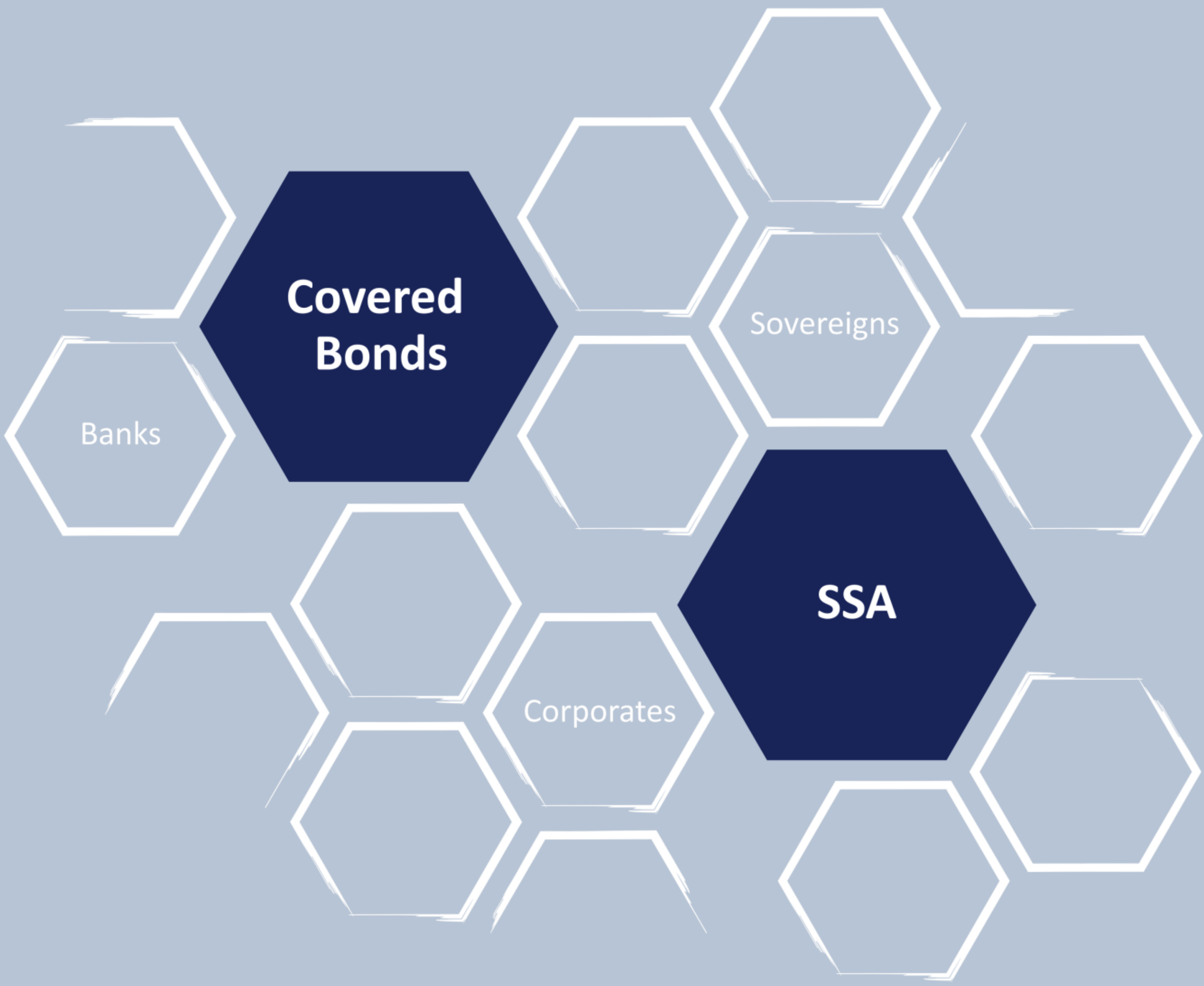

Covered Bond & SSA View

NORD/LB Markets Strategy & Floor Research

6 July 2022 ♦ 22/2022

Marketing communication (see disclaimer on the last pages)

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Market overview
Covered Bonds

Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

Primary market: on summer break?

In today's edition of our weekly publication, we will look back at the past six months in the covered bond segment and share a few thoughts for the second half of the year. Please refer to the corresponding Covered bond focus article for our review of the year so far and outlook for the second half of 2022. A few new deals did in fact emerge over the last trading days of June. On 23 June, Mediobanca from Italy approached investors with a benchmark, placing EUR 500m (5y) at ms +43bp and therefore at the level of the initial guidance. On the same day, Hamburg Commercial Bank (HCOB) appeared on the market with a mortgage Pfandbrief. This deal also had a volume of EUR 500m and was priced at ms +12bp (guidance: ms +12bp area; WPIR +/-1bp). PKO Bank Hipoteczny (PKO) generated an order book volume of EUR 850m with a green covered bond (3y) on 27 June. Details of the transaction and the PKO framework can be found in the paragraph below. Also on 27 June, Deutsche Bank demonstrated that even long maturities are still possible with its mortgage Pfandbrief. The deal with an initial residual maturity of 15 years was approved at a volume of EUR 800m (bid-to-cover ratio: 1.25x), with the reoffer spread ultimately set at ms +26bp (guidance: ms +27bp area). The day after, the final deal of June was attributable to Raiffeisenlandesbank Niederösterreich. Its new covered bond (3.5y) for EUR 750m (order book: EUR 960m) started with guidance in the region of ms +16bp and narrowed by one basis point in the marketing phase to a reoffer spread of ms +15bp. With Mediobanca, HCOB, PKO and Deutsche Bank, four institutions placed their new bonds on a June value date, meaning three EMU issuers still benefited from a higher ECB primary market order rate. Conversely, RLB Niederösterreich had placed its deal already in anticipation of a lower Eurosystem participation. The calculated new issue premiums for the last five deals in June averaged at more than 10bp. In our opinion, this maintains the repricing movement on the market. Three trading days into July, an issuer is yet to appear on the market, so it can seemingly be assumed that the summer break has begun. Over the last three years, there have been a few issuances in the first days of July. However, with the approaching deadline for the new European legal requirements this year (the "old" laws only apply until 7 July), the window is quite narrow, at least for issuers with EEA relevance.

Issuer	Country	Timing	ISIN	Maturity	Size	Spread	Rating	ESG
RLB Niederösterreich	AT	28.06.	XS2498470116	3.5y	0.75bn	ms +15bp	- / Aaa / -	-
Deutsche Bank	DE	27.06.	DE000DL19WV6	15.0y	0.80bn	ms +26bp	- / Aaa / -	-
PKO Bank	PL	27.06.	XS2495085784	2.9y	0.50bn	ms +36bp	- / Aa1 / -	X
HCOB	DE	23.06.	DE000HCB0BN7	5.0y	0.50bn	ms +12bp	- / Aa1 / -	-
Mediobanca	IT	23.06.	IT0005499543	5.0y	0.50bn	ms +43bp	AA / - / -	-

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

Deutsche Hypo Real Estate Economic Index: office climate falls below hotel climate

The latest report on the Deutsche Hypo Real Estate Economic Index was published at the end of June. The approximately 1,200 real estate experts surveyed continue to see the environment as more challenging than at the start of the year. Having fallen below the 100-point mark in May 2022, the esteemed index has now dropped by a further 17.5% to 80.8 points. The climate is therefore experiencing the sharpest decline since the beginning of the coronavirus crisis. As part of the index, this was largely attributable to a declining investment climate (-21.6% to 72.4 points). However, the earnings climate also suffered a noticeable setback and fell by 13.7% to 89.4 points. In fact, the rates of change for the segments are preceded by a minus sign across the board. After a positive development had been logged for the trade climate in May, with an increase of 17%, this has now fallen significantly by around 25% to 57.1 points. By contrast, the hotel climate fell less sharply (-5.9% to 82.8 points). It is worth noting that for the first time in more than five years, the office climate with 73.6 points has now dropped below hotel climate (-20.2% versus the previous month). The other segments residential and logistics also recorded double-digit declines. According to the press release, the outlook for the coming months makes for sombre reading: “The focus in the real estate sector is above all on the availability of materials and labour as well as the consequences for the real economy. China’s ongoing ‘Zero Covid’ strategy means no short-term easing in the markets is in sight.”

“Cost of living crisis”: S&P puts spotlight on impact of current price hikes

As part of a recent sector report, S&P’s rating experts focused on the consequences of the increased cost of living for borrowers and the impact on the asset classes of covered bonds and RMBS. Of concern are the significantly higher energy costs, the upward pressure on prices in other segments and the increased interest rate, which in summary raises the question of whether and to what extent borrowers are able to meet their mortgage obligations under these circumstances. The study concludes that rating downgrades, including for covered bonds, would only occur if the environment led to a rising rate of unemployment. However, this is not expected at the moment. No linear correlation was identified between credit quality and inflation, though S&P also expects an easing in price inflation over the coming years in this area. These statements are consistent with other studies (including Moody’s and Fitch), in which rising interest rates and a higher cost of living are expected to cool the real estate market but not cause it to crash. The current S&P study also highlights the increased share of fixed versus variable rates and to fixed interest periods of at least ten years, on average, in important covered bond markets such as France, Germany and the Netherlands. A high proportion of variable loans was found only in Norway, Finland and Portugal. Alongside inflation, which varies significantly from country to country due to divergent energy sources, the ratio of debt to disposable income is also very much fragmented. According to S&P, Sweden, the Netherlands, Norway and Denmark have a ratio of over 150% between mortgage debt and disposable income. We concur with the findings of the S&P experts and do not yet see any threat to the ratings of covered bonds, in part due to regulatory requirements (dual recourse, requirements for overcollateralisation and requirements for maximum loan-to-value ratios). However, we would also mention the currently increased probability of a recession scenario in Europe triggered by energy supply shortages, although this is by no means our baseline scenario at present.

PKO Bank Hipoteczny issues first green EUR benchmark from Poland

PKO Bank Hipoteczny (PKO) placed Poland's first green covered bond in EUR benchmark format on the market at the beginning of this week, which was also the Polish bank's fourth EUR benchmark issuance. In line with the Green Bond Framework, PKO's financing and refinancing is used as green cover assets, including loans for new or existing residential buildings, which are among the 15% lowest carbon in Poland. Loans for existing residential buildings in Poland where a 30% improvement in energy efficiency has been achieved are also eligible for recognition in this context under the Green Bond Framework. The bond with a three-year term and a volume of EUR 500m is firmly on the pulse in terms of maturity and "green format". This was also the first EUR benchmark transaction for PKO since 2019. The covered bond started with guidance in the region of ms +40bp. Due to the order book of over EUR 850m, the final reoffer spread was reduced by 4bp to ms +36bp. In fact, this was the largest spread narrowing on new issues we have seen for four weeks. In geographic terms, the majority of the issue was allocated to investors from Germany (42%), followed by the Nordics (17%), the UK (15%), Austria (12%), Benelux (8%) and the rest of Europe (6%). By type of investor, banks were among the strongest buyers (55%). Another 28% went into the books of asset & fund managers, 14% to central banks, 2% to insurance companies/pension funds and 1% to others.

Pfandbrief Act will temporarily deviate from practice from 8 July 2022 – change is on the way

An editorial error was made when transposing the European Covered Bond Directive into the German Pfandbrief Act (PfandBG). According to Article 2 Number 5 of the Covered Bonds Directive Implementation Act (CBDUmsG), the amended Section 4a of the PfandBG will apply with immediate effect on 8 July 2022, among others. This section relates to collective action clauses in government bonds (CAC). Following the amendment, a reference (Section 20 (1) number 1) will no longer be included, which means that, inter alia, bonds containing collective action clauses in accordance with Section 4a of the German Federal Debt Administration Act (Bundesschuldenwesengesetz) in their issuing terms are in principle no longer eligible for inclusion as ordinary cover for public sector Pfandbriefe. However, this deletion was not intended and was an "editorial oversight". Further amendment to the regulations is already in progress. Until then, of course, bonds containing collective action clauses placed by issuers will continue to be recognised as cover, as if this reference to Section 20 (1) number 1 had not been deleted.

Financial Stability Committee sees increase in systemic risks

In its June 2022 report on financial stability in Germany, the Financial Stability Committee (AFS) once again highlighted a significant increase in systemic risk in the latest reporting period (April 2021 to March 2022). While pandemic-related risk decreased, that for financial stability was up over the same period. BaFin had responded to the changed situation at the beginning of 2022 with a macroprudential package of measures. This included an increase in the countercyclical capital buffer, the introduction of a sectoral systemic risk buffer and supplementary supervisory communications. The ASF deems it appropriate to continue building on resilience. Although the economic outlook deteriorated in the reporting period, the German financial system was not subject to any functional problems. In line with scenario analyses by the Bundesbank from 2021, a sharp economic decline, upheavals on the financial markets, a slump in residential property prices and significant losses in the financial system cannot be ruled out. According to the ASF report, the risks are especially likely to persist if unfavourable real economic developments and an abrupt rise in interest rates occur concurrently. In this regard, the focus is above all on the residential real estate market. According to the ASF report, prices in cities were 15% to 40% higher in 2021 than the figures derived on the basis of models using fundamental data. Looking at Germany, the estimated overvaluation was even around 20% to 35%. At the same time, volumes for residential mortgages have also increased. Accordingly, falling prices combined with a slump in the economy could trigger a chain reaction. Households would have less income, as a result, loans would default and both the prices for residential real estate and the values of deposited collateral would collapse. As a consequence of this scenario analysis, banks could suffer losses. During the period under review, there was an increased danger that these risks are being systematically underestimated.

Berlin Hyp under new ownership since Friday

In a press release, LBBW and Berlin Hyp once more confirmed that the acquisition of Berlin Hyp by LBBW agreed on 26 January 2022 had been closed as planned, effective Friday, 1 July 2022. In economic and legal terms, Berlin Hyp is therefore now part of the LBBW Group. Berlin Hyp will continue to operate on the market independently as a Pfandbrief issuer in the future. Its lending strategy will also not be amended. Moody's rating agency responded to the change in ownership and applied an "under review" for possible downgrade to the issuer and senior rating outlook (Aa2). Fitch placed the issuer default rating on "Rating Watch Negative" and envisages a downgrade from A+ to A-. As at the end of March 2022, Berlin Hyp had an outstanding mortgage Pfandbrief volume of EUR 17.9bn, with a cover pool of EUR 18.5bn, as well as public sector Pfandbriefe of EUR 210m with a total cover pool of EUR 237m. At the same time, LBBW had mortgage Pfandbriefe of EUR 12.2bn with a cover pool of EUR 16.5bn and public sector Pfandbriefe of EUR 9.4bn backed by EUR 12.6bn of cover assets.

Market overview
SSA/Public Issuers

Author: Dr Norman Rudschuck, CIIA

NGEU: another EUR 50bn planned for H2

The EU’s plans ahead of the second half of 2022 were the subject of a great deal of attention, but the proverbial cat has now been let out of the bag: within the framework of the NGEU programme, the EU is planning for a funding requirement in the amount of EUR 50bn in the second half of 2022. The EU has once again reliably provided its funding calendar for these transactions, which we have reproduced for you below (syndicated transactions). In addition, there will be four instead of six auctions in the second half of the year, as the dates in July and December have been cancelled. EU auctions always take place on the fourth Monday of each month, with the exception of August, when it will be the fifth Monday of the month due to the way the calendar falls this year. Green bonds will of course also feature in this share of EUR 50bn (estimate: EUR 15bn). Overall, we had expected a greater funding requirement, although this estimate is almost confirmed in other ways: as part of the SURE programme, the EU can still issue EUR 6.6 billion in social bonds, which would add to the funding volume. A further EUR 9bn of aid for Ukraine is also possible as part of the MFA (Macro-Financial Assistance) platform and can be refinanced on the capital market. For both programs – SURE and MFA – the funding windows explicitly do not apply, since it is still unclear whether both sums will be called or if they are actually needed at all. Accordingly, one must always pay attention to the RfP: whether it is "NGEU Plain" or "NGEU Green", SURE (Social) or MFA (Plain). This can be seen in the pricing of the bond and the oversubscription ratio. Looking ahead, we expect the precise funding plan for H1 2023 to be published in December 2022, when it is possible that the headline figure will be higher than “only” EUR 50bn.

Time window for...

… NGEU bond issuances		… NGEU bond issuances	
CW 28	11-15 July	**CW 46**	14-18 November
CW 37	12-16 September	**CW 49**	05-09 December
CW 41	10-14 October		

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

ESM/EFSF has also sent out its funding newsletter

Of the annual funding requirement of EUR 19.5bn, the EFSF has already raised EUR 10.5bn in the first six months of the year. As such, a total of EUR 9bn is still pending for refinancing in H2 2022. The ESM is halfway through its funding requirement of EUR 8bn. As a result, H2 will be just as busy, albeit with the difference that there is still a USD bond to be issued. As we previously reported, the ESM has had the best credit rating (AAA/Aaa/AAA) from all three major rating agencies for a few weeks now.

Long-term funding plan incl. 2023 (EUR bn)

	2021	**2022**	**2023**	**∑**
EFSF	16.5	19.5	20.0	**56.0**
ESM	8.0	8.0	8.0	**24.0**
∑	**24.5**	**27.5**	**28.0**	**80.0**

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

End of net purchases under the APP

The APP's last rites have been read and net purchases under the Asset Purchase Program (APP) officially ended on July 1. This was the mandatory minimum requirement for the ECB to be able to make the first interest rate step of what is likely to be a protracted journey. This is exactly how "sequencing" is defined: only after the end of the bond purchases can and should there be a rise in key interest rates. According to the most recent data set from the ECB, the APP amounted to EUR 3,264.5bn, of which a total of EUR 2,593.2bn was attributable to the PSPP. This equates to roughly 80% of the total volume. At EUR 344.2bn, the CSPP ranks second in the breakdown, closely followed by the CBPP3 at EUR 301.5bn. The purchase programme for ABS ended at EUR 25.6bn. As we are dealing with Eurosystem holdings and not pure net purchases in this case, we assume in our reporting that these figures will be updated at the beginning of August – and therefore also on a monthly basis in the future.

Three pulls on the same day – SSA issuer also affected in the form of SAGESS

Things always seem to happen when you least expect them: it's rare enough for deals to be pulled, especially in the SSA market – two in one day is even rarer; this happened in May 2022 (without any SSA involvement). However, three in one go, as seen at the end of June, is definitely worth commenting on: the issuers involved were Close Brothers (GBP 250m), České dráhy (inaugural green deal at ms +275bp area) and above all SAGESS. For more detailed information on this issuer, please refer to the paragraph immediately below. It is rather fascinating that neither Close Brothers nor SAGESS offered any comment on the reasons for pulling their respective deals. For the Czech state railway company, a train accident on the same day was the sad reason why it opted to pull its deal. SAGESS had in fact already announced the final spread at +45bp over the French reference bond (OAT), which corresponded exactly to the guidance. The bond would have had a seven-year term. No further information on this subject has been released since June 27.

Société anonyme de gestion de stocks de sécurité (SAGESS)

While France has held strategic oil reserves since 1925, the French state established the Société anonyme de gestion de stocks de sécurité (SAGESS) in 1988. Created at the initiative of companies in the oil industry, SAGESS has the central role of building up, stockpiling and maintaining strategic oil reserves. The overall dependence on oil imports by EU states in general and France in particular (the majority of French oil requirements are covered by imports), together with supply-side shocks in recent decades, have underlined the necessity of amassing and maintaining strategic oil reserves. In 1968, the Member States of the European Community implemented the regulation that companies in the oil industry must hold stocks to cover requirements for at least 90 days (based on the previous year's consumption). In 2012, the EU changed the calculation of minimum stocks (90 days based on expected net imports). In order to comply with these requirements, French oil operators have the choice of delegating 56% or 90% of the required stocks to SAGESS or the Comité Professionnel des Stocks Stratégiques Pétroliers (CPSSP) against payment of charges. These two entities therefore hold most of the strategic oil reserves in France, which are stored in a total of 88 storage units. CPSSP ranks higher than SAGESS, which acts in the name and on behalf of CPSSP for the operational management of holding the reserves. CPSSP and SAGESS jointly form the national oil reserve agency. SAGESS has also been nominated as the Central Storage Entity (CSE) for France. SAGESS is owned by companies in the oil industry. Shares may only be transferred with the government's approval.

Primary market

In today's SSA article, we take a look back at a highly active first six months of 2022 after reaching the halfway point of the year. As usual, in this section we will be focusing on the deals placed since the last edition of our weekly publication. Bpifrance kicked things off in this regard, having carried out investor calls for a green bond as far back as mid-June. To use its ticker, OSEOFI opted for a five-year term with a volume of EUR 1.25bn. The deal was priced at OAT +33bp and the order book came to EUR 2.1bn, while narrowing of a single basis point was observed against the initial guidance. The SAGESS deal mentioned above was accompanied by investor calls on 20 June. At this time, the term to maturity was stated at 7-12 years. However, seven years and/or 12 years were said to be possible. However, this ultimately did not materialise after the deal was pulled, for which no reason was given. We will now round off the French section by commenting on IDF, which is the ticker for Île-de-France. This issuer mandated a consortium on 23 June for an investor call in connection with a sustainability bond with a term to maturity of 10 years. No further details have been disclosed since this time. During our brief publication pause due to business trips and conferences, HESSEN was active twice on the market: on June 27, the "crooked" deal brought a total of EUR 1.125bn into the budget over five years at ms -16bp. The order book amounted to EUR 1.95bn and the guidance started out in the area of ms -15bp. The Hessians can be very happy with this deal. Then, on Monday, 04 July, a deal in the form of a sole bookrunner totalling EUR 300m was placed for seven years at ms -14bp. When it comes to KfW, we are used to the fact that a) they don't hang around and b) their bonds are also subject to high demand. So let's first focus on the facts before we pour cold water on the matter: a total of EUR 4bn (7y) was raised in the form of a green bond at ms -16bp. The order books reached EUR 13.6bn and the marketing phase started with guidance of ms -15bp area. And now for the bitter-sweet side-story: a new issue premium of up to 5.8bp (according to Bloomberg) is not only unusual for this flagship deal, but rarely if ever seen for a green bond "made by KfW". The issuer itself calculated a new issue premium of 4bp. Usually, KfW saves a basis point or two with its green bonds and prices within its own curve. Petra Wehlert put this down to the considerable volatility seen during the last few trading days leading up to the deal. Next week, we are expecting an update on KfW's funding figures for 2022. Even before Putin's war of aggression in Ukraine, a total of EUR 80-85bn would have been in record-breaking territory if the upper limit was reached. Rentenbank was also active with a green bond (10y), with a total of EUR 1bn changing hands at ms -11bp. The guidance started out in the area of ms -9bp, while the order book came in at EUR 3.3bn. We also have a couple of taps to mention: the EIB tapped its CAB with a maturity to 2037 by EUR 1bn at ms +3bp. For its part, CADES tapped a 2029 bond by EUR 1.5bn at OAT +31bp. The EU has its first funding window next week (see above) and will issue a bond under its NGEU programme in this context. The RfP has already been sent to the banking group. Moreover, the Austrian OKB mandated a consortium for an investor call regarding an imminent sustainability bond (5y, EUR 500m, WNG). Further mandates for deals expected to be executed very promptly were issued by BNG (10y, ESG), SCHHOL (5y) and CAF (5y).

Issuer	Country	Timing	ISIN	Maturity	Size	Spread	Rating	ESG
RENTEN	DE	04.07.	XS2500341990	10.0y	1.00bn	ms -11bp	AAA / Aaa / AAA	X
KFW	DE	27.06.	XS2498154207	7.3y	4.00bn	ms -16bp	- / Aaa / AAA	X
HESSEN	DE	27.06.	DE000A1RQEE0	5.0y	1.125bn	ms -16bp	- / - / AA+	-
OSEOFI	FR	27.06.	FR001400BB83	5.4y	1.25bn	ms -10bp	AA / Aa2 / -	X

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

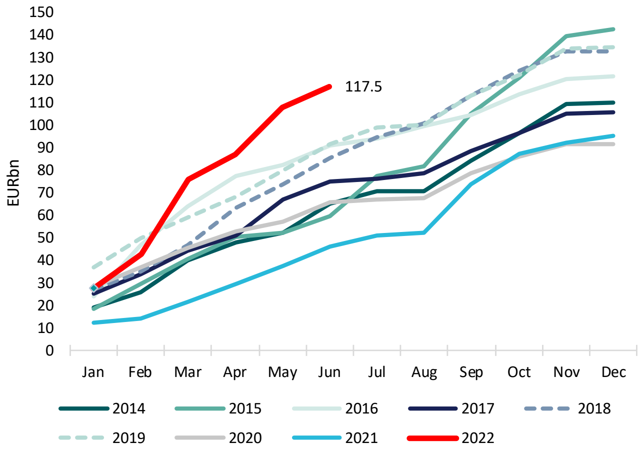
Covered Bonds
H1 review and outlook for H2 2022

Authors: Melanie Kiene, CIIA // Dr Frederik Kunze // Stefan Rahaus

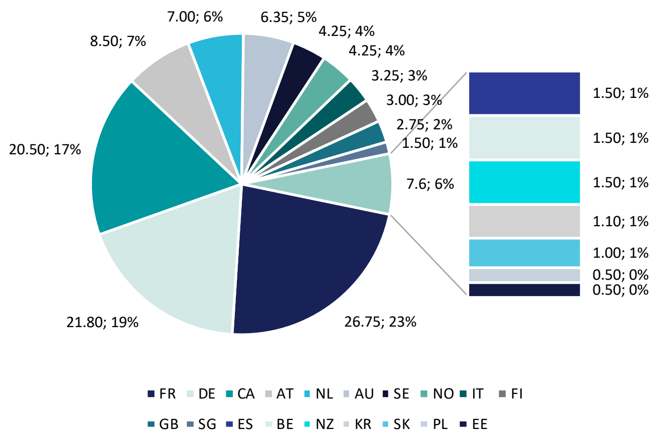
A memorable first six months

At the end of the first half of 2022, we once again look back over the last six months and the developments in the market for covered bonds in EUR benchmark format. The first half of this year is sure to remain memorable, if only because it shows such a completely different picture to the “leaner” years of 2020 and 2021. After the review, we move on to our outlook for the second half of 2022. The covered bond market is also facing a turning point and our assessment therefore no longer covers monetary policy and economic developments in the context of just the EUR benchmark segment. The question for both the European and non-European covered bond market now is how successfully the transition to the new legal and supervisory framework is implemented across the board.

EUR benchmarks: issue trend



EUR benchmark issues in H1 2022 (EUR bn)



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

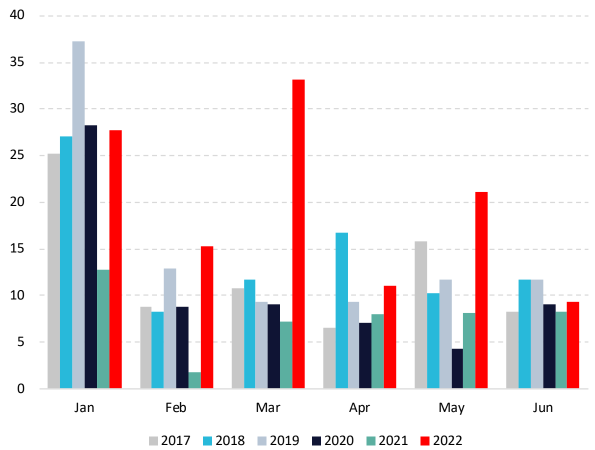
Primary market 2022: running and running…

Sometimes it’s enough to let the numbers speak for themselves. Admittedly, only a few months ago we were still not expecting to see an issuance volume of EUR 117.5bn for the first half of the year. Indeed, after the first few trading weeks, the talk was more of a return to the familiar issuance patterns, characterised by high levels of activity at the start of the year (although this was not the case in 2021, for instance). In actual fact, the primary market for covered bonds proved to be permanently in sprint mode. In the first three months of the year, primary market activity outstripped the respective volumes recorded in the same months between 2017 and 2021. In April and May, new issues also significantly exceeded the corresponding figures for the preceding three years. Most of the issues came from the jurisdictions of France (EUR 26.75bn), Germany (EUR 21.8bn) and Canada (EUR 20.5bn). The biggest surprise here was Canada.

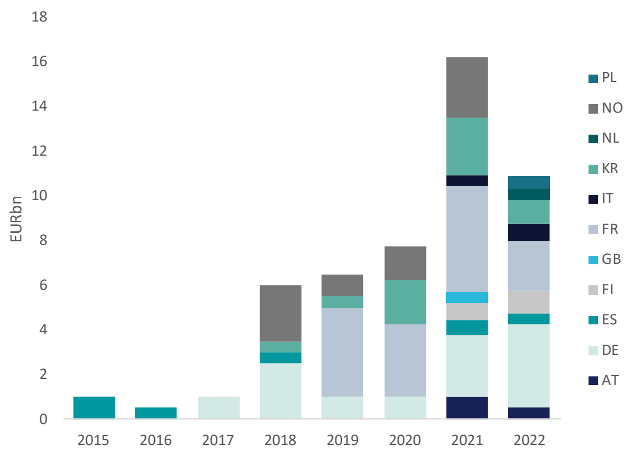
What didn't we expect? What should we have been expecting?

There's no question that issuance behaviour in the preceding years was heavily influenced by alternative funding options, and in some cases by reduced funding requirements as well, and this was not expected to apply in 2022. However, we had not anticipated such a rapid swing in market sentiment, which increasingly turned the focus to covered refinancing. Firstly, the inflation scenario had a quicker impact than we had expected, which enhanced the appeal of covered bonds due to significantly higher yields. Secondly, the dramatic developments in Ukraine and associated increase in geopolitical uncertainty made the covered debt securities segment popular. We see this not least as the result of limited funding options via senior unsecured bonds and central bank liquidity, as well as customer deposits. One good example here is the issuance volume from the eurozone, which at EUR 74.8bn in the first half of the year alone was far more dynamic than the total volumes of preceding years 2021 (EUR 58.55bn) and 2020 (EUR 70.1bn). However, in the case of Canada in particular, the higher funding requirement was caused by increasing items on the assets side. Price increases for residential property alone notably drove up nominal growth on the financing side. With regard to issuers of bonds governed by covered bond harmonisation at European level, there was one factor that we should have taken greater account of in our calculations. We are referring here to the significant level of prefunding intended to prevent regulatory bottlenecks directly after the start date for the new legal regulations (8 July 2022). According to our estimates, this would be particularly evident among covered bond issuers from Austria. At EUR 8.5bn (2021: EUR 4.0bn; 2020: EUR 5.0bn), the issuance volume from this jurisdiction is comparatively high. After all, the institutions have to obtain approval from the supervisory authority for the first issue under the new legislation. As we understand it, the approval proceedings can take up to six months. This in turn increased the incentive for prefunding ahead of 8 July 2022. We discussed these and other subjects as part of our Round Table Austrian Covered Bonds alongside Austrian issuers (cf. The Covered Bond Report: The Austrian Covered Bond Market 2022). Given the momentum, however, we are still surprised that no debut issuers went to the market in the EUR benchmark segment.

EUR benchmarks: timeline of new issuances (H1)



ESG: EUR benchmark segment issue trend



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

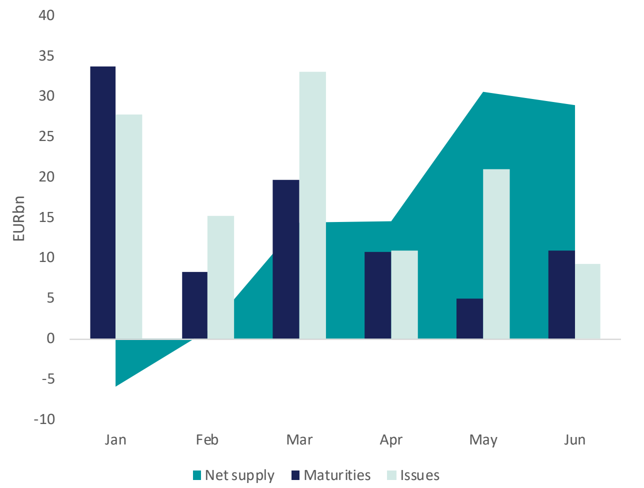
ESG deals: some new issues but activity slightly muted

While activity in the sub-market for sustainable bonds in the EUR benchmark segment was something of a saviour in 2021, momentum in the ESG segment in the current year appears weaker, at least at first glance. However, with newly-placed ESG covered bond benchmarks amounting to EUR 10.85bn across 16 deals, the figure for the first half of the year is higher than the respective figure for 2021 (EUR 8.0bn; 10 deals) and there are several newcomers to the ESG segment. Most recently PKO Bank issued the first ESG benchmark from Poland, choosing the format of a green mortgage covered bond. BayernLB also went to investors for the first time with a green benchmark. Its green Pfandbrief, which focuses on funding public transport, is backed by the bank's public sector cover pool. Austria's UniCredit Bank Austria made its debut with a green benchmark, while BerlinHyp (DE) made its first appearance in the benchmark segment with a social covered bond. Italy's Banco BPM joined the group of ESG issuers with a green covered bond, while Caja Rural de Navarra (ES) followed up its last sustainable benchmark with a green covered bond back in February this year. In the same month, DZ HYP, the top dog of mortgage Pfandbriefe, successfully placed its inaugural green benchmark in the market.

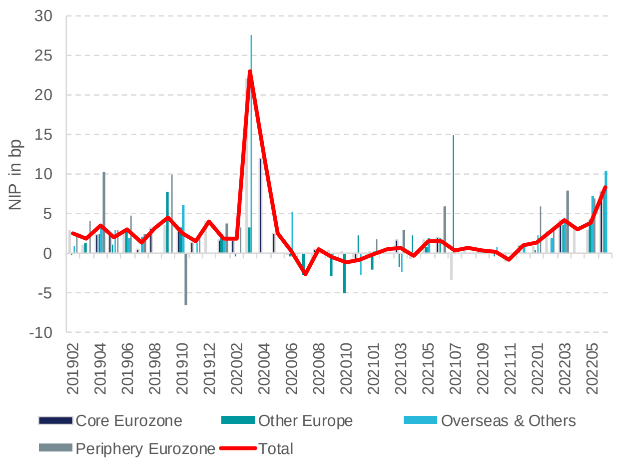
The market technicals: positive net supply in first half of 2022

Before looking at the movement in spreads in the first half of the year and beyond, we should first assess the market framework conditions. Here, there has been a trend towards a positive net supply over the course of the year. While initially 2022 unsurprisingly started with a preponderance of bond maturities (EUR 34bn in January vs. new issues of EUR 28bn), at times new issuances in the subsequent months significantly outstripped maturities, including as a result of the break from the seasonal pattern as outlined at the beginning of this article. In a technical assessment, strengthening net supply speaks for a rise in spreads and in new issuance premiums. However, the demand for fresh bonds was more than robust and also came increasingly from investors outside the Eurosystem. This development was supported by rising yields and higher swap rates, with the result that the reduction in the ECB primary market order ratio from 40% to 30% was evidently more than offset. On average, order books continued to fill up quickly and new issuance premiums initially remained at a manageable level. A combination of persistently strong supply, expectations of a change in monetary policy and the increased uncertainty dominating market sentiment successively drove oversubscription ratios down, paving the way for rising new issuance premiums. Up until the last few trading days of June, the market environment was characterised by expectations of a new cut in the ECB order ratio, and this then materialised with the first deals featuring July value dates. It is not all that surprising that we were unable to identify a sustained fundamental deterioration in the condition of the covered bond markets up to the end of the first half of the year. The rating agencies too had up to this point unanimously presented outlooks and forecasts confirming the robustness of the credit ratings. Although scenarios which could lead to fundamental downgrades were cited (in particular falling property values and material increases in the cost of living), these scenarios tended to be sidelined and viewed as extreme events.

Issues, maturities and net supply in H1 2022



Trend in new issue premiums

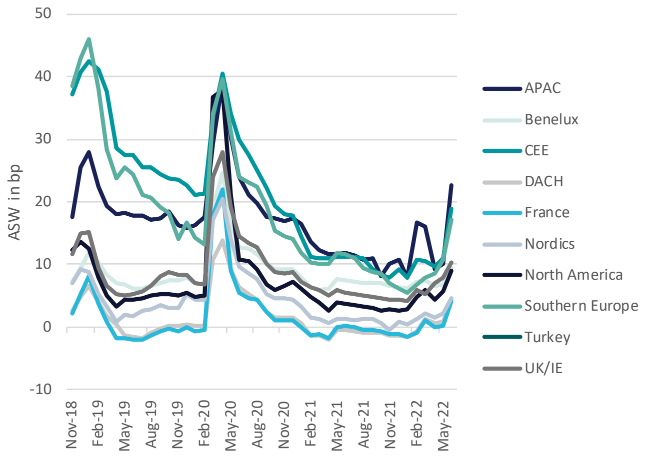


Source: Market data, Bloomberg, NORD/LB Markets Strategy & Floor Research

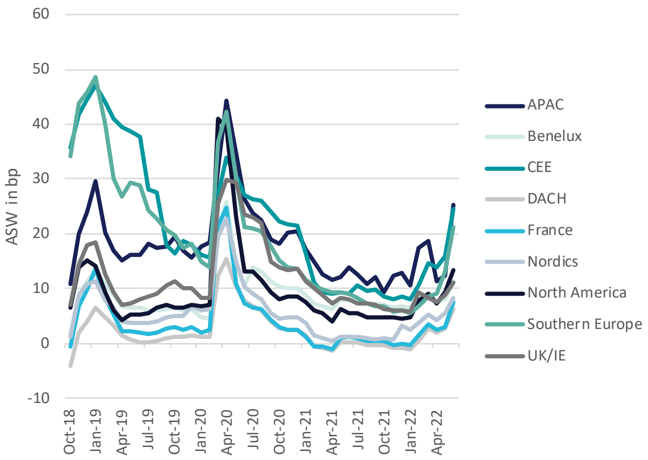
Spread trend: secondary market again characterised by question marks relating to screen prices

Following the intermittent sentiment-driven spread widening, particularly as a result of the escalation of the Ukraine situation, more sustainable repricing became established in the secondary market in the last trading days of the first half of the year at the latest. With new issue premiums recently of nine to ten basis points on average, the meaningfulness of screen prices was once again called into question. This is hardly surprising, given that the secondary market has been sidelined at times, both due to the war of aggression in Ukraine and, not completely unrelated, being overshadowed by a very lively primary market. Consequently, trading activity and bid/ask requests were not particularly dynamic, and the lack of liquidity ultimately undermined the meaningfulness of screen prices on a sustained basis. Nevertheless, at the end of the first half of the year in particular, the secondary market followed the widening tendencies of the primary market.

EUR BMK: spread trend (5y; generic)



EUR BMK: spread trend (7y; generic)

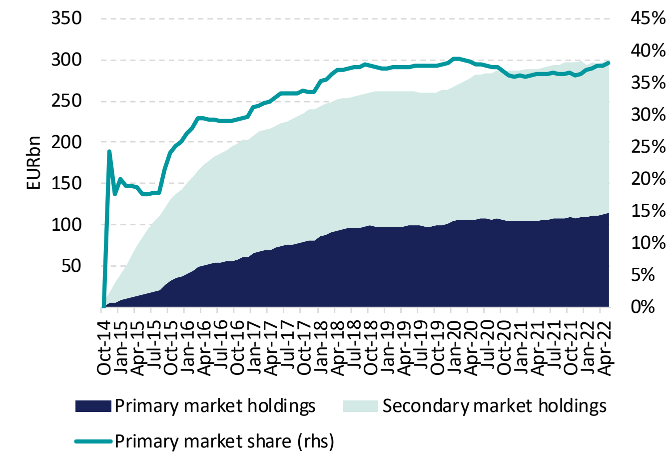


Source: Bloomberg, NORD/LB Markets Strategy & Floor Research

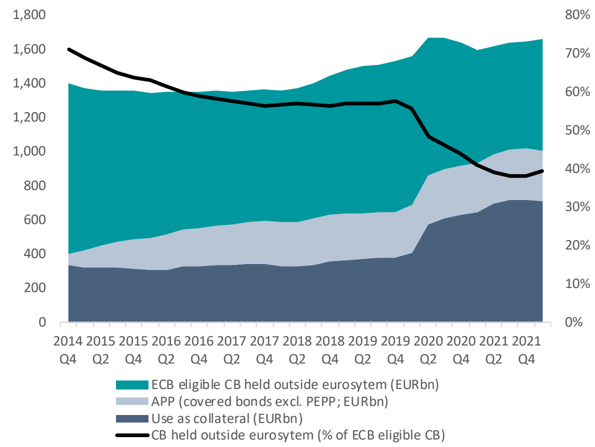
Additional implications linked to the change in monetary policy

The adjusted monetary policy direction of the ECB monetary authorities undoubtedly impacted market activity in the covered bond segment in the first months of the year as well. Here we should mention not only the reduction in the ECB order ratio referred to earlier, but also the movement in CBPP3 volumes and purchasing. The portfolio totalled EUR 301bn. At the end of 2021, the figure was EUR 298bn, which implies no dramatic net growth and which we already see as a modest withdrawal from the sub-market by the ECB. However, it should also be noted that maturities in the period January to June 2022 exceeded EUR 25bn. In terms of the total market for covered bonds eligible as collateral with the central bank, which can also include non-EUR and non-EMU bonds, we expect the level of "free float" to increase in the coming months and quarters. We consider covered bond issues that are not held by either the Eurosystem under the CBPP3 or lodged as collateral with the ECB as free float. The rise in "own use" covered bonds in the Use of Collateral category is due to the TLTRO III tender. In fact, we continue to see the unconventional long-term refinancing operations as a major influencing factor for the covered bond segment. To this extent, strategic decisions by the ECB have a notable impact on the issuance behaviour of EMU banks and therefore ultimately also on the spread trend.

ECB: CBPP3 volumes



ECB: impact on covered bond market



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

Primary market outlook: breather in second half of year…

First of all, we expect the issuance volume in the second half of the year to be significantly lower than in the first six months, taking the total for new benchmark deals for 2022 as a whole to EUR 156bn. Our rationale here is that some issuers have already carried out a significant amount of prefunding and made intensive use of the open issuance window. Implementation of all legal formalities and approvals in the wake of covered bond harmonisation could also bring a dip in new issues from EEA-relevant issuers after the summer break, which is unlikely to be offset by issues from overseas jurisdictions or third countries.

…and potential game changer?

However, we must also be prepared for potential deviations from our forecast in the second half of the year. For instance, a renewed rise in property prices and associated unexpected sharp increase in funding requirements could imply a bigger issuance volume. However, at the current interest rate level, this would be more of a tail event. On the other hand, dwindling deposits or a less attractive market environment again on the issuer side for senior unsecured bonds could drive issuers towards the covered bond primary market. It would hardly come as a surprise if the ECB were also to come into play again, as a game changer. The current prevailing TLTRO III terms and conditions, which include for example a positive carry for some issuers, could in theory be amended by the central bankers in such a way that preference would be given to early repayment and (at least partial) refinancing via covered funding. We forecast a positive net supply of EUR 18bn for the full year. However, this would in turn mean that maturities would exceed new issuances in the second half of the year.

NORD/LB forecast H2 2022: supply and maturities 2022 (EUR bn)

Jurisdiction	Outstanding volume	Issues 2022 ytd	Maturities 2022	Issues 2022e	Net supply 2022e
AT	39.0	8.5	3.0	8.5	5.5
AU	30.2	6.4	7.5	8.5	1.0
BE	17.3	1.5	2.8	2.5	-0.3
CA	76.7	20.7	8.0	23.0	15.0
CH	0.0	-	1.3	0.0	-1.3
CZ	0.5	-	0.0	0.5	0.5
DE	168.1	21.8	21.1	26.0	4.9
DK	5.0	-	2.5	1.5	-1.0
EE	1.0	0.5	0.0	0.5	0.5
ES	72.7	1.5	13.7	4.0	-9.7
FI	30.0	3.0	4.8	6.0	1.3
FR	228.8	26.8	30.8	32.0	1.2
GB	28.1	2.8	8.3	4.5	-3.8
GR	0.5	-	0.0	0.0	0.0
HU	0.0	-	0.0	0.5	0.5
IE	1.8	-	1.8	0.0	-1.8
IT	49.7	3.3	7.8	5.5	-2.3
JP	4.9	-	0.0	1.5	1.5
KR	6.7	1.1	0.0	2.0	2.0
LU	1.5	-	0.0	0.0	0.0
NL	67.4	7.0	5.3	8.0	2.8
NO	49.4	4.3	8.0	7.0	-1.0
NZ	9.2	1.5	1.8	2.5	0.8
PL	2.0	0.5	0.6	0.5	-0.1
PT	3.8	-	2.8	0.0	-2.8
SE	29.8	4.3	5.0	6.0	1.0
SG	7.8	1.5	1.5	3.0	1.5
SK	4.5	1.0	0.0	2.0	2.0
Total	**936.2**	**117.7**	**138.0**	**156.0**	**18.0**

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

Secondary market outlook: widening ahead!

As outlined at the beginning of this article, we do not yet see any signs in terms of fundamentals for a pronounced widening of covered bond spreads. Although there is uncertainty relating to interest rates and inflation, the issuers are also on a sound footing and banks will even be able to benefit from a new interest rate landscape to a large extent. With regard to the net supply side and general market sentiment, we do see potential for notable widening. A holistic assessment is important here, taking account of the implications of a change in ECB monetary policy. The APP asset purchasing programme ended on 1 July 2022. The CBPP3 is swinging into reinvestment mode and will remain active in the secondary and primary market for an as yet undetermined period of time. The stimulus from demand, particularly in the primary market, which was the focus throughout the first half of the year, will be significantly weaker. We believe this new environment will result in differences in covered bond spreads according to maturities and jurisdictions. Up to this point we had expected this to be a story for the first half of 2023. However, depending on general market sentiment and potential deviations by the ECB from the direction it has announced so far (including in terms of CBPP3 reinvestments and TLTRO III framework conditions), we believe this form of repricing could set in even earlier.

Conclusion

An exciting first half of 2022 has come to an end for the EUR benchmark segment as well. The covered bond market lived up to its “crisis-resilient” reputation and the issuance volume was unexpectedly high at EUR 117.5bn. However, we believe issuers are planning lower volumes for the second half of the year. Investor demand is also likely to be less pronounced, although we expect the sustained return of real money investors, among other factors, will close the gap left by the withdrawal of the ECB. Nevertheless, it should be noted here that a price-insensitive buyer, the Eurosystem, is turning its back on the market. We are already seeing the consequences of this. A higher execution risk and spread concessions by issuers are likely to dominate the picture as well in the next six months. However, we would not rate these developments too negatively, even while acknowledging the individual challenges. Rather, we take the view that the covered bond market in particular will succeed even further in fulfilling its important role for all parties, i.e. both issuers and investors, without the distorting influence of the ECB.

SSA/Public Issuers
Half time in the 2022 SSA year – taking stock

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

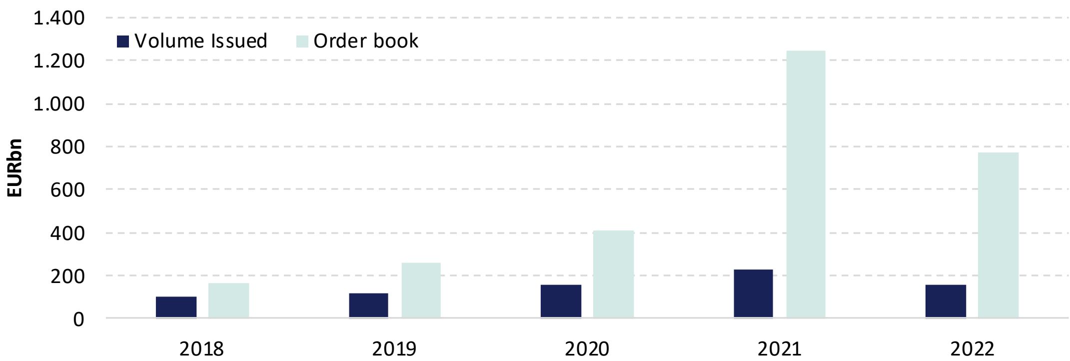
First half of the year extremely active, as expected

Having previously reviewed the always busy January in issue #04 on 2 February and given due consideration to the first four months of the year (issue #17 of this publication), we would now like to extend the time horizon to cover the first half of the year in this edition of our weekly publication. By the end of June 2022, EUR benchmarks totalled EUR 154.0bn in the SSA segment – supranationals, sub-sovereigns and agencies, i.e. excluding sovereigns – (2021: EUR 225.8bn, 2020: EUR 158.3bn, 2019: EUR 115.1bn). At EUR 769.8bn, order books were almost twice the size of those in 2020 (EUR 406.2bn). However, as expected, 2022 could not improve on the 2021 record year (EUR 1,247.8bn).

Market environment

Many will certainly have imagined the year so far to be different: high numbers of coronavirus cases during the Omicron wave, geopolitical shock news from Ukraine coupled with inflation. At most, the monetary policy turnaround was priced in at the beginning of the year, so now the imminent interest rate hike cycle starts on 21 July as the first step in a longer journey. It is therefore hardly surprising that investors are increasingly investing in "safe haven" bonds. Net purchases under the PEPP pandemic purchase programme were discontinued as planned at the end of March, though the expired PEPP was accompanied by the Asset Purchase Programme (APP) until 1 July, with net purchases of EUR 40bn in April, EUR 30bn in May and (again) EUR 20bn in June. As a reminder, the ECB (and its affiliated central banks) cannot make primary market purchases in the SSA segment under the PSPP or the PEPP. The ECB is now aiming for the expected interest rate hike once the last net purchases have been made. The Governing Council will primarily be asking itself whether the extent of interest rate hikes rather than just their number will be the crux of the matter. The highest inflation rates in recent decades do not bode well for the future – or are we already in the "new" normal?

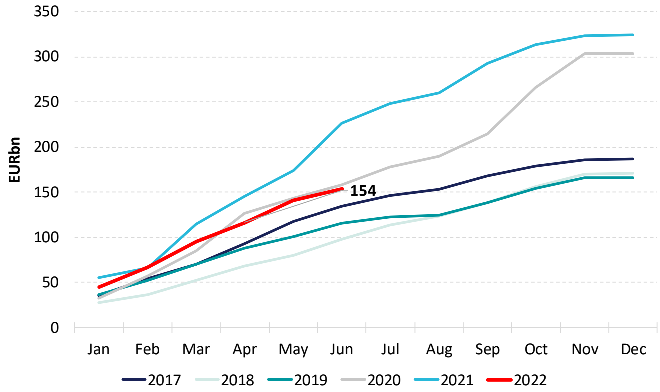
EUR benchmarks in EUR bn at mid-year of respective years versus order books*



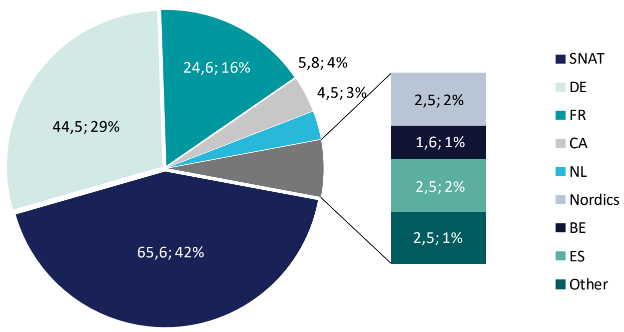
* excluding taps

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

Primary market: EUR BMK issue trend



Primary market: EUR BMK issuances



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

The bigger picture

Let's start our review with a comparison of the issue volumes of recent years: by the end of June, we recorded EUR BMK issues with a total volume of EUR 154.0bn in our SSA segment as defined above. Although the figure is below the pandemic years of 2020 and 2021, it is still a significantly larger sum than in the years before the pandemic. Supranationals accounted for the largest share: a total of 23 new bonds with a total volume of EUR 65.6bn were issued in this segment in the first half of the year. The order books of the supranationals have always been full so far this year: cumulatively across all issuances, we come to a value of EUR 449.6bn – more than in all other sub-segments combined. Although the largest number of bonds came from Germany (29), the total volume of EUR 44.5bn lags behind supranationals. The latter naturally operate on a larger scale than regional promotional banks or German Laender. Nevertheless, the aggregate order book volume of EUR 198.2bn was considerable. Naturally, KfW was the main driver here. France ranked third in our list with an aggregate issue volume of EUR 24.6bn. In the first half of the year, 14 bonds were issued. In the French SSA segment, the greatest interest reflected in order book entries was always in the CADES (Welfare Debt Repayment Fund). From Canada (and not only the provinces included in our coverage), we again recorded EUR BMK issuances of EUR 5.8bn, unchanged from the end of April, with more than half coming from pension funds that we do not analyse in more detail. Last year, bonds with a total volume of EUR 5.5bn were issued in the same period. From the Netherlands, we observed a year-on-year increase: while bonds totalling EUR 4.0bn were issued in 2021, the volume amounted to EUR 4.5bn in the same period of 2022. At EUR 2.5bn from four bonds, our coverage from the Nordics at the halfway point of 2022 is exactly the same as for Spanish issuers (EUR 2.5bn also from four bonds). This pushed Belgian issuers one spot down in the benchmark ranking. From all other jurisdictions (e.g. Portugal and Poland, but also Asia) a further EUR 2.5bn was raised across four EUR bond deals.

Overview of issuers with most transactions and largest volume

Issuer	# benchmark transactions	Issuer	EUR benchmarks (in bn)
KFW	6	EU	31.4
EU	6	KFW	24.0
NIESA	4	CADES	13.0
EFSF	4	EIB	12.0
EIB	4	EFSF	10.5
CADES	3	NRW	5.0
COE	3	IDAWBG	4.0
NRW	3	NIESA	3.0
NRWBK	3	COE	3.0
BERGER	3	BNG	2.8

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

A look at Germany: who has been active on the primary market and who has stayed so far on the sideline in 2022?

Let's take a detailed look at bond issuances in Germany. Of the "17" federal states (including the Joint Laender), we have so far entered EUR BMK bonds amounting to EUR 15.3bn into our database. In terms of volume, the state of North Rhine-Westphalia (EUR 5.0bn) has been the most active so far, while the state of Lower Saxony has been the most active in terms of the number of bonds: a total of four bonds with a total volume of EUR 3.0bn were issued from Hanover. The seven federal states of Bavaria, Baden-Wuerttemberg, Saxony, Schleswig-Holstein, Hamburg, Mecklenburg-Western Pomerania and Saarland have not yet appeared with EUR BMK bonds. It should be noted that the federal states of SCHHOL, HAMBRG, MECVOR and SAARLD were involved in the Laender jumbo deal (ticker: LANDER). Of the regional promotional banks in our coverage, some are still missing: in the first third of the year, only L-Bank and NRW.BANK were active with a volume of EUR 500m or more. KFW and RENTEN are as active as ever. It remains to be seen which issuers will still venture out on the market to issue a EUR BMK bond this year. Positive tax revenues – which are not least buoyant due to inflation – are causing a reassessment of funding needs at present, especially in the Laender. KfW is also currently revising its funding target of EUR 80-85bn but is not giving any indication whether this will be amended up or down.

E-supras in front by far

In the sub-segment of Supranationals, the E-names (EU, EIB and EFSF) especially stood out: for the mega-issuer the EU, we calculated a EUR BMK issue volume of EUR 31.4bn on the basis of six bonds (excluding auctions and taps). The order books demonstrated the popularity of this issuer: in aggregate terms, these amounted to EUR 279.3bn. From the EFSF and the EIB, we identified issues of EUR 10.5bn and EUR 12.0bn, respectively. On average, the EIB was oversubscribed almost nine times, with order books totalling EUR 102.5bn. Meanwhile, the ESM also put in an appearance by issuing a new bond (EUR 2.0bn). As a result, all four Luxembourg E-names already reached an impressive EUR 55.9bn. Outside of these big guys, we also recorded bonds from AFDB, COE, IDAWBG, NIB and ASIA. These issuers raised EUR 9.8bn. We are expecting a lot more from the supranationals in 2022, and not just due to the EU: as you can see from the SSA primary market section, the planning for the second half of 2022 (July to December) is now available.

ESG bonds continue to gain momentum

We will now briefly look at ESG issuances: in the first half of the year, we added 15 green bonds to our database. The aggregate volume of these bonds amounted to EUR 25.6bn. Social bonds registered a slightly smaller volume, with EUR 20.5bn from nine bonds. In this segment, France's CADES (naturally) stands out in particular. During the period under review, CADES issued three social bonds with a total volume of EUR 13.0bn. In the sustainability format, we identified 11 bonds with a total volume of EUR 14.5bn. In order to properly focus on ESG benchmarks, we will soon dedicate another article to them again in this publication. Until then, we would like to refer to our NORD/LB Fixed Income Special – ESG Update from the spring and issue #18 in 2022 of this publication.

Also significant: taps

Lastly, we would like to touch on the topic of taps. These have not been included in the data set considered above, as they do not represent a new issue of EUR BMK bonds. Nevertheless, we do not wish to sweep them under the carpet. In total, we recorded 29 taps in our coverage across the first half of the year, with a volume totalling EUR 38.3bn. The EU accounts for the lion's share here, with just under EUR 23bn.

Conclusion

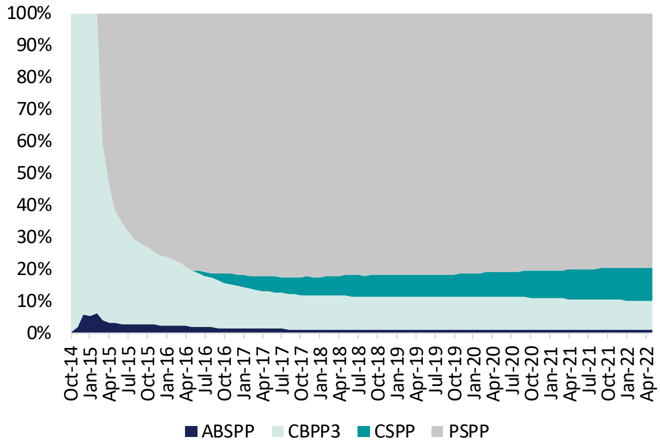
The events of the year so far mean 2022 is already set to go down history. As aid programmes to tackle the pandemic slowly come to an end, issuers are confronted with new challenges in the face of Russia's war of aggression in Ukraine. This is also reflected in the primary market: German Laender are finding their way back to "normality", but some have not yet been active on the primary market so far this year or only under the ticker LANDER instead of with their own EUR benchmarks. A focus for the rest of the year should therefore remain on the EU: as we describe in today's primary market section, EUR 50bn of new bonds will be issued under the NGEU programme alone. This could potentially be supplemented by SURE and MFA. In addition, the ECB has ended its net purchases, is on the cusp of initiating a first rate hike on 21 July and is working on an anti-fragmentation instrument. Although this should only affect government bonds, it may have indirect effects on supranationals, sub-sovereigns and agencies.

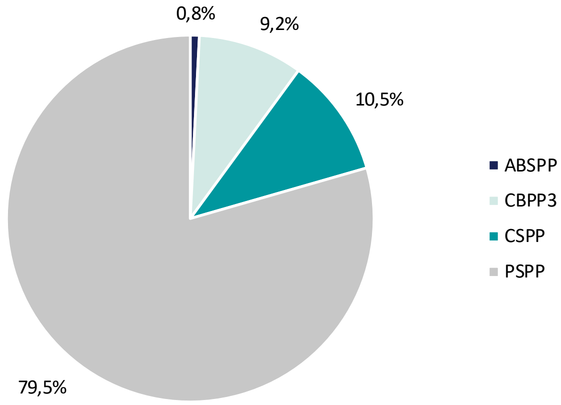
ECB tracker

Asset Purchase Programme (APP)

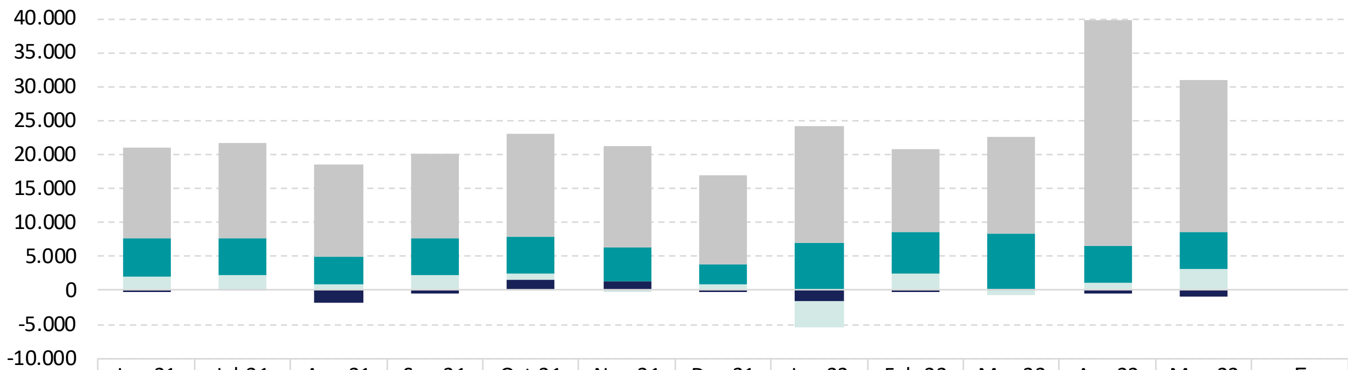
	ABSPP	CBPP3	CSPP	PSPP	APP
Apr-22	26.603	296.924	336.066	2.558.848	3.218.441
May-22	25.780	300.171	341.432	2.581.291	3.248.674
Δ	-823	+3,247	+5,366	+22,443	+30,233

Portfolio structure





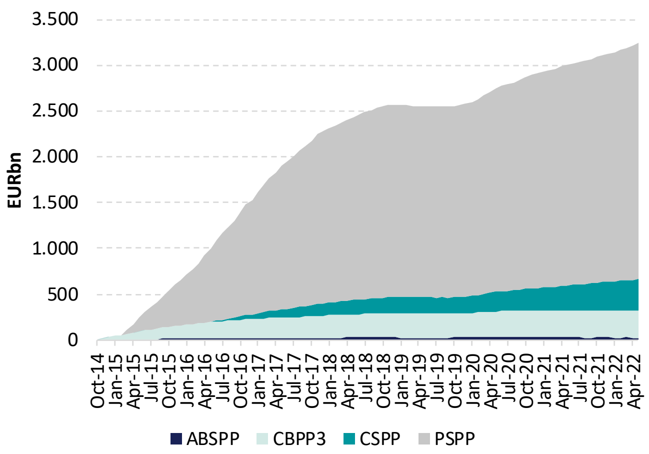
Monthly net purchases (in EURm)



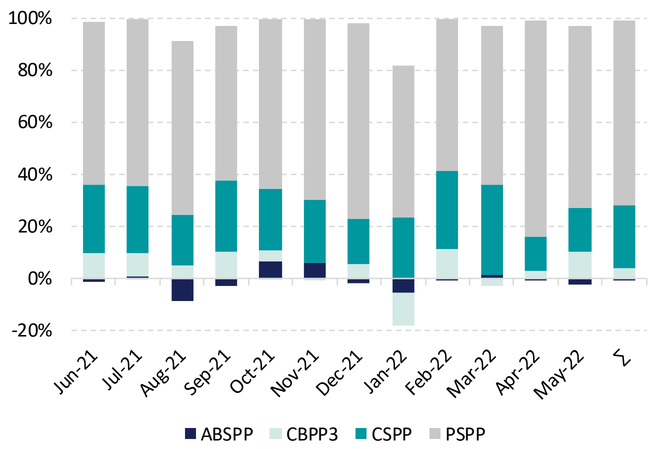
	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22	Apr-22	May-22	∑
APP	20.640	21.597	16.749	19.659	23.017	21.200	16.596	18.838	20.698	21.929	39.397	30.233	270.553
PSPP	13.320	13.943	13.563	12.423	15.038	14.815	12.989	17.292	12.095	14.172	33.238	22.443	195.331
CSPP	5.602	5.502	3.936	5.590	5.481	5.142	3.007	6.970	6.272	8.042	5.461	5.366	66.371
CBPP3	2.037	2.011	999	2.184	1.008	-12	942	-3.761	2.376	-606	1.074	3.247	11.499
ABSPP	-319	141	-1.749	-538	1.490	1.255	-342	-1.663	-45	321	-376	-823	-2.648

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

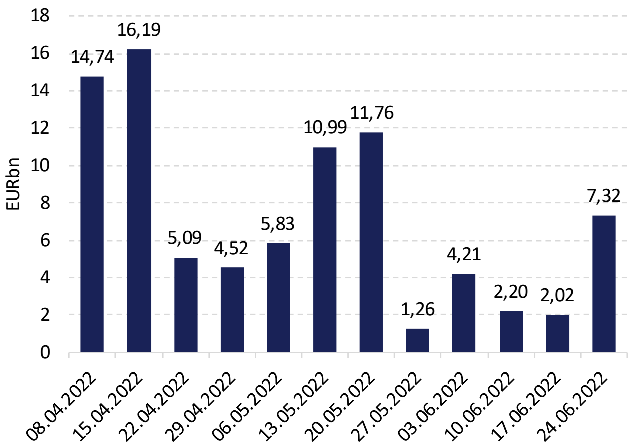
Portfolio development



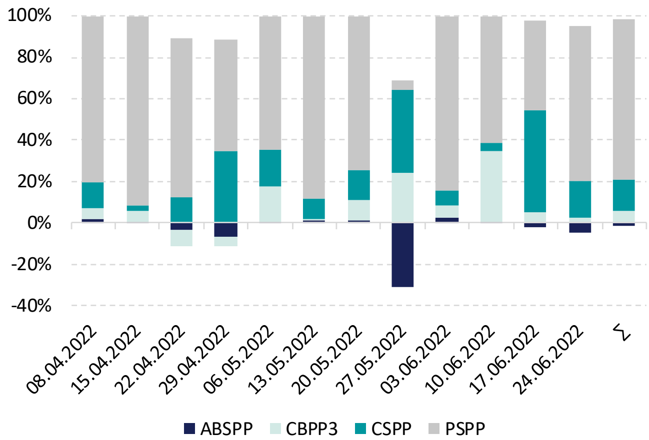
Distribution of monthly purchases



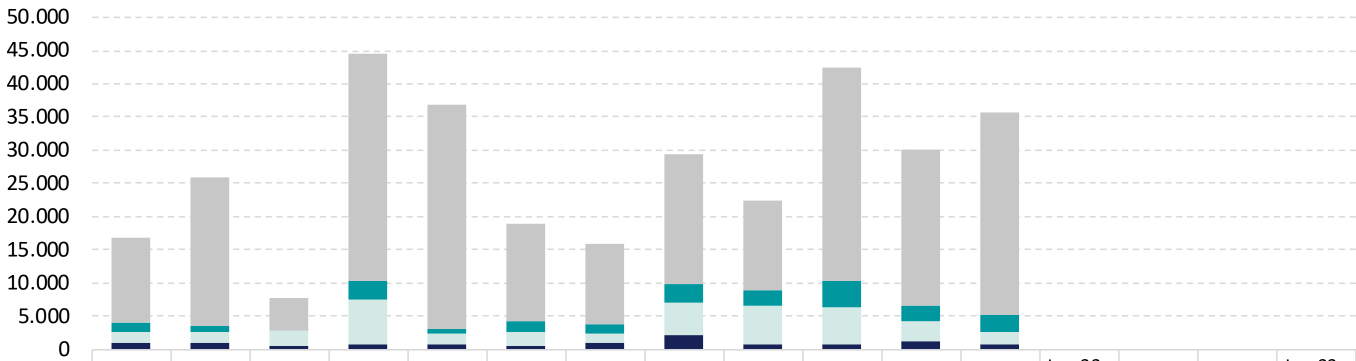
Weekly purchases



Distribution of weekly purchases



Expected monthly redemptions (in EURm)

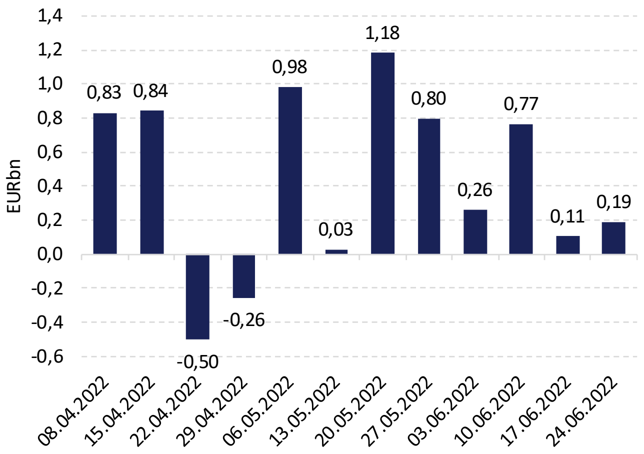


	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23	May-23	Jun-22 - May-23	2021	2022	Jan-23 - May-23
APP	16.722	26.013	7.685	44.565	36.969	18.879	15.832	29.308	22.459	42.437	30.038	35.798	326.705	247.069	298.690	160.040
PSPP	12.638	22.415	4.841	34.354	33.927	14.669	12.016	19.469	13.656	32.033	23.521	30.548	254.087	188.494	228.527	119.227
CSPP	1.491	978	96	2.684	674	1.557	1.416	2.902	2.158	4.101	2.361	2.566	22.984	17.134	17.326	14.088
CBPP3	1.582	1.629	2.227	6.873	1.651	2.167	1.485	4.786	5.957	5.631	2.917	1.872	38.777	30.143	41.242	21.163
ABSPP	1.011	991	521	654	717	486	915	2.151	688	672	1.239	812	10.857	11.298	11.595	5.562

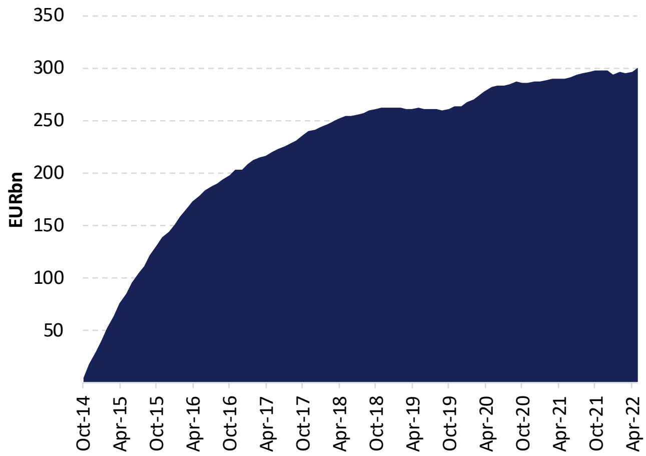
Source: ECB, Bloomberg, NORD/LB Markets Strategy & Floor Research

Covered Bond Purchase Programme 3 (CBPP3)

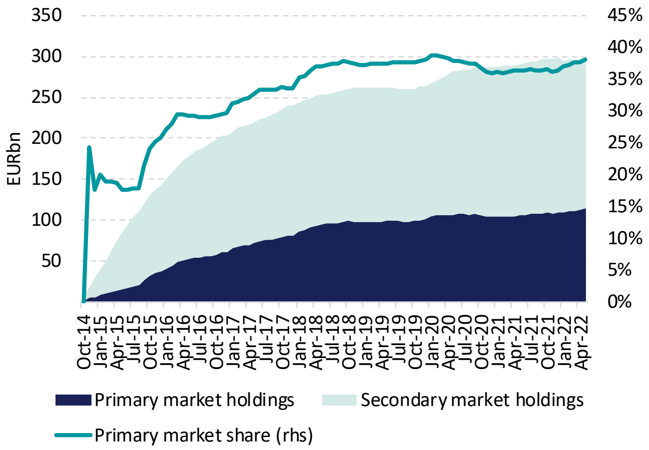
Weekly purchases



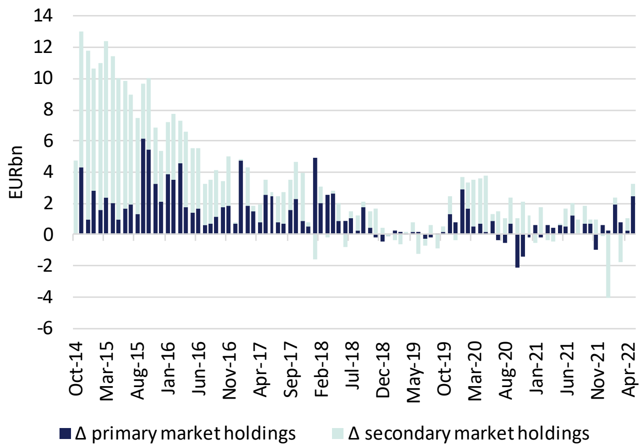
Development of CBPP3 volume



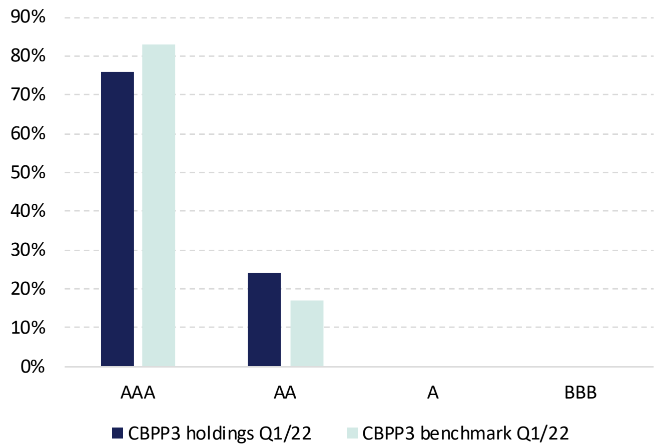
Primary and secondary market holdings



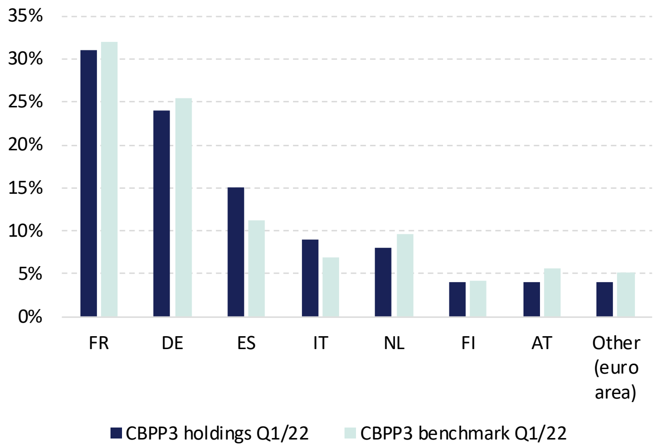
Change of primary and secondary market holdings



Distribution of CBPP3 by credit rating



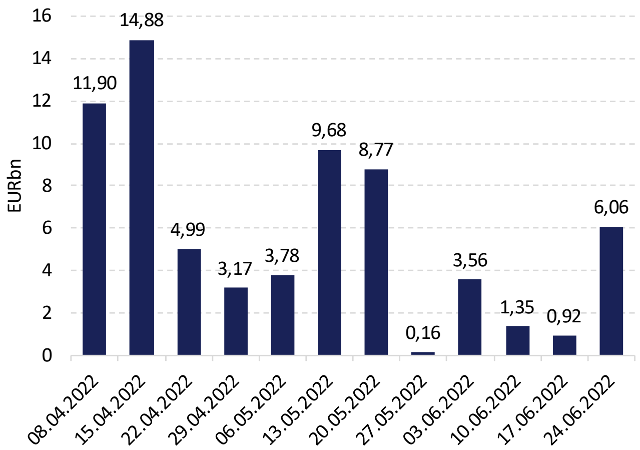
Distribution of CBPP3 by country of risk



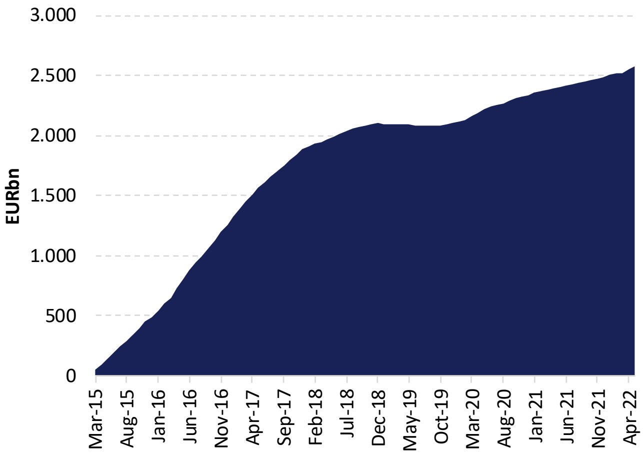
Source: ECB, Bloomberg, NORD/LB Markets Strategy & Floor Research

Public Sector Purchase Programme (PSPP)

Weekly purchases



Development of PSPP volume



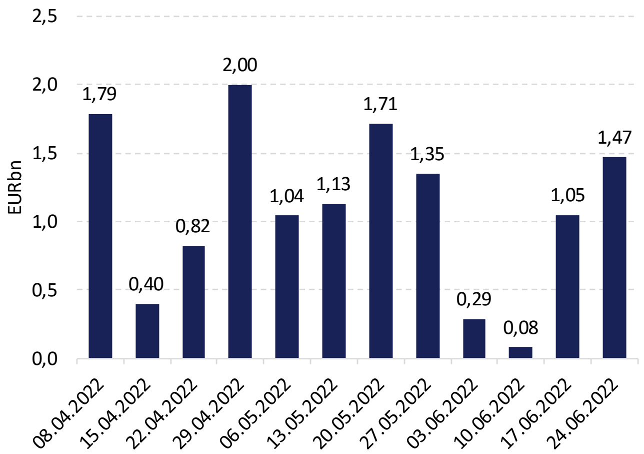
Overall distribution of PSPP buying at month-end

Jurisdiction	Adjusted distribution key[1]	Holdings (EURm)	Expected holdings (EURm)[2]	Difference (EURm)	Current WAM of portfolio[3] (in years)	WAM of eligible universe[4] (in years)	Difference (in years)
AT	2,7%	76.789	73.747	3.042	7,3	8,1	-0,8
BE	3,4%	94.131	91.796	2.335	7,5	9,9	-2,4
CY	0,2%	4.199	5.422	-1.223	8,5	8,9	-0,5
DE	24,3%	666.481	664.213	2.268	6,7	8,0	-1,3
EE	0,3%	438	7.098	-6.660	8,1	8,1	0,0
ES	11,0%	312.269	300.456	11.813	8,0	8,2	-0,2
FI	1,7%	43.170	46.282	-3.112	7,9	8,9	-1,0
FR	18,8%	526.667	514.618	12.049	6,9	8,4	-1,5
GR	0,0%	0	0	0	0,0	0,0	0,0
IE	1,6%	41.978	42.667	-689	8,4	10,1	-1,7
IT	15,7%	447.877	428.048	19.829	7,2	7,8	-0,7
LT	0,5%	5.791	14.583	-8.792	10,6	10,4	0,1
LU	0,3%	3.719	8.300	-4.581	5,8	6,1	-0,3
LV	0,4%	3.751	9.818	-6.067	9,5	9,4	0,1
MT	0,1%	1.403	2.643	-1.240	11,1	9,8	1,3
NL	5,4%	131.267	147.661	-16.394	7,7	9,3	-1,6
PT	2,2%	54.508	58.972	-4.464	7,5	7,9	-0,4
SI	0,4%	10.694	12.132	-1.438	9,7	9,9	-0,2
SK	1,1%	18.022	28.856	-10.834	8,1	8,8	-0,7
SNAT	10,0%	287.194	273.035	14.159	8,2	9,4	-1,2
Total / Avg.	**100,0%**	**2.730.346**	**2.730.346**	**0**	**7,3**	**8,4**	**-1,1**

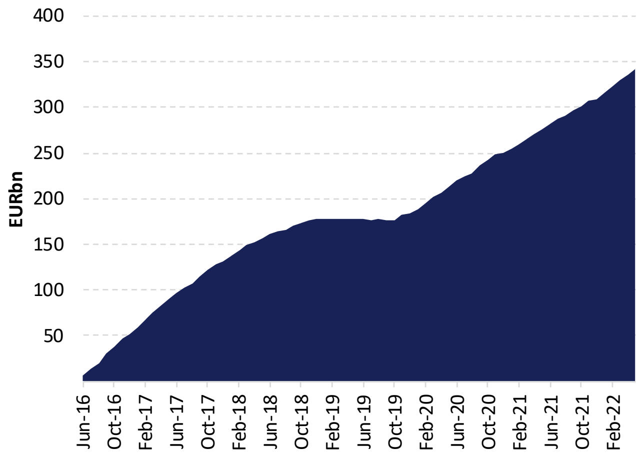
[1] Based on the ECB capital key, adjusted to include supras and the disqualification of Greece
[2] Based on the adjusted distribution key
[3] Weighted average time to maturity of PSPP portfolio holdings
[4] Weighted average time to maturity of the bonds eligible for purchasing under the PSPP
Source: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

Corporate Sector Purchase Programme (CSPP)

Weekly purchases

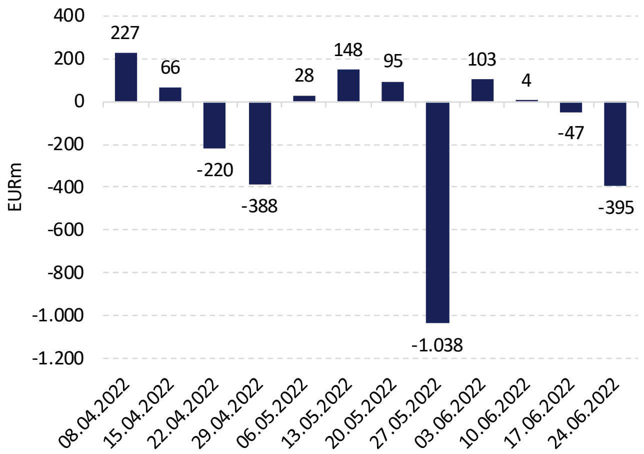


Development of CSPP volume

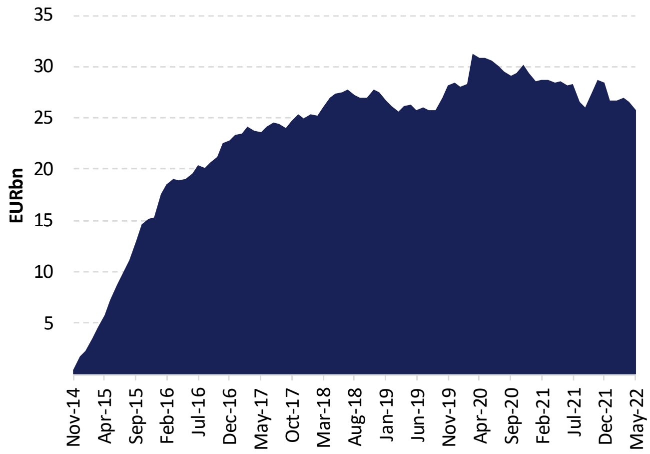


Asset-Backed Securities Purchase Programme (ABSPP)

Weekly purchases



Development of ABSPP volume



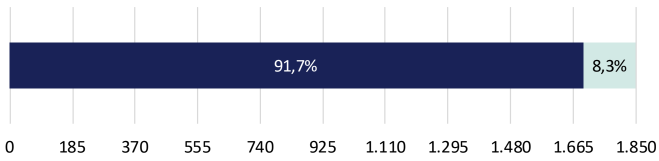
Source: ECB, Bloomberg, NORD/LB Markets Strategy & Floor Research

Pandemic Emergency Purchase Programme (PEPP)

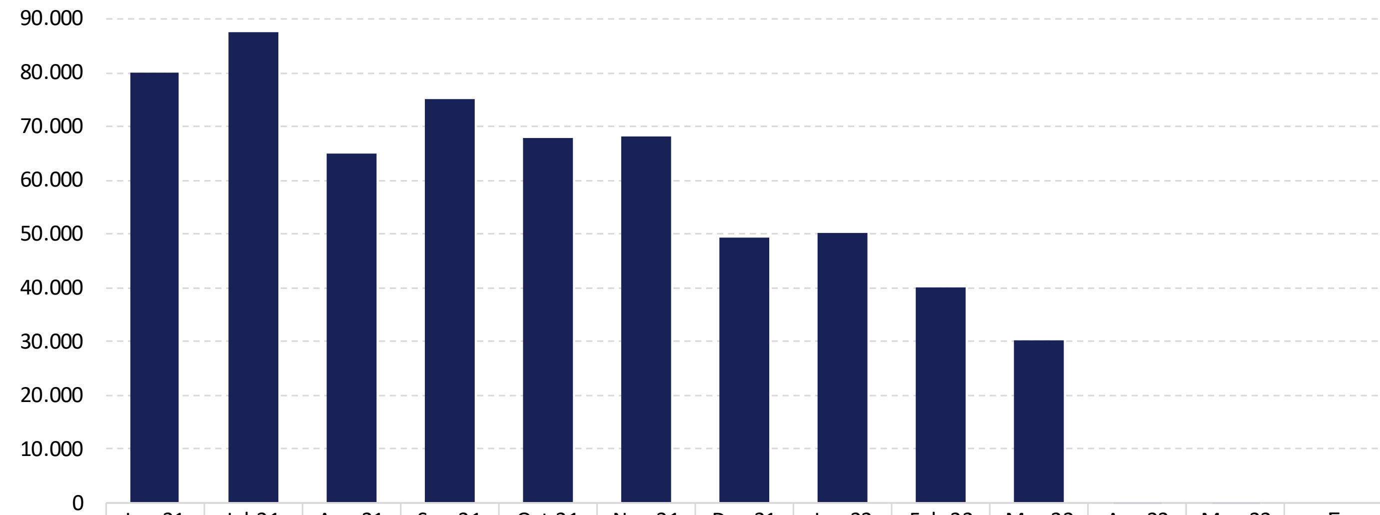
Holdings (in EURm)

	PEPP
Apr-22	1.718.071
May-22	1.718.061
Δ (net purchases)	-10

Invested share of PEPP envelope (in EURbn)

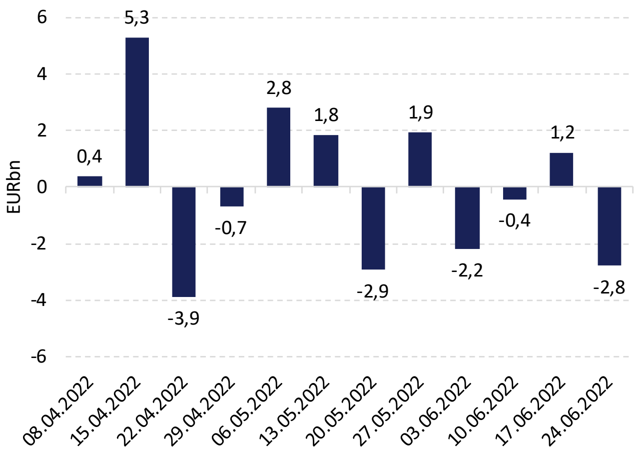


Monthly net purchases (in EURm)

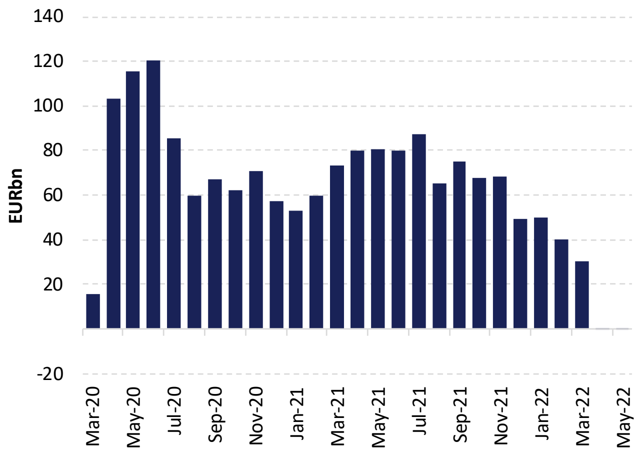


	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22	Apr-22	May-22	∑
PEPP	80.168	87.557	65.050	75.051	67.855	68.045	49.375	50.113	40.184	30.214	-4	-10	613.598

Weekly purchases



Development of PEPP volume

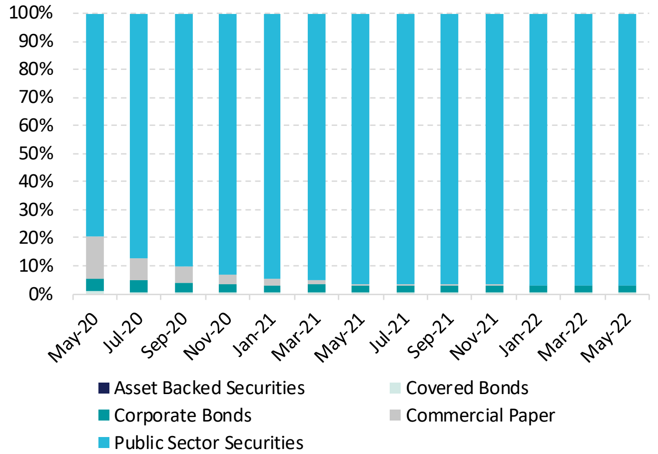


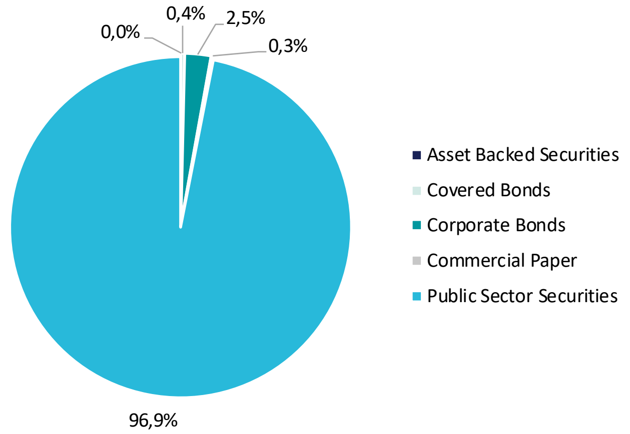
Source: ECB, Bloomberg, NORD/LB Markets Strategy & Floor Research

Holdings under the PEPP (in EURm)

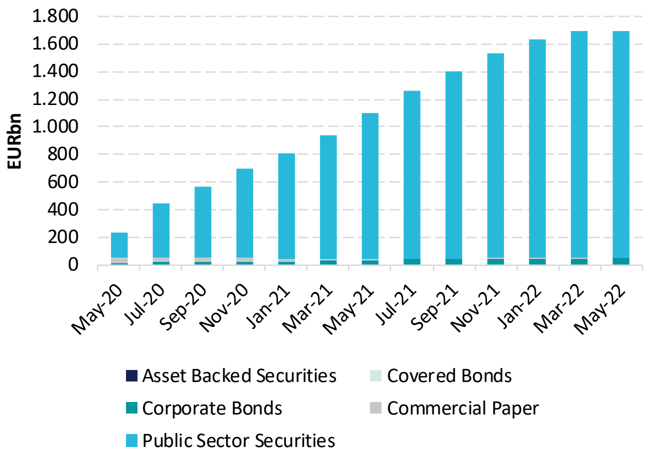
	Asset-backed Securities	Covered Bonds	Corporate Bonds	Commercial Paper	Public Sector Securities	PEPP
Mar-22	0	6.067	40.313	5.862	1.644.247	1.696.489
May-22	0	6.067	41.825	4.352	1.644.230	1.696.474
Δ (net purchases)	0	0	+1,512	-1.510	-17	-14

Portfolio structure

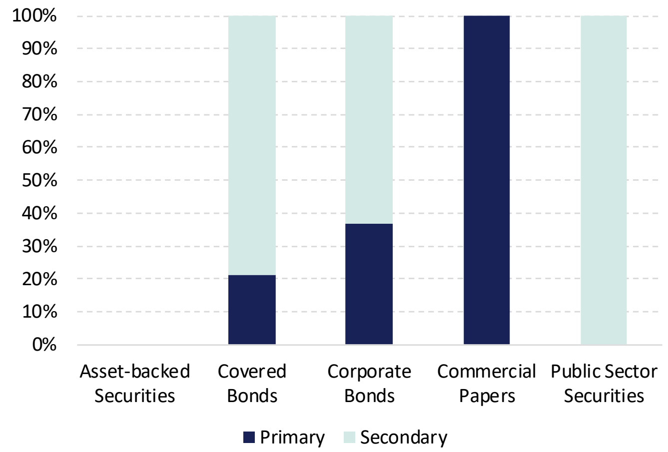




Portfolio development



Share of primary and secondary market holdings



Breakdown of private sector securities under the PEPP

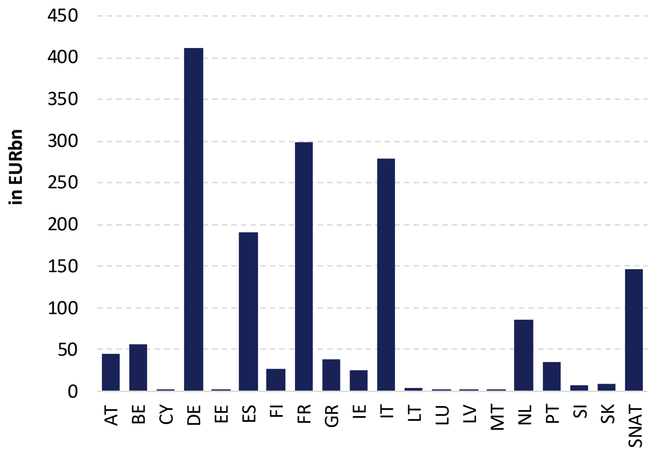
May-22	Asset-backed securities		Covered bonds		Corporate bonds		Commercial paper	
	Primary	Secondary	Primary	Secondary	Primary	Secondary	Primary	Secondary
Holdings in EURm	0	0	1.298	4.769	15.332	26.493	4.353	0
Share	0,0%	0,0%	21,4%	78,6%	36,7%	63,3%	100,0%	0,0%

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

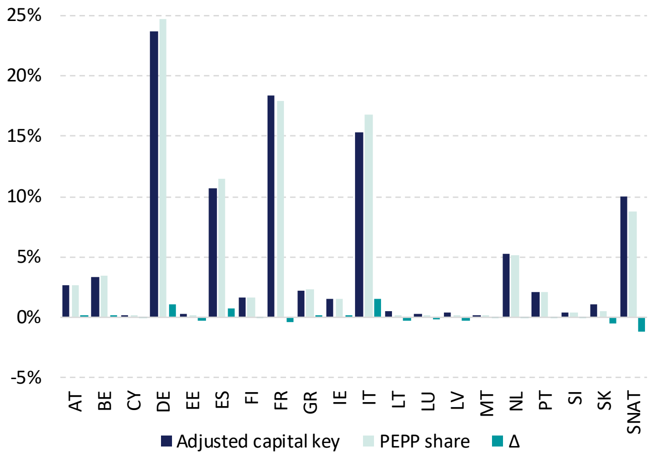
Breakdown of public sector securities under the PEPP

Jurisdiction	Holdings (in EURm)	Adj. distribution key[1]	PEPP share	Deviations from the adj. distribution key[2]	Current WAM[3] (in years)	WAM of eligible universe[4] (in years)	Difference (in years)
AT	44.280	2,6%	2,7%	0,0%	7,8	7,3	0,5
BE	57.052	3,3%	3,4%	0,1%	6,5	8,9	-2,4
CY	2.464	0,2%	0,1%	0,0%	9,0	8,3	0,7
DE	412.492	23,7%	24,8%	1,0%	6,4	6,8	-0,4
EE	256	0,3%	0,0%	-0,2%	8,0	6,5	1,6
ES	190.463	10,7%	11,4%	0,7%	7,6	7,5	0,1
FI	26.918	1,7%	1,6%	0,0%	7,2	7,8	-0,6
FR	298.979	18,4%	17,9%	-0,4%	8,1	7,8	0,2
GR	38.677	2,2%	2,3%	0,1%	8,6	9,7	-1,0
IE	25.832	1,5%	1,6%	0,0%	9,0	9,2	-0,2
IT	279.302	15,3%	16,8%	1,5%	7,2	7,0	0,2
LT	3.216	0,5%	0,2%	-0,3%	10,1	9,6	0,5
LU	1.853	0,3%	0,1%	-0,2%	6,3	7,2	-0,9
LV	1.890	0,4%	0,1%	-0,2%	8,6	8,5	0,1
MT	609	0,1%	0,0%	-0,1%	10,9	9,1	1,8
NL	86.124	5,3%	5,2%	-0,1%	7,7	8,6	-0,9
PT	34.802	2,1%	2,1%	0,0%	6,8	7,1	-0,3
SI	6.532	0,4%	0,4%	0,0%	9,2	9,2	0,0
SK	7.966	1,0%	0,5%	-0,6%	8,8	8,3	0,5
SNAT	145.953	10,0%	8,8%	-1,2%	10,4	8,5	1,9
Total / Avg.	**1.665.660**	**100,0%**	**100,0%**	**0,0%**	**7,6**	**7,6**	**0,0**

Distribution of public sector assets by jurisdiction



Deviations from the adjusted distribution key



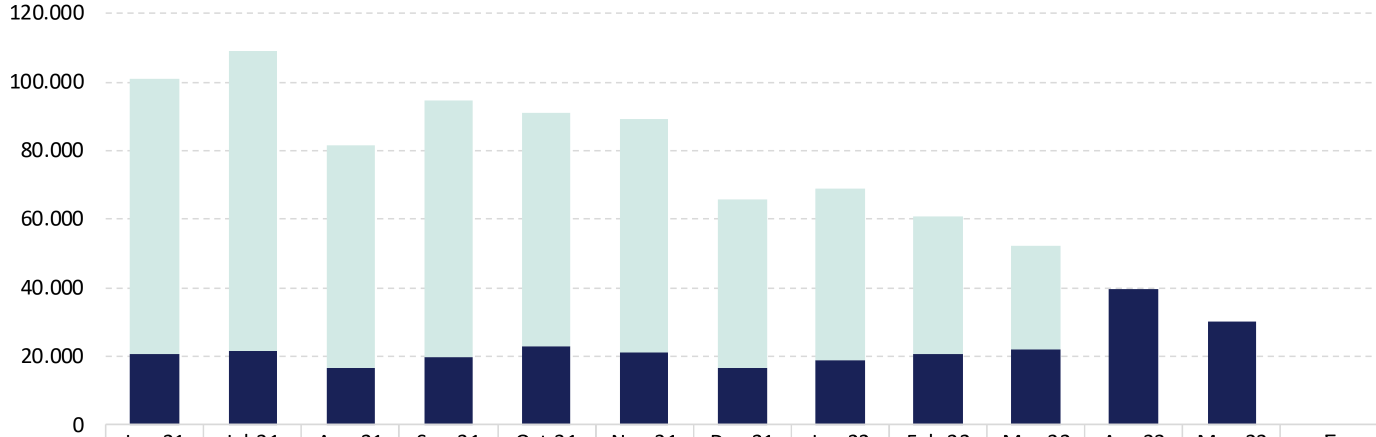
[1] Based on the ECB capital key, adjusted to include supras [2] Based on the adjusted distribution key
[3] Current WAM of public sector securities holdings under the PEPP [4] WAM of eligible universe of public sector securities holdings under the PEPP
Source: ECB, Bloomberg, NORD/LB Markets Strategy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

Aggregated purchase activity under APP and PEPP

Holdings (in EURm)

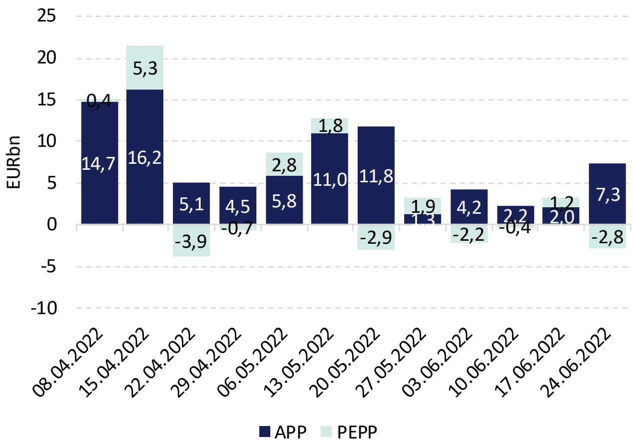
	APP	PEPP	APP & PEPP
Apr-22	3.218.441	1.718.071	4.936.512
May-22	3.248.674	1.718.061	4.966.735
Δ	+30,233	-10	+30,223

Monthly net purchases (in EURm)

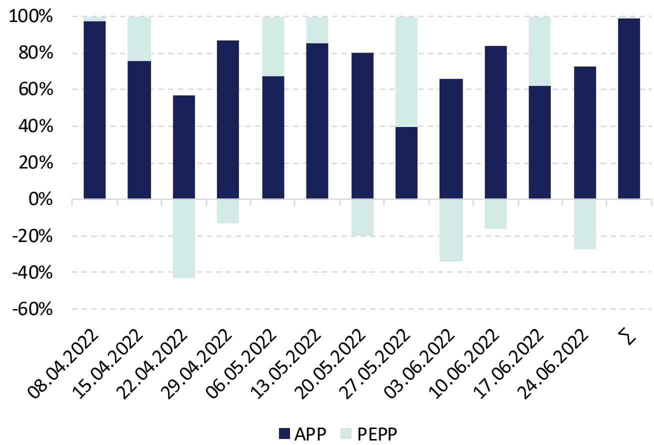


	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22	Apr-22	May-22	∑
∑	100.808	109.154	81.799	94.710	90.872	89.245	65.971	68.951	60.882	52.143	39.393	30.223	884.151
PEPP	80.168	87.557	65.050	75.051	67.855	68.045	49.375	50.113	40.184	30.214	-4	-10	613.598
APP	20.640	21.597	16.749	19.659	23.017	21.200	16.596	18.838	20.698	21.929	39.397	30.233	270.553

Weekly purchases



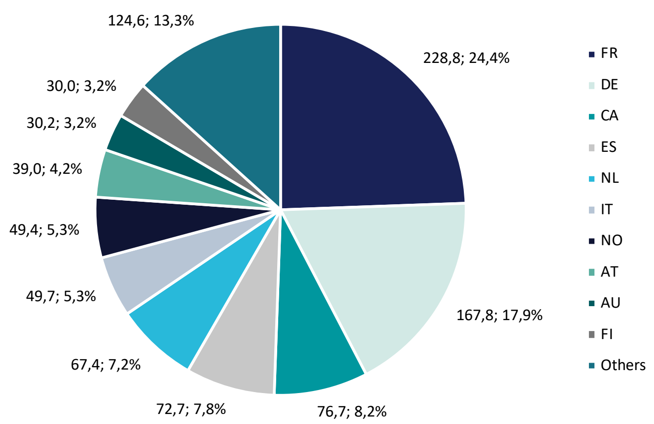
Distribution of weekly purchases



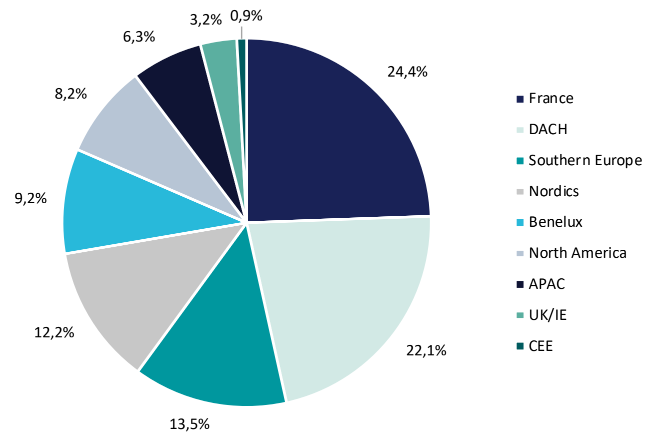
Source: ECB, Bloomberg, NORD/LB Markets Strategy & Floor Research

Charts & Figures
Covered Bonds

EUR benchmark volume by country (in EURbn)



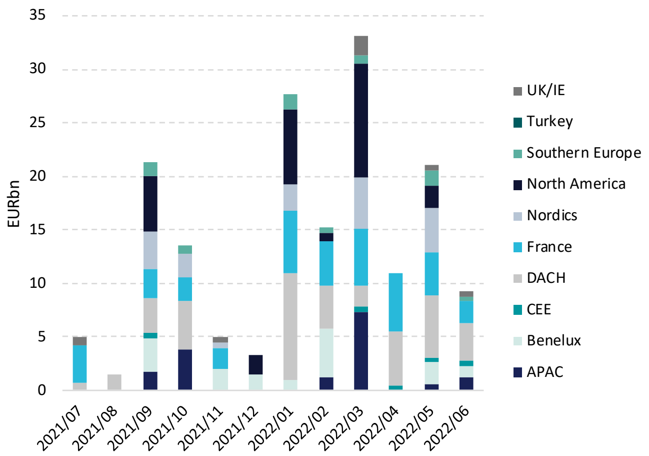
EUR benchmark volume by region (in EURbn)



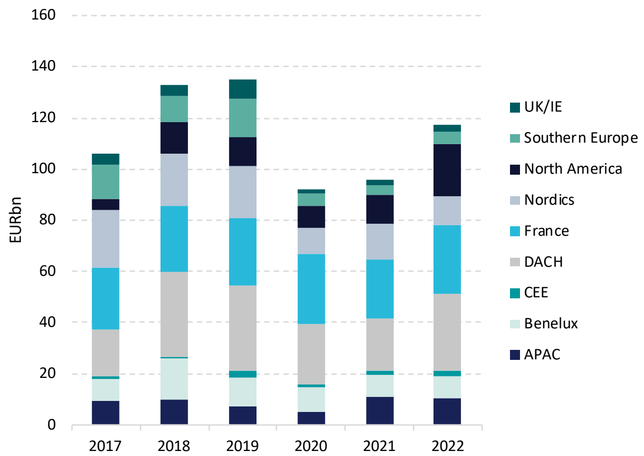
Top-10 jurisdictions

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	228,8	220	14	0,94	10,0	5,5	0,83
2	DE	167,8	243	20	0,63	8,4	4,6	0,47
3	CA	76,7	60	0	1,24	5,9	3,2	0,28
4	ES	72,7	59	5	1,12	11,7	3,7	1,73
5	NL	67,4	69	1	0,91	11,5	7,5	0,79
6	IT	49,7	60	2	0,80	9,2	4,1	1,27
7	NO	49,4	58	9	0,85	7,5	4,0	0,40
8	AT	39,0	71	3	0,55	9,3	5,9	0,65
9	AU	30,2	31	0	0,97	8,2	3,9	0,88
10	FI	30,0	32	2	0,94	7,7	3,7	0,40

EUR benchmark issue volume by month

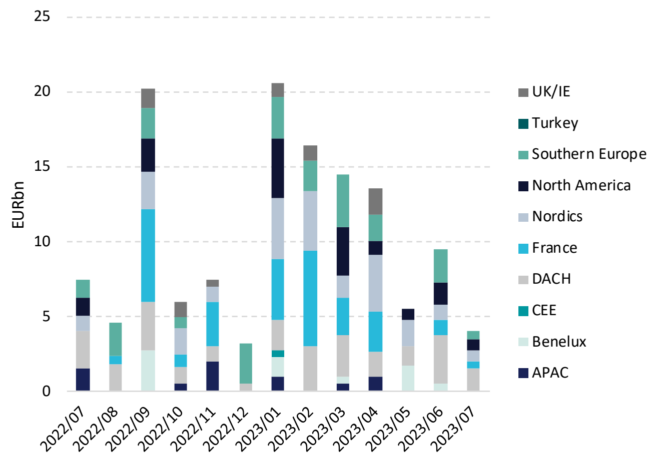


EUR benchmark issue volume by year

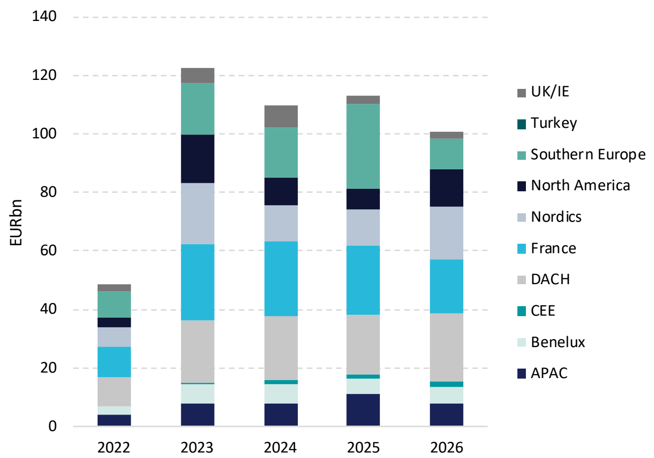


Source: Market data, Bloomberg, NORD/LB Markets Strategy & Floor Research

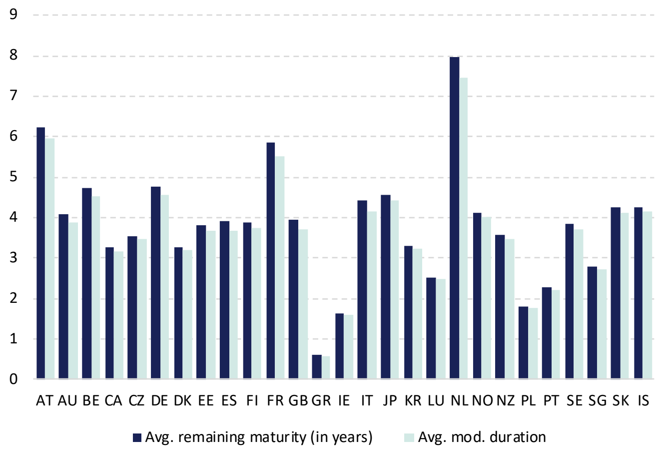
EUR benchmark maturities by month



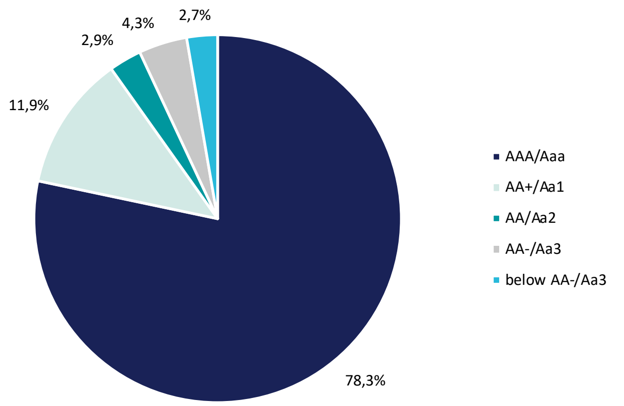
EUR benchmark maturities by year



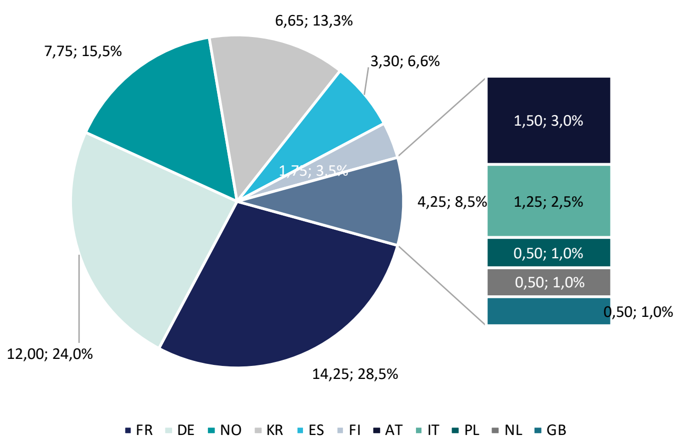
Modified duration and time to maturity by country



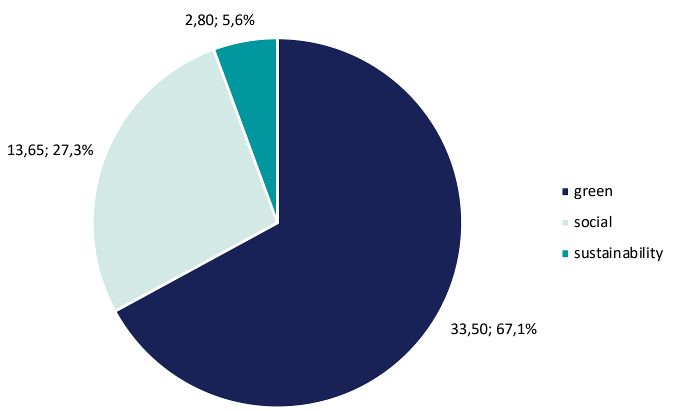
Rating distribution (volume weighted)



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

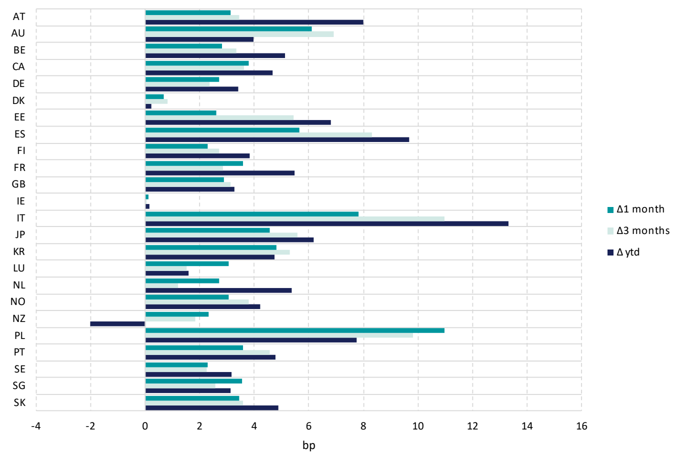


EUR benchmark volume (ESG) by type (in EURbn)

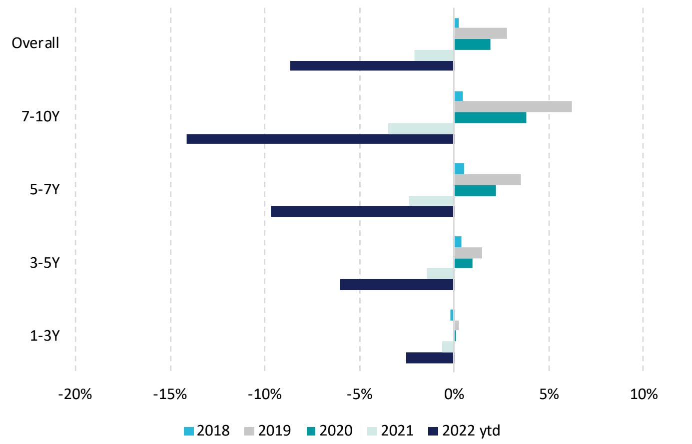


Source: Market data, Bloomberg, NORD/LB Markets Strategy & Floor Research

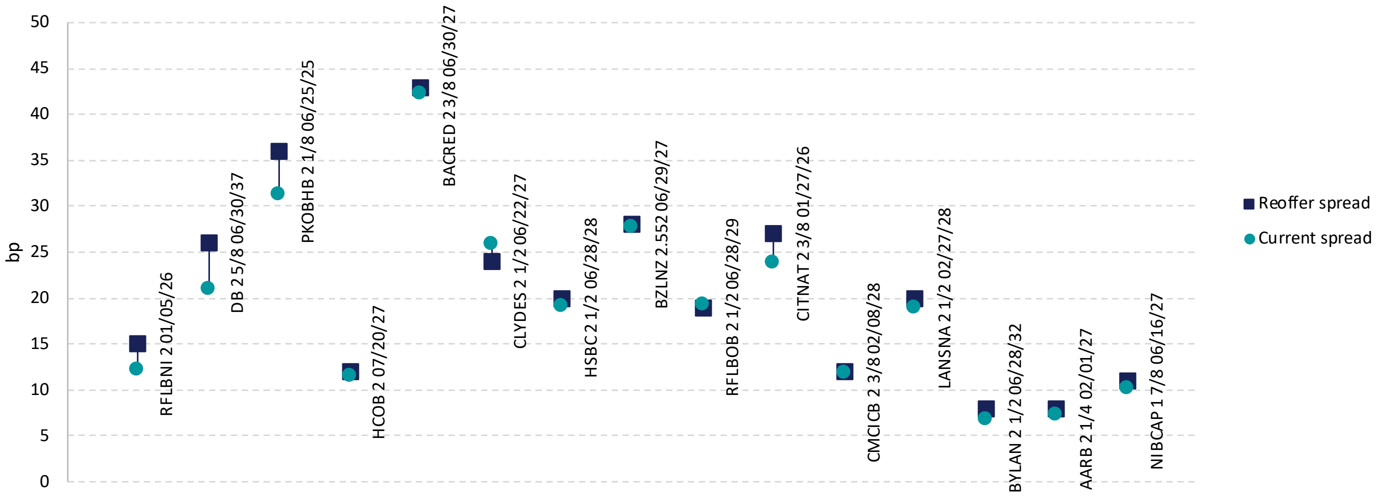
Spread development by country



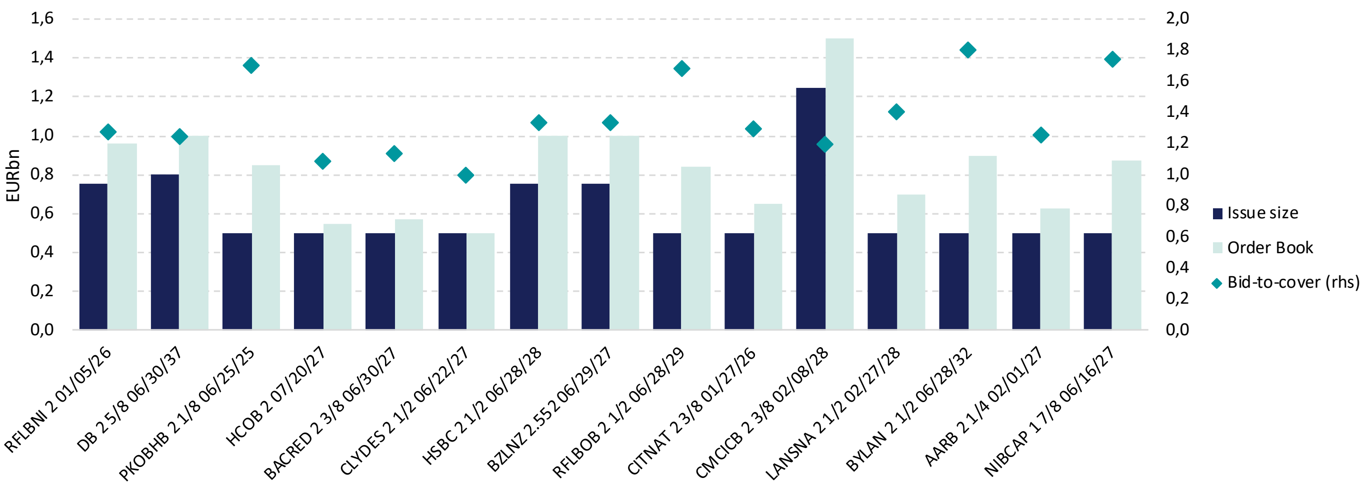
Covered bond performance (Total return)



Spread development (last 15 issues)



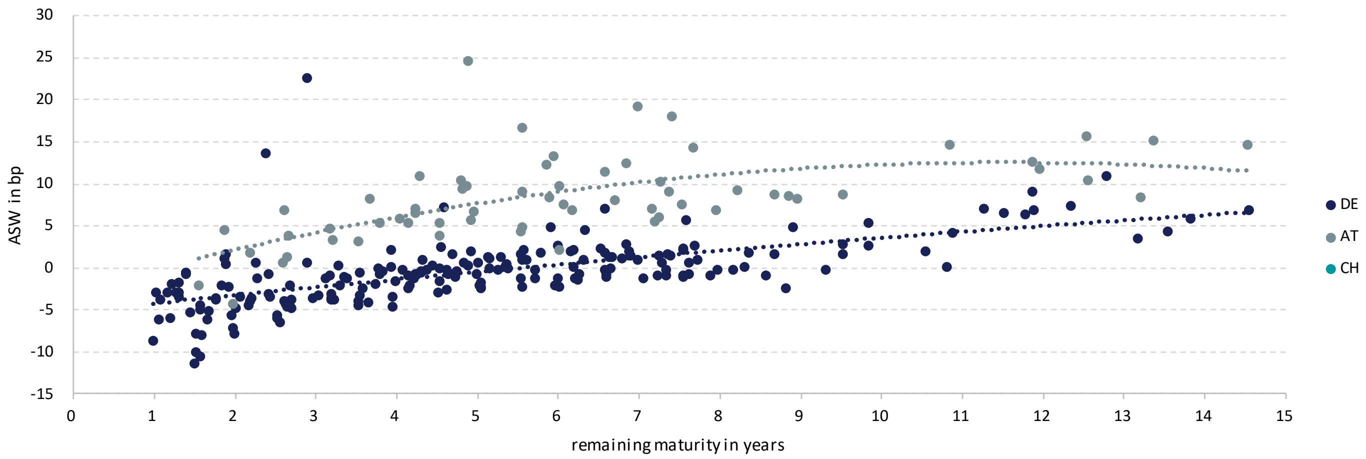
Order books (last 15 issues)



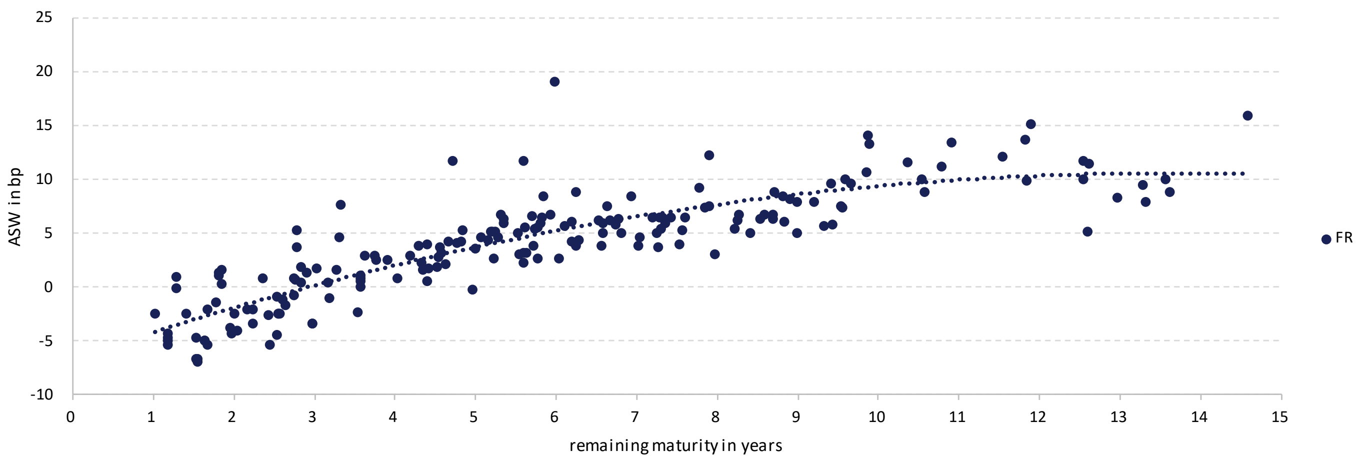
Source: Market data, Bloomberg, NORD/LB Markets Strategy & Floor Research

Spread overview[1]

DACH



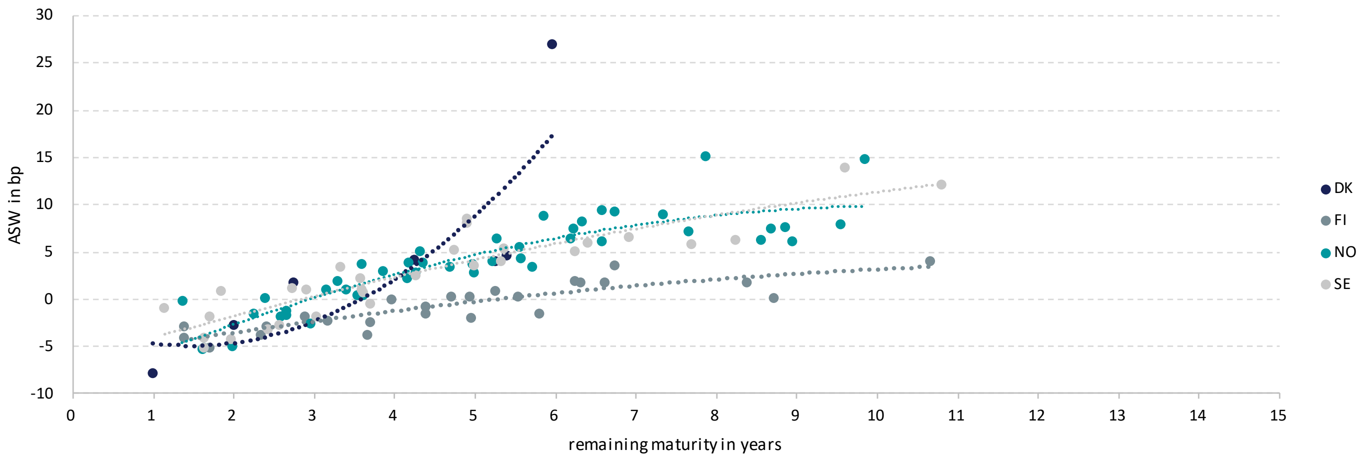
France



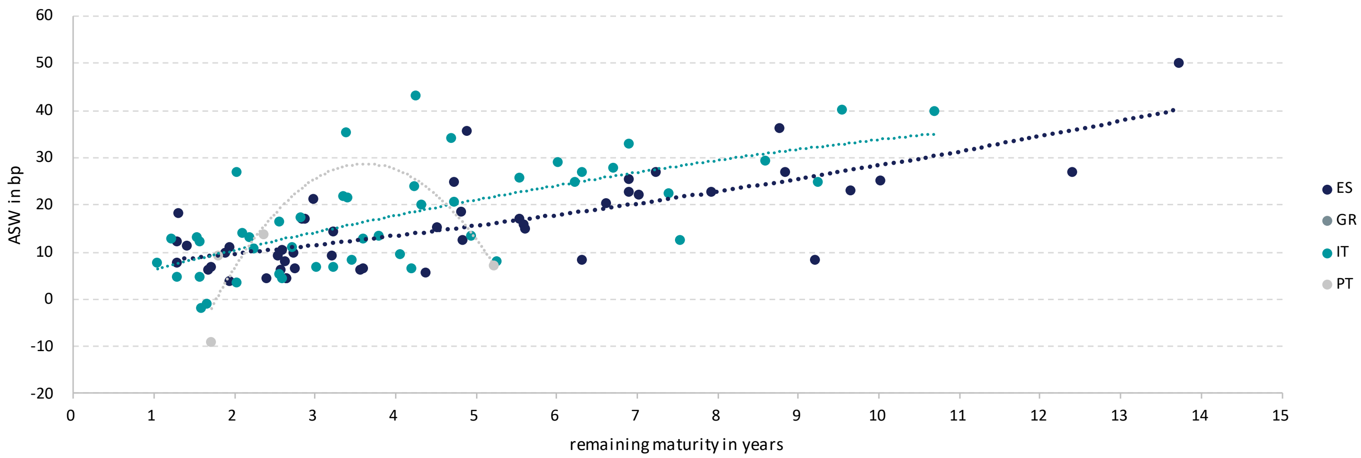
Benelux

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

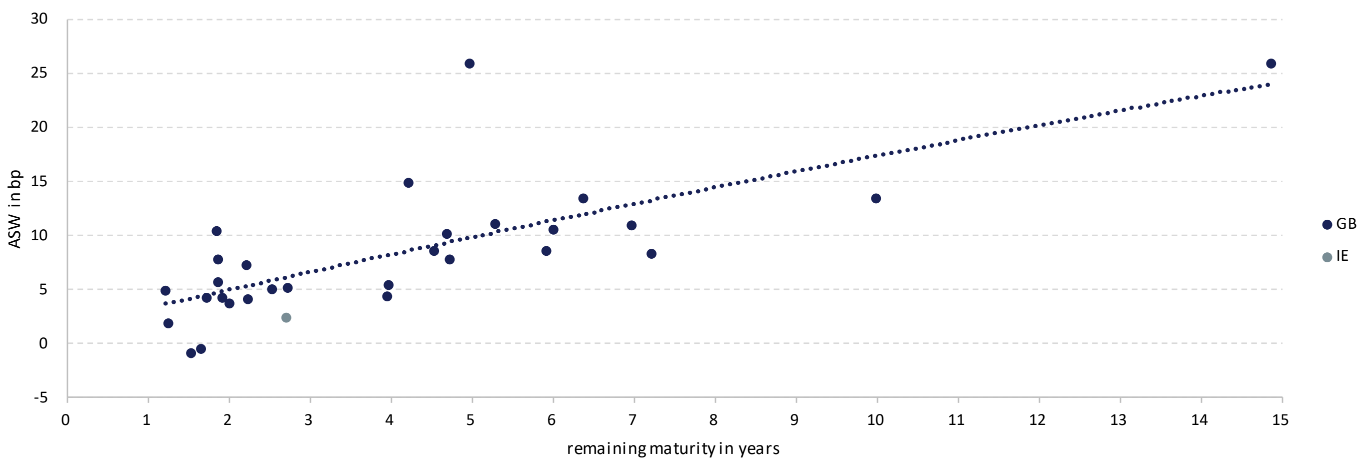
Nordics



Southern Europe

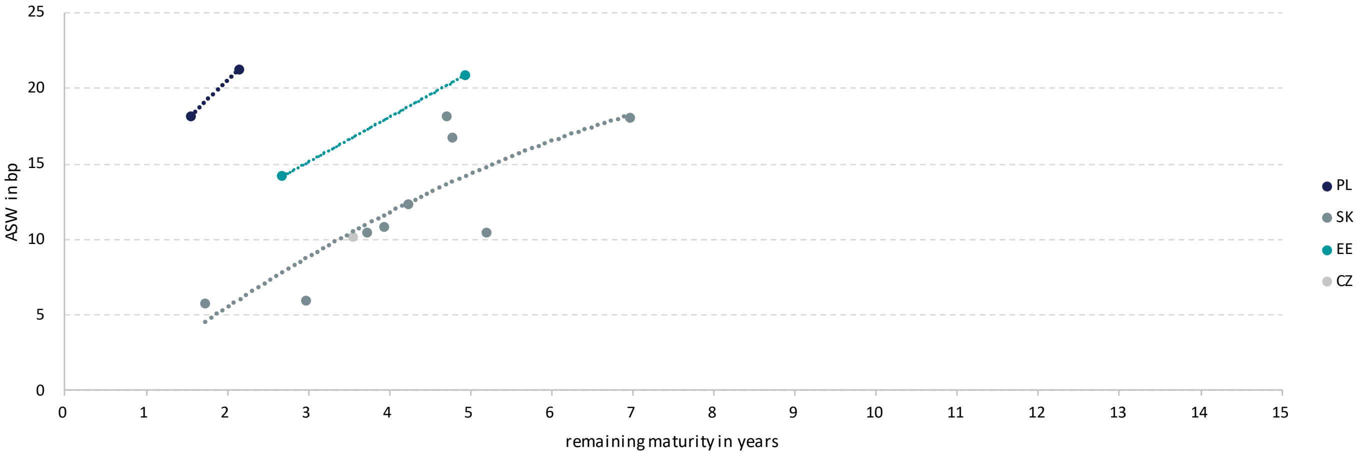


UK/IE

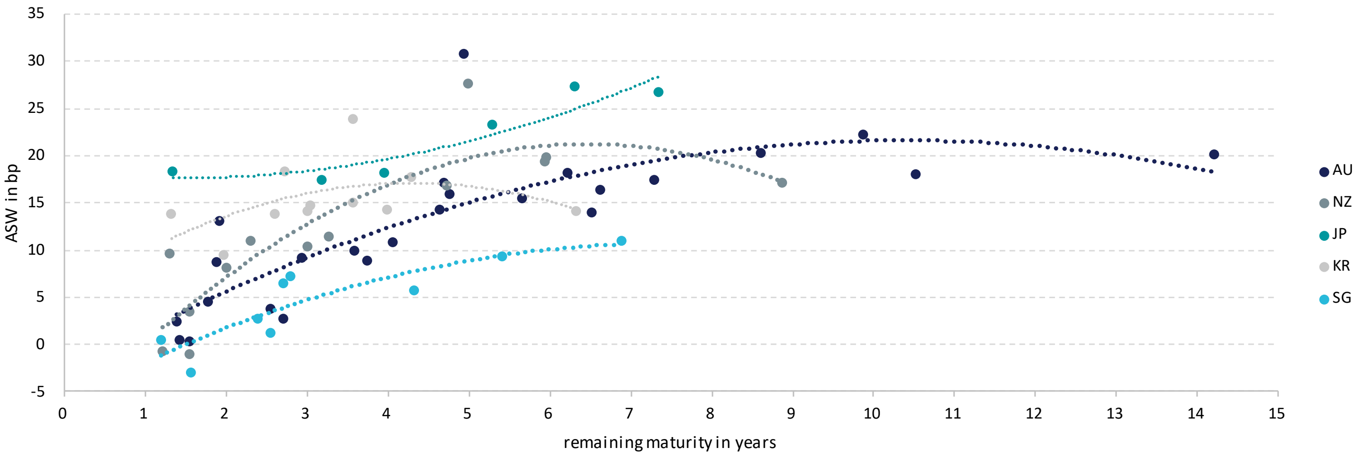


Source: Market data, Bloomberg, NORD/LB Markets Strategy & Floor Research

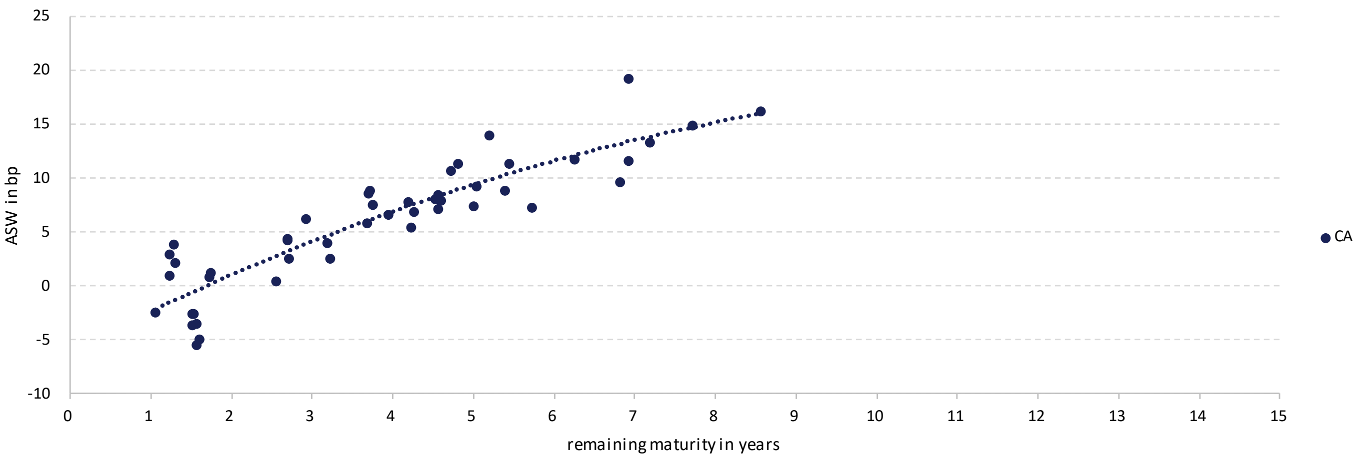
CEE



APAC



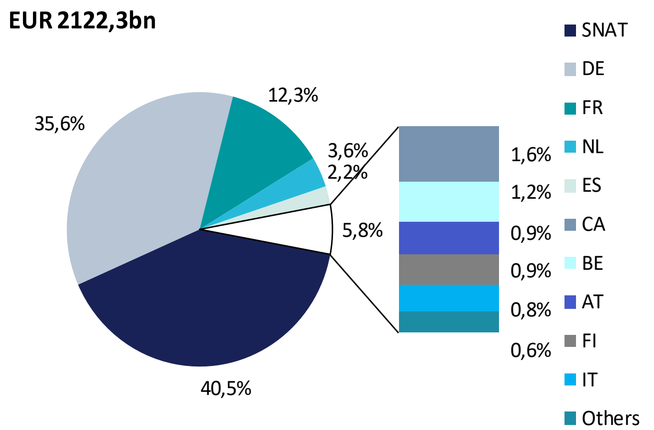
North America



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

Charts & Figures
SSA/Public Issuers

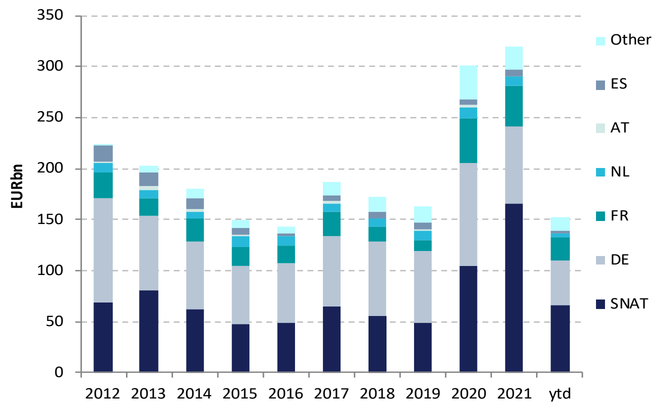
Outstanding volume (bmk)



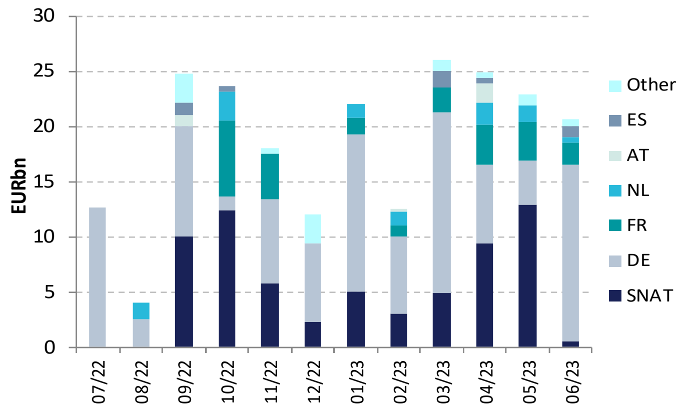
Top 10 countries (bmk)

Country	Vol. (€bn)	No. of bonds	ØVol. (€bn)	Vol. weight. ØMod. Dur.
SNAT	859,0	209	4,1	8,4
DE	756,3	571	1,3	6,5
FR	261,0	177	1,5	6,5
NL	76,0	68	1,1	6,6
ES	45,8	59	0,8	5,0
CA	33,2	22	1,5	4,9
BE	24,5	28	0,9	12,5
AT	21,2	22	0,9	4,7
FI	18,0	22	0,8	5,6
IT	16,0	19	0,8	5,3

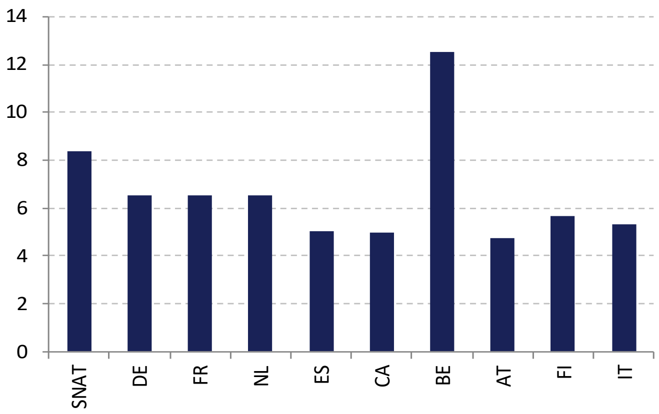
Issue volume by year (bmk)



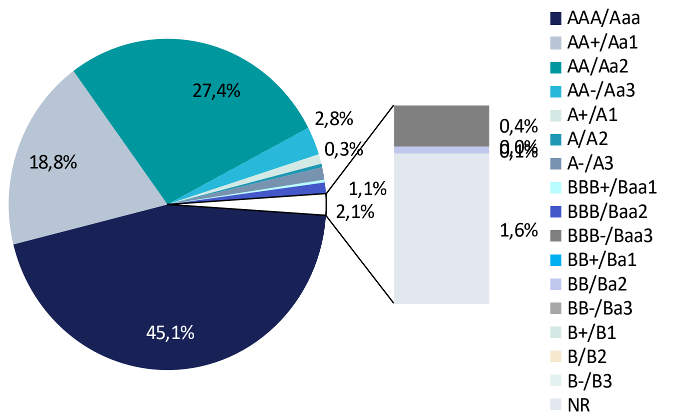
Maturities next 12 months (bmk)



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

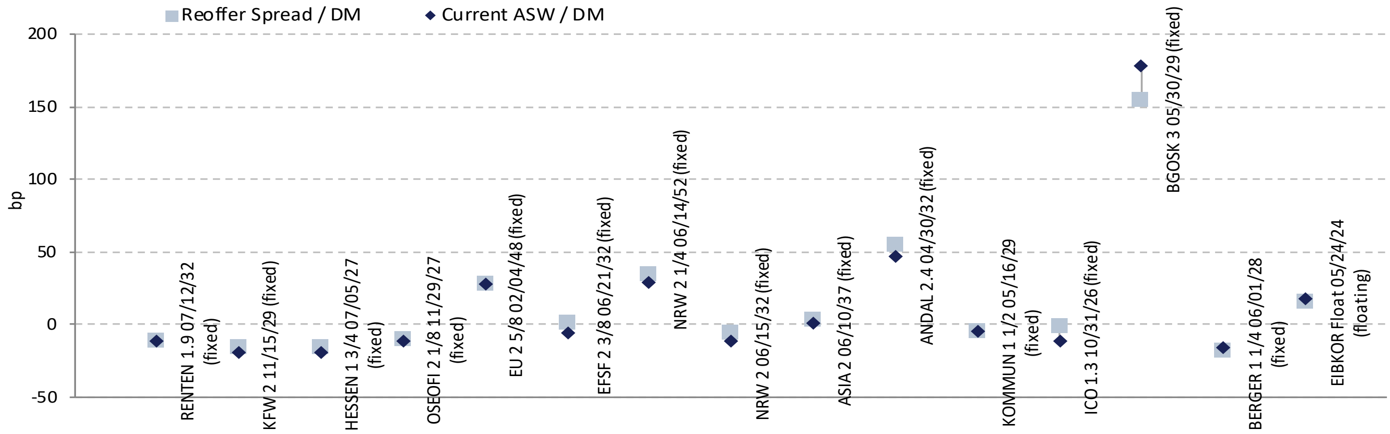


Rating distribution (vol. weighted)

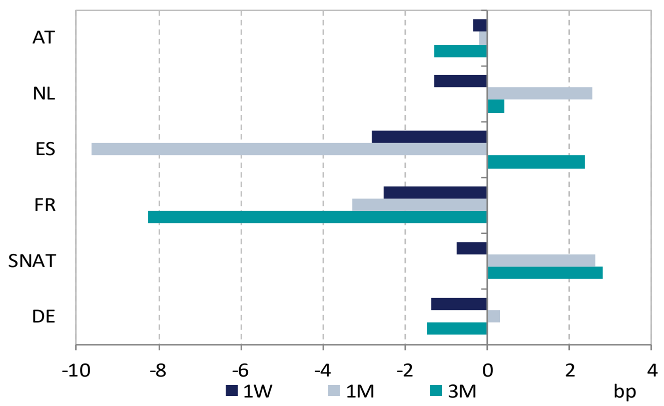


Source: Bloomberg, NORD/LB Markets Strategy & Floor Research

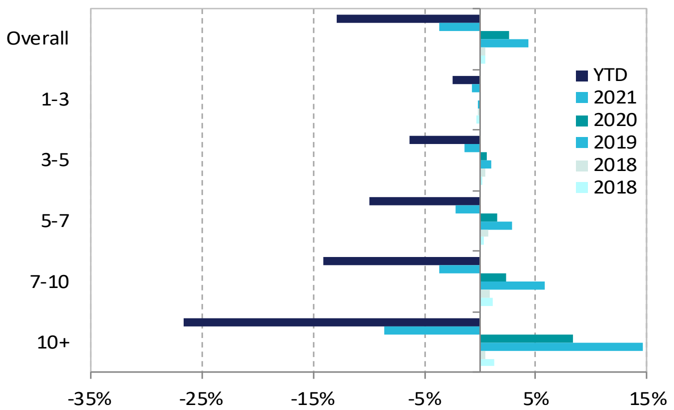
Spread development (last 15 issues)



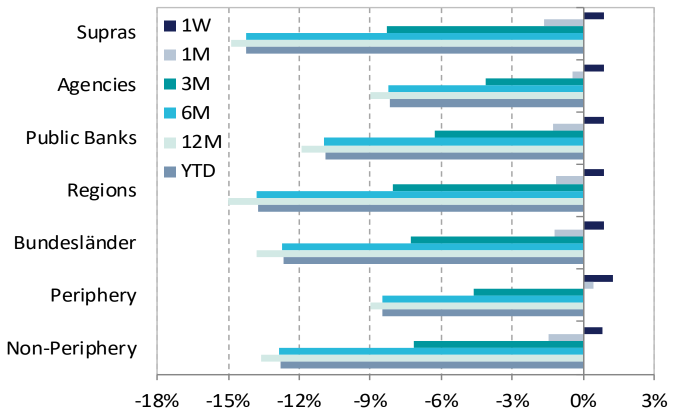
Spread development by country



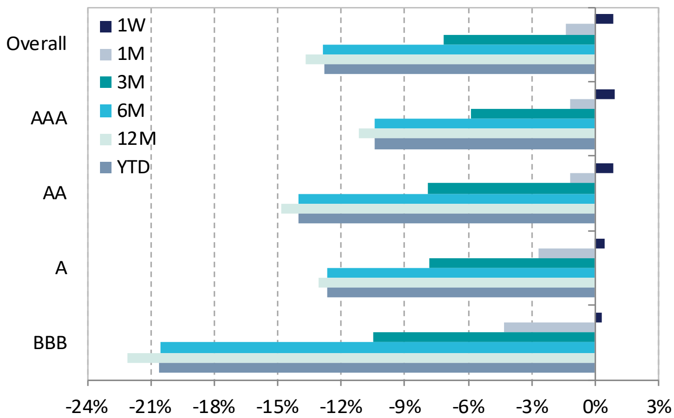
Performance (total return)



Performance (total return) by segments

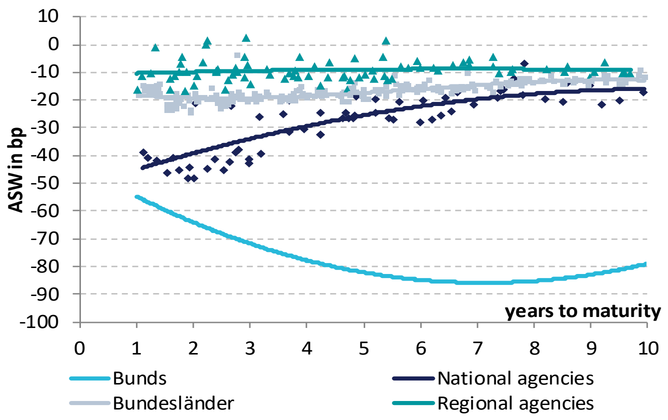


Performance (total return) by rating

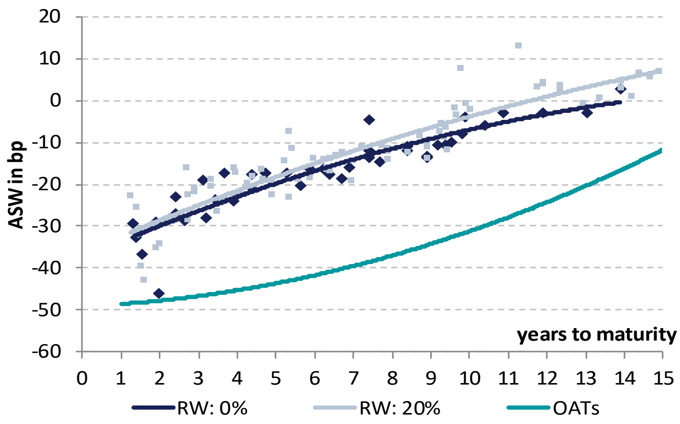


Source: Bloomberg, NORD/LB Markets Strategy & Floor Research

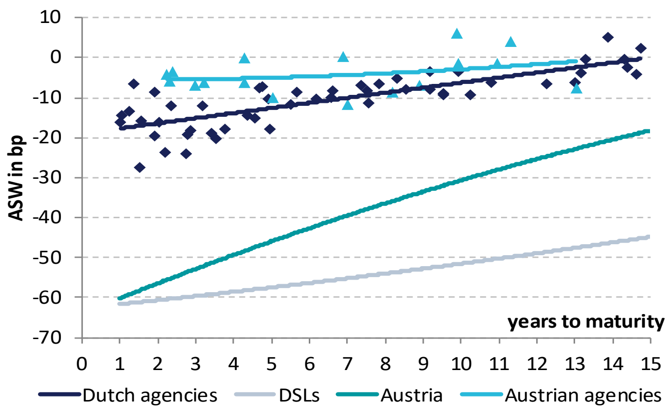
Germany (by segments)



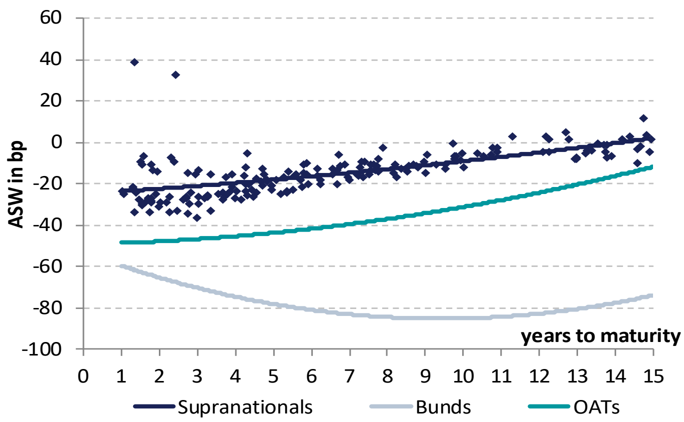
France (by risk weight)



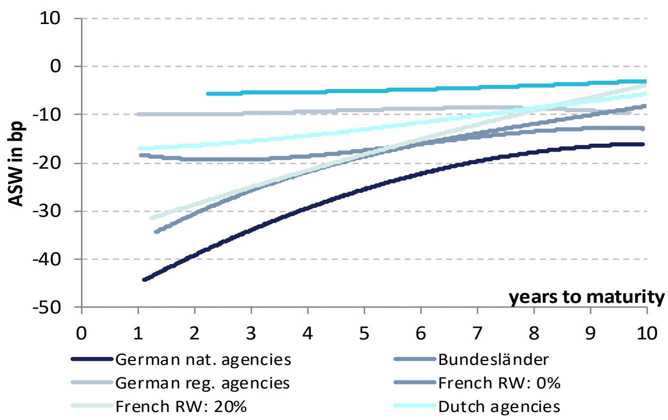
Netherlands & Austria



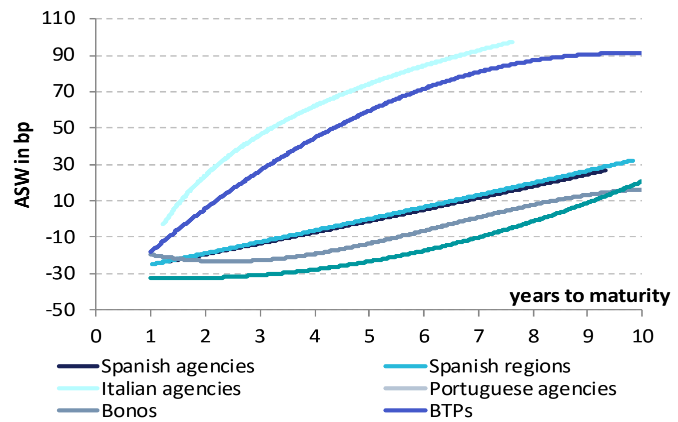
Supranationals



Core



Periphery



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

NORD/LB

Appendix
Overview of latest Covered Bond & SSA View editions

Publication	Topics
21/2022 ♦ 22 June	▪ Focus on ESG covered bonds: BayernLB's "green rail" public sector Pfandbrief ▪ Stability Council convenes for 25th meeting
20/2022 ♦ 15 June	▪ Covered bond jurisdictions in focus: a look at Australia and New Zealand ▪ NGEU: Green Bond Dashboard
19/2022 ♦ 01 June	▪ ECB: 3, 2, 1 – lift-off! Decisive June, active summer ahead ▪ The covered bond universe of Moody's: an overview ▪ ECB Financial Stability Review identifies increasing risks in the eurozone: a brief overview of covered bonds
18/2022 ♦ 25 May	▪ Transparency requirements §28 PfandBG Q1 2022 ▪ ESG: EUR-benchmarks 2022 in the SSA segment (ytd)
17/2022 ♦ 18 May	▪ Development of the German property market ▪ The SSA market in 2022 a review of the first four months
16/2022 ♦ 11 May	▪ Focus on covered bond jurisdictions: a look at Austria ▪ Update on DEUSTD – Joint German cities (bond No. 1)
15/2022 ♦ 04 May	▪ Focus on covered bond jurisdictions: Spotlight on Sweden ▪ ESG covered bonds from Germany: DKB issues social Pfandbrief in the form of a "Berlin Social Housing Bond" ▪ Issuer Guide SSA 2022: The Spanish agency market
14/2022 ♦ 13 April	▪ First ECB meeting after the end of the PEPP: (Not) a non-event!? ▪ PEPP reporting: (Not) an obituary
13/2022 ♦ 06 April	▪ ECB adjusts order behaviour in time for the new quarter ▪ United Kingdom: spotlight on the EUR benchmark segment ▪ Issuer Guide SSA 2022: the Nordic agency market
12/2022 ♦ 30 March	▪ An overview of the market for ESG covered bonds ▪ Issuer Guide SSA 2022: the Austrian agency market
11/2022 ♦ 23 March	▪ ESG update 2022 in the spotlight ▪ The ratings approach of DBRS
10/2022 ♦ 16 March	▪ What does the recent ECB meeting mean for covered bonds? ▪ Credit authorisations of the German Laender for 2022
09/2022 ♦ 09 March	▪ Transparency requirements § 28 PfandBG Q4/2021 ▪ Issuer Guide SSA 2022: The Dutch agency market
08/2022 ♦ 02 March	▪ ECB: Not everyone can get their act together at a turning point ▪ Welcome expansion of the covered bond ESG universe: Banco BPM green covered bond ▪ War in Ukraine and sanctions on Russia: spotlight on the European banking landscape
07/2022 ♦ 23 February	▪ ECB banking regulator also views the residential real estate market as a potential risk driver for banks ▪ Development of the German property market ▪ Beyond Bundeslaender: Paris metropolitan area (IDF and VDP)

Appendix
Publication overview

Covered Bonds:

- **Issuer Guide Covered Bonds 2021**
- **Risk weights and LCR levels of covered bonds (updated semi-annually)**
- **Transparency requirements §28 PfandBG (quarterly update)**
- **Covered bonds as eligible collateral for central banks**

SSA/Public Issuers:

- **Issuer Guide – German Laender 2021**
- **Beyond Bundeslaender: Greater Paris (IDF/VDP)**
- **Spotlight on Belgian regions**
- **Spotlight on Spanish regions**

Fixed Income Specials:

- **ESG-Update 2022**
- **ECB ready for lift-off: Every journey starts with a first step**
- **Face-saving ECB decision: Hawks have won – for now**
- **ECB decision: PEPP benched for now, APP comes in as Point Guard**
- **ECB holds course, but ups the ante – PEPP running until 2022**

Appendix
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