Covered Bond & SSA View

NORD/LB Floor Research

2 October 2024 ♦ 31/2024

NORD/LB

Agenda

Floor analysts:

Covered Bonds/Banks

Dr Frederik Kunze
frederik.kunze@nordlb.de

Lukas Kühne
lukas.kuehne@nordlb.de

Alexander Grenner
alexander.grenner@nordlb.de

SSA/Public Issuers

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

Christian Ilchmann
christian.ilchmann@nordlb.de

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

NORD/LB:
Floor Research

NORD/LB:
Covered Bond Research

NORD/LB:
SSA/Public Issuers Research

Bloomberg:
RESP NRDR <GO>

Market overview Covered Bonds

Author: Alexander Grenner

Primary market: first signs of saturation tendencies

Although primary market issuance activities may have eased off slightly in comparison with the previous week, the overall picture remains dynamic. Heterogeneity also remains high, with another four deals from four separate jurisdictions placed in the most recent trading week. However, with the spate of new issues seen on the market in recent weeks, a certain saturation tendency can now be observed, with order books not quite as well filled as was the case prior to the summer break. Caisse Française de Financement Local (CAFFIL) got the ball rolling on 25 September by making what is already its fourth appearance on the market for covered bonds this year. As was the case back in March, the French issuer again opted for a social bond, although on this occasion a term to maturity of seven years was the order of the day, with the deal guided at ms +52bp. Over the course of the marketing phase, this narrowed by two basis points to a final spread of ms +50bp (new issue premium: +6bp). Overall, the order books eventually amounted to EUR 1.25bn. Following the deal placed by DBS Bank last week, another issuer from Singapore appeared on the market on the same day. Standard Chartered Bank Singapore raised EUR 500m (WNG; 4.0y) from investors (bid-to-cover ratio: 1.8x). The bank only made its debut on the market for EUR benchmarks in May this year, when it successfully placed a deal worth EUR 500m with a term of three years. Together with Maybank Singapore, which also issued an inaugural EUR benchmark earlier this year (EUR 500m; 3.0y), Standard Chartered Bank Singapore represents a second newcomer to the market from the Southeast Asian jurisdiction. From our point of view, this is a clear signal that there is huge untapped potential in APAC markets and that we can expect further newcomers from this region in the EUR covered bond segment in the future. OP Mortgage Bank from Finland rounded things off at the end of last week with a covered bond over five years. A new issue premium of +4bp was offered for this second new issue in 2024 from Finland's largest bank. The bank prevailed in a competitive market environment by raising a total of EUR 1.0bn from investors, while the original guidance of ms +35bp area tightened by three basis points to a final spread of ms +32bp. In the current trading week, there was still time for Aareal Bank to put in an appearance with a EUR 500m bond in the five-year maturity segment. This is the bank's third new issue this year. For its first deal of 2024 in January, Aareal experienced some difficulties in particular owing to the market situation at this time and concerns in connection with the bank's high level of CRE exposure. However, by the time of its second market appearance in July, the general sentiment had already improved and the transaction was well received by investors.

Issuer	Country	Timing	ISIN	Maturity	Size	Spread	Rating	ESG
Aareal Bank	DE	01.10.	DE000AAR0447	5.5y	0.50bn	ms +58bp	- / Aaa / -	-
OP Mortgage Bank	FI	26.09.	XS2909760063	5.0y	1.00bn	ms +32bp	- / Aaa / -	-
Standard Chartered Bank	SG	25.09.	XS2909746740	4.0y	0.50bn	ms +34bp	- / Aaa / AAA	-
CAFFIL	FR	25.09.	FR001400SXM8	7.0y	1.25bn	ms +50bp	- / Aaa / AA+	X

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

Secondary market: weak performance continues at the long end

Going by market expectations, the recently published positive eurozone inflation figures now make it more likely that the ECB will move to cut interest rates again in October. At the same time, this puts some pressure on yields and swap spreads. New issues from recent weeks are performing pretty well on the secondary market, which has a supporting effect on spreads. However, there remains definite room for improvement in terms of the performance at the long end, especially when it comes to comparing 12y and 10y bonds. French covered bonds continue to be affected by spread widening.

Scope: bank performance in Spain benefiting from stronger economy and credit growth

In a recent analysis, the rating experts from Scope have outlined their expectations of a strong performance on the part of Spanish banks across the second half of 2024. This is primarily due to a prolonged period of high interest rates and a rapidly growing credit volume. At the same time, the banks stand to benefit from stable asset quality, which helps to curb any risks to profitability. The risk analysts also looked at the return on equity of the four banks BBVA, Santander, Sabadell and CaixaBank in the second quarter of 2024. The values here averaged 14.4%, which was higher than in the previous quarter (13.1%). According to Scope, this development can primarily be put down to a strong net interest income result. While the analysts expect this to decline in the second half of the year, banks with a strong retail focus could potentially stand to benefit in particular from positive economic development (projected GDP growth of +2.4%, which is in excess of the anticipated value for the eurozone) and seasonal consumption patterns. Asset quality also remains at a strong level despite an expected slight deterioration in the NPL ratio, Scope states. The rating experts do not expect any deterioration in credit quality, as Spanish banks have lower CRE exposures than institutions in other EU countries and are instead much more diversified. In our opinion, these factors are positive news for issuance activity on the Spanish covered bond market, both for the rest of the year and looking ahead to the projections for 2025. So far this year, we have recorded an issuance volume of EUR 2.1bn and are expecting another EUR 1.9bn across the remaining three months of the year. This would produce a negative net supply from Spain of EUR -2.25bn for 2024 as a whole.

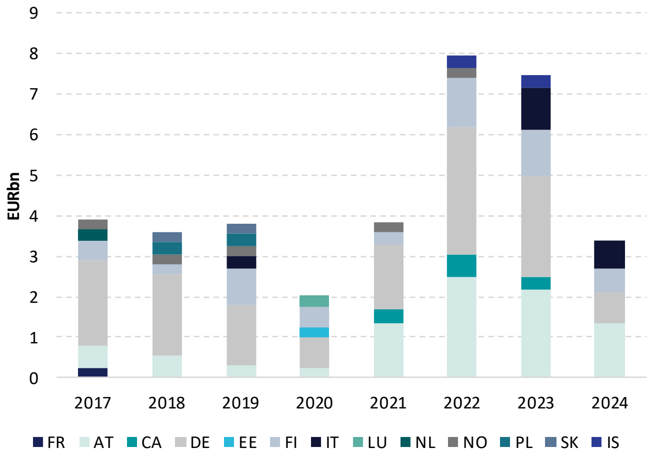
ESG market 2024: growth course and challenges

In the year to date, a total of 20 bond deals totalling EUR 13.0bn overall have been placed in the ESG segment. These are exclusively attributable to the categories of green (EUR 9.25bn) and social (EUR 3.75bn). The percentage share of ESG deals out of all new issues currently stands at 11.4%, which is slightly above the average value of previous years. Compared with prior years, the total number of new issues can still be described as somewhat restrained, although we should not overlook aspects such as the increasing demands on issuers and the quality of ESG bonds. At present, there are a total of 49 active ESG issuers in the EUR benchmark segment, with most of the bonds issued being distributed between Germany and France. Proportionally speaking, smaller jurisdictions such as South Korea and Poland in particular boast high ESG shares. This year, Bausparkasse Schwäbisch Hall (DE), Shinhan Bank (KR), Banca Monte dei Paschi di Siena (IT) and Argenta Spaarbank (BE), among others, made their debut on the ESG market by issuing green covered bonds, while Credito Emiliano from Italy and Equitable Bank from Canada each opted for the social format when making their inaugural venture onto the ESG market. Our readers can find a more detailed overview of the ESG market including a complete list of issuers in our recently updated Issuer Guide Covered Bonds 2024.

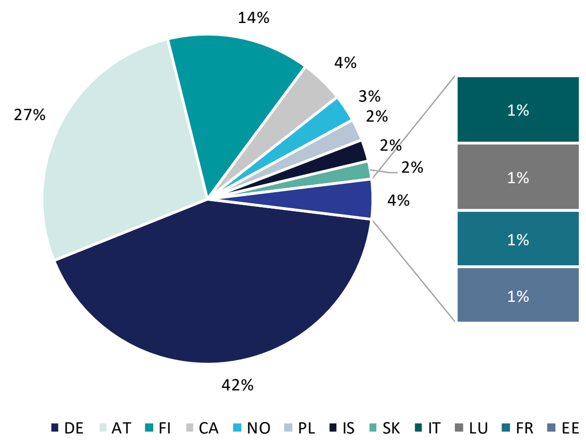
EUR sub-benchmark segment 2024: growth potential on the cards!

In comparison with the past two strong years in 2022 and 2023, the EUR sub-benchmark segment would appear to be lagging somewhat behind expectations this year. Upon closer inspection, however, it is striking that, at a current level of just under EUR 3.4bn, 2024 is actually nearly on a par with the previous years, when the new issuance volumes did not manage to exceed EUR 4.0bn. In total, 12 new deals from 12 different issuers have already been placed this year. As such, we can certainly talk of a highly differentiated picture. We are also pleased to report that these 12 issuers also include three newcomers to the sub-benchmark segment. In March, Sparkasse Dortmund ventured onto the market with a deal worth EUR 250m (7.0y), while Raiffeisen Bausparkasse Gesellschaft mbH from Austria appeared in July, when it successfully raised a sum of EUR 300m from investors over a term of five years. Recently, we welcomed the Italian Banca Sella to the market, which placed a deal worth EUR 400m. This is a volume that, from our point of view, offers scope for a future upgrade to benchmark size in the form of a tap deal, as we recently saw from Banco Desio. At present, the outstanding volume of this sub-market comes to a total of EUR 28bn, with the largest shares attributable to Germany (42%), Austria (26%) and Finland (16%).

EUR SBMK: Issuance trend



EUR SBMK distribution by country



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

Market overview
SSA/Public Issuers

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

KfW presents Green Bond Impact Report 2021/22 to mark tenth anniversary

On 19 September, KfW (ticker: KFW) presented its Green Bond Impact Report for the years 2021/22. The report contains information on the version of KfW's Green Bond Framework applicable at the time, an overview of all 57 issues (incl. taps) in the reporting periods, details of how the proceeds have been allocated and information about the environmental and social impacts of projects financed by KfW within the framework of the relevant credit programmes in the respective years. Annual reductions in CO_2 equivalent emissions of 136 tonnes for 2021 and 218 tonnes for 2022 per EUR 1m invested are expected for the projects financed with the green bonds issued in 2021/22. On the basis of the total net proceeds of EUR 26.8bn (2021: EUR 16.2bn; 2022: EUR 10.6bn) from both years, total annual reductions in CO_2 equivalent emissions of 4.5m tonnes can therefore be expected. This year marks the tenth anniversary for green bonds issued by KfW. Germany's largest promotional bank has issued green bonds totalling over EUR 80bn since 2014. Accounting for around 15% of the annual issuance volume, they have become an ever more important funding instrument in the agency's total funding mix. Tim Armbruster, Treasurer of KfW, commented on the anniversary as follows, "Through our 'Green Bonds – Made by KfW', we make an important contribution to increasing sustainability on the capital market. It is not just our role as a regular, reliable issuer of green bonds but also the way in which we provide key impetus for the development of the market as a whole. Examples of this can be found in the continual revision of our Green Bond Framework in line with developments in regulation and standards plus our ongoing dialogue with other market participants." In 2024, KfW has already placed two new EUR green benchmarks on the market and, in doing so, has raised funding of EUR 7bn.

Hamburg: draft planning for the 2025/26 budget – parliamentary discussions underway

The citizens of Hamburg (ticker: HAMBRG) are currently discussing the draft planning figures for the 2025/26 budget presented by the Senate. With planned total expenditure of EUR 21.5bn in 2025 and EUR 22.4bn in 2026 and annual investment of EUR 3bn, the city state would have a more generous financial framework in the next two years than anything achieved previously. The aim is not only to fully fund important projects in the areas of education and science, security and climate protection as well as revolutionising mobility but also to step up a gear in this respect. Hamburg's Senator for Finance, Dr Andreas Dressel commented as follows: "Hamburg is growing and Hamburg's budget is increasing in line with this! Through record investment in the 2025/26 budget, we shall ensure both the city's future viability and its basic civic functions even in difficult periods. […] At the same time, through a comprehensive tariff adjustment, including targeted increases from the registry office to housing benefit, we shall ensure that, in times of crisis especially, citizens can rely on their city working. […] We are therefore demonstrating once more that sound budget management and impressive levels of investment do not have to be a contradiction in terms."

Ontario publishes financial result for 2023/24 budget year

In mid-September, the government of the Canadian province of Ontario (ticker: ONT) published the sub-sovereign's audited financial results for the budget year that ended on 31 March. This showed that Ontario posted a deficit of CAD -600m (EUR equivalent: EUR -410m), compared with a forecast deficit of CAD -1.3bn in the 2023 budget. This improvement resulted from a combination of higher than planned revenues and lower debt interest than had previously been assumed. The public accounts showed that the province complied with its obligations under the 2023 budget. Annual revenues rose by CAD +13bn compared with the prior budget year, while total investment came to CAD 195.2bn. This corresponded to an increase in programme expenditure of +4.7% year on year or CAD +8.8bn compared with the previous budget year. Investment in infrastructure, which increased by +22.9% year on year to a total of CAD 23.6bn, and expenses for programmes in the health sector, which rose by +8.9% year on year to the current figure of CAD 85.5bn, were highlighted in particular. "The 2023/24 statement of accounts shows that we are pursuing a responsible, target-oriented approach to the province's financial planning and are undertaking major investments in healthcare, education and social services. The annual statement of accounts shows that the government is continuing to invest to support people and companies while complying with our obligation to provide Ontario's citizens with regular, transparent information about the province's finances," as Finance Minister Peter Bethlenfalvy comments.

Draft for the 2025 budget introduced to the parliament of Lower Saxony

The Minister of Finance for our owner state, Lower Saxony (ticker: NIESA), Gerald Heere, presented the draft for the 2025 budget to the Landtag (regional parliament) on 25 September. It envisages a budget of EUR 44.2bn. This would give the state government an increase in funding of EUR +1.6bn compared with the 2024 budget year. Adjusted expenses would accordingly amount to EUR 44.0bn, which would equate to growth of +3.8% year on year. Adjusted revenues would increase by +3.2% year on year to EUR 43.3bn, which would result in a fiscal balance of just under EUR -700m (2024: EUR -401.1m). Despite difficult economic framework conditions, the draft budget envisages substantial investment in areas of major significance for the future. Accordingly, it estimates EUR 11.6bn for education, science, research and culture, followed by social security benefits of EUR 9.7bn and a further EUR 5.8bn for municipal financial equalisation in Lower Saxony. The investment ratio is to be increased to 6.4% in 2025, compared with 5.9% in 2024. Additional investment is to be undertaken via the special funds created for this purpose. Meanwhile, EUR 406.7m is earmarked for net borrowing (2024: EUR -118.3m). "In uncertain times such as these, it is the responsibility of budget and financial policy to ensure that people can plan with confidence and that we do not add to the general levels of uncertainty. It is therefore a matter of importance for me that all planned budget measures for all the years covered by our medium-term planning are fully funded. […] We are proud to say that we complete everything that we start and only start those things that can be successfully seen through to the end," comments Minister of Finance Heere in his speech on the draft to the Landtag.

ESM & EFSF: funding for 2024 completed

For the first time since they were created, the European Financial Stability Facility (ticker: EFSF) and the European Stability Mechanism (ticker: ESM) have completed their long-term financing for the entire year as early as September. The EFSF achieved its funding target of EUR 20bn towards the end of August: EUR 3bn was raised via a dual tranche in the form of a new three-year bond, while a further EUR 2bn was raised by tapping the 2031 bond (cf. weekly publication dated 4 September). The ESM followed at the beginning of last week and completed its funding target for 2024 of EUR 6bn with the issue of a new three-year bond (EUR 2bn) (cf. weekly publication dated 25 September). Since the ESM had approved its commercial paper programme worth EUR 20bn in total in February, we expect additional funding activities over the rest of the year in the near future. Kalin Anev Janse, CFO of the ESM, also referred to upcoming events in the next three months, at which both the ESM and the EFSF will be represented, in the latest investor newsletter: the Annual Meeting of the IMF and World Bank (23-25 October in Washington, D.C.) and the UN Climate Change Conference (COP29, 11-22 November in Baku), as well as a series of various roadshows.

Primary market

With five new issues totalling EUR 2.9bn the market benefited from a respectable level of fresh supply. We commented on three mandates in our last issue, with marketing of the bonds starting immediately after this edition was published: Austria's Autobahnen- und Schnellstraßen-Finanzierungs-AG (ticker: ASFING) approached investors with a ten-year bond worth EUR 900m. The bond was finally priced one basis point lower than guidance at ms +37bp. The bid-to-cover ratio amounted to 1.9x. Île-de-France Mobilités (ticker: IDFMOB) boosted supplies in the ESG segment. The new green bond with a volume of EUR 500m, a coupon of 3.5% and a 15-year term was priced at OAT +29bp (corresponds to circa ms +97bp). Moving over to the German Laender, Hamburg (ticker: HAMBRG) was the first to put its money where its mouth is: the city state sought EUR 500m with a term of five years, which was ultimately raised at a reoffer spread of ms +15bp. The order book reached EUR 2.1bn at the end of the marketing phase. It was then followed yesterday (Tuesday) by Schleswig-Holstein (ticker: SCHHOL) with its fifth EUR benchmark this year in the form of a seven-year floater. Here, EUR 500m was purchased by investors at +15bp versus the 6M Euribor. Proceedings were brought to a close by Investitionsbank Berlin (ticker: IBB) with a new five-year deal worth EUR 500m. With a bid-to-cover ratio of 2.9x, the social bond was eventually printed at ms +18bp. In addition, Nordic Investment Bank (ticker: NIB) increased its 2027 FRN by EUR 25m at +7bp versus the 3M Euribor. For the third syndicated transaction in the second half of 2024 (cf. funding plan), the EU sent an RfP to the relevant banking group. The EIB subsequently issued mandates for an upcoming EUR benchmark (5y) within the framework of its EARN programme.

Issuer	Country	Timing	ISIN	Maturity	Size	Spread	Rating	ESG
IBB	DE	01.10.	DE000A3828G5	4.9y	0.50bn	ms +18bp	AAA / Aa1 / -	X
SCHHOL	DE	01.10.	DE000SHFM980	7.0y	0.50bn	6mE +15bp	AAA / - / -	-
ASFING	AT	25.09.	XS2911193956	10.0y	0.90bn	ms +37bp	- / Aa1 / AA+	-
IDFMOB	FR	25.09.	FR001400SZ94	15.0	0.50bn	ms +97bp	A+ / - / -	X
HAMBRG	DE	25.09.	DE000A2LQPR9	5.0y	0.50bn	ms +15bp	AAA / - / -	-

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

Covered Bonds
A review of Q3 in the Covered Bond segment

Author: Lukas Kühne

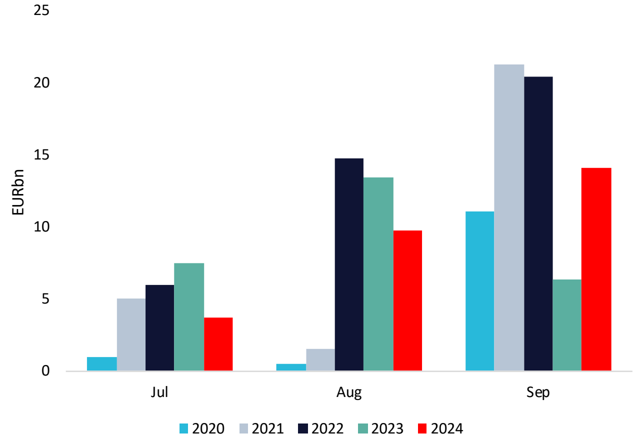
Summer break and restart dominated Q3 2024

Having focused our attention last week on the start following the summer break, in this issue of our weekly publication we look back at the third quarter of 2024. Alongside a review of the months July to September, we also take stock of the year to date as a whole. Once again, it is no exaggeration to say that the seasonal pattern of a lively start to issues following the summer break has been maintained. While in July 2024 only five issuers placed covered bonds in the market, the number of new deals rose significantly again in August (9 deals) and September (17 deals). This year, the summer break lasted for around one month. During this period, no issuers sought investors in the primary market between 17 July and 18 August. In addition to activity in the primary market, we will also take a closer look at the breakdown of investors and movement in spreads in the covered bond market.

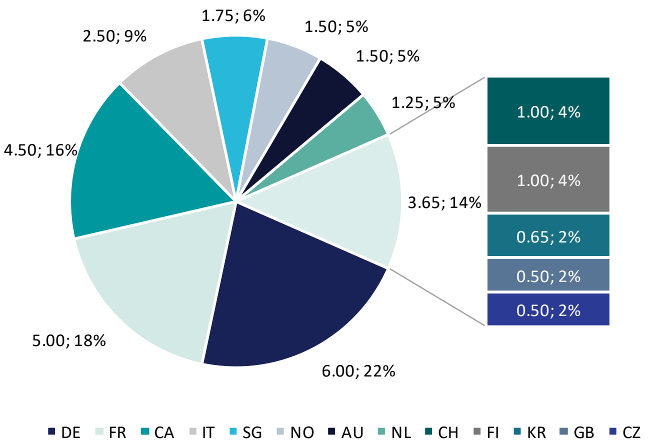
Primary market Q3 2024: issuance volume totals EUR 27.7bn

After a dynamic first half of the year, the primary market entered the anticipated summer break at the start of the third quarter. Consequently, the number of issuers entering the market with new deals did not increase again until August. Overall, the issuance volume in Q3 2024 amounted to EUR 27.7bn, with Germany (22%) and France (18%), as expected, accounting for the largest shares here. They are followed by issuers from the jurisdictions of Canada and Italy with shares of 16% and 9% respectively, with the latter placing covered bonds with a volume of EUR 6.0bn in Q3 2024. Canadian issuers alone placed three covered bonds with a volume of EUR 4.5bn with investors. In terms of the issuance volume, the past quarter is even on a par with Q3 2023 (EUR 27.4bn) but is still considerably down on the record volume achieved in Q3 2022 (EUR 41.2bn).

EUR BMK: new issuance history (Q3)



EUR benchmarks in Q3 2024 (EUR bn)



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

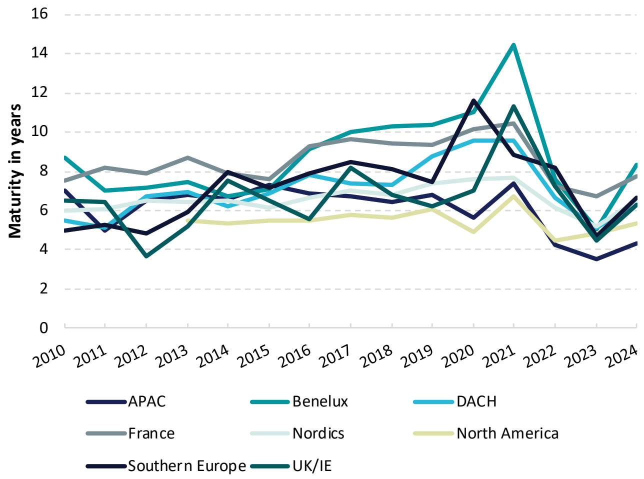
Active primary market in the first nine months of 2024

Despite a dynamic start to the second half of the year, at EUR 135.1bn, the issuance volume at the end of quarter was below the figures for the two preceding years of 2022 (EUR 159.1bn) and 2023 (EUR 163.4bn). However, this development is unsurprising given the lower volume of maturities in 2024. New issues in the primary market lagged behind the previous years' figures in the middle of the year in particular. The issuance volumes in June and July only totalled EUR 7.5bn, as against volumes for newly placed deals in the same period in the two preceding years of EUR 22.5bn (2023) and EUR 15.3bn (2022). As in Q3, issuers from France and Germany dominated in the first nine months of the year. Ranking in third place were issuers from Italy and Canada with EUR 9.5bn each. While Canada's ranking does not stand out especially, given the size of the market, the high volume of issues from Italy comes as a bit of a surprise. In the first nine months of the year, a total of nine Italian issuers sought investors, placing 15 covered bonds on the market.

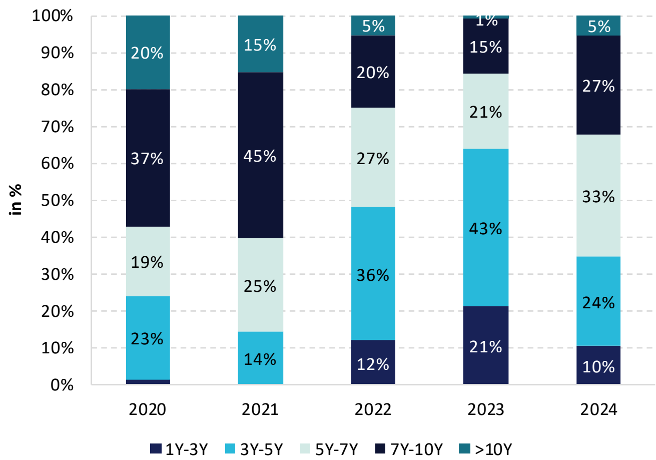
Shorter maturities more popular again

As we had already seen in the previous year, issuers increasingly turned their attention towards the shorter maturity segment again in the second half of 2024. In Q2 of this year, around 43% of new issues still had a maturity of seven years or more. In Q3 2024, the proportion of new deals in this segment dropped to around 5%. Only three issuers in the past quarter opted for a benchmark deal in this maturity segment. The most recent was Caffil, which issued a 7-year covered bond with a volume of EUR 1.3bn on 25 September. Issuers were clearly more focused on shorter maturity segments. Most benchmark deals in Q3 were placed in the maturity segments of 3y-5y (51%) and 5y-7y (29%). We believe one of the reasons for this development is issuers' spread sensitivity and do not see any significant reduction in investor interest in longer-dated covered bonds. The trend towards issuing shorter-dated covered bonds was somewhat stronger in the Pfandbrief segment than in relation to French covered bonds.

EUR BMK: maturities by jurisdiction



EUR BMK: maturities for new issues

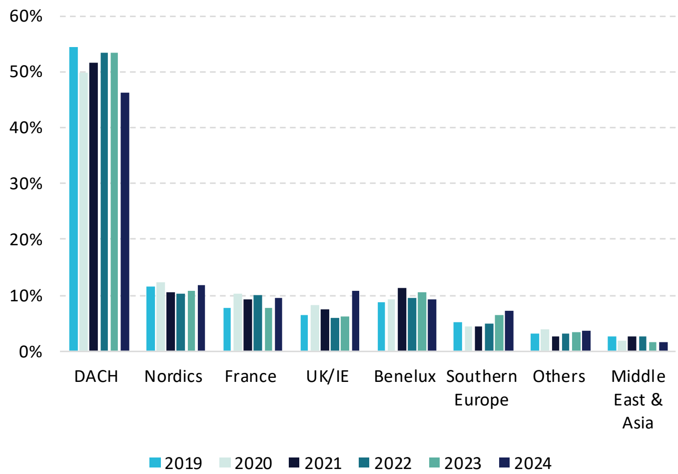


Source: Market data, Bloomberg, NORD/LB Floor Research

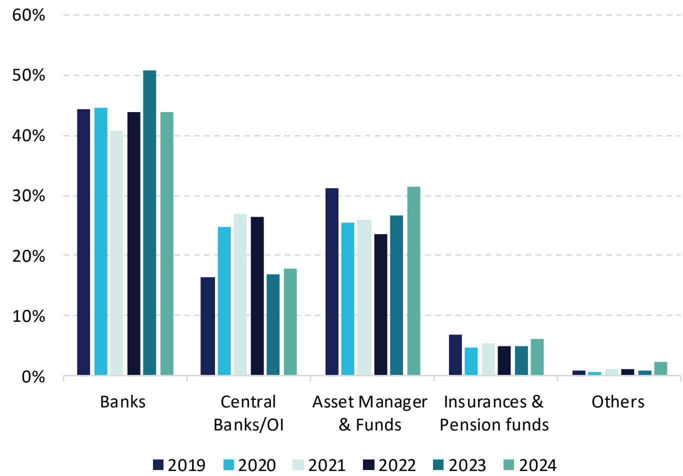
Declining investor demand in second half of 2024

Having seen strong investor demand for newly placed covered bonds in the first half of 2024, this trend has normalised increasingly since then. Bid-to-cover ratios for new deals have accordingly fallen considerably. On average, these dropped versus the first half of 2024 (average bid-to-cover ratio: 3.2x) to 1.9x (Q3 2024). Banks continue to represent the largest investor group in Q3, followed by asset managers and funds. The covered bond volume taken out of the primary market by the central bank following the change in interest rate policy and end of the ECB purchasing programme was offset at the start of the year by real money investors. Overall, however, demand appears to have fallen across all investor groups, which is due in part to the changed spread landscape. The fast money investors that were active in the covered bond segment at the start of 2024 have largely withdrawn from the primary market over the course of the year. This can also be seen as another reason for the lower bid-to-cover ratios in Q3. The largest investor group continues to stem from the German-speaking countries (DACH region), followed by investors from the Nordics and the Benelux nations.

Investor breakdown by country



Investor breakdown by issuer group

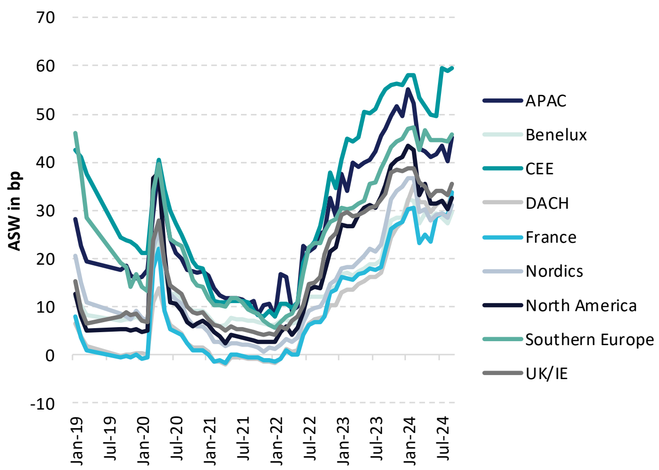


Source: Market data, Bloomberg, NORD/LB Floor Research

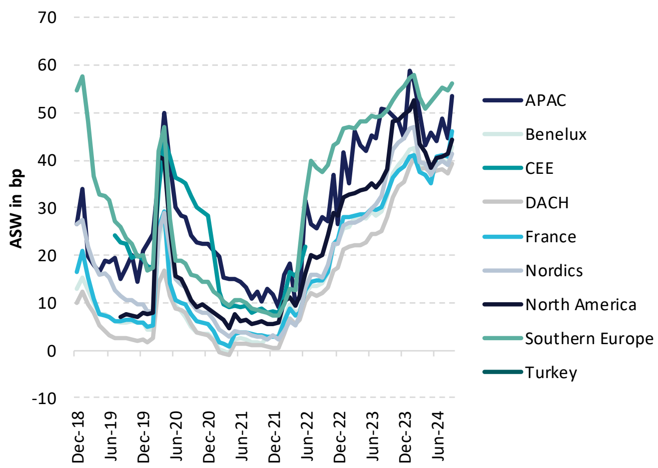
Eleven new issuers on the covered bond market

In the last three months, we have welcomed two new issuers from Germany and Norway to the market for EUR benchmarks. Moere Boligkreditt, previously only active in the EUR sub-benchmark segment, sought investors in September and successfully placed its first EUR 500m (5.0y) benchmark in the market. September also saw Lloyds Bank GmbH place its debut covered bond in the EUR benchmark segment, increasing the number of active Pfandbrief issuers in this market segment to 25. Including Moere Boligkreditt and Lloyds Bank GmbH, there were eleven new issuers in the EUR-benchmark segment in the first nine months. In geographical terms, four of the eleven new issuers come from Germany and two from Singapore. The other five new benchmark issuers are spread across a wide range of other jurisdictions.

EUR BMK: spread trend (5y; generic)



EUR BMK: spread trend (10y; generic)



Source: Bloomberg, NORD/LB Floor Research

Spread trend: slight rise in Q3 2024

Having risen slightly across nearly all jurisdictions at the start of the year, spreads then moved in the opposite direction over the remaining course of Q1 2024, leading to a notable fall in the spread level. As the first six months came to an end, this development then reversed, and spreads rose slightly again in almost all jurisdictions. However, there are differences in this trend across the various maturity segments and jurisdictions. The increased spread level compared with the middle of the year (30 June 2024) is most pronounced in the longer maturity segments than in covered bonds with a maturity of up to three years. In terms of jurisdictions, the rise in spreads is most notable for French covered bonds. This development is attributable to various factors, including the ongoing debate regarding France's state budget, but also to relative value viewpoints. With regard to the movement of spreads in the future, given the reduced demand and rise in spread levels in other asset classes we see several arguments for further widening tendencies in the covered bond market.

Conclusion and outlook

Overall, we can look back at an active Q3 that ranks easily among the series of dynamic market phases following a summer break, while not quite matching the record new issuance level of 2022. In the last three months, covered bonds with a total volume of EUR 27.7bn have been successfully placed in the market. Unsurprisingly, most of the issuers are attributable to the jurisdictions of Germany and France. The seasonal pattern of an active start following the summer break was again confirmed in Q3 2024. In our opinion, the new preference of investors for shorter maturities and decline in investor demand are to be highlighted. Investor demand, in particular, should be seen against the backdrop of changes in the spread landscape. With regard to the first nine months of 2024, issuance activity is down on the preceding years, which is not especially surprising given the lower volume of maturities in 2024. In addition to the prevailing market dynamics, we believe the future movement in spreads will also be influenced by the ramifications of the central banks' interest rate decisions.

SSA/Public Issuers
Teaser: Beyond Bundeslaender – Spanish Regions

Authors: Dr Norman Rudschuck, CIIA // Lukas-Finn Frese // assisted by Tim Bräunl

Introduction: Focus on Spanish regions

Having already updated our reports on sub-sovereign markets away from the German Laender in the form of publications on Belgium, Canada, Greater Paris (Île-de-France and Ville de Paris) as well as Portugal, we shall now take a look at Spain's autonomous communities with capital market relevance in the following section. Some of the issuers here offer an attractive investment alternative for ESG investors in particular. This teaser article aims to provide a brief overview of the issuers, which we will look at in greater detail from an economic, political and regulatory perspective in the full report, which is set to be published in the near future.

Structure of Spain

Spain is divided into 17 regions, which are referred to as autonomous communities. These were formed between 1979 and 1983 with the adoption of the Statutes of Autonomy. In addition, in 1995, Ceuta and Melilla, two Spanish exclaves located on the north African coast, were designated as autonomous cities. The autonomous communities are split into a total of 50 provinces, which are mostly named after the respective provincial capital. In turn, these are split into a total of 8,112 municipalities. Seven of the autonomous communities only consist of one province. Moreover, the Balearic Islands and Canary Islands, which are made up of four and seven islands respectively, are self-governing.

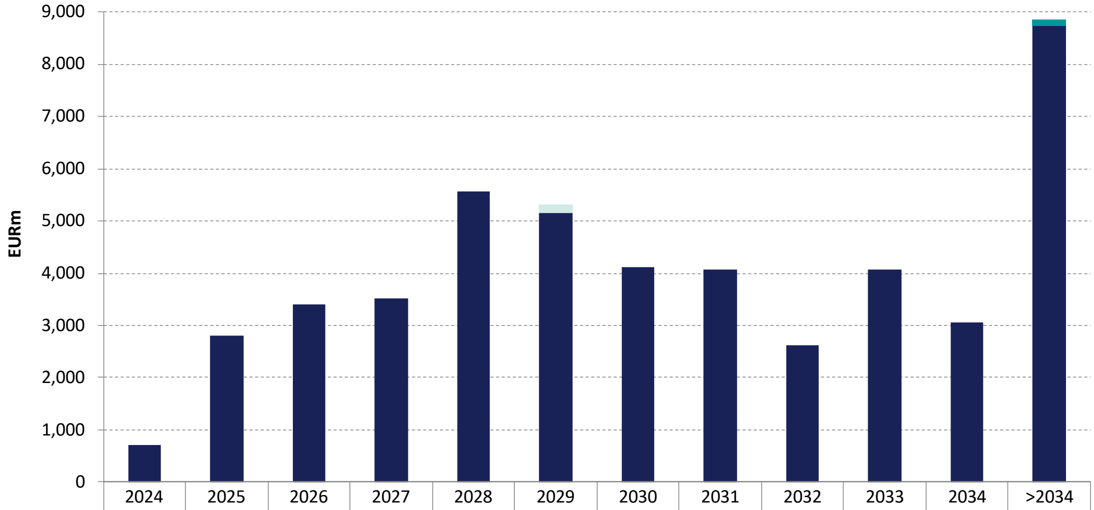
Capital market presence of the autonomous communities

At present, except for Cantabria and La Rioja, all of Spain's autonomous communities have bonds outstanding. We will be taking a more detailed look at nine of the 17 issuers (shown in **bold** below) in the full report. Sorted by their Bloomberg tickers, these are as follows:

- **ANDAL (Andalusia)**
- **ARAGON (Aragon)**
- BALEAR (Balearic Islands)
- **BASQUE (Basque Country)**
- CANARY (Canary Islands)
- **CASTIL (Castile and León)**
- CCANTA (Cantabria)
- **GENCAT (Catalonia)**
- **JUNGAL (Galicia)**
- JUNTEX (Extremadura)
- LRIOJA (La Rioja)
- **MADRID (Madrid)**
- MANCHA (Castile La Mancha)
- MURCIA (Murcia)
- **NAVARR (Navarre)**
- **PRIAST (Asturias)**
- VALMUN (Valencian Community)

Source: Bloomberg, NORD/LB Floor Research

Outstanding bonds of all Spanish regions by currency



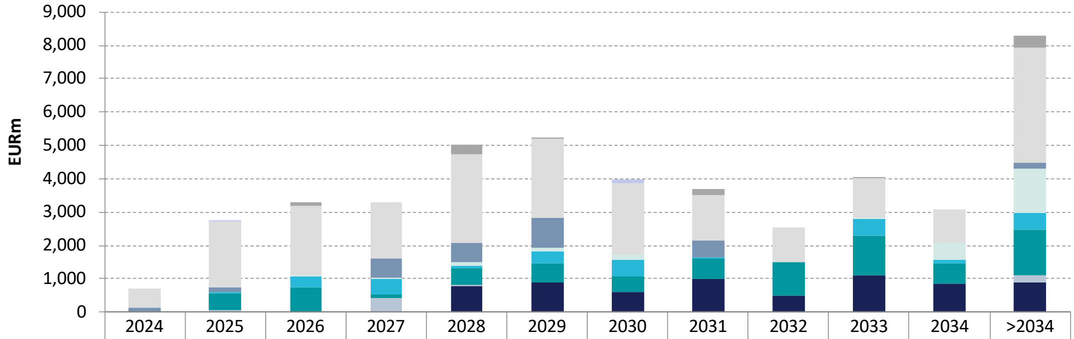
	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	>2034
JPY	0	0	0	0	0	0	0	0	0	0	0	112
USD	0	0	0	0	0	171	0	0	0	0	0	0
EUR	700	2,808	3,407	3,519	5,560	5,148	4,125	4,078	2,618	4,060	3,065	8,754

Source: Bloomberg, NORD/LB Floor Research

Volume of the Spanish regions sub-segment

The total market for Spanish regional bonds comprises the equivalent of around EUR 48bn in total spread across 178 separate ISINs. Of this figure, 176 bonds (EUR 47.8bn) are denominated in EUR, with one bond each denominated in USD and JPY respectively. With an outstanding volume of EUR 21.5bn split across 50 bonds, MADRID dominates the market, followed by BASQUE (EUR 7.8bn), ANDAL (EUR 6.6bn) and JUNGAL (EUR 3.0bn). In total, 45 of the 178 bonds have been issued in benchmark format (outstanding volume EUR ≥500m). MADRID has two ISINs of just under EUR 2.0bn, while the smallest bond in the universe of Spanish regions amounts to just EUR 5.0m (JUNTEX).

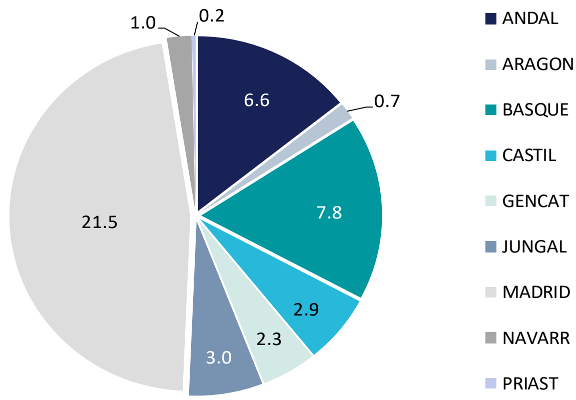
Outstanding bonds of selected Spanish regions



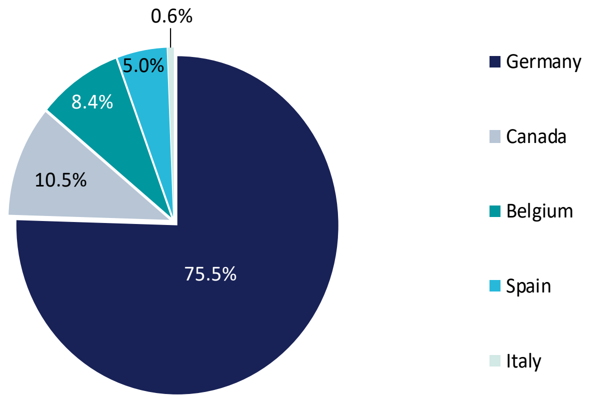
	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	>2034
PRIAST	0	19	0	0	0	0	131	0	0	0	0	0
NAVARR	0	0	100	0	260	58	0	200	0	15	0	376
MADRID	550	1,954	2,086	1,700	2,655	2,375	2,131	1,364	1,025	1,210	1,000	3,426
JUNGAL	150	150	0	550	575	900	0	500	0	0	0	200
GENCAT	0	0	20	50	111	90	140	0	0	18	500	1,332
CASTIL	0	50	316	453	100	360	500	44	0	500	115	482
BASQUE	0	503	760	100	500	600	500	600	1,000	1,200	600	1,398
ARAGON	0	54	0	438	24	0	0	0	0	0	0	185
ANDAL	0	0	0	0	780	871	584	1,000	500	1,100	850	901

Source: Bloomberg, NORD/LB Floor Research

Breakdown of the regions included (EURbn)



Country weighting within the iBoxx € Regions

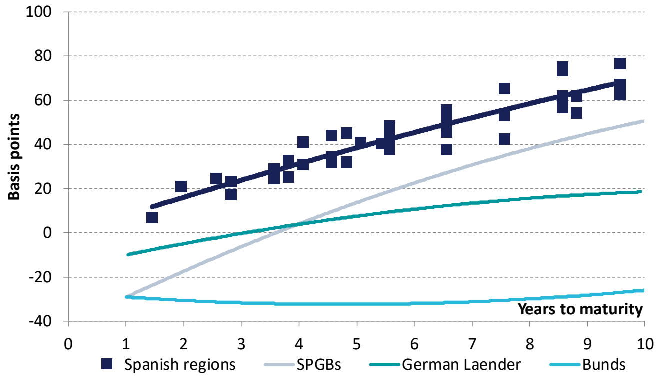


Source: Bloomberg, NORD/LB Floor Research

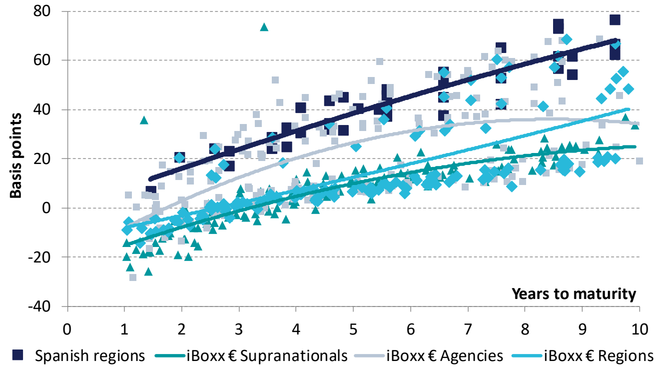
Spanish regions in the iBoxx € Regions and review of spreads

As shown above, the entire Spanish market for regional bonds amounts to about EUR 48bn, of which EUR 21.5bn alone is attributable to the MADRID ticker. In global terms, the indisputable leading issuer group remains the German Laender, which account for 75.5% of the composition of the iBoxx € Regions. After Canada (10.5%) and Belgium (8.4%), Spanish regions are ranked in fourth place at 5.0%. Italy is in fifth place (0.6%). Apart from the volumes, the spread levels are of course also suitable: compared with the iBoxx € Regions, the Spanish regions trade at premiums across the entire maturity spectrum. At the long end (up to 10 years), the spread difference can occasionally reach +27bp. The differences compared with agencies and supras are more marked. Compared with the supras that are better rated on average and the fact that the bonds issued by these regular issuers are usually far more liquid, this hardly comes as a surprise. Overall, in a peer comparison, Spanish regions feature the widest spreads and could therefore, at restricted liquidity levels, generate pick-ups for investors. Moreover, all issuers are likely to be open to private placements and certain expectations in terms of yield on the part of institutional investors.

Generic ASW spreads – a comparison



ASW curves of Spanish regions vs. iBoxx € indices



Source: Bloomberg, NORD/LB Floor Research; data as at 01 October 2024

Madrid following global trend by issuing sustainable bonds

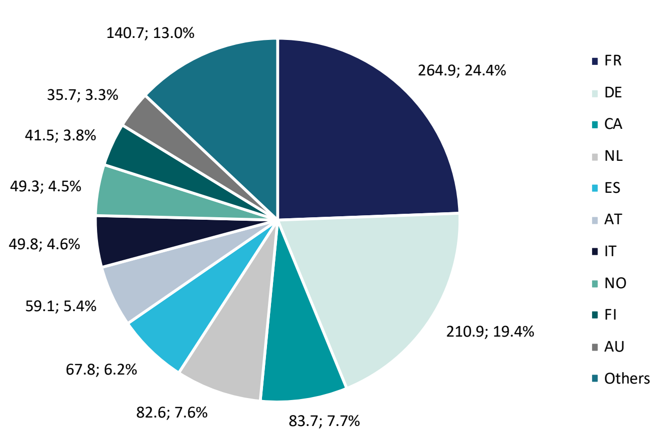
With Madrid's strategic focus on green and sustainability bonds in terms of its refinancing activities, the region is following a growing trend on the primary market and assuming a pioneering role at a national level in the process. In the meantime, other sub-sovereigns have discovered this market segment and issued noteworthy volumes of ESG bonds. Last year, the new issuance volume of EUR benchmarks placed by the Spanish regions in green and sustainability formats totalled EUR 3.9bn overall. In 2024, this value has already been replicated; in fact, at EUR 3.95bn split across six ISINs (same as across the full year 2023), it has actually been exceeded. Unsurprisingly, the largest share of this, at EUR 1.6bn, came from the Spanish capital, MADRID, which has been active in both green and sustainability formats. ANDAL follows in second place, with two sustainability bonds totalling EUR 1.25bn overall. In the year to date, the issuance picture is rounded off by one fresh EUR benchmark from JUNGAL and BASQUE amounting to EUR 500m and EUR 600m respectively. We expect that the Spanish regions will continue to provide substantial supply in the ESG segment in future.

Conclusion

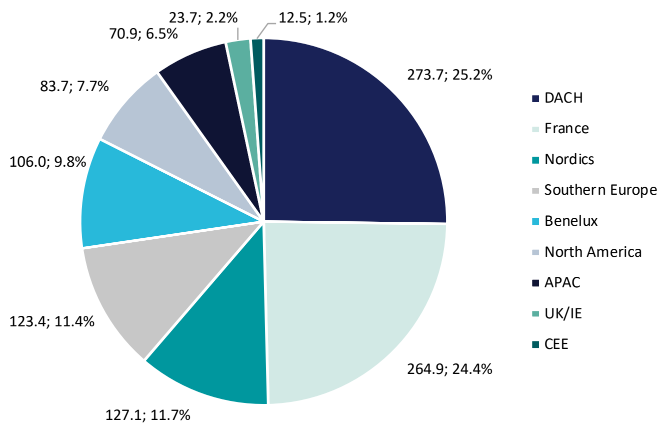
Against the backdrop of highly dynamic developments in the interest rate environment across both 2023 and 2024, interesting investment opportunities are repeatedly cropping up in certain niche markets "Beyond Bundeslaender". Our reports on Amsterdam, Belgium, Canada, Greater Paris (Île-de-France and Ville de Paris) as well as Portugal are also to be interpreted in this light. They supplement the traditional SSA portfolio in terms of maturity and/or yield, but in any case, also contribute to diversification. The increasing interest in Spanish regions is evidence that opportunities can be found here on a consistent basis. Despite its growth in recent years, at around EUR 48bn, the Spanish market for regional bonds – i.e., excluding sovereign bonds – must still be classified as something of a niche market. Unsurprisingly, deals placed by the Madrid region account for the largest volume. One interesting aspect is that there is scarcely any currency diversification (of the total of 178 bonds, there is just one deal each denominated in USD and JPY respectively). Not least because the Eurosystem has already acquired substantial amounts of Spanish bonds under the PSPP and PEPP, second and third tier issuers often tend to be the focus of rarer investment alternatives. These securities are of interest from a yield perspective and for regulatory reasons, while the issuers are also open to the possibility of private placements. In our view, the market for Spanish sub-sovereign bonds has also developed into an attractive alternative to, for example, German Laender bonds for ESG investors. In a market environment such as the one we have seen this year, in which the German Laender have so far not issued any new ESG bonds, we assess the issuance activities of Spanish regions very positively in this respect. Further details, such as individual issuer profiles and information on regulatory classifications can be found in the full publication, which we expect to publish in the coming days.

Charts & Figures
Covered Bonds

EUR benchmark volume by country (in EURbn)



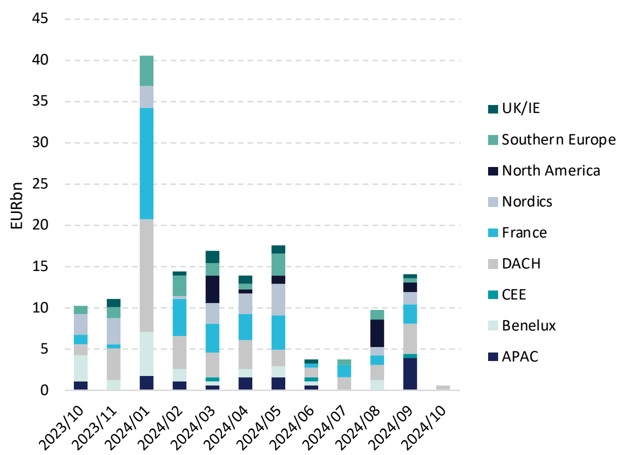
EUR benchmark volume by region (in EURbn)



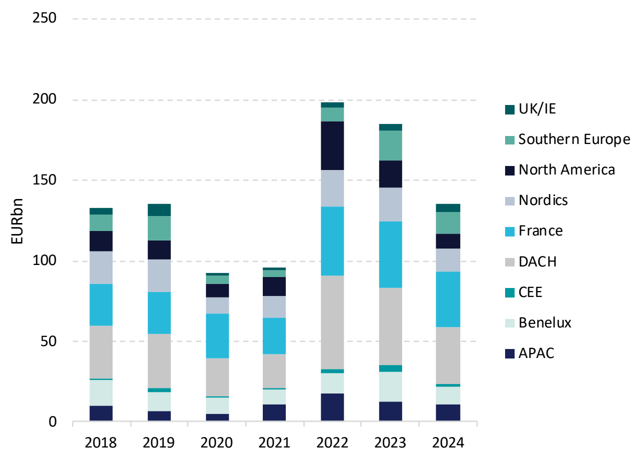
Top-10 jurisdictions

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	264.9	254	27	0.98	9.3	4.7	1.46
2	DE	210.9	298	44	0.65	7.8	3.9	1.50
3	CA	83.7	61	1	1.35	5.5	2.6	1.45
4	NL	82.6	84	3	0.92	10.4	5.9	1.35
5	ES	67.8	53	5	1.16	11.2	3.1	2.16
6	AT	59.1	99	5	0.59	8.1	4.2	1.54
7	IT	49.8	64	5	0.76	8.5	4.0	2.01
8	NO	49.3	60	12	0.82	7.2	3.4	1.09
9	FI	41.5	47	4	0.87	6.9	3.4	1.74
10	AU	35.7	33	0	1.08	7.1	3.3	1.83

EUR benchmark issue volume by month

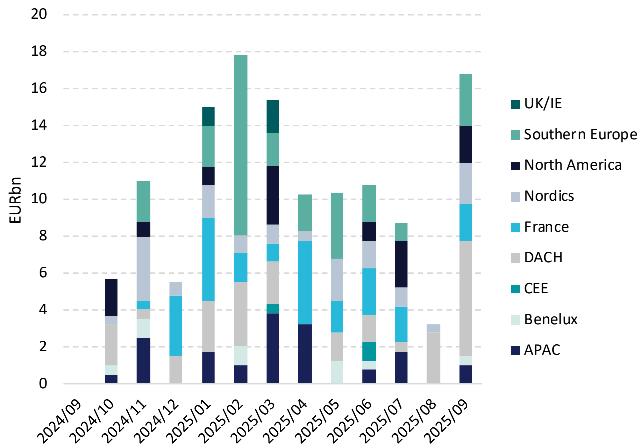


EUR benchmark issue volume by year

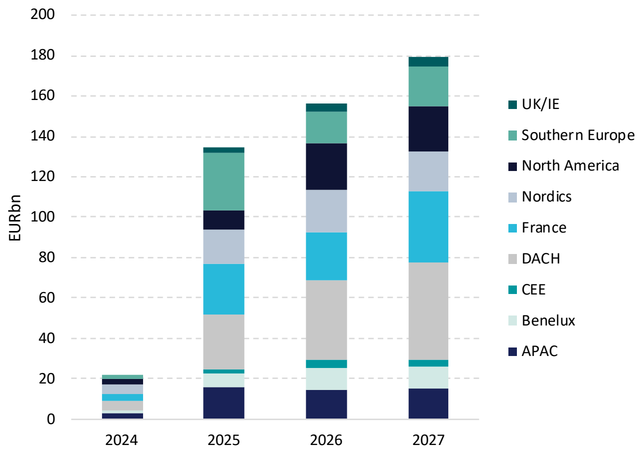


Source: Market data, Bloomberg, NORD/LB Floor Research

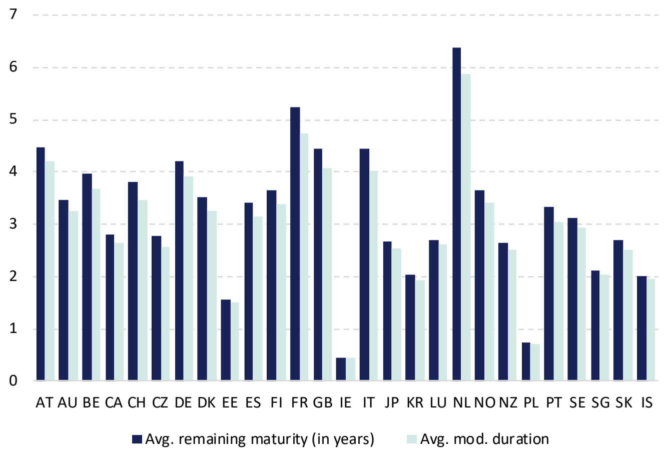
EUR benchmark maturities by month



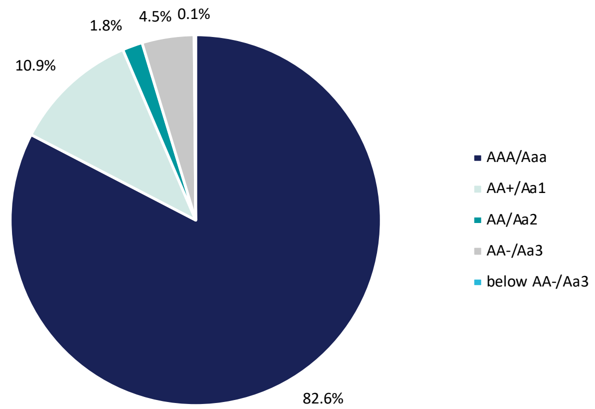
EUR benchmark maturities by year



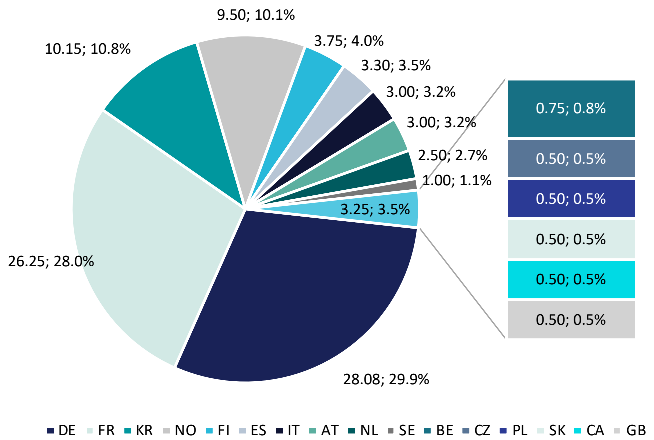
Modified duration and time to maturity by country



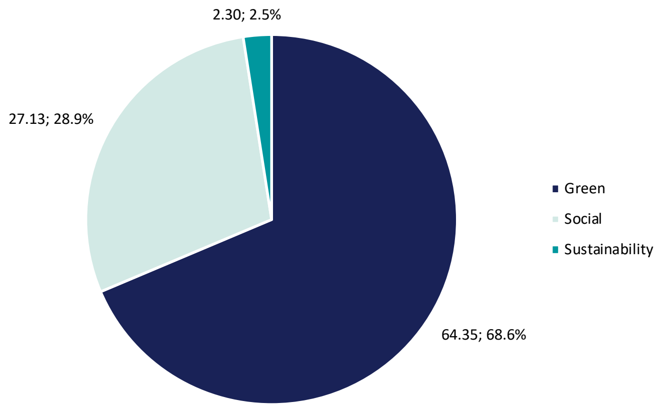
Rating distribution (volume weighted)



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

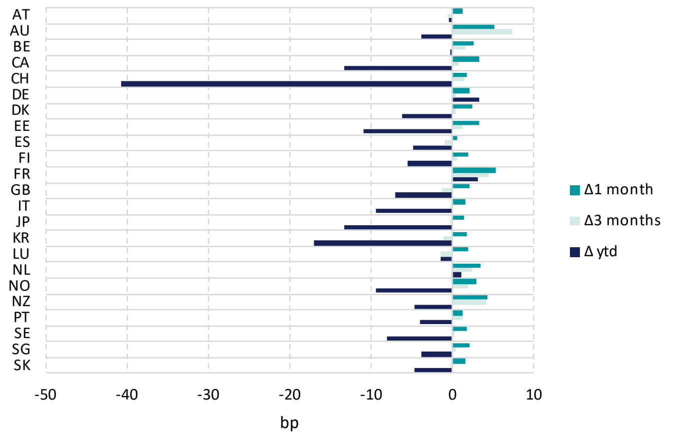


EUR benchmark volume (ESG) by type (in EURbn)

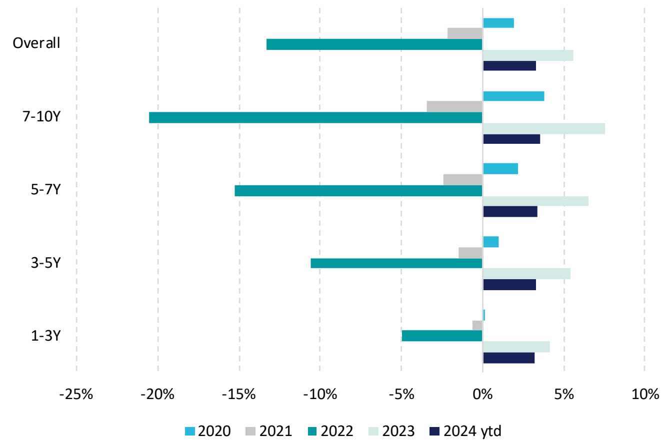


Source: Market data, Bloomberg, NORD/LB Floor Research

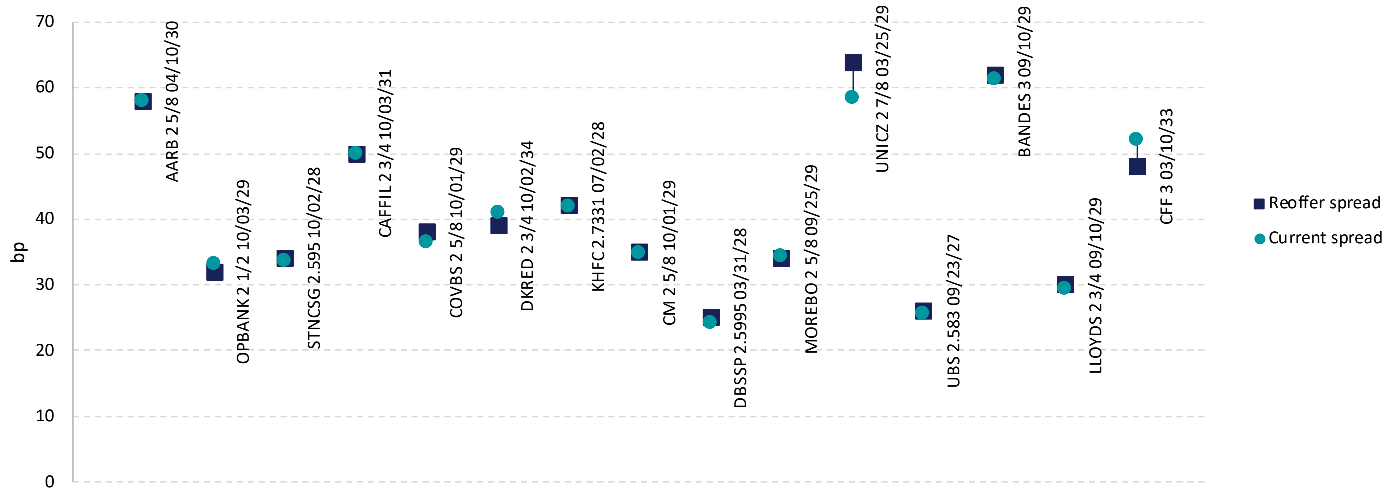
EUR benchmark emission pattern



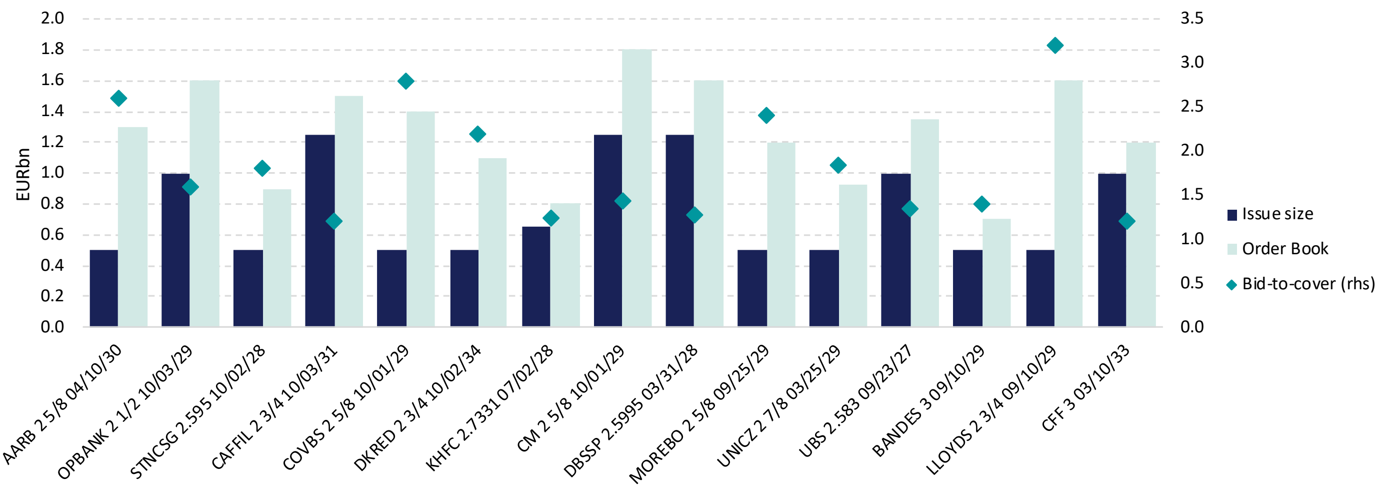
Covered bond performance (Total return)



Spread development (last 15 issues)



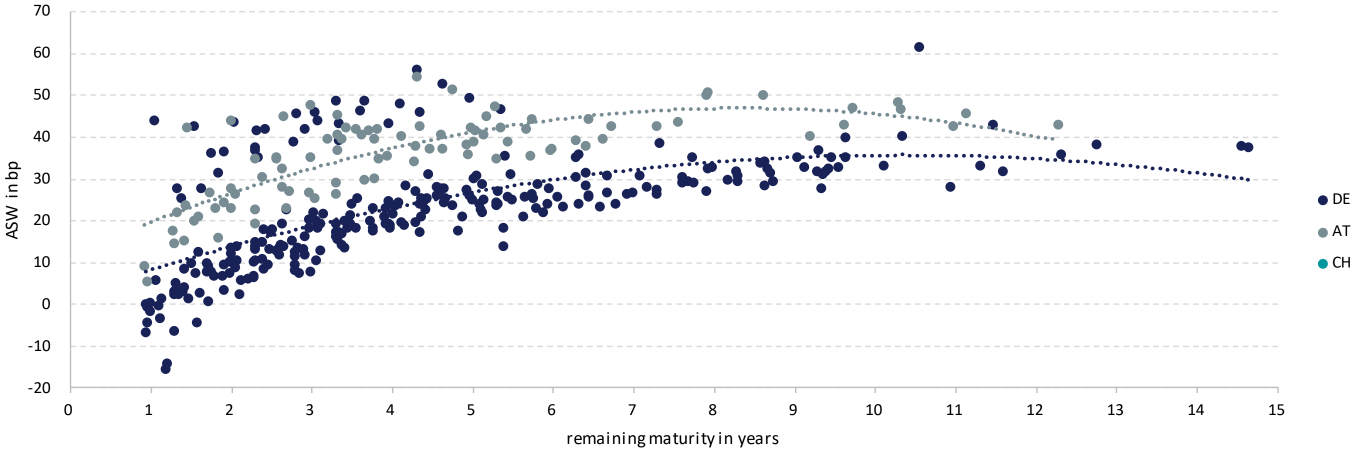
Order books (last 15 issues)



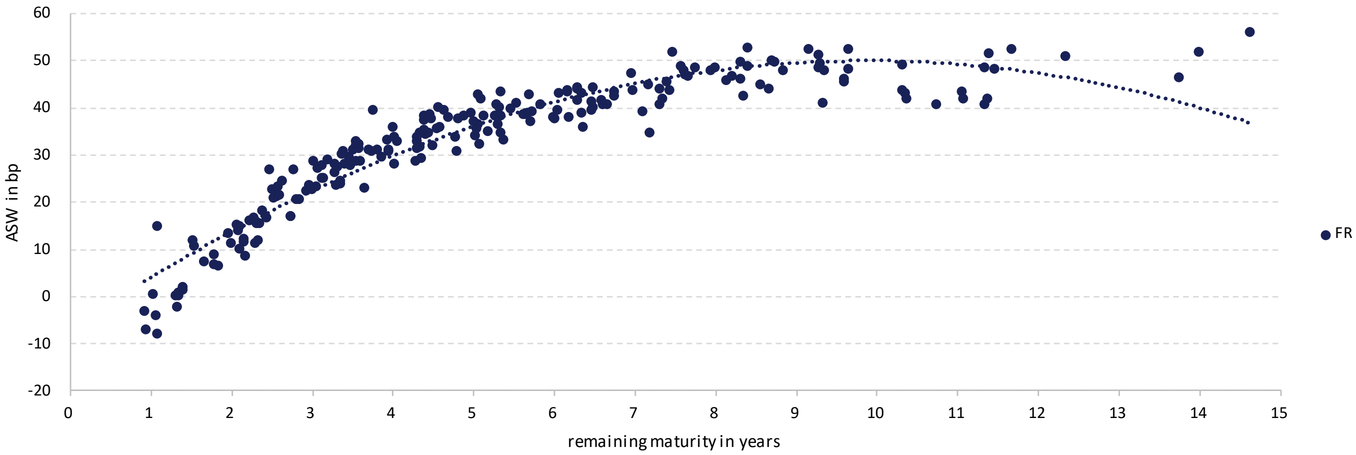
Source: Market data, Bloomberg, NORD/LB Floor Research

Spread overview[1]

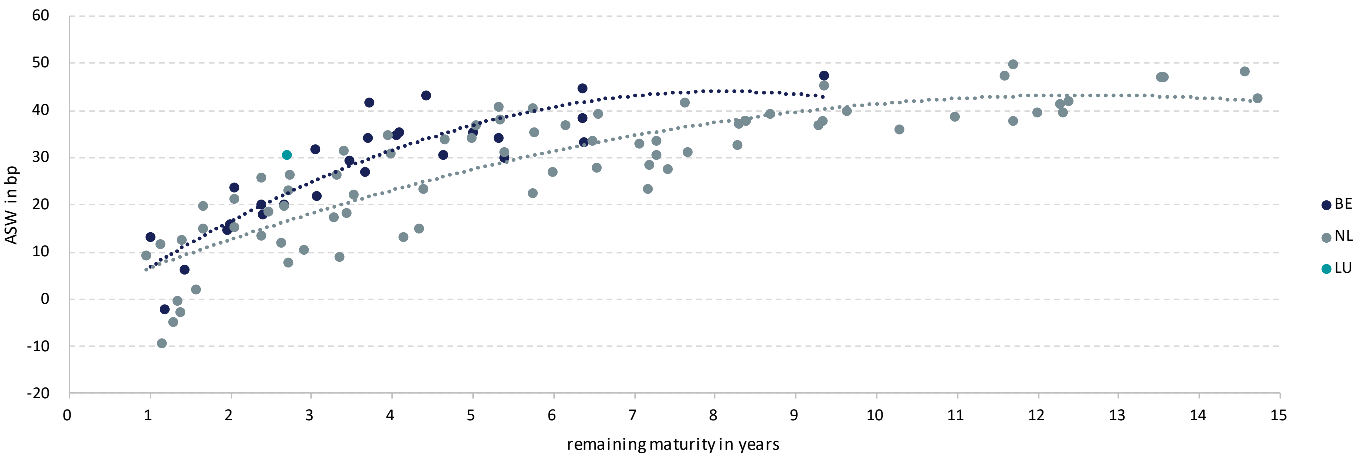
DACH



France

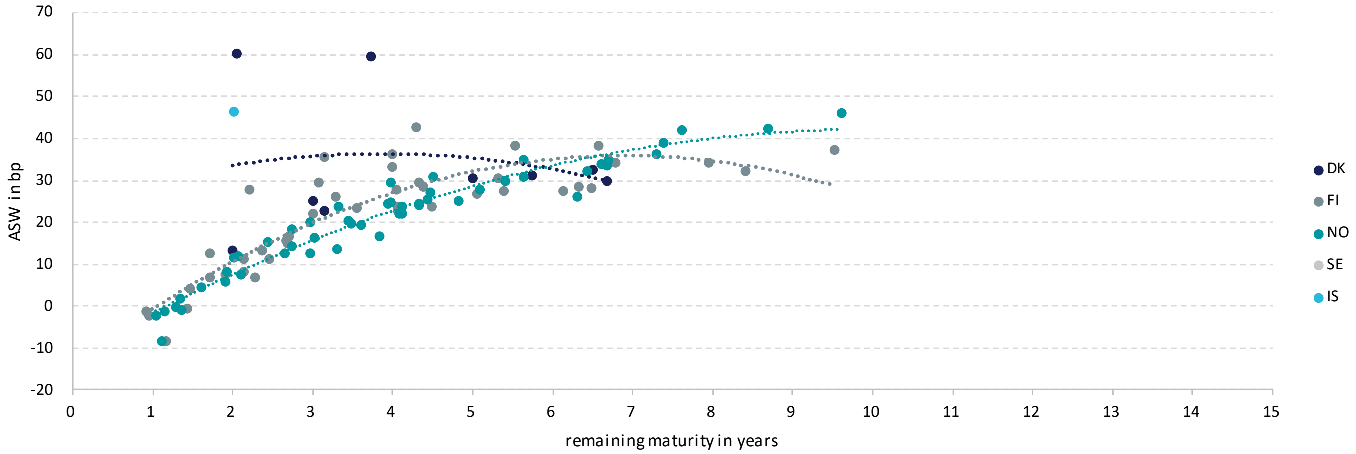


Benelux

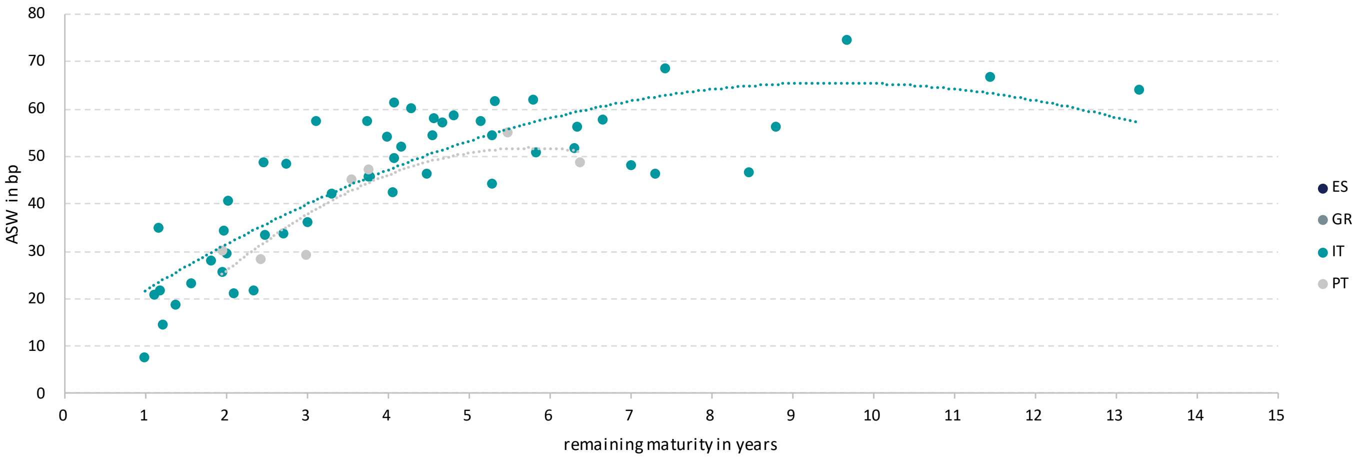


Source: Market data, Bloomberg, NORD/LB Floor Research [1]Time to maturity 1 ≤ y ≤ 15

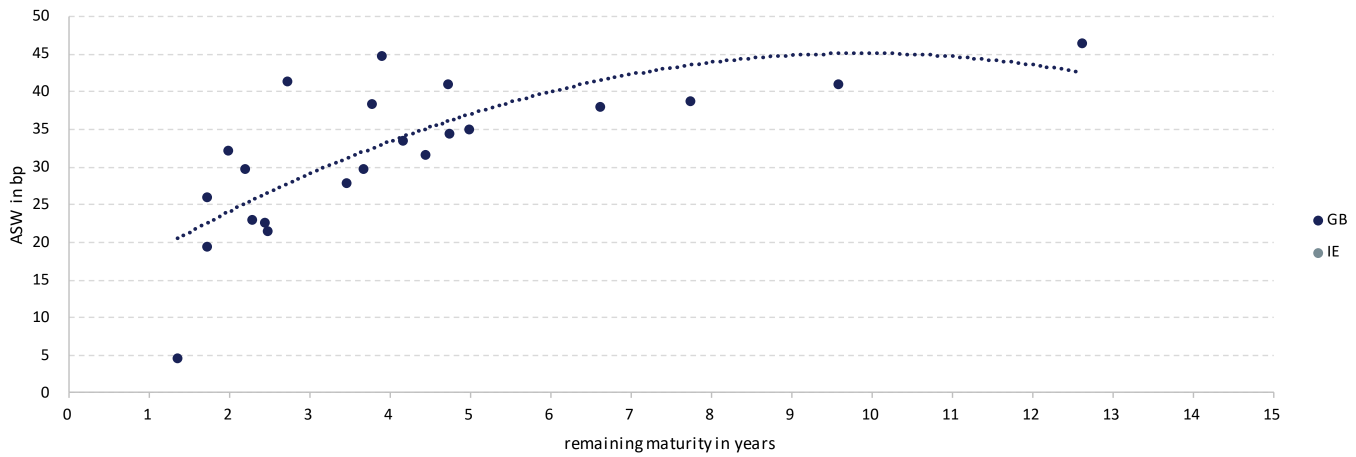
Nordics



Southern Europe

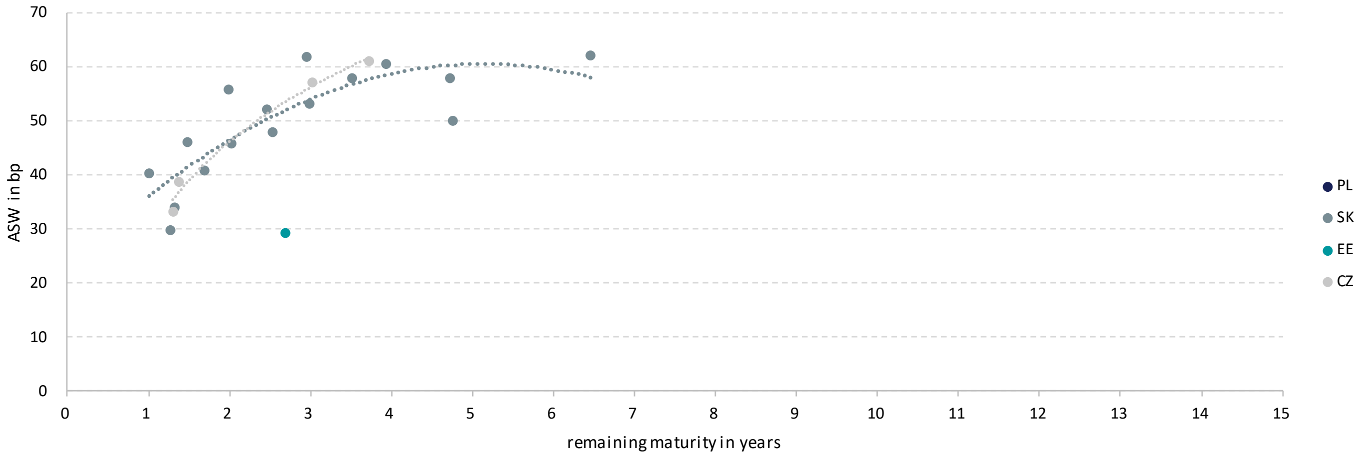


UK/IE

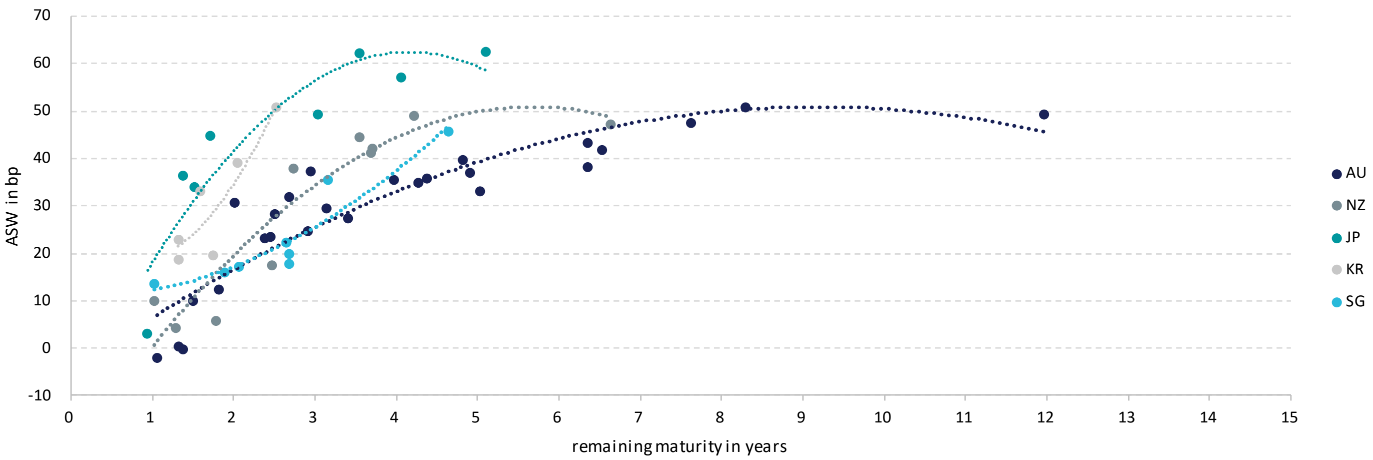


Source: Market data, Bloomberg, NORD/LB Floor Research

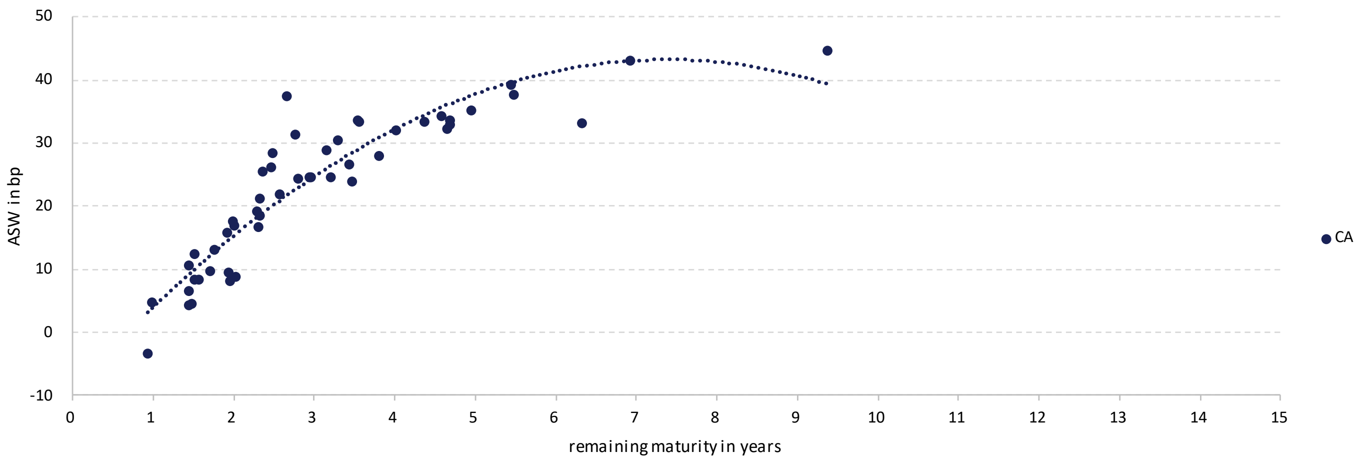
CEE



APAC



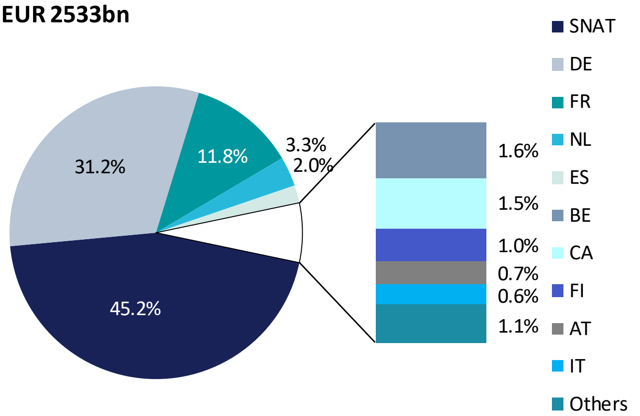
North America



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

Charts & Figures
SSA/Public Issuers

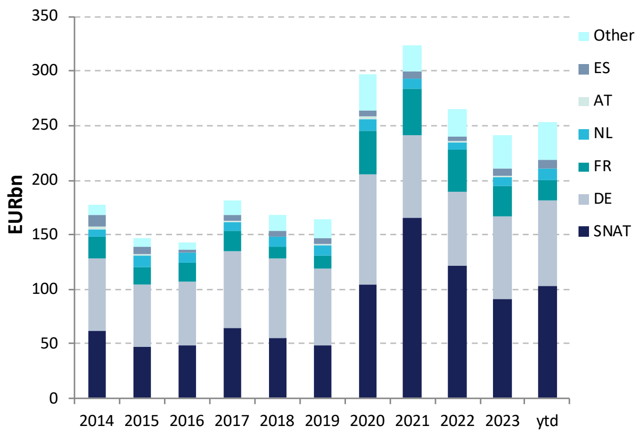
Outstanding volume (bmk)



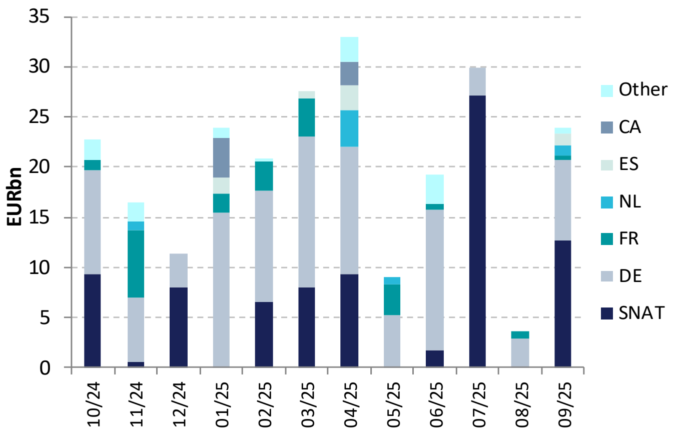
Top 10 countries (bmk)

Country	Vol. (EURbn)	No. of bonds	ØVol. (EURbn)	Vol. weight. ØMod. Dur.
SNAT	1,146.0	243	4.7	8.0
DE	790.3	592	1.3	6.2
FR	297.9	200	1.5	5.7
NL	82.9	68	1.2	6.5
ES	49.4	69	0.7	4.9
BE	41.6	45	0.9	10.5
CA	38.2	28	1.4	5.0
FI	25.2	26	1.0	4.3
AT	17.2	22	0.8	4.4
IT	15.6	20	0.8	4.5

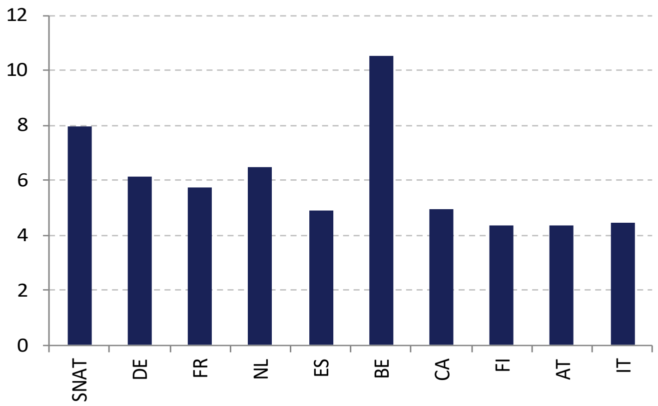
Issue volume by year (bmk)



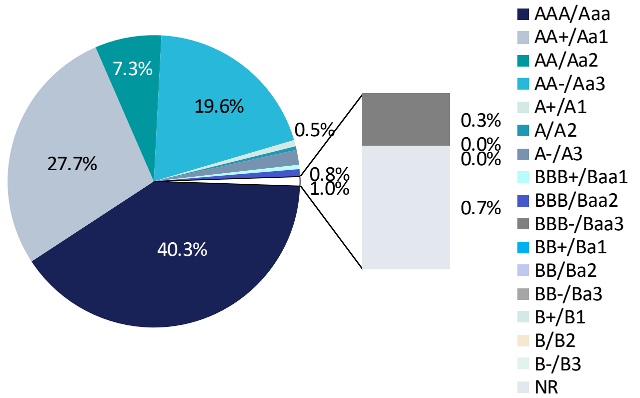
Maturities next 12 months (bmk)



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

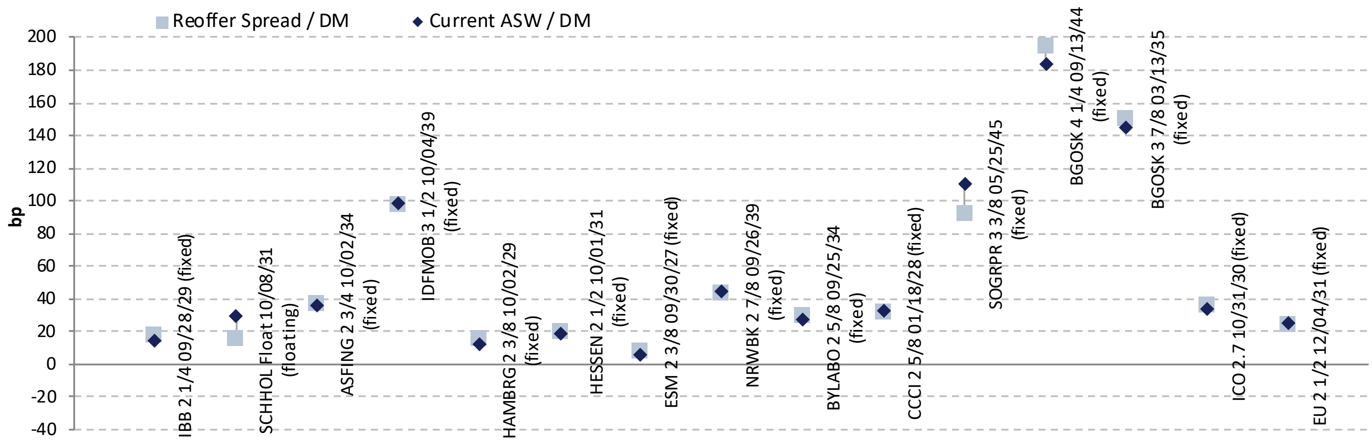


Rating distribution (vol. weighted)

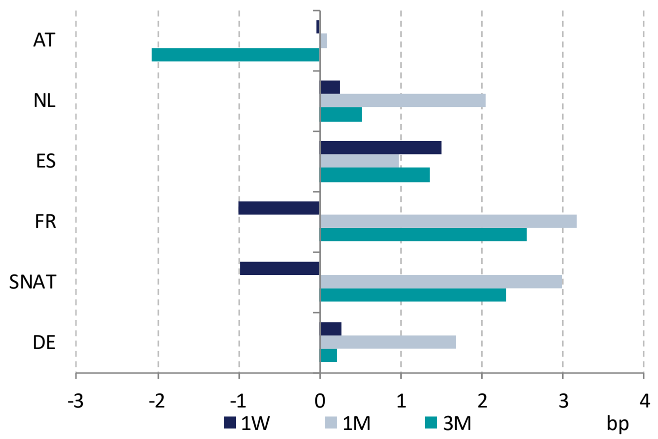


Source: Bloomberg, NORD/LB Floor Research

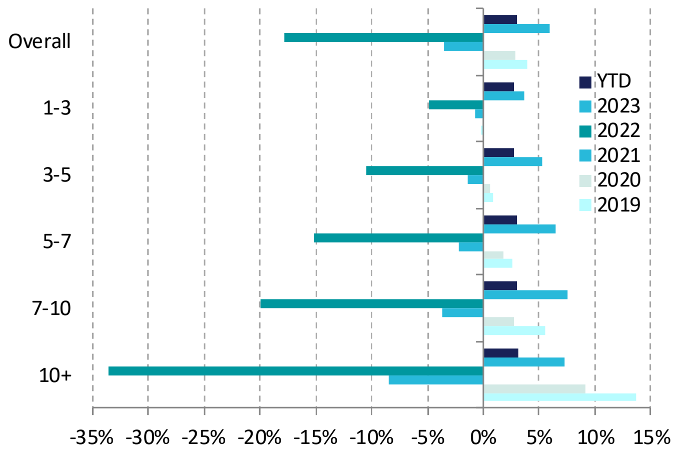
Spread development (last 15 issues)



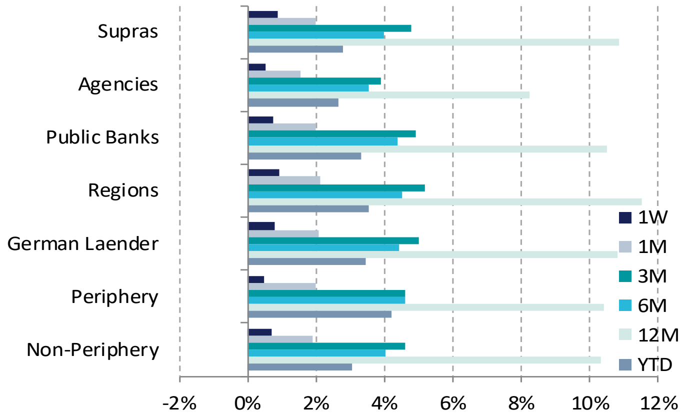
Spread development by country



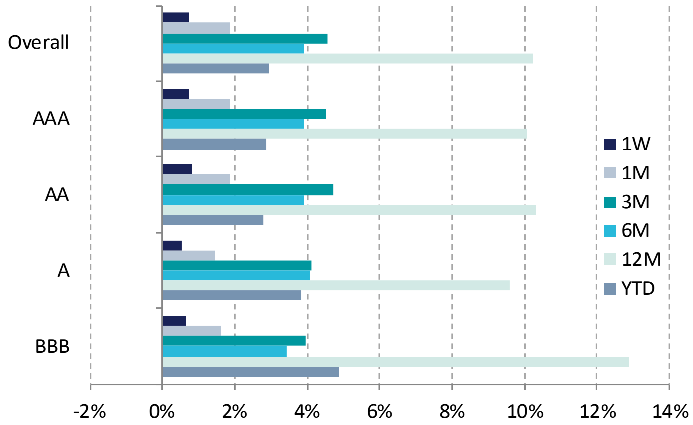
Performance (total return)



Performance (total return) by segments

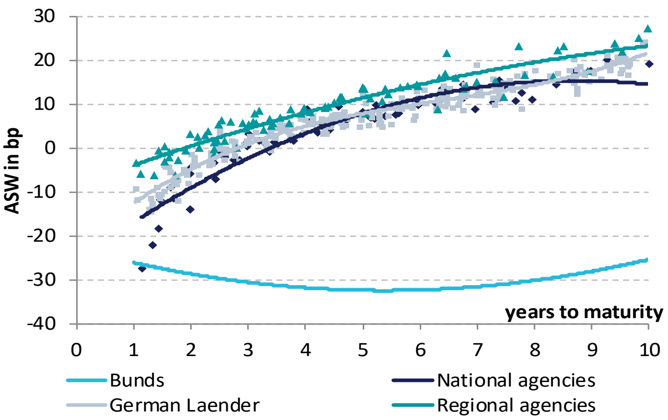


Performance (total return) by rating

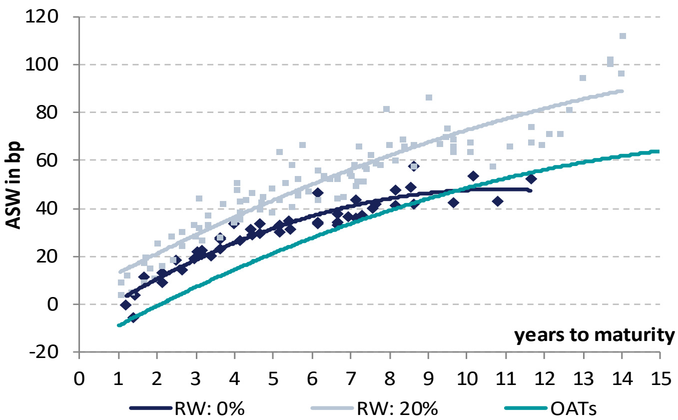


Source: Bloomberg, NORD/LB Floor Research

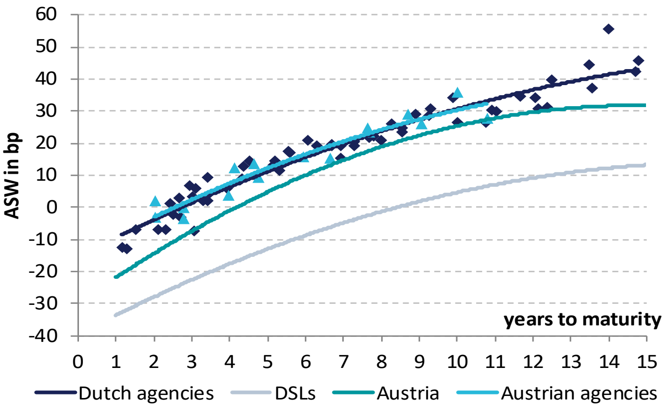
Germany (by segments)



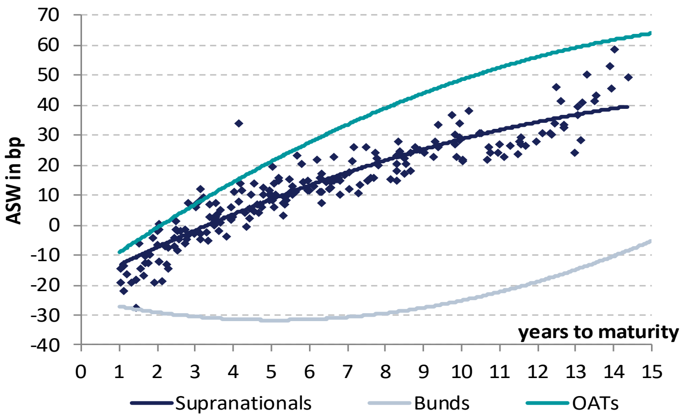
France (by risk weight)



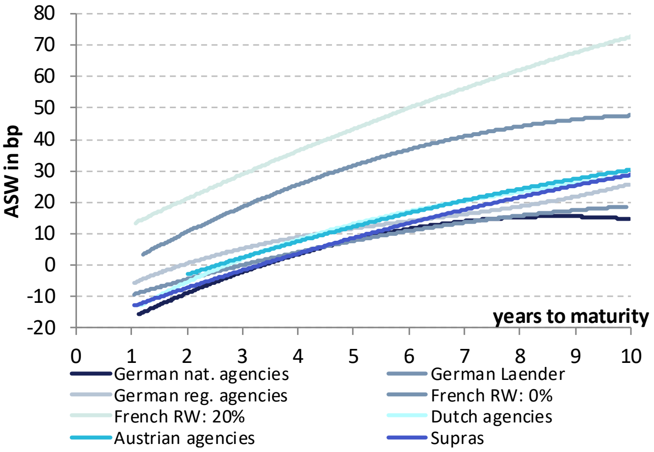
Netherlands & Austria



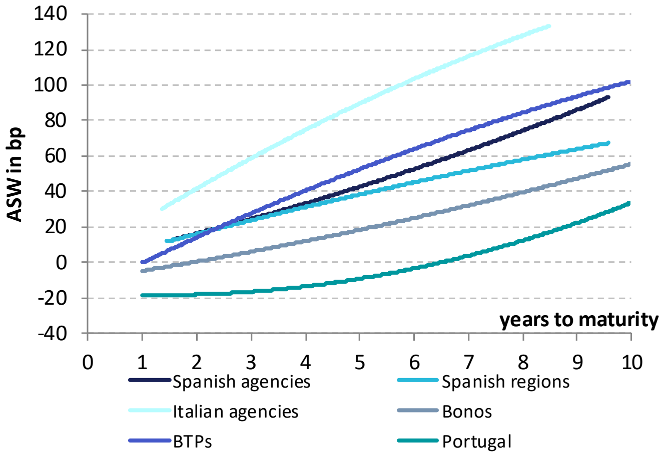
Supranationals



Core



Periphery



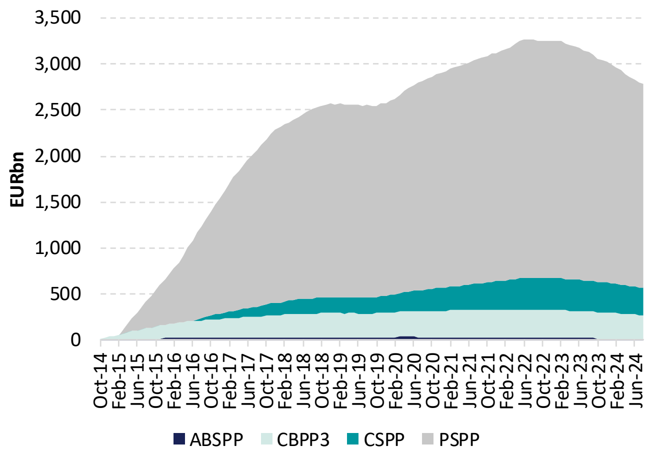
Source: Bloomberg, NORD/LB Floor Research

ECB tracker

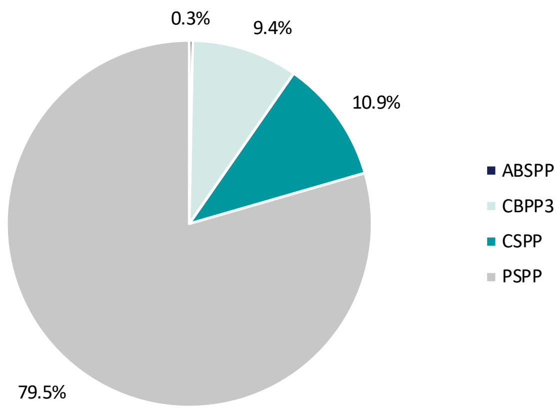
Asset Purchase Programme (APP)

	ABSPP	CBPP3	CSPP	PSPP	APP
Jul-24	8,641	262,403	303,010	2,227,758	2,801,812
Aug-24	8,398	261,861	302,758	2,217,196	2,790,213
Δ	-243	-541	-252	-10,562	-11,598

Portfolio development

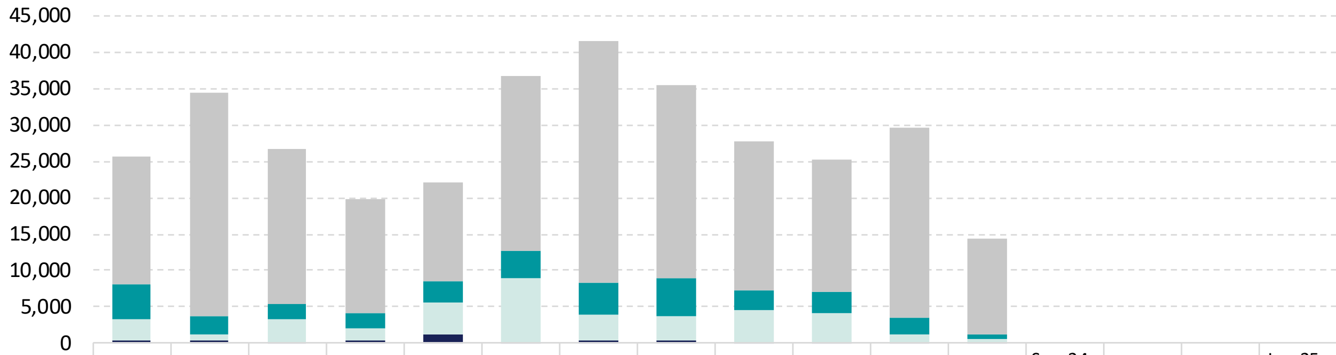


Portfolio structure



Source: ECB, NORD/LB Floor Research

Expected monthly redemptions (in EURm)

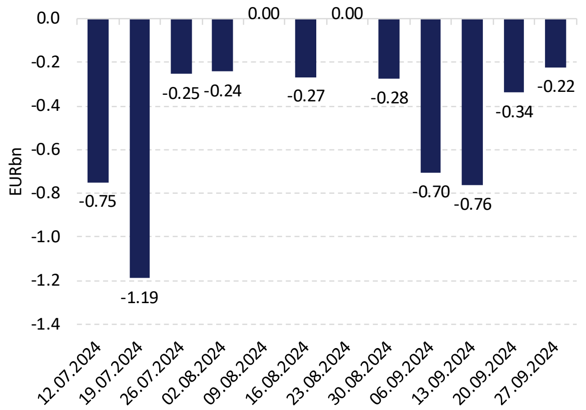


	Sep-24	Oct-24	Nov-24	Dec-24	Jan-25	Feb-25	Mar-25	Apr-25	May-25	Jun-25	Jul-25	Aug-25	Sep-24 - Aug-25	2023	2024	Jan-25 - Aug-25
APP	25,590	34,358	26,695	19,721	22,039	36,658	41,660	35,527	27,846	25,290	29,618	14,310	339,312	331,565	334,302	334,255
PSPP	17,505	30,578	21,298	15,643	13,463	24,021	33,379	26,671	20,541	18,261	26,161	13,114	260,635	255,025	264,480	253,586
CSPP	4,738	2,613	2,031	1,944	2,973	3,788	4,279	5,137	2,699	2,940	2,156	562	35,860	31,251	31,380	34,499
CBPP3	2,993	736	3,136	1,790	4,335	8,635	3,709	3,373	4,448	3,864	1,135	468	38,622	35,147	32,173	42,332
ABSPP	354	431	230	344	1,268	214	293	346	158	225	166	166	4,195	10,142	6,269	3,838

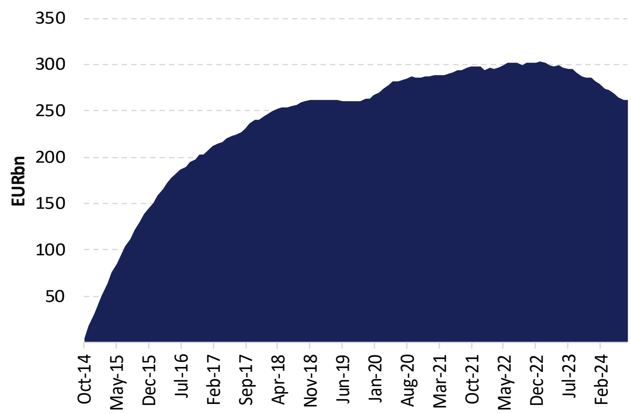
Source: ECB, Bloomberg, NORD/LB Floor Research

Covered Bond Purchase Programme 3 (CBPP3)

Weekly purchases

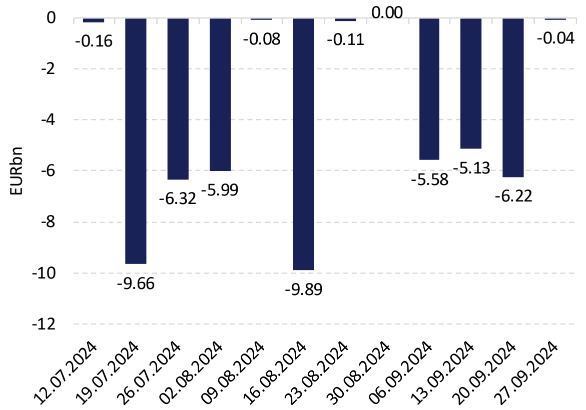


Development of CBPP3 volume

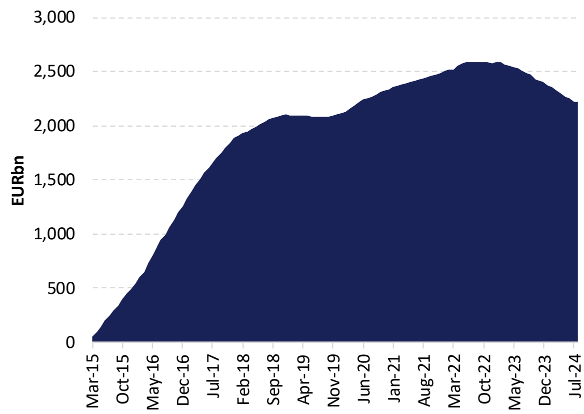


Public Sector Purchase Programme (PSPP)

Weekly purchases



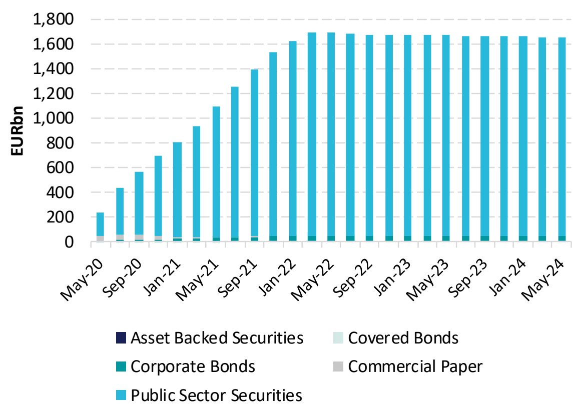
Development of PSPP volume



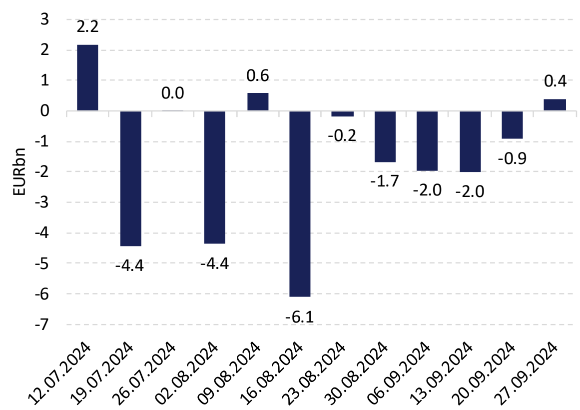
Source: ECB, Bloomberg, NORD/LB Floor Research

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
30/2024 ♦ 25 September	▪ The EUR benchmark segment after the summer break ▪ Update on German municipality bonds: DEUSTD and NRWGK
29/2024 ♦ 18 September	▪ ECBC publishes annual statistics for 2023 ▪ Sukuk bonds – an update on sharia-compliant investments
28/2024 ♦ 11 September	▪ Banca Sella joins the EUR sub-benchmark segment ▪ Teaser: Beyond Bundeslaender – Autonomous Portuguese regions
27/2024 ♦ 04 September	▪ New Pfandbrief issuer: Lloyds Bank GmbH ▪ Agencies and resolution instruments of the BRRD
26/2024 ♦ 21 August	▪ Central bank eligibility of covered bonds ▪ Teaser: Issuer Guide – German Agencies 2024
25/2024 ♦ 14 August	▪ Development of the German property market (vdp index) ▪ Classification of Supranationals and Agencies under Solvency II
24/2024 ♦ 07 August	▪ Transparency requirements §28 PfandBG Q2/2024 ▪ Teaser: Issuer Guide – Spanish Agencies 2024
23/2024 ♦ 10 July	▪ Repayment structures on the covered bond market: An update ▪ SSA review: EUR-ESG benchmarks in H1/2024
22/2024 ♦ 03 July	▪ Covereds: Half-year review and outlook for the second half of 2024 ▪ SSA half-year review 2024
21/2024 ♦ 26 June	▪ The covered bond universe of Moody's: An overview ▪ Teaser: Issuer Guide – Austrian Agencies 2024
20/2024 ♦ 19 June	▪ New EUR benchmark issuer from Slovakia ▪ ECB repo collateral rules and their implications for Supranationals & Agencies
19/2024 ♦ 12 June	▪ ESG covered bonds: Green deals continue to dominate ▪ Teaser: Issuer Guide - Nordic Agencies 2024
18/2024 ♦ 29 May	▪ Transparency requirements §28 PfandBG Q1/2024 ▪ Development of the German property market (vdp Index) ▪ Spotlight on the EU as a mega issuer
17/2024 ♦ 15 May	▪ Standard Chartered Bank Singapore boosts APAC growth ▪ Stability Council convenes for 29th meeting
16/2024 ♦ 08 May	▪ Whats happening away from the benchmark? ▪ Teaser: Issuer Guide – Dutch Agencies 2024
15/2024 ♦ 24 April	▪ A covered bond view of Portugal: Welcome back! ▪ Credit authorisations of the German Laender for 2024
14/2024 ♦ 17 April	▪ Moody's covered bond universe: An overview ▪ SSA review: EUR-ESG benchmarks in Q1/2024

NORD/LB:
Floor Research

NORD/LB:
Covered Bond Research

NORD/LB:
SSA/Public Issuers Research

Bloomberg:
RESP NRDR <GO>

Appendix
Publication overview

Covered Bonds:

- Issuer Guide – Covered Bonds 2024
- Covered Bond Laws
- Covered Bond Directive: Impact on risk weights and LCR levels
- Risk weights and LCR levels of covered bonds (updated semi-annually)
- Transparency requirements §28 PfandBG Q2/2024 (quarterly update)
- Transparency requirements §28 PfandBG Q2/2024 Sparkassen (quarterly update)

SSA/Public Issuers:

- Issuer Guide – German Laender 2024
- Issuer Guide – German Agencies 2024
- Issuer Guide – Canadian Provinces & Territories 2024
- Issuer Guide – European Supranationals 2023
- Issuer Guide – French Agencies 2023
- Issuer Guide – Nordic Agencies 2024
- Issuer Guide – Dutch Agencies 2024
- Issuer Guide – Non-European Supranationals (MDBs) 2024
- Beyond Bundeslaender: Belgium
- Beyond Bundeslaender: Greater Paris (IDF/VDP)
- Beyond Bundeslaender: Spanish regions

Fixed Income Specials:

- ESG-Update 2024
- ECB decision: Cut, sleep, repeat

Appendix
Contacts at NORD/LB

Floor Research

Dr Frederik Kunze
Covered Bonds/Banks

+49 172 354 8977
frederik.kunze@nordlb.de

Dr Norman Rudschuck, CIIA
SSA/Public Issuers

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

Lukas Kühne
Covered Bonds/Banks

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

Christian Ilchmann
SSA/Public Issuers

+49 157 851 64976
christian.ilchmann@nordlb.de

Alexander Grenner
Covered Bonds/Banks

+49 157 851 65070
alexander.grenner@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

Trading

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

Origination & Syndicate

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

Sales Wholesale Customers

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

Treasury

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

Relationship Management

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

Disclaimer

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Additional information for Recipients in the Republic of China (Taiwan):

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

Information for Recipients in the United Kingdom:

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

Time of going to press: 02 October 2024 (08:48)