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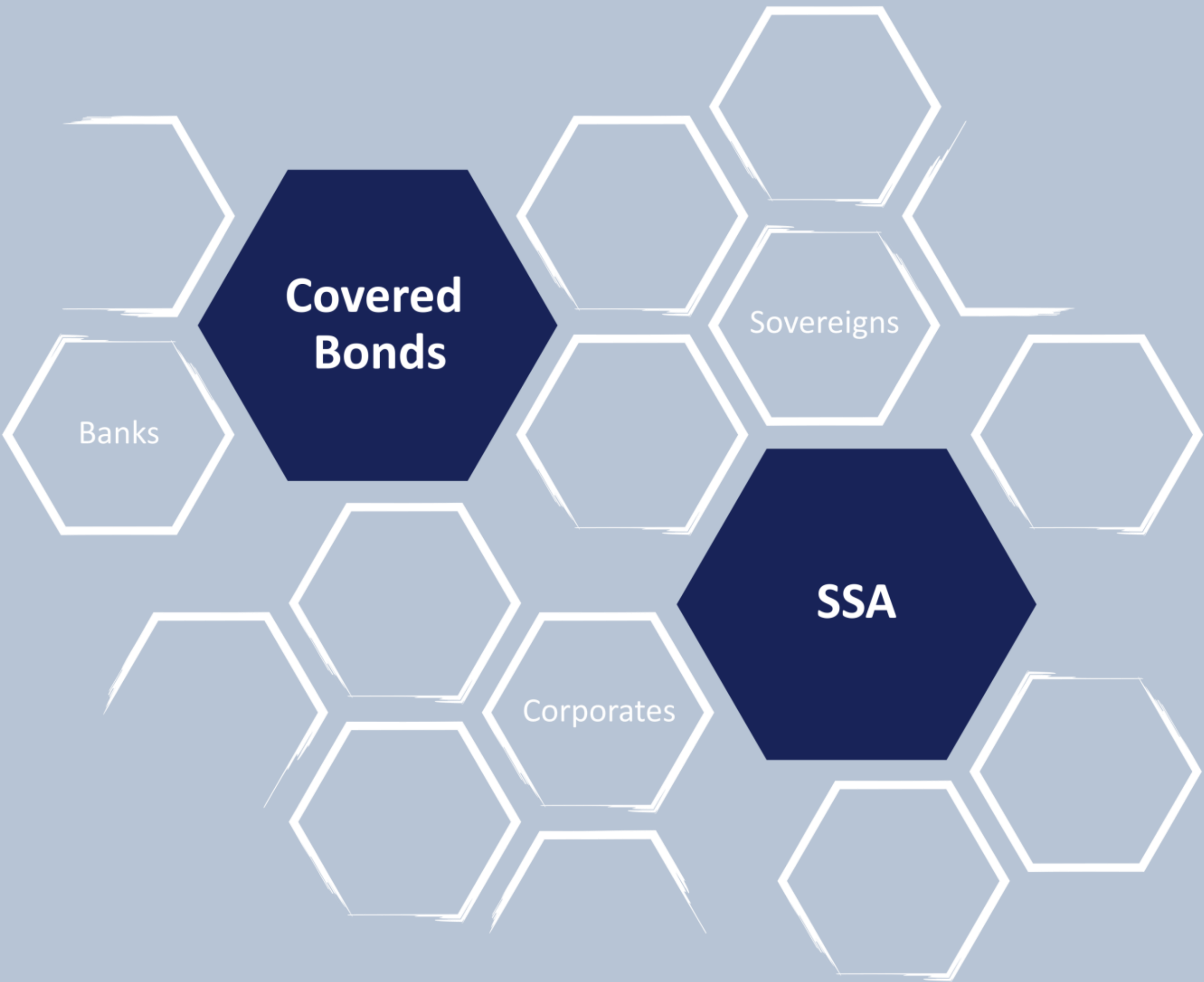

Covered Bond & SSA View

NORD/LB Markets Strategy & Floor Research

16 June 2021 ♦ 21/2021

Investment strategy recommendation and marketing communication

(see disclaimer on the last pages)

Finanzgruppe

Agenda

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Market overview
Covered Bonds

Authors: Henning Walten, CIIA // Dr Frederik Kunze

No new EUR benchmark deals

While last week we had four transactions to report in this section, there was no new activity on the market for EUR benchmarks over the past five trading days. The ECB meeting last Thursday also generated no real impetus with regard to covered bonds. While the pace of purchases under the PEPP is set to remain high into the third quarter as well, we do not see any impact on the covered bond market as a result of the ECB's decision-making due to the fact that covered bonds account for a share of just 0.4% of the PEPP volume and, moreover, no covered bonds were bought in either April or May under the programme (cf. Covered Bond & SSA View from 09 June). Further details related to the recent ECB meeting can be found in the SSA Market Overview article. Looking at the segment for EUR benchmarks, the issuance volume for 2021 therefore remains at EUR 41.95bn for the time being. At this stage last year, the volume stood at EUR 58.75bn, equating to a drop of 28.6% year on year at present. However, the picture is somewhat friendlier for the number of deals placed in the current year: in this context, the decline amounts to "only" 13.8% (56 vs. 65 deals). However, the number of jurisdictions from which new deals have been placed in the current year should also be highlighted (in comparison with the previous year in particular). With EUR benchmarks from 17 different countries, more jurisdictions are represented this year than was the case across 2020 as a whole (14). This is an aspect which reflects the widespread global use of the covered bond product, and in our view should therefore be regarded as a positive factor.

Issuer	Country	Timing	ISIN	Maturity	Size	Spread	Rating	ESG
-	-	-	-	-	-	-	-	-

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

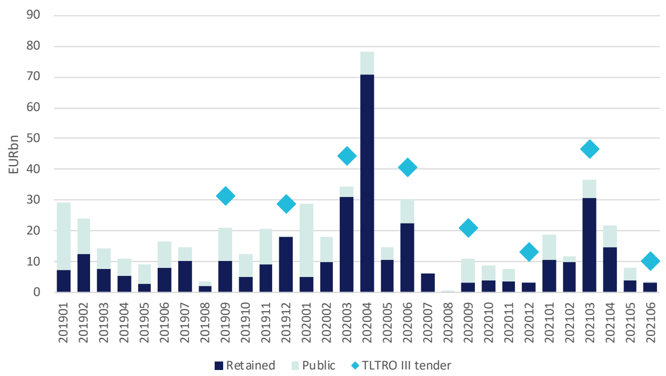
Activity in the covered bond segment in the form of two GBP deals

However, the past few days were not totally without new issuance activity. In this context, the Bank of Nova Scotia in Canada placed a deal worth GBP 1.3bn with a term to maturity of five years at the beginning of the current trading week. The bank was last active in the EUR benchmark segment on 11 March 2020 before then issuing another deal for USD 900m just a fortnight later. In contrast, the most recent transaction follows on from the last GBP benchmark in January 2018. With the order book amounting to GBP 1.45bn, the deal (which went to market priced at SONIA +28bp) was only marginally oversubscribed, although did still tighten by four basis points during the book-building process. Yesterday, on Tuesday, TSB Bank followed suit with a GBP benchmark. In contrast to its Canadian counterpart above, the bank has not previously been active outside of the GBP (with its most recent deal dating back to February 2019). TSB's third GBP benchmark featured a volume of GBP 500m with a term to maturity of seven years. After being priced at SONIA +37bp, the deal came in three basis points under the guidance. Based on a volume of GBP 2.0bn issued so far in 2021, the market has now grown by GBP 1.8bn to total GBP 3.8bn overall on the back of the two most recent transactions – nearly doubling in the process! Meanwhile, another bank has also signalled its intention to issue a GBP benchmark with yesterday's mandate from the Canadian Imperial Bank of Commerce.

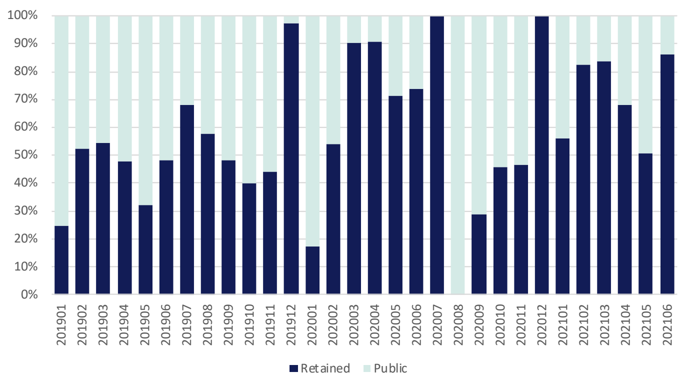
EMU covered bonds: TLTRO III.8 allocation scheduled for Thursday

Tomorrow, on Thursday, the TLTRO III.8 allocation is set to be announced in line with the TLTRO III calendar published by the ECB. For this eighth round of TLTRO III tenders, we expect rather more modest demand after the high levels of borrowing recorded by commercial banks as part of the TLTRO III.7 tender. We would initially justify this prediction by citing the cautious dynamic recently observed in connection with the placement of retained issues (retained covered bonds). After all, these "own use" securities represent a significant proportion of the collateral deposited with the ECB. In our opinion, considerations of advantages, especially with regard to achieving the best possible rate for TLTRO III funding, are set to become increasingly important on the part of the commercial banks. As a result, we would not rule out a scenario in which certain banks presently opt to exercise caution with regard to TLTRO III utilisation. However, this does not necessarily imply that a smaller volume of TLTRO III allocations will lead to greater dynamism for publicly placed covered bonds. In this context, too, a specific funding requirement is the decisive factor, for which a benchmark-sized EUR deal is the best possible alternative, also from a pricing point of view. If, contrary to our expectations, the TLTRO III.8 allocation is again on the high side, this would have to be seen as a sign that the covered bond issuance volume will again be dampened with a view to EUR benchmarks.

Covered bond issuances over time



Share of retained issuances over time



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

Market overview SSA/Public Issuers

Author: Dr Norman Rudschuck, CIIA

Review of the ECB Governing Council meeting

As expected, the European Central Bank decided to stick to its present highly loose monetary policy course at last Thursday's meeting of the Governing Council. The ECB's key interest rates all remain unchanged. Moreover, the ECB made no significant changes to either the total envelope of the PEPP, its minimum duration, the parameters of the APP or the forward guidance. The Council expects the pace of net asset purchases under the PEPP to again be significantly higher in Q3 than was the case in the first few months of this year. In our preview of the ECB meeting in this publication two weeks ago, we had specifically suggested that asset purchases by the Eurosystem in context of the pandemic programme would remain at the current level, although this would by no means rule out significant variations in weekly purchases. In Q4 2021, a systematic reduction to the level of Q1 2021 (EUR 14.6bn weekly) would make sense, while we assume a further reduction in weekly purchases to EUR 12.5bn for Q1 2022. Our assumptions have now been confirmed. Our economic forecast also fits in with the ECB's view: In spite of an improvement in the economic outlook and higher inflation figures lately (May: +2.0% Y/Y), the ECB's monetary policy is set to remain very loose for some time to come. One decisive factor in this respect is the central bankers' view, according to which higher inflation over the course of 2021 will mainly be attributable to exceptional factors and the impact should therefore be transitory in nature. This is also reflected in the June projections: although higher inflation is projected for 2021 (1.9%) and 2022 (1.5%) than was the case in March, the figure of 1.4% for 2023 is still well below the ECB's inflation target over the medium term. It comes as no surprise that the ECB also expects the heightened pace of asset purchases as part of the PEPP which was agreed in March to continue into Q3. Several ECB representatives had already made very dovish comments prior to the beginning of the usual quiet period, dampening the trend in capital market yields accordingly. Medium-term key interest rate expectations have also declined again slightly. According to our Chief Economist, there was nothing in ECB President Christine Lagarde's press conference that might have raised doubts about the central bank's continued commitment to cheap financing conditions and the smooth transmission of monetary policy in order to help overcome the coronavirus crisis. At the same time, declining infection figures, progress with the vaccination campaign and a more robust economic outlook are resulting in growing challenges in terms of communicating monetary policy. During the press conference, Lagarde avoided the "T" word (tapering); a discussion about exiting the PEPP would be premature, but only so long as financing conditions would allow it. The announcement of explicit tapering targets therefore remains unrealistic for the remainder of this year; rather, the programme is more likely to be subject to stiffer conditions and implicit controls. In light of this, an increase in the key interest rate is still unrealistic before 2024, assuming the ECB's inflation assessment does not prove fundamentally incorrect. For this reason, capital market yields should only rise gradually and moderately in the wake of economic recovery.

Update: EU as issuer

We are putting a big tick against the SURE programme (social bonds) which has now been well and truly completed – at least from a capital market perspective – but the EU does not consist solely of the "Next Generation EU" programme. The European Union (EU) was created in 1993 from the European Economic Community, which was itself founded back in 1958. Whereas the main aim was originally one of growing economic cooperation between the member states Belgium, Germany, France, Italy, Luxemburg and the Netherlands, both the number of members (currently down to 27) and the range of activities have since been expanded. The EU now pursues a variety of goals, ranging from development aid and business development all the way to environmental protection. The basis for these activities is the EU budget, although formerly, borrowing was not allowed for the purposes of financing the deficit. There are three financing programmes dating back to this "pre-coronavirus time", all of which are being refinanced via the capital market: the European Financial Stabilisation Mechanism (EFSM), the Balance of Payments (BoP) and the Macro-Financial Assistance (MFA). The EFSM was used to provide a total of EUR 46.8bn in financial assistance (2011-2014) to Ireland and Portugal, while Hungary, Latvia and Romania received a total of EUR 13.4bn through the BoP programme. However, the latter funds have already largely been repaid – although Latvia does still have EUR 200m outstanding. Up to EUR 50bn can be lent to EU countries outside the euro area through the BoP programme. In contrast, to date, there is a much lower, albeit growing, volume of loans under the MFA (EUR 5.8bn), with which existing IMF programmes for states outside the EU have mainly been supported up to 2020; more recently though, it has also provided coronavirus aid. We expect the following funding requirement up to the end of the year:

- **EFSM:** EUR 5bn before the end of July
- **MFA:** EUR 1.8bn by the end of the year
- **NGEU:** EUR 80bn in bonds by year-end (including yesterday's transaction)
    - Successful NGEU bond debut (EUR 20bn for ten years at ms -2bp)
    - Two further syndicated transactions before the summer break
    - Auctions from September; incl. green bonds (framework end of August)
    - EU bills also after the summer break (minimum EUR 20bn, expected volume of more like EUR 40bn as a minimum)

Legal details relating to the EU

EU bonds will continue to be guaranteed via the EU budget. In addition, new equity and/or sources of income will be based on a carbon border adjustment mechanism (CBAM), on the emissions trading system and a digital levy. According to the EU, there should be detailed proposals by the end of June 2021. Further fresh equity, which is due to be proposed by June 2024, could involve a financial transaction tax, a financing contribution tied to the corporate sector or a new common corporation tax base. The European Parliament, the Council and the Commission shall ensure that the financial means are made available to allow the Union to fulfil its legal obligations in respect of third parties (Art. 323 of the Treaty on the Functioning of the European Union [TFEU]). Since the European Council is also explicitly mentioned here as a body in which the heads of state and heads of government of EU member states meet regularly, there is, in our view, an implicit obligation of the member states. From this, we interpret an implicit guarantee in the form of a maintenance obligation on the part of the 27 EU member states which is comparable in this case with callable capital. The EU is headquartered in the Belgian capital of Brussels.

Primary market

Following on from the basic overview of the EU above, it is worth directly dealing with the largest individual transaction from Europe ever: a deal for EUR 20bn attracted an order book of over EUR 142bn for a 10y bond at ms -2bp. For a long time, market participants were wondering about the duration and size of the NGEU debut, and many were absolutely correct regarding the term to maturity. Even EUR 10bn would have been a mega deal, and market participants were therefore amazed and nodded approvingly when it turned out to be twice that amount. IPT had started at ms +1bp area and the guidance was still too high at ms flat area. In summary: this was the largest institutional bond deal ever seen in Europe, the largest institutional single-tranche transaction of all time and the largest volume raised by the EU in a single deal. Since yesterday, the market for outstanding supranational benchmarks is for the very first time also larger than the German benchmark universe as a whole (EUR 735.2bn vs. EUR 719.4bn), while the lead held by the supras segment will continue to grow massively, potentially even doubling, up to 2026. The first part of the programme, which will amount to EUR 80bn in total in 2021, is therefore in the bag; two further deals are expected before the summer break. The prediction that the size will not be quite so high next time round is unlikely to be all that bold. Green bonds are expected to account for 30% of the EUR 800bn by the end of 2026; these green bonds are likely to be slightly tighter priced than yesterday's plain bond. This transaction naturally dwarfs other deals this week, but these were, in their own way, very successful. Düsseldorf-based NRWBK launched a 20-year, EUR 500m (WNG) social bond at ms +8bp. The bid-to-cover ratio stood at 2.0. Also in the ESG segment, there was a green debut issue from Hesse. HESSEN, to use the Bloomberg ticker, raised EUR 600m for ten years at ms -4bp. The pricing approach to the bond with an initial price guidance at ms flat area and a revised guidance of ms -2bp area was incomprehensible since the deal still managed to attract an order book of EUR 3.2bn even at ms -4bp. Perhaps the aim was to ensure that the deal would get off the ground whatever happened – given the level of oversubscription, one can definitely say that it was a success. The transaction from Spain's ICO was also very successful: a six-year EUR 500m green bond came in at six basis points above the Spanish reference bond (SPGB 1.5% 04/30/27). As such, all the benchmark bonds except the NGEU transaction were attributable to the ESG segment. Even the only sub-benchmark of the trading week in our preview – Eurofima mandate for a 7y deal worth EUR 250m (WNG) – is expected to be a green bond. Later yesterday afternoon, word reached us about a UNEDIC mandate. The French issuer is set to place a benchmark with a term to maturity of 15 years in the form of a social bond. In a market environment favourable to the placement of ESG bonds, we expect pricing to be finalised promptly. In addition, we must thank the three Luxembourg-based issuers, namely the EU, the EIB and the ESM/EFSF, for two exciting and enjoyable digital conference days. The next large transactions on the market will be well received by the crowd of investors before large parts of the bonds find their way into the Eurosystem's purchase programs, the PSPP and PEPP.

Issuer	Country	Timing	ISIN	Maturity	Size	Spread	Rating	ESG
EU	SNAT	14.06.	EU000A3KSXE1	10.0y	20.00bn	ms -2bp	AAA / Aaa / AA	-
ICO	ES	14.06.	XS2356033147	5.8y	0.50bn	ms +10bp	A- / Baa1 / A	X
HESSEN	DE	09.06.	DE000A1RQD43	10.0y	0.60bn	ms -4bp	- / - / AA+	X
NRWBK	DE	08.06.	DE000NWB0AM9	20.0y	0.50bn	ms +8bp	AAA / Aa1 / AA	X

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

Covered Bonds
ICMA Green and Social Bond Principles: 2021 update

Author: Dr Frederik Kunze

Updated versions of ICMA Green & Social Bond Principals and Sustainability Bond Guidelines

The latest versions of the Green Bond Principles (GBP), Social Bond Principles (SBP) and Sustainability Bond Guidelines (SBG) were presented a few days ago on the website of the International Capital Market Association (ICMA). In the case of the ICMA GBP, this represents the first update in three years of the voluntary guidelines for financial market participants for placing green bonds. As regards the Social Bond Principles, the 2021 edition now replaces the ICMA SBP 2020, while the hitherto most recent SBG, which deals with the combined funding of green and social projects, now also dates back three years (SBG 2018). In the wake of the update of the Principles and Guidelines, the ICMA has also published or updated a series of accompanying documents, aids and additional information.

Green Bond Principles: notable amendments in 2021

As regards the amendments, the ICMA has notably drawn attention to two new recommendations relating to bond frameworks and the external review, which aim to help improve transparency. The four core elements of the Bond Principles (I. Use of Proceeds, II. Process for Project Evaluation and Selection, III. Management of Proceeds along with IV. Reporting) remain unchanged. In addition, a recommendation relating to heightened transparency at issuer level in relation to the latter's sustainability and corresponding obligations is now part of the 2021 edition of the GBP. Issuers are also being encouraged to provide information, on whether and if so, to what extent, the projects being funded already align with official or market-based taxonomies. Likewise, the new Principles aim to offer guidelines and/or instructions on processes for issuers in order to identify mitigants when dealing with material negative social and/or environmental risks.

Further (new) publications of ICMA documents and guidelines in an ESG context

As part of the announcement of the new 2021 edition, the ICMA has provided further documents and guidelines for issuers and market participants. These documents include not only examples of Key Performance Indicators in the context of sustainability-linked bonds, but also a pre-issuance checklist for social bonds and social bond programmes. There is also support for impact reporting, which is becoming increasingly important in our view (cf. Guidelines for Impact Reporting Database and Impact Reporting Metrics). The aim of the present Green Project Mapping is to classify the contributions of GBP project categories according to the five environmental goals (climate change mitigation, climate change adaptation, natural resource conservation, biodiversity conservation, pollution prevention and control). In addition, mapping provides a basis for comparison to other green taxonomies (e.g. also the EU taxonomy). Finally, an update of the Guidance Handbook (June 2021) is now also available from the ICMA; this can be regarded as the go-to reference work for frequently asked and relevant questions from market participants in the context of the Principles.

GBP mapping shows the benefits of the project categories

GBP project categories	Climate change mitigation	Climate change adaptation	Biodiversity conservation	Natural resource conservation	Pollution prevention and control
Renewable energies	●●●			●	●
Energy efficiency	●●●				●
Pollution prevention and control				●	●●●
Environmentally sustainable management of living natural resources and land use	●	●●	●●●	●●●	
Terrestrial and aquatic biodiversity conservation		●	●●●	●●●	
Clean transportation	●●●			●	●●●
Sustainable water and wastewater management		●●	●●	●●	●●●
Climate change adaptation		●●●			
Eco-efficient and/or circular economy adapted products, production technologies and processes	●●		●	●●●	●
Green buildings	●●●	●		●●●	●

Beitrag zu Nutzen: ●●● primary; ●● secondary;; ● teritiary

Source: ICMA Group, Green Bond Mapping June 2021, NORD/LB Markets Strategy & Floor Research

EU Taxonomy and ICMA GBP

Frameworks and also concrete specifications are evolving very rapidly, not least in view of a growing market for green bond issues, but also as a result of political goals in relation to slowing down climate change. The current ICMA GBP take this situation into account not only through the above-mentioned recommendations relating to providing information on relevant taxonomies but also through green bond mapping. Moreover, as regards the proposed metrics for impact reporting, the ICMA also refers to the EU Taxonomy, which defines a framework with specific criteria to identify and evaluate sustainable activity. The EU Taxonomy is important for covered bonds in so far as it lays down building criteria relating to the environmental goals of climate protection and adjustment to climate change.

NORD/LB

ICMA Principles universe and a look at ESG-related covered bond benchmarks

By their own reckoning, the ICMA GBP and SBP set the standard for a market worth in the region of USD 1,600bn, with 97% of sustainable bonds referencing ICMA Principles. Based on ICMA data, we count 619 green frameworks from 58 countries and 19 frameworks from supranational issuers, although there are multiple duplicate entries in the framework reporting. In the case of social bonds, we have identified 92 frameworks from 24 countries along with eight social bond frameworks of supranational issuers. In addition, 167 frameworks come from sustainability bond issuers based in 34 different countries (supranational: 5) and the current data for sustainability-linked bonds shows 30 frameworks from 18 countries. Looking at the EUR benchmark segment for covered bonds, there is a clear ICMA connection in the case of all the frameworks. As we have already shown for a large number of sustainable frameworks, relevant criteria can be derived – also based on ICMA Principles – for the choice of suitable projects or financings, although they can differ from one another at programme level. In this context, it is also important to bear in mind that concrete references to overarching goals (UN Sustainable Development Goals) can differ depending on both the ESG category and the issuer-specific framework. This is not to say that the Principles do not go far enough, merely that they are emblematic of the many-layered nature of the ESG segment as a whole. As such, the ICMA Principles in no way contradict the EU Taxonomy or even industry-specific or national requirements/market standards.

EUR benchmark issuers in ESG format

Issuer	Country	ESG Type	No. of ESG BMKs	Volume (in EUR)	Framework based on ICMA principles
Hypo Tirol Bank	AT	social	1	0.50bn	YES (Link)
Berlin Hyp	DE	green	7	3.50bn	YES (Link)
Deutsche Hypothekenbank	DE	green	2	1.00bn	YES (Link)
Deutsche Kreditbank	DE	social	2	1.00bn	YES (Link)
Landesbank Baden-Wuerttemberg	DE	green	1	0.50bn	YES (Link)
Muenchener Hypothekenbank	DE	green	1	0.50bn	YES (Link)
Caja Rural de Navarra SCC	ES	sustainability	2	1.10bn	YES (Link)
Kutxabank	ES	social	1	1.00bn	YES (Link)
OP Mortgage Bank	FI	green	1	0.75bn	YES (Link)
BPCE SFH	FR	green	2	2.75bn	YES (Link)
CAFFIL	FR	social	4	3.50bn	YES (Link)
Credit Agricole Home Loan SFH	FR	green	1	1.25bn	YES (Link)
Societe Generale SFH	FR	green	2	2.00bn	YES (Link)
Credit Agricole Italia	IT	green	1	0.50bn	YES (Link)
Hana Bank	KR	social	1	0.50bn	YES (Link)
Kookmin Bank	KR	sustainability	1	0.50bn	YES (Link)
Korea Housing Finance Corp	KR	social	4	2.50bn	YES (Link)
DNB Boligkreditt	NO	green	2	3.00bn	YES (Link)
Eika Boligkreditt	NO	green	1	0.50bn	YES (Link)
SpareBank 1 Boligkreditt	NO	green	2	2.00bn	YES (Link)
Sparebanken Soer Boligkreditt	NO	green	1	0.50bn	YES (Link)
Sparebanken Vest Boligkreditt	NO	green	1	0.50bn	YES (Link)
SR-Boligkreditt	NO	green	1	0.50bn	YES (Link)

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

National standards refer to ICMA Principles: e.g. Pfandbrief

We also regard national standards for individual product categories and assets classes more as an addition/complement to global ICMA Principles. In this context, it makes sense, in our view, to mention the requirements and conditions for issuing Green Pfandbriefe and Social Pfandbriefe. The latter make explicit reference to the ICMA Principles. The Association of Pfandbrief banks (vdp) refers not only to the ICMA Principles for green Pfandbriefe but also to the EU taxonomy and EU Green Bond Standards, which for us again underlines the complementary relationship between national standards and cross-border regulations. In this context, we should also mention measures from the industry side (which are again cross-border in nature) as important steps towards greater harmonisation. Accordingly, as regards the sector for property financing and green Pfandbriefe, reference is also made to the Energy Efficient Mortgage Initiative.

Conclusion

In our view, the new edition of the ICMA Principles also reflects the evolution of the ESG segment. As it grows in importance, this sub-market requires a high degree of transparency and disclosure from issuers and is moreover experiencing an increasing degree of regulation and technical criteria. The best example of this is the EU taxonomy, but also the EU Green Bond Standard. For this reason, it is hardly surprising that the ICMA is addressing precisely these points – among other things in the form of concrete recommendations. We still regard the ICMA Principles as a major foundation for the covered bond segment, and they also provide a common denominator in relation to other asset classes or issuer groups. National standards (cf. Green Pfandbrief and Social Pfandbrief) or even industry-specific initiatives (Energy Efficient Mortgage Initiative) also play a complementary part in this respect.

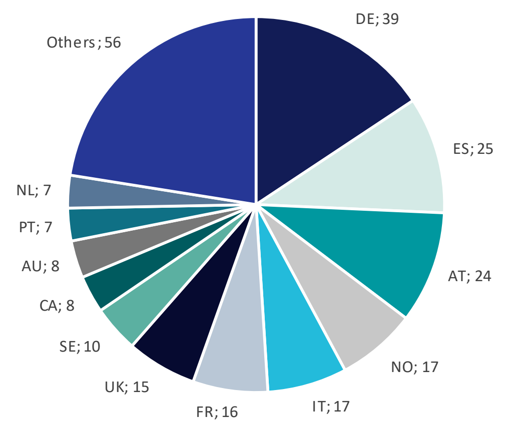
Covered Bonds
The covered bond universe of Moody's: an overview

Author: Henning Walten, CIIA

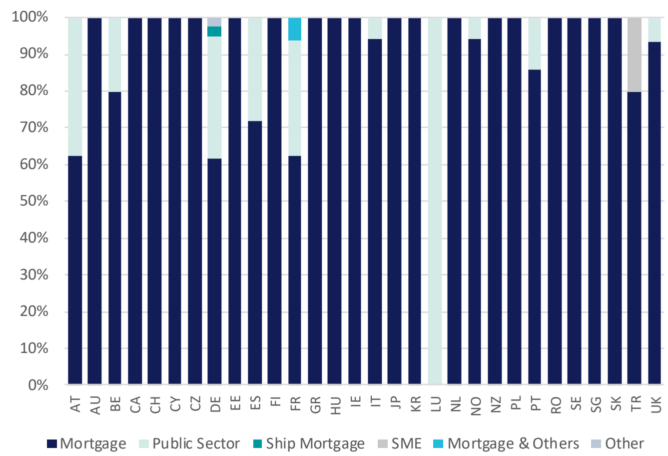
Covered bond programmes rated: 249

Moody's rating agency has published its quarterly report on its rating activities in the covered bond segment. For this, Moody's mainly draws on rating reports from the fourth quarter of 2020. The report shows that Moody's provided rating assessments for a total of 249 covered bond programmes (previous quarter: 248). Moody's covered bond universe covers 204 mortgage-backed programmes, making up the majority share of 81.9%. In addition, Moody's rates 41 public sector programmes (16.5%). These are predominantly concentrated in Germany (13 programmes), Austria (9), Spain (7) and France (5). Breaking the data down by jurisdiction, it can be established that almost 80% of programmes are in those 12 countries in which at least six programmes were rated. The remaining 56 programmes are spread across 18 jurisdictions overall.

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

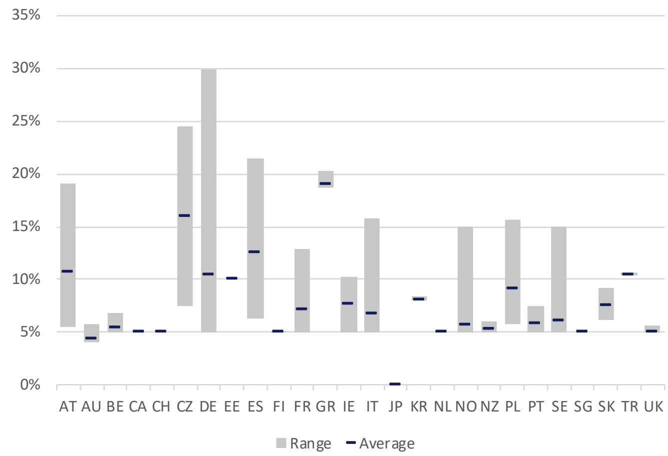
Looking at covered bonds in the Moody's ratings universe, there is unequivocally a focus on mortgage programmes, and these are almost all based in EUR benchmark jurisdictions. Only Turkey (4), Hungary (2), Cyprus (1) and Romania (1) do not currently have any outstanding covered bond issuances in the 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

With regard to the classification of cover assets in the individual programmes carried out by Moody's, it can be ascertained that, on average, 83.4% of bond cover consists of residential assets. Proportions averaging less than 75% are only registered for Germany (46.6%) and Austria (54.5%). Notable percentages of multi-family assets can be seen for Germany (11.1%), but also Switzerland (10.5%) and Austria (10.1%), while the share of commercial assets is especially high in Germany (37.9%), Austria (33.2%), Spain (19.3%) and the Czech Republic (17.9%). A noteworthy percentage of public sector cover assets is reported only for France (3.8%) 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)



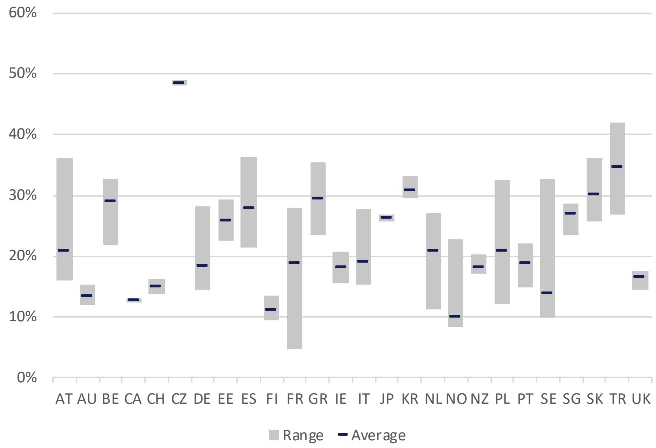
Source: Moody's, NORD/LB Markets Strategy & Floor Research

Collateral score as an indicator of cover pool quality

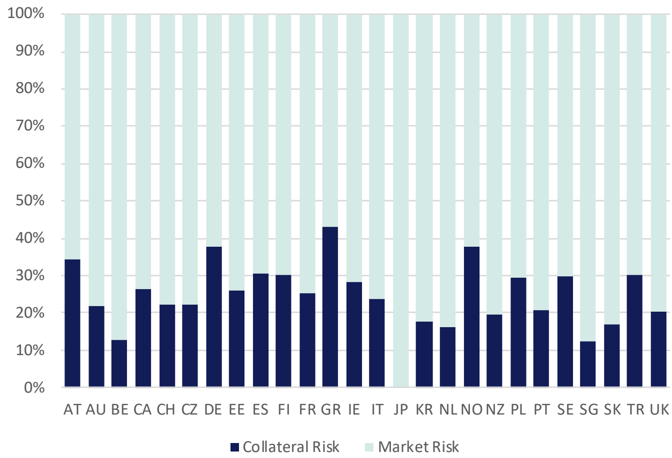
The collateral score is an important metric in the Moody's covered bond universe. This is used by the ratings agency to assess the quality of cover assets, with a low value indicating that the quality of assets in the cover pool is high. The above chart not only shows the average collateral score at national level in each case, but also the possible range of scores. Four jurisdictions have a score of 5%, namely Canada, Switzerland, the Netherlands and Singapore. The chart also shows that the range of collateral scores in these jurisdictions is comparatively low. For Austria, the Czech Republic, Germany, Spain and Italy, a significantly more heterogeneous picture emerges at national level with regard to the quality of the rated covered bond programmes. The average quality of assets in the cover pool is lowest in Greece, the Czech Republic and Spain. It is no surprise that a highly differentiated picture emerges at global level. While this heterogeneity does also manifest itself nationally in some jurisdictions, the cover pool quality is to a great extent equivalent between programmes rated by Moody's in many countries. Japan is a special case, as both of its covered bonds are residential mortgage-backed securities (RMBS) with a Aaa rating.

Cover pool losses: 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 risks) and collateral risk (asset quality and credit risk). 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 CPL in Canada, Finland and Norway are particularly low, while those in the Czech Republic, South Korea and Slovakia are especially 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.

Cover pool losses by country (mortgage programmes)



CPL risk component by country (mortgage programmes)



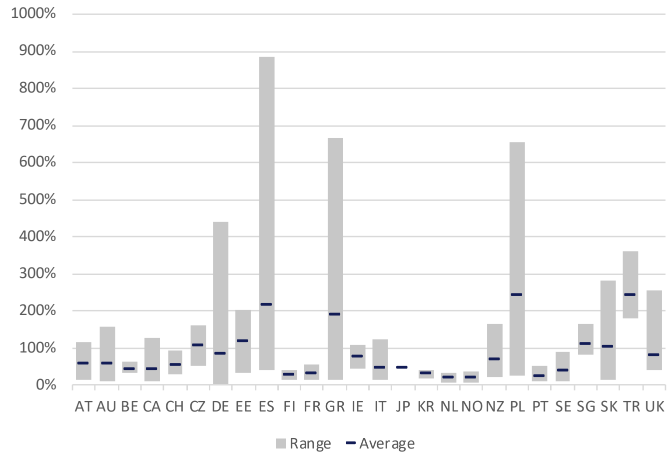
Source: Moody's, NORD/LB Markets Strategy & Floor Research

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 ascribed to the categories of refinancing, interest and currency risks and put down less often to the quality of cover assets.

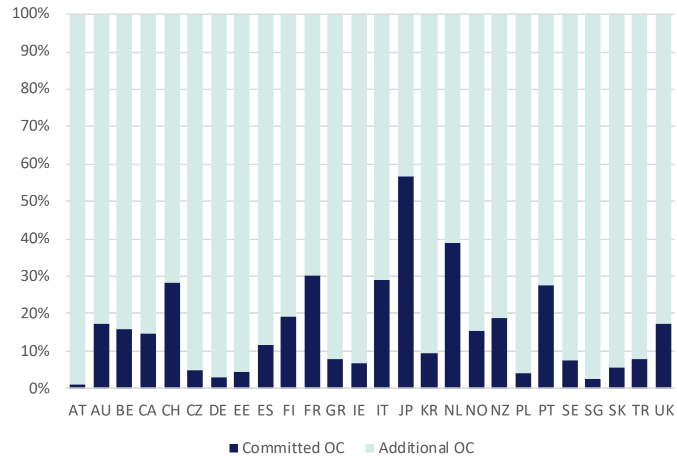
Spanish programmes with heterogeneous high overcollateralisation

Looking at the overcollateralisation ratio for programmes rated by Moody's, there are no real surprises with respect to differences internationally. The greatest national heterogeneity can be seen in Spain, Greece and Poland (only three programmes). While overcollateralisation was lowest for the Spanish programme at 41.3%, overcollateralisation of the Kutxabank programme was 883.7% in the third quarter of 2020. Conversely, Finland, South Korea and the Netherlands are all jurisdictions in which the overcollateralisation levels of individual programmes are comparable, with very low overcollateralisation variance.

Overcollateralisation by country (mortgage programmes)



Composition of overcollateralisation (mortgage programmes)



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

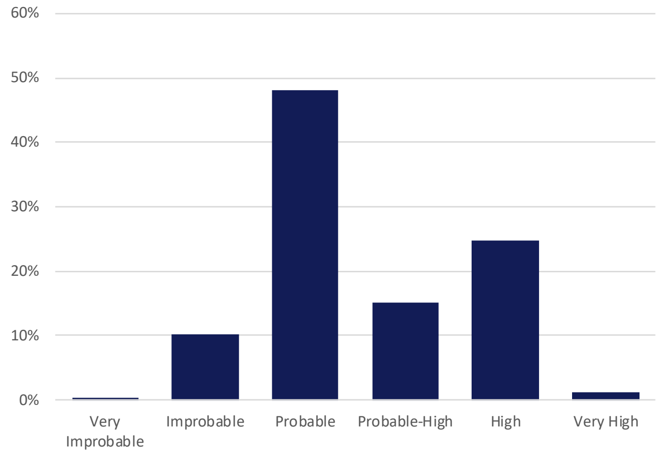
Committed OC as starting point for voluntary overcollateralisation

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 Austria, Germany and Singapore is to a large degree offered on a voluntary basis and therefore can be reduced relatively easily. This is also due to the low committed OC requirement, which averages at just 0.7% in Austria, for example, but is higher for Germany and Singapore, at 2.6% and 3.0%, respectively. By contrast, overcollateralisation in Japan, the Netherlands and South Korea is to a large extent made up of committed OC. Overall, it can be maintained that the greater proportion of overcollateralisation is offered on a voluntary basis by issuers, which is undoubtedly due to low levels of committed OC. Furthermore, a high proportion of committed OC by no means that overcollateralisation is also high.

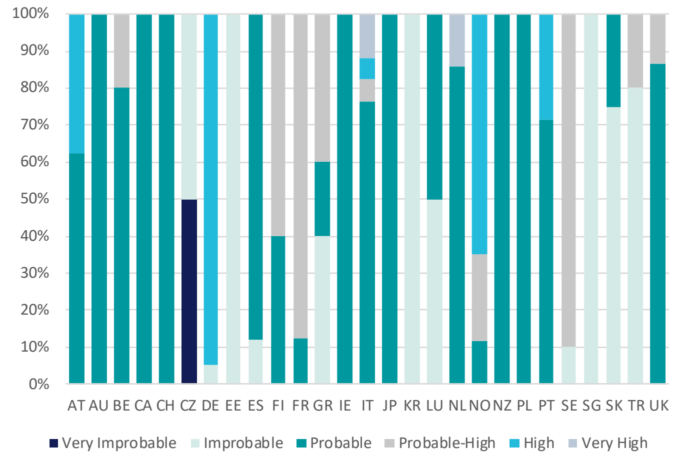
TPI links covered bond rating with issuer rating

One other ratio provided by Moody's is the timely payment indicator (TPI), which indicates the likelihood that timely payment will be made to covered bondholders in the event of issuer default. This ranges on a six-notch scale from "Very High" to "Very Improbable" (cf. table below). The TPI level also determines the potential covered bond rating to a certain number of notches above the issuer's rating. 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. The table below shows that around half of all mortgage programmes rated by Moody's have been assigned a TPI of "Probable". However, with shares of 0.4% and 1.2%, the lowest and highest assessment levels are less strongly represented at present.

Timely Payment Indicator (TPI) (mortgage programmes)



TPIs by country (mortgage programmes)



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

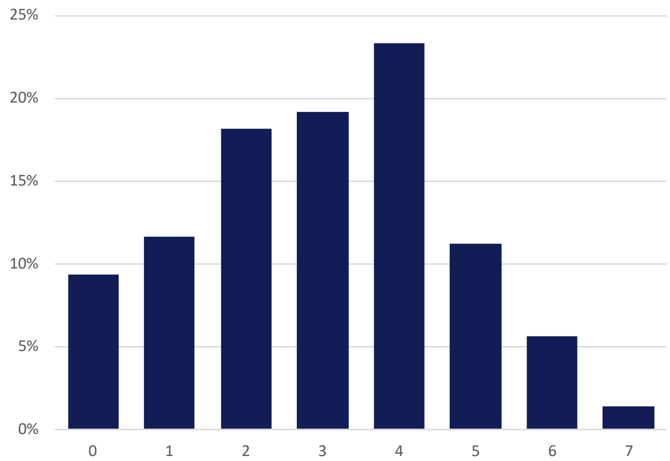
National estimates largely the same

In ten 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 Estonia, South Korea and Singapore only have a TPI of "Improbable". Only three programmes (2x IT and 1x NL) have been assigned the highest possible TPI of "Very High". Just one Czech programme falls at the other end of the spectrum ("Very Improbable"). At least three different levels for the likelihood that timely payment will be made can be found only in Greece, Italy 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 37 of the 39 programmes. In addition, a high probability is also ascribed to programmes in Norway (11 of 17 programmes) and Austria (9 of 24 programmes).

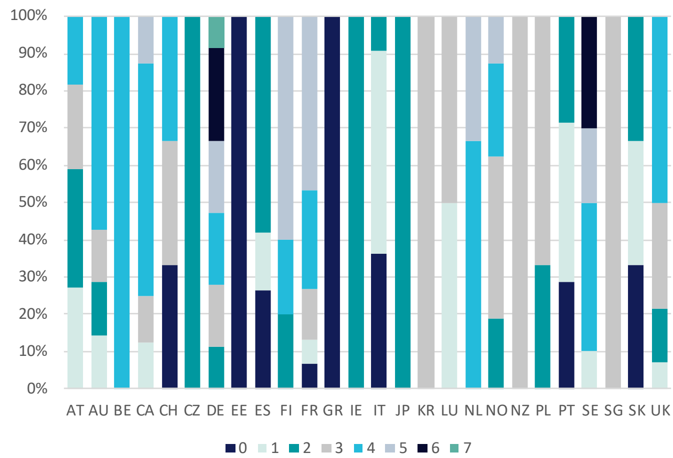
Adequate buffer with regard to downgrades

As previously mentioned, the TPI Leeway is another key metric, denoting the number of notches that the covered bond anchor can be lowered before the rating agency downgrades the covered bond programme because of TPI framework constraints. Of the covered bond programmes rated by Moody's, 20 do not have a corresponding buffer. This means that in the event that the covered bond anchor is downgraded, the programme would be downgraded as a direct consequence. The TPI Leeway is most commonly four notches (50 programmes). A little over 40% of programmes fall in the two middle – and therefore most common – categories of "3 notches" and "4 notches".

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 the UK have high buffers in some cases

Looking at national markets, it can be established once again 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 in these countries have been assigned a TPI Leeway of no less than five notches. However, at least four programmes each in Greece, Italy and Spain have no buffer, so in Greece this is the case for all programmes rated by Moody's.

Conclusion

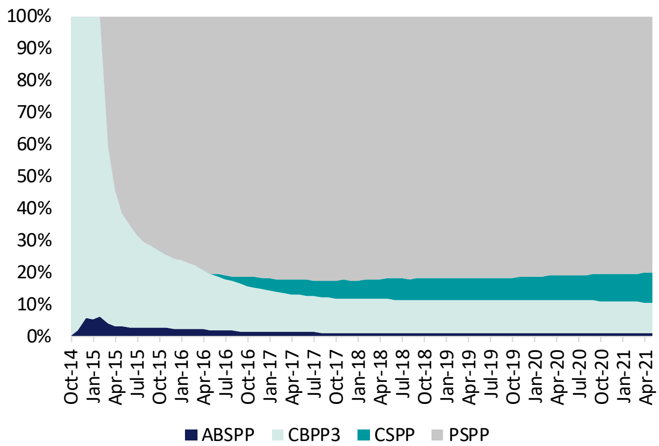
The latest report from Moody's rating agency once more shows the importance of Moody's ratings for the rating landscape in the EUR benchmark segment. It is not surprising that the data reveals a highly heterogeneous picture on a global level with regard to the individual rating assessments. Against the backdrop of the coronavirus pandemic, rating buffers of several notches certainly feature to buffer against downgrades, although a certain share of programmes do also have a degree of leeway or are rated on the basis of the country ceiling. By means of this article, we want to enable an improved and quicker allocation of key metrics for both national and international comparisons to facilitate analysis of the quality and characteristics of covered bond programmes as required.

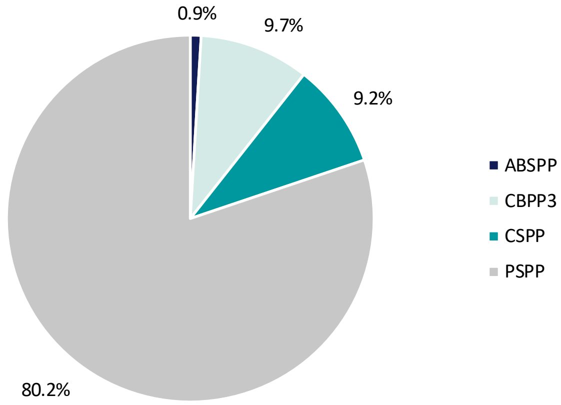
ECB tracker

Asset Purchase Programme (APP)

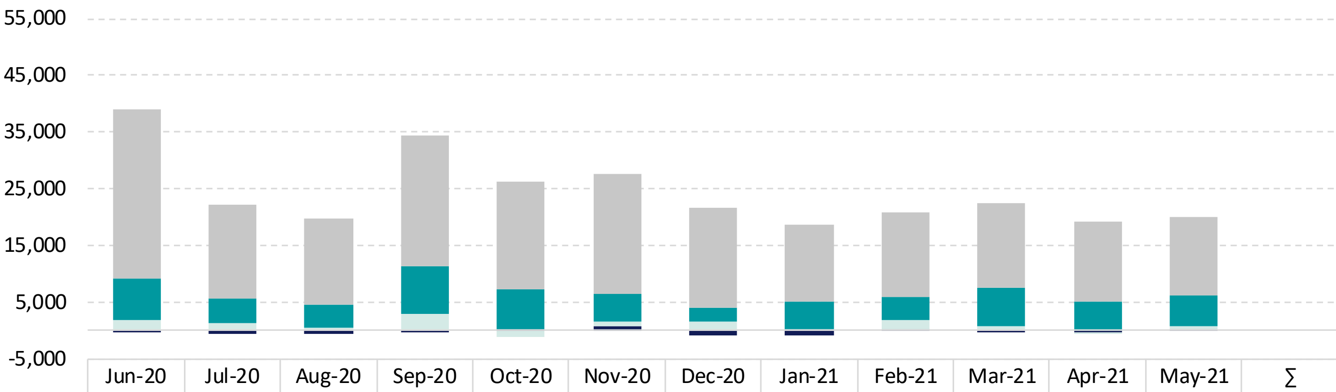
	ABSPP	CBPP3	CSPP	PSPP	APP
Apr-21	28,432	289,418	271,075	2,393,239	2,982,164
May-21	28,520	290,104	276,469	2,407,212	3,002,305
Δ	+88	+686	+5,394	+13,973	+20,141

Portfolio structure





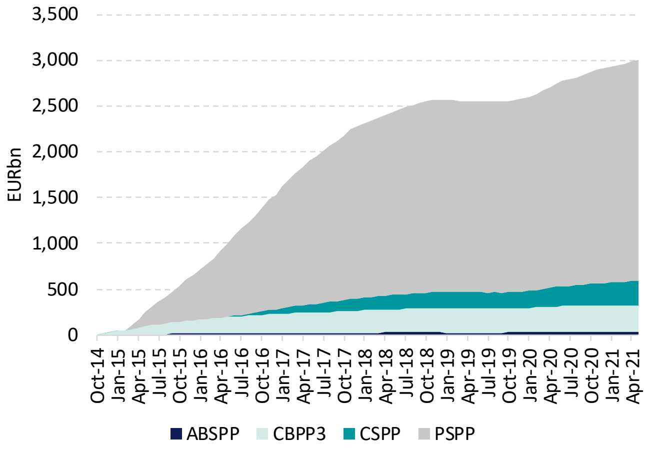
Monthly net purchases (in EURm)



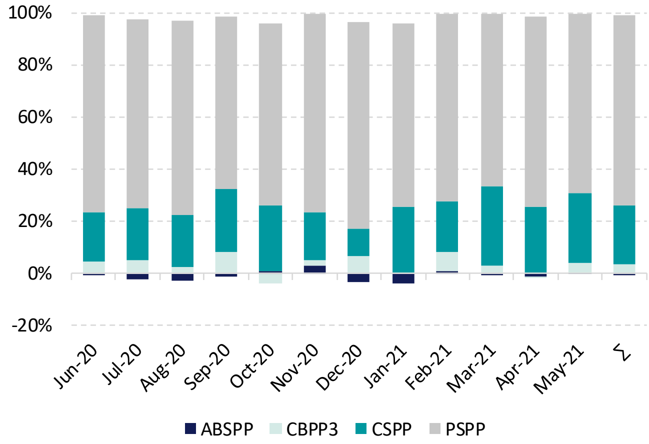
	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Apr-21	May-21	∑
APP	38,770	21,529	19,127	34,014	25,349	27,720	20,929	17,846	20,915	22,561	18,918	20,141	287,819
PSPP	29,779	16,370	15,150	23,102	19,182	21,241	17,822	13,655	15,129	14,955	14,186	13,973	214,544
CSPP	7,515	4,502	4,004	8,496	6,983	5,009	2,378	4,924	4,064	6,929	5,015	5,394	65,213
CBPP3	1,731	1,198	500	2,839	-1,041	646	1,529	74	1,539	684	-5	686	10,380
ABSPP	-255	-541	-527	-423	225	824	-800	-807	183	-7	-278	88	-2,318

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

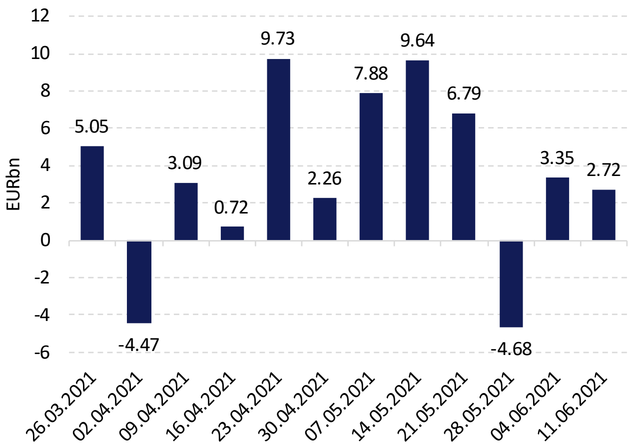
Portfolio development



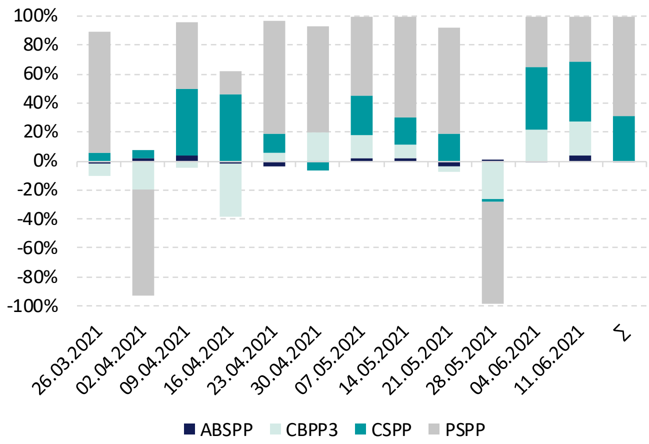
Distribution of monthly purchases



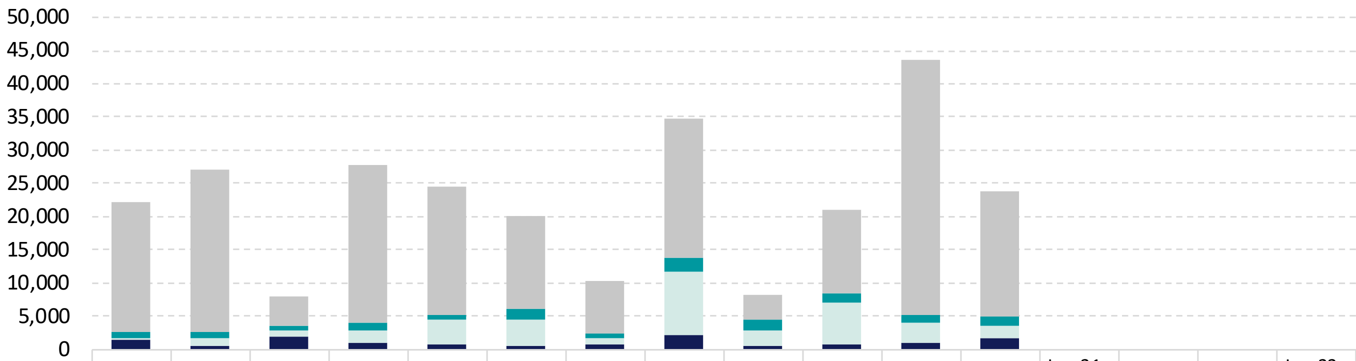
Weekly purchases



Distribution of weekly purchases



Expected monthly redemptions (in EURm)

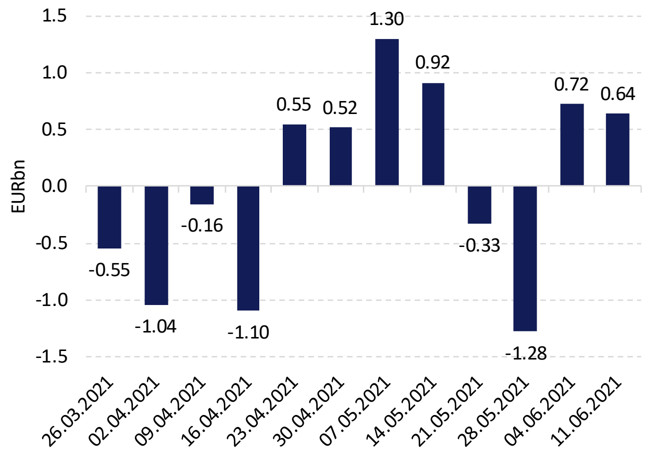


	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22	Apr-22	May-22	Jun-21 - May-22	2020	2021	Jan-22 - May-22
APP	22,244	27,140	7,910	27,662	24,456	20,010	10,231	34,665	8,093	21,113	43,681	23,840	271,045	262,253	245,608	131,392
PSPP	19,519	24,547	4,370	23,655	19,224	13,787	7,811	20,906	3,625	12,603	38,619	18,998	207,664	201,482	188,451	94,751
CSPP	942	828	712	1,102	800	1,673	826	1,946	1,590	1,416	1,125	1,341	14,301	18,267	16,189	7,418
CBPP3	367	1,132	1,002	1,915	3,775	4,048	937	9,776	2,452	6,347	2,990	1,844	36,585	33,236	30,138	23,409
ABSPP	1,416	633	1,826	990	657	502	657	2,037	426	747	947	1,657	12,495	9,268	10,830	5,814

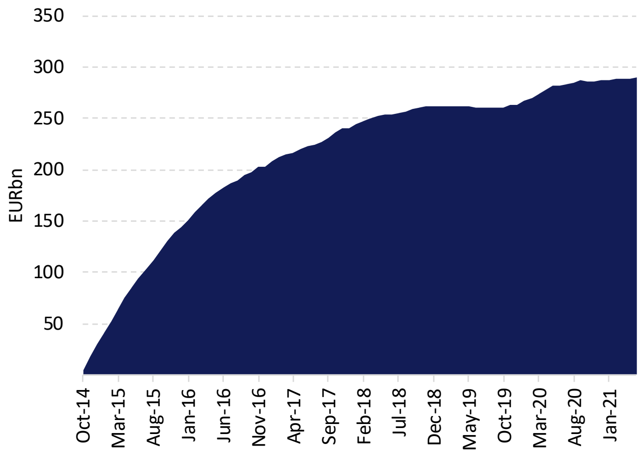
Source: ECB, Bloomberg, NORD/LB Markets Strategy & Floor Research

Covered Bond Purchase Programme 3 (CBPP3)

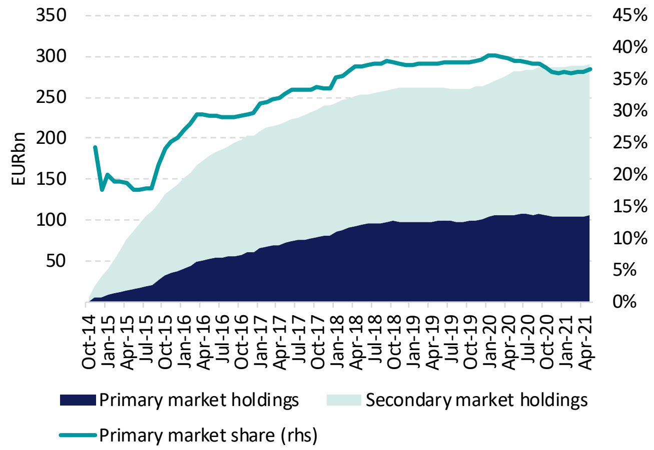
Weekly purchases



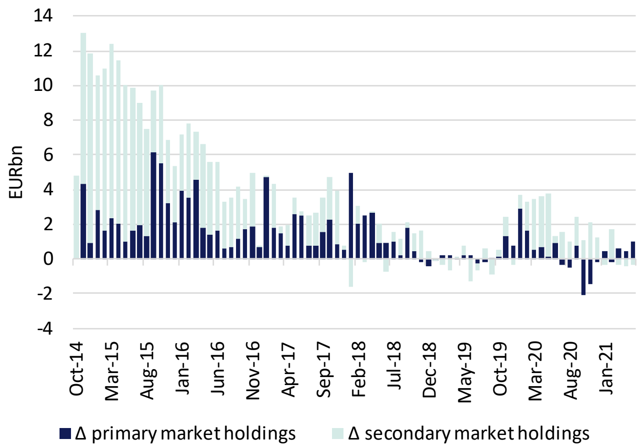
Development of CBPP3 volume



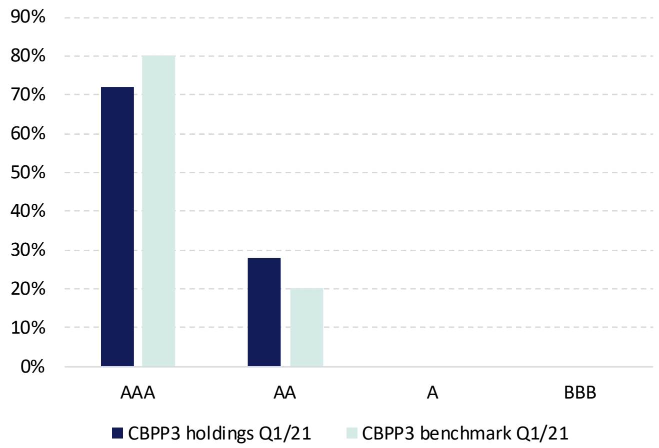
Primary and secondary market holdings



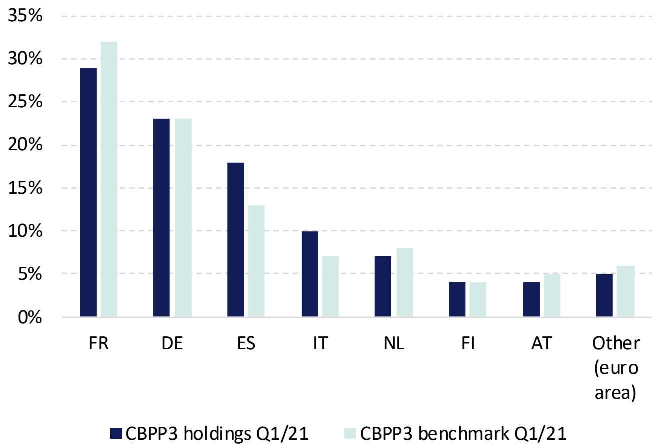
Change of primary and secondary market holdings



Distribution of CBPP3 by credit rating



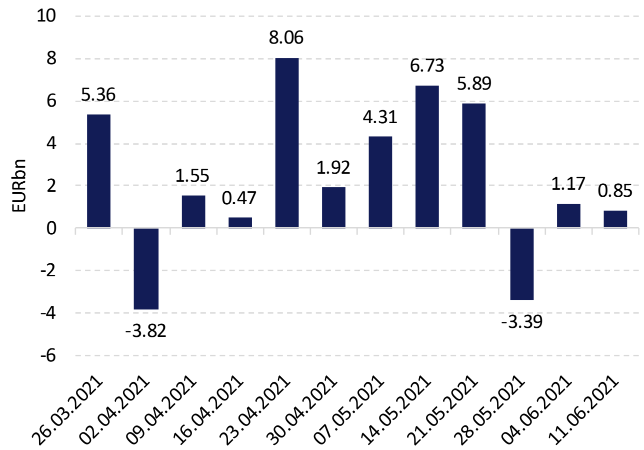
Distribution of CBPP3 by country of risk



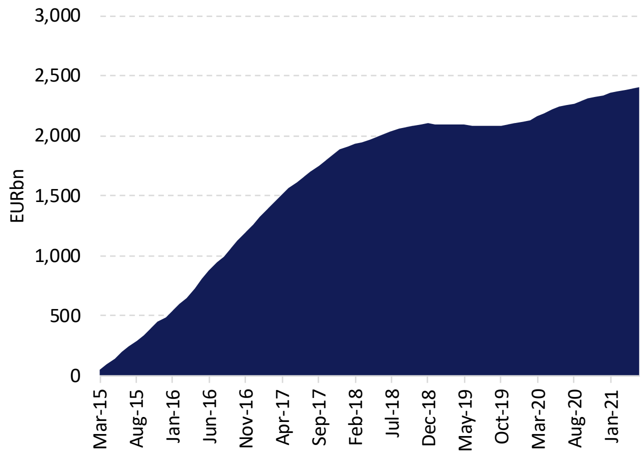
Source: ECB, Bloomberg, NORD/LB Markets Strategy & Floor Research

Public Sector Purchase Programme (PSPP)

Weekly purchases



Development of PSPP volume



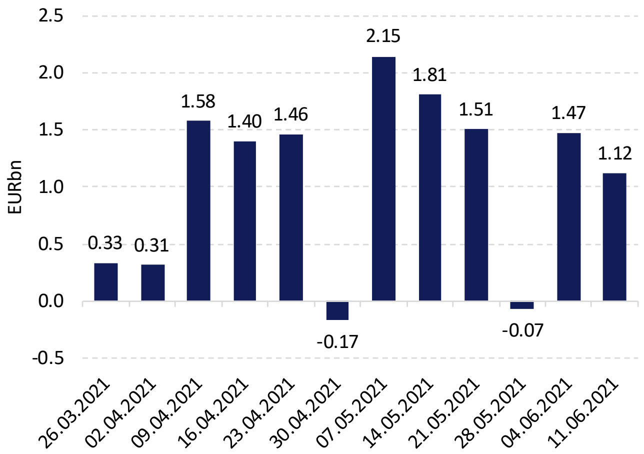
Overall distribution of PSPP buying at month-end

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%	71,167	68,471	2,696	7.5	7.6	-0.1
BE	3.4%	89,678	85,229	4,449	8.0	10.2	-2.2
CY	0.2%	3,677	5,034	-1,357	9.9	8.8	1.1
DE	24.3%	605,446	616,694	-11,248	6.6	7.6	-1.0
EE	0.3%	387	6,590	-6,203	9.2	7.5	1.7
ES	11.0%	299,019	278,961	20,058	8.0	8.4	-0.4
FI	1.7%	36,889	42,971	-6,082	6.9	7.7	-0.8
FR	18.8%	491,798	477,802	13,996	7.2	8.1	-0.9
GR	0.0%	0	0	0	0.0	0.0	0.0
IE	1.6%	39,118	39,615	-497	8.5	10.1	-1.6
IT	15.7%	425,346	397,425	27,921	7.1	7.9	-0.8
LT	0.5%	4,921	13,539	-8,618	10.2	10.6	-0.4
LU	0.3%	3,356	7,706	-4,350	5.6	7.2	-1.7
LV	0.4%	2,882	9,115	-6,233	11.3	10.4	0.9
MT	0.1%	1,259	2,454	-1,195	9.5	9.2	0.3
NL	5.4%	123,437	137,098	-13,661	7.7	9.0	-1.4
PT	2.2%	46,498	54,753	-8,255	7.0	7.2	-0.2
SI	0.4%	9,255	11,264	-2,009	9.9	10.2	-0.3
SK	1.1%	15,716	26,791	-11,075	8.2	8.3	-0.1
SNAT	10.0%	265,166	253,502	11,665	7.7	8.9	-1.2
Total / Avg.	**100.0%**	**2,535,015**	**2,535,015**	**0**	**7.3**	**8.2**	**-0.9**

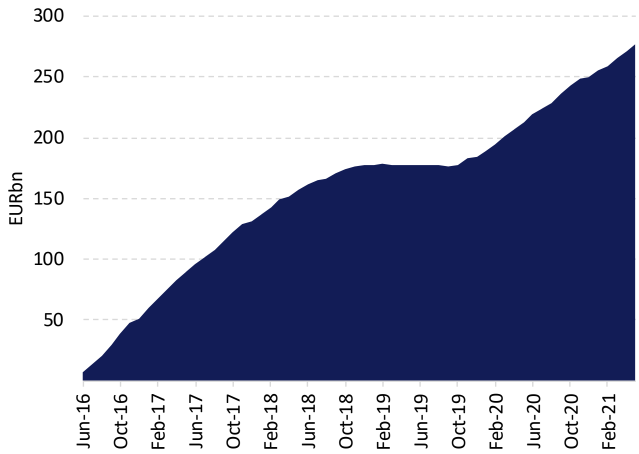
[1] Based on the ECB capital key, adjusted to include supras and the disqualification of Greece
[2] Based on the adjusted distribution key
[3] Weighted average time to maturity of the bonds eligible for purchasing under the PSPP (semi-annual data, Q1/2021)
Source: ECB, NORD/LB Markets Strategy & Floor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

Corporate Sector Purchase Programme (CSPP)

Weekly purchases

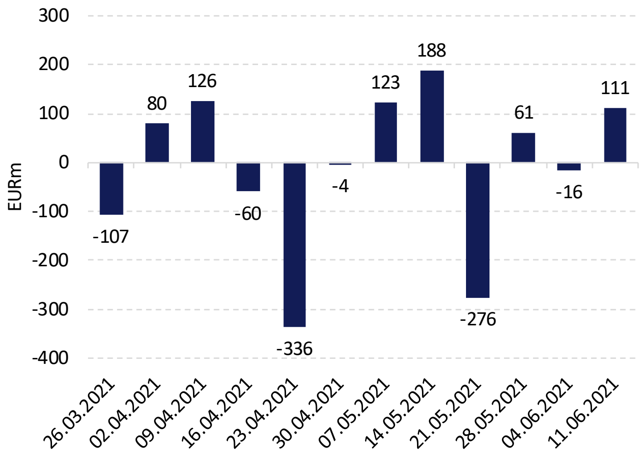


Development of CSPP volume

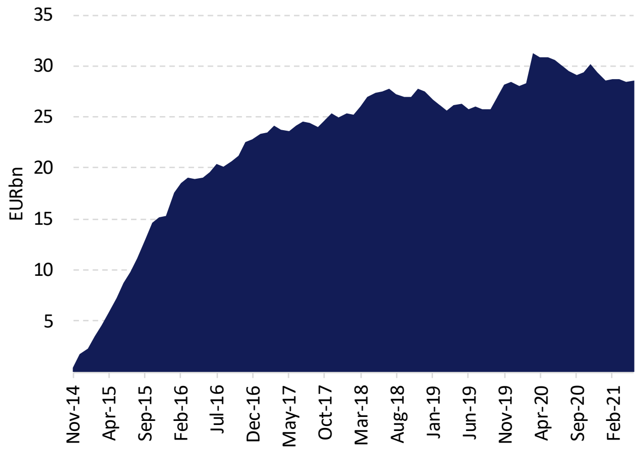


Asset-Backed Securities Purchase Programme (ABSPP)

Weekly purchases



Development of ABSPP volume



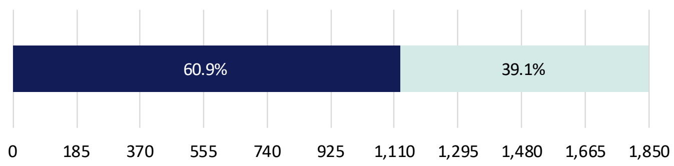
Source: ECB, Bloomberg, NORD/LB Markets Strategy & Floor Research

Pandemic Emergency Purchase Programme (PEPP)

Holdings (in EURm)

	PEPP
Apr-21	1,023,766
May-21	1,104,465
Δ	+80,700

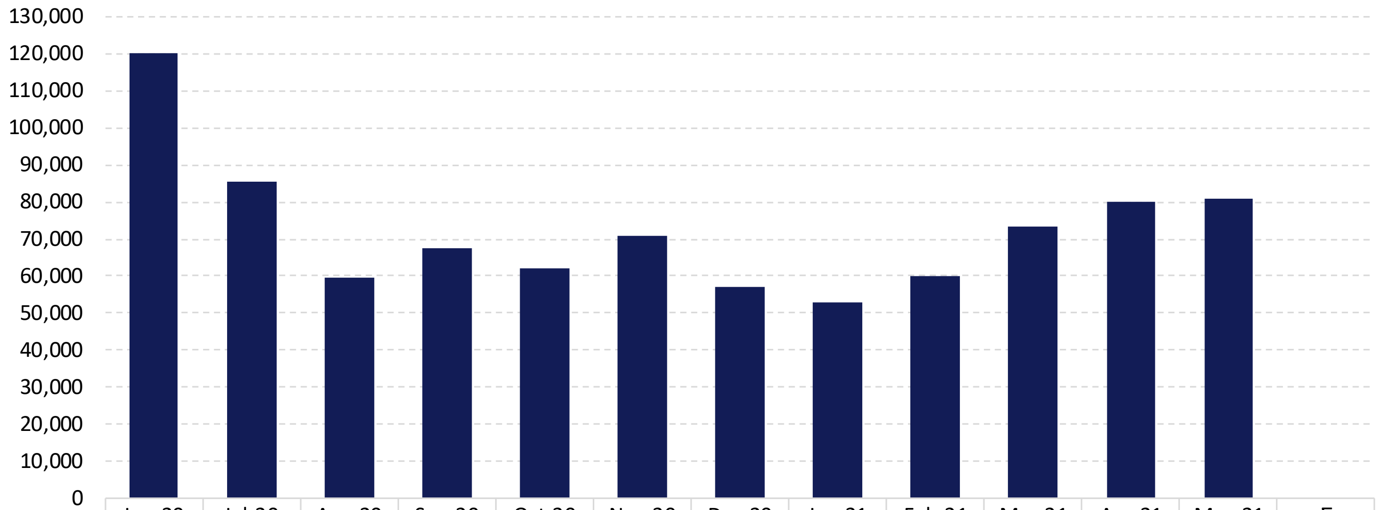
Volume already invested (in EURbn)



Estimated portfolio development

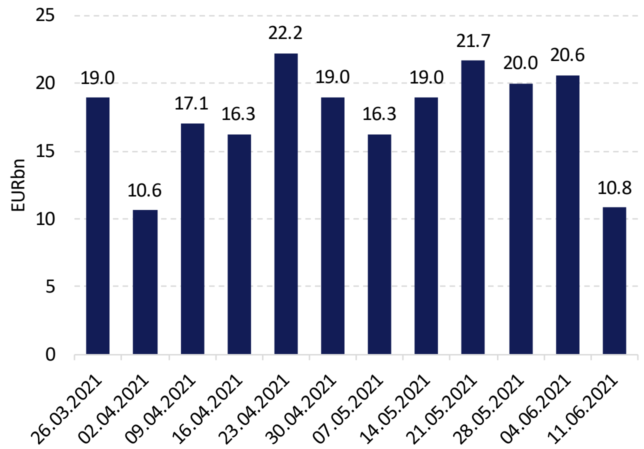
Assumed pace of purchases	Weekly net purchase volume	PEPP limit hit in ...
Average weekly net purchase volume so far	EUR 17.9bn	40 weeks (18.03.2022)

Monthly net purchases (in EURm)

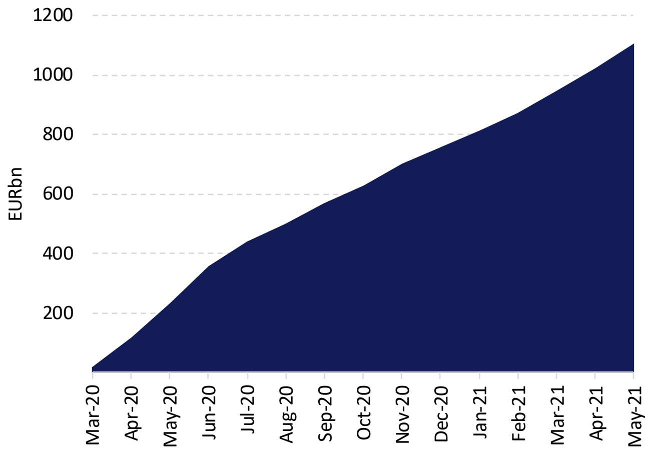


	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Apr-21	May-21	∑
PEPP	120,321	85,423	59,466	67,308	61,985	70,835	57,163	53,046	59,914	73,521	80,118	80,700	869,800

Weekly purchases



Development of PEPP volume

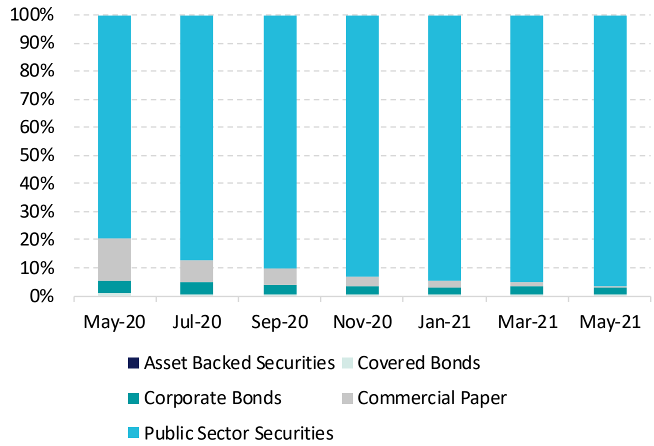


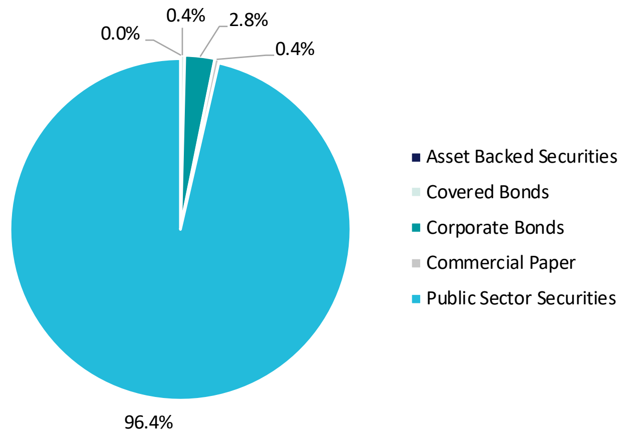
Source: ECB, Bloomberg, NORD/LB Markets Strategy & Floor Research

Holdings under the PEPP (in EURm)

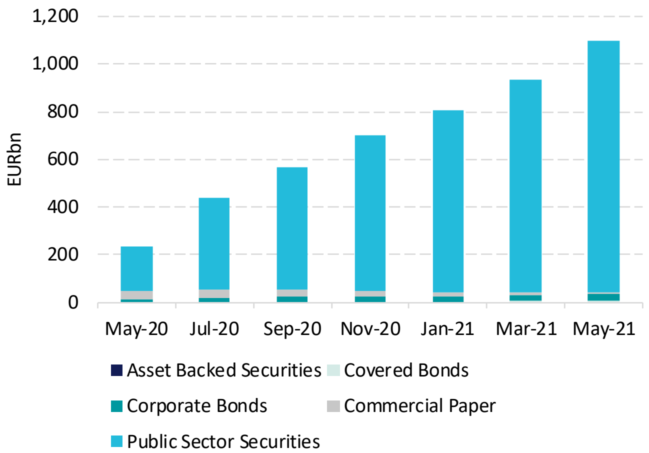
	Asset-backed Securities	Covered Bonds	Corporate Bonds	Commercial Paper	Public Sector Securities	PEPP
Mar-21	0	4,055	27,058	12,766	893,844	937,723
May-21	0	4,055	31,014	4,590	1,058,882	1,098,541
Δ	0	0	+3,956	-8,176	+165,038	+160,818

Portfolio structure

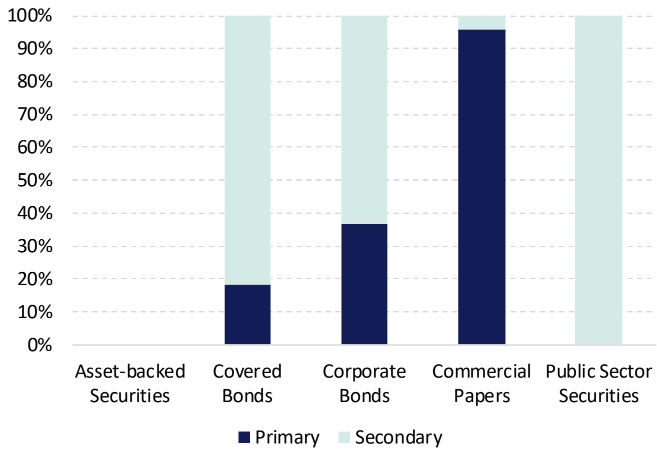




Portfolio development



Share of primary and secondary market holdings



Breakdown of private sector securities under the PEPP

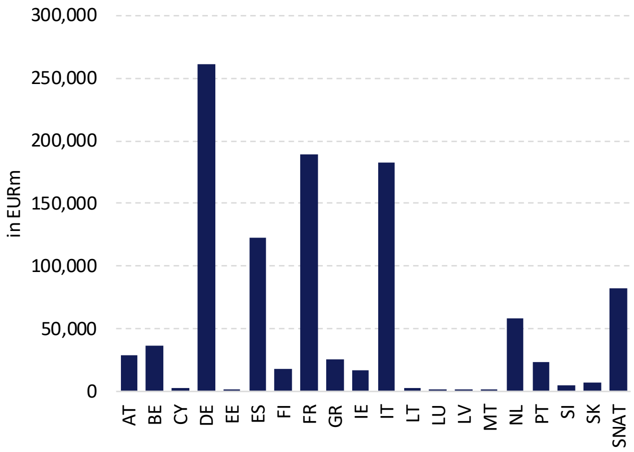
May-21	Asset-backed securities		Covered bonds		Corporate bonds		Commercial paper	
	Primary	Secondary	Primary	Secondary	Primary	Secondary	Primary	Secondary
Holdings in EURm	0	0	745	3,310	11,431	19,583	4,397	193
Share	0.0%	0.0%	18.4%	81.6%	36.9%	63.1%	95.8%	4.2%

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

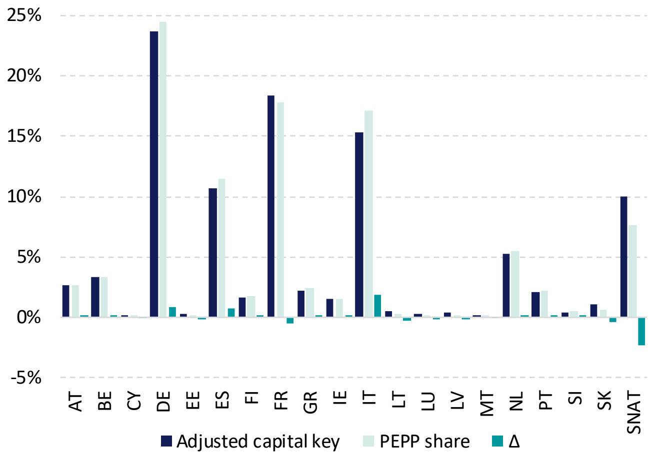
Breakdown of public sector securities under the PEPP

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	28,731	2.6%	2.7%	0.1%	9.4	6.9	2.6
BE	36,086	3.3%	3.4%	0.1%	6.7	9.1	-2.5
CY	2,060	0.2%	0.2%	0.0%	9.7	8.3	1.4
DE	261,137	23.7%	24.5%	0.8%	6.1	6.8	-0.7
EE	255	0.3%	0.0%	-0.2%	9.0	7.3	1.7
ES	122,583	10.7%	11.5%	0.8%	8.3	7.6	0.7
FI	18,174	1.7%	1.7%	0.1%	7.3	7.5	-0.2
FR	189,672	18.4%	17.8%	-0.6%	8.5	7.7	0.8
GR	25,680	2.2%	2.4%	0.2%	9.5	9.9	-0.5
IE	16,770	1.5%	1.6%	0.1%	9.2	9.5	-0.3
IT	182,946	15.3%	17.2%	1.9%	6.9	7.0	-0.1
LT	2,505	0.5%	0.2%	-0.3%	11.1	9.9	1.2
LU	1,726	0.3%	0.2%	-0.1%	7.0	6.6	0.5
LV	1,344	0.4%	0.1%	-0.2%	9.8	9.7	0.1
MT	305	0.1%	0.0%	-0.1%	7.9	8.7	-0.8
NL	58,043	5.3%	5.5%	0.2%	6.0	8.4	-2.3
PT	23,730	2.1%	2.2%	0.1%	7.4	7.3	0.1
SI	4,838	0.4%	0.5%	0.0%	9.2	9.3	-0.2
SK	6,384	1.0%	0.6%	-0.4%	9.5	8.4	1.1
SNAT	81,801	10.0%	7.7%	-2.3%	10.4	8.4	2.1
Total / Avg.	**1,064,769**	**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



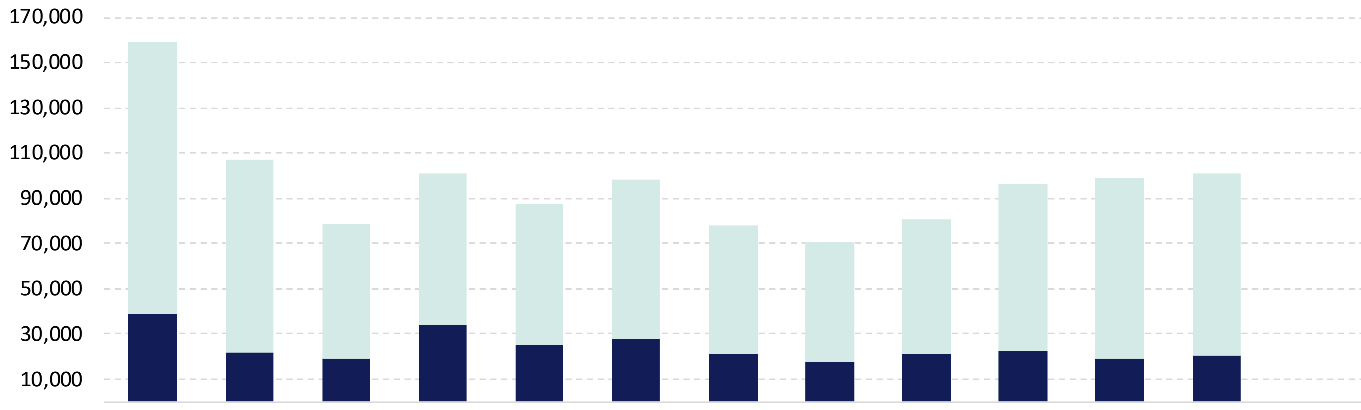
[1] Based on the ECB capital key, adjusted to include supras [2] Based on the adjusted distribution key
[3] Weighted average time to maturity of the bonds eligible for purchasing under the PEPP
Source: ECB, Bloomberg, NORD/LB Markets Strategy & Floor Research

Aggregated purchase activity under APP and PEPP

Holdings (in EURm)

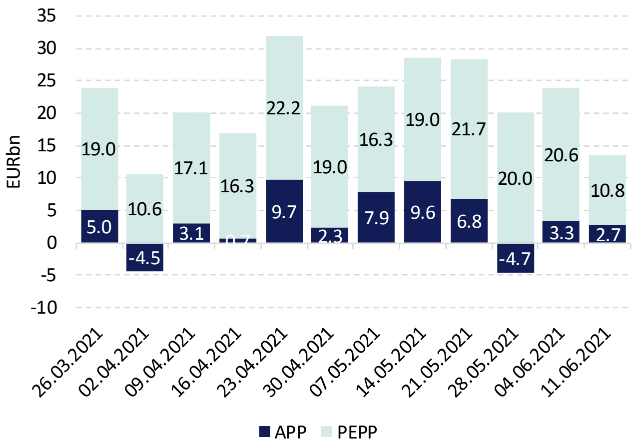
	APP	PEPP	APP & PEPP
Apr-21	2,982,164	1,023,766	4,005,930
May-21	3,002,305	1,104,465	4,106,770
Δ	+20,141	+80,700	+100,841

Monthly net purchases (in EURm)

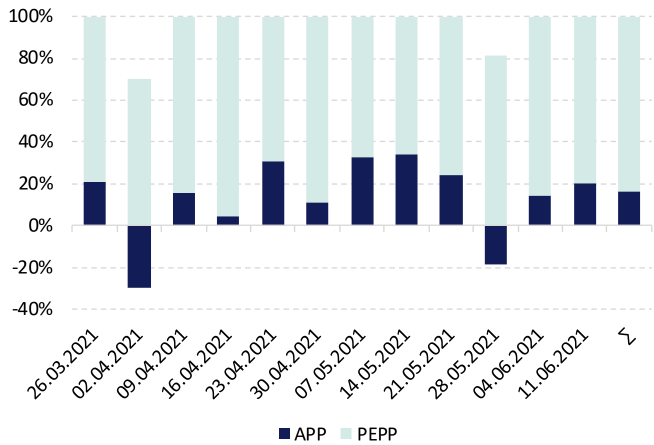


	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Apr-21	May-21	Σ
Σ	159,091	106,952	78,593	101,322	87,334	98,555	78,092	70,892	80,829	96,082	99,036	100,841	1,157,61
PEPP	120,321	85,423	59,466	67,308	61,985	70,835	57,163	53,046	59,914	73,521	80,118	80,700	869,800
APP	38,770	21,529	19,127	34,014	25,349	27,720	20,929	17,846	20,915	22,561	18,918	20,141	287,819

Weekly purchases



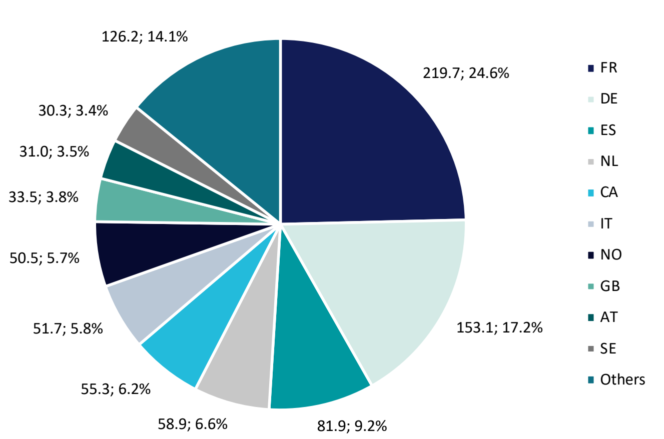
Distribution of weekly purchases



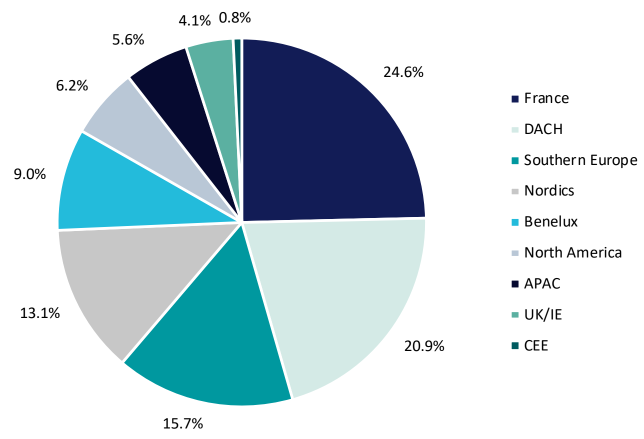
Source: ECB, Bloomberg, NORD/LB Markets Strategy & Floor Research

Charts & Figures
Covered Bonds

EUR benchmark volume by country (in EURbn)



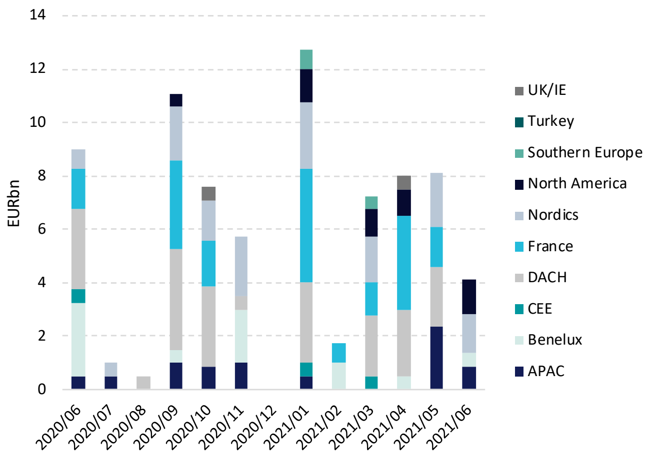
EUR benchmark volume by region (in EURbn)



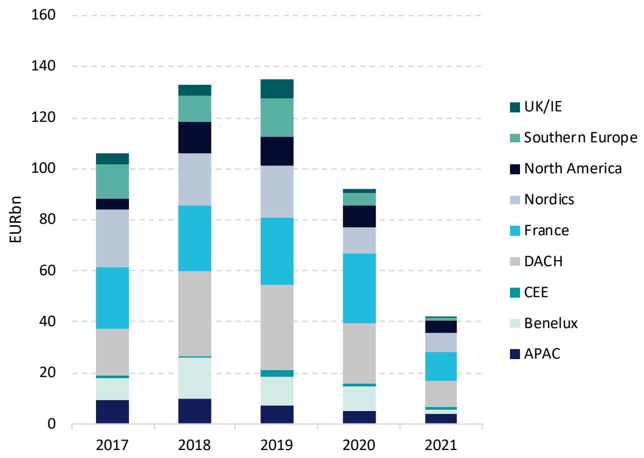
Top-10 jurisdictions

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	219.7	205	205	0.95	10.1	5.5	1.06
2	DE	153.1	229	229	0.60	8.4	4.7	0.43
3	ES	81.9	67	67	1.13	11.4	3.9	1.79
4	NL	58.9	60	60	0.93	11.3	7.4	0.90
5	CA	55.3	48	48	1.12	6.1	3.2	0.26
6	IT	51.7	60	60	0.83	9.1	4.2	1.41
7	NO	50.5	57	57	0.89	7.3	4.1	0.45
8	GB	33.5	39	39	0.89	8.6	3.6	1.02
9	AT	31.0	57	57	0.54	10.0	6.5	0.64
10	SE	30.3	36	36	0.84	7.5	3.6	0.44

EUR benchmark issue volume by month

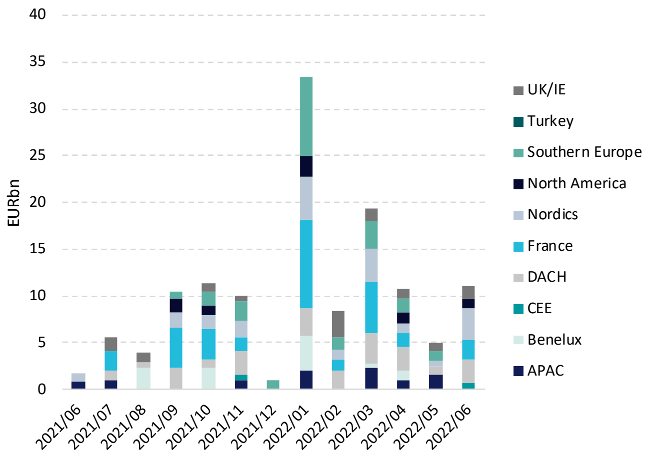


EUR benchmark issue volume by year

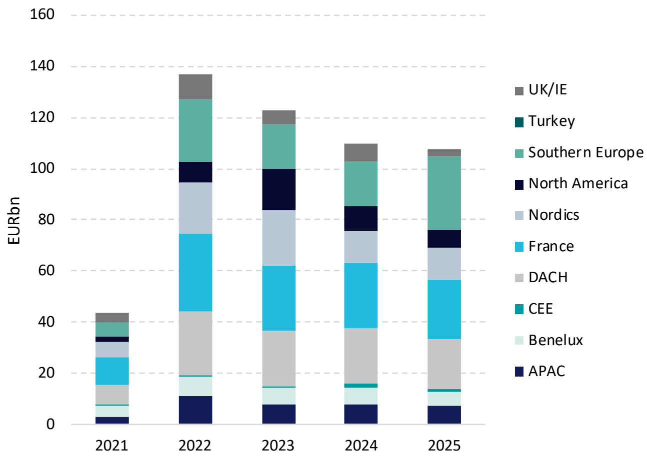


Source: Market data, Bloomberg, NORD/LB Markets Strategy & Floor Research

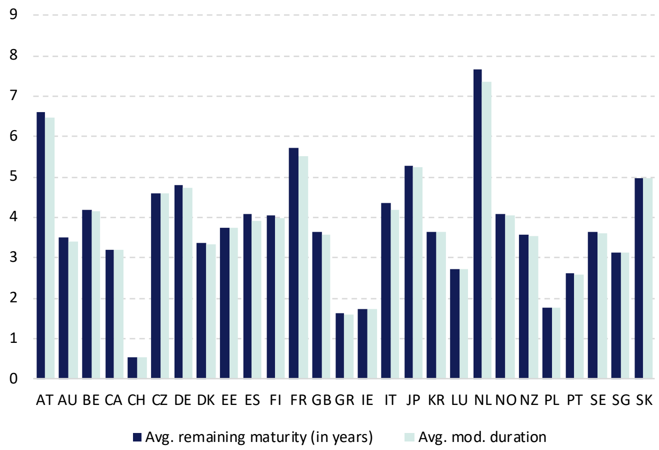
EUR benchmark maturities by month



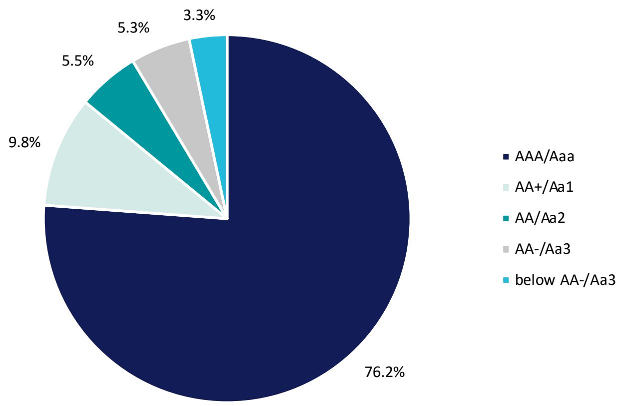
EUR benchmark maturities by year



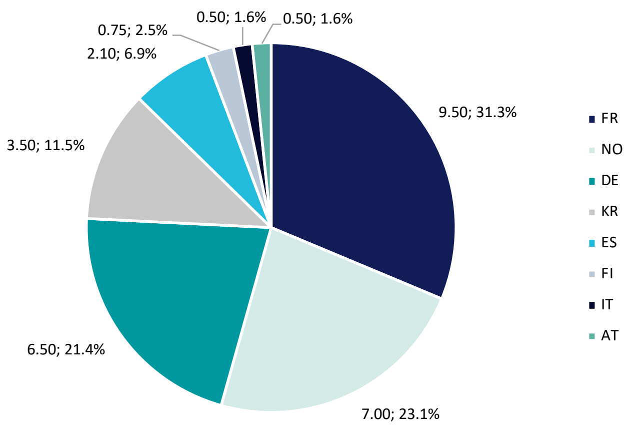
Modified duration and time to maturity by country



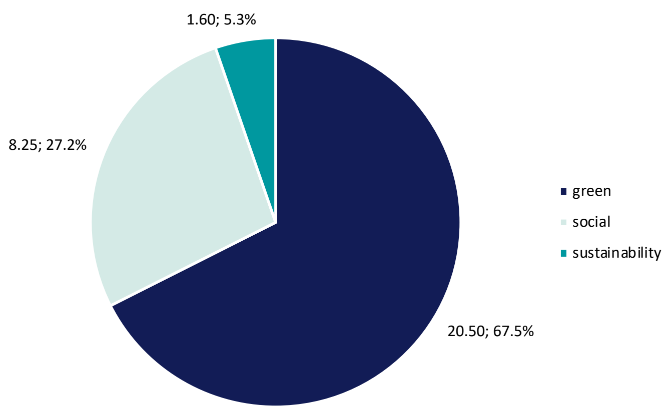
Rating distribution (volume weighted)



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



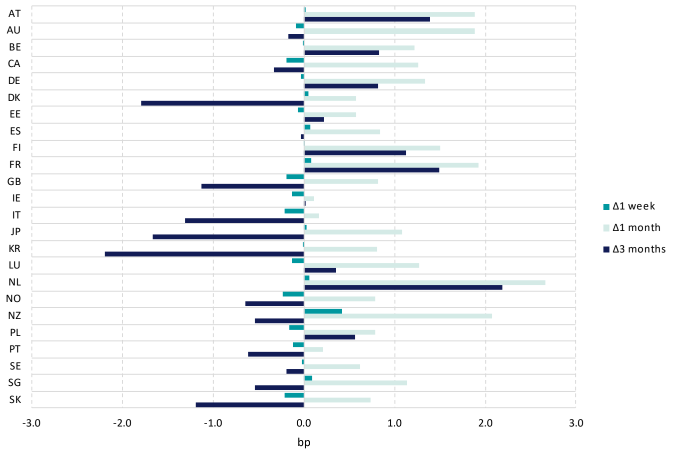
EUR benchmark volume (ESG) by type (in EURbn)



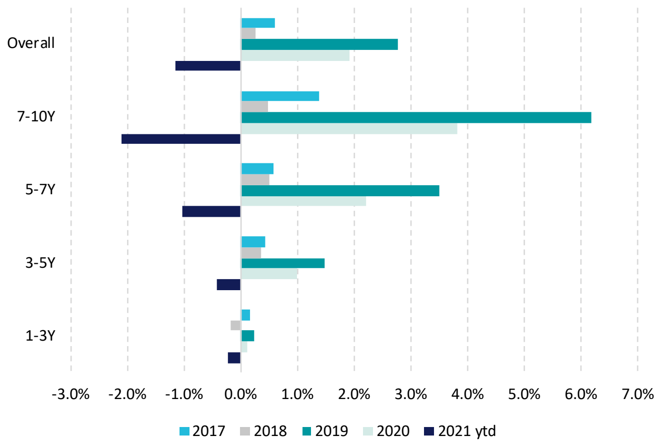
Source: Market data, Bloomberg, NORD/LB Markets Strategy & Floor Research

NORD/LB

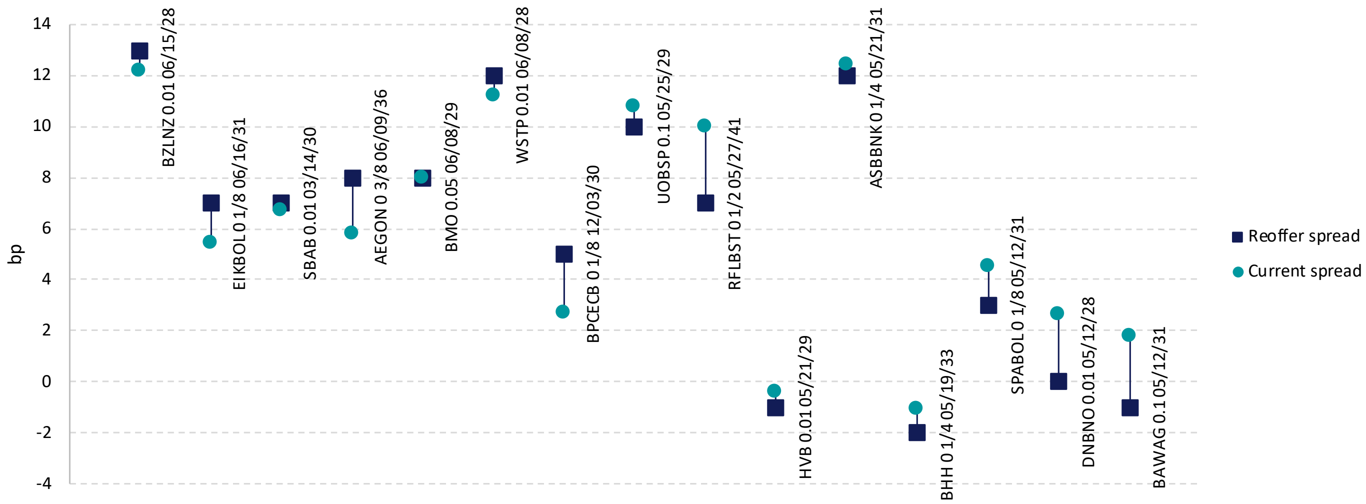
Spread development by country



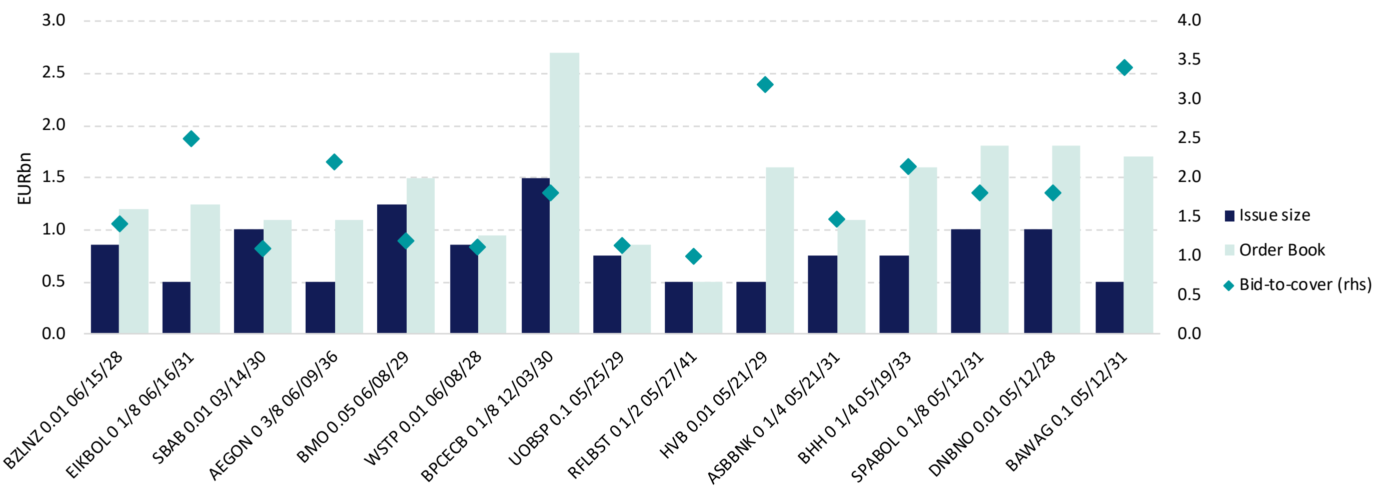
Covered bond performance (Total return)



Spread development (last 15 issues)



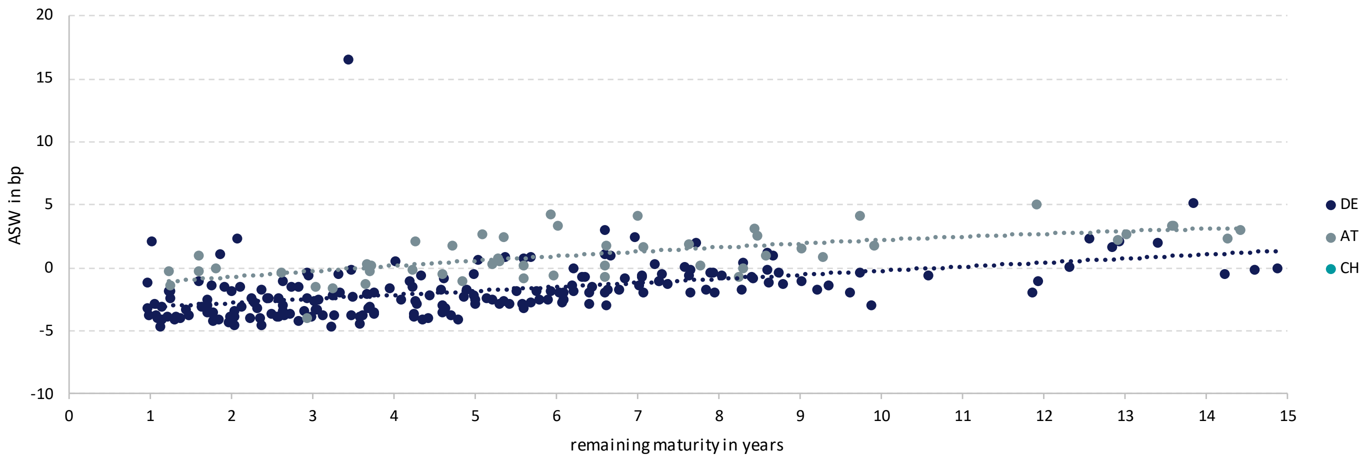
Order books (last 15 issues)



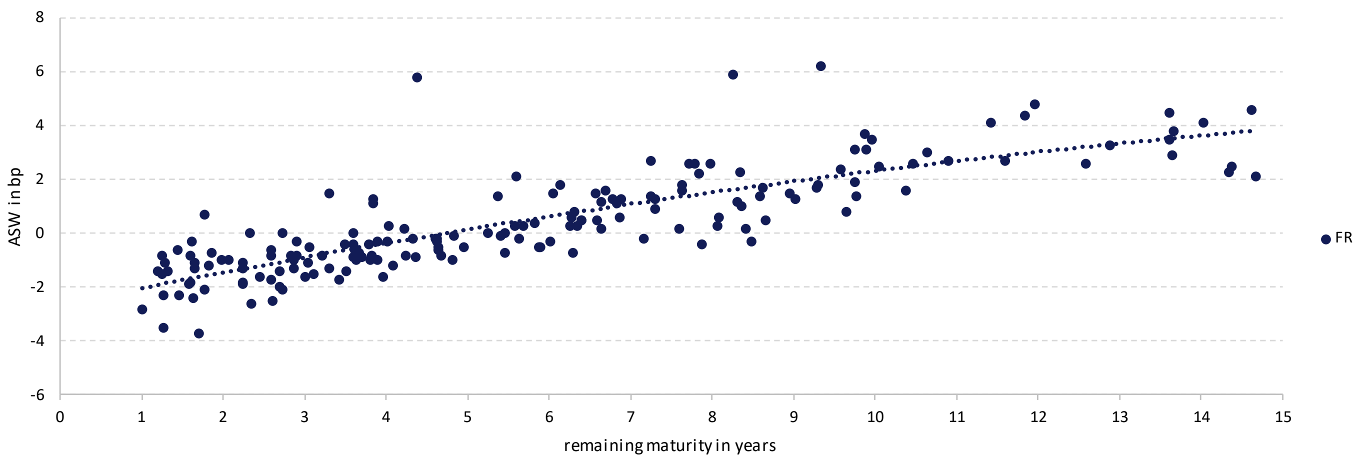
Source: Market data, Bloomberg, NORD/LB Markets Strategy & Floor Research

Spread overview[1]

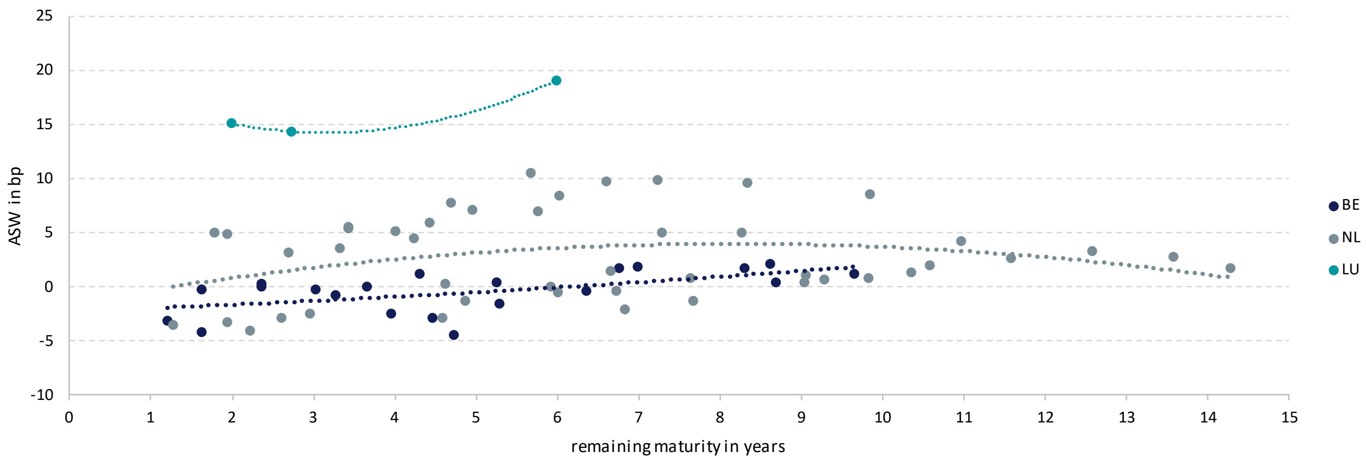
DACH



France

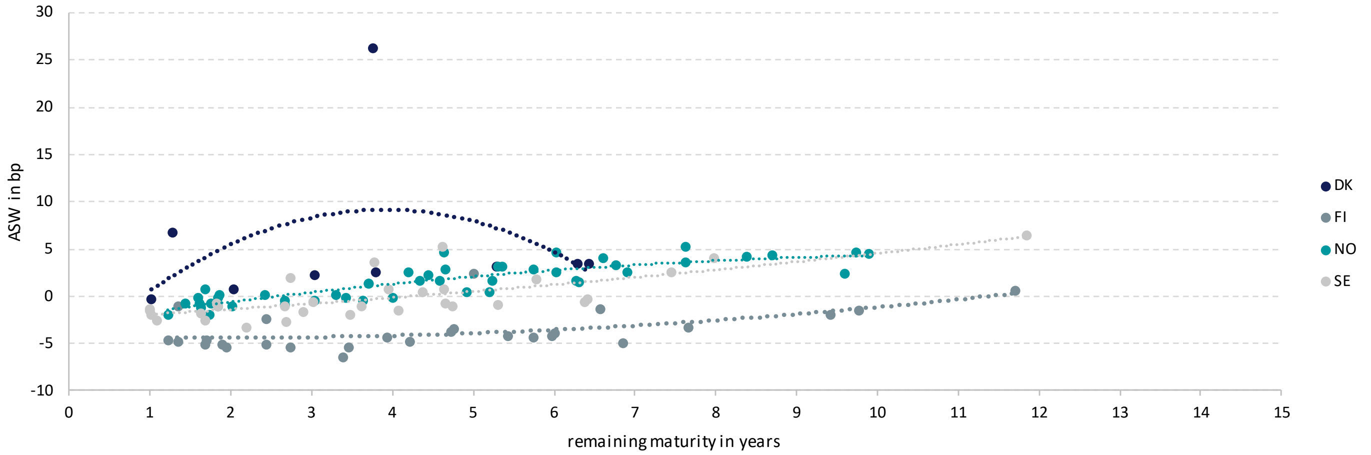


Benelux

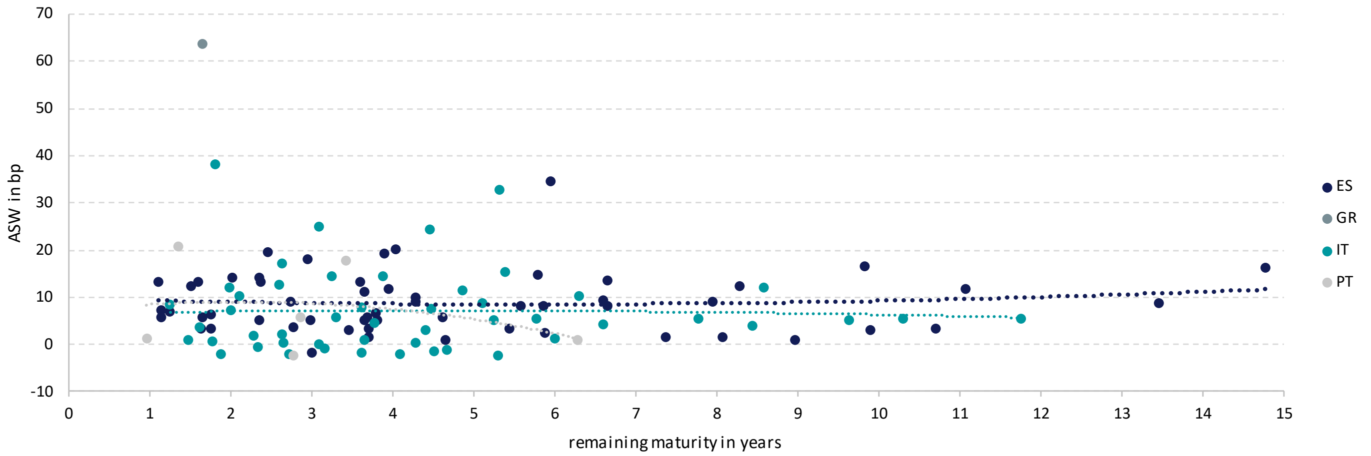


Source: Market data, Bloomberg, NORD/LB Markets Strategy & Floor Research [1]Time to maturity 1 ≤ y ≤ 15

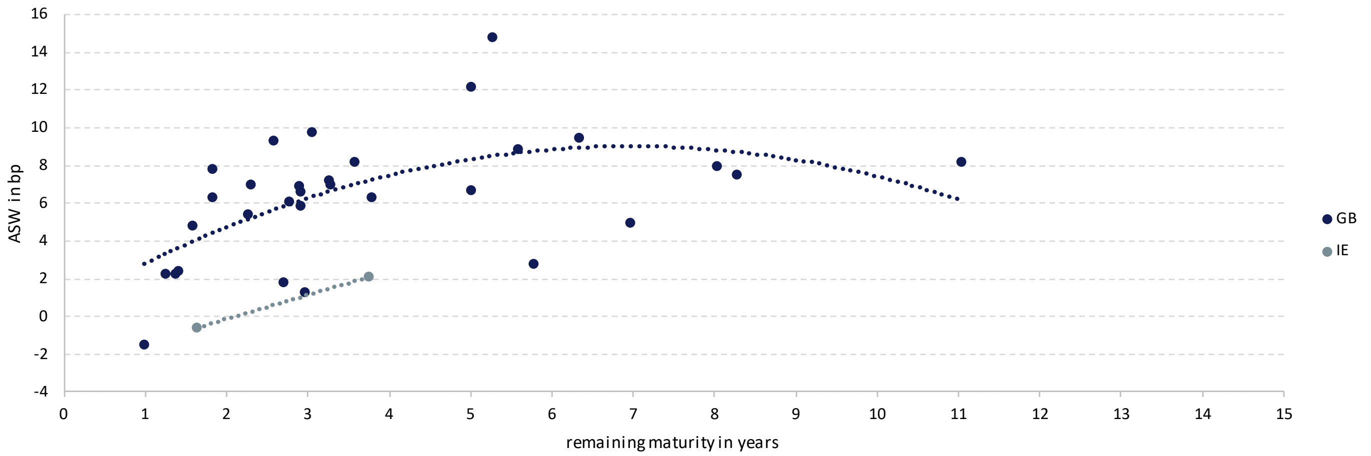
Nordics



Southern Europe

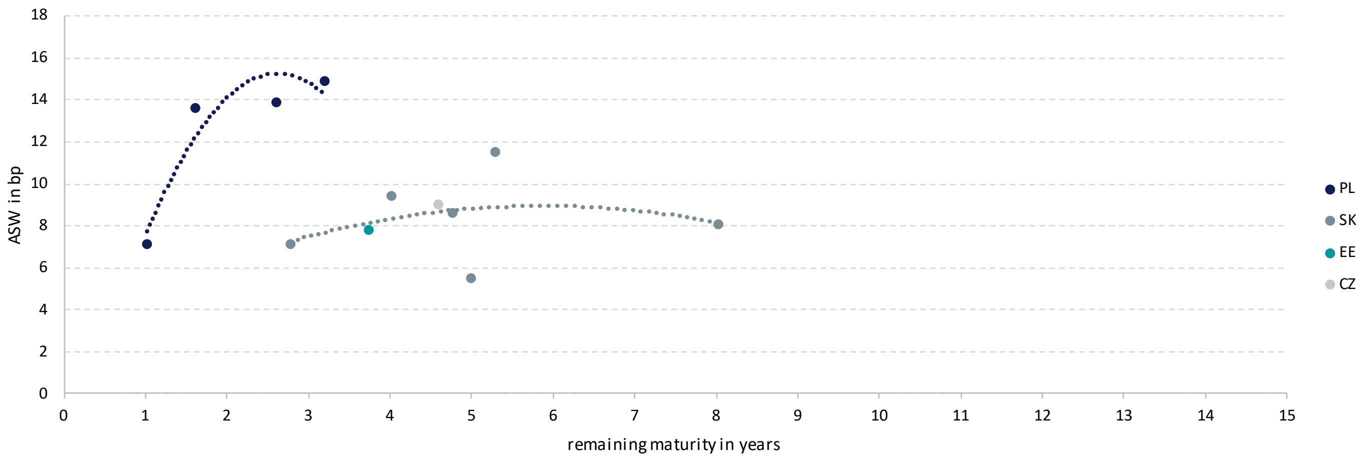


UK/IE

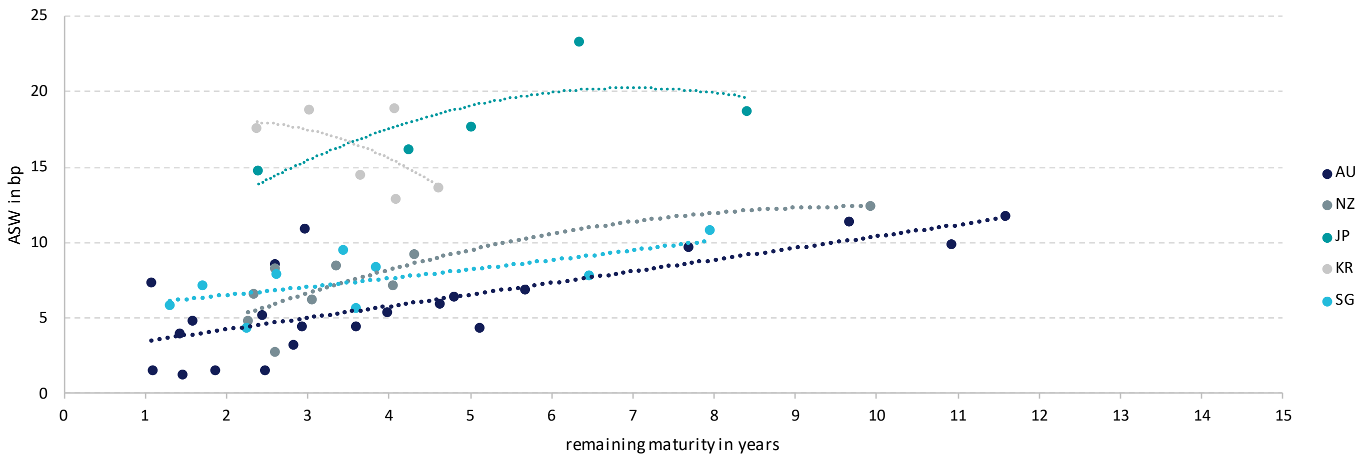


Source: Market data, Bloomberg, NORD/LB Markets Strategy & Floor Research

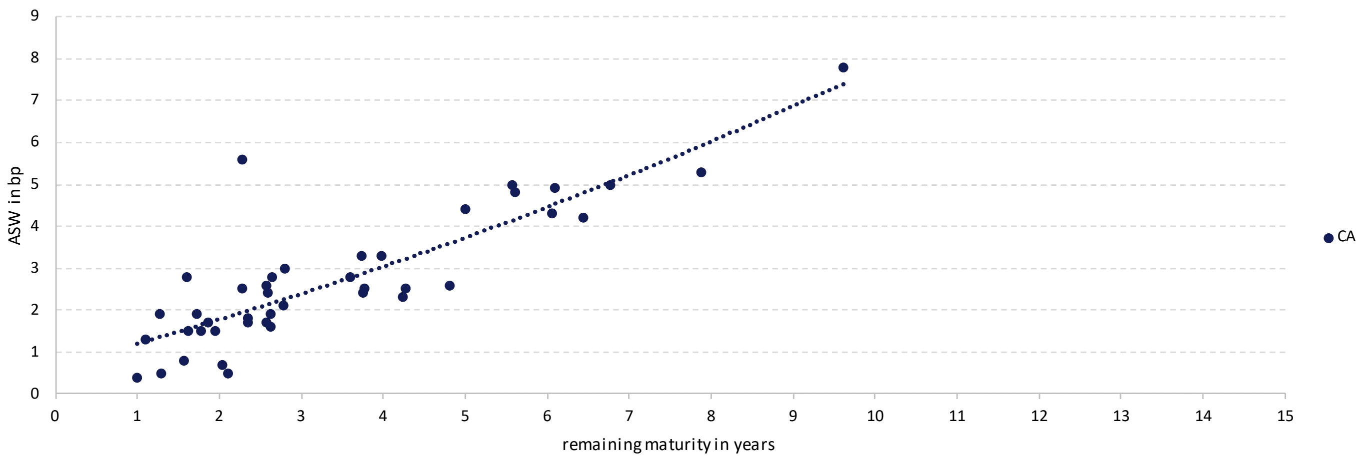
CEE



APAC



North America

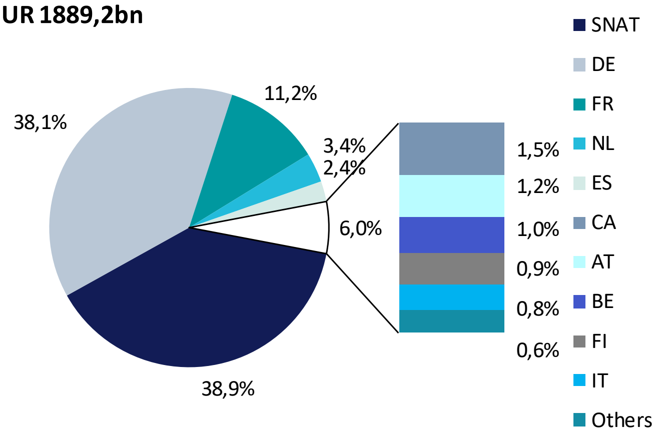


Source: Market data, Bloomberg, NORD/LB Markets Strategy & Floor Research

Charts & Figures
SSA/Public Issuers

Outstanding volume (bmk)

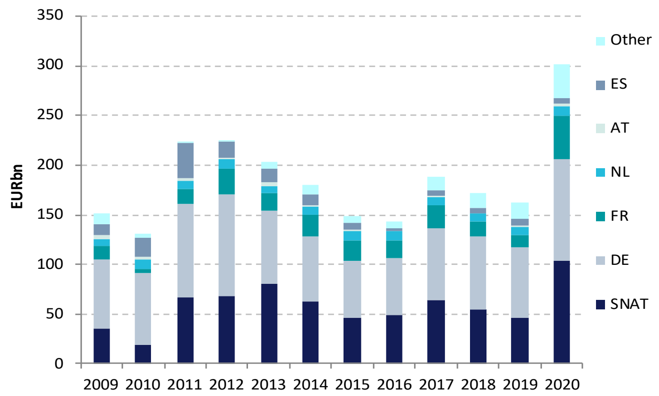
EUR 1889,2bn



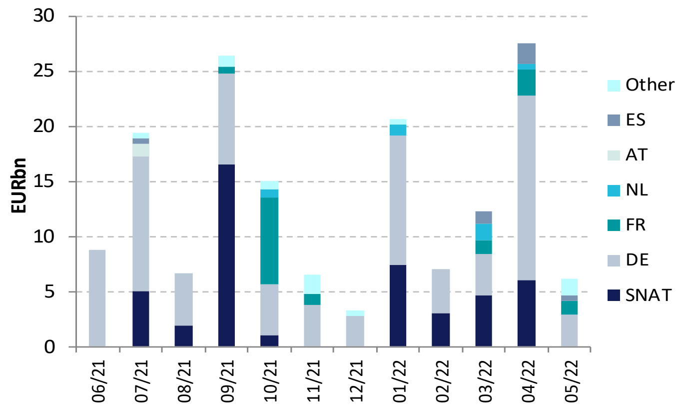
Top 10 countries (bmk)

Country	Vol. (€bn)	No. of bonds	ØVol. (€bn)	Vol. weight. ØMod. Dur.
SNAT	735,2	189	3,9	8,4
DE	719,4	560	1,3	6,8
FR	212,2	144	1,5	5,5
NL	64,4	65	1,0	6,6
ES	44,7	55	0,8	5,4
CA	28,5	20	1,4	5,8
AT	22,3	24	0,9	5,2
BE	19,2	23	0,8	14,8
FI	17,0	22	0,8	5,8
IT	14,5	18	0,8	6,0

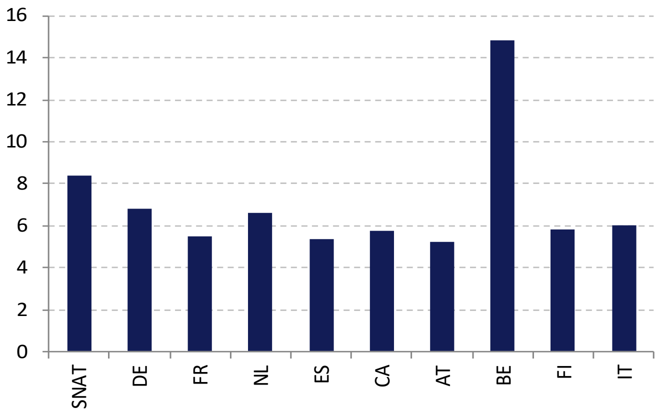
Issue volume by year (bmk)



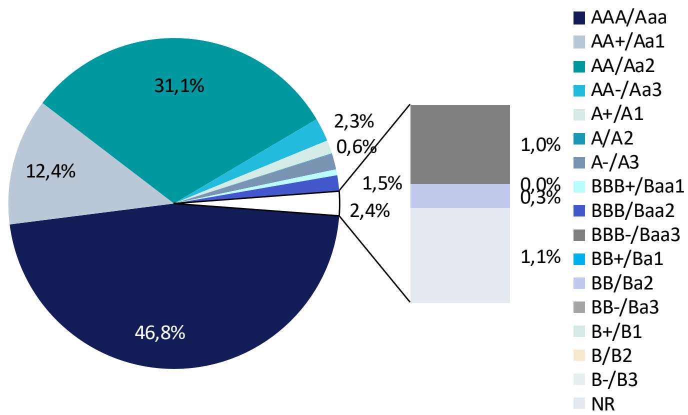
Maturities next 12 months (bmk)



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

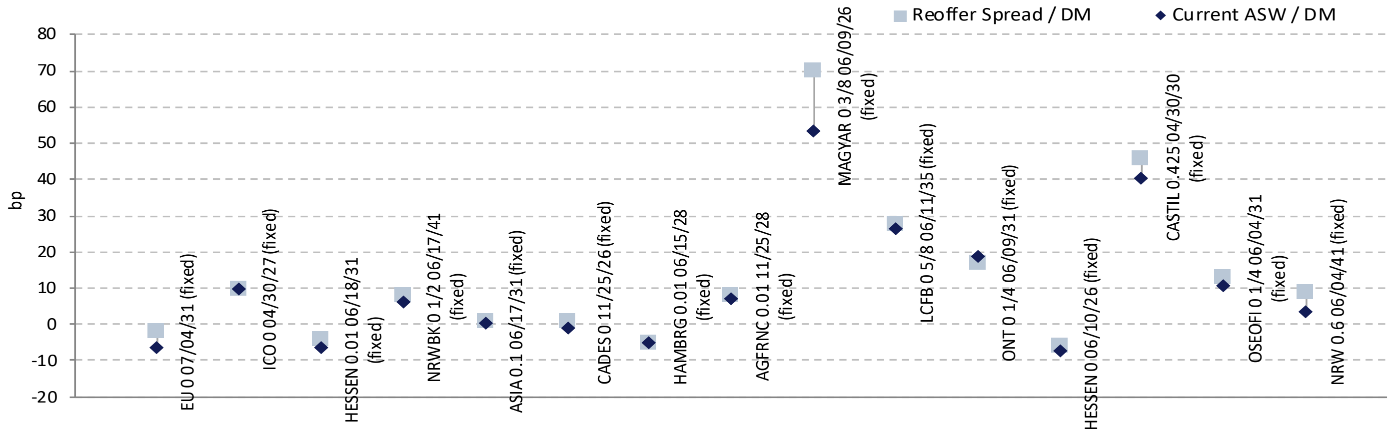


Rating distribution (vol. weighted)

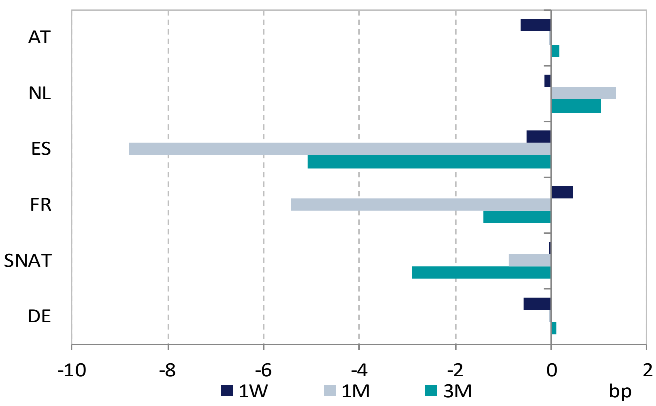


Source: Bloomberg, NORD/LB Markets Strategy & Floor Research

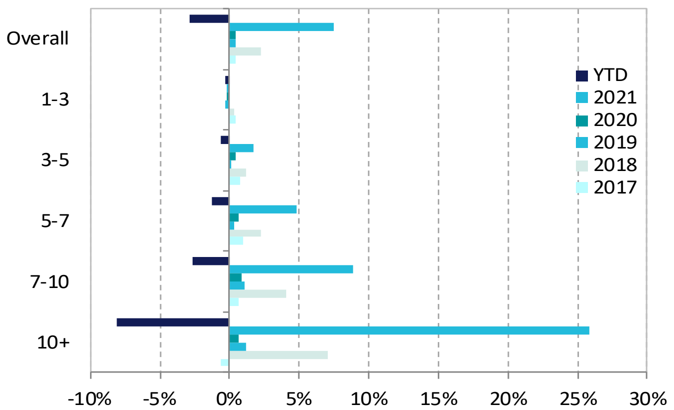
Spread development (last 15 issues)



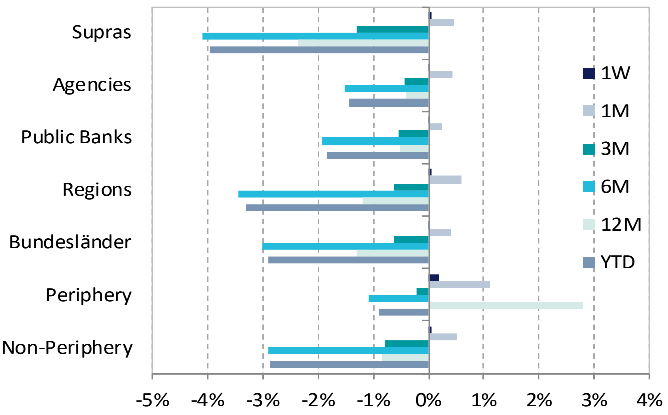
Spread development by country



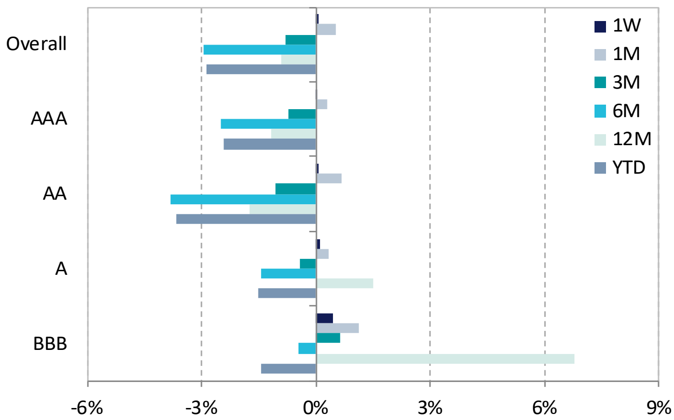
Performance (total return)



Performance (total return) by regions

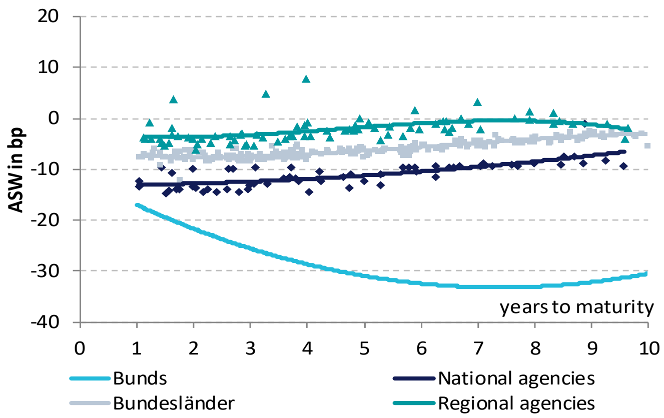


Performance (total return) by rating

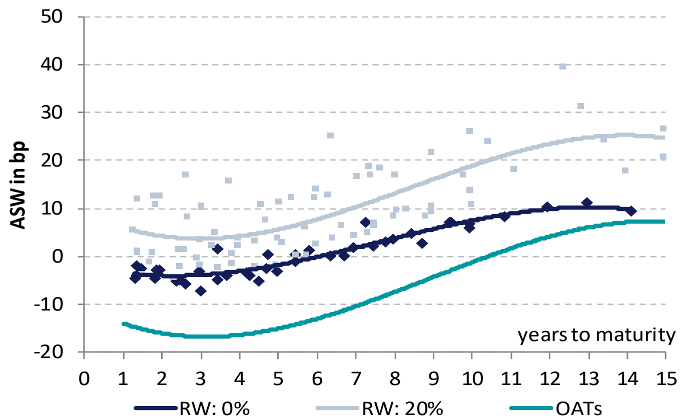


Source: Bloomberg, NORD/LB Markets Strategy & Floor Research

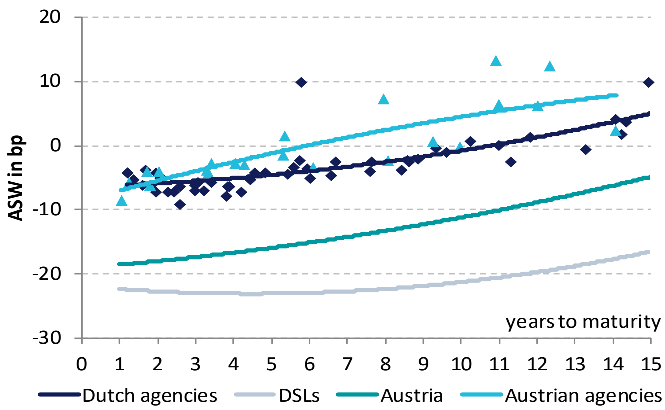
Germany (by segments)



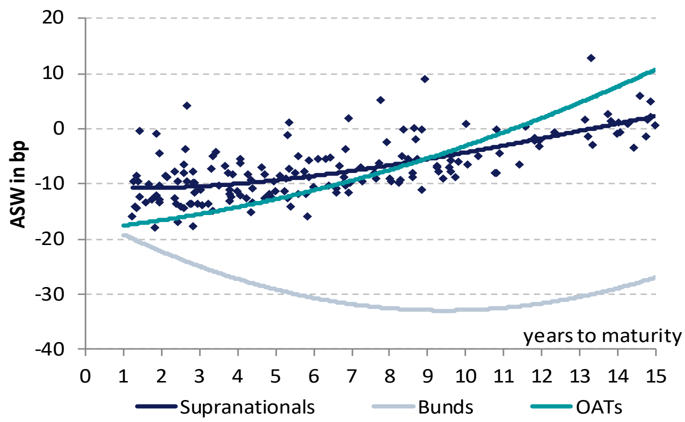
France (by risk weight)



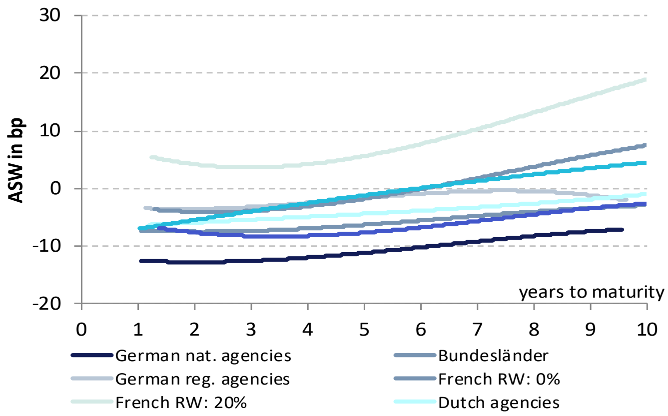
Netherlands & Austria



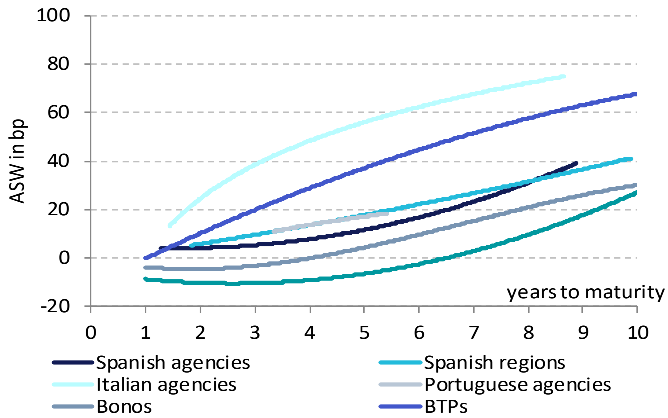
Supranationals



Core



Periphery



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

Appendix
Overview of latest Covered Bond & SSA View editions

Publication	Topics
20/2021 ♦ 09 June	▪ PEPP reporting: increased pace of purchases in Q2 ▪ Covered bonds vs. senior unsecured bonds
19/2021 ♦ 02 June	▪ ECB preview: Spectre of inflation fuelling tapering thoughts ▪ FX covered bonds: Same symptomatology as EUR benchmarks?
18/2021 ♦ 19 May	▪ United Overseas Bank reinvigorates the market in Singapore ▪ Transparency requirements §28 PfandBG Q1 2021
17/2021 ♦ 12 May	▪ ASB Finance opens primary market “Down Under”: Our outlook for the rest of the year ▪ Development of the German property market
16/2021 ♦ 05 May	▪ Austria implements requirements of the covered bond directive and harmonises existing legal framework ▪ EIB goes Blockchain
15/2021 ♦ 28 April	▪ EU Taxonomy meets the market for sustainable covered bonds
14/2021 ♦ 22 April	▪ LCR levels and risk weights of EUR benchmarks ▪ NextGenerationEU: NGEU is taking shape
13/2021 ♦ 14 April	▪ Predominant ECB strategy: wait-and-see but remain proactive ▪ PEPP reporting: First year done; a second (at least) now follows ▪ OSFI abandons temporarily increased 10% limit with immediate effect: (in)direct implications for Canadian benchmarks
12/2021 ♦ 31 March	▪ Unusual Q1 and revised supply forecast for 2021 ▪ Collective Action Clauses (CACs)
11/2021 ♦ 24 March	▪ Surprising dynamic: Eurosystem lends EUR 331bn to EMU banks via TLTRO III.7 ▪ German Pfandbrief savings banks in Q4 2020
10/2021 ♦ 17 March	▪ Transparency requirements §28 PfandBG Q4/2020 ▪ Credit authorisations for German Bundeslaender in 2021
09/2021 ♦ 10 March	▪ Moody’s covered bond universe – an overview ▪ Oldenburgische Landesbank expands sub-benchmark segment
08/2021 ♦ 03 March	▪ Repayment structures on the covered bond market ▪ ECB in a tight spot: litmus test for PEPP flexibility and preview of the second interest rate meeting of the year
07/2021 ♦ 24 February	▪ An overview of the EUR sub-benchmark segment ▪ ECB: crowding-out effects take hold ▪ PEPP vs. PSPP: Similarities and differences
06/2021 ♦ 17 February	▪ Insights into the iBoxx EUR Covered ▪ Development of the German property market
05/2021 ♦ 10 February	▪ PEPP reporting: upswing in public sector assets continues; covered bonds inconsequential

NORD/LB: Markets Strategy & Floor Research

NORD/LB: Covered Bond Research

NORD/LB: SSA/Public Issuer Research

Bloomberg: RESP NRDR <GO>

Appendix
Publication overview

Covered Bonds:

Issuer Guide Covered Bonds 2020

Risk weights and LCR levels of covered bonds

Transparency requirements §28 PfandBG

Transparenzvorschrift §28 PfandBG Sparkassen (German only)

SSA/Public Issuers:

Issuer Guide – Supranationals & Agencies 2019

Issuer Guide – Canadian Provinces & Territories 2020

Issuer Guide – German Bundeslaender 2020

Issuer Guide – Down Under 2019

Fixed Income:

ESG update

Analysis of ESG reporting

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

ECB launches corona pandemic emergency

ECB responds to corona risks

Appendix
Contacts at NORD/LB

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+49 152 545 67178
henning.walten@nordlb.de

Sales

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

Trading

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

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

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

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Additional information
Time of going to press: 16 June 2021 08:49h (CET)

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Issuer / security	Date	Recommendation	Bond type	Cause