

The 95 theses written by Martin Luther are giving us a public holiday.

The next edition of the CSV will be published on **08 November 2023**.



Covered Bond & SSA View

NORD/LB Markets Strategy & Floor Research



Agenda

Market overview

Covered Bonds	3
SSA/Public Issuers	7
Banks in Europe: the EBA Risk Dashboard in Q2 2023	10
Teaser: Issuer Guide – Spanish Agencies 2023	13
Charts & Figures	
Covered Bonds	16
SSA/Public Issuers	22
ECB tracker	
Asset Purchase Programme (APP)	25
Pandemic Emergency Purchase Programme (PEPP)	27
Overview of latest Covered Bond & SSA View editions	28
Publication overview	29
Contacts at NORD/LB	30

Floor analysts:

Covered Bonds/Banks

Dr Frederik Kunze

frederik.kunze@nordlb.de

Melanie Kiene, CIIA

melanie.kiene@nordlb.de

SSA/Public Issuers

Dr Norman Rudschuck, CIIA

norman.rudschuck@nordlb.de

Christian Ilchmann

christian.ilchmann@nordlb.de



Market overview Covered Bonds

Author: Dr Frederik Kunze

The ECB and the covered bond market: new "distortions" underway already?

During the extended period in which the ECB has been conducting its purchase programmes or offering attractive refinancing options via the central bank, we have repeatedly commented on the distortions to the covered bond segment, which materialised on both the supply and the demand side. While the impact of these distortions has declined perceptibly, we are already seeing new stimuli in ECB monetary policy that will have an impact on banks' funding and consequently also on future supply in the EUR benchmark segment. The influence of the level of interest rates on lending and on demand for new mortgage loans as well as general sentiment on the market, which covered bonds, as an asset class, cannot escape entirely, is also certainly apparent. This should not, however, be generally interpreted as a decline in the need for refinancing. It should be noted that funding via senior bonds can become relatively more expensive during periods of market volatility. However, in the battle to contain inflation in the eurozone, the ECB's Governing Council is also looking at other instruments (see ECB Preview). Halting PEPP reinvestment earlier (i.e., earlier than the end of 2024) would certainly have a more indirect impact. An adjustment to the minimum reserve requirements (which we do not expect at the upcoming meeting) could make funding via covered bonds more attractive for some issuers if the banks focus more closely on monitoring their LCR ratio. Overall, however, we believe that the covered bond market and, in particular, the EUR benchmark segment, is exposed to fewer specific distortions here and hope that there will be no "cannibalisation à la CBBP3 and TLTRO II/III" once again. In 2024, we expect a respectable supply in the order of magnitude of EUR 150-155bn at least. However, the figure is subject to the specific funding in the current year. Spreads are likely to have largely completed their repricing at the end of 2023 and increased "somewhat" from their current levels.

Primary market: four benchmarks and the first sub-benchmark for more than four weeks Caution is currently the watchword on the primary market. However, we can report four new benchmarks. Nordea (FI) approached investors on Thursday and placed EUR 1.0bn (maturity: 5.0y) at a – rather pricey – ms +26bp. The secondary market's performance was correspondingly subdued. It was joined by BNP Paribas Fortis (BE), which was no longer on our list of potential issuers for 2023, the following day. A total of EUR 1.0bn was allocated at ms +32bp (new issue premium: +9bp). The notable premium compared with fair value did not really help in the secondary market. Yesterday (Tuesday), Helaba (DE) placed a public sector Pfandbrief (3.8y). A total of EUR 750m was allocated at ms +15bp. The appearance of Sparebank 1 Boligkreditt (NO) is most welcome. The third benchmark (EUR 1.0bn; 4.75y) from Norway was priced at ms +36bp and therefore narrowed by four basis points in the marketing phase. With low levels of issuing activity in the EUR benchmark segment, we are definitely seeing a certain scarcity value. Thanks to Stadtsparkasse München (DE), we were also able to welcome the first sub-benchmark for more than four weeks. A deal for EUR 250m (5.0y; WNG) was placed at ms +27bp.



Issuer	Country	Timing	ISIN	Maturity	Size	Spread	Rating	ESG
SpareBank 1 Boligkreditt	NO	24.10.	XS2710358297	4.8y	1.00bn	ms +36bp	- / Aaa / -	-
Helaba	DE	24.10.	XS2711420054	3.8y	0.75bn	ms +15bp	AAA / Aaa / -	-
BNP Paribas Fortis	BE	20.10.	BE0002974559	5.0y	1.00bn	ms +32bp	- / Aaa / -	-
Nordea	FI	19.10.	XS2708690685	5.0y	1.00bn	ms +26bp	- / Aaa / -	-

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

Internal matters: Deutsche Hypo Real Estate Economic Index starts subdued Q4

Current figures for the Deutsche Hypo Real Estate Economic Index were published a few days ago. A fall of 4.9% compared with the previous month (to 66.4 points) was reported for the month of October for the index, which is based on responses from around 1,200 real estate experts. This was caused by setbacks in both the investment climate and the earnings climate. Growth (+2.4% to 103.1 points) was reported solely for the logistics climate. For Ingo Martin (Head of Real Estate Finance Origination), it is also true that there are signs of "selective" movement in the market once again. For instance - unlike the 2008 financial crisis - there is enough liquidity. However, project developers are confronted with more stringent requirements in terms of their debt servicing abilities. With regard to the office property market, Martin is seeing a "flight to quality" – towards properties in "top locations", for example. The retail industry is still facing significant challenges as well (see also the NORD/LB Real Estate Special on the Future of City Centres [German only]). In particular, the market for German Pfandbriefe is characterised by comparatively substantial shares of commercial property financing. We recently committed ourselves to this subsegment in a public and online series of lectures featuring well-known lecturers. You can see the presentation documents here: NORD/LB Capital Markets Spotlight: Commercial Real Estate - Bow Wave or Tsunami? [German only]. We would like to thank all our speakers and participants for their valuable contributions and their active participation in the round table discussions.

EMF review of Q2: further slowdown on European mortgage markets

Looking at the real estate segment at a European level too, it is clear that the situation is sobering at least. In the context of our weekly publication, we regularly refer to the analyses of the real estate and mortgage markets presented by the European Mortgage Federation (EMF). Not surprisingly, the current quarterly review for Q2 2023 states that the general slowdown has continued. We derive the majority of the data from both the aggregate and the comparative market analysis of the individual jurisdictions (EU27 plus UK). Accordingly, the dramatic impact of current monetary policy throughout the world and somewhat sluggish economic activity are uniting the mortgage markets. At the same time, labour markets overall remain extremely strong, which will reduce the risk of payment defaults or arrears on mortgage loans in the longer term. As far as changes in property prices are concerned, the picture is definitely less uniform. Markets in Northern Europe recorded significant falls here, while prices were still trending upwards in Italy, Spain and Greece during the second quarter. At a national level, the decision-makers have also taken measures in more and more jurisdictions that are expected to further ease the pressure on budgets. In Poland, for example, the supervisory authority introduced a new quota for long-term loans in May 2023, which should also benefit covered bond funding. Some governments (including France, for instance) have also focused more closely on the supply side of the real estate market.



Focus on property markets: S&P presents Global Covered Bond Insight Q4/2023...

Not surprisingly, developments on the real estate markets are also preoccupying the rating experts tasked with evaluating covered bonds. Solely the fact that the composition of cover pools for the vast majority of jurisdictions is based on the specific requirements of national covered bond legislation ultimately gives investors additional stability, especially in volatile real estate markets. Nevertheless, the current falls in property prices seen in many economies and their (possible) impact on ratings cannot be ignored. Within the current issue of its Global Covered Bond Insight, the experts at S&P focused on the price correction on the real estate market. Accordingly, the price trend will also affect the risk assessment of the cover assets, although immediate consequences for the ratings or their outlook are not expected here. S&P attributes this not least to the more than respectable state of employment markets in European economies. Nevertheless, the current period of economic weakness has led to certain downside risks, also supported by the trend in interest rates. The rating experts also assume that the pressure on property prices will continue into 2025.

S&P forecasts at country level: nominal house prices (Y/Y in %; in Q4 in each case)

Issuer	2020	2021	2022	2023	2024	2025	2026
Germany	8.7	12.6	-3.6	-4.9	-1.5	1.0	2.0
France	6.3	7.0	4.6	-2.6	-4.0	1.5	2.5
Italy	1.6	4.1	2.8	0.0	-4.9	-2.0	1.0
Spain	1.7	6.3	5.5	-4.0	-2.0	1.5	2.0
Netherlands	8.8	19.0	5.3	-5.4	-1.5	1.0	2.3
Belgium	5.7	6.1	4.7	-2.4	-1.0	2.0	2.4
Portugal	7.9	11.5	11.3	-4.4	-3.0	2.0	4.1
Switzerland	5.4	8.3	5.5	0.3	0.0	1.5	2.0
UK	6.0	8.3	9.6	-6.6	-4.9	1.4	3.0
Ireland	0.7	13.8	8.6	-5.1	-4.3	1.0	3.5
Sweden	5.4	11.0	-3.7	-5.4	1.8	2.8	3.2

Source: S&P, NORD/LB Markets Strategy & Floor Research

...and also discusses the impact on the covered bond market in this context

In their Covered Bond Insight, the experts at S&P approach the possible impacts of current developments on international property markets on covered bond ratings via the conceivable route of sustained payment arrears on the part of borrowers. As previously mentioned, the current employment situation, which is still sound, limits this risk considerably. As part of a scenario analysis (for the jurisdictions Ireland, Spain, Italy and the UK), S&P rated the impact of the forecast trends on real estate markets and their own economic expectations. In our opinion, the inferences based on the downside scenario (including a summarised increase in the employment rate of three percentage points and a corresponding fall in property prices of 20%) must be highlighted in this connection. There would still be sufficient credit enhancements for the rated programmes to ensure that it is unlikely that there would be any changes to ratings. Nevertheless, the proportions of past due cover pool assets increase under the downside scenario – most significantly in Italy (+4.3 percentage points) and Ireland (+3.4 percentage points).



Portugal: Moody's presents current assessment of the Covered Bond Act ...

The minimum standards introduced by the Covered Bond Directive in Europe, which have been applicable since July 2022, have necessitated amendments to national legislation. Amendments have also been included in the Covered Bond Act in Portugal. A few days ago, the risk experts at Moody's presented an updated version of their Covered Bond Report on the legal framework in Portugal. The agency highlights the mandatory exclusion of nonperforming loans (more than 90 days in arrears) from the cover pool as one of the legislation's strengths. In the event of an issuer default, Moody's also appreciates the nomination of the cover pool administrator by the regulator and the framework for asset sales, whereas the act is weaker with regard to overcollateralisation requirements, among other matters. For instance, the act sets the requisite OC at 0%, which is below the requirements of the CRR, meaning that issuers must set themselves more stringent requirements than those required by the act in their respective programmes if they wish to achieve a CRR risk weighting of 10%, for example, in the best case. Moody's also cites the absence of guidelines for stress tests (including interest and currency risks) and the theoretical possibility of taking in non-CRR compliant assets as cover assets as weaker characteristics. According to Moody's, the latter option is not used by active issuers. It also states that the banks providing housing finance are still performing very well despite the increase in mortgage rates which are also regarded as triggers of the fall in prices.

... and we take a current look at the market for Portuguese covered bonds

The "active" institutions include Banco BPI, Banco Comercial Portugues, Banco Santander Totta, Caixa Economica Montepio Geral, Caixa Geral de Depositos and Novo Banco, whereby only Banco BPI, Banco Santander Totta and Caixa Economica Montepio Geral currently feature in the EUR benchmark segment. In 2023, Banco Santander Totta approached investors with two EUR benchmarks, while Banco BPI placed a deal successfully and even tapped this same issue in 2023. The outstanding volume of EUR benchmarks stands at EUR 5.35bn. This figure is well below the total volume on the market, which still contains around EUR 20bn of covered bonds not placed by joint leads and around EUR 13bn (which was explicitly categorised as retained deals in Bloomberg). We definitely see the potential here for a shift in the balance of power towards the EUR benchmark segment and also expect the group of active benchmark issuers to widen in this context. The issuer Novo Banco is cited as an example here. It has over EUR 5.50bn in outstanding covered bonds, which are all classified as retained issues. In the current Investor Presentation, we see both the reference to the amended repayment structure (from CPT to soft bullet) and quantification of the issuance potential (at EUR 1.25bn) as noteworthy. In our opinion, the switch of rating provider (from DBRS to Moody's) is also worth mentioning. Regarding the changes to the covered bond programme, in addition to the amendment to the repayment structure and the introduction of the statutory 180-day liquidity buffer, Novo Banco also lists the new Aa2 rating from Moody's, which will replace the A rating from DBRS. However, we must go far back with regard to the bank's earlier presence in the EUR benchmark segment: the only EUR benchmark that we have recorded in the database fell due as far back as February 2015. The most recent Portuguese issuers to no longer have bonds outstanding were Banco Comercial Portugues in May 2022 and Caixa Geral de Depositos in January 2022.



Market overview SSA/Public Issuers

Authors: Dr Norman Rudschuck, CIIA // Christian Ilchmann

ECB interest rate decision: Wait and see without calling it a pause

When the ECB Governing Council announces its interest rate decision on Thursday, it would be a huge surprise to read "adjustment of key interest rates" after the event. As we reported in our ECB preview, a pause is clearly to be expected. The wait-and-see attitude of the central bankers actually has some advantages. Once again, this would avoid making the wrong decision in an acute crisis situation. Certainly, a wait-and-see attitude should not be confused with an opportunity to sit back and relax, as there are plenty of topics up for discussion. More hawkish central bankers would certainly like the topic of PEPP or even other monetary policy instruments, such as minimum reserve requirements, to be a little more prominent on the agenda. Discussions on the economic situation are likely to be equally spirited. At the end of the day, many exits are conceivable given the current developments. Here, emerging inflation fears need to be weighed against the threat of a hard landing. This week, they are "just discussing". In a meeting-by-meeting approach, they might not need to think about December or 2024 yet - but then it is not that simple. The ECB's decision-makers should already be thinking now about how an interest rate climbdown could be achieved without causing market distortions. This will certainly not be a mirror image of the series of interest rate hikes.

EIB: Multilateral development banks with record climate financing in 2022

On 12 October, the report by the Multilateral Development Banks (MDBs) for 2022 was presented in Marrakech under the auspices of the EIB (ticker: EIB), which bundled data from the African Development Bank (ticker: AFDB), Asian Development Bank (ticker: ASIA), Council of Europe Development Bank (ticker: COE), European Bank for Reconstruction and Development (ticker: EBRD), Inter-American Development Bank Group (ticker: IADB) and the Islamic Development Bank (ticker: ISDB), among others organizations. Last year, around EUR 94bn was made available worldwide for climate protection measures - a new record following the value of just under EUR 78bn in 2021. The total amount is distributed as follows: low- and middle-income economies received around EUR 58bn of MDB climate finance in 2022, of which 63% (EUR 36bn) was for climate change mitigation finance and around 37% (EUR 22bn) for climate change adaptation finance. Around EUR 36bn was allocated to high-income economies. Of this total, just under 94% (EUR 34bn) was for climate change mitigation finance, and around 6% (EUR 2bn) was for climate change adaptation finance. With the figures presented, the MDBs in 2022 now exceed the 2025 climate finance targets for the second time in a row. These were defined within the framework of the UN Climate Action Summit in 2019 and provide for the equivalent of around EUR 47bn annually. "The remarkable efforts made by MDBs to increase climate finance in 2022 show that we are moving together in the right direction. Addressing the climate crisis can bring about positive social change, as climate change [...] exacerbates existing patterns of inequality." says CEB Governor Carlo Monticelli.



MuniFin presents new sustainability agenda

On 13 October, Municipality Finance (ticker: KUNTA) unveiled its sustainability agenda entitled "Enabler of sustainable welfare in society", which sets the framework and goals for the company's long-term sustainability efforts until 2035. The company commits to increasing the proportion of sustainable finance and, for the first time, has defined emissions reduction targets for financed buildings. Esa Kallio, CEO of MuniFin, comments: "The sustainability agenda is our way of measuring and communicating what we aim to achieve through our work. Our goals are now more aligned with what we are already doing and what we aspire to achieve in the future." Key themes include supporting societal welfare and accelerating Finland's green transition. The sustainability agenda consists of three parts. The first part addresses MuniFin's business environment from the perspective of sustainable development and how its operations relate to national and international goals. The agenda's second and most important part includes the actual themes, goals, and metrics for MuniFin's sustainability efforts. The third part discusses the future of the company's sustainability work. However, as indicated above, one of the most notable changes is the establishment of concrete emissions reduction targets for the financed buildings. Specifically, emissions are to be reduced to 8 kg of CO₂ equivalent per square metre by 2035, which represents a 38% reduction against the 2022 levels. Goal achievement will be monitored annually in future as part of the annual reporting, and goals may be expanded or tightened as necessary.

NRW.BANK.ifo Business Climate September 2023: Economy in NRW ends downturn

On 5 October, the results of the survey were presented in the course of the NRW.BANK.ifo business climate conference in Düsseldorf. The mood in the North Rhine-Westphalian economy improved slightly in September for the first time since March this year. The NRW.BANK.ifo business climate improved by 1.4 points to -12.0 balance points compared with the previous month. Although the surveyed companies' assessment of their current business situation deteriorated once again at -2.8 balance points (August: -0.8), pessimism about future developments decreased significantly. Business expectations rose by 4.5 points and now stand at -20.8 balance points. "The good news from the survey is that we seem to have the bottom of the economic trough in sight in North Rhine-Westphalia. There is unlikely to be a deep slump in economic output in 2023," said Eckhard Forst, Chairman of Managing Board at NRW.BANK. The situation in the individual sectors is as follows: The climate improved most in the service sector, where companies were more satisfied with their current business situation. And business expectations were also significantly less pessimistic. The sentiment in the retail sector also improved somewhat. Although retailers' assessment of their current business was more negative, the outlook for the next six months improved noticeably. In the manufacturing sector, there was little change in the business climate - the more negative assessments of the business situation were offset by less pessimistic business expectations. A positive signal is coming from demand for industrial goods, which is stabilising. Only in the construction sector did the downturn in sentiment continue in September. Here, the NRW.BANK.ifo business climate fell to its lowest level since July 2009. Both current business and expectations for the next six months were rated significantly worse by construction companies. The mood in residential construction was particularly poor. Here expected construction activity in the coming three months fell to a new all-time low.



Quebec: Strengthening cooperation with Luxembourg

At the end of August, the Minister of International Relations and Francophonie and Women's Affairs of the Provincial Government of Quebec (ticker: Q), Martine Biron, travelled to Luxembourg. Among others, she met with the Prime Minister of Luxembourg, Xavier Bettel, as well as representatives of the EIB and the Luxembourg Chamber of Commerce. The main topics discussed were relations with Luxembourg partners and an intensification of bilateral, strategic cooperation. The focus was again on economic components, such as highlighting Quebec's expertise in sectors of bilateral interest in order to identify further possible partnerships, particularly in the areas of transport, sustainable technologies, the circular economy and infrastructure. Biron further reiterated the desire to accelerate foreign trade. The background to this is that Quebec is the second largest province in Canada as measured by both population and economic output behind Ontario. In 2022, the GDP of Quebec grew by 2.6% to CAD 391.2bn. Quebec is also very active in the capital market. Bonds amounting to the equivalent of EUR 170.3bn are currently outstanding, which corresponds to about 33% of the total bond volume of Canadian provinces. Bonds denominated in EUR account for EUR 19bn of this amount.

Primary market

After rather subdued primary market activity in recent weeks, we are pleased to report five benchmark deals and one sub-benchmark today. Schleswig-Holstein (ticker: SCHHOL) kicked things off with a five-year FRN in the amount of EUR 500m, which was placed at -12bp against the six-month Euribor in accordance with the guidance. Information on the order book was not published. Instituto de Crédito Oficial (ticker: ICO) then ventured onto the trading floor with a new deal featuring a term to maturity in excess of five years, with a figure of EUR 1.0bn in mind. With a bid-to-cover ratio of 2.3x, the deal was priced 18bp above the Spanish curve (reference: SPGB 3.5% 05/31/29), two basis points tighter than the guidance. At the beginning of the week, there was news from France: Bpifrance (ticker: BPIFRA) raised EUR 1.25bn in a social bond with a term of just under four years. With a guidance of OAT +41bp area above the French curve (references: FRTR 0% 2/2027 and FRTR 0.75% 2/2028), the order books filled to almost EUR 3bn, so that the deal was closed at OAT +39bp. In the meantime, the International Development Association (ticker: IDAWBG) raised EUR 550m (SDB) in a 30-year maturity at ms +74bp without much fanfare. No further information on this deal was made public. Finally, back to Germany in the EUR benchmark segment: NRW (also the issuer's ticker) issued a fresh deal worth EUR 1.0bn with a term of five years. At guidance of ms +2bp area, and a bid-to-cover ratio of 2.8x, the deal was finally in the bag at ms flat. The activity from our neighbours in France was on a smaller scale: Ville de Paris (ticker: VDP) made an appearance with a sub-benchmark. Here, a total of EUR 295m was issued as part of a 14y deal, with the whole thing processed in line with the guidance of OAT +40bp (no "area" required here). The EU bond auction also took place on 23 October. Around EUR 4.5bn was successfully raised through taps of the 2030 bond (EUR 2,203m) and the 2038 bond (EUR 2,257m).

			,,,		(-0,-0	,, .		
Issuer	Country	Timing	ISIN	Maturity	Size	Spread	Rating	ESG
IDAWBG	SNAT	24.10.	XS2711350848	30.0y	0.55bn	ms +74bp	- / Aaa / AAA	Х
NRW	DE	23.10.	DE000NRW0N83	5.0y	1.00bn	ms flat	AAA / Aa1 / AA	-
BPIFRA	FR	16.10.	FR001400LPZ1	3.9y	1.25bn	ms +9bp	AA- / Aa2 / -	Χ
ICO	ES	16.10.	XS2708407015	5.6y	1.00bn	ms +35bp	A- / Baa1 / A	-
SCHHOL	DE	16.10.	DE000SHFM915	5.0y	0.50bn	6mE -12bp	AAA / - / -	_

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



Covered Bonds

Banks in Europe: the EBA Risk Dashboard in Q2 2023

Author: Dr Frederik Kunze

EBA Risk Dashboard in Q2 2023

On 9 October 2023, the European Banking Authority (EBA) presented up-to-date figures on its highly regarded "Risk Dashboard" (RDB) (reporting period: Q2 2023). The database comprises a large number of indicators (including capital adequacy, liquidity, asset quality and profitability), which are compiled from supervisory data supplied by commercial banks. In addition, we draw on continuing trends from the EBA's latest Risk Assessment Questionnaire (RAQ), which was carried out with the participation 85 banks in the spring of this year. Similarly, data on compliance with the Minimum Requirement for Own Funds and Eligible Liabilities (MREL) is now provided with each publication of the EBA RDB. In this context – in addition to the annual EBA MREL Quantitative Monitoring Report and Impact Assessment – expanded information is provided. However, this is with a one quarter time lag, so the most recent reporting date here is 31 March 2023. In its report, the EBA states that bank profitability has continued to improve, but that macroeconomic uncertainty is not having a positive impact on credit growth. In the press release it was also highlighted that the gloomier economic outlook in the EU and China as well as the proposed bank levies have contributed to additional uncertainty in the markets. Contrary to these negative effects on credit growth, credit quality remains robust on average - with only isolated increases in NPL ratios. However, there is a risk that these could increase more rapidly in the near future. The EBA RDB is an important source of information for us. Ultimately, we believe that the publication not only provides important insights into the state of the European banking sector, but also refers to the funding behaviour of European institutions. In the context of covered bonds, the insights into the refinancing activities as well as the lending business of European banks are of particular importance. The dashboard also includes the TLTRO III tenders that are expiring or have already expired, in addition to referring to important liquidity metrics.

Profitability improved initially...

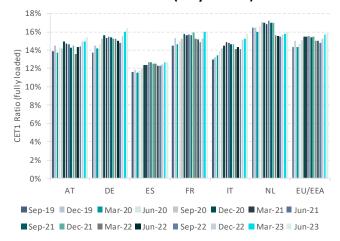
According to the EBA, the economic situation will continue to deteriorate in the second quarter of 2023, driven by weaker consumption and foreign trade. Global economic activity was stronger than expected in the first quarter. However, uncertainties regarding macroeconomic and geopolitical developments remained high. In the context of the publication of the RDB data, the EBA also notes that banks' profitability in Q2 continued to be supported by higher interest rates. However, the strength of the increase is heterogeneously distributed across the European banking landscape and is more or less pronounced depending on the balance sheet structure. Year-on-year, net interest income increased by an average of 20%. On the cost side, the EBA also highlights the declines in the cost-to-income ratio (Q2 2023: 56.5%) by three percentage points to an all-time low.



...but deposit betas and rising credit risk could have a negative impact moving forwards

For the time being, the average return on equity (RoE) in the EU is 10.8%. However, the EBA sees major challenges for banks to maintain current profitability at this level. The EBA cites rising operating costs – in connection with the repricing of liabilities – and subdued credit growth as reasons for this assessment. A prolonged phase of weakness on the credit market would also have a negative impact on future issuing activity in the covered bond segment. The refinancing costs for covered and uncovered bonds continued to rise in Q2 2023. Banks with a higher deposit ratio were able to keep their funding costs at a comparable level due to a lower "deposit beta". After a temporary standstill in the capital market in March 2023, funding activity for secured and unsecured bonds quickly regained strong momentum. The share of green funding continued to rise in the second quarter for senior non-preferred bonds and remained stable for covered bonds.

Risk Dashboard: CET1-Ratio (fully loaded)



Risk Dashboard: LCR (in %)



Source: EBA, NORD/LB Markets Strategy & Floor Research

Capital and liquidity ratios in Q1 2023

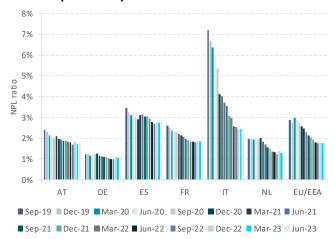
In its current statement, the EBA says the banks have strong liquidity ratios on average (LCR: 159.5%, NSFR: 126.5%). However, it is important to note that the LCR had to cope with a decline (-3.3 percentage points), which is due in particular to outflows from the liquidity buffers. The excess liquidity was used to repay the TLTRO III facilities. On the capital ratio side, the CET1 ratio (fully loaded) increased by 0.2 percentage points to 15.9% compared with the previous quarter. The capitalisation in the numerator of the ratio benefited from increased earnings, while the denominator from risk-weighted assets (RWA) also increased as a result of higher credit risks – but at a much slower pace.

Credit quality: NPL ratios not (yet) picking up

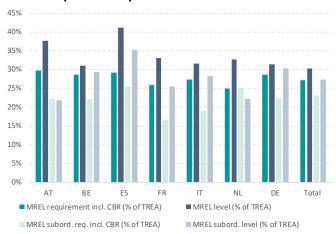
The EBA clarifies that despite the challenging macroeconomic environment, banks' asset quality ratios remain robust. The NPL ratio shows no change compared with the first quarter of 2023 and remains at a low level of 1.8%. In some jurisdictions, however, increases in NPL ratios can already be observed, which could intensify in the future due to the sensitivity with regard to higher interest rates.



Risk Dashboard: Ratio of Non-performing Loans and Advances (NPL ratio)



MREL Risk Dashboard: External MREL requirement and level (% of TREA)



Source: EBA, NORD/LB Markets Strategy & Floor Research; TREA = Total Risk Exposure Amount

MREL Dashboard indicates further decrease in MREL shortfall

The third edition of the MREL Dashboard shows an MREL shortfall of EUR 29.2bn across the analysed countries and banks as at the end of March 2023 (Q4 2022: EUR 28.2bn), which corresponds to a share of 0.38% of the total risk-weighted exposure. However, a comparison of countries shows clear differences. The share of MREL shortfall in total risk-weighted assets varies between countries in a range from 0.1% (Denmark) to 8.2% (Bulgaria). Furthermore, the PIIGS countries are those with the highest shortfalls. Supervisory authorities are monitoring the development and have already approved longer compliance periods for some banks.

Conclusion

The EBA RDB indicates the robust state of European commercial banks in Q2 2023 as well. This is true both in terms of capital and liquidity and with regard to the quality of the assets on the banks' balance sheets. Nevertheless, a somewhat less friendly picture is already crystallising for the future. Profitability is therefore expected to come under greater pressure in the coming months due to rising costs. Capital ratios could also be burdened by a risk-induced increase in RWA positions. In addition, a larger number of loans in default is to be expected, which could cause NPL ratios to rise from the low starting values. Overall, however, we see the banking sector in Europe as still in robust shape and see the gloomier outlook as a logical consequence of the current market environment. We do not see the credit quality of covered bonds from Europe as being jeopardised in any way, and we also anticipate continued momentum in covered funding.



SSA/Public Issuers

Teaser: Issuer Guide – Spanish Agencies 2023

Authors: Dr Norman Rudschuck, CIIA // Christian Ilchmann

Spanish agency market dominated by two large issuers

Today, we are going to take a brief look at the Spanish agencies market. There are four Spanish agencies included in our coverage, which currently have 61 outstanding bonds with a total volume of EUR 20.9bn. In a European comparison, the Spanish agency market can therefore be described as relatively small, albeit pretty diverse in nature at the same time. In addition to the promotional bank Instituto de Crédito Oficial (ICO), there is also a securitisation vehicle, a rail network operator and an institution responsible for administering Spain's strategic oil reserves. In the following, we shall be looking in greater detail at Fondo de Amortización del Déficit Eléctrico (FADE), which was founded in 2010 with the aim of securitising claims, or tariff deficit receivables, on the part of Spanish electricity providers against the government. Owing to the regulatory framework conditions, these electricity providers had generated losses, which were to be offset by the government. The purpose of FADE is to ensure that the deficits incurred by the electricity providers are offset more rapidly. The sale of their tariff deficit receivables to FADE has since led to the issuance of bonds, some of which have been in benchmark format. The second-largest agency measured in terms of total assets is ICO, the Spanish promotional bank. The importance of ICO increased during the Spanish banking crisis in particular, as many financial institutions reduced their lending activities, in some cases significantly so, on account of recapitalisation and restructuring processes. The promotional bank's influence also increased because market access became more difficult for the Spanish regions. The third agency covered in this article today is Corporación de Reservas Estratégicas de Productos Petrolíferos (CORES), which is responsible for administering Spain's strategic oil reserves in its role as a stockholding entity. Founded in 2013, ADIF Alta Velocidad (ADIF-AV) is the largest Spanish agency as measured by total assets. Its remit is to operate Spain's high-speed railway network and has been using the capital market since 2015 as one option of meeting its funding requirements. In comparison with other jurisdictions, attention must always be paid to ratings in the case of Spanish agencies, which are often lower than is the case, for example, for other issuers from Germany, France, the Netherlands and even Austria.

Spanish agencies – an overview

Spanish abelienes an overview				
Institution	Туре	Owner(s)	Guarantee	Risk weight
Instituto de Crédito Oficial (ICO)	Promotional bank	100% Spain	Explicit guarantee & EPE status	0%
Fondo de Amortización del Déficit Eléctrico (FADE)	Securitisation vehicle	-	Explicit guarantee for all bonds	0%
ADIF Alta Velocidad (ADIF-AV)	Rail network operator	100% Spain	EPE status	0%
Corporación de Reservas Estratégicas de Productos Petrolíferos (CORES)	Administrator of strategic oil reserves	-	-	50%

Source: Issuers, NORD/LB Markets Strategy & Floor Research

Explicit guarantees result in risk weighting of 0%

ICO and FADE have explicit guarantees from the Spanish state. As such, a risk weighting of 0% is possible according to the standard approach of CRR/Basel III.



Implicit liability due to EPE status with exception of CORES (RW 50%) and ICO

In Spain, the legal status of Entidad Pública Empresarial (EPE; public law institution) exists as a special form of liability mechanism. Both ICO and ADIF-AV operate under this status, which implies a strong dependency on the central government. EPEs are exempt from insolvency law and can only be liquidated through legislation. If liquidation occurs, the remaining assets and liabilities are transferred to the state or another institution with a comparable legal status. According to our understanding, there consequently exists an implicit guarantee for ADIF-AV, but this is weaker than the comparable liability mechanisms of the French établissement public (EP) status or the German Gewährträgerhaftung (guarantor liability), for example. Conversely, in the case of ICO, the statutes stipulate direct liability on the part of the Spanish state in addition to EPE status. However, in view of the absence of a liability mechanism, a 0% risk weighting is not possible in the case of CORES. Under the standard approach of CRR/Basel III, the applicable risk weighting is derived from the rating and amounts to 50% at present.

Special case: ADIF-AV

Another special case is that of ADIF-AV. A risk weighting of 0% applies for ADIF-AV, even without a corresponding liability mechanism having been put in place. Based on this risk weighting of 0%, ADIF-AV bonds also qualify as Level 1 assets under the LCR. In addition, ADIF-AV benefits from an implicit guarantee from the Spanish government due to its status as a government-related issuer.

Spanish agencies - an overview (EURbn/EUR equivalent)

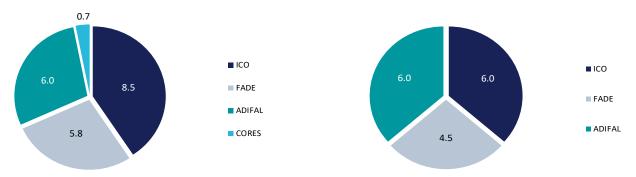
Name	Ticker	Rating (Fitch/Moody's/S&P)	Outstanding Volume	EUR volume	Funding target 2023	Maturities 2023	Net Supply 2023	Number of ESG bonds	ESG volume
ICO	ICO	A-/Baa1/A	8.5	7.9	5.5	1.0	4.5	10	5.0
FADE	FADE	-/-/-	5.8	5.8	1.0	3.5	-2.5	0	0.0
CORES	CORES	A-/-/A	0.7	0.7	0.5	0.0	0.0	0	0.0
ADIF-AV	ADIFAL	A-/Baa2/-	6.0	6.0	0.6	0.6	0.5	6	3.4
Total			21.0	20.4	7.6	5.1	2.5	16	8.4

NB: Fitch, Moody's and S&P rate FADE's bonds on a par with Spain's credit rating; FADE is not assigned an issuer rating. Foreign currencies are converted into EUR at rates as at 19 October 2023.

On account of the issuer's individual funding mix, the values for "funding target" and "net supply" in particular may deviate from reality. Source: Bloomberg, issuers, NORD/LB Markets Strategy & Floor Research

Outstanding bond volumes (EURbn)

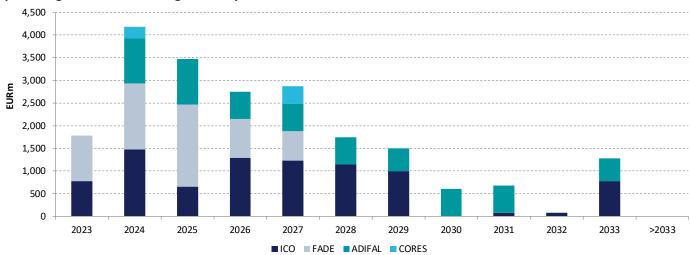
Outstanding EUR benchmarks (EURbn)



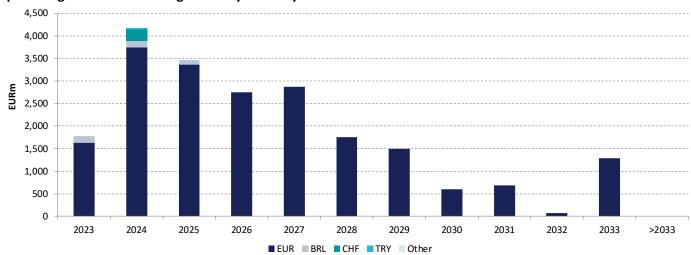
NB: Benchmarks are defined as bonds with a minimum volume of EUR 0.5bn. Foreign currencies are converted into EUR at rates as at 19 October 2023. Source: Bloomberg, NORD/LB Markets Strategy & Floor Research



Spanish agencies: outstanding bonds by issuer



Spanish agencies: outstanding bonds by currency



NB: Foreign currencies are converted into EUR at rates as at 19 October 2023. Source: Bloomberg, NORD/LB Markets Strategy & Floor Research

Conclusion and comment

After a brief high in 2011, issuance volumes on the part of Spanish agencies plummeted up to 2018. For more than five years now, issuance volumes have been at a comparable level (gross supply of roughly EUR 1.5-3bn per year). FADE will continue to refinance existing bonds via new issuances, meaning that the net supply of bonds will amount to a maximum of 0. In the meantime, ICO also reported declining primary market supply. Nevertheless, its primary market activities have since picked up pace again due to an abundance of maturing bonds and the COVID-19 pandemic. Supply from CORES is relatively marginal when compared with the other issuers, a situation reflected in the fact that this issuer currently has no EUR benchmark bonds outstanding. However, the fact that ADIF-AV has established itself on the primary market looks set to have a stabilising effect moving forwards. The supply of ESG bonds has also seen steady growth over recent years.

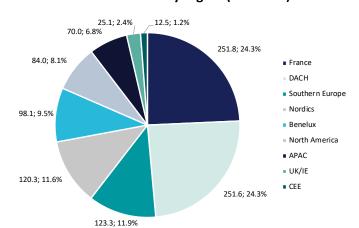


Charts & Figures Covered Bonds

EUR benchmark volume by country (in EURbn)

138.2; 13.3% 36.1; 3.5% 37.3; 3.6% 45.0; 4.3% 47.7; 4.6% 54.6; 5.3% 70.2; 6.8% 75.6; 7.3% 84.0; 8.1%

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	251.8	243	21	0.96	9.4	5.0	1.26
2	DE	196.3	280	34	0.65	8.0	4.1	1.15
3	CA	84.0	62	0	1.33	5.5	2.9	1.12
4	NL	75.6	77	2	0.92	10.6	6.3	1.13
5	ES	70.2	55	6	1.16	11.2	3.4	1.97
6	AT	54.6	93	4	0.58	8.2	4.7	1.35
7	IT	47.7	57	2	0.80	8.9	3.7	1.52
8	NO	45.0	54	12	0.83	7.4	3.7	0.68
9	FI	37.3	41	4	0.89	7.0	3.5	1.34
10	AU	36.1	35	0	1.03	7.1	3.3	1.49

■ FR

■ DE

■ CA

= NL

■ ES

AT

■ IT

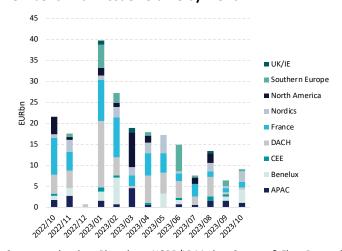
■ NO

■ FI

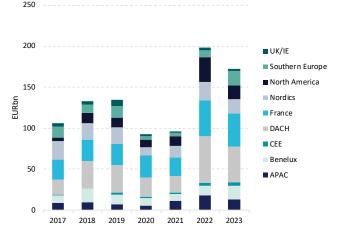
■ AU

Others

EUR benchmark issue volume by month

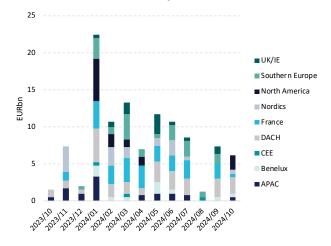


EUR benchmark issue volume by year

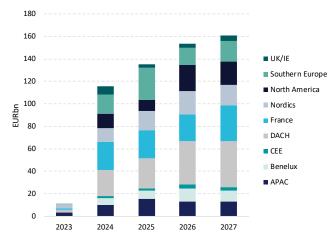




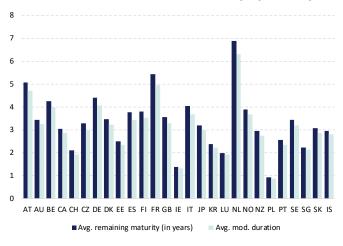
EUR benchmark maturities by month



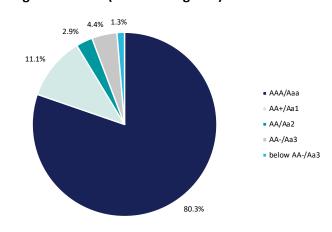
EUR benchmark maturities by year



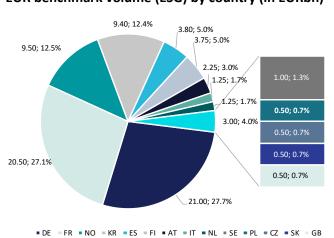
Modified duration and time to maturity by country



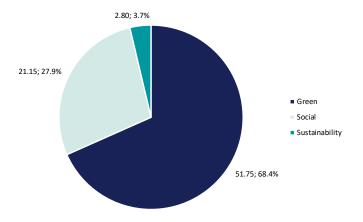
Rating distribution (volume weighted)



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

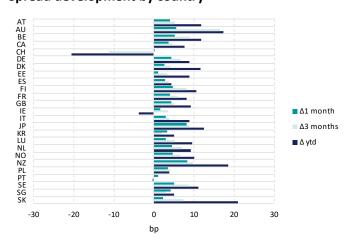


EUR benchmark volume (ESG) by type (in EURbn)

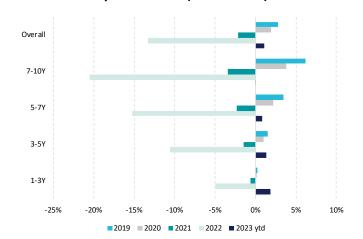




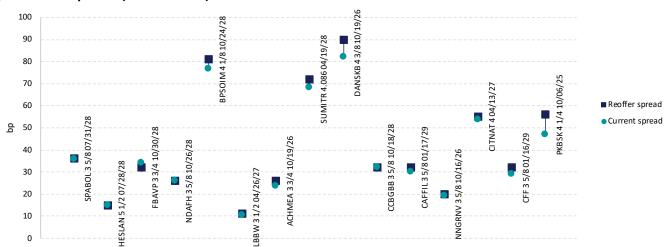
Spread development by country



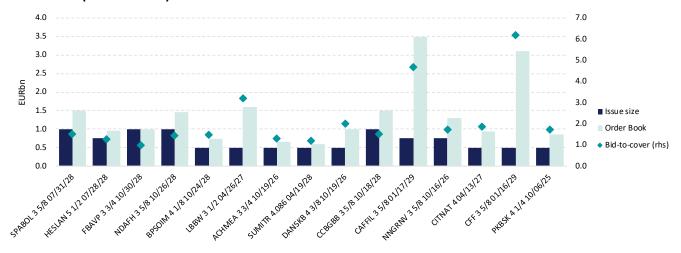
Covered bond performance (Total return)



Spread development (last 15 issues)

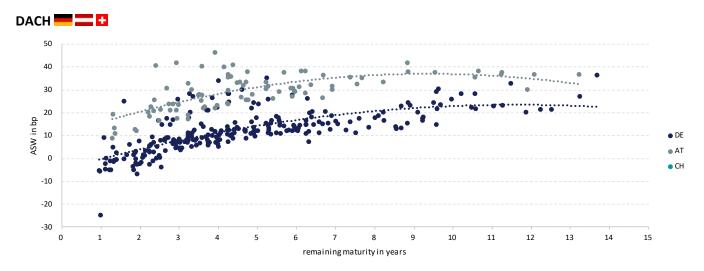


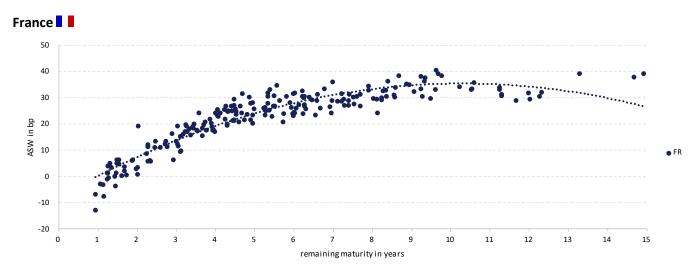
Order books (last 15 issues)

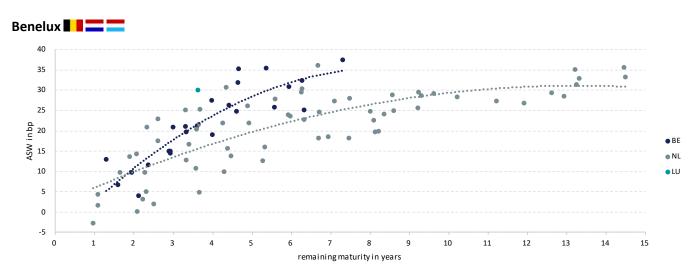




Spread overview¹

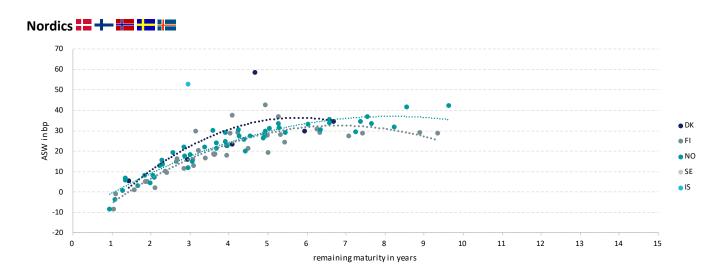


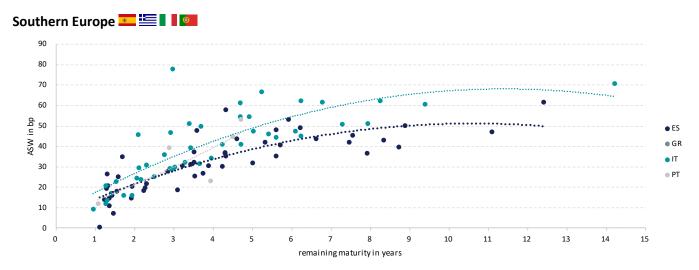


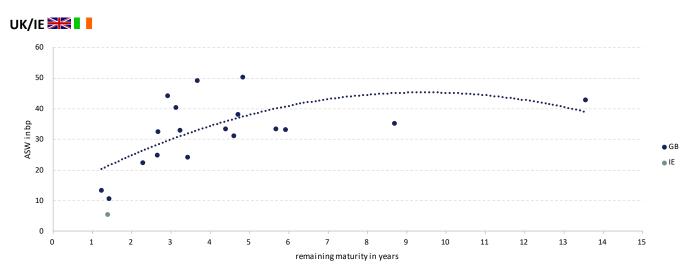


Source: market data, Bloomberg, NORD/LB Markets Strategy & Floor Research 1 Time to maturity $1 \le y \le 15$

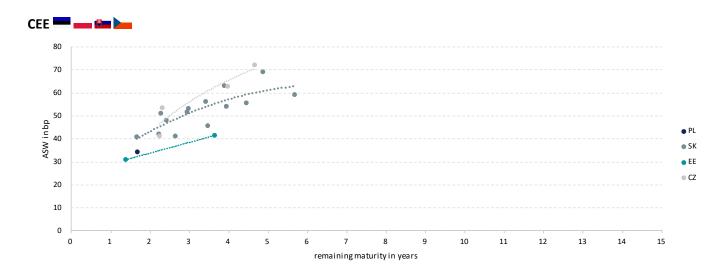


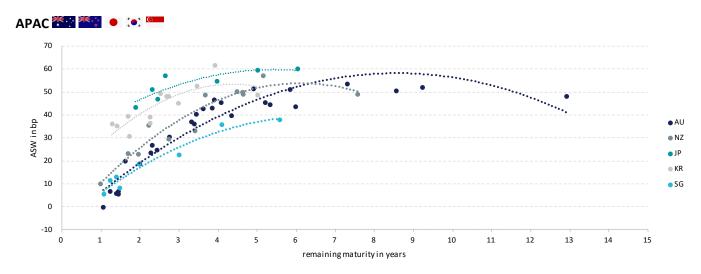


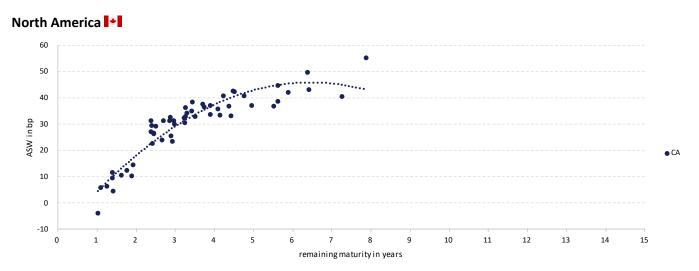








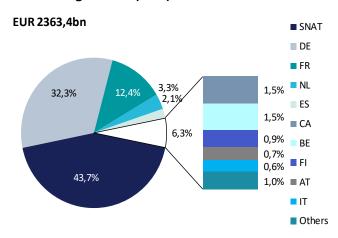






Charts & Figures SSA/Public Issuers

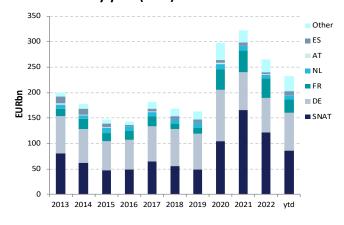
Outstanding volume (bmk)



Top 10 countries (bmk)

Country	Vol. (€bn)	No. of bonds	ØVol. (€bn)	Vol. weight. ØMod. Dur.
SNAT	1.031,9	230	4,5	7,9
DE	764,0	568	1,3	6,1
FR	292,3	198	1,5	5,9
NL	78,2	68	1,2	6,6
ES	48,5	66	0,7	4,6
CA	35,6	25	1,4	4,2
BE	35,2	38	0,9	10,6
FI	22,2	24	0,9	4,8
AT	17,3	21	0,8	4,6
IT	15,0	19	0,8	4,6

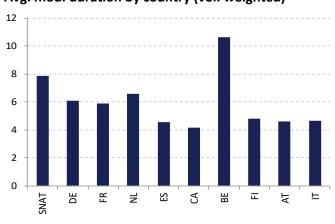
Issue volume by year (bmk)



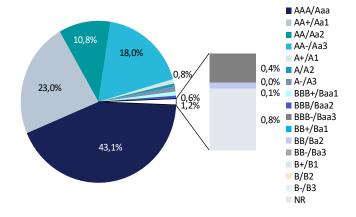
Maturities next 12 months (bmk)



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

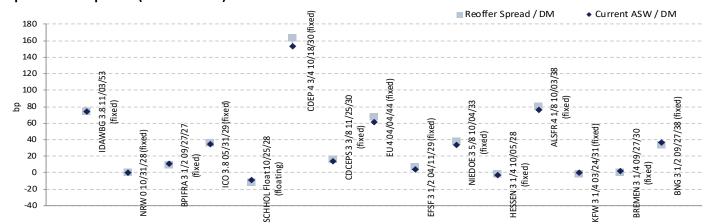


Rating distribution (vol. weighted)

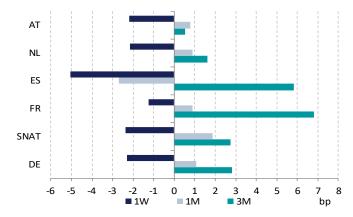




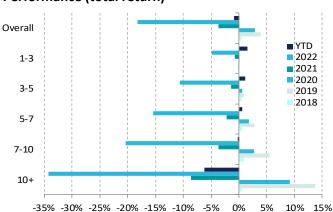
Spread development (last 15 issues)



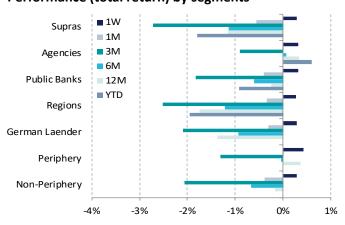
Spread development by country



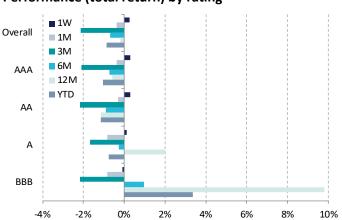
Performance (total return)



Performance (total return) by segments

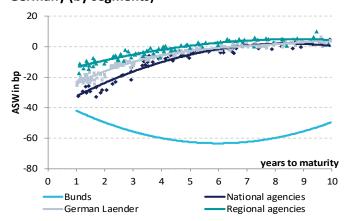


Performance (total return) by rating

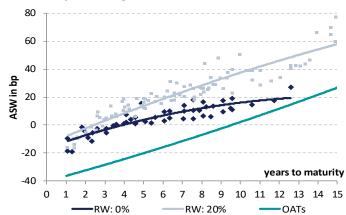




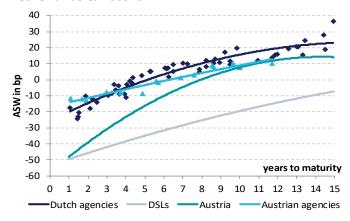
Germany (by segments)



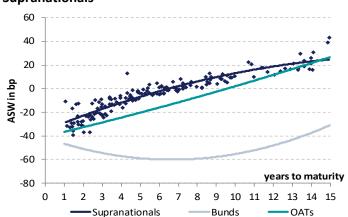
France (by risk weight)



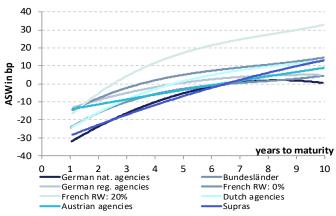
Netherlands & Austria



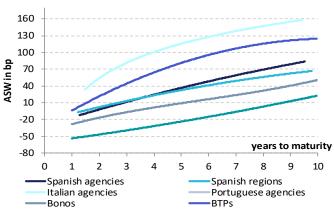
Supranationals



Core



Periphery





ECB tracker

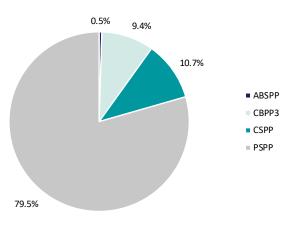
Asset Purchase Programme (APP)

	ABSPP	СВРР3	CSPP	PSPP	APP
Aug-23	16,436	295,503	334,738	2,487,900	3,134,577
Sep-23	15,324	291,992	331,156	2,470,598	3,109,070
Δ	-1.096	-3.346	-3.377	-13.434	-21.253

Portfolio development

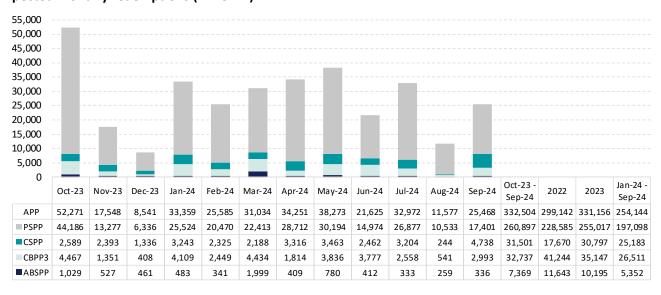
3,500 3,000 2,500 1,500 1,000 500 ABSPP CBPP3 CSPP PSPP

Portfolio structure



Source: ECB, NORD/LB Markets Strategy & Floor Research

Expected monthly redemptions (in EURm)

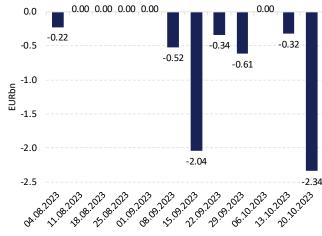


Source: ECB, Bloomberg, NORD/LB Markets Strategy & Floor Research

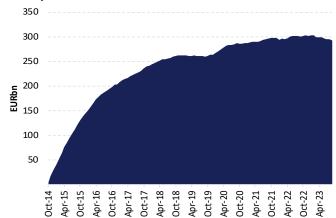


Covered Bond Purchase Programme 3 (CBPP3)

Weekly purchases



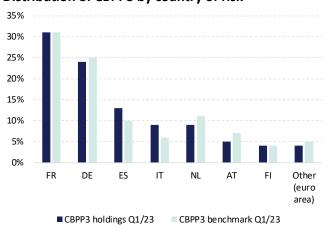
Development of CBPP3 volume



Change of primary and secondary market holdings

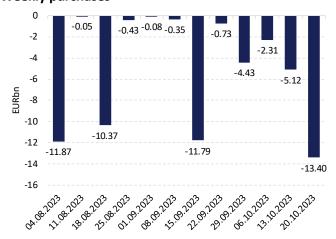


Distribution of CBPP3 by country of risk



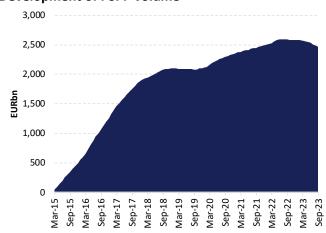
Public Sector Purchase Programme (PSPP)

Weekly purchases



Source: ECB, Bloomberg, NORD/LB Markets Strategy & Floor Research

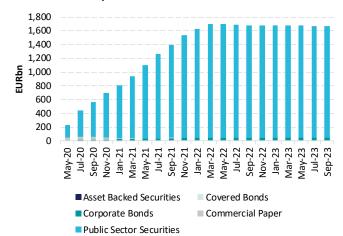
Development of PSPP volume



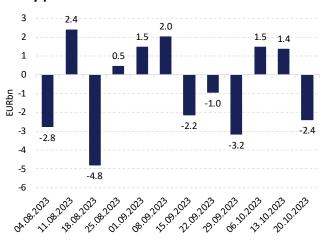


Pandemic Emergency Purchase Programme (PEPP)





Weekly purchases



Breakdown of public sector securities under the PEPP

Jurisdiction	Holdings (in EURm)	Δ Holdings previous period	Adj. distribution key ¹	PEPP share	Deviations from the adj. distribution key²	Current WAM ³ (in years)	WAM of eligible universe ⁴ (in years)
AT	44,129	-1,028	2.6%	2.7%	0.0%	7.2	7.8
BE	56,941	-610	3.3%	3.4%	0.2%	6.0	9.4
CY	2,423	-156	0.2%	0.1%	0.0%	8.4	8.2
DE	393,313	1,135	23.7%	23.7%	0.0%	6.7	7.0
EE	256	0	0.3%	0.0%	-0.2%	6.7	6.5
ES	193,041	-2,722	10.7%	11.6%	0.9%	7.2	7.4
FI	25,953	565	1.7%	1.6%	-0.1%	7.5	7.7
FR	298,322	1,717	18.4%	18.0%	-0.4%	7.3	7.8
GR	38,260	-172	2.2%	2.3%	0.1%	8.5	9.1
IE	25,541	133	1.5%	1.5%	0.0%	8.8	9.2
IT	292,198	938	15.3%	17.6%	2.3%	7.0	6.9
LT	3,145	-2	0.5%	0.2%	-0.3%	9.3	8.6
LU	1,858	-110	0.3%	0.1%	-0.2%	6.0	8.3
LV	1,843	23	0.4%	0.1%	-0.2%	7.9	7.5
MT	604	-4	0.1%	0.0%	-0.1%	9.8	8.5
NL	80,598	-2,269	5.3%	4.9%	-0.4%	7.6	8.9
PT	33,921	127	2.1%	2.0%	-0.1%	7.0	7.7
SI	6,493	44	0.4%	0.4%	0.0%	8.4	8.8
SK	8,040	65	1.0%	0.5%	-0.5%	7.9	8.3
SNAT	153,089	2,000	10.0%	9.2%	-0.8%	9.9	9.0
Total / Avg.	1,659,970	-327	100.0%	100.0%	0.0%	7.4	7.6

 $^{^{\}mathrm{1}}$ Based on the ECB capital key, adjusted to include supras $^{\mathrm{2}}$ Based on the adjusted distribution key

³ Current WAM of public sector securities holdings under the PEPP ⁴ WAM of eligible universe of public sector securities holdings under the PEPP Source: ECB, Bloomberg, NORD/LB Markets Strategy & Floor Research



Appendix

Overview of latest Covered Bond & SSA View editions

Publication	Topics
30/2023 ♦ 18 October	 Focus on covered bond jurisdictions: Canada in the spotlight
	A closer look at Newfoundland and Labrador
29/2023 ♦ 11 October	 A covered bond view of Belgium
	 Funding of Canadian provinces – an overview
28/2023 ♦ 27 September	■ The covered bond universe of Moody's: an overview
	 Update on DEUSTD – Joint German cities (bond No. 1)
27/2023 ♦ 20 September	 Newcomer to the EUR benchmark segment: Bendigo and Adelaide Bank set to expand issuer base in Australia
	■ Teaser: Issuer Guide – Austrian Agencies 2023
26/2023 ♦ 13 September	■ ECBC publishes annual statistics for 2022
	■ Teaser: Issuer Guide – Dutch Agencies 2023
25/2023 ♦ 06 September	 Covered bond market on the growth path: OLB looks set to join the ranks of EUR benchmark issuers
	■ NORD/LB Issuer Guide German Laender 2023 published
24/2023 ♦ 19 July	Banks in Europe: EBA Risk Dashboard in Q1 2023
	■ ECB repo collateral rules and German Laender
23/2023 ♦ 12 July	Covereds: Half-year review and outlook for the second half of 2023
22/2023 ♦ 28 June	 Special publication on LCR classification and risk weights: a (regulatory) overview of the EUR benchmark segment
	 ESG bonds of German Laender – significant further development
21/2023 ♦ 21 June	ESG covered bonds: a look at the supply side
	 Increasing exposure of E-supras to Ukraine
20/2023 ♦ 14 June	■ Moody's covered bond universe – an overview
	Beyond Bundeslaender: Spanish regions
19/2023 ♦ 07 June	■ ECB Preview: ECB's 25th anniversary and is still going strong
	 Focus on legal requirements for covered bonds
18/2023 ♦ 24 May	 Repayment structures on the covered bond market: an update
	 Stability Council convenes for 27th meeting
17/2023 ♦ 17 May	ESG update 2023 in the spotlight
	 Development of the German property market
	■ Transparency requirements §28 PfandBG Q1/2023
16/2023 ♦ 10 May	■ The ECB and the covered bond market: influences old and new
	Update: Joint Laender (Ticker: LANDER)
15/2023 ♦ 26 April	■ ECB preview: caught in two minds?
	■ EBA Risk Dashboard paints solid picture of Q4 2022
14/2023 ♦ 19 April	Lending in the Eurozone and Germany
	■ The French agency market – an overview
13/2023 ♦ 05 April	Supply forecast requires no great adjustment
	 Current risk weight of supranationals & agencies
NORD/LB.	NORD/I B. NORD/I B. Placemberg.

NORD/LB: Markets Strategy & Floor Research NORD/LB: Covered Bond Research NORD/LB: SSA/Public Issuer Research Bloomberg: RESP NRDR <GO>



Appendix Publication overview

Covered Bonds:

Issuer Guide Covered Bonds 2023

Covered Bond Laws

Covered Bond Directive: Impact on risk weights and LCR levels

Risk weights and LCR levels of covered bonds (updated semi-annually)

<u>Transparency requirements §28 PfandBG Q2/2023</u> (quarterly update)

Covered bonds as eligible collateral for central banks

SSA/Public Issuers:

<u>Issuer Guide – German Laender 2023</u>

<u>Issuer Guide – European Supranationals 2023</u>

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

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

<u>Issuer Guide – German Agencies 2022</u>

Beyond Bundeslaender: Belgium

Beyond Bundeslaender: Greater Paris (IDF/VDP)

Beyond Bundeslaender: Spanish regions

Fixed Income Specials:

ESG-Update 2023

ECB preview: Wait and see without calling it a pause

ECB: This rate terminates here - 99.9% sure

ECB preview: Knives out... It's edging-time



Appendix Contacts at NORD/LB

Markets Strategy & Floor Research



Dr Frederik Kunze Covered Bonds/Banks

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



Liquidity Management

Melanie Kiene, CIIA Covered Bonds/Banks

+49 172 169 2633 melanie.kiene@nordlb.de



Dr Norman Rudschuck, CIIA SSA/Public Issuers

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



Christian Ilchmann SSA/Public Issuers

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

Sales		Trading	
Institutional Sales	+49 511 9818-9440	Covereds/SSA	+49 511 9818-8040
Sales Sparkassen & Regionalbanken	+49 511 9818-9400	Financials	+49 511 9818-9490
Sales MM/FX	+49 511 9818-9460	Governments	+49 511 9818-9660
Fixed Income Relationship Management Europe	+352 452211-515	Länder/Regionen	+49 511 9818-9550
		Frequent Issuers	+49 511 9818-9640
Origination & Syndicate		Sales Wholesale Customers	
Origination & Syndicate Origination FI	+49 511 9818-6600	Sales Wholesale Customers Firmenkunden	+49 511 361-4003
	+49 511 9818-6600 +49 511 361-2911		_
Origination FI		Firmenkunden	+49 511 361-4003
Origination FI		Firmenkunden	+49 511 361-4003
Origination FI Origination Corporates		Firmenkunden Asset Finance	+49 511 361-4003

+49 511 9818-9650

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 Markets Strategy & Floor Research division of NORD/ LB. Any changes in the underlying premises may have a material impact on the developments described herein. Neither NORD/LB nor its governing bodies or employees can give any assurances as to or assume any responsibility or liability for the accuracy, appropriateness and completeness of this information or for any loss of return, any indirect, consequential or other damage which may be suffered by persons relying on the information or any statements or opinions set forth in the present Report (irrespective of whether such losses are incurred due to any negligence on the part of these persons or otherwise).

Past performance is not a reliable indicator of future performance. Exchange rates, price fluctuations of the financial instruments and similar factors may have a negative impact on the value and price of and return on the financial instruments referred to herein or any instruments linked thereto. Fees and commissions apply in relation to securities (purchase, sell, custody), which reduce the return on investment. An evaluation made on the basis of the historical performance of any security does not necessarily provide an indication of its future performance.

The present information neither constitutes any investment, legal, accounting or tax advice nor any assurance that an investment or strategy is suitable or appropriate in the light of the Recipient's individual circumstances, and nothing in this information constitutes a personal recommendation to the Recipient thereof. The securities or other financial instruments referred to herein may not be suitable for the Recipient's personal investment strategies and objectives, financial situation or individual needs.

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

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



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

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

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

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

By making use of this information, the Recipient shall accept the terms and conditions outlined above.

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

Additional information for Recipients in Australia:

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

Additional information for Recipients in Austria:

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

Additional information for Recipients in Belgium:

Evaluations of individual financial instruments on the basis of past performance are not necessarily indicative of future results. It should be noted that the reported figures relate to past years.

Additional information for Recipients in Canada:

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

Additional information for Recipients in Cyprus:

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

Additional information for Recipients in the Czech Republic:

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

Additional information for Recipients in Denmark:

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

Additional information for Recipients in Estonia:

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

Additional information for Recipients in Finland:

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



Additional information for Recipients in France:

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

Additional information for Recipients in Greece:

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

Additional information for Recipients in Indonesia:

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

Additional information for Recipients in the Republic of Ireland:

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

Additional information for Recipients in Japan:

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

Additional information for Recipients in South Korea:

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

Additional information for Recipients in Luxembourg:

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

Additional information for Recipients in New Zealand:

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

Additional information for Recipients in the Netherlands:

The value of your investment may fluctuate. Past performance is no guarantee for the future.

Additional information for Recipients in Poland:

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

Additional information for Recipients in Portugal:

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

Additional information for Recipients in Sweden:

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

Additional information for Recipients in Switzerland:

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



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

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

Information for Recipients in the United Kingdom:

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

Time of going to press: Wednesday, 25 October 2023 (08:55)

Distribution: 25.10.2023 16:04:04