NORD/LB



Covered Bond & SSA View

NORD/LB Markets Strategy & Floor Research





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Market overview Covered Bonds

Authors: Melanie Kiene, CIIA // Dr. Frederik Kunze

Primary market: EUR 100bn mark surpassed, greater differentiation now in evidence between order volumes and new issue premiums

Despite fundamentally weak framework conditions, last Wednesday three further issuers ventured onto the market: CAFFIL approached investors at the long end with a deal worth EUR 500m over 12 years at a re-offer spread of ms +12bp (guidance ms +14bp area; final order book of EUR 700m). On account of its structure as a social bond, a new issue premium of 3bp had to be paid despite the long maturity. Hamburg Commercial Bank (HCOB) offered the first ship Pfandbrief of the year. The deal featured a term to maturity of three years with a spread of ms +22bp. After the planned issuance volume of EUR 500m was reached, the initial guidance was reduced from the area of ms +23bp by a single basis point. Just the second issuer from Spain this year - Banco de Sabadell (SABSM) - also approached investors last week. In the end, the 7y deal offered by this issuer at ms +16bp (guidance ms +18bp area) generated an order volume of EUR 1.15bn. The issuance volume was fixed at EUR 1bn, although a new issue premium of around 6bp had to be accepted in exchange. Due to the weak market environment, no further issues were placed during the remainder of the previous week. However, with slightly improved parameters from Asia after the weekend, issuance activity picked up again on Monday. From Germany, DZ HYP entered the market offering a 9y bond with guidance in the area of ms +7bp, eventually placing a deal in the amount of EUR 750m at ms +5bp. France was represented via Crédit Agricole Home Loan SFH (ACACB), which issued a bond worth EUR 1bn with a term to maturity of eight years at ms +10bp. As such, tightening of a single basis point was observed against the initial guidance in the area of ms +11bp, with a new issue premium of around 4bp available (as was the case with the DZ HYP deal). Sweden's LF Hypotek (LANSBK) was able to celebrate a successful market appearance. A term to maturity of 5y offered the best bid-to-cover ratio of the week, at 2.4x (order book of EUR 1.2bn, issuance volume of EUR 500m), while the spread narrowed by 4bp to ms +6bp. Yesterday, on Tuesday, another Swedish bank, namely Swedbank Mortgage, put in an appearance in the popular 5y maturity segment (guidance ms +9bp area), while another periphery candidate also appeared on the market in the form of Credito Emiliano (CREDEM). As was previously the case with Banco Sabadell (SABSM) from Spain, the latter opted for a term of 7y, although the issuance volume was limited to EUR 500m and pricing was restricted to between ms +20bp and ms +22bp right from the get-go. Ultimately, a volume of EUR 500m was issued at ms +22bp, while the order book amounted to more than EUR 500m. For its part, Swedbank placed a deal in the amount of EUR 1bn at ms +6bp, generating an order volume of EUR 1.5bn in the process. As a result, the issuance spread tightened by 3bp versus the initial guidance. The total volume of EUR benchmark deals placed so far in 2022 therefore now amounts to EUR 105.35bn.



| Issuer | Country | Timing | ISIN | Maturity | Size | Spread | Rating | ESG |
|-------------------|---------|--------|--------------|----------|--------|----------|-----------------|-----|
| Swedbank | SE | 24.05. | XS2487057106 | 5.0y | 1.00bn | ms +6bp | - / Aaa / AAA | - |
| Credito Emiliano | IT | 24.05. | IT0005495889 | 7.0y | 0.50bn | ms +22bp | AA / Aa3 / - | - |
| Crédit Agricole | FR | 23.05. | FR001400AO71 | 8.0y | 1.00bn | ms +10bp | AAA / Aaa / AAA | - |
| LF Hypotek | SE | 23.05. | XS2486449072 | 5.0y | 0.50bn | ms +6bp | - / Aaa / AAA | - |
| DZ HYP | DE | 23.05. | DE000A3MP684 | 9.0y | 0.75bn | ms +5bp | - / Aaa / AAA | - |
| Banco de Sabadell | ES | 18.05. | ES0413860802 | 7.0y | 1.00bn | ms +16bp | - / Aa1 / - | - |
| НСОВ | DE | 18.05. | DE000HCB0BL1 | 3.0y | 0.50bn | ms +22bp | - / Aa1 / - | - |
| CAFFIL | FR | 18.05. | FR001400AJT0 | 12.0y | 0.50bn | ms +12bp | - / Aaa / AA+ | Χ |

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

Market environment becoming more challenging

Now that the issuance volume has already exceeded the year-end values recorded in both of the two previous years, we are now seeing the first signs of saturation in terms of the receptiveness of investors towards fresh supply. A slight trend towards widening spreads, especially at the long end of the secondary market, has already been observed over the past few days. For example, no further narrowing was seen for many of the 26 deals placed in the secondary market in May 2022. In fact, in some cases, there was slight widening compared with the reoffer spread, which also weighed on the bonds already outstanding. Triggered by higher requirements in connection with new issue premiums, we expect that this development could continue over the short term. New issue premiums have already been somewhat more generous in recent weeks than had previously been the case. As a result, the final issue spread based on the guidance has tended to narrow only marginally. Without a central bank primary market order, some deals have not achieved the issuance volume. Questions remain as to how a further reduction in the ECB's order rate from a current level of 30% as part of the adjustment of its interest rate policy will have an impact in July. At present, we see the risk that this development is not yet fully priced in, especially for peripheral and Tier 2 issuers, and could lead to greater differentiation in the covered bond universe over the coming weeks. The widening trends in the secondary market mentioned above were particularly noticeable in the periphery segment in the wake of the SABSM deal and the announcement of the CREDEM issue. On account of the low level of issuance activity from southern Europe seen up to this point, further fresh supply can be expected from this region across the remainder of the year. In total, nearly EUR 10bn is still due for repayment from periphery countries in 2022, with slightly over EUR 10bn having already fallen due so far this year. The swap spreads in the 5y and 10y maturity segments have also narrowed by 10bp to 15bp against Bunds, which significantly bridges the yield gap between covered bonds and German sovereign bonds. Investment alternatives in the senior unsecured segment have so far been rather limited due to a very subdued primary market, but issues have started to pick up speed again here too following the end of the reporting season. Occasionally, these are reaching the secondary market with significant premiums. In the past few days, this has led to another significant repricing and, after the sharp widening of spreads in the senior unsecured segment seen over recent weeks and months, to a correspondingly attractive yield level for investors inclined to accept risks. What is striking in both segments is that new issues with an ESG background are able to generate a significantly better order situation than bonds that are not assigned to this category. In general, the maturity segment of four years remains the most stable.



EUR sub-benchmark segment: further activity, Austria and Germany leading the way

A total of 17 bonds have been placed so far this year in the EUR sub-benchmark segment, with eight coming from Austria and six from Germany. The total volume in this subsegment currently amounts to EUR 4.8bn and, as is the case with the EUR benchmark segment, had therefore already exceeded the full-year volumes recorded in both 2021 (EUR 4.15bn) and 2020 (EUR 2.05bn) before the end of May. Last week, Raiffeisenverband Salzburg entered the market to place a 5y Pfandbrief worth EUR 300m at ms +11bp (guidance ms +13bp area; order book: EUR 470m). On the same day, Equitable Bank from Canada offered a 3y bond in the amount of EUR 300m at ms +20bp (guidance ms +20bp area). Then, yesterday, another Austrian name made an appearance on the market in the form of Hypo Oberösterreich, with the 7y maturity segment being tapped on this occasion. Initial guidance was in the area of ms +15bp for this deal worth EUR 250m, which generated an order book in excess of EUR 300m to ultimately be priced at ms +15bp. We presented a detailed overview of the highly fragmented Austrian covered bond market in our weekly publication a couple of weeks ago (cf. Covered Bond & SSA View 16/2022 from 11 May 2022). Yesterday, a sixth German issuer brought to market a Pfandbrief deal collateralised via public sector loans in social format. SaarLB raised EUR 250m for ten years at ms +11bp (guidance ms +12bp area; order book of EUR 340m). The sub-benchmark segment remains attractive to smaller issuers, and is not likely to become any less important even after the end of the ECB's net purchasing activities.



Market overview SSA/Public Issuers

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

EU emergency assistance for Ukraine plus reconstruction

Last week the European Commission presented plans for EU emergency assistance measures to close the funding gap in Ukraine as well as for longer term reconstruction. According to the press release, the EU has already substantially increased its support and mobilised around EUR 4.1bn to support Ukraine's overall economic, social and financial resilience in the form of macro-financial assistance, budget support, emergency assistance, crisis response and humanitarian aid. Military assistance measures have also been provided under the European Peace Facility, amounting to EUR 1.5bn, that will be used to reimburse Member States for their in-kind military support to Ukraine and a further EUR 500m is planned. According to the IMF, the gap in the Ukrainian balance of payments is likely to stand at around EUR 14.3bn in June alone. The war has led to a collapse in revenue from taxes, exports and other income streams, and this has been further exacerbated by extensive, unlawful appropriation of assets and goods for export, including in the agricultural sector, while unavoidable spending has risen rapidly. The European Commission therefore intends to grant Ukraine additional macro-finance assistance in 2022 in the form of loans up to EUR 9bn, which is set to be supplemented by support from other bilateral and multilateral international partners, including the G7. The assistance will be disbursed in tranches with long maturities. To facilitate this, the Member States are to agree on the provision of additional guarantees. Together with financial assistance from the EU budget to subsidise the associated interest payments, this ensures well-coordinated support at very favourable terms for Ukraine. Consideration was also given to the longer term and towards rebuilding when the present suffering is over. This is to be led by the local authorities with the EU, plus, for example, the G7, G20 and other third countries as well as international financial institutions and organisations. Partnerships between towns and regions (EU/Ukraine) could also promote and accelerate reconstruction. An international coordination platform for reconstruction would be used as the overarching strategic administrative body, which would be co-led by the European Commission and Ukrainian government. This body would be responsible for endorsing a reconstruction plan drawn up and implemented by Ukraine with administrative capacity support and technical assistance from the EU. Based on a needs assessment, the RebuildUkraine plan endorsed by the platform would serve as the foundation for setting the priority areas and projects to be financed. Coordination of the funding sources with recipients would be carried out via the platform to ensure optimum use of funds. Rebuilding progress would be monitored. The European Commission also proposes that the reconstruction plan be flanked by the RebuildUkraine facility. This would be the most important legal instrument for the EU's support and would provide grants as well as loans. It would be embedded in the EU budget. Although this builds on experience with the EU's rebuilding and resilience facility, the new facility must also be adjusted in line with the unprecedented challenges associated with rebuilding Ukraine and supporting the country on its European journey.



Determination not only over Ukraine but also REPowerEU

The determination to support Ukraine was already in place before Russia's war of aggression. The EU has provided extensive financial support to Ukraine: between 2014 and 2021, the financial assistance amounted to EUR 1.7bn in grants under the European Neighbour Instrument and loans of EUR 5.6bn through five macro-financial assistance programmes, EUR 194m in humanitarian aid and EUR 355m in foreign policy instruments. The EU supports Ukraine in the development of political strategies and comprehensive reforms. The Member States are also heavily involved in a Team Europe Concept. This includes decentralisation programmes as well as measures to reform public sector administration and combat corruption. On 8 March, against the backdrop of the Russian invasion of Ukraine, the European Commission presented the draft of a plan aimed at ceasing Europe's reliance on fossil fuels from Russia well ahead of 2030. This was followed by a meeting of the European Council on 24/25 March where the EU heads of state and government agreed this aim and asked the European Commission to submit the detailed REPowerEU-Plan which was adopted last week. According to the European Commission, the latest interruptions in gas supplies to Bulgaria and Poland demonstrate that measures to cut the reliance on unreliable energy supplies from Russia are now a matter of urgency. The European Green Deal is the EU's long-term growth plan to make Europe climate neutral by 2050. This goal is enshrined in the European Climate Act along with the legally binding obligation to reduce net greenhouse gas emissions by at least 55% versus 1990 levels by 2030. In July 2021, the EU presented its "Fit for 55" legislative package aimed at achieving these goals. Implementing the proposals would already reduce European gas consumption by 30% by 2030, with more than a third of these savings achieved by reaching EU energy efficiency targets. Transforming Europe's energy system is urgent on two fronts: first, it will stop the EU's dependence on fossil fuels from Russia, which is being used as an economic and political weapon and costs the European taxpayer almost EUR 100bn a year (according to the Commission), and second it will help combat the climate crisis. The green transition in Europe will also ensure more economic growth and security and strengthen climate protection measures. The Recovery and Resilience Facility (RRF) is at the heart of the REPowerEU Plan, supporting coordinated planning and financing of cross-border and national infrastructure as well as energy projects and reforms. The European Commission proposes making targeted amendments to the regulation via the RRF. Energy savings are the quickest and cheapest way to address the current energy crisis and reduce bills. The European Commission proposes to enhance long-term energy efficiency measures, including an increase from 9% to 13% of the binding Energy Efficiency Target under the "Fit for 55" package of European Green Deal legislation. Delivering the REPowerEU objectives requires an additional investment of EUR 210bn between now and 2027. This is a down payment on independence and security. These investments must be met by the private and public sector, and at national, cross-border and EU level. To support such measures, EUR 225bn is already available in loans under the RRF. In addition, the European Commission proposes to increase the funds under the Reconstruction and Resilience Facility by EUR 20bn in the form of grants; the funds for this should come from the sale of certificates from the EU Emission Trading System currently held in the Market Stability Reserve.



Germany resolves 2022 budget

Early on Friday morning, after more than 14 hours of deliberation by the Budget Committee, Germany's budget was decided. By comparison with the supplementary budget submitted by the German government at the end of April, spending was increased from EUR 483.9bn to EUR 495.8bn. The biggest increase in expenditure versus the previous draft was in the budget for the German Ministry of Health (EUR +11.8bn). Some of this additional spending had already been forecast in the supplementary budget in the form of global additional expenses, which have now been reduced accordingly. The draft budget had also been aligned with expected interest rate policy and with budgeted expenditure of EUR 12.6bn for interest, the figure is now around EUR 300m below the previous forecast. The Budget Committee put tax revenue this year at EUR 328.4bn, which is some EUR 4bn lower than in the supplementary budget and government draft. Planned expenditure therefore considerably exceeds tax and other income, resulting in a net borrowing forecast of EUR 138.9bn. The corresponding figure in the government's original draft was EUR 99.7bn. To compare, in pandemic year 2021 the German government borrowed EUR 215.4bn. As in 2020 and 2021, new debt in 2022 will be higher than the level of borrowing normally permitted under the debt rule in the Constitution. Consequently, an exemption from the so-called debt brake must be resolved again before taking on further debt. The draft amended by the Budget Committee will be debated in plenary in the week 30 May to 3 June.

Development Bank of Saxony: annual report 2021

Financial year 2021 for the Development Bank of Saxony (SAB; Sächsische Aufbaubank; ticker: SABFOE) was dominated by the coronavirus pandemic. The bank operated 21 aid programmes to mitigate the impact of the pandemic, resulting in a total of 49,360 approvals amounting to EUR 1.5bn. Since April 2020, around 60% of all businesses in the Free State of Saxony have been supported through these programmes. Based on total financing commitments of around EUR 3.5bn (2020: EUR 3.8bn), the proportion of pandemic-related assistance stands at some 42%. "2021 was an unusual year for SAB. High COVID-19 figures, persistent uncertainty, delivery bottlenecks, rising energy costs and inflation posed a challenge for the economy and society. Against the backdrop of this difficult environment, we have actively supported companies and communities in Saxony," says Dr. Katrin Leonhardt, CEO of SAB. As of 31 December 2021, the bank's total assets had risen by EUR 0.8bn on the previous year to stand at EUR 9.0bn. Net income for the year stands at EUR 0.7m (previous year: EUR 1.0m). As part of the strategy and transformation process launched in autumn 2020, SAB has tasked itself with digitalising the funding process and making it more streamlined. "We want to consistently simplify, standardise and digitalise SAB by 2025," explains SAB Management Board member Ronald Kothe. In addition to digitalisation, SAB also intends to focus on the topic of sustainability. The foundation has already been laid in the form of the bank's own sustainability strategy and SAB is also supporting Saxony's state ministries in the development of sustainability components in the funding programme. SAB aims to make its banking operations climate neutral by 2045 at the latest.



Primary market

The State of Baden-Wuerttemberg (ticker: BADWUR) kicked off activities this trading week. It had announced last Wednesday that it would be holding investor calls on 23 and 24 May. The issuance plans were presented along with the updated Green Bond Framework. The federal state is expected to issue its second green bond in the near future, with the proceeds going primarily to energy efficiency, green buildings, clean transportations, sustainable water and waste water management as well as to maintaining biodiversity. Staying with the sub-sovereigns for the time being: North Rhine-Westphalia (ticker: NRW) also intends to issue ESG benchmark bonds in the not-too-distant future. The mandate has already been announced and investor calls took place yesterday (Tuesday) and today. The plans are for a 10-year sustainable bond and possibly a 30-year bond as well. There has also been activity by one Bundesland outside of the ESG segment. Berlin (ticker: BERGER) tapped the primary market on Monday, raising EUR 650m. With a 6-year maturity and a coupon of 1.25%, the bond was priced at ms -18bp (guidance: ms -18bp area). The order book reached EUR 750m. The Polish development bank Gospodarstwa Krajowego (ticker: BGOSK), which has an explicit guarantee from the Republic of Poland, was also active. It issued a 7y bond worth EUR 500m at ms +155bp (guidance: ms +155bp area) and the order book totalled EUR 570m at the end of the marketing phase. Instituto de Crédito Oficial (ticker: ICO) from Spain likewise was active on the market, raising EUR 500m (WNG) at SPGB +9bp (guidance: SPGB +12bp area). This corresponds to around ms -1bp. The green bond has a maturity of 4.4 years and the proceeds will be used to finance or refinance new and existing projects in line with the ICO's Green Bond Framework. Investor interest was evident, with the order book amounting to EUR 1.1bn. Not in benchmark format but still noteworthy was the 20-year bond issued yesterday (Tuesday) by Bayerische Landesbodenkreditanstalt (ticker: BYLABO) at ms +13bp. The guidance stood at ms +14bp area and the order book reached EUR 434m. We should also mention the results of the most recent EU auction: the bond EU 1% 07/06/32 was increased by EUR 2.498bn. The bids totalled EUR 3.435bn, producing a bid-to-cover ratio of 1.4x in the process.

| Issuer | Country | Timing | ISIN | Maturity | Size | Spread | Rating | ESG |
|--------|---------|--------|--------------|----------|--------|-----------|---------------|-----|
| ICO | ES | 24.05. | XS2487056041 | 4.4y | 0.50bn | ms -1bp | A- / Baa1 / A | Χ |
| BGOSK | Other | 24.05. | XS2486282358 | 7.0y | 0.50bn | ms +155bp | A-/-/- | - |
| BERGER | DE | 20.05. | DE000A3MQYK2 | 6.0y | 0.65bn | ms -18bp | AAA / Aa1 / - | - |

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



Covered Bonds

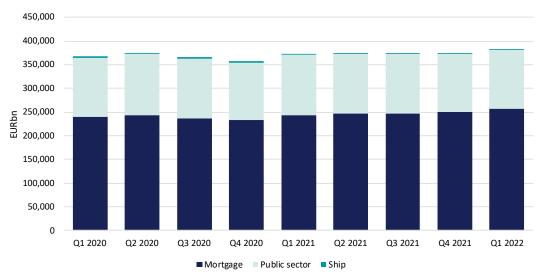
Transparency requirements §28 PfandBG Q1 2022

Author: Melanie Kiene, CIIA

Transparency disclosures pursuant to Section 28 PfandBG: 37 mortgage and 23 public sector Pfandbrief issuers

The Pfandbrief issuers that are members of the Association of German Pfandbrief Banks (vdp) recently published their transparency reports on the composition of their cover pools for the first quarter of 2022 in accordance with Section 28 PfandBG. With regard to the group of issuers, there were changes for the current reporting period too. After DSK Hyp stopped issuing public sector Pfandbriefe in Q4 2021, the group of mortgage Pfandbrief issuers was expanded to include BBBank, although it should be mentioned here that BBBank had still not placed a Pfandbrief as at the reporting date of 31 March 2022. With immediate effect, our Covered Bond Special "Transparency requirements §28 PfandBG Q1 2022" therefore contains cover pool data on 37 mortgage Pfandbrief issuers and 23 issuers of public sector Pfandbriefe. We have manually added the cover pool disclosures of Deutsche Bank, which are no longer reported on the vdp website.

Entwicklung des ausstehenden Volumens

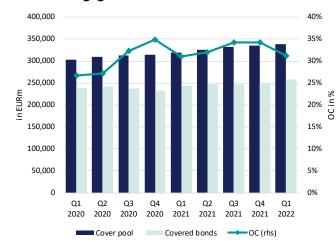


Source: vdp, Deutsche Bank, NORD/LB Markets Strategy & Floor Research

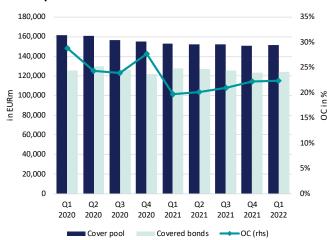
Pfandbriefe in circulation: total volume increased for the second time in succession in Q1 2022

At EUR 383.7bn, the outstanding total volume of Pfandbriefe has increased significantly compared with the previous quarter (as at 31 Dec. 2021: EUR 375.4bn). Here, outstanding mortgage Pfandbrief volume increased by EUR +7.7bn or +3.1% Q/Q, whereas public sector Pfandbriefe only increased slightly, at EUR +640m. Following the increase in ship Pfandbriefe in the last quarter, a decline was again reported on this occasion (EUR -50m). With regard to cover assets, mortgage assets grew by EUR 2.7bn, while ships increased by EUR 100m and cover assets for public sector Pfandbriefe rose by EUR 903m.

Trend - mortgage Pfandbriefe



Trend – public sector Pfandbriefe



Source: vdp, Deutsche Bank, NORD/LB Markets Strategy & Floor Research

Mortgage Pfandbriefe rose by EUR 7,720m or 3.1% Q/Q

Having reported a sound fourth quarter at the end of the year, mortgage Pfandbriefe posted significant growth for the period from January to March 2022, meaning that, at EUR 257.6bn, the volume of mortgage Pfandbriefe had increased by EUR +13.7bn or +5.6% Y/Y as at the end of March 2022. Banks that had significantly increased their outstanding volume compared with the previous quarter include Commerzbank (EUR +2.3bn), ING DiBa (EUR +1.4bn) and UniCredit (EUR +2.9bn). Compared with the previous year, apart from the merger of the two issuers in the form of NORD/LB and Deutsche Hypo, outstanding mortgage Pfandbriefe increased most sharply at Commerzbank (EUR +2,619m) and decreased most sharply at Helaba (EUR -2,441m). Outstanding mortgage Pfandbriefe of EUR 257.6bn were matched by cover assets of EUR 338.1bn. Average OC fell from 34.2% at the end of December 2021 to 31.3% at the end of March 2022.

Public sector Pfandbriefe segment: increase of EUR 640m or 0.5% Q/Q

Following three quarterly periods in which the outstanding nominal volume of public sector Pfandbriefe fell, it increased by EUR 640m (+0.5% Q/Q) in Q1 2022. Compared with the previous year, the overall Pfandbrief volume fell by EUR -3,654m (-2.9% Y/Y). At issuer level, UniCredit Bank posted the largest growth quarter on quarter (EUR +2,494m). The sharpest absolute decline in Q1 2022 was attributable to LBBW (EUR -1,417m). Compared with the previous year, the increase in Pfandbriefe backed by public sector assets at NORD/LB must also be mentioned (EUR +2,320m; as a result of the merger with Deutsche Hypo). Outstanding public sector Pfandbriefe totalled EUR 124.1bn at the end of Q1 2022. These were matched by cover assets of EUR 151.9bn, whereby the average overcollateralisation remained virtually constant compared with the previous quarter, at 22.4% (31 December 2021: 22.3%).



Ship Pfandbriefe are still a niche product

With a volume of EUR 2,038m (-2.4%% Q/Q; EUR -50m), the ship Pfandbriefe segment is still a niche market within the German Pfandbrief market, although an increase was registered here in Q4 2021 for the first time since Q3 2020. At present, only three banks, namely Commerzbank, HCOB and NORD/LB have outstanding ship Pfandbriefe, of which approximately 94% are attributable to HCOB.

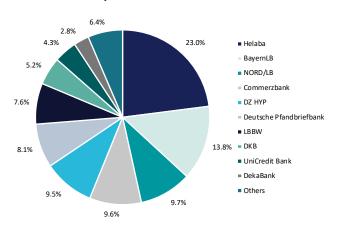
A look at the "top 10": no further shifts compared with the previous quarter

There were no changes with regard to the ranking of the three largest mortgage Pfandbrief issuers. Accordingly, the largest issuer in the sub-market for mortgage backed Pfandbriefe is still DZ HYP, followed by Münchener Hypothekenbank and UniCredit Bank. The share of the outstanding volume accounted for by "smaller" issuers is 24.3%. Among the public-sector Pfandbriefe, Helaba, BayernLB and NORD/LB occupy the top three places. Compared with the previous quarter (third place), DZ Hyp has slid to fifth place among the largest issuers of public sector Pfandbriefe; NORD/LB and Commerzbank each improved by one place.

Market shares - mortgage Pfandbriefe

13.1% DZ HYP 24.3% Münchener Hypothekenbank UniCredit Bank 12.2% Commerzbank Berlin Hyp Deutsche Pfandbriefbank 3.6% ■ Deutsche Bank LBBW 4.7% Aareal Bank 5 1% 9 4% 6.1%

Market shares – public sector Pfandbriefe



Source: vdp, Deutsche Bank, NORD/LB Markets Strategy & Floor Research

Conclusion

The total volume of outstanding Pfandbriefe again increased in Q1 2022. As in previous periods, account must be taken of extraordinary – albeit longstanding – factors when analysing Pfandbrief reporting. In this context, we have repeatedly pointed to the impact of monetary policy on issuance volume in our reports. Not least due to the imminent end of net purchases by the ECB and geopolitical developments, which have led to the senior unsecured primary market being closed over several weeks, issuers have focused their funding activities on the covered bond segment. This development is also apparent in the Section 28 transparency reports for Pfandbriefe. We expect issuance activity to remain buoyant over the next few months. For detailed information on the market for Pfandbriefe or cover pool characteristics as of 31 March 2022, please refer to the current report "Transparency requirements §28 PfandBG Q1/2022". For an overview of the issuers active in the EUR benchmark and EUR sub-benchmark segments and their cover pools, please also refer to our NORD/LB Issuer Guide Covered Bonds.



SSA/Public Issuers

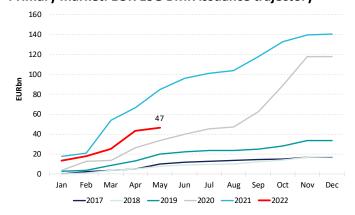
ESG: EUR-benchmarks 2022 in the SSA segment (ytd)

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

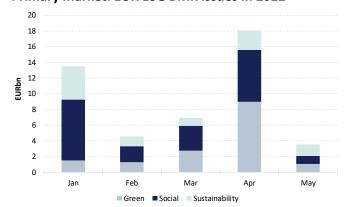
Introduction

Having addressed the aggregate issuance volume in the first four months of this year in the last edition of our weekly publication, we shall focus particularly on the ESG segment in our definition of SSAs (i.e. excluding sovereigns) in this issue. We published a report on the global ESG bond market in March this year (see NORD/LB Fixed Income Special - ESG Update). We intend to address this topic more frequently over the rest of the year and will present current market developments. The data on which this edition of our weekly publication is based is provided by our internal database, in which we enter each new EUR benchmark (BMK) issue from the SSA segment. We use data fields defined by the financial data provider Bloomberg to identify ESG bonds, which also allow us to differentiate between green, social and sustainability bonds. As at 20 May 2022, we recorded a total volume of EUR 46.6bn for EUR BMK issues with ESG characteristics since the beginning of the year. If this figure is compared with issuance patterns of previous years, it is admittedly less than the previous record achieved in 2021, albeit far in excess of the figures recorded between 2017 and 2020. There was one reason for the record achieved in 2021: the European Union issued EUR 46.1bn worth of social bonds under the SURE programme between February and May alone. The programme provided EU Member States with the financial support to cope with the social and public consequences of the coronavirus pandemic (such as the financing of short time working programmes). At the end of 2021, ESG bonds totalled EUR 140.3bn, having stood at EUR 117.7bn at the end of 2020. This is more than a three-fold increase compared with 2019 (EUR 33.7bn), which illustrates the significance and relevance of the ESG segment both for issuers and investors. The month of April 2022, which recorded the highest issuance volume so far (EUR 18.1bn), was particularly impressive. Both the EU and CADES each placed a large-volume bond (EUR 6bn and EUR 5bn, respectively) during the month. In January, which was the second strongest month to date, the figure was EUR 13.5bn.

Primary market: EUR ESG BMK issuance trajectory



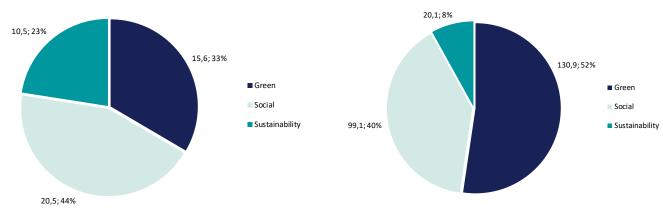
Primary market: EUR ESG BMK issues in 2022





Breakdown by ESG category (EUR bn)

Order books by ESG category (EUR bn)



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

Volume: social bonds ahead of green bonds

Let's examine the ESG issuance volume to date in greater detail: of the volume issued up to 20 May of EUR 46.6bn, green bonds accounted for 33% or EUR 15.6bn, while social bonds accounted for the lion's share, at 44% (EUR 20.5bn). Sustainability bonds issued to date totalled EUR 10.5bn (23%). Over the course of the year, social bonds are therefore currently leading the way; however, the dynamics on the market are such that the lead may change by the end of the year. Looking at the issuers, CADES, which has issued new social bonds worth EUR 13bn since the beginning of the year, stands out in the social segment. If one looks at demand in the form of aggregate order books, however, a different picture emerges. In this context, green bonds took the top spot, at EUR 130.9bn (52%), followed by social bonds (EUR 99.1bn). Sustainability bonds have so far recorded an aggregate volume of EUR 20.1bn (8%). However, we would not like to overlook the fact that the comparison of order books is of course also driven by ratings and the general popularity of specific issuers, and therefore can only be weighed up with difficulty. The substantial aggregate order book volume for green bonds is, for example, largely attributable to two issues: both KfW and the EU, whose bonds, including those without ESG characteristics, are almost always many times oversubscribed, each issued green bonds in April where the order books reached EUR 34bn and EUR 78.25bn respectively.

EU – a mega issuer of green and social bonds

We would like to acknowledge the European Union separately as an ESG issuer. To date, social bonds amounting to EUR 91.8bn have been issued under the SURE programme, which is capped at EUR 100bn. Consequently, a maximum of EUR 8.2bn can be issued over the rest of the year, although we do not currently assume that the programme will be completely exhausted in the near future. It is a different matter as far as the NextGenerationEU (NGEU) programme is concerned. The EU is planning a total volume of up to EUR 800bn for the programme until the end of 2026, citing an average annual funding target of EUR 150bn. It intends to raise around 30% of the funding from green bonds (up to EUR 250bn). This would make the EU the world's largest green bond issuer by then. However, the green bond volume issued to date in 2022 still has upside potential: so far, we have only recorded one newly issued green bond with a volume of EUR 6bn.



Overview of benchmark issuers by ESG category and EUR volume

| Issuer | Green (EUR bn) | Issuer | Social (EUR bn) | Issuer | Sustainability (EUR bn) |
|--------|-------------------|--------|--------------------|--------|----------------------------|
| EU | 6.0 | CADES | 13.0 | IDAWBG | 4.0 |
| KFW | 3.0 | EU | 2.2 | BNG | 1.8 |
| SOGRPR | 1.8 | NEDWBK | 1.8 | AGFRNC | 1.5 |
| IDFMOB | 1.3 | COE | 1.0 | ALSFR | 1.3 |
| EIB | 1.0 | UNEDIC | 1.0 | MADRID | 1.0 |
| EIBKOR | 0.6 | BNG | 1.0 | AFLBNK | 0.5 |
| KUNTA | 0.5 | LCFB | 0.6 | BASQUE | 0.5 |
| NRWBK | 0.5 | | | | |
| NIB | 0.5 | | | | |
| KOMINS | 0.5 | | | | |

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

Taps of ESG bonds to date

Taps are not included in the figures to date, as we deliberately differentiate between new issues and taps. Nevertheless, we would not like these to go unmentioned and shall now look at the ESG tap deals recorded so far this year: since the beginning of the year, we have registered four taps by two issuers in total, all of which fell into the green category. The taps amounted to EUR 5.75bn in total, while the order books came to EUR 13.85bn. The two issuers are familiar faces: the European Union for existing NGEU bonds and the EIB for climate awareness bonds (CAB).

Conclusion and outlook

In our definition of the SSA sector, ESG bonds are still heavily driven by individual issuers. In our opinion, there is still scope for improvement in terms of the diversity of EUR issues, since a list of top 10 issuers is not even possible for all three categories so far in 2022 (see tables above). Nevertheless, we question whether the volume to date indicates that it will be another record year. The SURE issues were too large in 2021, while even if the 30% quota for green bonds in NGEU funding volume set by the EU itself were to be met, this would accordingly constitute EUR 45bn with an average funding target of approx. EUR 150bn in 2022. There would have to be a bigger surprise here to outstrip 2021. Over the years, however, we assume that ESG bonds will account for an increasing share of the funding of the SSAs that we include in our coverage over the long term. Environmental protection, sustainability and social added value are not only highly relevant, but also popular with investors.

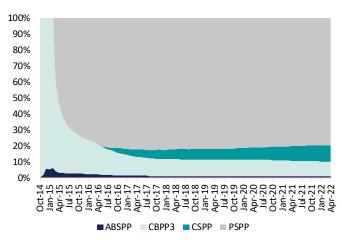


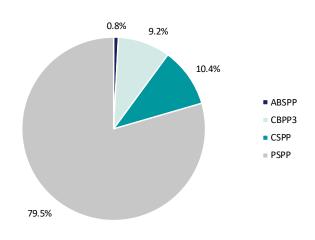
ECB tracker

Asset Purchase Programme (APP)

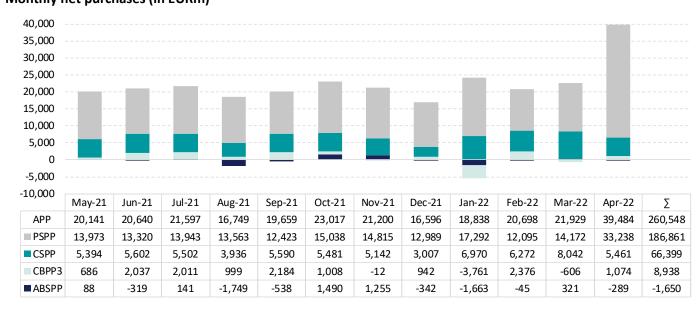
| | ABSPP | СВРР3 | CSPP | PSPP | APP |
|--------|--------|---------|---------|-----------|-----------|
| Mar-22 | 26,979 | 295,849 | 330,605 | 2,525,610 | 3,179,043 |
| Apr-22 | 26,691 | 296,924 | 336,066 | 2,558,848 | 3,218,529 |
| Δ | -289 | +1,074 | +5,461 | +33,238 | +39,484 |

Portfolio structure



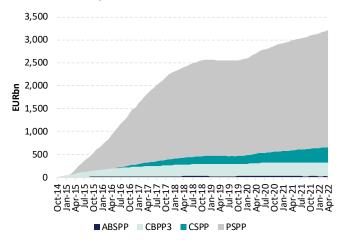


Monthly net purchases (in EURm)





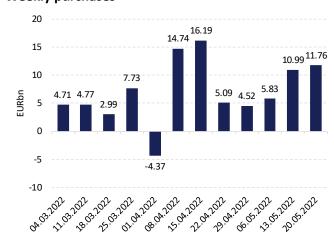
Portfolio development



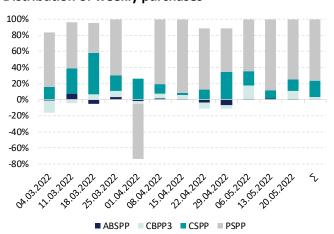
Distribution of monthly purchases



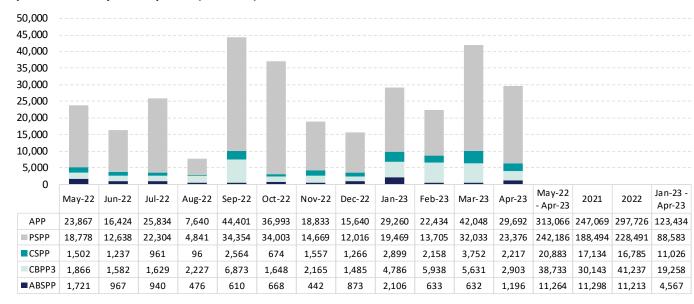
Weekly purchases



Distribution of weekly purchases



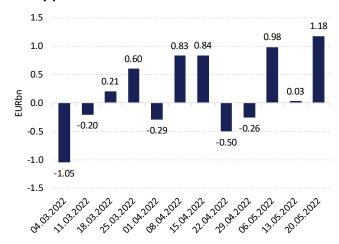
Expected monthly redemptions (in EURm)



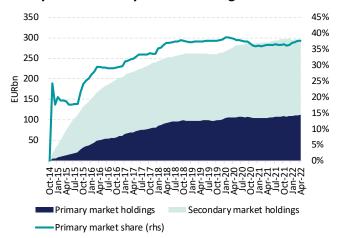


Covered Bond Purchase Programme 3 (CBPP3)

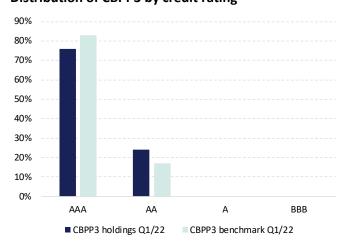
Weekly purchases



Primary and secondary market holdings

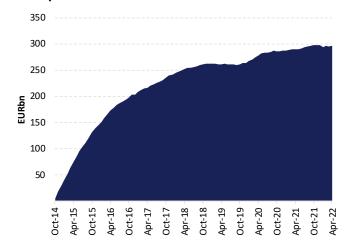


Distribution of CBPP3 by credit rating



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

Development of CBPP3 volume



Change of primary and secondary market holdings



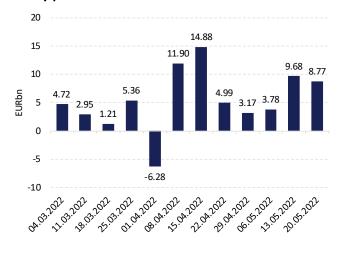
Distribution of CBPP3 by country of risk



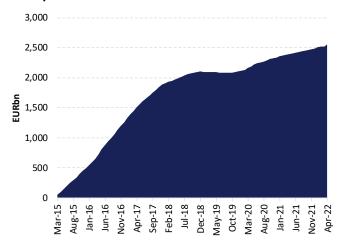


Public Sector Purchase Programme (PSPP)

Weekly purchases



Development of PSPP volume



Overall distribution of PSPP buying at month-end

| Jurisdiction | Adjusted distribution key ¹ | Holdings (EURm) | Expected holdings (EURm) ² | Difference (EURm) | Current WAM of portfolio ³ (in years) | WAM of eligible universe ⁴ (in years) | Difference (in years) |
|--------------|--|--------------------|---|----------------------|--|--|--------------------------|
| AT | 2.7% | 75,622 | 73,141 | 2,481 | 7.3 | 8.1 | -0.8 |
| BE | 3.4% | 92,910 | 91,042 | 1,868 | 7.5 | 9.9 | -2.4 |
| CY | 0.2% | 4,446 | 5,377 | -931 | 8.5 | 8.9 | -0.5 |
| DE | 24.3% | 655,956 | 658,753 | -2,797 | 6.7 | 8.0 | -1.3 |
| EE | 0.3% | 429 | 7,039 | -6,610 | 8.1 | 8.1 | 0.0 |
| ES | 11.0% | 314,676 | 297,986 | 16,690 | 8.0 | 8.2 | -0.2 |
| FI | 1.7% | 42,502 | 45,902 | -3,400 | 7.9 | 8.9 | -1.0 |
| FR | 18.8% | 528,080 | 510,388 | 17,692 | 6.9 | 8.4 | -1.5 |
| GR | 0.0% | 0 | 0 | 0 | 0.0 | 0.0 | 0.0 |
| IE | 1.6% | 41,333 | 42,316 | -983 | 8.4 | 10.1 | -1.7 |
| IT | 15.7% | 442,389 | 424,530 | 17,859 | 7.2 | 7.8 | -0.7 |
| LT | 0.5% | 5,786 | 14,463 | -8,677 | 10.6 | 10.4 | 0.1 |
| LU | 0.3% | 3,680 | 8,232 | -4,552 | 5.8 | 6.1 | -0.3 |
| LV | 0.4% | 3,661 | 9,737 | -6,076 | 9.5 | 9.4 | 0.1 |
| MT | 0.1% | 1,411 | 2,621 | -1,210 | 11.1 | 9.8 | 1.3 |
| NL | 5.4% | 129,120 | 146,448 | -17,328 | 7.7 | 9.3 | -1.6 |
| PT | 2.2% | 53,800 | 58,487 | -4,687 | 7.5 | 7.9 | -0.4 |
| SI | 0.4% | 10,571 | 12,032 | -1,461 | 9.7 | 9.9 | -0.2 |
| SK | 1.1% | 17,800 | 28,618 | -10,818 | 8.1 | 8.8 | -0.7 |
| SNAT | 10.0% | 283,732 | 270,790 | 12,942 | 8.2 | 9.4 | -1.2 |
| Total / Avg. | 100.0% | 2,707,903 | 2,707,903 | 0 | 7.3 | 8.4 | -1.1 |

 $^{^{\}rm 1}$ Based on the ECB capital key, adjusted to include supras and the disqualification of Greece

² Based on the adjusted distribution key

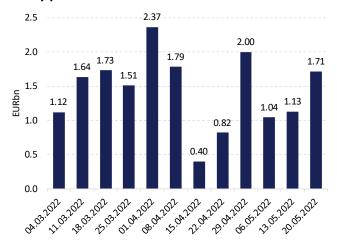
³ Weighted average time to maturity of PSPP portfolio holdings

 $^{^4}$ Weighted average time to maturity of the bonds eligible for purchasing under the PSPP Source: ECB, NORD/LB Markets Strategy & Floor Research

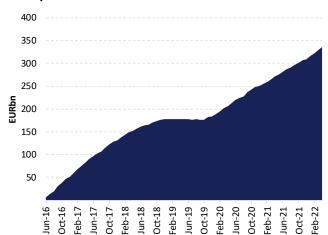


Corporate Sector Purchase Programme (CSPP)

Weekly purchases

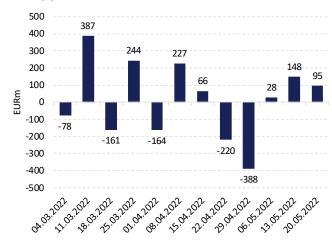


Development of CSPP volume



Asset-Backed Securities Purchase Programme (ABSPP)

Weekly purchases



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

Development of ABSPP volume



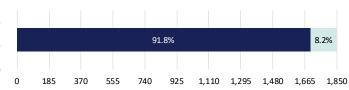


Pandemic Emergency Purchase Programme (PEPP)

Holdings (in EURm)

Invested share of PEPP envelope (in EURbn)

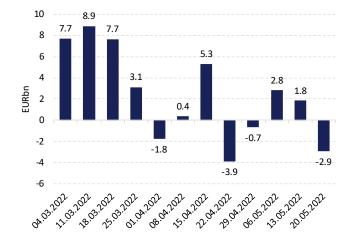
| | PEPP |
|-------------------|-----------|
| Mar-22 | 1,718,076 |
| Apr-22 | 1,718,071 |
| Δ (net purchases) | -4 |



Monthly net purchases (in EURm)

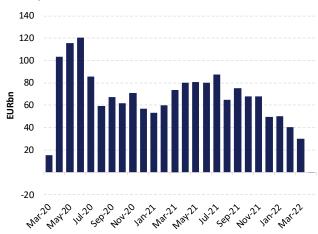


Weekly purchases



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

Development of PEPP volume

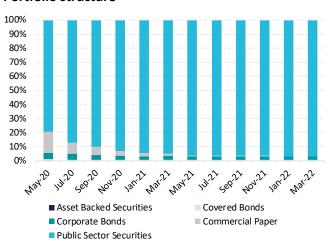


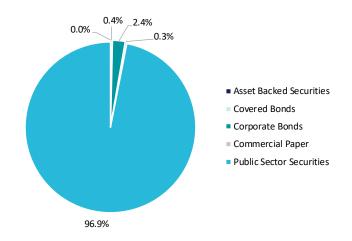


Holdings under the PEPP (in EURm)

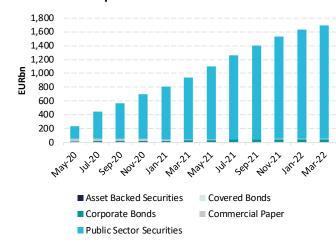
| | Asset-backed Securities | Covered Bonds | Corporate Bonds | Commercial Paper | Public Sector Securities | PEPP |
|-------------------|----------------------------|------------------|--------------------|---------------------|-----------------------------|-----------|
| Jan-22 | 0 | 6,073 | 40,301 | 3,857 | 1,580,547 | 1,630,779 |
| Mar-22 | 0 | 6,067 | 40,313 | 5,862 | 1,644,247 | 1,696,489 |
| Δ (net purchases) | 0 | 0 | +48 | +2,007 | +68,342 | +70,398 |

Portfolio structure

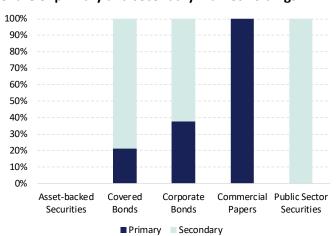




Portfolio development



Share of primary and secondary market holdings



Breakdown of private sector securities under the PEPP

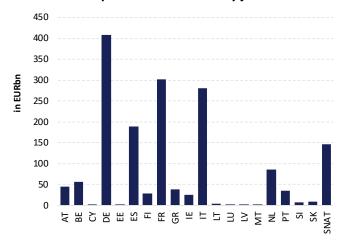
| Mar-22 | Asset-backed securities | | Covered bonds | | Corporate bonds | | Commercial paper | |
|------------------|-------------------------|-----------|---------------|-----------|-----------------|-----------|------------------|-----------|
| | Primary | Secondary | Primary | Secondary | Primary | Secondary | Primary | Secondary |
| Holdings in EURm | 0 | 0 | 1,298 | 4,769 | 15,162 | 25,151 | 5,862 | 0 |
| Share | 0.0% | 0.0% | 21.4% | 78.6% | 37.6% | 62.4% | 100.0% | 0.0% |



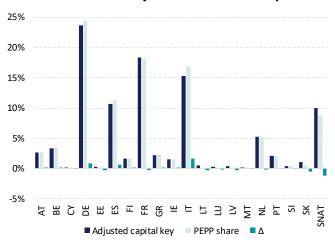
Breakdown of public sector securities under the PEPP

| Jurisdiction | Holdings (in EURm) | Adj. distribution key ¹ | PEPP share | Deviations from the adj. distribution key ² | Current WAM ³ (in years) | WAM of eligible universe ⁴ (in years) | Difference (in years) |
|--------------|-----------------------|--|---------------|--|---|--|--------------------------|
| AT | 43,980 | 2.6% | 2.6% | 0.0% | 7.9 | 7.1 | 0.8 |
| BE | 56,797 | 3.3% | 3.4% | 0.1% | 6.6 | 9.1 | -2.5 |
| CY | 2,633 | 0.2% | 0.2% | 0.0% | 8.6 | 8.5 | 0.1 |
| DE | 408,941 | 23.7% | 24.6% | 0.8% | 6.3 | 6.8 | -0.4 |
| EE | 256 | 0.3% | 0.0% | -0.2% | 8.2 | 6.6 | 1.6 |
| ES | 189,664 | 10.7% | 11.4% | 0.7% | 7.7 | 7.6 | 0.1 |
| FI | 28,183 | 1.7% | 1.7% | 0.0% | 6.8 | 8.0 | -1.2 |
| FR | 302,287 | 18.4% | 18.1% | -0.2% | 8.0 | 7.6 | 0.4 |
| GR | 38,504 | 2.2% | 2.3% | 0.1% | 8.7 | 9.5 | -0.7 |
| IE | 25,532 | 1.5% | 1.5% | 0.0% | 9.2 | 9.3 | -0.1 |
| IT | 281,026 | 15.3% | 16.9% | 1.6% | 7.1 | 6.9 | 0.1 |
| LT | 3,215 | 0.5% | 0.2% | -0.3% | 10.3 | 9.9 | 0.4 |
| LU | 1,833 | 0.3% | 0.1% | -0.2% | 6.5 | 6.2 | 0.3 |
| LV | 1,887 | 0.4% | 0.1% | -0.2% | 8.7 | 8.9 | -0.2 |
| MT | 610 | 0.1% | 0.0% | -0.1% | 11.1 | 9.2 | 1.9 |
| NL | 85,172 | 5.3% | 5.1% | -0.2% | 7.8 | 8.4 | -0.6 |
| PT | 34,742 | 2.1% | 2.1% | 0.0% | 6.8 | 7.2 | -0.3 |
| SI | 6,499 | 0.4% | 0.4% | 0.0% | 9.3 | 9.3 | -0.1 |
| SK | 7,966 | 1.0% | 0.5% | -0.6% | 8.9 | 8.3 | 0.6 |
| SNAT | 145,950 | 10.0% | 8.8% | -1.2% | 10.3 | 8.5 | 1.8 |
| Total / Avg. | 1,665,676 | 100.0% | 100.0% | 0.0% | 7.6 | 7.5 | 0.1 |

Distribution of public sector assets by jurisdiction



Deviations from the adjusted distribution key



 $^{^{\}mathrm{1}}$ 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

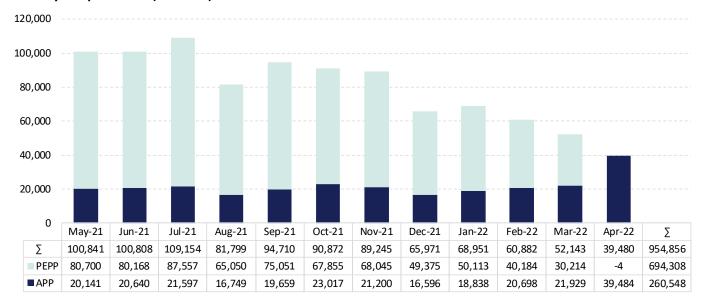


Aggregated purchase activity under APP and PEPP

Holdings (in EURm)

| | APP | PEPP | APP & PEPP |
|--------|-----------|-----------|------------|
| Mar-22 | 3,179,043 | 1,718,076 | 4,897,119 |
| Apr-22 | 3,218,529 | 1,718,071 | 4,936,600 |
| Δ | +39,484 | -4 | +39,480 |

Monthly net purchases (in EURm)

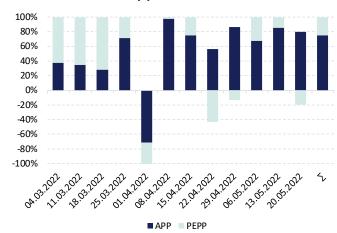


Weekly purchases



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

Distribution of weekly purchases



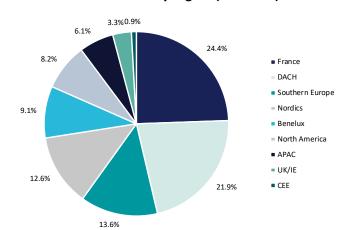


Charts & Figures Covered Bonds

EUR benchmark volume by country (in EURbn)

125.5; 13.4% ■ FR 228.8; 24.4% ■ DE 30.0; 3.2% CA 32.3; 3.5% ■ ES 37.0; 4.0% ■ NL ■ NO 49.2; 5.3% • IT AT 49.9; 5.3% SF 167.9; 17.9% ■ FI 66.3; 7.1% Others 72.7; 7.8% 76.7; 8.2%

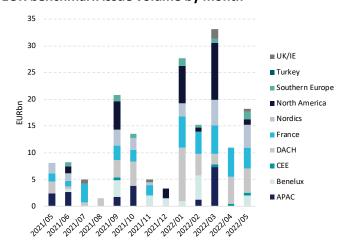
EUR benchmark volume by region (in EURbn)



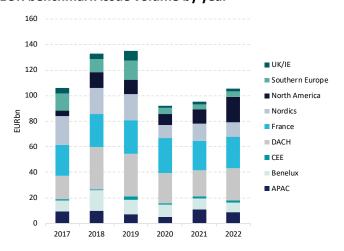
Top-10 jurisdictions

| 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 | 228.8 | 219 | 14 | 0.95 | 10.0 | 5.6 | 0.83 |
| 2 | DE | 167.9 | 243 | 19 | 0.63 | 8.4 | 4.6 | 0.45 |
| 3 | CA | 76.7 | 60 | 0 | 1.24 | 5.9 | 3.2 | 0.27 |
| 4 | ES | 72.7 | 59 | 5 | 1.12 | 11.7 | 3.8 | 1.73 |
| 5 | NL | 66.3 | 67 | 1 | 0.93 | 11.6 | 7.7 | 0.75 |
| 6 | NO | 49.9 | 59 | 9 | 0.84 | 7.4 | 4.1 | 0.40 |
| 7 | IT | 49.2 | 59 | 2 | 0.80 | 9.2 | 4.3 | 1.25 |
| 8 | AT | 37.0 | 68 | 3 | 0.54 | 9.5 | 6.1 | 0.58 |
| 9 | SE | 32.3 | 38 | 0 | 0.85 | 7.5 | 3.5 | 0.51 |
| 10 | FI | 30.0 | 32 | 2 | 0.94 | 7.7 | 3.9 | 0.40 |

EUR benchmark issue volume by month

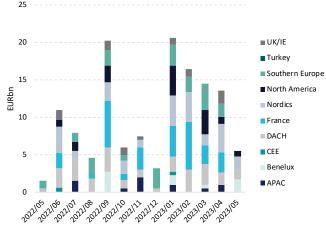


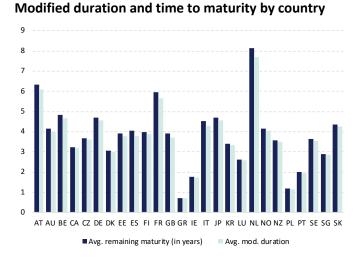
EUR benchmark issue volume by year



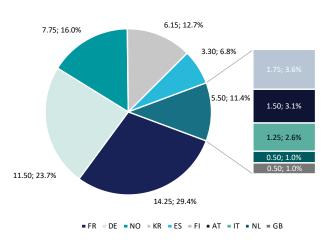


EUR benchmark maturities by month



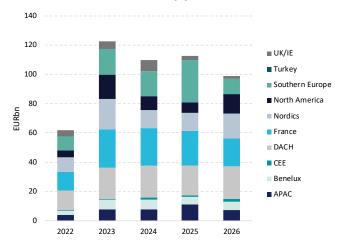


EUR benchmark volume (ESG) by country (in EURbn)

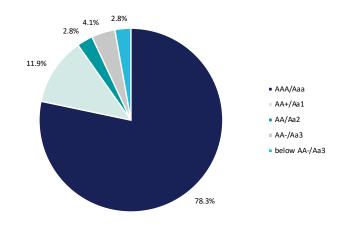


Source: Market data, Bloomberg, NORD/LB Markets Strategy & Floor Research

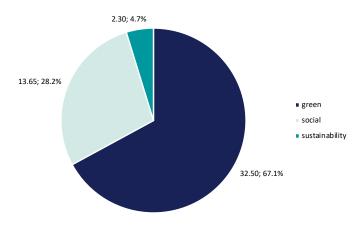
EUR benchmark maturities by year



Rating distribution (volume weighted)

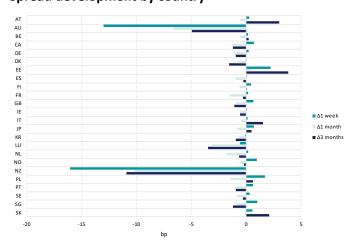


EUR benchmark volume (ESG) by type (in EURbn)

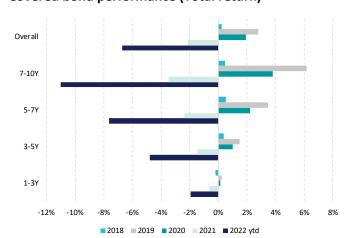




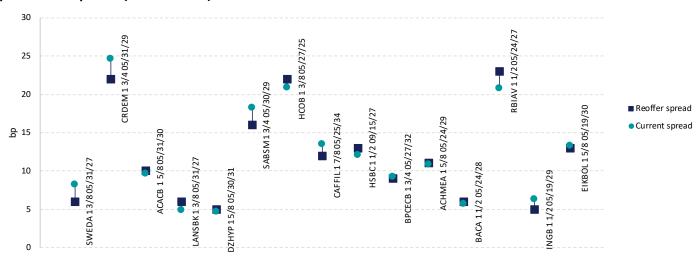
Spread development by country



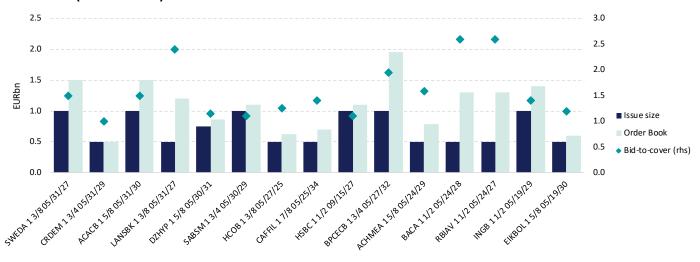
Covered bond performance (Total return)



Spread development (last 15 issues)

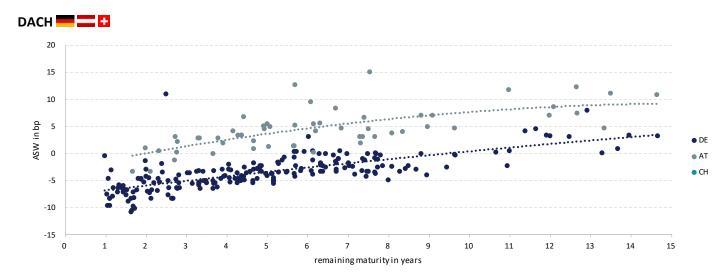


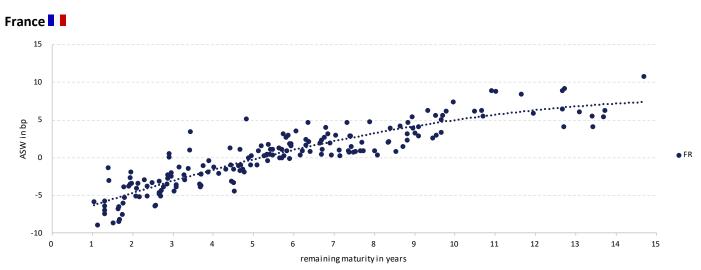
Order books (last 15 issues)

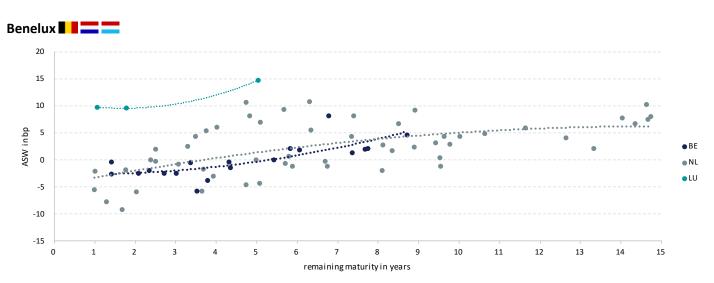




Spread overview¹

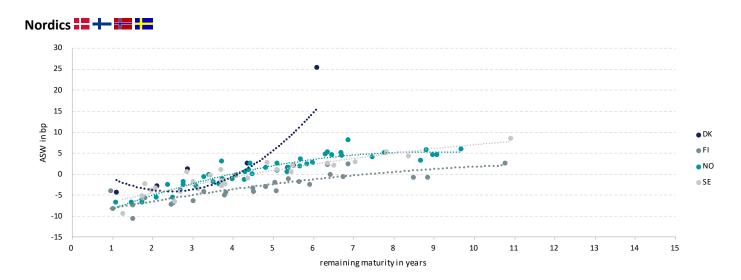


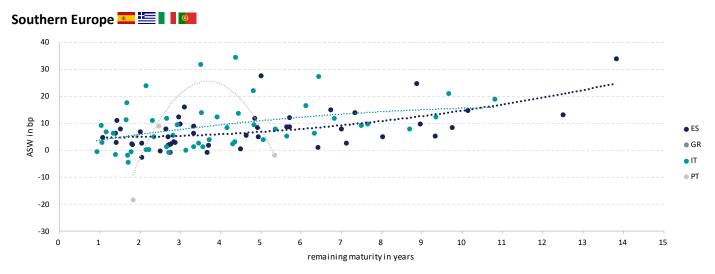


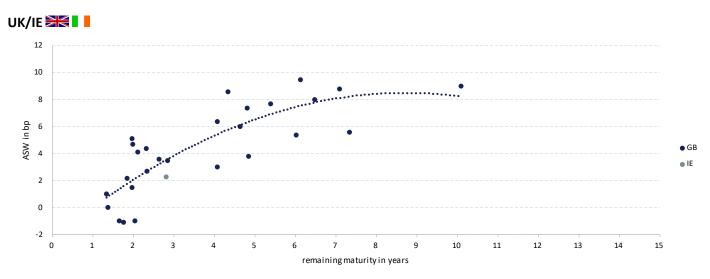


Source: Market data, Bloomberg, NORD/LB Markets Strategy & Floor Research 1 Time to maturity $1 \le y \le 15$

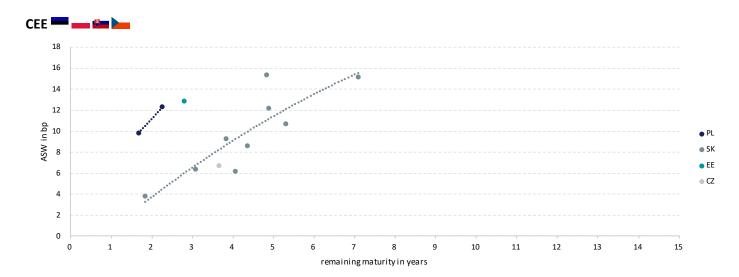


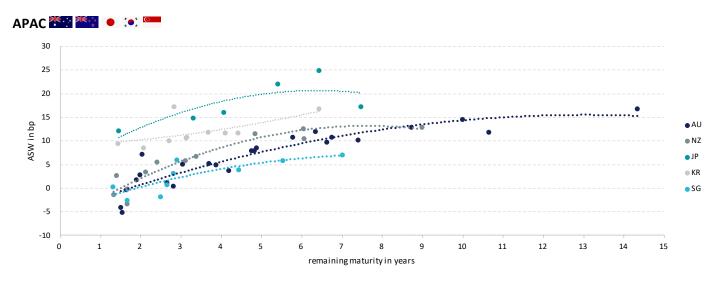


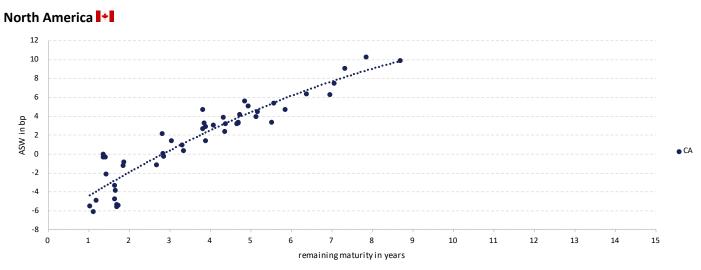








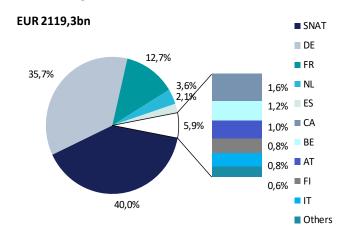






Charts & Figures SSA/Public Issuers

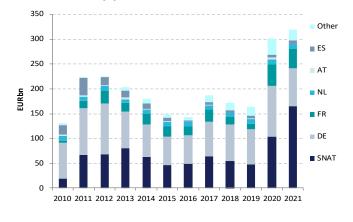
Outstanding volume (bmk)



Top 10 countries (bmk)

| Country | Vol. (€bn) | No. of bonds | ØVol. (€bn) | Vol. weight. ØMod. Dur. |
|---------|------------|-----------------|----------------|----------------------------|
| SNAT | 847,5 | 207 | 4,1 | 8,5 |
| DE | 756,1 | 570 | 1,3 | 6,6 |
| FR | 268,3 | 185 | 1,5 | 6,5 |
| NL | 76,0 | 68 | 1,1 | 6,7 |
| ES | 45,3 | 58 | 0,8 | 5,1 |
| CA | 33,2 | 22 | 1,5 | 5,1 |
| BE | 24,5 | 28 | 0,9 | 12,7 |
| AT | 21,2 | 23 | 0,9 | 4,5 |
| FI | 18,0 | 22 | 0,8 | 5,8 |
| IT | 16,8 | 20 | 0,8 | 5,1 |

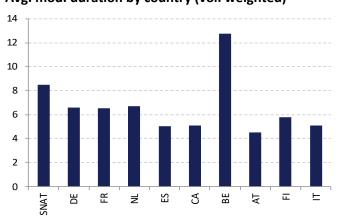
Issue volume by year (bmk)



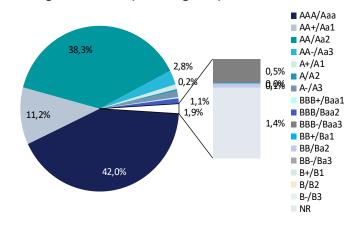
Maturities next 12 months (bmk)



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

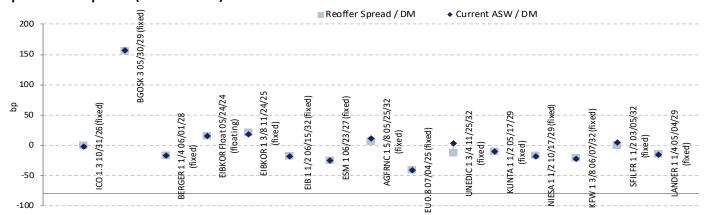


Rating distribution (vol. weighted)





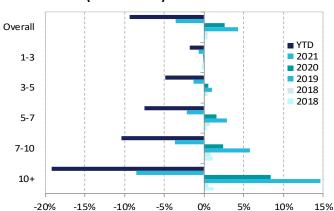
Spread development (last 15 issues)



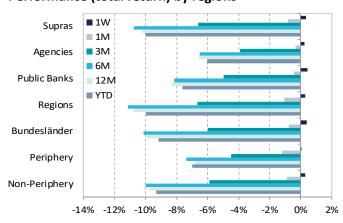
Spread development by country



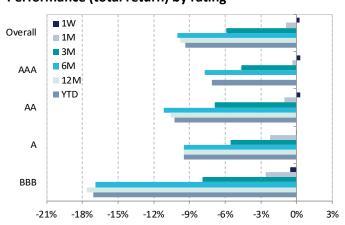
Performance (total return)



Performance (total return) by regions

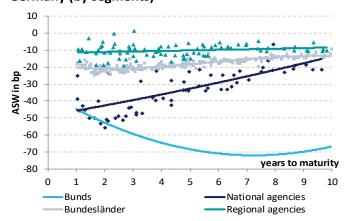


Performance (total return) by rating

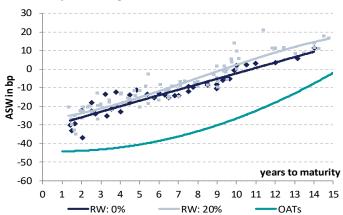




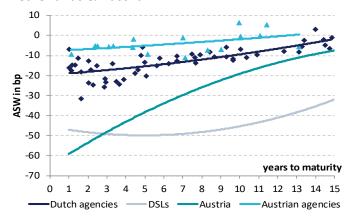
Germany (by segments)



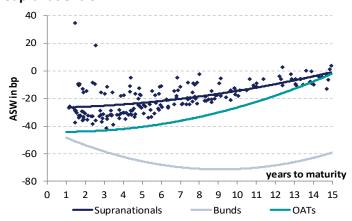
France (by risk weight)



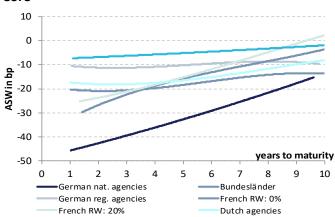
Netherlands & Austria



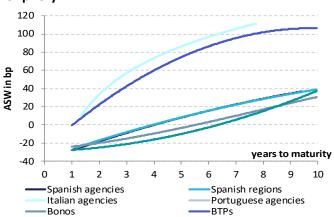
Supranationals



Core



Periphery





Appendix

Overview of latest Covered Bond & SSA View editions

| Development of the German property market | Publication | Topics |
|--|-----------------------|--|
| 16/2022 + 11 May 1 | 17/2022 ♦ 18 May | Development of the German property market |
| Update on DEUSTD – Joint German cities (bond No. 1) | | The SSA market in 2022 a review of the first four months |
| Focus on covered bond jurisdictions: Spotlight on Sweden | 16/2022 ♦ 11 May | Focus on covered bond jurisdictions: a look at Austria |
| ESG covered bonds from Germany: DKB issues social Pfandbrief in the form of a "Berlin Social Housing Bond" Issuer Guide SSA 2022: The Spanish agency market 14/2022 • 13 April PEPP reporting: (Not) an obituary PEPP reporting: (Not) an obituary Inited Kingdom: spotlight on the EUR benchmark segment Issuer Guide SSA 2022: the Nordic agency market 12/2022 • 30 March An overview of the market for ESG covered bonds Issuer Guide SSA 2022: the Austrian agency market 11/2022 • 23 March ESG update 2022 in the spotlight The ratings approach of DBRS 10/2022 • 16 March Interest Guide SSA 2022: the Austrian agency market 10/2022 • 09 March Interest Guide SSA 2022: the Austrian agency market 10/2022 • 09 March ESG update 2022 in the spotlight Interest Guide SSA 2022: the Austrian agency market 10/2022 • 16 March ESG update 2022 in the spotlight Interest Guide SSA 2022: the Output Guide SSA 2022: the Dutch agency market 10/2022 • 09 March ESCB: Not everyone can get their act together at a turning point Welcome expansion of the covered bond ESG universe: Banco BPM green covered bond War in Ukraine and sanctions on Russia: spotlight on the European banking landscape 10/2022 • 23 February ESCB banking regulator also views the residential real estate market as a potential risk driver for banks Development of the German property market Beyond Bundeslaender: Paris metropolitan area (IDF and VDP) 10/2022 • 16 February ESCB February ESCB ECB: Ilul speed, throttling, U-turn – or wrong turn? Insurance companies as covered bond investors: the bank-insurer nexus 10/2022 • 02 February ESCB Lisulary Review of January 2022: a reversion to old patterns does not always have to be bad SSA – New year, new hope? Less complete terrain. What's next? | | Update on DEUSTD – Joint German cities (bond No. 1) |
| Bond" Issuer Guide SSA 2022: The Spanish agency market | 15/2022 ♦ 04 May | Focus on covered bond jurisdictions: Spotlight on Sweden |
| 14/2022 + 13 April First ECB meeting after the end of the PEPP: (Not) a non-event!? PEPP reporting: (Not) an obituary 13/2022 + 06 April ECB adjusts order behaviour in time for the new quarter United Kingdom: spotlight on the EUR benchmark segment Issuer Guide SSA 2022: the Nordic agency market 12/2022 + 30 March An overview of the market for ESG covered bonds Issuer Guide SSA 2022: the Austrian agency market 11/2022 + 23 March ESG update 2022 in the spotlight The ratings approach of DBRS 10/2022 + 16 March What does the recent ECB meeting mean for covered bonds? Credit authorisations of the German Laender for 2022 19/2022 + 09 March Transparency requirements § 28 PfandBG Q4/2021 Issuer Guide SSA 2022: The Dutch agency market 18/2022 + 02 March ECB: Not everyone can get their act together at a turning point Welcome expansion of the covered bond ESG universe: Banco BPM green covered bond War in Ukraine and sanctions on Russia: spotlight on the European banking landscape 19/2022 + 23 February ECB banking regulator also views the residential real estate market as a potential risk driver for banks Development of the German property market Beyond Bundeslaender: Paris metropolitan area (IDF and VDP) 19/2022 + 16 February PEPP reporting: Finish line in sight, but no photo finish expected Do 2 HYP issues inaugural green Pfandbrief: ESG market in Germany continues its growth trajectory Insurance companies as covered bond linvestors: the bank-insurer nexus 19/2022 + 02 February ECB: full speed, throttling, U-turn – or wrong turn? Insurance companies as covered bond investors: the bank-insurer nexus SSA – New year, new hope? Less oomph to kick off the new year SSA – New year, new hope? Less oomph to kick off the new year SSA – New year, new hope? Less oomph to kick off the new year SSA – New year, new hope? Less oomph to kick off the new year SSA – New year, new hope? Less oomph to kick off the new year SSA – New year, new hope | | |
| # PEPP reporting: (Not) an obituary # ECB adjusts order behaviour in time for the new quarter # United Kingdom: spotlight on the EUR benchmark segment # Issuer Guide SSA 2022: the Nordic agency market # An overview of the market for ESG covered bonds # Issuer Guide SSA 2022: the Austrian agency market # ESG update 2022 in the spotlight # The ratings approach of DBRS # Credit authorisations of the German Laender for 2022 # OB/2022 • 16 March # Transparency requirements § 28 PfandBG Q4/2021 # Issuer Guide SSA 2022: The Dutch agency market # ECB: Not everyone can get their act together at a turning point # Welcome expansion of the covered bond ESG universe: Banco BPM green covered bond # War in Ukraine and sanctions on Russia: spotlight on the European banking landscape # ECB banking regulator also views the residential real estate market as a potential risk driver for banks # Development of the German property market # Beyond Bundeslaender: Paris metropolitan area (IDF and VDP) # ECB: full speed, throttling, U-turn – or wrong turn? # Insurance companies as covered bond investors: the bank-insurer nexus # Covered Bonds – Review of January 2022: a reversion to old patterns does not always have to be bad # SSA – New year, new hope? Less oomph to kick off the new year # ECB preview: 109 Bund spotted in positive terrain. What's next? | | Issuer Guide SSA 2022: The Spanish agency market |
| 13/2022 • 06 April | 14/2022 ♦ 13 April | First ECB meeting after the end of the PEPP: (Not) a non-event!? |
| United Kingdom: spotlight on the EUR benchmark segment | | PEPP reporting: (Not) an obituary |
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| O9/2022 ◆ 09 March Transparency requirements § 28 PfandBG Q4/2021 Issuer Guide SSA 2022: The Dutch agency market ECB: Not everyone can get their act together at a turning point Welcome expansion of the covered bond ESG universe: Banco BPM green covered bond War in Ukraine and sanctions on Russia: spotlight on the European banking landscape O7/2022 ◆ 23 February ECB banking regulator also views the residential real estate market as a potential risk driver for banks Development of the German property market Beyond Bundeslaender: Paris metropolitan area (IDF and VDP) O6/2022 ◆ 16 February PEPP reporting: Finish line in sight, but no photo finish expected DZ HYP issues inaugural green Pfandbrief: ESG market in Germany continues its growth trajectory O5/2022 ◆ 09 February ECB: full speed, throttling, U-turn − or wrong turn? Insurance companies as covered bond investors: the bank-insurer nexus O4/2022 ◆ 02 February Covered Bonds − Review of January 2022: a reversion to old patterns does not always have to be bad SSA − New year, new hope? Less oomph to kick off the new year O3/2022 ◆ 26 January ECB preview: 10y Bund spotted in positive terrain. What's next? | 10/2022 ♦ 16 March | What does the recent ECB meeting mean for covered bonds? |
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| | | SSA – New year, new hope? Less oomph to kick off the new year |
| EUR benchmark segment in Canada: our supply forecast already null and void | 03/2022 ♦ 26 January | ECB preview: 10y Bund spotted in positive terrain. What's next? |
| | | EUR benchmark segment in Canada: our supply forecast already null and void |

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 2021

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

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

Covered bonds as eligible collateral for central banks

SSA/Public Issuers:

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

Issuer Guide - Canadian Provinces & Territories 2020

Issuer Guide – Supranationals & Agencies 2019 (update planned for 2022)

Issuer Guide - Down Under 2019

Fixed Income Specials:

ESG-Update 2022

Face-saving ECB decision: Hawks have won - for now

ECB decision: PEPP benched for now, APP comes in as Point Guard

ECB holds course, but ups the ante – PEPP running until 2022

ECB launches PEPP (Pandemic Emergency Purchase Programme)



Appendix Contacts at NORD/LB

Markets Strategy & Floor Research



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Dr Norman Rudschuck, CIIA SSA/Public Issuers

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

Sales

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

Origination & Syndicate

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

Treasury

| Collat. Management/Repos | +49 511 9818-9200 |
|--------------------------|-------------------|
| Liquidity Management | +49 511 9818-9620 |
| Liquidity ividilagement | +49 511 9818-9650 |

Trading

| Covereds/SSA | +49 511 9818-8040 |
|------------------|-------------------|
| Financials | +49 511 9818-9490 |
| Governments | +49 511 9818-9660 |
| Laender/Regionen | +49 511 9818-9550 |
| Frequent Issuers | +49 511 9818-9640 |

Sales Wholesale Customers

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



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