



Covered Bond & SSA View

NORD/LB Markets Strategy & Floor Research





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Market overview Covered Bonds

Authors: Dr Frederik Kunze // Henning Walten, CIIA

Primary market once again enters period of slumber

Over the past five trading days, the primary market has again showed its quieter side. As such, no issuers have made moves to approach investors. In this way, the market for covered bank bonds differs to a significant extent from both the SSA segment and the market for senior unsecured bonds, which have both displayed a far greater dynamic. The scarce supply of covered bonds is also reflected in the marked negative net supply in evidence in the year to date. Based on historical issuance patterns, we expected new issuances in January and February 2021 to amount to EUR 32bn. With expected redemptions of EUR 42bn across the same time frame, this should have produced negative net supply of EUR 10bn. In view of the new issuances worth EUR 14bn we have seen so far (January: EUR 12.75bn; February so far: EUR 1.25bn), the supply deficit on the market is likely to be even more pronounced as a result. Given these market conditions, the expensive issuance spreads for covered bond placements observed across the board come as little surprise. A stable performance is evident in the secondary market at this spread level too, so that all issues placed so far in 2021 are currently trading below the re-offer spread based on Bloomberg screen prices.

Issuer Country Timing ISIN Maturity Size Spread Rating ESG

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

Nationwide Building Society active in the GBP segment

While the EUR benchmark segment, as mentioned above, remained an activity-free zone in terms of new issuances over the past five trading days, the Nationwide Building Society did offer a benchmark transaction in GBP. The SONIA-based bond went to market with a volume of GBP 1.0bn and a term to maturity of 10 years at a price of SONIA +40bp. The transaction not only marked the first deal of 2021, but also the return of issuers to the market for GBP benchmarks after a long period of abstinence. According to our records, the last activity here dates back to September 2020 when Deutsche Pfandbriefbank was active in this segment. The most recent activity on the part of a UK bank (Santander UK) was even recorded more than 12 months ago. In the EUR benchmark segment, UK banks were active on only two occasions across the whole of 2020. While Yorkshire Building Society placed a bond worth EUR 500m in October, it was Santander UK that accessed this market first, raising a total of EUR 1.25bn at the start of 2020. For the current year, we are expecting EUR benchmarks from the UK in the amount of EUR 5bn, which would produce a negative net supply of EUR -8.1bn. This would also be the second highest negative net supply for 2021, after Spain.



ECB has purchased covered bonds totalling EUR 7.2bn so far in 2021

Since the start of the year, the Eurosystem has increased its holdings of covered bonds under the CBPP3 by EUR 1.41bn. In so doing, the weekly net purchase volume has remained highly volatile. While portfolio holdings under the CBPP3 declined by EUR 1.12bn as at 22 January, the volume rose just two weeks later by EUR 1.04bn. In the previous reporting week, however, securities totalling EUR 290m were acquired under the programme. In addition to looking at the net changes, it is worth analysing the gross values as well. In this regard, it is clear that since the beginning of the year the Eurosystem has purchased covered bonds under the CBPP3 worth roughly EUR 7.2bn, which would accordingly indicate redemptions of approximately EUR 5.9bn offsetting this figure. The share of primary market purchases under the CBPP3 has been around 37% for three years or so.

Canada: new covered bond issuer announced

Not least in view of the market conditions outlined above, newcomers in the EUR benchmark segment are to be expressly welcomed at the moment. In this context, we see successful debut issuances from South Korea, Belgium and even the Czech Republic as pleasing developments. Another issuer from Canada, namely Equitable Bank, has now registered a covered bond programme on the basis of Canadian legislation. Following successful accreditation in the CMHC Canadian Covered Bonds Registry, the number of covered bond issuers in Canada totals nine. Of the issuers currently active, seven banks have EUR benchmarks outstanding, while we are of the view that the issuer HSBC Bank Canada is likely to turn its attention to this segment in the near future. In our opinion, the additional covered bond issuer Equitable Bank would also appear to be a likely candidate for a EUR benchmark debut. The secured bank bonds ultimately provide access to EUR-denominated funding for many overseas issuers even in times of crisis. For 2021 as a whole, Canada is likely to rank among the more dynamic jurisdictions within the EUR benchmark segment. In our forecast, we are therefore expecting positive net supply of EUR 1.5bn, which with redemptions totalling EUR 7.5bn would suggest a sizeable issuance volume of EUR 9.0bn is on the cards. Up to this point, however, only RBC has made an appearance on the market, placing a bond worth EUR 1.25bn. Consequently, we are expecting to see a certain catchup dynamic in effect over the further course of the year.



Market overview SSA/Public Issuers

Author: Dr Norman Rudschuck, CIIA

FMSWER sells DEPFA to BAWAG

On Monday, the Federal government's winding-up institution FMS Wertmanagement (FMS-WM) announced that it is selling its 100% investment in Ireland's DEPFA BANK plc (DEPFA) to Austria's BAWAG P.S.K. AG. This was on the basis of a resolution adopted by the FMS-WM Executive Board, and approved by the FMS-WM Supervisory Board and the Federal Agency for Financial Market Stabilisation (FMSA). The sale brings the broad tender process launched by FMS-WM last summer to a successful close. The parties agreed not to disclose the purchase price of the transaction, which is still subject to approval by supervisory and antitrust authorities. A reminder: FMS-WM had acquired DEPFA from the Hypo Real Estate Group (HRE) in 2014. In the years that followed, FMS-WM succeeded in significantly reducing the total assets of DEPFA and its subsidiaries, lowering its administrative expenses and markedly increasing its Tier 1 capital ratio, among other achievements. Implementing the wind-up strategy also allowed FMS-WM to harness major synergies and improve refinancing costs over this entire period. According to the press release, "the bottom line is that the sale marks what is a successful conclusion to the winding-up of DEPFA, also from the perspective of the German taxpayer". FMS-WM was founded in 2010 with the aim of winding up the risk positions and operations that were transferred to the company from HRE effective 1 October 2010. It is supervised by the Federal Agency for Financial Market Stabilisation. The Financial Market Stabilisation Fund is obligated without limitation to provide additional funds for losses incurred in winding up the portfolio under Section 8a of the German Law Establishing a Financial Market and Economic Stabilisation Fund (Gesetz zur Errichtung eines Finanzmarkt- und Wirtschaftsstabilisierungsfonds - Stabilisierungsfondsgesetz).

Bräunig, Kukies, Scholz and KfW

Jörg Kukies, the former Germany head of Goldman Sachs and current State Secretary at the Federal Ministry of Finance, will either become the new President of the Federal Financial Supervisory Authority (Bafin) or, from mid-2021, succeed Günther Bräunig as Chief Executive Officer of the KfW Group — but just according to market rumours. As planned, Günther Bräunig will be leaving the Executive Board of KfW when his contract ends in summer 2021, with potential successors starting to be touted already last year. While non-party, Bräunig is affiliated with the CDU political party, and here the political power games begin. A top official moving straight from the Ministry to the state-owned bank does not make a good impression, Federal Minister of Finance Olaf Scholz (SPD) has ruled, as the Spiegel newspaper reported on the basis of information from the Federal Ministry of Finance. What's more, this violates a recently adopted transparency act. This debate certainly does not inspire spread movement, with KfW especially being regarded as a haven of calm in the pandemic crisis. Putting an end to the background noise promptly will nonetheless be important, as the sustainability debate on financing of cruise ships and the Wirecard loans have shown.



Budget: Île-de-France

In December 2020, we reported on Greater Paris as an investment alternative. In this brief follow-up article, we wish to give our readers an update on the budget of Île-de-France (IDF) for 2021. Since 2016, IDF has set itself the goal of reducing administrative costs and devoting a larger share of its budget to investment. The latter includes modernising public transport, building secondary schools and supporting research. At EUR 5bn, the budget for 2021 has remained stable year on year. While only 40% of the budget was spent on investment in 2016, this has increased to 59% for 2021. This means the investment share has once more increased substantially on the previous year (54%). Overall, investment spending has increased by 17% between 2020 and 2021 to EUR 2.6bn, while administrative costs remain at EUR 1.9bn, having been reduced by 7% in the previous year. According to President of the Regional Council Valérie Pécresse, a budget this "aggressive is unprecedented" and will enable Île-de-France to counteract the economic consequences of the pandemic in the best-possible way. From the left side of the opposition, the proposal has been rated as "a backwards step in social and environmental terms". According to Pécresse, however, a budget of this kind in the midst of the crisis is possible due to the exemplary management between 2016 and 2020, which has resulted in there now being sufficient financial leeway. This already enabled a supplementary budget in the amount of EUR 1.3bn last year. What's more, IDF's debt level has remained stable on the previous year and, on account of the strong financial situation, a tax reduction was announced despite the decline in income. The "development tax" for small companies and nursing homes will cease to exist in future, which will help support these companies through the crisis. Sustainability will continue to be a focus of budget planning in the region: in 2021, EUR 2.5bn (which means around 50% of budget spending) has been earmarked for the purposes of environmental transformation.

Budget: Ville de Paris

In its latest budget plan, Ville de Paris (VDP) highlights that Paris has been suffering under the impact of the pandemic considerably more severely than other parts of the country. Gross savings have consequently declined considerably as a result of the fall in tax revenue from sectors impacted by the pandemic, such as tourism and gastronomy. In contrast to other French local authorities, this is not offset in Paris by state aid due to the financial equalisation system, which does not benefit the economically strong Paris. Given the availability of the necessary financial scope, VDP is able to actively counteract the consequences of the pandemic. Assuming an annual budget of around EUR 10bn and estimated indebtedness of EUR 7.1bn as at the end of 2021 (versus EUR 6.4bn at the end of 2020), the Council of Paris laments the reduction in its funds and restriction in room for manoeuvre. Considerable criticism of taking on debt has come from the former justice minister and current leader of the opposition in the Council of Paris, Rachida Dati. She maintains the budget would lead Paris "into bankruptcy". We take a different view, as not taking any countermeasures would end up being even more expensive. What's more, debt is par for the course in public budgets.

Reminder: Société du Grand Paris (SOGRPR)

The Supervisory Board of Société du Grand Paris (SGP) has granted the issuer authorisation to issue green bonds worth EUR 10bn in 2021. This will allow SGP to maintain an annual investment level of around EUR 4bn to EUR 5bn until 2023.



Draghi's green super ministry

Mario Draghi, very much a familiar name to our readers, took office on Saturday as the head of a unity government created to steer Italy out of the coronavirus crisis and economic slump. "Ours will be an ecological government," Prime Minister Draghi told his first cabinet meeting on Saturday. In this vein, Draghi has picked physicist Roberto Cingolani to head up the new super ministry for ecological transition. In his role, Cingolani will take over energy matters previously shared with other ministries and combine them with the environment portfolio. Under an EU agreement, 37% of the money received under the Recovery Fund (a substantial amount of more than EUR 200bn overall) must be dedicated to the transition to a low carbon economy. Draghi has until the end of April to present his plans to the European Commission, or Italy will not receive the funds so urgently needed to revive the recession-hit economy. We rate Cingolani's appointment as a sign of Draghi's intention to involve experts in employing the EU recovery fund and picking the right technologies to drive long-term development. The creation of the new ministry helped to win over Italy's 5-Star Movement, which prides itself on its green credentials, but had faced internal strife over the prospect of joining a cabinet containing its political foes. However, some 5-Star members were disappointed that the new ministry will only absorb the energy arm of the industry ministry and not the rest, which includes business crisis resolution and international trade. Climate policies are central to the Brussels agenda, which wants to reach net zero emissions by 2050. Some countries have already set up separate ministries, including France, Spain and Portugal to help deliver the goal. It seems many Italian companies are increasingly complaining that an overly complicated approval process is holding back projects. "This is putting the Recovery Fund at risk. Some 70% of the grants will be disbursed between 2021 and 2023 and need to be spent by 2026, which is impossible if permits are not there," a source involved in the Recovery Fund process said to Reuters on condition of anonymity. Italy is also is also gearing up to be a good host. The UN Climate Change Conference 2020 in Glasgow was supposed to be the 26th Conference (COP 26). It had been due to take place in November 2020, but was rescheduled on account of the pandemic and will now run from 1 to 12 November 2021. The Conference is being hosted by the United Kingdom, in partnership with Italy. It follows on from the Madrid COP 25 (December 2019).

Municipality Finance Plc (ticker: KUNTA)

It is always a joy to report briefly on Kuntarahoitus Oyj, also known as Municipality Finance Plc. Last year, KUNTA issued bonds in the amount of EUR 11.0bn (2019: EUR 7.4bn). Of these, only four bonds were denominated in EUR with a total volume of EUR 165m. Other issued currencies were primarily USD and JPY, but also AUD and NOK. This breakdown explains why this name comes up so rarely in our EUR reporting. As at the end of the year, a bond volume of EUR 38.1bn was outstanding, up from EUR 33.9bn at the end of 2019. The 2020 financial year was of course dominated by the pandemic. This has significantly increased demand for MuniFin Group's customer financing, especially the growth of municipal sector's financing. The net operating profit amounted to EUR 194m (2019: EUR 131m). At 104.3% (83.1%), the Group's CET1 capital ratio remained very strong. The Group's leverage ratio was 3.9% (4.0%) at the end of December.



Clear rejection of debt cut

More than 100 economists recently published an open letter calling for the ECB to writeoff the debts run up by eurozone members, as was reported in the Börsen-Zeitung newspaper. In the letter published in several leading European newspapers, they demanded that the ECB cancel the public debt of around EUR 2,500bn in its holding. The 5-Star movement in Italy and the Italian President of the European Parliament, David Sassolil, also regularly appear in this context. In their call, the economists argue that the ECB holds around 25% of all European debt. If this debt is ever to be repaid, new loans must be taken on to "roll the debt", or taxes increased or spending cut. It would therefore be better – the question begging to be asked at this juncture is for whom? – for the ECB and the states to reach an agreement on a debt cancellation: the economists propose instead that the ECB forgive these debts (or transform them into perpetual debts with 0% interest rate) in exchange for the European states pledging to spend the equivalent amount on a green transition and social projects. "Cancelling this debt is inconceivable," according to ECB President Christine Lagarde. "It would be in violation of the EU Treaty which strictly prohibits monetary financing. This rule is a fundamental pillar of the common framework underpinning the euro," she said.

Primary market

In a trading week during which Italy was the centre of attention in many ways – with Mario Draghi becoming the new Prime Minister and a new 10-year deal attracting more than record-setting EUR 110bn in demand before the order book closed – only a few other issuers appeared on the market. We identified two German Bundeslaender and mandates for future transactions. This is in part likely due to the national holiday in the USA on Monday (George Washington's birthday) and the Lunar New Year celebrations. So, on the front line, there are only HAMBRG and BERGER to mention. While the Free and Hanseatic City of Hamburg opted for a 20-year maturity (EUR 500m, ms +2bp), Berlin decided to go for 15 years (also EUR 500m, ms +1bp). HAMBRG was oversubscribed almost four times, meaning the bond was able to narrow by 1bp against the guidance. The guidance of Berlin's LSA (Landesschatzanweisung) was already in the range (ms +1bp area) and the books amounted to EUR 645m for pricing. Even mandates were thin on the ground: by yesterday afternoon, we saw Canada Pension Plan Investment Board (CPPIB) with a ten-year bond and BREMEN with a 30-year bond (EUR 500m, WNG).

Issuer	Country	Timing	ISIN	Maturity	Size	Spread	Rating	ESG
BERGER	DE	16.02.	DE000A3H2Y24	15.0y	0.50bn	ms +1bp	AAA / - / -	-
HAMBRG	DE	10.02.	DE000A2LQPH0	20.0y	0.50bn	ms +2bp	AAA / - / -	-

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



Covered Bonds Insights into the iBoxx EUR Covered

Author: Henning Walten, CIIA

iBoxx EUR Covered suitably depicts the EUR benchmark segment

In our view, the iBoxx EUR Covered serves as a kind of guiding index for the segment of EUR-denominated covered bonds in a benchmark format. Unlike its <u>counterpart for GBP bonds</u>, the requirements of the iBoxx EUR Covered are such that it indicatively captures the EUR benchmark segment, as it is based on bonds with an investment grade rating and a fixed coupon. For this reason, we will take a brief look at the specifics of the current index composition. We will above all refer to market data as at 12 February 2021, with comparisons against data derived from the index composition one year ago (as at: 28 February 2020).

Volume and number of bonds most recently in decline

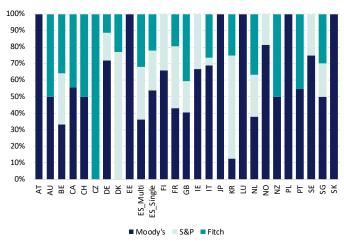
The iBoxx EUR Covered currently comprises 895 bonds with a total volume of EUR 782.9bn. The volume is therefore the lowest it has been since May 2017. One year ago, the index still contained 935 bonds with an aggregate volume of EUR 841.8bn, which corresponds to a decline of 7%, or 40 ISINs. This latest decline is — unsurprisingly — due to negative net supply on the market for EUR benchmarks in the wake of the coronavirus pandemic. The adjustment of the index at the turn of the month from January to February 2021 alone saw the volume drop by EUR 25.5bn. Going forward, the index volume is likely to continue to fall, as we expect a pronounced negative net supply for 2021 as a whole. From a historic perspective, the current volume is therefore EUR 84.5bn below the previous record of EUR 867.4bn in June 2019 and still EUR 53.8bn above the record low of EUR 729.1bn logged in August 2015.

Volume of iBoxx EUR Covered since 2013



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

Rating breakdown by country





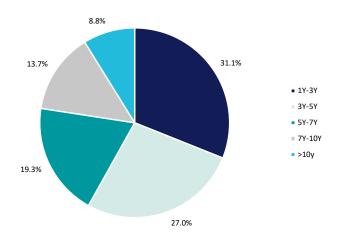
Ratings: share of bonds with top rating remains high

The EUR benchmarks currently included in the iBoxx have been assigned a total of 1,400 ratings (February 2020: 1,507) by the three main agencies of Fitch, Moody's and S&P. Of these ratings, 55.5% (775) were from Moody's, while S&P rated 22.8% of the bonds (319) and Fitch 21.9% (306). Moody's can therefore be deemed the most important ratings agency for the EUR benchmark bond segment. This view is supported by the fact that 775 of the 895 iBoxx bonds have a Moody's rating, which equates to a share of 86.6%. The respective shares for S&P and Fitch are just 34.2% and 35.6%. More than half of all bonds (458 or 51.2%) have only one rating, while 369 benchmarks (41.2%) feature a rating from two of the three agencies. The remaining 68 deals (7.6%) have been assigned a rating by all three agencies. Overall, 97.6% of the assigned ratings are in at least the AA segment. The top ratings of AAA or Aaa has been awarded to 1,128 of the 1,400 bonds, which corresponds to 80.6%. Based on the aforementioned reduction in the index, that the number of allocated ratings has also decreased comes as no surprise. However, we would put some of this decline down to the fact that bonds rated multiple times previously are now doing without this for reasons such as cost, for example. When compared with the previous year, the index includes 107 fewer ratings, versus a decrease of 40 for deals. At the same time, the share of multiple ratings has dropped slightly.

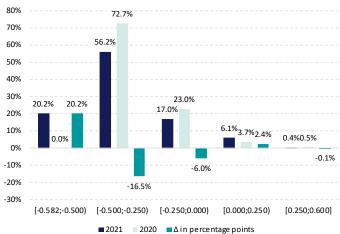
Almost no change in residual maturities

Looking at the residual maturities within the iBoxx, around one in three can be allocated to the category of 1-3y, which also makes up the greatest share. A further 27.0% are found in the 3-5y segment. Almost 60% of benchmarks in the iBoxx therefore have a residual maturity of no more than five years. A further 8.8% are in the >10y category, with the average residual maturity for this cluster being 14.1 years. When comparing against the composition in February 2020, the shares are almost the same. The average figure for residual maturity of all iBoxx bonds was 5.2 years for both reference dates.

Breakdown of residual maturities in the index



Yield landscape versus previous year



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



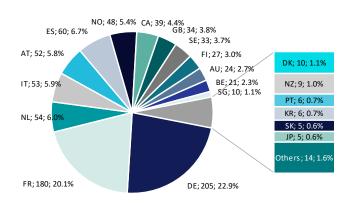
Yields: 93.4% of bonds are in negative yield territory

At present, it is clear from a yield perspective that no less than 20.2% of bonds have a yield of less than -0.500% and therefore fall short of the European Central Bank's deposit facility rate. At 56.2%, more than half of all bonds in the iBoxx EUR Covered are in the yield range of -0.500% to -0.250%. In our chart, the negative yield range also includes the range of -0.250% to 0.000%, which encompasses 17.0% of bonds. This puts the share of EUR benchmarks with negative interest at the moment at 93.4%. The above graph also shows that the index has seen some notable changes in terms of yield structure when compared with the situation at the end of February 2020. Specifically, one year ago the iBoxx did not include any EUR benchmarks with a yield of less than -0.500%, which was already the valid deposit facility rate at that point. Consequently, more bonds were allocated to the bucket -0.500% to -0.250%. The share of bonds with a negative yield was 2.3 percentage points higher a year ago. While it follows that the index does currently include a higher number of bonds with a negative yield, but at the same time the share of bonds with a positive yield is 2.3 percentage points higher as well. With the exception of one Japanese benchmark, the deals with a positive return are currently all bonds with residual maturities of more than ten years (average: 15.2 years). One year ago, there were still nine exceptions, one from Japan and the other eight from Italy.

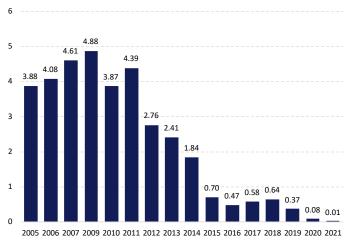
Country breakdown

The iBoxx represents the global market for EUR benchmarks. This is also reflected in the jurisdictions presented in the index. Covered bonds from a total of 26 jurisdictions are included in the current composition, which is two more than a year ago (Estonia and the Czech Republic). The index is dominated by bond issuances from Germany (205 bonds) and France (180). Adding in bonds from the Netherlands, almost 50% of bonds are accounted for by these three jurisdictions. The strongest decline in comparison with February 2020 was registered by Spain (-10) in addition to the UK, Sweden and Australia (each -7). The most additions were logged for France (+5) and South Korea (+4). The Others category includes deals from Ireland (4), Poland (4), Luxembourg (3), Switzerland (1), Estonia (1) and the Czech Republic (1).

Jurisdictions in the iBoxx EUR Covered



Average coupon by year of issuance



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



Coupons: 0.01% features most commonly

In addition to yields, we consider coupons to be of interest. For benchmarks currently included in the index, this reveals that no less than 55 deals (6.1%) feature a coupon of more than 2.5%. The most commonly seen coupon is now 0.01%, with a total of 114 bonds bearing this lowest possible coupon. Ten EUR benchmarks do not have any coupon. However, these deals were predominantly issued in 2019 and 2016. Most recently, a benchmark with no coupon was placed on the market in May 2020. The average coupon in the iBoxx is currently still 0.765%, so already 20% less than the average figure a year ago, when this had still been close to the 1% mark (0.962%). Looking ahead, the average is likely to sink further, as new bond issuances are currently featuring coupons barely worth mentioning and, conversely, ever more bonds with high coupons are reaching maturity. The coupon range of new EUR benchmark bonds placed in 2020 and 2021 was between 0% and 1%, while around 75% featured a coupon of less than 0.1% and 68% the previously mentioned coupon of 0.01%.

ESG benchmark share is 3.9%

The share of deals in ESG format is currently 3.9% (35 bonds) and therefore still very low. Assuming a further decline in the volume and scope of the index, coupled with the increasing importance of sustainability considerations, this share is likely to increase in future. The projected rise is favoured by the fact that ESG bonds are relatively young bonds, which means only few deals will leave the iBoxx EUR Covered over the next few months due to reaching maturity. Within the ESG segment, green covered bonds dominate with 62.9% (22 deals). This is owing to the mainly mortgage-backed character of bonds included in the index, often used for refinancing green real estate. In the area of social covered bonds, no less than four of the ten transactions are public sector covered bonds.

Conclusion

The iBoxx EUR Covered effectively represents the market for EUR benchmarks in the covered bonds market and offers a good starting point for an assessment of the current market. This has shown that the volume is currently in significant decline on account of the coronavirus pandemic and that this trend is not likely to be halted any time soon. Looking at the ratings, AAA and Aaa ratings continue to dominate. Yields in part lie below the ECB's deposit facility rate (-0.50%) and, aside from a few exceptions, all are negative. Coupons continue to decline, as a component of the yield. However, with regard to yields, a positive view should be taken of the fact the swap yields have tightened again considerably since the start of the year.



Covered Bonds Development of the German property market

Author: Henning Walten, CIIA

Price index rises +6.0% in 2020 despite pandemic

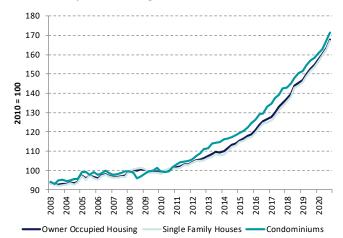
The Association of German Pfandbrief Banks (vdp) has published the performance of its real estate price index for last year. This shows that in spite of the macroeconomic impact of the pandemic, prices for real estate in Germany went up by +6.0% (previous quarter: +6.1%) in 2020. However, the performances of the various sub-indices differ. While residential property posted price growth of +7.5% (previous quarter: +7.1%), commercial real estate was less resilient, but still recorded a marginal price rise of +0.6% (previous quarter: +2.6%). This gap also represents the largest difference by far in the performance of the two indices (6.9 percentage points). Since the launch of the overall index in 2008, the difference between the two has only been 1.9 percentage points on average. The top 7 index for residential property, which shows the movement in prices in the cities of Berlin, Hamburg, Frankfurt/Main, Munich, Stuttgart, Düsseldorf and Cologne, rose by +4.7% (previous quarter: +3.8%) in 2020. This was still a significant increase but not as large as the national average. While the upward trend in prices for residential property picked up again in the past 12 months (prices went up by "only" +5.8% between Q3 2018 and Q3 2019), the pandemic has had a clear impact on the commercial sector. Since the end of 2019, prices here have declined continually across a 12-month view.

Price performance of owner-occupied housing

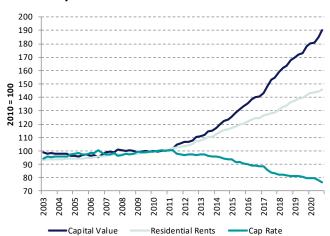
For the owner-occupied residential property sector, the index calculated by the vdp shows a rise of +8.5% versus Q4 2019 (previous quarter: +7.3%), which is its biggest year-on-year increase ever. The differences between the two sub-categories of single-family houses (+8.5%) and condominiums (+8.4%) are also only marginal. In our opinion, one of the reasons for this development is the greater importance attached to owning your own four walls during the lockdown phases which is likely to have pushed up the demand for residential property. All three residential property indices posted increases of more than 8.0% for the very first time and, with the exception of the single-family house index, the price rises also represented new records. Even though the movement in prices in Q1 2020 was not yet decisively influenced by the coronavirus crisis and an accurate conclusion after a year of the pandemic cannot be reached until the figures for Q1 2021 are published, it is already clear that, contrary to possible expectations of a significant downturn, the crisis has instead boosted the residential property market. This is also likely to have been supported in part by the ECB's monetary policy instruments, which were adjusted in light of the pandemic and provide favourable financing modalities in the longer term.



Owner-occupied housing



Multi-family houses



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

Rents and prices for multi-family houses

The year-on-year market performance of multi-family houses was also unaffected by the pandemic. With a rise over the last 12 months of +6.7% (previous quarter: +7.0%), prices here continued to rise significantly. One possible reason for this development could be the low risk of rent defaults, which is likely to be higher in the commercial sector, prompting continued investor activity in the multi-family housing segment. Alongside prices, there was also a rise of +2.8% (previous quarter: +3.4%) in rents under new contracts, although this increase is lower than in the previous quarter. The latest performance is therefore still above the two-year average (6.2%). In a quarterly comparison, prices were up by +2.7%, a figure last seen in Q3 2017. Like the owner-occupied housing market, the multi-family housing segment has also proven resilient during the coronavirus pandemic, although the rate of price increases here is slightly slower. However, the current figure makes the quarter one of three with the highest rates of increase over a period of two years, or eight quarters.

Prices for office property continue to lose momentum

Unlike the residential property market, the commercial sector has been significantly affected by the pandemic and its side effects. Consequently, prices for office property rose by only +1.7% in 2020. Looking at the quarterly figures for 2020 on a year-on-year basis, however, increases of +4.7% (Q3/20), +6.3% (Q2/20) and +8.4% (Q1/20) were recorded. On a quarterly comparison basis, the index also fell twice in 2020, for the first time since 2010. Momentum in office rents has also slowed, dropping continually since Q3 2019 from +6.8% to the present level of just +0.7%. A reversal of this trend is currently unlikely and the market for office property is more likely to remain difficult in the future. We believe the push towards digitisation and flexibility in terms of workplaces and working hours triggered by the pandemic will lead to a decrease in demand for office space. The extent of this downturn is unclear at present since the new working world has revealed not only the advantages of mobile working but also the limitations, especially with regard to interpersonal relationships. The middle ground has yet to be found here.



Office property

Retail property



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

Prices for retail property: notable negative impact

Just as the office sector is on the brink of potential accelerated change, the retail sector too has been facing numerous challenges for some time now, challenges which have grown in the wake of the pandemic. The retail sector is also the property sector that has been hardest hit by lockdown measures. Consequently, prices fell year on year by 2.0%. Prices have also been down year on year in 7 of the last 8 quarters. We believe this situation is unlikely to improve. The sector is facing an uncertain future as a result of the (unavoidable) acceleration in the shift towards online shopping, as well as the likelihood of retailers going bankrupt because of the pandemic. Here, too, we will have to wait and see the extent to which the situation recovers or deteriorates once the pandemic is over. The market for retail property therefore remains the only sub-market analysed here to record falling prices. Although the pandemic did not trigger this development, it has certainly exacerbated it and acted as a catalyser for a trend that had already started.

Top 7 housing market: constant growth

The separate index reflecting the performance of the housing market in the top 7 cities again showed a somewhat stronger uptick over a 12-month period. Despite the coronavirus pandemic, prices went up by +4.7% over the last 12 months compared with a rise of "just" +2.9% in 2019. The biggest increase was recorded by the condominium sub-index in the top 7 cities with prices climbing +6.3%. As with the nationwide assessment of the residential property market, there is no sign at the moment of a negative impact on the market in the top 7 cities either. In fact, prices have risen faster than before the pandemic.



Conclusion

The picture for the German real estate market in 2020 is a divided one. While prices for some residential property recorded big increases, the impact and repercussions of the pandemic were clearly reflected in the figures for the commercial sector. Retail property was hit particularly hard by the crisis, further exacerbating the trend seen in preceding quarters. Office property, too, has been affected by the pandemic. Demand for residential property, in contrast, was strong and prices rose significantly year on year. The current figures therefore reflect two answers to the question posed at the start of the pandemic regarding its impact on the real estate sector in Germany. Residential property is likely to have become more important during the crisis months and financing modalities are favourable and likely to remain so in the longer term. The performance of commercial property however has been much weaker in 2020. While the rise in prices for office property was only +1.7% and has therefore really lost momentum, prices for the sector that has been hardest hit by the pandemic actually fell by 2% year on year. For both commercial sectors, the long-term impact of the crisis and whether it will lead to a possible structural change remains to be seen.



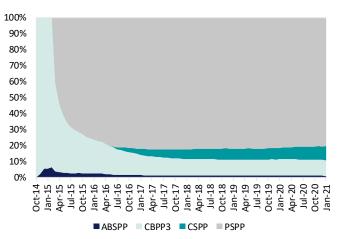
ECB tracker

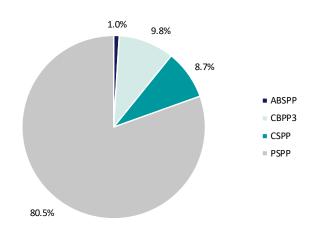
Asset Purchase Programme (APP)

Holdings (in EURm)

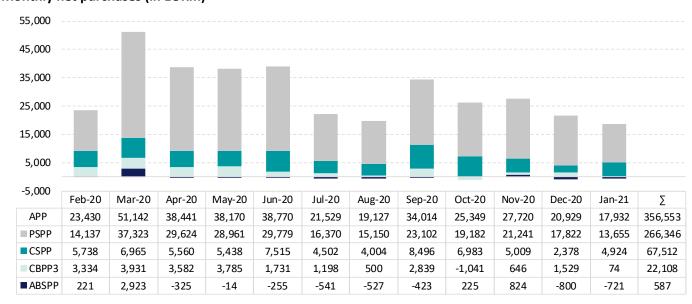
	ABSPP	СВРР3	CSPP	PSPP	APP
Dec-20	29,352	287,545	250,403	2,341,607	2,908,908
Jan-21	28,631	287,619	255,327	2,355,262	2,926,840
Δ	-721	+74	+4,924	+13,655	+17,932

Portfolio structure





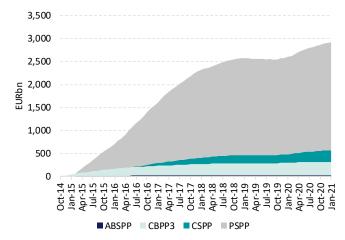
Monthly net purchases (in EURm)



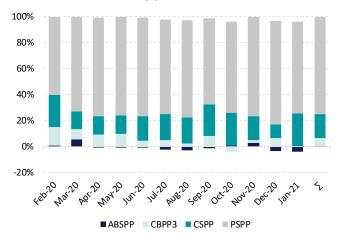
Source: ECB, NORD/LB Markets Strategy & Floor Research



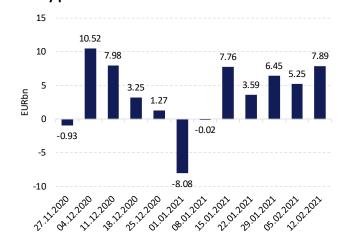
Portfolio development



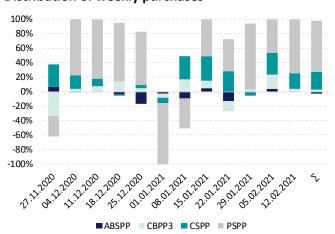
Distribution of monthly purchases



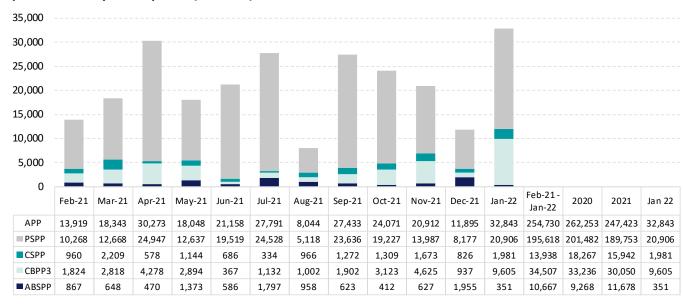
Weekly purchases



Distribution of weekly purchases



Expected monthly redemptions (in EURm)

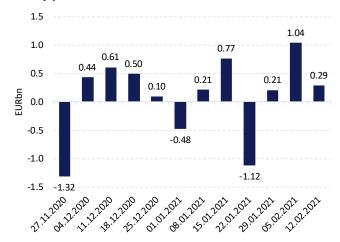


Source: ECB, Bloomberg, NORD/LB Markets Strategy & Floor Research

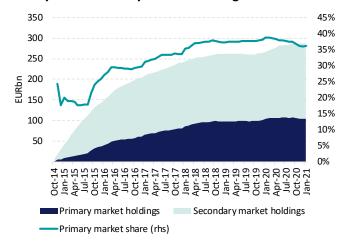


Covered Bond Purchase Programme 3 (CBPP3)

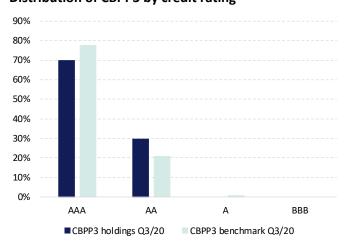
Weekly purchases



Primary and secondary market holdings

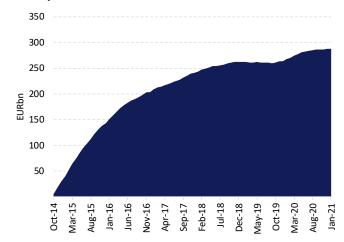


Distribution of CBPP3 by credit rating



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

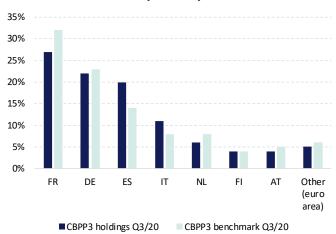
Development of CBPP3 volume



Change of primary and secondary market holdings



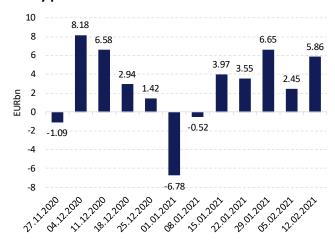
Distribution of CBPP3 by country of risk



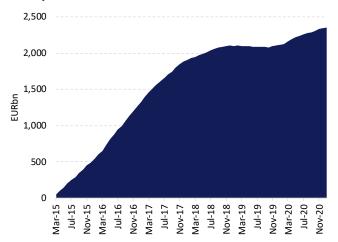


Public Sector Purchase Programme (PSPP)

Weekly purchases



Development of PSPP volume



Overall distribution of PSPP buying at month-end

Jurisdiction	Adjusted distribution key ¹	Purchases (EURm)	Expected purchases (EURm) ²	Difference (EURm)	Avg. time to maturity ³ (in years)	Market average ³ (in years) ³	Difference (in years)
AT	2.7%	68,774	66,898	1,876	7.8	7.8	0.0
BE	3.4%	87,044	83,271	3,773	8.4	10.2	-1.8
CY	0.2%	3,362	4,918	-1,556	10.0	9.3	0.7
DE	24.3%	579,970	602,526	-22,556	6.5	7.6	-1.1
EE	0.3%	302	6,439	-6,137	9.7	9.7	0.0
ES	11.0%	294,999	272,552	22,447	8.2	8.5	-0.3
FI	1.7%	36,359	41,984	-5,625	7.2	7.9	-0.7
FR	18.8%	493,134	466,824	26,310	7.0	8.1	-1.1
GR	0.0%	0	0	0	0.0	0.0	0.0
IE	1.6%	37,857	38,704	-847	8.6	9.9	-1.3
IT	15.7%	414,990	388,294	26,696	7.1	7.8	-0.7
LT	0.5%	4,689	13,228	-8,539	9.5	11.3	-1.8
LU	0.3%	3,091	7,529	-4,438	5.0	6.5	-1.5
LV	0.4%	2,524	8,906	-6,382	10.1	10.5	-0.4
MT	0.1%	1,215	2,397	-1,182	10.1	9.2	0.9
NL	5.4%	119,059	133,948	-14,889	7.5	8.4	-0.9
PT	2.2%	46,415	53,495	-7,080	7.2	7.6	-0.4
SI	0.4%	8,896	11,005	-2,109	9.4	9.3	0.1
SK	1.1%	14,884	26,176	-11,292	8.4	8.6	-0.2
SNAT	10.0%	259,209	247,677	11,532	7.2	8.3	-1.1
Total / Avg.	100.0%	2,476,772	2,476,772	0	7.2	8.1	-0.9

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

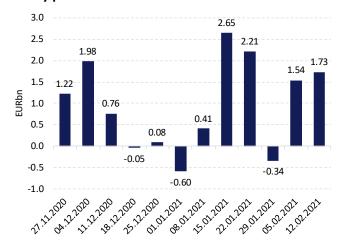
² Based on the adjusted distribution key

³ Weighted average time to maturity of the bonds eligible for purchasing under the PSPP (semi-annual data, Q3/2020) Source: ECB, NORD/LB Markets Strategy & Floor Research

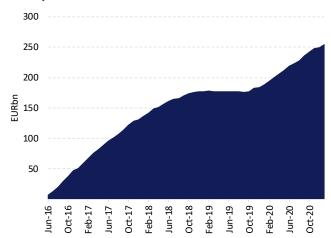


Corporate Sector Purchase Programme (CSPP)

Weekly purchases

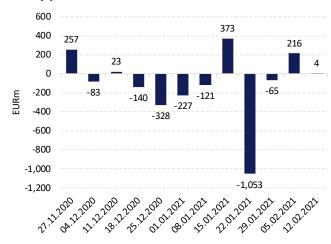


Development of CSPP volume



Asset-Backed Securities Purchase Programme (ABSPP)

Weekly purchases



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

Development of ABSPP volume



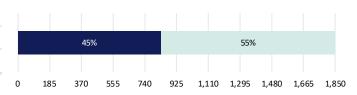


Pandemic Emergency Purchase Programme (PEPP)

Holdings (in EURm)

Volume already invested (in EURbn)

	PEPP
Dec-20	757,166
Jan-21	810,212
Δ	+53,046



Estimated portfolio development

Assumed pace of purchases

Weekly net purchase volume

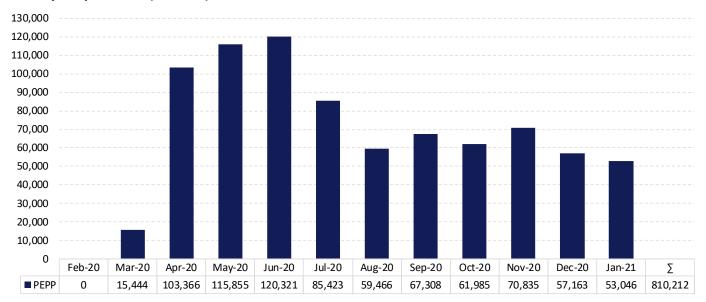
PEPP limit hit in ...

Average weekly net purchase volume so far

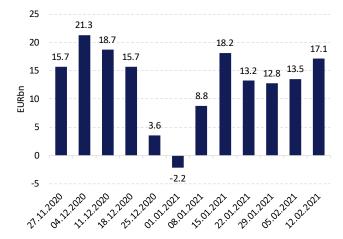
EUR 18.2bn

56 weeks (11.03.2022)

Monthly net purchases (in EURm)

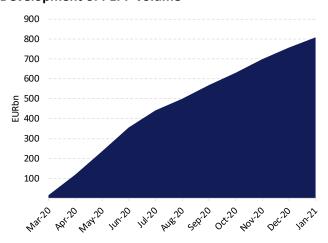


Weekly purchases



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

Development of PEPP volume

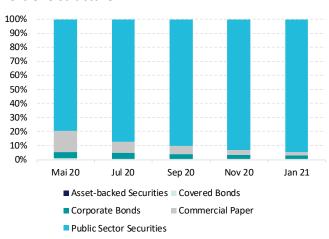


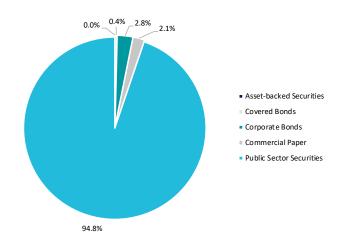


Holdings under the PEPP (in EURm)

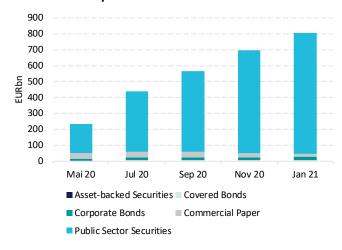
	Asset-backed Securities	Covered Bonds	Corporate Bonds	Commercial Paper	Public Sector Securities	PEPP
Nov-20	0	3,123	20,760	24,306	650,272	698,461
Jan-21	0	3,120	22,315	16,611	764,710	806,756
Δ	0	-3	+1,555	-7,695	+114,438	+108,295

Portfolio structure

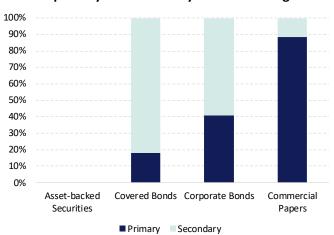




Portfolio development



Share of primary and secondary market holdings



Breakdown of private sector securities under the PEPP as of January 2021

	Asset-backed securities		Covered bonds		Corporate bonds		Commercial papers	
	Primary	Secondary	Primary	Secondary	Primary	Secondary	Primary	Secondary
Holdings in EURm	0	0	557	2,563	9,092	13,223	14,663	1,948
Share	0.0%	0.0%	17.9%	82.2%	40.7%	59.3%	88.3%	11.7%

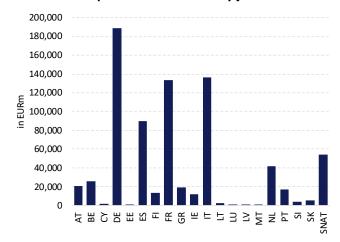
Source: ECB, Bloomberg, NORD/LB Markets Strategy & Floor Research



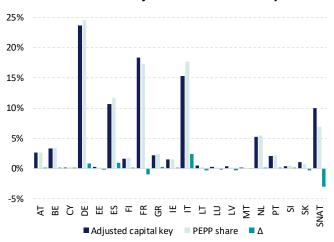
Breakdown of public sector securities under the PEPP

Jurisdiction	Holdings (in EURm)	Adj. distribution key ¹	PEPP share	Deviations from the adj. distribution key²	ø time to maturity (in years)	Market average ³ (in years)	Difference (in years)
AT	20,692	2.6%	2.7%	0.1%	10.0	7.1	3.0
BE	26,084	3.3%	3.4%	0.1%	6.5	9.3	-2.8
CY	1,712	0.2%	0.2%	0.0%	10.4	8.2	2.3
DE	188,751	23.7%	24.6%	0.8%	5.1	6.7	-1.6
EE	211	0.3%	0.0%	-0.2%	8.9	8.2	0.8
ES	89,846	10.7%	11.7%	1.0%	8.5	7.4	1.0
FI	13,103	1.7%	1.7%	0.1%	7.1	6.9	0.2
FR	133,594	18.4%	17.4%	-1.0%	8.4	7.3	1.1
GR	18,950	2.2%	2.5%	0.2%	8.6	9.5	-0.8
IE	12,123	1.5%	1.6%	0.1%	9.0	9.4	-0.5
IT	136,310	15.3%	17.7%	2.5%	6.8	6.9	-0.1
LT	2,183	0.5%	0.3%	-0.2%	11.5	10.3	1.2
LU	1,301	0.3%	0.2%	-0.1%	6.9	6.2	0.6
LV	888	0.4%	0.1%	-0.2%	9.7	10.1	-0.4
MT	266	0.1%	0.0%	-0.1%	7.2	8.0	-0.8
NL	41,956	5.3%	5.5%	0.2%	4.4	7.8	-3.3
PT	17,304	2.1%	2.3%	0.1%	6.6	6.6	0.0
SI	3,644	0.4%	0.5%	0.0%	9.3	9.8	-0.5
SK	5,381	1.0%	0.7%	-0.3%	8.6	8.2	0.4
SNAT	53,849	10.0%	7.0%	-3.0%	9.8	7.9	1.9
Total / Avg.	768,148	100.0%	100.0%	0.0%	7.1	7.3	-0.2

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

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

 $^{^{\}rm 3}$ Weighted average time to maturity of the bonds eligible for purchasing under the PEPP

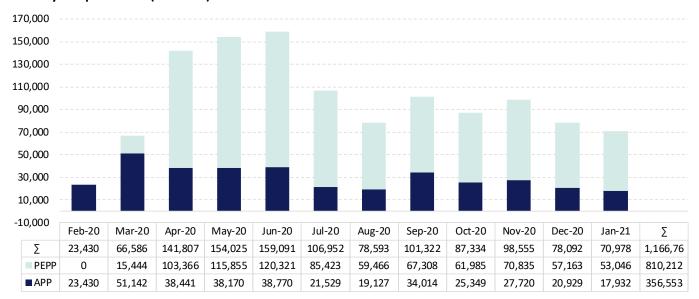


Aggregated purchase activity under APP and PEPP

Holdings (in EURm)

	APP	PEPP	APP & PEPP
Dec-20	2,908,908	757,166	3,666,074
Jan-21	2,926,840	810,212	3,737,052
Δ	+17,932	+53,046	+70,978

Monthly net purchases (in EURm)

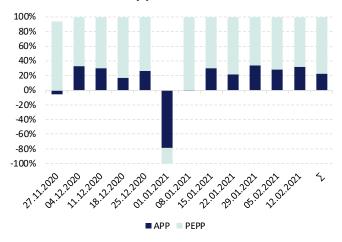


Weekly purchases



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

Distribution of weekly purchases



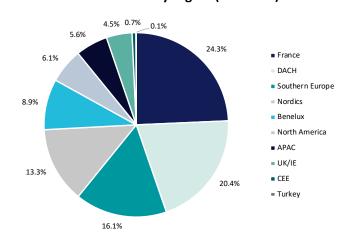


Charts & Figures Covered Bonds

EUR benchmark volume by country (in EURbn)

133.5; 14.6% 222.6; 24.3% = DE 31.5; 3.4% ■ ES 33.3; 3.6% = NL CA 36.5; 4.0% IT ■ NO 50.0; 5.5% ■ GB ■ SE 151.9; 16.6% 52.2; 5.7% = AT Others 55.8; 6.1% 59.4; 6.5% 89.3; 9.7%

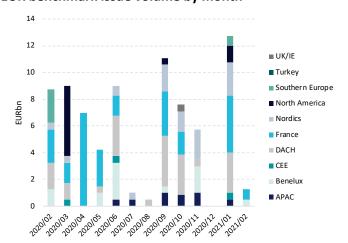
EUR benchmark volume by region (in EURbn)



Top-10 jurisdictions

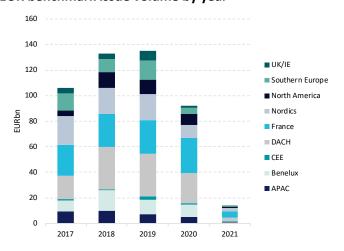
Rank	Country	Amount outst. (EURbn)	No. of BMKs	There of ESG BMKs	Avg. issue size (EURbn)	Avg. initial maturity (in years)	Avg. mod. Duration (in years)	Avg. coupon (in %)
1	FR	222.6	204	7	0.96	10.1	5.6	1.17
2	DE	151.9	227	12	0.60	8.3	4.7	0.47
3	ES	89.3	72	3	1.13	11.4	3.9	1.86
4	NL	59.4	58	0	0.97	11.1	7.2	0.98
5	CA	55.8	47	0	1.16	6.0	3.0	0.30
6	IT	52.2	60	0	0.84	9.0	4.3	1.45
7	NO	50.0	57	7	0.88	7.2	3.7	0.55
8	GB	36.5	41	0	0.90	8.4	3.2	1.12
9	SE	33.3	39	0	0.85	7.5	3.4	0.59
10	AT	31.5	57	0	0.55	9.4	5.8	0.75

EUR benchmark issue volume by month



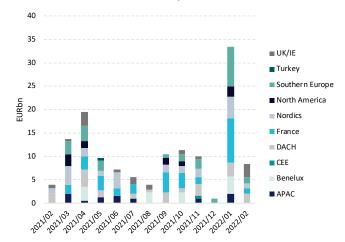
Source: Market data, Bloomberg, NORD/LB Markets Strategy & Floor Research

EUR benchmark issue volume by year

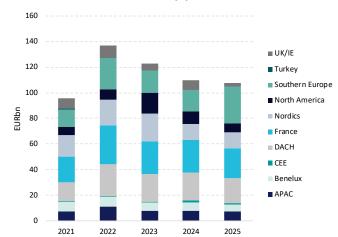




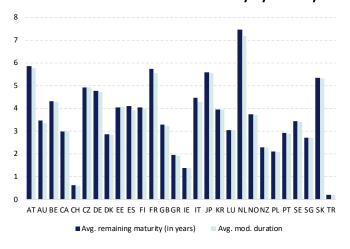
EUR benchmark maturities by month



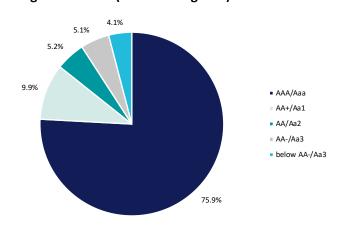
EUR benchmark maturities by year



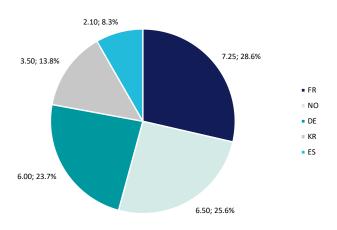
Modified duration and time to maturity by country



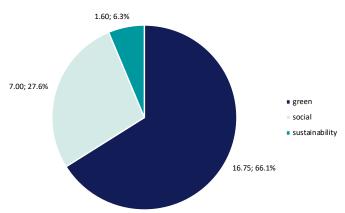
Rating distribution (volume weighted)



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



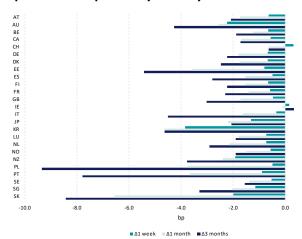
EUR benchmark volume (ESG) by type (in EURbn)



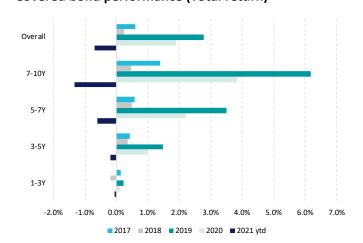
Source: Market data, Bloomberg, NORD/LB Markets Strategy & Floor Research



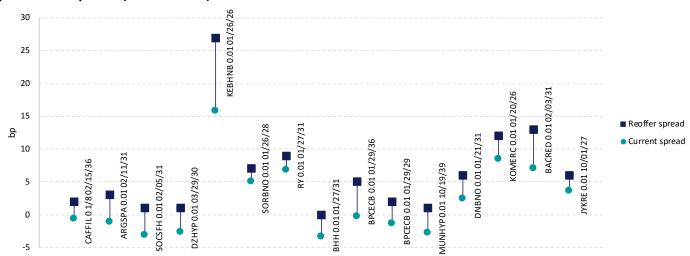
Spread development by country



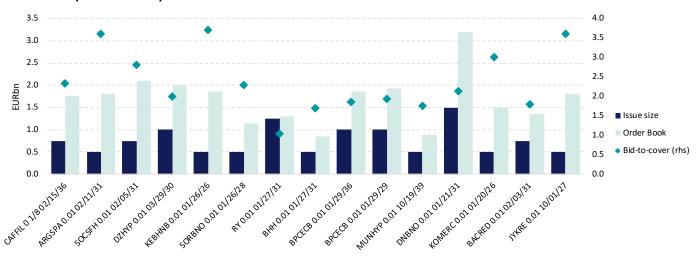
Covered bond performance (Total return)



Spread development (last 15 issues)



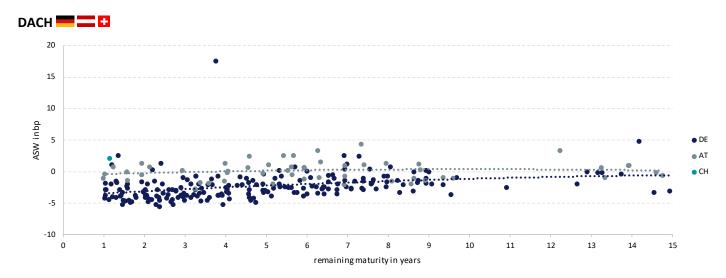
Order books (last 15 issues)

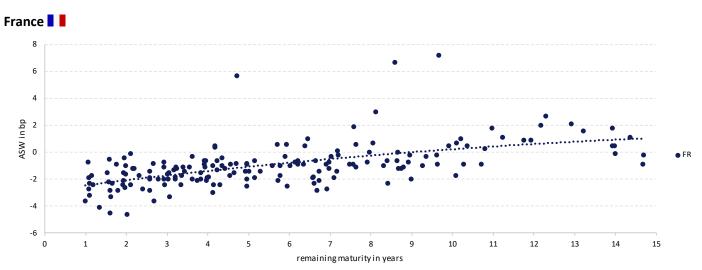


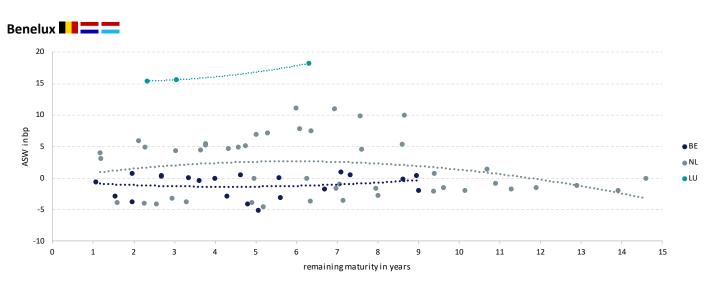
Source: Market data, Bloomberg, NORD/LB Markets Strategy & Floor Research



Spread overview¹

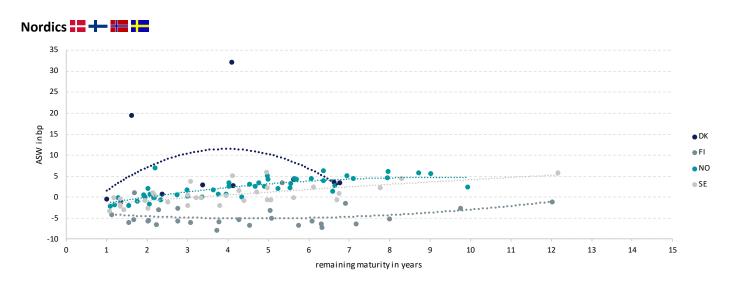


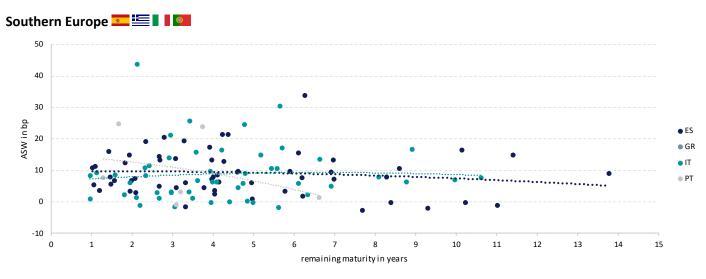


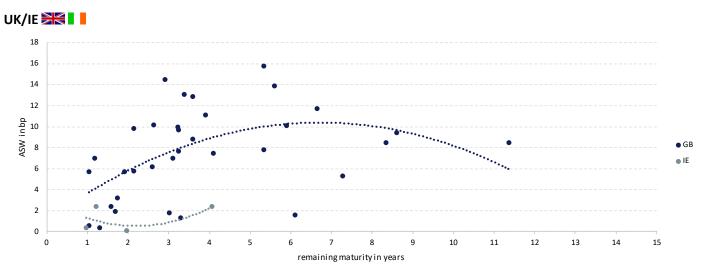


Source: Market data, Bloomberg, NORD/LB Markets Strategy & Floor Research 1 Time to maturity $1 \le y \le 15$



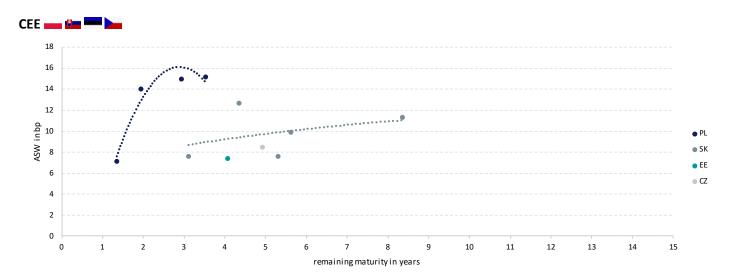


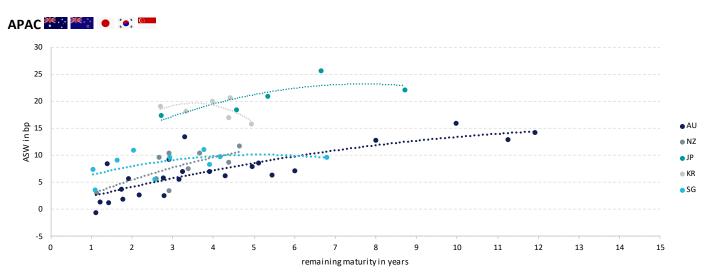


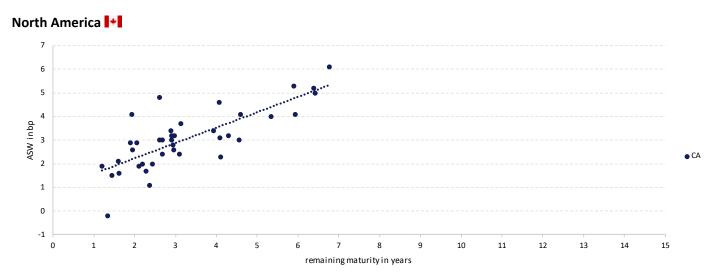


Source: Market data, Bloomberg, NORD/LB Markets Strategy & Floor Research







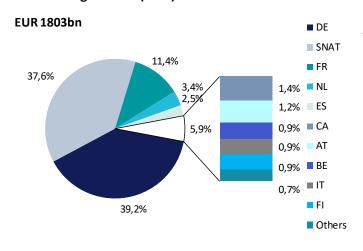


Source: Market data, Bloomberg, NORD/LB Markets Strategy & Floor Research



Charts & Figures SSA/Public Issuers

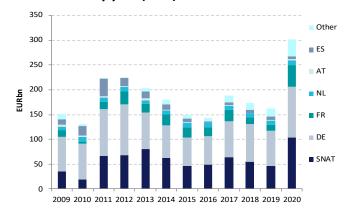
Outstanding volume (bmk)



Top 10 countries (bmk)

Country	Vol. (€bn)	No. of bonds	ØVol. (€bn)	Vol. weight. ØMod. Dur.
DE	707,2	555	1,3	6,6
SNAT	677,1	178	3,8	7,8
FR	205,1	144	1,4	5,3
NL	61,7	63	1,0	6,6
ES	45,1	53	0,9	4,5
CA	25,0	18	1,4	5,6
AT	22,5	24	0,9	5,3
BE	16,3	19	0,9	14,1
IT	15,8	20	0,8	6,0
FI	15,5	20	0,8	5,9

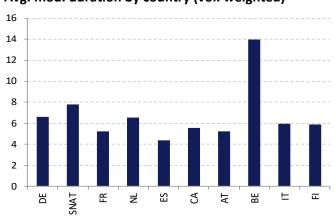
Issue volume by year (bmk)



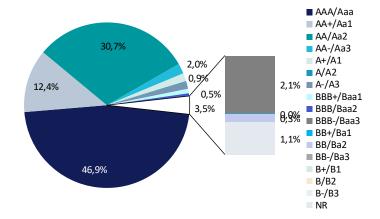
Maturities next 12 months (bmk)



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



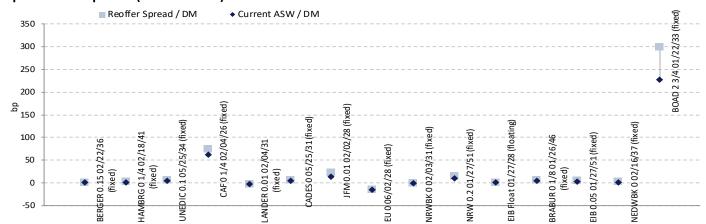
Rating distribution (vol. weighted)



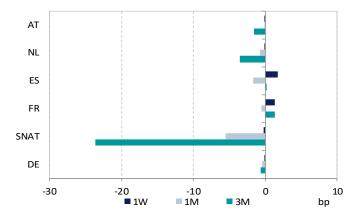
Source: Bloomberg, NORD/LB Markets Strategy & Floor Research



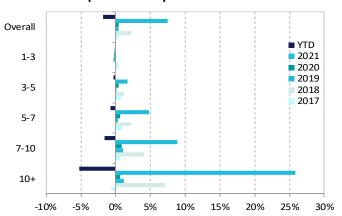
Spread development (last 15 issues)



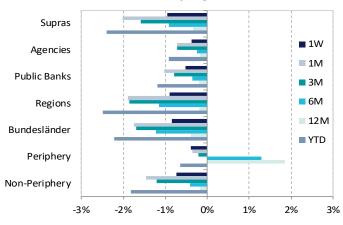
Spread development by country



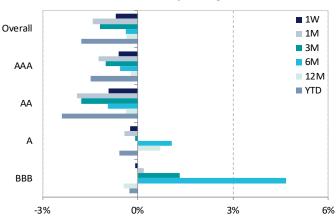
Performance (total return)



Performance (total return) by regions



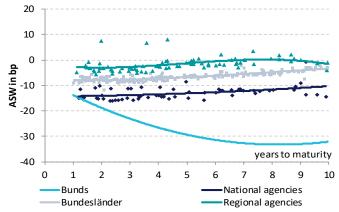
Performance (total return) by rating



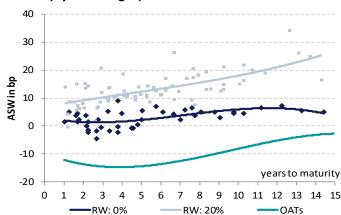
Source: Bloomberg, NORD/LB Markets Strategy & Floor Research



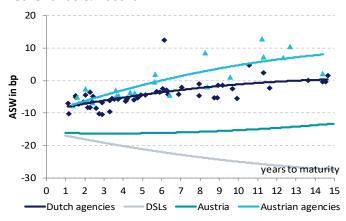




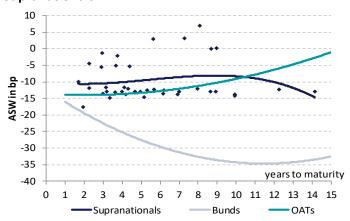
France (by risk weight)



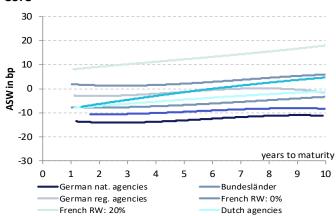
Netherlands & Austria



Supranationals

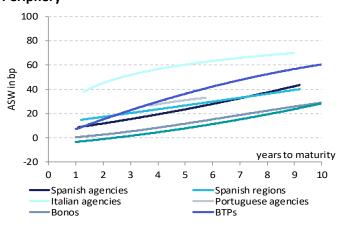


Core



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

Periphery





Appendix

Overview of latest Covered Bond & SSA View editions

Publication	Topics
05/2021 ♦ 10 February	PEPP reporting: upswing in public sector assets continues; covered bonds inconsequential
04/2021 ♦ 03 February	 Argenta Spaarbank expands Belgian market for EUR benchmarks
	 An overview of the Fitch covered bond universe
	January 2021 packs a punch to kick off the new year
03/2021 ♦ 27 January	An unusual – albeit expected – start to the year?
	 A look at USD benchmarks
	■ ESM reform – restructuring continues
02/2021 ♦ 20 January	Spread considerations – APAC covered bonds riding the wave of ECB purchase programmes?
	Return of the Danish market for EUR benchmark bond issues
	 22nd meeting of the Stability Council (Dec. 2020)
01/2021 • 13 January	■ EUR benchmark from the Czech Republic: Komerční Banka launches a new covered bond programme
	New covered bond programme from South Korea: Hana Bank
	 Annual review of 2020 – covered bonds
	Annual review of 2020 – SSA
48/2020 ♦ 16 December	 TLTRO III: ECB extends tender and also raises the threshold
47/2020 ♦ 09 December	■ Fourth and final round of PEPP reporting in 2020
	 Investment alternative: Paris metropolitan area (IDF and VDP)
46/2020 ♦ 02 December	■ The ECB ahead of its course-setting meeting for 2021
	Covered Bonds – Outlook 2021: Waiting for the game changer?
	 SSA – Outlook 2021: Coronavirus and ECB dominate public-sector segment
45/2020 ♦ 25 November	 UOB ends the state of hibernation on Singapore's primary market
	The covered bond universe of Moody's: an overview
	 Update: Belgium regions as investment alternatives
44/2020 ♦ 18 November	Primary market 2021: real prospect of Hungarian EUR benchmarks?
	 German Pfandbrief savings banks in Q3 2020
	Development of the German property market
43/2020 ♦ 11 November	Newcomer to the benchmark segment: HSBC Bank Canada sets sights on EUR debut
	 OP Mortgage Bank: First green covered bond from Finland
	 Transparency requirements §28 PfandBG Q3/2020
42/2020 ♦ 04 November	 Covered Bond Framework and Liquidity Coverage Ratio: European Commission presents draft version of
	amendments to LCR regulation
	An overview of the Fitch covered bond universe
41/2020 ♦ 28 October	■ ECB: The year of the owl – review and outlook
	Yield developments on the covered bond market
40/2020 ♦ 21 October	 German building societies: EUR benchmark debuts and requirements for investing in soft bullet bonds
	 NPLs in cover pools – lack of unified approach at national level

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 2020

Risk weights and LCR levels of covered bonds

Transparency requirements §28 PfandBG

Transparenzvorschrift §28 PfandBG Sparkassen (German only)

SSA/Public Issuers:

<u>Issuer Guide – Supranationals & Agencies 2019</u>

<u>Issuer Guide – Canadian Provinces & Territories 2020</u>

<u>Issuer Guide – German Bundeslaender 2020</u>

<u>Issuer Guide – Down Under 2019</u>

Fixed Income:

ESG update

Analysis of ESG reporting

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

ECB launches corona pandemic emergency

ECB responds to corona risks



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Governments	+49 511 9818-9660
Länder/Regionen	+49 511 9818-9550
Frequent Issuers	+49 511 9818-9640

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Additional information

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Disclosure of possible conflicts of interest at NORD/LB in accordance with Section 85 (1) of the German Securities Trading Act (WpHG) in conjunction with Article 20 of the Market Abuse Regulation (EU) No. 596/2014 and Articles 5 and 6 of Regulation (EU) 2016/958.

None

Sources and price details

For the preparation of investment recommendations, we use issuer-specific financial data providers, our own estimates, company information and publicly available media. Unless otherwise stated in the information, price information refers to the closing price of the previous day. Fees and commissions are incurred in connection with securities (purchase, sale, custody), which reduce the return on the investment.

Basis of valuation and frequency of updates

For the preparation of investment recommendations, we use company-specific methods from fundamental securities' analysis, quantitative / statistical methods and models as well as from technical information processes. It should be noted that the results of the information are snapshots and past performance is not a reliable indicator of future returns. The basis of valuation may change at any time and in an unforeseeable manner, which may lead to divergent assessments. The recommendation horizon is 6 to 12 months. The above information is prepared on a weekly basis. Recipients have no right to publish updated information. For more detailed information on our assessment bases, check under: www.nordlb-pib.de/Bewertungsverfahren.

Recommendation system

Positive: Positive expectations for the issuer, a bond type or a bond placed by the

issuer.

Neutral: Neutral expectations for the issuer, a bond type or a bond of the issuer.

Negative: Negative expectations for the issuer, a type of bond or a bond placed by the issuer. **Relative Value (RV):** Relative recommendation to a market segment, an individual issuer or a

range of maturities.

Breakdown of recommendations (12 months)

Positive: 36% Neutral: 50%

Neutral: 50% Negative: 14%

Recommendation record (12 months)

For an overview of our overall pension recommendations for the past 12 months, please visit www.nordlb-pib.de/empfehlungsuebersicht_renten. The password is "renten/Liste3".

Issuer / security Date Recommendation Bond type Cause

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