



Covered Bond & SSA View

NORD/LB Floor Research

25 September 2024 ♦ 30/2024 Marketing communication (see disclaimer on the last pages)



Agenda

Market overview	
Covered Bonds	3
SSA/Public Issuers	6
The EUR benchmark segment after the summer break	10
Update on German municipality bonds: DEUSTD and NRWGK	14
Charts & Figures	
Covered Bonds	22
SSA/Public Issuers	28
ECB tracker	
Asset Purchase Programme (APP)	31
Pandemic Emergency Purchase Programme (PEPP)	32
Overview of latest Covered Bond & SSA View editions	33
Publication overview	34
Contacts at NORD/LB	35

Floor analysts:

Covered Bonds/Banks

Dr Frederik Kunze frederik.kunze@nordlb.de

Lukas Kühne lukas.kuehne@nordlb.de

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

Authors: Lukas Kühne // Dr Frederik Kunze

Primary market: it's all about the mix!

Over the past five trading days, seven issuers from seven different jurisdictions approached investors on the market. While some commentators may have been somewhat cautious, we would warn against taking an overly pessimistic view of the situation. To a certain extent, we would even speak of a normalisation, as reflected by lower oversubscription rates and slightly easing new issue premiums (NIPs). Nevertheless, we have been anticipating a certain widening of spreads on both the primary and secondary markets and expect this repricing trend to continue – albeit by no means dramatically. Looking at the primary market appearances, which came in all shapes and sizes, we initially saw EURbenchmarks from Norway (Moere Boligkreditt; ticker: MOREBO) and Slovakia (UniCredit Bank CZ & SK; ticker: UNICZ) last Wednesday. MOREBO raised a total of EUR 500m at ms +34bp (new issue premium: +1bp), while UNICZ (volume also EUR 500m) paid a premium of four basis points against fair value at a re-offer spread of ms +64bp. DBS from Singapore can also look back upon a successful deal after having allocated EUR 1.25bn on Friday. During the marketing phase, the spread tightened by five basis points to a final level of ms +25bp, meaning that the issuer paid no new issue premium. At the start of the new week, it was the "third countries" that ensured a continuation of primary market activities. The Canadian Imperial Bank of Commerce (CIBC) selected a term to maturity of five years for its first EUR benchmark since March 2023, which started off the marketing phase with guidance in the area of ms +40bp. With a final volume of EUR 1.25bn, the re-offer spread stood at ms +35bp (new issue premium: ±0bp). Korean Housing Finance Corporation (KHFC) had already laid the groundwork for potential investors for its second EUR benchmark in 2024 last week. A total of EUR 650m (3.8y) was ultimately placed at ms +42bp, which produced a calculated new issue premium of seven basis points. With an initial term of ten years, Deutsche Kreditbank (DKB; cf. Issuer View) yesterday sought to access the long end, which issuers have recently been shying away from. The last long-dated bond in EUR benchmark format was placed by Achmea (NL) in June, when the Dutch issuer placed a 12y bond worth EUR 500m at ms +46bp. For DKB's social Pfandbrief (EUR 500m; WNG), the books were opened at a guidance of ms +43bp area. The deal was eventually priced at ms +39 bp. Thanks to Coventry Building Society (cf. Issuer View), we are also pleased to report on the first EUR benchmark from the UK since June 2024. The British issuer also opted for a pre-defined issuance volume (EUR 500m; WNG). The order book was initially opened with a guidance of ms +42bp area. The bond was finally priced at ms +38bp, which resulted in a calculated new issue premium of +3bp. Although we do not really have any concerns about the covered bond segment, as mentioned at the beginning of this section, the issues of the last five trading days certainly do show that the environment for newly placed covered bonds is more heterogeneous. In this set of circumstances, investors are likely to operate more selectively, as has been the case in comparable market phases in the past. But this does not really come as a surprise either.

lssuer	Country	Timing	ISIN	Maturity	Size	Spread	Rating	ESG
Coventry BS	GB	24.09.	XS2853557374	5.0y	0.50bn	ms +38bp	AAA / Aaa / -	-
DKB	DE	24.09.	DE000SCB0062	10.0y	0.50bn	ms +39bp	- / Aaa / -	Х
KHFC	KR	23.09.	XS2900380226	3.8y	0.65bn	ms +42bp	- / Aaa / AAA	Х
CIBC	CA	23.09.	XS2909743648	5.0y	1.25bn	ms +35bp	AAA / Aaa / -	-
DBS	SG	19.09.	XS2908597789	3.5y	1.25bn	ms +25bp	AAA / Aaa / -	-
Moere Boligkreditt	NO	18.09.	XS2907263284	5.0y	0.50bn	ms +34bp	- / Aaa / -	-
UniCredit Bank CZ & SK	SK	18.09.	XS2907249457	4.5y	0.50bn	ms +64bp	- / Aa2 / -	-

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

Secondary market: France and the long end coming under some pressure

The secondary market got off to a slightly shaky start in the new trading week. On the secondary market, renewed widening would seem to be inevitable for French benchmarks. The situation of various (budgetary) political elements is clearly having an impact on covered bonds here. But isolated widening trends have also been seen in other jurisdictions. Turnover – especially in relation to longer maturities – remains subdued. In this case, too, we are sticking to our expectation that the spreads should initially continue to widen.

Internal matters: NORD/LB Issuer Guide Covered Bonds 2024 now published

Last Friday, we published what is now the 12th edition of our annual NORD/LB Issuer Guide Covered Bonds. As usual, the publication offers our readers a comprehensive overview of the covered bond market. The focus of the Issuer Guide is again on covered bond issuers and their corresponding cover pools. In 2024, the study is based on information from a total of 189 institutions that each have outstanding EUR benchmarks and/or subbenchmark deals. As part of the analysis, we looked at data related to 228 cover pools from 27 jurisdictions.

EBA Risk Dashboard: no major parameter shifts in Q2 2024

A few trading days ago, the European Banking Authority (EBA) presented updated figures on its highly regarded EBA Risk Dashboard (Link). The data basis for the second quarter of 2024 once again provides important insights into the earnings and risk situation of the European banking market. According to the current figures, compared with the previous year, the return on equity (RoE) indicator fell only slightly – by ten basis points – to 10.9% in the current reporting period, while it increased by 30 basis points compared with the previous quarter. Capitalisation (as measured by the CET1 ratio) in the aggregated data basis, which includes both the EU and the EEA countries, remained at a solid level of 16.1% for the second quarter of 2024. The NSFR (Q2 2024: 163.2%) and LCR (127.8%) liquidity ratios continue to reflect high levels of capitalisation. The category of "Extremely High Quality Covered Bonds" accounts for 6% of the HQLA portfolios of EU/EEA banks, which is on a par with the previous reporting period. Compared with the prior year, this share was two percentage points lower at 4%. The share of secured funding rose to 31.9% in the current reporting quarter (previous reporting period: 31.3%). In terms of outstanding receivables, a sideways trend in relation to the NPL ratio suggests that banks are in robust form. Nevertheless, slight increases were recorded for SMEs and commercial real estate financing. From our point of view, the EBA data does not indicate any need for a fundamental reassessment of covered bonds.

S&P sticking to stable rating outlook for Q4 2024...

In their recently published "Global Covered Bond Insight", the rating experts at Standard & Poor's (S&P) take the view that the covered bond market looks set for a strong year overall. While new issuance activity in the first half of the year and the month of September may have fallen short of the respective levels recorded in 2023, according to the rating experts, however, covered bonds remain one of the primary sources of funding for banks – especially in Europe. With regard to investor interest, S&P anticipates a shift in maturity preference to longer maturities of 7-10 years. According to the rating experts, this should give issuers the opportunity to better manage any asset-liability mismatches. For the rest of the year, i.e. the fourth quarter of 2024, the rating agency is sticking to its stable outlook with regard to covered bond ratings. This assessment is supported by the combined expectation of an economic recovery and turnaround in the interest rate environment. According to S&P, this should have a positive impact on the performance of the covered assets in the cover pools.

...but has reduced the rating uplifts for some French covered bond programmes

In addition to its global outlook for the fourth quarter of 2024, the rating agency S&P has carried out a more in-depth analysis of the French covered bond market. According to S&P, this market includes around EUR 481bn in covered bond deals (publicly placed and retained) as at 31 August 2024. In this context, the rating experts explicitly refer to the sharp growth in the volume of retained covered bonds since 2023. They state that this increase is due, in particular, to the need for additional liquidity reserves, as residential real estate loans may no longer be used as collateral in the Eurosystem. The volume of new issues in 2024, which S&P classifies as strong, reflects the increasing relevance of covered bonds as a source of refinancing for French banks, as the rating experts explain further. Real estate loans constitute the primary form of collateral for French covered bonds. Accordingly, new lending is of relevance in this regard. According to S&P, this is now on the road to recovery following a sharp downward trend in 2023, which is being driven by a more attractive interest rate environment for banks and lower real estate prices. With regard to the covered bond ratings of French programmes, there have been no rating adjustments as a result of the downgrade of the French sovereign rating (from AA to AA-) earlier this year. Only the unused notches of rating uplifts were scaled back for some covered bond programmes as a result of this development.

Banca Sella unveiled as new Covered Bond Label Foundation (CBLF) member

Following a successful debut in the EUR sub-benchmark segment on 05 September 2024, the Italian issuer Banca Sella has now also been confirmed as a new member of the Covered Bond Label Foundation and will in future report its cover pool data in line with the uniform standard of the Covered Bond Label (HTT). With this, the number of issuers reporting in accordance with the Covered Bond Label has increased to 146 overall. In the future, the cover pool data of 185 covered bond programmes from 25 jurisdictions will be reported pursuant to the uniform standard. For Luca Bertalot (CBLF administrator), it is clear that the key role of the HTT in promoting transparency in the covered bond market will be further strengthened with Banca Sella joining the CBLF. With Banca Sella, 13 Italian issuers are now members of the CBLF and use the HTT as a reporting standard.

Market overview SSA/Public Issuers

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

Update: Credit authorisations of German Laender 2024

The German Laender had already largely concluded their credit planning for the current year in spring. Nevertheless, some Laender still needed to finalise their figures for credit authorisations in 2024 when we issued our first update for our weekly publication in April. However, complete figures were then available in July, just in time for the publication of this year's NORD/LB Issuer Guide – German Laender 2024 in August. At the beginning of September there was an update of the data, which can be viewed in the broadest sense as the gross funding target of the 16 Laender. The relevant change relates to the refinancing plans of Bremen (ticker: BREMEN). Accordingly, the gross credit authorisations of the Hanseatic City for the current year amount to EUR 3.82bn, which in turn results in a net figure of EUR 1.17bn. In the previous set of data from mid-July, the latest figures then were EUR 2.65bn and EUR 0.0bn respectively. It is also interesting to note that the figures for Saarland have been completely removed. In July, the gross credit authorisation here amounted to EUR 1.5bn (net: EUR 0.0bn). Therefore, across 15 Laender, the aggregated gross figure currently stands at EUR 91.61bn (net: EUR 0.89bn). This planning also includes SSD deals and private placements – and does not have to be exhausted in full, as 2022 and 2023 emphatically demonstrated. This above all applies to Baden-Wuerttemberg (ticker: BADWUR), where the value of EUR 32.36bn should be seen as an accounting continuation of the once approved credit authorisations rather than as a funding target for the respective calendar year. This circumstance has distorted the presentation of the data for several years now.

AFL replaces Moody's rating with Fitch

Agence France Locale (AFL, ticker: AFLBNK), the French municipal financier, was assigned an AA- credit rating with a stable outlook by the rating agency Fitch at the beginning of September. At the same time, AFL prompted the risk experts at Moody's to withdraw the credit rating they had previously prepared. The decision was mainly taken for methodological reasons. Yves Millardet, Chairman of AFL's Management Board, commented as follows: "AFL has decided to be rated by Fitch Ratings. The rating model of Fitch Ratings places AFL's risk profile on a par with that of its guarantors which have the highest possible credit profile. Now rated at the same level as the French State, AFL is in a similar position to its peers in Northern Europe and other French public agencies and banks. It will benefit from additional recognition of its credit quality, which should make it even easier to distribute its debt instruments on capital markets and enable it to continue financing French local authorities under the best possible conditions." In addition to Fitch, the municipal financier's creditworthiness is currently also rated by S&P (rating: AA-, outlook: stable).

BADWUR: Draft double budget for 2025/26 approved

The Council of Ministers of the government of the German federal state of Baden-Wuerttemberg (ticker: BADWUR) has adopted the draft double budget for 2025/26. This comprises a volume of EUR 136bn and includes additional expenditure of EUR 3.3bn. The main cornerstones of the budget are investments in education, internal security and innovation. In total, the Land intends to invest almost EUR 2bn in political priorities and municipalities in Baden-Wuerttemberg. It is also providing around EUR 200m for the internal security package. Here the focus is mainly on digitalisation and equipping the police. Overall, EUR 1.4bn of the additional expenditure referred to above can be categorised as unavoidable additional expenditure. These necessary payments would be incurred on the basis of the Land's legal obligations or previous resolutions by the state government. Examples of this include the implementation of federal laws such as the Inclusion Act and the Federal Participation Act. Funding for early years childcare in the municipal financial equalisation system or expenditure for the initial reception of refugees in Baden-Wuerttemberg are also unavoidable. Overall, reduced repayment obligations as well as net borrowing of EUR 890m would provide the state with additional capital of EUR 1.2bn compared with the previous year. Beyond this, however, the draft does not provide for any new borrowings.

NRW: Budget 2025 and supplementary budget 2024 submitted to the State Parliament

The Minister of Finance of North Rhine-Westphalia (ticker: NRW), Dr Marcus Optendrenk, presented the budget for the coming year and the supplementary budget for 2024 to the State Parliament on 13 September. The budget for 2025 comprises a volume of EUR 105.5bn. Spending on education is set to hit a new record of almost EUR 42bn in the next financial year. Another large item concerns the local authorities. The draft budget for 2025 and the financial planning for the following years should give them further planning security. From the coming year, the state will also enter into the old debt solution for the municipalities in NRW at an annual cost of EUR 250m. As the draft shows, more than one in three euros from the state budget will go to the municipalities and municipal associations with payments totalling EUR 38bn. With the draft budget 2025, the departments have made considerable efforts overall and achieved savings of EUR 3.6bn compared to the updated financial planning. As in the federal budget and the budgets of almost all German Laender, the planning would also provide for the use of the possible credit authorisation from the economic stimulus component within the framework of the debt brake. The provisional component for 2025 would amount to EUR 1.34bn and would be reviewed on a regular basis after the autumn tax estimate in 2024. The results of the current tax estimate are, however, an expression of the weak growth in German economic output. According to the regionalisation of the spring forecasts of the "Tax Estimates" working group, NRW must expect losses in tax revenue of EUR 1.2bn for the current financial year and EUR 1.3bn in the coming year. In response to the ongoing weak economic development in German, the supplementary budget for 2024 therefore provides for the use of the economic stimulus component within the framework of the debt brake for the first time. This is to be used to compensate for the predicted tax shortfalls and for unavoidable additional expenditure. The extent to which the economic stimulus component and the resulting possible credit authorisations will actually be used at the end of the year will become apparent in light of further economic developments.

KommuneKredit presents Interim Report for H1/2024

At the beginning of September, the Danish municipal bank KommuneKredit (ticker: KOMMUN) presented its Interim Report for first half 2024. Profit before value adjustments and tax increased by DKK +144m year on year to a total of DKK 230m (EUR equivalent: EUR 30m). The result includes net interest income for H1/2024 of DKK 336m, up by DKK +145m from the prior-year level. Common Equity Tier 1 (CET1), however, decreased from DKK 10.2m as at the end of December 2023 to DKK 9.9m. The equity ratio is therefore 4%, which is above the regulatory minimum requirement of 3%. The aforementioned decrease is mainly due to negative value adjustments in the lending business. KOMMUN is amending its business forecast for 2024 as a whole as follows: the target for net interest income is DKK 650m, with significantly higher interest income on investments assumed. The forecast for net lending/net borrowing has been raised from DKK 4.5bn to DKK 6.5bn. The projected administrative expenses for the full year remain unchanged at DKK 200m. Accordingly, the profit for the year before value adjustments and tax is expected to be DKK 450m.

EIB: EUR 5.3bn for climate resilience and business competitiveness

As the Board of Directors of the European Investment Bank (ticker: EIB) announced last week, EUR 3.5bn of new financing has been approved for urban development and smart cities. In addition, a sum of EUR 1.4bn is to be made available for business investment and corporate innovation, while EUR 350m will be put towards sustainable transport and water. EIB President Nadia Calviño explains this step as follows: "The floods that hit Europe in recent days show the human and economic costs of the climate crisis. Investments approved today will help cities, businesses and communities in Europe and beyond to become climate neutral, more competitive, and more resilient. We will continue to work with partners and provide support for countries and regions most affected by climate change." The following projects are planned: 1) The EIB is supporting accommodation, education and health services for 1.4m Ukrainian refugees in 16 Polish voivodeships (provinces). The money for this comes from the EIB's Ukraine Solidarity Package and is managed by Poland's national promotional bank BGK (ticker: BGOSK). 2) Financing is to be provided for research projects in the automotive and aviation industries and for the development of clean transport, hydrogen and battery technologies. 3) More investment in agricultural companies in the Republic of Côte d'Ivoire (formerly Ivory Coast) will enhance skills and employment opportunities for young people there. 4) The EIB is financing investment in modern water and wastewater infrastructure in Bratislava and a 44km expansion of the Nagpur metro in India. 5) The EIB is providing new financing for urban development across Bulgaria alongside EU Structural Funds and upgrading energy infrastructure in the southern German city of Reutlingen. Nadia Calviño also presented an "Action Plan for More Transparency, Accountability and Well-Being in the Workplace" within the EIB. This includes setting up an independent ombudsman's office, where employees will receive confidential support in dealing with all forms of misconduct.

Hesse presents Annual Report 2023

Last week, Dr R. Alexander Lorz, Finance Minister of Hesse (ticker: HESSEN), presented his federal state's Annual Report 2023. This is published because the sub-sovereign also uses commercial bookkeeping, known as double-entry bookkeeping, in addition to cash-based accounting. The recently published 15th Annual Report shows the state's net assets, financial position and results of operations. Since the 2013 financial statements, the balance sheet has also received an audit certificate from an authorised auditor. With the new version of the state budget regulations that came into force in 2022, Hesse is also interlinking double-entry bookkeeping and cash-based accounting more closely in terms of budgetary law. By appropriately combining the strengths of both approaches the transparency of the budget is to be increased. The cash-based budget will, however, continue to be the management tool for budget preparation and the debt brake. The Annual Report with consolidated financial statements now transparently presents the state's assets with the budget accounts. The key findings in brief: Hesse managed without any new budgetary debt in 2023. Conversely, the balance sheet, in which future charges are also taken into account, shows a net loss for the year of EUR 9bn. The reason for this is stagnating tax revenues with simultaneously rising personnel costs. As a result, the Hessian budgetary situation is extremely tight, which makes savings and targeted investment necessary.

Primary market

This week we can report on three fresh EUR benchmarks, one sub-benchmark and various taps in the SSA segment. As usual we begin in chronological order: last Wednesday NRW.BANK (ticker: NRWBK) led the way with a 15-year EUR 500m bond with a social label. With an order book worth EUR 545m, the bond was priced at ms +47bp in line with guidance. Next, the European Stability Mechanism (Ticker: ESM) ventured onto the trading floor and was looking to raise EUR 2bn with a three-year term. With a bid-to-cover ratio of 3.3x, a narrowing compared with the guidance of one basis point to ms +8bp was finally achieved. This allowed the ESM to complete its funding for this year, and it is the same story for the EFSF. Yesterday (Tuesday, 24.09.), Hesse (ticker: HESSEN) approached investors with a dual tranche. Firstly, a seven-year benchmark bond amounting to EUR 1bn was issued in line with the guidance at ms +20bp (order book: EUR 1.35bn). This was followed by a tap to its 2039 bond amounting to EUR 250m at ms +42bp. Here, EUR 265m was quoted as the final order book. In the sub-benchmark segment, we have the Bavarian state capital Munich (ticker: MUENCH) with a EUR 300m green bond to report. Entering the marketing phase with a guidance of ms +50bp area, the deal with an order book of EUR 640m could finally be closed at ms +47bp – meaning the city will not run out of liquidity during the Oktoberfest. We would also like to share with you the results of the latest EU bond auction last Monday: The 2029 bond was increased by almost EUR 2.5bn and the 2044 bond by around EUR 2.3bn New mandates for the days to come: IDFMOB (green EUR benchmark, 15y), ASFING (EUR benchmark, 10y) and HAMBRG (EUR 500m, WNG, 5y).

Issuer	Country	Timing	ISIN	Maturity	Size	Spread	Rating	ESG
HESSEN	DE	24.09.	DE000A1RQEZ5	7.0y	1.00bn	ms +20bp	- / - / AA+	-
ESM	SNAT	23.09.	EU000A1Z99V7	3.0y	2.00bn	ms +8bp	AAA / Aaa / AAA	-
NRWBK	DE	18.09.	DE000NWB0AX6	15.0y	0.50bn	ms +43bp	AAA / Aa1 / AA	Х

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

Covered Bonds The EUR benchmark segment after the summer break Author: Lukas Kühne

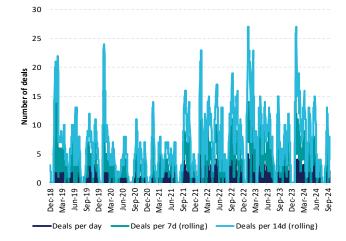
Dynamic primary market interrupted by short periods of calm

We would like to take the dynamic events on the primary market during the past five trading days (see <u>market overview</u>) as an opportunity to look at the developments on the covered bond market after the summer break. After the summer recess, which lasted for more than a month, the primary market entered the second (but much shorter) half of the year on 19 August with Commerzbank's Pfandbrief issue (EUR 1.25bn, 5.0y). Since then, a total of 22 issuers have appeared on the market, placing covered bonds with a volume of EUR 21.2bn. We would, however, consider the issuance activity – at least in the meantime – to be somewhat too restrained. For example, the primary market had an issuance break lasting almost two weeks (between 3 and 16 September). In addition to the usual triggers for turning points on the primary market, such as the ECB meeting on 12 September or the "ECBC Week" in Porto, an increased level of uncertainty in the real economy in response to the debate about the French budget contributed to lethargy on the part of issuers. Geopolitical distortions must also be seen as having an issuance-inhibiting effect in this context. However, since 16 September this phase appears to behind us and the primary market looks to be back in business again.

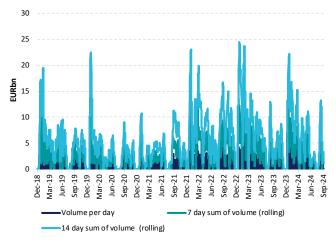
Is the month of September at odds with the seasonal issuance pattern?

The pronounced issuance activity since the summer break does not stand out unduly from a historical perspective. In the current month of September, 14 issuers have already approached investors with fresh produce totalling EUR 11.4bn. This figure is certainly higher than the total September volume in 2023 (EUR 6.4bn), although we did see EUR 20.5bn in September 2022, while in 2021 the issuance volume for the month of September was as high as EUR 21.3bn. We would therefore talk of an active, but not exceptionally dynamic September.

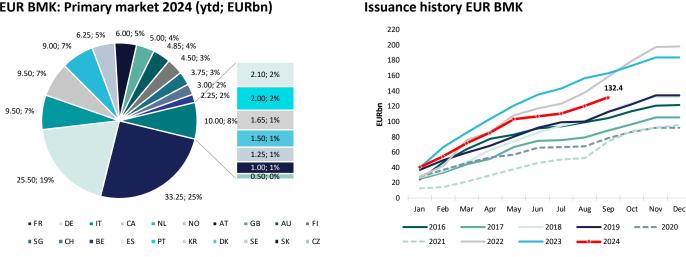
EUR BMK: issuance pattern (number of deals)



EUR BMK: issuance pattern (EURbn)



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

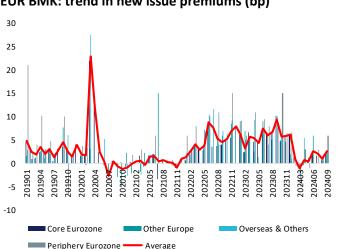


EUR BMK: Primary market 2024 (ytd; EURbn)

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

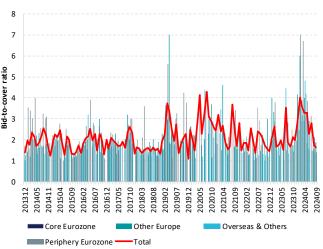
Primary market 2024: What has happened since the summer break?

In the EUR benchmark segment, covered bonds with a volume of EUR 21.2bn (spread over 23 issues) have been placed since the end of the summer break (19 August). This brings the total issuance volume for 2024 to date to EUR 132.4bn. While the picture of the largest covered bond jurisdictions at an annual level remains unchanged, new issues after the summer break were relatively broadly distributed over issuers from various countries. In total, 22 issuers from twelve jurisdictions have been active on the market. With four and three deals respectively, issuers from Germany and Italy have been among the most active on the primary market since the summer break. Out of the new issues, the triple tranche of Toronto-Dominion Bank (TD) particularly stands out. At the end of August 2024, the bank approached investors with two covered bonds with fixed coupons and a floater. In the end, TD was able to place bonds with a volume of EUR 4.3bn on the market. Overall, market activity is becoming more and more dynamic and is not expected to come to an abrupt end in the coming weeks in line with the familiar seasonal pattern.



EUR BMK: trend in new issue premiums (bp)

Bid-to-cover ratios



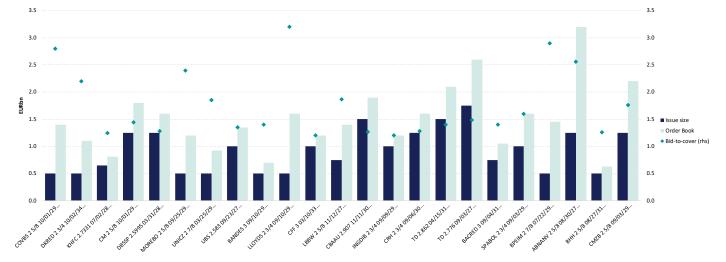
NORD/LB

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

New issue premiums and bid-to-cover ratios on the path to normalisation?

At the start of 2024, the fresh deals almost all had high bid-to-cover ratios, which is ultimately not unusual in January due to the liquidity situation on the part of investors (partly due to high maturities). On average, in the first three months of the year, the bid-to-cover ratio was 3.5x. In February this figure reached as high as 4.0x. We would describe these ratios as high – even by historical standards. In our opinion, the resulting investor demand can be explained by the fact that covered bonds were also attractive from a relative value point of view and were at times favoured by real money investors over traditional "credits". As is not uncommon in the seasonal pattern, the oversubscription ratios have normalised again, so that the current rate of around 1.6x in September can be described as quite healthy. In terms of new issue premiums, the start of the year was once again characterised by "extreme values". After the summer break, new issue premiums have so far stayed at a rather low level. However, together with a general spread widening, pick-ups versus fair value are also likely to rise.

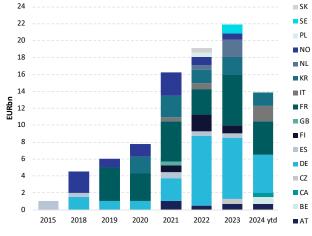




Source: Market data, Bloomberg, NORD/LB Floor Research

Issuers less focused on ESG issues

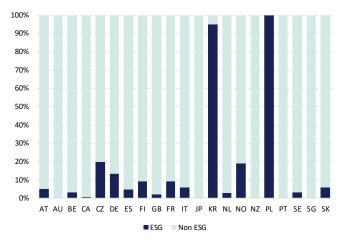
The covered bond segment is also slowly getting back on track after the summer break in terms of the sustainable variants "social", "green" and "sustainability". Three issuers have already placed a covered bond in social format on the market since August. This week alone, the issuers Korea Housing Finance Corporation (KHFC; EUR 650m; 3.8y) and Deutsche Kreditbank (EUR 500m; 10.0y) approached investors after Berlin Hyp reopened the market for "sustainable" covered bonds on 20 August with the issue of a social Pfandbrief (EUR 500m; 7.0y). With the fresh deals, the volume of issued ESG benchmarks in 2024 totals EUR 13.9bn. The lion's share of the new issues in the ESG segment continues to be in the "Green Covered Bonds" category (2024: EUR 9.0bn), followed by covered bonds in social format (EUR 4.9bn). Covered Bonds in the "sustainability" category have not yet been issued in 2024.



EUR benchmark ESG deals (EURbn)

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

ESG covered bonds: market share (EUR BMK)



Primary market outlook: what comes next?

We started 2024 with a forecast for gross new issuance volume of EUR 168.8bn, which we gently increased to EUR 171.5bn at the mid-year point. Therefore, we expect further benchmark deals with a volume of around EUR 39bn for the rest of the year. In view of the increasing momentum on the primary market described above, we still continue our forecast based on a bottom-up approach to be reasonable. In terms of the individual jurisdictions, we anticipate even larger volumes from France (another EUR 6.8bn according to our forecast), New Zealand (EUR 3.0bn) and Sweden (EUR 3.0bn). We should mention as a forecast risk the continuing challenging market environment in France. As a result of the ongoing political uncertainty, the spreads of French covered bonds also remain under pressure, which could consequently act as an issuance break. Overall, the EUR benchmark segment should continue to grow in 2024. With maturities of EUR 111.4bn, we expect a net new supply in the order of EUR 60bn.

Conclusion

All in all, in terms of primary market activity, we would certainly speak of a pleasing start after the summer break. Given the lower oversubscription ratios and the slight increase in new issue premiums, we think the market is actually more on a normalisation path. In our opinion, this view is in no way inconsistent with the fact that there are signs of saturation on the part of investors. In the coming trading weeks, the focus will actually be on the question as to when the "longer end" can be accessed with greater regularity again. As we made clear in the previous issue of our weekly publication, this is unlikely to be possible without rising spreads.

SSA/Public Issuers Update on German municipality bonds: DEUSTD and NRWGK Authors: Dr Norman Rudschuck, CIIA // Lukas-Finn Frese

Introduction

In February 2014, six cities in North Rhine-Westphalia placed what was then the largest municipal communal bond in Germany to date. It was the first time in the history of Germany that half a dozen cities in one of the German Laender raised funds jointly on the capital market. Since then, German cities and municipalities have looked for new, albeit established forms of financing, as more and more banks have given up traditional creditbased municipal financing in response to ever diminishing yields. So far, seven joint NRW municipality bonds have been issued under the ticker NRWGK, of which five are still outstanding. The composition of the local authorities involved has varied from one issue to another. As things stand at present, the bonds are set to mature between February 2025 and August 2032 with outstanding volumes of EUR 125-500m. NRWGK #8 is currently in the starting blocks. Never before have seven municipalities come together in this manner. Municipality bonds offer a series of attractive advantages for cities and municipalities: as already mentioned, this opens up a new funding avenue, the use of which spares existing lines of credit from the authorities' main banks. Moreover, the joint municipality bond approach makes it possible to take advantage of economies of scale. However, such issues also pose challenges: fixed costs, arranger fees, legal advice and similar costs. In some cases, issuers also have to factor in requirements relating to sustainability-related reporting, in cases where the bond to be placed is an ESG bond. Persistently high interest rates also mean that funding costs remain high for municipalities. Nonetheless, in view of the interest rate turnaround by the ECB started in June 2024, it is fair to assume that conditions should become more favourable in the future again.

Inaugural German cities bond – ticker: DEUSTD

An innovative new bond was launched for the first time on the German bond market at the end of November 2018: the security issued was innovative in that cities from various German Laender were active in the market jointly for the first time under the ticker DEUSTD. The issuers of Bochum, Celle, Emden, Essen and Saarbrücken participated in the bond with varying amounts: Essen (EUR 55m), Saarbrücken (EUR 55m) and Bochum (EUR 50m) had the largest stake in the bond, which totalled EUR 200m overall, while Emden (EUR 25m) and Celle (EUR 15m) had a much smaller share. Such differences are not unusual in this segment and were also a feature of the joint municipal bonds from NRW. Although the order book was oversubscribed at just over EUR 336m, the issue size was not increased. Strong demand nevertheless speaks for the attraction of joint city bonds as an asset class. The coupon was set at 1% and, at ms +20bp, pricing of the ten-year bond was a few basis points more expensive for investors than expected. Most recently (24 September 2024), the bond was quoting at around 94% of its nominal value and the yield would have been just under 2.6% for current buyers. At one time, banks and savings banks were the main buyers, with 14% of the bond being sold to investors outside Germany. This new form of bond transfers the principle behind the Joint German Laender issuance vehicle (ticker: LANDER) to lower administrative levels.

Municipal budget situation in 2023: First deficit since 2011

In 2023, municipalities and municipal associations reported their first budget deficit since 2011 amounting to EUR -6.8bn (core and additional budgets). In the prior year, the municipal balance was still EUR +2.6bn. There was a fairly sharp rise of +12% in adjusted expenditure in 2023 (EUR +39.2bn) to a total of EUR 364.9bn. Expenditure was mainly driven by social benefits, which rose by +11.7% to EUR 76.0bn. This reflected higher rates for the "Bürgergeld" (citizen's income) and for income support. Core budgets were also hit by a +7.4% rise to EUR 80.9bn in personnel expenses, mainly reflecting the pay settlement for public servants in 2023. Inflation led to an +8.2% increase in ongoing general and administrative expenses and of +12.3% in tangible assets. The +37.4% increase in interest expenses in 2023 reflects higher interest rates in line with ECB monetary policy. Although the adjusted revenues of municipal budgets were +9.0% higher in 2023 than the previous year, at EUR 358.1bn (EUR +29.7bn) this was not enough to offset the rise in expenditure. Tax revenues in 2023 were +7.3% higher than in 2022 at EUR 130.3bn, while revenue from corporation tax also rose by +7.3%. Further information on municipal financing can be found in our NORD/LB Issuer Guide – German Laender 2024.

ESG also gaining ground among municipalities

To talk of ESG bonds as a trend does not do justice to either their volume or significance. It is a fact that sustainability is a growing topic for municipalities as well and we welcome this development. Hanover, the capital of Lower Saxony (ticker: HANNOV), led the way in 2018 with the issue of a Green & Social Schuldscheindarlehen (SSD) from which it raised EUR 100m for 30 years on the capital market, subsequently investing the proceeds exclusively in the municipal housing stock. The Bavarian capital of Munich (Ticker: MUENCH) followed in 2020 with a EUR 120m (12y) social municipality bond. Proceeds were invested in affordable housing. This year, Munich decided to extend its presence in the ESG segment with a seven-year EUR 300m green bond (reoffer spread: ms +47bp). In September 2022, from NRW, the city of Münster (ticker: MUENST) was the first to successfully to place a green SSD for environmental and social investment purposes. In light of lively interest, the city opted to increase the size of the bond from an initially planned EUR 100m to EUR 140m. The second green bond (for EUR 170m) followed in May 2024. The <u>city of</u> Cologne (ticker: KOELNC) is now also ranked among the issuers of green municipality bonds. After announcing precise details for the placement of a green bond in December 2022, the issue took place last February (volume: EUR 150m).

Database of DEUSTD participants

In the following section, we look at transactions that have taken place to date along with the municipal and regional authorities involved in the inaugural German cities bond, focusing on economic figures, budget and borrowing data from the vdpKommunalScore provided by vdpExpertise GmbH. In order to avoid inaccuracies caused by different accounting policies (single and double-entry), the ongoing income and expenses of bodies using single-entry accounting are adjusted. Imputed variables, transfers from the administrative to the capital budget and target shortfalls in the administrative budget are not taken into consideration.

Economic and structural key metric	s				
Population	2018	2019	2020	2021	2022
Bochum (independent city)	364,628	365,587	364,454	363,441	365,742
Celle (independent municipality)	69,602	69,540	69,399	69,279	70,138
Emden (independent city)	50,195	49,913	49,874	49,523	50,535
Essen (independent city)	583,109	582,760	582,415	579,432	584,580
Saarbrücken (independent municipality)	180,741	180,374	179,349	179,634	181,959
Population growth rate (%)	2018	2019	2020	2021	2022
Bochum (independent city)	-0.25%	0.26%	-0.31%	-0.28%	0.63%
Celle (independent municipality)	-0.15%	-0.09%	-0.20%	-0.17%	1.24%
Emden (independent city)	-0.81%	-0.56%	-0.08%	-0.70%	2.04%
Essen (independent city)	-0.05%	-0.06%	-0.06%	-0.51%	0.89%
Saarbrücken (independent municipality)	-0,12%	-0,20%	-0,57%	0,16%	1,29%
Nominal GDP per capita in EUR	2018	2019	2020	2021	2022e
Bochum (independent city)	33,659	34,989	34,991	37,650	37,650*
Celle (independent municipality)	30,112	30,756	30,033	31,013	31,013*
Emden (independent city)	72,212	75,036	65,207	66,872	66,872*
Essen (independent city)	44,180	45,180	44,557	46,673	46,673*
Saarbrücken (independent municipality)	44,819	44,770	43,750	45,776	45,776*
Germany	40,594	41,800	40,950	43,292	43,292*
Nominal GDP per capita in %					
in relation to Germany	2018	2019	2020	2021	2022e
Bochum (independent city)	82.92%	83.71%	85.45%	85.97%	85.97%*
Celle (independent municipality)	74.18%	73.58%	73.34%	71.64%	71.64%*
Emden (independent city)	177.89%	179.51%	159.24%	154.47%	154.47%*
Essen (independent city)	108.83%	108.09%	108.81%	107.81%	107.81%*
Saarbrücken (independent municipality)	110.41%	107.11%	106.84%	105.74%	105.74%*
Unemployment rate	2018	2019	2020	2021	2022
Bochum (independent city)	8.9%	8.5%	9.4%	9.1%	8.6%
Celle (independent municipality)	6.2%	5.7%	6.4%	6.0%	5.5%
Emden (independent city)	8.1%	8.2%	9.0%	8.5%	8.2%
Essen (independent city)	10.6%	10.2%	11.0%	10.8%	10.0%
Saarbrücken (independent municipality)	8.6%	8.8%	10.3%	9.6%	8.8%
Germany	5.2%	5.0%	5.9%	5.7%	5.3%

Source: vdpKommunalScore, Federal Statistical Office, NORD/LB Floor Research

* taken from the previous year

Structural data

If we look at the economic and structural figures of the cities involved in the inaugural DEUSTD issue, it is clear that there are considerable differences. These vary significantly firstly in terms of the number of inhabitants and secondly in their economic performance. For example, Essen is almost 12 times bigger than Emden, but per capita GDP in the East Frisian city with its industrial harbours, dockyards and the motor manufacturer VW is by far the highest of the five municipalities. Each of the cities reported fairly constant population figures in the last years – albeit the trend is rising slightly. Moreover, all the regional and local authorities registered a fall in unemployment for the second year in a row. Nevertheless, the unemployment rate in all the municipalities under consideration was consistently higher than the German average (5.3%). In a direct city comparison, unemployment in 2022 was lowest in Celle at 5.5%.

Key budget metrics					
Current revenues (EURm)	2018	2019	2020	2021	2022
Bochum (independent city)	1,390.95	1,413.64	1,446.06	1,568.75	1,634.00
Celle (independent municipality)	219.56	201.12	181.71	176.90	167.13
Emden (independent city)	155.67	164.79	166.48	186.99	182.45
Essen (independent city)	2,981.51	3,042.35	3,176.61	3,203.03	3,296.80
Saarbrücken (independent municipality)	469.61	490.02	552.18	498.23	526.45
Current expenses (EURm)	2018	2019	2020	2021	2022
Bochum (independent city)	1,269.54	1,282.65	1,339.16	1,447.81	1,474.84
Celle (independent municipality)	204.75	182.61	148.05	152.49	164.24
Emden (independent city)	155.60	157.47	165.64	175.66	187.73
Essen (independent city)	2,756.01	2,832.43	2,973.15	3,134.32	3,153.48
Saarbrücken (independent municipality)	435.06	450.77	451.69	444.90	492.62
Of which interest payments (EURk)	2018	2019	2020	2021	2022
Bochum (independent city)	19,379.62	18,706.68	19,831.58	15,793.44	17,097.08
Celle (independent municipality)	3,850.27	3,711.59	3,308.48	3,098.92	2,604.91
Emden (independent city)	-1,790.30	-736.13	-1,401.49	-1,678.00	-1,569.75
Essen (independent city)	37,918.76	31,330.51	25,627.55	24,170.25	20,682.98
Saarbrücken (independent municipality)	13,205.11	10,761.64	10,089.74	9,974.02	9,345.63
Interest payments as % of					
current revenues	2018	2019	2020	2021	2022
Bochum (independent city)	1.39%	1.32%	1.37%	1.01%	1.05%
Celle (independent municipality)	1.75%	1.85%	1.82%	1.75%	1.56%
Emden (independent city)	-1.15%	-0.45%	-0.84%	-0.90%	-0.86%
Essen (independent city)	1.27%	1.03%	0.81%	0.75%	0.63%
Saarbrücken (independent municipality)	2.81%	2.20%	1.83%	2.00%	1.78%

Source: vdpKommunalScore, NORD/LB Floor Research

Key budget metrics

There are also major differences in the size of the cities' budgets due to the differences in population. As expected, Essen, where both revenues and expenses in 2022 were higher than in the four other municipalities put together, stands out in this regard. In the case of interest payments, it is immediately clear that these are far higher in Saarbrücken than in other cities based on current income. The reverse is true of Emden, which only reported interest income in the period under review. In general, all the issuers of the first German cities bond are paying less interest for the period under consideration.

Key debt figures					
Total debt (EURm)	2018	2019	2020	2021	2022
Bochum (independent city)	1,757.76	1,722.45	1,777.88	1,756.51	1,709.33
Celle (independent municipality)	253.57	272.52	269.22	252.32	250.94
Emden (independent city)	210.66	199.03	198.90	219.00	254.80
Essen (independent city)	3,355.54	3,357.57	3,034.72	3,050.64	3,085.72
Saarbrücken (independent municipality)	1,386.75	1,379.02	1,293.66	1,250.96	1,769.25
Debt per capita (EUR)	2018	2019	2020	2021	2022
Bochum (independent city)	4,820.68	4,711.45	4,878.19	4,833.00	4,673.59
Celle (independent municipality)	3,643.14	3,918.93	3,879.37	3,642.03	3,577.80
Emden (independent city)	4,196.84	3,987.62	3,988.04	4,422.10	5,041.98
Essen (independent city)	5,754.57	5,761.50	5,210.57	5,264.87	5,244.31
Saarbrücken (independent municipality)	7,672.59	7,645.36	7,213.10	6,963.96	9,723.32
Debt as % of total revenues	2018	2019	2020	2021	2022
Bochum (independent city)	122.02%	117.55%	118.70%	108.13%	100.78%
Celle (independent municipality)	111.31%	132.17%	136.56%	131.59%	140.57%
Emden (independent city)	131.83%	117.11%	114.19%	113.65%	133.84%
Essen (independent city)	109.39%	106.44%	92.36%	91.88%	89.50%
Saarbrücken (independent municipality)	292.28%	276.22%	226.29%	246.59%	330.87%
Share of Kassenkredite as % of debt					
of original administration	2018	2019	2020	2021	2022
Bochum (independent city)	28.67%	26.75%	25.38%	22.58%	17.40%
Celle (independent municipality)	31.12%	24.43%	22.35%	21.09%	21.03%
Emden (independent city)	8.77%	0.00%	0.00%	0.00%	0.00%
Essen (independent city)	49.81%	48.46%	42.09%	40.07%	36.83%
Saarbrücken (independent municipality)	61.91%	61.47%	55.53%	52.83%	40.71%

Source: vdpKommunalScore, NORD/LB Floor Research

Key debt metrics

The level of debt of the five cities under consideration stood at between just under 90% and 140% of revenues in the case of Bochum, Celle, Emden and Essen in the period from 2018 to 2022. Saarbrücken was once again the outlier in this respect with a figure of 330.87%. Although it saw an increase in revenues in 2022, this was not enough to offset a sharper rise in debt. Apart from Saarbrücken, Celle and Emden were also unable to improve their debt ratio compared with the previous year, whereas Bochum and Essen did manage to reduce their respective figures. Regarding per capita debt, the cities of Emden and Saarbrücken saw a year-on-year increase. It is worth taking a look at short-term liabilities in the form of Kassenkredite: while Emden has completely given up such loans since 2019, the trend in other cities has also been consistently downwards. An important factor in the context of debt and debt sustainability is that municipalities can fundamentally never go bankrupt. Insolvency is not possible for a municipality under Section 128 (2) GO NRW (municipal code for the federal state of North Rhine-Westphalia) and Section 12 (1). Ultimately, the federal state is the guarantor for the municipalities and, in accordance with the principle of federal loyalty, the Bund provides an implicit guarantee for the German Laender.

Explanation of the following table

In the following section, we look at transactions that have taken place to date in the German municipality bond segment. The table does not include SSD deals of the kind issued by the city of Hannover for example, among other aspects. With the exception of the relevant NRW cities bonds, we no longer list bonds which have matured in this table. In our view, the existing data nevertheless ensures adequate comparability of pricing. In the context of SSDs: the EUR 50.1m amortising bond issued by Hannover in April 2022 is not listed in the table either in view of its structure and hence a lack of comparability. The same applies for the green SSDs issued by Münster and Cologne, although they could not be left unmentioned.

lssuer	Coupon	Timing	ISIN	Maturity	Spread	Volume
NRW Cities #1	Fix	06.02.14	DE000A11QCH9	4.0y	ms +35bp	500m*
Ludwigshafen	Fix	27.11.14	DE000A13SLB5	10.0y	ms +41bp	150m
NRW Cities #2	Fix	19.02.15	DE000A14KP45	10.0y	ms + 50bp	500m
NRW Cities #3	Fix	10.06.15	DE000A161UQ4	7.0y	ms +40bp	250m
Mainz	Float	27.04.16	DE000A2BPUH3	7.4y	FRN	125m
Bochum	Fix	11.05.16	DE000A2AATG1	10.0y	ms +50bp	115m
NRW Cities #4	Fix	31.05.16	DE000A2AAWM3	10.0y	ms +49bp	125m
Mainz	Float	16.02.17	DE000A2DADA2	7.6y	FRN	100m
Dortmund	Fix	22.03.17	DE000A2E4YF9	10.0y	ms +35bp	140m
NRW Cities #5	Fix	04.04.17	DE000A2DALY5	10.0y	ms +38bp	250m
Ludwigshafen	Fix	28.11.17	DE000A2GSSS7	10.0y	ms +22bp	150m
NRW Cities #6	Fix	20.02.18	DE000A2G8VA5	10.0y	ms +24bp	250m
Joint Cities (DEUSTD)	Fix	28.11.18	DE000A2LQRG8	10.0y	ms +20bp	200m
Dortmund	Fix	14.10.19	DE000A2YN264	10.0y	ms +17bp	130m
Munich	Fix	11.02.20	DE000A254SP3	12.8y	ms +15bp	120m
Bochum	Fix	11.11.20	DE000A289FM3	10.0y	ms +23bp	250m
NRW Cities #7	Fix	24.08.22	DE000A30VKN0	10.0y	ms +25bp	125m
Dortmund	Fix	23.05.23	DE000A351TQ3	7.0y	ms +38bp	110m
Munich	Fix	18.09.24	DE000A383VA6	7.0y	ms +47bp	300m
NRW Cities #8			tba			

German municipality bonds (outstanding): issuance history

* Subsequently increased by EUR 100m

Source: Bloomberg, NORD/LB Floor Research

Initial

Initial

Overview – municipal bonds from NRW

A look back provides the most important key figures for the seven joint municipal bonds issued so far by North Rhine-Westphalia under the ticker NRWGK. The next bond in this format is already in the starting blocks and is expected this autumn, when a record seven cities will come together for joint funding purposes. The bond is set to have a nine-year maturity. No more precise details are known yet in relation to the size of the issue, the coupon structure or split between the municipalities involved.

Joint NRW municipality bonds (ticker: NRWGK)

Joint municipal bond #1 (al	ready matured)		Joint municipal bond #2		
City	Share	Volume	City	Share	Volume
Dortmund	20%	EUR 400m	Bochum	25%	EUR 500m
Essen	28%	Coupon	Essen	40%	Coupon
Herne	8%	1.125%	Herne	10%	1.125%
Remscheid	18%	Maturity	Remscheid	5%	Maturity
Solingen	6%	4 years	Solingen	10%	10 years
Wuppertal	20%	Increase	Wuppertal	10%	Increase
Total	100%	Yes	Total	100%	No
Issued: February 2014		EUR +100m	Issued: February 2015		
Joint municipal bond #3 (al	ready matured)		Joint municipal bond #4		
City	Share	Volume	City	Share	Volume
Bielefeld	20%	EUR 250m	Hagen	30%	EUR 125m
Essen	20%	Coupon	Remscheid	30%	Coupon
Gelsenkirchen	24%	1.25%	Solingen	40%	1.00%
Hagen	16%	Maturity	Total	100%	Maturity
Remscheid	20%	7 years			10 years
Total	100%	Increase			Increase
Issued: June 2015		No	Issued: Mai 2016		No
Joint municipal bond #5			Joint municipal bond #6		
City	Share	Volume	City	Share	Volume
Essen	42%	EUR 250m	Essen	44%	EUR 250m
Gelsenkirchen	30%	Coupon	Hagen	16%	Coupon
Remscheid	16%	1.00%	Herne	16%	1.375%
Solingen	12%	Maturity	Remscheid	8%	Maturity
		10 years	Solingen	16%	10 years
Total	100%	Increase	Total	100%	Increase
Issued: April 2017		No	Issued: February 2018		No
Joint municipal bond #7			Joint municipal bond #8		
City	Share	Volume	City	Share	Volume
Essen	44%	EUR 125m	Bochum	tba	tba
Hagen	32%	Coupon	Dortmund	tba	Coupon
Remscheid	24%	1.95%	Essen	tba	tba
		Maturity	Hagen	tba	Maturity
		10 years	Remscheid	tba	9 years
Total	100%	Increase	Solingen	tba	
Issued: August 2022		No	Wuppertal	tba	
			Total	100%	Increase

Expected: Autumn 2024

Source: Issuers, NORD/LB Floor Research

Each city is liable according with its share

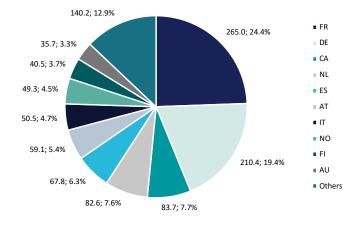
Things become more interesting if a debtor gets into arrears in repayment of the bond or defaults. In such a case, the rules governing liability within the group of issuing cities are as follows: the joint debtors of the bond are the respective participating cities which are only liable in line with their share of the bond. Interest payments must also be made in proportion to these shares. The creditworthiness or rating of a city will not be affected if one of the issuing cities gets into financial difficulties during the term of the bond or at the repayment date. For the reasons mentioned above, they are not subject to "financial problems" (in the narrower sense). Furthermore, municipalities are not rated, nor are any joint cities bonds. These factors are also key for some investors, since each participant in the issuer group often requires a separate check and/or due diligence, and the participating municipalities frequently change from bond to bond. Furthermore, regarding regulatory treatment: all German municipality bonds benefit from a 0% risk weighting under <u>CRR</u>/Basel III, a classification as a Level 1 asset in the context of the <u>LCR</u> as well as preferential treatment under <u>Solvency II</u>. They therefore benefit from the same regulatory advantages as German Laender bonds or Bunds.

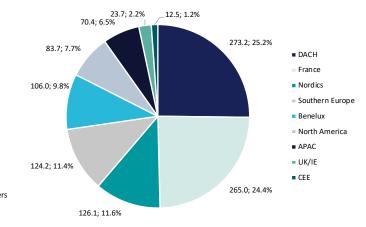
Conclusion and outlook

Cities or municipalities are likely to continue to join forces on a regular basis to issue joint bonds – after all, we already expect the eighth bond under the NRWGK ticker in the autumn of 2024, now involving the participation of seven municipalities for the first time. One of the crucial arguments for issuers is likely to remain unchanged, namely that they can appeal to more investors by issuing comparatively larger amounts, which is likely to have a favourable impact on refinancing costs in turn. On top of this, the regulatory burden associated with a joint city bond and associated costs are often too much for the cities involved on their own. SSDs, which have advantages compared with a bearer bond due to their streamlined documentation and the fact that they are both familiar to and popular with investors, therefore provide a sensible alternative. Although international investors have also become far more aware of SSDs in recent years, they are still unlikely to be as familiar as traditional bonds. In addition, jointly issued bonds frequently involve a lot of paperwork for institutional investors since, depending on their internal guidelines, they require a separate credit line for each municipality. Even though the size of the first German cross Laender cities bond was not especially large at EUR 200m, it is nevertheless fair to say that joint bond issuing by cities and municipalities across Laender borders should continue to function in future. As far as ESG topics are concerned, many municipalities without a suitable framework hitherto face similar challenges. In addition, there are strict and costly reporting standards involved in the issuance of securities in this format even after placement. However, on balance, ESG topics should enjoy an ongoing boost since many municipalities are likely to face similar dilemmas in order to be better equipped for the future. Nevertheless, cities such as Hanover, Cologne, Munich and Münster have already done a lot of the groundwork, which municipalities can use to guide their own plans. Going forward, therefore, we not only expect further joint new issues by cities, but also a fresh supply in the ESG segment, coming from individual German regional and local authorities.

Charts & Figures Covered Bonds

EUR benchmark volume by country (in EURbn)





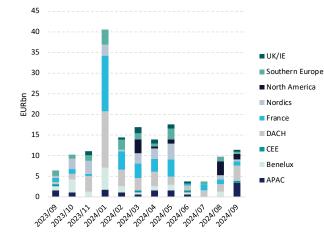
EUR benchmark volume by region (in EURbn)

Top-10 jurisdictions

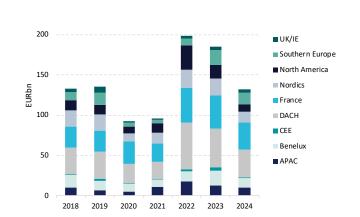
Rank	Country	Amount outst. (EURbn)	No. of BMKs	There of ESG BMKs	Avg. issue size (EURbn)	Avg. initial maturity (in years)	Avg. mod. Duration (in years)	Avg. coupon (in %)
1	FR	265.0	255	26	0.98	9.3	4.7	1.45
2	DE	210.4	297	44	0.65	7.8	3.9	1.50
3	CA	83.7	61	1	1.35	5.5	2.7	1.45
4	NL	82.6	84	3	0.92	10.4	5.9	1.35
5	ES	67.8	53	5	1.16	11.2	3.2	2.16
6	AT	59.1	99	5	0.59	8.1	4.2	1.54
7	IT	50.5	65	5	0.76	8.5	4.0	1.98
8	NO	49.3	60	12	0.82	7.2	3.4	1.09
9	FI	40.5	46	4	0.87	6.9	3.4	1.72
10	AU	35.7	33	0	1.08	7.1	3.3	1.83

250

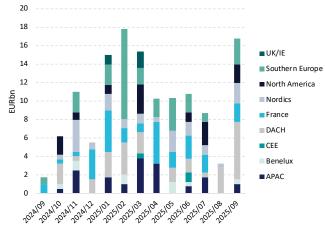
EUR benchmark issue volume by month



EUR benchmark issue volume by year

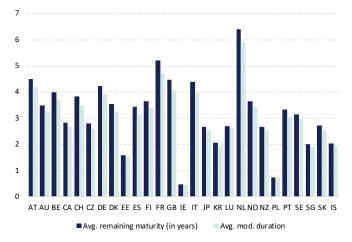


Source: Market data, Bloomberg, NORD/LB Floor Research

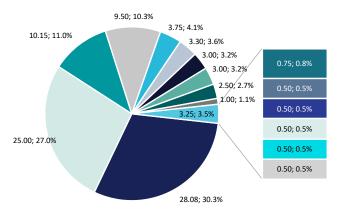


EUR benchmark maturities by month





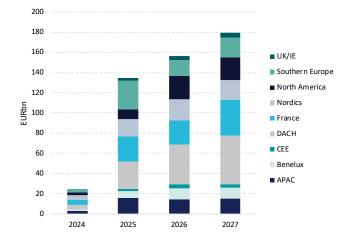
EUR benchmark volume (ESG) by country (in EURbn)



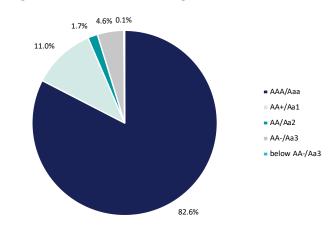
DE FR KR NO FI ES IT AT NL SE BE CZ PL SK CA GB

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

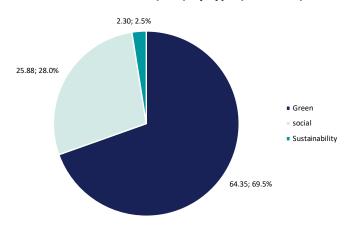
EUR benchmark maturities by year



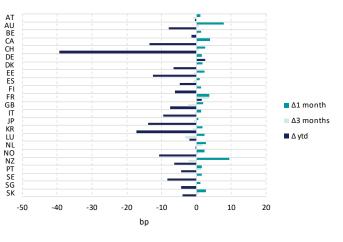
Rating distribution (volume weighted)



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



NORD/LB

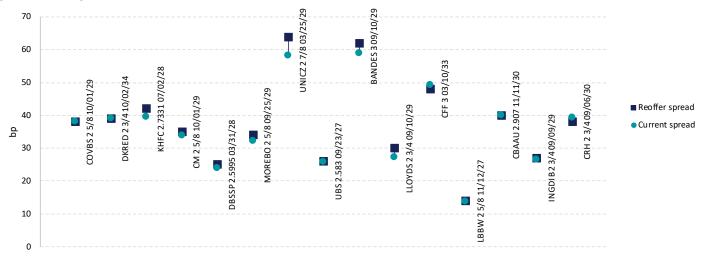


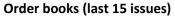
EUR benchmark emission pattern

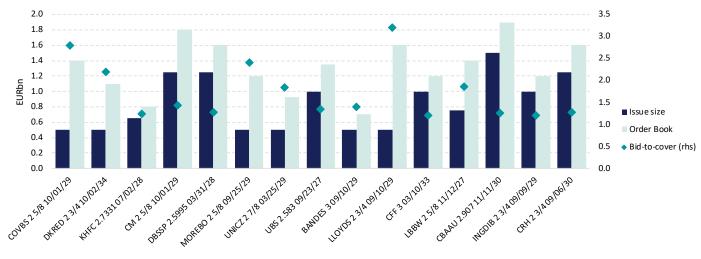


Covered bond performance (Total return)

Spread development (last 15 issues)

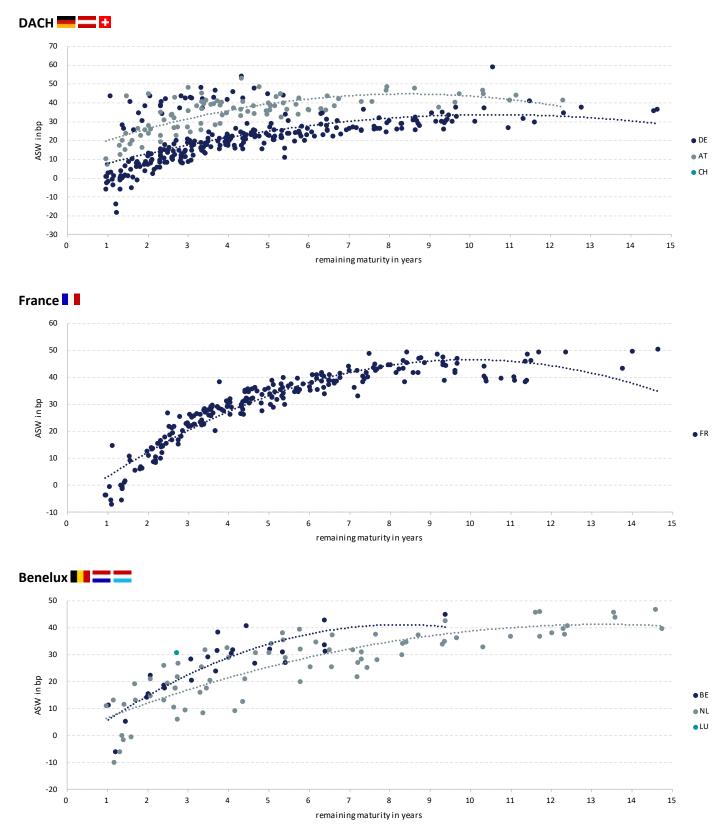




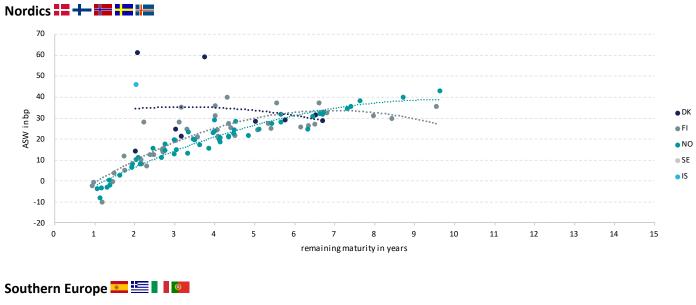


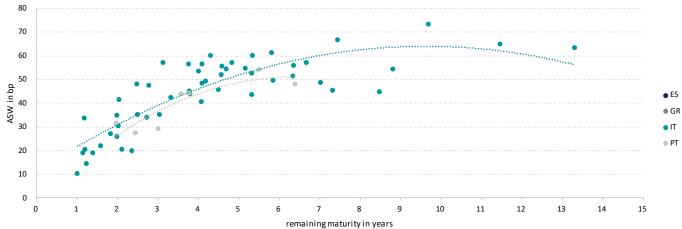
Source: Market data, Bloomberg, NORD/LB Floor Research

Spread overview¹

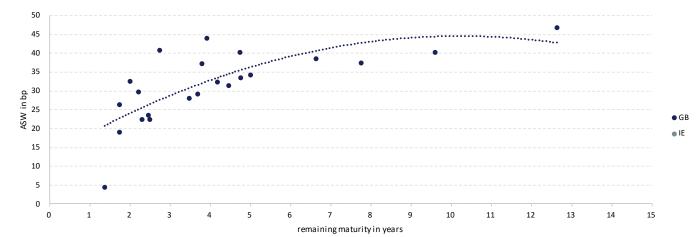


Source: Market data, Bloomberg, NORD/LB Floor Research ¹Time to maturity $1 \le y \le 15$

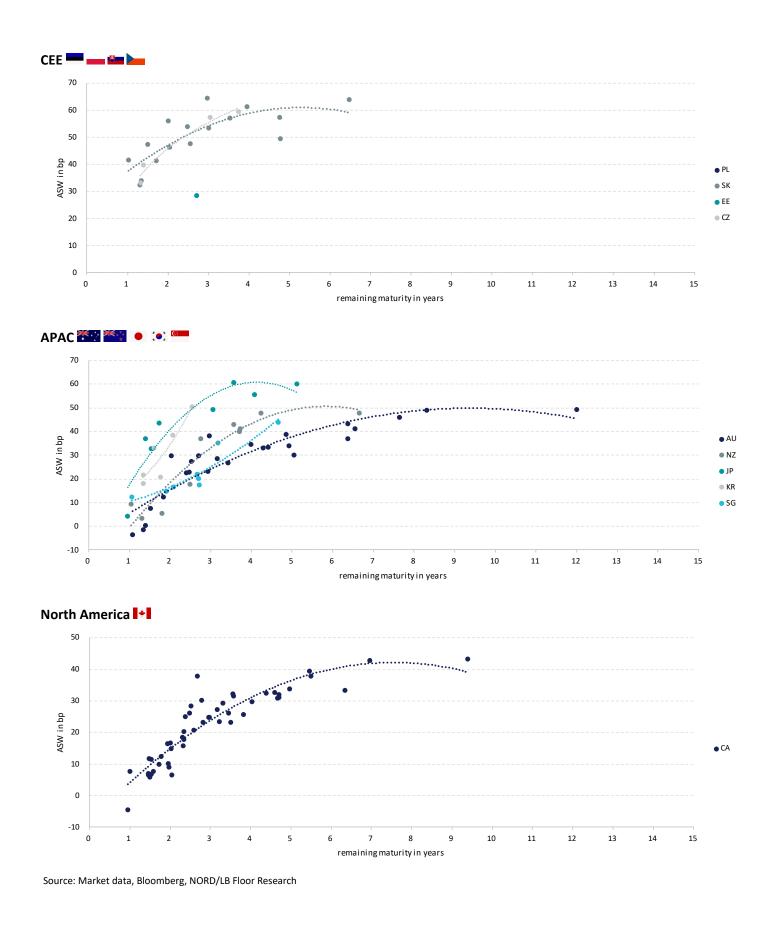




UK/IE 🚟 🛯

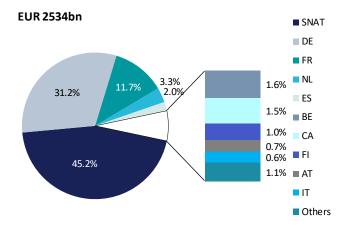


Source: Market data, Bloomberg, NORD/LB Floor Research



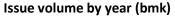
Charts & Figures SSA/Public Issuers

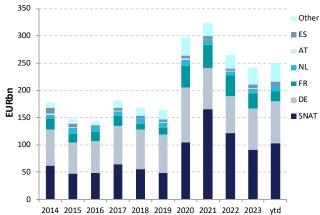
Outstanding volume (bmk)



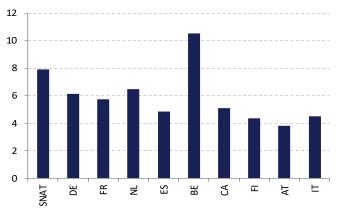
Top 10 countries (bmk)

Country	Vol. (EURbn)	No. of bonds	ØVol. (EURbn)	Vol. weight. ØMod. Dur.
SNAT	1,146.0	243	4.7	7.9
DE	790.1	590	1.3	6.1
FR	297.4	199	1.5	5.7
NL	82.8	68	1.2	6.5
ES	50.0	70	0.7	4.9
BE	41.6	45	0.9	10.5
CA	38.9	28	1.4	5.1
FI	25.2	26	1.0	4.4
AT	17.8	22	0.8	3.8
IT	15.6	20	0.8	4.5





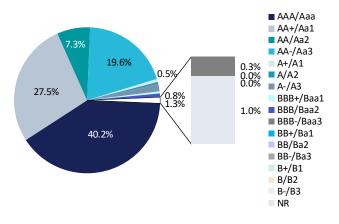
Avg. mod. duration by country (vol. weighted)



Maturities next 12 months (bmk)



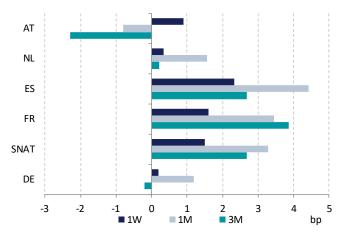
Rating distribution (vol. weighted)



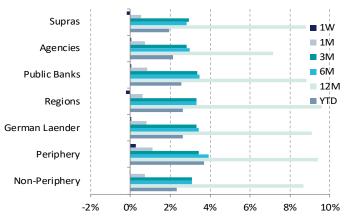
Source: Bloomberg, NORD/LB Floor Research

Spread development (last 15 issues) BGOSK 4 1/4 09/13/44 (fixed) Reoffer Spread / DM Current ASW / DM 200 GOSK 3 7/8 03/13/35 • 180 SOGRPR 3 3/8 05/25/45 (fixed) 160 (fixed) 140 120 ු දු • /BK 2 7/8 09/26/39 5/8 09/11/28 (fixed) CCCI 2 5/8 01/18/28 (fixed 10/31/30 (fixed) 80 (fixed) BYLABO 2 5/8 09/25/34 (fi xe d) HESSEN 2 1/2 10/01/31 60 (fixed) /27 2 5/8 03/04 (fixed) 11/60 2/ L/2 09/13 40 12/04/31 (fixed) 09/30/27 xed) (fixed) 20 0 21/2 NIB 2 3/8 05 0 DBJJP 2 ESM 2 3/8 SCHHOL **MMOX** NEDWBK -20 Ð -40

Spread development by country

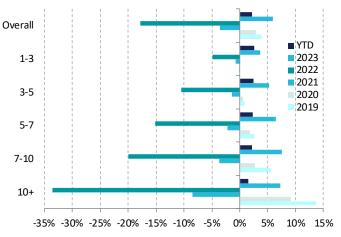


Performance (total return) by segments

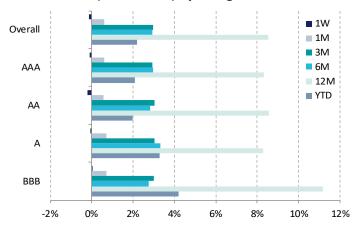


Source: Bloomberg, NORD/LB Floor Research

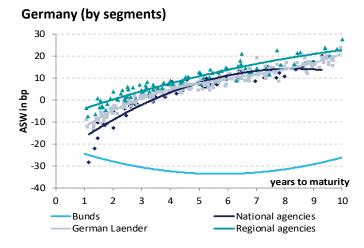
Performance (total return)



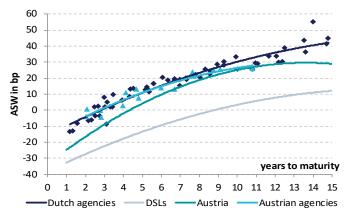
Performance (total return) by rating

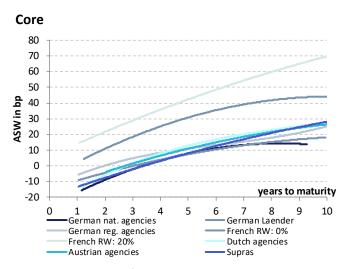


NORD/LB

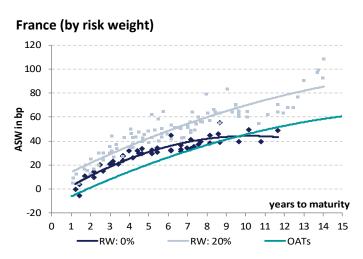


Netherlands & Austria

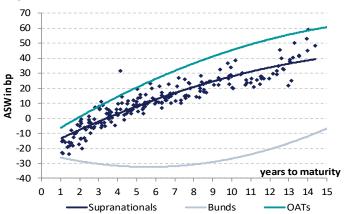




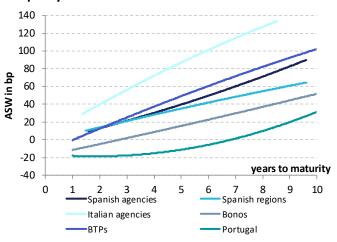
Source: Bloomberg, NORD/LB Floor Research







Periphery



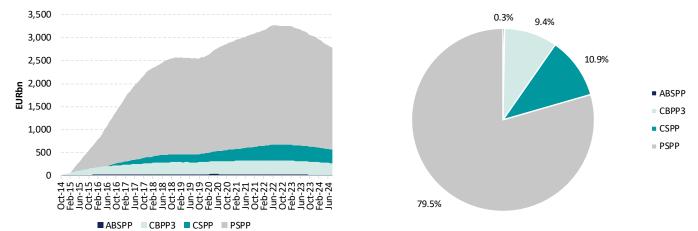
ECB tracker

Asset Purchase Programme (APP)

	ABSPP	СВРРЗ	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

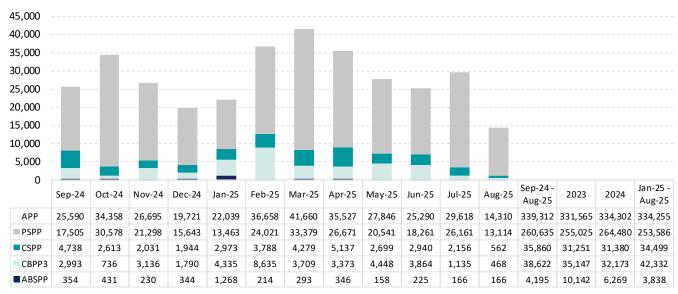
Portfolio development

Portfolio structure

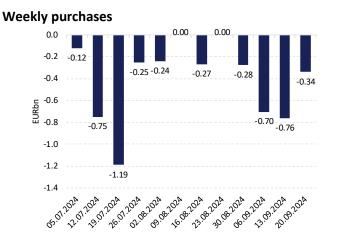


Source: ECB, NORD/LB Floor Research

Expected monthly redemptions (in EURm)



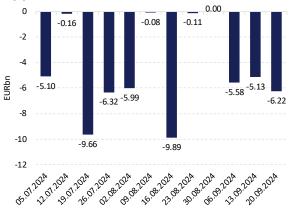
Source: ECB, Bloomberg, NORD/LB Floor Research



Covered Bond Purchase Programme 3 (CBPP3)

Public Sector Purchase Programme (PSPP)

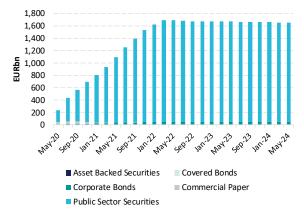
Weekly purchases



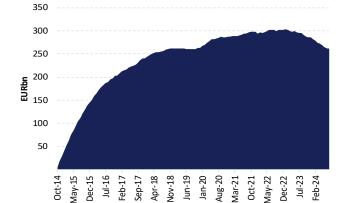
Source: ECB, Bloomberg, NORD/LB Floor Research

Pandemic Emergency Purchase Programme (PEPP)

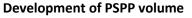
Portfolio development



Source: ECB, Bloomberg, NORD/LB Floor Research

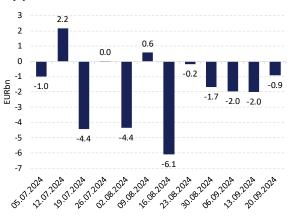


Development of CBPP3 volume





Weekly purchases



Appendix Overview of latest Covered Bond & SSA View editions

Publication	Topics
29/2024	 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	 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
<u>22/2024 ♦ 03 July</u>	 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	New EUR benchmark issuer from Slovakia
	 ECB repo collateral rules and their implications for Supranationals & Agencies
<u>19/2024 ♦ 12 June</u>	ESG covered bonds: Green deals continue to dominate
	 Teaser: Issuer Guide - Nordic Agencies 2024
<u>18/2024 ♦ 29 May</u>	 Transparency requirements §28 PfandBG Q1/2024
	 Development of the German property market (vdp Index)
	 Spotlight on the EU as a mega issuer
<u>17/2024 ♦ 15 May</u>	 Standard Chartered Bank Singapore boosts APAC growth
	 Stability Council convenes for 29th meeting
<u>16/2024 ♦ 08 May</u>	Whats happening away from the benchmark?
	 Teaser: Issuer Guide – Dutch Agencies 2024
<u>15/2024 🔶 24 April</u>	A covered bond view of Portugal: Welcome back!
	 Credit authorisations of the German Laender for 2024
<u>14/2024 🔶 17 April</u>	 Moody's covered bond universe: An overview
	 SSA review: EUR-ESG benchmarks in Q1/2024
<u>13/2024 ♦ 10 April</u>	 A review of Q1 in the Covered Bond segment
	 A review of Q1 in the SSA segment
NORD/LB:	NORD/LB: NORD/LB: Bloomberg:
Floor Research	<u>Covered Bond Research</u> <u>SSA/Public Issuers Research</u> <u>RESP NRDR <go></go></u>

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:

<u> Issuer Guide – German Laender 2024</u>

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



Lukas Kühne Covered Bonds/Banks

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

Alexander Grenner Covered Bonds/Banks

+49 157 851 65070 <u>alexander.grenner@nordlb.de</u>





Dr Norman Rudschuck, CIIA

norman.rudschuck@nordlb.de



Christian Ilchmann SSA/Public Issuers

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



Lukas-Finn Frese SSA/Public Issuers

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

Sales

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

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

Treasury

Liquidity Management/Repos

+49 511 9818-9620 +49 511 9818-9650

Sales Wholesale Customers

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

Relationship Management

Institutionelle Kunden	<u>rm-vs@nordlb.de</u>
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 <u>www.nordlb.de</u>.

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 AUS-TRALIAN 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 there-to, 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 within the meaning of the Danish Securities Trading Act or any executive orders issued pursuant there-to, 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: 25 September 2024 (08:50)