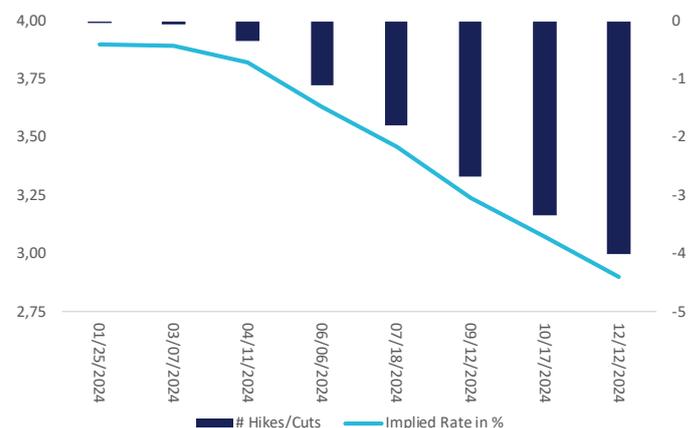
ECB meeting: interest rate cut unlikely in March

Last week we published our [preview for the upcoming ECB Governing Council meeting](#) entitled “Delays in operations or full focus on June?” In other words, the market has so far been of the same opinion that “The train has no brakes” – at least if the market is to be believed, the interest rate cut bandwagon, or train to continue the analogy above, could hardly be stopped in 2024. After all, some people thought they could find happiness in interest rate cuts that, to our minds, were completely premature. For the time being, we would therefore like to take a closer look at the implied interest rate probabilities and their “alignment” with reality. We continue to believe that nothing will happen until the summer, although a first small move in June (-25bp) would be the absolute limit for us. To stay with the railway image: Will there be delays in operations or is caution already required at the platform edge in the near future? There could also be a “strike” in relation to interest rate cuts and one or the other market participant would have bet on premature moves to the downside. It is also clear that if the ECB Governing Council gets on the interest rate cut train and buys its ticket for the journey, there will be no way to buy a return ticket in 2024 or 2025. Everyone is also in agreement for the March meeting: another interest rate pause on the elevated platform is clearly to be expected. The central bankers’ wait-and-see attitude actually has some advantages. Certainly, this standstill should not be mistaken for sitting back. There are plenty of topics to cover. Discussions on the economic situation are likely to be just as spirited. After all, in light of current developments, there are many conceivable outcomes. Following a meeting-by-meeting approach, discourse is once again the most effective means. We are looking forward to the meeting in March with great interest, as the new staff projections will be announced and these are always somewhat explosive in nature. The staff projections have once again gained in importance, as everyone is looking ahead to the data-based first interest rate cut around the middle of the year.

Implied interest rate probabilities on 27 Dec. 2023



Implied interest rate probabilities on 26 Feb. 2024



KfW Business Cycle Compass: grounds for optimism after a difficult winter?

Every quarter, KfW forecasts the change in GDP and inflation (HICP) in Germany and the euro area in its Business Cycle Compass. In its latest analysis from 23 February, the promotional bank assumes that German economic growth is likely to stagnate in Q1/2024. In the previous quarter, real GDP fell by -0.3%, having previously stagnated on average over the course of over a whole year. A significant decline in investment in machinery and equipment (-3.5%) decisively contributed to the shrinking economic output at the end of 2023. In this segment, KfW argues that the end of the environmental bonus for the purchase of for commercial used electric vehicles at the end of August 2023 had a significant impact, as many companies conducted forward investments which therefore did not materialise in the subsequent period. In 2023, there was also a GDP contraction rate of -0.3% for the year as a whole, with consumption and residential construction in particular putting the brakes on annual real growth. For Q1/2024, however, KfW is forecasting stagnation, but also emphasises the possibility of another minor GDP contraction, bringing the risk of a technical recession in the winter half-year within the realms of possibility. In addition to weak monthly indicators in the producing and retail turnover sectors, the current economic environment is being negatively impacted by high illness rates in companies as well as (ongoing) strikes in the railway and aviation sector. However, the economy is likely to gain speed again over the course of the year. A slight increase in GDP of +0.3% is expected for 2024 as a whole. The unfavourable start to the year prompted KfW to revise its previous forecast of +0.6% downwards. However, falling inflation, rising nominal wages, the stable labour market and recovering global trade provide the conditions for a recovery induced by private consumption and exports and therefore positive economic growth. This is likely to continue in 2025: German GDP is forecast to increase by +1.2% next year. Given the numerous crises and challenges, including in particular transitioning the economy and society to carbon neutrality, the return to growth this year and next offers some reasons to be cheerful. According to the Ecological Price Tag for GDP, introduced by KfW in the autumn of 2022, a further reduction in greenhouse gas (GHG) emissions can be expected. The annual caps on GHG emissions newly introduced for the current decade under the amendment to the Federal Climate Change Act will presumably be met in the forecast period covering 2023–2025. In terms of the inflation rate, it can be stated that price pressure across the economy is easing further in line with expectations. In this context, inflation in Germany, as measured by the year-on-year variation of the Harmonised Index of Consumer Prices (HICP), dropped by a significant 0.7 percentage points to 3.1% in January. KfW believes that the scope for companies to increase prices is currently noticeably limited due to the economic weakness. For this reason, an average inflation rate in Germany of +2.5% is assumed for 2024. Annual inflation will likely reach the monetary policy target of +2.0% again in 2025. Risks in relation to higher than expected inflation are centred around the continued fragile geopolitical environment and service inflation stubbornly persisting at higher level than anticipated. With regard to the economy in the euro area, KfW expects economic growth in 2024 to be similar to the previous year at +0.6%. After a sluggish start in Q1/2024, the pace is likely to pick up over the course of the year. The ECB's monetary policy turnaround this year and the high growth rates in southern European countries are key drivers of this development. With regard to inflation in the eurozone, KfW continues to forecast a value of +2.3%.

CEB: preliminary results for 2023 published

The Council of Europe Development Bank (CEB, ticker: COE) published its preliminary business results for 2023 at the end of January 2024. Last year, the multilateral development bank fully implemented its [Strategic Framework 2023-2027](#) for the first time. A total of EUR 4.1bn in new loans was approved, including EUR 3.7bn in accordance with the principles of the framework. In line with the CEB's mandate, 48 new social investments focused on improving people's living environment and creating more inclusive and resilient societies in the member countries. At the meeting of the Governing Board in November 2023, the CEB approved its first loan to Ukraine in the amount of EUR 100m, after the country only joined the CEB in June 2023. The CEB's preliminary unaudited results for 2023 show a net financial profit of EUR 108.8m, an increase of +36.6% year on year. This increase is mainly due to the high interest rate environment. The core earnings, which excludes volatile elements such as risk costs and the valuation of financial instruments, stood at EUR 116.2m at the end of 2023. This in turn corresponds to an increase of +39.1% compared with year-end 2022. The preliminary figures also show that the CEB has complied with all the ratios set out in its risk management framework. As in previous years, no credit default, credit risk events or late payment was recorded during the reporting period. On the funding side, the CEB continued to be active primarily as an issuer of social bonds. To support its social operations, a total of six Social Inclusion Bonds (SIBs) with a total volume of EUR 2.3bn were successfully issued across five different currencies. This included a EUR 1.0bn benchmark bond in the seven-year maturity segment, which was issued in April 2023. The social bond carries a coupon of 2.875% and has a current yield of around 2.9% as at 4 March 2024. Thanks to its strong loan performance, improved capitalisation and lower credit risk, as well as its increasing political relevance, the CEB regained its full "AAA" rating in 2023. The official financial statements for 2023 are expected to be submitted to the Governing Board for approval in April 2024.

KBN: larger market share and profitable growth in Q4/2023

The Norwegian municipal financier Kommunalbanken (ticker: KBN) presented its results for Q4/2023 in mid-February 2024. According to the press release, the bank's lending grew by NOK 26bn (equivalent to around EUR 2.3bn) in 2023, while its market share also increased to 51.1%. By way of comparison, at the end of 2022, KBN's market share was still 49.7%. Net interest income rose to NOK 2.1m last year. (2022: NOK 1.9m). Looking at the figures from Q4/2023, core earnings increased to NOK 273m, as against NOK 242m in Q4/2022. The aforementioned increase in net interest income due to higher interest rates was the main reason for the growth in core earnings. In turn, profit increased to NOK 566m (Q4/2022: NOK 224m). Jannicke Trumpy Granquist, CEO of KBN, summarised the quarter and the year as a whole as follows: "In 2023, we have increased our market share, increased interest income and had good growth in green lending. Now that the figures from the IV. quarter are clear, we can state that 2023 was a very positive year for KBN."

Primary market

There are not too many deals in the SSA segment to report on from the past trading week. The flood of emissions since the beginning of the year has now noticeably lost momentum. The upcoming ECB meeting on Thursday will also play its part, and as usual we published our forecast in detail in our [ECB Preview of 27 February](#), in addition to a brief overview at the beginning of this [Market Overview](#) section. Nevertheless, this section usually fills up as if by magic, as this week we have three benchmarks, a tap, four mandates and the results of the last EU bond auction all to discuss. The marketing phase for the mandate of a fresh benchmark with a volume of EUR 1bn from Schleswig-Holstein (ticker: SCHHOL), which we already commented on in the previous edition, started right away on Wednesday. The bond in the seven-year maturity segment with a coupon of 2.875% was brought to investors at ms +13bp in line with guidance. The order book of EUR 1.15bn suggests that the North German state's first new issue of 2024 was spot on. Staying in Germany: the state of Hesse (ticker: HESSEN) decided to raise a fresh EUR 1bn with a term of 15 years, which was last chosen by one of the German Laender for a new deal almost three years ago. After an initial guidance of ms +38bp was announced at the beginning of the book-building process, the high demand with a corresponding order book totalling EUR 2.8bn meant that the price was finally successfully tightened by two basis points to ms +36bp. This was already the federal state's third new issue this year. HESSEN has therefore already raised a total of EUR 3bn on the capital market through new issues in 2024. Saxony (ticker: SAXONY) was the third German federal state to complete the trio yesterday (Tuesday). The East Germans ventured on to the trading floor with a fresh EUR 500m (6y) bond. The spread at the end of the marketing phase was ms +8bp (guidance: ms +8bp area). We also have one tap to comment on: the International Development Association (Ticker: IDAWBG) decided to increase its long IDAWBG 3.8% 11/03/2053 by EUR 400m at ms +74bp. As of 5 March, the bond yields 3.4%. We would also like to share with you the results of the latest EU bond auction last Monday: With EU 3.125% 05/12/2028 and EU 3.375% 04/10/2038, two bonds were directly tapped. The bond with the shorter maturity was increased in volume by EUR 2.747bn and the one with the longer maturity by EUR 1.703bn. The bid-to-cover ratios were 1.19x and 1.3x, respectively. Based on the mandates that have been issued, we expect to see the following deals on our screens in the near future: After steering clear of the market for nearly 2.5 years, New Zealand's Auckland Council (ticker: AUCKCN) is once again planning to issue a EUR benchmark in green format based on its own [Sustainable Finance Framework](#), while Île-de-France Mobilités (ticker: IDFMOB) is also planning to issue a EUR benchmark in the green segment. A global investor call and a series of investor meetings are to be arranged for this purpose. Moreover, Berlin (ticker: BERGER) looks set to approach investors with a dual tranche deal comprising a benchmark (30y) and a tap (EUR 500m, WNG, 2028). Finally, the Polish issuer Bank Gospodarstwa Krajowego (ticker: BGOSK) has also issued a mandate for a dual tranche made up of two bonds (8y and 15y), for which the bank is in the process of organising a roadshow and is additionally available for individual investor talks.

Issuer	Country	Timing	ISIN	Maturity	Size	Spread	Rating	ESG
SAXONY	DE	05.03.	DE0001789378	6.0y	0.50bn	ms +8bp	- / - / AAA	-
HESSEN	DE	29.02.	DE000A1RQES0	15.0y	1.00bn	ms +36bp	- / - / AA+	-
SCHHOL	DE	28.02.	DE000SHFM923	7.0y	1.00bn	ms +13bp	AAA / - / -	-

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

Covered Bonds

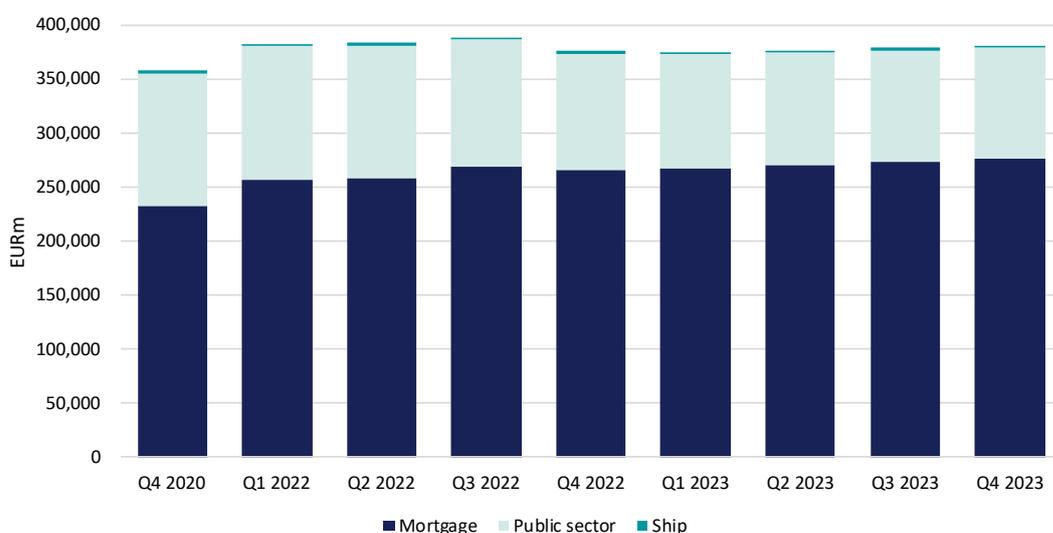
Transparency requirements §28 PfandBG Q4/2023

Authors: Dr Frederik Kunze // Lukas Kühne

Transparency disclosures under §28 PfandBG: A look at the German Pfandbrief market

In the current issuing year, German Pfandbrief banks are once again among the key drivers on the primary market, in terms of both the EUR benchmark segment and the EUR sub-benchmark segment. In our view, delving deeper into the composition of the cover pools of German Pfandbrief issuers also provides a little more clarity about the CRE exposure and its forms among the Pfandbrief issuers analysed. The main focus here is on both the type of cover (residential vs. commercial) and the geographical distribution of the properties. In this context, the transparency requirements of §28 PfandBG currently also represent an important input variable. The reporting obligations for Pfandbrief banks required in this context in accordance with §28 PfandBG, which have been extended once again in the course of implementing the EU Covered Bond Directive, are fulfilled for the majority of issuers by the Association of German Pfandbrief Banks (vdp), as part of the [transparency reports](#) on a quarterly basis. This database also provides us with a very important basis for our NORD/LB Covered Bond Special “[Transparency requirements §28 PfandBG Q4/2023](#)”, which we published at the beginning of this trading week. The cover pool data for 37 mortgage Pfandbrief programmes and 21 public-sector Pfandbrief programmes, as well as two ship Pfandbrief programmes, are presented here. In the quarter under review, we have again manually added the information on Deutsche Bank’s cover pool that is not reported on the vdp website. Below, we summarise the main developments and key messages from the transparency reports at the end of Q4 2023.

Development of outstanding Pfandbrief volume

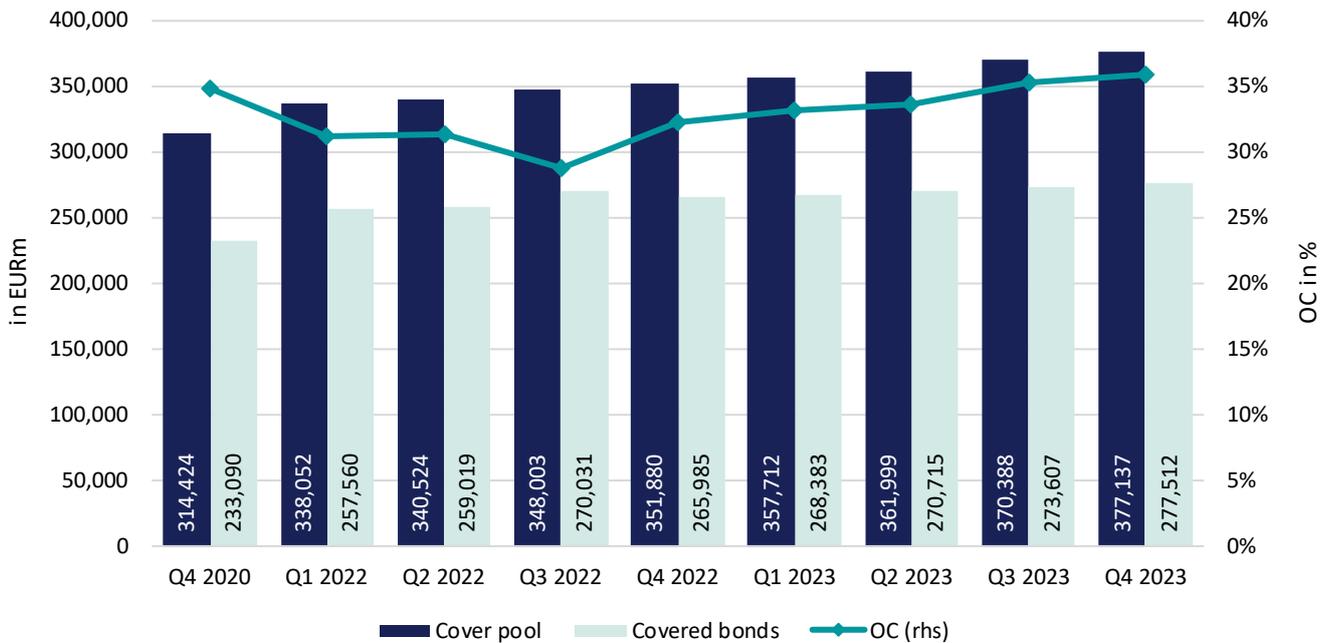


Source: vdp, Deutsche Bank, NORD/LB Floor Research

Pfandbrief circulation: total volume rose once again

At EUR 381.1bn in outstanding Pfandbriefe, the total volume rose again compared with the previous quarter (reporting date: 30 September 2023: EUR 379.4bn). This marks the fourth increase in a row. Compared with the previous quarter, the outstanding mortgage Pfandbrief volume increased by EUR 3.9bn to EUR 277.5bn. The absolute increase of EUR 11.5bn compared with the same quarter in 2022 is quite considerable. The volume of public-sector Pfandbriefe fell again (EUR -1.9m or -1.8% Q/Q) to EUR 102.2bn. The volume of outstanding ship Pfandbriefe (Schipfe) fell by EUR 310m to EUR 1.4bn. At 72.8%, mortgage Pfandbriefe thus continue to account for the largest share of the Pfandbrief market in the definition considered here.

Development of mortgage Pfandbriefe

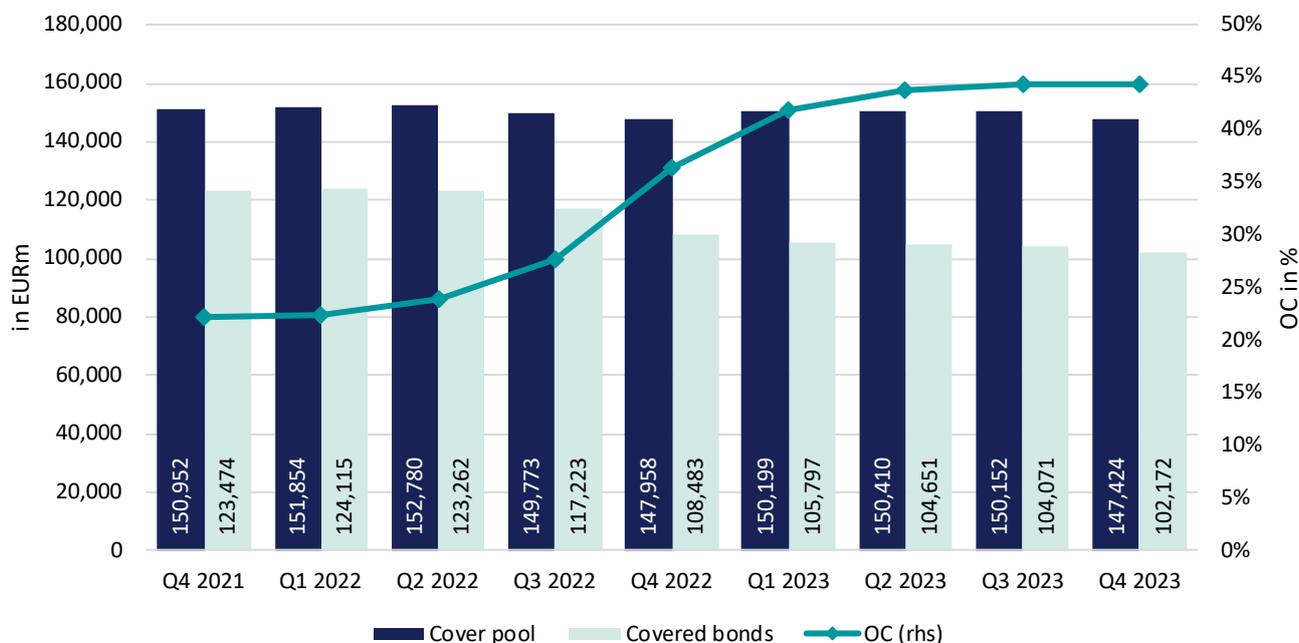


Source: vdp, Deutsche Bank, NORD/LB Floor Research

Mortgage Pfandbriefe: OC ratio increased to 35.9%

As already mentioned, mortgage Pfandbriefe totalled a volume of EUR 277.5bn. This contrasts with a cover pool volume of EUR 370.4bn, resulting in an arithmetical overcollateralisation (OC) ratio of EUR 99.6bn or 35.9% (previous quarter: EUR 96.8bn or 35.4%). In our opinion, this average analysis therefore does not yet indicate a shortage of cover assets that should affect the issuance potential in the coming quarters. On the contrary, issuers were able to raise the OC ratio overall, although the outstanding volume increased. At issuer level, the increase in ING-DiBa's outstanding volume of EUR 4.0bn stands out in the reporting date analysis. Münchener Hypothekenbank also recorded an increase of around EUR 1.5bn. Compared with the previous year, the issuer even recorded an increase of EUR 3.5bn in the outstanding volume. In addition, the significant declines at UniCredit Bank (EUR -740m) and Bayerische Landesbank (EUR -993m) are also worthy of note.

Development of public sector Pfandbriefe



Source: vdp, Deutsche Bank, NORD/LB Floor Research

Public sector Pfandbriefe: Volume decline continues in the fourth quarter

The public sector Pfandbriefe segment maintained its downward trend in the fourth quarter. In the current reporting period, the volume of bonds still amounted to EUR 102.1bn (previous quarter: EUR 104.0bn). The volume of cover assets also fell slightly compared with the previous period and now stands at EUR 147.4bn (previous quarter: EUR 150.2bn). The arithmetical OC ratio therefore comes to 44.3% and is at the same level as the previous quarter. We see the isolated consideration of the growing cover pools as an indication of adequate issuance potential in the future. We at least stand by our assessment that the decline in the outstanding volume of public sector Pfandbriefe will not necessarily continue at the same rate as we have seen in recent years. In our opinion, this should also materialise in the EUR benchmark segment and the EUR sub-benchmark segment. At issuer level, the increase at UniCredit Bank is striking. Outstanding Pfandbriefe increased here by EUR 887m versus the previous quarter. At EUR 2.1bn, the increase compared with the same quarter of the previous year is even more pronounced. By contrast, Landesbank Hessen-Thüringen (EUR -2.1bn), Commerzbank (EUR -1.1bn) and Bayerische Landesbank (EUR -540m) recorded significant declines.

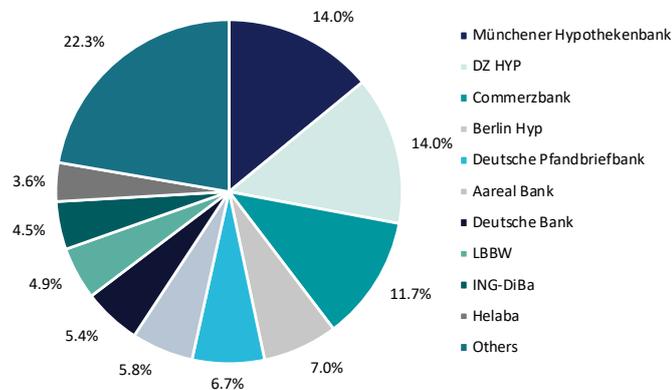
Ship Pfandbriefe remain a niche product

With a share of 0.4% of the total volume, the ship Pfandbriefe segment is still a niche market within the Pfandbrief market. Outstanding ship Pfandbriefe (Schipfe) decreased further from EUR 1,759m in the previous quarter to EUR 1,449m (-17.6% Q/Q). Only two banks, Commerzbank (EUR 49m) and Hamburg Commercial Bank (EUR 1,400m), still have outstanding ship Pfandbriefe in their portfolios.

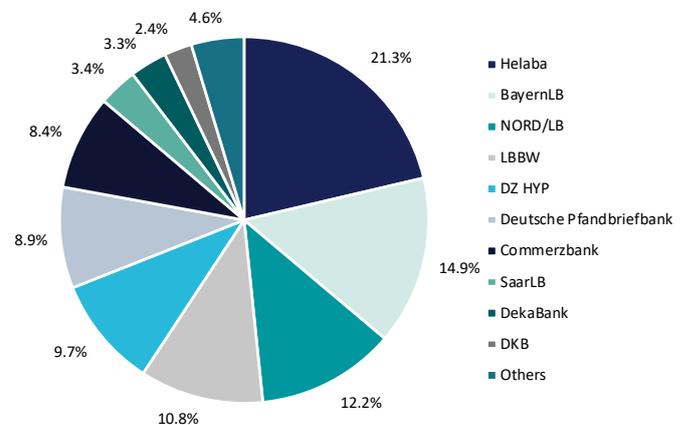
A look at the top 10

In terms of the top 10 largest mortgage Pfandbrief issuers by outstanding volume, Münchener Hypothekenbank and DZ HYP share first place as at the reporting date of 31 December 2023, each with a share of 14.0%, followed by Commerzbank (11.7%) and Berlin Hyp (7.0%). The ten largest issuers account for a total of 77.7% of the outstanding volume. This share is 93.5% for public sector Pfandbriefe. Helaba, BayernLB, NORD/LB, LBBW and DZ HYP continue to occupy the top five spots in this regard, followed by Deutsche Pfandbriefbank and Commerzbank in the next two positions.

Market shares of mortgage Pfandbriefe



Market shares of public sector Pfandbriefe



Source: vdp, Deutsche Bank, NORD/LB Floor Research

Additional information on the German Pfandbrief market as part of our coverage

In addition to the evaluation presented here, which offers more of a general overview, assessments at the level of the individual pools or programmes should not be neglected. For a more detailed description, we again refer you – with regard to the German market – to our [“§28 Study”](#). For example, the overview table on page 5 shows which mortgage cover pools have a high proportion of commercial assets, while the publication additionally looks at the geographical distribution. For a more international view, please refer to the [NORD/LB Issuer Guide Covered Bonds 2023](#). In this publication, we provide a comprehensive overview of all issuers active in the EUR benchmark segment and/or EUR sub-benchmark segment at the time of going to print.

Conclusion

The German Pfandbrief market remained on its growth trajectory in the fourth quarter of 2023, with mortgage Pfandbriefe largely responsible for driving this development. We believe that the §28 PfandBG reports provide a good basis for analysis, allowing deeper insights into the data structure of the cover pools of German Pfandbrief issuers, including information on the proportion of commercial cover pool assets and OC ratios. In our opinion, these are consistently adequate, which means that nothing should stand in the way of further growth on the Pfandbrief market.

SSA/Public Issuers

Current LCR classification for our SSA coverage

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

Objective of the LCR: reduction in liquidity risks for credit institutions

The objective of the LCR is to control the liquidity risk of a credit institution in such a way that sufficient High-Quality Liquid Assets (HQLA) are available at all times in order to survive a significant stress scenario lasting 30 days. It comprises the minimum liquidity buffer, which is required in order to bridge liquidity mismatches of one month in crisis situations. Specifically, the LCR is calculated from the ratio of HQLA to the net payment outflows in the 30-day stress scenario, whereby this ratio must be at least 100%.

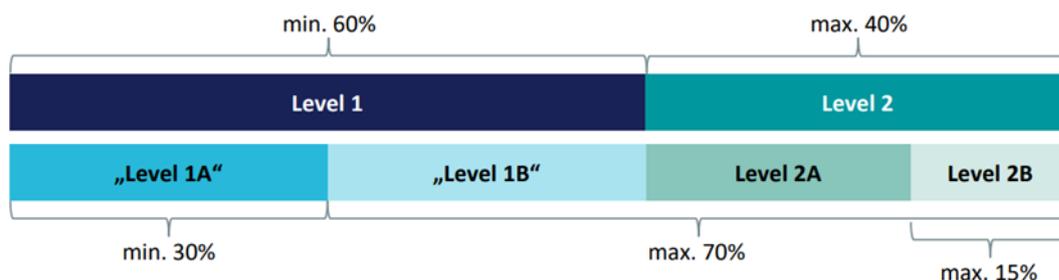
10 October 2014: European Commission publishes LCR Regulation

After there had been a lack of clarity for a long time about the precise definition of HQLA, as well as the EBA recommendation published at the end of 2013 only leading to further uncertainty, the [Liquidity Coverage Requirement Delegated Act](#) was finally published on 10 October 2014. This LCR legal act specified in particular which assets are to be treated as HQLA in the future. A revised version of the LCR Regulation first published in July 2018 took effect from 30 April 2020. This governs the regulation concerning assets from third countries, repo transactions, CIU shares and stocks. An update was also issued on 8 July 2022, which has resolved clashes between the specific liquidity requirements for covered bonds and the existing general liquidity requirements of the [CRR](#).

Categorisation in different liquidity levels

Under the HQLA definition, the legislation, as proposed by the BCBS, divides HQLA into different liquidity levels. Depending on the assigned level, this results in upper and lower limits for certain levels and the application of possible haircuts. On the following two pages we provide a brief overview of asset classification and allocation, before analysing the implications for SSAs. Please note that in market practice, however, a distinction is occasionally made within Level 1 between Level 1A assets and Level 1B assets (Level 1 covered bonds due to obligatory haircut), even if such a linguistic distinction appears neither in the CRR nor the LCR Regulation.

Structure of the LCR portfolio (Art. 17 LCR Regulation)



Source: LCR Regulation, NORD/LB Floor Research

Classification overview

Level 1 assets (Art. 10 LCR Regulation)	Minimum haircut (for shares or units in CIUs)
(a) Coins and bank notes	- (-)
(b) Following exposures to central banks:	- (-)
(i) Assets representing claims on or guaranteed by the ECB or an EEA member state's central bank	
(ii) Assets representing claims on or guaranteed by central banks of third countries (CQS 1)	
(iii) Reserves held by the credit institution in a central bank referred to in (i) and (ii), provided that the credit institution is permitted to withdraw such reserves at any time during stress periods and the conditions for such withdrawal have been specified in an agreement between the relevant competent authority and the ECB or the central bank	
(c) Assets representing claims on or guaranteed by the following central or regional governments, local authorities or public sector entities:	- (5%)
(i) Central government of an EEA member state	
(ii) Central government of a third country (CQS 1)	
(iii) Regional governments or local authorities and PSEs in an EEA member state, provided that they are treated as exposures to the central government of the respective EEA member state (i.e. risk weighting of 0%)	
(iv) Regional governments or local authorities in a third country of the type referred to in (ii), provided that they are treated as exposures to the central government of the third country (i.e. same risk weighting as central government [0%])	
(v) PSEs, provided that they are treated as exposures to the central government of an EEA member state or to one of the regional governments or local authorities referred to in (iii), (i.e. same risk weighting of 0%).	
(d) Following assets:	- (5%)
(i) Assets representing claims on or guaranteed by the central government or the central bank of a third country that has not been assigned a CQS 1 (rating below AA-)	
(ii) Reserves held by the credit institution in a central bank referred to in (i) which meet certain conditions	
(e) Assets issued by credit institutions which meet at least one of the following requirements:	- (5%)
(i) Incorporated in, or established by the central government of, an EEA member state or the regional government or local authority in an EEA member state; the government or local authority is under the legal obligation to protect the economic basis of the credit institution and maintain its financial viability throughout its lifetime, and any exposure to that regional government or local authority, if applicable, is treated as an exposure to the central government (i.e. risk weighting of 0%).	
(ii) The credit institution extends promotional loans as defined in Article 10(1)(e)(ii).	
(f) Qualifying EEA covered bonds which meet all the requirements of Art. 10(f), including issue size at least EUR 500m or equivalent in domestic currency, rating: min. CQS 1 or if no rating, a risk weighting of 10% according to Art. 129(5) CRR.	7% (12%)
(g) Assets representing claims on or guaranteed by multilateral development banks and international organisations (Art. 117(2) and Art. 118 CRR respectively)	- (5%)

NB: CQS = Credit Quality Step (rating class) as defined in CSA

Source: LCR Regulation, NORD/LB Floor Research

Classification overview (continued)

Level 2A assets (Art. 11 LCR Regulation)	Minimum haircut (for shares or units in CIUs)
(a) Assets representing claims on or guaranteed by regional governments, local authorities or PSEs in an EEA member state, which are assigned a risk weighting of 20% according to Art. 115(1)(5) and Art. 116(1)(2)(3) CRR, respectively	15% (20%)
(b) Assets representing claims on or guaranteed by the central government or the central bank of, or by the regional government, local authority or PSE in a third country, which are assigned a risk weighting of 20% according to Art. 114(2) or Art. 115 respectively, or Art. 116	15% (20%)
(c) Qualifying EEA covered bonds which meet all the requirements of Art. 11(c), including issue size at least EUR 250m or equivalent in domestic currency, rating: min. CQS 2 or if no rating, a risk weighting of 20% according to Art. 129(5) CRR	15% (20%)
(d) Qualifying covered bonds from third countries which meet all the requirements of Art. 11(d), including being issued by a credit institution or a 100% subsidiary of a credit institution guaranteeing the issue, issue size at least EUR 500m or equivalent in domestic currency, rating: min. CQS 1 or if no rating, a risk weighting of 10% according to Art. 129(5) CRR	15% (20%)
(e) Corporate debt securities which meet all of the following requirements: (i) CQS 1 (minimum rating AA- or equivalent in the case of a short-term credit assessment) (ii) Issue size of at least EUR 250m or equivalent in domestic currency (iii) Maximum time to maturity of the securities at the time of issuance is 10 years	15% (20%)
Level 2B assets (Art. 12 LCR Regulation)	Minimum haircut (for shares or units in CIUs)
(a) Exposures in the form of ABS under certain conditions (Art. 13 LCR Regulation)	25-35% (30-40%)
(b) Corporate debt securities which meet all of the following requirements: (i) CQS ≤ 3 (ii) Issue size of at least EUR 250m or equivalent in domestic currency (iii) Maximum time to maturity of the securities at the time of issuance is 10 years	50% (55%)
(c) Shares or units, provided that they meet certain conditions (Art. 12(1)(c) LCR Regulation)	50% (55%)
(d) Restricted-use committed liquidity facilities provided by the ECB, the central bank of an EEA member state, or a third country under certain conditions (Art. 14 LCR Regulation)	- (-)
(e) Qualifying EEA covered bonds which meet the requirements of Art. 12(1)(e) LCR Regulation	30% (35%)
(f) Only for religiously observant credit institutions: certain non-interest bearing assets	50% (55%)

NB: CQS = Credit Quality Step (rating class) as defined in CSA

Source: LCR Regulation, NORD/LB Floor Research

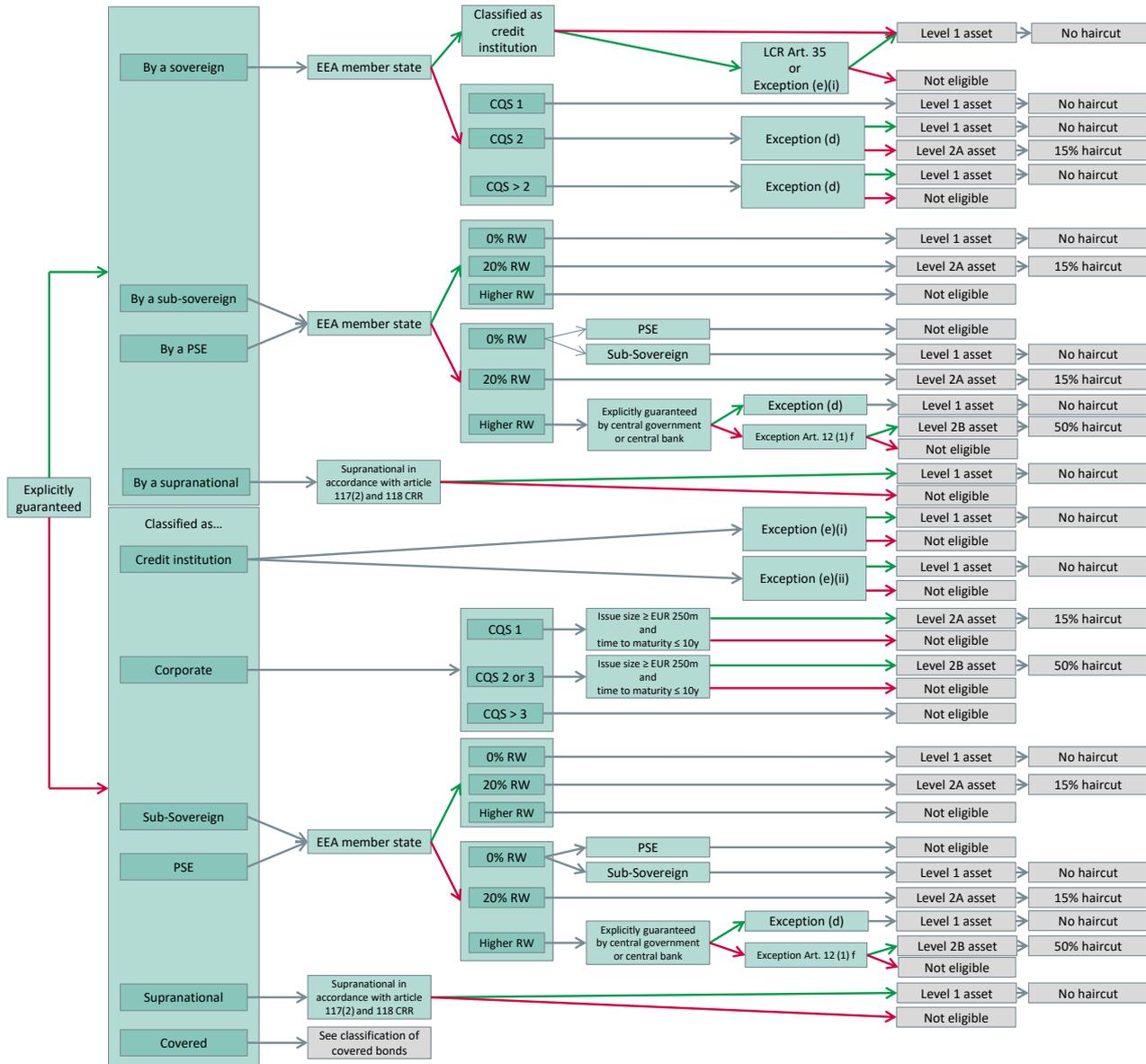
Mapping table (long-term)

Rating class	Fitch	Moody's	S&P
1	AAA to AA-	Aaa to Aa3	AAA to AA-
2	A+ to A-	A1 to A3	A+ to A-
3	BBB+ to BBB-	Baa1 to Baa3	BBB+ to BBB-
4	BB+ to BB-	Ba1 to Ba3	BB+ to BB-
5	B+ to B-	B1 to B3	B+ to B-
6	CCC+ and lower	Caa1 and lower	CCC+ and lower

Source: CRR, NORD/LB Floor Research

NB: Other rating agencies indicated in [Regulation \(EU\) 2016/1799](#)

LCR classification of assets (Articles 10 - 12 LCR Regulation)



NB: stated haircuts do not apply to shares or units in CIUs; PSE = Public Sector Entity; CQS = Credit Quality Step (rating class) as defined in CSA; green = condition met; red = condition not met; grey = tbc
 Source: LCR Regulation, NORD/LB Floor Research

Classification of sovereigns

Bonds from EEA states or bonds from issuers that are explicitly secured by EEA states are classified as Level 1 assets for the purposes of LCR, unless they are classified as a credit institution. For EEA issuers classified as credit institutions, classification as Level 1 assets is possible, provided that Article 35 of the LCR Regulation or Article 10(1)(e) of the LCR Regulation is applicable. Further restrictions apply to non-EEA states. Bonds issued by non-EEA sovereigns have to be rated at least AA-/Aa3 to be eligible as Level 1 assets. Government bonds qualify for a Level 2A classification if a risk weighting of 20% according to the CRR standardised approach can be applied, i.e. if they have a rating of at least A-/A3.

Exemption Art. 10(1)(d) LCR Regulation

However, an exemption is provided for ratings lower than AA-/Aa3 through point (d). Consequently, bonds of corresponding non-EEA states can also be declared a Level 1 asset by a credit institution to cover liquidity outflows in the same currency in which the bond is denominated. However, the eligibility as Level 1 asset is limited to the extent of the calculated net liquidity outflows in periods of stress. If the currency of the bond in question does not correspond to the domestic currency of the relevant country, credit institutions can only classify the bond as a Level 1 asset up to the amount of the credit institution's stressed net liquidity outflows in that foreign currency, corresponding to its operations in the jurisdiction where the liquidity risk is taken on. Exemption (d) also applies to bonds that are guaranteed by countries with ratings lower than AA-/Aa3.

Exemption Article 10(1)(e) LCR Regulation

Article 10(1)(e) of the LCR Regulation makes it possible to classify bonds issued by banks as Level 1 assets. Bank securities are otherwise not regarded as liquid assets, apart from certain covered bonds. This is subject to the condition that exposures to the respective regional governments or local authorities (RGLAs; referred to below as sub-sovereigns) can be treated as exposures to the relevant central government for regulatory purposes. This condition stipulates that a risk weighting of 0% can be applied under the CRR standardised approach.

(i)

This exemption relates to credit institutions established by the central government or a sub-sovereign of an EEA member state, or which have their registered office in an EEA state, and for which a corresponding guarantee also exists. If the central government or the sub-sovereign(s) is/are consequently legally obliged to protect the economic basis and to maintain the financial viability indefinitely, bonds of these credit institutions can be classified as Level 1 assets.

(ii)

This exemption relates to credit institutions that are promotional lenders. They fulfil three criteria:

- Purpose is to advance public policy objectives of the EU, an EEA central government or an EEA sub-sovereign
- Provision of loans on a non-competitive, not-for-profit basis
- Loans granted are directly or indirectly guaranteed to at least 90% by the central government or (a) sub-sovereign(s)

Explicitly guaranteed bank bonds

Under Article 35 of the LCR, bonds from credit institutions with a guarantee from an EEA central government also qualify as Level 1 assets. At a glance, the conditions are as follows:

1. Guarantee by an EEA member state, assuming the guarantee was awarded prior to 30 June 2014 for a maximum amount and the guarantee is direct, explicit, irrevocable and unconditional, and covers payments of interest and principal.
2. If the guarantor is a sub-sovereign of an EEA member state, a 0% risk weighting can be applied and the guarantee conditions as per condition 1 must be met.
3. As long as there is a guarantee, a Level 1 classification is possible. If the guarantee amount is increased after 30 June 2014, the respective bonds are eligible for inclusion only up to the maximum guarantee amount in place prior to 30 June 2014.
4. Bank bonds with an explicit guarantee are treated just like any other state-guaranteed assets in the context of the LCR.
5. If there is a guarantee mechanism in place for a credit institution or its bonds, the mechanism as a whole shall apply as a guarantee for the purposes of this article.

SSAs: classification depends on several factors

The classification for SSAs is relatively complex, as it depends on several steps. If a guarantee is given for an issuer or its bonds, the liquidity category is based on the classification of the guarantor. For agencies with an explicit guarantee from an EEA member state, this means, for example, that they are assigned to Level 1. If no guarantee is given, classification is more complex in that different classifications apply depending on whether the SSA is in regulatory terms a sub-sovereign, public sector entity (PSE), supranational or corporate. In specific cases, the exemptions above may apply.

Classification of supranationals

The classification of supranationals is the simplest of all the SSAs in that claims on or guaranteed by supranationals listed in Articles 117(2) and 118 CRR are assigned to Level 1. Through Article 118(f), they also include financial institutions that were established by at least two EEA member states and whose purpose it is to mobilise funding and provide financial assistance to the benefit of its members that are experiencing or threatened by severe financial problems. If a supranational does not meet this criterion and/or is not mentioned in the two CRR articles, bonds of these institutions may not be classified as either Level 1 or Level 2 assets. Within our coverage, this directly affects EUROFIMA and the South American CAF, for example, as their bonds are not therefore eligible for inclusion as liquid assets.

LCR classification of assets representing claims on or guaranteed by supranationals:**Level 1 issuers**

Issuer (Bloomberg ticker)	CRR Article
International Bank for Reconstruction and Development (IBRD)	Art. 117(2)(a)
International Finance Corporation (IFC)	Art. 117(2)(b)
Inter-American Development Bank (IADB)	Art. 117(2)(c)
Asian Development Bank (ASIA)	Art. 117(2)(d)
African Development Bank (AFDB)	Art. 117(2)(e)
Council of Europe Development Bank (COE)	Art. 117(2)(f)
Nordic Investment Bank (NIB)	Art. 117(2)(g)
Caribbean Development Bank (CARDEV)	Art. 117(2)(h)
European Bank for Reconstruction and Development (EBRD)	Art. 117(2)(i)
European Investment Bank (EIB)	Art. 117(2)(j)
European Investment Fund	Art. 117(2)(k)
Multilateral Investment Guarantee Agency (MULIGA)	Art. 117(2)(l)
International Finance Facility for Immunisation (IFFIM)	Art. 117(2)(m)
Islamic Development Bank (ISDB)	Art. 117(2)(n)
International Development Association	Art. 117(2)(o)
Asian Infrastructure Investment Bank (AIIB)	Art. 117(2)(p)
European Union (EU); European Atomic Energy Community (EURAT)	Art. 118(a)
International Monetary Fund	Art. 118(b)
Bank for International Settlements (BIS)	Art. 118(c)
European Financial Stability Facility (EFSF)	Art. 118(d)
European Stability Mechanism (ESM)	Art. 118(e)

Source: CRR, NORD/LB Floor Research

Classification of PSEs and sub-sovereigns

The classification of PSEs and sub-sovereigns (regional governments and local authorities, RGLAs for short) is almost identical. If an explicit guarantee is given for a bond or an issuer by a central government, classification is the same as for sovereign bonds (see previous pages). If no explicit guarantee is given, classification is carried out primarily on the basis of the issuer's risk weighting. If, in regulatory terms, PSE and sub-sovereign bonds may be treated as exposures to the respective central government and a risk weighting of 0% can be applied, these issuers can accordingly be classified as Level 1. Theoretically, exceptions to this are issuers from outside the EEA where a risk weighting of 0% can be applied but there is no explicit guarantee in place. If it involves a PSE, classification is not possible. Sub-sovereigns can be classified as Level 1. Institutions where a risk weighting of 20% can be applied are classified as Level 2A issuers. Institutions with higher risk weightings that are based outside the EEA and have an explicit guarantee from a central bank or government can be classified as Level 1 issuers, using the conditions of Exemption (d), (see classification of sovereigns). If an explicit guarantee is not in place, a Level 2B classification as defined in Art. 12(1)(f) LCR Regulation remains an option. This refers to institutions which, due to their religious beliefs, are not permitted to hold interest-bearing assets. Bonds of other PSEs and sub-sovereigns for which the risk weighting is higher than 20% under the standardised credit risk approach cannot be classified as liquid assets.

Interim conclusion for sub-sovereigns and PSEs

The CRR, as the relevant European legislative text, frequently makes a distinction in the treatment of risk positions between positions issued within the EU and those issued outside the EU. The grounds for this classification are that the supervisory regimes differ greatly in some cases, and less so in others, from the international Basel III regulations or the European requirements. In order to avoid risks due to inadequate supervisory systems, a higher risk weighting is applied to assets issued outside the EU than to comparable positions of EU member-state origin. A list of countries where supervisory and legal regulations are regarded as being at least equally stringent to those of the EU is provided in the [Commission Implementing Decision \(EU\) 2021/1753](#). The country of origin, e.g. New Zealand, must apply a risk weighting of 0% to its sub-sovereigns, in order for a 0% risk weighting to apply for local investors as well. The New Zealand regulator (RBNZ), for instance, does not do this, but instead assigns its sub-sovereigns a risk weighting of 20% (example: Auckland Council, the country's largest sub-sovereign (ticker: AUCCN)).

PSE definition is gaining in importance

As a result of this classification, the PSE definition, in particular, is gaining in importance within the CRR. The CRR stipulates the basic differentiation, but national supervisory bodies or national laws may define exactly which issuers are to be classified as PSE in the home country. A public sector entity (PSE) is defined in Article 4(1)(8) CRR as:

- “[...] a non-commercial administrative body responsible to central governments or regional or local authorities, or to authorities that exercise the same responsibilities as regional governments and local authorities, or a non-commercial undertaking that is owned by or set up and sponsored by central governments, regional governments or local authorities, and that has explicit guarantee arrangements, and may include self-administered bodies governed by law that are under public supervision.”

PSE list provides (some) clarity

In our opinion, the existing definition is too vague. However, the EBA publishes a [list](#) of public sector entities whose exposure in relation to Art. 116 CRR is defined as identical to RGLAs. PSEs not on this list must nonetheless continue to be examined individually on the basis of the PSE definition.

Level 2 classification possible for non-PSEs

Agencies which are not classified as PSEs and are therefore excluded from this classification path may qualify for Level 2 classification in that if an agency is not a bank, it can be categorised as Level 2A or Level 2B issuer within the scope of the classification of corporates.

Classification of corporates

If agencies are classified as corporates in regulatory terms, there are essentially three different restrictions: ratings, issuance volume and term to maturity.

Classification of individual issuers

To determine the effects on individual issuers, we implement the LCR classification as detailed on the following pages.

LCR classification of assets representing claims on or guaranteed by regions*

Issuer	Current LCR level*
Belgian regions	Level 1
German Laender	Level 1
French regions	Level 2A
Italian regions	Level 2A
Canadian provinces & territories	Level 1
Austrian Laender	Level 1
Portuguese regions	Level 2A**
Swedish regions	Level 1
Spanish regions	Level 1

* NB: In the absence of an explicit guarantee from the respective nation state, the current LCR level is dependent on the relevant rating (see CQS classification and LCR classification of assets).

** Exemption: Guaranteed bonds from Madeira are classified as Level 1.

Source: NORD/LB Floor Research

LCR classification of assets representing claims on or guaranteed by supranationals

Issuer	Bloomberg ticker	Current LCR level
Council of Europe Development Bank	COE	Level 1
European Bank for Reconstruction and Development	EBRD	Level 1
European Financial Stability Facility	EFSF	Level 1
European Investment Bank	EIB	Level 1
European Stability Mechanism	ESM	Level 1
European Union	EU	Level 1
EUROFIMA	EUROF	Not eligible
Nordic Investment Bank	NIB	Level 1
African Development Bank	AFDB	Level 1
Asian Development Bank	ASIA	Level 1
Corporación Andina de Fomento	CAF	Not eligible
International Bank for Reconstruction and Development	IBRD	Level 1
Inter-American Development Bank	IADB	Level 1
International Finance Corporation	IFC	Level 1
Islamic Development Bank	ISDB	Level 1

Source: NORD/LB Floor Research

Clarity on supranationals, but ambiguity regarding non-explicit guarantees

While there is clarity with regard to the classification of supranationals, this is lacking for certain agencies that do not have an explicit guarantee from a central government or a sub-sovereign. Consequently, the overview on the next page, where applicable, lists our assumptions regarding liquidity level classification.

LCR classification of assets representing claims on or guaranteed by agencies

Issuer	Country	Ticker	Haircut	Rationale	Current LCR level
KfW	DE	KFW	-	Art. 10(1)(c)(i): explicit state guarantee	Level 1
Rentenbank	DE	RENTEN	-	Art. 10(1)(c)(i): explicit state guarantee	Level 1
FMS-WM	DE	FMSWER	-	Art. 10(1)(c)(v): FMS-WM classified as PSE	Level 1
EAA	DE	ERSTAA	-	Art. 10(1)(c)(v): EAA classified as PSE	Level 1
NRW.BANK	DE	NRWBK	-	Art. 10(1)(c)(iii): explicit guarantee from regional government	Level 1
L-Bank	DE	LBANK	-	Art. 10(1)(c)(iii): explicit guarantee from regional government	Level 1
WIBank	DE	WIBANK	-	Art. 10(1)(c)(iii): explicit guarantee from regional government	Level 1
LfA	DE	BAYLAN	-	Art. 10(1)(c)(iii): explicit guarantee from regional government	Level 1
IB.SH	DE	IBBSH	-	Art. 10(1)(c)(iii): explicit guarantee from regional government	Level 1
BayernLabo	DE	BYLABO	-	Art. 10(1)(c)(iii): explicit guarantee from regional government	Level 1
IBB	DE	IBB	-	Art. 10(1)(c)(iii): explicit guarantee from regional government	Level 1
ILBB	DE	ILBB	-	Art. 10(1)(c)(iii): explicit guarantee from regional government	Level 1
SAB	DE	SABFOE	-	Art. 10(1)(c)(iii): explicit guarantee from regional government	Level 1
ISBRLP	DE	ISBRLP	-	Art. 10(1)(c)(iii): explicit guarantee from regional government	Level 1
IFBHH	DE	IFBHH	-	Art. 10(1)(c)(iii): explicit guarantee from regional government	Level 1

Source: NORD/LB Floor Research

LCR classification of assets representing claims on or guaranteed by agencies (continued)

Issuer	Country	Ticker	Haircut	Rationale	Current LCR level
CADES	FR	CADES	-	Art. 10(1)(c)(i): PSE with risk weighting of 0%*	Level 1
AFD	FR	AGFRNC	-	-	Not eligible
Unédic	FR	UNEDIC	-	Art. 10(1)(c)(i): PSE with risk weighting of 0%*	Level 1
CDC	FR	CDCEPS	-	Art. 10(1)(c)(v): PSE with risk weighting of 0%*	Level 1
Bpifrance	FR	BPIFRA	-	Level 1 classification in line with Art. 10(1)(e)(i)	Level 1
SAGESS	FR	SAGESS	15%	Art. 11(1)(a): PSE with risk weighting of 20%	Level 2A
AFL	FR	AFLBNK	15%	Art. 11(1)(b): explicit guarantee from RGLAs with risk weighting of 20%	Level 2A
SFIL	FR	SFILFR	-	Level 1 classification in line with Art. 10(1)(e)(i)	Level 1
SGP	FR	SOGRPR	15%	Art. 11(1)(a): PSE with risk weighting of 20%	Level 2A
3CIF	FR	CCCI	-	Art. 10(1)(c)(i): explicit state guarantee	Level 1
BNG	NL	BNG	-	Art. 10(1)(e)(ii): promotional credit institution**	Level 1
NWB	NL	NEDWBK	-	Art. 10(1)(e)(ii): promotional credit institution**	Level 1
FMO	NL	NEDFIN	-	Art. 10(1)(c)(i): explicit state guarantee	Level 1
OeKB	AT	OKB	-	Art. 10(1)(c)(i): explicit state guarantee	Level 1
ÖBB-Infrastruktur	AT	OBND	-	Art. 10(1)(c)(i): explicit state guarantee	Level 1
ASFiNAG	AT	ASFING	-	Art. 10(1)(c)(i): explicit state guarantee	Level 1

* According to classification of Banque de France

** Applicability of Article 10(1)(e)(i) confirmed by De Nederlandsche Bank.

Source: NORD/LB Floor Research

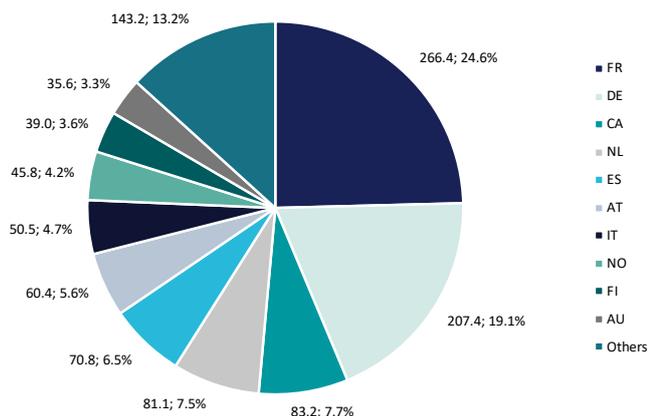
LCR classification of assets representing claims on or guaranteed by agencies (continued)

Issuer	Country	Ticker	Haircut	Rationale	Current LCR level
KBN	NO	KBN	15%	Art. 11(1)(a): PSE with RW of 20%	Level 2A
SEK	SE	SEK	15%	Level 2A classification in line with Art. 11(1)(a)	Level 2A
Kommun-invest	SE	KOMINS	-	Level 1 classification in line with Art. 10(1)(e)(i)	Level 1
MuniFin	FI	KUNTA	-	Art. 10(1)(c)(v): explicit guarantee from PSE	Level 1
Kommune-Kredit	DK	KOMMUN	-	Art. 10(c)(iv): explicit guarantee from RGLA with risk weighting of 0%	Level 1
Finnvera	FI	FINNVE	-	Art. 10(1)(c)(i): explicit state guarantee	Level 1
ICO	ES	ICO	-	Art. 10(1)(c)(i): explicit state guarantee	Level 1
FADE	ES	FADE	-	Art. 10(1)(c)(i): explicit state guarantee	Level 1
ADIF-AV	ES	ADIFAL	-	Art. 10(1)(c)(v): PSE with risk weighting of 0%	Level 1
CORES	ES	CORES	-	Art. 11(1)(a): PSE with RW of 50%	Not eligible
CDP	IT	CDEP	-	Not a corporate, RW too high to apply Art. 11(1)(a)	Not eligible
REFER	PT	REFER	-	Art. 10(1)(c)(i): explicit state guarantee (only guaranteed bonds)	Level 1 (guaranteed bonds)
BGK	PL	BGOSK	-	Art. 10(1)(c)(i): explicit state guarantee (only guaranteed bonds)	Level 1 (guaranteed bonds)
EXIM	HU	MAEXIM	-	Art. 10(1)(c)(i): explicit state guarantee	Level 1
DCL	BE	DEXGRP	-	Art. 10(1)(c)(i): explicit state guarantee (only guaranteed bonds)	Level 1 (guaranteed bonds)
JFM	JP	JFM	15%	Art. 11(1)(b): explicit state guarantee (only guaranteed bonds)	Level 2A (guaranteed bonds)
KDB	KO	KDB	15%	Level 2A classification in line with Art. 11(1)(b)	Level 2A
KEXIM	KO	EIBKOR	15%	Level 2A classification in line with Art. 11(1)(b)	Level 2A
DBJ	JP	DBJJP	15%	Art. 11(1)(b) explicit state guarantee (only guaranteed bonds)	Level 2A (guaranteed bonds)
IBK	KO	INDKOR	15%	Level 2A classification in line with Art. 11(1)(b)	Level 2A
EDC	CA	EDC	-	Art. 11(1)(b) explicit state guarantee	Level 1
CDB	CN	SDBC	-	Not a corporate, RW too high to apply Art. 11(1)(a)	Not eligible

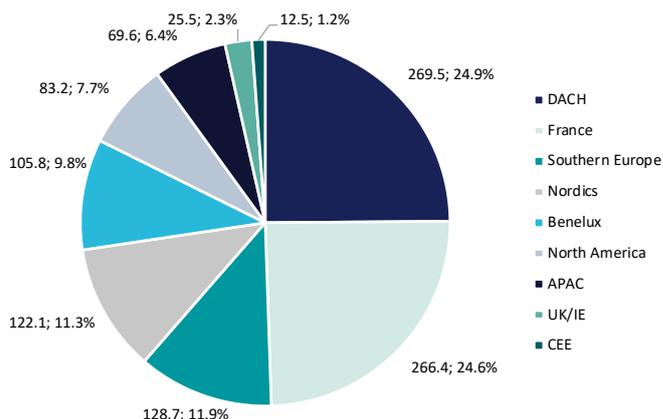
Source: NORD/LB Floor Research

Charts & Figures Covered Bonds

EUR benchmark volume by country (in EURbn)



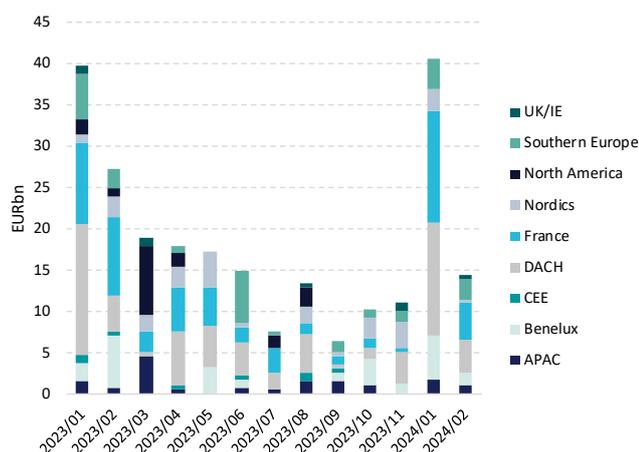
EUR benchmark volume by region (in EURbn)



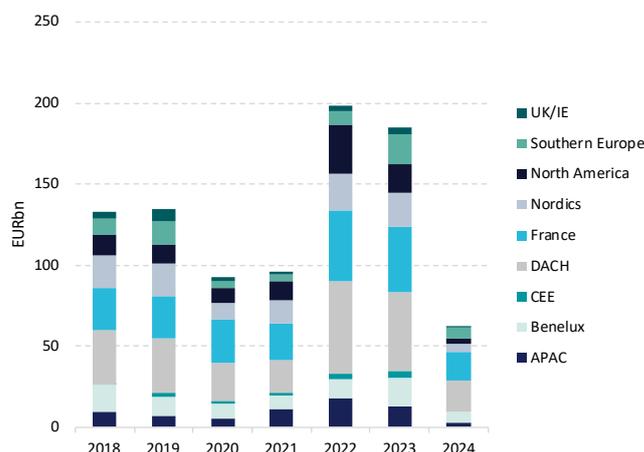
Top-10 jurisdictions

Rank	Country	Amount outst. (EURbn)	No. of BMKs	There of ESG BMKs	Avg. issue size (EURbn)	Avg. initial maturity (in years)	Avg. mod. Duration (in years)	Avg. coupon (in %)
1	FR	266.4	256	24	0.97	9.3	4.9	1.38
2	DE	207.4	296	39	0.65	7.8	4.1	1.35
3	CA	83.2	61	0	1.34	5.6	2.7	1.24
4	NL	81.1	81	3	0.94	10.5	6.1	1.25
5	ES	70.8	56	5	1.15	11.0	3.2	2.05
6	AT	60.4	101	5	0.59	8.1	4.5	1.49
7	IT	50.5	63	4	0.77	8.6	3.9	1.77
8	NO	45.8	55	12	0.83	7.3	3.7	0.88
9	FI	39.0	43	4	0.89	6.9	3.6	1.56
10	AU	35.6	34	0	1.05	7.2	3.3	1.60

EUR benchmark issue volume by month

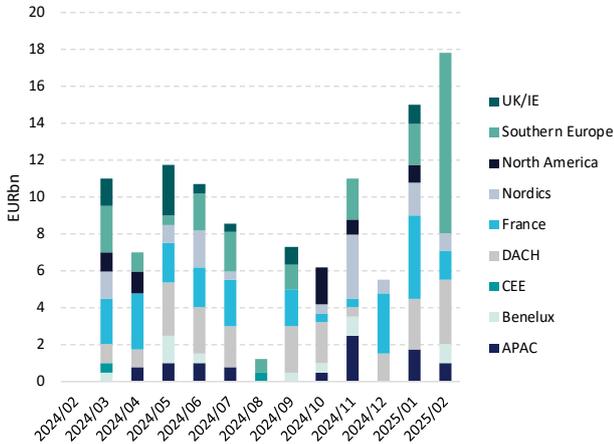


EUR benchmark issue volume by year

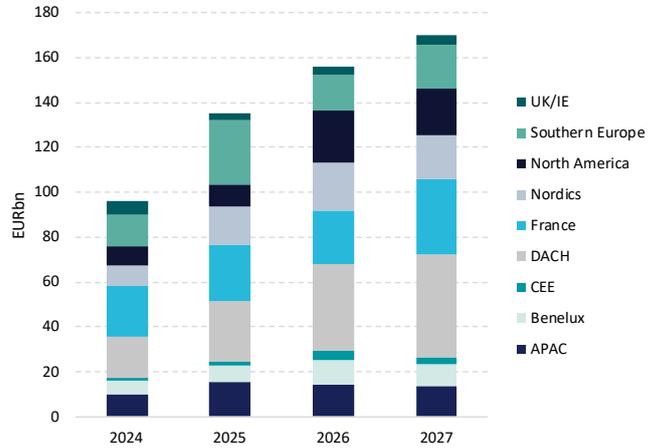


Source: market data, Bloomberg, NORD/LB Floor Research

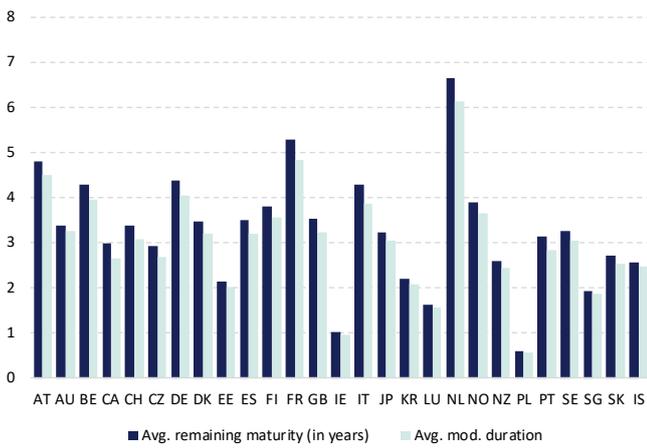
EUR benchmark maturities by month



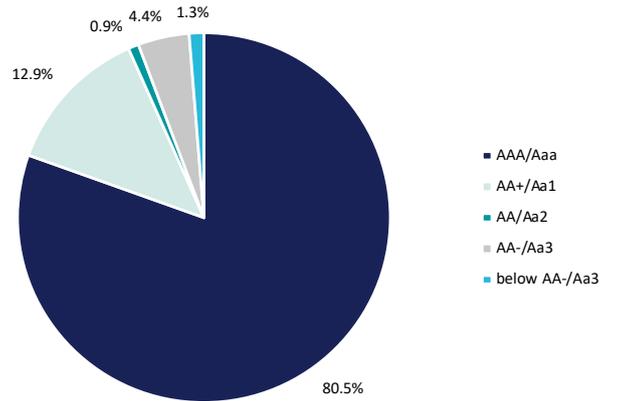
EUR benchmark maturities by year



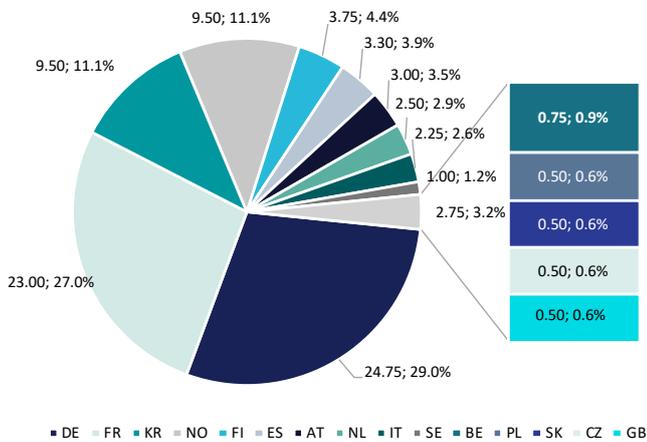
Modified duration and time to maturity by country



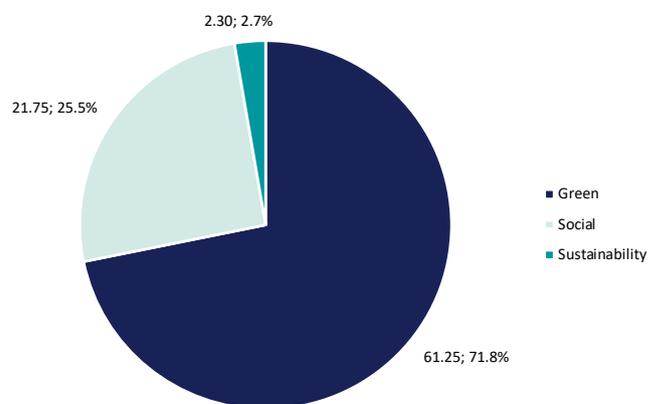
Rating distribution (volume weighted)



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

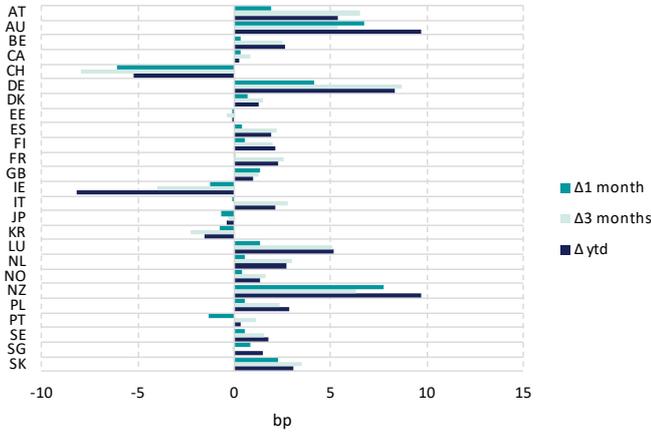


EUR benchmark volume (ESG) by type (in EURbn)

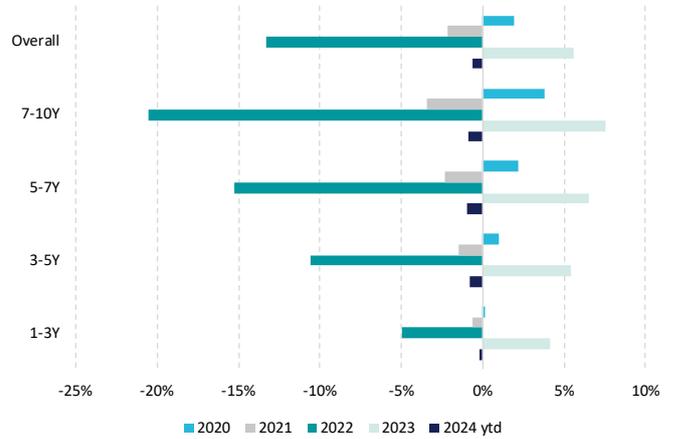


Source: market data, Bloomberg, NORD/LB Floor Research

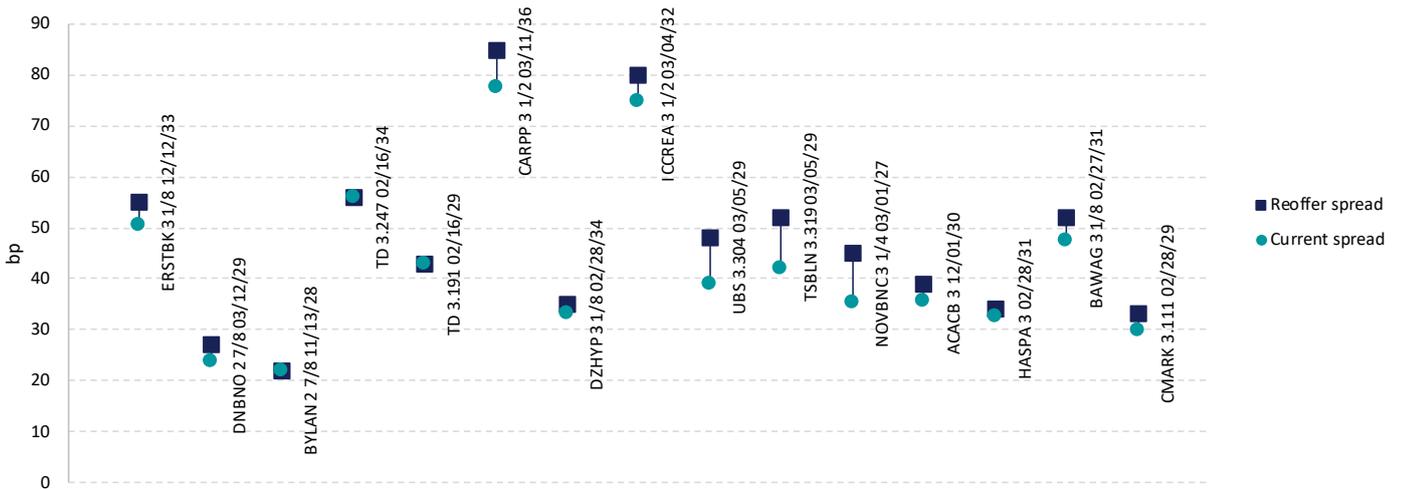
Spread development by country



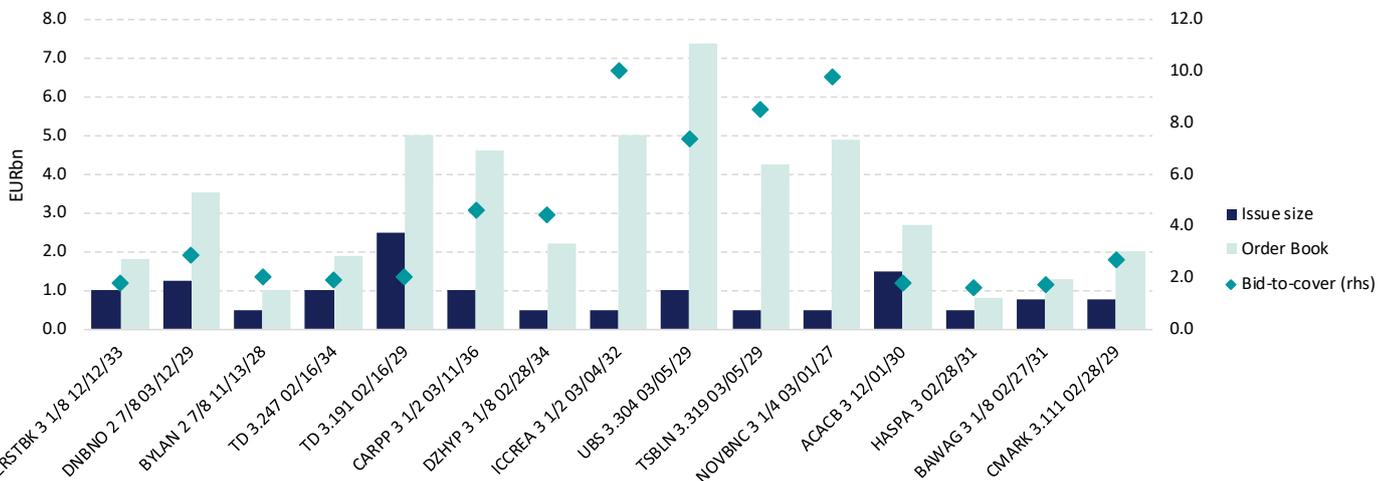
Covered bond performance (Total return)



Spread development (last 15 issues)

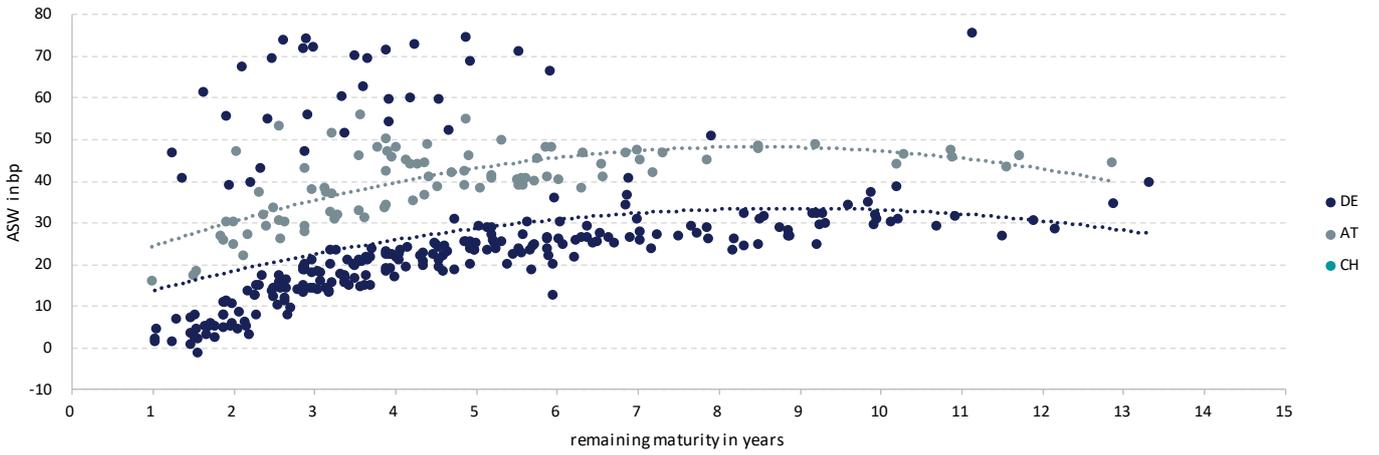


Order books (last 15 issues)

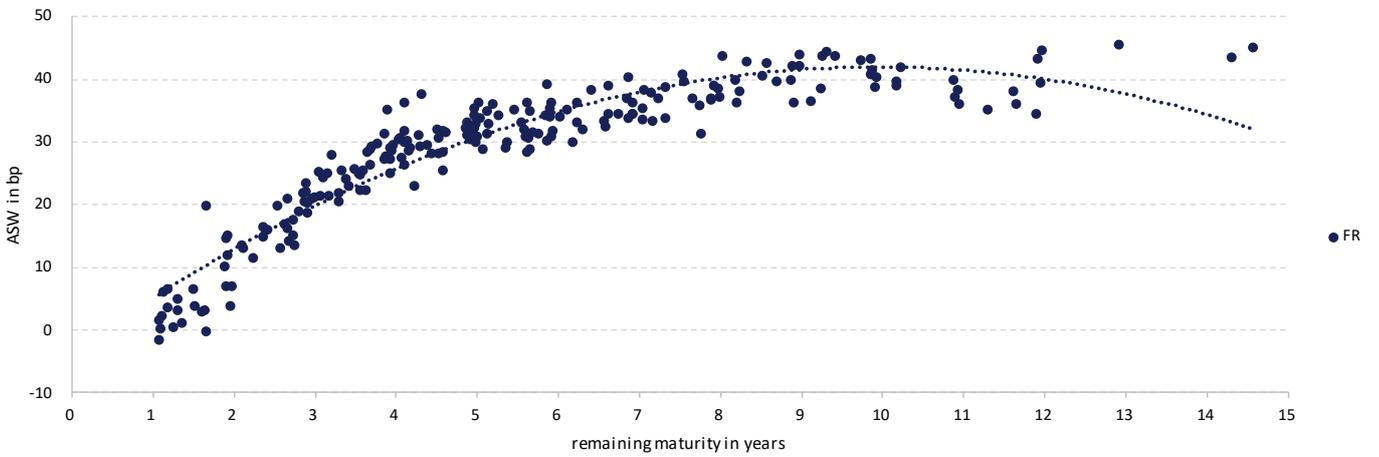


Spread overview¹

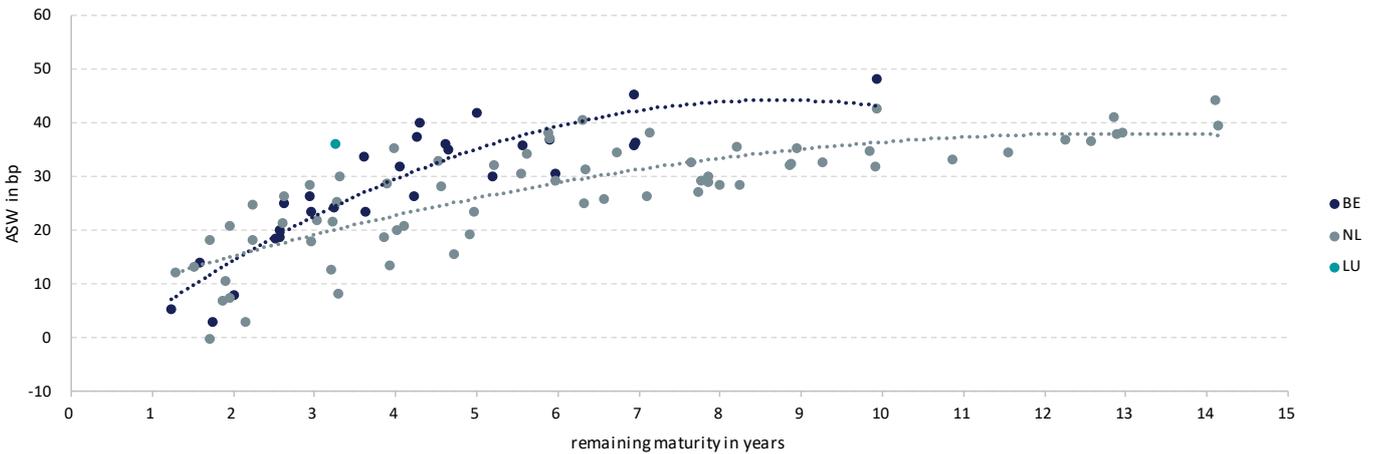
DACH 



France 

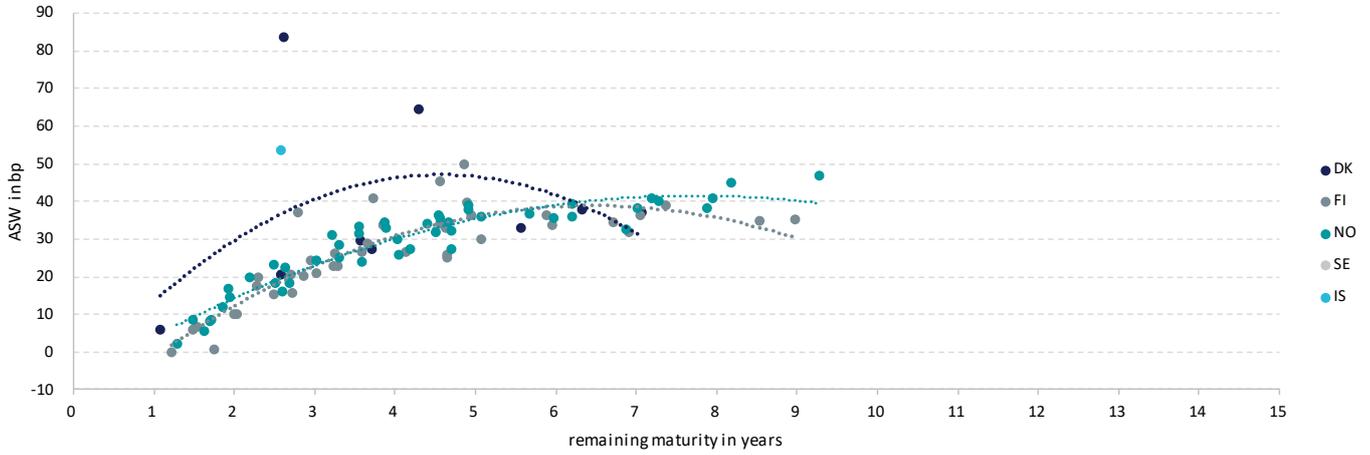


Benelux 

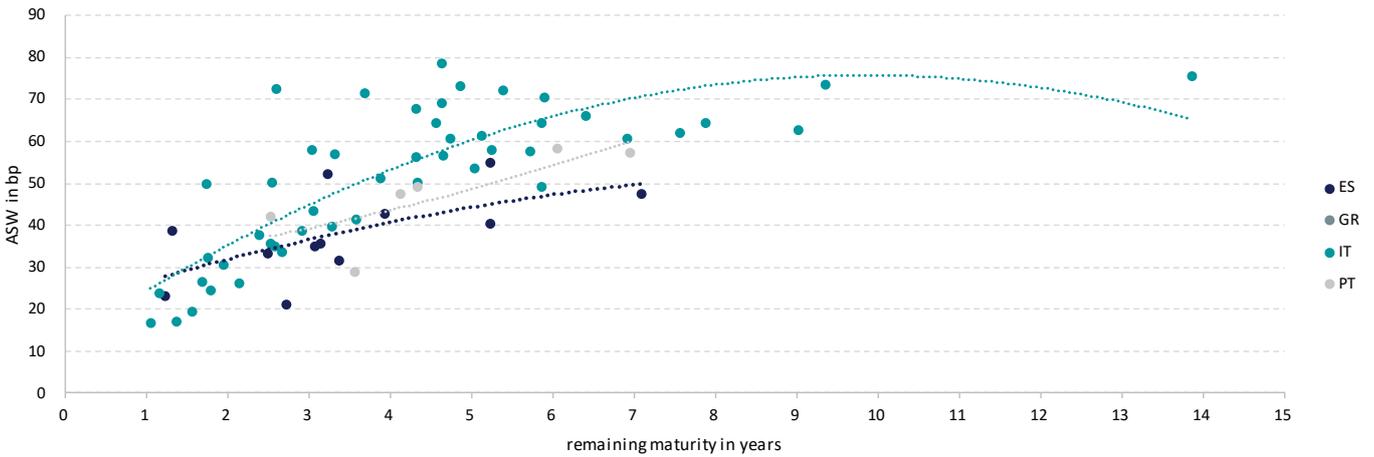


Source: market data, Bloomberg, NORD/LB Floor Research ¹Time to maturity 1 ≤ y ≤ 15

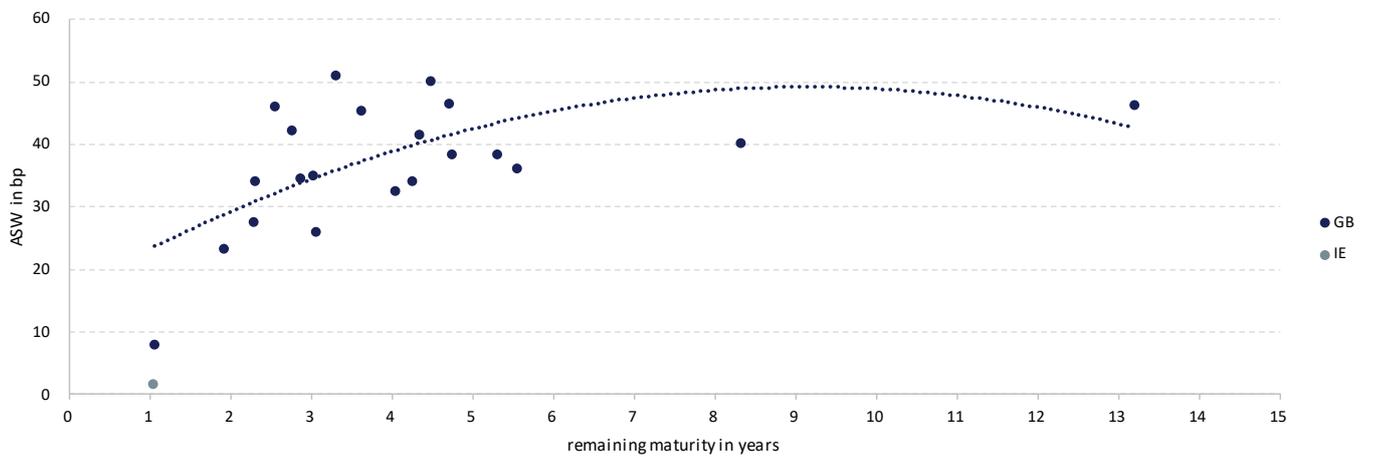
Nordics 🇩🇰 🇫🇮 🇳🇴 🇸🇪 🇮🇸



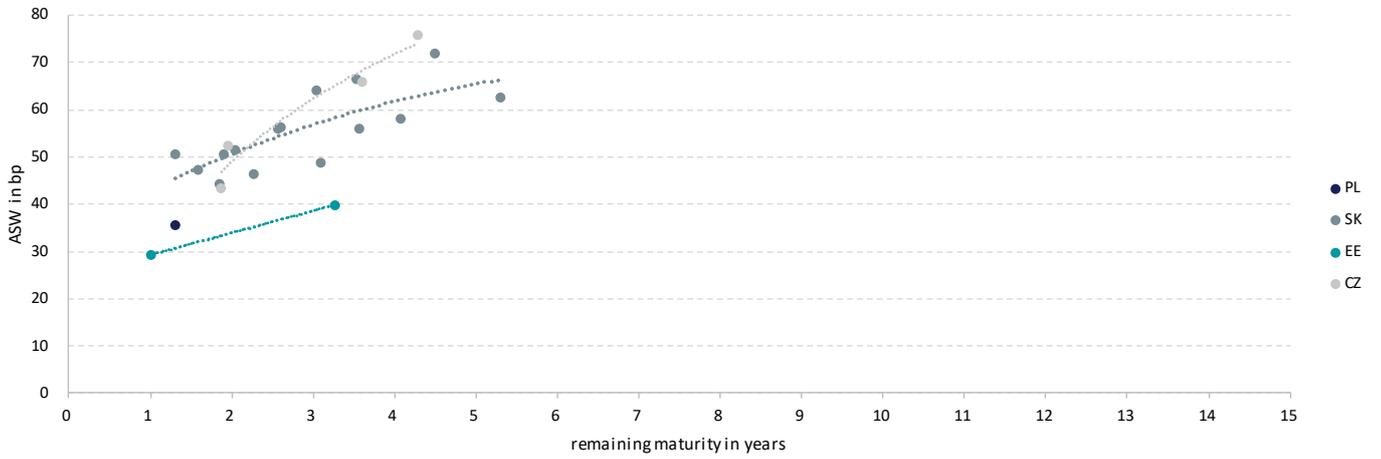
Southern Europe 🇪🇸 🇬🇷 🇮🇹 🇵🇹



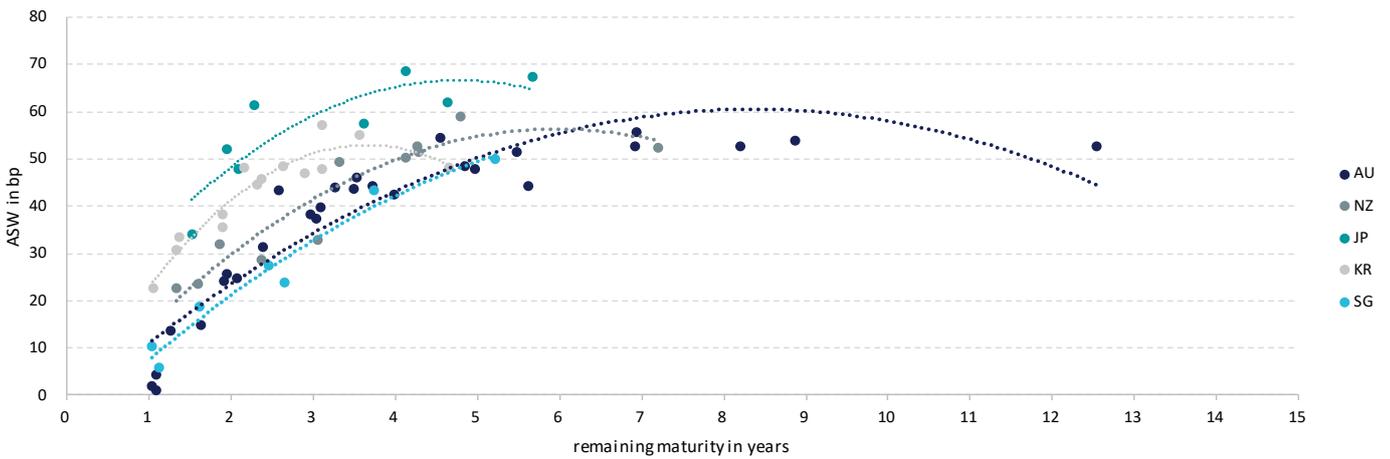
UK/IE 🇬🇧 🇮🇪



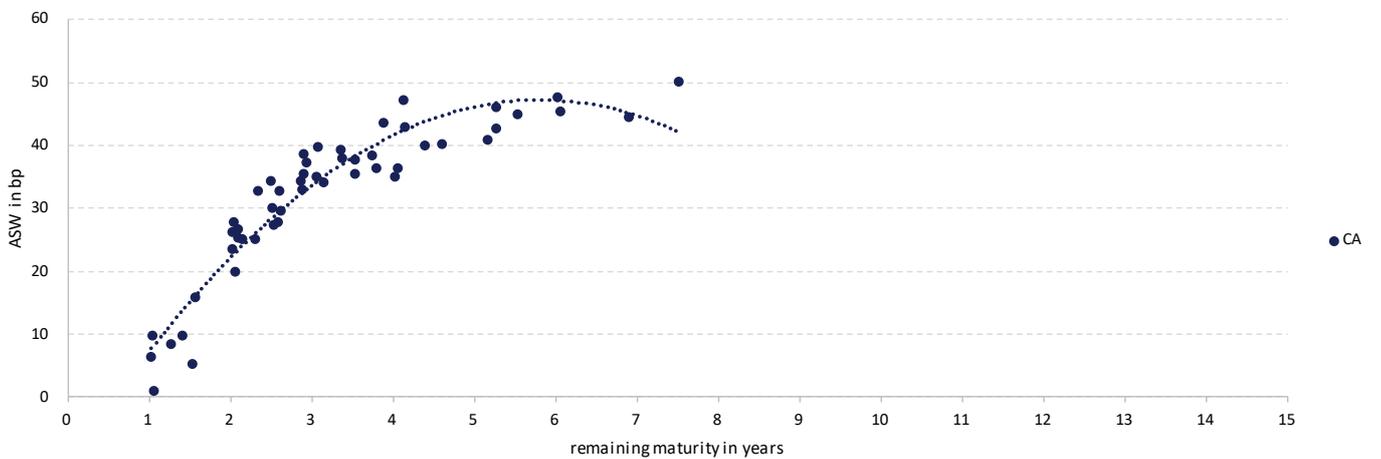
CEE 



APAC 



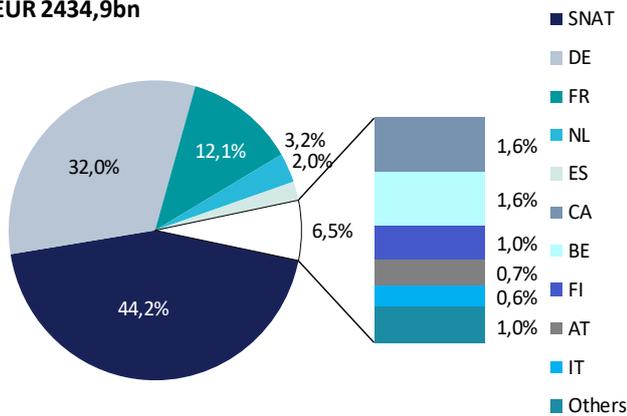
North America 



Charts & Figures SSA/Public Issuers

Outstanding volume (bmk)

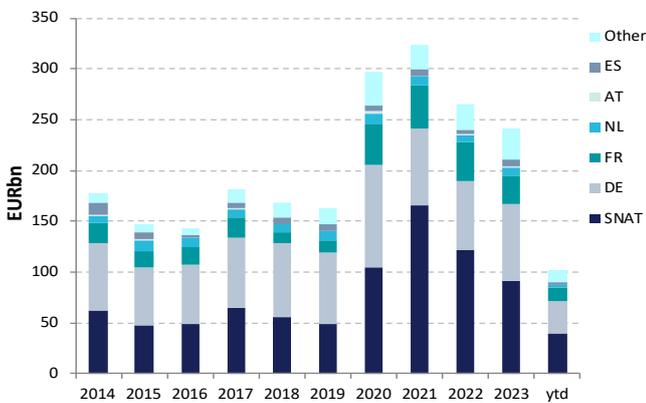
EUR 2434,9bn



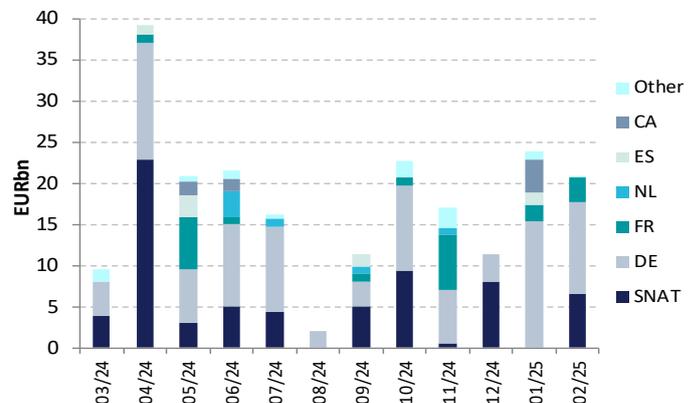
Top 10 countries (bmk)

Country	Vol. (€bn)	No. of bonds	ØVol. (€bn)	Vol. weight. ØMod. Dur.
SNAT	1.076,8	233	4,6	8,0
DE	778,9	580	1,3	6,2
FR	295,2	198	1,5	6,0
NL	77,3	67	1,2	6,7
ES	49,6	67	0,7	4,7
CA	38,1	27	1,4	4,5
BE	37,8	41	0,9	10,6
FI	23,5	25	0,9	4,7
AT	17,8	22	0,8	4,3
IT	15,2	19	0,8	4,4

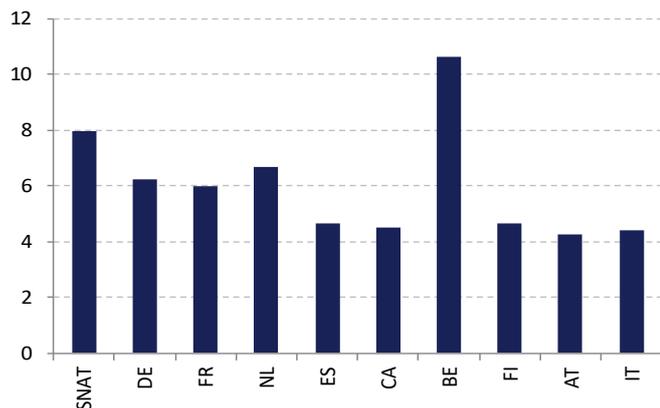
Issue volume by year (bmk)



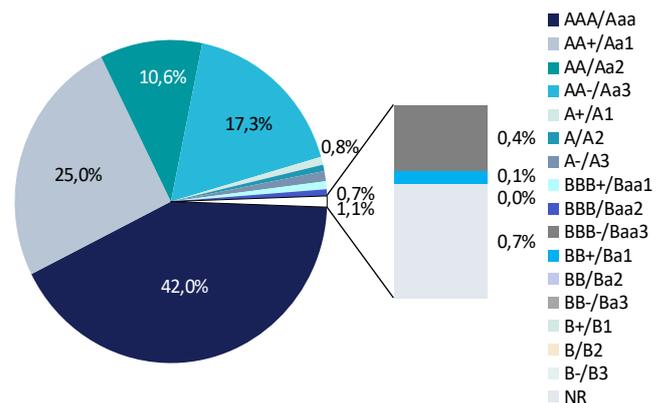
Maturities next 12 months (bmk)



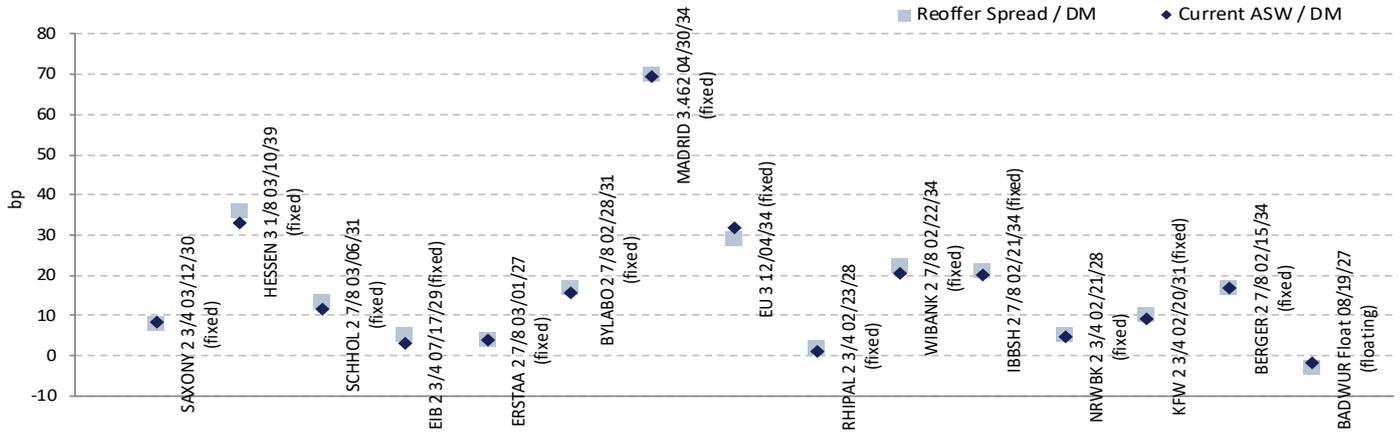
Avg. mod. duration by country (vol. weighted)



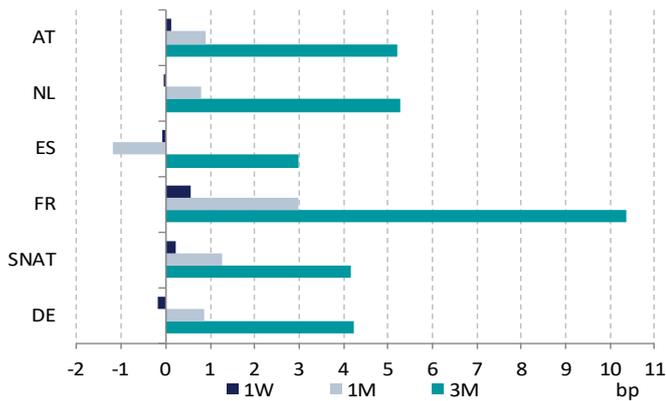
Rating distribution (vol. weighted)



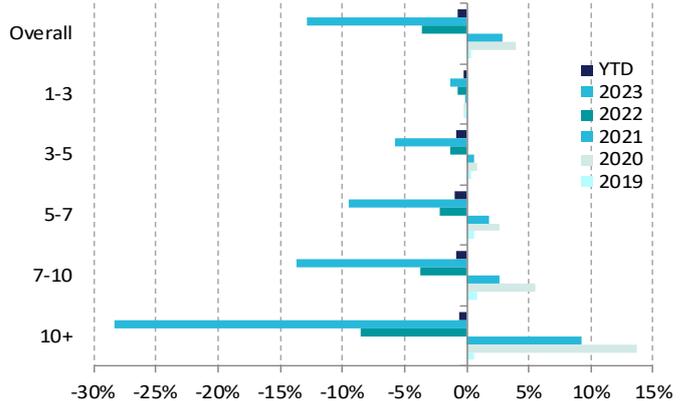
Spread development (last 15 issues)



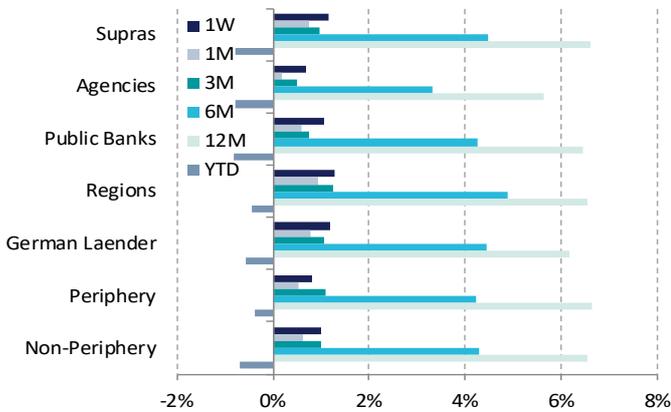
Spread development by country



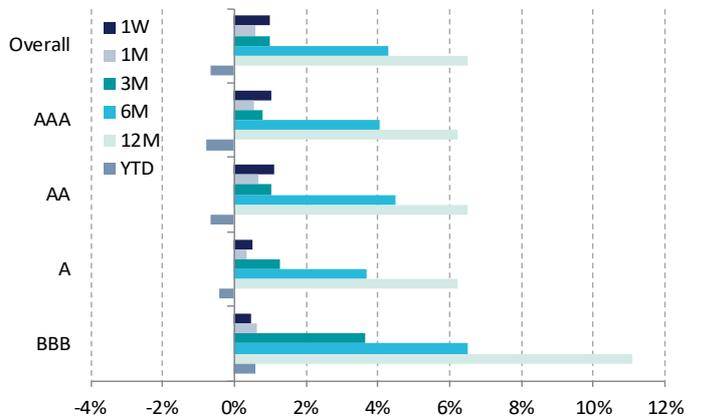
Performance (total return)



Performance (total return) by segments

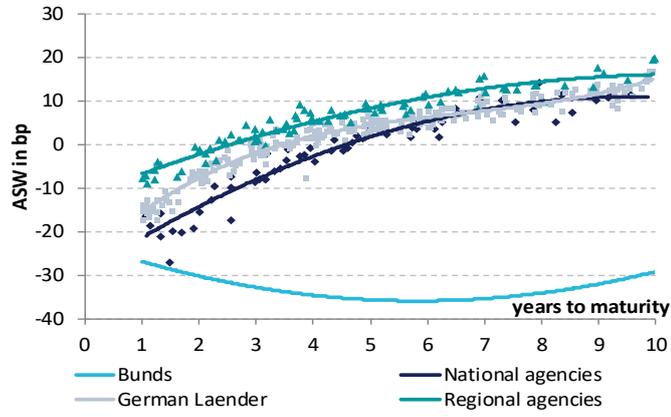


Performance (total return) by rating

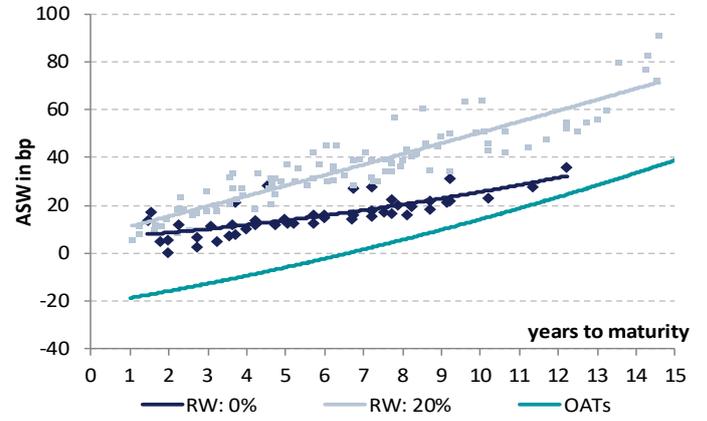


Source: Bloomberg, NORD/LB Floor Research

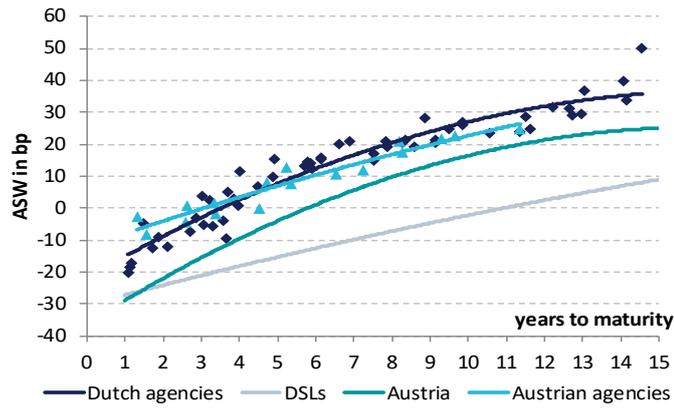
Germany (by segments)



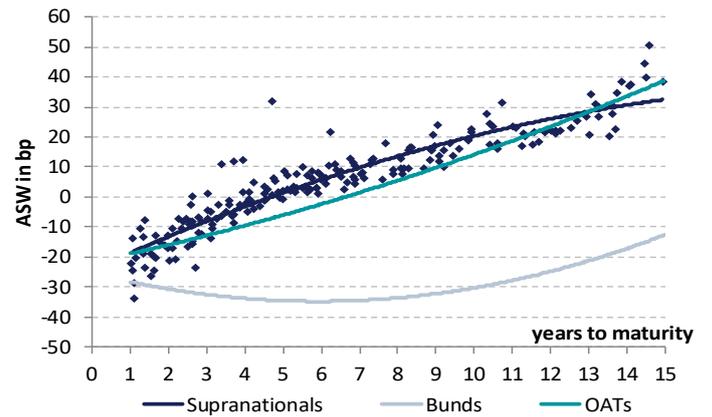
France (by risk weight)



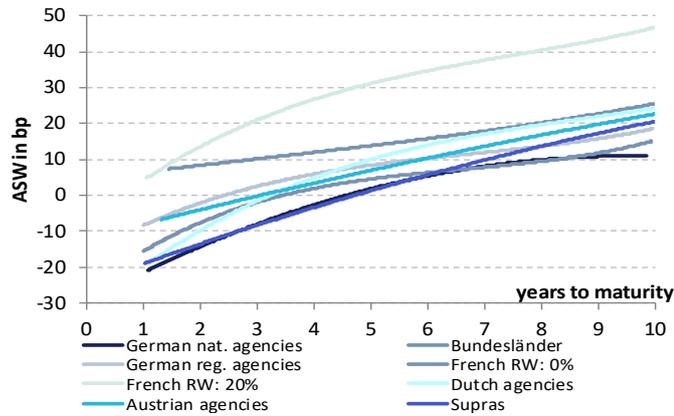
Netherlands & Austria



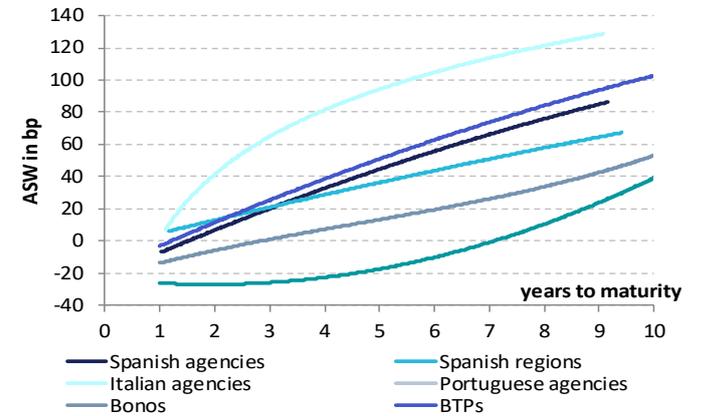
Supranationals



Core



Periphery



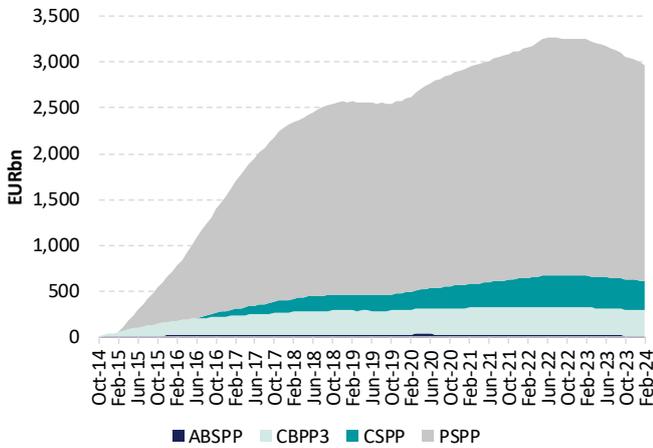
Source: Bloomberg, NORD/LB Floor Research

ECB tracker

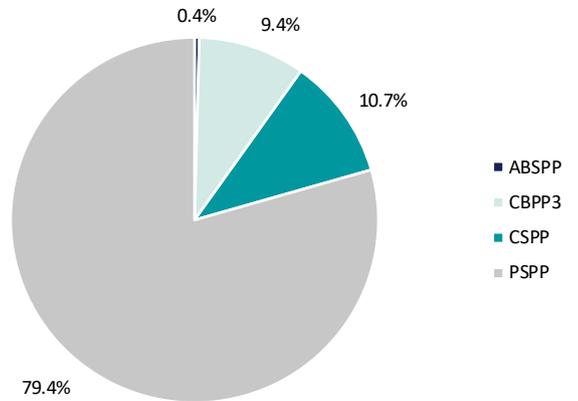
Asset Purchase Programme (APP)

	ABSPP	CBPP3	CSPP	PSPP	APP
Jan-24	12,895	281,510	320,763	2,377,495	2,992,663
Feb-24	12,547	279,061	318,688	2,356,971	2,967,267
Δ	-347	-2,449	-2,075	-20,524	-25,395

Portfolio development

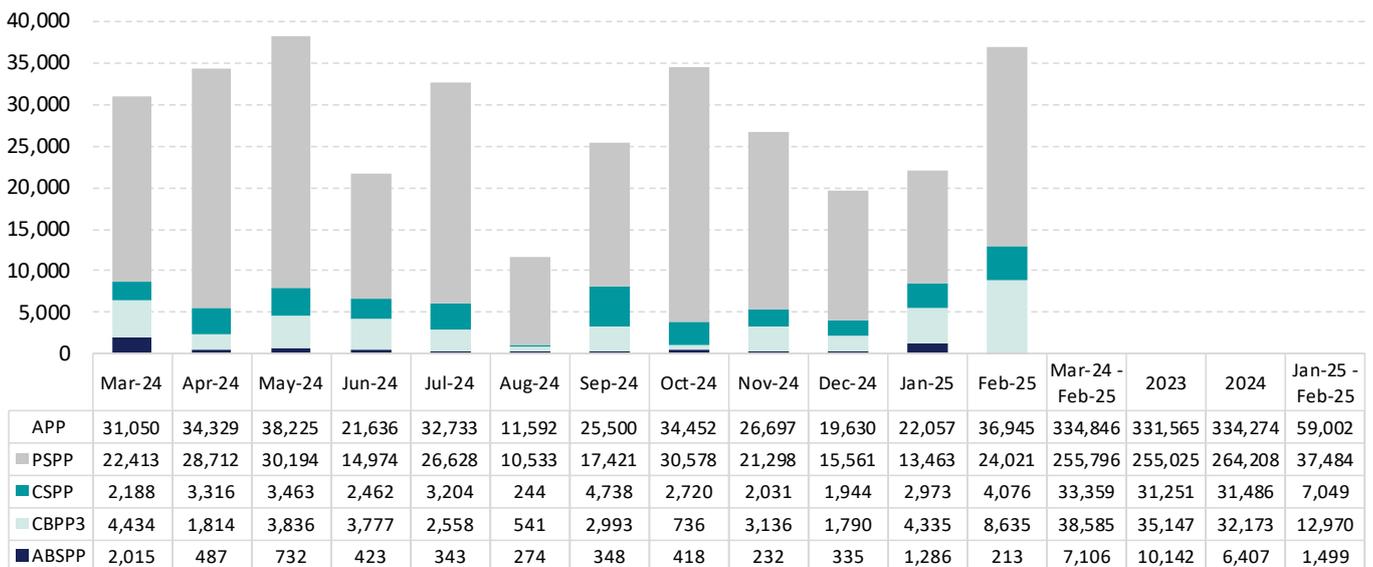


Portfolio structure



Source: ECB, NORD/LB Floor Research

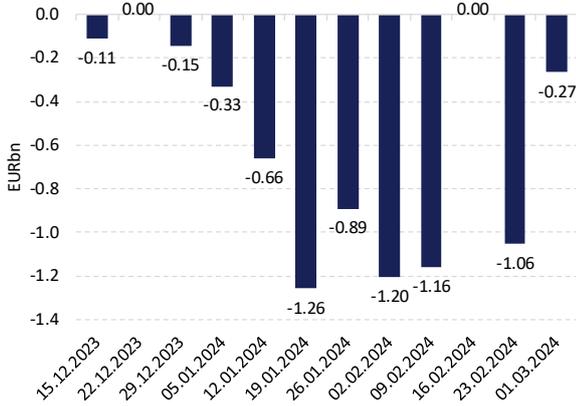
Expected monthly redemptions (in EURm)



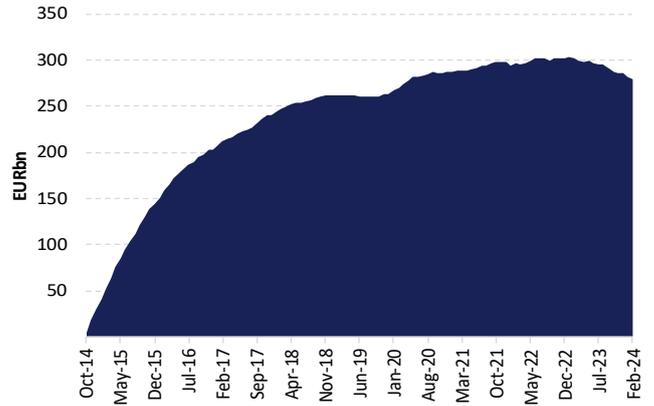
Source: ECB, Bloomberg, NORD/LB Floor Research

Covered Bond Purchase Programme 3 (CBPP3)

Weekly purchases

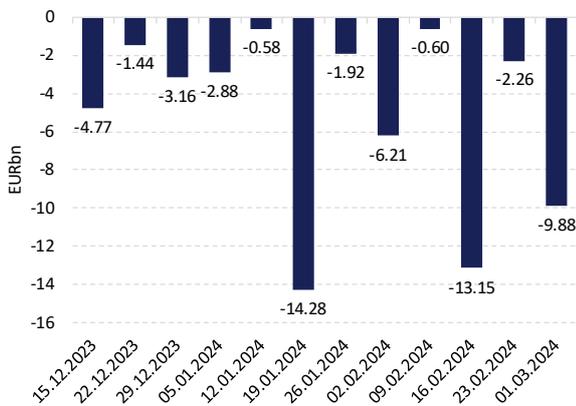


Development of CBPP3 volume

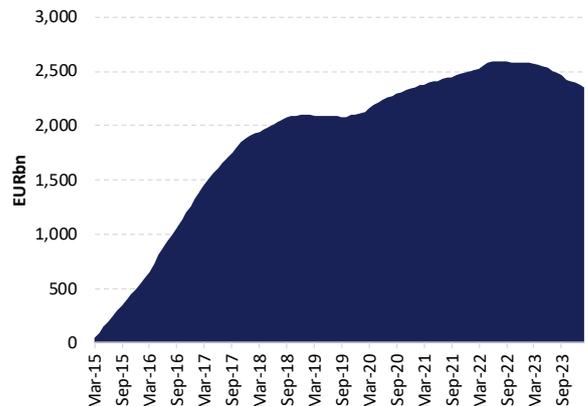


Public Sector Purchase Programme (PSPP)

Weekly purchases



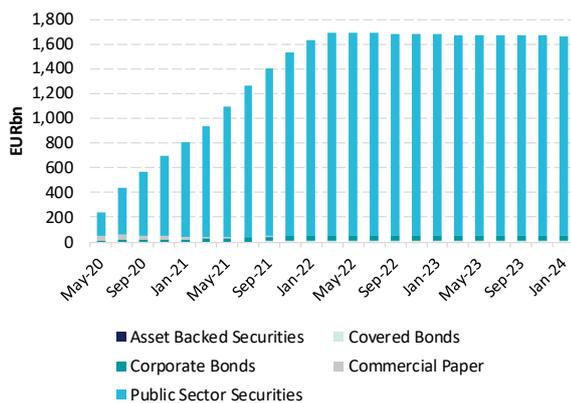
Development of PSPP volume



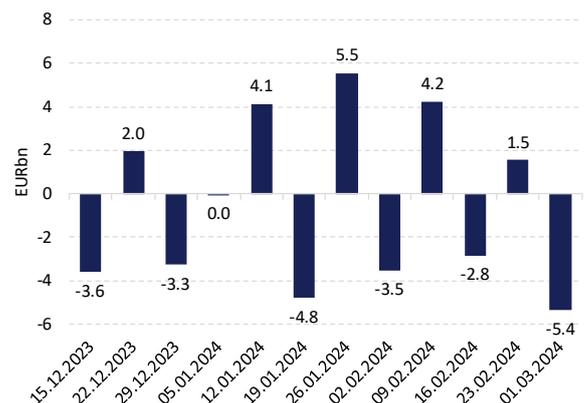
Source: ECB, Bloomberg, NORD/LB Floor Research

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
08/2024 ♦ 28 January	<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 January	<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
33/2023 ♦ 15 November	<ul style="list-style-type: none"> Development of the German property market ECB repo collateral rules and their implications for Supranationals & Agencies
32/2023 ♦ 08 November	<ul style="list-style-type: none"> Norway: creation of SpareBank 1 Sor-Norge ECB: PEPP versus TPI – or: (re)investing where others like to go on holiday
31/2023 ♦ 25 October	<ul style="list-style-type: none"> Banks in Europe: the EBA Risk Dashboard in Q2 2023 Teaser: Issuer Guide – Spanish Agencies 2023
30/2023 ♦ 18 October	<ul style="list-style-type: none"> Focus on covered bond jurisdictions: Canada in the spotlight A closer look at Newfoundland and Labrador
29/2023 ♦ 11 October	<ul style="list-style-type: none"> A covered bond view of Belgium Funding of Canadian provinces – an overview

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)

[Covered bonds as eligible collateral for central banks](#)

SSA/Public Issuers:

[Issuer Guide – German Laender 2023](#)

[Issuer Guide – German Agencies 2023](#)

[Issuer Guide – European Supranationals 2023](#)

[Issuer Guide – French Agencies 2023](#)

[Issuer Guide – Dutch Agencies 2023](#)

[Beyond Bundeslaender: Belgium](#)

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

[Beyond Bundeslaender: Spanish regions](#)

Fixed Income Specials:

[ESG-Update 2023](#)

[ECB preview: Delays in operations or full focus on June?](#)

[ECB decision: Council versus market](#)

[ECB preview: New year, new luck?!](#)

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: 06 March 2024 (08:44)