Covered Bond & SSA View

NORD/LB Markets Strategy & Floor Research

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Finanzgruppe

NORD/LB

Agenda

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Market overview
Covered Bonds

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Primary market: issuers take advantage of time window to bring (even) more fresh supply to market

After the issuance of longer-dated new issues at the beginning of last week in particular did not go quite as smoothly as had previously been the case, the primary market paused for breath over the rest of the past trading week due to public holidays and bridge days. With UniCredit Bank (cf. also NORD/LB Issuer View – UniCredit Bank) kicking things off in the trading week with a fresh EUR benchmark on Monday, a further three issuers then approached investors yesterday, on Tuesday, in the form of BAWAG from Austria, the Bank of Queensland from Australia and the Royal Bank of Canada. The mortgage Pfandbrief issued by UniCredit Bank (EUR 500m; WNG; 5y) was ultimately priced at ms flat after the bond started out in the marketing phase with guidance in the area of ms +5bp. In the end, the order book totalled EUR 935m, which more or less reflects an oversubscription ratio of 2.0x. Based on a fair value of ms -2bp, a new issue premium of ms +2bp was calculated for this deal. In geographical terms, the largest share (77%) of the allocation went to investors based in the German-speaking DACH (Germany, Austria, Switzerland) region, followed by the Nordics (9%) and France (5%). In the breakdown by investor type, Banks (51%) were the dominant investors, ahead of Asset Managers & Fund Managers (29%) in addition to Central Banks/OI (20%). BAWAG (cf. also NORD/LB Issuer View – BAWAG Group successfully issued a benchmark deal in the amount of EUR 750m (7.75y). The order book for the bond, which in the current market environment certainly features a term to maturity on the longer side, opened at ms +15bp area, with the final re-offer spread narrowing by a single basis point during the book-building process. The order book ultimately amounted to EUR 1.1bn. The fifth bond of the year from Australia was also placed on Tuesday by the Bank of Queensland. The volume of this CPT covered bond was EUR 600m. The final re-offer spread of ms +30bp was precisely in line with the guidance, with the order books coming in at EUR 665m. With its bond, the Royal Bank of Canada was able to increase the volume placed from Canada in the current year by a further EUR 1.0bn. Tightening of two basis points to ms +16bp was possible on the back of guidance of ms +18bp. The latest Pfandbrief from UniCredit Bank has brought the issuance volume in the EUR benchmark segment from Germany to an impressive EUR 24.75bn in the current year, spread across 24 bonds. The value is therefore already well in excess of the EUR 16.5bn recorded across the full year 2021. In fact, in the context of the previous issuance activity across the entire EUR benchmark segment, bonds that are set to fall due in the near future and a stronger focus on the part of many issuers towards covered refinancing, we again feel compelled to adjust our supply forecast upwards. We now expect the issuance volume for the full year 2022 to top EUR 155bn overall.

Issuer	Country	Timing	ISIN	Maturity	Size	Spread	Rating	ESG
Bank of Queensland Ltd	AU	31.05.	xs2489398185	5.0y	0.60bn	ms +0bp	AAA / Aaa / -	-
Royal Bank of Canada	CA	31.05.	XS2488800405	7.0y	1.00bn	ms +16bp	AAA / Aaa / -	-
BAWAG	AT	31.05.	XS2487770104	7.8y	0.75bn	ms +14bp	- / Aaa / -	-
UniCredit Bank	DE	30.05.	DE000HV2AYZ8	5.0y	0.50bn	ms +0bp	- / Aaa / -	-

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

Austria: Moody's and Scope express views on new FMA lending standards

Österreichische Nationalbank (OeNB), the Austrian central bank, has identified risks to financial stability due to more relaxed lending standards and rising property prices. In the wake of this, Financial Market Authority Austria (FMA) - the country's independent and autonomous supervisory authority for the financial sector - announced more stringent lending regulations that will take effect from 01 July 2022. The new regulations stipulate a maximum loan-to-value ratio (LTV limit) for residential mortgages of 90%, a maximum debt service ratio of 40% of the borrower's income in addition to a maximum credit term of 35 years. However, the new standards allow up to 20% of new loans to exceed the LTV limit, 10% to exceed the maximum debt service ratio and 5% to exceed the maximum credit term, provided that no more than 20% of new loans in total breach any of the three limits. According to the risk experts from Moody's, it can be expected that the new requirements will improve the credit quality of new mortgage loans and reduce the probability of payment defaults, which should also have a corresponding positive impact on covered bonds in Austria. Moody's is of the view that the new borrower-related macroprudential mortgage lending policy will bring Austria into line with other European countries, where mortgage loans tend to granted on the basis of strict requirements. According to Moody's, the new rules in Austria are actually stricter than those that apply in Germany, Italy, Spain and the UK. With regard to covered bonds, it should be noted at this point that the Austrian Pfandbrief Act (PfandBG) already sets the LTV limit for mortgage financing at 80% (although each bank can define a lower limit via its Articles of Association), while the German Pfandbrief Act defines a loan-to-value ratio that is limited at 60%. In our opinion, the statements made by Moody's relate more to the general lending requirements and the reduction of risks in the area of residential mortgage loans in general. In contrast, however, the rating agency Scope outlines in a statement dated 13 May 2022 that the new regulations will not ensure financial stability as long as interest rate risks are excluded from the equation. Traditionally, a significant proportion of property loans in Austria feature variable interest rates, which accordingly carry risks in the event of sharply rising short-term interest rates in the future. Scope takes the view that the current toolkit does not adequately take into account these potential developments and associated risks for financial stability. Moreover, it describes the exceptions to the new lending standards that apply to up to 20% of the volume of new lending business as being excessively generous. We previously reviewed the Austrian covered bond market in greater detail as part of our weekly publication on 11 May 2022.

CEE covered bonds: Moody's sees limited risks from the inflation path overall

Rapidly rising inflation is naturally also impacting the CEE region as well. However, in terms of the implications for covered bonds from this region, the risk experts at Moody's recently appeared to be rather relaxed about the situation. While the susceptibility of cover pools in jurisdictions such as Romania, Poland, Slovakia and the Czech Republic can, in relative terms, be regarded as being on the higher side, overall risks are limited from Moody's perspective. Rising interest rates would also enable banks operating across the region to roll out measures with a compensatory effect as far as higher costs are concerned. Moody's additionally highlighted the comparatively low level of household debt and the high proportion of owner-occupied homes as characteristics of credit quality. Issuers from the Czech Republic, Poland and Slovakia are currently represented in the EUR benchmark segment. We certainly expect growth here in the coming years, although we would not rule out the possibility of smaller banks in particular making a successful debut in the EUR sub-benchmark segment.

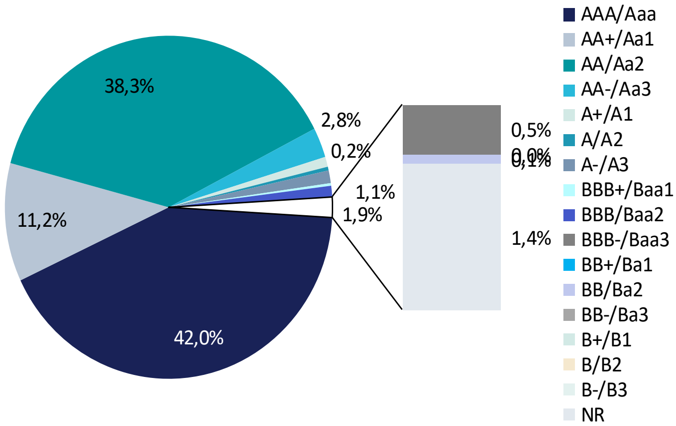
Market overview
SSA/Public Issuers

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

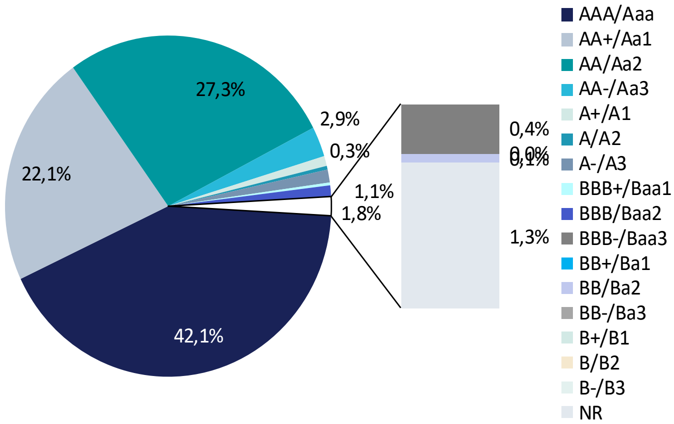
Rating upgrade for the EU and Euratom from S&P - now AA+ (stable)

Following an internal review of the methodology used to rate the European Union (EU), the rating now reflects S&P's assessment that all 27 member states display a sustained ability and willingness to support the EU budget. This is in parallel with extraordinary support from member states with a strong rating towards the EU's debt service, under certain stress assumptions. In principle, S&P first calculates an anchor of AA- that is based on the nominal GDP-weighted average rating of all member states. Furthermore, S&P adds two notches to the anchor, which is based on the funds available to service debt. This is measured on the basis of the difference between the maximum amounts which the EU may request from member states with a rating above the anchor (upper limit for own funds) and the amount which these member states actually make available each year towards the EU budget. Consequently, the rating agency has upgraded its long-term issuer ratings for the EU and Euratom from AA to AA+ with a stable outlook. The most important change was as follows: based on the previous methodology, only net contributors to the EU budget were taken into account. However, the methodology now takes into account each member state's share in the nominal GDP of the EU. All member states are now included in the above-mentioned anchor calculation because, according to S&P, the EU has shown a strong, coordinated and coherent political response to a number of external shocks. First and foremost, the SURE and NGEU programmes should be mentioned, which we have often cited. In addition, the multi-year financial framework (2021-2027) is to be mentioned. Moreover, the structure of the NGEU programme and the path presented for generating more own earnings based on three pillars should also be mentioned: emissions trading, the Carbon Border Adjustment Mechanism and the residual income of multinationals. Following a start-up phase, these new sources of income are likely to contribute an annual average of up to EUR 17bn for the EU budget in the period from 2026 to 2030. The EU rating upgrade has shifted our volume-weighted distribution as follows (before/after comparison):

Rating distribution (volume-weighted; before)



Rating distribution (volume-weighted; after)

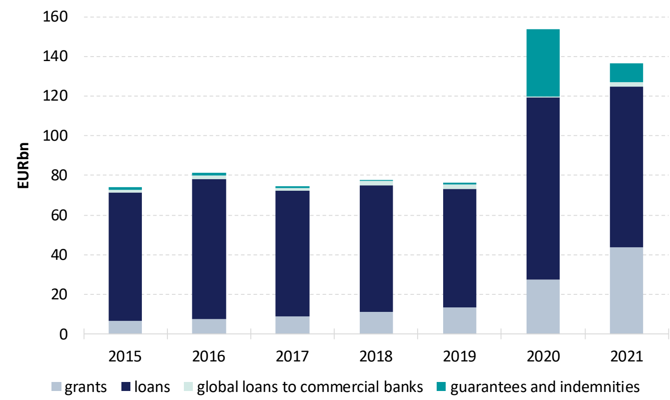


Source: Bloomberg, NORD/LB Markets Strategy & Floor Research

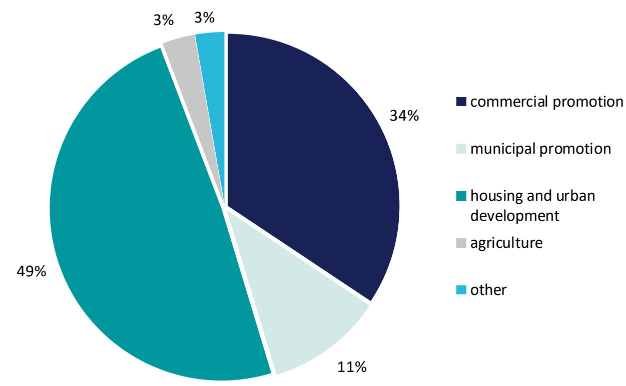
Promotional volume once again high in 2021

On 16 May 2022, the Association of German Public Banks (Bundesverband Öffentlicher Banken Deutschlands, VÖB) published its promotional volume statistics for 2021. According to the statistics, the promotional banks owned by the federal and state governments awarded grants worth almost EUR 44bn from federal and state government funds in 2021. The total value was therefore three times higher than in the pre-crisis year of 2019, and EUR 17bn more than in the previous record year of 2020, driven once again by the Covid pandemic. At EUR 28bn, business promotion represented the lion's share, with EUR 10bn going into housing and urban development. The remaining sum was divided between municipal promotion, agriculture and the category "other". In addition to grants, the promotional banks also extend loans (twice the volume of grants) and guarantees as well as granting exemption from liability. In aggregated terms, the 2021 volume across all of the promotional instruments listed amounted to a value of EUR 136.5bn. Compared with 2020, the current record year at EUR 153.9bn, the value is EUR 17.4bn lower. However, compared with the pre-crisis year of 2019, it represents an increase of almost 80% (EUR +60.4bn). In 2021, loans (EUR 81bn) accounted for the highest share of promotional instruments at 59%. At EUR 39.6bn (49%), the majority of development loans were for housing and urban development, followed by EUR 27.8bn (34%) for business development. Around EUR 8.9bn (11%) was attributable to municipal promotion and EUR 2.5bn (3%) to agriculture. The category "other" accounted for the remaining EUR 2.2bn. Erk Westermann-Lammers, Chief Executive Officer of Investitionsbank Schleswig-Holstein and Chairman of the Promotional Banks Committee of the VÖB, explained: "In the second year of the pandemic, the promotional banks again provided massive support to the German economy. Thanks to the coronavirus aid programmes of the federal and state governments, which the promotional banks granted to the economy, Germany got through the pandemic comparatively well. Nevertheless, the economy has remained in crisis mode. We are already feeling the effects of the cruel war in Ukraine. The promotional banks, as strong partners, continue to assist the economy, politicians and society in overcoming current and future challenges." As an addition, the report also noted that promotional banks should not be seen solely as a stability anchor during a crisis, but equally as playing an active part in the transformation of the economy and society in terms of digitalisation and sustainability. To adapt rapidly to changing conditions, a regulatory framework is necessary that supports the promotional banks in their social duties and responsibilities.

Germany: trend in promotional instruments



Breakdown of loans by promotion category



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

KfW Municipal Panel 2022 – crisis challenge for municipalities

Every year since 2009, KfW has published the findings of a survey and representative projection it commissions in the form of the KfW Municipal Panel. It is carried out by the German Institute of Urban Affairs (Deutsches Institut für Urbanistik, Difu). The finance departments in towns and municipalities with more than 2,000 inhabitants as well as all districts are surveyed. With regard to this year's publication, it should be noted that the survey was carried out in autumn 2021 and therefore before the events that have occurred since 24 February 2022 (Russian invasion of Ukraine). Nevertheless, the survey still revealed that local authorities are under significant strain following the impact of the disastrous floods and the Covid-19 pandemic, with 48% of finance departments stating that their financial position was only "adequate" or "inadequate". Just 21% indicated that their budget situation in the second year of the pandemic was "good" or "very good". Although a financial surplus of EUR 4.6bn was achieved in the 2021 survey year in view of surprisingly strong growth in tax revenue as reflected in the cash statistics, structurally strong regions mainly benefited from this in the form of an increase in trade tax. In terms of revenue, an imbalance therefore exists while additional expenditure, for example higher cost of materials as a result of the pandemic, affects all local authorities. The majority of the local authorities surveyed expects budgets to return to pre-crisis levels in the next two to five years. Overall, around 70% of the municipalities surveyed expected their financial situation to deteriorate in the medium term, with only 9% expecting an improvement. Compared with the previous year, sentiment was brighter. However, it remained weaker than the long-term average. With regard to investment, the local authorities surveyed assumed a slight increase to EUR 40.6bn in 2022, despite the financial planning risk. Last year's assessments once again highlight that around one-third of planned investment subsequently is not carried out. Furthermore, the sharp rise in construction costs has already been priced in. A shift in the focus of investments was also noted: more is to be invested in areas that attracted particular attention in the wake of the pandemic and the flooding (schools, IT and emergency response). The perceived investment backlog of municipalities is stated at EUR 159bn. The biggest share is attributable to schools (EUR 45.6bn), followed by roads (EUR 39.3bn) and administrative buildings (EUR 19.6bn). Across all areas of investment, a total of 28% of the municipalities surveyed expected a further increase in the investment backlog while 36% each expected either no change or a decrease. With regard to municipal debt, an increase was established. In nine of the 13 non-city Laender, credit market debt rose in 2021. At the same time, short-term lending to public sector bodies have steadily decreased since 2014. In this respect, regional differences represent a fascinating aspect: municipal debt in Rhineland-Palatinate amounted to approximately EUR 3,000 per capita, whereas it was approximately one-sixth of that in Saxony, at EUR 550 per inhabitant. Although municipalities with high debt are currently (still) benefiting from low interest rates, this might present an additional risk to municipal budgets in the longer term. One challenge all municipalities are already facing is the administrative and financial pressure resulting from the war in Ukraine. Rising energy prices represent a further burden on municipal budgets. The German federal government has already set up a relief package worth EUR 2bn for the Laender and municipalities. It remains to be seen to what extent this amount will significantly ease the burden in terms of the tense budget situation of municipalities.

Primary market

This week, not many new bond issues were observed in our SSA universe. However, the fresh supply for ESG investors is worth mentioning. In the last issue of our publication, we mentioned that the federal state of Baden-Württemberg (ticker: BADWUR) would shortly be launching its second green bond issue. This already became a reality in the current week: although the bond worth EUR 350m (WNG) is allocated in the sub-benchmark segment, we did not want to overlook this deal altogether. Compared with the guidance in the ms -10bp area, pricing was two basis points tighter at ms -12bp. The order book totalled EUR 610m, which resulted in a bid-to-cover ratio of 1.7x. In addition, yesterday, Tuesday, two other ESG placements occurred. One by Danish KommuneKredit (ticker: KOMMUN) and the other from Spain, by the Autonomous Community of Andalusia (ticker: ANDAL). The Danes opted for a green bond with a maturity of seven years. The volume amounted to EUR 500m and – unsurprisingly – is to be used for projects that are consistent with the Green Bond Framework. The bond was priced at ms -5bp. Compared with the guidance in the ms -3bp area, tightening of two basis points was achieved. The final order book amounted to EUR 975m. In contrast, the Autonomous Community of Andalusia issued a sustainability bond, also worth EUR 500m, with a term to maturity of ten years. As is typical of Spanish issuers in our universe, the guidance and pricing were not in relation to the mid-swap curve, but instead in relation to Spanish government bonds. The initial guidance for the deal was in the SPGB +28bp area, although this was soon revised to SPGB +26bp area. The sustainability bond was eventually placed at SPGB +25bp. According to our calculation, this amounts to approximately ms +55bp. The bid-to-cover ratio was 1.5x, given the order book of EUR 750m. As a reference to facilitate interpretation of the above-mentioned bid-to-cover ratios, we can mention that the 2022 mean value across all ESG bond issues to date in our database is 3.7x. The ESG label alone does not automatically make a bond deal a sure-fire success. In addition, KfW – which is also its ticker – appeared on screens on Monday, with a tap issue. Although it did not involve ESG bonds, the volume was quite considerable. A total of EUR 1bn was raised with KFW 1.125% 03/31/37 at ms -8bp (guidance: ms -8bp area). The order book totalled EUR 1.25bn. Yesterday afternoon, a fresh mandate was also announced by the Asian Development Bank. The intention is for ADB (also its ticker) to launch a 15y EUR benchmark bond issue. We expect the order book to open today.

Issuer	Country	Timing	ISIN	Maturity	Size	Spread	Rating	ESG
ANDAL	ES	30.05.	ES0000090896	9.9y	0.50bn	ms +55bp	- / Baa2 / BBB+	X
KOMMUN	Nordics	30.05.	XS2489343793	6.9y	0.50bn	ms -5bp	- / Aaa / AAA	X

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

Cross asset
ECB: 3, 2, 1 – lift-off! Decisive June, active summer ahead

Authors: Dr Norman Rudschuck, CIIA // Dr Frederik Kunze

ECB meeting on 9 June: Disappointed faces are perhaps inevitable

After the end of net purchases under the PEPP at the end of March, the focus of market observers with regard to monetary policy in the Eurozone is now increasingly shifting to the control variables of the remaining APP (net) purchases, hikes to the central bank's reference interest rates and, currently, also to unconventional instruments (especially TLTRO III). Although we do not want to downplay the importance of the PEPP portfolio beyond the end of net purchases due to reinvestment until the end of 2024, there will soon be more important and ground-breaking decisions to be made at ECB headquarters in Frankfurt. However, the focus is no longer solely on the question of how ECB policymakers will initiate the turnaround in monetary policy, but rather on the implications of the turnaround triggered by the escalation in Ukraine for real economic activity, price developments and the stability of the financial markets as a whole. In particular, the inflationary drivers from the dramatic developments must be considered. The implications and repercussions of Russia's war of aggression in Ukraine will, unsurprisingly, once again have a high priority for the presentation of the decisions at the latest ECB meeting next week as well as for the discussions within the Council leading up to this meeting. Nevertheless, the ECB must keep in mind its mandate, the fulfilment of which faces rapidly intensifying inflationary challenges.

Minutes of the April meeting: uncertainty prevails

Admittedly, looking in the rear-view mirror should not play a key role in the context of a preview. Nevertheless, we believe that insights into the internal discussions taking place in the ECB Governing Council can be highly informative at this time as well, even if the assessment of immense uncertainty, both previously and currently, with regard to price developments in the single currency area does not really come as a surprise. The minutes of the ECB meeting of 13 and 14 April, presented on 19 May, perfectly mirror this: The word "uncertainty" alone appeared 23 times. The Council disagreed, among other aspects, on the question of the path of wage development, which is very important, in particular when assessing the sustainability of price increases or the inflation trajectory. With regard to the end of the APP securities purchase programme, the minutes also suggest that the majority of ECB decision-makers believe that "net asset purchases should end sooner rather than later in the third quarter". The postponement of decisions to be made is also undoubtedly evident from the summary of the discussion contributions from the April meeting. Thus, the minutes state that the view was taken "that the conditions for an increase in the ECB's key rates will be decisive for the monetary policy discussion at the June meeting of the Governing Council". In summary, we would certainly conclude that the minutes of the April meeting indicate a more hawkish stance than the statement read out in April. In view of the latest developments, the ECB Governing Council will be under intense pressure at the June meeting – at least in terms of a more specific timetable.

Blog post: ECB President highlights opportunity to exit negative interest rates in Q3

And the ECB Governing Council seems keen to deliver and leave no doubt about this "guidance". President Christine Lagarde already talked about monetary policy normalisation in the single currency area in a blog post dated 23 May on the ECB's homepage (see Monetary policy normalisation in the euro area). Firstly, however, she discussed both the driving forces behind the "previous" low inflation and the new inflation landscape, differentiating between the phase of extremely low inflation, which was due to weak demand in particular, and the upward dynamics in the development of inflation triggered in part by external shocks. Lagarde also assessed the uncertain growth outlook in light of potential monetary policy decisions and the future course of action. However, she also made it clear that there were no classic overheating tendencies to speak of. Lagarde also mentioned the burdens of (imported) price increases for private households, e.g. due to falling real wages, and the negative side-effects for the industrial sector of high energy costs coupled with demand bottlenecks. All this apparently also led her to the following conclusion: "Against the backdrop of the evidence I presented above, I expect net purchases under the APP to end very early in the third quarter." This would also allow the Governing Council to raise rates at the July meeting, which is also in line with the forward guidance. She continued: "Based on the current outlook, we are likely to be in a position to exit negative interest rates by the end of the third quarter."

What else have we recently heard from the Governing Council?

The latest statements by the ECB's chief economist Philip R. Lane should also be seen in direct relation to Lagarde's remarks. He clarified that interest rate hikes would naturally take place in steps of 25 basis points. Accordingly, he sees increases of precisely that amount in the July and September meetings as the "benchmark pace". At least that is how he put it in his answer to the question about a possible move of 50 basis points in July, which was put to him on 23 May in an interview with the Spanish newspaper "Cinco Días". In so doing, he certainly did not completely rule out discussions on such striking steps, but again linked this to the need for appropriate justification. Council member Robert Holzmann could possibly come up with the relevant arguments during internal debates. After all, last week he already advocated that the ECB should at least consider kicking off the rate hike cycle with a step of half a percentage point. With regard to the necessary justification, he addressed the importance of signalling strength. Reading between the lines, a significant deviation from Lagarde's blog post can be detected. After all, she tends more towards the line of "natural" interest rate steps, just like Philip R. Lane. In fact, advocates of a bolder approach are underrepresented in the Governing Council. In addition to Holzmann, another ECB central banker, Klaas Knot (on 17 May), spoke out in favour of the possibility of a July step in the order of 50 basis points, but also tied this to a more dramatic development in terms of inflation. However, the statements of the ECB Governing Council members in the run-up to the June meeting seem unanimous, at least to the effect that there will be no adjustment of the key rates in June, which can of course also be explained by the still ongoing APP. In mid-May, François Villeroy de Galhau already spoke of a "decisive" June meeting and an "active" summer.

Future ECB path is the talk of the town

At the risk of repeating ourselves in the context of our weekly publication: there is no manual on when is the right time to exit quantitative measures, how to behave during a pandemic, or how right (or wrong) it feels to raise interest rates during a war of aggression inside Europe. The fact is: the inflation data has long justified an interest rate hike. However, opinions are divided on whether there should be two to three steps or "only" one in 2022 and whether these could then be two small steps (e.g. ten basis points), "normal" (25 basis points) or large ones (50 basis points). For now, we expect that the ECB projections from March will have to be revised again in June (see table below). This means that inflation expectations will again be raised for 2022 at least, but the growth outlook will once more be revised downwards. This is all part of the ECB's balancing act – wanting to curb inflation without choking off the economy while some growth is still forecast. To do this, the APP must end first anyway. In the ECB Governing Council, there is a familiar debate between the hawks on one side and the doves on the other. Grist to the mill for the hawks: The inflation rate in the Eurozone reached 7.4% in both March and April, the highest level since the introduction of the euro as a clearing currency in 1999, again clearly exceeding the ECB's target of 2%. In contrast, the doves cite arguments such as the war, supply chains and zero-covid in China, for example. Yesterday there was the first estimate for Eurozone inflation data in May: The median of the survey had suggested a value of 7.8%. The CPI estimate was then as high as 8.1%. The ECB is solely committed to the goal of monetary stability, which would clearly be a reason for an interest rate hike. It would then be partly responsible for choking off the economic engine. This is not part of its mandate, which clearly distinguishes it from the US Fed, which is already in full rate-hike mode. This is why comparisons of monetary policy on this and the other side of the Atlantic are mostly inappropriate. New projections in June on GDP growth and inflation rates could see discussions move away from STAGflation and more in the direction of SLOWflation. As already known and communicated, the APP ends in Q3, but the exact path and possible tapering along the way are still unclear. The path is data-dependent. According to press reports, the ECB is working on a crisis instrument to be used in the event of an undesired breakout (upwards) in bond yields of the weaker Eurozone economies. We would be very interested in the details here. To recap: in the spring of 2008, the ECB raised key rates and regretted this step only a few weeks later before moving on to an unprecedented frenzy of interest rate cuts. In 2011, the committee led by Trichet raised interest rates twice in a row, Draghi took over and cut interest rates from 1.5% to 0.0%. The ECB will certainly have learned from its last interest rate hikes and will therefore not act in June. However, this could disappoint a few market participants.

ECB projections for euro area growth and inflation in the Eurozone*

	March 2022 projections				Adverse scenario				Severe scenario			
	2021	2022	2023	2024	2021	2022	2023	2024	2021	2022	2023	2024
Real GDP	5,4	3,7	2,8	1,6	5,4	2,5	2,7	2,1	5,4	2,3	2,3	1,9
HICP inflation	2,6	5,1	2,1	1,9	2,6	5,9	2,0	1,6	2,6	7,1	2,7	1,9

* Changes versus previous year in %
Source: ECB, NORD/LB Markets Strategy & Floor Research

ECB projections: June updates

What the ECB minutes of the last few meetings not least show us is that, in the wake of current developments, the ECB projections are to some extent lagging behind reality. This is certainly a harsh verdict for forecasts, but it is quite understandable given the dramatic events in Ukraine. The next projections are due next week at the June meeting (see ECB calendar) and should again indicate lower growth and higher price dynamics. These adjustments could then also be additional drivers for significant monetary policy decisions, as we will explain below.

ECB calendar: all a question of timing – future ECB Governing Council meetings 2022

The ECB regularly publishes non-binding calendars for the Eurosystem's regular tender operations and reserve maintenance periods, as well as its meeting dates for the current year. Updated ECB projections are due on 9 June. The current and expected upward pressure on prices into 2024 should to some extent increase pressure for the Governing Council to act. At the same time, in our view, this also increases the likelihood of landmark decisions being announced in the coming week.

- 9 June (new ECB projections)
- 21 July
- 08 September (new ECB projections)
- 27 October
- 15 December (new ECB projections, first time for 2025)

What do we expect, what does the rest of the year hold?

The following paragraphs are intended to address a wide variety of discussion points:

- When will the first interest rate step be taken?
- How high will it be?
- How many more will follow in 2022?
- Which interest rate will move first?
- When does the APP end?
- How long will reinvestments under the APP continue?

Classification: status quo

Record inflation in the Eurozone has pushed the Governing Council more into the hawkish camp overall. A majority of monetary policy makers now favour an initial rate hike in July and a move away from negative interest rates in September, according to interviews, blogs and polls, as well as a synopsis by the news agency Bloomberg. The future course of the central bank is the subject of heated discussions. As mentioned earlier, hawks like Dutch central bank chief Klaas Knot, his Austrian colleague Robert Holzmann and Latvia's Martins Kazaks would push for considering larger interest rate steps at least as an option.

When will the first interest rate step be taken?

This would already answer the first question, if one were to give sufficient credence to the current opinions expressed. The upcoming meeting has the potential to disappoint. The APP ends first, so that the first interest rate step can be decided on 21 July – and would therefore fall into Q3. As far as we understand, this will not take effect immediately, but will come into force about a week later.

How high will it be?

The inflation data have long justified an interest rate hike. Opinions differ, however, on the number of steps and, above all, the size. Since everything is under consideration, small steps (e.g. 10 basis points) would also be conceivable. However, due to the ferocity of inflation rates, we have incorporated “normal” steps (25 basis points) in our baseline scenario. As the demands of some central bankers also show, even isolated large steps (50 basis points) are more likely than small ones. Here, the question of obtaining a majority remains, which we doubt.

How many more steps will follow in 2022?

This does not seem to be a foregone conclusion, and as there are four more Council meetings in the second half of the year, two of them involving new projections (September and December), sufficient room for manoeuvre remains. We rather ask ourselves which interest rates will move when and by how much.

Which interest rate will move first?

The clear favourite for the first increase is the deposit facility rate. This has been at -0.50% since September 2019 and is mainly responsible for negative interest rates on current and business accounts. The main purpose of the interest rate is, of course, the overnight deposit at the ECB and has a corresponding signalling function. Therefore, we envisage a hike of 25 basis points here. The main refinancing rate and thus the key rate in the narrower sense (MRO; main refinancing operations rate) has already been at 0.00% since March 2016. It was preceded by a value of 0.05%, which shows that steps above or below 25bp are always conceivable in either direction. The marginal lending rate, i.e. borrowing money overnight from the central bank, has also been at its lowest level of 0.25% since March 2016. Exciting, albeit of a rather homeopathic nature: The previous rate was 0.30%, so that even a step of 5 basis points was made here. This had a signalling function at the time to establish a symmetric corridor of the three interest rates. Incidentally, this new symmetry (-0.25%; 0.00%; 0.25%) would be achieved again if the deposit rate were raised after the Whitsun holiday period. Accordingly, our baseline scenario envisages that this symmetry will be maintained and that the subsequent interest rate step should raise all three rates by 25 basis points, making negative interest rates by the central bank a thing of the past. After that, the symmetric corridor might even expand again in 2023. This used to be at least 50, and for a long time even 100, basis points upwards and downwards.

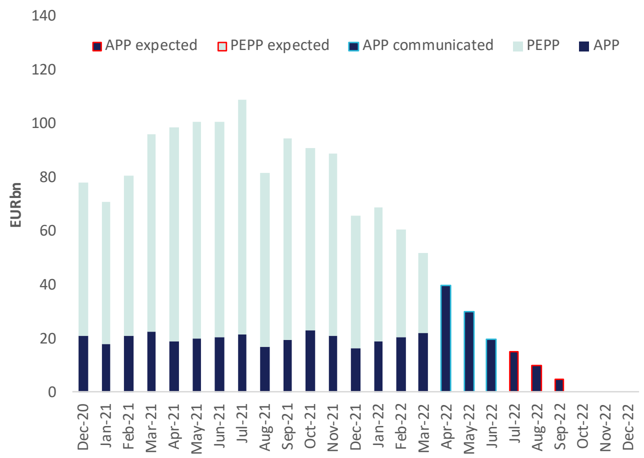
When does the APP end?

Until yesterday (May 2022), the Eurosystem was still purchasing assets in the amount of EUR 30bn per month within the framework of the Asset Purchase Programme (APP for short); as of today (June 2022), it is back to the usual level of EUR 20bn per month seen up to the end of March. We should no longer look too much into the future here as far as net purchases under the APP are concerned. Our former baseline scenario of a gradual scaling back in Q3 does not seem likely to materialise, with an abrupt end at some point (day X) in July more likely at this stage. It is highly improbable that purchases will continue only until 1 July in order to only meet the third quarter deadline. To us, either 15 July (Friday) or 20 July (the eve of the next ECB decision) would appear to be more likely. The APP must end before the rate hike cycle starts in July (21). This seems to be more of a cold turkey approach than a medium-term withdrawal. However, net purchases under the APP were terminated once before it was resurrected.

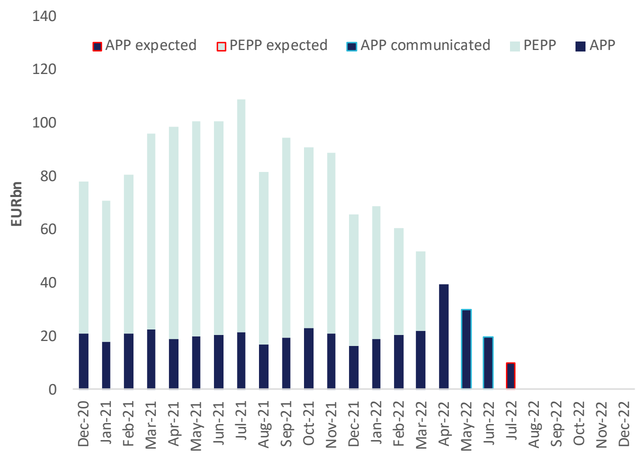
How long will reinvestments under the APP continue?

As unclear as the data situation and reporting by the Eurosystem within the framework of the PEPP (Pandemic Emergency Purchase Programme) may seem, the cards are clearly on the table in terms of reinvestments. Although the programme stopped its net purchases at the end of March before exhausting its self-imposed envelope of EUR 1,850bn, maturities of partly (still) unknown amounts will be reinvested until the end of 2024. This means that we have been dealing with the PEPP for further 2.5 years with no reduction in the balance sheet total. This aspect is currently much more cryptic under the APP. "The Governing Council also intends to continue to reinvest, in full, the principal payments of the maturing securities acquired under the APP for an extended period of time after the date when key ECB interest rates start to rise and, in any event, for as long as necessary to maintain favourable liquidity conditions and a wide degree of monetary accommodation." At the moment, we think anything from six months to more than 24 months is conceivable and we hope to have some information at the press conference after next week's ECB Governing Council meeting on Thursday.

APP and PEPP: purchases and baseline scenario (old)



APP and PEPP: purchases and baseline scenario (new)



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

TLTRO III less in focus, but interest rate path could curb early repayments

With regard to other monetary policy instruments such as TLTRO III and the graduated interest rate, adjustments or announcements at the June meeting – or later in the year – are also theoretically conceivable. However, in our view, the end of the extremely attractive interest rate on the TLTRO III tenders (special interest period) is a fait accompli and a decision on follow-up tenders would be premature now. The increase in key rates (and especially the deposit facility rate as a determinant of the interest rate on tenders) at the end of the special interest rate period has significant implications for commercial banks in the Eurozone, which have significant volumes of TLTRO III liquidity at their disposal. The TLTRO III rate is calculated in an average view over the term of the respective tender. In an upward interest rate path, the potential for arbitrage or carry trade arises again. Also due to significant prefunding in recent weeks (mainly via covered bonds), we do not see this resulting in any significant changes on the supply side in 2022. What is quite conceivable, however, is that the repayments without preceding voluntary repayments will come in a more concentrated form in 2023, which could bring more supply to the market depending on the original funding requirements.

Conclusion and comments

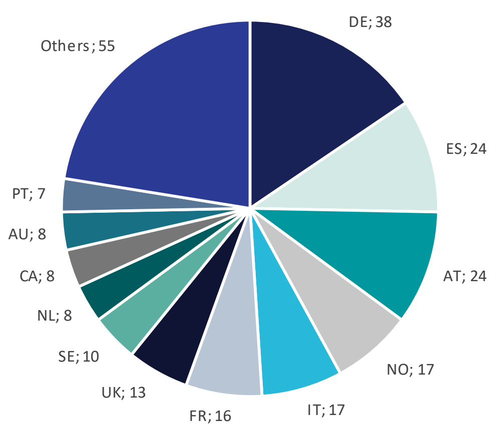
Expectations of interest rate hikes on the financial markets have intensified once again in recent weeks. Accordingly, a minimum of two key interest rate steps appears increasingly plausible as a baseline scenario. In our opinion, not least the presented minutes of the April meeting, coupled with the very clear blog post by President Lagarde, support this view of things. However, we would not want to raise high expectations with regard to concrete interest rate announcements for the ECB's key rate decision in eight days' time. First of all, on 9 June, the wait-and-see attitude should be abandoned, which is strongly related to newly emerging data. Consequently, this should be the nail in the coffin for the APP. As we understand it, the latest end date can only be 20 July, and the earliest 1 July. We think 15 July is the most likely end date. With regard to concrete interest rate decisions, we also see this meeting as another intermediate step. In this respect, we are also wary of describing the June meeting in advance as a "non-event", as the interest rate turnaround is knocking ever louder on the door. The ECB will start the countdown in June for a lift-off in July. Moreover, also with regard to the new projections in June, we refer more to slowflation than stagflation, since the growth forecasts everywhere are still positive for 2022 and are not predicting stagnation or even a decline in GDP at all – but rather a slowdown coupled with ever increasing inflation rates. In July, the interest rate on the deposit facility is likely to then be raised from -0.50% to -0.25%. Later in the year, the negative interest rate would be shelved (September) and the key interest rate would also no longer be at 0% if we correctly assume at least one further interest rate step for all three key rates. Going forward, this corridor is likely to widen from ±25 basis points upwards and downwards to at least 50 basis points before we reach a "new normal" in 2023 or 2024. Many may think this is not sufficient for the 9 June meeting, but in our opinion the ECB cannot deviate from sequencing in the last few metres. First the APP must end in Q3, then the rate hike cycle starts – but not until 21 July.

Covered Bonds
The covered bond universe of Moody's: an overview
Author: Stefan Rahaus

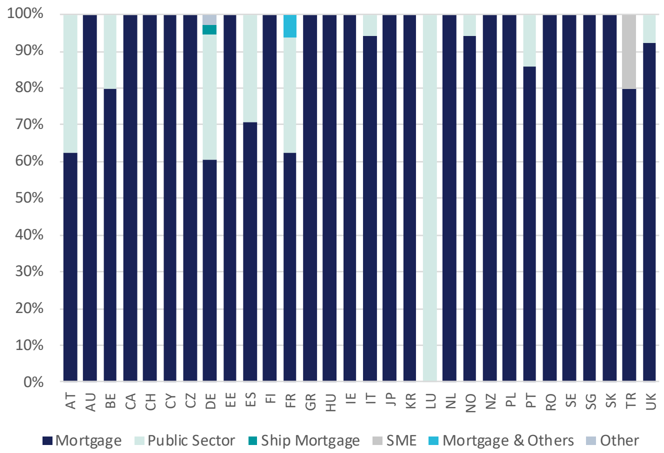
245 Covered bond programmes rated

Moody's rating agency last published details of the covered bond programmes it rates at the start of May 2022 as part of the report "Sector Update – Q1 2022: Geopolitical developments pose new risks to global recovery". In the following, we will again provide an insight into this covered bond universe. For this purpose, Moody's mainly uses rating reports from the third quarter of 2021 and evaluates key figures on cover pool losses, collateral scores, leeway in the timely payment indicator (TPI) and a combination of TPI Leeway and overcollateralisation (OC). The report shows that Moody's provided rating assessments for a total of 245 covered bond programmes from 30 jurisdictions (previous quarter: 250). The agency therefore covers a significant proportion of the entire covered bond universe. With regard to breakdown by jurisdiction, Germany continues to occupy the top spot with 38 covered bond programmes. Next come Spain and Austria with 24 each, Norway and Italy with 17 each and France with 16 programmes. Twelve countries account for 77.6% of programmes, with at least seven programmes rated in each country. The remaining 55 programmes are spread across 18 jurisdictions. Of the 245 covered bond programmes rated overall, 200 are mortgage-backed, making up 81.6% of Moody's covered bond universe. In addition, Moody's rates 41 public sector programmes (16.7%), with almost 83% concentrated in Germany (13 programmes), Austria (9), Spain (7) and France (5). Moody's currently only rates one covered bond programme backed by ships, which was issued in Germany.

Number of programmes with a Moody's rating



Breakdown of programme type by country



Source: Moody's, NORD/LB Markets Strategy & Floor Research

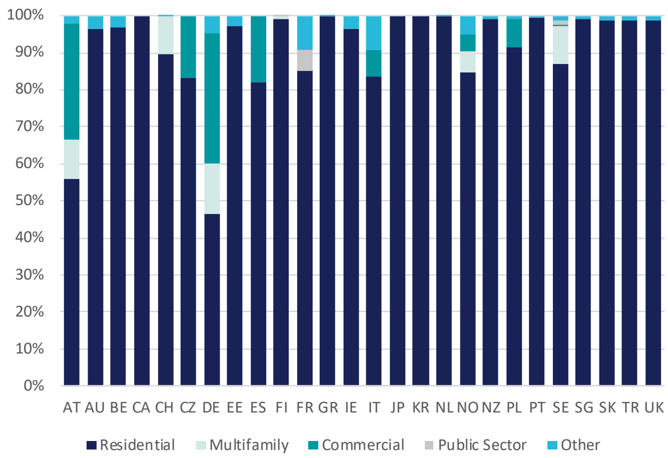
Focus on mortgage programmes from EUR benchmark jurisdictions

The main focus of Moody's rating universe for covered bonds is therefore unequivocally on mortgage programmes, much of which can be attributed to EUR benchmark jurisdictions. Only Turkey (5 programmes), Switzerland (4), Hungary (2), Cyprus (1) and Romania (1) do not currently have any outstanding covered bond issuances in the EUR benchmark segment. For this reason, we will be focusing on those mortgage-backed programmes that were established in EUR benchmark jurisdictions in our following analysis. In this context, it should be taken into account that EUR benchmarks were not necessarily issued through these programmes. Rather, placing this limitation on our assessment of the Moody's covered bond universe as a whole will allow for a better comparison between the data from an investor's perspective.

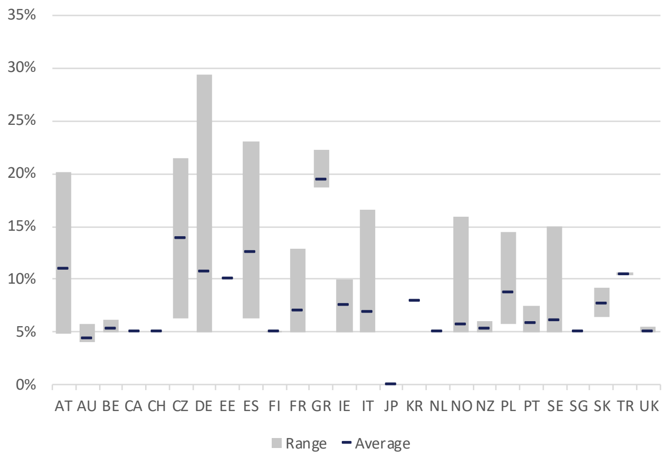
Mortgage programmes are predominantly residential

Looking at the classification of cover assets in the individual programmes carried out by Moody's, it can be ascertained that more than 80% of bond cover consists of residential assets in almost all countries. Notable in this respect are Germany and Austria, which clearly fall below the average (83.8%), at 46.5% and 56.1%. Conversely, the share of commercial cover assets in these two countries is correspondingly higher, at 35.4% in Germany and 31.5% in Austria. Nonetheless, the 10%-mark for commercial assets is exceeded by Spain, with 18%, and the Czech Republic, with 16.8%. In addition to Germany (13.5%), Austria (10.3%), Switzerland (10.2%) and Sweden (10.1%) also have significant shares of multifamily assets. A noteworthy percentage of public sector cover assets is reported only for France (5.9%) and Sweden (1.2%), though in both cases it still only makes up a tiny proportion of the mortgage cover pool volume.

Structure of cover pools (mortgage programmes)



Collateral score by country (mortgage programmes)



Source: Moody's, NORD/LB Markets Strategy & Floor Research

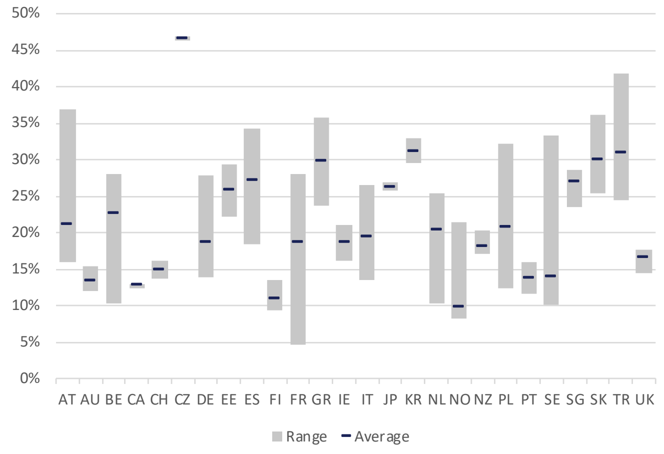
Collateral score as an indicator of cover pool quality

The collateral score is an important metric in the Moody's covered bond methodology. It measures credit quality in the cover pool and outlines the expected reduction in the cover pool value due to a covered bond anchor event. A low value indicates the quality of assets in the cover pool is high or a slight deterioration of the assets in the cover pool due to issuer insolvency. In addition, the collateral score denotes the deterioration in credit quality of cover assets in the event of a severe recession scenario. In principle, we consider it appropriate to compare collateral scores across programmes and jurisdictions. Nevertheless, some specific features must be taken into account. For example, Moody's provides for a lower limit of the collateral score of 5% for the majority of mortgage programmes. Collateral scores fall as low as 4% in Australia, while in Japan they are exclusively set at 0%, due to the RMBS structure of the respective programmes. The above chart shows not only the average collateral score at national level in each case, but also the possible range of scores. Four jurisdictions always have a score of 5%, namely Canada, Switzerland, the Netherlands and Singapore. Variation is also very low in Finland (5% to 5.1%). Meanwhile, the collateral score range for Austria, the Czech Republic, Germany, Spain, Italy, Norway and Sweden is 10% or more. The basic average of all collateral scores for residential assets was most recently 8.1%, with this average trending horizontally in a very narrow range between 8.0% and 8.2% since the second quarter of 2018. In the preceding years, this figure had gradually improved from a level of 11%. Greece (average collateral score: 19.4%), the Czech Republic (13.9%) and Spain (12.6%) are expected to have the lowest average quality of assets included in the cover pools. It is no surprise that a highly differentiated picture emerges at global level.

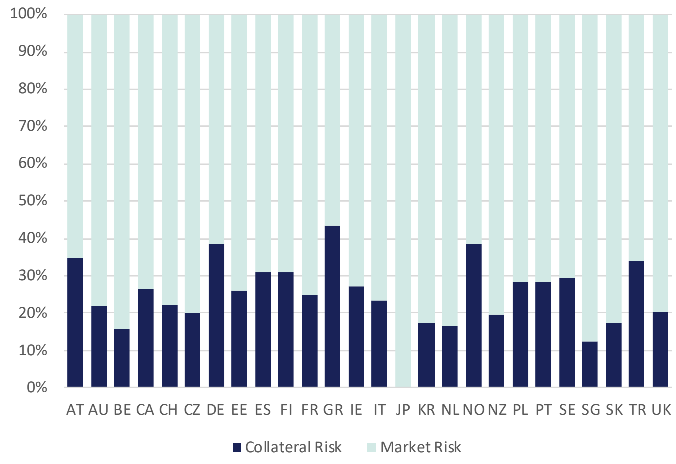
Cover pool losses an indicator comprising two components

Moody's rating experts use the cover pool losses (CPL) to reflect the losses expected in the cover pool in the event of issuer default. This risk is composed of two components: market risk (refinancing, interest and currency risk) and collateral risk (asset quality and credit risk). In the third quarter of 2021, the basic average market risk for mortgage programmes was 13.7%, the lowest level since 2013. At 5.4% in the third quarter of 2021, collateral risk has been trending horizontally since mid-2020, though it is also at its lowest level since 2013. Similarly to the collateral score, a high degree of heterogeneity can be identified in a global comparison of CPL. This is reflected not only in the average CPL, but also with regard to the range of national variation. Specifically, the cover pool losses in Canada, Finland and Norway are particularly low, while those in the Czech Republic, South Korea and Slovakia tend to be high. However, the range is low for programmes from Canada, the Czech Republic and Japan, though this is partly attributable to the small number of programmes in these countries. A high range above 20% can be observed in Austria, France and Sweden.

Cover pool losses by country (mortgage programmes)



CPL risk component by country (mortgage programmes)



Source: Moody's, NORD/LB Markets Strategy & Floor Research

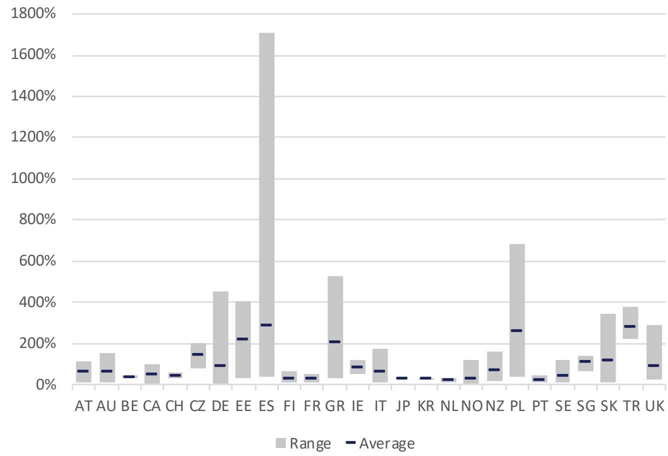
Refinancing, interest and currency risks determine the expected losses

The top right chart shows that there is considerable variation at national level between the two components (collateral risk and market risk). The share of collateral risk in the CPL is relatively high in Germany, Greece and Norway. On account of a declining quality in the cover pool in the event of issuer insolvency, the degree of CPL is comparably low in Belgium, Japan and Singapore. The two programmes from Japan once again adopt a special position, with no collateral risk on account of their cover pool structures (cover assets are RMBS transactions alone). On the whole, it can be ascertained that CPL are largely impacted by market risk, so that losses in the event of issuer insolvency are attributed more to the categories of refinancing, interest and currency risk and less to the quality of cover assets.

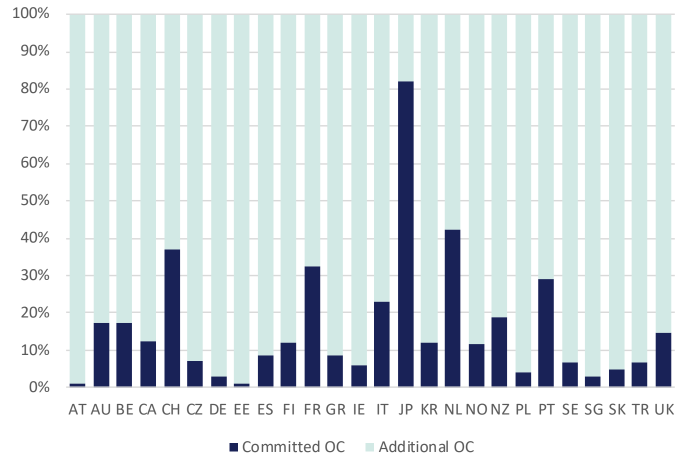
Spanish programmes with heterogeneous high overcollateralisation

Looking at the overcollateralisation ratio for programmes rated by Moody's, it is not surprising that there are significant differences on an international level. The greatest national heterogeneity can be seen in Spain, Greece and Poland (only three programmes). While the lowest overcollateralisation among the Spanish programmes was 40.8%, overcollateralisation of Kutxabank's programme was 1,706.3%. With comparatively high overcollateralisation ratios of more than 200%, banks from Turkey, Poland, Greece and Estonia – the second tier – feature alongside Spain in this context.

Overcollateralisation by country (mortgage programmes)



Composition of overcollateralisation (mortgage programmes)



Source: Moody's, NORD/LB Markets Strategy & Floor Research

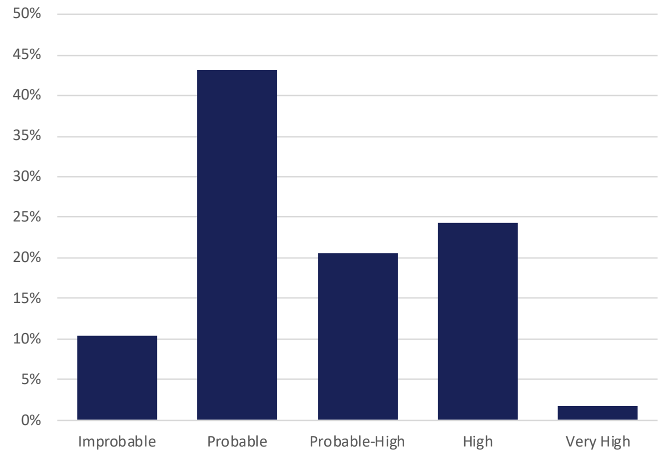
Committed OC as starting point for voluntary overcollateralisation

Overcollateralisation can also be divided into subcomponents. It might have been committed to the rating agency to ensure a certain rating or as a legal requirement. Committed OC can therefore be seen as a kind of lower threshold, meaning that overcollateralisation should not readily or even must under no circumstances fall below this level. In contrast, actual overcollateralisation might just be a temporary status, which is potentially subject to certain volatilities through new issuances or maturities. With regard to the proportion of OC levels made up of committed OC, it becomes apparent that overcollateralisation in Estonia, Austria, Germany and Singapore is to a large degree offered on a voluntary basis and therefore can be reduced relatively easily. However, this is also due to the low committed OC requirement, which averages at just 0.7% in Austria, for example, but is higher for Estonia, Germany and Singapore, at 2.5%, 2.6% and 3.0%, respectively. Committed OC values of less than 3% can still be seen in Sweden, with 2.8%, and Norway, with 2.9%. High committed OC of 25% is reported for Spain and Japan. A high share of committed OC does not mean high overall overcollateralisation, as the example of Japan demonstrates. Here, current OC is 30.4%, so committed OC accounts for 82.3% of total OC. The Netherlands, Switzerland and France still hold high shares of over 30% in committed OC. Overall, it can be determined that a larger share of overcollateralisation is provided by the issuer on a voluntary basis.

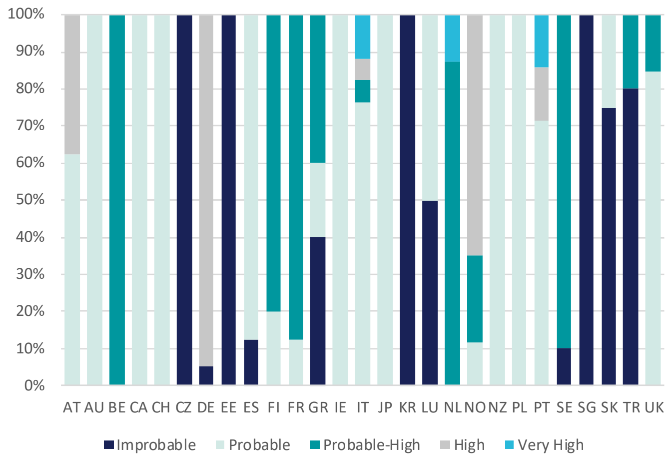
TPI as an indicator of timely payment & limiting factor for covered bond ratings

Another metric provided by Moody's is the timely payment indicator (TPI). The TPI reflects the likelihood that payments on the covered bond will be made on time after a CB-anchor event and follows a six-point scale ranging from "very high" to "very improbable" (see illustration below). The TPI level also limits the potential covered bond rating to a certain number of notches above the issuer's rating (TPI-cap). The table below shows that almost half of all mortgage programmes rated by Moody's have been assigned a TPI of "probable". The highest possible level of "very high" was achieved by 1.7% of programmes. TPIs tend to be higher in countries with a sovereign rating of Aa3 or better than in countries with a sovereign rating of A1 or lower.

Timely Payment Indicator (TPI) (mortgage programmes)



TPIs by country (mortgage programmes)



Source: Moody's, NORD/LB Markets Strategy & Floor Research

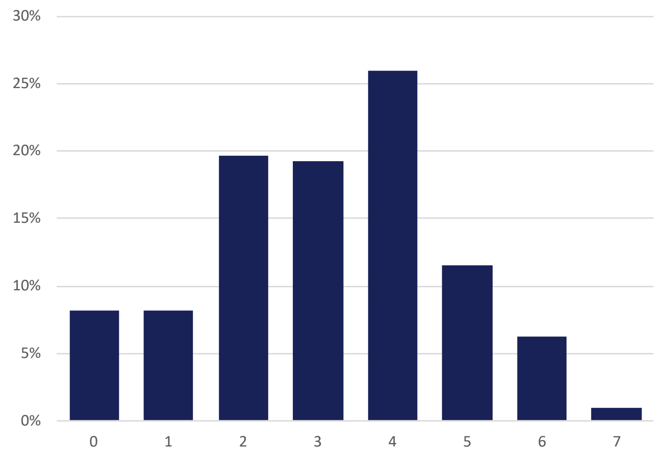
National estimates largely the same

In 12 EUR benchmark jurisdictions, the programmes within a jurisdiction have all been assigned the same TPI level. While this is "probable" in seven cases, the programmes in the Czech Republic, Estonia, South Korea and Singapore only have a TPI of "improbable". The five programmes from Belgium are all categorised as "probable high". Only four programmes (2x IT, 1x PT and 1x NL) have been assigned the highest possible TPI of "very high". Conversely, 25 programmes (10.5%) are classified as just "improbable", these being 100% of the programmes from the Czech Republic, Estonia, South Korea and Singapore. At least three different levels for the likelihood that timely payment will be made can be found only in Greece, Italy, Portugal and Norway. In Germany, a high probability that payment obligations will be met on a timely basis in the event of issuer default is assumed for 36 of the 38 programmes. In addition, a high probability is also ascribed to programmes in Norway (11 of 17 programmes) and Austria (9 of 24 programmes) in particular.

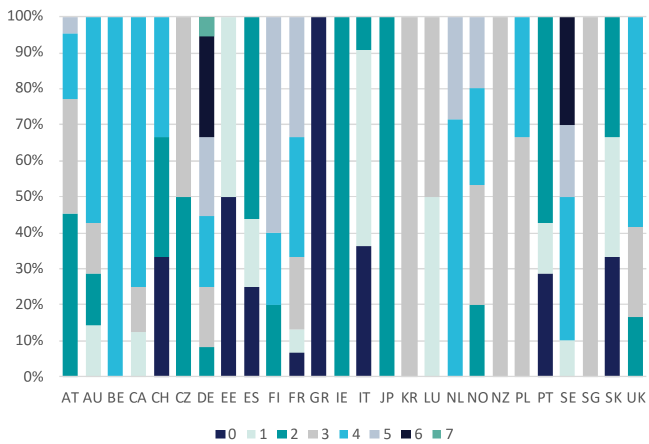
TPI Leeway: adequate buffer with regard to downgrades

The TPI Leeway denotes the number of notches by which Moody's might lower the covered bond anchor before the rating agency downgrades the covered bond programme because of TPI framework constraints. Of the covered bond programmes rated by Moody's, 17 (8.2%) do not have a corresponding buffer. This means that in the event that the anchor is downgraded, the programme would be downgraded as a direct consequence. The TPI Leeway is most commonly four notches (54 programmes; 26.0%). More than 45.2% of programmes are in the two middle – and also most common – categories of "3 notches" and "4 notches", while two programmes from Germany are even seven notches from a downgrade.

TPI Leeways in notches (mortgage programmes)



TPI Leeways in notches by country (mortgage programmes)



Source: Moody's, NORD/LB Markets Strategy & Floor Research

Germany, France, Sweden and Norway have high buffers in some cases

Looking at national markets, it can again be established that these feature a high degree of heterogeneity. The rated programmes in Germany and France have at least five different notch assessments on the TPI Leeway scale. TPI Leeways – and therefore rating buffers – are often high in Germany, France and Sweden, as at least five programmes have been assigned a TPI Leeway of no fewer than five notches. However, at least three programmes each in Greece, Italy and Spain have no buffer, whereby in the case of Greece, none of the programmes rated by Moody's has a buffer.

Conclusion

Moody's quarterly data on the rating-specific nature of the cover pools for mortgage-backed and public sector covered bonds show a largely unchanged robust picture. However, a certain heterogeneity remains in some jurisdictions, for instance with regard to assessing the credit quality of the cover assets. For example, Aaa-rated covered bond programmes typically have medium to high TPI Leeway levels and medium to high overcollateralisation, indicating a good degree of resilience to a deterioration in the issuer's credit rating. Covered bonds rated below Aaa generally tend to have a lower TPI Leeway and OC surplus.

Covered Bonds
ECB Financial Stability Review identifies increasing risks in the eurozone: a brief overview of covered bonds

Authors: Melanie Kiene // Dr Frederik Kunze

Risk elevated in the financial system: implications for EMU covered bonds?

Last Wednesday, the ECB published its latest Financial Stability Review. This report is published twice a year and provides an overview of potential risks to financial stability in the eurozone. In this latest edition, the ECB summarises the core issue as follows: implications of the war in Ukraine are expected to weaken growth and drive inflation, amplifying existing vulnerabilities. Higher financial market volatility underscores risks of sharp corrections and eurozone sovereigns, corporates and households face higher interest rates and cost pressures that could "test" debt sustainability for the more highly indebted. After a remarkable recovery in bank profitability in 2021, the profit outlook has since deteriorated. Risks from mortgage indebtedness might also be amplified by the rising pressure on the financial situation of households. The ECB warns of a real estate price bubble, as residential properties are sometimes overvalued by up to 60%. In this article, we will first outline key findings from the Financial Stability Review and discuss possible implications for covered bonds in the eurozone.

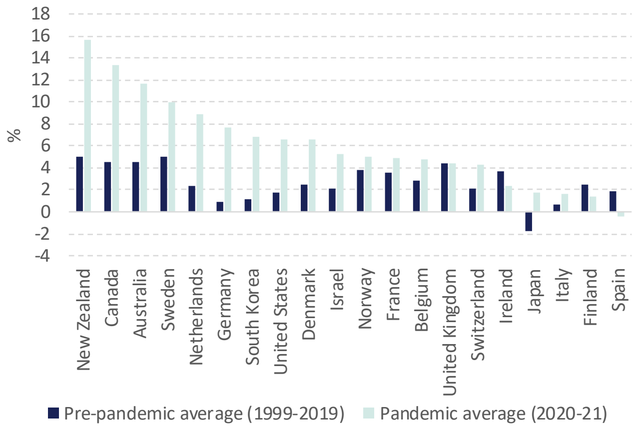
No sector was unaffected

Despite recent adjustments to some assets, there continues to be a risk of further corrections if growth prospects continue to weaken and/or inflation is again significantly higher than expected. Susceptibility above all depends on the uncertainty associated with Russia's invasion of Ukraine. Companies in the non-bank financial sector in the eurozone are facing rising costs and a further deterioration in growth prospects. This increases the likelihood of company default, especially in sectors that have not yet fully recovered from the coronavirus pandemic, but also of highly indebted companies and those with low credit ratings. Following recovery in 2021, the profitability prospects of European banks have deteriorated again. Here, the backdrop of increased energy prices, higher inflation and weaker growth lead to asset quality concerns. However, a recent vulnerability analysis by the ECB showed that only a few banks have significant direct exposure to Russia and Ukraine and that the eurozone banking system should remain resilient even under severely adverse economic scenarios. Resilience is also strengthened by the additional capital buffers already adopted by some countries (including Germany, Austria, Sweden and Finland). House prices in the eurozone have continued to rise, while mortgage lending growth is accelerating too, although a widespread extension of fixed-rate mortgages should shield many borrowers from higher interest rates in the near term. As the development of property prices is of interest to covered bond investors, we take a closer look at this part of the Financial Stability Review.

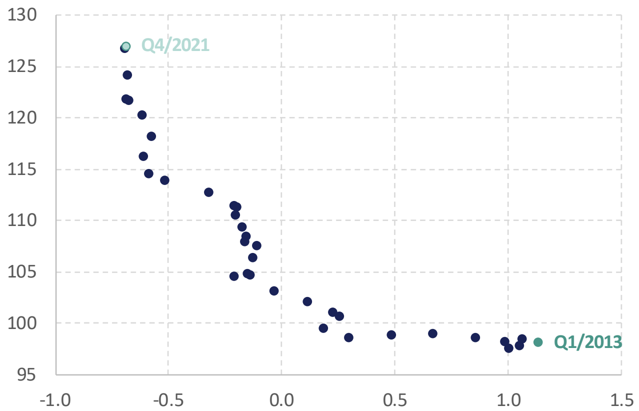
Nominal house prices increased by 9.6% year on year in the fourth quarter of 2021

According to the ECB, prices in eurozone residential real estate have risen at a rapid pace, which the central bank states has resulted in increasingly stretched valuations. Nominal house prices rose by 9.6% year on year in the eurozone in the fourth quarter of 2021, the fastest rate observed in the last 20 years. The key factors putting upward pressure on prices are the low cost of borrowing coupled with bottlenecks on the supply side. This effect has been exacerbated by shortages of both labour and materials, causing prices in the construction sector to rise. According to the ECB, this will in turn contribute to further upward pressure on house prices going forward. Mortgage lending in the eurozone remains robust, with the pace of growth at 5.4% in March 2022, contributing to the build-up of household debt. Patterns vary greatly from country to country. House prices increased substantially during the pandemic in real terms, meaning adjusted for inflation. In many advanced economies, real house price growth exceeded 4% during the pandemic, reaching 4.3% in the eurozone in the fourth quarter of 2021. At the same time, real mortgage rates have fallen further to reach historic lows. Shifts in housing preferences have been an important driver of this trend, especially in areas where the pandemic led to increased working from home (remote working).

Real house price growth
(Q1 1999-Q4 2021, percentages)



EU real house prices and real mortgage lending rates
(Q1 2013-Q4 2021; y-axis: index; x-axis: %)



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

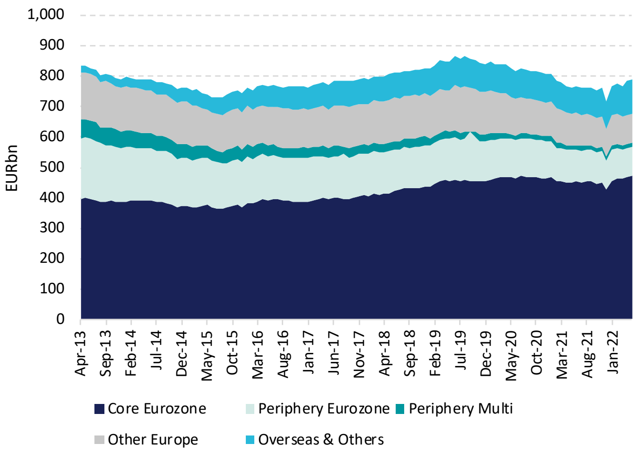
Rise in real mortgage rates has stronger impacts on real estate prices when interest rates are low

The ECB's gradual ending of expansionary monetary policy measures and slightly higher interest rates in the foreseeable future also impact property price growth. With increases in real interest rates, substantial house price reversals become more likely. The ECB's model suggests that, the lower the real interest rate level, the more significant the change in housing prices and in turn the interest rate. Potential reversals in residential real estate prices could therefore be larger than several years ago. The ECB comparison between estimated linear and non-linear models for the eurozone shows that the estimated house price response to a 0.1 percentage point increase in real mortgage rates (from the current very low level) is around 28 basis points stronger than for non-linear relationships.

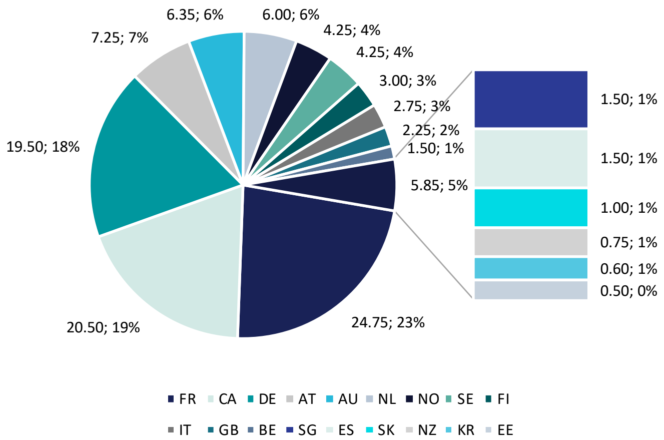
Abrupt repricing in the housing market could (theoretically) produce notable spillover effects

If demand for housing were to go into reverse or real interest rates were to rise significantly, an abrupt repricing in the housing market could produce spillover effects to the wider financial system and economy. According to the ECB, such price reversals in housing markets "could reflect a return to pre-pandemic work modalities" or a strong increase in real interest rates. Other possible factors include a more general deterioration in risk sentiment related to an exacerbation of geopolitical risks or progressing climate change, to speak in broad terms. The models described above indicate that a 1% drop in house prices could generate a peak drop in real GDP of 0.2% after two years (due to a shift in housing demand on average across all countries). Of course, the decline varies from country to country, with a fall of up to 0.9% possible in some advanced economies – although it should be stressed that these ECB estimates come with a significant degree of uncertainty. According to the ECB, to strengthen financial stability and cushion adverse implications, a tightening of macroprudential measures seems warranted in some countries where strong house price growth and buoyant credit dynamics have been observed.

iBoxx EUR Covered: outstanding volume



EUR BMK-Covered Bonds: issuance volume YTD



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

Property market and covered bond volume

The issuance volume of covered bonds has at times risen sharply in recent years, partly because rising real estate prices and higher demand for loans and loan growth have led to a corresponding increase in required funding. The covered bond purchase programmes also supported this trend, as the expectation of an ECB order meant issuers had already secured a relevant investor, significantly reducing the average risk of execution. The option of utilising long-term tenders (TLTRO II and III), for which institutions could deposit their own covered bonds as collateral (keyword: "own use"), also led to an increase in the total market volume, although these retained bonds were withheld from the market.

New momentum in covered bonds and advantages of dual recourse product as market looks to be slowing

Although growth rates for real estate prices and mortgage loans have slowed, it is too soon to speak of a sustained slump of the market. Accordingly, we continue to see arguments for the growing importance of covered bonds as a funding tool. This year alone, covered bonds of EUR 108.2bn have so far been issued in the EUR benchmark segment. In 2021, only EUR 95bn was recorded here for the year as a whole. By the end of 2022, just under EUR 62bn will still reach maturity. We assume that the issue volume will amount to EUR 155bn as at the end of this year (see Market Overview section). Pronounced counter-movements in real estate markets are often also associated with a negative effect on covered bonds secured by mortgage assets. In fact, we consider the risks to be manageable in that covered bond investors will initially focus on the issuer's credit. Furthermore, covered bond legislation is known to have far-reaching requirements regarding overcollateralisation ratios and upper limits on loan-to-value ratios. In addition, there are the advantages of balanced cover pools, especially with regard to seasoning, i.e. the previous maturities of loans. In this respect, properties financed some time ago feature a significant valuation buffer due to market movement in some jurisdictions.

Conclusion

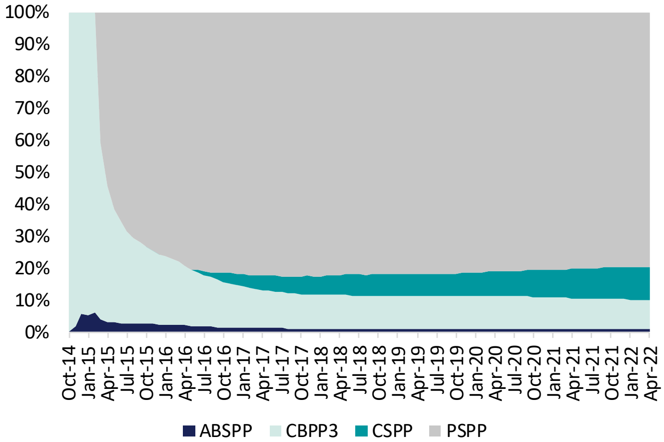
As part of its current Financial Stability Review, the ECB has identified the real estate market as a key risk factor. Given the current momentum on Europe's real estate markets, this is by no means surprising. Nevertheless, we do not initially identify any severe negative consequences for covered bonds or their cover pools from this development. In fact, the real estate market is likely to remain a key driver of the covered bond primary market.

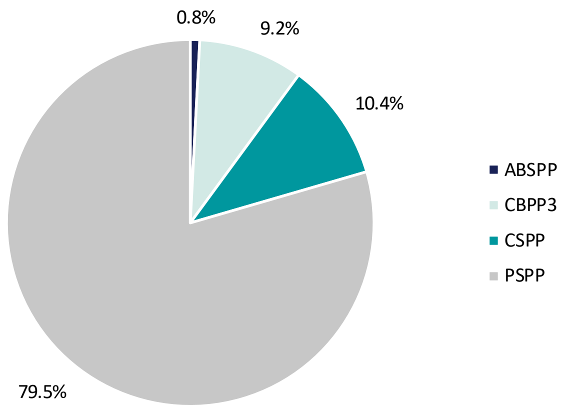
ECB tracker

Asset Purchase Programme (APP)

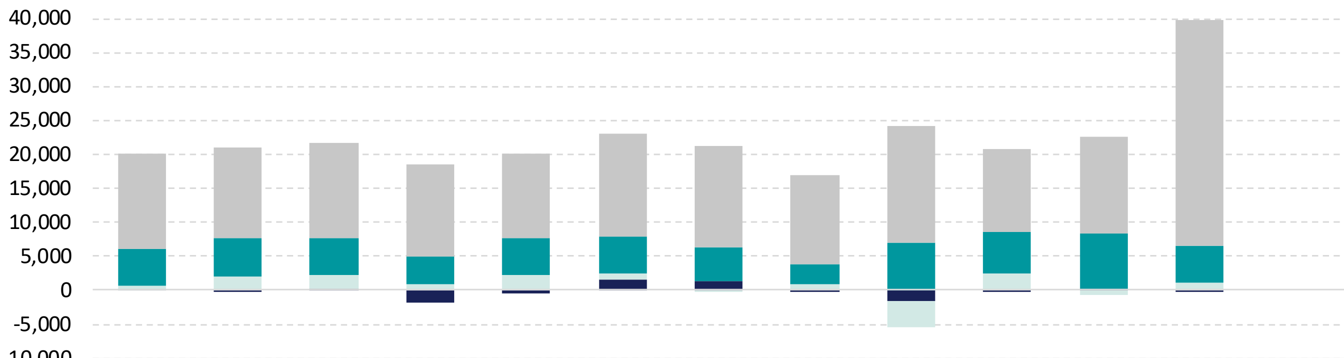
	ABSPP	CBPP3	CSPP	PSPP	APP
Mar-22	26,979	295,849	330,605	2,525,610	3,179,043
Apr-22	26,691	296,924	336,066	2,558,848	3,218,529
Δ	-289	+1,074	+5,461	+33,238	+39,484

Portfolio structure





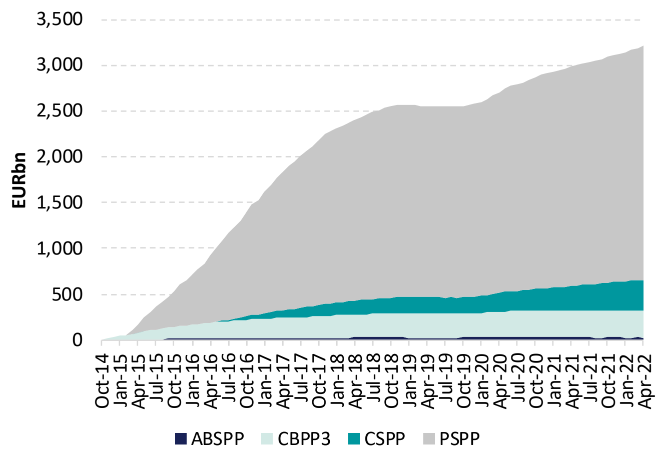
Monthly net purchases (in EURm)



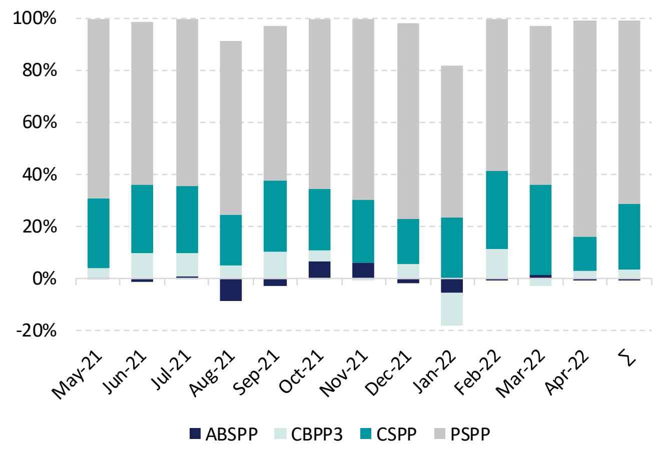
	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22	Apr-22	∑
APP	20,141	20,640	21,597	16,749	19,659	23,017	21,200	16,596	18,838	20,698	21,929	39,484	260,548
PSPP	13,973	13,320	13,943	13,563	12,423	15,038	14,815	12,989	17,292	12,095	14,172	33,238	186,861
CSPP	5,394	5,602	5,502	3,936	5,590	5,481	5,142	3,007	6,970	6,272	8,042	5,461	66,399
CBPP3	686	2,037	2,011	999	2,184	1,008	-12	942	-3,761	2,376	-606	1,074	8,938
ABSPP	88	-319	141	-1,749	-538	1,490	1,255	-342	-1,663	-45	321	-289	-1,650

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

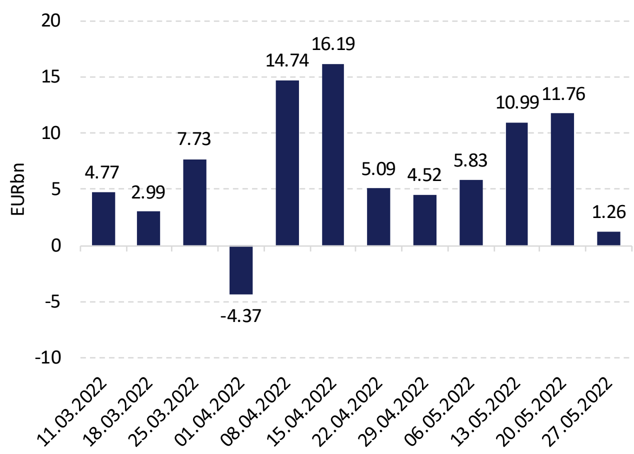
Portfolio development



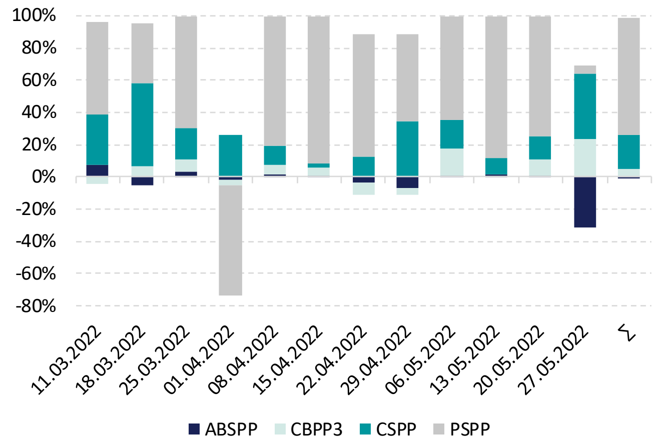
Distribution of monthly purchases



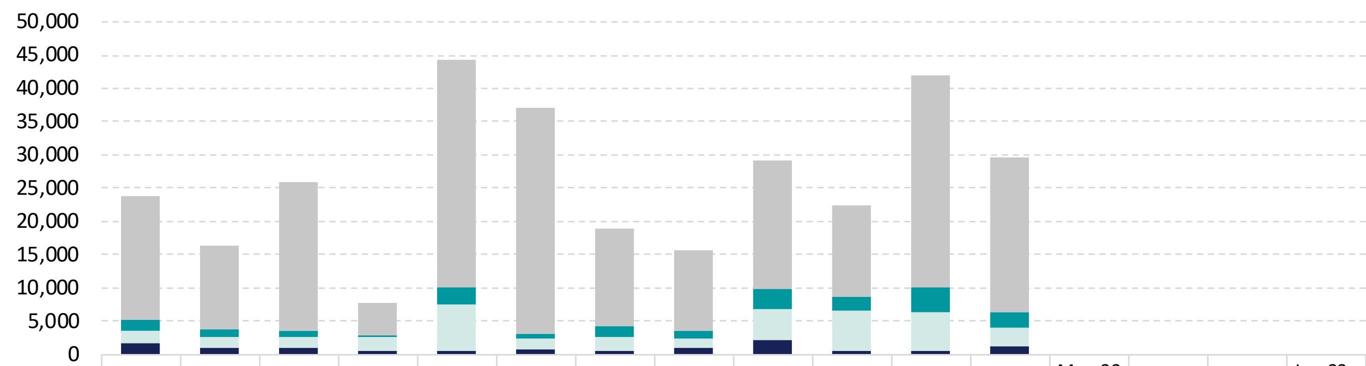
Weekly purchases



Distribution of weekly purchases



Expected monthly redemptions (in EURm)

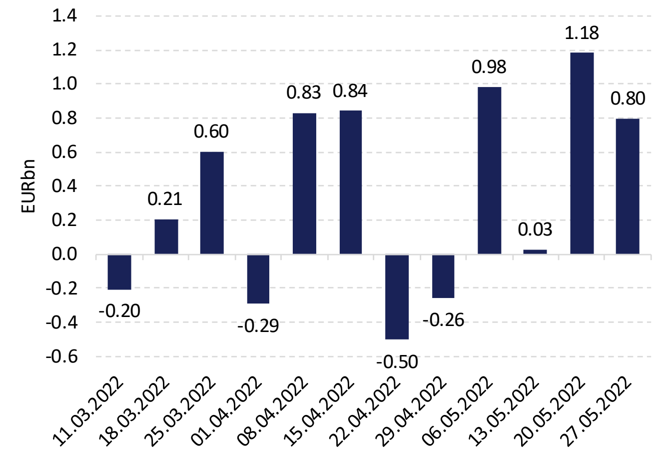


	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23	May-22 - Apr-23	2021	2022	Jan-23 - Apr-23
APP	23,867	16,424	25,834	7,640	44,401	36,993	18,833	15,640	29,260	22,434	42,048	29,692	313,066	247,069	297,726	123,434
PSPP	18,778	12,638	22,304	4,841	34,354	34,003	14,669	12,016	19,469	13,705	32,033	23,376	242,186	188,494	228,491	88,583
CSPP	1,502	1,237	961	96	2,564	674	1,557	1,266	2,899	2,158	3,752	2,217	20,883	17,134	16,785	11,026
CBPP3	1,866	1,582	1,629	2,227	6,873	1,648	2,165	1,485	4,786	5,938	5,631	2,903	38,733	30,143	41,237	19,258
ABSPP	1,721	967	940	476	610	668	442	873	2,106	633	632	1,196	11,264	11,298	11,213	4,567

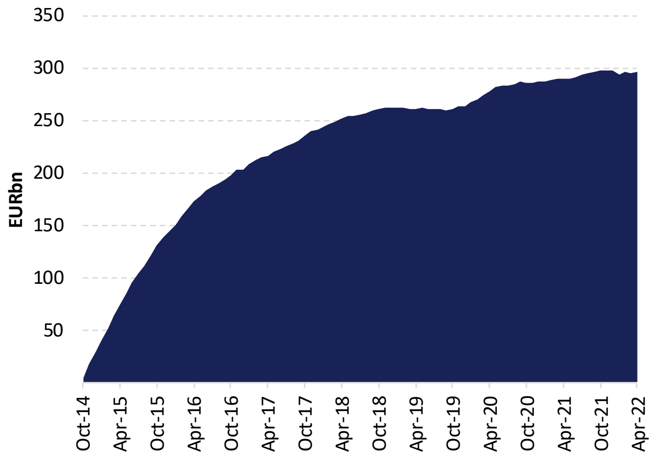
Source: ECB, Bloomberg, NORD/LB Markets Strategy & Floor Research

Covered Bond Purchase Programme 3 (CBPP3)

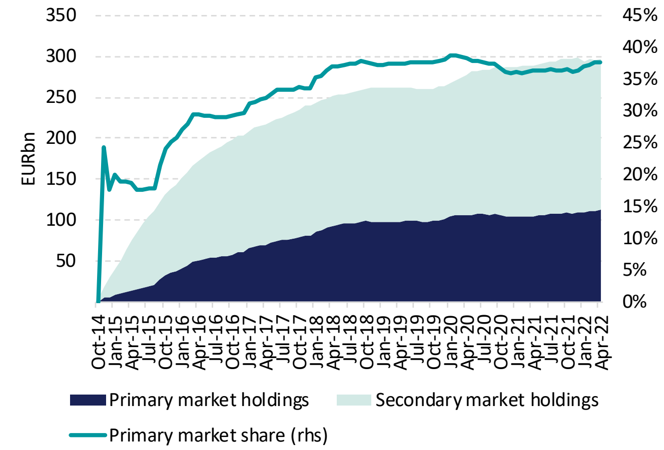
Weekly purchases



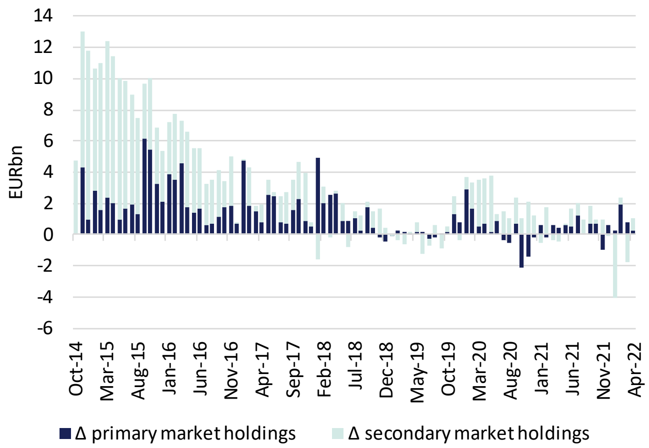
Development of CBPP3 volume



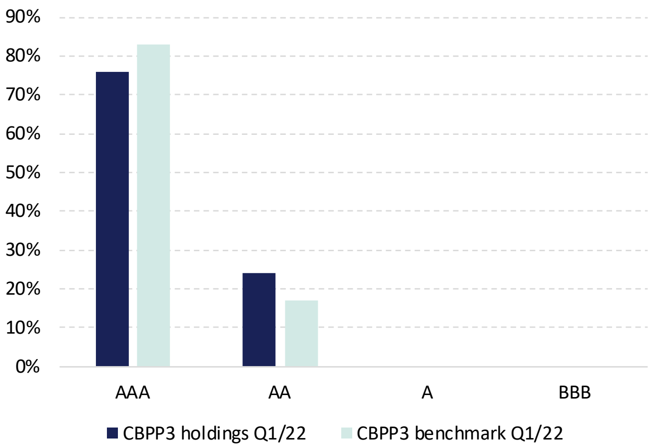
Primary and secondary market holdings



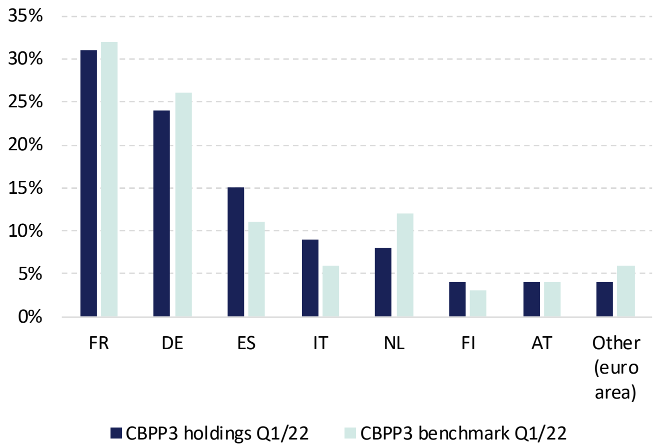
Change of primary and secondary market holdings



Distribution of CBPP3 by credit rating



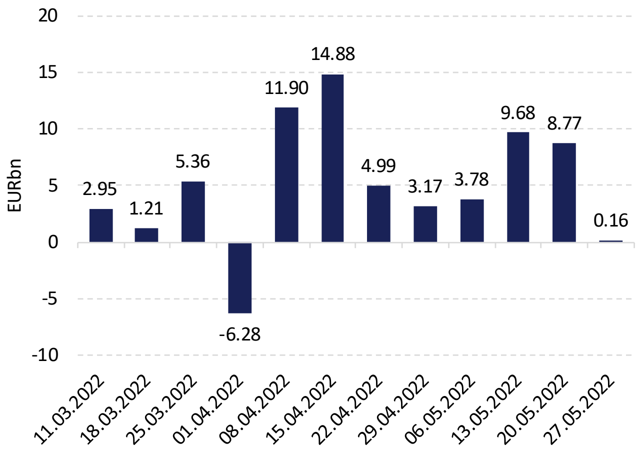
Distribution of CBPP3 by country of risk



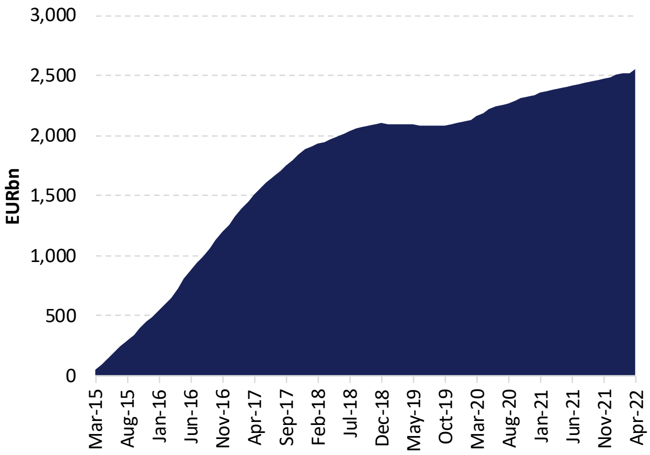
Source: ECB, Bloomberg, NORD/LB Markets Strategy & Floor Research

Public Sector Purchase Programme (PSPP)

Weekly purchases



Development of PSPP volume



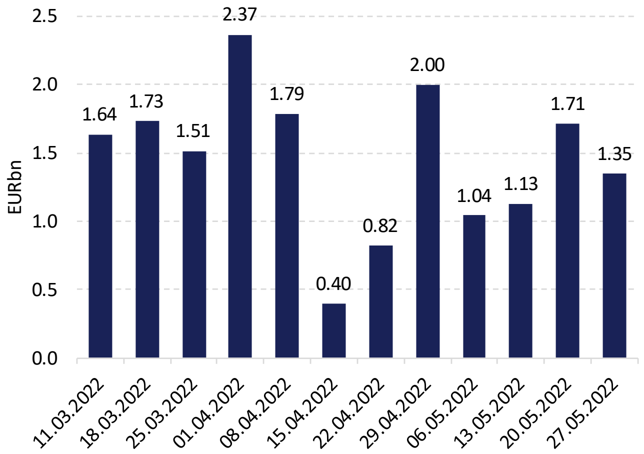
Overall distribution of PSPP buying at month-end

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**

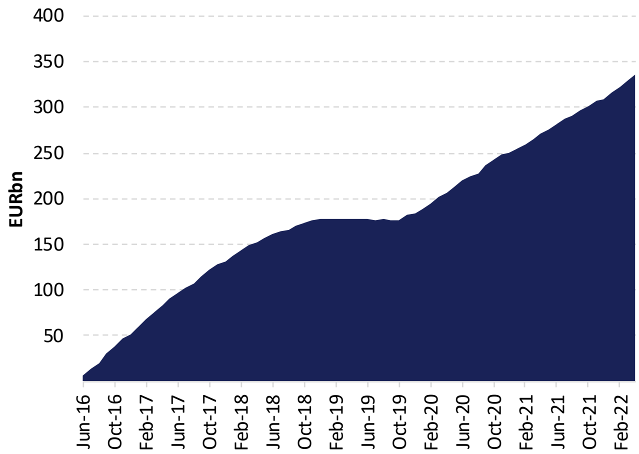
[1] Based on the ECB capital key, adjusted to include supras and the disqualification of Greece
[2] Based on the adjusted distribution key
[3] Weighted average time to maturity of PSPP portfolio holdings
[4] Weighted average time to maturity of the bonds eligible for purchasing under the PSPP
Source: ECB, NORD/LB Markets Strategy & Floor Research

Corporate Sector Purchase Programme (CSPP)

Weekly purchases

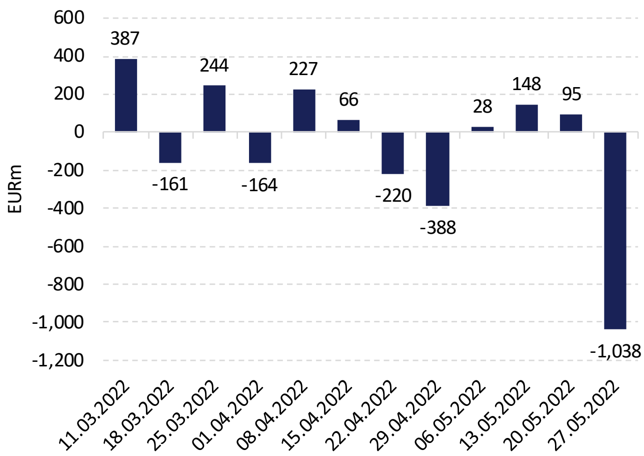


Development of CSPP volume

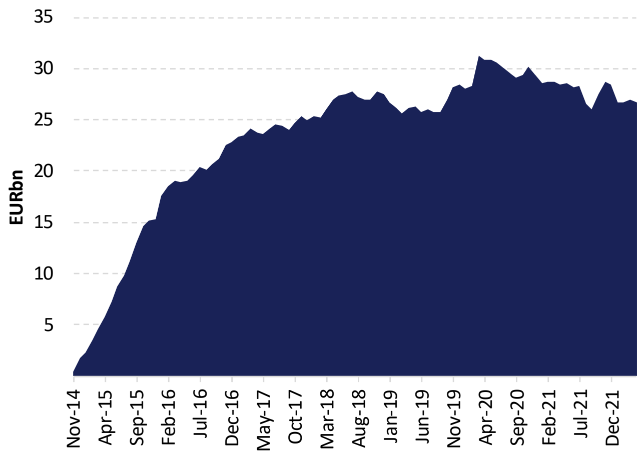


Asset-Backed Securities Purchase Programme (ABSPP)

Weekly purchases



Development of ABSPP volume



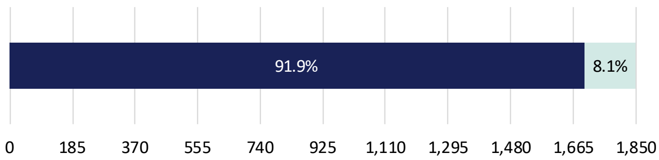
Source: ECB, Bloomberg, NORD/LB Markets Strategy & Floor Research

Pandemic Emergency Purchase Programme (PEPP)

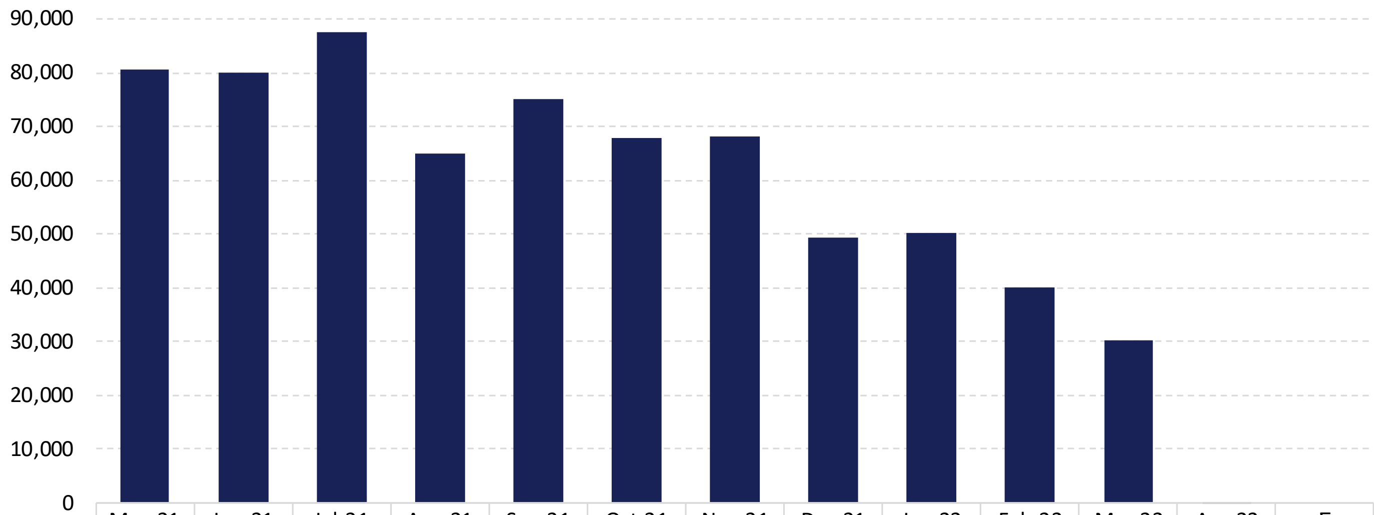
Holdings (in EURm)

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

Invested share of PEPP envelope (in EURbn)

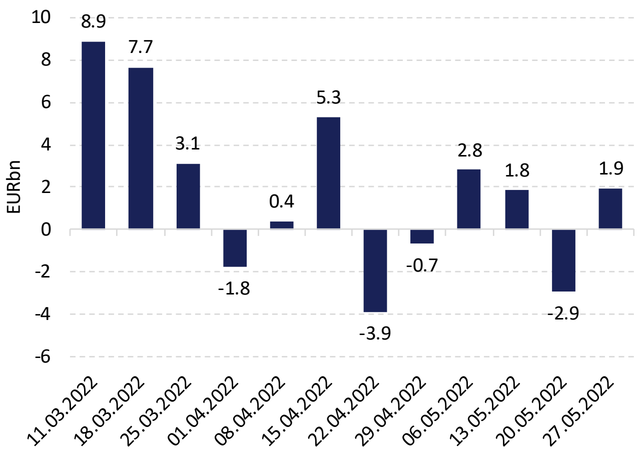


Monthly net purchases (in EURm)

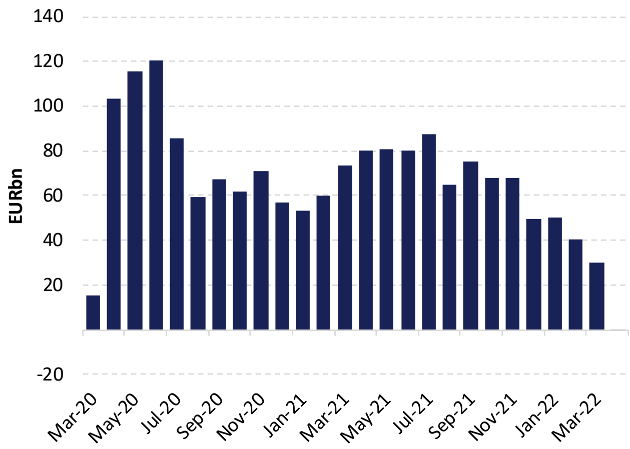


	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22	Apr-22	∑
PEPP	80,700	80,168	87,557	65,050	75,051	67,855	68,045	49,375	50,113	40,184	30,214	-4	694,308

Weekly purchases



Development of PEPP volume

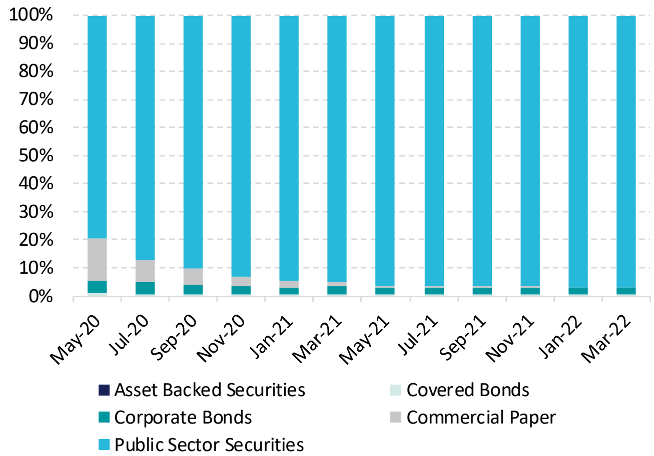


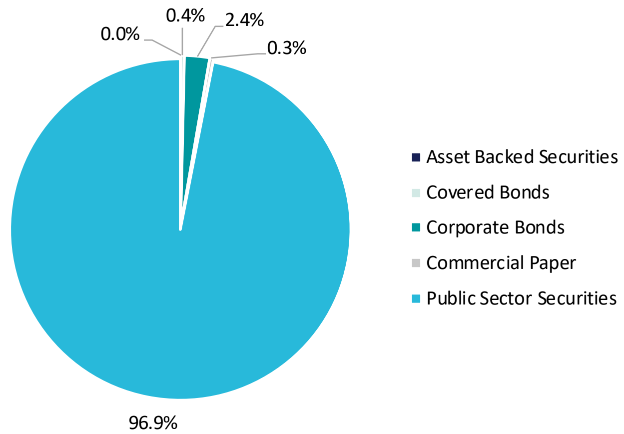
Source: ECB, Bloomberg, NORD/LB Markets Strategy & Floor Research

Holdings under the PEPP (in EURm)

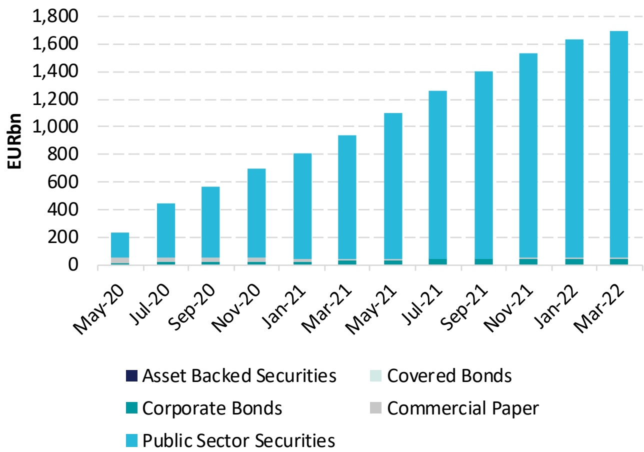
	Asset-backed Securities	Covered Bonds	Corporate Bonds	Commercial Paper	Public Sector Securities	PEPP
Jan-22	0	6,073	40,301	3,857	1,580,547	1,630,779
Mar-22	0	6,067	40,313	5,862	1,644,247	1,696,489
Δ (net purchases)	0	0	+48	+2,007	+68,342	+70,398

Portfolio structure

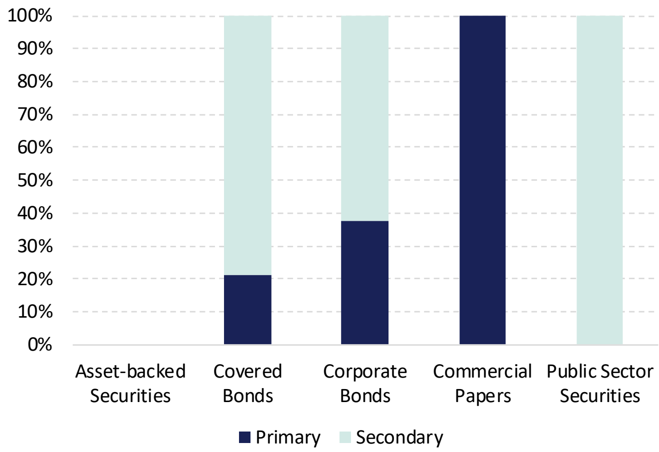




Portfolio development



Share of primary and secondary market holdings



Breakdown of private sector securities under the PEPP

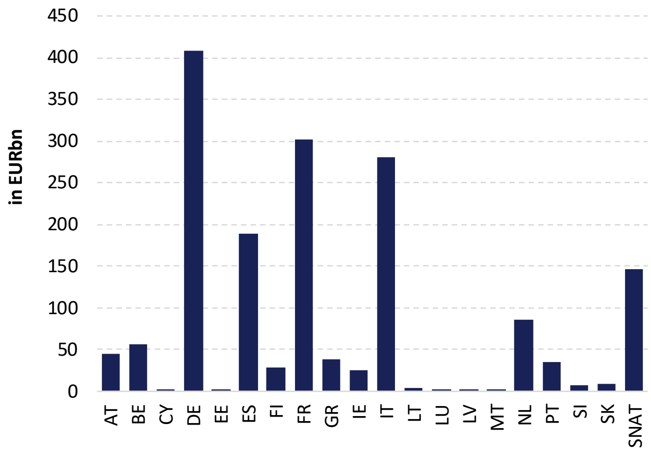
Mar-22	Asset-backed securities		Covered bonds		Corporate bonds		Commercial paper	
	Primary	**Secondary**	**Primary**	**Secondary**	**Primary**	**Secondary**	**Primary**	**Secondary**
Holdings in EURm	0	0	1,298	4,769	15,162	25,151	5,862	0
Share	0.0%	0.0%	21.4%	78.6%	37.6%	62.4%	100.0%	0.0%

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

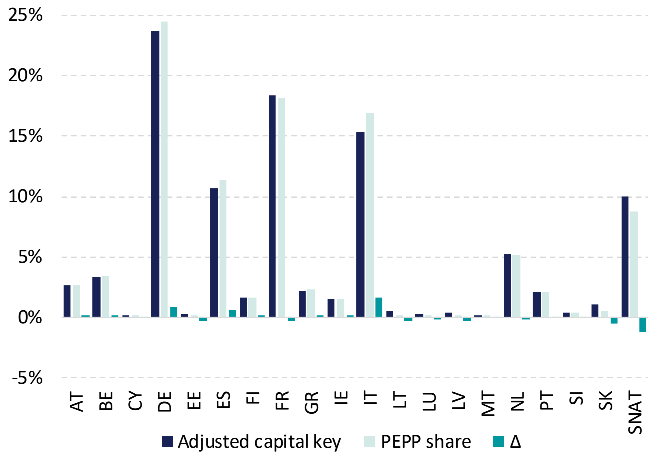
Breakdown of public sector securities under the PEPP

Jurisdiction	Holdings (in EURm)	Adj. distribution key[1]	PEPP share	Deviations from the adj. distribution 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



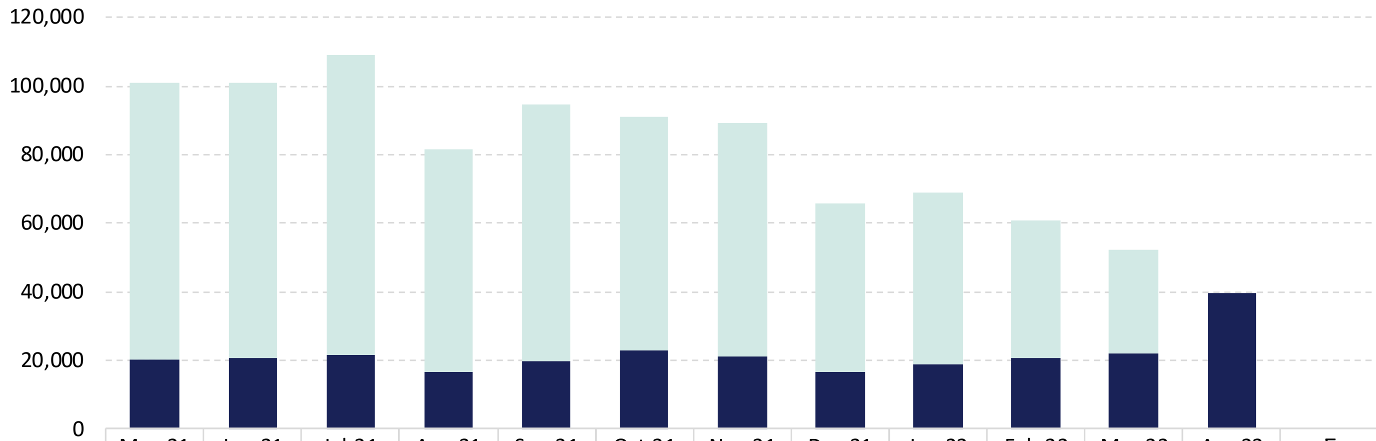
[1] Based on the ECB capital key, adjusted to include supras [2] Based on the adjusted distribution key
[3] Current WAM of public sector securities holdings under the PEPP [4] WAM of eligible universe of public sector securities holdings under the PEPP
Source: ECB, Bloomberg, NORD/LB Markets Strategy & Floor Research

Aggregated purchase activity under APP and PEPP

Holdings (in EURm)

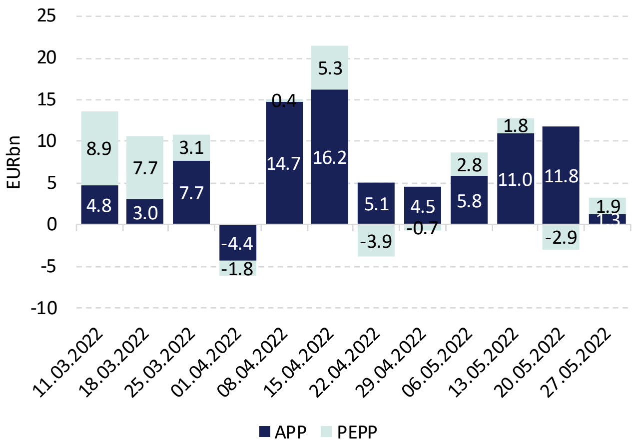
	APP	PEPP	APP & PEPP
Mar-22	3,179,043	1,718,076	4,897,119
Apr-22	3,218,529	1,718,071	4,936,600
Δ	+39,484	-4	+39,480

Monthly net purchases (in EURm)

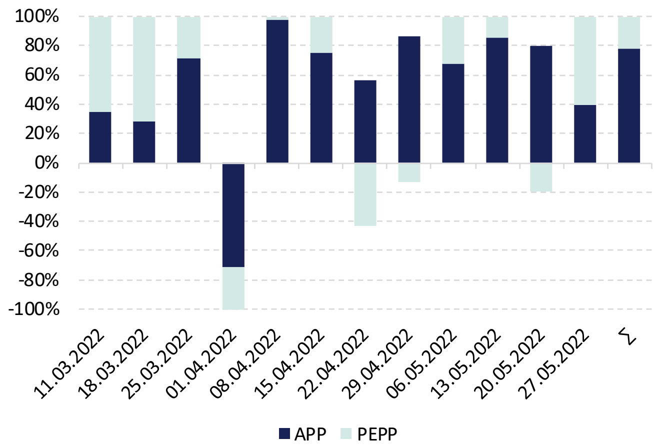


	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22	Apr-22	∑
∑	100,841	100,808	109,154	81,799	94,710	90,872	89,245	65,971	68,951	60,882	52,143	39,480	954,856
PEPP	80,700	80,168	87,557	65,050	75,051	67,855	68,045	49,375	50,113	40,184	30,214	-4	694,308
APP	20,141	20,640	21,597	16,749	19,659	23,017	21,200	16,596	18,838	20,698	21,929	39,484	260,548

Weekly purchases



Distribution of weekly purchases

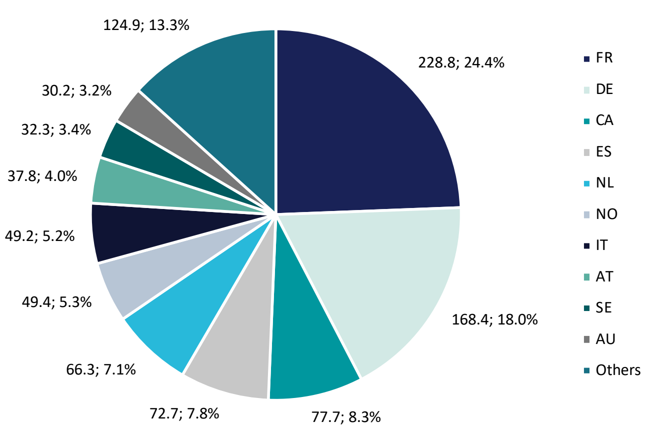


Source: ECB, Bloomberg, NORD/LB Markets Strategy & Floor Research

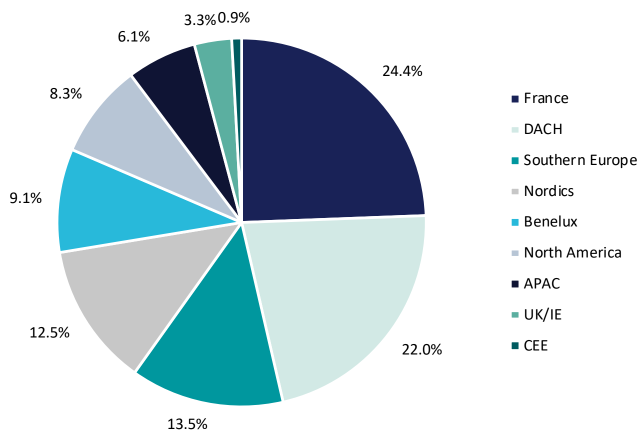
NORD/LB

Charts & Figures
Covered Bonds

EUR benchmark volume by country (in EURbn)



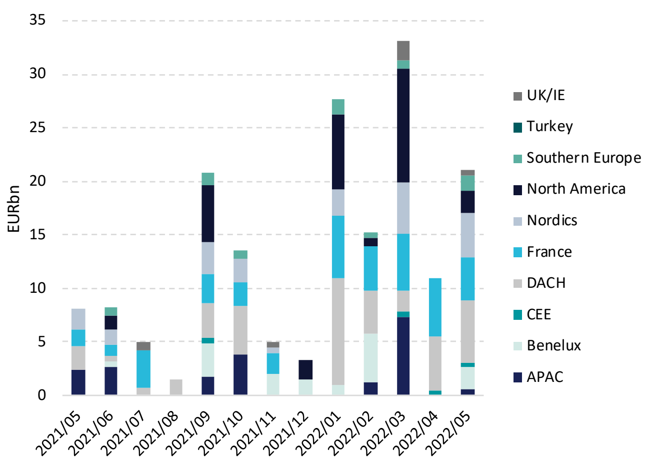
EUR benchmark volume by region (in EURbn)



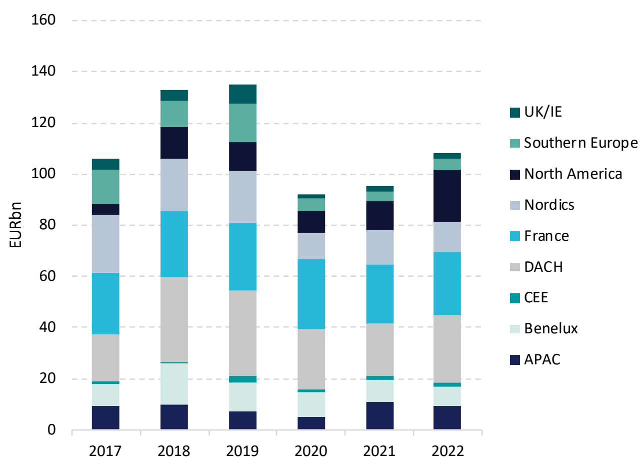
Top-10 jurisdictions

Rank	Country	Amount outst. (EURbn)	No. of BMKs	There of ESG BMKs	Avg. issue size (EURbn)	Avg. initial maturity (in years)	Avg. mod. Duration (in years)	Avg. coupon (in %)
1	FR	228.8	219	14	0.95	10.0	5.6	0.83
2	DE	168.4	244	19	0.63	8.4	4.5	0.45
3	CA	77.7	61	0	1.23	5.9	3.2	0.29
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	49.4	58	9	0.85	7.5	4.1	0.40
7	IT	49.2	59	2	0.80	9.2	4.2	1.25
8	AT	37.8	69	3	0.54	9.5	6.1	0.60
9	SE	32.3	38	0	0.85	7.5	3.5	0.51
10	AU	30.2	31	0	0.97	8.2	4.0	0.88

EUR benchmark issue volume by month

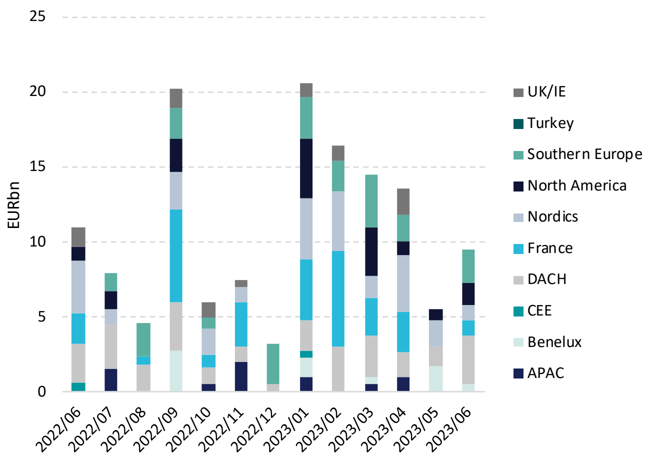


EUR benchmark issue volume by year

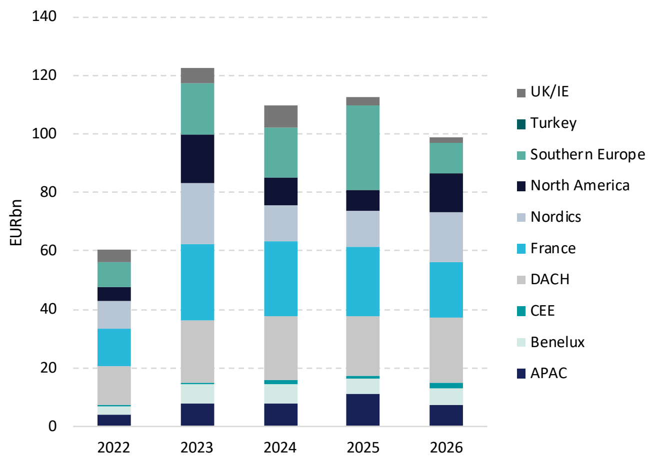


Source: Market data, Bloomberg, NORD/LB Markets Strategy & Floor Research

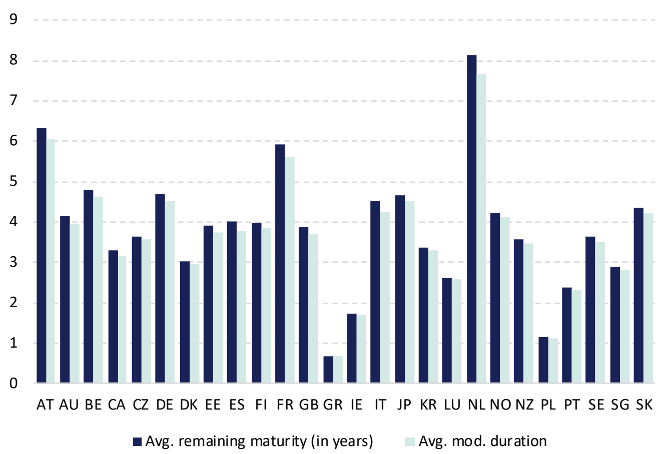
EUR benchmark maturities by month



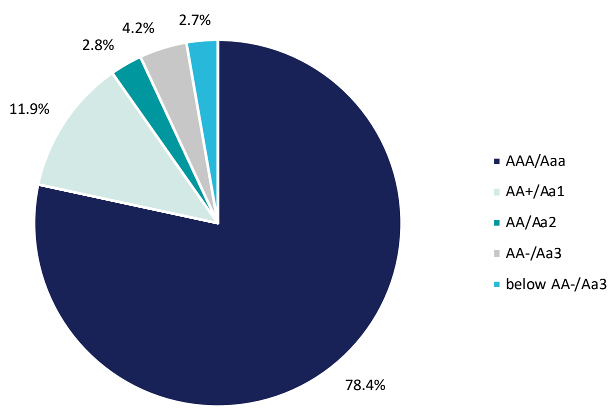
EUR benchmark maturities by year



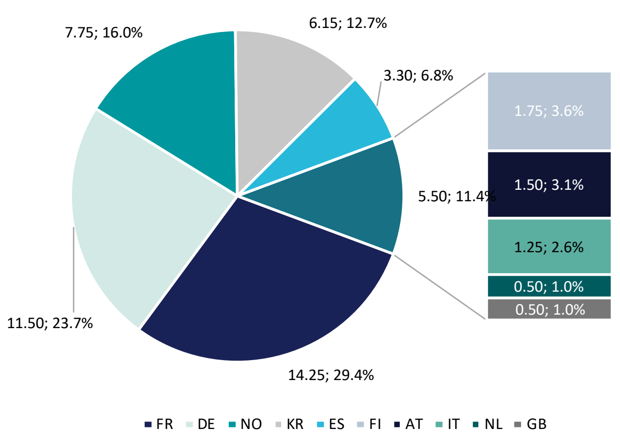
Modified duration and time to maturity by country



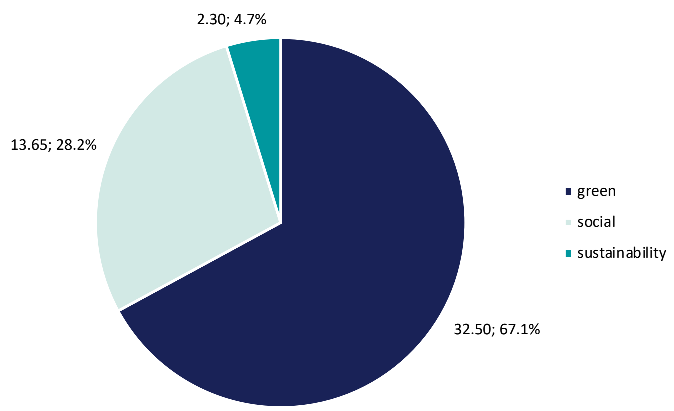
Rating distribution (volume weighted)



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

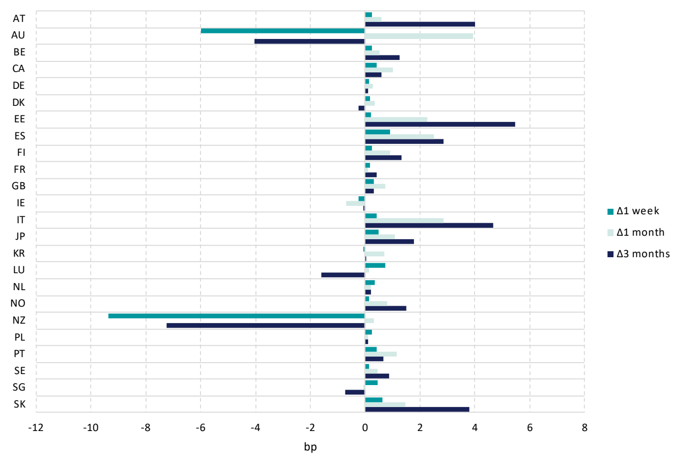


EUR benchmark volume (ESG) by type (in EURbn)

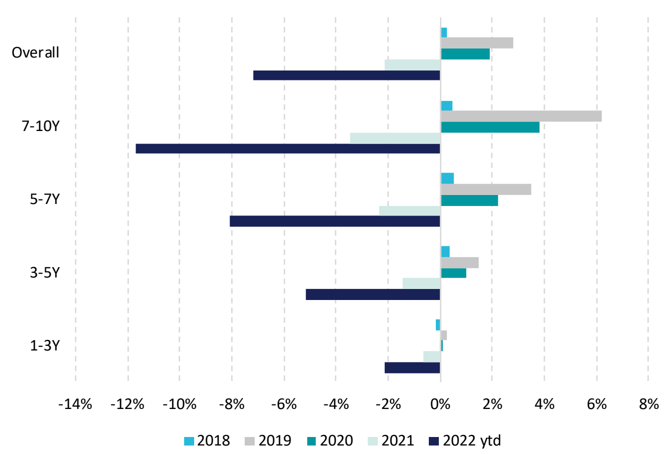


Source: Market data, Bloomberg, NORD/LB Markets Strategy & Floor Research

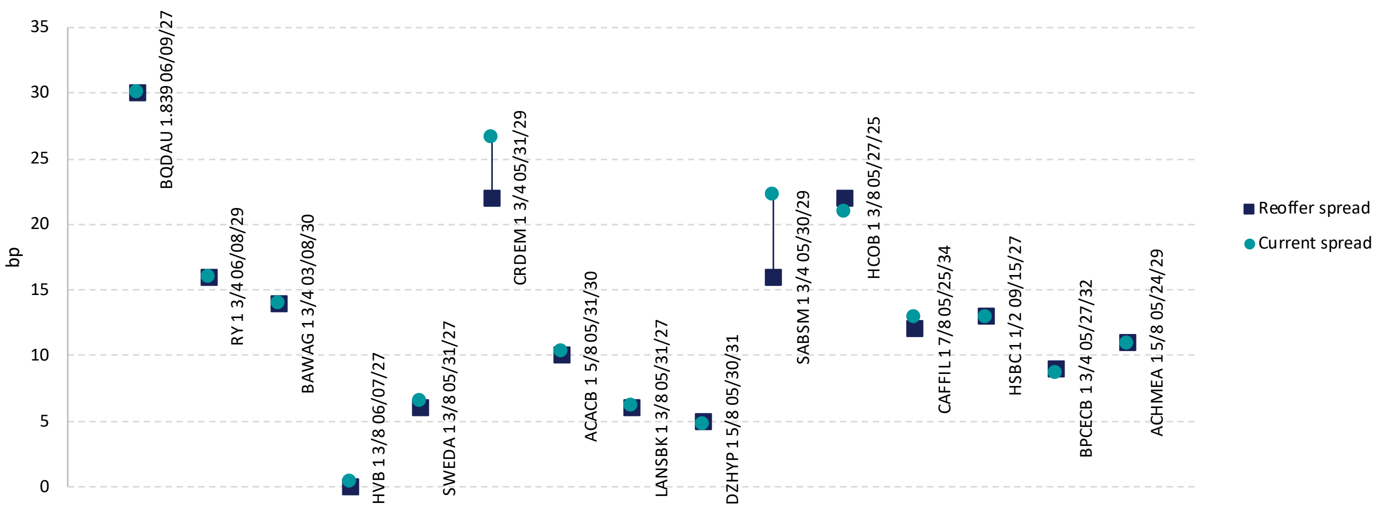
Spread development by country



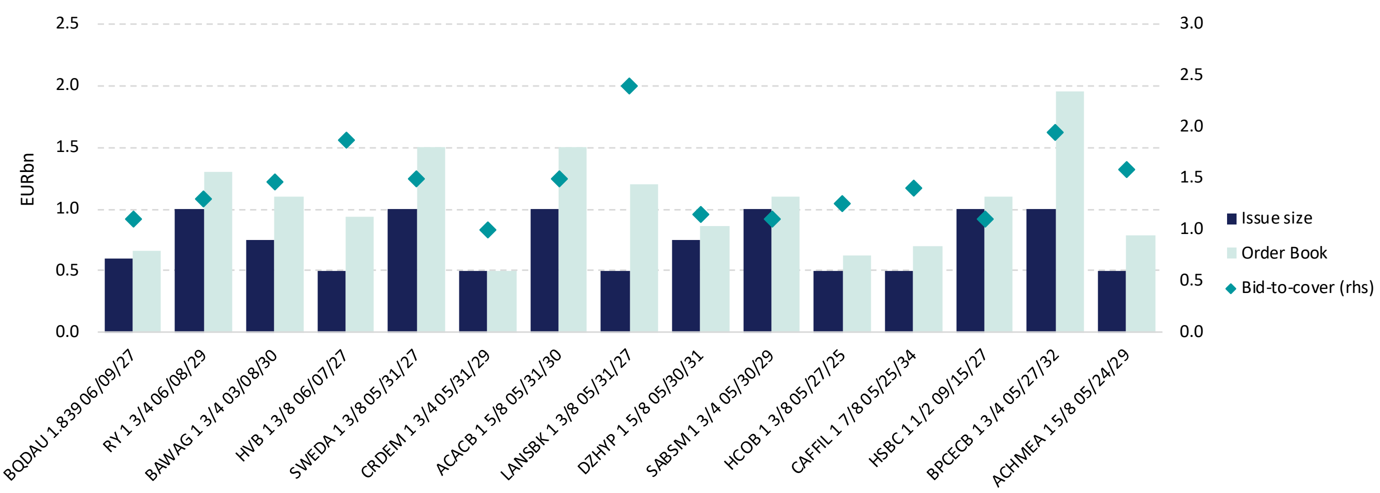
Covered bond performance (Total return)



Spread development (last 15 issues)



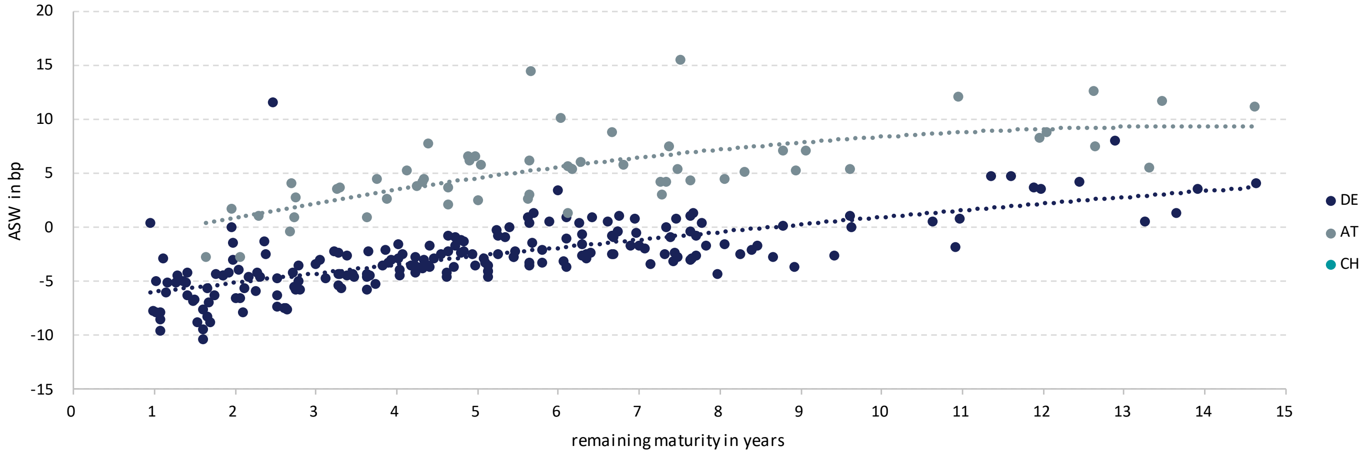
Order books (last 15 issues)



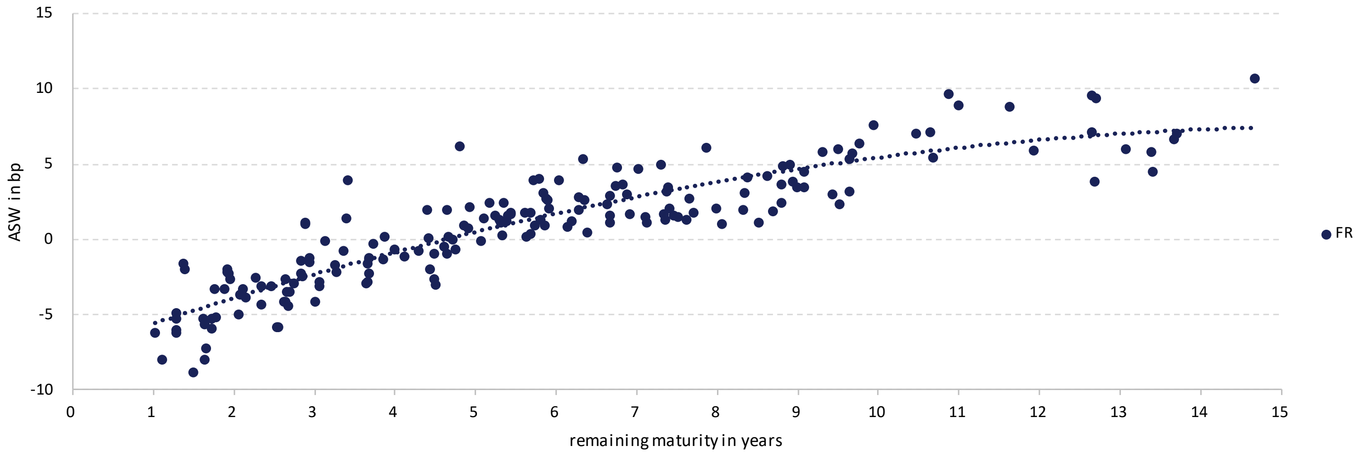
Source: Market data, Bloomberg, NORD/LB Markets Strategy & Floor Research

Spread overview[1]

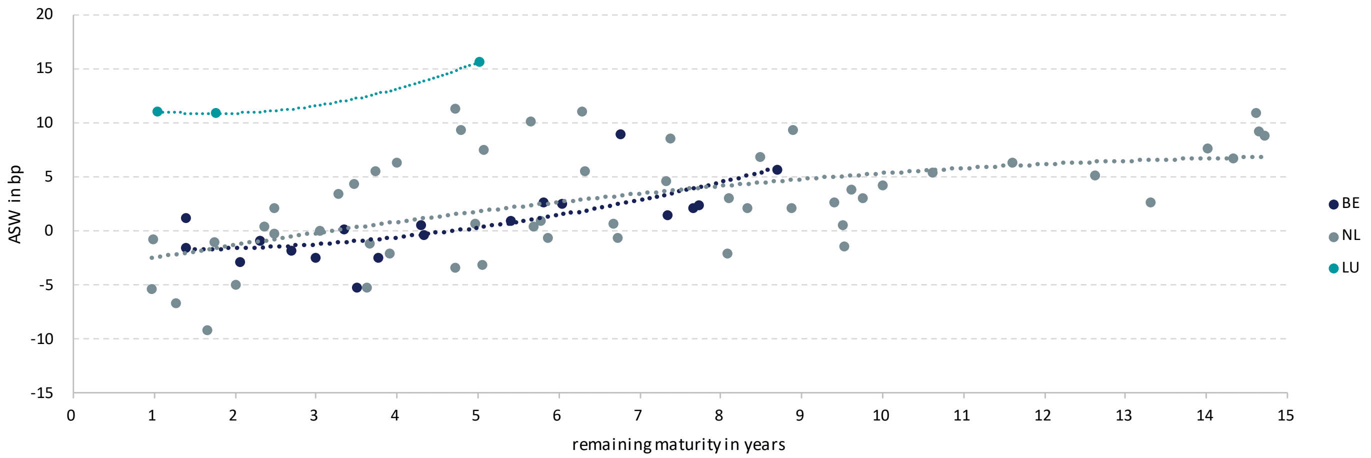
DACH



France

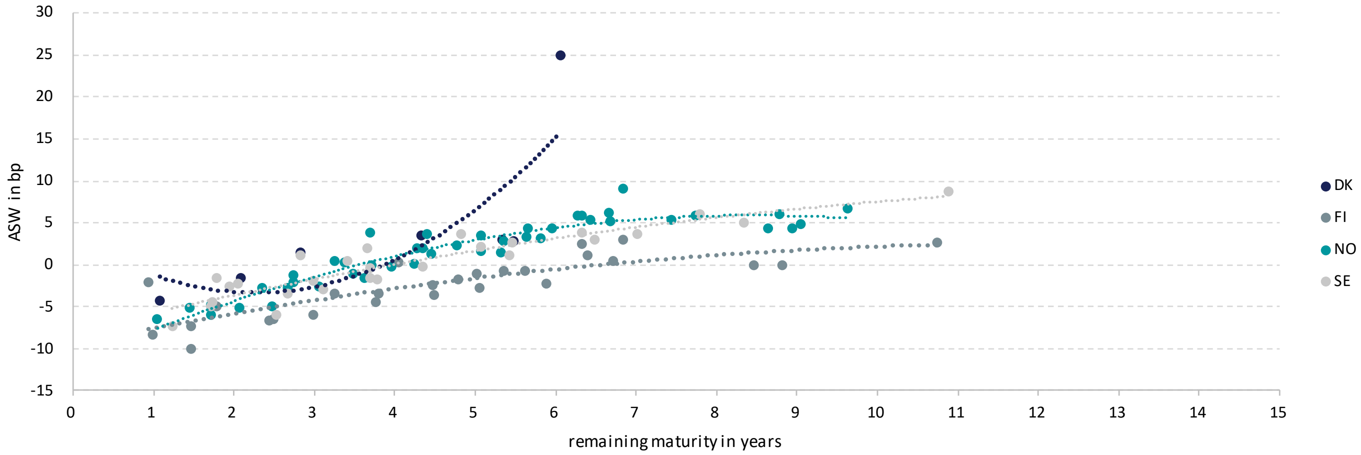


Benelux

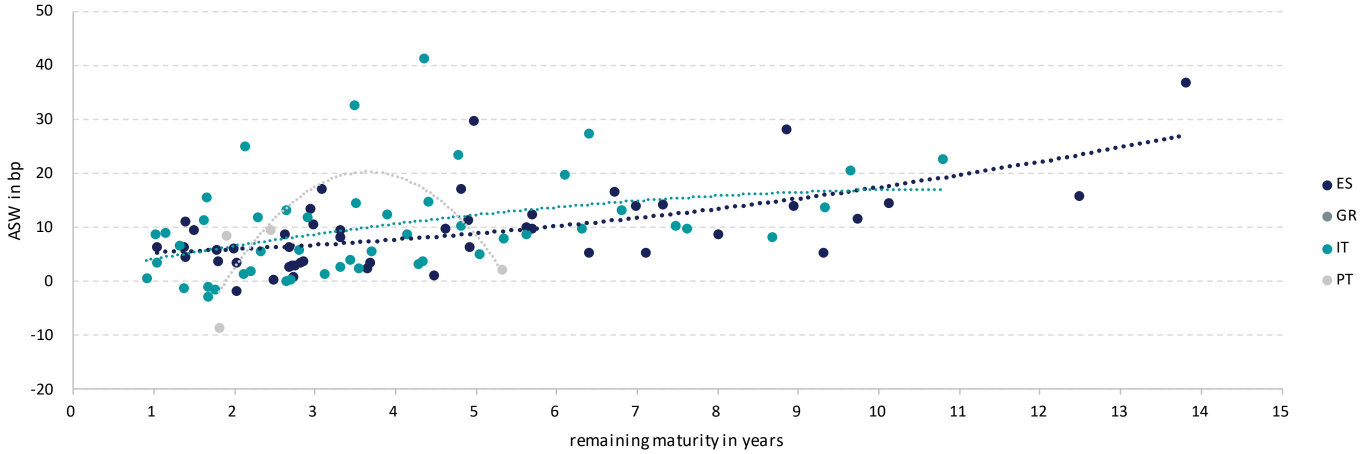


Source: Market data, Bloomberg, NORD/LB Markets Strategy & Floor Research [1]Time to maturity 1 ≤ y ≤ 15

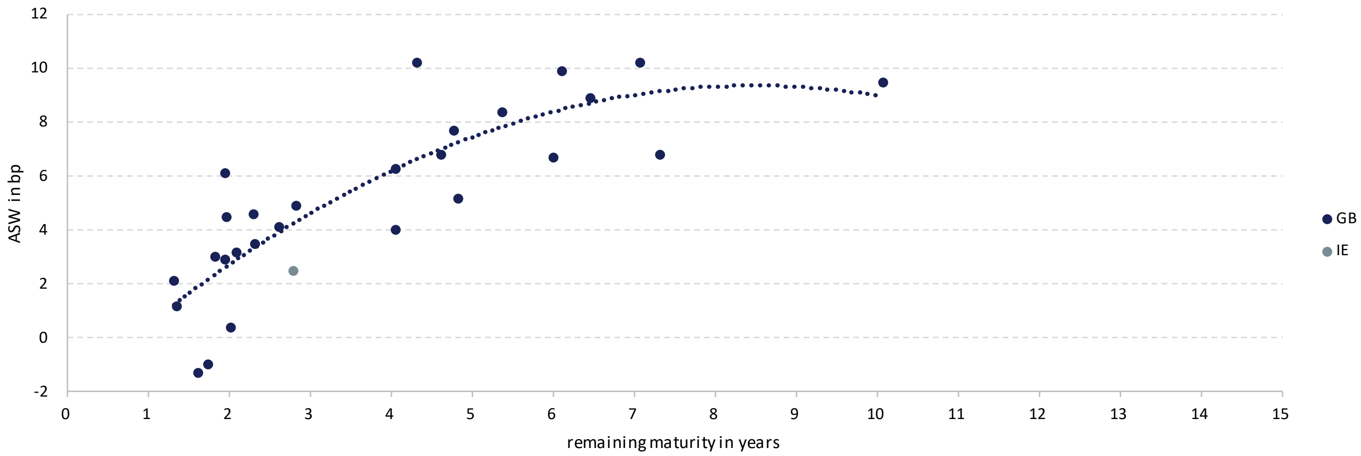
Nordics



Southern Europe

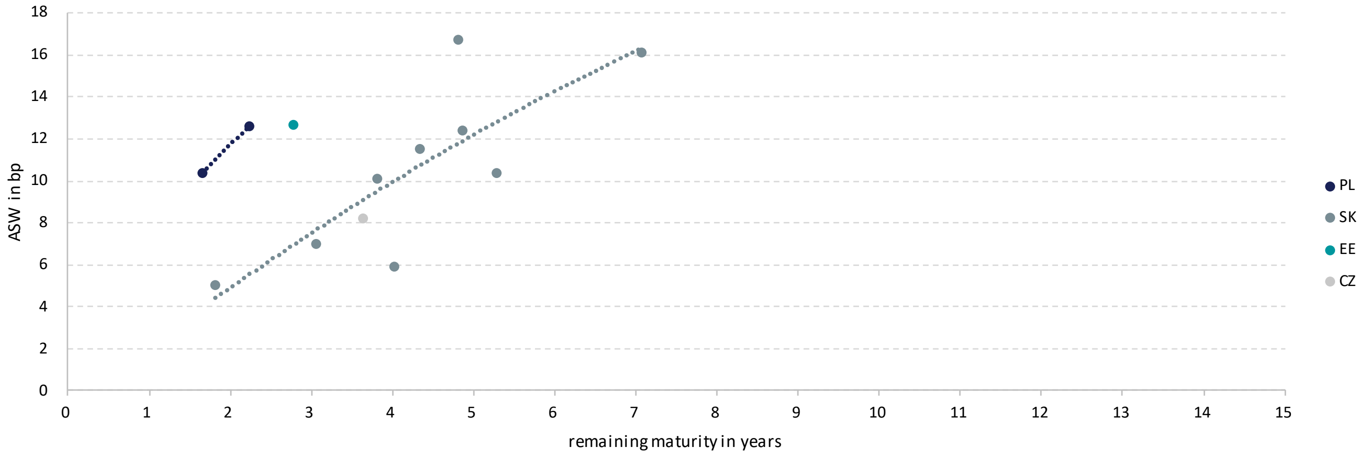


UK/IE

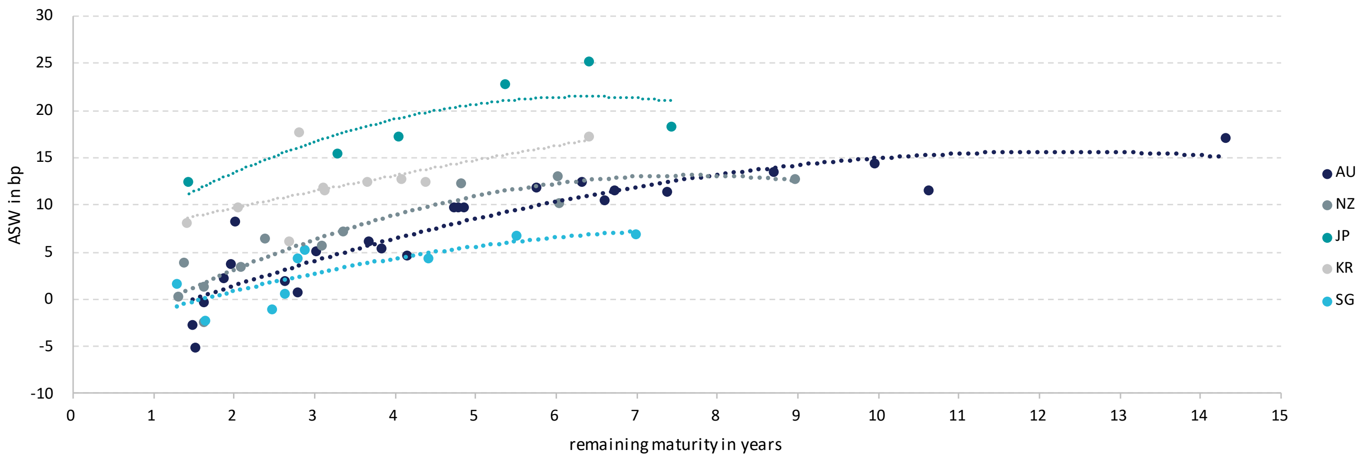


Source: Market data, Bloomberg, NORD/LB Markets Strategy & Floor Research

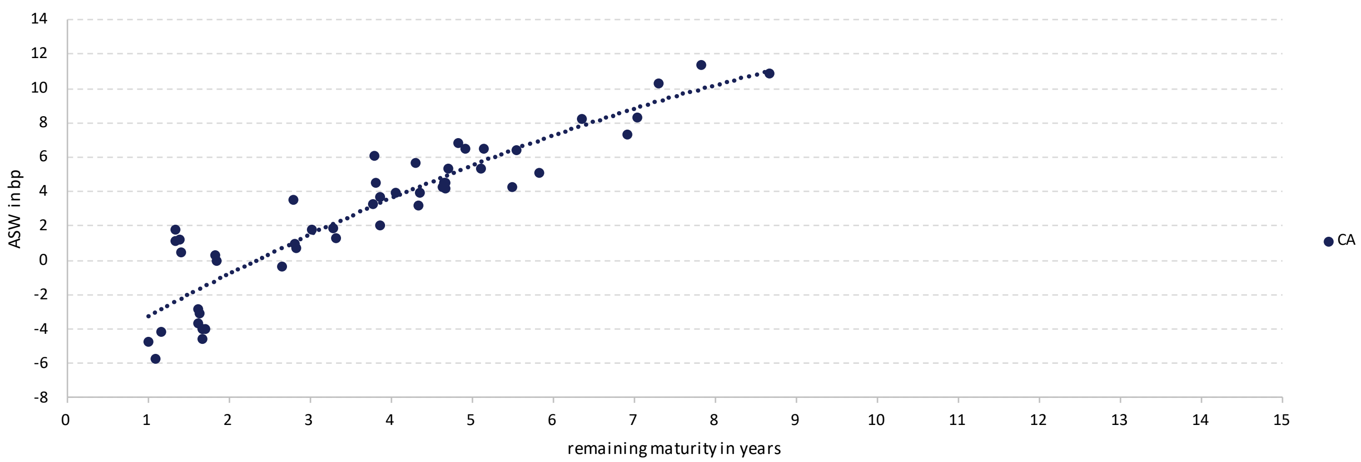
CEE



APAC



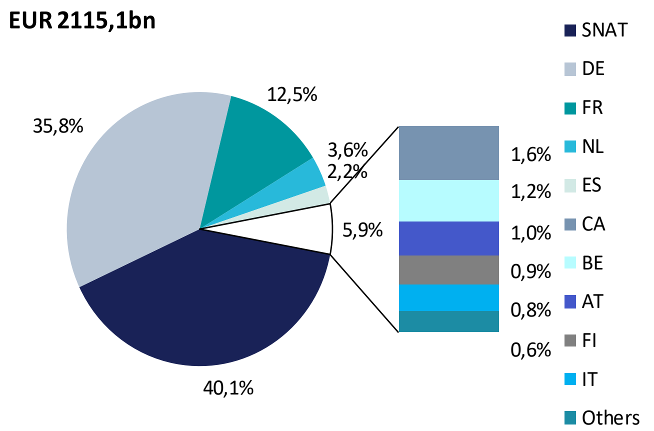
North America



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

Charts & Figures
SSA/Public Issuers

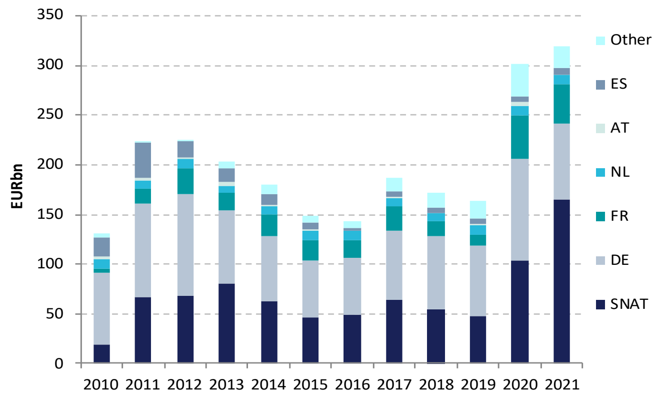
Outstanding volume (bmk)



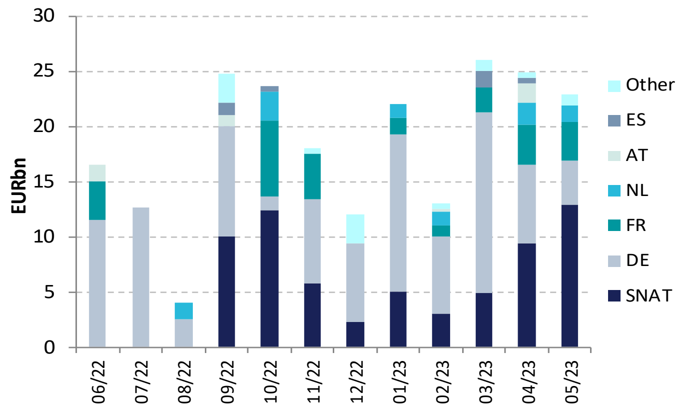
Top 10 countries (bmk)

Country	Vol. (€bn)	No. of bonds	ØVol. (€bn)	Vol. weight. ØMod. Dur.
SNAT	847,5	207	4,1	8,4
DE	757,1	570	1,3	6,8
FR	263,4	177	1,5	6,6
NL	76,0	68	1,1	6,7
ES	45,8	59	0,8	5,1
CA	33,2	22	1,5	5,0
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	16,0	19	0,8	5,4

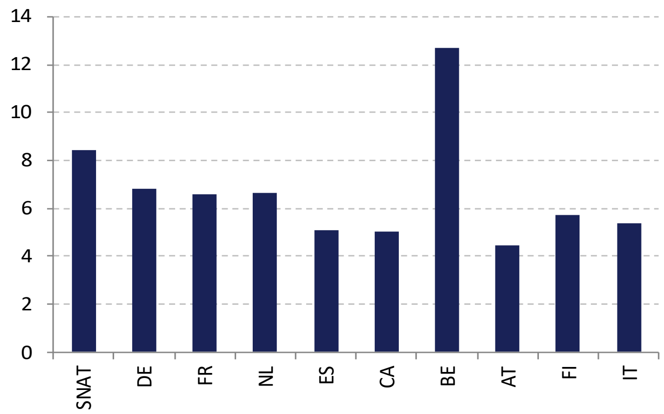
Issue volume by year (bmk)



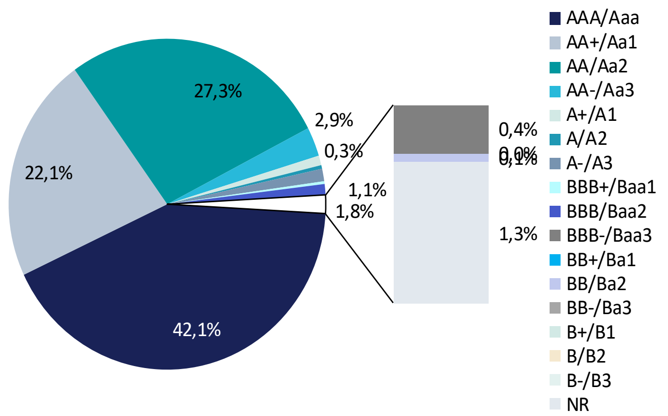
Maturities next 12 months (bmk)



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

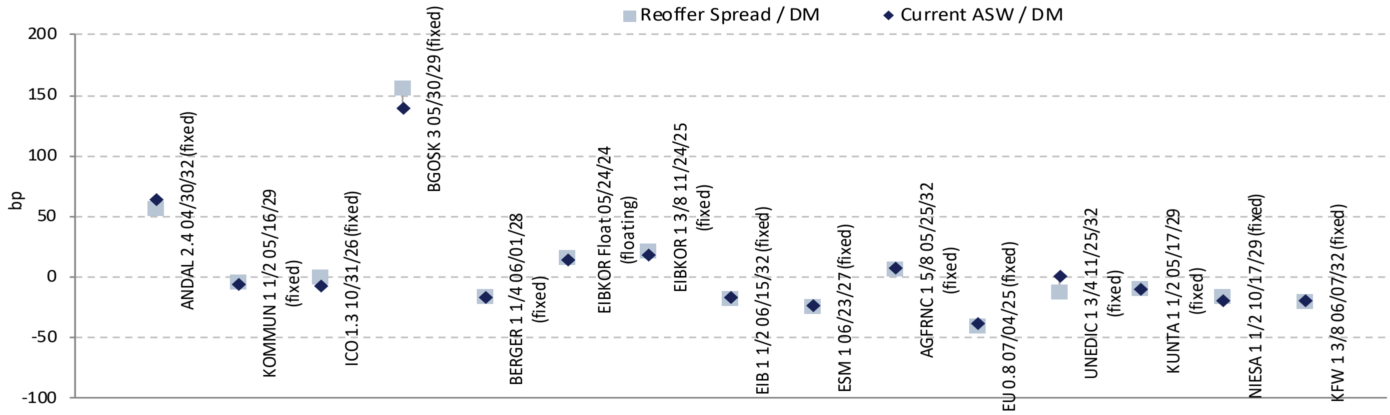


Rating distribution (vol. weighted)

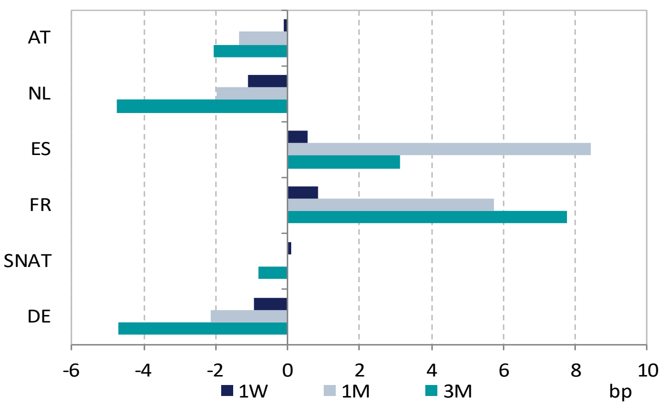


Source: Bloomberg, NORD/LB Markets Strategy & Floor Research

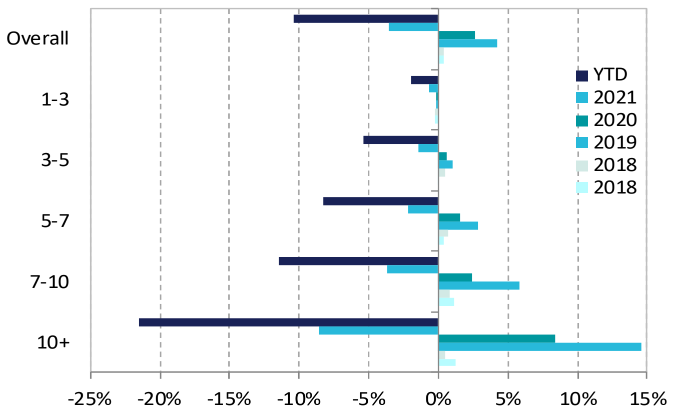
Spread development (last 15 issues)



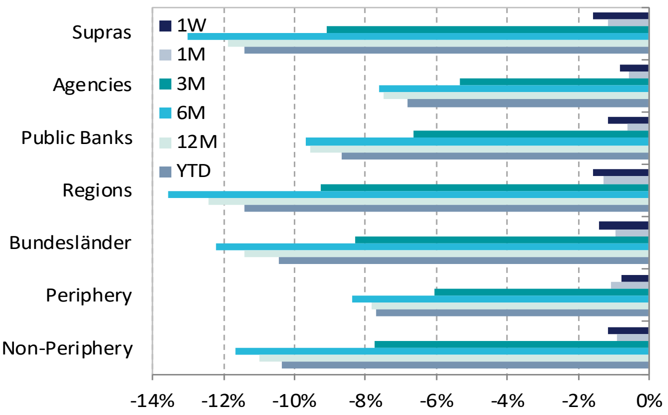
Spread development by country



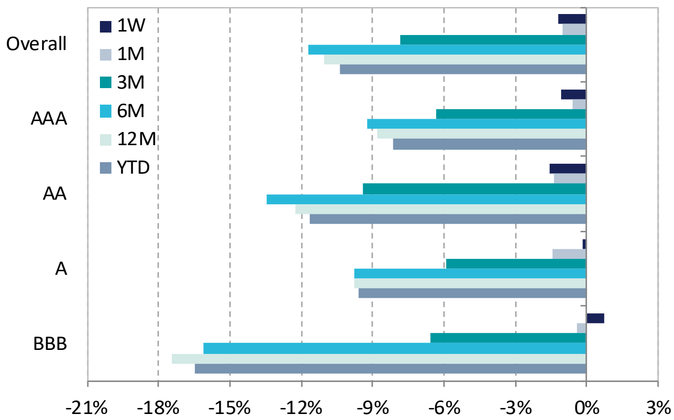
Performance (total return)



Performance (total return) by regions

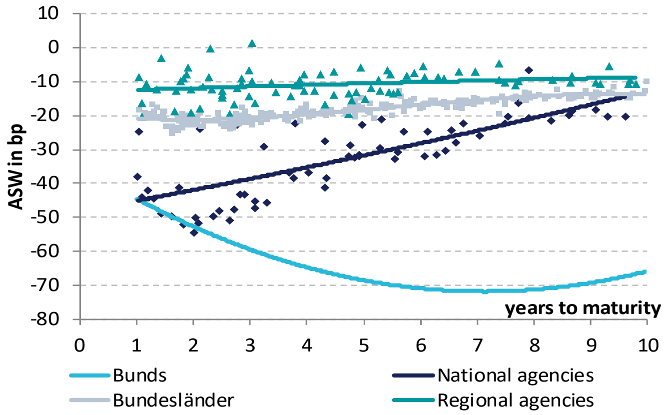


Performance (total return) by rating

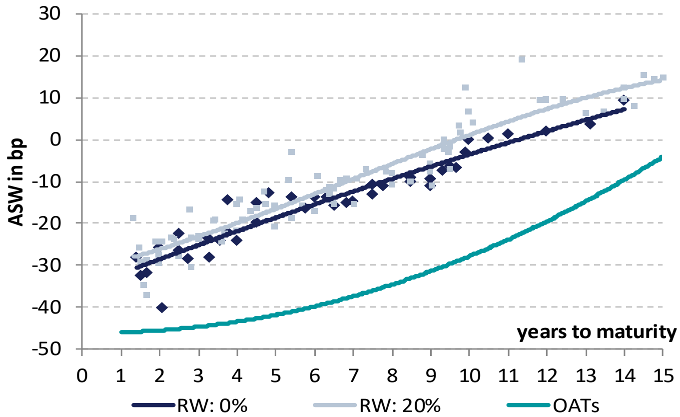


Source: Bloomberg, NORD/LB Markets Strategy & Floor Research

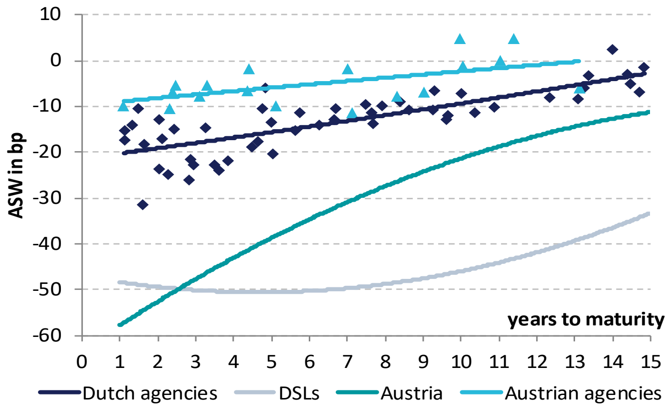
Germany (by segments)



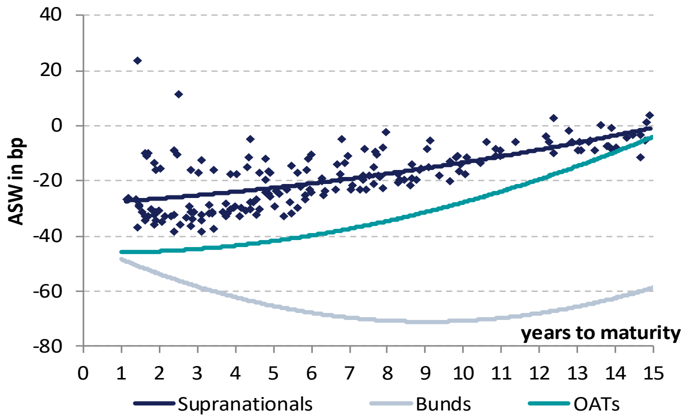
France (by risk weight)



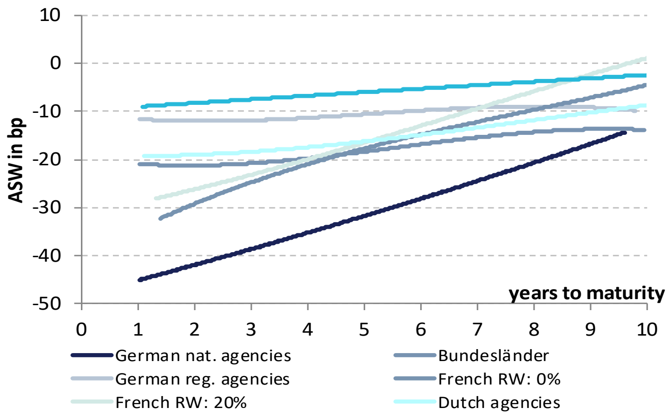
Netherlands & Austria



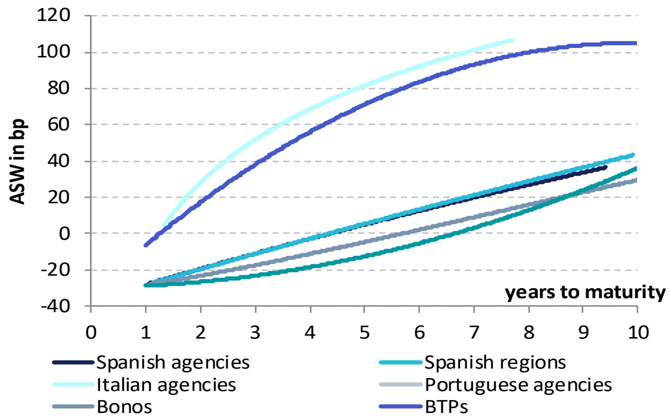
Supranationals



Core



Periphery



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

Appendix
Overview of latest Covered Bond & SSA View editions

Publication	Topics
18/2022 ♦ 25 May	▪ Transparency requirements §28 PfandBG Q1 2022 ▪ ESG: EUR-benchmarks 2022 in the SSA segment (ytd)
17/2022 ♦ 18 May	▪ Development of the German property market ▪ The SSA market in 2022 a review of the first four months
16/2022 ♦ 11 May	▪ Focus on covered bond jurisdictions: a look at Austria ▪ Update on DEUSTD – Joint German cities (bond No. 1)
15/2022 ♦ 04 May	▪ Focus on covered bond jurisdictions: Spotlight on Sweden ▪ 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	▪ 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
09/2022 ♦ 09 March	▪ Transparency requirements § 28 PfandBG Q4/2021 ▪ Issuer Guide SSA 2022: The Dutch agency market
08/2022 ♦ 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
07/2022 ♦ 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)
06/2022 ♦ 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
05/2022 ♦ 09 February	▪ ECB: full speed, throttling, U-turn – or wrong turn? ▪ Insurance companies as covered bond investors: the bank-insurer nexus
04/2022 ♦ 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

NORD/LB:
Markets Strategy & Floor Research

NORD/LB:
Covered Bond Research

NORD/LB:
SSA/Public Issuer Research

Bloomberg:
RESP NRDR <GO>

NORD/LB

Appendix
Publication overview

Covered Bonds:

Issuer Guide Covered Bonds 2021

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

Transparency requirements §28 PfandBG (quarterly update)

Covered bonds as eligible collateral for central banks

SSA/Public Issuers:

Issuer Guide – German Laender 2021

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)

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

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Sales MM/FX	+49 511 9818-9460
Sales Europe	+352 452211-515

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

Origination & Syndicate

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

Sales Wholesale Customers

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

Treasury

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Liquidity Management	+49 511 9818-9620 +49 511 9818-9650

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