Covered Bond & SSA View

NORD/LB Floor Research

05 November 2025 ♦ 37/2025

Marketing communication (see disclaimer on the last pages)

NORD/LB

Agenda

Floor analysts:

Head of Desk

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

Covered Bonds/Banks

Lukas Kühne
lukas.kuehne@nordlb.de

Alexander Grenner
alexander.grenner@nordlb.de

SSA/Public Issuers

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

Tobias Cordes, CIIA
tobias.cordes@nordlb.de

Market overview
Covered Bonds

Authors: Alexander Grenner // Lukas Kühne

Primary market: everything points to a quiet end to the year

Over the past five trading days, we recorded no new market activities on the primary market for covered bonds. While lower issuance volumes are common immediately before and after ECB interest rate decisions (as was the case last week), the lack of new issues so far this week increasingly raises the question as to when the market will enter its period of hibernation for the winter. Traditionally, November is one of the quieter months for covered bond deals. However, with issuance volumes of EUR 17.6bn and EUR 11.0bn respectively, 2022 and 2023 demonstrated that there can be exceptions to this rule, and that fresh supply can be well received by the market even well into November. In contrast, no new deals have been placed on the market in December in either of the previous two years, meaning the last covered bond deal in December dates back to 2022. What applies to the covered bond market in December can also be replicated almost like-for-like on the senior bond market: in contrast, issuers of senior benchmark bonds have been slightly more active in November in recent years than their counterparts in the covered bond market. There is a significant gap between the two markets, particularly when comparing issuance volumes in November 2024. Against the backdrop of the trend in the Bund-swap spread, we recorded only two primary market deals from covered bond issuers in November (issue volume: EUR 2.0bn), while eight issuers approached investors with new senior non-preferred bonds with an overall volume of EUR 6.3bn. At the start of this week, too, Deutsche Kreditbank (DKB) was active with a senior bond (cf. Issuer View) on the market, whereas the covered bond primary market remained dormant. For the remainder of the year, we expect the odd issuer to appear on the market still. However, we are not anticipating a similarly high level of fresh supply as seen in the years 2022 and 2023. Moreover, given that EUR benchmark issuers have already made substantial progress towards completing their funding activities for the year, we assume that the final weeks of 2025 will be comparatively quiet on the covered bond market.

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

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

Secondary market: German monoline banks in the spotlight again

In recent days, market players have been focusing on the bonds of German monoline banks in the CRE segment. Triggered by significant share sales by Deutsche Pfandbriefbank (pbb) at the end of last week, the covered bond spreads of these monoline banks rose sharply on the secondary market. However, the reasons behind this sell-off remain unclear, with pbb planning to publish its quarterly figures for the third quarter of 2025 next week on 13 November. Overall, the spread increase remains limited to the monoline banks and is not currently impacting the spread level of covered bonds on the secondary market.

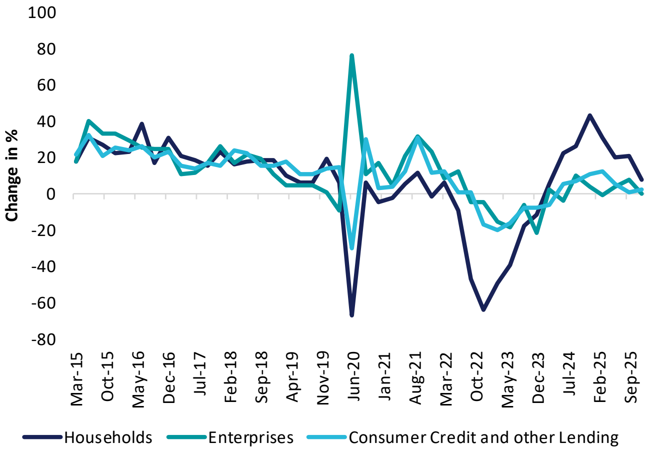
EUR sub-benchmark segment: Kreissparkasse Ludwigsburg issues second bond

While there were no new issues in the EUR benchmark segment to report on this week, Kreissparkasse Ludwigsburg took advantage of its opportunity to hold the full attention of investors to place its second EUR sub-benchmark bond on Tuesday (04 November). The savings bank limited the final issuance volume of its deal (8.0y) to EUR 250m upon securing the mandate on Monday. The order book totalled EUR 435m. In the end, the deal went through at a reoffer spread of ms +38bp (guidance: ms +41bp area). While this is the second EUR sub-benchmark transaction of Kreissparkasse Ludwigsburg, the institution is among the savings banks to have made its debut in this sub-market in the past two years. For a more detailed overview of primary market issuers from the savings bank sector, please refer to our Focus Article in this present edition of our weekly publication.

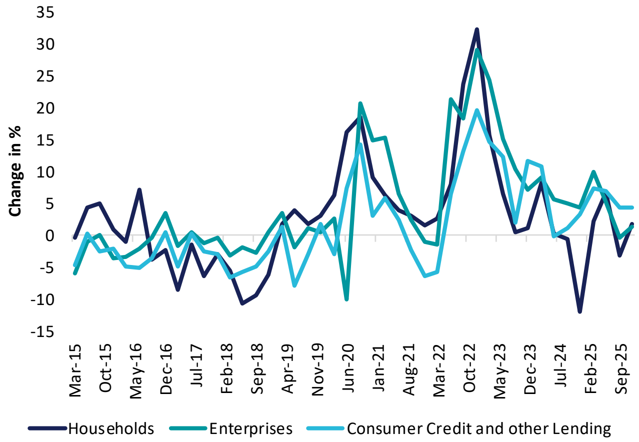
ECB: Bank Lending Survey

On 28 October, the evaluations of the latest feedback received on the "ECB Bank Lending Survey" (ECB BLS) were published (cf. press release). The data publication includes responses from 154 banks in the Eurozone (survey period: 19 September to 07 October). Given the presence of increased risks in the economic environment and geopolitical uncertainties, commercial banks in the currency union have slightly tightened lending standards for businesses. Although demand has increased marginally, it remains at a weak level. Conditions for housing loans did improve slightly, with another dynamic increase registered on this occasion (+28% after +37% in Q2/2025). In the area of consumer loans, lending standards have been tightened slightly, while overall demand remained at a stable level. In response to the ad-hoc questions in the current edition, the participating banks reported stable to slightly improving refinancing conditions in relation to wholesale funding activities, which can be taken as generally positive news for the covered bond market as well. Banks were able to partially offset the negative impact of the ECB's interest rate policy on their interest margins through higher loan volumes. Portfolio reduction reportedly had a neutral overall impact on liquidity.

ECB BLS: change in demand (anticipated)



ECB BLS: change in lending standards (anticipated)



Source: Bloomberg, ECB, NORD/LB Floor Research

S&P: analysis of the impacts of sovereign rating changes on covered bonds

In a recent publication, the ratings experts from S&P analysed how potential changes to the sovereign rating landscape might impact the ratings of covered bonds. According to this analysis, changes in jurisdiction ratings are seen as the most significant influencing factor. For example, a downgrade of a single notch would directly impact approximately 15% of the covered bond programmes rated by S&P. A further 23% of programmes would require a higher overcollateralisation (OC) ratio to prevent a potential downgrade of their covered bond rating. In the event of a two-notch downgrade of the sovereign rating, around 23% of covered bond programmes would be directly impacted, while roughly 32% of all S&P-rated programmes would need to maintain a higher OC ratio in order to keep the current rating. According to the information, publicly secured programmes are more sensitive to downgrades than mortgage-backed programmes. In terms of the latter, those in France, Greece, Iceland, Italy, South Korea and Spain would be particularly affected by potential downgrades. As far as programmes backed by public sector cover assets are concerned, it is issuers in Austria, Belgium and France that could be particularly impacted. According to S&P, upgrades to sovereign ratings would have only a limited impact, as the majority of covered bonds already feature the top rating of AAA. Just 4% of programmes would be upgraded in this event, with covered bonds from Austria, Greece, Iceland and Italy potentially standing to benefit the most. The sensitivity of rating changes is said to primarily depend on the cover assets' reliance on a potential sovereign default and the hedging of refinancing risks. The rating experts point out that the majority of covered bond programmes are likely to remain largely unchanged in the event of moderate sovereign rating changes, although publicly guaranteed programmes from countries with lower credit ratings would be particularly affected. In our view, France remains a focal point in this regard due to the prevailing political uncertainty and comparatively high budget deficit. The two rating downgrades of France by S&P have so far had no impact on the assessment of French covered bonds. However, as S&P's analysis shows, this situation could change if France is subject to a third downgrade.

Overview of covered bond rating changes following sovereign downgrade

Country	Sovereign Rating (Outlook)	1-Notch Sovereign Rating Downgrade		2-Notch Sovereign Rating Downgrade	
		CB Downgrade	Required OC increase	CB Downgrade	Required OC increase
Germany	AAA (Stable)	0%	0%	0%	57%
Denmark	AAA (Stable)	0%	57%	0%	71%
Sweden	AA+ (Stable)	0%	100%	0%	100%
Austria	AA+ (Stable)	29%	29%	29%	29%
Belgium	AA (Stable)	25%	25%	25%	25%
South Korea	AA (Stable)	40%	20%	40%	60%
France	A+ (Stable)	30%	10%	90%	0%
Spain	A+ (Stable)	100%	0%	100%	0%
Iceland	A+ (Stable)	50%	0%	50%	0%
Italy	BBB+ (Stable)	100%	0%	100%	0%
Greece	BBB+ (Stable)	0%	0%	100%	0%

Source: S&P, NORD/LB Floor Research

Market overview
SSA/Public Issuers

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

ECB Governing Council meeting: the silence of autumn

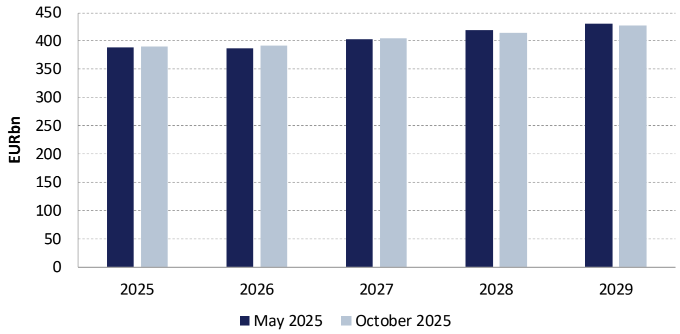
As a guest at the Banca d'Italia building in picturesque Florence, the ECB Governing Council decided last Thursday that the deposit facility rate would remain at a level of 2.0%. The main refinancing operations rate still stands at 2.15%, while the rate of the marginal lending facility has been kept at 2.4% moving forwards too. As the series of rate cuts continues apace in the USA following the Fed's decision, European central bankers see themselves in a good place in terms of interest rates. Even though the annual inflation rate in the common currency area recently climbed to 2.2% in September, reaching its highest level in five months, this should not give cause for the ECB to panic. After all, the increase was triggered in particular by base effects from energy prices. All eyes are now likely to turn to the next meeting of the Governing Council on 18 December, during which new staff projections will be published again – then for the first time with forecasts for the inflation rate and economic growth in the Eurozone for 2028. Although the anticipated interest rate cut at the end of the year has been priced out by the market participants bit by bit, we believe the door remains open for such a move. Nevertheless, the ECB opted not to reveal its cards today regarding the future monetary policy path. Accordingly, the Council members traditionally referred to their meeting-by-meeting approach as well as the data dependence of their decisions. "There is a silence of autumn even in the colours", as the Austrian author Hugo von Hofmannsthal wrote back in 1922. The latest statements and announcements by central bankers left little doubt in advance that the ECB would be extending its "interest rate silence" at the penultimate meeting of 2025. For more information about the ECB, please refer to our Special from last Thursday.

NBank now rated by Fitch

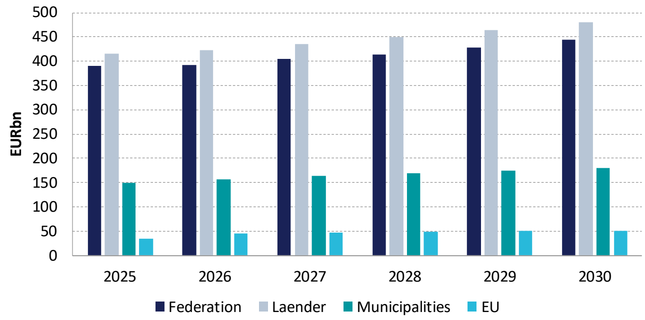
The rating agency Fitch has assessed the creditworthiness of Investitions- und Förderbank Niedersachsen (NBank) for the first time, awarding its top rating of AAA (outlook: stable) to match that of the federal state of Lower Saxony (ticker: NIESA) in the process. The risk experts from Fitch consider the strong guarantee and liability mechanism to be the main factor in equating the rating with that of the federal state. "The excellent rating confirms NBank's strategic positioning as a strong investment and development bank for the state of Lower Saxony and its sustainable business focus. We stand firm and fully committed to financial security. The rating strengthens our position as a reliable partner for private and corporate customers, giving us the opportunity to carry out refinancing activities on favourable terms, thereby supporting people, businesses and local authorities in Lower Saxony even more robustly than before", said Michael Kiesewetter, CEO of NBank. As an issuer, NBank is for the moment (still) not part of our Issuer Guide – German Agencies, although we have already taken a closer look at the promotional bank this year in our weekly publication.

Federal Finance Minister Lars Klingbeil presents results of the 169th tax estimate
Following the 169th meeting of the "Tax Revenue Estimates" working group from 21 to 23 October in Berlin to analyse the expected development of tax revenues, the results have now been presented. Accordingly, tax revenues for the federal government, Laender and local authorities are expected to amount to EUR 990.7bn in 2025, taking into account the tax law changes that will have come into force by October 2025. This is higher than forecast in the May tax estimate (EUR 979.7bn). The same also applies to all other years in the forecasting period: compared with the May tax estimate, a consistently more positive development is now also anticipated for the years 2026-29, meaning that estimated tax revenues in each year will be on average a mid-single-digit billion higher than expected in May. However, it is mainly the Laender and local authorities that will benefit from this increase, whereas the federal government can expect lower tax revenues from 2028 onwards than was assumed in spring 2025. According to current estimates, the federal government can expect tax revenues of EUR 414.5bn in 2028 and EUR 427.6bn in 2029, after forecasts in May of EUR 418.6bn and EUR 431.3bn. The bottom line is that the federal government cannot expect to receive more money during the period under review, as the lower revenues from 2028 onwards compared to the previous forecast will offset the higher tax revenues in the period 2025-27. The working group's tax revenue estimates are based on the federal government's autumn projection, which, in view of the ongoing trade conflicts and the associated uncertainty, anticipates only (slight) growth in price-adjusted gross domestic product of +0.2% for 2025. Price-adjusted growth in economic output of +1.3% and +1.4% is expected for 2026 and 2027, partly in light of the desired impetus from the German government's economic and fiscal policy measures. By comparison: in May, gross domestic product was still expected to stagnate, with a growth rate of +1.0% forecast for 2026. "What we do works. Our investment package is a powerful stimulus for new economic growth", explained Federal Minister of Finance Klingbeil. "The more positive outlook is also reflected in rising tax revenues. This above all bolsters the ability of the Laender and local authorities to act. The federal government will bear the vast majority of the costs of the growth booster we are using to stimulate the economy. That is why the federal government will benefit little from additional tax revenue […]." Despite improved growth prospects and increasing tax revenues overall, pressure to consolidate the federal budget remains high, with ministries still required to make savings and continue on the consolidation course.

Estimate of federal tax revenues



Results of the tax revenue estimate (October 2025)



Source: Federal Ministry of Finance, NORD/LB Floor Research

Lower Saxony: tax revenues on the rise, but financial leeway is not

As described on the previous page, the "Tax Revenue Estimates" working group has revised the revenue expectations of the Laender upwards, among other reasons due to the improved macroeconomic forecast for the coming years. Accordingly, Lower Saxony (ticker: NIESA) will also benefit from an expected increase in tax revenues, although cyclical adjustments for this year and the coming year will not lead to any significant new financial leeway. Therefore, no adjustment to the Supplementary Budget 2025, which is currently still undergoing parliamentary proceedings, will be needed. Conversely, there are minor adjustments to the 2026 budget that could be taken into account in the ongoing proceedings. Taking into account municipal financial equalisation (KFA) and updated tax revenue estimates, the sub-sovereign now expects a surplus of EUR +441m for the current financial year. Expectations for the following years have also been revised upwards accordingly compared with the May estimate: for 2026 by EUR +592m, for 2027 by EUR +531m, for 2028 by EUR +533m and for 2029 by EUR +532m. Lower Saxony's tax revenues are expected to amount to EUR 36.3bn in 2025 and could rise to as much as EUR 39.0bn (2028) and EUR 39.9bn (2029) in subsequent years.

Primary market

No sign of a break on the SSA primary market: after we mentioned the planned issue by Export-Import Bank of Korea (ticker: EIBKOR) in the previous edition, the export financier finally placed EUR 1bn (5y) on Monday at ms +34bp (guidance: ms +40bp area). Last Thursday, Brandenburg (ticker: BRABUR) also put its money where its mouth is by issuing its third benchmark in the current year, raising EUR 500m (8y) at ms +27bp (guidance: ms +28bp area). On the same day, the European Financial Stability Facility (ticker: EFSF) took the opportunity to satisfy its funding requirements. The supranational raised a total of EUR 4.5bn through a dual tranche, of which EUR 3bn came in the form of a fresh bond (5y) priced at ms +22bp (order book: EUR 23.5bn). A further EUR 1.5bn was raised by increasing its existing 2035 bond (bid-to-cover ratio: 15.0x). At the beginning of this week, however, attention was once again focused on the European Union (ticker: EU), which increased three of its bonds in the course of its fifth bond auction in H2/2025 (cf. funding plan). First, the volume of the 2031 bond (coupon: 2.5%) was increased by almost EUR 1.8bn. Thereafter, the EU opted to top up the 2035 bond (coupon: 3.375%) by EUR 2.0bn, before finally increasing the volume of the 2054 bond (coupon: 3.375%) by around EUR 1.3bn. The bid-to-cover ratios came to 1.3x, 1.6x and 1.3x respectively. New mandates of interest include one from Investitionsbank Berlin (ticker: IBB), which intends to issue a social bond with a volume of EUR 500m. In addition, the French promotional bank Bpifrance (ticker: BPIFRA) is planning to issue its first defence bond (5y), the proceeds from which are specifically earmarked to finance companies operating in the European defence sector, as part of its European Defence Bond Framework published in July. To this end, talks have been held with potential investors since 03 November.

Issuer	Country	Timing	ISIN	Maturity	Size	Spread	Rating	ESG
EFSF	SNAT	04.11.	EU000A2SCAV2	5.0y	3.00bn	ms +22bp	A+ / Aaa / A+	-
BRABUR	DE	04.11.	DE000A351UR9	8.0y	0.50bn	ms +27bp	- / Aaa / -	-
EIBKOR	Other	03.11.	XS3213414033	5.0y	1.00bn	ms +34bp	AA- / Aa2 / AA	-

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

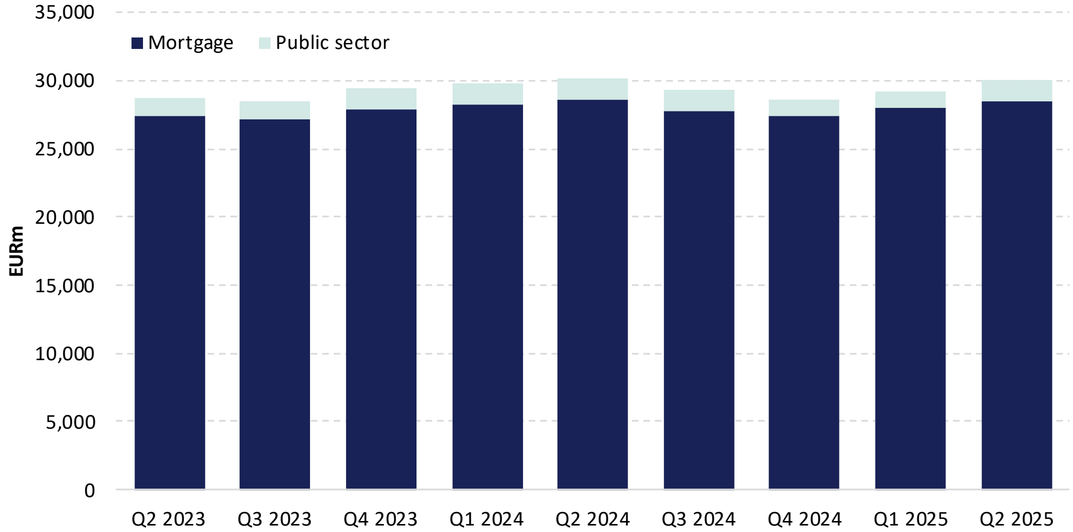
Covered Bonds
Savings banks as primary market issuers

Authors: Lukas Kühne // Dr Norman Rudschuck, CIIA

Savings banks as Pfandbrief issuers

Once again, German Pfandbrief banks have ranked among the major drivers on the primary market in the current issuance year. Increasingly, we are also seeing smaller banks, especially from the savings bank sector, seeking a pathway to the market for EUR benchmarks or EUR sub-benchmarks. We have accordingly welcomed a total of four new savings banks as issuers in the EUR sub-benchmark segment and one in the EUR benchmark segment in the last two years. Moreover, it was only in October that Hamburger Sparkasse (Haspa) successfully placed its first benchmark-sized public sector Pfandbrief on the market. We have taken the increasing number and significance of savings banks as Pfandbrief issuers as an opportunity to look more closely at issuers from the German savings bank sector in the EUR benchmark and EUR sub-benchmark segments. In addition to current market dynamics, we shall also focus on the composition of savings banks' cover pools, among other matters. In this context, the transparency requirements of §28 PfandBG also constitute a key input variable at present. In this respect, the mandatory reporting obligations for Pfandbrief banks from the savings bank sector are presented quarterly for the majority of issuers by the Association of German Pfandbrief banks (vdp) as part of transparency reports. These include the cover pool data for 43 mortgage Pfandbrief programmes and 13 programmes for public sector Pfandbriefe operated by German savings banks. We provide a detailed overview of the cover pools of issuers from the savings bank sector as part our Covered Bond Specials "Transparency requirements §28 PfandBG Sparkassen", which are published each quarter.

Savings banks: trend in outstanding Pfandbrief volume



Source: vdp, NORD/LB Floor Research

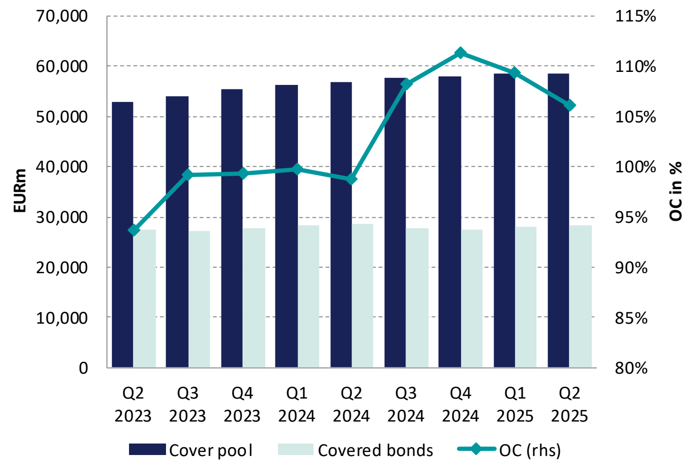
German savings banks – Pfandbriefe in circulation: market overview

In geographical terms, the savings banks in the database provided by the vdp are spread across virtually the whole of Germany. At EUR 30.1bn in outstanding Pfandbriefe, the total volume as at 30 June 2025 was only slightly down on the previous high of EUR 30.2bn from Q2/2024. As far as issuance volume is concerned, the picture is very mixed. For instance, Niederrheinische Sparkasse RheinLippe had outstanding Pfandbriefe worth EUR 10m in mid-2025, while the outstanding Pfandbrief volume of Hamburger Sparkasse totalled EUR 5.5bn on the same date. With well over 90% of the outstanding volume, the majority of issues are attributable to mortgage Pfandbriefe. Nevertheless, the volume of public sector Pfandbriefe has increased steadily for over two years: having stood at EUR 1,364m at the end of Q2/2023, the outstanding volume stood at EUR 1,636m at the end of Q2/2025, which equates to growth of almost 20%. In contrast to this, the increase in the amount of outstanding mortgage Pfandbriefe in the same period was far lower, at around 4%.

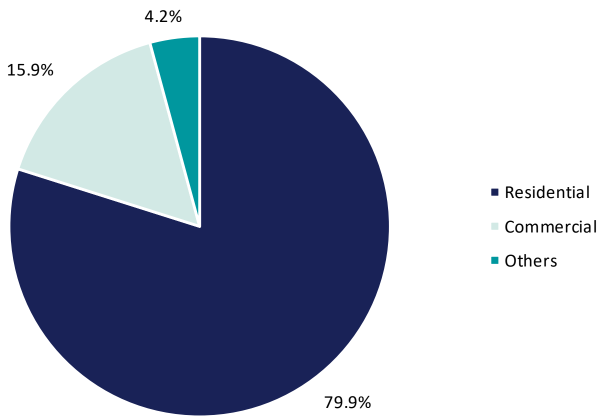
Cover pools located exclusively in Germany

Outstanding mortgage Pfandbriefe total EUR 28.4bn. This stands against a cover pool volume of EUR 58.6bn, resulting in calculated overcollateralisation (OC) of EUR 30.2bn or 106.1%. Despite a small fall in the OC ratio, in our opinion, this still points on average to there being no shortage of cover assets that might restrain issuance potential over the next few quarters. The same is true of the OC ratio for public sector Pfandbriefe from the savings bank sector, which is once again a far higher figure, at over 170% (Q2/2025). With regard to the geographical breakdown, all the cover assets held in the cover pools of savings banks are located in Germany as at 30 June 2025. In regional terms, the saving banks focus on their respective geographical business area. With regard to the type of cover assets, residential assets predominate in the case of mortgage Pfandbriefe from the savings bank sector. Accordingly, at the end of Q2/2025, only two issuers had a share of commercial cover assets exceeding 30%, while 33 savings banks had a share of residential cover assets exceeding 80%.

DE savings banks – mortgage Pfandbriefe: trend



DE savings banks – mortgage Pfandbriefe: CRE share



Source: vdp, NORD/LB Floor Research

Three savings banks active on the market as issuers of EUR benchmarks

Currently, there are three savings banks represented in the EUR benchmark segment with nine issues, including Haspa, Sparkasse Hannover and Sparkasse Pforzheim Calw. The outstanding volume totals EUR 5bn and is spread across eight mortgage Pfandbriefe and two Pfandbriefe backed by public sector assets. This year, two of three established issuers from the savings bank sector, namely Hamburger Sparkasse and Sparkasse Hannover, ventured onto the market for EUR benchmarks, and both placed public sector Pfandbriefe worth EUR 500m. These are the first Pfandbrief deals backed by public sector assets to be issued by savings banks in this sub-market, making them these issuers' first placements. Previously, savings banks in the EUR benchmark segment only issued mortgage Pfandbriefe. Apart from Haspa, no issuer from the public sector banking segment is solely active in the EUR benchmark segment. Accordingly, both Sparkasse Hannover and Sparkasse Pforzheim Calw have a least one outstanding bond in the EUR sub-benchmark segment.

Cover pools consistently feature high OC ratios[1]

Issuer	Type	Cover Pool (EURm)	Outst. Volume (EURm)	OC (%)	CRE share (%)	LCR level / Risk weight	BMK/SBMK	Covered Bond rating (Fitch / Moody's / S&P)	Amt. Outstanding EUR BMK	Amt. Outstanding EUR SBMK
BSK 1818 AG	M	7,316.4	3,444.0	112.4	28.2	2A / 10%	SBMK	- / Aaa / -	-	EUR 3.20bn
	P	1,246.2	500.0	149.2	-	2A / 10%	SBMK	- / Aaa / -	-	EUR 0.30bn
Die Sparkasse Bremen AG	M	1,197.7	700.0	71.1	34.3	2A / 10%	SBMK	AA+ / - / -	-	EUR 0.50bn
Hamburger Sparkasse AG	M	8,776.8	5,461.6	52.6	28.6	1 / 10%	BMK	- / Aaa / -	EUR 2.00bn	-
	P	1,193.5	25.0	4,673.9	-	1 / 10%	BMK	- / Aaa / -	EUR 0.50bn	-
Kreissparkasse Köln	M	6,825.7	802.0	751.1	10.8	2A / 10%	SBMK	- / Aaa / -	-	EUR 0.25bn
Kreissparkasse Ludwigsburg	M	1,723.6	1,030.0	67.3	14.7	2A / 10%	SBMK	AA+ / - / -	-	EUR 0.50bn
Nassauische Sparkasse	M	1,230.0	708.0	73.7	10.2	2A / 10%	SBMK	AA+ / - / -	-	EUR 0.25bn
Sparkasse Dortmund	M	1,114.1	830.0	34.2	12.6	2A / 10%	SBMK	AAA / - / -	-	EUR 0.50bn
Sparkasse Hannover	M	3,116.5	2,118.6	47.1	15.4	1 / 10%[2]	BMK / SBMK	AAA / - / -	EUR 0.50bn	EUR 1.25bn
	P	1,610.8	1,061.1	51.8	-	1 / 10%[2]	BMK / SBMK	AAA / - / -	EUR 0.50bn	EUR 0.25bn
Stadtsparkasse München	M	1,493.5	945.0	58.0	5.9	2A / 10%	SBMK	AA+ / - / -	-	EUR 0.75bn
Sparkasse Pforzheim Calw	M	3,019.5	2,358.0	28.1	11.7	1 / 10%[2]	BMK / SBMK	AAA / - / -	EUR 1.50bn	EUR 0.55bn

Source: Issuers, rating agencies, NORD/LB Floor Research

[1] Cover pool data as at the reporting date of 30 June 2025; [2] for the issuer's BMKs; in our view, the SBMKs qualify as Level 2A assets for LCR management purposes

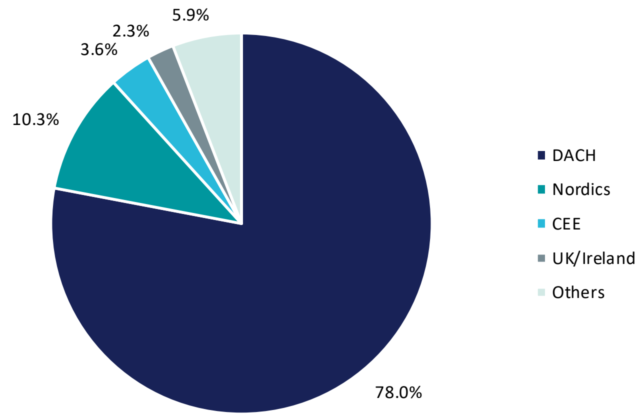
Debut issues from the savings bank sector in the EUR sub-benchmark segment

The list of savings banks active on the primary market is supplemented by another seven savings banks that have at least one outstanding EUR sub-benchmark market transaction. The Pfandbrief volume issued by savings banks in this sub-market currently totals EUR 8.3bn. Without doubt, this makes savings banks some of the most important issuers of EUR sub-benchmarks. Only two issuers are active in this market segment with outstanding public sector Pfandbriefe, namely BSK 1818 AG (Berliner Sparkasse) and Sparkasse Hannover. Accordingly, over 90% of the outstanding volume is attributable to mortgage-backed Pfandbriefe. In 2025 alone, eight issuers from the savings bank sector have ventured onto this sub-market to date, placing new bonds worth EUR 2.4bn in the process. The group of savings banks was joined by another issuer this year, namely Nassauische Sparkasse, following debut issues from Sparkasse Bremen, Kreissparkasse Ludwigsburg and Sparkasse Dortmund in this segment in the previous year. Kreissparkasse Köln also placed the first green Pfandbrief by a savings bank in this sub-market this year.

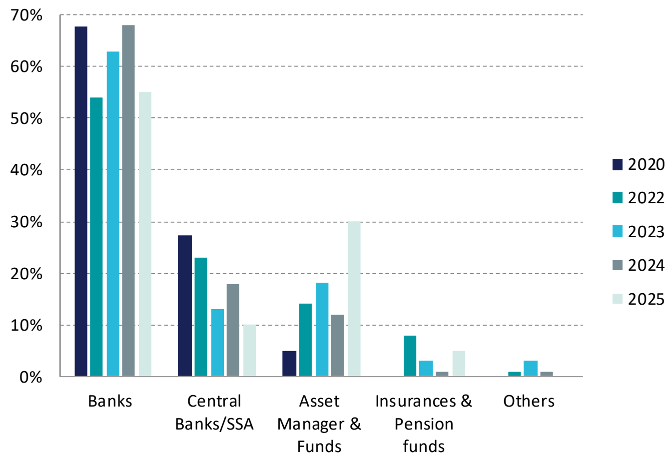
Savings banks' investors demonstrate marked "home bias"

The investor base of savings banks with at least one outstanding EUR benchmark is dominated by investors from Germany, Austria and Switzerland. Over the last four years, the proportion of investors from German-speaking countries averages 78.0%, followed by the Nordics (10.3%) and CEE (3.6%) regions. In our opinion, there is clearly a "home bias" for Pfandbriefe issued by savings banks. However, this should not be overly surprising, given that the issuers are less familiar to investors outside Germany. In terms of volume, banks or banks' treasury departments have been the leading Pfandbrief investors for saving banks over recent years, whereas the proportion of asset managers among investors has increased this year. We believe that this is attributable to the thoroughly attractive spreads on offer for the inaugural public sector Pfandbrief deals placed by savings banks, among other factors. In contrast, according to our database, insurance companies and pension funds as well as central banks only play a subordinate role.

DE savings banks: investor breakdown by region



DE savings banks: investor breakdown by type

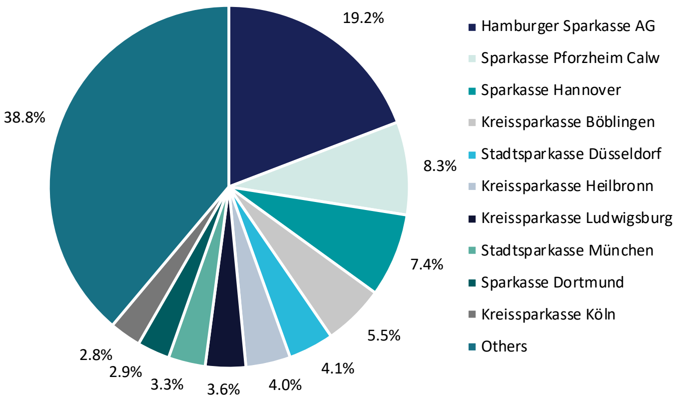


Source: Market data, NORD/LB Floor Research

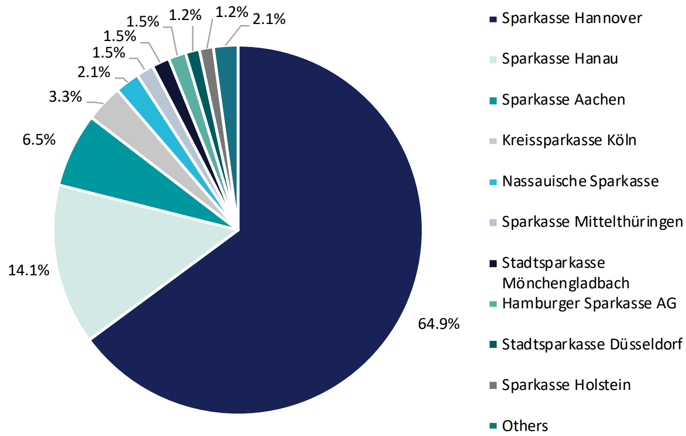
Number of savings banks active on the primary market could increase further

Despite the increasing number of EUR sub-benchmark debuts by savings banks in recent years, there are still some issuers from the public sector that could potentially place their first Pfandbrief in this sub-market over the next few years. A further three savings banks that currently have no Pfandbrief issues in benchmark or sub-benchmark format have outstanding mortgage Pfandbriefe worth over EUR 1,000m as at 30 June, while a further eleven savings banks have outstanding mortgage Pfandbriefe worth over EUR 500m. The high overcollateralisation ratios also indicate no shortage of available cover assets that might prevent possible market growth. We therefore see further potential for possible debut benchmark transactions by savings banks, especially in the EUR sub-benchmark segment. Here, we believe that the focus should be primarily concentrated on mortgage-backed Pfandbriefe. In the case of public sector Pfandbriefe, the group of active savings banks so far is much smaller, while both the volume of outstanding covered bonds and the available cover pools are far lower.

DE savings banks – market shares: mortgage Pfandbriefe



DE savings banks – market shares: public sector Pfandbriefe



Source: vdp, NORD/LB Floor Research

Conclusion and outlook

The EUR sub-benchmark debuts made by savings banks in recent years have shown not least that issuers from the public sector increasingly view this sub-market as an attractive alternative for placing their Pfandbrief deals. Savings banks have also been increasingly active in the EUR benchmark segment. Accordingly, both Hamburger Sparkasse and Sparkasse Hannover placed their first public sector Pfandbrief in this market segment. As far as the cover pools of savings banks are concerned, it is clear that they focus solely on Germany and on residential assets. Almost without exception, all the covered bond programmes operated by Pfandbrief issuers from the savings bank sector active on the primary market also have top ratings from one of the rating agencies Fitch, Moody's or S&P. The high overcollateralisation ratios indicate that there is currently no shortage of cover assets in issuers' cover pools. From our point of view, it is therefore quite possible that more issuers from the savings bank sector will venture onto the primary market for the first time in the next few years. However, in this respect, the focus is likely to primarily be on mortgage-backed Pfandbriefe.

SSA/Public Issuers
Auvergne-Rhône-Alpes Region – spotlight on REGRHO

Authors: Dr Norman Rudschuck, CIIA // Lukas-Finn Frese // Tobias Cordes, CIIA // assisted by Justin Hoff

Auvergne-Rhône-Alpes region – an overview

The Auvergne-Rhône-Alpes region (ARA, ticker: REGRHO) was created in 2016 from the merger of the Auvergne and Rhône-Alpes regions and now constitutes one of the 13 regions of France. The sub-sovereign is located in south-eastern France and contains major cities such as Lyon, as well as other notable conurbations including Grenoble and Clermont-Ferrand. The first of these, as the largest city and administrative centre, is one of France's most dynamic urban areas. The ARA region has 13 departments (regional authorities) and borders Italy, Switzerland and several other French regions. It is home to 8.2m inhabitants or around 13% of the French population. The age structure is similar to the national average: around 29% of the population is aged under 25. The ARA region benefits from a highly varied landscape extending from the Alps in the east through vast river valleys and agricultural areas to the volcanic mountains of the Auvergne.

Regional government built around Les Républicains following 2021 elections

Laurent Wauquiez (Les Républicains) won the French regional elections in 2021 and therefore remained the president of the region – an office he had occupied since 2016. He resigned in September 2024 to lead the parliamentary group in Paris. The office of regional president is now occupied by Fabrice Pannekoucke (Les Républicains). The regional parliament consists of a conservative government and a strong left-wing (51 seats) and right-wing (17) opposition. The political power of the regional parliament is comparable to that of a German Landtag (regional parliament): its main duties therefore include education, infrastructure and economic development. On a national level, the central government and national parliament – which consists of two chambers – take precedence over the regional government. The two chambers, the national assembly and senate, function in a similar way to the British bicameral system. At local level, in contrast, the structure is similar to the German system: the French regional authorities are essentially divided into regions, departments and municipalities. Several municipalities belong to a department; several departments make up a region. The division of tasks and legal options open to these regional authorities are similar to those in the German system.

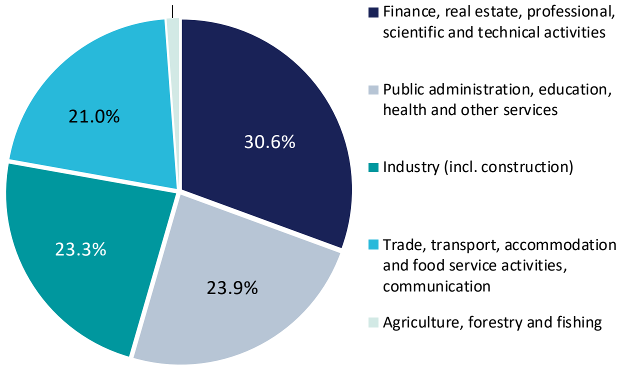
The appeal of the ARA region

Tourism is one of the region's key economic sectors. With 175 ski resorts, two national parks and three of the largest lakes in France, the region offers numerous opportunities for sporting activities and leisure time spent outdoors in nature. This makes it particularly attractive to athletes and active holidaymakers. In addition to its natural attractions, its cities are also a key part of the region's success. For instance, Lyon is not only well-known for its rich history and superb culinary heritage, but its ancient city centre has also been recognised as a UNESCO world heritage site. In 2024, the region generated revenue from tourism of EUR 21.2bn, making it France's second most important tourism region after Paris. With 285m overnight stays (+3.2% compared with 2023) in the same year, the ARA region ranks sixth in Europe, which also emphasises the importance of the sector.

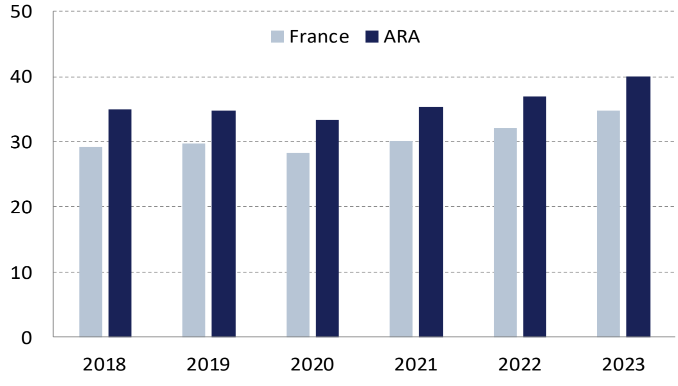
A key economic region with real innovative power

The ARA region is one of the most innovative and economically strong regions of France. The sub-sovereign lies at the junction of key French and European transport routes and, thanks to its well-developed infrastructure, plays a key role as a hub for transportation and logistics. The transport infrastructure consists of a dense network of motorways, international airports and a highly developed rail network with numerous high-speed lines. The significance of industry is characteristic of the sub-sovereign: with more than 520,000 jobs at around 55,000 locations, it is the French region with the highest number of jobs in this sector. It accounts for 17.8% of total value added in industry. Accordingly, a large number of well-known companies – such as Michelin, Sanofi and Danone – are headquartered or have production facilities in the region. It is also the second largest region for universities with over 370,000 students spread across eight universities and 44 Grandes Écoles. Thanks to close links to industry combined with the large number of universities, the ARA region has evolved into a centre for innovative start-ups and now ranks among the world's 100 most important science and technology clusters. This is reflected in the fact that 13 of the 55 French "pôles de compétitivité" (competitive clusters) are based in the region. Its capacity for innovation is apparent from the number of patent applications, in particular: around 20% of all France's patent-protected innovations and approximately 81% of French semiconductor patents alone originate in this sub-sovereign. R&D expenditure is therefore comparatively high, accounting for just under 16% of all R&D expenditure in France, at EUR 9.3bn, in 2022. In terms of nominal GDP, at almost EUR 329bn, the ARA region was the strongest economic region in France after Île-de-France (around EUR 860bn) in 2023. This economic strength is also reflected in the economic indicators: in 2023, per capita GDP was the second highest in France at EUR 40,000 and average household income, at EUR 31,620, was around 4.5% above the national average of EUR 30,269. In Q2/2025, the (provisional) unemployment rate of 6.5% was below the national average (7.5%). The two biggest, non-French trading partners in the region are Germany and Italy, which jointly accounted for more than 22% of all exports and imports in 2023. It is striking that, although China is not among the five largest export partners, it is the third largest import partner. ARA is a leader in the area of electricity generation thanks to two carbon-free energy sources: the region is responsible for a share of 26% of the electricity generated nationwide on the basis of nuclear power, while 45% of French electricity production comes from hydroelectric power in the region.

Gross value-added by economic sector (2022)



Development of nominal GDP per capita (TEUR)



Source: Eurostat, NORD/LB Floor Research

Extensive efforts in relation to environmental protection

Auvergne-Rhône-Alpes Énergie Environnement (AURA-EE) was founded in 1978 as an environmental agency supported by the regional parliament. The institution operates as a non-profit making organisation with more than 70 members consisting of public institutions, other NGOs and energy companies. Its activities are mostly limited to supporting local institutions in implementing projects with an emphasis on sustainability and environmental protection. In this context, the focus is on energy and climate planning, energy efficiency in buildings and transport, mobility as well as waste disposal and the circular economy. At EU level, the AURA-EE leads the EUSALP initiative (EU Strategy for the Alpine Region) as Co-Lead. In 2021, the ARA region issued an inaugural sustainability bond in the amount of EUR 100m to finance environmental projects.

Rating downgrade in line with that of France

After S&P downgraded its rating for France from AA to AA- in 2024 in response to the increase in government borrowing and the high budget deficit, the next downgrade to A+ followed in October 2025. This is due to the growing political instability, which jeopardises the stabilisation of public finances. S&P will not rate individual regions more highly than the central state, which is why ARA's rating was adjusted to match the sovereign's credit rating. Risk experts expect ARA's budgetary situation to deteriorate in 2025 due to lower tax revenues and reduced government transfer payments as a consequence of budgetary measures implemented by the French government.

Liability mechanism and regulations

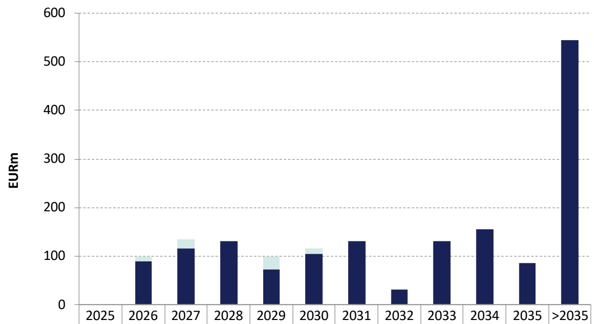
While the French government does not provide any explicit guarantees for regions or regional authorities, a financial equalisation system was enshrined in the constitution as part of the decentralisation of France in 2003, which provides for both horizontal and vertical financial equalisation (Art. 72-2). Under the current legal position, it is not possible for the regions to become insolvent either. In this respect, the region is – as described above – highly creditworthy despite the rating downgrade. In June 2024, the French financial market supervisory authority, Autorité de Contrôle Prudentiel et de Résolution (ACPR), which is directly subordinate to the Banque de France in operational terms, also decided that in future risk exposure to French sub-sovereigns would be treated in the same way as exposure to the French central government from a regulatory perspective (cf. weekly publication dated 07 August 2024). Under the standard approach of the CRR, ARA therefore has a risk weight of 0%. Consequently, this classification also allows it to be categorised as a Level 1 Asset under the LCR, and to derive a corresponding NSFR classification of 0%. As such, the region's bonds enjoy regulatory parity with bonds issued by German Laender. They already benefited from preferential classification under Solvency II – irrespective of the changes to regulatory treatment.

Regulatory summary for Auvergne-Rhône-Alpes and French regions

Risk weight	0%
LCR classification	Level 1 (EBA list)
NSFR classification	0%
Solvency II classification	Preferred (0%)

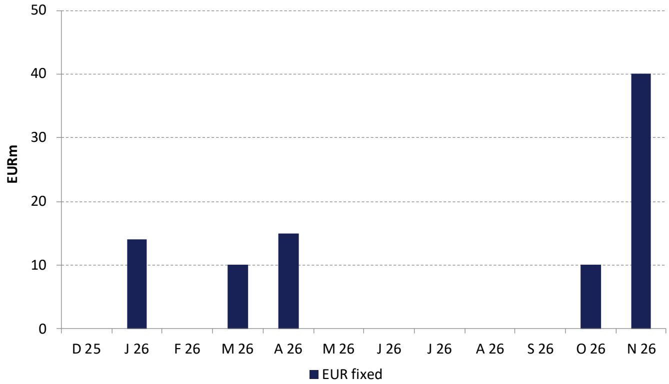
Source: Regulation (EU) No. 575/2013, Delegated Regulation (EU) 2015/61, Delegated Regulation (EU) 2015/35, NORD/LB Floor Research

Maturity profile by currency and coupon type



	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	>2035
EUR floating	0	10	20	0	25	10	0	0	0	0	0	0
EUR fixed	0	89	115	130	73	105	130	30	130	155	85	545

Bond maturities in the next 12 months



Source: Bloomberg, NORD/LB Floor Research; data from 04 November 2025

Outstanding volume of the Auvergne-Rhône-Alpes region

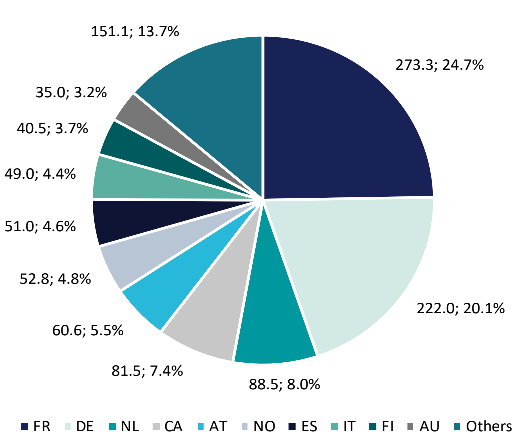
The outstanding bond volume under ticker REGRHO amounts to EUR 1.6bn in total, split between 61 different ISINs. Of this figure, EUR 545m (33%) will not mature until after 2035. The share of EUR 65m under “floating” is almost negligible at 3.9%. While there is no diversification in terms of foreign currency offerings, the sustainability projects mentioned above and the ESG framework could be of interest. The longest outstanding bond is the bond issued in May 2022 (EUR 25m, 20y). Medium and long-term refinancing activities are carried out on the capital market within the framework of the EMTN programme amounting to EUR 2.0bn.

Conclusion

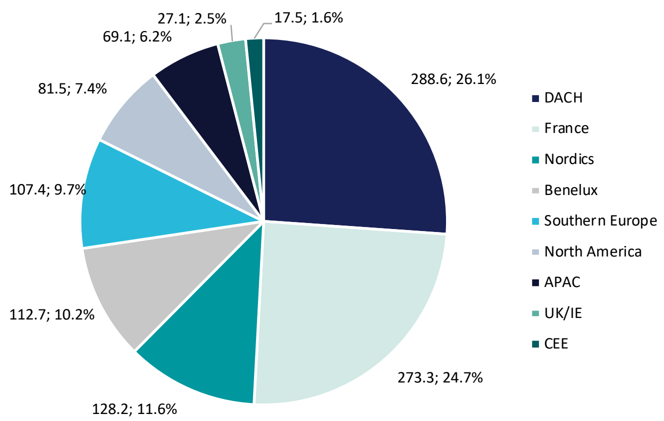
The ARA region is characterised in particular by its economic strength and also has good links to Europe thanks to its excellent infrastructure. Its highly diversified economy meant that ARA was able to overcome the effects and consequences of the COVID-19 pandemic rather more easily than some other French regions. In a comparison of French regions, ARA consistently ranks among the top three in terms of GDP, employment and tourism, often coming second to only Île-de-France. Despite the rating downgrades in the past two years due to the French government’s difficult budgetary situation, we believe the region will remain attractive to investors. Prudent financial management, positive socio-economic indicators and the region’s future-oriented focus contribute to this assessment. The region also benefits from the changes to regulatory treatment in 2024 and, in our opinion, these improve the conditions for future refinancing activities on the capital market

Charts & Figures
Covered Bonds

EUR benchmark volume by country (in EURbn)



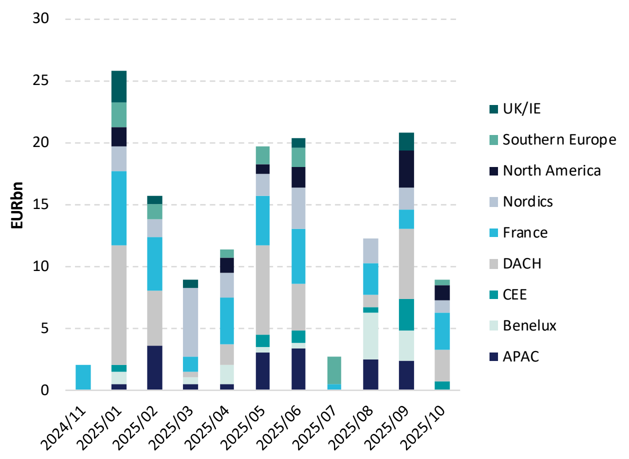
EUR benchmark volume by region (in EURbn)



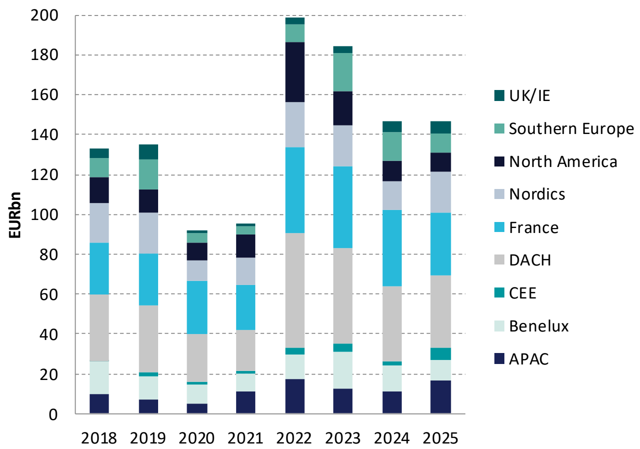
Top 10 jurisdictions

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	273.3	266	37	0.97	9.0	4.5	1.72
2	DE	222.0	312	49	0.66	7.7	3.6	1.76
3	NL	88.5	88	4	0.94	10.1	5.2	1.54
4	CA	81.5	60	1	1.34	5.5	2.3	1.70
5	AT	60.6	100	5	0.60	7.9	3.6	1.69
6	NO	52.8	63	11	0.84	7.0	3.2	1.43
7	ES	51.0	44	4	1.05	10.1	3.3	2.29
8	IT	49.0	63	6	0.75	8.2	3.6	2.15
9	FI	40.5	48	5	0.83	6.6	3.0	1.92
10	AU	35.0	34	0	1.03	7.2	3.4	1.94

EUR benchmark issue volume by month

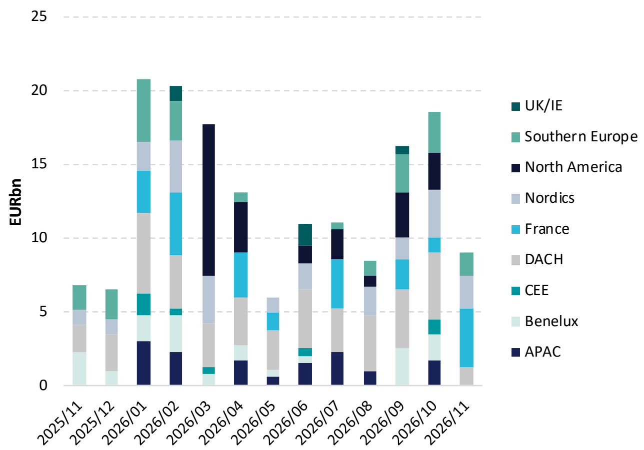


EUR benchmark issue volume by year

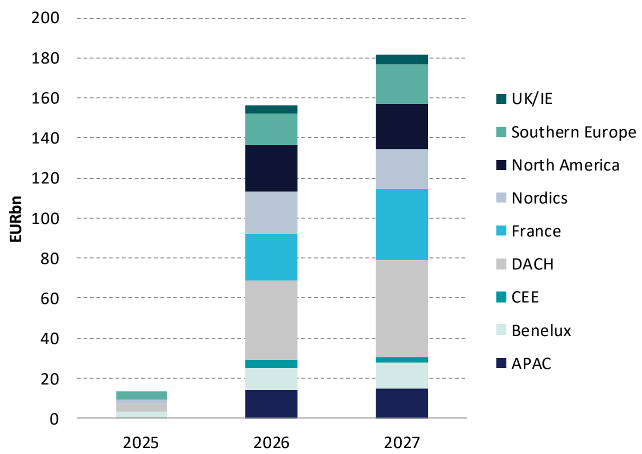


Source: Market data, Bloomberg, NORD/LB Floor Research

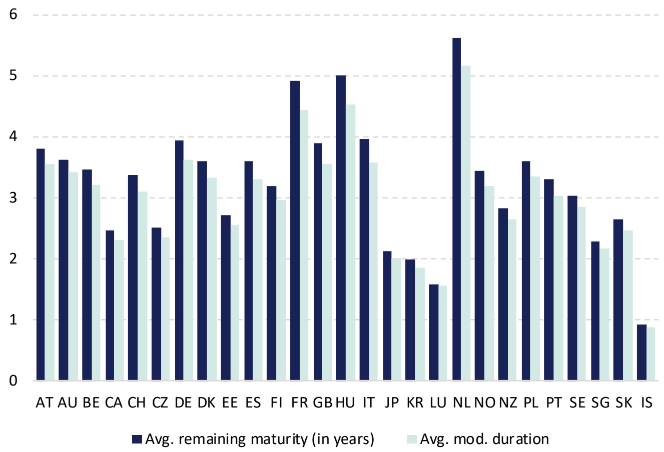
EUR benchmark maturities by month



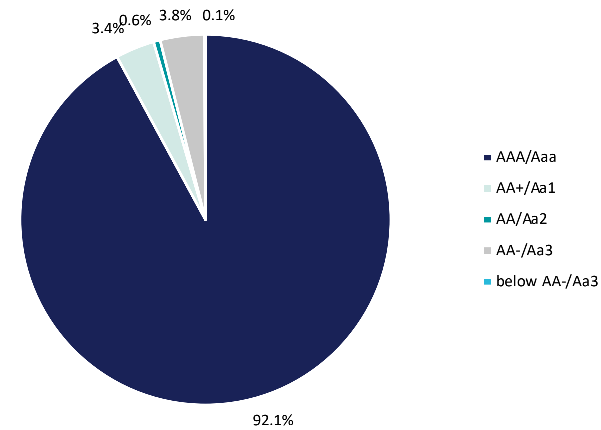
EUR benchmark maturities by year



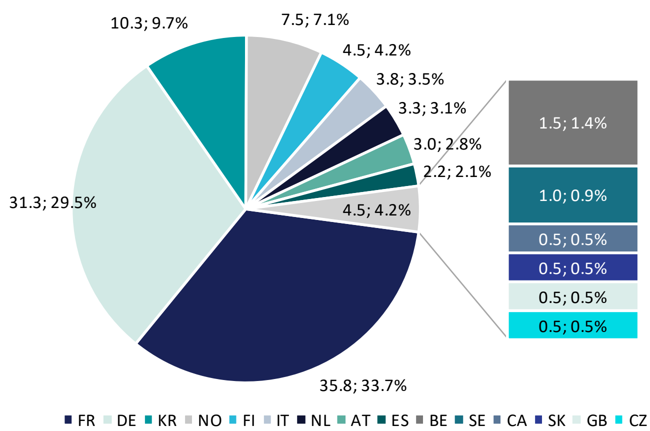
Modified duration and time to maturity by country



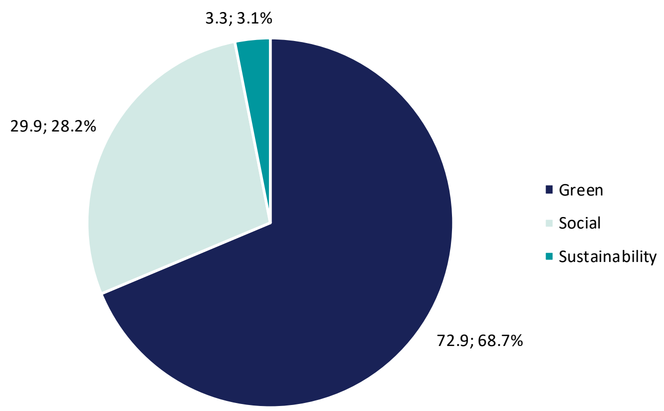
Rating distribution (volume weighted)



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

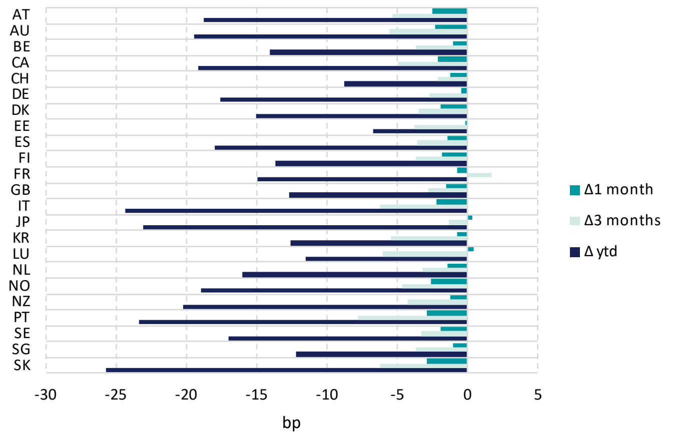


EUR benchmark volume (ESG) by type (in EURbn)

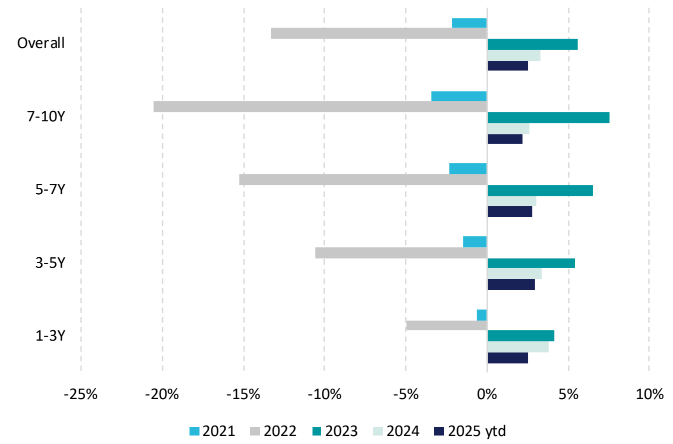


Source: Market data, Bloomberg, NORD/LB Floor Research

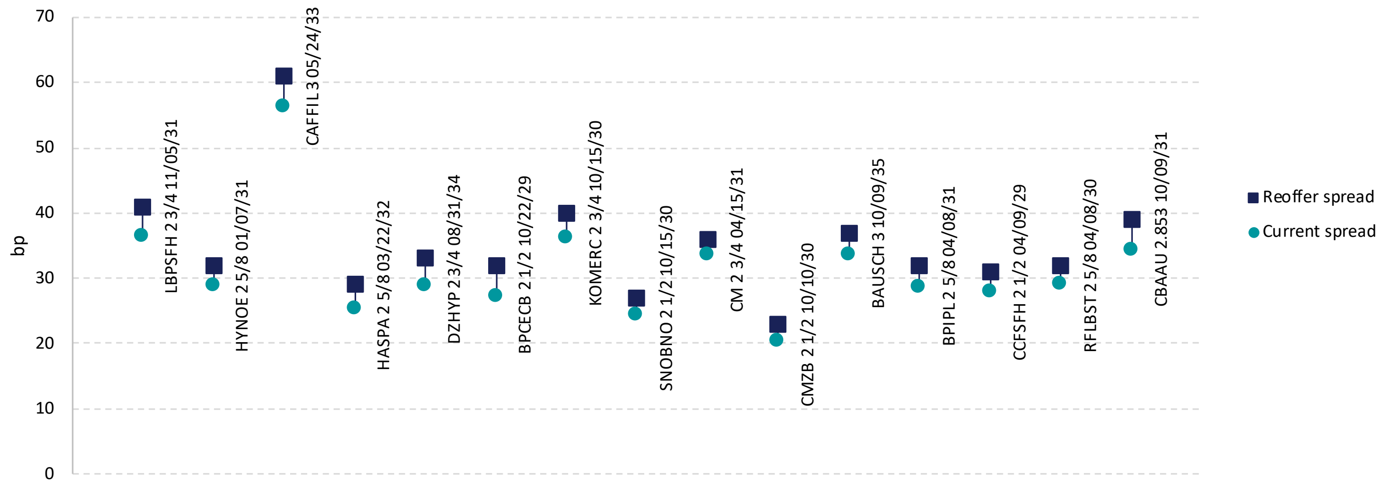
EUR benchmark emission pattern



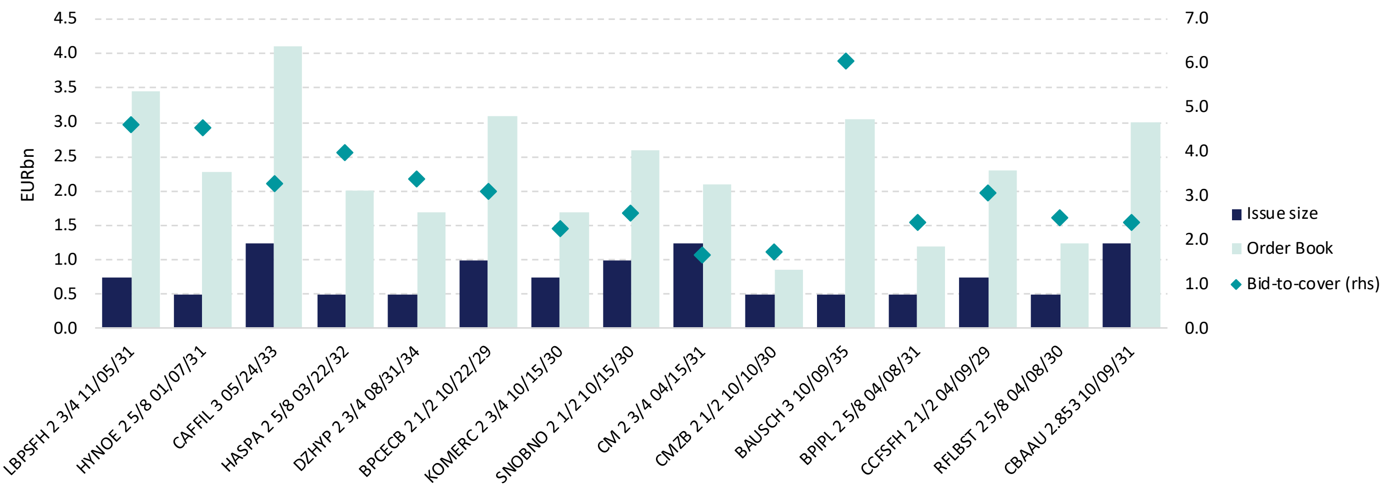
Covered bond performance (Total return)



Spread development (last 15 issues)



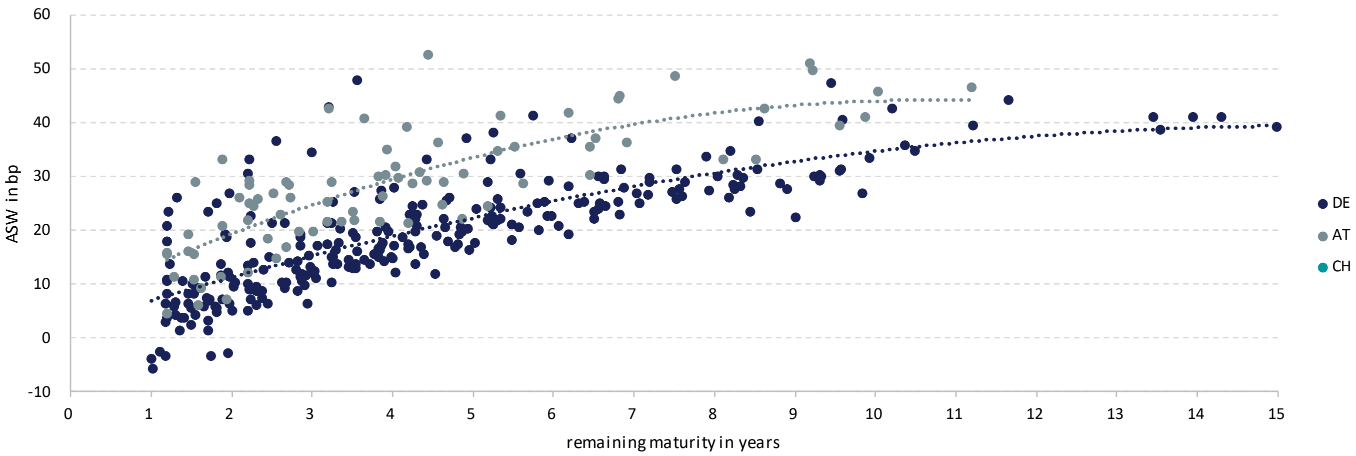
Order books (last 15 issues)



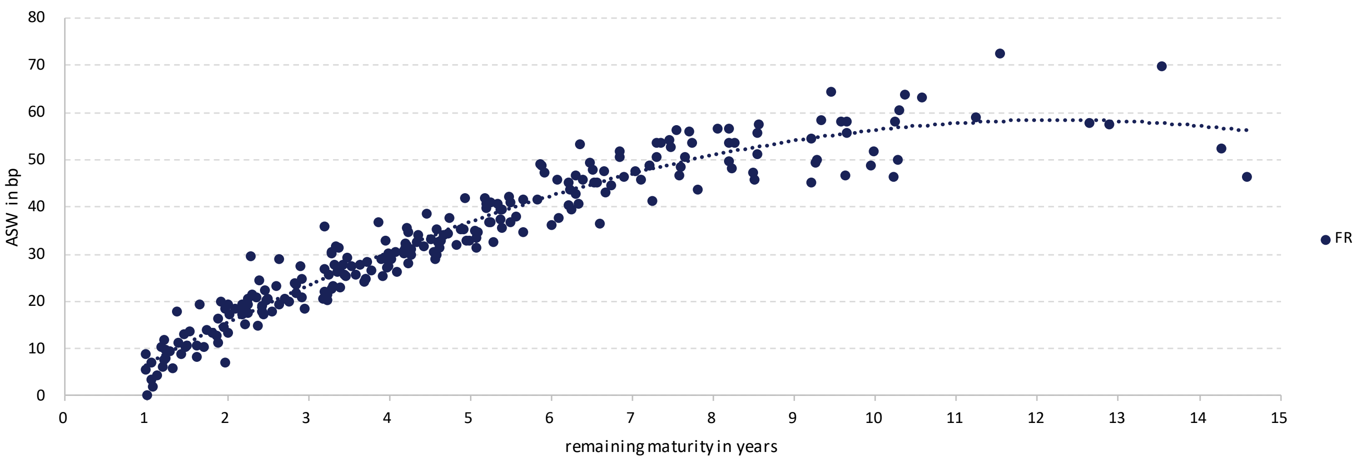
Source: Market data, Bloomberg, NORD/LB Floor Research

Spread overview[1]

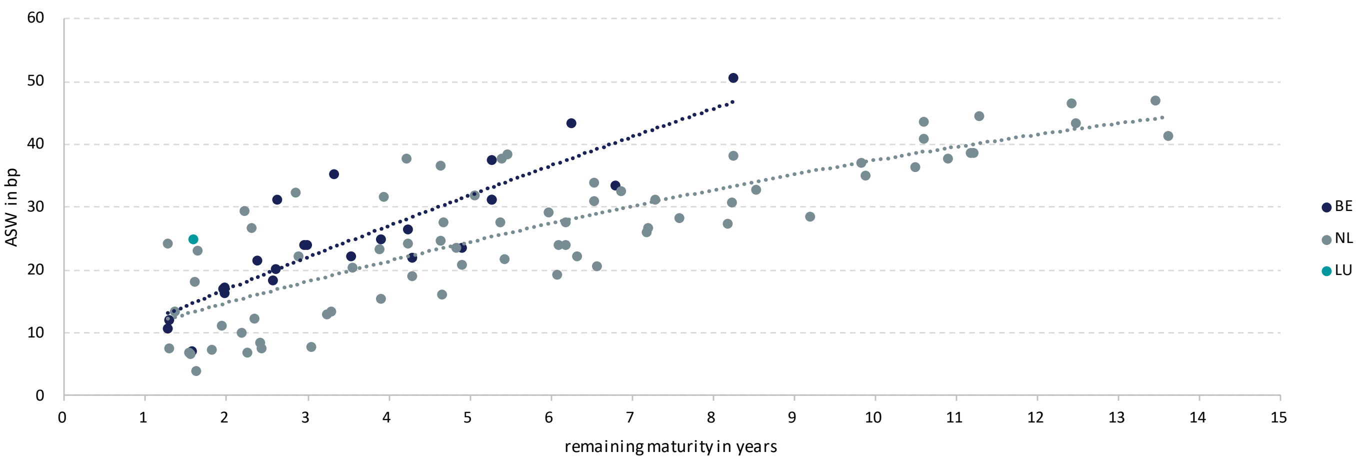
DACH



France

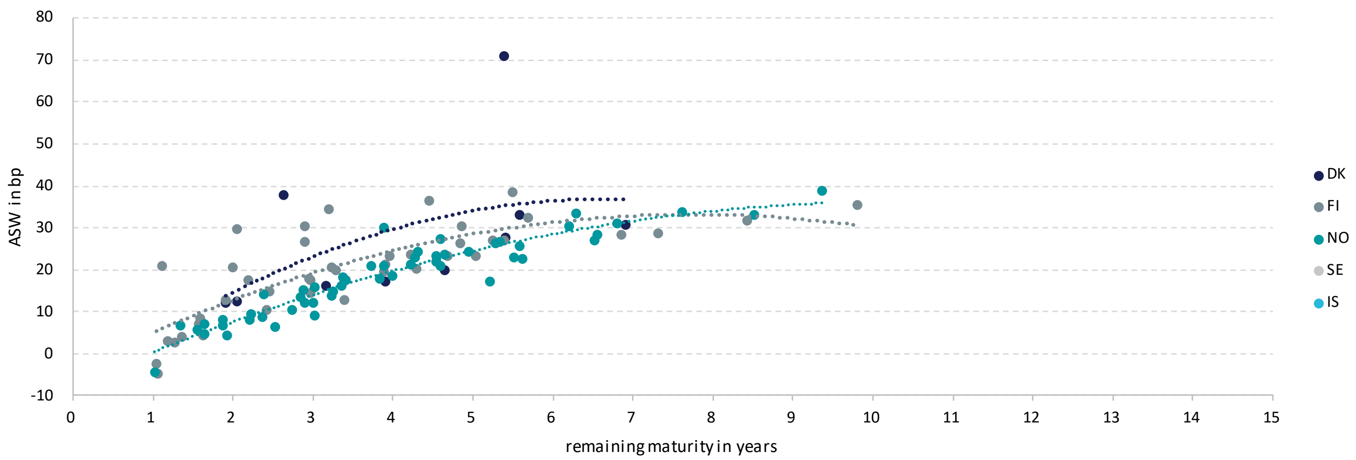


Benelux

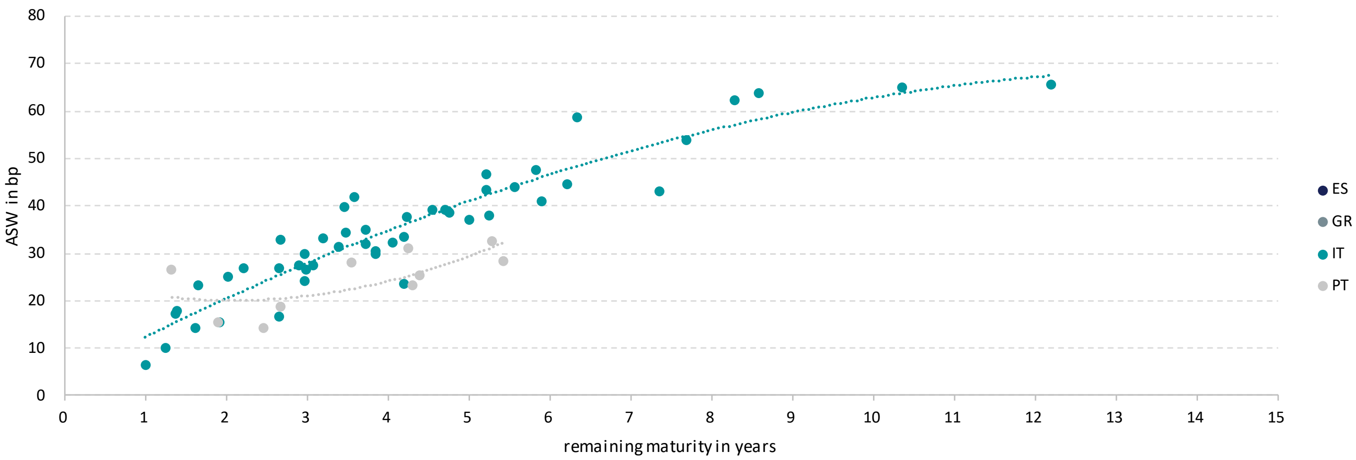


Source: Market data, Bloomberg, NORD/LB Floor Research [1] Time to maturity 1 ≤ y ≤ 15

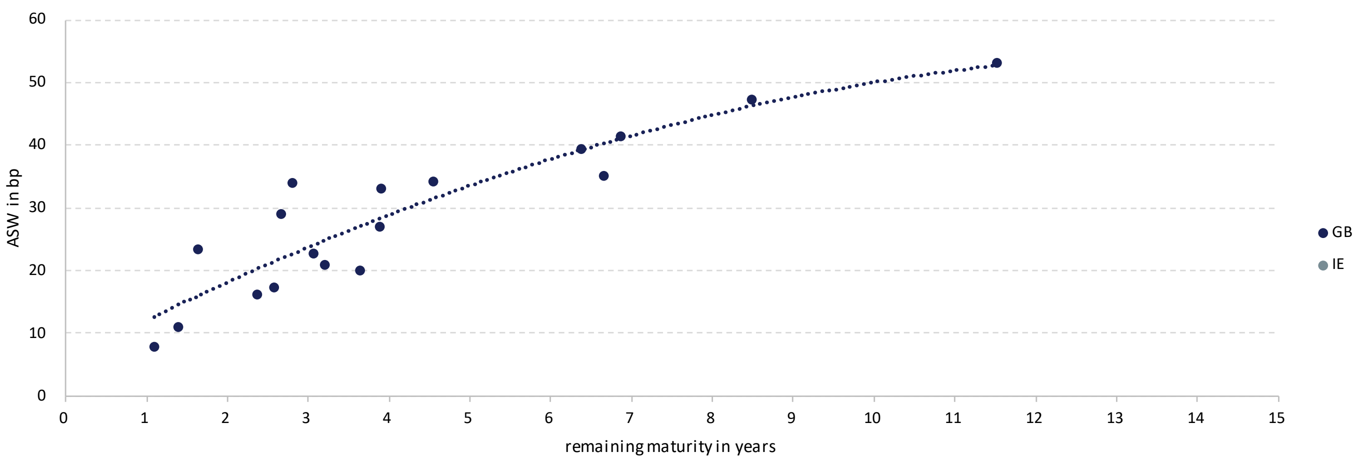
Nordics



Southern Europe

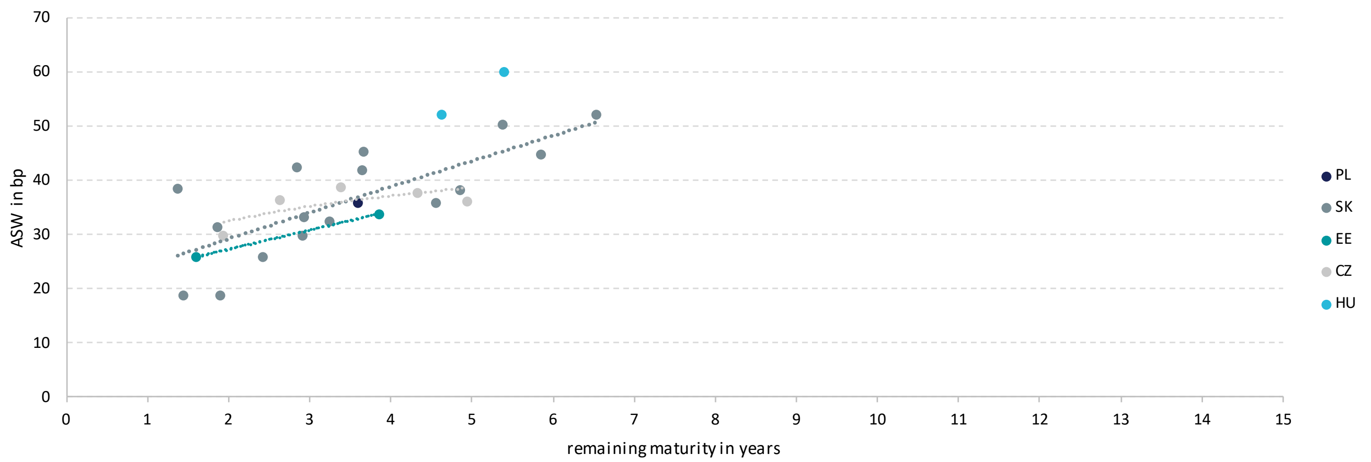


UK/IE

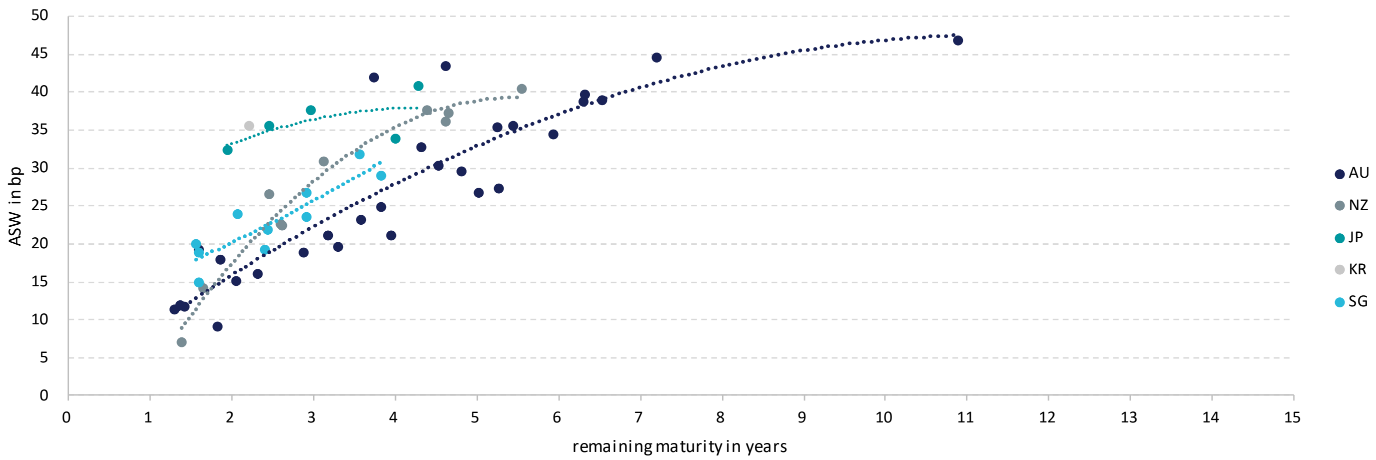


Source: Market data, Bloomberg, NORD/LB Floor Research

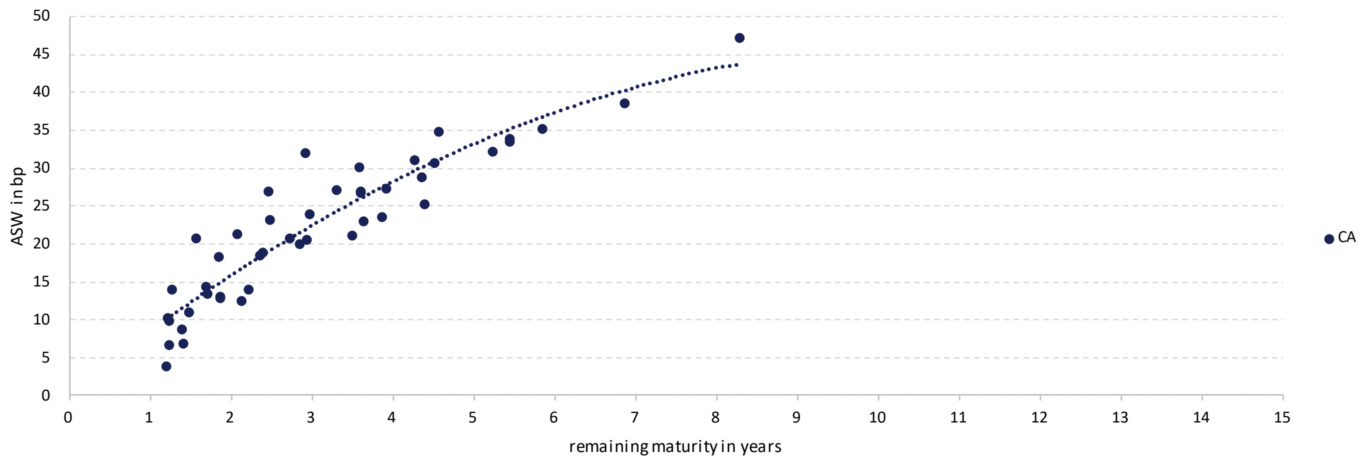
CEE



APAC



North America

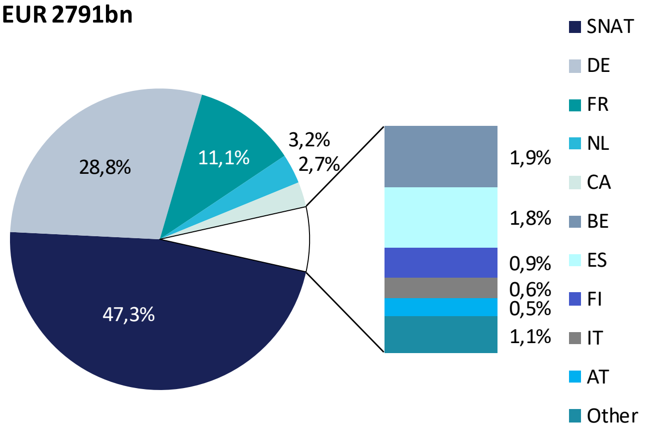


Source: Market data, Bloomberg, NORD/LB Floor Research

Charts & Figures
SSA/Public Issuers

Outstanding volume (bmk)

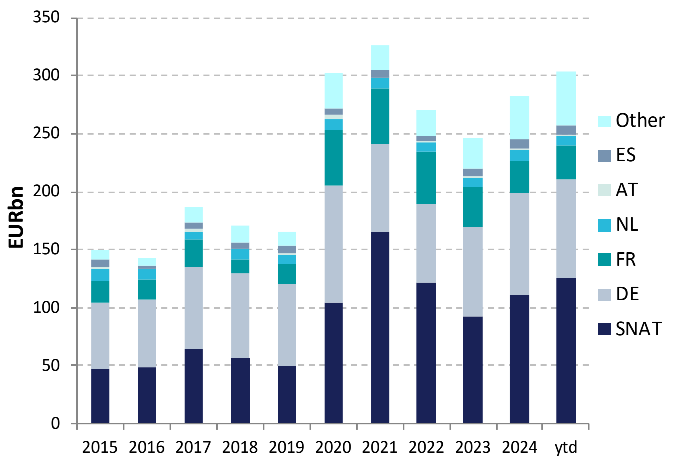
EUR 2791bn



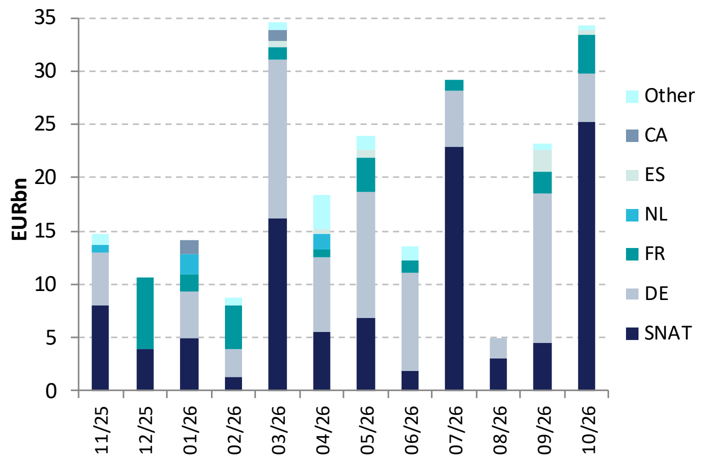
Top 10 countries (bmk)

Country	Vol. (EURbn)	No. of bonds	ØVol. (EURbn)	Vol. weight. ØMod. Dur.
SNAT	1,320.2	264	5.0	7.6
DE	803.4	609	1.3	5.8
FR	310.2	204	1.5	5.3
NL	88.8	70	1.3	5.9
CA	75.0	67	1.1	6.2
BE	52.8	50	1.1	9.8
ES	51.4	75	0.7	4.8
FI	26.2	27	1.0	4.0
IT	17.3	22	0.8	4.2
AT	14.5	21	0.7	5.3

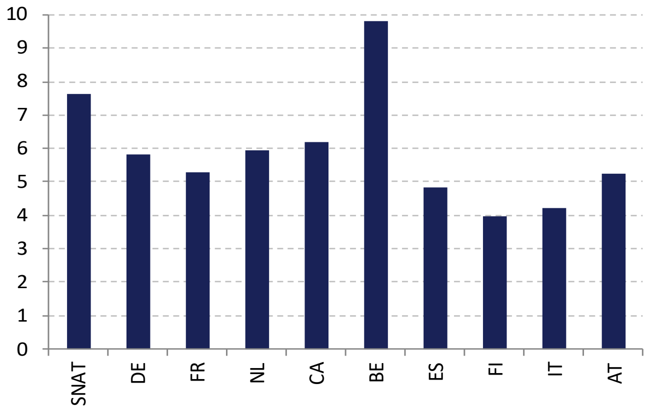
Issue volume by year (bmk)



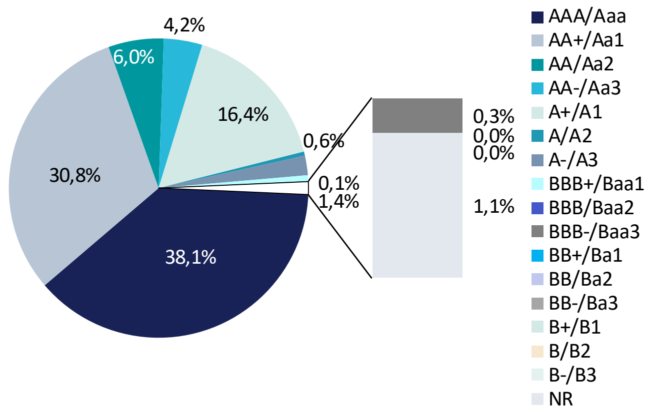
Maturities next 12 months (bmk)



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

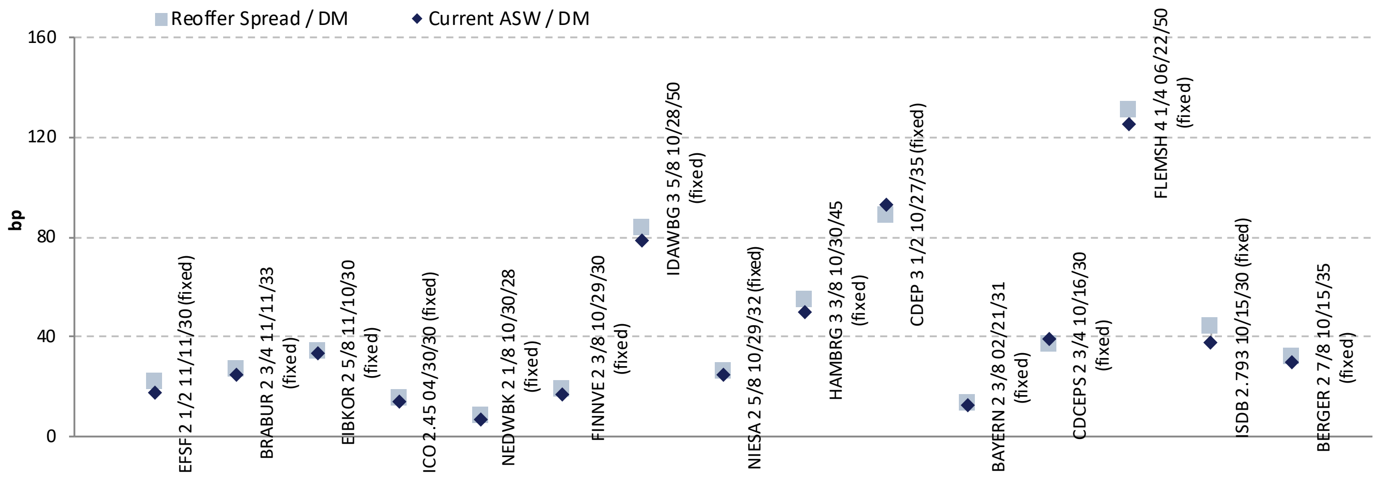


Rating distribution (vol. weighted)

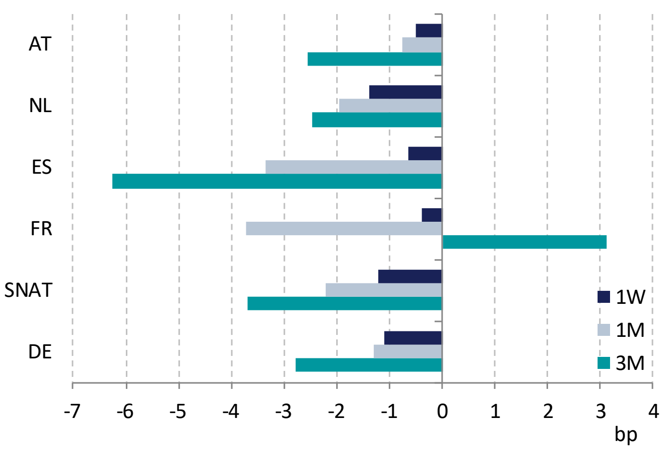


Source: Bloomberg, NORD/LB Floor Research

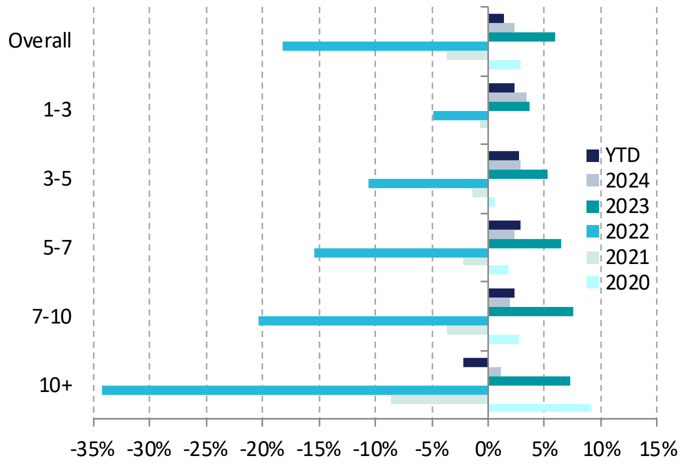
Spread development (last 15 issues)



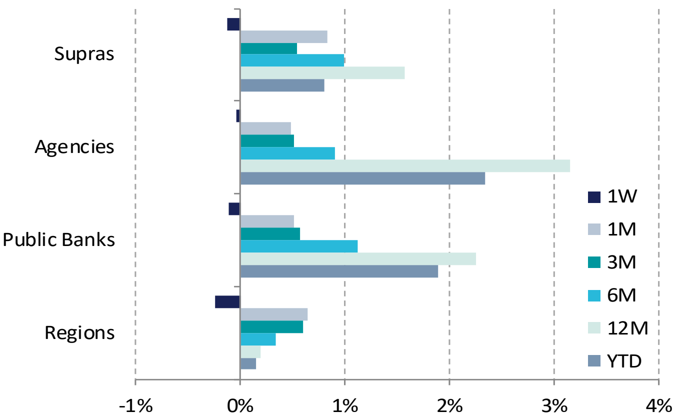
Spread development by country



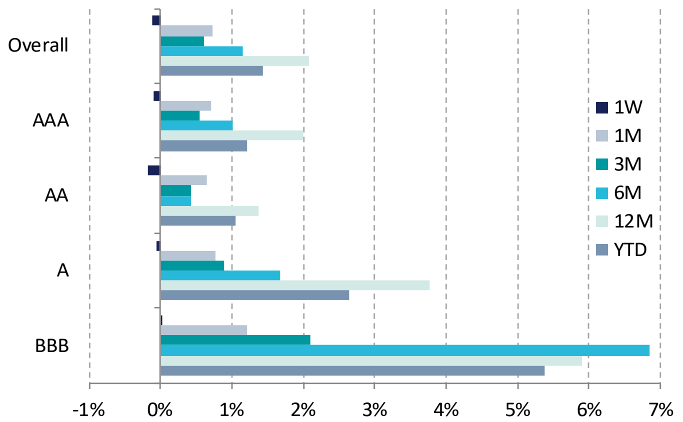
Performance (total return)



Performance (total return) by segments

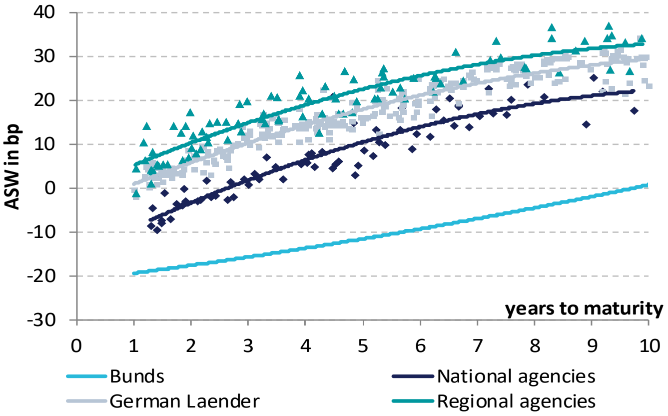


Performance (total return) by rating

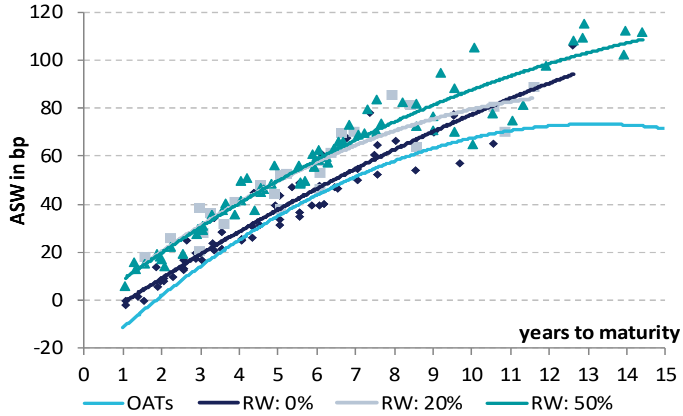


Source: Bloomberg, NORD/LB Floor Research

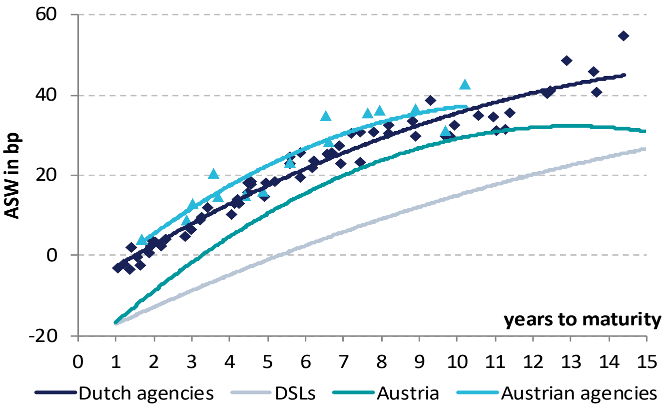
Germany (by segments)



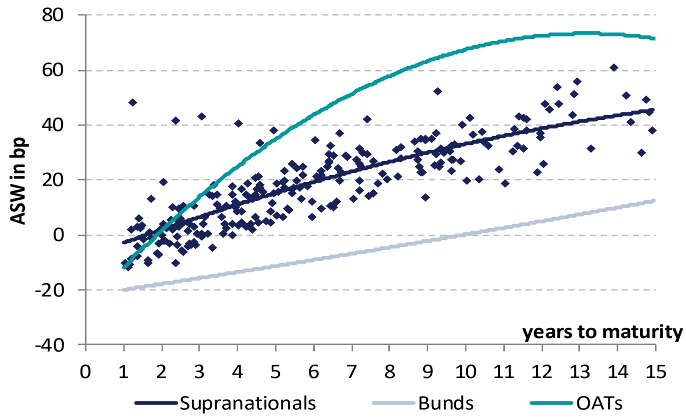
France (by risk weight)



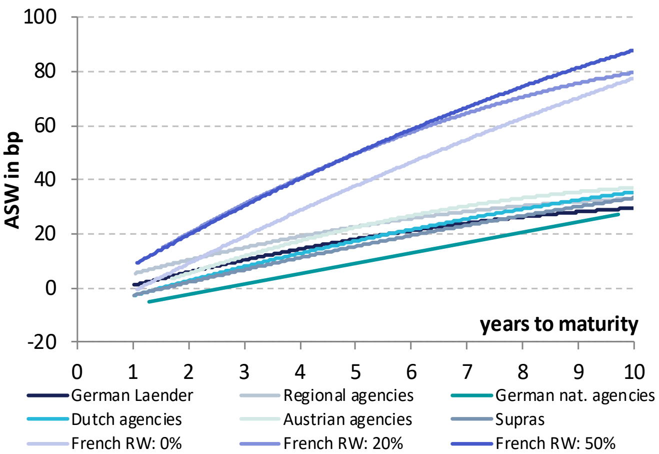
Netherlands & Austria



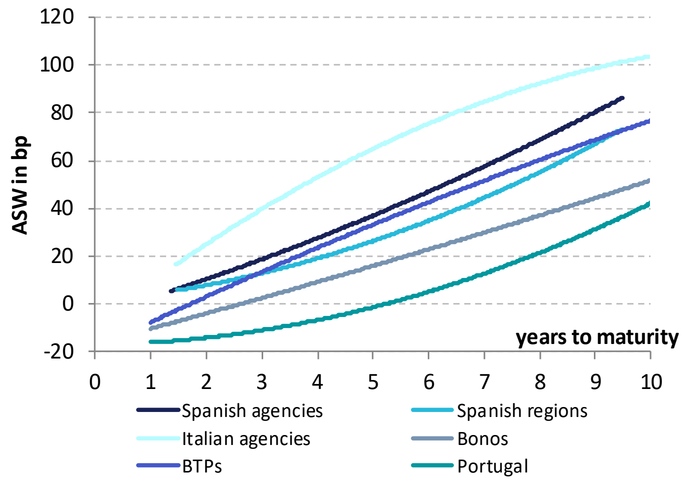
Supranationals



Core



Periphery

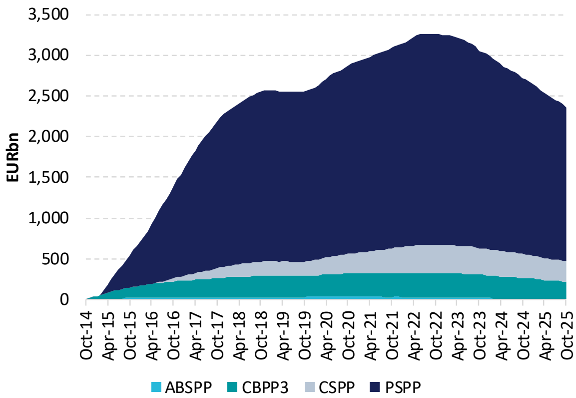


Source: Bloomberg, NORD/LB Floor Research

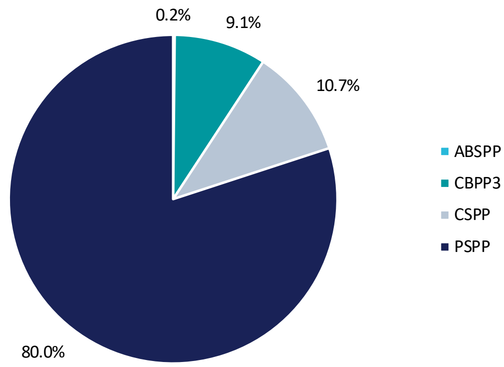
Charts & Figures
ECB tracker

Asset Purchase Programme (APP)

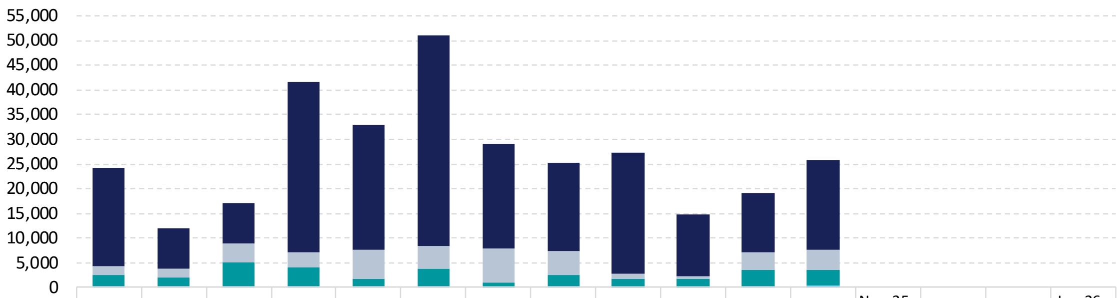
APP: Portfolio development



APP: Portfolio structure

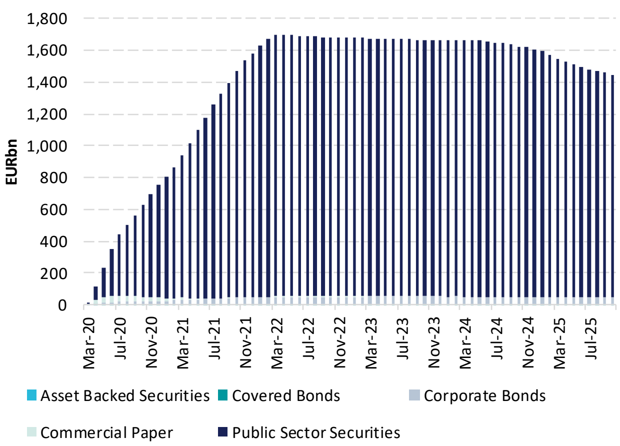


Expected monthly redemptions (in EURm)

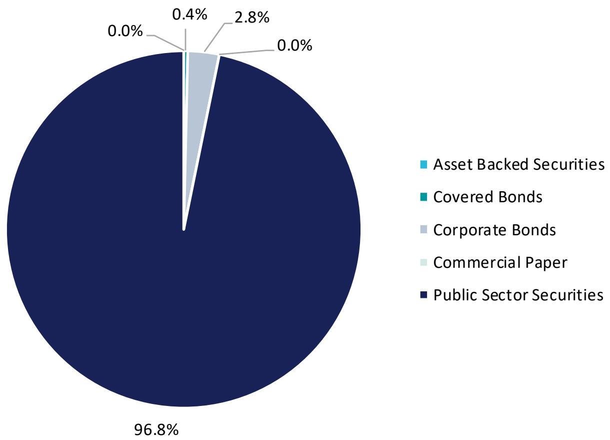


	Nov-25	Dec-25	Jan-26	Feb-26	Mar-26	Apr-26	May-26	Jun-26	Jul-26	Aug-26	Sep-26	Oct-26	Nov-25 - Oct-26	2024	2025	Jan-26 - Oct-26
APP	24,375	12,078	17,119	41,523	32,837	51,023	29,020	25,281	27,197	14,893	19,219	25,849	320,414	335,094	332,840	283,961
PSPP	20,060	8,274	8,318	34,465	25,111	42,657	21,135	17,964	24,306	12,570	12,097	18,215	245,172	264,479	252,566	216,838
CSPP	1,905	1,693	3,815	2,926	5,886	4,562	6,820	4,857	1,245	684	3,610	4,069	42,072	32,191	33,961	38,474
CBPP3	2,106	1,903	4,740	3,911	1,575	3,685	1,003	2,317	1,554	1,566	3,281	3,123	30,764	32,173	42,332	26,755
ABSPP	304	208	246	221	265	119	62	143	92	73	231	442	2,406	6,251	3,981	1,648

PEPP: Portfolio development



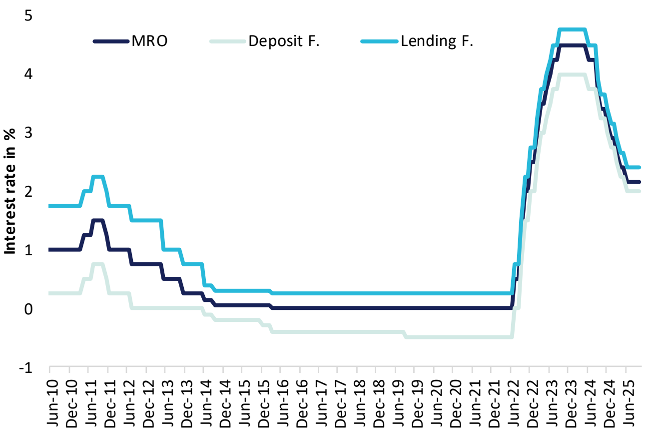
PEPP: Portfolio structure



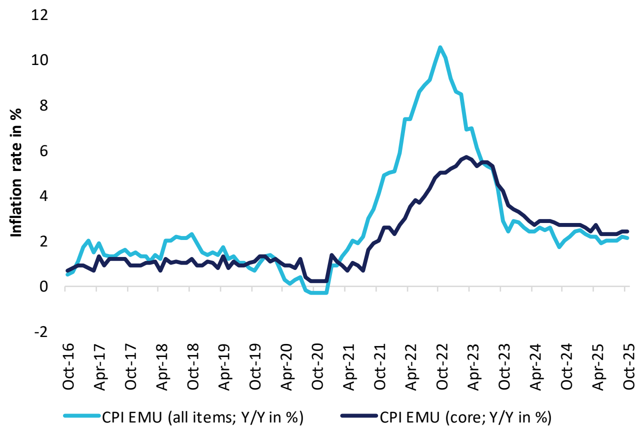
Source: ECB, NORD/LB Floor Research

Charts & Figures
Cross Asset

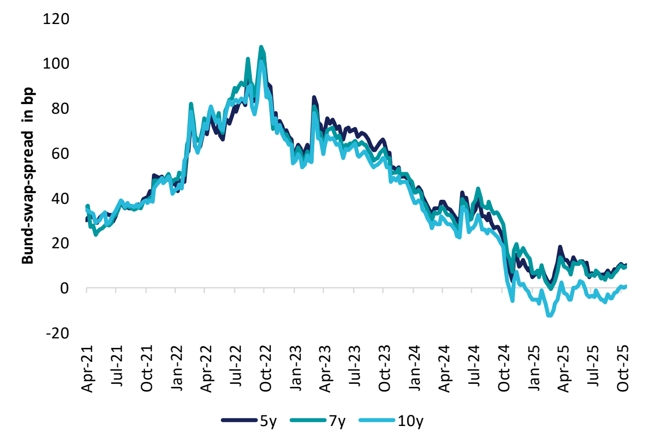
ECB key interest rates



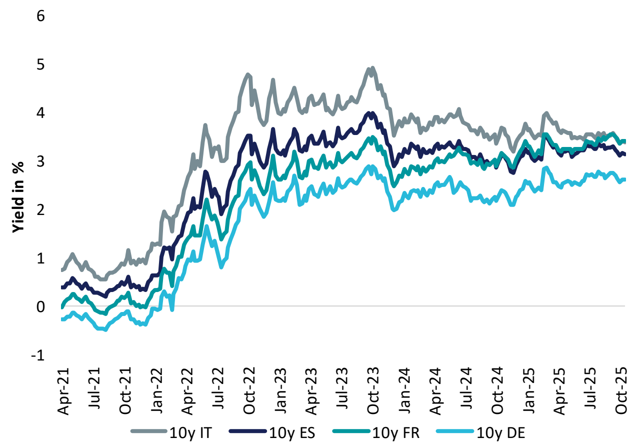
Inflation development in the euro area



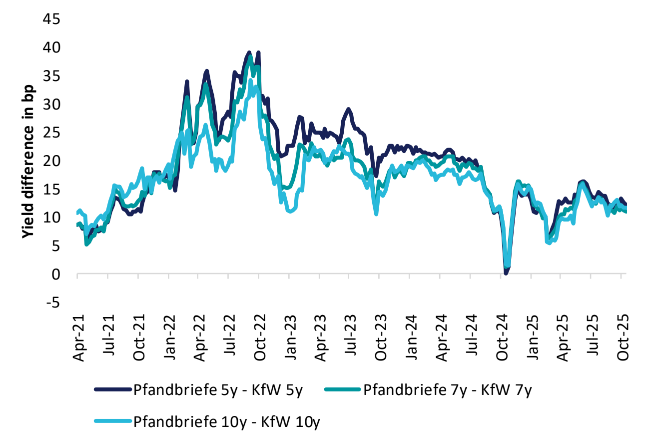
Bund-swap-spread



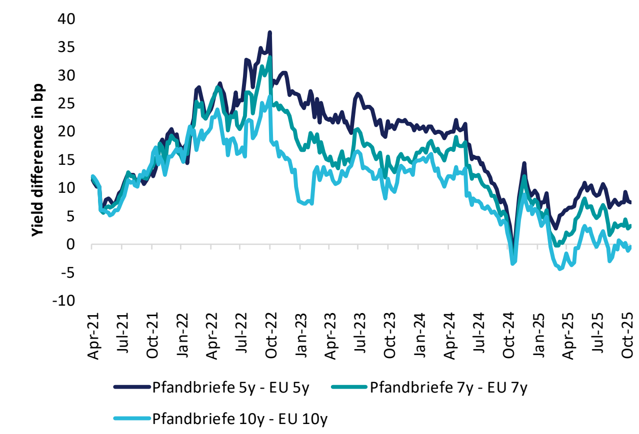
Selected yield developments (sovereigns)



Pfandbriefe vs. KfW



Pfandbriefe vs. EU



Source: ECB, Bloomberg, NORD/LB Floor Research

Appendix
Overview of latest Covered Bond & SSA View editions

Publication	Topics
36/2025 ♦ 29 October	▪ Covereds: A look at the EUR sub-benchmark segment ▪ SSA: Canadian pension funds in the spotlight
35/2025 ♦ 22 October	▪ ESG benchmark segment at a crossroads? ▪ Teaser: Issuer Guide – European Supranationals 2025
34/2025 ♦ 15 October	▪ Greece: covered bond jurisdiction on the rise? ▪ Agencies and resolution instruments of the BRRD
33/2025 ♦ 08 October	▪ Solvency II and covered bonds ▪ NGEU: Green Bond Dashboard
32/2025 ♦ 01 October	▪ Teaser: EBA report on the review of the EU covered bond framework ▪ Update on German municipality bonds: DEUSTD and NRWGK
31/2025 ♦ 24 September	▪ The rating approach of Morningstar DBRS ▪ Teaser: Beyond Bundeslaender – Greater Paris (IDF/VDP)
30/2025 ♦ 03 September	▪ A look at the German banking market ▪ ECB repo collateral rules and their implications for Supras & Agencies
29/2025 ♦ 27 August	▪ The rating approach of Standard & Poor's ▪ Pension avalanche and municipal debt: Laender under pressure
28/2025 ♦ 20 August	▪ Transparency requirements §28 PfandBG Q2/2025 ▪ Teaser: Issuer Guide – Spanish Agencies 2025
27/2025 ♦ 13 August	▪ Covereds – Relative value analysis: a stocktake of the situation ▪ SSA review: EUR-ESG benchmarks in H1/2025
26/2025 ♦ 06 August	▪ Repayment structures on the covered bond market: an update ▪ Teaser: Issuer Guide – German Agencies 2025
25/2025 ♦ 09 July	▪ The covered bond universe of Moody's: an overview ▪ Spotlight on the EU as a mega issuer
24/2025 ♦ 02 July	▪ Covereds: Half-year review and outlook for second half of 2025 ▪ SSA half-year review 2025 and outlook
23/2025 ♦ 25 June	▪ The ratings approach of Scope ▪ Classification of Supranationals and Agencies under Solvency II
22/2025 ♦ 18 June	▪ The UK covered bond market ▪ Stability Council convenes for 31st meeting
21/2025 ♦ 11 June	▪ Moody's: rating approach Covered Bonds ▪ Teaser: Issuer Guide – Austrian Agencies 2025
20/2025 ♦ 28 May	▪ Cross Asset // Teaser: ESG update 2025 – Focus on greenium and socium+
19/2025 ♦ 21 May	▪ Development of the German property market (vdp index) ▪ Teaser: Issuer Guide – Nordic Agencies 2025
18/2025 ♦ 14 May	▪ Transparency requirements §28 PfandBG Q1/2025 ▪ Current LCR classification for our SSA coverage

NORD/LB:
Floor Research

NORD/LB:
Covered Bond Research

NORD/LB:
SSA/Public Issuers Research

Bloomberg:
Weekly: DS NDB <GO>

Appendix
Publication overview

Covered Bonds:

- Issuer Guide – Covered Bonds 2024
- Risk weights and LCR levels of covered bonds (updated semi-annually)
- Transparency requirements §28 PfandBG Q2/2025 (quarterly update)
- Transparency requirements §28 PfandBG Q2/2025 Sparkassen (quarterly update)
- Covered bonds as eligible collateral for central banks
- EBA report on the review of the EU covered bond framework

SSA/Public Issuers:

- Issuer Guide – German Laender 2025
- Issuer Guide – Canadian Provinces & Territories 2024
- Issuer Guide – Down Under 2024
- Issuer Guide – European Supranationals 2025
- Issuer Guide – Non-European Supranationals (MDBs) 2025
- Issuer Guide – German Agencies 2025
- Issuer Guide – French Agencies 2024
- Issuer Guide – Nordic Agencies 2025
- Issuer Guide – Dutch Agencies 2025
- Issuer Guide – Austrian Agencies 2025
- Beyond Bundeslaender: Belgium
- Beyond Bundeslaender: Greater Paris (IDF/VDP)
- Beyond Bundeslaender: Spanish regions

Fixed Income Specials:

- ESG-Update 2025
- ECB Council meeting: The silence of autumn

Appendix
Contacts at NORD/LB

Floor Research

Dr Norman Rudschuck, CIIA
Head of Desk

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

Lukas Kühne
Covered Bonds/Banks

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

Lukas-Finn Frese
SSA/Public Issuers

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

Alexander Grenner
Covered Bonds/Banks

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

Tobias Cordes, CIIA
SSA/Public Issuers

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

Sales

Institutional Sales	+49 511 9818-9440
Sales Sparkassen & Regionalbanken	+49 511 9818-9400
Institutional Sales MM/FX	+49 511 9818-9460
Fixed Income Relationship Management Europe	+352 452211-515

Trading

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

Origination & Syndicate

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

Sales Wholesale Customers

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

Treasury

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

Relationship Management

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

Disclaimer

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Time of going to press: 05 November 2025 (08:51)