



Covered Bond & SSA View

NORD/LB Markets Strategy & Floor Research

Agenda

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Market overview Covered Bonds

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Primary market: year-end not yet in sight

Due to public holidays and central bank events, in the previous trading week we experienced the quietest period of issuance activity on the covered bond market since the height of the summer recess at the beginning of August. Only Deutsche Bank (ticker: DB) placed what is now its fourth covered bond this year at ms +8bp (term: 5.4y; volume: EUR 1.0bn; order book: EUR 1.6bn; new issue premium: 8bp), having prior to this year not been seen on the primary market since January 2020. There was far more activity to kick off the current week, with three issuers seeking investors for bond deals on both Monday (ANZ: EUR 2.0bn, 2y, ms+14bp; Sparebanken Soer [SORBNO]: 3y, green; CFF: EUR 1.35bn, 4.5y, hard bullet) and Tuesday (MUNHYP: EUR 700m, 4.7y; CAFFIL: 5y, green, hard bullet; Mortgage Society of Finland [SUOHYP]: EUR 300m sub-benchmark, 5y, ms+23bp); for further details, please refer to the table below. It remains striking from our perspective that over the past few weeks hardly any issuers have dared to place bonds in the maturity segment of 7 years and longer. Since the beginning of the fourth quarter, just two issuers from France have placed bonds with a term to maturity of 7+ years (equates to just 3.58% of the issuance volume of EUR 27.9bn recorded in the fourth quarter so far). We have continued to see comparatively high new issue premiums, with some even occasionally hitting double figures. It is pleasing that another two ESG deals have been launched by SORBNO and CAFFIL.

Issuer	Country	Timing	ISIN	Maturity	Size	Spread	Rating	ESG
MUNHYP	DE	08.11.	DE000MHB32J7	4.7y	0.70bn	ms +1bp	- / Aaa / -	
CAFFIL	FR	08.11.	FR001400DXR9	5.0y	0.75bn	ms +11bp	- / Aaa / AA+	Х
CFF	FR	07.11.	FR001400DXH0	4.5y	1.35bn	ms +14bp	- / Aaa / AAA	
ANZ	AU	07.11.	XS2555209035	2.0y	2.00bn	ms +14bp	AAA / Aaa / -	
Sparebanken Soer	NO	07.11.	XS2555209381	3.0y	0.50bn	ms +11bp	- / Aaa / -	Х
Deutsche Bank	DE	03.11.	DE000A30V2V0	5.3y	1.00bn	ms +8bp	- / Aaa / -	

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

Secondary market: new deals hit spreads

As we had been fearing in recent weeks, the primary market is increasingly influencing secondary market prices, where widening of one to two basis points on average has been seen over the past week. Declining risk appetite on the part of traders in addition to sustained primary market supply do not raise much hope of a reversal of this trend. The long end should in particular remain under pressure, since there are hardly any reliable bids on Bloomberg on ALLQ and the prices traded are currently well below the bids shown as an indication.

NORD/LB Issuer Guide Covered Bonds 2022 now published

At the start of the week, we published our NORD/LB Issuer Guide Covered Bonds 2022 in both <u>German</u> and <u>English</u>. Following on from the first issue in 2013, this edition is now the tenth publication in this format, which has consistently provided an extensive overview of the covered bond market. A dedicated article on this topic included later on in this edition of our weekly publication will provide a first impression of the structure and content of this comprehensive 509-page reference work.

ECB meeting last Thursday: new TLTRO conditions also likely to leave their mark on the covered bond primary market

As expected, following its interest rate meeting on 27 October, the Governing Council of the ECB announced a further rate hike of 75 basis points – for all three rates (cf. NORD/LB Fixed Income Special as well). In the opinion of the central bankers, the inflation rate is still excessively high, so that further hikes can be expected at the meetings to come. According to information emerging from the ECB Governing Council itself, it will stick to its "meetingby-meeting" approach. However, decision-makers will not be quite as committed to the extremely generous conditions of the current TLTRO III tenders. In this context, in terms of the last interest calculation period (set to start on 23 November), in a best-case scenario the retrospective average of the deposit facility ratio (DFR) will no longer be decisive, but rather the forward-looking average. From this date forwards, which is also the settlement date for the first of three additional voluntary TLTRO III repayment dates announced at the meeting, the "carry" earnings of the commercial banks will be negated. The settlement dates for the two other repayments will be 25 January 2023 and 22 February 2023. Even if decisions are made on increased and earlier repayment of TLTRO III tenders on the basis of bank-specific factors, on balance we see additional impetus for the issuance activities of covered bond issuers in the EUR benchmark segment. Some banks are likely to have already drawn conclusions over recent days, meaning that we would not rule out additional primary market appearances before the end of 2022 due to limited time frame. The momentum from the TLTRO III decision should also have an effect into 2023, which means that we can expect additional covered funding as a result of the adjustment of conditions.

NORD/LB supply forecast 2023: At EUR 196.5bn in fresh EUR benchmarks, we are expecting another "strong year"

Also as a result of the latest ECB decision, we expect the fresh supply of covered bonds to be very high again in 2023. Across the EUR benchmark jurisdictions we cover, this would result in a volume of EUR 196.5bn. With maturing bonds calculated to amount to EUR 115.5bn, this would produce another pronounced positive net supply of EUR 81bn, meaning that the figure would even outstrip the value expected for 2022 (EUR 62.6bn). On the spread side, market technicals should lead to gentle widening. Viewed in isolation, we expect rising new issue premiums and subtle widening of credit curves across all jurisdictions. In addition, however, we also anticipate sentiment-driven spread increases. In this context, the future course of the ECB will again be key to developments. For example, the ECB Governing Council has at least raised the prospect of a discussion on the issue of Quantitative Tightening (QT) at the December meeting. Any move away from the current approach of fully reinvesting the proceeds from bonds maturing under the APP would also have an impact on the primary market for covered bonds in particular. After all, this would mean that a significant order would gradually disappear from the books of primary market transactions in the common currency area, which would lead to an increased execution risk for new issues. In turn, this would ultimately trigger a compensatory movement in the direction of additional increases in new issue premiums.

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Jurisdiction	Current outstanding volume	Maturities 2022e	Issues 2022e	Issues 2022 ytd	Net supply 2022e	Maturities 2023e	Issues 2023e	Net supply 2023e
AT	42.8	3.0	13.5	13.3	10.5	1.8	14.0	12.3
AU	33.1	7.5	9.0	10.7	1.5	3.8	4.5	0.8
BE	17.0	2.8	2.5	2.5	-0.3	2.5	3.0	0.5
CA	82.2	8.0	30.5	29.5	22.5	15.0	25.0	10.0
СН	0.0	1.3	0.0	-	-1.3	0.0	1.0	1.0
CZ	1.0	0.0	0.5	0.5	0.5	0.0	1.0	1.0
DE	178.7	19.5	42.0	40.4	22.5	17.8	33.0	15.3
DK	5.0	2.5	0.5	0.5	-2.0	0.8	1.5	0.8
EE	1.0	0.0	0.5	0.5	0.5	0.0	0.5	0.5
ES	71.8	13.7	5.0	5.0	-8.7	9.4	9.0	-0.4
FI	30.3	4.8	6.0	6.0	1.3	5.8	8.0	2.3
FR	233.4	24.7	40.0	38.9	15.4	22.7	42.5	19.9
GB	21.9	8.0	4.0	3.3	-4.0	4.0	4.0	0.0
GR	0.5	0.0	0.0	-	0.0	0.5	0.5	0.0
HU	0.0	0.0	0.5	-	0.5	0.0	0.5	0.5
IE	1.8	1.8	0.0	-	-1.8	1.0	0.0	-1.0
IS	0.5	0.0	0.0	-	0.0	0.0	0.5	0.5
IT	48.8	7.8	3.8	3.3	-4.0	7.3	9.0	1.8
JP	4.9	0.0	1.5	-	1.5	1.0	1.5	0.5
KR	7.2	0.0	1.6	1.6	1.6	0.5	2.5	2.0
LU	1.5	0.0	0.0	-	0.0	0.5	0.0	-0.5
NL	67.1	5.3	8.5	8.0	3.3	3.8	10.0	6.3
NO	52.4	8.0	8.5	8.3	0.5	10.3	9.0	-1.3
NZ	10.0	1.8	3.0	2.3	1.3	1.5	4.0	2.5
PL	2.0	0.5	0.5	0.5	0.0	0.5	1.0	0.5
PT	3.0	2.8	0.0	-	-2.8	0.0	0.0	0.0
SE	29.8	5.0	6.0	5.3	1.0	4.5	6.0	1.5
SG	8.0	1.5	3.0	2.3	1.5	1.0	3.0	2.0
SK	5.0	0.0	1.5	1.5	1.5	0.0	2.0	2.0
Σ	960.3	129.8	192.4	183.8	62.6	115.5	196.5	81.0

EUR benchmark segment: NORD/LB supply forecast 2022 and 2023

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

Moody's changes banking sector outlook in some European countries

The rating agency Moody's reviewed the situation in a total of eight banking sectors at the start of November and altered the outlook for Czech Republic, Germany, Hungary, Italy, Poland and Slovakia from stable to negative. The outlook for the banking sector was kept at stable for just two jurisdictions, Austria and the UK. The weaker outlook for the six countries listed can be attributed to the economic slowdown in evidence in these respective markets. For example, the agency anticipates that rising prices and interest rates will compromise the creditworthiness of many businesses and households, which could unleash a fresh wave of problem loans. For Austria and the UK, Moody's sees greater resilience against the challenging macroeconomic environment through strong capitalisation and improved bank margins. Declining credit quality can also affect covered bonds. However, we do not expect any changes in the covered bond ratings or any significant deterioration in credit quality, since NPLs in the cover pools are usually exchanged for new cover assets in good time. We recently took a more detailed look at the cover pools of EUR benchmark and sub-benchmark issuers as part of our NORD/LB Issuer Guide Covered Bonds 2022. In this publication, investors will find information on the respective issuers as well as data on NPLs in the cover pools, among other aspects. Irrespective of the downturn seen in some banking sectors, we continue to regard covered bonds as a high-quality product, even in times of crisis.

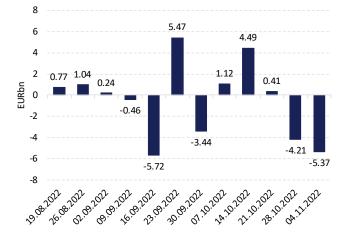
Market overview SSA/Public Issuers

Author: Jan-Phillipp Hensing

ECB meeting: delivered what had been expected?

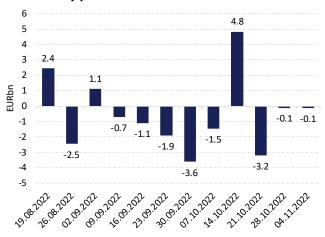
As anticipated, the ECB Governing Council decided to raise the three key ECB interest rates by 75bp each at its most recent regular meeting on 27 October. At the same time, it expects to raise interest rates further, since inflation remains well above its 2% medium-term inflation target. According to the central bank, inflation continues to be driven by soaring energy and food prices, supply bottlenecks and the post-pandemic recovery. The monetary policy is aimed at reducing support for demand and guarding against the risk of a persistent upward shift in inflation expectations. Flash estimates by Eurostat do not exactly ease the pressure on the monetary authority: inflation is expected to be 10.7% in October 2022. There were, however, no new updates regarding the APP and PEPP purchase programmes: reinvestments under the APP will continue "in any case, for as long as necessary" to maintain ample liquidity conditions and an appropriate monetary policy stance. As concerns the PEPP, the Governing Council still intends to reinvest the principal payments from maturing securities purchased under the programme until at least the end of 2024. We expect new information regarding reinvestments to be provided at the next regular meeting in December. What impact does the interest rate decision have on our coverage in the SSA segment? We are certain that the interest rate decision will not have a particularly negative impact on the refinancing conditions of supranationals, the German Laender or KfW, for example. Supras do not operate in a vacuum away from the above-mentioned political tensions, but when order books are oversubscribed several times, it will be in this sub segment. The +75bp rate hike had after all been expected and already priced in by most market players. The German Laender are currently exercising restraint, although the odd issue is nonetheless to be expected.

PSPP: weekly purchase volume



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

PEPP: weekly purchase volume



Investitionsbank Schleswig-Holstein: SME energy security fund launched

Since 1 November, small and medium-sized companies in Schleswig-Holstein have been able to utilise the SME energy security fund (Mittelstandssicherungsfonds Energie – MSFE) launched by Investitionsbank Schleswig-Holstein (ticker: IBBSH) via their house bank. The fund volume is EUR 200m and is part of the EUR 500m relief package set up by the federal state government in Kiel. This fund supports companies that have seen their energy costs at least double over the last year and are consequently now facing – or will face in the foreseeable future – liquidity problems. The loan amounts are between EUR 15,000 and EUR 750,000, and applications are being accepted until October 2023. Due to the rise in interest rates on the capital market, the interest rate on promotional loans is currently around 3.5%, though adjustments due to rising refinancing costs cannot be ruled out and a fixed interest rate will be granted for the first five years. In addition, the first two years are redemption-free. "The loans are tailored to companies that have an acute need for liquidity but would not get a loan from their principal bank alone under the current conditions", explained Claus Ruhe Madsen, State Minister of Economic Affairs. Furthermore, Madsen regards the programme – which Schleswig-Holstein is the first Land to launch – as a supplement to the support provided by the German government. According to the Minister, the companies concerned will only be able to survive in the long term if energy prices fall.

Debt brake: Bund and Laender at odds

There is a dilemma: the 16 Laender are almost unanimously calling for a suspension of the debt brake for 2023. Their reasoning is that without a state of emergency being declared, many Laender do not see themselves in a position to maintain a third relief package. However, there is one person who takes a different view: Federal Minister of Finance Christian Lindner. According to information from the Handelsblatt, his in-house lawyers came to the conclusion that determining an emergency situation was not easy from a legal point of view. In addition, the Laender themselves can declare an emergency situation by state constitution. In the last edition, we wrote an article on this topic and took a closer look at the different implementation of the debt brake at Laender level. The Laender, in turn, argue that declaring an emergency situation at Laender level is legally sensitive and therefore the German government must lead the way. Furthermore, the Laender's reasoning is that the Bund could declare an emergency and at the same time comply with the debt brake. However, the Federal Ministry of Finance does not see this as necessary and refers to the current financial situation of the federal and Laender governments. The Bund is planning for around EUR 140bn of new debt this year, while the Laender have achieved a surplus of around EUR 24bn in the first eight months. This means the Laender have a high surplus this year and often have extensive reserves available for financially worse times.

Nordic Investment Bank: record ESG issuances in 2022

Following its NOK 1bn tap issue for its green bond on 28 October, the Nordic Investment Bank (ticker: NIB) raised more than EUR 1bn (EUR equivalent) in ESG funding since the beginning of the year. Since its first issue of a green bond in 2011, this represents a record value for the issuer. It issues NIB Environmental Bonds (NEB) in the currencies EUR, SEK, DKK and NOK, thereby enabling global and Nordic-Baltic investors to invest in environmentally friendly projects in the countries of the shareholders.

Internal matters: Issuer Guide – publication of the Nordic Agencies 2022

Last Friday, we published the Issuer Guide – Nordic Agencies 2022 for our Germanspeaking readers (English version to follow). With a total outstanding bond volume equivalent to around EUR 213.4bn, spread over an impressive 1,666 bonds at the six agencies included in our study, Scandinavia is one of Europe's medium-sized agency markets. The players within this market are in some ways very similar. The market is particularly defined by institutions whose task is to finance regional local authorities. The Norwegian Kommunalbank (KBN), the Swedish Kommuninvest i Sverige, the Danish KommuneKredit and the Finnish Municipality Finance (MuniFin) account for the majority of the currently outstanding bonds issued by Scandinavian agencies. Due to their lending to municipalities, municipal associations, regions and public companies, there is an ongoing need for refinancing, which is largely covered by the capital market.

Inaugural issue: IDB Invest places a EUR benchmark bond for the first time

IDB Invest (ticker: IDBINV) – a member of the Inter-American Development Bank group (ticker: IADB) – is a multilateral development bank committed to promoting the economic development of its member countries in Latin America and the Caribbean through the private sector. IDB Invest mainly finances sustainable companies and projects in order to maximize economic, social and environmental development in the region. The largest regional shareholders are Argentina (12.1%), Brazil (10.9%) and Mexico (7.7%). Outside the region, the USA is the largest shareholder with a holding of 14.9%. The total assets of IDB Invest have continually increased in recent years, though in comparison with other multilateral development banks, the figure is still relatively small. Having amounted to USD 2.2bn in 2017, total assets steadily grew to reach USD 7.6bn in the most recent financial year. Net income was USD 131m in 2021. Fitch ratings agency has assigned IDB Invest its top rating of AAA with a stable outlook. Fitch highlights the "excellent" capitalisation levels, although this significantly diminished in recent years in the course of the pandemic and the resultant increase in lending. Ratings agency S&P assigned IDB Invest a grade of AA+ with a stable outlook and emphasised the extremely strong financial risk profile. Moody's also puts the issuer one notch below its top rating, assigning a grade of Aa1 (outlook: stable) and highlighted its strong asset performance and close relationship with IADB. On the capital market, IDB Invest currently has 17 bonds outstanding in four different currencies. When converted to EUR, the volume amounts to EUR 5.0bn. The lion's share has so far been placed in USD, with the equivalent of EUR 3.9bn issued, followed some way behind by the AUD at EUR 727m. Volumes in MXN and COP are rather low, with the equivalent of EUR 360m and EUR 29m placed, respectively. The maturities of the outstanding bonds tend to be short: up to and including 2026, the total volume amounts to EUR 4.5bn. With yesterday's EUR benchmark issue, another currency has been added: a social bond with a five-year maturity and a volume of EUR 650m was issued. The initial guidance was in the area of ms +15bp, but successfully narrowed by 3bp in the marketing phase to ms +12bp. The corresponding order book amounted to EUR 1bn and illustrates the investor interest in this issuer.

Primary market

After the ECB meeting, a few issuers ventured out onto the market. Due to our short publication break, we will reflect on the deals over the past two weeks in this issue. Things kicked off with KfW placing a tap: the green bond KFW 1.375% 06/07/32 was increased by EUR 1bn at ms -16bp. The order book amounted to EUR 1.2bn. A tap issue also came on the primary market from the European Investment Bank (ticker: EIB). The multilateral development bank tapped its climate awareness bond EIB 0.05% 11/15/29, also by EUR 1bn. The mid-swap spread was -17bp (guidance: ms -17bp area) and the books totalled EUR 1.35bn. Next came the Land of Hesse with a five-year bond. Marketing for the bond volume of EUR 500m (WNG) started in the region of ms -19bp and did not narrow further. The books ultimately had a volume of EUR 840m. Eurofima appeared on our screens by means of a green bond. The European Company for the Financing of Railroad Rolling Stock (ticker: EUROF) raised EUR 500m (WNG) for funding electric rolling stock for passenger railway transportation. Marketing started in the area of ms +22bp, but narrowed by 3bp to ms +19bp. The bond maturity was nine years and the order book amounted to an impressive EUR 1.5bn. Sticking with green bonds: Nederlandse Waterschapsbank (ticker: NED-WBK) also issued an ESG bond. The volume amounted to EUR 500m and the maturity was five years. The bond was placed at ms -11bp (guidance: ms -11bp area) and the corresponding order book amounted to EUR 700m. We had been expecting the next deal for some time. Agence France Locale (ticker: AFLBNK) issued a mandate a few weeks ago, and on Monday it was placed on the primary market. A total of EUR 500m (WNG) changed hands at OAT +67bp (guidance: OAT +70bp area) with a maturity of nine years. According to our calculations, this corresponds to approximately ms +25bp. It seems to have been worth the wait: the order book amounted to EUR 1.6bn. From Germany, Rentenbank (ticker: RENTEN) also approached investors with a 12-year bond. With a volume of EUR 500m, the deal was placed at ms -5bp, although no information was provided regarding guidance or order book. Two bonds were placed on the capital market yesterday, on Tuesday. We already discussed the IDB Invest deal on the previous page; the other bond was issued by the French Bpifrance (ticker: OSEOFI), with EUR 1bn changing hands at OAT +56bp (guidance: OAT +60bp) and a maturity of four years. The books amounted to EUR 1.95bn overall. Mandates were also announced: the EU – also this issuer's ticker – provided selected banks with RfPs to meet further funding requirements under the NGEU and MFA programmes. In addition, CADES intends to issue a five-year social bond in the near future. Interestingly, the EIB is planning further digital bonds. This would be an inaugural GBP bond and the second EUR-denominated digital transaction in the bank's history.

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Issuer	Country	Timing	ISIN	Maturity	Size	Spread	Rating	ESG
OSEOFI	FR	08.11.	FR001400DXK4	3.8y	1.00bn	ms -1bp	AA / Aa2 / -	-
IDBINV	SNAT	07.11.	XS2547604715	5.0y	0.65bn	ms +12bp	AAA / Aa1 / AA+	Х
AFLBNK	FR	07.11.	FR001400DLI3	9.2y	0.50bn	ms +25bp	- / Aa3 / AA-	-
RENTEN	DE	07.11.	XS2555166128	12.0y	0.50bn	ms -5bp	AAA / Aaa / AAA	-
NEDWBK	NL	01.11.	XS2553554812	5.0y	0.50bn	ms -11bp	- / Aaa / AAA	Х
EUROF	SNAT	01.11.	XS2552880838	9.0y	0.50bn	ms +19bp	AA / Aa2 / AA	Х
HESSEN	DE	01.11.	DE000A1RQEG5	4.8y	0.50bn	ms -19bp	- / - / AA+	-

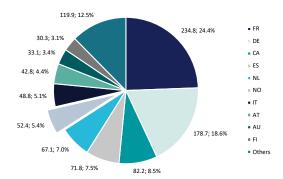
Source: Bloomberg, NORD/LB Markets Strategy & Floor Research (Rating: Fitch / Moody's / S&P)

Covered Bonds Covered bond jurisdictions in the spotlight: a look at Norway

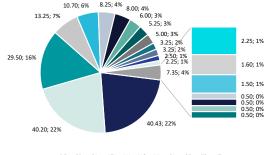
Norway: a special covered bond jurisdiction

Together with Denmark and Sweden, Norway ranks among those economies that have the largest mortgage-backed covered bond markets relative to GDP. While the outstanding volume of mortgage covered bonds accounted for 129% of annual economic output in Denmark in 2021, the figures for Sweden and Norway were 45% and 32% respectively. The comparative figures for other European countries are definitely far lower, namely 7% for Germany, 9% for France, 18% for Spain, 19% for Finland and 22% for the Netherlands. In this respect, it is not surprising that Norway ranks as one of the major covered bond jurisdictions in terms of the total volume of outstanding covered bonds, although the figure in Norway has fallen sharply compared with 2020 (41%). According to the current ECBC annual statistics (reference date: 31 December 2021), Norway ranks in tenth place at EUR 131bn; this is ahead of the UK (EUR 92bn) and just behind Canada (EUR 138bn). There can therefore be no doubt as to the systemic relevance of covered bonds in Norway. With regard to the EUR benchmark segment on which we concentrate, the Scandinavian country ranks among the top 10 issuing countries. In terms of outstanding volume, Norway ranks sixth (EUR 52.4bn). Nevertheless, issues in domestic currency play a major role. According to the ECBC's statistics for 2021, EUR-denominated bonds account for virtually the same issuance volume as those in the domestic currency (EUR 62.2bn vs. equivalent of EUR 62.5bn in NOK). We have already seen five of the seven active benchmark issuers on the market in the current year (EIKBOL, total EUR 1.0bn; SPABOL, EUR 3.5bn; SVEGNO, EUR 1.5bn and SRBANK, EUR 1.75bn, SORBNO; EUR 500m). Given the criteria specified by Norwegian covered bond legislation and the stringent lending criteria required by the supervisory authority in conjunction with the robust health of the Norwegian banking market, we believe that "Obligasjoner med fortrinnsrett" (covered bonds according to Norwegian law) are definitely a welcome addition for some investors. For this reason, we have decided to examine the Norwegian covered bond market, including its legislation and the EUR benchmark segment, in greater detail as part of the following article.

Distribution by jurisdiction (EUR BMK; EUR bn)



Primary market (2022 ytd; EUR BMK; EUR bn)

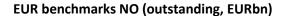


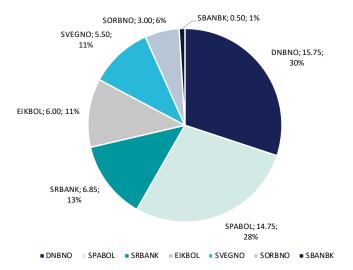
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Source: Bloomberg, NORD/LB Markets Strategy & Floor Research

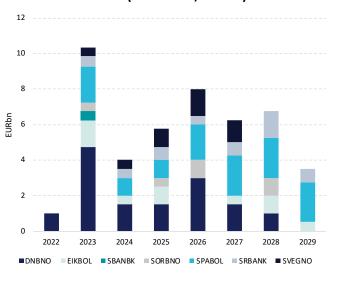
Norwegian covered bond market

As discussed at the beginning, the Norwegian covered bond market consists almost equally of NOK issues and EUR issues. We see the equivalence of the percentage share with those covered bonds issued in domestic currency as an indicator of the fact that the extended investor base is of major relevance for Norwegian issuers, which is why Norwegian issuers increasingly rely on the EUR benchmark segment in addition to their domestic currency. While currency-specific aspects such as the cross-currency basis may be an argument for issuers here and there, we would see the targeting of a major group of investors, in particular, as a selling point for EUR benchmarks.





EUR benchmarks NO (maturities, EURbn)



NORD/LB

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

EUR benchmark segment in Norway: seven active issuers with an outstanding volume of EUR 52.4bn

We currently calculate the volume of outstanding EUR benchmarks from Norway to amount to EUR 52.4bn spread across seven issuers. The two largest issuers DNB (EUR 15.75bn or 30%) and SPABOL (EUR 14.75bn or 28%) together account for almost 70% of the outstanding EUR benchmarks from Norway. As alluded to in the opening paragraph, Norwegian issuers have already approached investors with a total of EUR 8.25bn in ten issues this year. All banks focus on the soft bullet (SB) sub-segment. Key figures for the five issuers or seven programmes are shown in the following table. DNB has by far the largest cover pool with cover assets amounting to the equivalent of EUR 66.2bn. These are matched by covered bonds of EUR 36.3bn. DNB is also the largest EUR benchmark issuer in terms of volume, namely EUR 15.75bn (11 bonds), while SpareBank 1 Boligkreditt is the largest in terms of the number of outstanding covered bonds, namely 14 bonds. The proportion of residential assets in cover pools is comparatively high. The covered bonds benefit without exception from a top rating from Moody's (Aaa) and in the case of DNB an additional AAA rating from S&P. The overcollateralisation ratios are well above the minimum standards required by law (2%) and in excess of the overcollateralisation required to maintain the respective ratings.

Cover Pool Outst. Volume OC LCR level / Maturity **Covered Bond rating** Bank (link) Туре вмк (EURm) **Risk weight** (EUR m) (%) Туре (Fitch / Moody's / S&P / DB DNB Bank (DNBNO) Μ 66,242 36,259 82.7 BMK 1/10% SB - / Aaa / AAA / -Eika Boligkreditt (EIKBOL) 1/10% 8.8 - / Aaa / - / -М 10,847 9.973 BMK SB 20.3 1/10% - / Aaa / - / -Sbanken (SBANBK) Μ 3,622 3,011 BMK SB - / Aaa / - / -Sparebanken 1 (SPABOL) М 26.009 24.630 BMK 1/10%SB 5.6 Sparebank 1 SR-Bank (SRBANK) Μ BMK 1/10% - / Aaa / - / -9,832 7,857 25.1 SB Sparebanken Sør (SORBNO) 4.753 1/10%- / Aaa / - / -М 5.438 14.4 BMK SB Sparebanken Vest (SVEGNO) 12,211 9,486 28.7 BMK 1/10% SB - / Aaa / - / -Μ

Extract from the NORD/LB Issuer Guide Covered Bonds 2022: Norwegian EUR benchmark issuers

Source: Banks, rating agencies, NORD/LB Markets Strategy & Floor Research

Norwegian covered bond legislation

The Norwegian Act on Financial Institutions and the associated regulation provide the legal basis for issuing covered bonds in Norway; they came into effect in June 2007 and were revised in January 2016 and July 2022. They also provide the legal basis for covered bond investors' preferential claim to the cover assets. The specialist bank principle applies to the issuance of covered bonds in Norway, under which banks use special purpose vehicles (SPV) to place covered bonds; these can be recognised in Norway by the term "Boligkreditt". This is clear from the issuers: DNB Bank – DNB Boligkreditt, Eika Gruppen AS – Eika Boligkreditt, SpareBank 1 Alliance – SpareBank 1 Boligkreditt, SpareBank 1 SR-Bank – SR-Boligkreditt, Sparebanken Sør – Sparebanken Sør Boligkreditt, Sparebanken Vest -Sparebanken Vest Boligkreditt. In Norway, suitable cover assets include mortgage, public sector assets and loans that are secured with other assets (among others, these may be loans to banks or derivatives). The LTV ratios for mortgage assets depend on the type of cover and are between 60% and 75%, whereby cover assets with higher LTV ratios can be included in cover up to the limits. Geographically speaking, the assets are concentrated in the EEA and OECD states, and this applies to both mortgage receivables and public sector cover. The issuer is obliged to review the assets and analyse the impact of changes in property values on loan-to-value ratios and the value of the cover pool at least once a year. The limit for possible substitute cover assets is 20%. With regard to the repayment structure, all placements have been issued as soft bullets in Norway. Norwegian covered bonds satisfy the requirements of the old article 52(4) UCITS and the requirements of article 129 of the CRR. Accordingly, under the standardised credit risk approach, covered bonds can benefit from a risk weighting of 10% in the bast case. The EUR benchmark bonds placed by the issuers considered by us in this article are also eligible as collateral at the ECB.

NORD/LB

Norway also amended its covered bond law

Norway is one of the countries that have implemented the European frameworks such as the CRR, CRD and now the Covered Bond Directive although they are not members of the European monetary union. There are scarcely any significant changes compared with the previous national covered bond act. Among others, adjustments were made to the matter of the minimum requirements for overcollateralisation (2% and 5%; both in terms of the net present volume and nominally) and the liquidity buffer that has to be maintained (180 days).

CB Directive implemented: "European Covered Bonds (Premium)" also found in Norway Overall, the amendments to covered bond legislation in the wake of the harmonisation of the European covered bond market also constitute an improvement in credit quality for Norwegian covered bonds, as is clear for the other jurisdictions that are active on the market. For example, the above-mentioned adjustments improve the protection from liquidity risks. While the new requirements set a higher legal minimum requirement, the OC ratios of the issuers active on the Norwegian market already exceeded these requirements before implementation of the CBD. The fact that Norway also ranks among those jurisdictions that have not introduced any new types of possible cover assets must also be highlighted, which ultimately also leads to the assessment that Norwegian covered bonds issued from 8 July 2022 may carry the "European Covered Bond (Premium)" label.

An overview of legislation: Norway und Germany

Country	Norway	Germany
Name	Obligasjoner med fortrinnsrett	Public sector Pfandbriefe, mortgage, ship & aircraft Pfandbriefe
Abbreviation	OMF	Öpfe, Hypfe, Schipfe, Flupfe
Special act	Yes	Yes
Cover assets (incl. substitute cover, if applicable)	Mortgage loans, public sector receivables, loans secured with other assets	Mortgage, ship and aircraft loans, public sector receivables
Owner of the assets	lssuer	Issuer
Specialist bank principle	Yes	No
Geographical restriction – mortgage cover	EEA, OECD	EEA, CH, US, CA, JP, AU, NZ, SG, UK ¹ , Schipfe and Flupfe worldwide
Geographical restriction – public sector cover	EEA, OECD	EEA, CH, US, CA, JP, UK ¹⁰
LTV ratio – mortgage cover	Private: 75%, commercial: 60%, Holiday/leisure properties: 60%	60% of the loan to value ratio
Legal priority in bankruptcy	Yes	Yes
Cover register	Yes	Yes
Derivatives in the cover pool	Yes	Yes
Substitute cover	Yes	Yes
Substitute cover limit	20%	15% Öpfe, 20% Hypfe, SchipfE, Flupfe
Minimum overcollateralisation	2% / 5% nominal	Hypfe/Öpfe: 2% Schipfe/Flupfe: 5%
Asset encumbrance	-	-
Deferral of maturity	Yes	Yes
Triggers for deferral of maturity	Issuer insolvency / liquidation	Issuer insolvency / liquidation
CRD met	Yes	Yes (does not apply to aircraft Pfandbriefe)
ECB-eligibility	Yes	Yes

Source: national laws, ECBC, NORD/LB Markets Strategy & Floor Research

¹Non-EEA assets limited to 10% unless the collateral is guaranteed

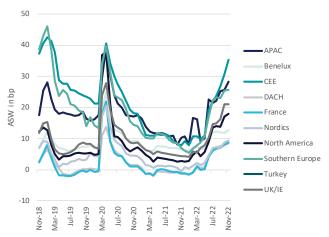
Spread trend in the current environment

With regard to the spread trend in the Norwegian EUR benchmark segment, spreads were seen to widen in the wake of the Russian war of aggression against Ukraine and the turnaround in interest rates, as they did in other covered bond jurisdictions. While the ineligibility of Norwegian EUR benchmarks for purchase under the CBPP3 or PEPP theoretically means that they do not benefit from one of the factors supporting spreads, the shortage of supply could have resulted in tighter spreads; at least as the result of purely technical consideration of the market. Overall, there has been no market-specific development for covered bonds from Norway that would have justified a marked widening.

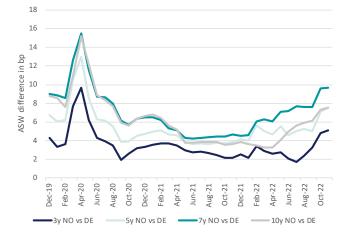
Spread trend and issue forecast for 2022/2023

With regard to future supply up to the end of 2022, we are still expecting primary market issues of around EUR 500m from Norway. For 2023, we forecast a new issuance volume of EUR 9.0bn with maturities of EUR 10.3bn, resulting in a negative net supply. With regard to spreads up to the midway point of 2023, we expect slight widening tendencies from the current level. However, the short maturity range of 3y should only widen by just under one basis point, whereas we expect spreads to widen by 2bp for 5y bonds and 5bp for 10y bonds.

Covered bonds: spreads (generic)



Covered bonds: ASW NO vs. DE (3y, 5y, 7y, generic)



Source: Market data, NORD/LB Markets Strategy & Floor Research

Conclusion

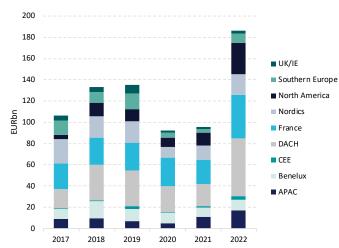
With regard to the size of the Norwegian covered bond market as a whole, the country's EUR benchmark segment seems to be well placed even though the euro is not the domestic currency. Having said that, the country is also one of the established EUR benchmark jurisdictions. We still expect to see the odd Norwegian issuer on the primary market before the end of the current year and are expecting net supply to be slightly negative in 2023. Essentially, the situation for covered bonds from Norwegian issuers can be viewed as robust, which is attributable to the legal framework conditions, the credit quality, profitability of issuers in the EUR benchmark segment and the sound economic environment. Although the situation on the property market must be viewed as challenging as a consequence of the turnaround in interest rates combined with surging prices, the situation for covered bond ratings is likely to be stable for the moment at least.

Covered Bonds Tenth edition of the NORD/LB Issuer Guide Covered Bonds Author: Stefan Rahaus

Covered bond market: turning point(s) here, too

On several levels, the 2022 global covered bond market is characterised by the muchquoted phrase "turning point": the date of 8 July 2022 should of course first be mentioned in this context, as it is when the uniform minimum requirements for covered bonds came into effect with the Covered Bond Directive in the countries of the eurozone as well as in those opting for voluntary implementation. From this date, the designations "European Covered Bond" and "European Covered Bond (Premium)" have also been introduced. Even though there are still some significant deviations between national legislations, we welcome the harmonised minimum standards and the extended reporting requirements. With the heralded turnaround in interest rates and the shift away from unconventional measures (TLTRO III conditions, ECB order sizes), the ECB's monetary policy also had a considerable impact on the covered bond market. The rise in interest rates, in conjunction with high swap spreads, led to attractive final yields for investors that had not been seen for several years. In addition to the general economic environment, geopolitics (mainly due to the Russia's war of aggression against Ukraine) have brought a high degree of uncertainty into the markets. In this context, covered bonds were able to live up to their status as safe havens in 2022 and affirmed their appeal for issuers and investors: when compared to the two previous years, there might indeed be talk of a major countermovement in the issuance volume of EUR benchmark and sub-benchmark bonds, the new issue volume nearly doubled compared with the previous year (to date) in both sub-markets.

EUR benchmark issuances over time



EUR sub-benchmark issuances over time



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

NORD/LB Issuer Guide Covered Bonds 2022: global overview of 216 cover pools for 182 institutions from 27 jurisdictions

The Issuer Guide for 2022 includes information from 182 institutions that each had outstanding EUR benchmark and/or sub benchmark issues as at the reporting date. In the course of our evaluation, we collected data from 216 cover pools in 27 jurisdictions. The cover pool volume of the cover pools listed amounts to the equivalent of EUR 2,993.97bn, which is offset by issuances equivalent to EUR 2,031.73bn. The volume of outstanding benchmarks amounts to EUR 943.12bn (1,092 bonds), with issuers from France again accounting for the largest share with a volume of EUR 233.42bn (224 bonds), followed by Germany with EUR 177.71bn (254 bonds). In view of the increasingly important market for ESG covered bonds, this sub-segment has been shown to still very much play a niche role: EUR 55.95bn split across 78 bonds from Germany (26), France (14), South Korea (12), Norway (10), Spain (5), Austria (3), Finland, Italy (2 each) as well as the Netherlands, Poland, Slovakia and the UK (1 each).

Germany accounts for the most cover pools in the NORD/LB Issuer Guide Covered Bonds 2022

The different characteristics of jurisdictions included in the Issuer Guide are also reflected in the country profiles from our selection criteria. Accordingly, Germany has the highest number of cover pools. We recorded data for 42 cover pools in the country, which cumulatively (EUR 476.39bn) ranks ahead of France (EUR 458.06bn from 17 pools). From Austria, 21 pools (previous year 17) have been included. Overcollateralisation, calculated on the basis of the cover pool and outstanding volume, ranges at country level from 124.02% in Singapore to 11.73% in Denmark. The basic average overcollateralisation for all countries is 50.75%. Interesting conclusions can also be drawn with regard to the size of issuances: the average volume across all EUR benchmarks is EUR 745m, although Canada (EUR 1.305bn), Spain (EUR 1.143bn) and France (EUR 1.042bn) are all issuing large volume bonds of more than EUR 1.0bn, on average. Germany is moving at EUR 700m in this respect.

Conclusion

Investors and issuers are currently once more increasingly focusing on the covered bond market. In our opinion, the NORD/LB Issuer Guide Covered Bonds 2022 offers a good opportunity to gain an overview of the market, even in this phase of "turning points". Along-side market overviews for 27 jurisdictions, the 182 issuer profiles and a standardised examination of 216 cover pools also allow for conclusions to be drawn at a micro level. In addition, the "Regulatory" chapter also provides information on the classification of covered bonds in accordance with the CRR and LCR management. As the implementation phase for amendments to the European covered bond legislation comes to an end, the "Regulatory" chapter of the Issuer Guide 2022 again includes an updated table providing an overview of legislation amendments in different countries for comparison. We are confident that the NORD/LB Issuer Guide Covered Bonds 2022 will once again add value in your day-to-day work.

SSA/Public Issuers SSA primary stats ytd before the final sprint

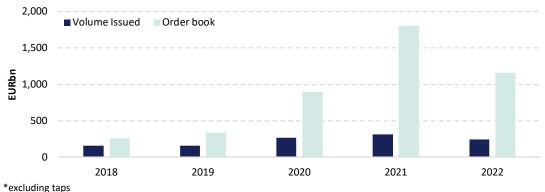
Authors: Jan-Phillipp Hensing // Dr Norman Rudschuck, CIIA

As expected, high issuance volumes

Having already looked at January, which is always busy, in <u>Issue #04</u> from 2 February and also provided a suitable appraisal of the first third of the year and the first half of the year (<u>Issue #17</u> and <u>Issue #22</u> of this publication, respectively), we would like to extend the time scale to ten months in this issue. Up to the end of October 2022, for the SSA segment as defined by us – supranationals, sub-sovereigns and agencies, i.e., excluding sovereigns – EUR benchmarks totalled EUR 243.7bn (2021: EUR 313.2bn; 2020: EUR 266.0bn; 2019: EUR 154.5bn). At a cumulative figure of EUR 1,163.1bn, the order books were far larger than in 2020 (EUR 893.5bn). However, as expected, it was impossible to build on the level of the 2021 record year (EUR 1,806.1bn) in 2022.

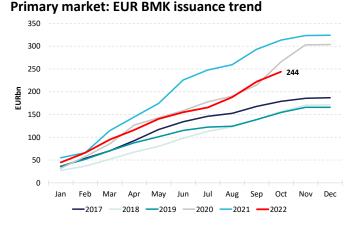
Market environment

Many people would certainly have expected the year to date to have played out very differently: there were high numbers of coronavirus cases during the Omicron wave in addition to the shocking geopolitical news from Ukraine combined with rising inflation rates. At most, the monetary policy turning point was priced in at the beginning of the year. The cycle of rising interest rates finally started on 21 July with the first step in a longer journey. It is therefore not surprising that investors are increasingly investing in "safe haven" bonds. The net purchases under the PEPP were suspended as planned at the end of March, but the APP (asset purchase programme) stepped up in place of the obsolete PEPP until 1 July with net purchases of EUR 40bn in April, EUR 30bn in May and EUR 20bn (again) in June. As a reminder, primary market purchases by the ECB (and associated central banks) are not possible in the SSA segment under the PSPP and PEPP. As announced, the ECB aspired to raise interest rates following the end of the last net purchases, which were brought to an end on 1 July. The number and, in particular, the level of rate hikes constitute or constituted the sticking point to date. Given the highest inflation rates in recent decades, it is already clear that the omens are not good, and this has been reflected in three significant rate hikes so far (+50bp, 2x +75bp).

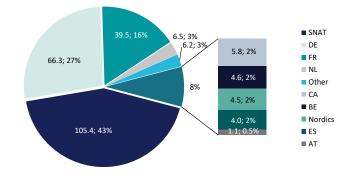


EUR benchmarks at end of October through the respective years versus order books*

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







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

The big picture

Let us start our review by comparing issuance volumes in recent years: up to the end of October, we recorded EUR BMK issues totalling EUR 243.7bn in our SSA segment, which we defined at the beginning. The figure is admittedly down on the pandemic years of 2020 and 2021 but is still a significantly larger total than in the years preceding the pandemic. The largest share was accounted for by supranationals: in total 35 new bonds amounting to EUR 105.4bn were issued in this segment. Supranationals' order books have been full to bursting so far this year: if all the issues are added together, we come to a figure of EUR 697.4bn – more than all the other sub-segments put together. We registered the largest number of bonds (43) in Germany, however, their total amount, at EUR 66.3bn, lags behind that of the supranationals. Naturally, they operate on a larger scale than regional promotional banks or even the German Laender. Nevertheless, the aggregate order book volume of EUR 275.8bn was considerable. By definition, KfW was the main driver here. France achieved third place on our list with an aggregate issuance volume of EUR 39.5bn. Here, 25 bonds were issued up to the end of October; the deficit or debt repayment fund CADES has always attracted the most interest in the form of order book entries in the French SSA segment. In Canada (not just the provinces we cover), we recorded EUR BMK issues of EUR 5.8bn, which is unchanged from the end of April, of which more than half were issued by pension funds that we do not analyse in detail. Bonds totalling EUR 5.5bn were issued in the same period last year. Belgium comes in behind Canada in the benchmark ranking with a volume of EUR 4.6bn. The Belgian SSA market is noteworthy in that it consists solely of regions. We also recorded a year-on-year increase in issues from the Netherlands: following issues of EUR 5.0bn in 2021, the volume came to EUR 6.5bn in the same period for 2022. Our coverage from the Nordics amounted to EUR 4.5bn at the end of October in the form of six bonds. Spanish issuers therefore occupied the penultimate place in the benchmark ranking (EUR 4.0bn from seven bonds). We registered the lowest issuance volume (EUR 1.1bn) in Austria due among other factors to the fact that the government has been solely responsible for funding ÖBB Infrastruktur since 2017. A further EUR 6.2bn was raised by all other jurisdictions (such as Portugal and Poland, as well as those in Asia) across five EUR bond deals.

Issuer	# Benchmark transactions	lssuer	EUR benchmarks (in bn)
EU	10	EU	54.4
KFW	9	KFW	36.0
EFSF	6	CADES	21.0
NRWBK	5	EFSF	18.0
CADES	5	EIB	16.0
EIB	5	NRW	7.5
BERGER	4	IDAWBG	6.0
NIESA	4	OSEOFI	4.3
OSEOFI	4	BNG	4.3
NRW	4	NRWBK	4.0

Overview of issuers with the most transactions and the largest volume

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

A look at Germany: who has been active on the primary market, and who has been absent so far in 2022?

Let's look at issues in Germany in detail. To date, we have included EUR BMK issues of EUR 20.5bn from the "17" German states (including the Gemeinschaft deutscher Laender joint issuance vehicle) in our database. In terms of volume, North Rhine-Westphalia (EUR 7.5bn) has been most active to date, while in terms of the number of bonds, the states of Lower Saxony (EUR 3.0bn), Berlin (EUR 2.2bn) and North Rhine-Westphalia rank equally with four bonds in each case. There have been no EUR BMK bonds so far from the six states Bavaria, Baden-Württemberg, Saxony, Hamburg, Mecklenburg-Western Pomerania and Saarland. However, it should be noted here that the states HAMBRG, MECVOR and SAARLD participated in the Laender jumbo (ticker: LANDER). There have been no bonds so far from some of the regional promotional banks included in our coverage either: in the year to date, only LBANK, NRWBK, IBB and IBBSH issued bonds of more than EUR 500m. KFW and RENTEN remain as active as ever. We also saw an issuing syndicate of regional promotional banks for the first time after IFBHH, ISBRLP and ILBB jointly raised EUR 500m through a social bond (ticker: LFIESG).

E-supras well ahead

In the sub-segment of supranationals, the e-supras (EU, EIB and EFSF) stood out in particular: in the case of the mega-issuer, the EU, we established an EUR BMK issuance volume of EUR 54.4bn based on ten issues (excluding auctions and taps). The order books provided evidence of the issuer's popularity: in total, these amounted to EUR 452.8bn. We recorded issues of EUR 18.0bn and EUR 16.0bn from the EFSF and EIB, respectively. On average the EIB's order books were more than eight times oversubscribed, amounting to EUR 135.5bn in total. The ESM also issued a new bond (EUR 2.0bn). As such, the four Luxembourg supras have therefore achieved an impressive EUR 90.4bn so far. Outside the e-issuers, we recorded issues by AFDB, COE, IDAWBG, NIB, ASIA, CAF and EUROF. These issuers raised a total of EUR 15.0bn. We are still expecting the EU to carry out sporadic issues, while the EFSF and ESM have already announced that their funding for 2022 is complete.

ESG gaining further momentum

Let us take a look at the steadily increasing supply of ESG bonds: in 2022, we have so far included a total of 22 green bonds in our database, of which the aggregate volume amounted to EUR 37.9bn. Social bonds came to a slightly smaller total: here, we reported a total volume of EUR 32.3bn based on 16 bonds. In particular, France's CADES (naturally) stands out in this segment, having issued five social bonds totalling EUR 21.0bn in the period under consideration. We determined a total of 21 bonds in sustainability format totalling EUR 23.3bn. For further information regarding the development of the ESG market, please refer to our NORD/LB Fixed Income Special – ESG Update from the spring and Issue #18 in 2022 of this publication.

Taps also of relevance

Before we reach the conclusion, we should like to look briefly at taps. These were not included in the data considered above, as they do not constitute new EUR BMK bonds. Nevertheless, we do not wish to sweep them under the carpet. In total, we have reported 50 taps in our coverage up to the end of October. The total volume is definitely respectable, amounting to EUR 72.3bn overall. At EUR 42.5bn, the European Union (EU) accounts for the lion's share here.

Conclusion

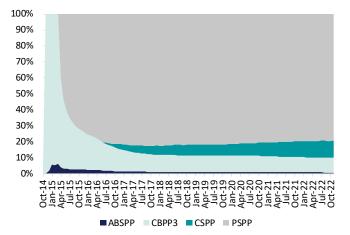
The year 2022 will already be going down in history because of the various events seen across the globe. While the aid programmes to contain the coronavirus pandemic are slowly dissipating, issuers and investors are now both facing new challenges in light of Russia's war of aggression against Ukraine and the resulting energy crisis. This is also clearly reflected on the primary market: although the German Laender are finding their way back to "normality", some of them have not ventured onto the primary market in the year to date or have only issued bonds under the LANDER ticker instead of their own EUR benchmarks. Nevertheless, new relief packages and special funds are already being planned, which may result in higher funding figures next year. We do not expect any major surprises over the rest of this year. The European Union will appear several more times according to its funding plan. Otherwise, the odd agency could still conduct some strategic pre-funding for 2023.

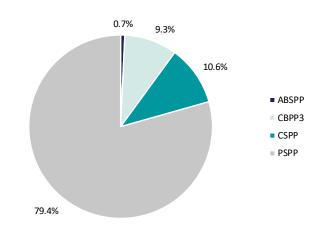
ECB tracker

Asset Purchase Programme (APP)

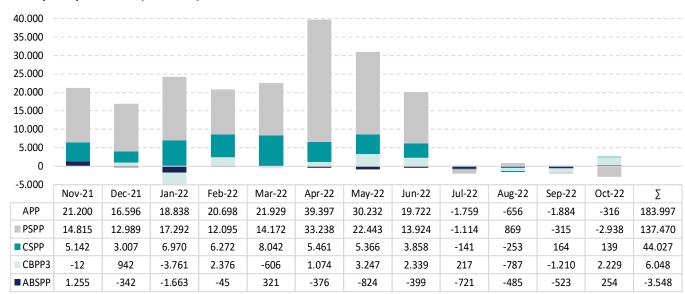
	ABSPP	СВРРЗ	CSPP	PSPP	APP
Sep-22	23,594	300,157	344,388	2,588,118	3,256,257
Oct-22	23,849	302,385	344,527	2,585,180	3,255,941
Δ	+254	+2,229	+139	-2,938	-316

Portfolio structure

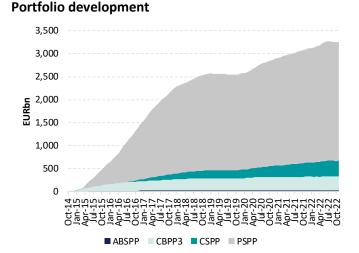




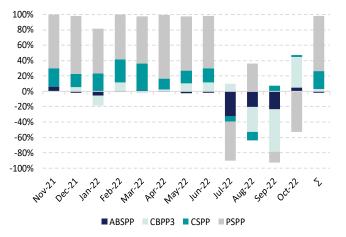
Monthly net purchases (in EURm)



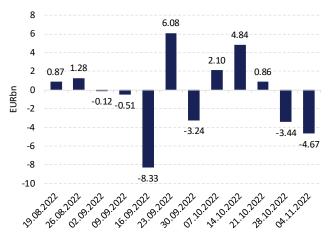
Source: ECB, NORD/LB Markets Strategy & Floor Research



Distribution of monthly purchases



Weekly purchases

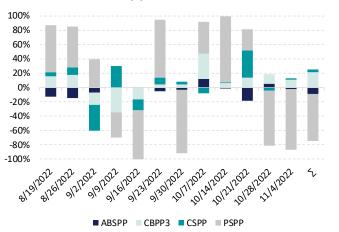


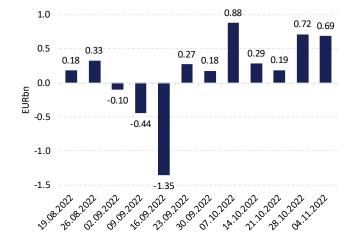
Expected monthly redemptions (in EURm)

55.000 50.000 45.000 40.000 35.000 30.000 25.000 20.000 15.000 10.000 5.000 0 Jan-23 -Nov-22 -2021 2022 Nov-22 Dec-22 Jan-23 Feb-23 Mar-23 Apr-23 May-23 Jun-23 Jul-23 Aug-23 Sep-23 Oct-23 Oct-23 Oct-23 APP 18.356 15.631 29.172 22.562 42.480 30.257 35.805 22.837 31.021 17.823 21.078 52.693 339.715 247.069 299.119 305.728 PSPP 14.669 12.016 19.469 13.624 31.965 23.712 30.554 16.619 26.317 16.445 13.272 44.745 263.407 188.494 228.585 236.722 CSPP 2.579 28.966 1.031 1.243 2.784 2.182 4.219 2.388 2.557 3.033 986 3.358 2.606 17.134 17.670 26.692 CBPP3 2.937 2.167 1.487 4.786 6.050 5.631 1.874 3.112 1.170 0 3.346 4.465 37.025 30.143 41.244 33.371 ABSPP 489 2.133 706 665 1.220 798 549 501 392 1.102 877 10.317 11.298 11.620 8.943 885

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

Distribution of weekly purchases

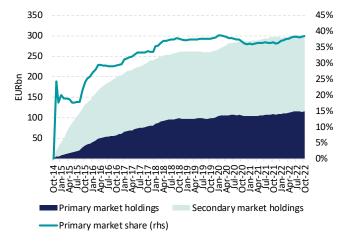




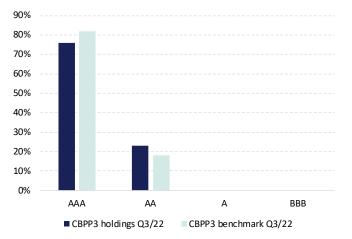
Covered Bond Purchase Programme 3 (CBPP3)

Weekly purchases

Primary and secondary market holdings

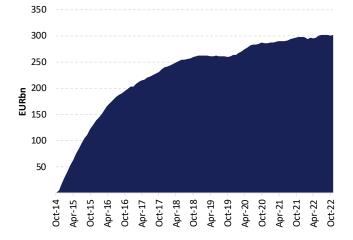


Distribution of CBPP3 by credit rating



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

Development of CBPP3 volume

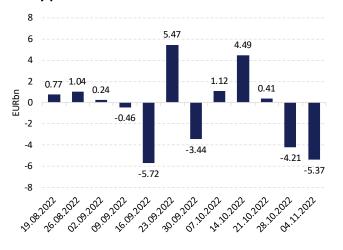


Change of primary and secondary market holdings



Distribution of CBPP3 by country of risk





Public Sector Purchase Programme (PSPP)

Weekly purchases



Adjusted Expected Current WAM WAM of Holdings Difference Difference of portfolio³ eligible universe⁴ Jurisdiction distribution holdings (EURm) (EURm) (in years) key¹ (EURm)² (in years) (in years) AT 2.7% 76,849 74,108 2,741 7.3 8.2 -0.9 ΒE 3.4% 92,985 92,246 739 7.5 10.3 -2.8 CY 0.2% 4,398 5,448 -1,050 8.6 9.1 -0.5 DE 24.3% -5,138 8.0 662,326 667,464 6.7 -1.3 EE 0.3% 445 7,132 -6,687 7.7 7.7 0.0 ES 11.0% 16,745 7.7 -0.5 318,672 301,927 8.2 -0.7 FI 1.7% 43,279 46,509 -3,230 8.2 8.9 FR 537,438 517,137 20,301 6.7 8.6 -1.9 18.8% GR 0.0% 0 0 0 0.0 0.0 0.0 706 IE 1.6% 43,582 42,876 8.2 10.5 -2.4 IT 15.7% 443,160 430,143 13,017 7.2 7.9 -0.7 -8,739 LT 0.5% 5,915 14,654 10.4 10.2 0.2 LU 0.3% 3,901 8,340 -4,439 5.8 7.8 -2.0 LV 0.4% 3,863 9,866 -6,003 8.9 9.0 -0.1 MT 0.1% 1,417 2,656 -1,239 11.2 9.6 1.6 NL 5.4% 131,597 148,384 -16,787 7.8 9.6 -1.8 ΡT 55,924 -0.3 2.2% 59,261 -3,337 7.2 7.5 SI 0.4% 11,052 12,192 -1,140 9.4 9.5 -0.1 -0.5 SK 1.1% 18,418 28,997 -10,579 7.9 8.4 **SNAT** 10.0% 288,489 274,371 14,118 9.4 -1.4 8.1 Total / Avg. 100.0% 0 7.2 8.5 -1.2 2,743,710 2,743,710

¹ Based on the ECB capital key, adjusted to include supras and the disqualification of Greece

² Based on the adjusted distribution key

³ Weighted average time to maturity of PSPP portfolio holdings

⁴ Weighted average time to maturity of the bonds eligible for purchasing under the PSPP

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

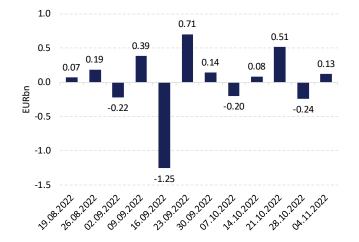


Development of PSPP volume

Corporate Sector Purchase Programme (CSPP)

Weekly purchases

Weekly purchases



Asset-Backed Securities Purchase Programme (ABSPP)

400 300 292 300 200 100 1 0 E Engra -100 -9 -21 43 -114 125 -200 152 -300 -246 -271 -400 -375 -500 23.09.2022 30.09.2022 07.20.2022 16.09.2022 21.10.2022 26.08.202 02.09.2022 09.09.2022 14.10.2022 04.11.2022 28.10.202 19.08.2022

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

Development of CSPP volume



Development of ABSPP volume



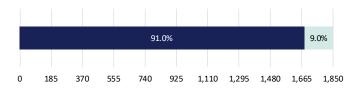
NORD/LB

Pandemic Emergency Purchase Programme (PEPP)

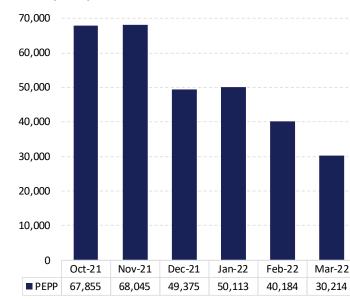
Holdings (in EURm)

	PEPP
Aug-22	1,714,539
Sep-22	1,713,035
Δ (net purchases)	-1,505

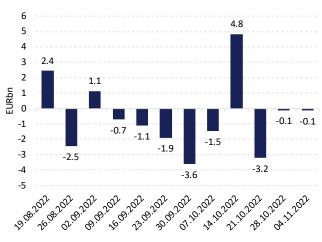
Invested share of PEPP envelope (in EURbn)



Monthly net purchases (in EURm)



Weekly purchases



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

Development of PEPP volume

Jun-22

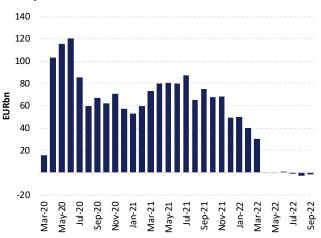
12

May-22

-10

Apr-22

-4



Jul-22

-722

Aug-22

-2,813

Sep-22

-1,505

Σ

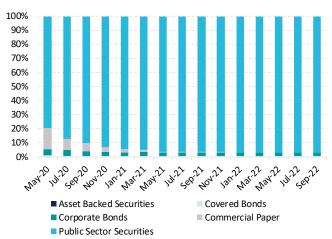
300,744

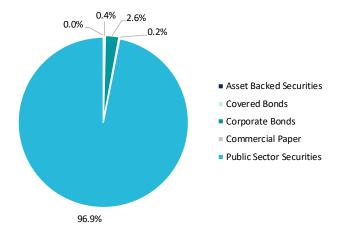


Asset-backed Commercial **Public Sector** Covered Corporate PEPP Securities Bonds Bonds **Securities** Paper Jul-22 0 6,062 42,814 3,322 1,639,774 1,691,971 6,056 43,233 1,631,176 Sep-22 0 2,871 1,683,336 0 Δ (net purchases) 0 +453 -450 -4,320 -4,317

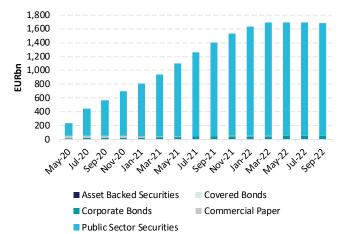
Holdings under the PEPP (in EURm)

Portfolio structure

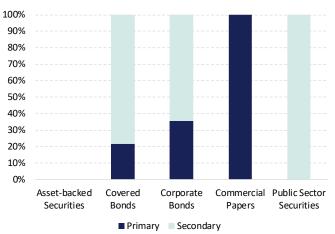




Portfolio development



Share of primary and secondary market holdings



Breakdown of private sector securities under the PEPP

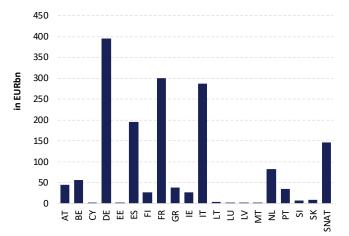
5an 22	Asset-backed securities		Covered bonds		Corporate bonds		Commercial paper	
Sep-22	Primary	Secondary	Primary	Secondary	Primary	Secondary	Primary	Secondary
Holdings in EURm	0	0	1,298	4,758	15,407	27,826	2,873	0
Share	0.0%	0.0%	21.4%	78.6%	35.6%	64.4%	100.0%	0.0%

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

WAM of eligible Adj. Deviations Current Holdings PEPP Difference distribution WAM³ Jurisdiction from the adj. universe⁴ (in EURm) (in years) share distribution key² key¹ (in years) (in years) AT 44,120 2.6% 2.7% 0.0% 7.4 0.3 7.6 BE 9.5 -3.2 56,872 3.3% 3.4% 0.1% 6.4 CY 2,483 0.2% 0.1% 0.0% 8.6 8.0 0.6 DE 395,153 23.7% 23.8% 0.1% 6.8 6.9 -0.1 EE 256 0.3% 0.0% -0.2% 7.7 6.3 1.4 ES 196,176 10.7% 11.8% 1.1% 7.4 7.4 0.0 FI 26,381 1.7% 7.5 7.9 -0.4 1.6% -0.1% FR 299,737 18.4% 18.0% -0.3% 7.8 7.8 0.0 GR 38,877 2.2% 2.3% 0.1% 8.5 9.3 -0.8 IE 26,328 1.5% 1.6% 10.0 -1.3 0.1% 8.6 IT 0.3 287,821 15.3% 17.3% 2.0% 7.2 7.0 LT 3,208 0.5% 0.2% -0.3% 9.9 9.3 0.6 0.3% -0.2% 6.9 -0.7 LU 1,879 0.1% 6.1 LV 1,890 0.4% -0.2% 8.2 0.1 0.1% 8.1 MT 605 0.1% 0.0% -0.1% 10.8 8.8 2.0 NL 82,869 5.3% 5.0% -0.3% 7.9 8.6 -0.7 PT 35,492 2.1% 2.1% 0.0% 6.5 7.2 -0.7 SI 6,567 0.4% 0.4% 0.0% 8.8 9.1 -0.3 SK 7,966 1.0% 0.5% 8.4 8.0 0.5 -0.6% SNAT 145,914 10.0% 8.8% -1.2% 10.5 8.7 1.8 Total / Avg. 1,660,594 100.0% 100.0% 0.0% 7.6 7.6 0.0

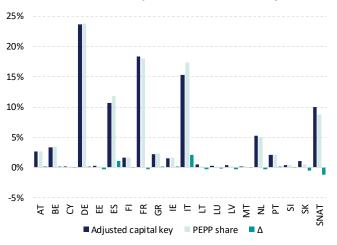
Breakdown of public sector securities under the PEPP





Deviations from the adjusted distribution key

NORD/LB



¹ Based on the ECB capital key, adjusted to include supras 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

Aggregated purchase activity under APP and PEPP

Holdings (in EURm)

	APP	PEPP	APP & PEPP
Aug-22	3,262,729	1,714,539	4,977,268
Sep-22	3,256,302	1,713,035	4,969,337
Δ	-1,838	-1,505	-3,343

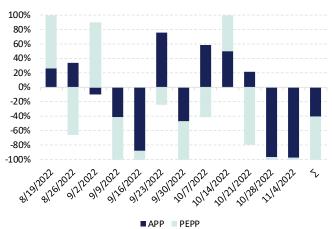
Monthly net purchases (in EURm)



Weekly purchases



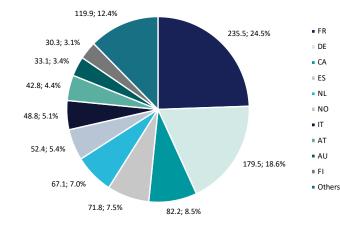
Distribution of weekly purchases

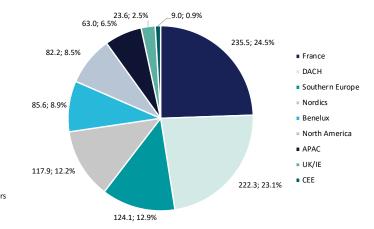


Source: ECB, Bloomberg, NORD/LB Markets Strategy & Floor Research

Charts & Figures Covered Bonds

EUR benchmark volume by country (in EURbn)



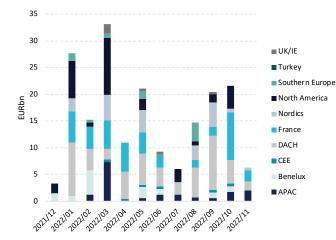


EUR benchmark volume by region (in EURbn)

Top-10 jurisdictions

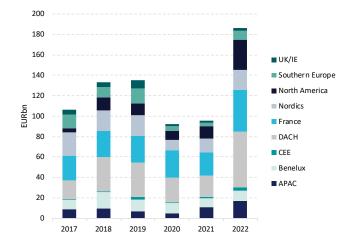
Rank	Country	Amount outst. (EURbn)	No. of BMKs	There of ESG BMKs	Avg. issue size (EURbn)	Avg. initial maturity (in years)	Avg. mod. Duration (in years)	Avg. coupon (in %)
1	FR	235.5	226	15	0.95	9.8	5.3	0.95
2	DE	179.5	256	26	0.64	8.3	4.5	0.66
3	CA	82.2	63	0	1.27	5.6	3.0	0.49
4	ES	71.8	57	5	1.15	11.7	3.6	1.74
5	NL	67.1	69	1	0.91	11.4	7.1	0.78
6	NO	52.4	62	11	0.84	7.3	3.7	0.55
7	IT	48.8	59	2	0.79	9.2	3.8	1.28
8	AT	42.8	76	3	0.56	9.2	5.7	0.80
9	AU	33.1	33	0	1.00	7.7	3.8	1.05
10	FI	30.3	32	2	0.95	7.6	3.9	0.60

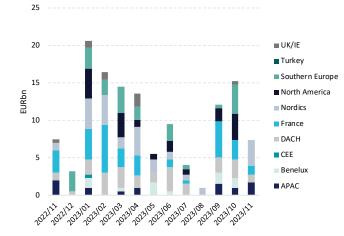
EUR benchmark issue volume by month



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

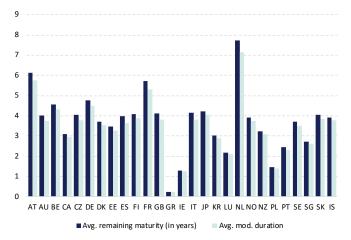
EUR benchmark issue volume by year



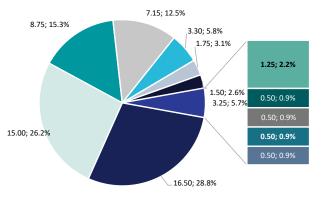


EUR benchmark maturities by month





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



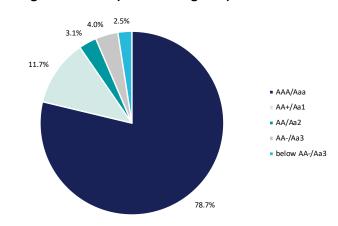
• DE = FR • NO = KR • ES = FI • AT = IT • PL = SK • NL = GB

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

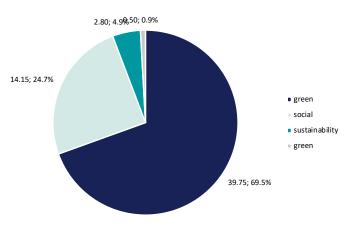
EUR benchmark maturities by year



Rating distribution (volume weighted)



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

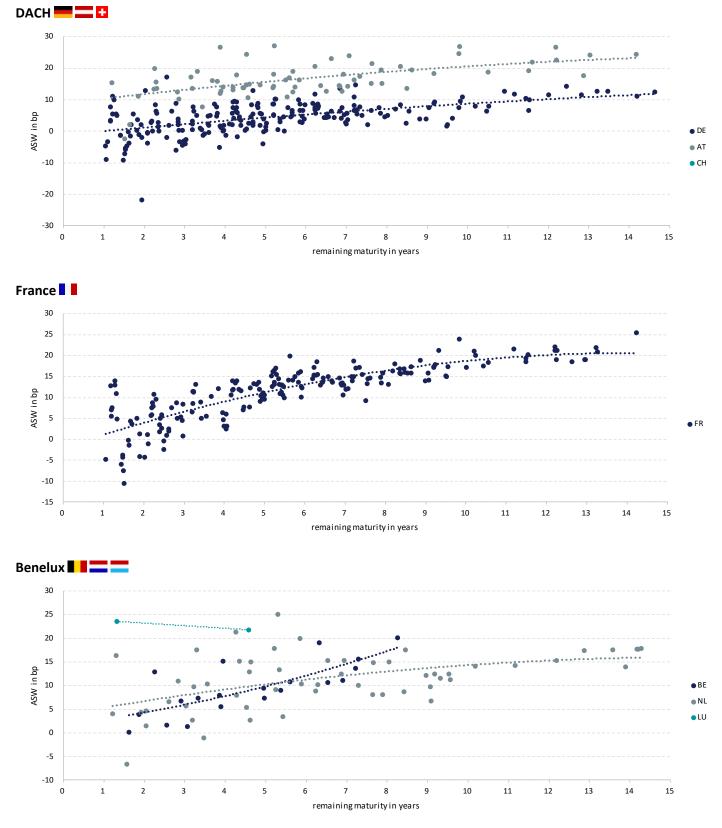




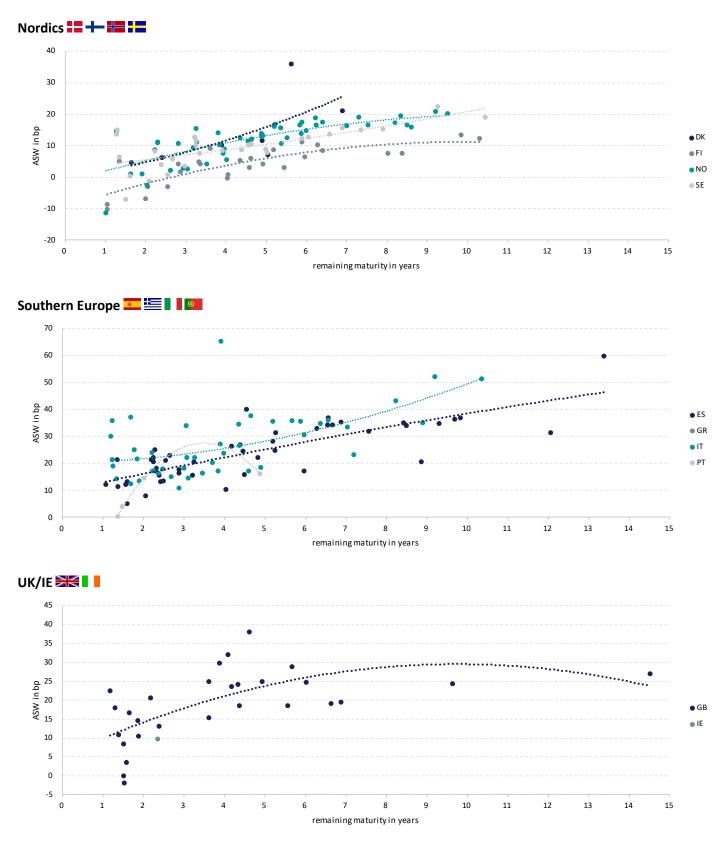
Spread development by country

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

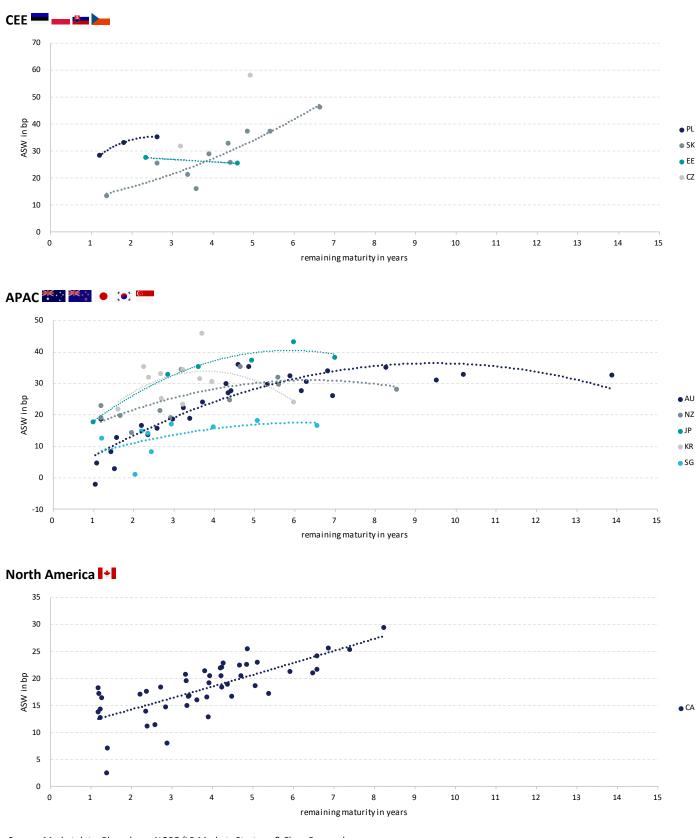
Spread overview¹



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



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



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

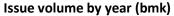
Charts & Figures SSA/Public Issuers

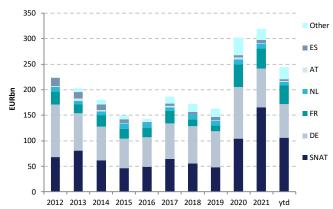
Outstanding volume (bmk)

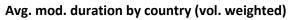
EUR 2188,8bn SNAT DE FR 3,5% 2,1% NL 1,5% 12,3% 34,8% ES 1,3% CA 5,9% 0,9% BE 0,8% AT 41,4% 0,8% 🔳 FI 0,6% IT Others

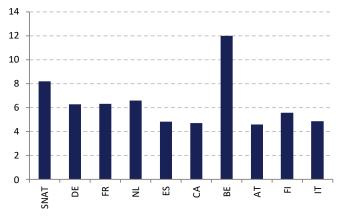
Top 10 countries (bmk)

Country	Vol. (€bn)	No. of bonds	ØVol. (€bn)	Vol. weight. ØMod. Dur.
SNAT	906,0	217	4,2	8,2
DE	760,7	566	1,3	6,3
FR	269,7	181	1,5	6,3
NL	77,2	69	1,1	6,6
ES	45,6	60	0,8	4,8
CA	32,6	23	1,4	4,7
BE	27,5	31	0,9	12,0
AT	19,8	23	0,9	4,6
FI	18,5	22	0,8	5,6
IT	17,3	21	0,8	4,9







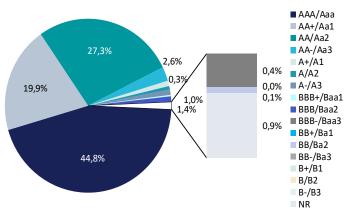


Source: Bloomberg, NORD/LB Markets Strategy & Floor Research

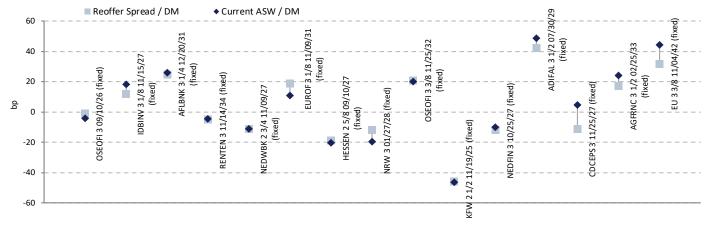
Maturities next 12 months (bmk)



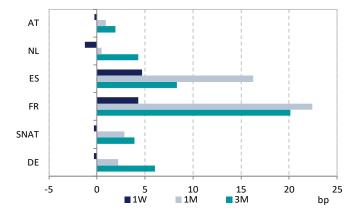
Rating distribution (vol. weighted)



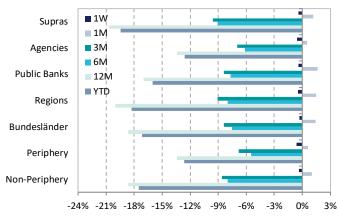
Spread development (last 15 issues)



Spread development by country

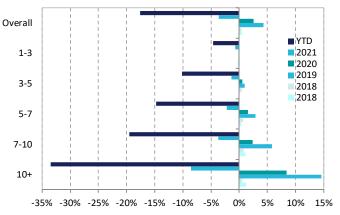


Performance (total return) by segments

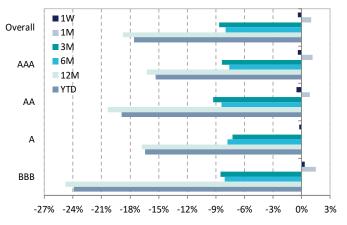


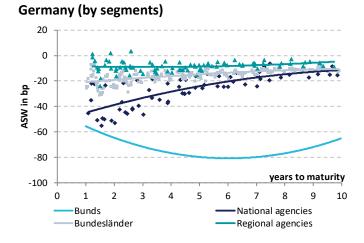
Source: Bloomberg, NORD/LB Markets Strategy & Floor Research

Performance (total return)

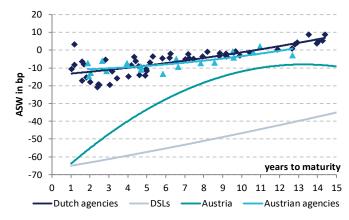


Performance (total return) by rating

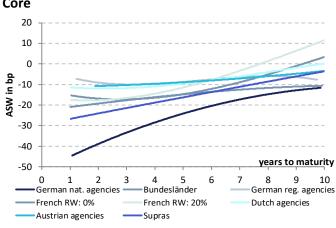




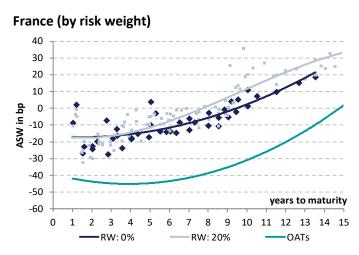
Netherlands & Austria



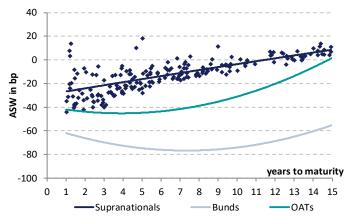




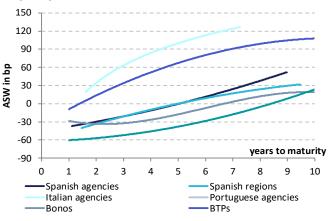








Periphery



Appendix Overview of latest Covered Bond & SSA View editions

Publication	Topics		
<u>33/2022 ♦ 26 October</u>	 Repayment structures on the covered bond market: EU harmonisation project consigns hard bullets to the shadows 		
	 The debt brake at Laender level 		
32/2022	ECB preview: +75bp and the balance sheet question		
	 EBA Risk Dashboard paints a robust picture in Q2 2022 		
	An overview of the German Laender		
31/2022 ♦ 12 October	The covered bond rating approach of S&P		
	Benchmark indices for German Laender		
30/2022	 Focus on covered bond jurisdictions: Singapore in the spotlight 		
	German Laender: more ESG issues on the horizon?		
29/2022 21 September	ECBC publishes annual statistics for 2021		
	 Update: Gemeinschaft deutscher Laender (Ticker: LANDER) 		
28/2022	 Primary market: A little more to come! 		
	 ECB: PEPP visibly active as first line of defence 		
27/2022 ♦ 31 August	 ECB rate hikes: minimum of +100bp still to come by year-end 		
27/2022 V 51 August	Australia: Macquarie returns to the EUR benchmark segment		
26/2022 A 24 August			
<u>26/2022 ♦ 24 August</u>	 Development of the German property market Transparency requirements §28 PfandBG Q2/2022 		
25 /2022 A 27 July			
<u>25/2022 ♦ 27 July</u>	 ECB likes abbreviations: After OMT and SMP, we now have TPI Covereds vs. Senior Unsecured Bonds 		
24/2022 4 20 1-1-			
24/2022 20 July	 A brief spotlight on the EUR sub-benchmark segment Deutsche Hypo real estate climate: index falls again 		
23/2022 ♦ 13 July	ECB preview: might the ECB go slightly further?		
	 EBA Report on Asset Encumbrance: levels increasing 		
22/2022 ♦ 06 July	 H1 review and outlook for H2 2022 		
	 Half time in the 2022 SSA year – taking stock 		
21/2022 ♦ 22 June	 Focus on ESG covered bonds: BayernLB's "green rail" public sector Pfandbrief 		
	Stability Council convenes for 25th meeting		
20/2022	 Covered bond jurisdictions in focus: a look at Australia and New Zealand 		
	 NGEU: Green Bond Dashboard 		
<u>19/2022 🔶 01 June</u>	ECB: 3, 2, 1 – lift-off! Decisive June, active summer ahead		
	The covered bond universe of Moody's: an overview		
	 ECB Financial Stability Review identifies increasing risks in the eurozone: a brief overview of covered bonds 		
18/2022 25 May	 Transparency requirements §28 PfandBG Q1 2022 		
	 ESG: EUR-benchmarks 2022 in the SSA segment (ytd) 		
NORD/LB:	NORD/LB: NORD/LB: Bloomberg:		
Markets Strategy & Floor			

Appendix Publication overview

Covered Bonds:

Issuer Guide Covered Bonds 2022

Covered Bond Directive: Impact on risk weights and LCR levels

<u>Risk weights and LCR levels of covered bonds</u> (updated semi-annually)

Transparency requirements §28 PfandBG (quarterly update)

Covered bonds as eligible collateral for central banks

SSA/Public Issuers:

<u> Issuer Guide – German Laender 2021</u>

Issuer Guide – German Agencies 2022

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

Beyond Bundeslaender: Greater Paris (IDF/VDP)

Spotlight on Belgian regions

Spotlight on Spanish regions

Fixed Income Specials:

ESG-Update 2022

ECB interest rate decision: delivered as expected?

ECB acts as the 'House of Hikes' - or: Winter is coming!

ECB frontloads rate hike by +50bp and breaches pre-commitment

ECB ready for lift-off: Every journey starts with a first step

NORD/LB: Covered Bond Research

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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	
Sales Europe	+352 452211-515	Länder/Regionen	+49 511 9818-9550	
		Frequent Issuers	+49 511 9818-9640	
Origination & Syndicate				
Origination FI	+49 511 9818-6600	Sales Wholesale Customers		
Origination Corporates	+49 511 361-2911	Firmenkunden	+49 511 361-4003	
		Asset Finance	+49 511 361-8150	
Treasury				
Collat. Management/Repos	+49 511 9818-9200			

+49 511 9818-9620

+49 511 9818-9650

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