



Covered Bond & SSA View

NORD/LB Floor Research

24 January 2024 ♦ 03/2024

Marketing communication (see disclaimer on the last pages)

Agenda

Market overview	
Covered Bonds	3
SSA/Public Issuers	6
The “V” in the LTV calculation: Differing approaches persist despite EU Directive	10
28th meeting of the Stability Council (December 2023)	15
Charts & Figures	
Covered Bonds	20
SSA/Public Issuers	26
ECB tracker	
Asset Purchase Programme (APP)	29
Pandemic Emergency Purchase Programme (PEPP)	30
Overview of latest Covered Bond & SSA View editions	31
Publication overview	32
Contacts at NORD/LB	33

Floor analysts:

Covered Bonds/Banks

Dr Frederik Kunze
frederik.kunze@nordlb.de

Lukas Kühne
lukas.kuehne@nordlb.de

SSA/Public Issuers

Dr Norman Rudschuck, CIAA
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: we are delighted to welcome (even) longer maturities, additional newcomers and seldom-seen issues to the EUR benchmark segment

Ahead of the ECB meeting tomorrow (Thursday, 25 January; cf. [ECB Preview](#)), the covered bond market was again in highly energetic form. And in view of the previous five trading days, we can certainly talk of a pleasingly lively dynamic. This applies not only in terms of the number of issues and freshly placed volume (11 deals; EUR 9.9bn), but also with regard to the wide variety of (new) structural aspects in evidence. For example, we welcomed two newcomers to the EUR benchmark segment. As part of our weekly publication, we have already covered the EUR benchmark debut from the South Korean issuer Shinhan Bank, and we can now describe this inaugural deal as a success. The bond worth EUR 500m (3.0y; green) was 4.0x oversubscribed at a final spread of ms +54bp. Oldenburgische Landesbank (OLB; cf. [Issuer View](#)) also enjoyed its benchmark debut, having generated a high level of demand. In addition, the mortgage Pfandbrief (EUR 500m; WNG; 8.0y) was initially guided at ms +65bp area, before the final spread narrowed by six basis points to ms +59bp. We also saw something of a rarity on the primary market in terms of the asset class: a ship Pfandbrief. Yesterday, Hamburg Commercial Bank (HCOB; cf. [Issuer View](#)) opened the books for its first ship Pfandbrief in benchmark format (EUR 500m; WNG; 2.0y) since May 2022. The final order book came to EUR 4.0bn and the re-offer spread was fixed at ms +73bp (guidance: ms +83bp area). Societe Generale SFH (SG SFH) also showed that it was keen to get in on the action with a benchmark of its own that featured an initial term of 12 years, whereas we also spotted our first “Spaniard” on the market this year in the shape of Cajamar Caja Rural. The Spanish issuer placed its EUR benchmark (EUR 600m; 5.5y) with investors at ms +78bp. With the longer-dated bond of its dual tranche (3.0y; EUR 1.3bn at ms +20bp & 12.0y; EUR 1.0bn at ms +50bp) SG SFH tested the waters in terms of demand at the long end and was able to generate an order book totalling EUR 2.1bn. We would now certainly expect issuers from jurisdictions in which the 10y maturity segment has already been utilised (e.g. France, Germany and the Netherlands) to follow the example set by the French issuer with this deal.

Issuer	Country	Timing	ISIN	Maturity	Size	Spread	Rating	ESG
Societe Generale	FR	23.01.	FR001400NJB1	3.0y	1.25bn	ms +20bp	AAA / Aaa / -	-
Societe Generale	FR	23.01.	FR001400NJ99	12.0y	1.00bn	ms +50bp	AAA / Aaa / -	-
HCOB	DE	23.01.	DE000HCB0B28	2.0y	0.50bn	ms +73bp	- / Aa3 / -	-
Rabobank	NL	23.01.	XS2756520248	10.0y	1.50bn	ms +37bp	- / Aaa / -	-
OLB	DE	22.01.	DE000A11QJS1	8.0y	0.50bn	ms +59bp	- / Aa1 / -	-
Shinhan Bank	KR	22.01.	XS2740452649	3.0y	0.50bn	ms +54bp	AAA / Aaa / -	X
Credit Mutuel	FR	22.01.	FR001400NIS7	7.0y	1.50bn	ms +40bp	- / Aaa / -	-
La Banque Postale	FR	19.01.	FR001400NGT9	10.0y	0.75bn	ms +45bp	- / - / AAA	X
Cajamar	ES	18.01.	ES0422714206	5.5y	0.60bn	ms +78bp	- / - / AA+	-
CAFFIL	FR	17.01.	FR001400NE03	9.8y	1.00bn	ms +47bp	- / Aaa / AA+	-
Banco BPM	IT	17.01.	IT0005580771	6.0y	0.75bn	ms +77bp	- / Aa3 / -	-

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

Secondary market: New issues performing well and curves widening

There was a largely unchanged picture on the secondary market over the past five trading days. Accordingly, freshly issued deals appear attractive both in comparison with outstanding covered bonds and – across various asset classes – from relative value perspectives, which can explain the performance of new issues in particular. This also has situational correlations with the primary market. A certain degree of narrowing with regard to new issue premiums has been observed as well as a trend towards stagnating spread levels. While this might not apply to all newly placed deals, it can certainly reverberate on the secondary market in some cases. In the event that the “imaginary gap” between the curves and the new deals converges to a significant extent, this may also mark something of a turning point for the primary market.

Covered bond market in Slovakia: Moody’s publishes its considerations on the legal framework

With the finalisation of the EU Covered Bond Directive in terms of its requirements being implemented into national law, the risk experts at Moody’s are also gradually adjusting their analyses of the individual covered bond legislation. A few days ago, the rating agency presented an update for Slovakia, in which a handful of strengths of the legal framework were highlighted. This includes the configuration of the 180-day liquidity buffer as well as the option to postpone the due date, which reduces the refinancing risks. Moody’s also highlights the legal regulations for transferring a covered bond programme from a “failed” bank to a new institution as a strong feature of the framework. However, the agency notes that although annual stress tests are required by law, there were no specific legal requirements for dealing with interest rate and currency risks. Slovakia is one of the covered bond markets in the CEE region that is recording generic growth. In our opinion, Slovakian banks have the advantage of significantly lower hedging costs with regard to currency risks, particularly in comparison with their non-eurozone regional counterparts. The current composition of the iBoxx EUR Covered includes four Slovakian banks in the form of Prima Banka Slovensko, Slovenska Sporitelna, Tatra Banka and VUB Banka. The total volume amounts to EUR 7.5bn (split across 15 bonds). For 2024, we anticipate an issuance volume of around EUR 1.5bn (after EUR 3.0bn in 2023). In terms of the CEE region as a whole, we see this as a growth market and expect covered bonds in EUR benchmark format to become increasingly important in terms of the refinancing activities of banks across the region. In fact, in this context, covered refinancing has the potential not only to offer a real leg up to capital market funding, which still plays a niche role in some jurisdictions, but also to become a genuine catalyst for the green transformation in the region.

Internal matters: NORD/LB Regulatory Update 2024 on 29 February in Hanover

In 2024, you are once again cordially invited to take part in our NORD/LB Regulatory Update in Hanover. Together with you, we are again keen to tackle current and market-relevant developments in the area of banking regulations. Moreover, another focus of the event will be on the comparatively recent requirements in the area of ESG activities. We are pleased to have organised an interesting mix of specialist contributions and insights from applied practice for you, and would like to offer our thanks in advance to the diverse range of speakers secured for the event, who come from the world of science, industry associations, the banking industry and consulting firms.

Scope publishes Outlook 2024 for the covered bond segment...

A few days ago, the risk experts at Scope rounded off the picture of covered bond outlooks issued by external credit assessment institutions (ECAI) recognized within the framework of the Eurosystem Credit Assessment Framework (ECAF). In our weekly publication, we have already commented on the outlooks published by DBRS, Moody's, S&P and Fitch. This year, Scope again presented its [outlook](#) shortly after the start of the new year, as has been the case in previous years, meaning it was able to draw on its observations in terms of market activities across the first few trading days of 2024. In this context, the risk experts at Scope hit the nail on the head in offering their summary that “we are back in a buyer's market”. Investors are once again focusing on the credit quality of issuers and cover pools, as well as market risks, to a greater extent, which, in the view of scope, has the potential to further drive the differentiation of spreads. The agency expects the volume of newly issued EUR benchmarks to total EUR 160-170bn, which would be driven by maturities (around EUR 110bn) as well as expected interest rate cuts and banks opting to focus on optimising their own funding costs to a greater extent. Geopolitical crises are more likely to support the product's reputation as a safe haven. At the same time, Scope also highlights factors of uncertainty with regard to monetary policy – again in the context of the CBPP3 and TLTRO III, but also with a view to minimum reserve requirements. In terms of the broad field of energy efficiency in buildings, Scope believes that 2024 could bring about a turning point. This assessment is based on the current developments with regard to the Energy Performance Building Directive (EPBD), which creates an additional pressure point in connection with the valuations of less energy-efficient residential buildings and commercial properties in particular.

...presents detailed assessments of real estate markets...

Pressure points have also been identified for the real estate market as a whole. In this context, the risk experts paint a heterogeneous picture when formulating their expectations and initially note that, in retrospect, residential property prices were surprisingly robust across 2023. For example, looking at the EU plus Switzerland/UK, corrections were only seen for Luxembourg, Germany, Finland, Sweden and Denmark. Scope expects further corrections in 2024, citing Austria, Norway, Luxembourg, Switzerland, Portugal, France and Sweden as countries in which the longer-term increase in residential property prices has sustainably outperformed long-term GDP growth. Nevertheless, robust demand in tandem with stagnating construction activity will remain the supporting element here. After all, Scope expects new business in real estate financing to be more dynamic in 2024, linking this with market-based interest rate expectations. We share this assessment and see growth in lending in this segment as a catalyst for covered bond activities. For the European banking market, Scope is working on the assumption of declining profitability in 2024 and 2025 (dwindling margins and moderately increasing credit risks on the part of CRE and corporate loans). However, it rules out the possibility of a systemic shock.

...and indicates stable covered bond ratings

The outlook for the [41 covered bond programmes](#) rated by Scope, which all feature the top rating of AAA, is “stable”. As a result of the bank's high credit quality on average, in combination with the transaction-specific connection between complexity and transparency, the lowest vulnerability in terms of issuer downgrades for covered bond ratings can also be seen in the jurisdictions of France, the Netherlands, Denmark and Finland.

Market overview

SSA/Public Issuers

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

ECB key rate decision – new year, new luck?!

The upcoming monetary policy meeting of the ECB's Governing Council will take place in an ongoing climate of increased geopolitical uncertainty. In our [ECB Preview](#), we reported that all of the parameters for the imminent meeting of the ECB's Governing Council on Thursday underpin that the key rates are set to remain unchanged – for the time being anyway. The schedule for the PEPP is on the table and is being implemented unflinchingly in 2024. Now the question on everyone's lips is when will the ECB's Governing Council dare to touch the minimum reserve ratio? Furthermore, market players are also asking themselves how soon interest rates will be cut. In terms of a forecast, we have predicted relatively few interest rate moves in 2024 and pointed out that calls for interest rates to be cut as early as in Q1 2024 seem premature in our opinion. However, it is also too soon to categorically rule out an interest rate cut in H1 2024. Overall, everything still suggests that the meeting-by-meeting approach based on the data will be maintained.

Germany's federal budget for 2024 is in place – an update

[Last week](#), we already reported on the key points planned for Germany's 2024 federal budget, which the competent committee has now agreed. This means that the budget is in place. Although the German Bundestag and Bundesrat have yet to take a formal and final decision, it is assumed that they will approve. It provides for expenditure of around EUR 476.8bn and new borrowing totalling approx. EUR 39bn. The debt brake is to take full effect again after a pause that lasted several years. In summary, social security benefits are largely excluded from cutbacks. At the same time, the unemployment payment is to cease completely for a maximum of two months where recipients stubbornly refuse to accept a job. The Green Party succeeded in achieving that this rule will apply for a limited time of two years, when it will be reviewed. The tax break for pension funds will be cut by EUR 600m. In contrast, the government dispenses with the initially planned repayment of EUR 1.5bn from Bundesagentur für Arbeit funds to the Bund. The budget committee withdrew originally planned cutbacks to voluntary services in an honorary capacity. The income threshold up to which the parental allowance applies will gradually be reduced. From April 2024, this threshold will be reduced to EUR 200,000 of taxable annual income and from April 2025, an income threshold of EUR 175,000 will apply. With regard to transport, the share capital of the national railway company is to be increased substantially by EUR 5.5bn, in order to drive forward the modernisation of the rail network. From May 2024 onwards, airlines will have to pay higher aviation tax for flights departing from German airports. In addition, the carbon price of heating oil, natural gas and petrol has increased more sharply than planned since the start of this year. Furthermore, additional funding of EUR 1bn is to be made available for the construction of small, affordable flats, whereas funds for development cooperation and humanitarian aid for other countries will be cut by EUR 2bn in total. The parliamentary parties also made a commitment in terms of the cutback in the rebate on agricultural diesel. The government had previously withdrawn more than half of the originally planned cutbacks in the agricultural sector and agricultural vehicles will remain exempt from vehicle tax. Moreover, the rebate on agricultural diesel will not be reduced immediately but in three stages over a period of three years.

L-Bank – a strong year for business promotion

Despite concerns and adverse conditions, the promotional business of L-Bank progressed exceptionally last year. Loans and grants to established firms and start-ups in Baden-Württemberg totalling more than EUR 3.7bn (previous year: EUR 3.9bn) were approved. Deducting the COVID-19 rescue schemes which ended in 2023 as well as special financing from other promotional and development banks, this represents a decrease of around 7% on the previous year. However, for the first time since the outbreak of the COVID-19 pandemic, the number of customers in loan programmes had risen again, from 6,290 in 2022 to 6,472 last year. In all towns and cities which are not assigned to a Landkreis (rural district) for administrative purposes and the Landkreise (rural districts), funding had a positive impact on the labour market, with around 9,500 additional jobs created at the companies supported throughout the federal state. Edith Weymayr, L-Bank CEO, explained that “in terms of development, 2023 was a year we could not have expected. The balance sheet highlights that Baden-Württemberg’s trade and industry have continued to be resilient and strong enough to invest in the future during the fourth year of the crisis, in spite of the economy remaining in the doldrums. As a promotional bank, we are well positioned to provide support.” For 2024, Weymayr expects the economy of the federal state of Baden-Württemberg to stabilise at a low level. However, she went on to say that it was too soon for overly optimistic expectations: “Uncertainty and pessimism have stayed with us in the new year to date. International conflicts, inflation and the domestic budget situation have all dampened sentiment: The L-Bank-ifo business climate index remained very weak at the turn of the year.”

NRW.BANK – publication of new sustainability strategy

NRW.BANK wants to achieve net zero in the three pillars of promotional business, capital market operations and banking operations by no later than 2045, thereby supporting the aims of the Paris Agreement. Additionally, strengthening social responsibility in North Rhine-Westphalia (NRW) represents a key point of the new sustainability strategy that was published on 18 January 2024. Eckhard Forst, Chairman of the Managing Board of NRW.BANK and of the bank’s Sustainability Committee, explained: “Sustainability is the key task of our time. [...] Our goal is to offer the appropriate development incentives that facilitate sustainable and commercially successful projects and advance the transition.” The new sustainability strategy specifies how to deal with the topic of sustainability as follows: 1) promotional business: in addition to the existing promotional programmes, NRW.BANK will enhance its product range to support transition processes. The aim is to reduce greenhouse gas emissions and negative environmental impacts as well as reinforce climate resilience and protect biodiversity. Regarding the social dimension, funding is to be made available for housing that responds to demand, is affordable and meets the needs of the relevant generation, 2) capital market operations: the aim is carbon neutral structuring of the investment portfolio by 2045 at the latest, making a contribution to limiting global warming to 1.5 °C. This excludes any new investment in companies that have no transition ambitions while actively supporting investment in companies that are ambitious regarding transition in line with the Paris climate targets. Furthermore, NRW.BANK will launch at least one green bond issue and one social bond issue in 2024, 3) banking operations: fewer resources and energy are to be consumed during banking operations, for example in offices and the staff canteen. For this purpose, banking operations are currently being certified in line with EMAS (Eco-Management and Audit Scheme). In addition to improving the bank’s own environmental performance, this also encompasses responsibility towards staff by creating a working environment that will remain attractive in the long term.

IBB – Berlin economy stutters in the second half of 2023

The engine of Berlin's economic growth stuttered in the second half of 2023. Both consumer spending and investments lacked the necessary stability to provide positive economic impetus. Uncertainty in the wake of the decision of Germany's Federal Constitutional Court (Bunverfassungsgericht) on the Climate and Transformation Fund (KTF) meant that planned investments failed in many areas. Nevertheless, GDP growth of almost 1% in 2023 remains a possibility for Berlin. In 2024, boosted by a gradual recovery, growth of around 1.5% could be achieved. Hinrich Holm, Chairman of the IBB Board of Management, said: "These days, economic sentiment is gloomy nationwide. Uncertainty is particularly high when it comes to investment projects that require state subsidies. As a result, such projects are either deferred or fail to materialise. There are some glimmers of hope from falling inflation and tariff agreements which will lead to a gradual improvement of real wages and encourage consumption. The high-turnover service sector of Germany's capital city propped up growth this year, and this also allows us to expect growth in GDP of around 1.5% for Berlin in the coming year." Real wages in the capital are slowly recovering in view of falling inflation and successful pay talks in the second and third quarters of 2023, with increases of 0.7% and 0.3% respectively. However, households in Berlin have become well versed in curbing their consumption because the previous four quarters, with losses in terms of real wages of up to 3%, have not yet been digested. Consumers' willingness to spend is only likely to return in the course of 2024, as more increases in real wages become more reliable and stabilise growth. Year on year, the number of people in work and subject to social security contributions rose by over 18,300 in November 2023 to around 1.69m. According to IBB's economists, it means that Berlin has remained in second place among all federal states, with growth of 1.1%. This is almost double the national average for Germany (+0.6%).

EUROFIMA presents Annual Engagement Report 2023

On 16 January 2024, EUROFIMA published its second Annual Engagement Report for 2023. Portfolio Manager Kristina Micic and EUROFIMA CEO Christoph Pasternak explained: "At EUROFIMA, we believe that investing our assets is not just about financial returns; it's about shaping a better outcome for many stakeholders." Close cooperation with companies in which EUROFIMA invests is a cornerstone of the agency's sustainability approach. Based on an open dialogue, critical issues regarding sustainability are discussed. Negotiations go beyond traditional thinking in terms of the categories, profit and loss, and instead are geared to the clusters of general corporate responsibility, environmental responsibility and community impact. According to EUROFIMA, bilateral meetings of this kind were conducted with twelve companies in 2023, whose main focus was managing key ESG risks, including in a sector comparison. As part of this, a few (and in some cases) relatively significant gaps were identified at affiliated companies. Selected results are summarised in the recently published Engagement Report. Micic and Pasternak continued: "We thank the companies which entered into this dialogue. By working together, we know that we can drive positive change, enhance long-term value and contribute to a world that is not only financially stable but also environmentally and socially responsible." Although EUROFIMA tends to be a rare guest in the primary market, we expect new bond issues in the EUR and USD benchmark segments during 2024.

Primary market

A month of many bond issues, January has progressed to the next round, as the last trading week also had plenty to offer. In addition to five new bond issues, we have noted two tap issues and four mandates. In the last edition of our weekly publication, we already mentioned three mandates with order books that opened last Wednesday after going to press. Nordic Investment Bank (ticker: NIB) went first, placing a green bond with a maturity of seven years and a volume of EUR 500m at ms +6bp. The guidance was ms +8bp area and the order book totalled EUR 1.3bn. Berlin (ticker: BERGER) also launched a bond issue in the 7y maturity segment, with EUR 1.5bn going into the securities portfolios of investors in line with the guidance of ms +12bp. A Canadian province made a pleasing return to the EUR market following a long absence: the benchmark bond issue of British Columbia (ticker: BRCOL) worth EUR 1.25bn (10.5y) was placed at ms +44bp. Compared with the guidance, no tightening was achieved at the marketing stage. From the segment of Belgian regions, which we recently described in detail as part of our [Public Issuers Special – Beyond Bundeslaender: Belgium 2023](#), Belgium’s French Community (ticker: LCFB) raised EUR 600m at OLO +46bp. This is approximately equivalent to ms +64bp. Meanwhile, German Laender still seem to be keen on floaters. Hesse (ticker: HESSEN) took to the floor with an FRN (4y) worth EUR 500m, which was placed in line with the guidance at ms -7bp versus the six-month Euribor. With a first ever EUR-denominated bond issue, Arab Bank for Economic Development in Africa (ticker: ARBBNK) was one of two issuers from outside our SSA coverage to appear on screens last Thursday, along with Canadian OMERS Finance Trust (ticker: OMERFT), both of which we mention briefly. ARBBNK issued a social bond with a maturity of three years, worth EUR 500m and placed at a final price of ms +100bp. However, we regard neither the bond nor the bank, whose registered office is located in Khartoum (Sudan), as “social”, given the fact that it was established by the Arab League at the [6th Arab Summit](#) in 1973 to counter Israel’s alleged “Zionist aggression” (sic). There is no space in our coverage for this kind of mindset. OMERFT, on the other hand, raised EUR 750m with a maturity of five years at ms +60bp. In accordance with the [funding plan](#) of the European Union (ticker: EU) for H1 2024, the first of six syndicated transactions was due this week. Instead of a new bond issue, the EU opted for two tap issues. Firstly, EU 3.125% 12/04/2030, the bond with the shorter maturity, was increased by EUR 3bn. As expected, demand was very high, with the deal being more than 27.0x oversubscribed as the order book totalled EUR 81bn. Compared with the guidance of ms +14bp area, the bond tightened by three basis points to ms +11bp during the marketing stage. The longer-dated EU 3% 03/04/2053 was tapped for EUR 5bn. With an order book of a remarkable EUR 99bn, the bid-to-cover ratio was 19.8x. The guidance was ms +87bp area and the bond was ultimately priced at ms +85bp. Four mandates came in yesterday (Tuesday, 23 January): KOMMUN (15y, WNG), IDF (10y, ESG), BREMEN (8y, WNG) and ONT (10y).

Issuer	Country	Timing	ISIN	Maturity	Size	Spread	Rating	ESG
LCFB	BE	18.01.	BE0002996776	10.4y	0.60bn	ms +64bp	- / A2 / -	-
HESSEN	DE	18.01.	DE000A1RQEQ4	4.0y	0.50bn	6mE -7	- / - / AA+	-
BRCOL	CA	17.01.	XS2753539068	10.5y	1.25bn	ms +44bp	AA+u / Aaa / AA	-
BERGER	DE	17.01.	DE000A351PH0	7.0y	1.50bn	ms +12bp	AAA / - / -	-
NIB	SNAT	17.01.	XS2753549703	7.0y	0.50bn	ms +6bp	- / Aaa / AAA	X

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

Covered Bonds

The “V” in the LTV calculation: Differing approaches persist despite EU Directive

Author: Lukas Kühne

EU Covered Bond Directive does not harmonise everything!

With the implementation of the [EU Covered Bond Directive](#) on 8 July 2022, a minimum standard was created for national covered bond legislation in the EU. This development on the covered bond market is very welcome, but in our view should not be equated with full harmonisation. Issuers and investors must therefore continue to weigh individual aspects of the national requirements against each other. Particularly in the context of the current debate on the development of the property markets, we think it is vital to focus on the different requirements for deriving the LTV ratios in the relevant mortgage cover pools. In addition to implications for LCR eligibility and risk weightings of covered bonds, the current version of the CRR also defines requirements in relation to the valuation of mortgage collateral in cover pools of covered bonds. However, in our opinion, this should also be regarded as a minimum standard rather than a uniform specification. The EU Covered Bond Directive does not explicitly regulate the derivation of the property values on which the LTV is based. However, we believe that the differences in the LTV ratios in the cover calculation are highly relevant, also for a comparative assessment of the credit quality of mortgage covered bonds in Europe. Mortgage-backed covered bonds make up the majority of covered bonds placed on the market. According to the annual statistics from the current [European Covered Bond Fact Book](#), 90.4% of all outstanding covered bonds at the end of 2022 were in the mortgage-backed. For the German Pfandbrief market, the dominance of mortgage Pfandbriefe in the EUR benchmark segment is only slightly less pronounced at just under 85% of all outstanding bonds. In addition to residential assets, the cover pools of some German Pfandbrief issuers also contain sizable proportions of commercial assets, which are considered “riskier” than residential properties. We provide a detailed summary of the composition of the cover pools of all German member institutions of the Association of German Pfandbrief Banks (vdp) in our [section 28 study](#). The property valuation is included in the cover pool reporting via the loan-to-value (LTV) ratio. In the current issue of our weekly publication, we would first like to look at the specific characteristics of property valuation in the context of Mortgage Pfandbriefe and then broaden our focus to include selected European jurisdictions and non-European countries. We think this is prudent, not least because the “V” in the LTV can be used to explain noticeable differences in the “hidden reserves” in relation to the credit quality of mortgage cover pools. For example, some rating institutions recognise the high requirements associated with the legal framework for German Pfandbriefe in their risk assessment of this sub-market in the covered bond universe.

The LTV ratio in cover pool reporting

In cover pool reporting, property valuation plays a central role, particularly with regard to the LTV ratio, the disclosure of which is required by law in cover pool reporting in most jurisdictions. The LTV percentage is the ratio between the loan volume of the financed property and the value of the property. The challenge in interpreting this key figure lies in the property valuation procedure, which can be structured differently depending on the jurisdiction. For example, the EU Covered Bond Directive does not contain a uniform valuation standard for the “V” in the LTV; instead, the member states are free to define whether the issuers should value the assets in the cover pool at market value and/or mortgage lending value ([EU 2019/2162](#)). It is therefore difficult to talk about a comparable figure across jurisdictions at this point. For this reason, in this article, we first want to take a closer look at the different approaches to property valuation in some selected jurisdictions.

Mortgage lending value ordinance: the mortgage lending value as a “sustainable” property value

The valuation of properties according to the mortgage lending value (“Beleihungswert”) has a long tradition in Germany, which can essentially be traced back to the Mortgage Banks Act of 1900. The German legislator has incorporated the regulations on the mortgage lending value primarily in the PfandBG and in the Mortgage Lending Value Ordinance (BelWertV). The valuation of properties in the cover pool according to the mortgage lending value method is codified in Section 16 PfandBG and is specified by the BelWertV. The mortgage lending value is intended to eliminate short-term market fluctuations and speculative elements in order to obtain a “sustainable” property price that can be achieved consistently over the entire term of the mortgage loan (Section 3 BelWertV). Accordingly, the mortgage lending value must inevitably be lower than the market value. To determine the mortgage lending value, the capitalised earnings value and the asset value of the property are calculated separately. As a rule, the capitalised earnings value is the decisive factor, which must not be exceeded. The asset value is usually used to check the capitalised earnings value. The starting point for determining the capitalised earnings value is the gross profit. This corresponds to the income “that the property can sustainably provide to each owner if it is properly managed and used as permitted” (Section 10 BelWertV). Some deductions have to be applied to this and the land value, determined separately, must be added. The asset value is made up of the value of the building, in particular the construction costs and the land value. If the calculated asset value is more than 20% below the capitalised earnings value, the underlying earnings must be reviewed with regard to their sustainability (Section 4 BelWertV).

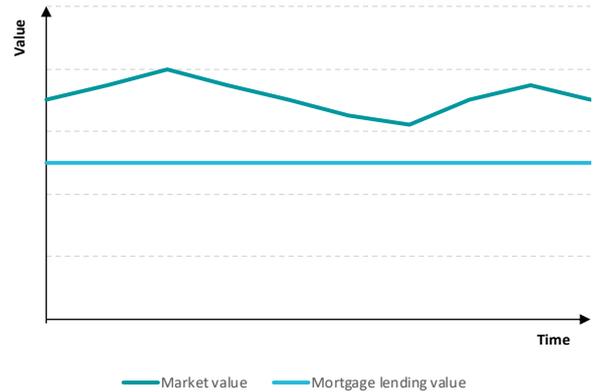
Pfandbrief Act: Mortgage lending value limit in Germany is 60%

As part of the disclosure requirements, each Pfandbrief issuer must also disclose the average weighted loan-to-value ratio for all assets in the cover pool on a quarterly basis. Legislation limits the assets eligible as cover assets to 60% of the loan-to-value ratio. If an asset exceeds this limit, only the portion of the loan that does not exceed the limit formally remains part of the cover pool. The mortgage lending value must be reviewed at least once a year and “must be reduced if necessary” (Section 26 BelWertV). This may be the case in particular if there is a significant deterioration in the basis for determining the mortgage lending value.

Model: capitalised earnings value method according to BelWertV

- Gross profit (§10) BelWertV
- Property management costs (§11) BelWertV
- Appropriate interest on land value
- Earnings from buildings and structures
- ✕ Multiplier (§12) and (§9) BelWertV
- Capitalised earnings value of the building
- + Land value (§15) BelWertV
- Capitalised earnings value

Chart: mortgage lending value vs. market value

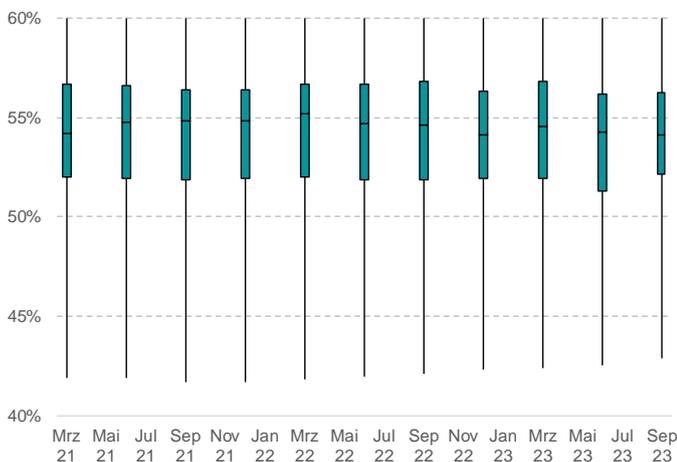


Source: vdp, NORD/LB Floor Research

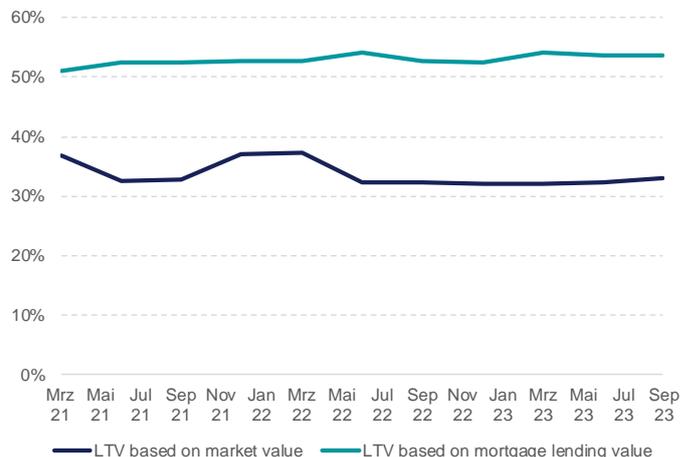
Development of loan-to-value ratios in Germany

In our [Publications on the transparency requirements of §28 PfandBG](#), we regularly report on the composition of the cover pools of German Pfandbrief issuers. In addition to the mandatory disclosure of the average weighted loan-to-value ratio (Section 28 PfandBG), the vdp also asks its member institutions for the average weighted loan-to-value ratio on a market value basis. However, this is a voluntary disclosure and is currently only reported by Aareal Bank and Deutsche Pfandbriefbank. The loan-to-value ratios of German Pfandbrief issuers fluctuate between 42% and 60%, but have averaged just over 50% in recent years. In comparison, however, these are significantly higher than the loan-to-value ratios on a market value basis. In September 2023, Aareal Bank reported a loan-to-value ratio of 55.3%, whereas the loan-to-value ratio on a market value basis was significantly lower at 32.7%. In our opinion, this demonstrates the “strength” of the mortgage lending value in terms of the credit quality, as it provides additional protection against price fluctuations on the property markets and therefore also has a buffer function.

DE: Box plot of loan-to-value ratios¹



DE: Average loan-to-value ratios¹



Source: vdp, NORD/LB Floor Research

¹ Composition of the database: Section 28 reporting by vdp member institutions

Moody's emphasises the mortgage lending value as "rating positive"

As part of their detailed legal framework analyses, Moody's rating experts last looked at the covered bond legislation in Germany in June 2022 and also referred to the LTV approach used in Germany. In particular, the agency emphasises the mortgage lending value limit of 60%, which is low by international standards, and the method for valuing mortgage collateral according to the mortgage lending value. This is below the market value of the property and therefore offers additional security. The rating agency sees these factors as one of the explicit strengths of the German covered bond legislation.

Going back to our initial question on harmonisation at European level

The amendment to harmonise covered bond legislation in the EU also resulted in amendments to the CRR. In particular, the review period for commercial property valuations that are part of a cover pool was cut from three years to one year. It should be emphasised that Article 129 CRR introduced a minimum standard for covered bonds that must be met by all countries. The member states are, however, free to establish stricter requirements or standards in their own covered bond legislation. Article 129 CRR stipulates that mortgage-backed cover pool assets must be measured either at market value or at mortgage lending value. A maximum LTV of 80% is stipulated as the upper limit for residential property and 60% for commercial property. However, the LTV limit may be increased to 70% if all requirements of Section 129 (1) (f) CRR are met. Among other things, this means that the OC ratio of the cover pool must be at least 10%. According to the CRR, the LTV values must be reviewed at least once a year, regardless of the type of property. In our view, the requirements of the CRR offer the member states a relatively large amount of leeway that does not allow for absolute comparability.

LTV comparability using the example of Germany and France

In our opinion, the divergence in the interpretation of the CRR is well illustrated by the two largest EUR benchmark jurisdictions, Germany and France. Whereas in Germany only the mortgage lending value may be used to value properties, in France the market value (less costs directly associated with the acquisition of the property) or, in exceptional cases, the total costs of initial use are applied. This should not contain any speculative elements and should be based on the long-term characteristics of the property. However, it is significantly less conservative than the result of the BelWertV would be. The upper LTV limit for residential properties in France is also higher than in Germany at 80%, while the LTV for commercial properties may not exceed 60%. As in Germany, property valuations in France must be reviewed at least once a year. In France, a statistical method is used for this purpose that reflects the performance of the property market and can lead to revaluations in the event of major price fluctuations. In our view, these characteristics alone highlight the dilemma of comparing LTVs across multiple jurisdictions. If the German loan-to-value ratio is now "used" synonymously with the French LTV on a market value basis, this could be misleading, in that there is no major difference between the two ratios when they result in identical or very similar values. At the end of the day, the "V" in the German loan-to-value ratio differs from the "V" in the French LTV.

LTV regulation outside the EU using the example of Canada

In major covered bond jurisdictions that are not part of the EU, different regulations apply in some cases with regard to LTVs. Nevertheless, it should be noted that the legislation in these countries is strongly orientated towards the CRR. This convergence is clearly evident when looking at the jurisdiction of Canada, for example. A significant difference compared to Germany lies in the selection of eligible cover pool assets. In Canada, only loans for financing residential property and multi-family houses with a maximum of four residential units are eligible for cover pools. As in France, the properties must be valued at market value, using either an independent property valuer or a valuation model that calculates the value of the property on the basis of comparative values to derive this value. The LTV may not exceed a maximum value of 80% in Canada. The property valuations are reviewed at least once a quarter by means of indexation to a Canadian property price index (see for example [CMHC](#) or [Teranet](#) House Price Index). Similar regulatory requirements also apply in the other major covered bond jurisdictions that are not members of the EU. Consequently, we also conclude for these jurisdictions that the LTV is also not comparable with the German loan-to-value ratio. Unsurprisingly, we also see this as a consequence of how the property value is derived.

Conclusion and comments

If we take the mortgage Pfandbrief, it is clear that the LTV ratios reported by German issuers on the basis of the PfandBVG and BelWertV are not comparable with the ratios from other jurisdictions. In our opinion, property valuation based on the mortgage lending value inevitably leads to higher LTV ratios than a valuation using a market value method. The German loan-to-value ratio therefore offers “additional” protection against distortions on the property market, which is also a testament to the quality of the assets in the cover pools of German Pfandbrief banks. This is clearly illustrated by the German Pfandbrief issuers, who report LTV ratios based on both valuation approaches. The EU Covered Bond Directive has set a standard for the covered bond market, but is less specific in its choice of property valuation method for eligible cover pool assets than in other areas (e.g. the types of cover assets required to achieve the premium label). In our opinion, the LTV ratio of a French issuer is therefore not fully comparable with that of a German institution. Accordingly, when comparing LTV ratios of covered bond issuers from different jurisdictions, the national covered bond laws must be examined in each case in order to be able to put this comparison into perspective. From this point of view, a certain degree of standardisation in the context of the EU directive would certainly have been conceivable or even desirable for the comparability of European covered bonds. Nevertheless, this is an isolated view pertaining to the issue we have been dealing with today. After all, a corresponding adjustment or specification could have significantly delayed the finalisation of the minimum standards, which were already the subject of intense debate.

SSA/Public Issuers

28th meeting of the Stability Council (December 2023)

Authors: Dr Norman Rudschuck, CIAA // Christian Ilchmann

Foreword on the Stability Council and the economic situation

The Stability Council, a joint body operated by the federal government (Bund) and federal states (Laender), convened for its 28th meeting on 18 December 2023. The meeting was chaired by Dr Marcus Optendrenk, Minister of Finance of North Rhine-Westphalia, and Christian Lindner, Federal Minister of Finance. The establishment of the Stability Council can be traced back to the Federalism Reform II (Foederalismusreform II), since which time its existence has been governed by Article 109a of the Basic Law (GG). In the press release covering the 28th meeting, the considerable repercussions on the Bund's budget policy and that of the Laender amidst the ruling by the Federal Constitutional Court (BVerfG) on the federal government's 2021 Second Supplementary Budget Act (Zweite Nachtragshaushaltsgesetz) on 15 November 2023 were highlighted in particular. The governments and budgetary legislators of the Bund and the individual Laender had already grasped the first immediate ramifications. There was a consensus in the Stability Council that implementation of the ruling would have to lead to greater comparability and transparency of public budgets in any crisis situations in the future. The Stability Council would also benefit from this in fulfilling its monitoring responsibilities. The energy crisis triggered by the Russian war of aggression in Ukraine, high inflation and the restrictive monetary policy now being pursued by the European Central bank are still hampering economic development. The Federal Statistical Office is forecasting a fall in gross domestic product (GDP) adjusted for inflation, seasonal and calendar-related factors of -0.3% for 2023. The economic experts forecast a slight increase in economic output of +0.7% for the following year (2024), while the Macroeconomic Policy Institute (IMK) within the Hans-Böckler Foundation still expects a slight recession in the current year (-0.3%).

Reduction in the structural deficit by 2027

For 2023, the Stability Council expects structural net borrowing (NKA) of around 0.35% of GDP for the federal budget, as it does for 2024, meaning that the requirements of the debt brake will be met precisely. The structural budget balance will improve to EUR -401 per capita up to 2027 (2023: EUR -1,223). All other things being equal, the European medium-term budgetary target – a general government structural deficit of not more than 0.5% of GDP – will probably be complied with on average from 2024 to 2027. In the opinion of the Stability Council, the current deviations are permissible on the basis of the European exception or rather the usual demands from the European budget monitoring authorities to reduce the structural deficit, especially after the debt brake was again suspended at federal level for 2023. We view the figures of the Federal Ministry of Finance as incommensurable with this. Here, the structural budget balance is shown as -2% of GDP for 2023, before falling to -1.5% in 2024. We feel that this discrepancy can only result from a different definition of terms, in particular, by (not) netting out economic effects or not more precisely specified non-recurring effects. This does not exactly provide consistency or clarity in the overall picture.

Stability Council reviews on the basis of individual stability reports

As part of its regular budgetary monitoring procedures, the Stability Council reviewed the budgetary situation at both Bund and Laender level on the basis of their respective stability reports. In the previous year, on 16 December 2022, the Stability Council established that the Bremen was facing an impending budget emergency. According to Section 5 (1) of the Stability Council Act (StabiRatG), the Land is obliged to present a proposal for a restructuring programme. To determine the budgetary emergency, the Stability Council had previously established an Evaluation Committee at its 24th meeting. Following extensive consultations with the Evaluation Committee regarding the objective of the restructuring programme and the measures it would require, Bremen submitted a draft restructuring programme in autumn 2023. There are currently no indications of a potential budget emergency in the other 15 Laender.

Number of anomalies increases slightly

Laender finances and their financial planning have not escaped the effects of the ongoing crises emanating from various directions either. The number of anomalies has risen from 16 to 20 compared with the previous year. The peak value of 29 anomalies was registered in 2011, while the lowest number, 16 anomalies, was first determined in 2019. The Stability Council identifies an anomaly as soon as one of the key metrics (budget balance, credit financing ratio, interest/tax ratio, debt level) breaches the permitted level several times in one of the analysis periods (1. Current situation = last two financial years and current financial year; 2. Planning = financial planning of the coming years). Since 2020, an updated system to assess the budgetary situation has been used. Details regarding the new version can be accessed (German only) [here](#). Information on the function of the Stability Council, its key metrics and unchanged definitions is available in the most recent version of our [Issuer Guide – German Laender 2023](#).

Anomalies identified by the Stability Council

	Budget balance		Credit financing ratio		Interest-tax ratio		Debt level	
	Current situation	Planning	Current situation	Planning	Current situation	Planning	Current situation	Planning
Baden-Wuerttemberg	No	Nein	No	No	No	No	No	No
Bavaria	No	No	No	No	No	No	No	No
Brandenburg	Yes	No	Yes	No	No	No	No	No
Hesse	No	No	No	No	No	No	No	No
Mecklenburg-Western P.	No	No	No	No	No	No	No	No
Lower Saxony	No	No	No	No	No	No	No	No
North Rhine-Westphalia	Yes	No	No	No	No	No	No	No
Rhineland-Palatinate	No	No	No	No	No	No	No	No
Saarland	No	No	No	No	Yes	Yes	Yes	Yes
Saxony	No	No	No	No	No	No	No	No
Saxony-Anhalt	No	No	No	No	No	No	Yes	Yes
Schleswig-Holstein	No	No	No	No	No	No	Yes	Yes
Thuringia	No	No	No	No	No	No	No	No
Berlin	No	Yes	No	No	Yes	No	No	No
Bremen	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes
Hamburg	No	No	No	No	No	No	No	No

Source: Stability Council, NORD/LB Floor Research

Structural budget balance in EUR per capita

	Current		Target	Limit	2024	Financial planning		2027	Limit
	2021	2022	2023	violations		2025	2026		violations
Baden-Wuerttemberg	233	275	48	no	14	205	205	-	no
Bavaria	-4	197	-169	no	60	78	109	-	no
Brandenburg	-219	53	-874	yes	-559	-50	-7	-	no
Hesse	158	275	-54	no	-50	36	60	61	no
Mecklenburg-Western P.	485	281	-55	no	191	-24	206	249	no
Lower Saxony	-49	288	7	no	-9	-34	-17	-44	no
North Rhine-Westphalia	-180	-227	-114	yes	149	28	26	55	no
Rhineland-Palatinate	390	497	-133	no	18	38	28	27	no
Saarland	-4	-2,889	107	no	115	75	126	127	no
Saxony	156	364	-111	no	19	318	330	378	no
Saxony-Anhalt	-867	472	32	no	90	102	129	-	no
Schleswig-Holstein	161	-227	-279	no	0	31	42	-	no
Thuringia	-66	162	-347	no	-364	135	131	132	no
Berlin	84	179	-541	no	-695	-624	-18	27	yes
Bremen	-230	-340	-788	yes	-931	-850	-789	-730	yes
Hamburg	514	1,468	-27	no	-155	-157	-285	-	no
Laender average*	23	129	-135		-132	-43	17	28	
Threshold (universal)	-177	-71	-335		-385	-385	-385	-385	

* The Laender average from 2024 was determined using estimates. **Red** = Violation of permitted threshold values; several times = value exceeded
Source: Stability Council, NORD/LB Floor Research

Credit financing ratio in %

	Current		Target	Limit	2024	Financial planning		2027	Limit
	2021	2022	2023	violations		2025	2026		violations
Baden-Wuerttemberg	3.6	-2.0	0.6	no	-1.9	-2.1	-2.2	-	no
Bavaria	3.1	0.6	-0.2	no	-0.8	-1.1	-1.4	-	no
Brandenburg	8.8	-6.5	9.7	yes	4.7	-0.3	1.3	-	no
Hesse	-0.7	-1.0	-0.2	no	-0.8	-0.8	-0.8	-0.8	no
Mecklenburg-Western P.	-2.5	-0.4	-1.6	no	-4.2	-2.7	-2.8	-2.7	no
Lower Saxony	-4.2	-2.2	0.0	no	-0.3	-0.2	-0.5	-0.4	no
North Rhine-Westphalia	3.2	3.8	0.5	no	-3.0	-0.3	-0.2	-0.2	no
Rhineland-Palatinate	-2.6	-4.5	-2.5	no	0.2	-0.9	-0.7	-0.7	no
Saarland	0.9	33.3	-1.5	no	-1.3	-1.2	-1.2	-1.2	no
Saxony	-2.7	1.4	-4.5	no	-5.6	-6.2	-6.3	-6.5	no
Saxony-Anhalt	11.7	-6.5	-2.6	no	-0.8	-0.8	-1.0	-	no
Schleswig-Holstein	-4.5	-11.8	1.7	no	-0.2	-0.3	-0.5	-	no
Thuringia	-0.8	0.2	-0.6	no	-1.8	-2.0	-2.0	-2.0	no
Berlin	-7.1	0.7	0.0	no	1.5	1.5	1.0	0.3	no
Bremen	7.8	5.8	38.2	yes	-0.1	-0.1	-0.4	-0.6	no
Hamburg	1.5	-8.3	0.7	no	1.6	2.5	4.3	-	no
Laender average*	1.0	0.6	0.7		-0.8	-0.9	-0.8	-1.5	
Threshold (universal)	4.0	3.6	3.7		5.7	5.7	5.7	5.7	

* The Laender average from 2024 was determined using estimates. **Red** = Violation of permitted threshold values; several times = value exceeded
Source: Stability Council, NORD/LB Floor Research

Interest/tax ratio in %

	Current		Target 2023	Limit violations	2024	Financial planning			Limit violations
	2021	2022				2025	2026	2027	
Baden-Wuerttemberg	3.6	2.5	2.9	no	2.9	2.9	3.2	-	no
Bavaria	0.8	0.7	1.2	no	2.0	2.3	2.5	-	no
Brandenburg	2.4	1.8	2.5	no	2.5	2.6	2.6	-	no
Hesse	3.3	2.8	2.9	no	3.2	3.7	4.4	4.8	no
Mecklenburg-Western P.	2.8	2.6	3.7	no	2.4	2.4	2.4	2.5	no
Lower Saxony	1.9	2.4	3.3	no	3.9	4.3	4.7	5.2	no
North Rhine-Westphalia	2.2	1.9	3.7	no	4.6	4.7	4.8	4.9	no
Rhineland-Palatinate	2.0	2.1	2.2	no	2.4	2.9	3.0	3.2	no
Saarland	6.2	5.6	6.1	yes	6.1	5.7	6.2	6.4	yes
Saxony	0.4	0.3	0.3	no	0.5	0.8	1.1	1.2	no
Saxony-Anhalt	3.6	2.7	3.4	no	3.4	3.7	4.2	-	no
Schleswig-Holstein	2.9	2.8	3.7	no	4.8	5.0	5.0	-	no
Thuringia	3.0	2.5	2.6	no	2.6	2.8	3.0	3.3	no
Berlin	4.1	3.4	3.8	yes	4.0	4.3	4.7	5.0	no
Bremen	12.0	11.1	10.4	yes	10.1	9.4	8.9	8.5	yes
Hamburg	2.7	2.3	2.7	no	2.8	3.3	3.8	-	no
Laender average*	2.7	2.6	2.7		3.6	3.8	4.0	4.5	
Threshold (non-city states)	3.6	3.1	4.1		5.1	5.1	5.1	5.1	
Threshold (city states)	3.8	3.3	4.4		5.4	5.4	5.4	5.4	

* The Laender average from 2024 was determined using estimates. Red = Violation of permitted threshold values; several times = value exceeded
Source: Stability Council, NORD/LB Floor Research

Debt level in EUR per capita

	Current		Target 2023	Limit violations	2024	Financial planning			Limit violations
	2021	2022				2025	2026	2027	
Baden-Wuerttemberg	5,370	5,225	5,337	no	5,319	5,296	5,296	-	no
Bavaria	2,810	2,771	2,767	no	2,736	2,687	2,616	-	no
Brandenburg	6,905	6,595	7,211	no	7,499	7,475	7,552	-	no
Hesse	6,388	6,210	6,243	no	6,243	6,243	6,243	6,243	no
Mecklenburg-Western P.	7,595	7,518	7,518	no	7,352	7,273	7,194	7,115	no
Lower Saxony	8,484	8,237	8,237	no	8,223	8,212	8,189	8,165	no
North Rhine-Westphalia	8,917	9,062	9,100	no	8,932	8,908	8,884	8,860	no
Rhineland-Palatinate	7,732	7,582	7,444	no	7,456	7,407	7,369	7,332	no
Saarland	14,840	17,458	17,357	yes	17,255	17,154	17,053	16,952	yes
Saxony	3,171	3,237	3,193	no	3,095	2,982	2,863	2,745	no
Saxony-Anhalt	10,179	10,580	10,557	yes	10,642	10,732	10,818	-	yes
Schleswig-Holstein	10,829	10,590	10,716	yes	10,734	10,747	10,747	-	yes
Thuringia	7,444	7,384	7,347	no	7,233	7,115	6,995	6,871	no
Berlin	16,318	15,960	15,987	no	16,169	16,354	16,482	16,547	no
Bremen	32,682	32,583	36,680	yes	36,586	36,494	36,370	36,213	yes
Hamburg	13,777	13,397	13,431	no	13,549	13,767	14,183	-	no
Laender average*	7,580	7,529	7,600		10,564	10,553	10,553	11,704	
Threshold (non-city states)	9,854	9,787	9,880		9,980	10,080	10,180	10,280	
Threshold (city states)	16,676	16,563	16,721		16,821	16,921	17,021	17,212	

* The Laender average from 2024 was determined using estimates. Red = Violation of permitted threshold values; several times = value exceeded
Source: Stability Council, NORD/LB Floor Research

Bremen: potential impending budget emergency

Together with Saarland, Bremen also underwent a restructuring programme starting in 2011, which expired at the end of 2020. As mentioned previously, anomalies in terms of Bremen's key budget metrics were again identified at the 24th meeting of the Stability Council in December 2021, which is why an Evaluation Committee was established at state secretary level. However, given the crisis prevailing at the time, the Evaluation Committee took the view that submission of a proposal for a reconstruction programme by Bremen at the Council meeting at the end of 2023 was justifiable. The Stability Council subsequently followed the proposals and established an impending budgetary emergency for Bremen. On 29 November 2023, the Evaluation Committee was notified that the Bremen Senate had decided during a closed meeting on 28 November that the state government would have to present a second supplementary budget as a consequence of the ruling by the BVerfG mentioned previously. This will have significant repercussions for the 2023 financial year and financial planning. The previously presented restructuring programme will also have to be amended to take account of this. The Stability Council has therefore asked the Evaluation Committee to continue consulting on the restructuring programme and to present a restructuring agreement with Bremen based on updated budget data at the meeting of the Stability Council in the second half of 2024.

Lower Saxony: balanced budgets and stable debt level

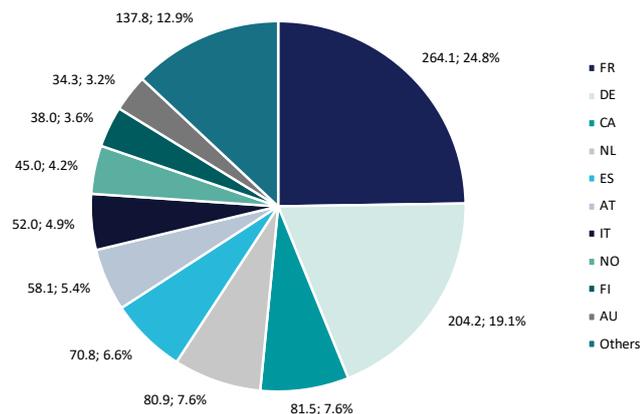
And how is our principal shareholder faring? Lower Saxony has not exceeded the threshold value for any of the key figures monitored by the Stability Council and is therefore again not required to undergo restructuring. Accordingly, no anomalies have again been recorded for Lower Saxony. Due to solid budget management in recent years, Lower Saxony will be able to navigate the challenges presented by the pandemic, energy crisis and inflation. The current situation proves that the Land's ability to act remains unaffected by the introduction of the debt brake. In line with current budget and financial planning, Lower Saxony has already posted a positive structural budget balance since 2022. This will turn slightly negative once more from 2024 to 2027 according to the planning figures but will always be well above the threshold values.

Conclusion

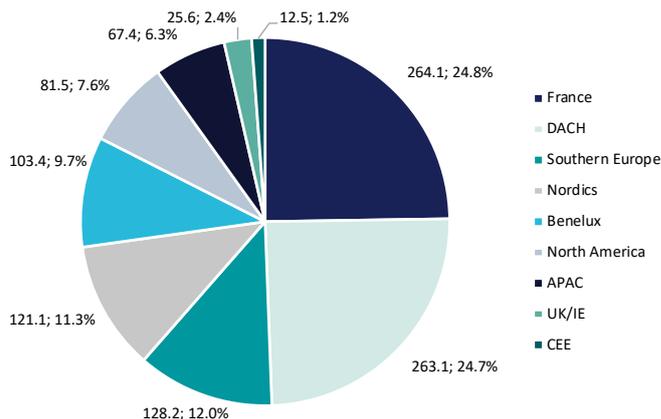
The 28th meeting of the Stability Council was again dominated by challenges associated with multiple crises. Since its first meeting in April 2010, the financial situation of the German Laender has steadily improved. This is evident from the decreasing number of anomalies and/or exceeded limits identified by the Stability Council. The meeting in 2011 identified a total of 29 anomalies, whereas the figure was down to 20 in 2023 – following the record low of 16 in 2022 – despite the war, energy crisis, more restrictive monetary policy and inflation. As such, development has been positive overall. Only in Bremen has an imminent budgetary crisis been confirmed once more. A second supplementary budget for 2023 was needed in Bremen in response to the ruling by the BVerfG, which will entail adjustments to the restructuring programme presented in November 2023. We expect correspondingly adjusted proposals for the restructuring process in the second half of 2024. As usual, we shall report on the latest developments in due course.

Charts & Figures Covered Bonds

EUR benchmark volume by country (in EURbn)



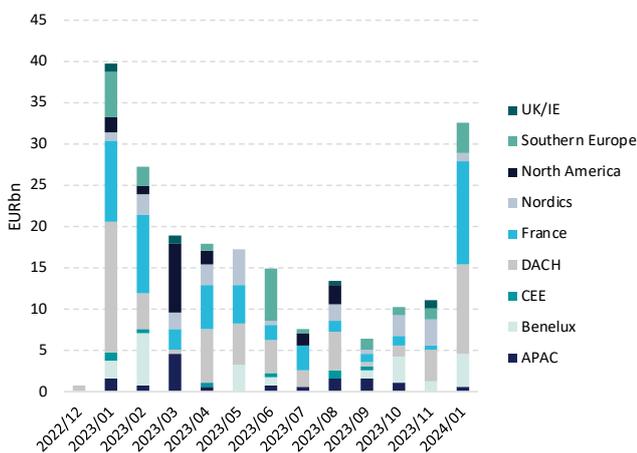
EUR benchmark volume by region (in EURbn)



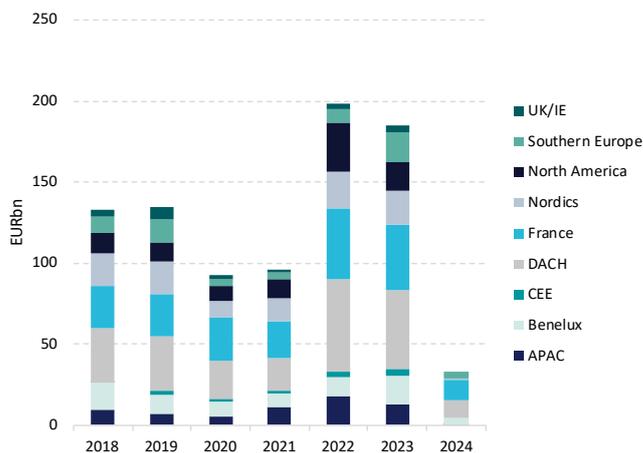
Top-10 jurisdictions

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	264.1	254	24	0.97	9.3	4.9	1.34
2	DE	204.2	291	37	0.65	7.8	4.1	1.29
3	CA	81.5	60	0	1.33	5.5	2.7	1.15
4	NL	80.9	81	3	0.94	10.4	6.1	1.22
5	ES	70.8	56	5	1.15	11.0	3.3	2.05
6	AT	58.1	98	5	0.58	8.1	4.5	1.44
7	IT	52.0	64	4	0.78	8.5	3.7	1.73
8	NO	45.0	55	12	0.82	7.3	3.6	0.78
9	FI	38.0	42	4	0.89	6.9	3.6	1.53
10	AU	34.3	33	0	1.04	7.2	3.3	1.56

EUR benchmark issue volume by month

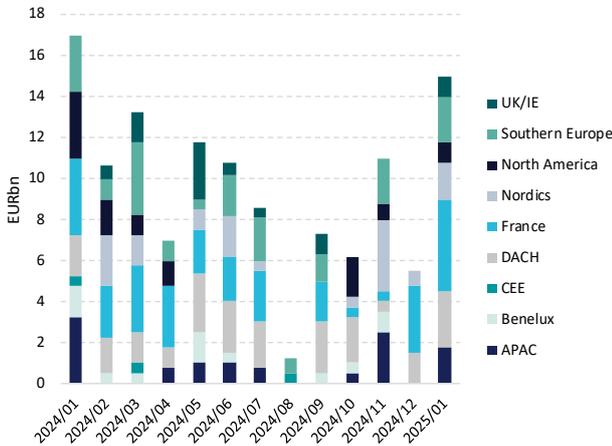


EUR benchmark issue volume by year

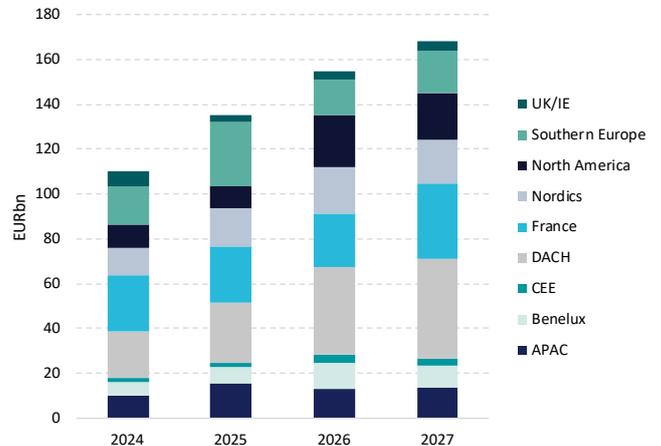


Source: market data, Bloomberg, NORD/LB Floor Research

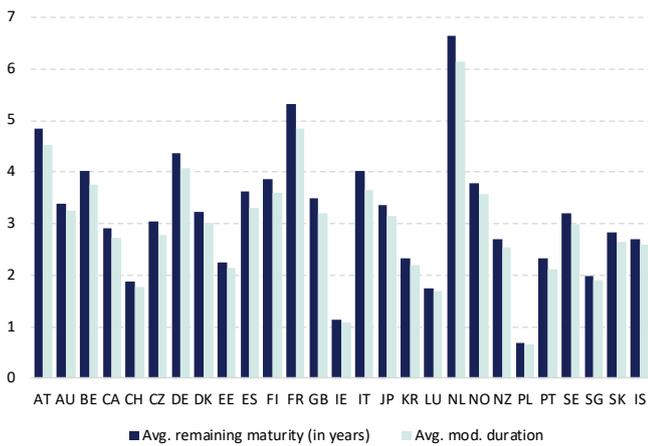
EUR benchmark maturities by month



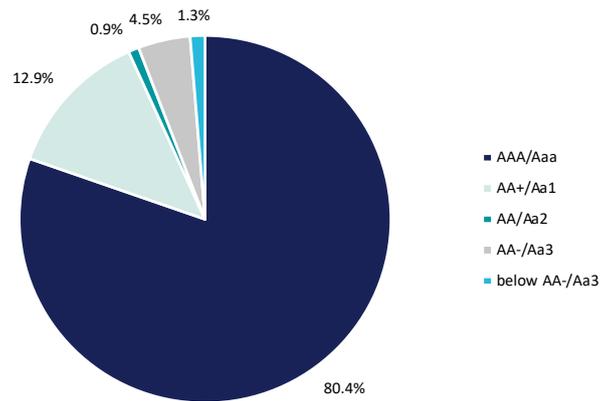
EUR benchmark maturities by year



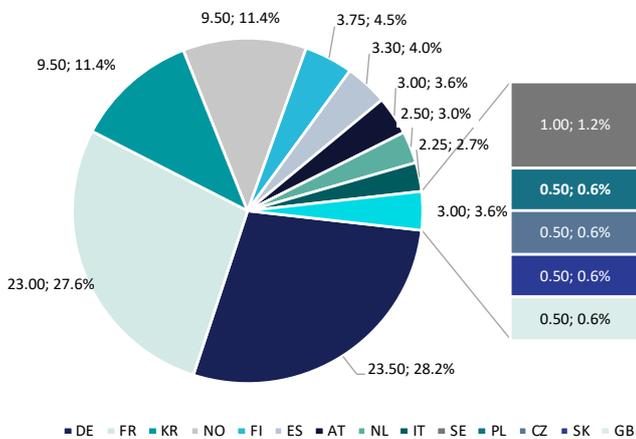
Modified duration and time to maturity by country



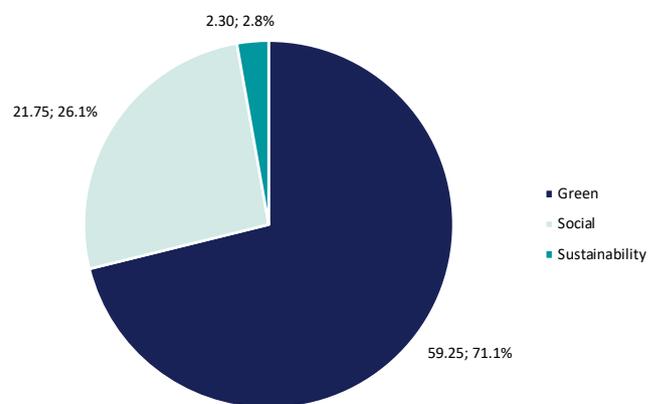
Rating distribution (volume weighted)



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

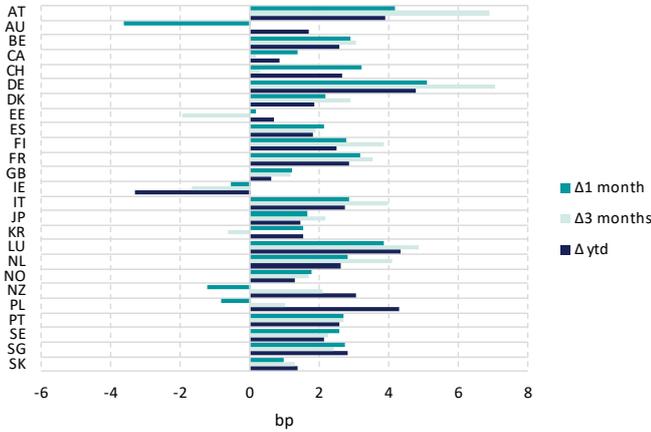


EUR benchmark volume (ESG) by type (in EURbn)

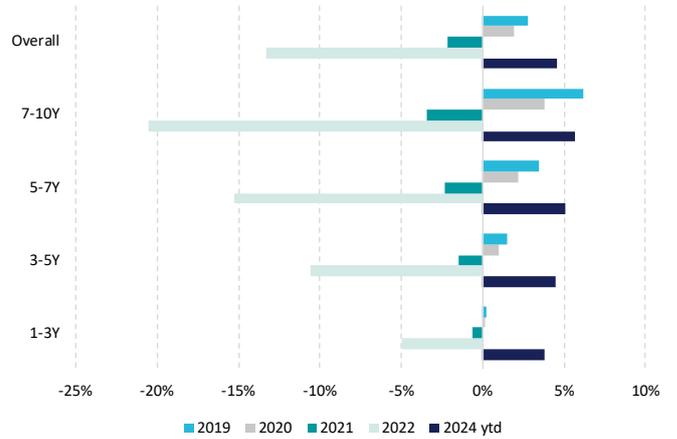


Source: market data, Bloomberg, NORD/LB Floor Research

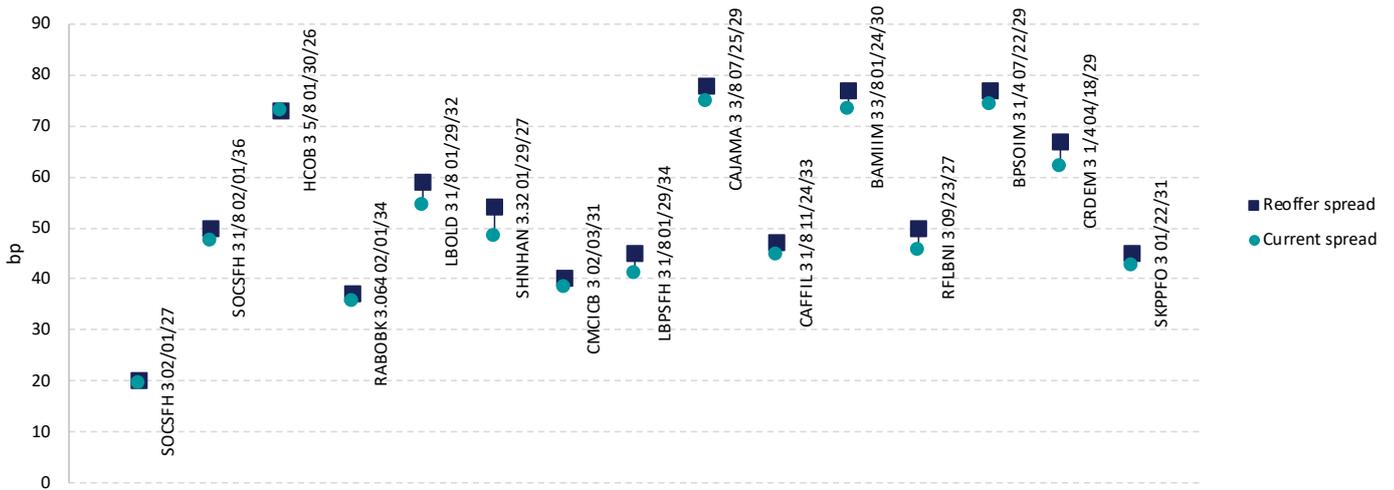
Spread development by country



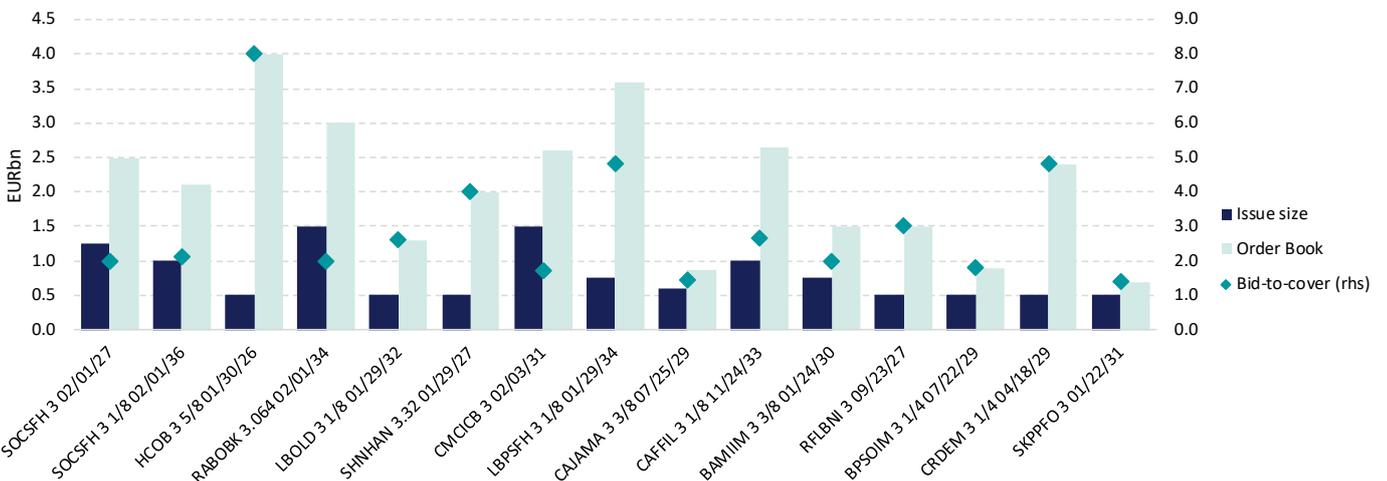
Covered bond performance (Total return)



Spread development (last 15 issues)



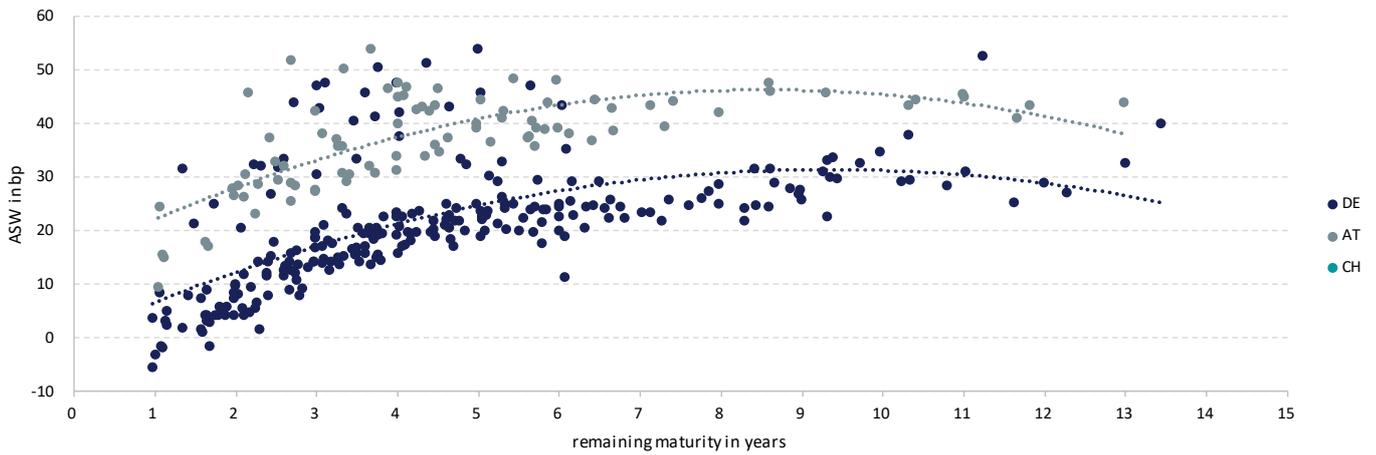
Order books (last 15 issues)



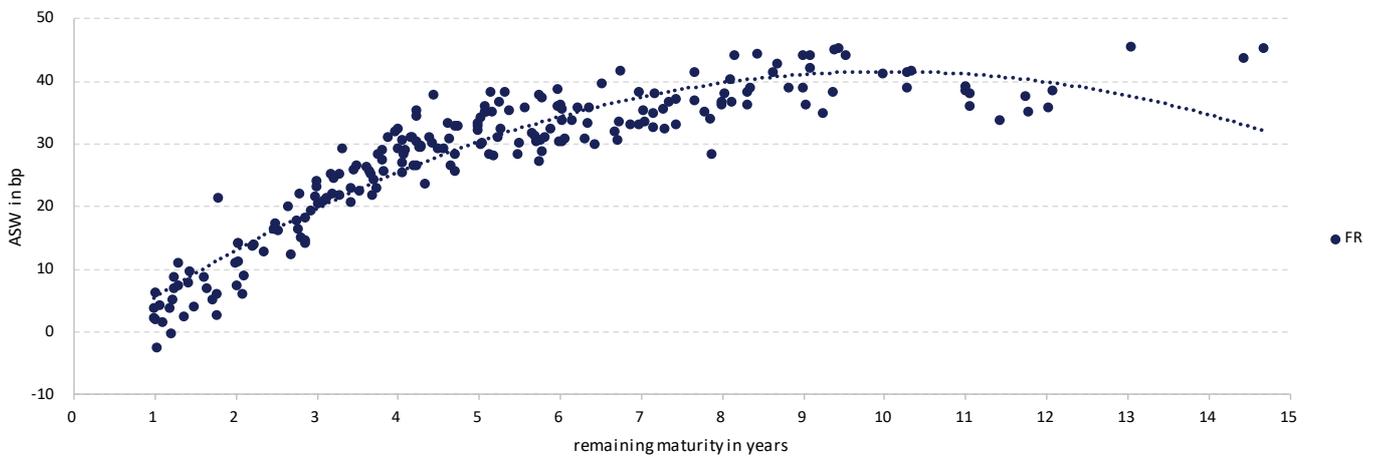
Source: market data, Bloomberg, NORD/LB Floor Research

Spread overview¹

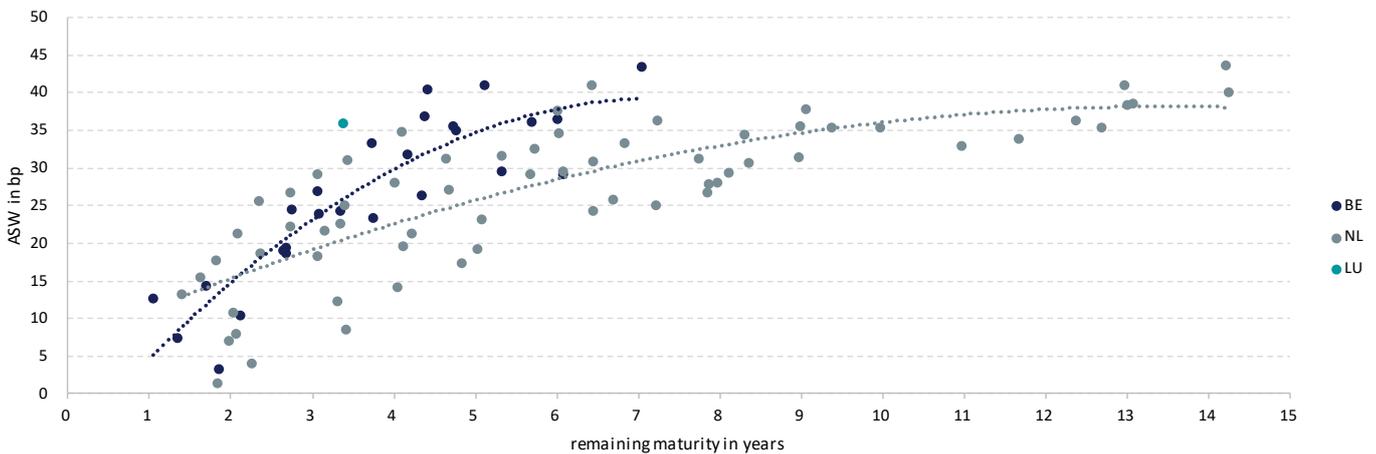
DACH 



France 

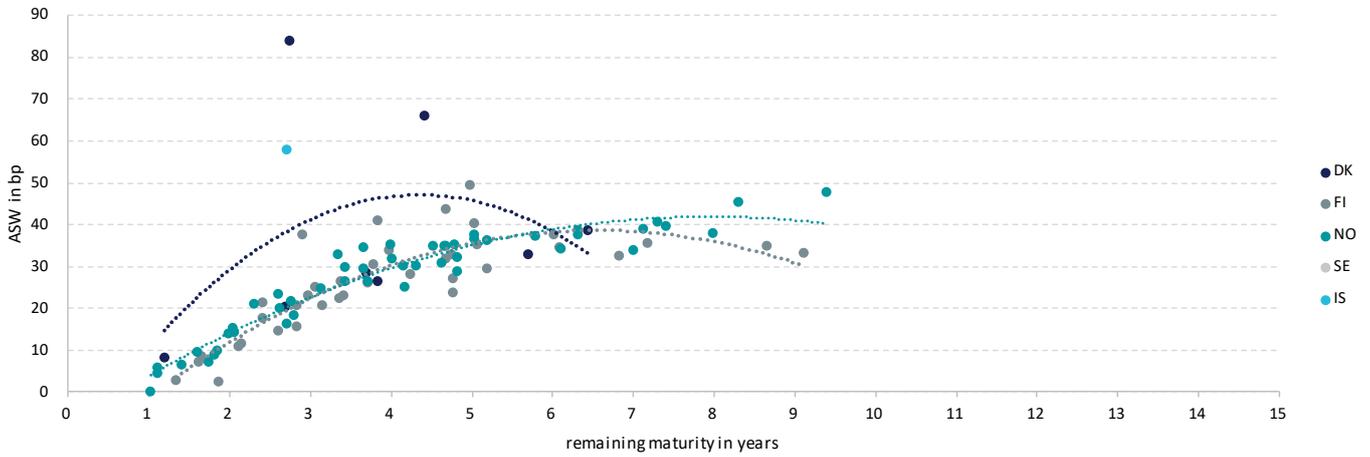


Benelux 

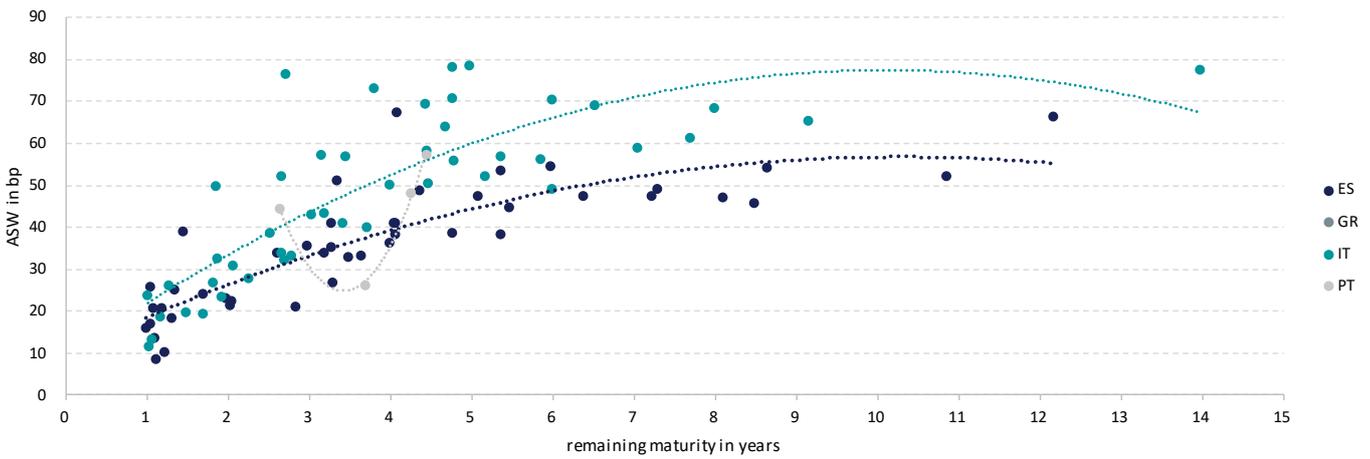


Source: market data, Bloomberg, NORD/LB Floor Research ¹Time to maturity 1 ≤ y ≤ 15

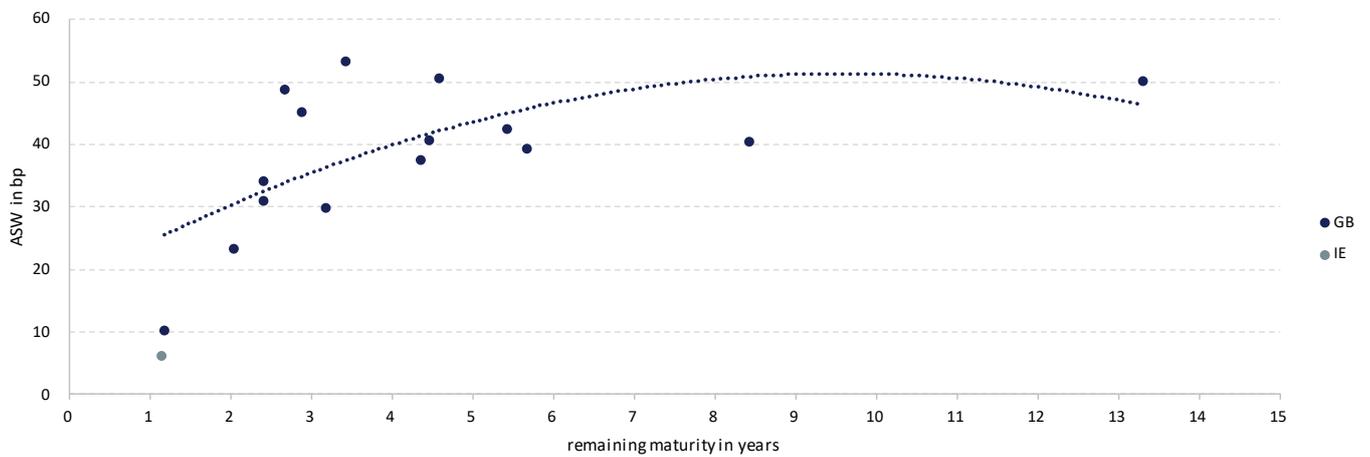
Nordics 🇩🇰 🇸🇪 🇳🇴 🇫🇮 🇮🇸



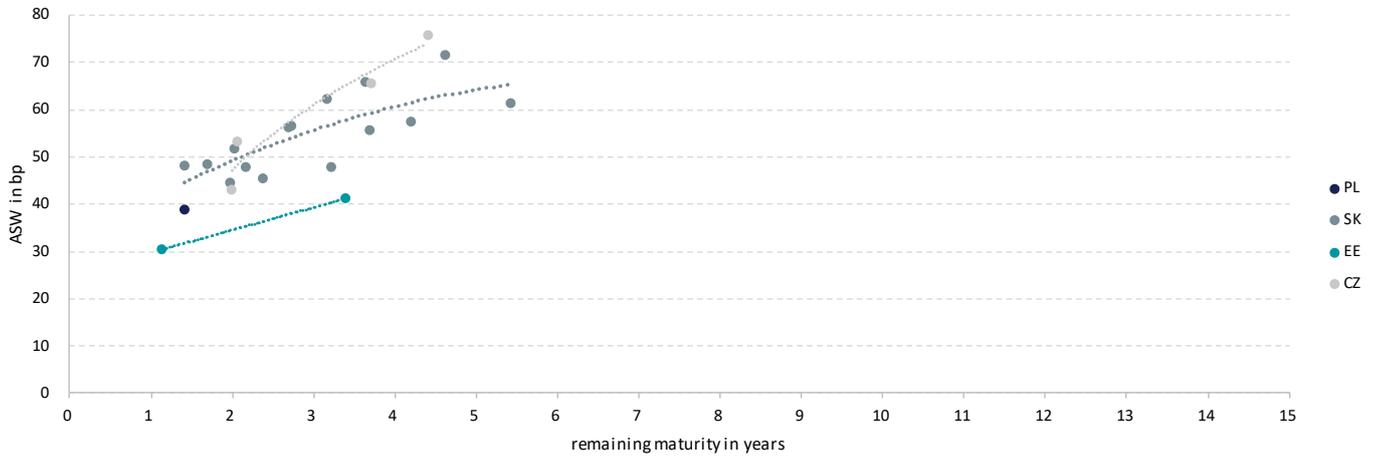
Southern Europe 🇪🇸 🇬🇷 🇮🇹 🇵🇹



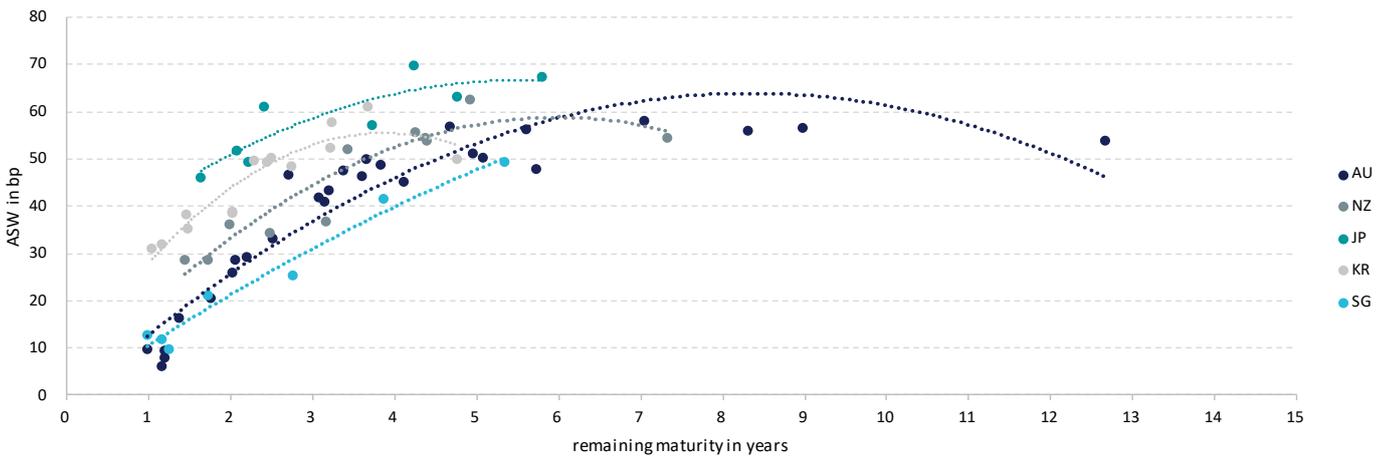
UK/IE 🇬🇧 🇮🇪



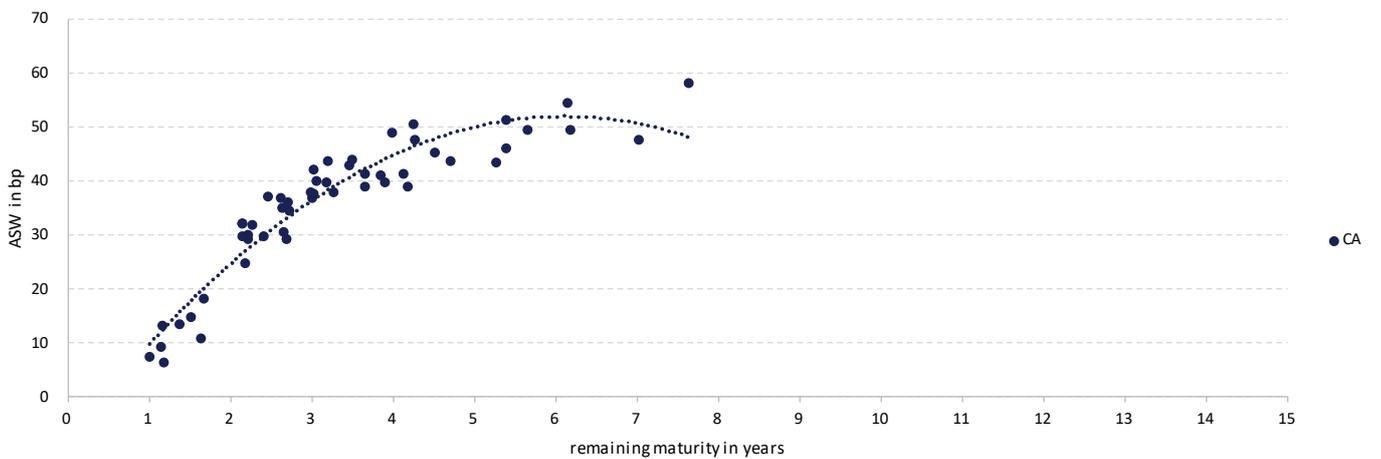
CEE 



APAC 



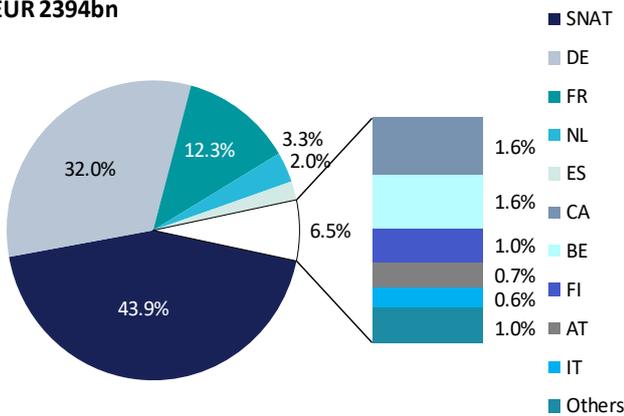
North America 



Charts & Figures SSA/Public Issuers

Outstanding volume (bmk)

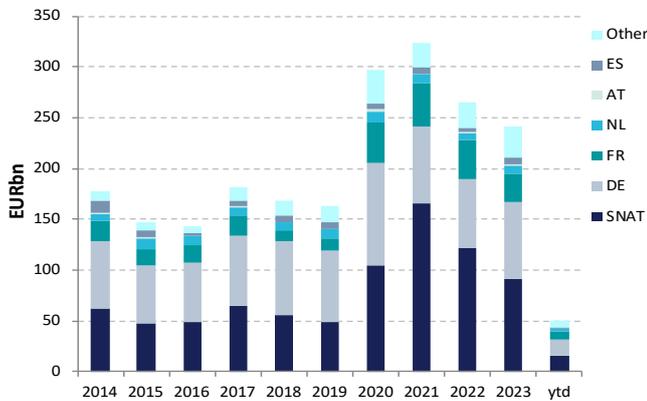
EUR 2394bn



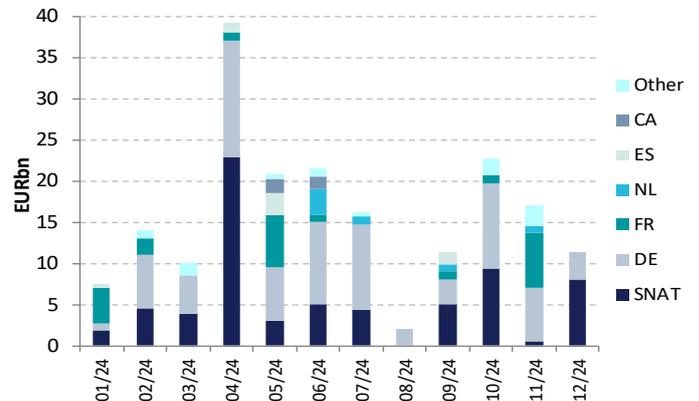
Top 10 countries (bmk)

Country	Vol. (€bn)	No. of bonds	ØVol. (€bn)	Vol. weight. ØMod. Dur.
SNAT	1,050.8	231	4.5	8.0
DE	766.4	571	1.3	6.2
FR	293.5	198	1.5	5.9
NL	78.2	67	1.2	6.7
ES	48.5	66	0.7	4.6
CA	39.3	26	1.5	4.4
BE	37.8	41	0.9	10.5
FI	23.5	25	0.9	4.8
AT	17.8	22	0.8	4.4
IT	14.5	18	0.8	4.5

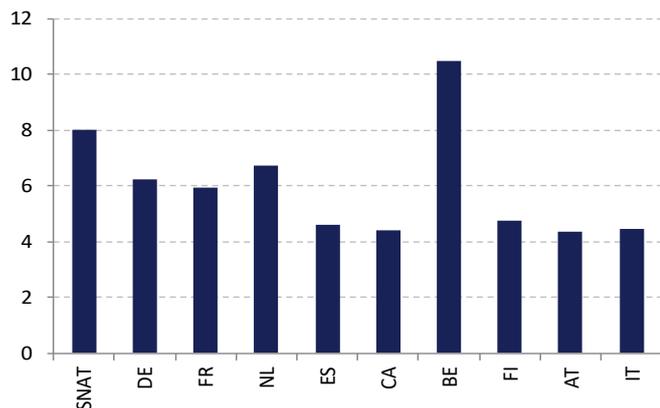
Issue volume by year (bmk)



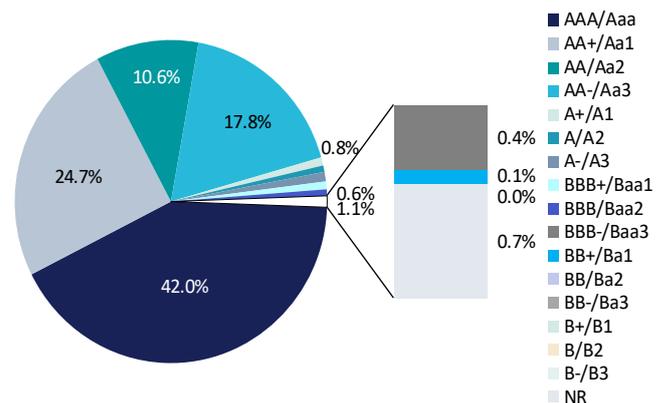
Maturities next 12 months (bmk)



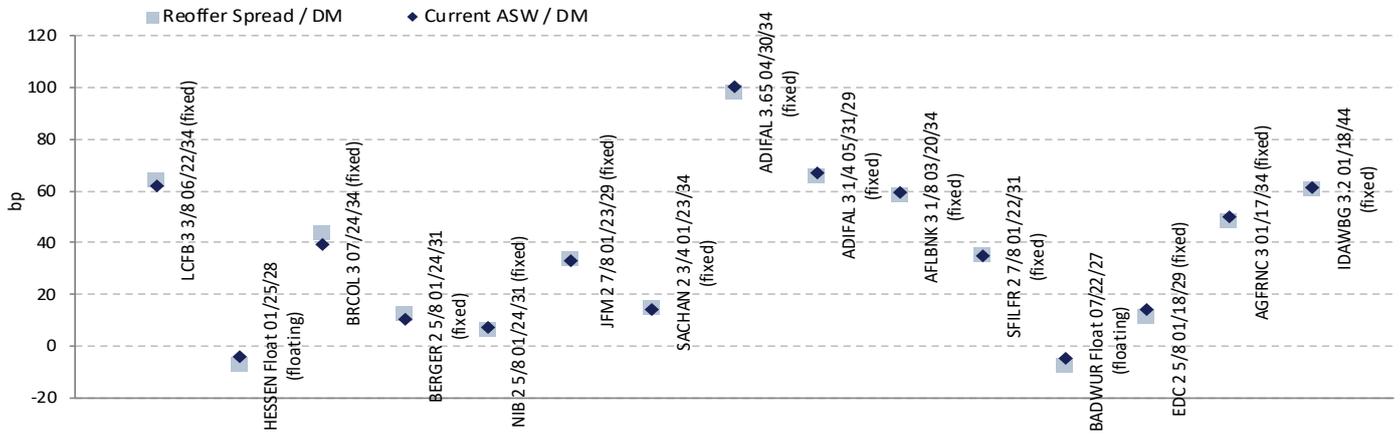
Avg. mod. duration by country (vol. weighted)



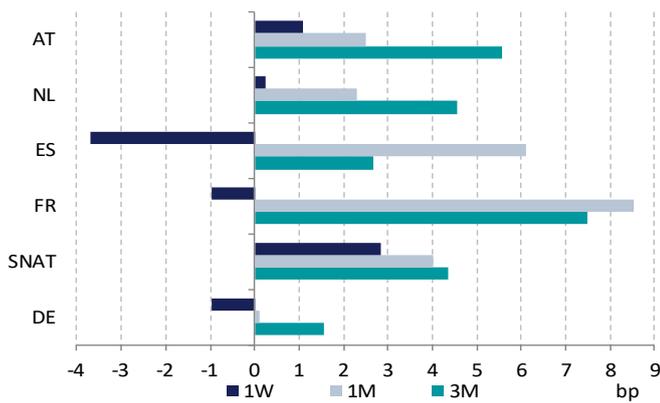
Rating distribution (vol. weighted)



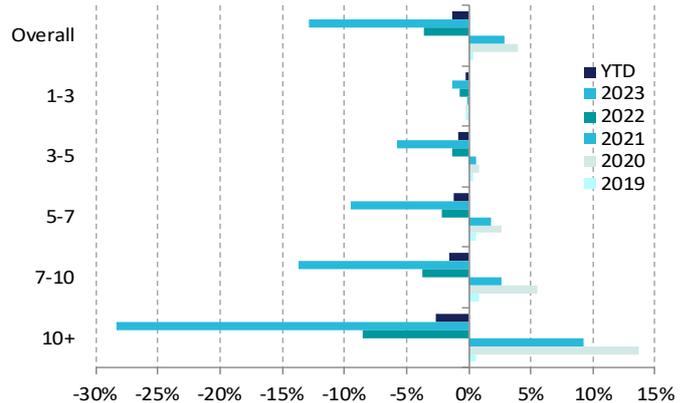
Spread development (last 15 issues)



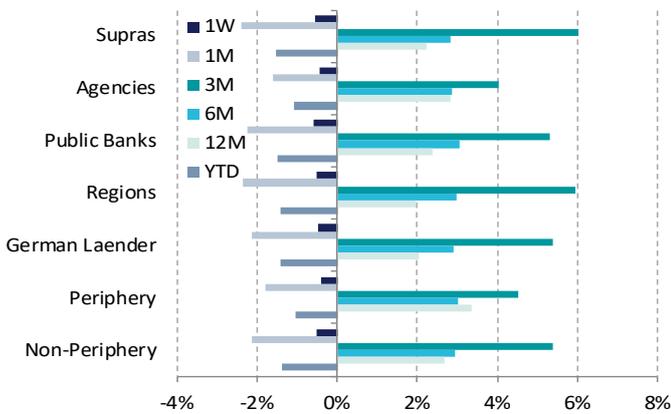
Spread development by country



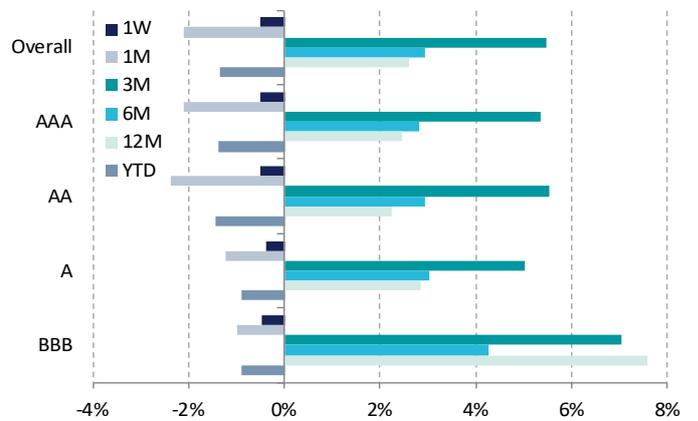
Performance (total return)



Performance (total return) by segments

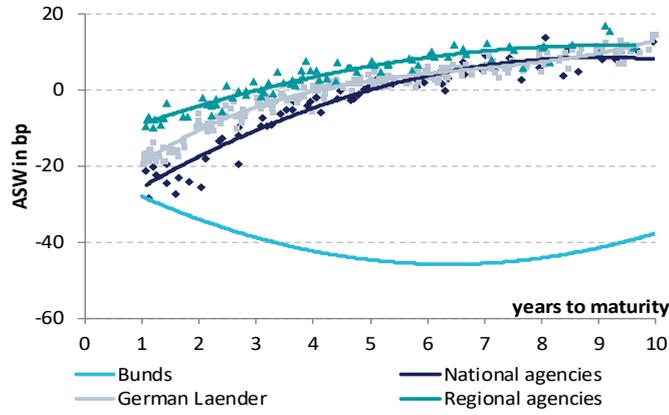


Performance (total return) by rating

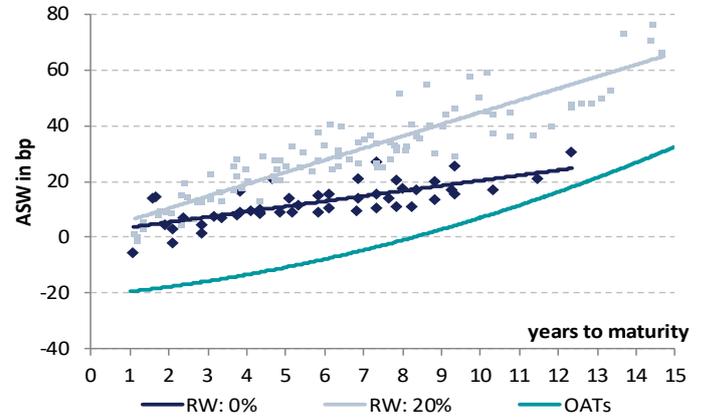


Source: Bloomberg, NORD/LB Floor Research

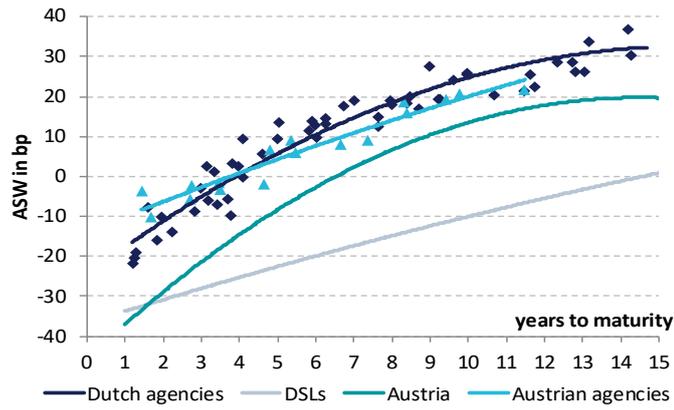
Germany (by segments)



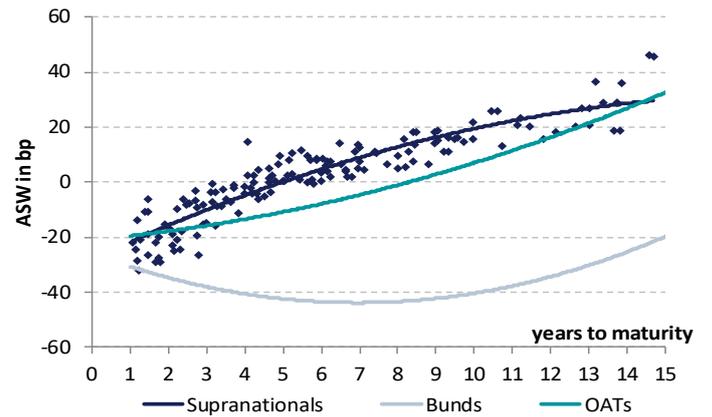
France (by risk weight)



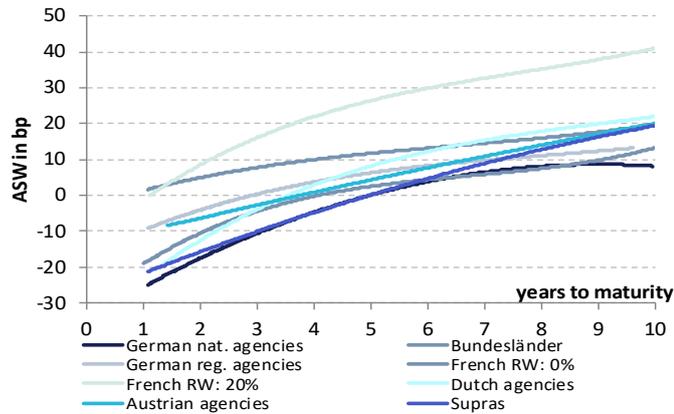
Netherlands & Austria



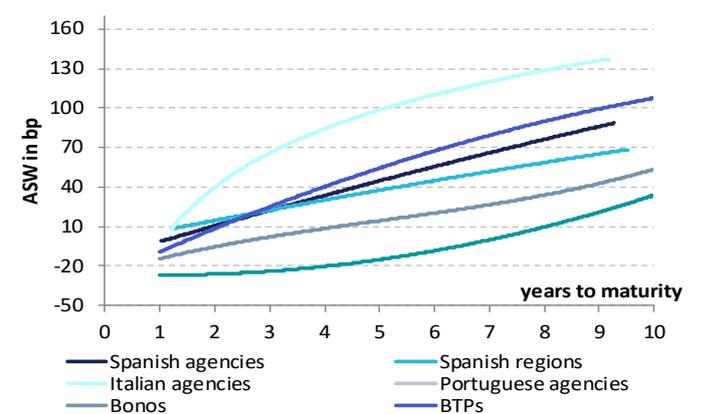
Supranationals



Core



Periphery



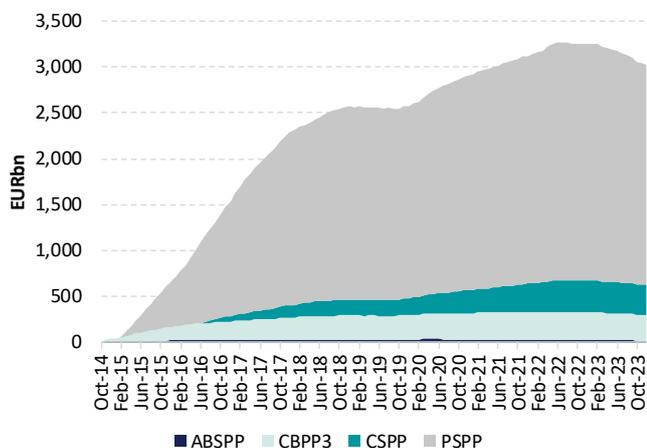
Source: Bloomberg, NORD/LB Floor Research

ECB tracker

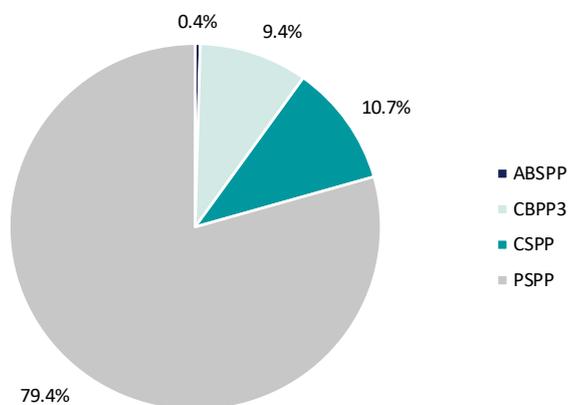
Asset Purchase Programme (APP)

	ABSPP	CBPP3	CSPP	PSPP	APP
Nov-23	13,840	286,174	325,481	2,412,976	3,038,471
Dec-23	13,350	285,620	323,921	2,403,035	3,025,926
Δ	-478	-408	-1,355	-6,776	-9,017

Portfolio development

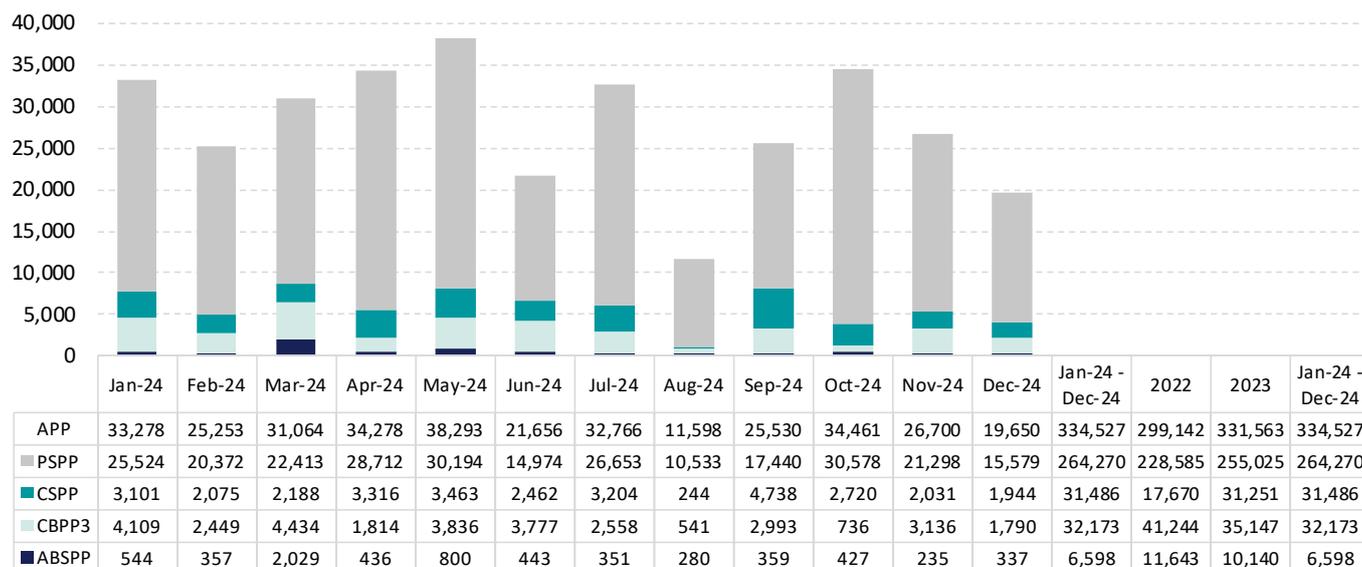


Portfolio structure



Source: ECB, NORD/LB Floor Research

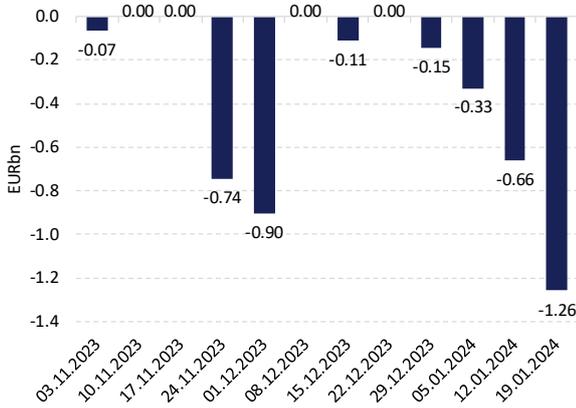
Expected monthly redemptions (in EURm)



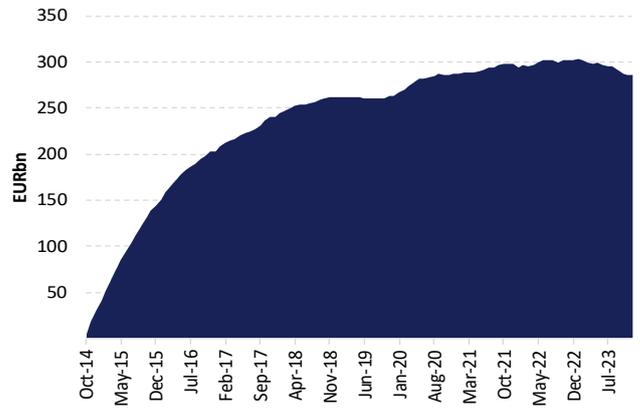
Source: ECB, Bloomberg, NORD/LB Floor Research

Covered Bond Purchase Programme 3 (CBPP3)

Weekly purchases

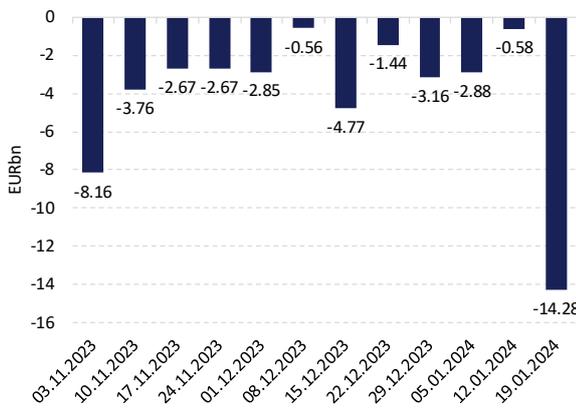


Development of CBPP3 volume

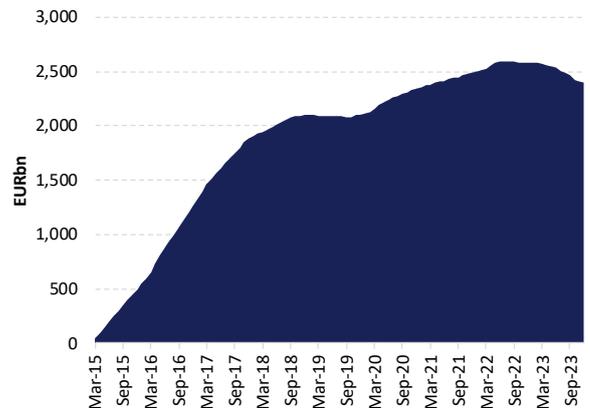


Public Sector Purchase Programme (PSPP)

Weekly purchases



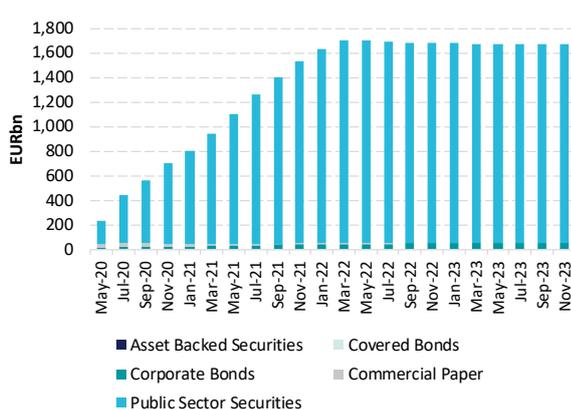
Development of PSPP volume



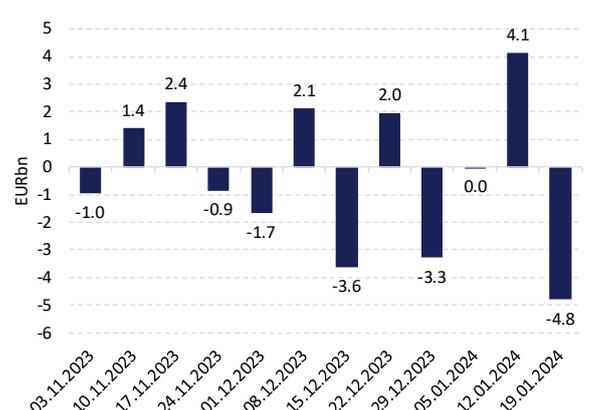
Source: ECB, Bloomberg, NORD/LB Floor Research

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
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 supnationals & 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 Suprationals & 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
28/2023 ♦ 27 September	<ul style="list-style-type: none"> ▪ The covered bond universe of Moody's: an overview ▪ Update on DEUSTD – Joint German cities (bond No. 1)
27/2023 ♦ 20 September	<ul style="list-style-type: none"> ▪ Newcomer to the EUR benchmark segment: Bendigo and Adelaide Bank set to expand issuer base in Australia ▪ Teaser: Issuer Guide – Austrian Agencies 2023
26/2023 ♦ 13 September	<ul style="list-style-type: none"> ▪ ECBC publishes annual statistics for 2022 ▪ Teaser: Issuer Guide – Dutch Agencies 2023
25/2023 ♦ 06 September	<ul style="list-style-type: none"> ▪ Covered bond market on the growth path: OLB looks set to join the ranks of EUR benchmark issuers ▪ NORD/LB Issuer Guide German Laender 2023 published
24/2023 ♦ 19 July	<ul style="list-style-type: none"> ▪ Banks in Europe: EBA Risk Dashboard in Q1 2023 ▪ ECB repo collateral rules and German Laender
23/2023 ♦ 12 July	<ul style="list-style-type: none"> ▪ Covereds: Half-year review and outlook for the second half of 2023
22/2023 ♦ 28 June	<ul style="list-style-type: none"> ▪ Special publication on LCR classification and risk weights: a (regulatory) overview of the EUR benchmark segment ▪ ESG bonds of German Laender – significant further development

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 Q3/2023](#) (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: New year, new luck?!](#)

[ECB: Scarf, dry cough and with less liquidity unwell into 2024](#)

[ECB preview: A silent, but holy summit meeting?](#)

Appendix

Contacts at NORD/LB

Floor Research



Dr. Frederik Kunze

Covered Bonds/Banks

+49 172 354 8977

frederik.kunze@nordlb.de



Lukas Kühne

Covered Bonds/Banks

+49 176 152 90932

lukas.kuehne@nordlb.de



Dr. Norman Rudschuck, ClIA

SSA/Public Issuers

+49 152 090 24094

norman.rudschuck@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: 24 January 2024 (08:41)