



Covered Bond & SSA View

NORD/LB Floor Research

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Marketing communication (see disclaimer on the last pages)



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Market overview Covered Bonds

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Primary market: restrained issuance activities in the run up to the US election

At the start of November, the primary market was much quieter than at the start of October. This can be attributed not least to the traditionally lower levels of issuance activity towards the end of the year. In addition, the US presidential elections may have already been casting a shadow over the market. In this context, just one issuer approached investors on the primary market in the past five trading days. As was the case last week, it was once again a French issuer in the form of BPCE SFH (cf. Issuer View) that successfully carried out an issue on the market on Monday. The deal, with a maturity of 5.3 years, started out in the marketing phase with guidance in the area of ms +50bp. Eventually, a covered bond with a volume of EUR 1.0bn was issued at a re-offer spread of ms +46bp. The bid-tocover ratio for this deal amounted to 1.3x, while the new issue premium came to two basis points. The issuer is among the most active primary market players, placing a volume of EUR 7.3bn in covered bonds on the market this year alone. This includes a green covered bond issued in May 2024 (volume: EUR 1.5bn). Although we do not expect any considerable distortions as a result of the US presidential election in the segment of EUR benchmarks that we analyse, at the time of going to print it is hard to predict just how long issuance activities on the primary market will be subdued for. Fundamentally speaking, the market remains intact, meaning that an issuance window could open up again after the election to allow issuers to realise their required funding activities. However, the prevailing spread level at the current margin and the changes in the attractiveness of covered bonds from a relative value perspective could argue against the primary market presence of more opportunistic issuers who no longer see an acute need for funding this year.

Issuer	Country	Timing	ISIN	Maturity	Size	Spread	Rating	ESG
BPCE SFH	FR	04.11.	FR001400TWB1	5.3y	1.00bn	ms +46bp	- / Aaa / AAA	-

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

Secondary market: covered bond spreads under pressure

On the secondary market, the picture is similar to last week. Spreads in other asset classes continue to widen more notably than covered bonds, which is putting pressure on their spreads as a result. French covered bonds at the long end are less affected by this. Demand for short maturities of up to three years remains high, while there are practically no trading volumes in evidence for longer terms at present. From a relative value perspective, the repricing on the secondary market does not seem to have run its course yet.



Fitch upgrades the ratings for three covered bond programmes

At the end of last week, Fitch presented its report on rating-relevant trends in the third quarter of 2024 in relation to the covered bond programmes that form part of its rating universe. In the report, the risk experts from Fitch noted a sustained positive trend in covered bond ratings. In total, three covered bond programmes and five series of multiissuers of Cedulas Hipotecarias received a rating upgrade in this period, including one issuer active in the EUR benchmark segment. For example, the rating of the covered bonds issued by Equitable Bank in Canada was raised by one notch to AA+. In the third quarter of 2024, Fitch also included the covered bond programme of Kreissparkasse Ludwigsburg, which made its debut on the EUR sub-benchmark market in October 2024, in its rating coverage for the first time. The programme was awarded a rating of AA+ by Fitch. With the addition of Kreissparkasse Ludwigsburg, Fitch rates a total of 109 covered bond programmes as at the end of the third quarter of 2024. According to Fitch, the geographical focus is on European issuers, although rating assessments outside Europe are increasingly on the rise. At 89.9%, mortgage-backed covered bonds dominate the Fitch rating universe. The unused notches uplift, which serve as a buffer to protect against a downgrade of the issuer default rating (IDR), came in at an average of 4.7 notches in the third quarter of 2024, according to the rating experts. In 14 of the programmes, the covered bond programme would be downgraded in the event that the issuer's IDR rating were to be downgraded by one notch. Accordingly, the majority of the programmes rated by Fitch have protection of at least one notch against an IDR downgrade.

ECB also accepts Scope ratings for marketable assets within the framework of the Eurosystem Credit Assessment Framework

The ECB <u>recently announced</u> that Scope rating assessments can be used from 16 December 2024 to evaluate the credit quality of marketable assets for monetary policy operations after the technical implementation process was successfully completed. With the completion of the onboarding process, Scope is the only European rating agency whose ratings can be used for monetary policy operations under the ECB and the eurozone central banks. This final step marks the end of a process to integrate Scope ratings into the ECB's Eurosystem Credit Assessment Framework that has lasted for more than a year. In November 2023, Scope's ratings were initially generally accepted under the Eurosystem Credit Assessment Framework, the primary objective of which is to ensure the creditworthiness of counterparties and the collateral used in Eurosystem credit operations. This was followed in May 2024 by the acceptance of the asset-backed securities rated by Scope, and this process is now expected to reach its conclusion in December with the marketable collateral.



Scope puts issuance volume for 2024 at EUR 141bn to EUR 170bn

In their review of the third quarter of 2024, the rating experts from Scope summarise the events of relevance to the covered bond market. While Mario Draghi's report provided a lot of food for thought in relation to a stronger securitisation market, Scope saw little in the way of ramifications for the covered bond market. However, from the point of view of the rating experts, covered bonds could make a significant contribution to the three most important areas highlighted in Draghi's report. Here, Scope includes decarbonisation and higher competitiveness, increased security and less dependency, in addition to closing the innovation gap between the EU and the USA or China. According to the rating experts, the greatest challenge is the necessary financing of these transformation processes. The existing toolbox of European Covered Bonds is already in place and can support this process, Scope explains. With regard to the issuance volume on the covered bond market, Scope states that this remained stable in the third quarter of the year. In September, the rating experts again adjusted their issuance forecast for the year and now expect a volume of between EUR 141bn and EUR 170bn for the full year. According to Scope, spreads on the covered bond market have narrowed from 2023 to 2024. In particular, very low spreads (<10bp) and high spreads (>70bp) represented the absolute exception this year, although outliers were particularly evident among issuers from Italy, Germany and Austria. In Germany and Austria, the debate about the higher CRE exposure of some issuers was described as the cause of the spread widening, while for Italy, Scope puts the higher spread variance down to the credit diversification among issuers.

ECB Macroprudential Bulletin: investigating the connection between CRE markets and the financial system

In a current study linked to the ECB Macroprudential Bulletin, Pierce Daly, Ellen Ryan and Oscar Schwartz Blicke investigate the complex relationships between the commercial real estate (CRE) market and the financial system. The study, which claims to be the first of its kind in the eurozone, identifies three key findings on the propagation of shocks in the CRE market and the impact that these can have on financial stability. First, various sectors with a particularly high levels of exposure to commercial real estate, both in absolute terms and in relation to total assets, are defined. This applies in particular to real estate companies (RECs), real estate investment funds (REIFs) and real estate investment trusts (REITs), which are therefore particularly vulnerable to shocks in the CRE market. Second, structural vulnerabilities such as liquidity imbalances (REIFs) or high debt levels (RECs and REITs) additionally exacerbate the vulnerability of the players and at the same time increase the likelihood of further amplifying these shocks. The third point concerns the complexity of the CRE commitments of the various players, which arise from the extensive debt and equity crossovers with their financiers. In addition to the already known risk, these can exacerbate uncertainties and feedback loops. In summary, the results underline the importance of comprehensive data availability in order to be able to monitor the links between CRE and the financial system more closely. As part of our regular coverage, we focus in particular on the CRE exposures of covered bond issuers, as well as the shares of these in the cover pools. In terms of the German sub-market, where cover pools have high CRE shares, we would refer you to our quarterly reports on Transparency requirements §28 PfandBG for more detailed information.



Market overview SSA/Public Issuers

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

How NRW sustainability bonds work

After North Rhine-Westphalia (ticker: NRW) issued its tenth bond in sustainable format in June last year, it was time for the Wuppertal Institute to take stock. The think tank for impact- and application-oriented sustainability and transformation research analysed which projects got off the ground with the help of the funds raised and the contribution these projects made to implementing the sub-sovereign's sustainability goals. According to the calculations, thanks to the projects financed with the anniversary bond, an estimated 35,000 hectares of damaged forest could be reforested, and 80,500 social tickets and 109 additional kilometres of cycle paths could be funded. By promoting photovoltaic systems 39,000 tons of CO₂ emissions per year could also be "saved". NRW Minister of Finance Dr Marcus Optendrenk explained: "North Rhine-Westphalia's sustainability bonds are respected and sought-after on the market and are also regularly honoured with prestigious awards. The state was a pioneer in this segment in 2015 and has since extended its leading role as a public issuer. The sustainability bonds are a genuine 'made in North Rhine-Westphalia' success model." Last October, the sub-sovereign issued its eleventh sustainability bond and therefore continued to back the important issue of sustainability – and this went down well with investors: according to the press release, interest in subscribing to the EUR 1.25bn bond with a five-year maturity was high and more than 70% was placed with investors with a clear focus on sustainability. To get a feel for the price: the final reoffer spread stood at ms +15bp (cf. weekly publication of 16 October).

Lower Saxony: results of the autumn tax estimate

The most recently published results of the autumn tax estimate for the German Laender could hardly be clearer: the sub-sovereigns must expect significantly lower tax revenues. Even Lower Saxony (ticker: NIESA) is not spared from this development. The Tax Estimate working group already projected a considerable drop in revenues in May of this year. The current results once again downgrade the revenue expectations due to the ongoing phase of economic weakness. Taking into account the municipal financial equalisation, there will be arithmetical changes of around EUR -479m for the current year compared to the 2024 budget. Significant revenue shortfalls can also be expected for the draft budget in 2025 and subsequent planning years up to and including 2028. "As expected, the situation is serious, and the current estimate further restricts the room for manoeuvre in the coming years. Thanks to our prudent and forward-looking financial planning, in Lower Saxony we will be able to compensate for the reduced revenue this year and next without having to cut services for our citizens. Another supplementary budget will also not be necessary this year. However, the need for budget consolidation will significantly increase from 2026 as a result of this forecast," as Lower Saxony's Minister of Finance Gerald Heere explained.



LCFB: New Sustainable Finance Framework expands capital market presence

Under the motto "Have the courage for change to create a brighter future" the French Community of Belgium (French: Fédération Wallonie-Bruxelles; ticker: LCFB) has presented its new Sustainable Finance Framework. The French Community, like the other two language communities, forms part of the Belgian federal state. Its legal existence is enshrined in Belgium's constitution and its jurisdiction extends to all persons based in the Frenchspeaking region. This includes Wallonia (with the exception of members of the Germanspeaking Community) and the French-speaking institutions in the officially bilingual Brussels Capital Region. The Wallonia-Brussels Federation is specifically responsible for the areas of education, culture, youth welfare, health, sport, etc. Since the Special Financing Act 1989, the Federation has enjoyed extensive autonomy in terms of budget management and also retains 99% of general revenues. Art. 54 of the Financing Act also stipulates a support mechanism, which guarantees the Communities a government loan in the event of payment default or delay, the interest costs of which are borne by the state. The French Community also carries out its funding on the capital market on a selective basis. Not only conventional bonds are issued, but also securities in a social format since 2021. According to the issuer, almost EUR 2.8bn in social funds have been raised on the capital market since the publication of the Social Finance Framework. Three public transactions in EUR benchmark format have been carried out as well as 34 private placements. The French Community has now created a comprehensive framework with its Sustainable Finance Framework in order to be able to finance green and sustainable projects in addition to social projects in the future. The proceeds are primarily intended to enable better access to education and social inclusion, promote the development of sports and cultural infrastructure, increase the energy efficiency of existing buildings through renovation measures and fund the construction of environment-friendly infrastructure. Regular allocation and impact reports are to be published every year to inform the general public. ESG bonds under the ticker of the French Community can also benefit from excellent treatment from a regulatory perspective: LCFB bonds qualify for a risk weight of 0% according to CRR/Basel III. Under the LCR Regulation, they are also classified as a Level 1 asset. Furthermore, the sub-sovereign has preferred status under Solvency II. For further information on the French Community, please refer to our NORD/LB Public Issuers Special - Beyond Bundes-<u>laender: Belgium</u>. We have planned an update of this study at the turn of the year.

Spain supports the International Development Association with EUR 400m

Spain has announced an early financial commitment of EUR 400m to the International Development Association, which is part of the World Bank group (IDA, ticker: IDAWBG). This reflects a +37% rise on the previous IDA replenishment cycle and underscores Spain's continued commitment to sustainable development worldwide, particularly in low-income countries. It raises Spain's total contribution to over EUR 5bn since IDA's creation. The year-long IDA21 replenishment process culminates in December. The most recent replenishment, IDA20, yielded a EUR 93bn package to finance projects in developing countries.



S&P confirms rating of Hesse and its promotional bank

At the end of October, S&P's risk experts announced the results of their regular credit rating review for the German state of Hesse (ticker: HESSEN) and therefore also for the regional development bank Wirtschafts- und Infrastrukturbank Hessen (WIBank, ticker: WIBANK). The sub-sovereign's AA+ rating was confirmed with a stable outlook. S&P emphasised both Hesse's high debt and liquidity management standards and the commitment to fiscal consolidation and cost control that it has shown to date. The measures taken will increase the predictability of interest payments, which the rating agency assessed as positive. "We must now maintain a consistent fiscal policy even in particularly challenging financial times. Only by continuing to save and making targeted investments can we create a financially sustainable basis for the future development of our state — as well as positive ratings on the capital markets", said Hesse's Minister of Finance, Prof. Dr R. Alexander Lorz. Based on its classification as a government-related entity, WIBank's rating is aligned with that of Hesse. Consequently, S&P also confirmed the agency's "AA+" rating and a maintained the stable outlook.

Primary market

Last week, the SSA primary market was much quieter due to the upcoming US election. As such, we can only report on one issue in the EUR benchmark segment. As already announced, the Islamic Development Bank (ticker: ISDB) approached investors with a fiveyear sukuk bond and raised EUR 500m at ms +50bp in line with guidance. The order book totalled EUR 530m and was therefore slightly oversubscribed (bid-to-cover ratio: 1.06x). The European Union (ticker: EU) was also active again, increasing two of its bonds in one fell swoop on Monday as part of its fifth bond auction in the second half of 2024. The volume of the 2029 bond with a coupon of 2.875% was increased by EUR 2.1bn and the 2034 bond (coupon: 3.25%) was topped up by EUR 2.5bn. The bid-to-cover ratios were 1.15x and 1.39x respectively. The sixth and likely last EU bond auction this year will take place before the end of the month on 25 November 2024. According to its funding plan, the EU's fourth syndicated transaction is also scheduled to take place in calendar week 47, for which the EU is expected to send the RfP to the relevant banks in the near future. In closing, we would like to draw your attention to an interesting mandate: the European Investment Bank (ticker: EIB) has commissioned selected banks to explore the options for issuing a digital bond in EUR, thereby advancing the digitalisation of capital markets. The project is part of the trial phase of new technologies for settling (DLT)-based financial market transactions in central bank money. Besides the EIB, other issuers have also garnered experience in issuing digital bonds. You can gain an insight into how they work and the associated advantages as well as the perspective of investors and issuers in our July publication.

Issuer	Country	Timing	ISIN	Maturity	Size	Spread	Rating	ESG
ISDB	SNAT	30.10.	XS2932797306	5.0y	0.50bn	ms +50bp	AAA / Aaa / AAA	-

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



Covered Bonds

ESG covered bonds: Benchmark segment on a growth trajectory

Authors: Alexander Grenner // Lukas Kühne

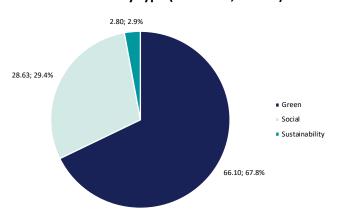
Market for ESG covered bonds: an update

As part of our annual <u>ESG Update</u>, we regularly discuss general developments in the ESG segment, focusing thereby on both the momentum in the steadily growing sub-market for ESG-compliant benchmark covered bonds and on regulatory progress and framework conditions. In the present issue of our weekly publication, we concentrate on changes in the context of the EU Taxonomy as well as the EU Green Bond Standard. In the same issue, we also propose to take a closer look at current developments in the ESG sub-market for EUR benchmarks, since issuers have been opting for a sustainable format in a large number of new issues, especially over the past few weeks.

ESG covered bonds by country (EUR BMK; EURbn)

9.50; 9.7% 3.75; 3.8% 3.30; 3.4% 3.00; 3.1% 2.50; 2.6% 1.50; 1.5% 0.50; 0.5% 0.50; 0.5% 0.50; 0.5% 0.50; 0.5% 0.50; 0.5%

ESG covered bonds by type (EUR BMK; EURbn)



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

ESG EUR benchmarks: green bonds still account for a dominant share

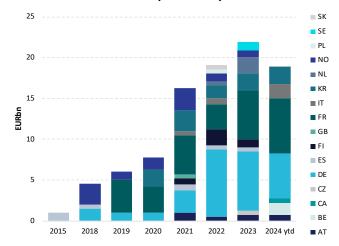
At present, the total outstanding volume of EUR benchmarks amounts to around EUR 1,089.4bn, of which ESG covered bonds account for around EUR 97.5bn. Green bonds remain the dominant type of bond with a share of EUR 66.1bn (67.8%), although social bonds have been making up some ground and currently account for EUR 28.6bn (29.4%). At EUR 2.8bn (2.9%), sustainability bonds are a more niche segment, even though there was recently a new issue in this format from Kookmin Bank in South Korea. In general, only issuers from South Korea and Spain have gone to the market with covered bonds in this sub-category. The dominance of green bonds hardly comes as a surprise, bearing in mind the asset class and the strong preference for certain types of cover assets (namely residential and commercial property financings).



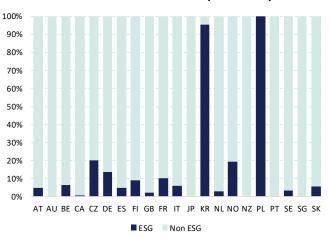
Germany remains the largest supplier of ESG covered bonds

A country analysis shows that Germany (EUR 26.6bn; 46 bonds) and France (EUR 23.3bn; 29 bonds) account for the bulk of a total of 134 outstanding ESG covered bonds. Two further relatively active players in the ESG segment are Norway (EUR 9.5bn; 12 bonds) and South Korea (EUR 10.7bn; 17 bonds). One particular feature that should be borne in mind in the case of South Korean issuers is that the market has an extremely high weighting of ESG issues, above all in view of the public remit of the Korea Housing Finance Corporation (KHFC). This is also in evidence at market level, where the share of ESG bonds in relation to outstanding bonds remains very varied, although smaller markets seem to account if anything for a larger share of ESGs. Poland is a case in point: here, the only outstanding EUR benchmark issue at present is also in a sustainable format. The market for ESG EUR benchmarks currently comprises a total of 16 jurisdictions.

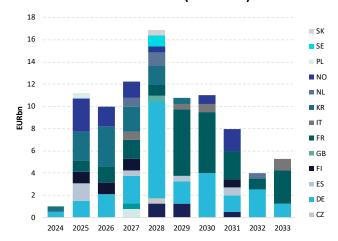
ESG covered bond issues (EUR BMK)



ESG covered bonds: market share (EUR BMK)

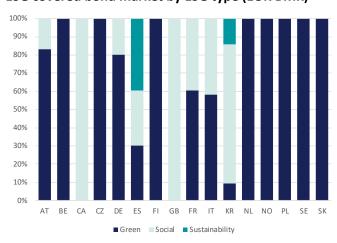


ESG covered bond maturities (EUR BMK)



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

ESG covered bond market by ESG type (EUR BMK)





Current market performance in 2024 and outlook

The new issue volume of ESG EUR benchmarks placed to date in 2024 amounts to a total of EUR 18.9bn. Of this, green bonds account for a share of EUR 10.8bn; social bonds for EUR 7.7bn and sustainability bonds for EUR 500m. Since it is already so late in the year, it is fair to assume that the record levels of new issues of the last two years (2022: EUR 19.1bn; 2023: EUR 21.85bn) are highly unlikely to be repeated. Measured in relation to the number of single issues, the figures are a little tighter. So far, 29 ESG deals have been placed (against 28 in 2022 and 31 in 2023); 2024 is therefore on a par with the two previous years. Based on the figures analysed so far, it would be fair at first glance to conclude that the market has stagnated, if anything, after two exceptionally strong years. However, in this case as well, we need to refer to the previous maturities graph, which shows that only a total of EUR 1.0bn will be maturing in the full year. The net new ESG issue volume therefore stands at EUR 17.9bn (2022: EUR 18.6bn; 2023: EUR 18.85bn). Even though this means that there have been no new records in relation to new issue volumes or to the number of individual new issues, the ESG market has nevertheless shown strong growth for the third year in a row. The next few years, in which we can expect a much higher annual volume of maturities, should be worth watching from this point of view. It will therefore be very interesting to see whether the ESG market continues to grow as strongly in future. The figure of EUR 18.9bn of fresh ESG products in 2024 mentioned above accounts for 13% of the total primary market, based on a new issue volume so far of EUR 145.5bn in the EUR benchmark segment. On average over the period from 2019 to 2024, ESG placements have accounted for 10.7% of new issues. This shows a steady increase, although in our view, there is still a lot of headroom. In this respect, we should not overlook growing requirements in terms of quality placed on ESG products, especially in relation to issuers and their business models.

ESG benchmark covered bonds: 49 active issuers

After several ESG debuts already in 2024, we now have 49 active ESG issuers in the EUR benchmark covered bond segment. There were green debuts for Bausparkasse Schwäbisch Hall (DE), Shinhan Bank (KR) and Argenta Spaarbank (BE), among others. In 2024, Bausparkasse Schwäbisch Hall took advantage of the opportunity to place green Pfandbriefe twice, with an issue in January and another one in February of this year. There were two ESG debuts in the form of social benchmarks from Italy: both Credito Emiliano and Banca Monte dei Paschi di Siena opted for this variant, increasing the number of active Italian ESG issuers to four. Moreover, we saw the first ESG benchmark from Canada. Equitable Bank also opted for a social format for its issue in April this year. The EUR 500m offering placed as part of the bank's own <u>Sustainable Bond Framework</u> was announced as a secured social standard bond. In line with the Social Bond Principles chapter 4(ii) Appendix I (cf. table overleaf; summarised from the English original), this is a bond where "social projects" will not necessarily have to securitize the corresponding (covered) bond. In our view, this format and clear communication is a rather rare issue form for green and/or social bonds.



Issuers of ESG EUR benchmarks¹

Issuer	Country	ESG Type	Volume (in EURbn)	No. of ESG BMKs	Last Issuance
BAWAG	AT	Green	0.50	1	2021
Hypo Tirol Bank	AT	Social	0.50	1	2021
UniCredit Bank Austria	AT	Green	2.00	3	2021
Argenta Spaarbank	BE	Green	1.50	2	2024 2024
Equitable Bank	CA	Social	0.50	1	2024
UniCredit Bank Czech Republic	CZ	Green	0.50	1	2024
Bausparkasse Schwaebisch Hall	DE	Green	1.00	2	2023 2024
	DE	Green	1.00	2	2024
Bayerische Landesbank Berlin Hyp	DE	Green & Social	7.88	13	2023
Deutsche Kreditbank	DE	Social	3.35	6	2023
	DE			5	2024
DZ HYP	DE	Green	3.25	3	2024
ING-DiBa		Green	3.25		
Landesbank Baden-Wuerttemberg	DE	Green	1.50	2	2023
Muenchener Hypothekenbank	DE	Green	3.75	5	2023
Norddeutsche Landesbank	DE	Green	2.50	5	2024
UniCredit Bank	DE	Green	1.00	2	2022
Wuestenrot Bausparkasse	DE	Green	0.60	1	2023
Caja Rural de Navarra	ES	Green & Sustainability	1.60	3	2023
Eurocaja Rural	ES	Sustainability	0.70	1	2021
Kutxabank	ES	Social	1.00	1	2015
Nordea Kiinnitysluottopankki	FI 	Green	2.00	2	2023
OP Mortgage Bank	FI 	Green	1.75	2	2022
Arkea Home Loans SFH	FR	Green	1.00	1	2023
BPCE SFH	FR	Green	6.00	5	2024
CAFFIL	FR	Green & Social	7.75	10	2024
Compagnie de Financement Foncier	FR	Social	1.00	2	2024
Credit Agricole Home Loan SFH	FR	Green & Social	4.75	4	2024
La Banque Postale Home Loan SFH	FR	Green & Social	3.75	4	2024
Societe Generale SFH	FR	Green	3.50	3	2021
Yorkshire Building Society	GB	Social	0.50	1	2021
Banca Monte dei Paschi di Siena SpA	IT	Social	0.75	1	2024
Banco BPM	IT	Green	0.75	1	2022
Credit Agricole Italia	IT	Green	1.00	2	2024
Credito Emiliano	IT	Social	0.50	1	2024
Hana Bank	KR	Social	1.10	2	2023
Kookmin Bank	KR	Green & Sustainability	2.00	4	2024
Korea Housing Finance	KR	Social	7.05	10	2024
Shinhan Bank	KR	Green	0.50	1	2024
Cooperatieve Rabobank	NL	Green	1.25	1	2023
Nationale-Nederlanden Bank NV	NL	Green	1.25	2	2023
DNB Boligkreditt	NO	Green	3.00	2	2021
Eika Boligkreditt	NO	Green	1.00	2	2022
SpareBank 1 Boligkreditt	NO	Green	2.75	3	2023
Sparebanken Soer Boligkreditt	NO	Green	1.00	2	2022
Sparebanken Vest Boligkreditt	NO	Green	1.25	2	2021
SR-Boligkreditt	NO	Green	0.50	1	2019
PKO Bank Hipoteczny	PL	Green	0.50	1	2022
Stadshypotek	SE	Green	1.00	1	2023
Slovenska Sporitelna	SK	Green	0.50	1	2022

Source: Market data, issuers, NORD/LB Floor Research; ¹ bold = inaugural ESG deal



European Green Bond Standard: new option for issuing sustainable bonds

In the following, we propose to take a closer look at a number of regulatory conditions. For even more detailed information, we would refer our readers to our annual <u>ESG Update</u>. At present, issuers wishing to place internationally recognised ESG covered bonds only have one option, namely to apply the ICMA Bond Principles. These are normally the Green Bond Principles (GBP), Social Bond Principles (SBP) and Sustainability Bond Guidelines (SBG), from the bonds issued on the basis of the ICMA Principles get their respective category names. According to the ICMA, 97% of sustainable bonds issued in 2023 were based on these principles. The EU Green Bond Standard (EU GBS) will come into force from 21 December 2024 and will thereafter aim to provide another option for issuers to place sustainable bonds on the market which are reviewed by an external supervisory body. Ultimately, the EU GBS should serve as a voluntary standard with the aim of promoting the green transformation of financial markets with the help of a better framework. Both private and public issuers will be able to use the standard. As things stand at present though, it is not known which issuers are planning to use the new standard.

Requirements for EU green bonds

In order to qualify as a covered bond certified under the new European Green Bond Standard, potential issuers will be required to meet specific requirements. Firstly, they will have to publish an EU Green Bond Factsheet certified externally prior to the issue. There will be compulsory detailed reporting, including full transparency regarding use of proceeds ("allocation reporting") and ecological uses ("impact reporting"). At the same time, proceeds will have to be used for projects which fully comply with the EU Taxonomy (exemptions as per Section 5(1): 85%), whereby the grandfathering period in the case of changes in the taxonomy will be seven years. An external reviewer will be required in order to check that the taxonomy requirements are correctly met. In order to ensure the quality and reliability of reviews, reviewers will have to be registered with the European Securities and Markets Authority (ESMA) and at the same time be subject to its supervision (investor protection and market integrity).

EU Taxonomy: central component for the financing of sustainable growth

The <u>EU Taxonomy regulation</u> is the cornerstone of the <u>EU action plan on financing sustainable growth</u> published in 2018. The package aims to promote the capitalisation of sustainable investment in order to reach net zero in the EU by 2050 and is compatible with the aims of the Paris Agreement of 2015. The EU Taxonomy classified economic activities in relation to their degree of ecological sustainability and serves as a guide for investors in the financing of sustainable economic activities. In order to be classified as ecologically sustainable, the economic activity must a) make a significant contribution to realising one of the six defined environmental objectives; b) do no significant harm to other environmental objectives; c) be exercised while adhering to minimum social standards, and d) comply with technical screening criteria. At the same time, more precise details of and additional information on the EU Taxonomy can be found in special legal acts (so-called Delegated Regulation). One such example is the Climate Delegated Act, which among other things sets out precise provisions in relation to economic activities for the buildings sector.



Conclusion

The market for ESG covered bonds continues to experience strong growth, even though the issuance volume in 2024 will not quite match the record level seen in 2023. It will be very interesting to see whether the market can sustain this level of growth in the coming years, especially in the context of a far higher level of ESG maturities. Whatever the case may be, we see significant challenges in the overall market for ESG bonds, which we have also looked at in the context of our ESG Update. We are glad to report that there have been a number of new issuers of sustainable bonds coming to the market this year from various jurisdictions. We are still of the view that the covered bond segment can serve as a key element in the (re)financing of the green transformation. In order to do justice to this role, however, both issuers and investors are still dependent on the existing framework. New criteria relating to the EU Taxonomy and the EU Green Bond Standard should provide a meaningful addition to existing guidelines (e.g. ICMA criteria), but they do also bring about additional challenges for issuers. At the same time, however, regulatory matters are still important.



SSA/Public Issuers Current LCR classification for our SSA coverage

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

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

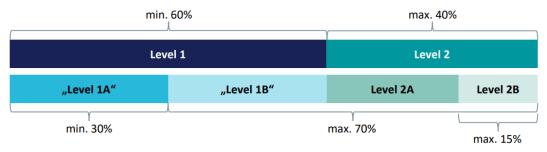
The objective of the LCR is to control the liquidity risk of a credit institution in such a way that sufficient High-Quality Liquid Assets (HQLA) are available at all times in order to survive a significant stress scenario lasting 30 days. It comprises the minimum liquidity buffer, which is required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

10 October 2014: European Commission publishes LCR Regulation

After there had been a lack of clarity for a long time about the precise definition of HQLA, as well as the EBA recommendation published at the end of 2013 only leading to further uncertainty, the <u>Liquidity Coverage Requirement Delegated Act</u> was finally published on 10 October 2014. This LCR legal act specified in particular which assets are to be treated as HQLA in the future. A revised version of the LCR Regulation first published in July 2018 took effect from 30 April 2020. This governs the regulation concerning assets from third countries, repo transactions, CIU shares and stocks. An update was also issued on 08 July 2022, which has resolved clashes between the specific liquidity requirements for covered bonds and the existing general liquidity requirements of the CRR.

Categorisation in different liquidity levels

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



Source: LCR-R, NORD/LB Floor Research



Classification overview

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



Minimum haircut

Classification overview (continued)

	Level 2A assets (Art. 11 LCR Regulation)	(for shares or units in CIUs)
(a)	Assets representing claims on or guaranteed by regional governments, local authorities or PSEs in an EEA Member State, which are assigned a risk weight of 20% according to Art. 115(1)(5) and Art. 116(1)(2)(3) CRR, respectively.	15% (20%)
(b)	Assets representing claims on or guaranteed by the central government or central bank of, or regional government, local authority or PSE in, a third country, which are assigned a risk weight of 20% according to Art. 114(2) or Art. 115 respectively, or Art. 116.	15% (20%)
(c)	Qualifying EEA covered bonds which meet all the requirements of Art. 11(c), including issue size at least EUR 250m or equivalent in domestic currency, rating: min. CQS 2 or if no rating, a risk weigh of 20% according to Art. 129(5) CRR.	15% (20%)
(d)	Qualifying covered bonds from third countries which meet all the requirements of Art. 11(d), including being issued by a credit institution or a 100% subsidiary of a credit institution guaranteeing the issue, issue size at least EUR 500m or equivalent in domestic currency, rating: min. CQS 1 or if no rating, a risk weight of 10% according to Art. 129(5) CRR.	15% (20%)
	Corporate debt securities which meet all of the following requirements:	
, ,	(i) CQS 1 (minimum rating AA- or equivalent in the case of a short-term credit assessment)	450((000()
(e)	(ii) Issue size of at least EUR 250m or equivalent in domestic currency	15% (20%)
	(iii) Maximum time to maturity of the securities at the time of issuance is 10 years.	
	Level 2B assets (Art. 12 LCR Regulation)	Minimum haircut (for shares or units in CIUs)
(a)	Exposures in the form of ABS under certain conditions (Art. 13 LCR Regulation)	25-35% (30-40%)
	Corporate debt securities which meet all of the following requirements:	
(b)	(i) CQS ≤ 3	50% (55%)
(5)	(ii) Issue size of at least EUR 250m or equivalent in domestic currency	3070 (3370)
	(iii) Maximum time to maturity of the securities at the time of issuance is 10 years.	
(c)	Shares or units, provided that they meet certain conditions (Art. 12(1)(c) LCR Regulation).	50% (55%)
(d)	Restricted-use committed liquidity facilities provided by the ECB, the central bank of an EEA Member State, or a third country under certain conditions (Art. 14 LCR Regulation).	- (-)
(e)	Qualifying EEA covered bonds which meet the requirements of Art. 12(1)(e) LCR Regulation.	30% (35%)
(f)	Only for religiously observant credit institutions: certain non-interest bearing assets.	50% (55%)
	CQS = Credit Quality Step (rating class) as defined in CSA ce: LCR-R, NORD/LB Floor Research	

Mapping table (long-term)

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

Source: CRR, NORD/LB Floor Research

NB: Other rating agencies indicated in Regulation EU/2016/1799



LCR classification of assets (Articles 10 - 12 LCR Regulation) Classified as credit Level 1 asset No haircut LCR Art. 35 By a sovereign EEA member state Not eligible Exception (e)(i) COS 1 Level 1 asset No haircut Level 1 asset No haircut CQS 2 Exception (d) Level 2A asset 15% haircut Level 1 asset CQS > 2 Exception (d) Not eligible 0% RW Level 1 asset No haircut 20% RW Level 2A asset 15% haircut By a sub-sovereign EEA member state Not eligible 0% RW By a PSE Sub-Sovereign Level 1 asset No haircut 20% RW Level 2A asset 15% haircut Exception (d) Level 1 asset No haircut by central government or central bank Level 2B asset 50% haircut Not eligible Level 1 asset No haircut By a supranational Explicitly 117(2) and 118 CRR Not eligible guaranteed Level 1 asset No haircut Classified as. Exception (e)(i) Not eligible Credit institution Level 1 asset No haircut Exception (e)(ii) Not eligible Issue size ≥ EUR 250m Level 2A asset 15% haircut CQS 1 and time to maturity ≤ 10y Not eligible Issue size ≥ EUR 250m Level 2B asset 50% haircut Corporate CQS 2 or 3 Not eligible CQS > 3 Not eligible 0% RW Level 1 asset No haircut 20% RW 15% haircut Not eligible Sub-Sovereign EEA member state PSE Not eligible 0% RW PSE Sub-Sovereign Level 1 asset No haircut 20% RW Level 2A asset Level 1 asset No haircut Exception (d) Explicitly guaranteed by central government Higher RW Level 2B asset Not eligible Supranational in Level 1 asset No haircut Supranational 117(2) and 118 CRR Not eligible See classification of Covered

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

Source: LCR-R, NORD/LB Floor Research

Classification of sovereigns

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



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

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

Exemption Article 10(1)(e) LCR Regulation

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

(i)

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

(ii)

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

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



Explicitly guaranteed bank bonds

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

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

SSAs: classification depends on several factors

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

Classification of supranationals

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



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

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

Source: CRR, NORD/LB Floor Research

Classification of PSEs and sub-sovereigns

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



Interim conclusion for sub-sovereigns and PSEs

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

PSE definition is gaining in importance

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

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

PSE list provides (some) clarity

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

Level 2 classification possible for non-PSEs

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

Classification of corporates

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



Classification of individual issuers

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

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

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

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

Source: NORD/LB Floor Research

LCR classification of assets representing claims on or guaranteed by supranationals

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

Source: NORD/LB Floor Research

Clarity on supranationals, but ambiguity regarding non-explicit guarantees

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

 $[\]ensuremath{^{**}}$ Exemption: Guaranteed bonds from Madeira are classified as Level 1.



LCR classification of assets representing claims on or guaranteed by agencies

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

Source: NORD/LB Floor Research



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

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

^{*} According to classification of <u>Banque de France</u>
** Applicability of Article 10(1)(e)(i) confirmed by <u>De Nederlandsche Bank</u> Source: NORD/LB Floor Research



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

Issuer	Country	Ticker	Haircut	Rationale	Current LCR level
KBN	NO	KBN	15%	Art. 11(1)(a): PSE with RW of 20%	Level 2A
SEK	SE	SEK	15%	Level 2A classification in line with Art. 11(1)(a):	Level 2A
Kommuninvest	SE	KOMINS	-	Level 1 classification in line with Art. 10(1)(e)(i)	Level 1
MuniFin	FI	KUNTA	-	Art. 10(1)(c)(v): explicit guarantee from PSE Art. 10(c)(iv): Explicit	Level 1
KommuneKredit	DK	KOMMUN	-	guarantee from RGLA with risk weight of 0%	Level 1
Finnvera	FI	FINNVE	-	Art. 10(1)(c)(i): Explicit state guarantee	Level 1
ICO	ES	ICO	-	Art. 10(1)(c)(i): explicit state guarantee	Level 1
FADE	ES	FADE	-	Art. 10(1)(c)(i): explicit state guarantee	Level 1
ADIF-AV	ES	ADIFAL	-	Art. 10(1)(c)(v): PSE with risk weight of 0%	Level 1
CORES	ES	CORES	-	Art. 11(1)(a): PSE with RW of 50%	Not eligible
CDP	IT	CDEP	-	Not a corporate, RW too high to apply Art. 11(1)(a)	Not eligible
REFER	PT	REFER	-	Art. 10(1)(c)(i): explicit state guarantee (only guaranteed bonds)	Level 1 (guaranteed bonds)
BGK	PL	BGOSK	-	Art. 10(1)(c)(i): explicit state guarantee (only guaranteed bonds)	Level 1 (guaranteed bonds)
EXIM	HU	MAEXIM	-	Art. 10(1)(c)(i): explicit state guarantee	Level 1
DCL	BE	DEXGRP	-	Art. 10(1)(c)(i): explicit state guarantee (only guaranteed bonds)	Level 1 (guaranteed bonds)
JFM	JP	JFM	15%	Art. 11(1)(b): explicit state guarantee (only guaranteed bonds)	Level 2A (guaranteed bonds)
KDB	КО	KDB	15%	Level 2A classification in line with Art. 11(1)(b)	Level 2A
KEXIM	КО	EIBKOR	15%	Level 2A classification in line with Art. 11(1)(b) Art. 11(1)(b) explicit	Level 2A
DBJ	JP	DBJJP	15%	state guarantee (only guaranteed bonds)	Level 2A (guaranteed bonds)
IDIK	ко	INDKOR	15%	Level 2A classification in line with Art. 11(1)(b)	Level 2A
IBK				4 . 44/4/// 1: ::	
EDC	CA	EDC	-	Art. 11(1)(b) explicit state guarantee Not a corporate, RW too high to	Level 1

Source: NORD/LB Floor Research

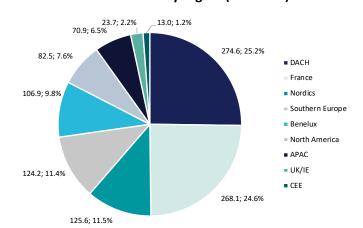


Charts & Figures Covered Bonds

EUR benchmark volume by country (in EURbn)

142.0; 13.0% 268.1; 24.6% 40.5; 3.7% 48.8; 4.5% 49.8; 4.6% 59.6; 5.5% 211.3; 19.4% 82.5; 7.6% 82.7; 7.6%

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	268.1	258	29	0.98	9.2	4.6	1.48
2	DE	211.3	300	46	0.65	7.7	3.9	1.52
3	NL	82.7	84	3	0.92	10.4	5.8	1.38
4	CA	82.5	61	1	1.33	5.6	2.6	1.45
5	ES	68.6	54	5	1.15	11.1	3.1	2.17
6	AT	59.6	100	5	0.59	8.0	4.1	1.56
7	IT	49.8	64	5	0.76	8.5	3.9	2.01
8	NO	48.8	59	12	0.83	7.2	3.4	1.10
9	FI	40.5	46	4	0.87	6.8	3.4	1.75
10	AU	35.7	33	0	1.08	7.1	3.2	1.83

■ FR

DE

NL

■ CA

■ ES

AT

• IT

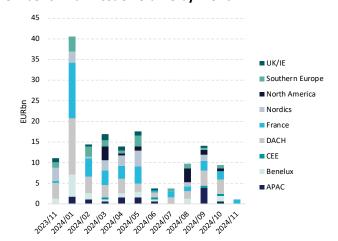
■ NO

■ FI

■ AU

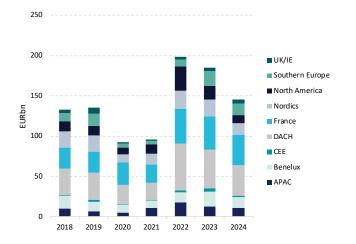
Others

EUR benchmark issue volume by month



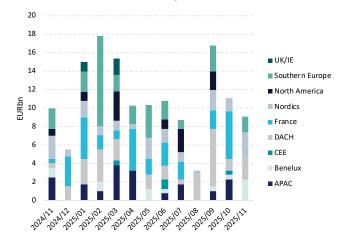
Source: Market data, Bloomberg, NORD/LB Floor Research

EUR benchmark issue volume by year

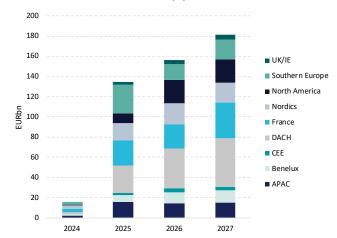




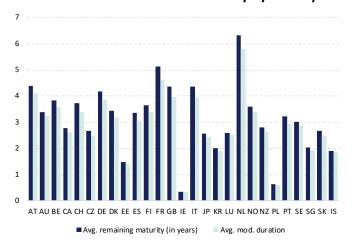
EUR benchmark maturities by month



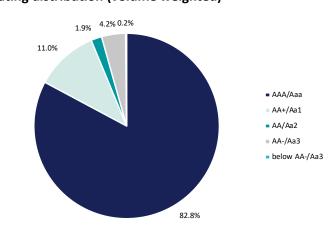
EUR benchmark maturities by year



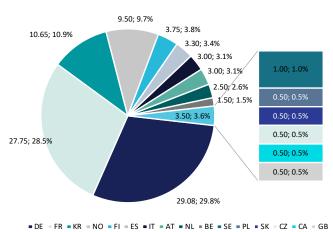
Modified duration and time to maturity by country



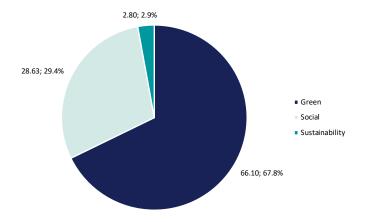
Rating distribution (volume weighted)



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



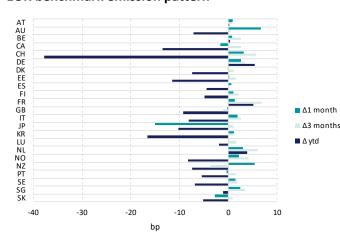
EUR benchmark volume (ESG) by type (in EURbn)



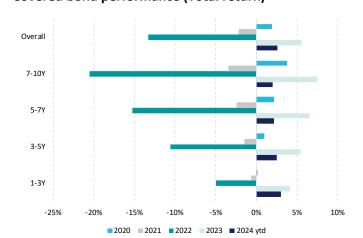
Source: Market data, Bloomberg, NORD/LB Floor Research



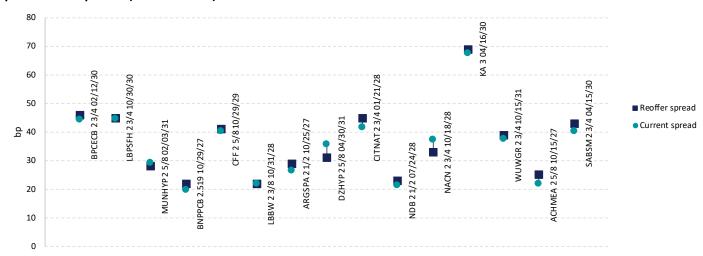
EUR benchmark emission pattern



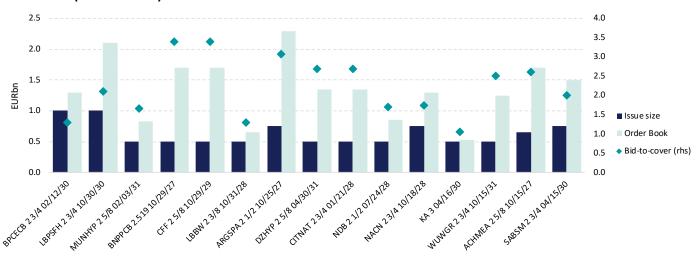
Covered bond performance (Total return)



Spread development (last 15 issues)



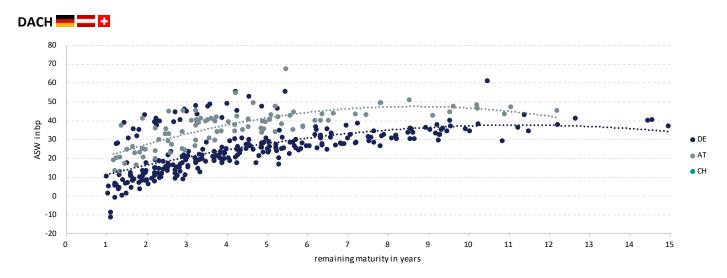
Order books (last 15 issues)

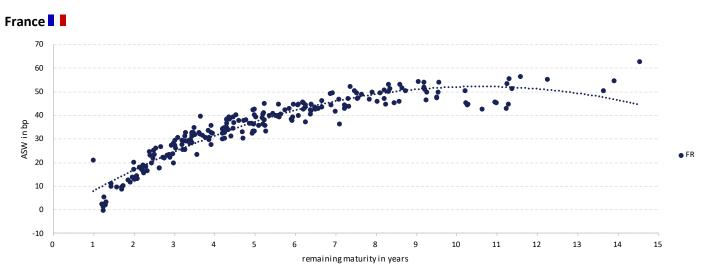


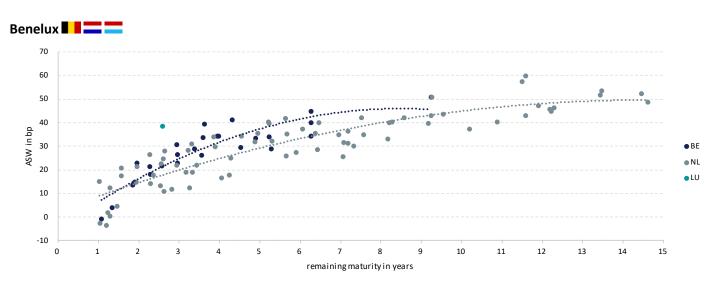
Source: Market data, Bloomberg, NORD/LB Floor Research



Spread overview¹

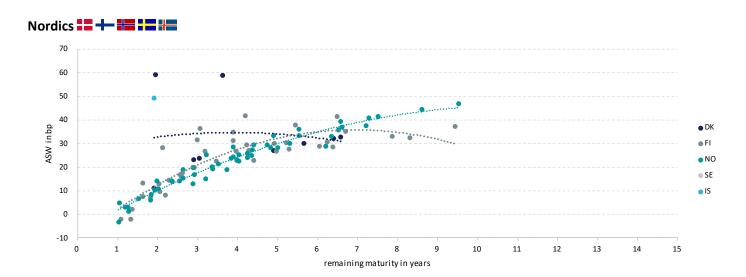


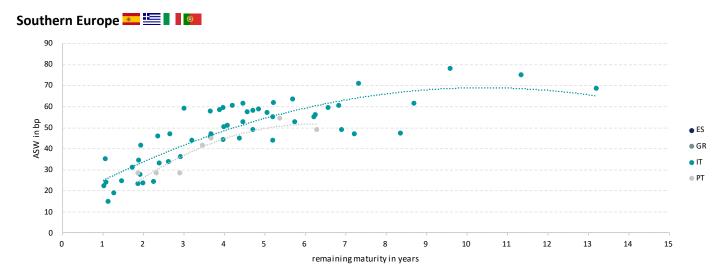


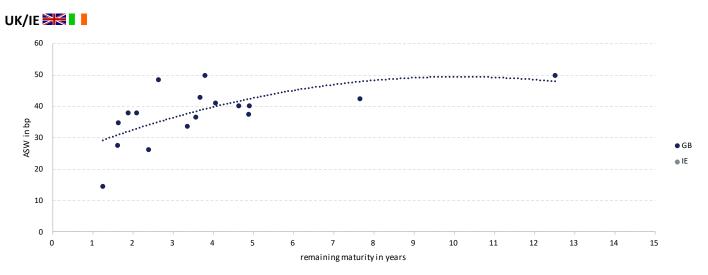


Source: Market data, Bloomberg, NORD/LB Floor Research 1 Time to maturity $1 \le y \le 15$



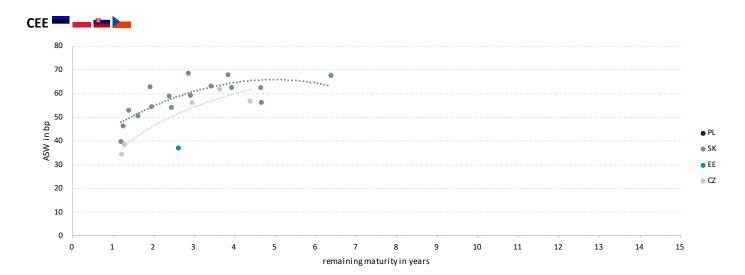


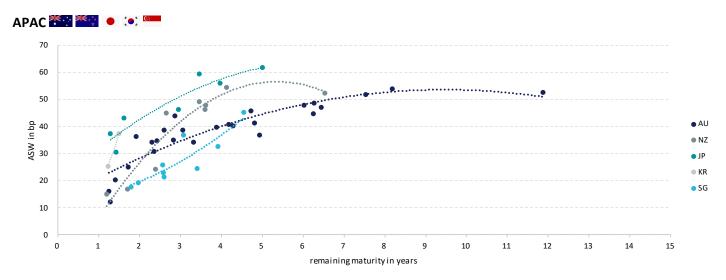


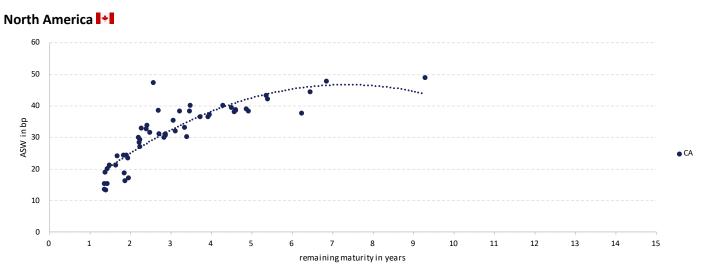


Source: Market data, Bloomberg, NORD/LB Floor Research







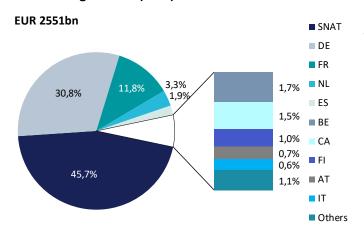


Source: Market data, Bloomberg, NORD/LB Floor Research



Charts & Figures SSA/Public Issuers

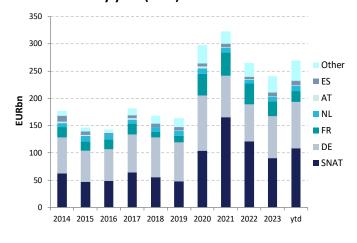
Outstanding volume (bmk)



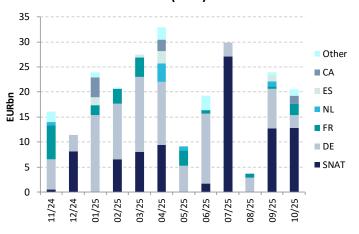
Top 10 countries (bmk)

Country	Vol. (EURbn)	No. of bonds	ØVol. (EURbn)	Vol. weight. ØMod. Dur.
SNAT	1.164,6	243	4,8	7,9
DE	786,1	590	1,3	6,1
FR	300,1	202	1,5	5,7
NL	83,0	68	1,2	6,4
ES	49,4	69	0,7	4,8
BE	43,1	46	0,9	10,2
CA	38,2	28	1,4	4,8
FI	25,2	26	1,0	4,2
AT	17,0	22	0,8	4,7
IT	15,6	20	0,8	4,4

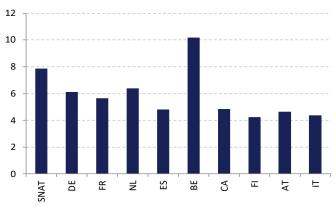
Issue volume by year (bmk)



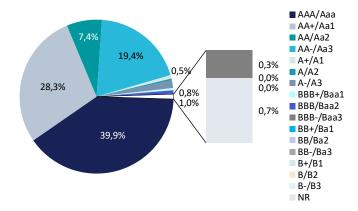
Maturities next 12 months (bmk)



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



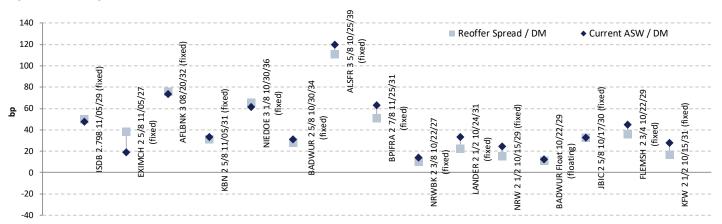
Rating distribution (vol. weighted)



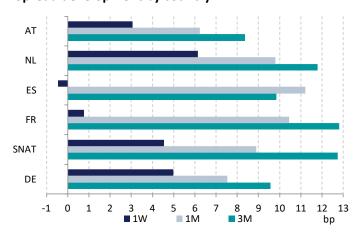
Source: Bloomberg, NORD/LB Floor Research



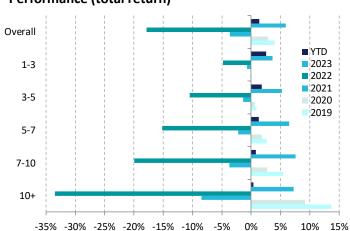
Spread development (last 15 issues)



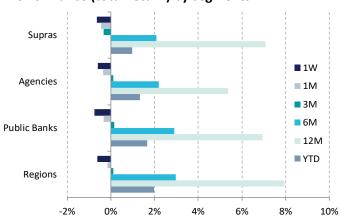
Spread development by country



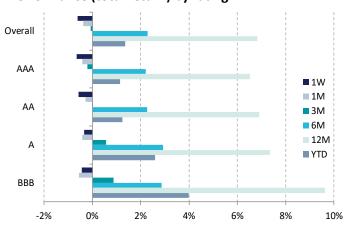
Performance (total return)



Performance (total return) by segments

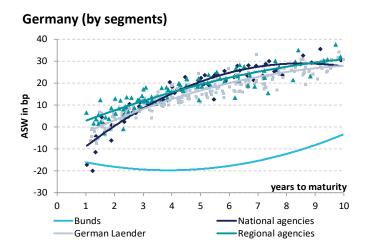


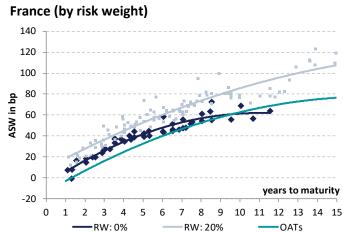
Performance (total return) by rating

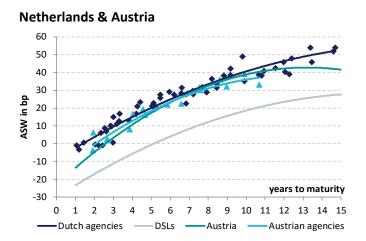


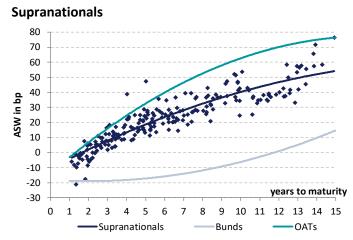
Source: Bloomberg, NORD/LB Floor Research

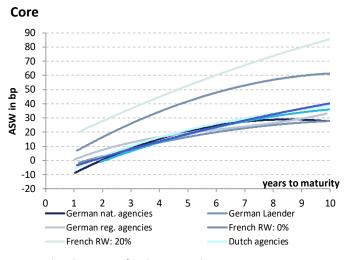


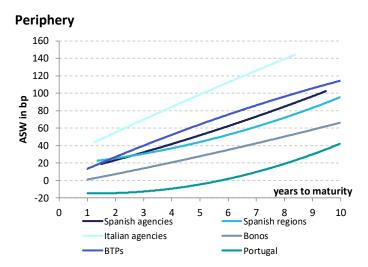












Source: Bloomberg, NORD/LB Floor Research



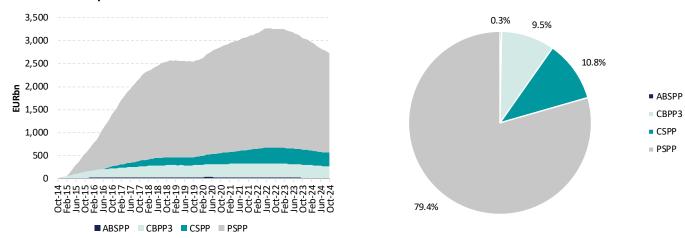
ECB tracker

Asset Purchase Programme (APP)

	ABSPP	СВРР3	CSPP	PSPP	APP
Sep-24	8,003	258,768	297,662	2,196,710	2,761,143
Oct-24	7,748	258,032	294,507	2,165,737	2,726,024
Δ	-256	-736	-3,154	-30,973	-35,119

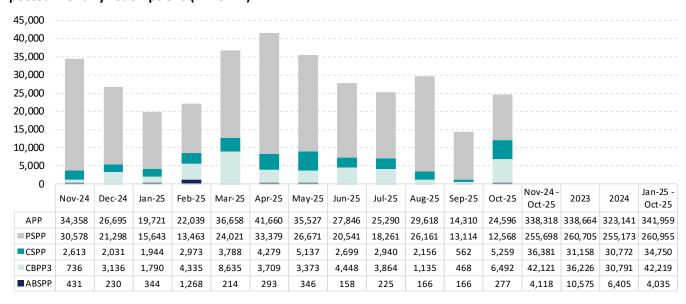
Portfolio development

Portfolio structure



Source: ECB, NORD/LB Floor Research

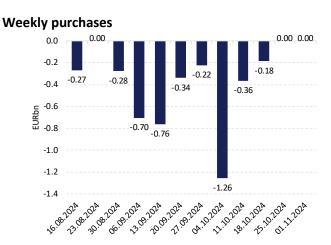
Expected monthly redemptions (in EURm)

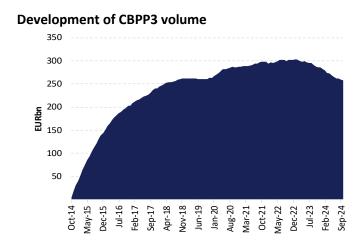


Source: ECB, Bloomberg, NORD/LB Floor Research

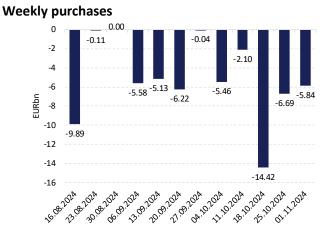


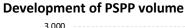
Covered Bond Purchase Programme 3 (CBPP3)





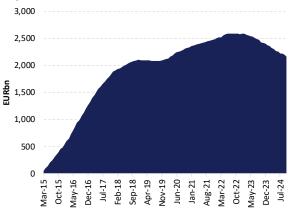
Public Sector Purchase Programme (PSPP)





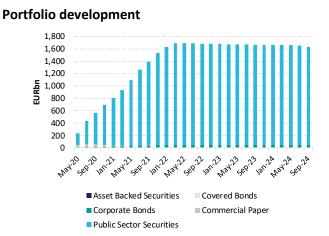
Weekly purchases

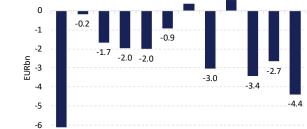
1



Source: ECB, Bloomberg, NORD/LB Floor Research

Pandemic Emergency Purchase Programme (PEPP)





0.6

0.4

Source: ECB, Bloomberg, NORD/LB Floor Research



Appendix

Overview of latest Covered Bond & SSA View editions

Publication	Topics				
35/2024 ♦ 30 October	Maturities the future driver in the primary market?				
	■ German-speaking Community of Belgium — spotlight on DGBE				
34/2024 ♦ 23 October	 A relative value investigation of covered bonds 				
	 Current risk weight of supranationals & agencies 				
33/2024 ♦ 16 October	The covered bond universe of Moody's: an overview				
	■ Teaser: Issuer Guide – European Supranationals 2024				
32/2024 ♦ 09 October	 A look at the CEE covered bond market 				
	■ NGEU: Green Bond Dashboard				
31/2024 ♦ 02 October	 A review of Q3 in the Covered Bond segment 				
	■ Teaser: Beyond Bundeslaender – Spanish Regions				
30/2024 ♦ 25 September	■ The EUR benchmark segment after the summer break				
	Update on German municipality bonds: DEUSTD and NRWGK				
29/2024 ♦ 18 September	■ ECBC publishes annual statistics for 2023				
	 Sukuk bonds – an update on sharia-compliant investments 				
28/2024 ♦ 11 September	■ Banca Sella joins the EUR sub-benchmark segment				
	 Teaser: Beyond Bundeslaender – Autonomous Portuguese regions 				
27/2024 ♦ 04 September	New Pfandbrief issuer: Lloyds Bank GmbH				
	 Agencies and resolution instruments of the BRRD 				
26/2024 ♦ 21 August	 Central bank eligibility of covered bonds 				
	■ Teaser: Issuer Guide – German Agencies 2024				
25/2024 ♦ 14 August	 Development of the German property market (vdp index) 				
	Classification of Supranationals and Agencies under Solvency II				
24/2024 ♦ 07 August	 Transparency requirements §28 PfandBG Q2/2024 				
	■ Teaser: Issuer Guide – Spanish Agencies 2024				
23/2024 ♦ 10 July	Repayment structures on the covered bond market: An update				
	SSA review: EUR-ESG benchmarks in H1/2024				
22/2024 ♦ 03 July	 Covereds: Half-year review and outlook for the second half of 2024 				
	SSA half-year review 2024				
21/2024 ♦ 26 June	The covered bond universe of Moody's: An overview				
	■ Teaser: Issuer Guide – Austrian Agencies 2024				
20/2024 ♦ 19 June	 New EUR benchmark issuer from Slovakia 				
	ECB repo collateral rules and their implications for Supranationals & Agencies				
19/2024 ♦ 12 June	 ESG covered bonds: Green deals continue to dominate 				
	■ Teaser: Issuer Guide - Nordic Agencies 2024				
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:

<u>Issuer Guide – Covered Bonds 2024</u>

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)

<u>Transparency requirements §28 PfandBG Q2/2024 Sparkassen</u> (quarterly update)

SSA/Public Issuers:

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

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

<u>Issuer Guide – Canadian Provinces & Territories 2024</u>

<u>Issuer Guide – European Supranationals 2024</u>

<u>Issuer Guide – French Agencies 2023</u>

<u>Issuer Guide – Nordic Agencies 2024</u>

<u>Issuer Guide – Dutch Agencies 2024</u>

<u>Issuer Guide – Non-European Supranationals (MDBs) 2024</u>

Beyond Bundeslaender: Belgium

Beyond Bundeslaender: Greater Paris (IDF/VDP)

Beyond Bundeslaender: Spanish regions

Fixed Income Specials:

ESG-Update 2024

ECB: An autumn of interest rate cuts that wasn't supposed to be?



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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

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Origination Corporates	+49 511 361-2911

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