Covered Bond & SSA View

NORD/LB Markets Strategy & Floor Research

9 March 2022 ♦ 09/2022

Investment strategy recommendation and marketing communication

(see disclaimer on the last pages)

Agenda

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Market overview
Covered Bonds

Authors: Melanie Kiene, CIIA // Dr Frederik Kunze

Primary market: issuers utilise "stop and go" issuance window

This year, it is issuers from Canada, in particular, who are playing havoc with our short-term and medium-term forecasts. However, we would like to emphasise that we are by no means unhappy about this fact. Only last week we stated that it was our expectation the primary market would be opened by a "major core EMU issuer", focusing on the maturity range between five and seven years. What actually transpired was a hugely successful deal by the Canadian Imperial Bank of Commerce (CIBC) with a maturity of four years. The EUR benchmark was placed on the market with an initial guidance in the region of ms +10bp. As part of the book-building process, the final reoffer spread narrowed by four basis points to ms +6bp. With a volume of EUR 2.5bn, this was the largest covered bond ever placed by this issuer. It had to offer a new issue premium (NIP) of just two basis points. The bond was mostly allocated to accounts in Germany/Austria (30%), followed by the APAC region (21%), the Nordics (13%) as well as the UK/Ireland and the Benelux countries (both 12%). Given the bond was not eligible for purchase under the CBPP3, the 36% share of the bond allocated to the Central Banks/OI category was also striking, larger than that allocated to banks (31%) and fund managers (27%). We assume that a significant portion of the Central Banks/OI category is due to the high allocation of accounts in Asia, although central banks outside the Eurosystem (including Norges Bank and SNB) as well as well-known supranational institutions are likely to have come into play as well. Despite the CIBC deal, no other institutions initially appeared on the market over the following two trading days on account of the geopolitical situation and conflict in Ukraine. However, on Tuesday – two days before tomorrow's ECB meetings – no less than four issuers from four jurisdictions entered the market. First, Australia's ANZ announced an even shorter EUR benchmark with a term of three years. The second deal from Down Under this year started the marketing phase in the region of ms +12bp and was ultimately placed at ms +7bp with a volume of EUR 1.75bn. Shortly after, the Bank of Nova Scotia (BNS), another Canadian bank, announced a primary market presence and opened the books for a further benchmark deal with a short maturity (4y) in the region of ms +12bp. The deal worth EUR 2bn was priced at ms +10bp. The EMU core jurisdictions we previously touted also produced deals in the open issue window. As such, the overseas deals were followed by both Commerzbank's mortgage Pfandbrief (5y) and a EUR benchmark (6y) from Cie de Financement Foncier (CFF). Commerzbank was able to place its Pfandbrief of an impressive EUR 1.5bn at ms +4bp at the lower end of the specified range (guidance: ms +4/+6bp WPIR), while CFF ultimately set the re-offer spread for its bond of EUR 1.25bn at ms +6bp, having started the marketing phase in the region of ms +10bp. The example of Commerzbank certainly demonstrates a certain repricing of the market. Consequently, the secondary curve was at a level of ms -2bp. Nevertheless, it is not uncommon for spreads to be made wider by the "first movers" in these market phases. Moving forwards, it will now depend on how subsequent issuers appeal to the market.

Issuer	Country	Timing	ISIN	Maturity	Size	Spread	Rating	ESG
CFF	FR	08.03.	FR00140095D5	6.0y	1.25bn	ms +6bp	- / Aaa/ AAA	-
Commerzbank	DE	08.03.	DE000CZ45W16	5.0y	1.50bn	ms +4bp	- / Aaa/ -	-
BNS	CA	08.03.	XS2457002538	4.0y	2.00bn	ms +10bp	AAA / Aaa / -	-
ANZ	AU	08.03.	XS2456253082	3.0y	1.75bn	ms +7bp	AAA / Aaa / -	-
CIBC	CA	03.03.	XS2454011839	4.0y	2.50bn	ms +6bp	AAA / Aaa / -	-

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

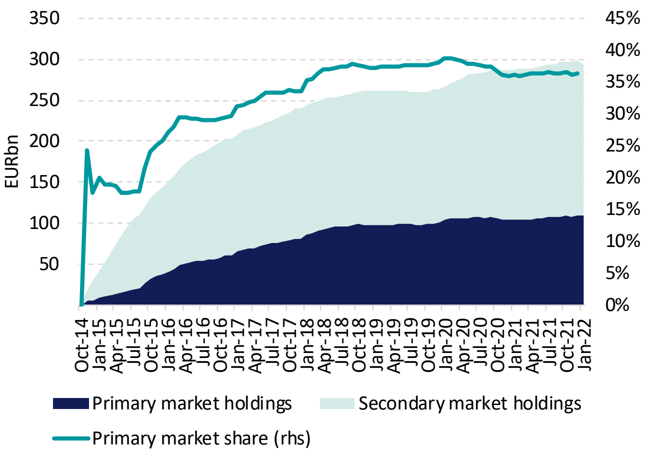
Market is receptive: situation remains more than just tense

We would even go so far as to say that the selected maturities also display a minimisation of the execution risk for the new benchmarks and therefore speak for a defensive approach from the issuers in addition to the guidance requirements. The new issue premiums also reflect this (average NIP for the last four deals: +5bp). Nevertheless, the abundance of deals and issuers also indicates that the market is open. Accordingly, we expect follow-up deals in the coming days. Overall, the geopolitical situation remains incredibly tense. It is not only for this reason that we expect the secondary market to be less dynamic in the coming days, as some investors are also likely to wait for further primary market appearances before making their moves.

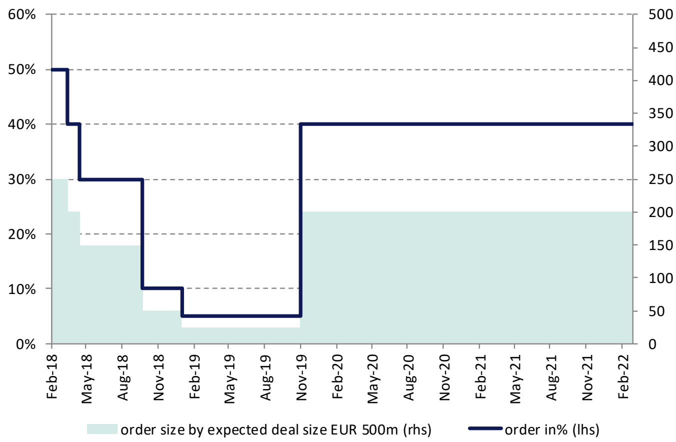
ECB meeting on Thursday: what can we expect for the covered bond market?

The current drama owing to the geopolitical situation, with its multidimensional shockwaves on price developments, the economy and financial stability, also increases uncertainty as to which monetary policy path the ECB will have to follow in the short, medium and long term and what decisions will be taken by the ECB Governing Council. In the short term, we would actually speak of uncertainty rather than instability. Looking at the further course of events, what probabilities should the ECB Governing Council be working with? In this respect and in relation to tomorrow's ECB meeting, there is a great deal to be said for the fact that the trend-setting decisions originally envisaged or initially generally expected by market players are likely to be at a disadvantage compared to the emphasis on flexibility. Conversely, monetary policy decision-makers may also want to send a strong signal to ensure financial stability in the common currency area, as they did in times of extremely high uncertainty in the wake of the outbreak of the COVID-19 pandemic. This approach would then even suggest the potential announcement of new monetary policy instruments or programmes. Overall, this broadens the range of possible responses and therefore also the effects on bond markets in general and on covered bond spreads, in particular. In the medium term, an ECB announcement could further intensify the battle against inflation. Low purchases of covered bonds under the CBPP3 as an indication of the impact on the primary and secondary markets would also be reflected in spread widening. However, placing greater emphasis on financial market stability in the short term might trigger an expansionary stimulus in monetary policy, which would tend to provide a boost to spreads. However, the double-edged sword of new TLTRO tenders could then also intervene in the supply structure on the EUR benchmark segment, which we would not see as our baseline scenario, to a certain extent on account of our own wishful thinking. As a minimum, the central bankers will need to assess the current situation in the context of their statement at the press conference. In our opinion, the further course of the APP will play a significant role at least in the medium term, as we outlined last week in our cross asset article and included again in the market overview for public issuers in this present edition of our weekly publication.

CBPP3 trend



ECB order behaviour



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

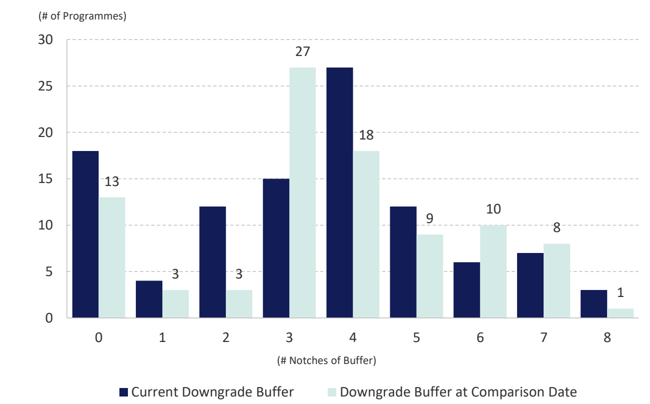
vdp examines the effects of rising interest rates on real estate loans

At the start of March 2022, the vdp published its assessment of the effects that rising interest rates would have on the residential real estate market. In recent years, we have repeatedly commented on the fact that real estate prices have risen sharply almost everywhere. Despite these significant increases, the financing of homes and condominiums has been – and is – possible in the German market for owner-occupied residential property over the past ten or eleven years because interest rates are at historically low levels and a property is considered a safe investment. According to the data collected by the vdp, the average fixed interest period is 14 to 15 years and the share of short-term and medium-term fixed interest rates in mortgage loans is only around 1%. A rise in interest rates for already financed real estate is therefore of little relevance. With regard to initial repayment rates, which have averaged at more than 3% since 2015, subsequent follow-up financing will also be affordable. The question remains as to the impact on new mortgage and real estate business. For this purpose, the vdp has provided model assumptions. In the case of an owner-occupied property that is 80% financed in the long term with reported annuity for the financing period of 4.5%, an interest rate increase from 1.3% to 1.8%, for example, would push up the overall cost of purchasing by 6% (with assumptions otherwise unchanged). The purchase price would even be 12.8% higher if interest rates were to rise by one percentage point. However, this price rise equivalent would be spread over the entire financing period of around 30 years and therefore not be of immediate full impact. Nevertheless, the vdp anticipates an impact on new business, as the cost of residential real estate will rise, which should in effect reduce demand and slow down price increases. First, the association expects fewer property transactions and new builds as borderline buyers are forced out of the market. Second, weaker demand should curb price growth in the existing market within the scope of interest rates responding to nominal residential property prices. With regard to the high prices, there is less financial leeway as incomes have not risen in tandem with residential property prices.

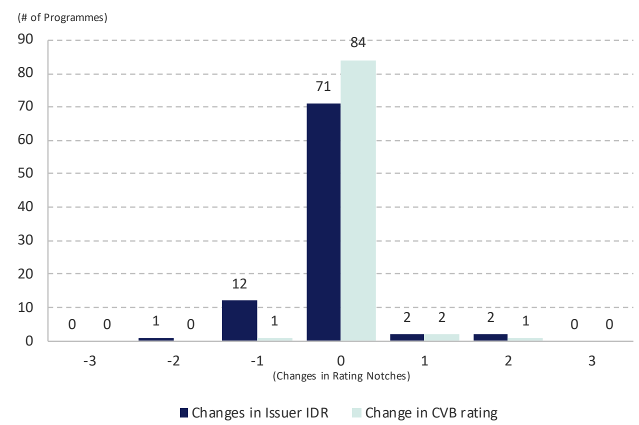
Fitch: covered bond ratings largely spared during the COVID-19 crisis due to "buffers" in issuer downgrades

The rating agency Fitch announced in a press release at the beginning of March that covered bond ratings have benefited from significant protection against downgrades of issuer ratings during the COVID-19 crisis due to covered bond buffers. As the agency reported, of the programmes rated by Fitch in both March 2020 and February 2022, only one was affected by a downgrade following an issuer downgrade, while a total of 13 issuers were downgraded during this period (including issuers from Australia, Canada, France, Italy, the Netherlands, New Zealand and Portugal). As was the case before the pandemic, the average covered bond rating buffer against a downgrade of the issuer was 3.7 notches. However, most covered bond changes were due to a downgrade in the sovereign rating. For example, this applies to the changed sovereign rating of Italy (May 2020 and December 2021) and the upgrade of Greece's sovereign rating. As mentioned, just one covered bond programme had a lower credit rating now than was the case in March 2020. Specifically, this resulted from Panama being downgraded in February 2021, as in this case the asset cash flows are dependent on the state. The outlook for covered bond and issuer ratings also developed positively. While in March 2020, 85% of CB ratings still had a stable outlook, 66% of issuer ratings featured a negative outlook or even a rating watch negative. However, at the end of February 2022, 95% of the evaluated programmes and 83% of the issuer ratings had a stable outlook. Compared to before the crisis, the buffer has also improved on account of available overcollateralisation.

Theoretical buffer versus issuer downgrade



Changes to issuer and CB rating



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

Brief note: Poland's financial regulator recommends more widespread use of covered bonds

The Polish Financial Supervision Authority has been concerned with the solvency of private households of late. As part of new guidance, the authority recommends that banks examine whether households could withstand a rise in interest rates of 500bp (previously: 250bp). Institutions should also monitor debt service/income ratios and improve the appeal of fixed-rate loans. Also noteworthy is the specific recommendation that banks should focus more on covered bonds. This could also benefit the EUR benchmark segment in the long term. We clearly include Poland as one of the growth markets in this respect.

Market overview
SSA/Public Issuers

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

Eyes and ears currently trained on two things: Ukraine…

There are no words for the unimaginable events and daily suffering in Ukraine that we are witnessing in footage showing the devastation and hearing in interviews with local people. No generation should have to experience war any more, especially not in Europe. The financial and capital markets are having to adjust to this new situation, and share prices are on a rollercoaster ride while oil prices are rising. Russian bonds are more or less on the verge of default and Ukrainian bonds are performing surprisingly well (compared with Russia). In the first chaotic days of the war, coupon payments by Ukraine became due on six bonds (amount payable: around USD 300m), which were issued in 2015 after the annexation of Crimea. So-called “war bonds” also appeared in the market. The government is using its regular Tuesday date for “military bonds”. In the first auction of this type at the start of last week Ukraine raised UAH 8.1bn (hryvnia or gryvnya; EUR 242m). According to Bloomberg, this step attracted attention worldwide, as it was not just institutional investors wanting to buy the bonds, but private individuals also wanting to demonstrate their support for the country. The document presented by Bloomberg indicates that the purpose of the bonds is more defensive and positive, since the proceeds of the auction will be used for “priority humanitarian aid” including clothing and footwear, blankets and hospital beds. The bonds will also finance protective equipment such as helmets and bullet-proof vests as well as communications equipment and laptops. It was difficult to obtain information ahead of the issue as the Ukrainian debt agency had shut off access to its Investor Relations for fear of hacking attempts. To get round this, the Ukrainian Finance Ministry therefore intends to use Twitter and LinkedIn as sources of information.

…and the price of crude (Brent/WTI)

On Monday, the price of Brent crude exceeded the mark of USD 135 per barrel, driving up prices at petrol pumps. Only a few days earlier we had seen the issue of an exciting mandate: the OPEC Fund for International Development is currently conducting non-deal global investor meetings. These are taking place across the globe depending on the calendar week and will go on into April. Most people only know OPEC as the oil cartel headquartered in Vienna, and not as an MDB (multilateral development bank). The OPEC Fund was established in 1976 but does not yet have a Bloomberg ticker. Recent figures showed total assets amounting to some USD 6bn and an NPL ratio of 2.4%. It has two ratings of AA (S&P, positive outlook) and AA+ (Fitch, stable). Ranked according to the size of their stake, its members are Saudi Arabia, Venezuela, Kuwait, Nigeria, Iran, Libya, United Arab Emirates, Algeria, Iraq, Indonesia, Ecuador and Gabon. The delineation is important as the OPEC Fund only extends loans to non-members. The Investor Presentation includes case studies on Senegal, Columbia, Jordan and Ghana, which have received funds in order to achieve the Sustainable Development Goals (SDG). The information pack also shows that around USD 1bn has gone to 19 countries in Africa, Asia and Latin America to help them combat the pandemic. The main aims of the forthcoming primary market activities are to expand the investor base and position the OPEC Fund alongside other MDBs such as the African Development Bank (AfDB), Asian Development Bank (ADB) and IBRD. Whether this will ever result in EUR-denominated bonds, only time will tell.

EU: joint bond programme for energy transition and defense?

The European Union seems to be enjoying tapping the capital market on a large scale. Following hot on the heels of SURE (Support to Mitigate Unemployment Risks in an Emergency; EUR 94.3bn in social bonds) to combat the pandemic in 2020/21 comes the EUR 806.9bn NGEU programme (NextGenerationEU) which will run until 2026 (EUR 750bn at 2018 prices). Of this total, there are plans to issue EUR 250bn as green bonds. To recap: the loans granted to Member States under SURE are secured by a system of voluntary guarantees by the Member States. The contribution of the individual Member States to the total volume of the guarantee corresponds to their relative share in the total gross national income of the European Union according to the EU budget 2020. The SURE programme is another concrete expression of solidarity in the Union. The Member States are providing mutual support via the Union; the additional funds are made available in the form of loans. A total of EUR 89.6bn of the total raised has been disbursed. The long-term EU budget continues to be financed from the familiar revenue streams: duties, contributions from Member States based on value added tax (VAT) and contributions based on gross national income. Since 1 January 2021, there has been a new national contribution to the EU budget based on non-recycled plastic packaging. On 31 May 2021, the Member States ratified the Own Resources Decision in accordance with the constitution. The Commission is now able to finance the recovery in the context of Next Generation EU. On 15 June 2021, the Commission launched its first deal under NGEU amounting to EUR 20bn. Why are we telling you about all this again? Yesterday, the idea emerged that the EU could resolve a package by the end of this week that would ensure the energy transition and the defence of the alliance. The EU heads of state and government are meeting in Versailles on 10/11 March. At present, Macron's suggestion is not likely to find consensus. In our opinion, a volume of EUR 100bn will not suffice for such wide-ranging packages, although it does not directly have to be the full EUR 800bn plus agreed under the NGEU either. We therefore estimate the volume at EUR 300-500bn, also extending into 2026 at least. This could also satisfy the ECB's calls for (more) financial activity.

ECB will attempt to reassure with words

The EU pursues long-term plans and will take action in the short term. The ECB will behave in a similar fashion. Times are uncertain and insecure, as we have commented on in the Covered Bonds section above. We believe opinions internally at the ECB may vary, but to the outside world it will show as much determination and flexibility as possible. There are good reasons for the ECB to maintain the course it has already adopted and not change direction now in times of war, or to play for time and see if the situation is somewhat clearer in April. Almost 97% of the PEPP is made up of bonds from public sector issuers, with the equivalent figure for the APP standing at nearly 80% (in total over EUR 5 trillion). At the end of January this corresponded to EUR 1,580bn in public sector securities under the PEPP and EUR 2,504bn in the PSPP as part of the APP. This is over EUR 4,080bn. Consequently, any future purchasing activity by the Eurosystem significantly affects the SSA segment. Here, it is not just returns on sovereign bonds that are kept low, but also spreads for supranationals, sub-sovereigns and agencies. Nevertheless, the situation is more unclear than it has been for a very long time, since the ECB has never had to respond to a war (of aggression) and does not have a blueprint to refer to regarding how it should proceed with its policy direction now and when to prepare the markets for an interest rate rise. We are therefore reproducing our conceivable scenarios for the moment and consider each one to be equally likely.

ECB purchase programme: conceivable paths and announcements

Previous path

- By end of Q1: Discontinuation of PEPP, EUR 1,850bn not exhausted
- Q1 2022: APP is at EUR 20bn per month
- Q2 2022: APP doubles to EUR 40bn per month
- Q3 2022: APP is reduced to EUR 30bn per month
- Q4 2022: APP returns to current level (EUR 20bn per month)
- H1 2023: First interest rate hike by 25 basis points

Total APP 2022: **EUR 330bn**

Conceivable new path: Scenario 1

- *April/May: APP doubles to EUR 40bn per month*
- *June/July: APP is reduced to EUR 30bn per month*
- *August/September: APP back at EUR 20bn and expires*
- *Q4 2022: First interest rate hike by 25 basis points*

Total APP 2022: **EUR 240bn**

...Scenario 2

- *Q2 2022: APP remains at EUR 20bn per month*
- *Q3 2022: APP is reduced to EUR 10bn per month*
- *Q4 2022: First interest rate hike by 25 basis points*

Total APP 2022: **EUR 150bn**

...Scenario 3

- *Q2 2022: APP is lowered to EUR 15bn per month*
- *Q3 2022: APP is reduced to EUR 10bn per month*
- *Q4 2022: APP is reduced for the last time to EUR 5bn per month*
- *Q1 2023:* First interest rate hike by 25 basis points

Total APP 2022: **EUR 150bn**

...Scenario 4

The ECB has been postulating the greatest possible flexibility for several months now. So why should it beat itself up, so to speak, with monthly targets? The PEPP has shown how it can be done. The ECB could also present an envelope for the APP on 10 March or at the subsequent meeting on 14 April, which it intends to target at the end of the purchase programme. This could, for example, be at the lower end of the scenarios outlined above (EUR 150bn) or at the upper end (EUR 330bn). This would mean a scenario of six to nine months of APP with a target value of EUR 150-330bn and an average of EUR 25bn to EUR 37bn monthly. In addition, this scenario would include the trump card “flexibility” of being more accommodative until the summer and then only flanking the market to prepare for an interest rate turnaround. Moreover, this would grant all degrees of freedom to respond to the dynamic war situation between Russia and Ukraine and, if necessary, cautiously vary the pressure on the gas pedal. We are therefore very happy to quote Siegfried Wache, illustrator and author, at this point: “Not everyone can get their act together at a turning point”. May President Lagarde fare significantly better at this than President Putin.

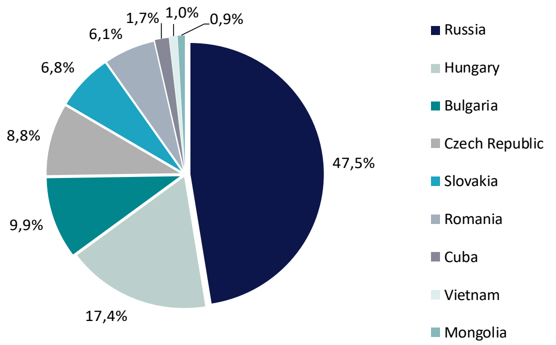
Total APP 2022 as corridor or envelope: **EUR 150-330bn**

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

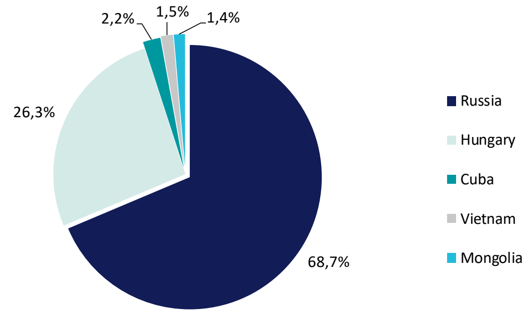
Update on International Investment Bank (IIB)

Founded in 1970, the International Investment Bank (IIB) is a multilateral development bank (MDB) registered with the United Nations whose aim is to promote social and economic development and cooperation in the member states. The focus here is on SMEs as well as import-export business which, alongside financing commercial transactions, also includes various financial products and services. However, most of its business operations relate to lending to SMEs. In the first instance, the IIB has recourse to a network of development banks, public sector banks and other financial institutions whose distribution networks are used for these lending activities. In addition to creditworthiness, other important factors are innovative capacity, modernisation, resource and energy efficiency and social responsibility. As a result of its ownership structure, there is an implied guarantee on the part of the state owners. To date this has been borne by the member countries, as expressed by the capital increase since 2014, which was characterised in particular by an increase in the callable capital. Around 19% of the current capital is paid-up. The remaining amount can be called in from the shareholders immediately if required. In 2019, the IIB moved its headquarters from Moscow to Budapest in the EU and has so far been exempt from EU sanctions against Russia. Nevertheless, last week a hitherto unsuspected fundamental problem arose: four EU countries want to cancel their holdings in IIB – and the sooner the better! This was announced in a joint press release issued by the finance ministers of the Czech Republic, Romania, Slovakia and Bulgaria, in addition to Poland. In the joint statement, the countries referred not only to the IIB, which Poland left back in 2000, but also to the IBEC (International Bank for Economic Cooperation), which is just half the size. Poland is still a member of IBEC and these mentioned EU states want to withdraw from both the IIB and IBEC. According to our information, this means giving six months' notice to the end of the year, i.e. by the end of June 2022 at the latest. The charts below show the current ownership structure and a potential future ownership structure but do not take account of Serbia potentially joining. Serbian media has adopted a pro-Russian stance in the Russian invasion of Ukraine and has reported several times that the invasion was triggered by Ukraine. What that would mean for future cooperation we can scarcely imagine at the moment. The newspapers "Welt" and "Frankfurter Allgemeine" currently refer to the IIB as a "bank of spies" and an "extension of Putin". The exit of the above countries could spell the economic end of the IBEC in particular.

Current ownership structure



Potential future ownership structure



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

Primary market

Once again, the market environment this week was dominated by Putin's war of aggression. Depending on the day's news, opportunities arose for some safe haven issuers, which we describe in more detail below. In chronological order, we start with the EUR-benchmark bond issued by Nordic Investment Bank (Bloomberg ticker: NIB). Under its NIB Environmental Bond (NEB) Framework, the Scandinavians issued a 7-year EUR 500m (WNG) bond at ms -18bp. The guidance started at ms -16bp area, before being revised to ms -17bp area during the course of marketing. There was a lot of interest in the deal, resulting in a respectable order book of EUR 1.45bn. In line with the Framework, the funds raised are set to be used to finance projects which contribute to improving environmental conditions in the member states. For the statisticians among us: 41% of the deal went to asset managers, followed by banks at 26%, official institutions at 23% and the remaining 10% to insurance companies and pension funds. The second issue in our trading week was carried out by the Council of Europe Development Bank (ticker: COE), which issued its second EUR benchmark of 2022 and according to its press release has consequently already achieved around 50% of its funding target for the year. The bond has a 5-year maturity and a volume of EUR 1bn. The deal was priced at ms -21bp (initial guidance: ms -18bp area). A full order book of EUR 3bn enabled the spread to tighten by 3bp. The initial annual yield for the bond therefore stands at 0.241% and shows a difference of 50.9bp versus the benchmark (DBR 0.25% 02/15/27). The last new deal came from our esteemed neighbour, the Free Hanseatic City of Bremen. Under its ticker BREMEN, it issued a EUR 500m, 7-year bond at ms -16bp. During the marketing phase it tightened by 2bp versus the original guidance of ms -14bp. With an order book of EUR 1.25bn, the deal was 2.5x oversubscribed. There were also some tap issues this trading week: we had already announced the tap by Lower Saxony in the last issue. An additional EUR 500m was added to NIESA 0.01% 11/25/27 at ms -17bp (guidance: ms -15bp area). The tap was 6.8x oversubscribed, making it the most oversubscribed deal in the week under review. KfW increased three bonds in the last week: a EUR 1bn (WNG) tap for KFW 0% 11/09/28 at ms -31bp (guidance: ms -29bp) and yesterday (08.03.) EUR 1bn (WNG) each for KFW 0% 06/15/26 and KFW 0% 01/10/31 at ms -37bp and ms -23bp respectively. Fresh supply at the long-dated end came from North Rhine-Westphalia. In total, an additional EUR 850m at ms +50bp was added to NRW 1.75% 10/26/57. Last but not least, according to information from the European Union, the EU intends to issue a private placement amounting to EUR 300m in the next few days as part of the Macro-Financial Assistance Programme (MFA).

Issuer	Country	Timing	ISIN	Maturity	Size	Spread	Rating	ESG
BREMEN	DE	07.03.	DE000A3E5V88	5.0y	0.50bn	ms -16bp	AAA / - / -	-
COE	SNAT	23.03.	XS2454764429	5.0y	1.00bn	ms -21bp	AA+ / Aa1 / AAA	-
NIB	SNAT	02.03.	XS2454249652	7.0y	0.50bn	ms -18bp	- / Aaa / AAA	X

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

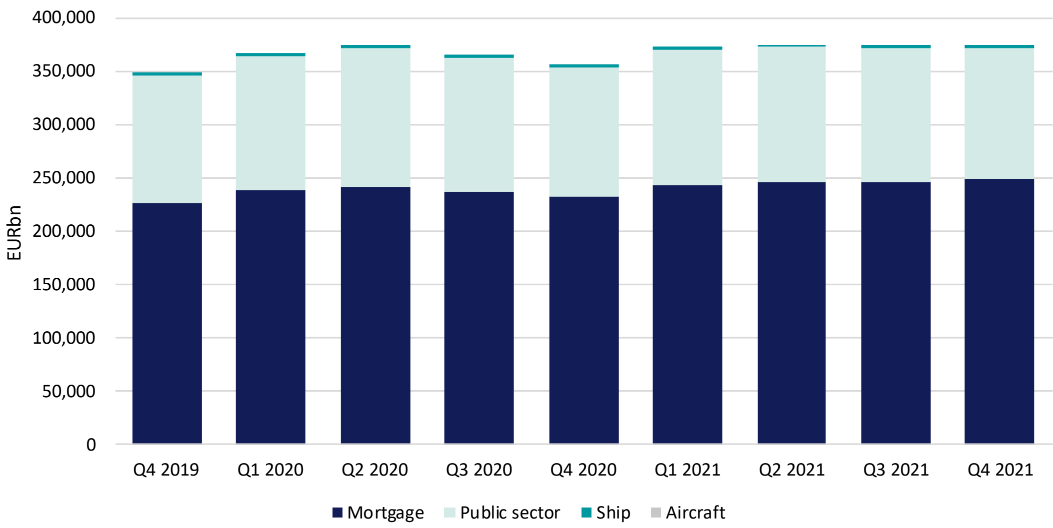
Covered Bonds
Transparency requirements § 28 PfandBG Q4/2021

Authors: Melanie Kiene, CIIA // Dr Frederik Kunze

Transparency reports pursuant to Section 28 PfandBG: 36 mortgage Pfandbrief issuers and 23 public sector Pfandbrief issuers

The Pfandbrief issuers organised in the Association of German Pfandbrief Banks (vdp) recently published their transparency reports on the composition of their cover pools for the fourth quarter of last year in accordance with Section 28 of the German Pfandbrief Act (Pfandbriefgesetz; PfandBG). With regard to the circle of issuers, there were changes in the reporting period as DSK Hyp no longer has any public sector Pfandbriefe outstanding, which has reduced the circle of issuers of public sector Pfandbriefe accordingly. Our Covered Bond Special "Transparency requirements §28 PfandBG Q4/2021" still contains cover pool data on 36 mortgage Pfandbrief issuers, but only 23 public sector Pfandbrief issuers now. As the cover pool data of Deutsche Bank is no longer reported on the vdp website, this has been added manually.

Development of outstanding volume



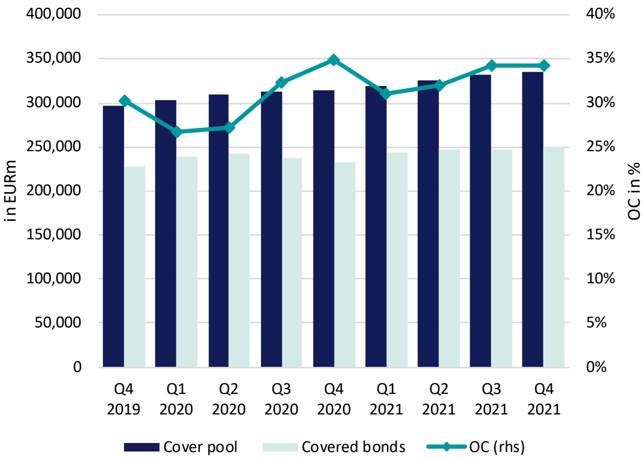
Source: vdp, NORD/LB Markets Strategy & Floor Research

Pfandbriefe in circulation: total volume up slightly in the fourth quarter of 2021

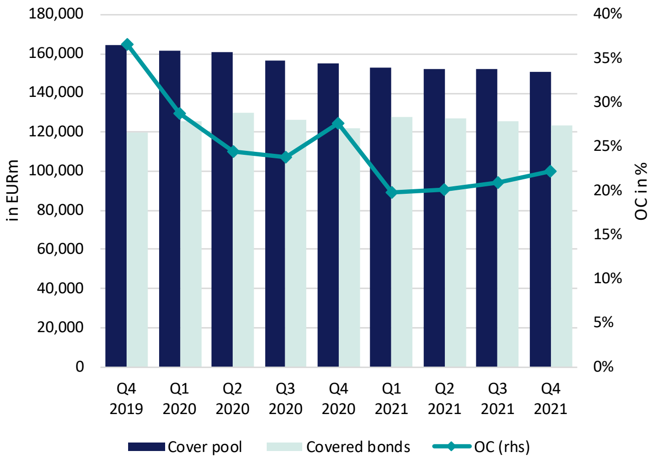
At EUR 375.4bn, the total volume of outstanding Pfandbriefe has again increased slightly when compared with the previous quarter (reference date of 30 September 2021: EUR 375.0bn). The outstanding mortgage Pfandbrief volume rose once more (EUR +2.4bn, or +1.0% Q/Q), while the public sector Pfandbriefe volume dropped by EUR -2,300m. For the first time since the first quarter of 2021, the volume of outstanding ship Pfandbriefe increased, on this occasion by EUR 250m. With regard to the cover assets, there was an increase of EUR 3.0bn for mortgage assets and growth of EUR 158m for ships, while a decrease of EUR 1,160m was recorded for public sector Pfandbrief cover assets.

NORD/LB

Trend – mortgage Pfandbriefe



Trend – public sector Pfandbriefe



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

Rise of EUR 2,412m or 1.0% Q/Q recorded for mortgage Pfandbriefe

After a weak third quarter, mortgage Pfandbriefe recorded growth towards the end of the year for the reporting period from October to December 2021, so a volume increase of EUR 16.75bn, or +7.2%, year on year was posted at year-end 2021. ING Diba (EUR +1.25bn) and LBBW (EUR +1.21bn) are among the banks with a significantly higher outstanding volume than in the previous quarter. Aside from the merger of the two issuers NORD/LB and Deutsche Hypo, the outstanding volume of mortgage Pfandbriefe increased most sharply year on year at Berlin Hyp, by EUR 2,433m, and Helaba, by EUR 2,668m. Overall, at the end of the fourth quarter of 2021, the outstanding mortgage Pfandbriefe of EUR 249.8bn was backed by cover assets of EUR 335.3bn. Average overcollateralisation was almost unchanged at 34.2% (previous quarter: 34.3%).

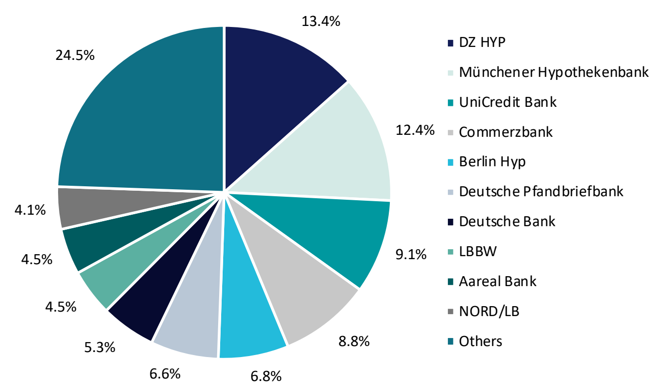
Public sector Pfandbrief segment: decline of EUR 2.3bn or -1.8% Q/Q

The decline in the outstanding nominal volume of public sector Pfandbriefe in the fourth quarter of 2021 was EUR 2,300m (or -1.8% Q/Q). Compared with the previous year, the Pfandbrief volume increased by EUR 1,726m, or +1.4% year on year. At issuer level, Bayerische Landesbank recorded the strongest absolute decline in the fourth quarter of 2021 (EUR -0.74bn). The strongest year-on-year growth can be attributed to Deutsche Pfandbriefbank (EUR +2.1bn). Also worth mentioning is the volume increase for Pfandbriefe with public cover assets at LBBW (EUR +1,890m) and NORD/LB (EUR +1,309m; as a result of the merger with Deutsche Hypo). Overall, the outstanding volume of public sector Pfandbriefe amounted to EUR 123.5bn at the end of the fourth quarter of 2021. This was backed by cover assets of EUR 151.0bn, which slightly increased average overcollateralisation from 20.9% in the third quarter of 2021 to 22.3%.

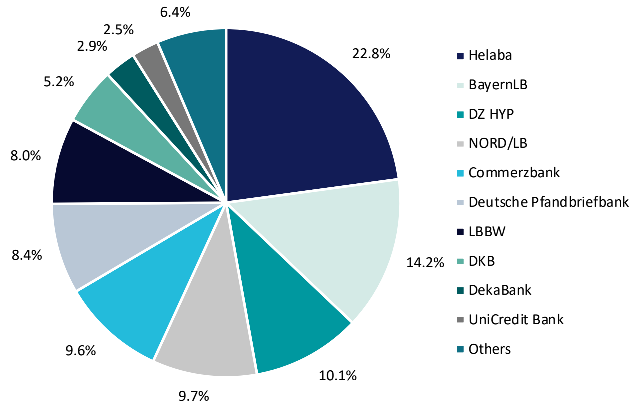
Ship Pfandbriefe remain a niche product
With a volume of EUR 2,088bn (+13.6% Q/Q or EUR +250m), the ship Pfandbrief segment continues to represent a niche within the German Pfandbrief market, although it has grown for the first time since the third quarter of 2020. With Commerzbank, HCOB and NORD/LB, only three institutions currently have outstanding ship Pfandbriefe, with Hamburg Commercial Bank accounting for around 93%.

A look at the top 10: no further shifts since the previous quarter
With regard to the ranking of the three largest mortgage Pfandbriefe issuers, there were no changes. DZ HYP remains the largest issuer in the mortgage-backed Pfandbriefe submarket, followed by Münchener Hypothekenbank and UniCredit Bank. The share of the "smaller" issuers in the outstanding volume is 24.5%. Helaba, Bayern LB and DZ HYP continue to occupy the top three places in the public sector Pfandbriefe. By combining the cover pools, NORD/LB's Pfandbrief circulation currently ranks further ahead in terms of size distribution (mortgage Pfandbriefe: ranked 10th; public sector Pfandbriefe: ranked 4th).

Market share – mortgage Pfandbriefe



Market share – public sector Pfandbriefe



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

Conclusion
The total volume of outstanding Pfandbriefe once again rose in the fourth quarter. As in previous periods, Pfandbrief reporting must be analysed taking into account extraordinary – though some might persist – influencing factors. For example, in our studies, we have in this context repeatedly pointed out the influence of monetary policy on the issue volume, which for some issuers is reflected in the form of a higher weight of retained bonds at the expense of public placements. This circumstance is not directly reflected in the reported data but was and is rather evident in the EUR benchmark segment. In addition to the availability of central bank liquidity, other factors (including high deposits and currently the Russia-Ukraine war) have recently had an impact on the funding behaviour of issuers. For detailed information on the market for Pfandbriefe and the cover pool characteristics as at 31 December 2021, please refer to the current study Transparency requirements §28 PfandBG Q4/2021. For an overview of the issuers active in the EUR benchmark and EUR sub-benchmark segments and their cover pools, please also refer to our NORD/LB Issuer Guide Covered Bonds.

SSA/Public Issuers
Issuer Guide SSA 2022: The Dutch agency market

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

Dutch agency market mainly defined by two public-sector agencies

To preview our upcoming "NORD/LB Issuer Guide Supranationals & Agencies", we shall be shedding some light on the Dutch agency market in this present edition of our weekly publication. In the hope of publishing this Issuer Guide by the end of the second quarter of 2022 at the latest, we will start with a Sector Update today. Measured in terms of the number of issuers, the Dutch agency market is comparatively small. Three agencies regularly issue bonds: Bank Nederlandse Gemeenten (BNG), Nederlandse Waterschapsbank (NWB) and Nederlandse Financierings-Maatschappij voor Ontwikkelingslanden (FMO). However, despite the small number of issuers, the Dutch agency market is one of the largest of its kind when measured by outstanding bond volume. The three issuers covered here have outstanding bonds totalling the equivalent of EUR 160.1bn spread across 552 separate bond issuances. The two main players on the Dutch agency market, BNG and NWB, focus (almost) exclusively on the provision of public sector financing. Accordingly, both agencies make funding available for companies in the healthcare and housing construction sectors, in particular. Loans to these companies are guaranteed by funds for which the Dutch government is, in turn, ultimately liable. These loans, which make up a large proportion of the BNG and NWB credit portfolios, therefore benefit from an implicit guarantee provided by the Dutch government. Other major clients from the public sector include municipalities and the Dutch water boards (Waterschappen). These institutions, some of which date back to the 13th century, play a key role in managing the water industry in the Netherlands. Roughly one quarter (26%) of the area of the Netherlands is below sea level, which presents huge challenges in terms of water quality, water treatment and water supply. In contrast, FMO concentrates on development aid in the areas of energy, banks and the agricultural sector, as well as food and water, while additionally maintaining a particular focus on the private sector. Furthermore, Dutch agencies are also active in the market for socially responsible investment (SRI) bonds The funding strategy within this segment is exceptionally expansive, with bonds covering the full spectrum of ESG (Environmental, Social and Governance) activities. In the Netherlands, this extends from social housing through to funding for conventional ecological projects. As a promotional bank for the public sector, BNG also indirectly issues "green" funding to eligible municipalities, for example.

Dutch agencies – an overview

Institution	Type	Owner(s)	Guarantee	Risk weighting
Bank Nederlandse Gemeenten (BNG)	Municipal bank	50% Netherlands, 50% Dutch municipalities, regions and one water board	-	20%
Nederlandse Waterschapsbank (NWB)	Municipal bank	81% Dutch water boards, 17% Netherlands, 2% Dutch provinces	-	20%
Nederlandse Financierings-Maatschappij voor Ontwikkelingslanden (FMO)	Promotional development bank	51% Netherlands, 42% private banks, 7% trade unions and employer associations	Maintenance obligation	0%

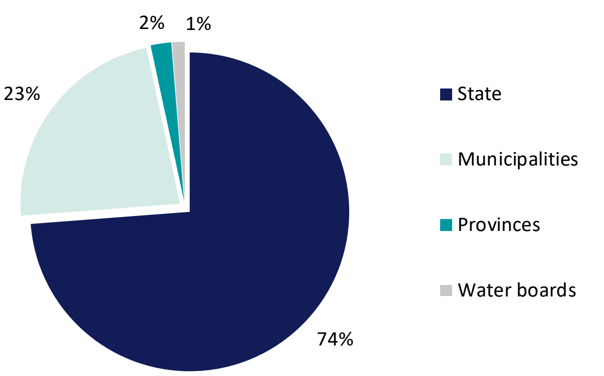
Source: Issuers, NORD/LB Markets Strategy & Floor Research

Risk weighting of 0% according to CRR/Basel III only possible for FMO
It should be noted that because the Dutch state has not provided any explicit guarantees, neither BNG nor NWB benefit from a 0% risk weighting according to CRR/Basel III. However, a maintenance obligation for FMO means that a risk weighting of 0% is possible for this agency. Unlike BNG or NWB, the Dutch state implicitly guarantees the liabilities of FMO. An agreement stipulated that the Netherlands should strive to avoid situations where FMO is unable to meet its obligations on time (maintenance obligation). The state is also obliged to cover FMO's losses from unforeseeable business risks if it has not made any provision for this eventuality and the general risk reserves have been exhausted.

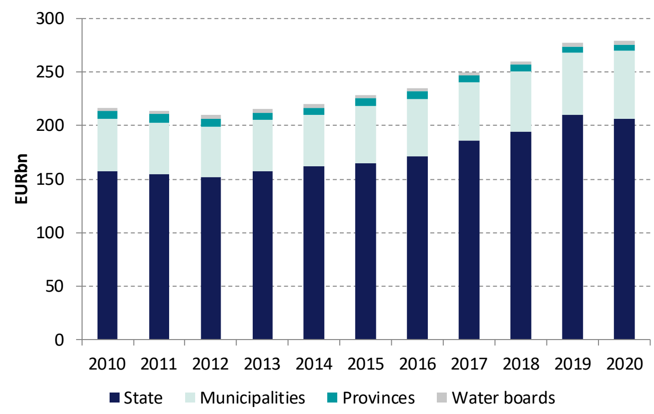
Dutch sub-sovereigns dominate BNG and NWB risk
A large portion of the BNG and NWB lending portfolios holds risks attributable to Dutch regional and local governments (state, provinces, municipalities and water boards).

Municipalities, provinces and water boards as part of the Dutch state
Dutch municipalities, provinces and water boards (the three forms of Dutch sub-sovereign) are part of the Dutch government. They are therefore entitled within existing regulatory frameworks to make binding decisions for citizens, to draft their own regulations, to issue or refuse permits and to levy taxes. More than 25% of the Dutch state's income was attributable to these three sub-sovereign groups in 2020, while the majority accrued to the Dutch central government.

Income sources by sub-sovereign



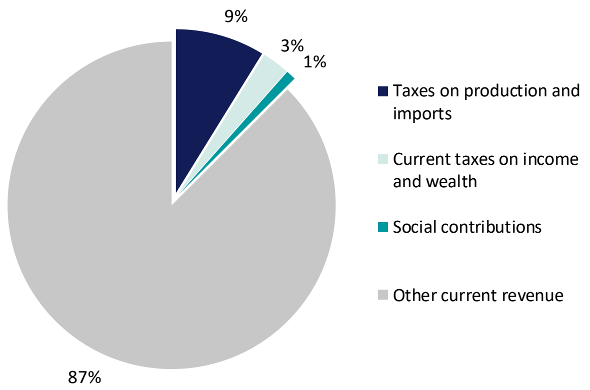
Trend in income sources



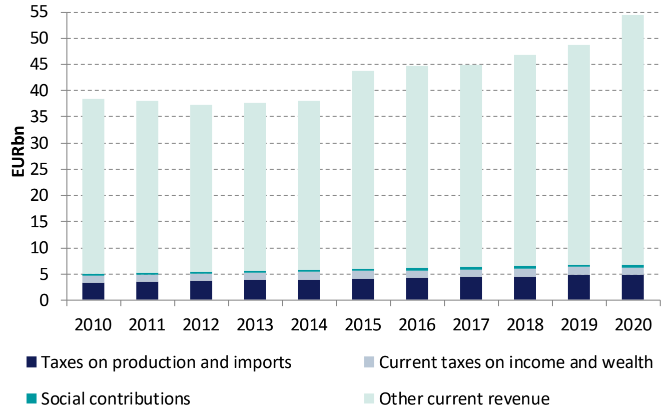
Source: Centraal Bureau voor de Statistiek (CBS), NORD/LB Markets Strategy & Floor Research

345 municipalities and 12 provinces
As of 2022, the Netherlands is divided into 345 municipalities. A year earlier, this figure stood at 352. The slight decline reflects a steady trend: in 2005, the Netherlands was divided into 467 municipalities, although at the start of the 1990s, the number of Dutch municipalities was as high as 774. The municipalities are overseen by 12 provinces, which form the regional governments in the Netherlands. By and large, the municipalities and provinces perform similar tasks, which they are entitled to finance by levying taxes, among other measures.

Distribution of income sources of municipalities



Trend in income sources of municipalities

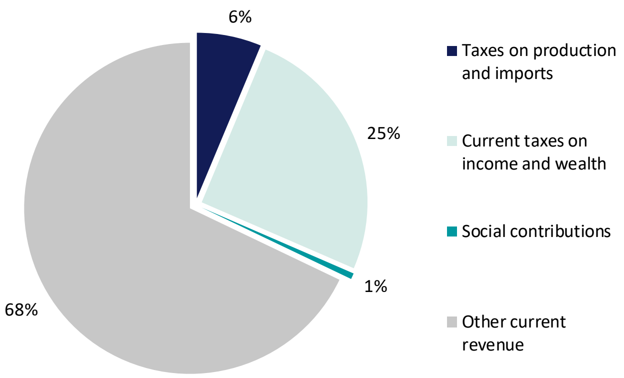


Source: Centraal Bureau voor de Statistiek (CBS), NORD/LB Markets Strategy & Floor Research

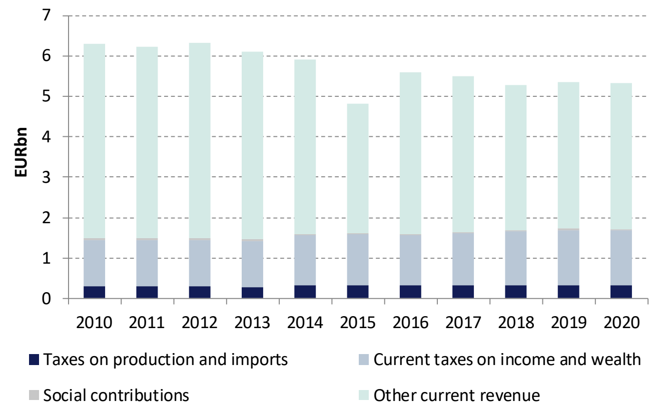
Income sources of Dutch municipalities

Central state transfers are the most important source of income for Dutch municipalities: in the graphic above, they are listed under “Other current revenue” and account for around 87% of this income item at present. Generally speaking, the municipalities receive these transfers in the form of general and special grants. General allocations are formula-based and independent of the municipalities’ expenses and taxation. The aim of these allocations is to allow each local government to finance service levels of equal value while imposing comparable, appropriate levels of taxation. A system consisting of 60 criteria is used to calculate the allocations, making this one of the most complex financial equalisation systems in the world. Municipalities receive specific allocations that make up around 50% of the general allocations to finance tasks specified by the Dutch state, which means that they are earmarked for this specific purpose. However, this form of allocation has been reduced as part of the policy of decentralisation in the last few years. Local governments obtain their other income from taxes and other receipts (see charts), with the tax rates in each municipality being set individually by the respective Municipal Council. The largest percentage of tax income is generated via “Taxes on production and imports”, which includes land tax, among other elements. Moreover, municipalities are obliged to present balanced budgets.

Breakdown of income sources of Dutch provinces



Trend in income sources of Dutch provinces

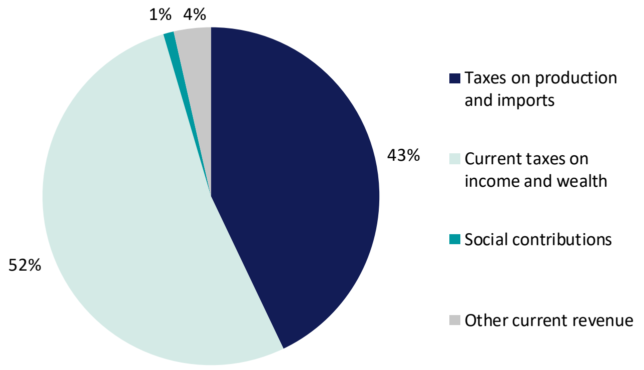


Source: Centraal Bureau voor de Statistiek (CBS), NORD/LB Markets Strategy & Floor Research

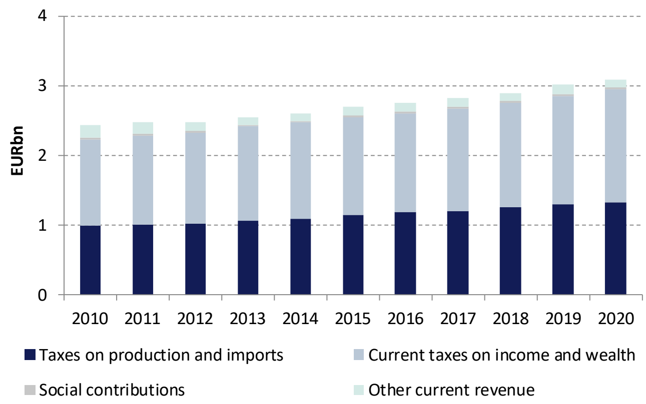
Income sources of Dutch provinces

The 12 provinces obtain their income from taxes, service charges, government subsidies and other earnings such as a share of profits generated by utility companies. While the share of government subsidies is certainly lower than is the case for the municipalities in the Netherlands, this item does nevertheless still dominate at approximately 68%. In 2020, the independently managed Dutch provinces received around EUR 1.7bn in tax income.

Income sources of Dutch water boards



Trend in income sources of Dutch water boards



Source: Centraal Bureau voor de Statistiek (CBS), NORD/LB Markets Strategy & Floor Research

Income sources of Dutch water boards

There are 21 water boards in the Netherlands that are organised within the framework of the Unie van Waterschappen (Association of Regional Water Authorities), which is the authorities' national and international lobbying group. Water boards have a similar legal status to municipalities and provinces. Their investments are mainly funded from their own income, which is generated from charges for water pollution and other water taxes. However, by covering the costs of construction and repair, the central government makes an additional contribution to the financing.

Guarantee funds determine the credit risk of BNG and NWB

The financing of social housing construction projects and of healthcare companies is a key part of the business activities of both BNG and NWB. In the Netherlands, funds are generally used to guarantee financing in these two sectors, therefore making them correspondingly important for determining the credit risk of BNG and NWB.

Guarantee funds for social housing construction project loans

Since 1983, Waarborgfonds Sociale Woningbouw (WSW) has functioned as guarantor for interest and principal payments on the part of Dutch construction companies that carry out social housing projects. As a rule, these are WSW members. The aim is to achieve lower interest rates for the construction of social housing, the effects of which are, in turn, intended to be passed on in the form of lower rent. If the guarantee is called, the WSW will step in at the first level with its risk assets (2020: EUR 509.9m). If these funds are insufficient to meet the guarantees provided, members of the WSW (around 98% of all Dutch housing construction companies) may be called upon to provide capital of around EUR 3.1bn (year-end 2020). If these funds are not sufficient either, the unlimited provision of capital from the municipalities and the central government represents the final safeguard. In this context, the WSW's liabilities are therefore guaranteed by Dutch municipalities and the state, which is why it is rated Aaa by Moody's and AAA by S&P.

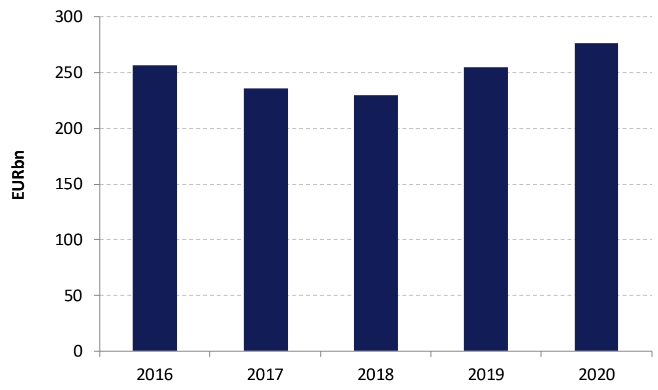
Guarantee funds for loans to the healthcare sector

Waarborgfonds voor de Zorgsector (WFZ), founded in 1999, pursues the objective of ensuring funding for the Dutch healthcare sector. To this end, WFZ guarantees, in a similar vein to WSW, loans to companies from this sector on the proviso that they are members of the guarantee fund. Hospitals, geriatric care, care for the disabled and psychiatric healthcare are subsidised as a result. Just like WSW, WFZ will initially step in with its own venture capital if the guarantee is called (2020: EUR 297m). If these funds are not sufficient, WFZ members are obliged to provide the funds with interest free loans of up to 3% of the guarantees provided. If this level of liability is not sufficient either, there is a guarantee from the Dutch central government. The rating agency S&P assigns a rating of AAA to WFZ on account of this guarantee structure.

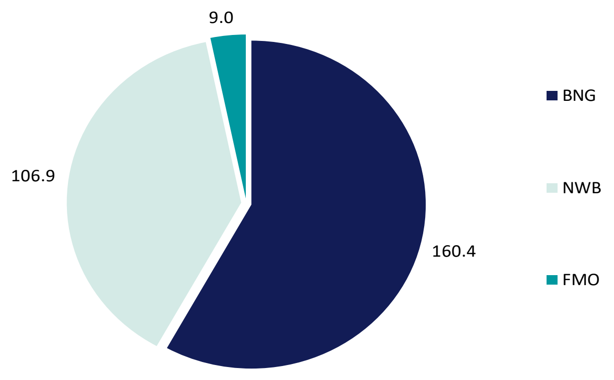
No explicit guarantee for BNG or NWB

Neither BNG nor NWB have explicit guarantees provided by the Dutch central government. Nevertheless, it is highly likely that the state or public sector would support both institutions should either encounter any financial difficulties. The owners of both banks are, in addition to the Dutch government, both the municipalities and water boards, for which BNG and NWB are hugely important in terms of funding. The institutes' ability to secure funding at favourable terms due to their high creditworthiness and low-risk business models does, however, lead to tighter credit margins for private institutes, with the result that BNG and NWB's market shares in business segments are correspondingly high. On account of the agencies' status as the public sector's main source of funding, public sector institutions would be exposed to a substantial funding risk should even just one of the two banks have to file for insolvency. From our perspective, the assumption of state support is therefore certainly justified.

Balance sheet growth of Dutch agencies



Comparison of balance sheet totals (EUR bn)

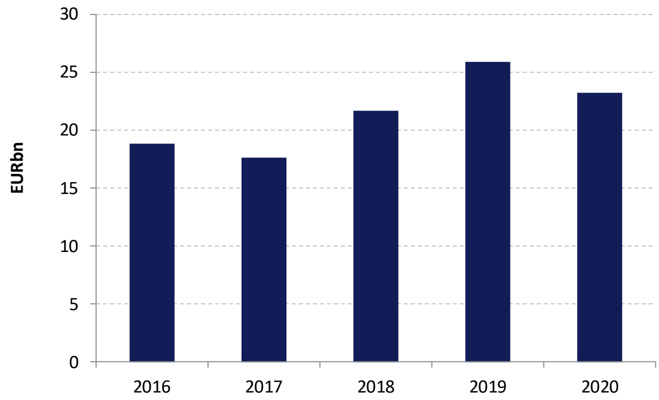


Source: Issuers, NORD/LB Markets Strategy & Floor Research

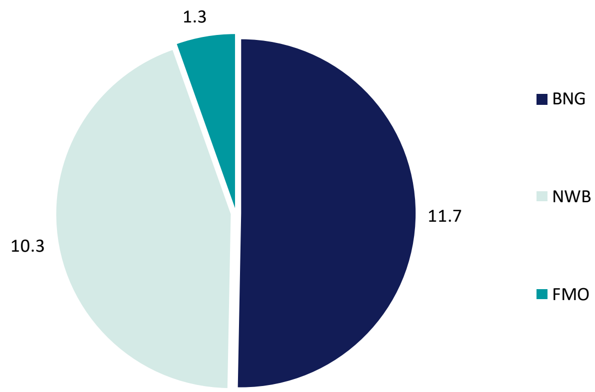
Total assets rising, new commitments below prior-year level

The aggregated balance sheet totals of the agencies covered here rose by EUR 20.9bn to EUR 276.2bn in 2020. This increase can be attributed to balance sheet growth at both BNG and NWB. Conversely, the total assets of FMO declined by EUR 0.4bn year on year. With total assets of EUR 160.4bn and EUR 106.9bn respectively, BNG and NWB are the largest institutes by far. The rising trend in the volume of new commitments was not sustained in 2020. While NWB posted growth of EUR 0.1bn to EUR 10.3bn, the volume declined by EUR -2.3bn and EUR -0.4bn at BNG and FMO respectively.

New commitments of Dutch agencies



Comparison of new commitments (EUR bn)

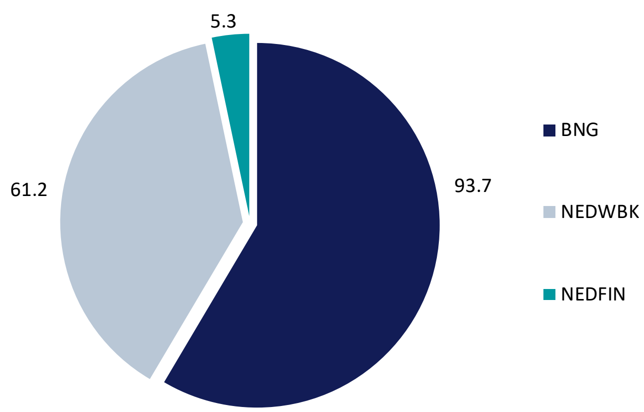


Source: Issuers, NORD/LB Markets Strategy & Floor Research

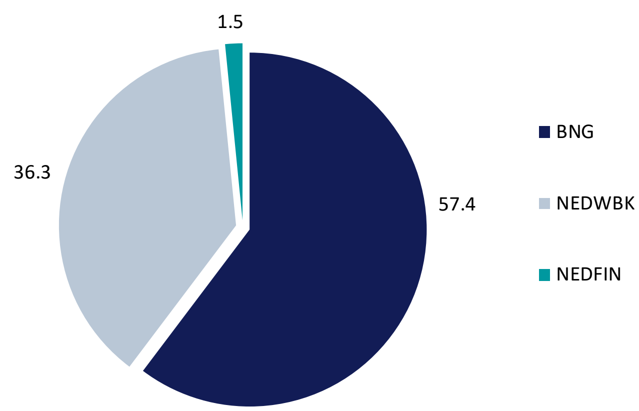
Compliance with leverage ratio considered a challenge

Since the start of 2018, agencies have been obliged to fulfil CRR/Basel III regulatory framework conditions, including compliance with a leverage ratio of at least 3%. They had already been required to publish their leverage ratios since 1 January 2015. Compliance with this ratio, which compares regulatory equity with exposure, is and has been a particular challenge for BNG and NWB. In this context, the leverage ratio (LR) of BNG, for example, stood at 3.5% as at year-end 2020 (2019: 3.6%), while that of NWB was just 2.5% (FMO: 27.0%). While, in principle, compliance at 3% still applies, a model has been approved for European promotional banks allowing these institutes to fulfil leverage ratio requirements on the basis of a modified approach. Our understanding of the matter is that these (promotional) banks have had to satisfy an "adjusted leverage ratio" from mid-2021 onwards, which does not take into account pass-through promotional loans, for example. This leads to decreased risk exposure and, all things being equal, ensures that the metric rises. For NWB, this adjusted leverage ratio came in at 13.5% as at year-end 2020, meaning that compliance with the 3% threshold no longer poses a problem.

Outstanding bond volume (EUR bn)



Outstanding EUR benchmarks (EUR bn)

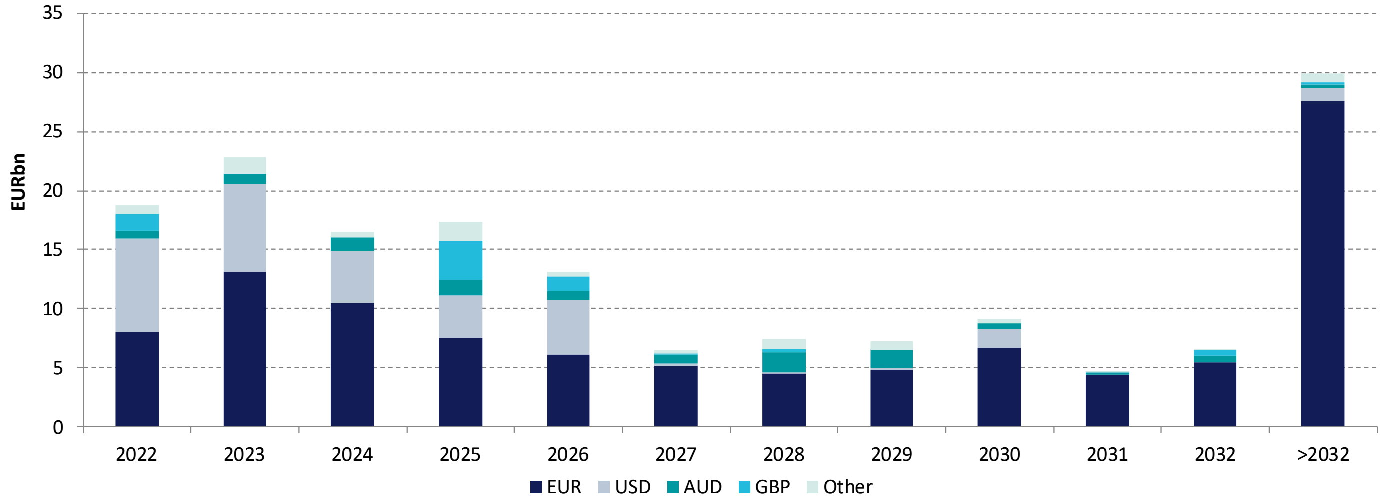


NB: benchmarks are defined as bonds with a minimum volume of EUR 0.5bn.
Source: Bloomberg, NORD/LB Markets Strategy & Floor Research

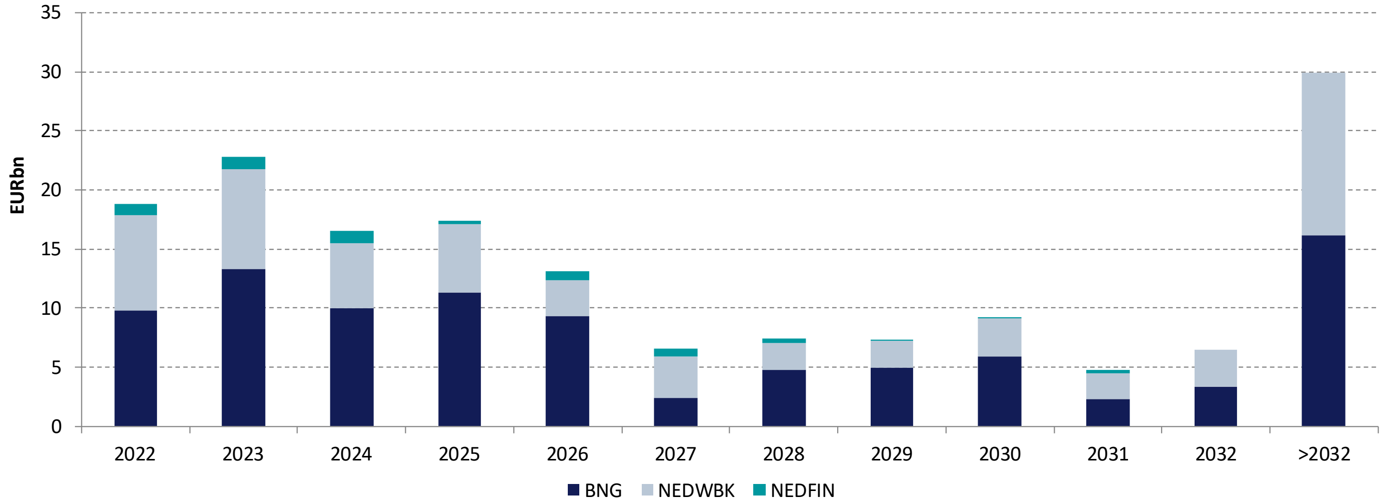
Fluctuating share of EUR benchmarks in overall funding mix

Dutch agencies conduct their activities across a variety of currencies (18 different FX denominations, plus EUR), although in recent years we have observed an increased proportion of EUR benchmarks at BNG in particular. Demand for refinancing on the part of the agencies is even trending upwards, a development which will be reflected on the liabilities side of their balance sheet totals. ESG bonds are particularly popular in the Netherlands and certainly appeal to investors.

Dutch agencies: outstanding bonds by currency



Dutch agencies: outstanding bonds by issuer



NB: Foreign currencies are converted into EUR at rates as at 07 March 2022.
Source: Bloomberg, NORD/LB Markets Strategy & Floor Research

Dutch agencies tend to opt for short-term refinancing

With the exception of NEDWBK, whose refinancing is to a large extent conducted at the long end, Dutch agencies tend to opt for short-term refinancing. Despite the very high and clustered refinancing periods, we do not expect any surprises at all in terms of primary market activities, as Dutch agencies have in the past been characterised by their extremely reliable funding plans and capital market communications.

Dutch agencies – an overview

Name	Ticker	Ratings (Fitch/Moody's/S&P)	Outstanding volume (EUR bn equivalent)	EUR volume (EUR bn)	Funding target 2022 (EUR bn equivalent)
BNG	BNG	AAA/Aaa/AAA	93.7	61.9	±13
NWB	NEDWBK	-/Aaa/AAA	61.2	40.4	12-13
FMO	NEDFIN	AAA/-/AAA	5.3	1.8	0.9
Total			**160.1**	**104.1**	**26.4**

NB: Foreign currencies are converted into EUR at rates as at 07 March 2022.
On account of the issuer's individual funding mix, the values for "funding target" and "net supply" in particular may deviate from reality.
Source: Bloomberg, issuers, NORD/LB Markets Strategy & Floor Research

Conclusion and comment

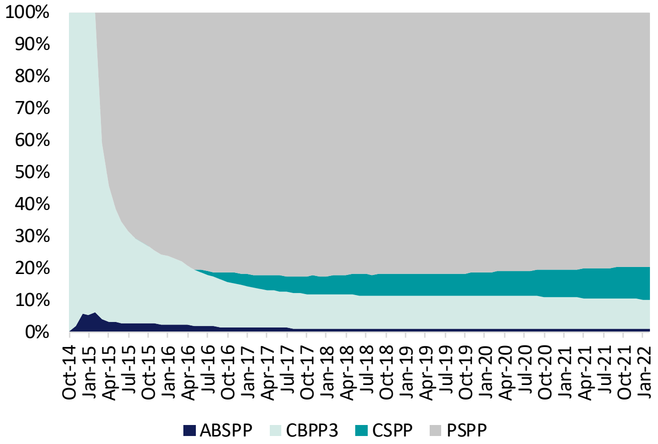
Despite the small number of issuers, the Dutch agency market is one of the largest of its kind when measured by outstanding bond volume, as shown above. The issuers presented here have outstanding bonds totalling the equivalent of EUR 160.1bn spread across 552 separate bond issuances at present. The funding target of NEDWBK, to use its ticker, is again between EUR 12-13bn for 2022, while a value of EUR ±13bn has been defined for BNG. The comparatively small FMO (ticker: NEDFIN) plans to raise a total of USD 1.0bn, or the equivalent of EUR 920m, across 2022 as a whole.

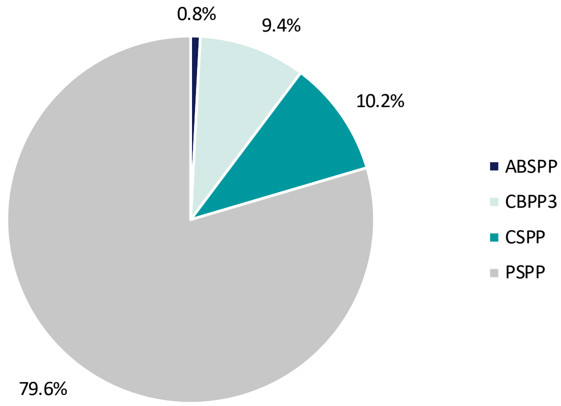
ECB tracker

Asset Purchase Programme (APP)

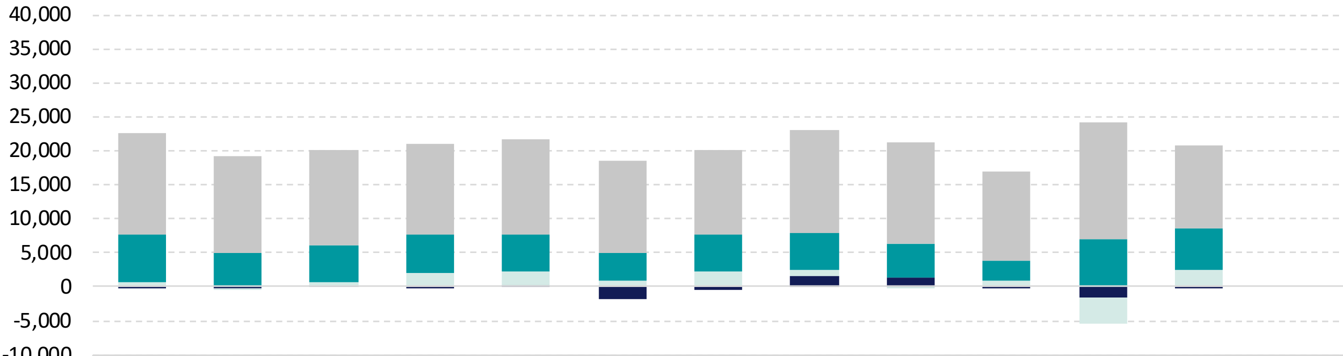
	ABSPP	CBPP3	CSPP	PSPP	APP
Jan-22	26,740	294,407	316,646	2,504,428	3,142,221
Feb-22	26,696	296,783	322,918	2,516,523	3,162,920
Δ	-45	+2,376	+6,272	+12,095	+20,698

Portfolio structure





Monthly net purchases (in EURm)

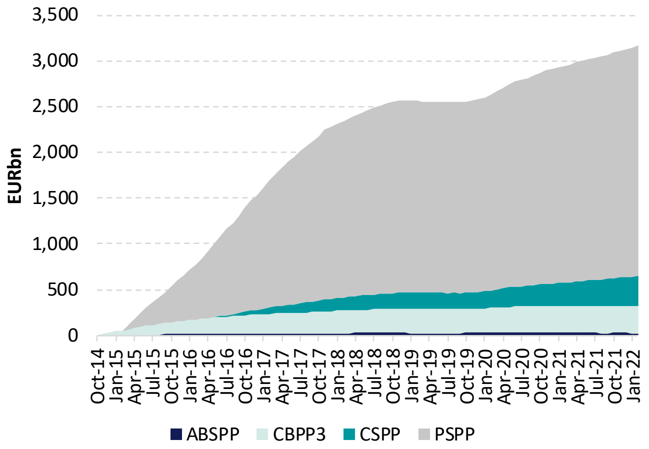


	Mar-21	Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Nov-21	Dec-21	Jan-22	Feb-22	∑
APP	22,561	18,918	20,141	20,640	21,597	16,749	19,659	23,017	21,200	16,596	18,838	20,698	240,614
PSPP	14,955	14,186	13,973	13,320	13,943	13,563	12,423	15,038	14,815	12,989	17,292	12,095	168,592
CSPP	6,929	5,015	5,394	5,602	5,502	3,936	5,590	5,481	5,142	3,007	6,970	6,272	64,840
CBPP3	684	-5	686	2,037	2,011	999	2,184	1,008	-12	942	-3,761	2,376	9,149
ABSPP	-7	-278	88	-319	141	-1,749	-538	1,490	1,255	-342	-1,663	-45	-1,967

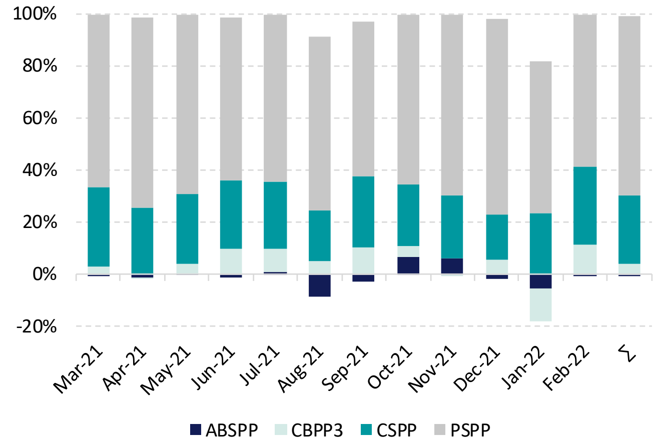
Source: ECB, NORD/LB Markets Strategy & Floor Research

NORD/LB

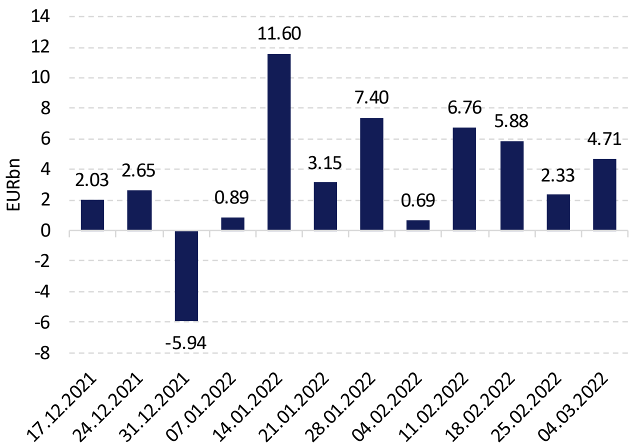
Portfolio development



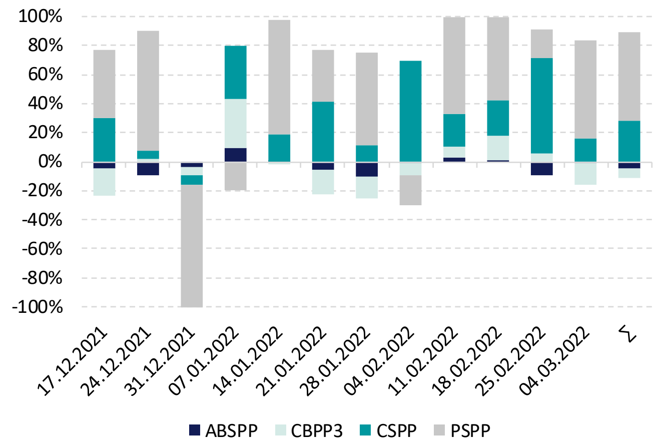
Distribution of monthly purchases



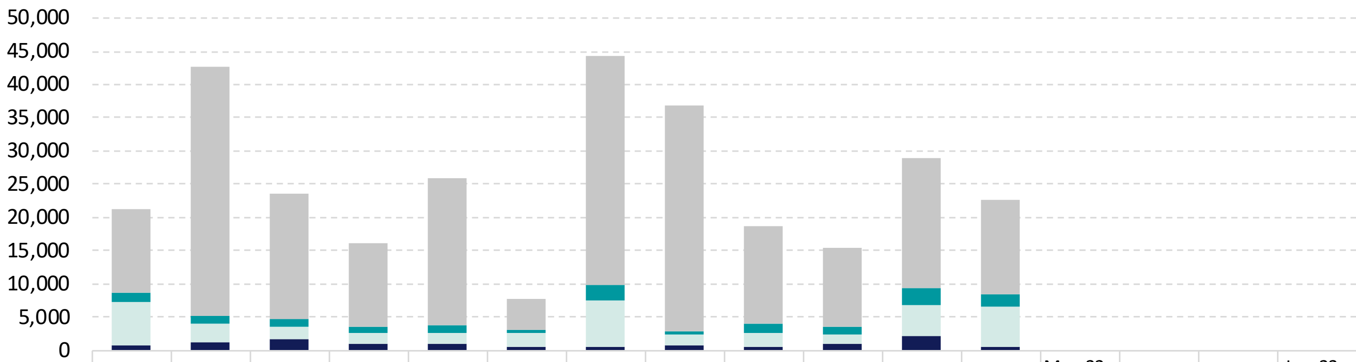
Weekly purchases



Distribution of weekly purchases



Expected monthly redemptions (in EURm)

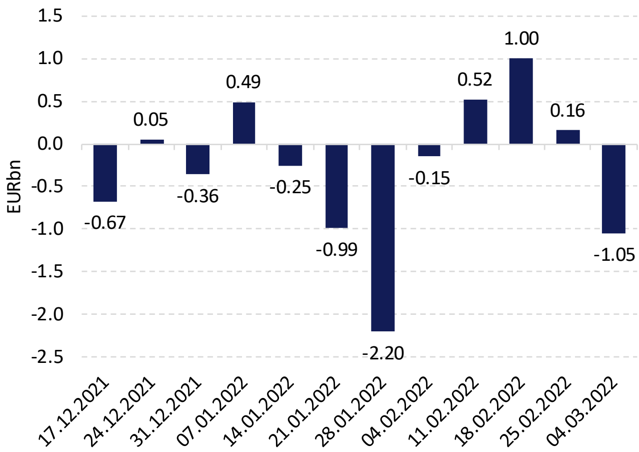


	Mar-22	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	Mar-22 - Feb-23	2021	2022	Jan-23 - Feb-23
APP	21,175	42,745	23,603	16,211	26,009	7,834	44,257	36,867	18,607	15,465	28,836	22,762	304,371	247,069	296,334	51,598
PSPP	12,603	37,532	18,999	12,638	22,238	4,841	34,354	34,003	14,669	12,016	19,469	14,255	237,617	188,494	228,424	33,724
CSPP	1,337	1,093	996	1,017	1,198	280	2,431	549	1,332	1,166	2,482	1,970	15,851	17,134	15,498	4,452
CBPP3	6,419	3,019	1,866	1,582	1,629	2,227	6,866	1,647	2,165	1,408	4,783	5,922	39,533	30,143	41,152	10,705
ABSPP	816	1,101	1,742	974	944	486	606	668	441	875	2,102	615	11,370	11,298	11,260	2,717

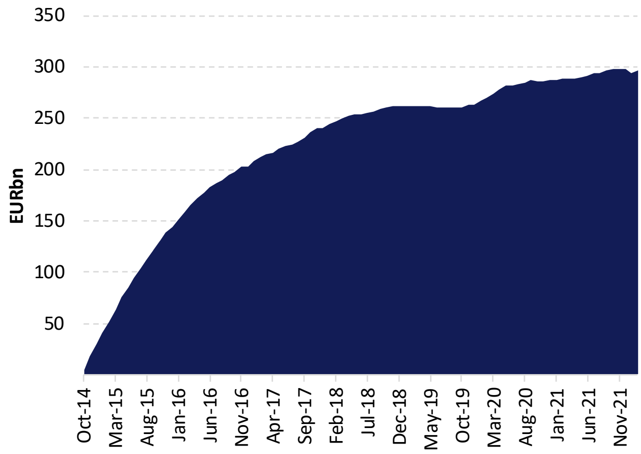
Source: ECB, Bloomberg, NORD/LB Markets Strategy & Floor Research

Covered Bond Purchase Programme 3 (CBPP3)

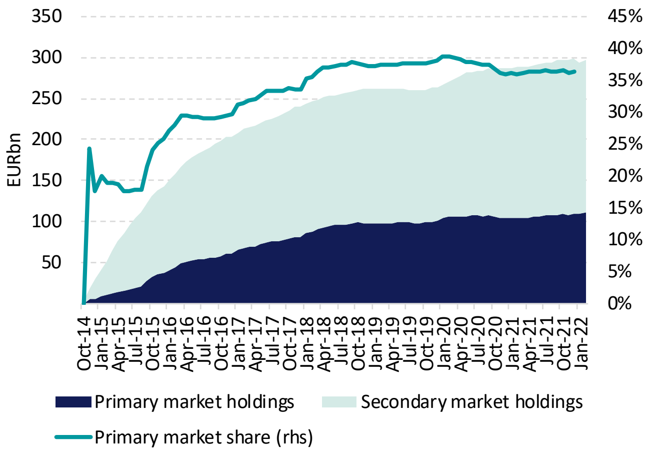
Weekly purchases



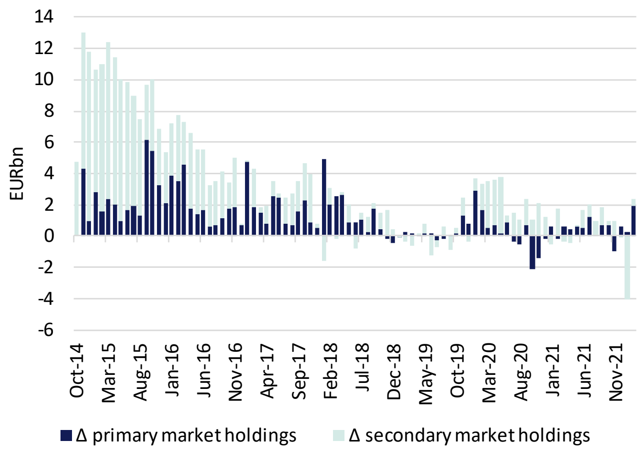
Development of CBPP3 volume



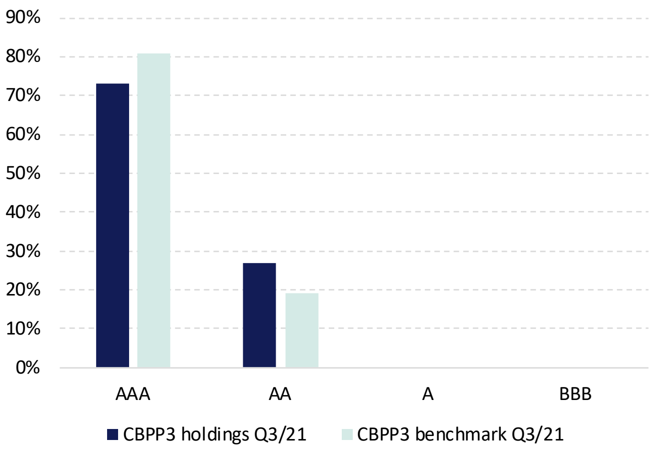
Primary and secondary market holdings



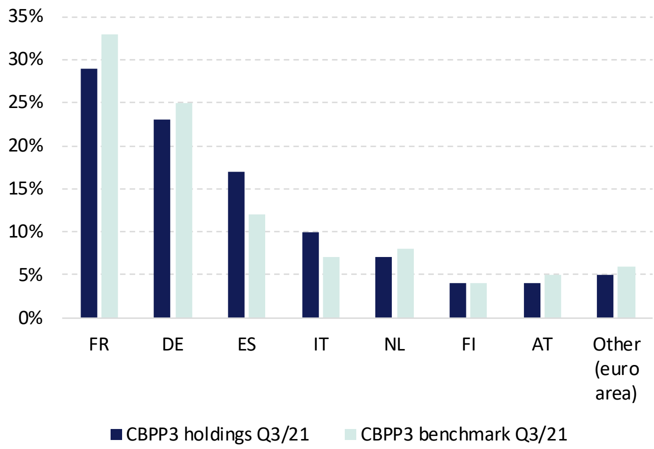
Change of primary and secondary market holdings



Distribution of CBPP3 by credit rating



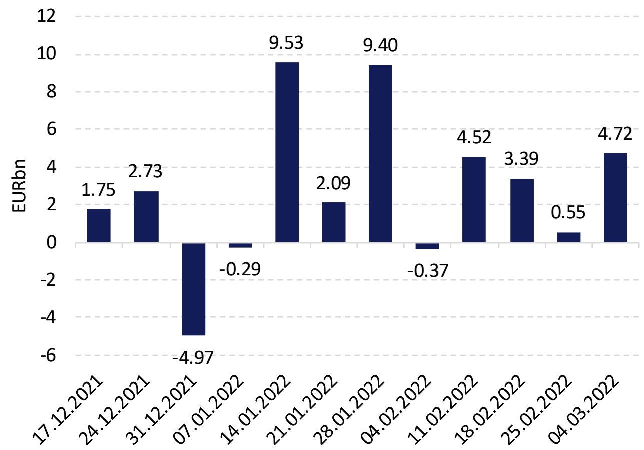
Distribution of CBPP3 by country of risk



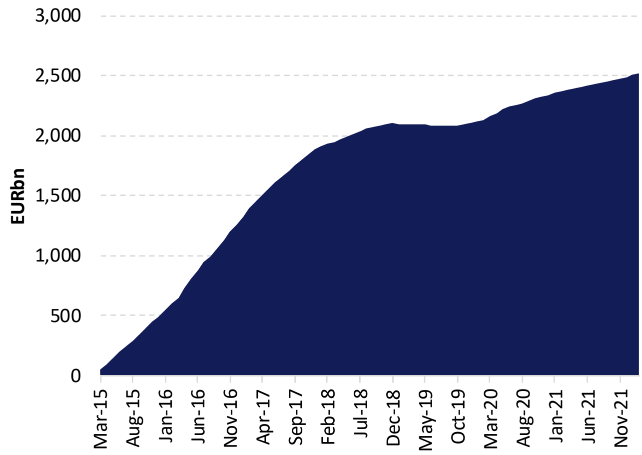
Source: ECB, Bloomberg, NORD/LB Markets Strategy & Floor Research

Public Sector Purchase Programme (PSPP)

Weekly purchases



Development of PSPP volume



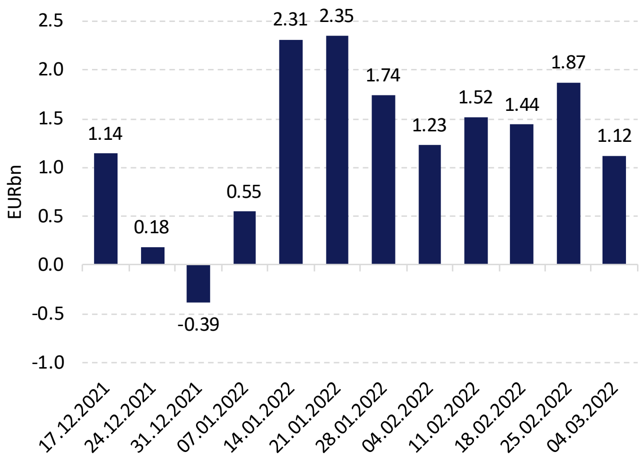
Overall distribution of PSPP buying at month-end

Jurisdiction	Adjusted distribution key[1]	Purchases (EURm)	Expected purchases (EURm)[2]	Difference (EURm)	Avg. time to maturity[3] (in years)	Market average[3] (in years)[3]	Difference (in years)
AT	2.7%	73,940	71,860	2,080	7.5	7.6	-0.1
BE	3.4%	92,603	89,448	3,155	8.0	10.2	-2.2
CY	0.2%	4,275	5,283	-1,008	9.9	8.8	1.1
DE	24.3%	640,615	647,220	-6,605	6.6	7.6	-1.0
EE	0.3%	414	6,916	-6,502	9.2	7.5	1.7
ES	11.0%	305,586	292,769	12,817	8.0	8.4	-0.4
FI	1.7%	42,422	45,098	-2,676	6.9	7.7	-0.8
FR	18.8%	522,937	501,452	21,485	7.2	8.1	-0.9
GR	0.0%	0	0	0	0.0	0.0	0.0
IE	1.6%	41,963	41,575	388	8.5	10.1	-1.6
IT	15.7%	437,653	417,097	20,556	7.1	7.9	-0.8
LT	0.5%	5,649	14,210	-8,561	10.2	10.6	-0.4
LU	0.3%	3,944	8,087	-4,143	5.6	7.2	-1.7
LV	0.4%	3,440	9,567	-6,127	11.3	10.4	0.9
MT	0.1%	1,375	2,575	-1,200	9.5	9.2	0.3
NL	5.4%	124,353	143,884	-19,531	7.7	9.0	-1.4
PT	2.2%	52,086	57,463	-5,377	7.0	7.2	-0.2
SI	0.4%	10,544	11,822	-1,278	9.9	10.2	-0.3
SK	1.1%	17,322	28,117	-10,795	8.2	8.3	-0.1
SNAT	10.0%	279,373	266,049	13,324	7.7	8.9	-1.2
Total / Avg.	**100.0%**	**2,660,494**	**2,660,494**	**0**	**7.3**	**8.2**	**-0.9**

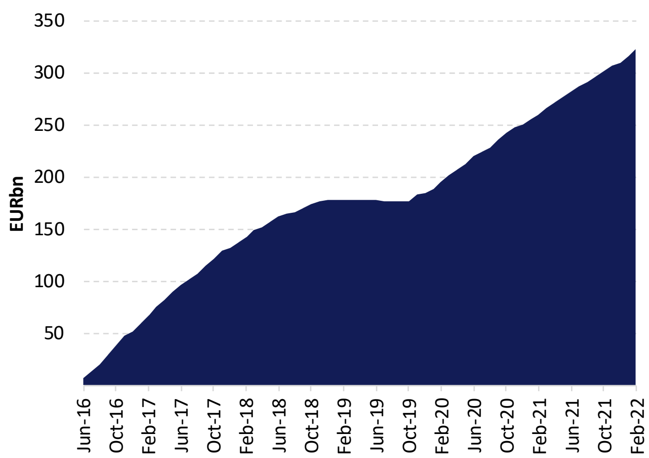
[1] Based on the ECB capital key, adjusted to include supras and the disqualification of Greece
[2] Based on the adjusted distribution key
[3] Weighted average time to maturity of the bonds eligible for purchasing under the PSPP (semi-annual data, Q1/2021)
Source: ECB, NORD/LB Markets Strategy & Floor Research

Corporate Sector Purchase Programme (CSPP)

Weekly purchases

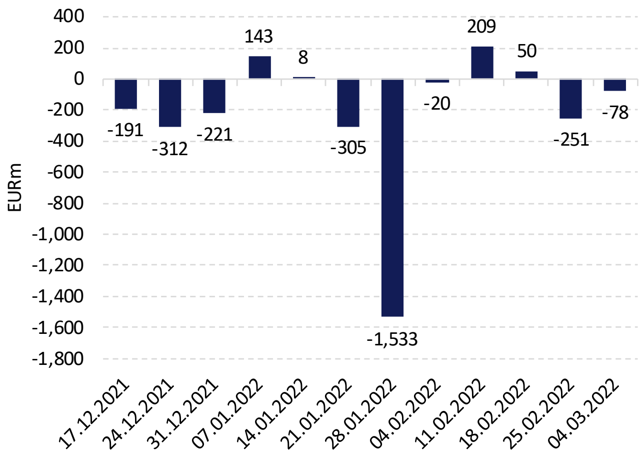


Development of CSPP volume

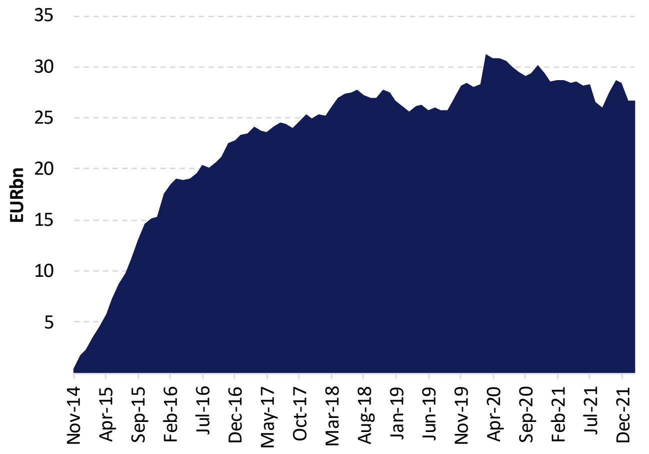


Asset-Backed Securities Purchase Programme (ABSPP)

Weekly purchases



Development of ABSPP volume



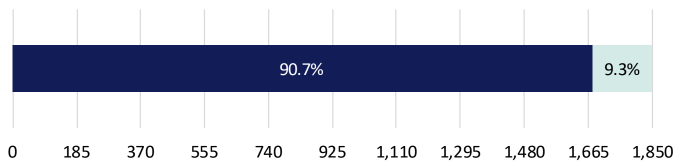
Source: ECB, Bloomberg, NORD/LB Markets Strategy & Floor Research

Pandemic Emergency Purchase Programme (PEPP)

Holdings (in EURm)

	PEPP
Jan-22	1,647,678
Feb-22	1,687,862
Δ	+40,184

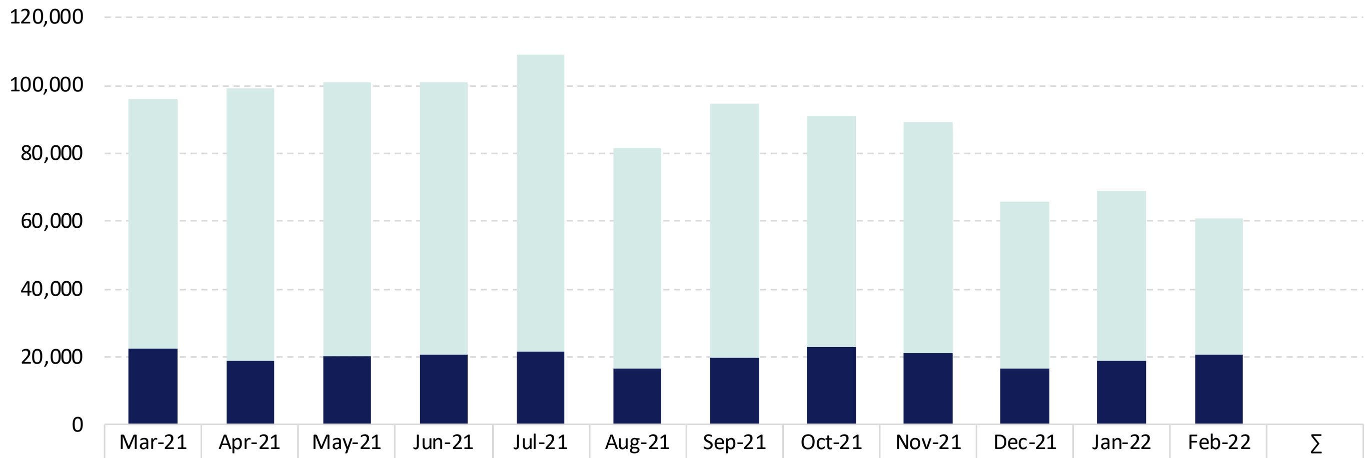
Volume already invested (in EURbn)



Estimated portfolio development

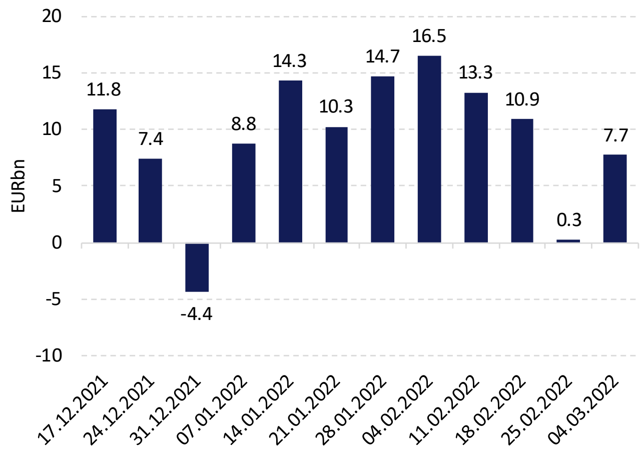
Assumed pace of purchases	Weekly net purchase volume	PEPP (theoretically) limit hit in ...
Average weekly net purchase volume so far	EUR 16.6bn	10 weeks (13.05.2022)

Monthly net purchases (in EURm)

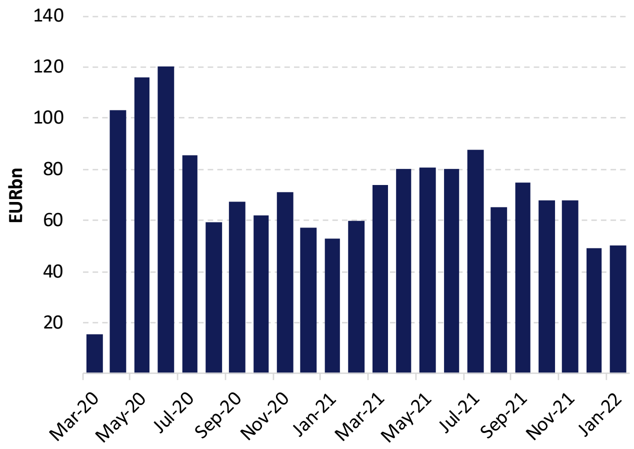


	Mar-21	Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Nov-21	Dec-21	Jan-22	Feb-22	∑
∑	96,082	99,036	100,841	100,808	109,154	81,799	94,710	90,872	89,245	65,971	68,951	60,882	1,058,35
PEPP	73,521	80,118	80,700	80,168	87,557	65,050	75,051	67,855	68,045	49,375	50,113	40,184	817,737
APP	22,561	18,918	20,141	20,640	21,597	16,749	19,659	23,017	21,200	16,596	18,838	20,698	240,614

Weekly purchases



Development of PEPP volume

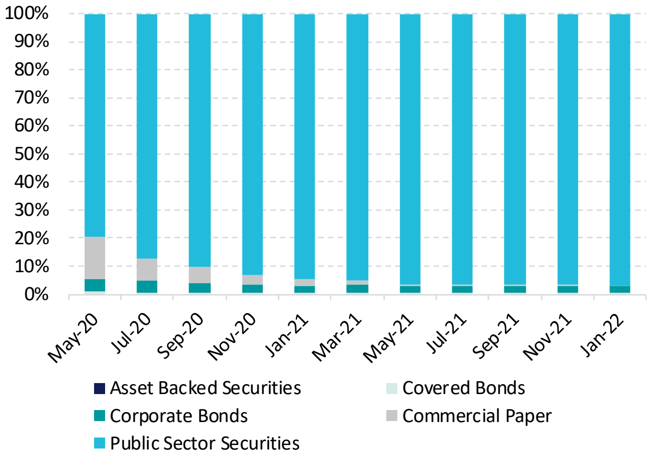


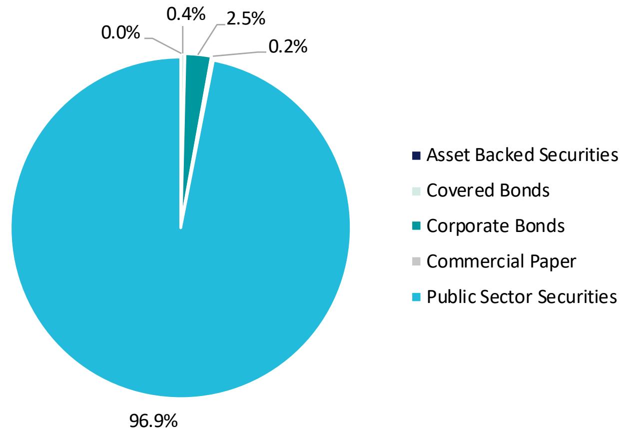
Source: ECB, Bloomberg, NORD/LB Markets Strategy & Floor Research

Holdings under the PEPP (in EURm)

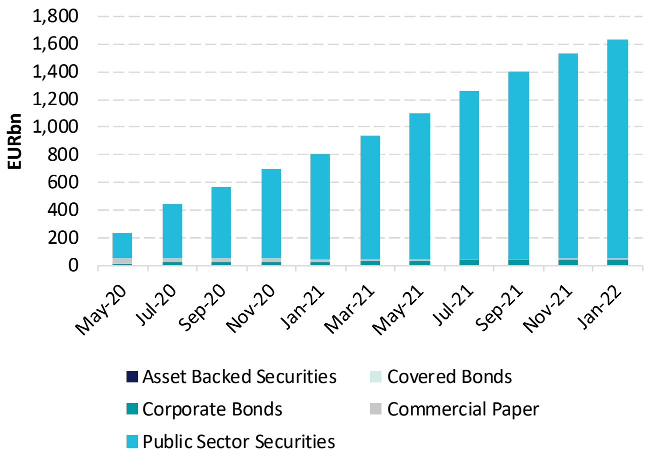
	Asset-backed Securities	Covered Bonds	Corporate Bonds	Commercial Paper	Public Sector Securities	PEPP
Nov-21	0	6,079	39,871	4,032	1,485,526	1,535,508
Jan-22	0	6,073	40,301	3,857	1,580,547	1,630,779
Δ	0	0	+467	-172	+99,193	+99,488

Portfolio structure

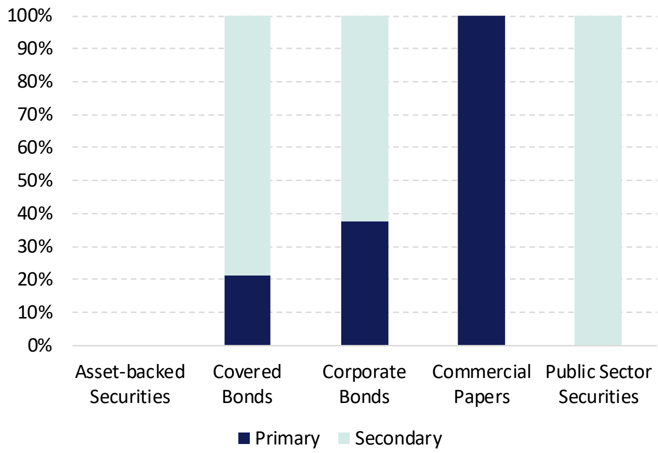




Portfolio development



Share of primary and secondary market holdings



Breakdown of private sector securities under the PEPP

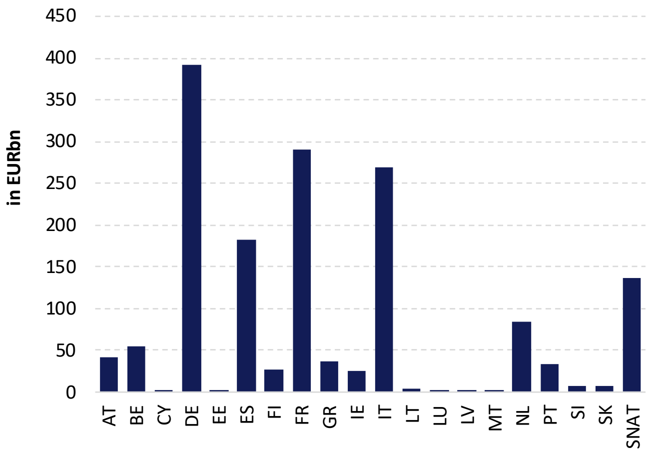
Jan-22	Asset-backed securities		Covered bonds		Corporate bonds		Commercial paper	
	Primary	Secondary	Primary	Secondary	Primary	Secondary	Primary	Secondary
Holdings in EURm	0	0	1,298	4,775	15,101	25,200	3,857	0
Share	0.0%	0.0%	21.4%	78.6%	37.5%	62.5%	100.0%	0.0%

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

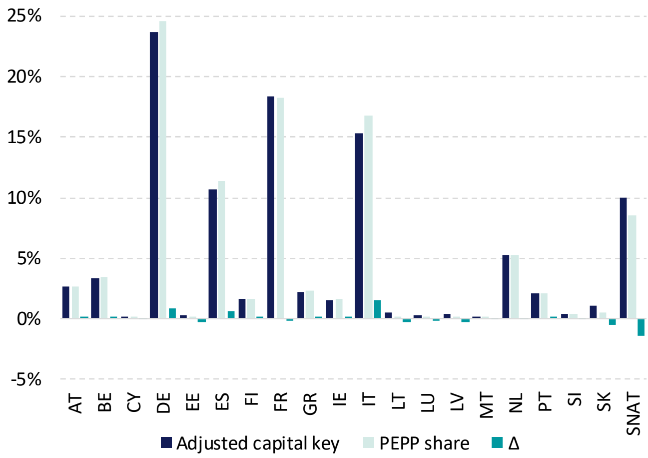
Breakdown of public sector securities under the PEPP

Jurisdiction	Holdings (in EURm)	Adj. distribution key[1]	PEPP share	Deviations from the adj. distribution key[2]	ø time to maturity (in years)	Market average[3] (in years)	Difference (in years)
AT	42,272	2.6%	2.6%	0.0%	8.2	7.0	1.2
BE	54,203	3.3%	3.4%	0.1%	6.6	9.2	-2.6
CY	2,514	0.2%	0.2%	0.0%	8.6	8.1	0.5
DE	392,570	23.7%	24.6%	0.9%	6.2	6.8	-0.6
EE	256	0.3%	0.0%	-0.2%	8.4	8.4	0.0
ES	181,624	10.7%	11.4%	0.6%	7.7	7.5	0.2
FI	26,807	1.7%	1.7%	0.0%	6.9	7.5	-0.7
FR	291,113	18.4%	18.2%	-0.2%	8.1	7.5	0.6
GR	36,876	2.2%	2.3%	0.1%	8.9	9.6	-0.7
IE	25,332	1.5%	1.6%	0.1%	8.9	9.5	-0.6
IT	268,405	15.3%	16.8%	1.5%	7.1	6.9	0.2
LT	3,129	0.5%	0.2%	-0.3%	10.5	10.1	0.4
LU	1,914	0.3%	0.1%	-0.2%	6.3	6.3	0.0
LV	1,710	0.4%	0.1%	-0.2%	9.3	9.2	0.0
MT	544	0.1%	0.0%	-0.1%	10.8	9.0	1.9
NL	83,893	5.3%	5.3%	0.0%	7.6	8.5	-0.9
PT	33,857	2.1%	2.1%	0.0%	6.9	7.3	-0.4
SI	6,311	0.4%	0.4%	0.0%	9.2	9.2	0.0
SK	7,605	1.0%	0.5%	-0.6%	9.2	8.4	0.8
SNAT	136,399	10.0%	8.5%	-1.5%	10.1	8.5	1.5
Total / Avg.	**1,597,334**	**100.0%**	**100.0%**	**0.0%**	**7.5**	**7.5**	**0.1**

Distribution of public sector assets by jurisdiction



Deviations from the adjusted distribution key



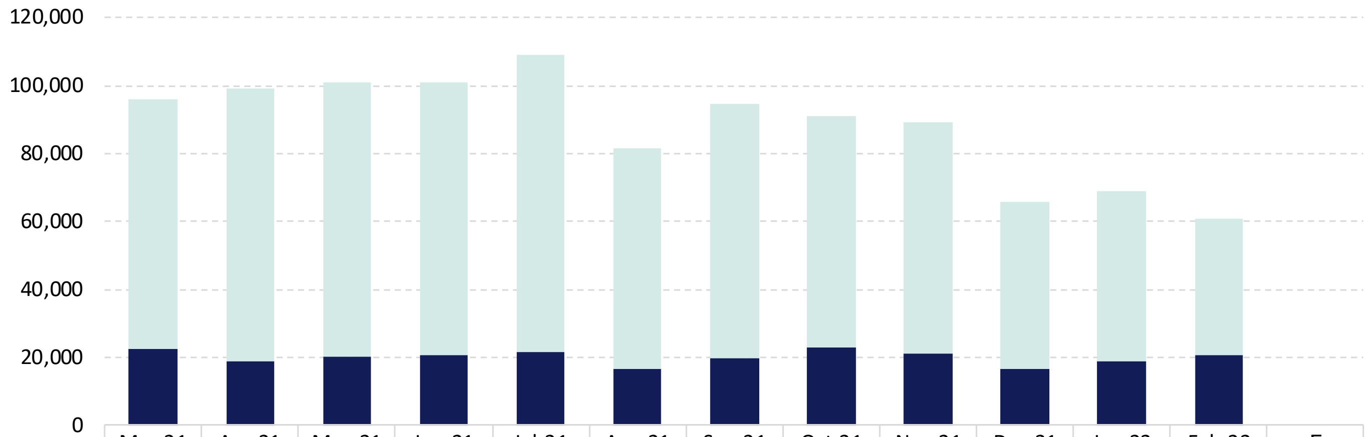
[1] Based on the ECB capital key, adjusted to include supras [2] Based on the adjusted distribution key
[3] Weighted average time to maturity of the bonds eligible for purchasing under the PEPP
Source: ECB, Bloomberg, NORD/LB Markets Strategy & Floor Research

Aggregated purchase activity under APP and PEPP

Holdings (in EURm)

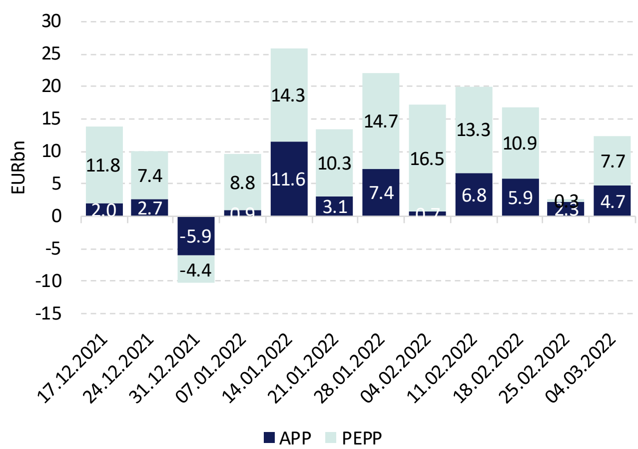
	APP	PEPP	APP & PEPP
Jan-22	3,142,221	1,647,678	4,789,899
Feb-22	3,162,920	1,687,862	4,850,782
Δ	+20,698	+40,184	+60,882

Monthly net purchases (in EURm)

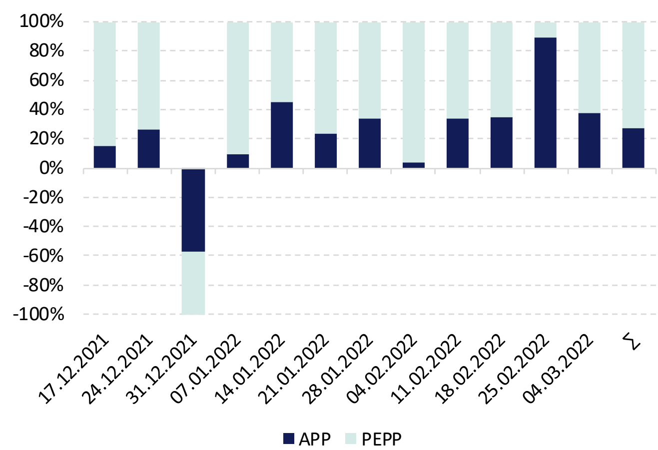


	Mar-21	Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Nov-21	Dec-21	Jan-22	Feb-22	∑
∑	96,082	99,036	100,841	100,808	109,154	81,799	94,710	90,872	89,245	65,971	68,951	60,882	1,058,35
PEPP	73,521	80,118	80,700	80,168	87,557	65,050	75,051	67,855	68,045	49,375	50,113	40,184	817,737
APP	22,561	18,918	20,141	20,640	21,597	16,749	19,659	23,017	21,200	16,596	18,838	20,698	240,614

Weekly purchases



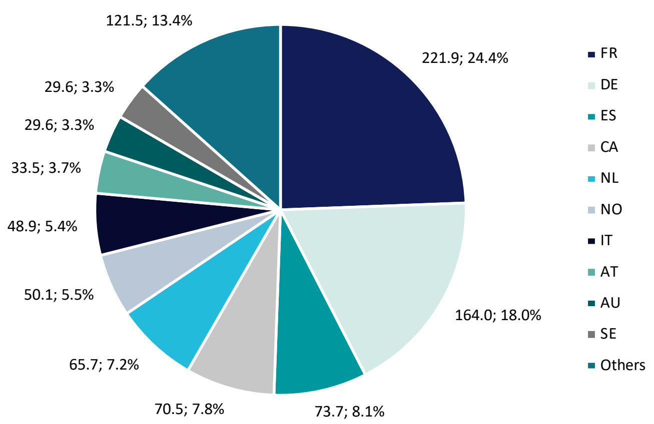
Distribution of weekly purchases



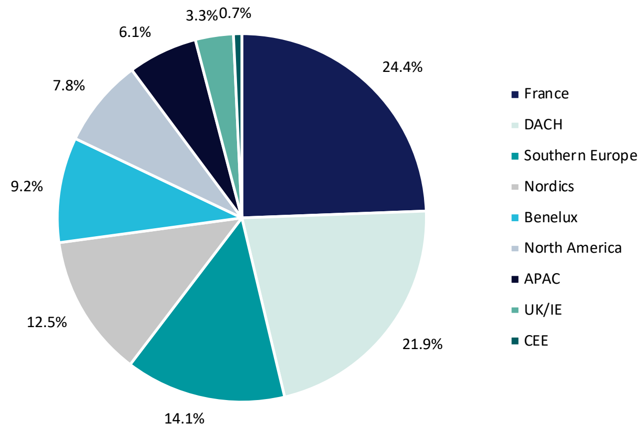
Source: ECB, Bloomberg, NORD/LB Markets Strategy & Floor Research

Charts & Figures
Covered Bonds

EUR benchmark volume by country (in EURbn)



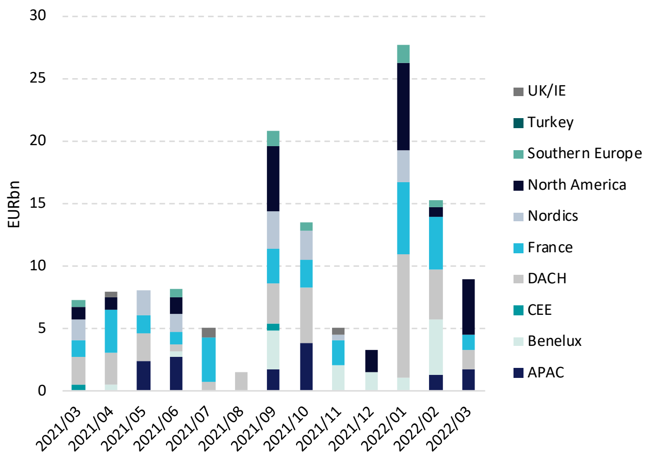
EUR benchmark volume by region (in EURbn)



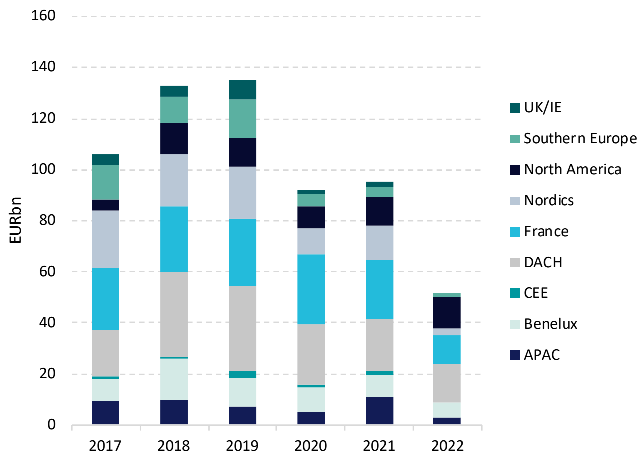
Top-10 jurisdictions

Rank	Country	Amount outst. (EURbn)	No. of BMKs	There of ESG BMKs	Avg. issue size (EURbn)	Avg. initial maturity (in years)	Avg. mod. Duration (in years)	Avg. coupon (in %)
1	FR	221.9	213	11	0.94	10.1	5.6	0.81
2	DE	164.0	238	17	0.63	8.4	4.6	0.41
3	ES	73.7	60	5	1.12	11.8	3.8	1.76
4	CA	70.5	57	0	1.20	6.0	3.3	0.22
5	NL	65.7	67	0	0.93	11.6	7.7	0.71
6	NO	50.1	58	9	0.86	7.4	4.0	0.38
7	IT	48.9	58	1	0.81	9.3	4.4	1.25
8	AT	33.5	62	2	0.54	9.9	6.3	0.53
9	AU	29.6	30	0	0.99	8.5	3.9	0.90
10	SE	29.6	36	0	0.82	7.6	3.3	0.41

EUR benchmark issue volume by month

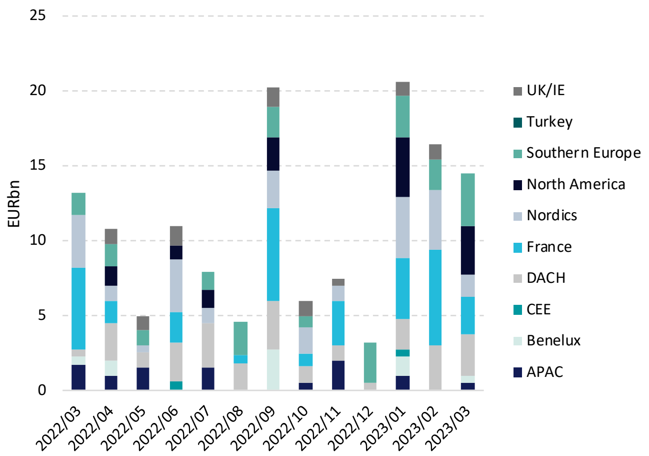


EUR benchmark issue volume by year

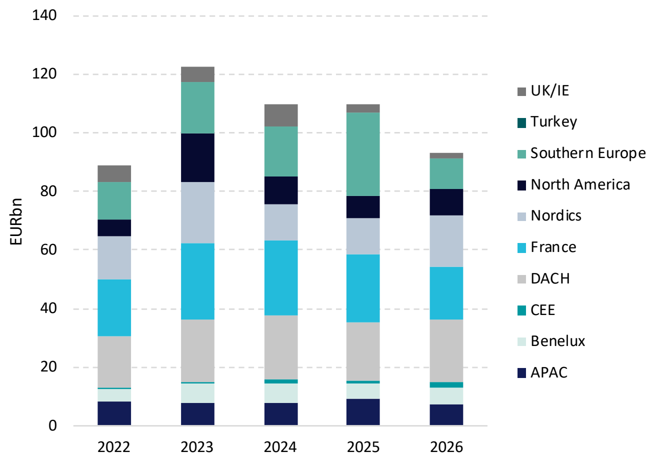


Source: Market data, Bloomberg, NORD/LB Markets Strategy & Floor Research

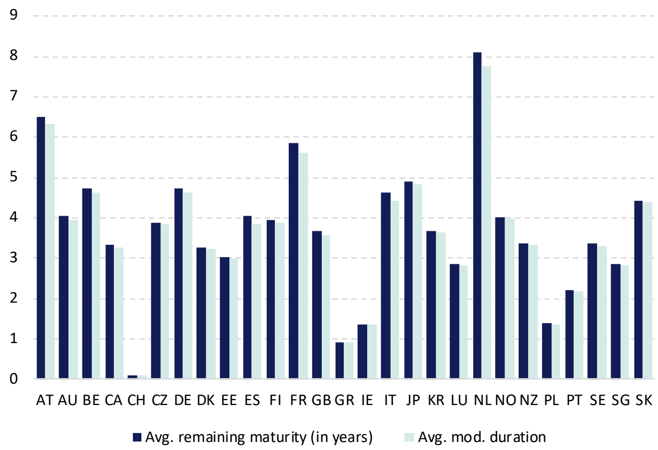
EUR benchmark maturities by month



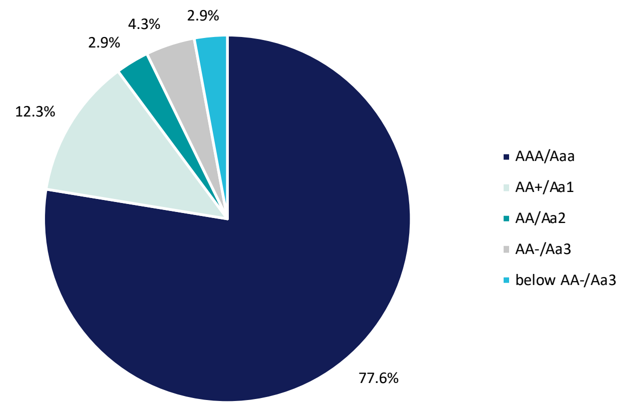
EUR benchmark maturities by year



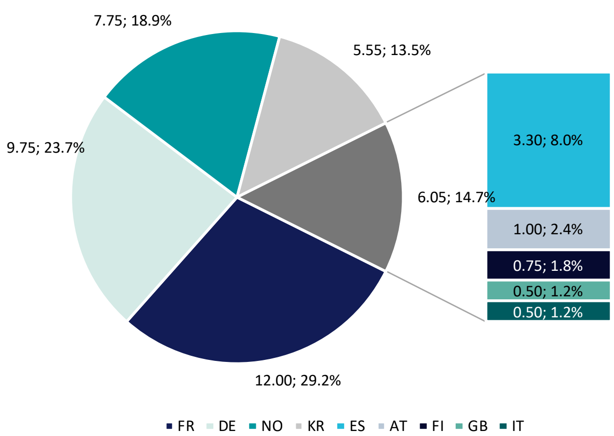
Modified duration and time to maturity by country



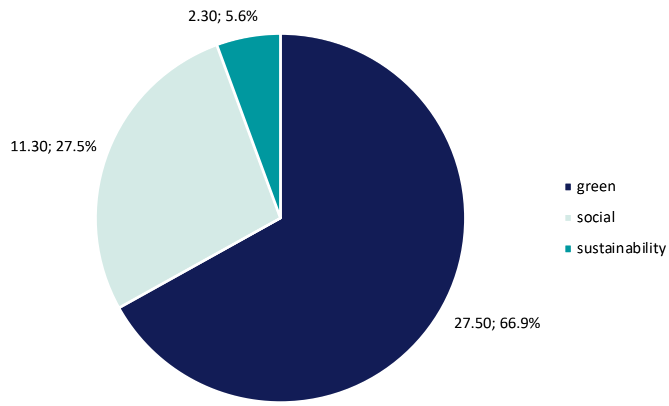
Rating distribution (volume weighted)



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



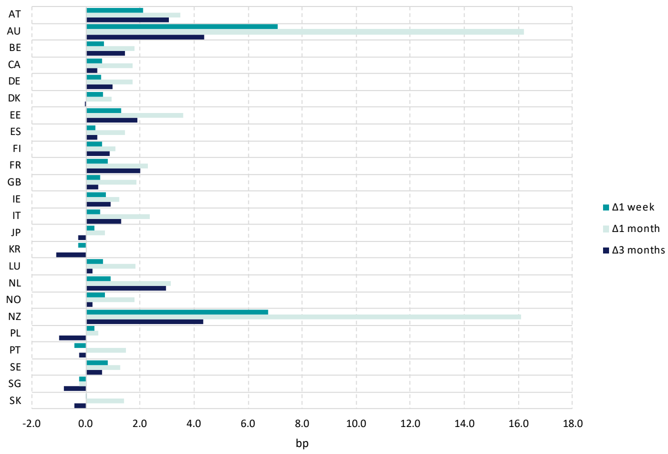
EUR benchmark volume (ESG) by type (in EURbn)



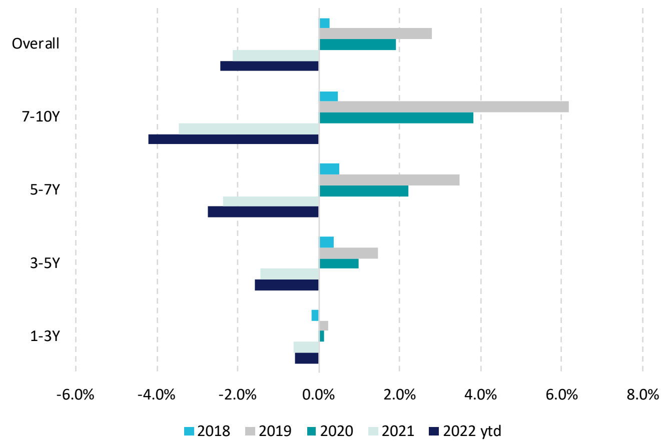
Source: Market data, Bloomberg, NORD/LB Markets Strategy & Floor Research

NORD/LB

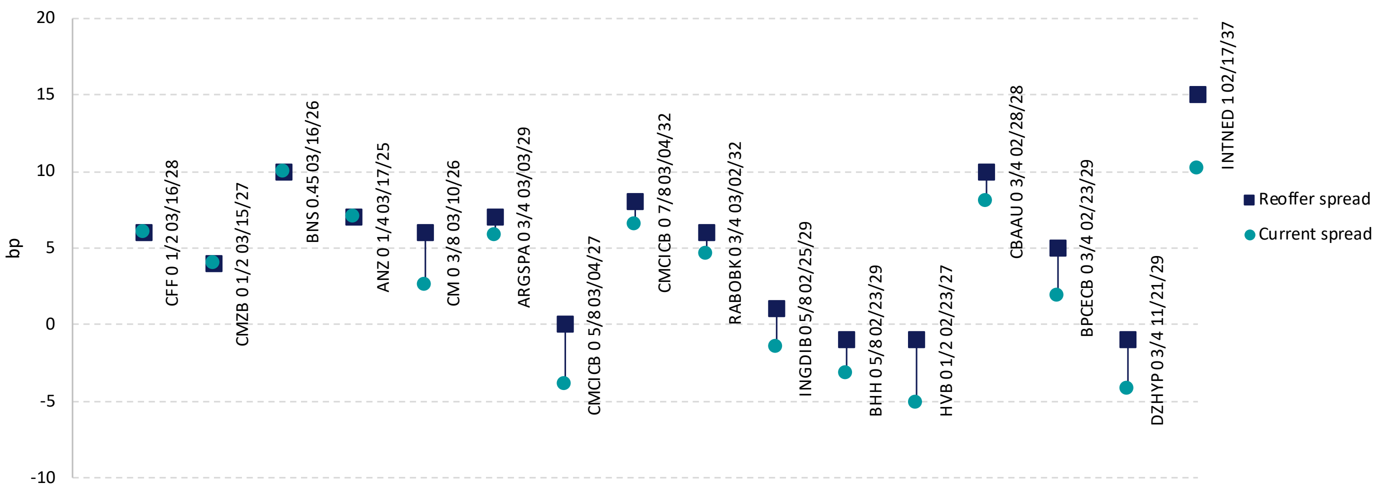
Spread development by country



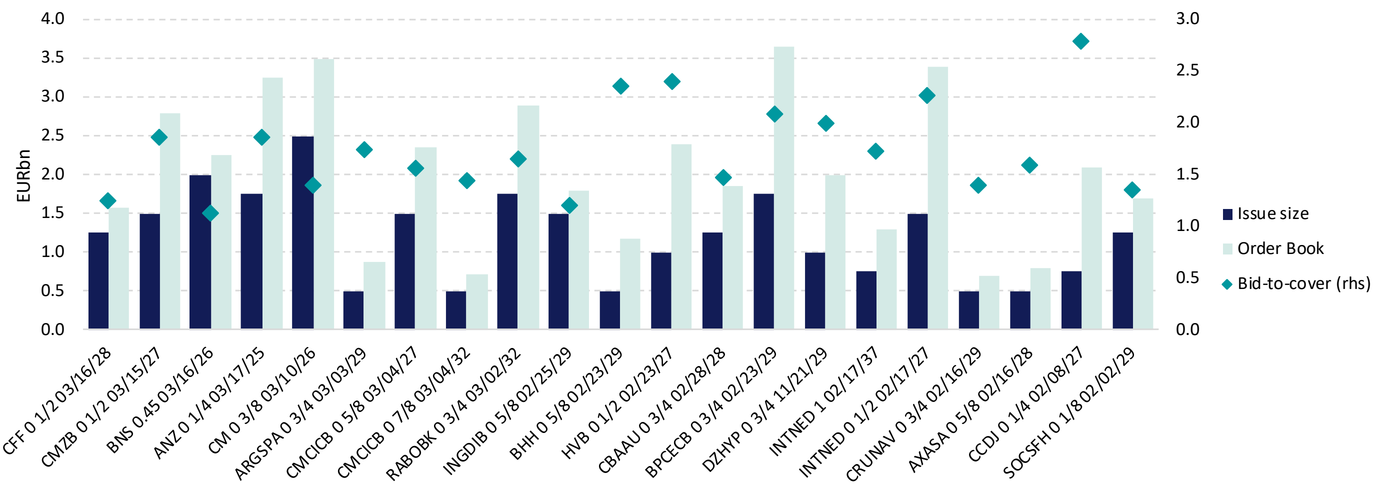
Covered bond performance (Total return)



Spread development (last 15 issues)



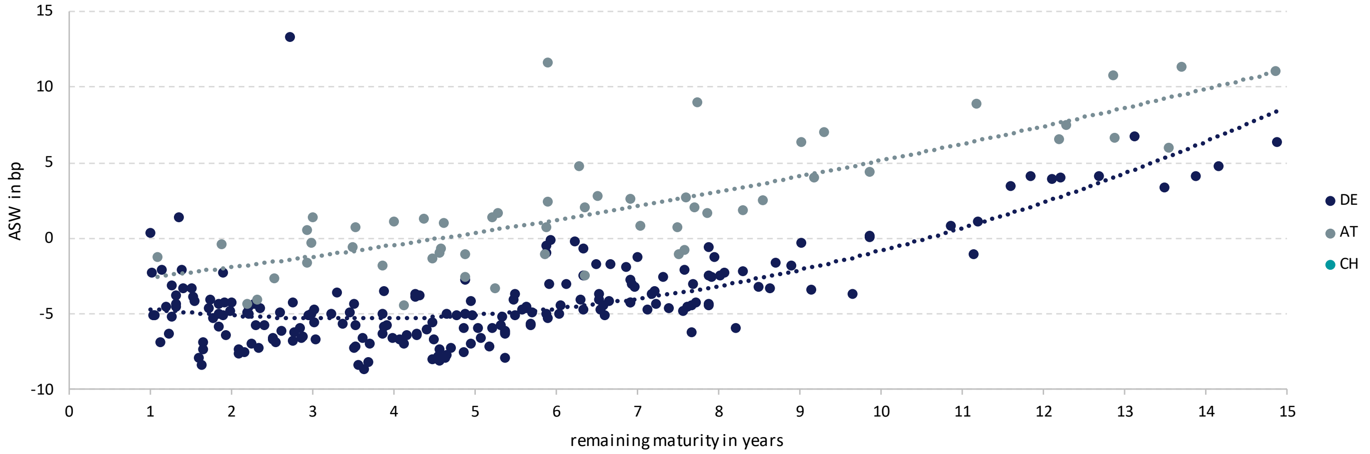
Order books (last 15 issues)



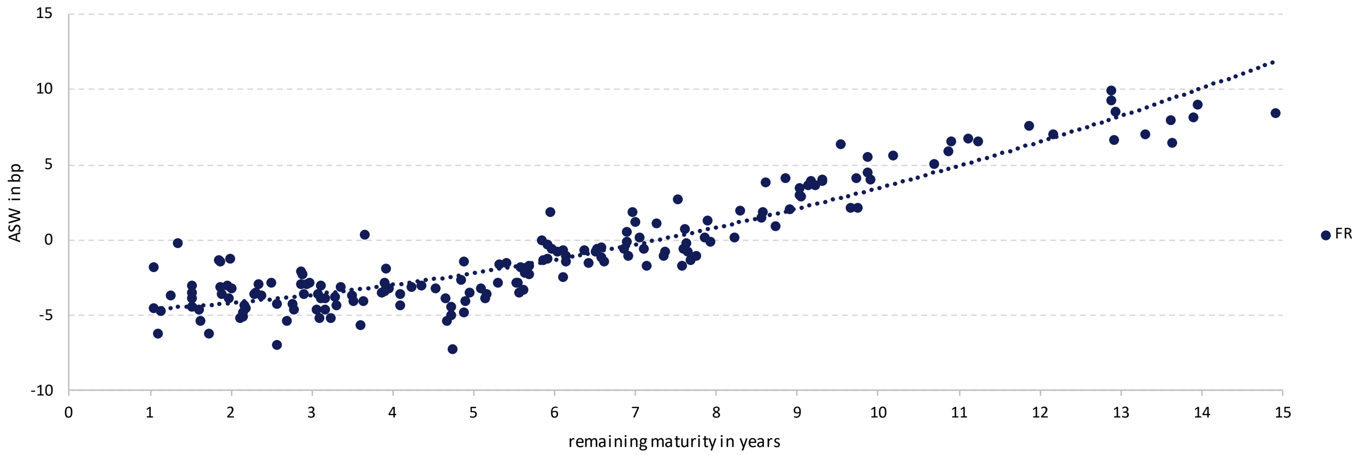
Source: Market data, Bloomberg, NORD/LB Markets Strategy & Floor Research

Spread overview[1]

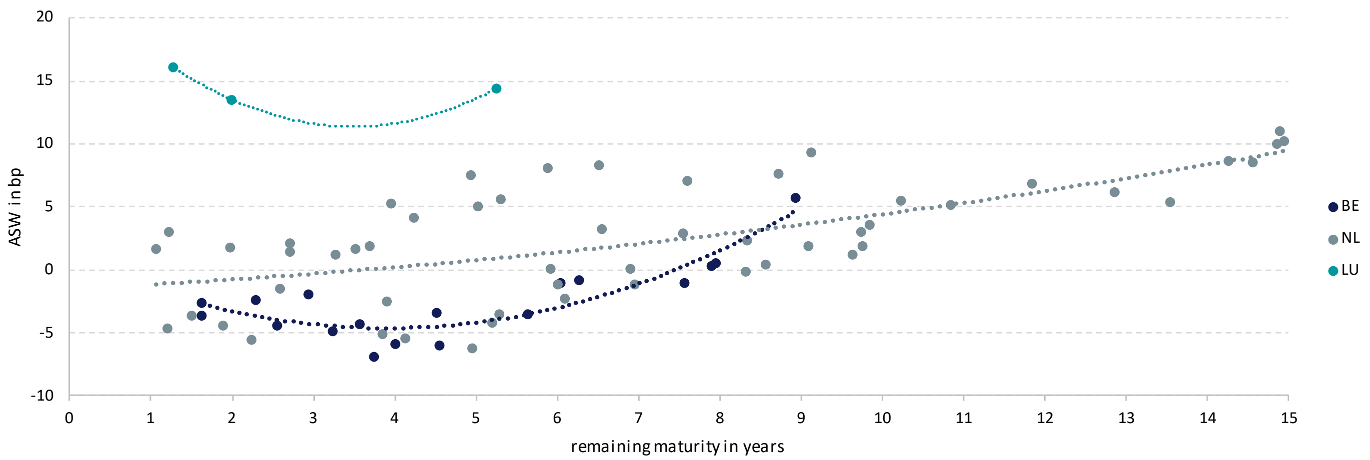
DACH



France

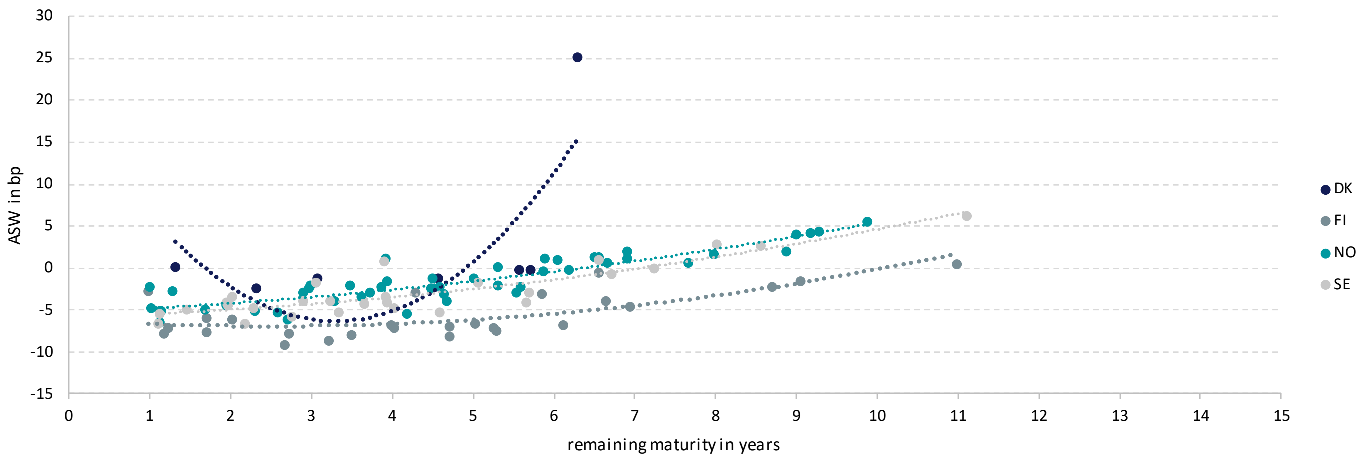


Benelux

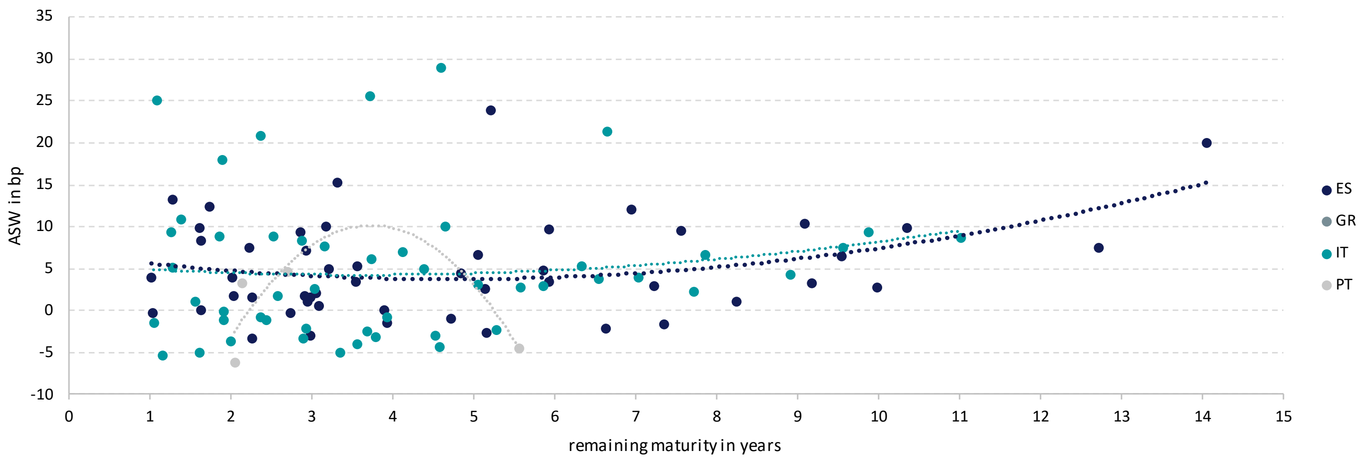


Source: Market data, Bloomberg, NORD/LB Markets Strategy & Floor Research [1]Time to maturity 1 ≤ y ≤ 15

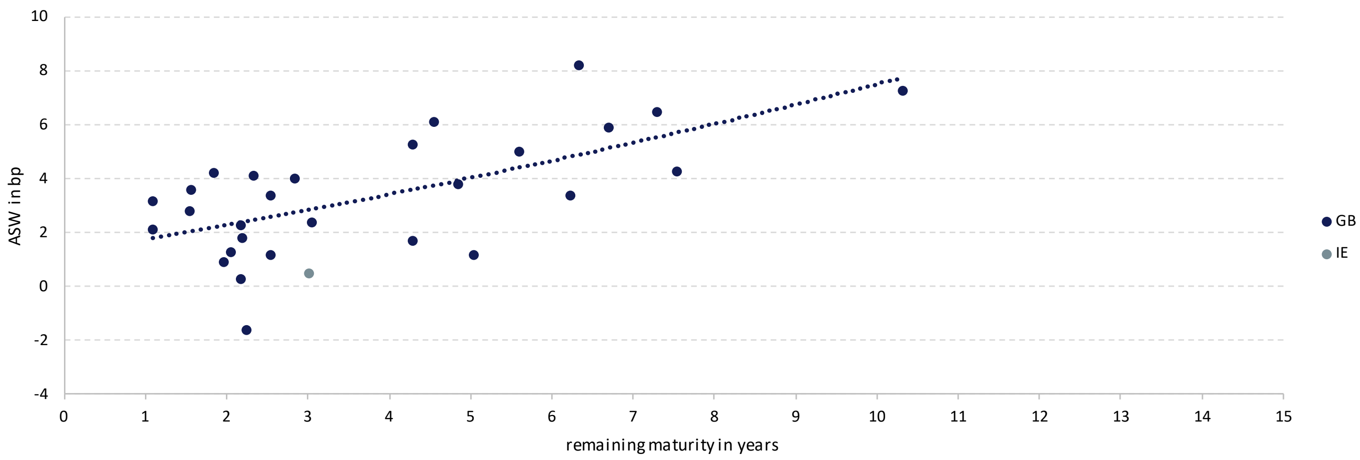
Nordics



Southern Europe

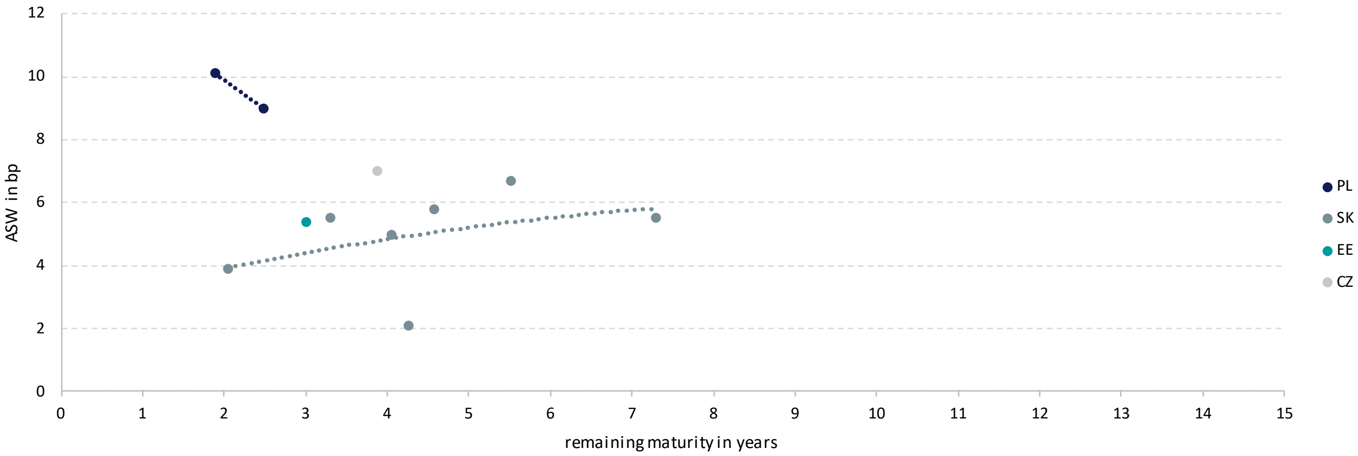


UK/IE

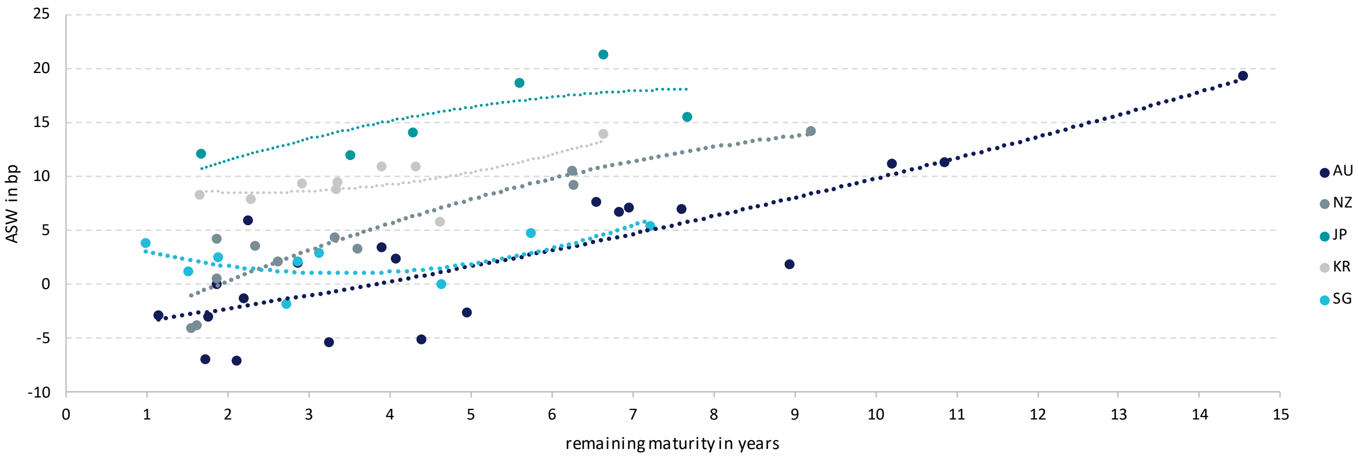


Source: Market data, Bloomberg, NORD/LB Markets Strategy & Floor Research

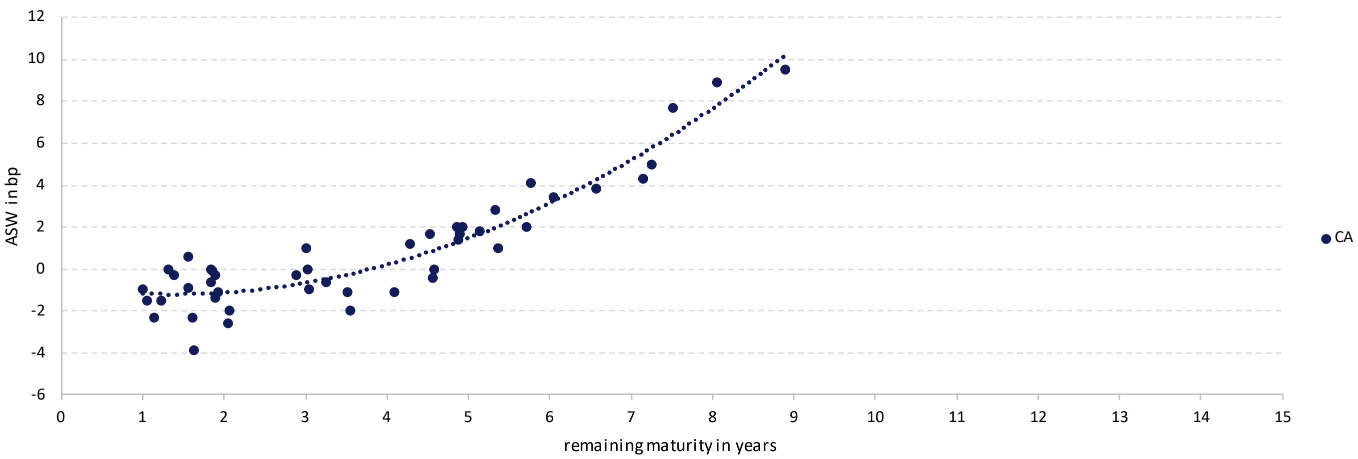
CEE



APAC



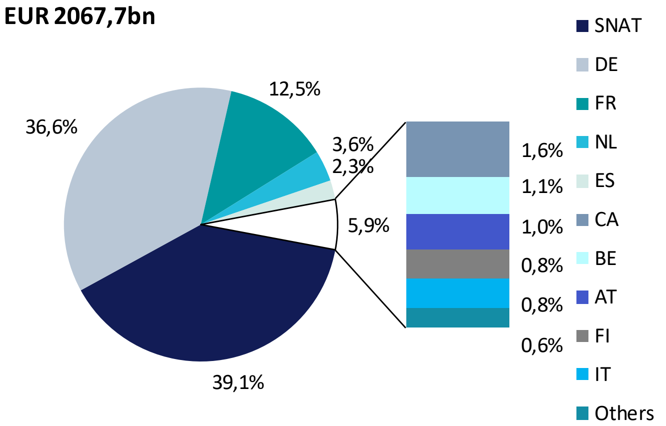
North America



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

Charts & Figures
SSA/Public Issuers

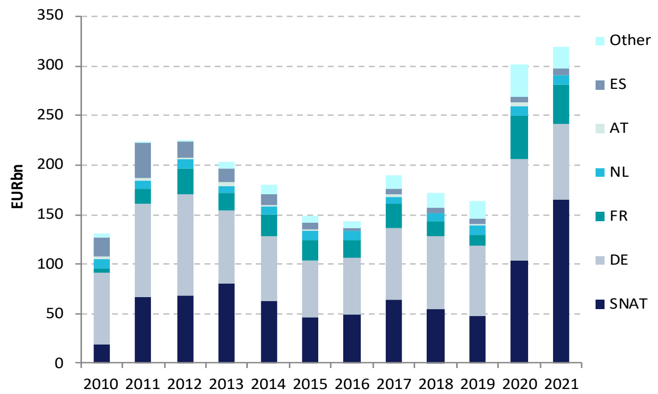
Outstanding volume (bmk)



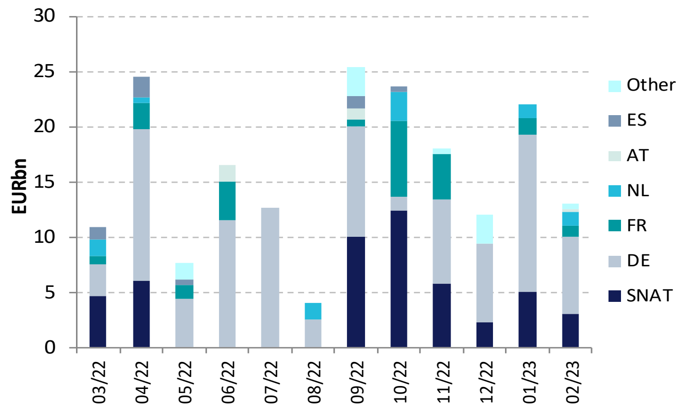
Top 10 countries (bmk)

Country	Vol. (€bn)	No. of bonds	ØVol. (€bn)	Vol. weight. ØMod. Dur.
SNAT	807,9	199	4,1	8,5
DE	756,1	575	1,3	6,8
FR	259,4	181	1,4	6,6
NL	75,3	69	1,1	6,5
ES	46,8	59	0,8	4,8
CA	33,2	22	1,5	5,3
BE	21,7	25	0,9	13,5
AT	21,2	23	0,9	4,7
FI	17,4	21	0,8	6,0
IT	16,8	20	0,8	5,4

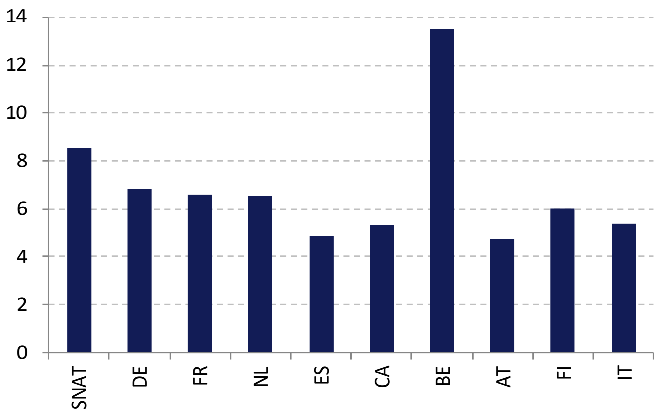
Issue volume by year (bmk)



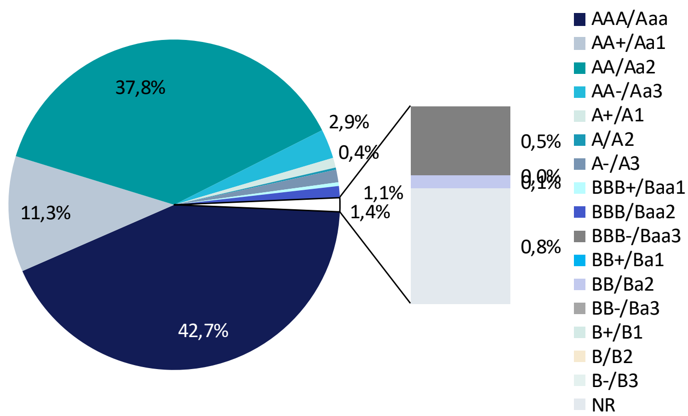
Maturities next 12 months (bmk)



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

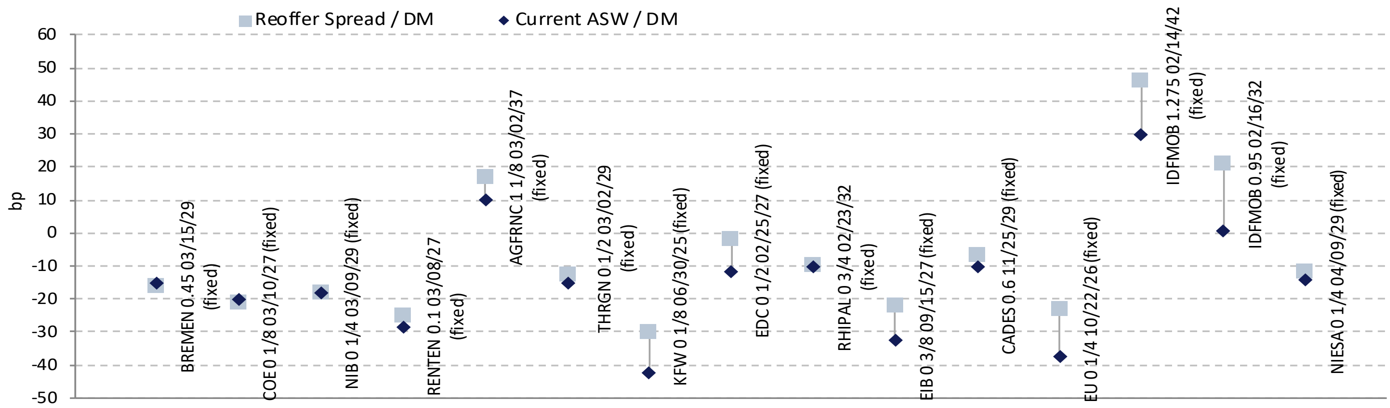


Rating distribution (vol. weighted)

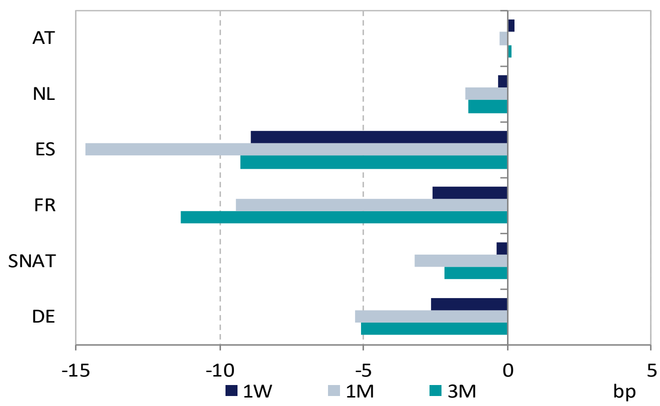


Source: Bloomberg, NORD/LB Markets Strategy & Floor Research

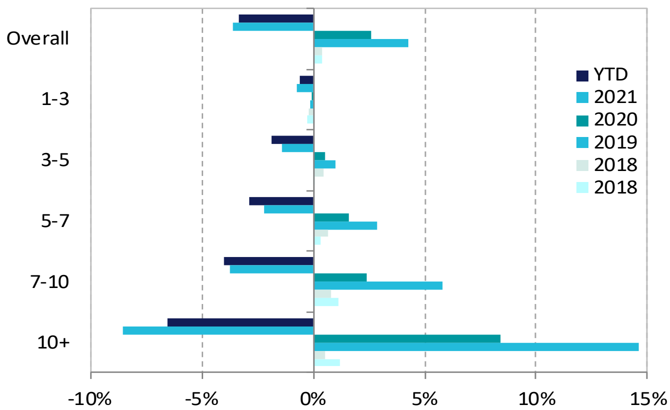
Spread development (last 15 issues)



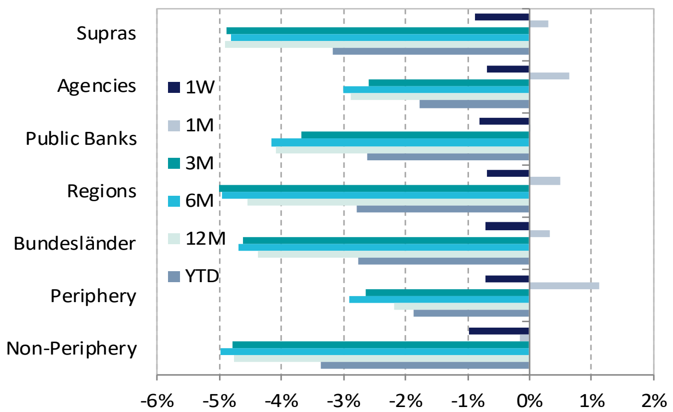
Spread development by country



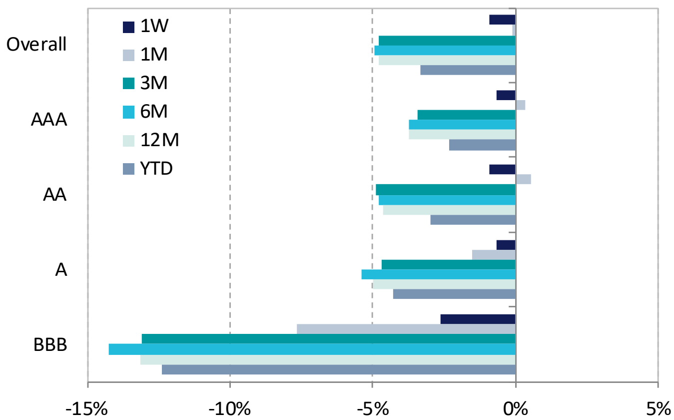
Performance (total return)



Performance (total return) by regions

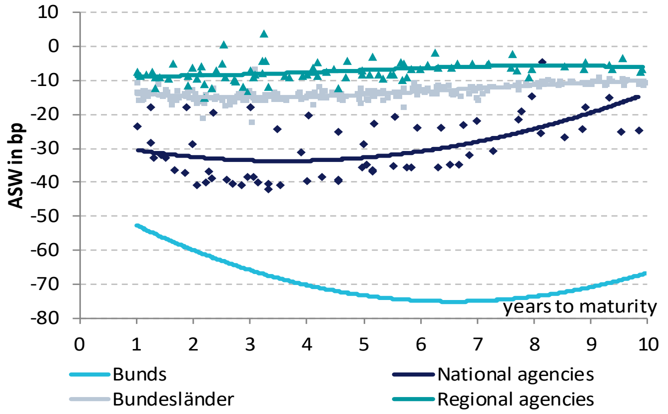


Performance (total return) by rating

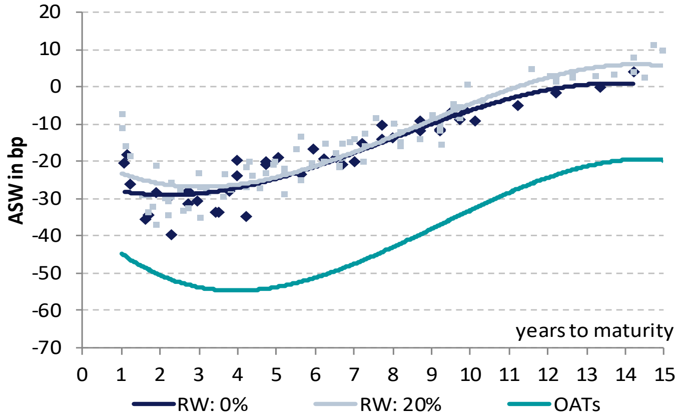


Source: Bloomberg, NORD/LB Markets Strategy & Floor Research

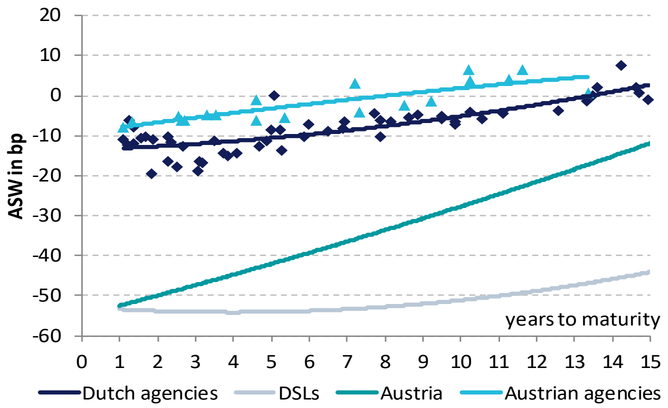
Germany (by segments)



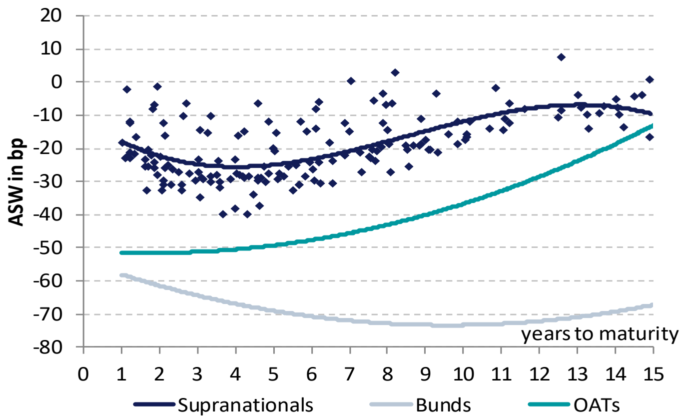
France (by risk weight)



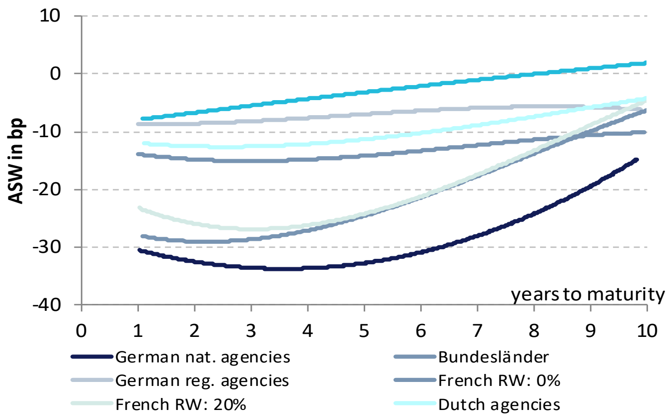
Netherlands & Austria



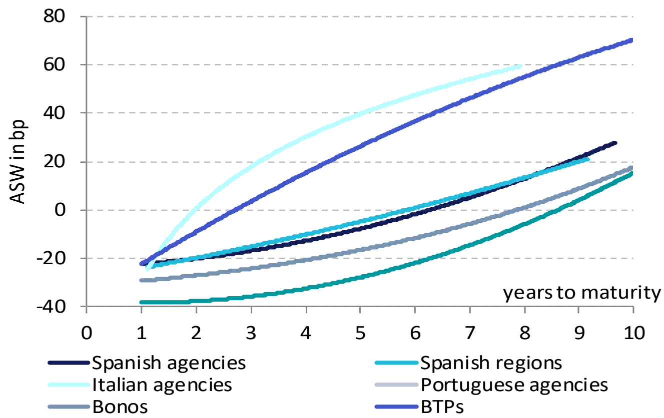
Supranationals



Core



Periphery



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

NORD/LB

Appendix
Overview of latest Covered Bond & SSA View editions

Publication	Topics
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
03/2022 ♦ 26 January	▪ ECB preview: 10y Bund spotted in positive terrain. What's next? ▪ EUR benchmark segment in Canada: our supply forecast already null and void
02/2022 ♦ 19 January	▪ Spotlight on the EUR benchmark segment: a look at the covered bond markets in Belgium and the Netherlands ▪ 24th meeting of the Stability Council (Dec. 2021)
01/2022 ♦ 12 January	▪ Covered Bonds Annual Review 2021 ▪ The Moody's covered bond universe – an overview ▪ SSA Annual Review 2021: Record after record
40/2021 ♦ 15 December	▪ ECB preview: End of PEPP, booster for APP?! ▪ Our view of the covered bond market in 2022 ▪ SSA Outlook 2022: Public sector caught between ECB & COVID
39/2021 ♦ 08 December	▪ The ECB, monetary policy and covered bond market: Hypothetical "What if...?" considerations ▪ The Moody's rating approach
38/2021 ♦ 01 December	▪ United Kingdom: Spotlight on the EUR benchmark segment ▪ Beyond Bundeslaender: Region Pays de la Loire (PDLL)
37/2021 ♦ 24 November	▪ Benchmark deals outside the euro: momentum has returned! ▪ Transparency regulations under Section 28 of the Pfandbriefgesetz (PfandBG - German Pfandbrief Act) Q3 2021 ▪ Beyond Bundeslaender: Auvergne-Rhône-Alpes Region (ARA)
36/2021 ♦ 17 November	▪ Primary market forecast 2022: time for a comeback? ▪ Development of the German property market ▪ Beyond Bundeslaender: Spotlight on Belgian regions
35/2021 ♦ 10 November	▪ PEPP approaching notional end – will the APP be pepped up? ▪ Spain's major move – will the amended covered bond legislation breathe new life into the market?
34/2021 ♦ 03 November	▪ Repayment structures on the covered bond market: EU harmonisation is already leaving its mark ▪ Beyond Bundeslaender: Spanish regions in the spotlight

Appendix
Publication overview

Covered Bonds:

Issuer Guide Covered Bonds 2021

Risk weights and LCR levels of covered bonds

Transparency requirements §28 PfandBG

Transparenzvorschrift §28 PfandBG Sparkassen (German only)

SSA/Public Issuers:

Issuer Guide – German Bundeslaender 2021

Issuer Guide – Canadian Provinces & Territories 2020

Issuer Guide – Supranationals & Agencies 2019

Issuer Guide – Down Under 2019

Fixed Income:

ESG update

Analysis of ESG reporting

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 corona pandemic emergency

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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Governments	+49 511 9818-9660
Laender/Regionen	+49 511 9818-9550
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Origination Corporates	+49 511 361-2911

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

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Additional information
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None

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Issuer / security	Date	Recommendation	Bond type	Cause