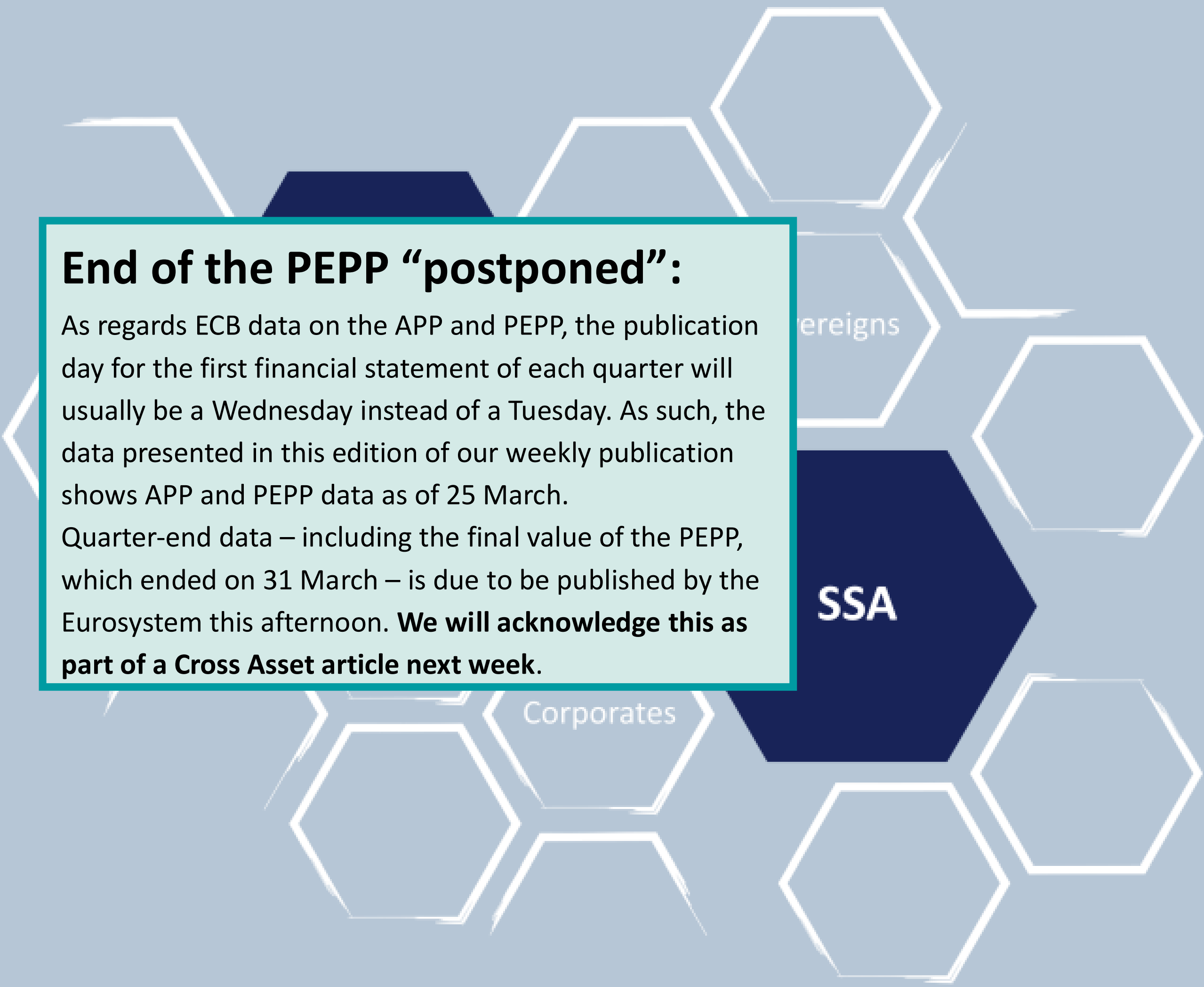

End of the PEPP “postponed”:

As regards ECB data on the APP and PEPP, the publication day for the first financial statement of each quarter will usually be a Wednesday instead of a Tuesday. As such, the data presented in this edition of our weekly publication shows APP and PEPP data as of 25 March.
Quarter-end data – including the final value of the PEPP, which ended on 31 March – is due to be published by the Eurosystem this afternoon. **We will acknowledge this as part of a Cross Asset article next week**.

Covered Bond & SSA View

NORD/LB Markets Strategy & Floor Research

6 April 2022 ♦ 13/2022

Investment strategy recommendation and marketing communication
(see disclaimer on the last pages)

Finanzgruppe

Agenda

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Covered Bond Research

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Bloomberg:
RESP NRDR <GO>

Market overview
Covered Bonds

Author: Dr Frederik Kunze

Primary market: the music plays on!

Over the past five trading days, the primary market for EUR benchmarks again continued to be extremely dynamic. A total of five issuers from four jurisdictions appealed for investors and placed a total volume of EUR 5.5bn in new bonds. Last Thursday, Santander UK became the first issuer from the United Kingdom to place a covered bond in EUR benchmark format this year. The bank started the marketing phase with an initial guidance in the region of ms +15bp and placed a volume of EUR 1.75bn (5y) at ms +11bp in the end. The deal, which was after all the largest covered bond benchmark from the UK in more than ten years, ultimately attracted an order volume of EUR 2.15bn. It was mainly allocated to the Benelux countries (31%), Germany & Austria (28%) and the UK & Ireland (24%). Looking at the type of investor, the central banks/OI category dominated (40%), followed by banks (33%) and asset managers (25%). The first primary market appearance of an EMU issuer came on 4 April, after the ECB had reportedly reduced its order size on the primary market from a deal size of 40% to 30%. After a dual tranche on 12 January (BPCECB 0 3/8 01/21/32 and BPCECB 0.01 01/21/27) and a benchmark on 15 February (BPCECB 0 3/4 02/23/29), BPCE's fourth bond followed on Monday. The books for the new benchmark, featuring what is now almost an "unusual" term of eight years, opened with IPT in the region of ms +12bp. In the course of the marketing phase, the issuer was able to place a volume of EUR 1.5bn and price at a final spread of ms +9bp. The order volume amounted to EUR 1.95bn. Another deal from France followed on Tuesday. CAFFIL took advantage of issuance window remaining open to place a benchmark with a long six-year maturity. The final pricing of the deal was ms +5bp, while the initial guidance had been given as ms +8bp. With this covered bond of EUR 1bn, the volume of French benchmarks placed so far in 2022 now totals EUR 17.75bn. Through BAWAG, we noted further primary market activity from Austria. The issuer has already been active on the market this year with a benchmark in January (EUR 500m; 10y) and opted for a maturity of 6.3 years for the new deal, which it had announced the previous day. The books opened yesterday, on Tuesday, with guidance in the region of ms +11bp. The reoffer spread ultimately narrowed by 3bp to ms +8bp during the marketing phase. Finally, the second benchmark from Slovakia was brought to market by Slovenska Sporitelna (SLOSPO). The EUR 500m bond (WNG) was placed at ms +15bp (guidance: ms +17bp area) and was able to attract an order volume of EUR 720m. For SLOSPO's second appearance on the primary market, a new issue premium (NIP) of 5bp to 6bp can also be derived, with reference to the latest VUB deal. In conclusion, our observations have not identified any dramatic fluctuations in the NIPs of the EMU deals, even with the ECB having cut its order sizes. On balance, we continue to calculate an average level of 4bp. However, we do not rule out further downward adjustment steps in ECB order behaviour. We also discuss possible implications of this in our Covered bond focus article on the first quarter and the ECB.

Issuer	Country	Timing	ISIN	Maturity	Size	Spread	Rating	ESG
CAFIIL	FR	05.04.	FR0014009OM1	6.2y	1.00bn	ms +5bp	- /Aaa/AA+	-
SLOSPO	SK	05.04.	SK4000020673	5.0y	0.50bn	ms +15bp	- /Aaa/ -	-
BAWAG	AT	04.04.	XS2468221747	6.3y	0.75bn	ms +8bp	- /Aaa/ -	-
BPCE SFH	FR	04.04.	FR0014009O88	8.0y	1.50bn	ms +9bp	- /Aaa/AAA	-
Santander UK	GB	31.03.	XS2466426215	4.9y	1.75bn	ms +11bp	AAA/Aaa/AAA	-

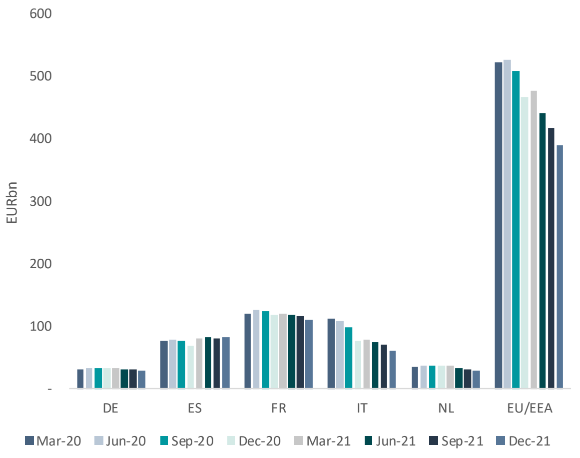
Source: Bloomberg, NORD/LB Markets Strategy & Floor Research, (Rating: Fitch / Moody's / S&P)

Arion Bank successfully taps bond to benchmark level
Through a tap issue, Arion Bank (IS) has topped up its EUR sub-benchmark bond placed in September 2021 (EUR 300m; ARION 0.05 10/05/26) to benchmark level. The issuer's target was a minimum volume of EUR 100m for the tap (guidance: ms +38bp area). The reoffer spread was ultimately ms +37bp and Arion secured EUR 200m, resulting in an outstanding volume of EUR 500m after 40 days once the new bond was merged with the ISIN of the outstanding sub-benchmark. If all other iBoxx criteria are then met, Iceland is then likely to be included as a new jurisdiction in the iBoxx EUR Covered. Due to Arion placing a sub-benchmark deal last year, our coverage already includes Arion Bank, which also has a Green Bond Framework.

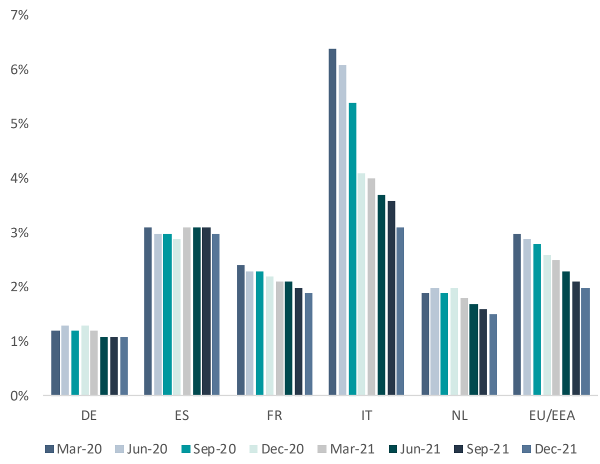
NORD/LB capital market spotlight on 8 April at 2 p.m.: "Update on UK"
With Santander UK's covered bond, the first EUR benchmark in 2022 from the UK has now also been successfully placed on the market. We expect other issuers to follow suit over the course of the current year. With this in mind, we are also looking forward to this week's upcoming client event "NORD/LB Capital Market Spotlight: Update on UK". As part of the virtual format, we intend to throw a spotlight on the current covered bond market in the UK. Issuer presentations from Nationwide Building Society and Santander UK will form the centrepiece of the event, which will be rounded off with a chance to talk directly to the issuers in the Q&A session. If you are interested in the "UK spotlight" event, please contact us directly or email event-markets@nordlb.de. An up-to-date assessment of the UK EUR benchmark segment can also be found today in our weekly publication (cf. Covered Bond article on UK benchmarks).

DBRS comments on the Spanish real estate market
So far in 2022, we have only welcomed one EUR benchmark from Spain to the primary market. In fact, we do not expect the offering from the Southern European covered bond jurisdiction to be extensive in 2022. Nevertheless, the Spanish mortgage market, in particular, is certainly faring much better. On 31 March 2022, the rating agency DBRS presented an up-to-date analysis of the Spanish real estate market, highlighting, among other aspects, the strong growth of the housing market and an increase on the lending side. However, DBRS also noted that the need for government support measures has fallen significantly, which can, in the context of the analysis, be explained not least by developments on the labour market. In fact, with regard to the covered bond market and above all the EUR benchmark segment, we expect momentum to pick up only gradually. For Spanish institutions, the funding requirement via covered bonds is likely increase over the course of 2023 rather than in 2022. We therefore maintain our assessment that the Spanish EUR benchmark segment will shrink to a significant extent in 2022 (expected net supply: EUR -9.7bn).

NPL trend for selected countries (EUR bn)



NPL trend for selected countries (%)

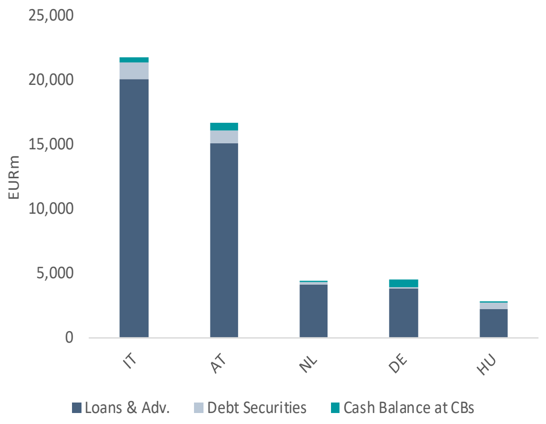


Source: EBA, NORD/LB Markets Strategy & Floor Research

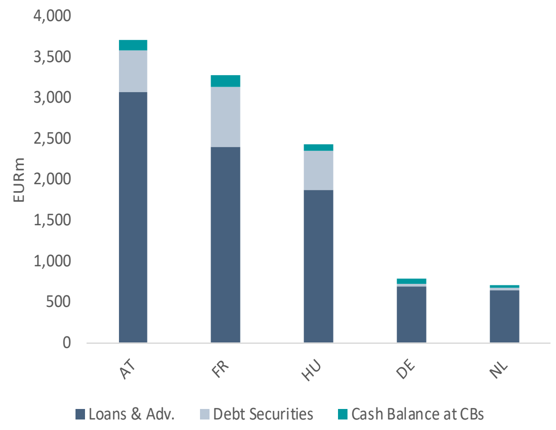
EBA Risk Dashboard Q4/2021: robust fundamental data

The current figures for the EBA Risk Dashboard were presented last Friday. The European Banking Authority's database now also includes information on the fourth quarter of 2021. As the EBA also expresses in a press release dated 1 April 2022, the capital and liquidity ratios remained strong on the whole. The profitability ratios, which have now stabilised at levels higher than in the pre-pandemic period, also paint a robust picture. Moreover, asset quality improved, with banks reporting further declines in NPL ratios. The EBA therefore confirms that the European banking sector was in a more than solid position overall in the most recent reporting period. Nevertheless, it should be borne in mind that the dramatic developments in Ukraine and the associated sanctions against Russia are not yet part of this current set of statistics. The EBA highlights the potential impact with a "special feature" and presents data which reflects that direct exposures to Russia and Ukraine are limited. The EBA's initial assessment is that second-round effects are more worrying from a financial stability perspective than first-round risks to the EU banking system.

Top 5 countries by Russia exposures (EUR m)



Top 5 countries by Ukraine exposures (EUR m)



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

Moody's: Focus on Raiffeisen Bank International

The risk experts at Moody's have also taken the current geopolitical developments as an opportunity to focus on issuers with exposures in Russia and Ukraine. For example, Raiffeisen Bank International (RBI) has a public sector cover pool to which cover assets from these two countries can be assigned. In the RBI public sector cover pool, Russia (19%) and Ukraine (8%) account for 27% of the cover assets overall. Moody's analysts specifically questioned Russia's willingness and ability to pay its debt obligations. For Ukraine, the report rather highlights the liquidity risk. The direct risk for covered bond investors is not least strongly limited by the dual recourse structure of the covered bond alone. After all, it is not the cover assets directly but RBI which ensures bond interest and repayment are paid. In addition, Moody's makes reference to the existing ECA guarantees, which are backed by EU member states as well as Switzerland. Even in the case of war, payments to be made as necessary are not excluded. According to Moody's, the worst-case scenario in the event of default of all Russian exposures (without recovery) would bring the OC to a level of 0% and therefore still mean the covered bonds are backed in full. We regard Moody's considerations as particularly important because they clearly identify the possible risks and also include risk mitigation mechanisms. As a result, the economic positions in Russia and Ukraine are attributable to the guarantors in the EU and Switzerland, respectively. As part of our coverage (e.g. as part of the NORD/LB Issuer Guide Covered Bonds), we are focusing on RBI's mortgage cover pool. This is also RBI's EUR benchmark programme. According to our understanding, no EUR benchmark covered bonds can be assigned to the public cover pool.

EU taxonomy: Association of German Pfandbrief Banks (vdp) presents benchmarking for the Top 15% criterion together with Drees & Sommer

As we explained in the NORD/LB ESG update, the EU taxonomy has a great impact on the financial and capital markets as well as on the fixed income segment via the EU Green Bond Standard (EUGBS). According to a press release, the vdp has developed a benchmarking approach together with the consulting firm Drees & Sommer which is intended to support banks in providing evidence of compliance with the EU taxonomy for meeting the top 15% criterion with regard to primary energy demand. This means the benchmarking approach focuses specifically on those properties for which conformity with the EU taxonomy cannot be proven by energy performance classes. Residential buildings without an energy performance certificate can evidence belonging to the top 15% via primary energy demand, which must be lower than 74 kWh or 70 kWh per square metre. According to Drees & Sommer's calculations, office and retail properties are within the top 15% of their property class if they, at a minimum, comply with the requirements of the EnEV 2009; for logistics buildings, the same applies if they were built in line with the requirements of the EnEV 2014 or a more recent regulation. We believe that the help this benchmarking tool will provide should not be underestimated. After all, pursuant to the European green bond standard (EUGBS), current discussions suggest bond issuers will have to demonstrate 100% alignment with the EU Taxonomy. The vdp regards this percentage as too high. The vdp is calling for a transitional phase in which only 80% taxonomy compliance would be required to create the necessary scope for new and already active green covered bond issuers on the market.

Market overview
SSA/Public Issuers

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

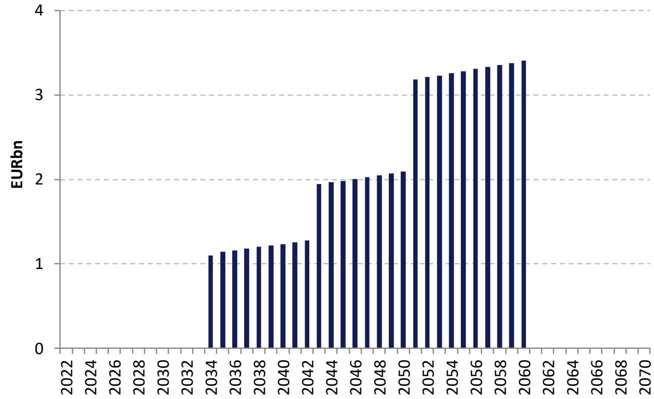
Allocation of KfW's proceeds from green bond in 2021

KfW has been issuing "Green Bonds – Made by KfW" since 2014 and recently published its Allocation Report for the reporting year 2021. In total, the German promotional bank issued 22 new green bonds last year and tapped existing green bonds 15 times. The share of sustainable bonds as a percentage of the total funding volume in 2021 is 19.6%, twice as high as in 2020, whereas the number of different currencies used for issues and taps last year amounts to 13. The net proceeds resulting from the green bond issues totalled EUR 16.2bn and have a volume-weighted residual maturity of 6.6 years. The average maturity of the cumulative loans refinanced from the green bond proceeds is 8.6 years, which is in line with the Green Bond Framework. The demand for green projects was high in 2021: EUR 21.3bn in project financing qualified for green bonds last year, meaning that the net proceeds from the issues could be fully allocated. But where did the proceeds go? KfW states that 94.6% went to projects within Germany, which should come as little surprise given the shareholders (80% Federal Republic of Germany, 20% Bundeslaender). In addition, 2.6% of the proceeds went to France, 1.2% to the Netherlands, 0.6% to Poland, 0.3% each to Spain and Sweden, 0.2% to Austria, 0.1% each to Italy and Ireland and finally 0.03% each to the United Kingdom and Finland. Broken down into categories, according to the allocation report, 84.8% went to energy efficiency (divided into 83.0% residential buildings and 1.9% other buildings [rounding differences]) while 15.2% was used for renewable energies (9.5% wind energy, 5.2% solar energy and 0.4% hydropower and other technologies [rounding differences]). KfW indicates the environmental and social impact of the programmes in the period from 2014 to 2020 as follows: every EUR 1m of net proceeds from green bonds avoids the equivalent of 109 tons of CO_2, resulting in an additional 206 MWh of renewable energy and an energy saving of 9.3 MWh annually. In addition, for every EUR 1m invested in “Green Bonds – Made by KfW”, twelve jobs (converted into person-years) could be safeguarded. The equivalents for the period from 2021 are expected for the allocation report in 2024. Earlier in 2022, the Green Bond Framework was also expanded: when the framework was introduced in 2014, only renewable energies were covered initially, before the area of energy efficiency was included in the first update in 2019. Right at the start of 2022, the second update to date took place, which from then on also included sustainable mobility. To recap, in its press release dated 17 December 2021, KfW stated its intention to issue at least EUR 10bn in "Green Bonds – Made by KfW" in 2022. The total expected funding volume for 2022 is EUR 80-85bn. However, we anticipate that this could even be exceeded, as was the case last year. Of course, this always depends on the market conditions.

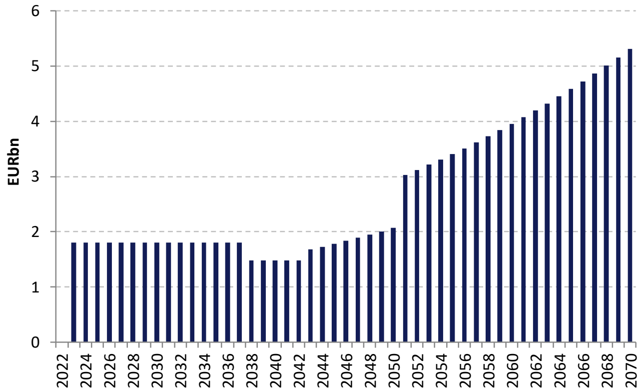
ESM and EFSF waive parallelity clause in case of early repayment by Greece to the IMF and the Greek Loan Facility

Greece wants to repay early its outstanding loan of EUR 1.86bn from the International Monetary Fund (IMF) and an outstanding loan of EUR 2.65bn from the Greek Loan Facility (GLF). You are probably quite rightly asking yourself what could stand in its way? Under the European Stability Mechanism (ESM) and European Financial Stabilisation Facility (EFSF) loan agreements with Greece, upon early repayment to other creditors, a proportional amount of the financial assistance provided under ESM and EFSF facilities becomes immediately due and payable (parallelity clause). In the ESM's press release dated 28 March, it was announced that the credit facilities would waive this clause. It is emphasised that the early repayment of Greece's debts sends a positive signal to markets and will have a direct impact on Greece's debt profile, thereby generating (interest) savings for the Greek budget. It is also in the interests of the ESM and EFSF, who hold around half of Greece's public debt. To recap, the Greek Loan Facility was the first financial support programme for Greece, agreed in May 2010. It consisted of bilateral loans from 14 Euro area countries, amounting to EUR 52.9bn, and an IMF loan with a volume of EUR 20.1bn. The European Financial Stabilisation Facility was established only a month later in June 2010.

Greece: repayment profile under the ESM



Greece: repayment profile under the EFSF



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

EIB signs EUR 1.9bn InvestEU guarantee agreement

The European Investment Bank has signed a EUR 1.9bn guarantee agreement with the European Commission under the InvestEU investment plan. The InvestEU programme comprises a total of EUR 372bn of investments over a period from 2021 to 2027. The aim is to give an additional boost to sustainable investment, innovation and job creation in Europe. The programme is divided into four policy areas (so-called windows), namely "sustainable infrastructure", "research, innovation and digitisation", "small and medium-sized enterprises (SMEs)" and "social investment and skills". The projects that will be the first to benefit from the EIB's EU guarantee fall into the "social investment and skills" and "sustainable infrastructure" windows.

Primary market

In this issue, the primary market section is dominated by the regions. True to our duty as chroniclers, we start with the Walloon Region (ticker: WALLOO) in Belgium, which decided to issue a ten-year EUR 1bn bond at OLO +33bp. This corresponded to around ms +13bp at the relative point in time. The guidance was OLO +35bp area and the order book was reported at EUR 1.2bn. Next, the Autonomous Community of Madrid (ticker: MADRID) issued a EUR 1bn sustainability bond – also with a ten-year maturity – at SPGB +16bp. According to our calculations, this corresponds to about ms +40bp at the time of issue. Compared to the guidance, a narrowing of two basis points was also possible here and the order book likewise amounted to EUR 1.2bn. The Autonomous Region of the Azores (ticker: AZORES), on the other hand, opted for a dainty volume of EUR 455m and is therefore just below the threshold for benchmark size. Nevertheless, we would also like to comment on this deal with due brevity and refer to last year's edition, in which we took a closer look at the Madeira and Azores regions as part of our series "Beyond Bundeslaender". The maturity of the bond is ten years, the guidance was PGB +70bp area, and it was finally priced at PGB +65bp. This corresponded to approximately ms +82bp. The order book was reported at EUR 650m. Next to issue a bond was, for a change, not a region, but the French infrastructure operator Société du Grand Paris (ticker: SOGRPR). With a longer maturity of 20 years, fresh supply was provided in the form of a green bond with a volume of EUR 1.75bn. Compared to the guidance of OAT +34bp area, the spread narrowed by one basis point to OAT +33bp. This corresponded to roughly ms +37bp. The order book is reported at EUR 2.3bn, resulting in a bid-to-cover ratio of 1.31x. The next issuer also comes from France: Action Logement Services (ticker: ALSFR) issued a ten-year sustainability bond with a volume of EUR 1.25bn at OAT +42bp (guidance: OAT +45bp area). With an order book of EUR 2.8bn, this gives a bid-to-cover ratio of 2.24x. Against the mid-swap curve, we have calculated a spread of ms +15bp at the relative point in time. Next, we have spotted a German sub-sovereign: Berlin issued a FRN (6y) with a volume of EUR 500m at 3mE +60bp. In addition, the European Union (ticker: EU) has been active again in the primary market, providing further funding for the NGEU programme. It opted for a green bond with a 20-year maturity and a volume of EUR 6bn. The marketing phase started with a guidance of ms +11bp area. The bond was finally priced at ms +9bp. The level of investor interest was once again very high – the order book amounted to EUR 78.25bn. We would like to mention a tap at this point: KfW topped up its KFW 0% 02/18/25 bond by EUR 1bn at OBL +41.6bp. Last but not least, a mandate from the Council of Europe Development Bank for a seven-year social inclusion bond was announced yesterday (Tuesday).

Issuer	Country	Timing	ISIN	Maturity	Size	Spread	Rating	ESG
BERGER	DE	05.04.	DE000A3MQYH8	6.0y	0.50bn	3mE +60bp	AAA / Aa1 / -	-
EU	SNAT	04.04.	EU000A3K4DG1	20.8y	6.00bn	ms +9bp	AAA / Aaa / AA	X
ALSFR	FR	01.04.	FR0014009N55	10.1y	1.25bn	ms +15bp	AA / - / -	X
SOGRPR	FR	29.03.	FR0014009KL1	20.0y	1.75bn	ms +37bp	AA / - / -	X
AZORES	Other	29.03.	PTRAAIOM0009	10.0y	0.46bn	ms +82bp	BBB- / Ba1 / -	-
MADRID	ES	29.03.	ES0000101012	10.1y	1.00bn	ms +40bp	- / - / A-	X
WALLOO	BE	29.03.	BE0002849306	10.0y	1.00bn	ms +13bp	- / A3 / -	-

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

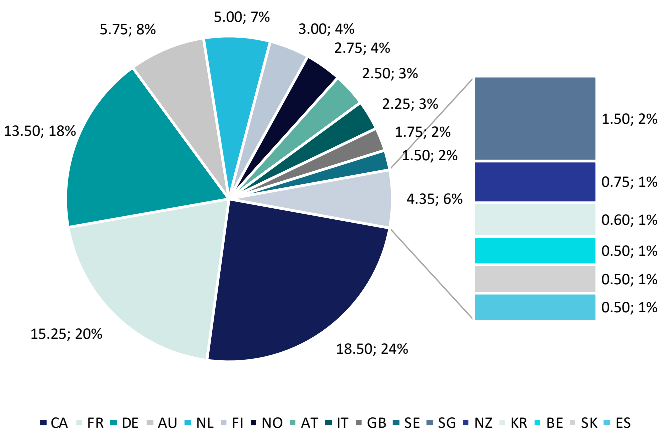
Covered Bonds
ECB adjusts order behaviour in time for the new quarter

Author: Dr Frederik Kunze

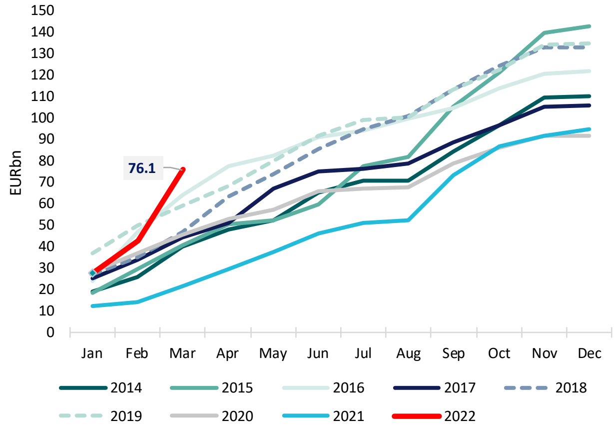
A first quarter that will stay in the memory!

As we have already noted elsewhere at one time or another, the first three months of the year were characterised by an unexpected degree of dynamism. This can be seen simply by looking at the volume of primary market issues in the EUR benchmark segment at the end of Q1 2022. We had not expected EUR 76.1bn by this point in the current year, which shows once again that past performance is not always a reliable indicator for the future. Admittedly, the past two years have been marked by significant structural breaks, which also left their mark on the covered bond market. The high volume on the primary market can be explained, among other things, by catch-up effects from the "pandemic-dominated" past and by (pre-)funding brought forward for a future characterised by monetary and geopolitical uncertainty. In the primary market, the large presence of Canadian issuers was also a big surprise. We are self-critical enough to note that our original forecast of an issuance volume from Canada of EUR 9bn for the full year 2022 was a clear misjudgement, with EUR 18.5bn having actually been placed by the end of March 2022. However, Canada was not the only surprise of the first quarter of 2022. With the apparent lowering of its own primary market order share from 40% to 30%, the ECB went into exit mode on 29 March 2022, much earlier than expected. Although the Eurosystem's presence on the covered bond market is likely to remain significant in the coming weeks and months, we believe this latest change of direction on the primary market is the starting signal for the dawn of a new era. In the following, we would like to assess the developments in the months January to March as well as the new implications for the momentum on the covered bond market in the coming months and quarters.

Primary market: Jurisdictions (EUR bn; ytd)



Primary market: Issuance history year on year

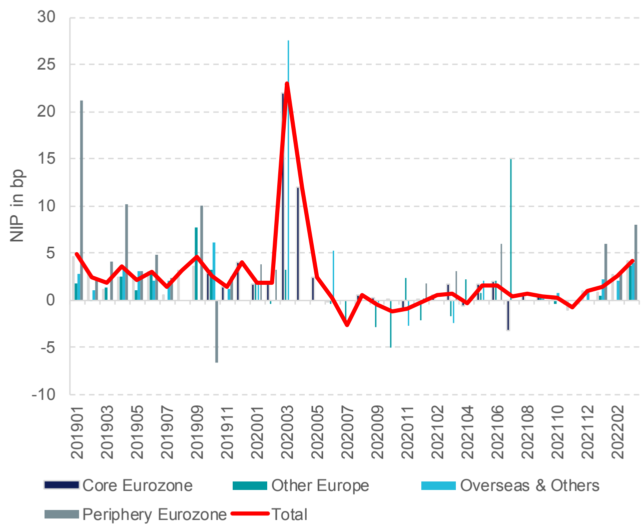


Source: Market data, Bloomberg, NORD/LB Markets Strategy & Floor Research

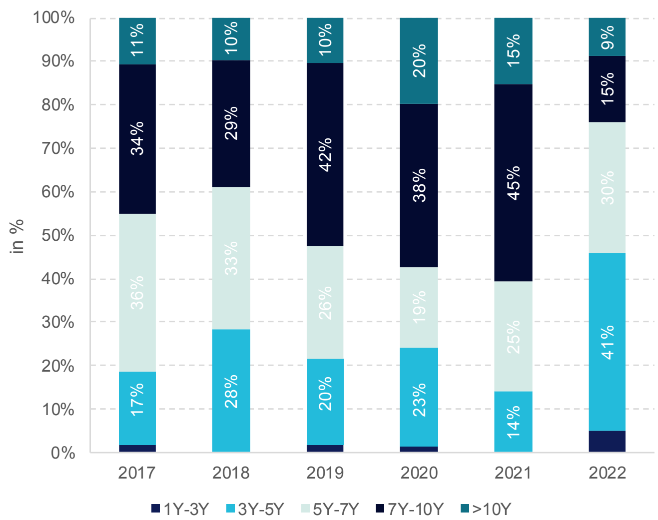
The primary market in Q1 2022

What follows is a brief summary of key features of the covered bond primary market in the first three months of the current year. What is particularly striking here - apart from the high volume - is the issuers' focus on the shorter maturity segment. Credit institutions are certainly also responding to investors' wishes. The general uncertainty and the expected turnaround on interest rates have also reduced the appetite for longer maturities, as has the upward movement in general yield levels that has already taken place. Overall, the market was receptive to the high supply. The order books, or rather the oversubscription quotas, declined noticeably, although this can be explained by both less inflationary order books and larger deal sizes overall. New issue premiums have recently moved on from the extremely low levels of around zero and at least offered investors a noticeable pick-up again. Consequently, it should come as no surprise that demand is focused more on the primary market. The fact that secondary trading has virtually come to a standstill in the meantime is mainly due to the uncertainty of market participants in the wake of the dramatic developments in Ukraine. The bulk of the primary market deals could still be performed secondarily according to the Bloomberg umbrella prices, which we are also bearing in mind as an important indicator for future spread development. In terms of the investor distribution of the deals placed on the market, the preponderance of allocation to the DACH countries with a share of 49% has persisted so far this year. By investor type, the largest share is once again attributable to the Banks segment. However, the figure of 37% is definitely well down on the figures seen in previous years (2021: 41%; 2020: 45%; 2019: 44%). The Central Banks/OI category has caught up (34% vs. 27% in 2021, 25% in 2020 and 17% in 2019). For EMU deals (i.e. primary market issues that can be purchased by the Eurosystem), the share of the Central Banks/OI category at 35% is also significantly above the levels of previous years 2021 (29%), 2020 (26%) and 2019 (17%). We see the not too large deviation from the overall market as an indication that the central banks and official government institutions outside the Eurosystem are also relatively active investors on the covered bond primary market.

Primary market: new issue premiums in basis points



Primary market: maturities (shares in %)

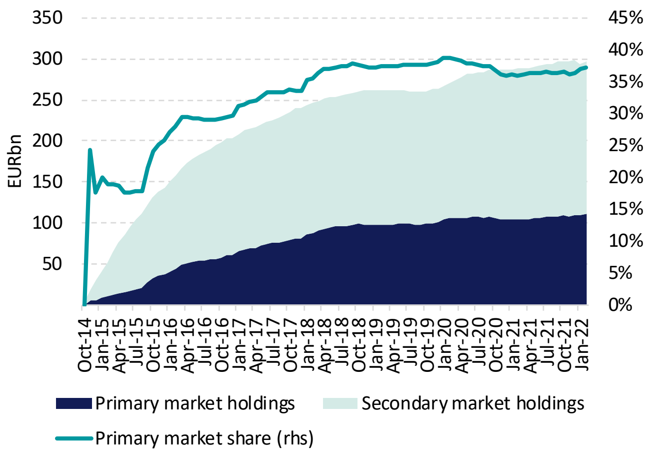


Source: Market data, Bloomberg, NORD/LB Markets Strategy & Floor Research

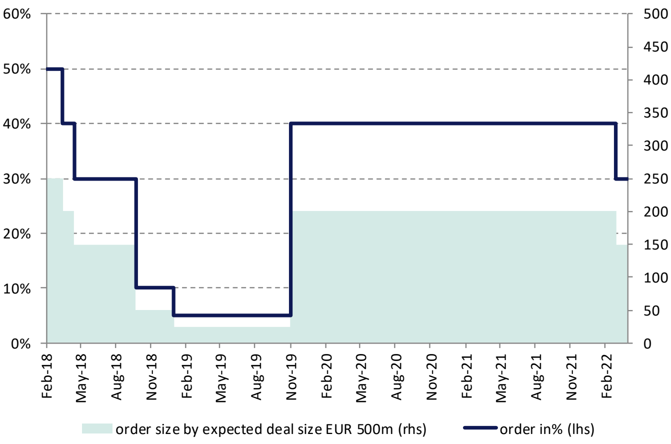
ECB monetary policy remains crucial for spread outlook

Although we do not want to downplay the importance of demand from institutions such as Norges Bank or large accounts from Asia (e.g. SAFE), the focus of attention has at the latest since 29 March 2022 been on the ECB. Therefore, the adjustment of the primary market order share mentioned above will affect the spread structure of the entire EUR benchmark segment. The change of direction has in the end come sooner than expected. After we had initially expected a sideways movement in the order share and a reduction in the second quarter at the earliest, there are now many indications that the ECB will reduce orders more quickly. For issuers, this in turn means that although the execution risk will increase, the ECB will not withdraw completely on an ad hoc basis. In any case, with the high maturities under CBPP3, a certain "residuum" in the order rate remains more than likely even after the end of net purchases. In addition to the primary market, the ECB will also have to turn its attention to the secondary market. The question is how maturities will be reinvested. In the current year, the net CBPP3 volume has shrunk. With a reduced presence by the Eurosystem on the demand side, the probability of rising spreads is also increasing. On average, we expect spreads to continue widening by around five basis points across all maturities and jurisdictions up to the end of Q2 2022, although there may be one or two exceptions. Systematic spread differentiation, which we had actually only expected in the first half of 2023, has now already become far more likely for the second half of 2022.

CBPP3 trend



ECB order behaviour



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

Conclusion

A strong first quarter that eclipses previous years and the like of which we shall probably not see again in the future has come to an end. Virtually as the icing on the cake, the ECB adjusted its own order behaviour at the end of March 2022. Both higher supply and prospectively lower demand by the ECB are indicators of spread widening. To put this into perspective, we should add that supply has also been high outside the Eurosystem. On the other hand, we should not yet equate the ECB's reduced primary market order with an end to the defining influence of its monetary policy on the covered bond market.

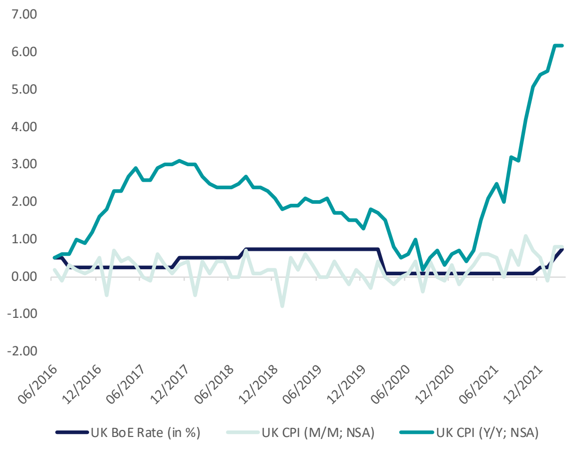
Covered Bonds
United Kingdom: spotlight on the EUR benchmark segment

Author: Dr Frederik Kunze

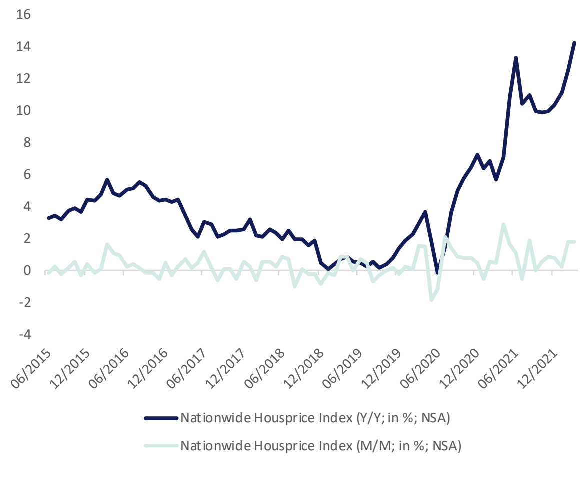
A look at the UK covered bond market

As part of this focus article, we provide a brief update on the UK covered bond market, focusing on the EUR benchmark segment. After five months of inaction, this sub-market came back to life last week, so to speak. Issuance business in the UK also reflects a recent observable trend with regard to primary market activity. With Santander UK's EUR benchmark of EUR 1.75bn placed in the last trading week, the largest volume for more than ten years on the UK primary market for EUR benchmarks has been recorded. In our view, solid demand and robust secondary market performance indicate that the market is receptive to UK benchmarks.

UK: price trend and BoE rate



UK: property price development



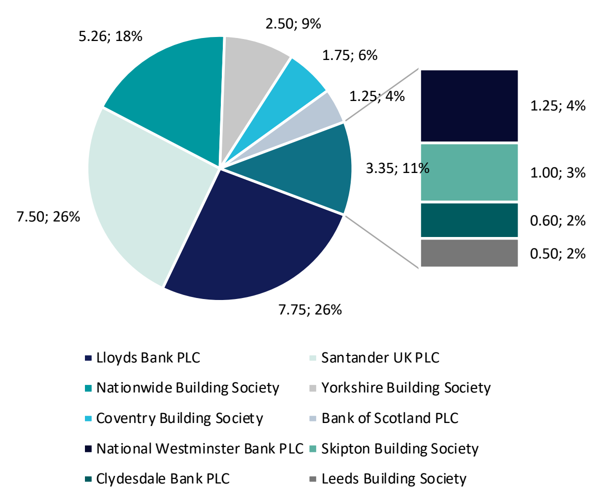
Source: Bloomberg, NORD/LB Markets Strategy & Floor Research

Macroeconomic conditions in the UK

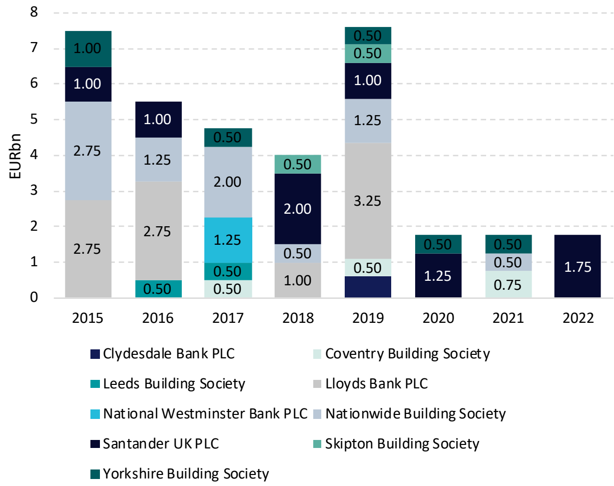
As in the other covered bond jurisdictions, the general conditions in the UK are shaped by the dramatic developments in Ukraine and the currently prevailing inflation environment. In addition, the UK economy is increasingly seeking to move on from the consequences of the pandemic and the fiscal and monetary policy support measures directly associated with it, but is also facing downside risks from new infection rates (for example, in China) and from long-term disruptions to supply chains. The real estate sector in the UK continues to be robust, with mortgage rates rising, not least as a result of the Bank of England's recent interest rate hikes, which should have a somewhat dampening effect on the real estate market. The state of the labour market remains robust and is likely to be accompanied by wage increases. Funding via covered bonds will presumably become more important to banks in the future, as indicated by GBP bond issuances in the current year.

EUR benchmark segment UK: outstanding volume amounts to EUR 29.36bn
At present, the UK EUR benchmark segment consists of eleven covered bond issuers. With 36 bonds outstanding, the total volume amounts to EUR 29.36bn. The largest volumes are accounted for by Lloyds Bank (EUR 7.75bn; 7 bonds), Santander UK (EUR 7.50bn; 7 bonds) and Nationwide Building Society (EUR 5.26bn; 8 bonds). So far this year, only Santander UK has been active on the market.

EUR benchmarks UK (outstanding, EUR bn)



EUR benchmarks UK (issuances, EUR bn)



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

Publicly placed UK covered bonds in currencies other than euro
While only one UK issuer has been active on the market so far this year in the EUR benchmark segment, four issuers have chosen the domestic currency GBP for their primary market appearances. In fact, from the point of view of banks, GBP bonds make sense for the purchase of real estate funding on the domestic market. Having said that, the covered bond market certainly continues to be a EUR market at its core. Hence, it is not surprising that in addition to Yorkshire BS (GBP 500m), Clydesdale Bank (GBP 600m) and Skipton BS (GBP 500m), Santander UK was active in the GBP market (GBP 1.5bn) but also came back impressively to the EUR-Segment recently.

Overview: UK EUR benchmark issuers *(all data retrieved on: 5 April 2022).*

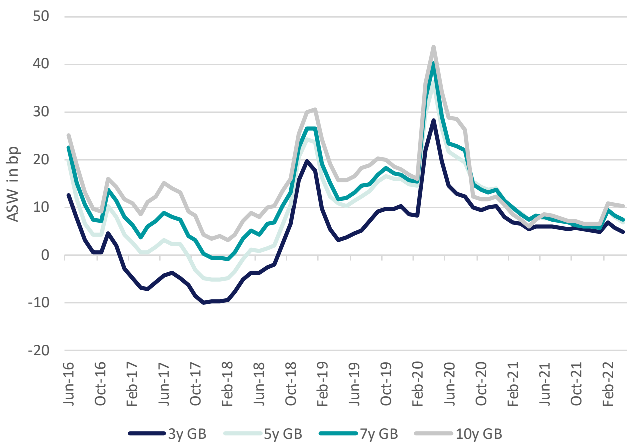
Emittent (*Link*)	Cover pool volume (in mEUR)	Total amount outstanding (in mEUR)	OC	Programme size	Maturity type (BMK)	CB-Rating (Fitch / Moody's/ S&P)	Main region	Owner occupied
Bank of Scotland	2,983	1,197	149.2%	EUR 60bn	Soft Bullet	AAA / Aaa / AAA	London 18.7%	99.5%
Barclays Bank	11,980	4,739	52.8%	EUR 35bn	Soft Bullet	AAA / Aaa / AAA	South East 21.6%	100.0%
Clydesdale	9,931	2,873	245.7%	EUR 7bn	Soft Bullet	AAA / Aaa / -	South East 20.4%	87.41%
Coventry BS	9,294	5,820	59.7%	EUR 7bn	Soft Bullet	AAA / Aaa / -	London 16.8%	100.0%
Leeds BS	2,803	1,935	44.8%	EUR 7bn	Soft Bullet	AAA / Aaa / -	Yorkshire 14.0%	87.0%
Llyods Bank	39,341	25,548	54.0%	EUR 60bn	Soft Bullet	AAA / Aaa / -	South East 13.8%	96.7%
National Westminster	9,482	3,352	182.9%	EUR 25bn	Soft Bullet	AAA / Aaa / -	Greater London 20.5%	87.9%
Nationwide BS	24, 631	15,236	61.7 %	EUR 45bn	Soft Bullet	AAA / Aaa / AAA	Outer Metro 15.7%	100.0%
Santander UK	21,838	15,309	42.6%	EUR 35bn	Soft Bullet	AAA / Aaa / AAA	South East 22.2%	100.0%
Skipton BS	4,522	2,195	106.0%	EUR 7.5bn	Soft Bullet	AAA / Aaa / -	Scotland 14.53%	87.3%
Yorkshire BS	7,650	4,594	66.5%	EUR 7.5bn	Soft Bullet	AAA / Aaa / -	Yorkshire 50.55%	100.0%

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

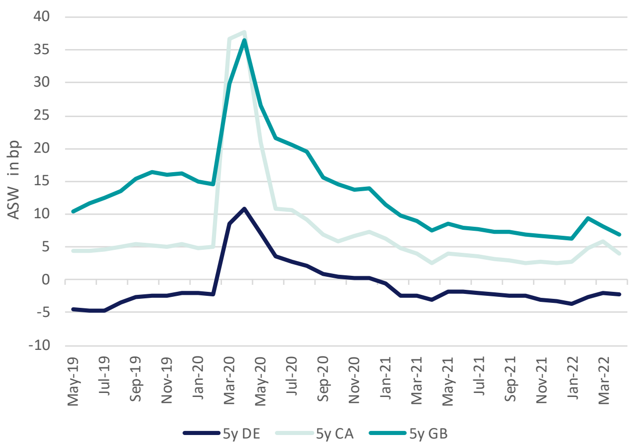
Outlook: covered bond supply from the UK in 2022 and spread implications

The UK EUR benchmark segment was one of the sub-markets characterised by a pronounced negative net supply in 2021. The EUR 1.75bn placed for the full year 2021 was offset by maturities falling due with a volume of EUR 13.1bn. For 2022, we again expect a shrinking benchmark segment in the UK. For 2022 as a whole, maturities due total EUR 8.3bn, while we expect new bond issuances in the order of EUR 4bn. On the spread side, we also expect UK covered bonds to widen slightly until mid-2022. With regard to the expected differentiation of covered bond spreads for EUR benchmarks, which should run alongside the gradual withdrawal of the ECB, we believe UK covered bonds will be at comparable levels to Canadian securities and significantly wider than core bonds, from Germany, for example.

Covered bonds: Spreads UK (generic)



Covered bonds: ASW UK vs. CA vs. DE (5y, generic)



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

Conclusion

The UK covered bond market has still been rather dormant in 2022 so far. This applies to the EUR benchmark segment, in particular. Nevertheless, we regard both the fundamental data situation and also the monetary policy turnaround heralded in the UK as favourable factors for EUR benchmark placements from the UK. In fact, the brisk issuance activity from Canada may have impressively demonstrated to UK issuers the extent of demand for bonds that do not benefit from the best possible regulatory preferences.

NORD/LB

SSA/Public Issuers
Issuer Guide SSA 2022: the Nordic agency market

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

Banks for regional authorities dominate Nordic agency market

Once again, as part of our weekly publication we shall be taking a look at a sub-segment and chapter of our Issuer Guide Supranationals & Agencies, which we are planning to publish by the end of Q2 2022. With outstanding bonds totalling the equivalent of around EUR 208.6bn, divided across 1,769 bonds issued by the six agencies covered in this article, the Nordic agency market is a medium-sized market within Europe. The players within this market are very similar in many respects. Institutions whose mission is to finance local authorities play a particularly key role. The Norwegian Kommunalbanken (KBN), the Swedish Kommuninvest i Sverige, the Danish KommuneKredit and the Finnish Municipality Finance (MuniFin) account for a large portion of the bonds from Nordic agencies that are currently in circulation. Given that they lend to municipalities, municipal associations, regions or public sector companies, there is a constant funding requirement, which is largely covered through the capital markets. The largest Nordic agency as measured by total assets is Sweden's Kommuninvest i Sverige. The second-largest institution is the Norwegian bank KBN. Unlike the other agencies from Nordic countries included in our Issuer Guide, SEK's mandate is to manage Sweden's export financing scheme. In this case, too, specialised export lending leads to a funding requirement that is heavily influenced by the demand for export credit and, consequently, by growth in the Swedish export industry. The Finnish institution Finnvera has a similar mandate. It became active in the EUR benchmark segment for the first time in 2014 and has since gradually developed a benchmark curve in EUR. In addition to export development, it is also involved in financing small and medium size enterprises (SMEs).

Nordic agencies – an overview

Institution	Type	Owner(s)	Guarantee	Risk weight
Kommunalbanken (KBN; Norway)	Municipal bank	100% Norway	Maintenance obligation	20%
Svensk Exportkredit (SEK; Sweden)	Export financier	100% Sweden	-	20%
Kommuninvest i Sverige (Sweden)	Municipal bank	100% Kommuninvest Cooperative Society	Joint and several liability	0%
Municipality Finance (MuniFin; Finland)	Municipal bank	53% municipalities, municipal associations and companies in municipality ownership; 31% municipal pension institutions; 16% Finland	Joint and several liability	0%
KommuneKredit (Denmark)	Municipal bank	100% Danish municipalities and regions	Joint and several liability	0%
Finnvera (Finland)	Export financier	100% Finland	Explicit guarantee	0%

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

Varying risk weighting under CRR/Basel III

Four Nordic agencies have explicit guarantees, enabling a risk weighting of 0% based on the standard approach of CRR/Basel III. Although KBN exhibits an implicit maintenance obligation through a Letter of Support, in this case only a risk weighting of 20% can be assigned. Since SEK does not have any kind of guarantee or liability mechanism, a risk weighting of just 20% is possible on the basis of the standard approach.

Joint and several liability

Local authorities bear liability for three of the four municipal banks (Kommuninvest, KommuneKredit, MuniFin). This means that each individual local authority guarantees the entirety of the relevant municipal bank's liabilities. If a liability event occurs, the creditors may demand performance or satisfaction of the claim from the entirety of the guarantors. The guarantors are obliged to service the overall claim even if one of the guarantors is unable to make the necessary payments. The liability quotas for each of the local authorities are specified through internal regulations. In relation to external entities, however, creditors are always entitled to full satisfaction of their claims.

Maintenance obligation

A maintenance obligation exists for the Norwegian KBN. This requires the Norwegian state to provide KBN with the funding necessary for its functioning, as defined in a Letter of Support. The state therefore has a duty to ensure that KBN's finances are managed in such a way that proper business operations are maintained and KBN's liabilities are serviced. The maintenance obligation thus requires the guarantor to ensure solvency. It corresponds de facto to an implied (liquidity) guarantee.

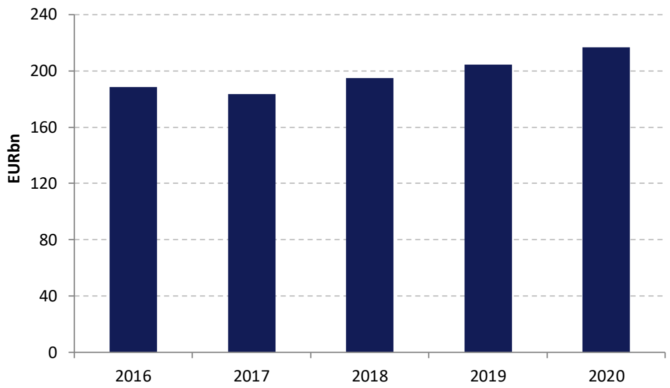
Nordic regional local authorities: Extremely creditworthy

Most credit risks of Nordic agencies are accounted for by regional and local authorities (sub-sovereigns) in the respective home countries. The degree of decentralisation in handling public expenditure is very high in Nordic states. Sub-sovereigns such as municipalities, municipal associations, administrative districts or regions are responsible for planning most public-sector expenditure. The need for funding is accordingly high. For this reason, Nordic sub-sovereigns obtain a significant proportion of their revenue by collecting income taxes.

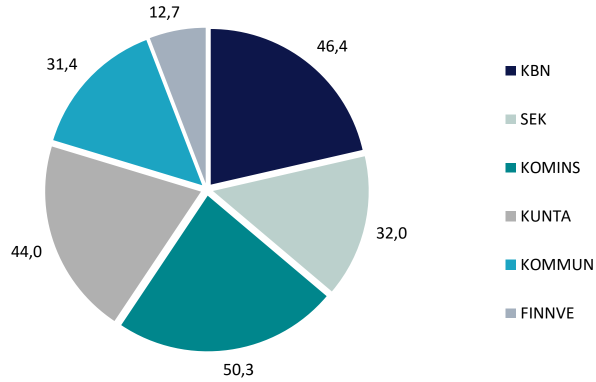
Strong state links and excluded from insolvency law

Links to central government are nevertheless also very high. Municipal banks were also established in the four countries to finance the general budget expenditure or projects. The mission of these banks is to finance regional and local authorities and companies with which they are associated. In Denmark, Finland, Norway and Sweden, municipal banks are the biggest financiers of the public sector. With the exception of the Norwegian KBN, the liabilities of the municipal banks are guaranteed by municipalities, municipal associations, regions or administrative districts. Regional and local authorities are exempted from insolvency laws in all four Nordic states, while they are also authorised to collect income taxes.

Balance sheet totals of Nordic agencies



Comparison of total assets (EURbn)

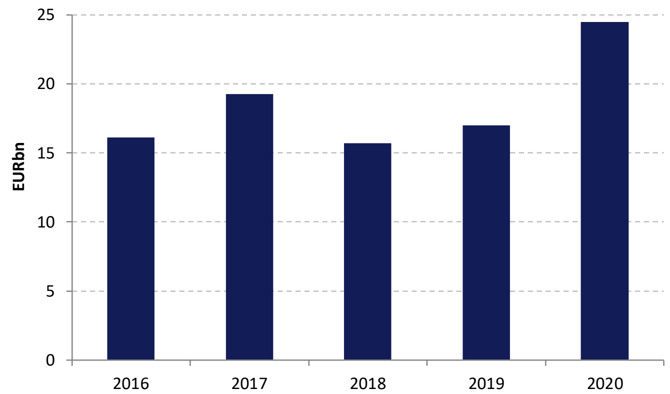


NB: some accounts in foreign currencies. Converted at average exchange rates for the year.
Source: Issuers, NORD/LB Markets Strategy & Floor Research

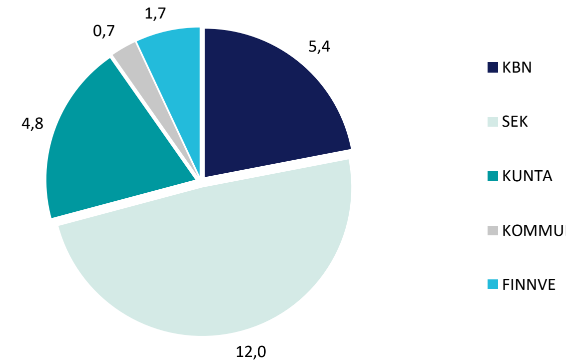
Further growth in balance sheet totals and volume of new commitments

Steady growth in the aggregated balance sheet totals of Nordic agencies has been observed since 2017. Following the most recent decline in the aggregated value back in 2017, total assets have since increased substantially. After being converted into EUR, total assets rose in 2020 by EUR 12.2bn to EUR 216.8bn, with Kommuninvest i Sverige and MuniFin the main drivers of this growth in 2020. Converted into EUR, Kommuninvest registered the highest balance sheet growth in absolute terms of EUR +5.8bn (+12.9% Y/Y), closely followed by the total assets of MuniFin, which rose by EUR +5.1bn (+13.1% Y/Y). The total assets of the Swedish export financier SEK saw an increase of EUR 2.0bn (+6.7% Y/Y), while the balance sheet total of its Finnish counterpart Finnvera stagnated (EUR +0.0bn). In the previous reporting year, total assets at the Danish municipal financier KommuneKredit decreased by EUR -0.4bn (-1.1% Y/Y). KBN registered a second consecutive decline in its balance sheet total (EUR -0.3bn; -0.7% Y/Y). Measured by its total assets converted into euro of EUR 46.4bn, KBN is therefore no longer the largest Nordic agency, with Kommuninvest now enjoying this status instead. The aggregated volume of new commitments in 2020 rose sharply year on year (EUR +7.5bn). We currently do not have access to any data on the new commitments of Kommuninvest.

New commitments of Nordic agencies*

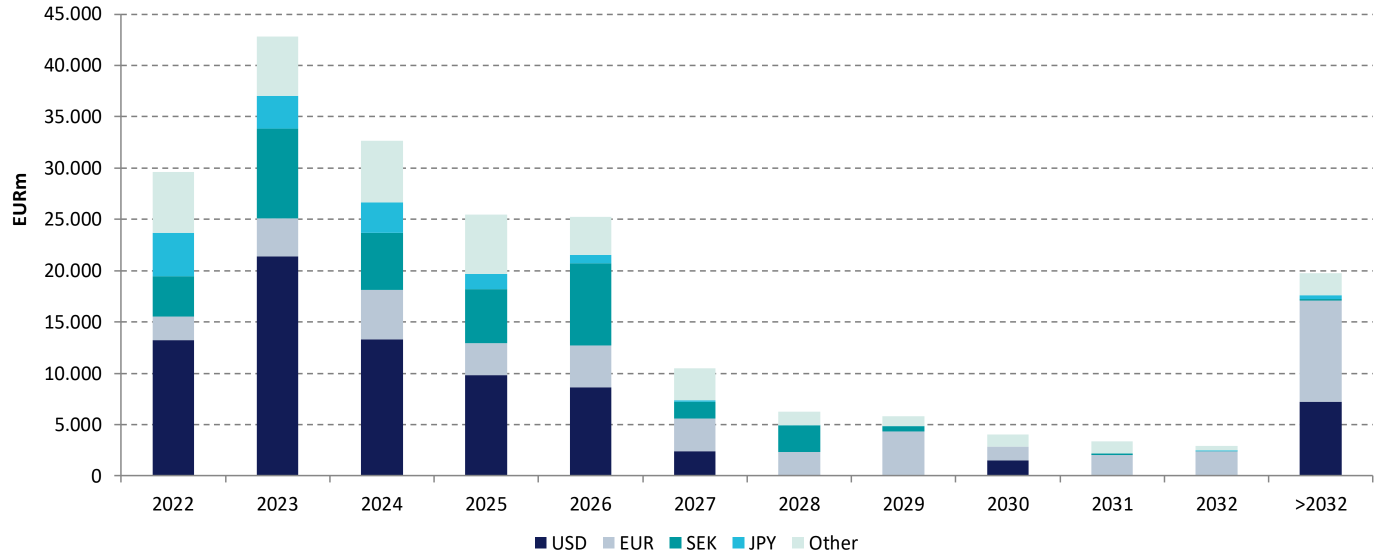


Comparison of new commitments 2020 (EUR bn)

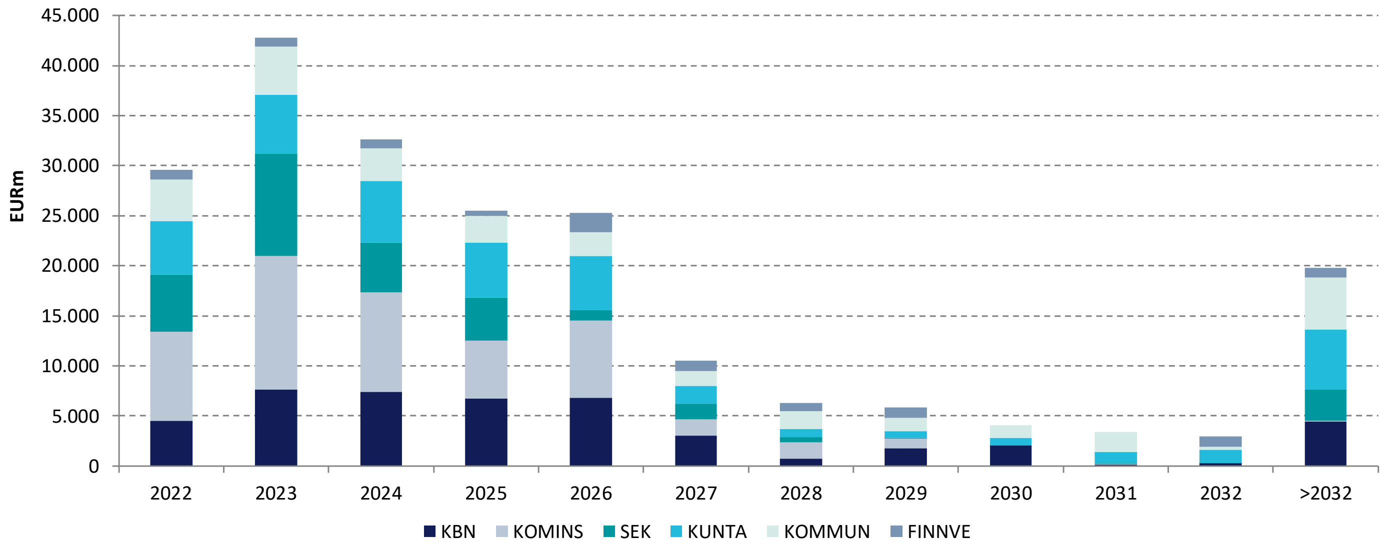


*Excluding Kommuninvest. NB: some accounts in foreign currencies. Converted at average exchange rates for the year.
Source: Issuers, NORD/LB Markets Strategy & Floor Research

Nordic agencies: outstanding bonds by currency



Nordic agencies: outstanding bonds by issuer

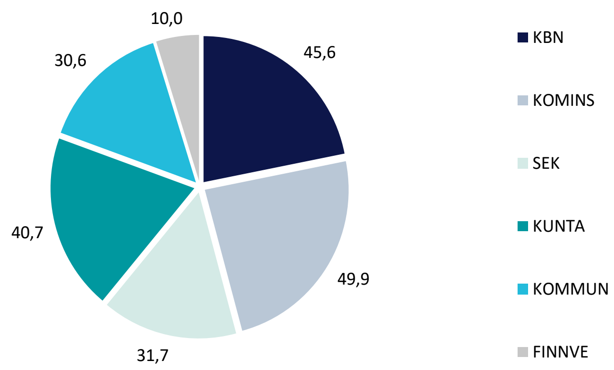


NB: Foreign currencies are converted into EUR at rates as at 04 April 2022.
Source: Bloomberg, NORD/LB Markets Strategy & Floor Research

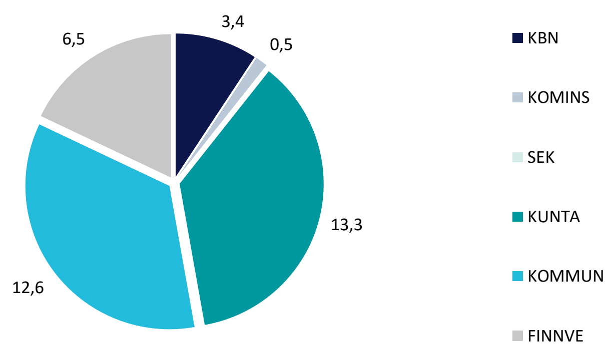
Very broad supply of FX bonds

The outstanding bonds issued by Nordic agencies are largely denominated in foreign currencies, with a focus in this regard on the USD. A total of 21 different foreign currencies are used for funding purposes by the six agencies covered in this article. The euro is of comparatively minor importance. Overall, 79.1% of the outstanding volume is not denominated in the single currency. Previously, values way in excess of 80% had been observed.

Outstanding bond volume (EURbn)



Outstanding EUR benchmarks (EURbn)



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

Nordic agencies – an overview

Name	Ticker	Ratings (Fitch/Moody's/S&P)	Outstanding volume (EURbn equivalent)	EUR volume (EURbn)	Funding target 2022e (EURbn equivalent)
KBN	KBN	-/Aaa/AAA	45.6	3.7	9
SEK	SEK	-/Aa1/AA+	31.7	1.3	9
Kommuninvest	KOMINS	-/Aaa/AAA	49.9	0.9	11-13
MuniFin	KUNTA	-/Aa1/AA+	40.7	17.0	9.5
KommuneKredit	KOMMUN	-/Aaa/AAA	30.6	14.1	5
Finnvera	FINNVE	AA+/Aa1/-	10.0	6.5	1
Total			**208.6**	**43.5**	**45.5**

NB: Foreign currencies are converted into EUR at rates as at 04 April 2022.
On account of the individual funding mix of the issuers, the values for "funding target" may deviate from reality.
Source: Bloomberg, issuers, NORD/LB Markets Strategy & Floor Research

Primary market activities indicate large supply of new bonds

The primary market activities of Nordic agencies have been at a high level for several years at the equivalent of more than EUR 40bn. The 2022 EUR-equivalent funding targets of the agencies covered in this article amounts to around EUR 45.5bn. Kommuninvest in particular is worth highlighting at this point; in March 2022, it issued a bond in the form of a EUR benchmark for the first time in several years.

Comment and conclusion

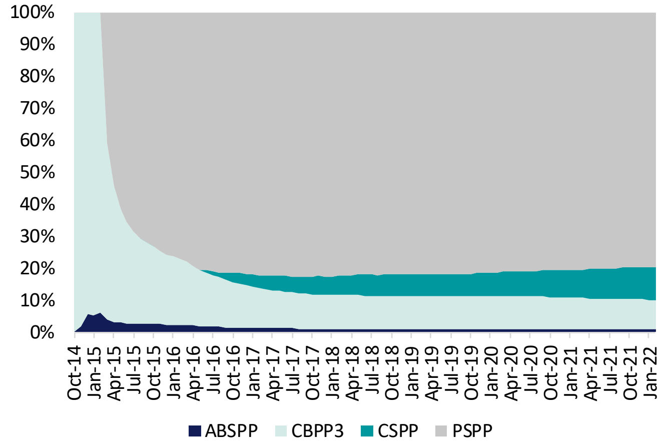
The Nordic agency market is a significant player when compared with other European markets, especially with regard to foreign currency bonds. New issues are also at a high level, producing a broad supply in a range of foreign currencies. However, the EUR supply is relatively constrained. We would expect state support in the event that any of the institutes covered here encountered financial difficulties. Theoretically speaking, the importance of the respective institutes for their owners or states is too great for them not to take action should the banks face problems. It should be noted that since no explicit guarantees are in place, KBN and SEK bonds are assigned a risk weight of 20% under CRR/Basel III.

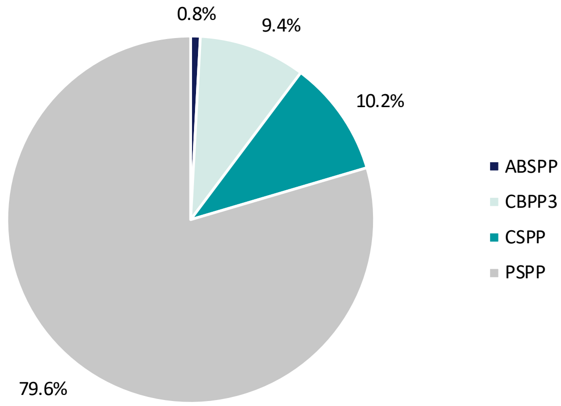
ECB tracker

Asset Purchase Programme (APP)

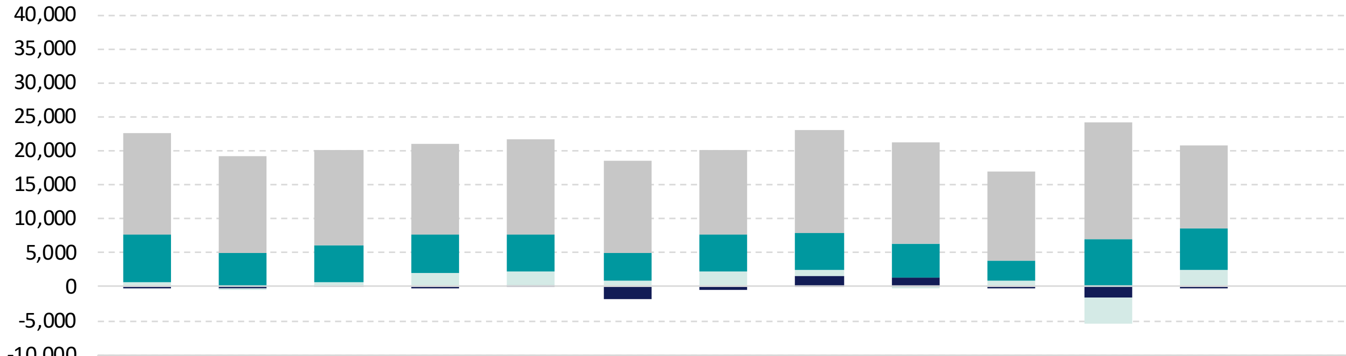
	ABSPP	CBPP3	CSPP	PSPP	APP
Jan-22	26,740	294,407	316,646	2,504,428	3,142,221
Feb-22	26,696	296,783	322,918	2,516,523	3,162,920
Δ	-45	+2,376	+6,272	+12,095	+20,698

Portfolio structure





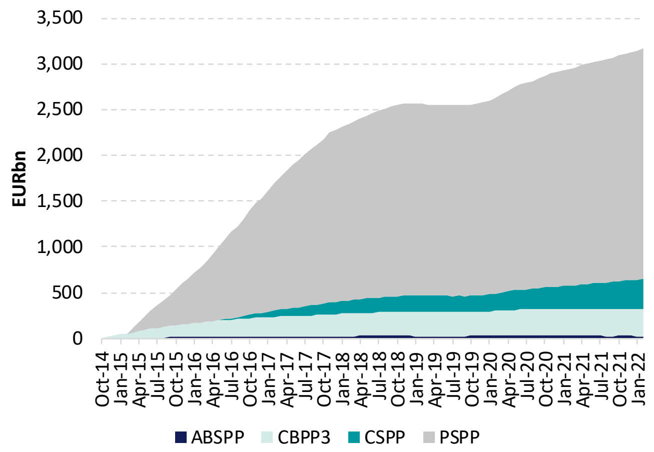
Monthly net purchases (in EURm)



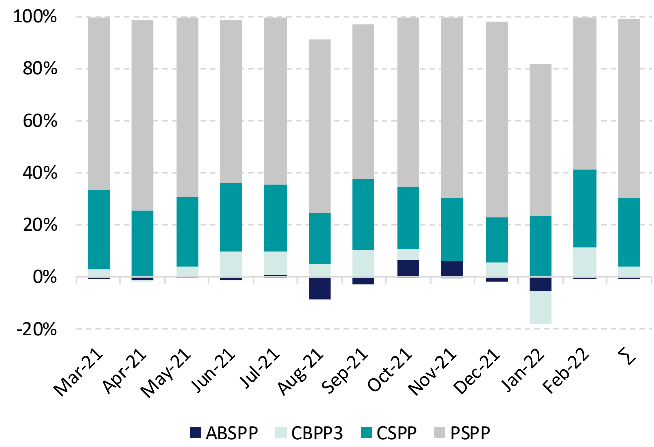
	Mar-21	Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Nov-21	Dec-21	Jan-22	Feb-22	∑
APP	22,561	18,918	20,141	20,640	21,597	16,749	19,659	23,017	21,200	16,596	18,838	20,698	240,614
PSPP	14,955	14,186	13,973	13,320	13,943	13,563	12,423	15,038	14,815	12,989	17,292	12,095	168,592
CSPP	6,929	5,015	5,394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

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

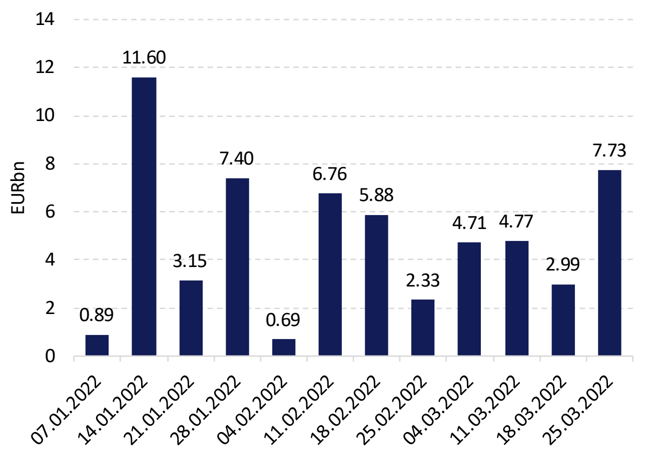
Portfolio development



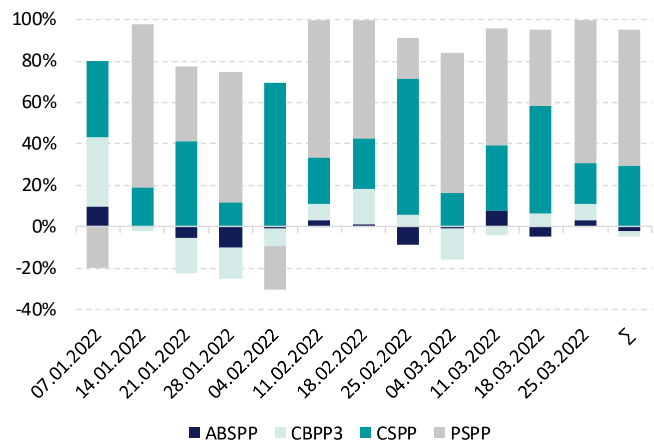
Distribution of monthly purchases



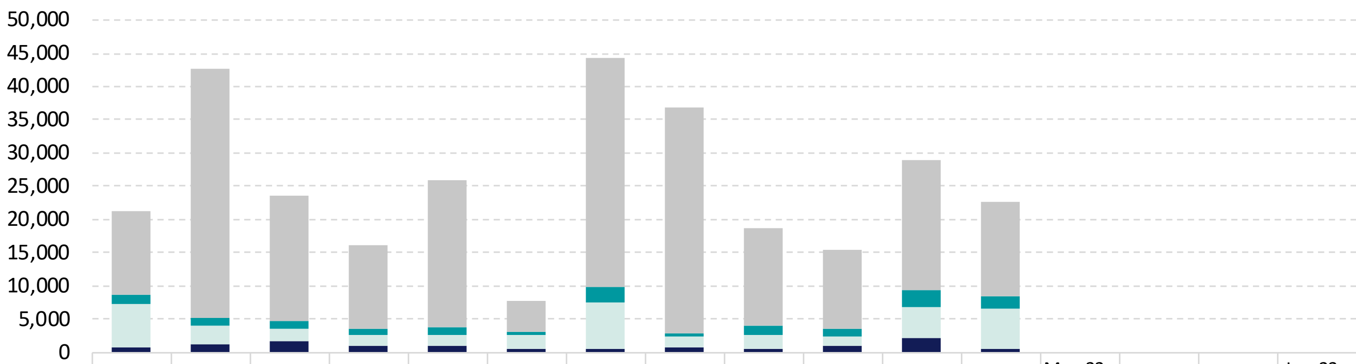
Weekly purchases



Distribution of weekly purchases



Expected monthly redemptions (in EURm)

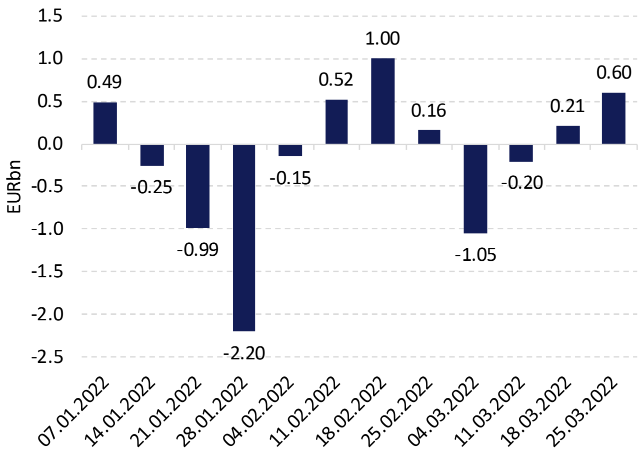


	Mar-22	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	Mar-22 - Feb-23	2021	2022	Jan-23 - Feb-23
APP	21,175	42,745	23,603	16,211	26,009	7,834	44,257	36,867	18,607	15,465	28,836	22,762	304,371	247,069	296,334	51,598
PSPP	12,603	37,532	18,999	12,638	22,238	4,841	34,354	34,003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

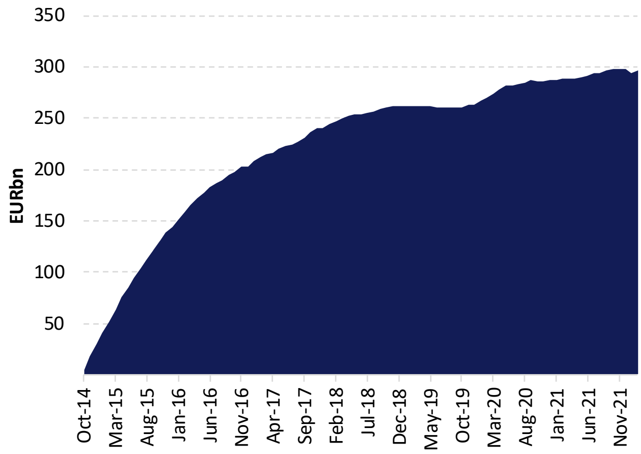
Source: ECB, Bloomberg, NORD/LB Markets Strategy & Floor Research

Covered Bond Purchase Programme 3 (CBPP3)

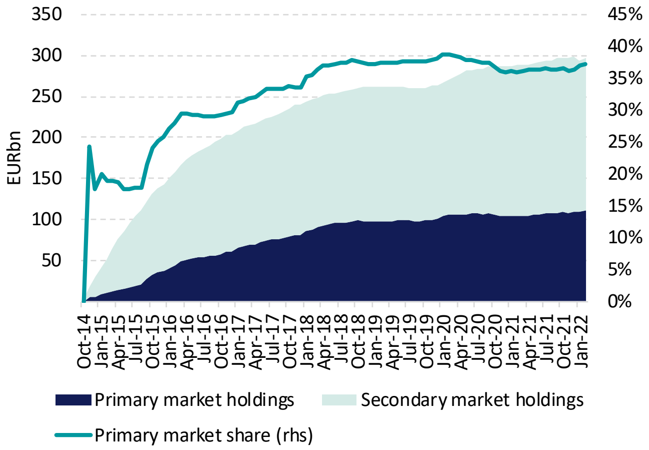
Weekly purchases



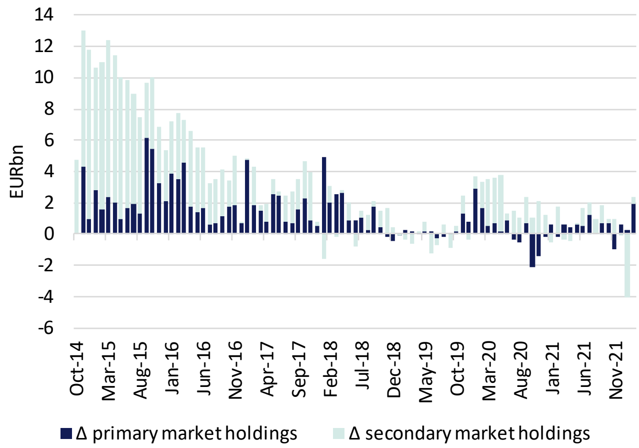
Development of CBPP3 volume



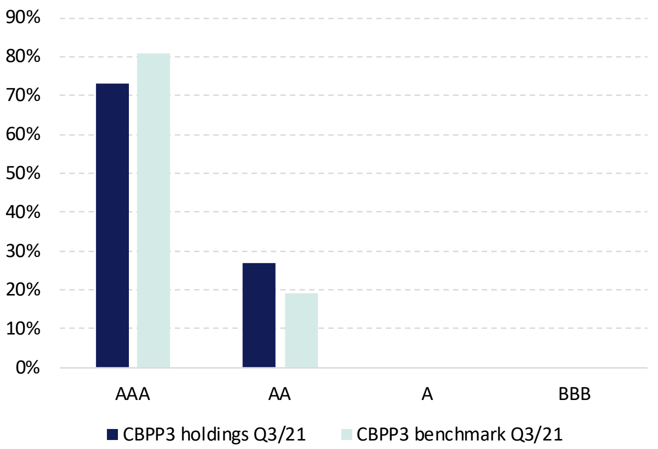
Primary and secondary market holdings



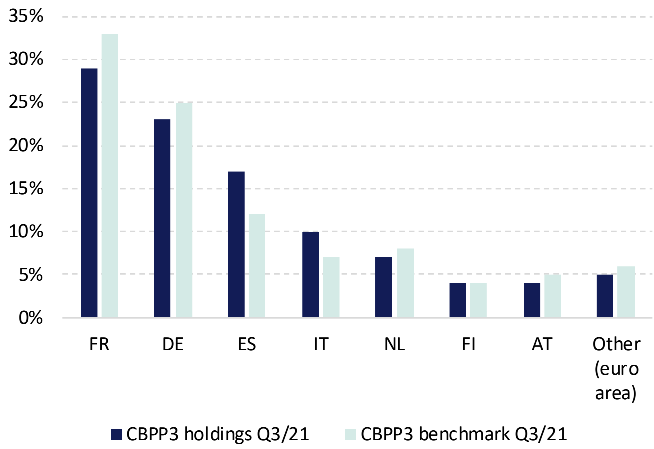
Change of primary and secondary market holdings



Distribution of CBPP3 by credit rating



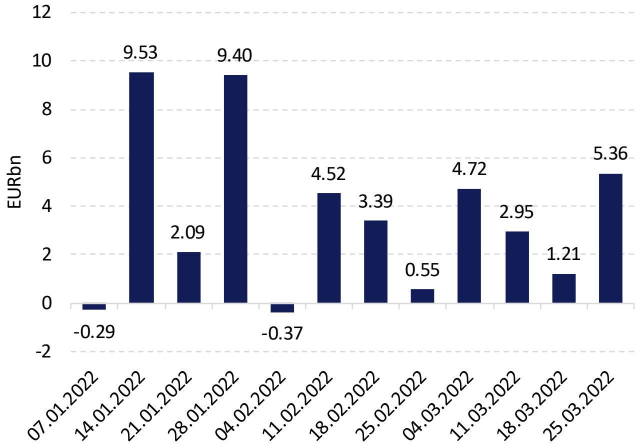
Distribution of CBPP3 by country of risk



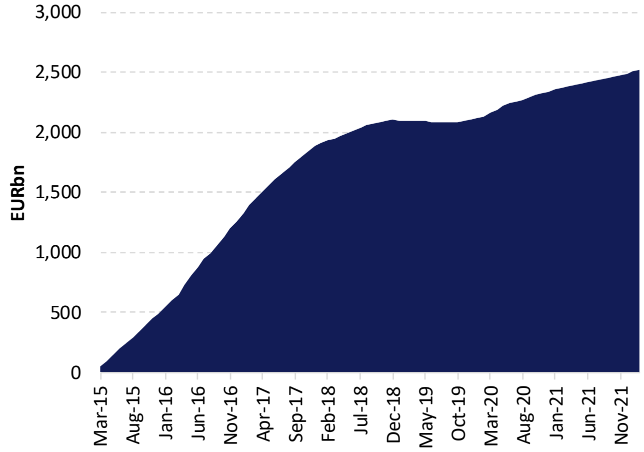
Source: ECB, Bloomberg, NORD/LB Markets Strategy & Floor Research

Public Sector Purchase Programme (PSPP)

Weekly purchases



Development of PSPP volume



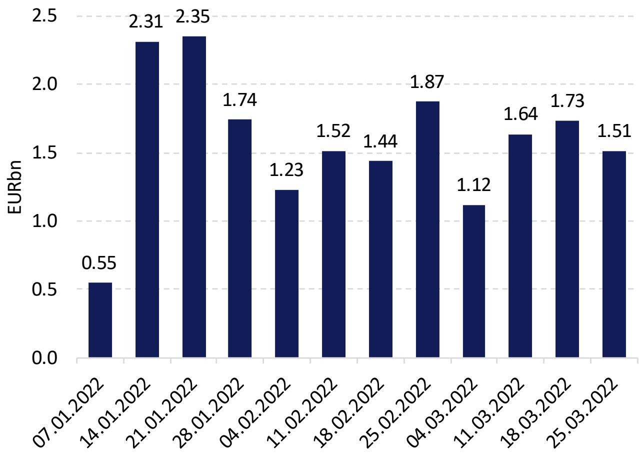
Overall distribution of PSPP buying at month-end

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

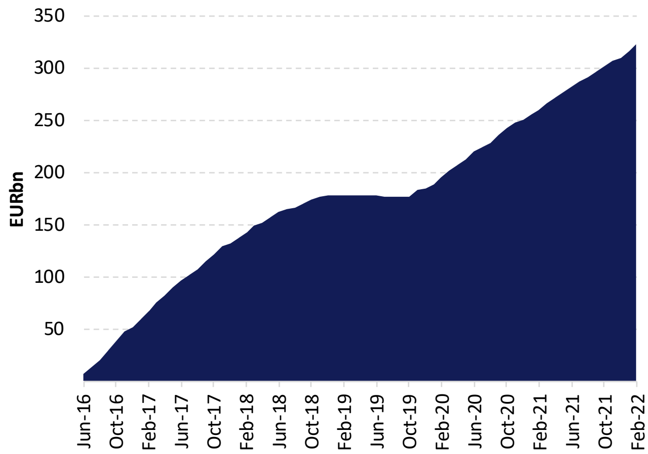
[1] Based on the ECB capital key, adjusted to include supras and the disqualification of Greece
[2] Based on the adjusted distribution key
[3] Weighted average time to maturity of the bonds eligible for purchasing under the PSPP (semi-annual data, Q1/2021)
Source: ECB, NORD/LB Markets Strategy & Floor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

Corporate Sector Purchase Programme (CSPP)

Weekly purchases

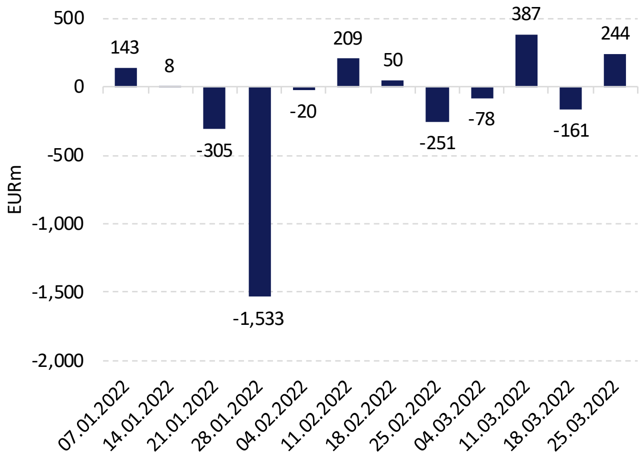


Development of CSPP volume

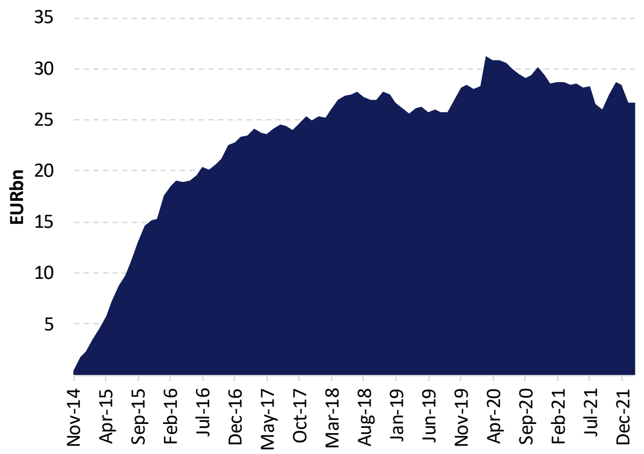


Asset-Backed Securities Purchase Programme (ABSPP)

Weekly purchases



Development of ABSPP volume



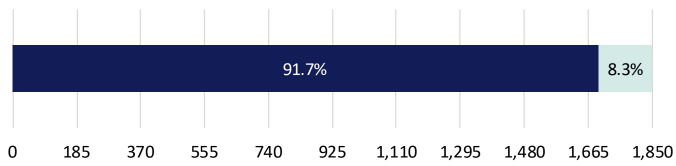
Source: ECB, Bloomberg, NORD/LB Markets Strategy & Floor Research

Pandemic Emergency Purchase Programme (PEPP)

Holdings (in EURm)

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

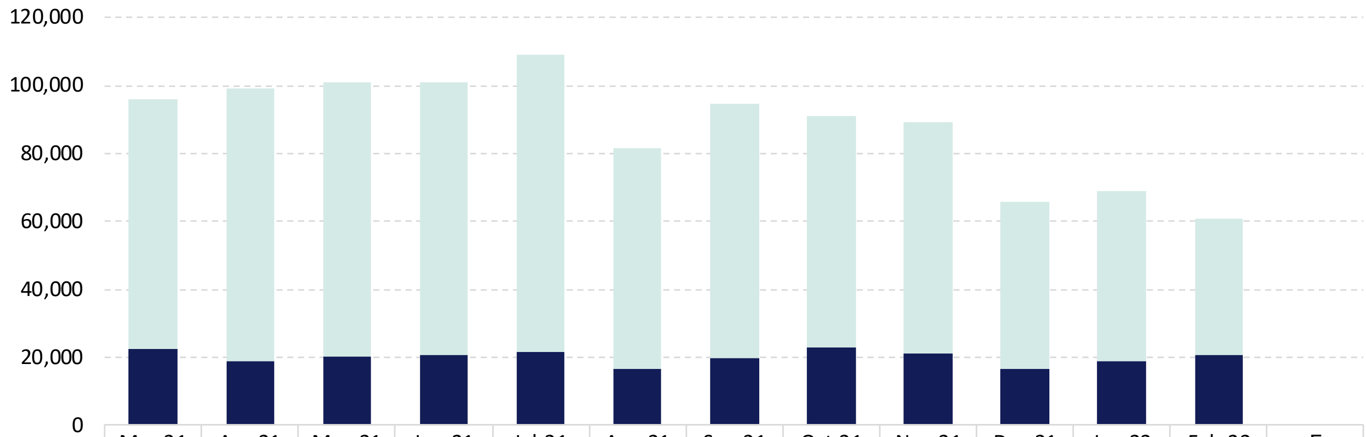
Volume already invested (in EURbn)



Estimated portfolio development

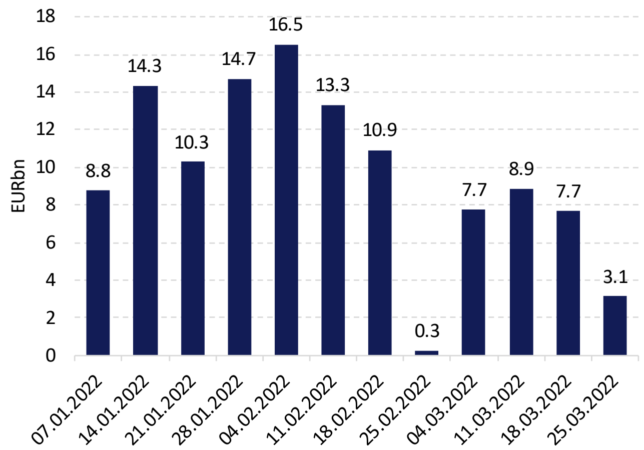
Assumed pace of purchases	Weekly net purchase volume	PEPP (theoretically) limit hit in …
Average weekly net purchase volume so far	EUR 16.3bn	9 weeks (27.05.2022)

Monthly net purchases (in EURm)

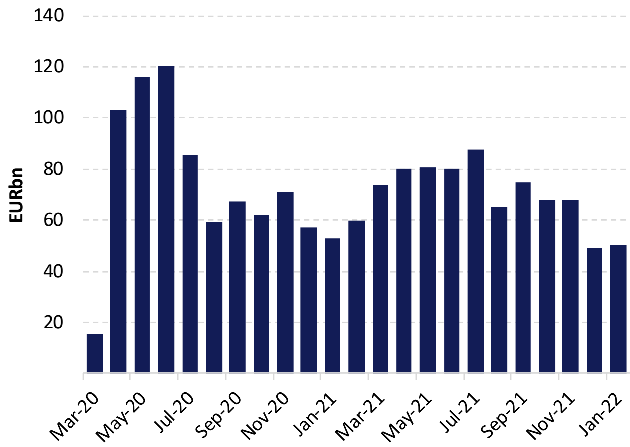


	Mar-21	Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Nov-21	Dec-21	Jan-22	Feb-22	∑
∑	96,082	99,036	100,841	100,808	109,154	81,799	94,710	90,872	89,245	65,971	68,951	60,882	1,058,35
PEPP	73,521	80,118	80,700	80,168	87,557	65,050	75,051	67,855	68,045	49,375	50,113	40,184	817,737
APP	22,561	18,918	20,141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

Weekly purchases



Development of PEPP volume

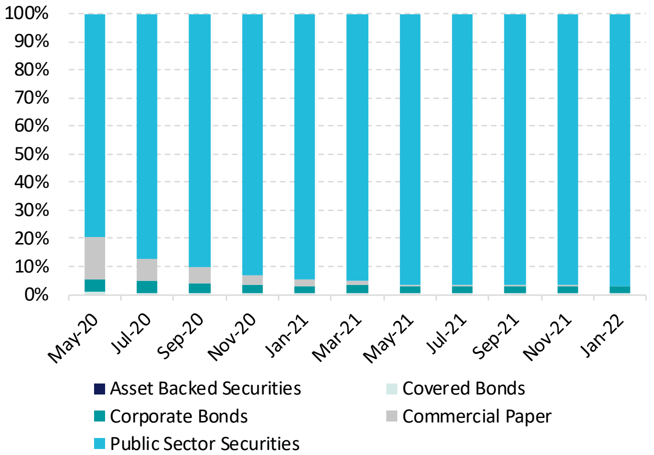


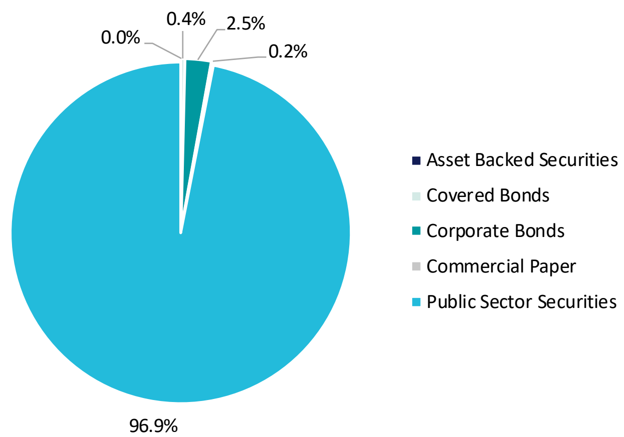
Source: ECB, Bloomberg, NORD/LB Markets Strategy & Floor Research

Holdings under the PEPP (in EURm)

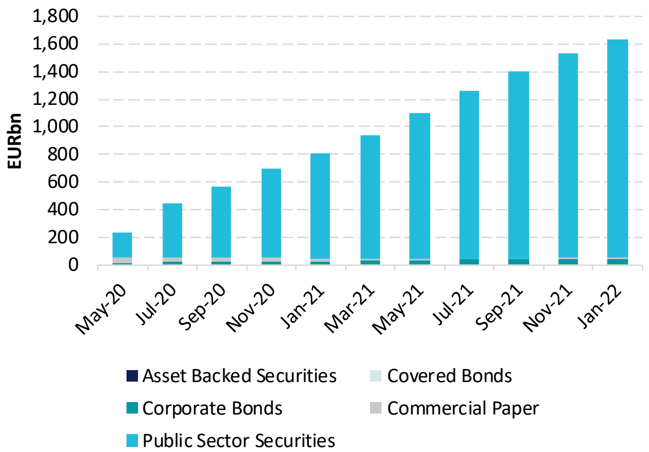
	Asset-backed Securities	Covered Bonds	Corporate Bonds	Commercial Paper	Public Sector Securities	PEPP
Nov-21	0	6,079	39,871	4,032	1,485,526	1,535,508
Jan-22	0	6,073	40,301	3,857	1,580,547	1,630,779
Δ	0	0	+467	-172	+99,193	+99,488

Portfolio structure

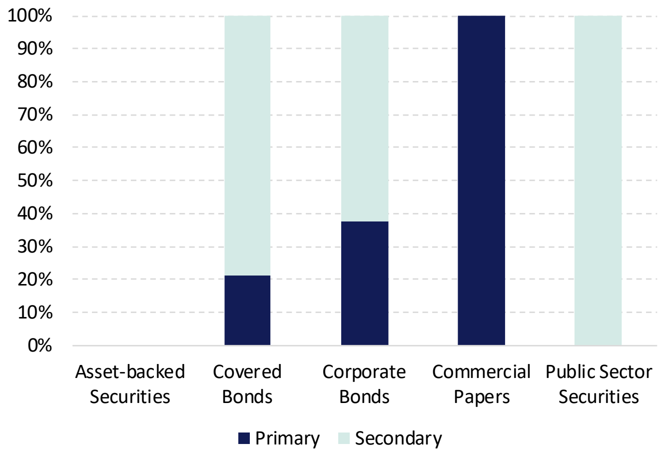




Portfolio development



Share of primary and secondary market holdings



Breakdown of private sector securities under the PEPP

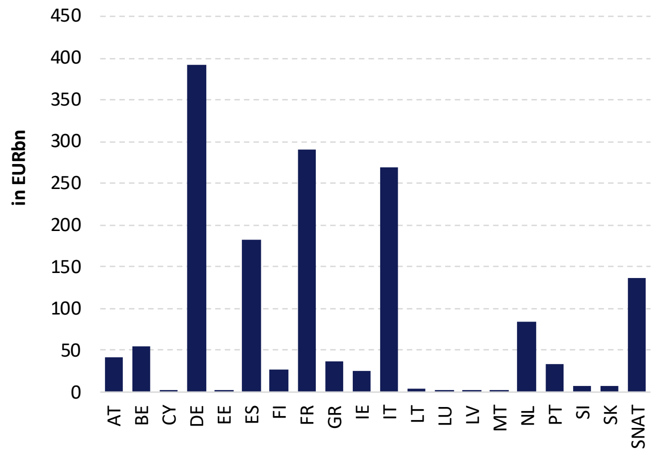
Jan-22	Asset-backed securities		Covered bonds		Corporate bonds		Commercial paper	
	Primary	**Secondary**	**Primary**	**Secondary**	**Primary**	**Secondary**	**Primary**	**Secondary**
Holdings in EURm	0	0	1,298	4,775	15,101	25,200	3,857	0
Share	0.0%	0.0%	21.4%	78.6%	37.5%	62.5%	100.0%	0.0%

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

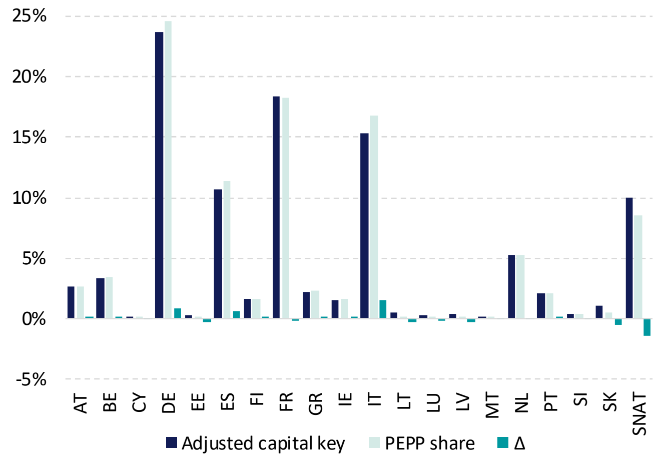
Breakdown of public sector securities under the PEPP

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

Distribution of public sector assets by jurisdiction



Deviations from the adjusted distribution key



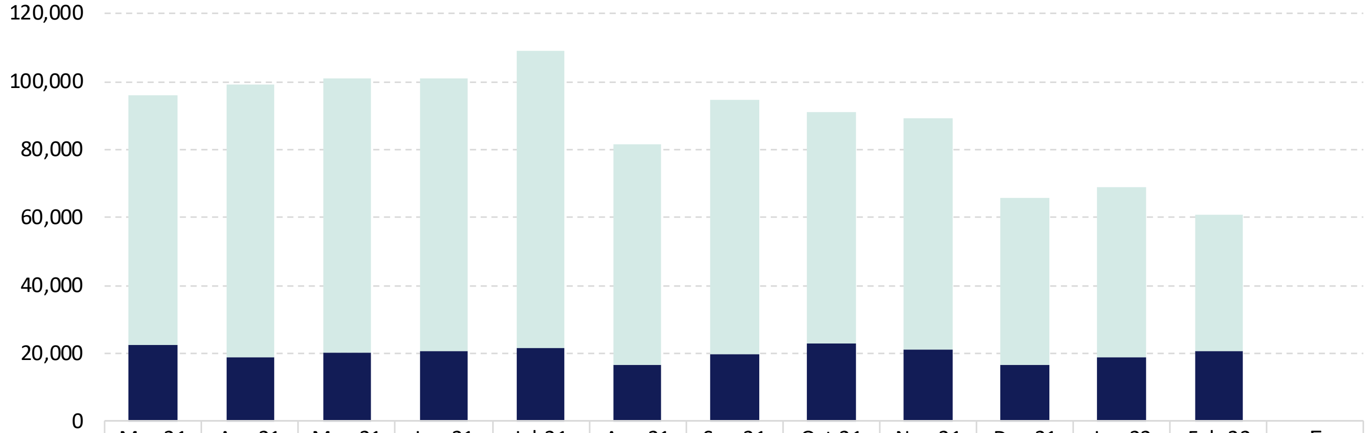
[1] Based on the ECB capital key, adjusted to include supras [2] Based on the adjusted distribution key
[3] Weighted average time to maturity of the bonds eligible for purchasing under the PEPP
Source: ECB, Bloomberg, NORD/LB Markets Strategy & Floor Research

Aggregated purchase activity under APP and PEPP

Holdings (in EURm)

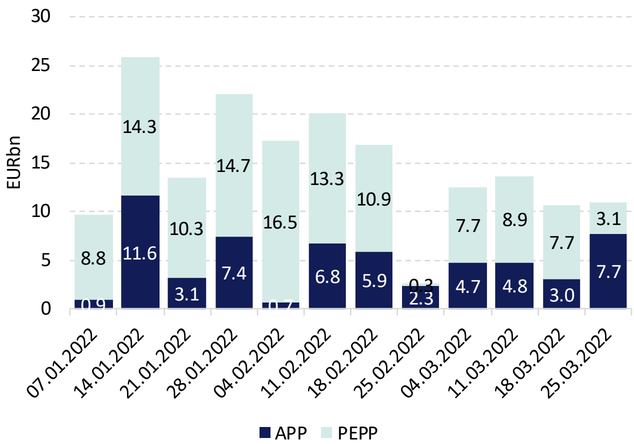
	APP	PEPP	APP & PEPP
Jan-22	3,142,221	1,647,678	4,789,899
Feb-22	3,162,920	1,687,862	4,850,782
Δ	+20,698	+40,184	+60,882

Monthly net purchases (in EURm)

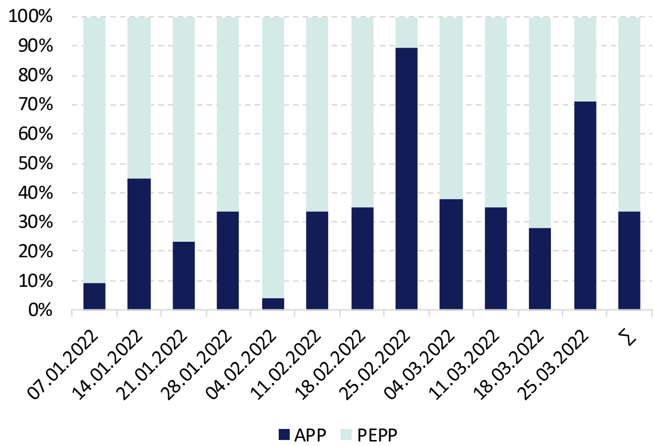


	Mar-21	Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Nov-21	Dec-21	Jan-22	Feb-22	∑
∑	96,082	99,036	100,841	100,808	109,154	81,799	94,710	90,872	89,245	65,971	68,951	60,882	1,058,35
PEPP	73,521	80,118	80,700	80,168	87,557	65,050	75,051	67,855	68,045	49,375	50,113	40,184	817,737
APP	22,561	18,918	20,141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

Weekly purchases



Distribution of weekly purchases

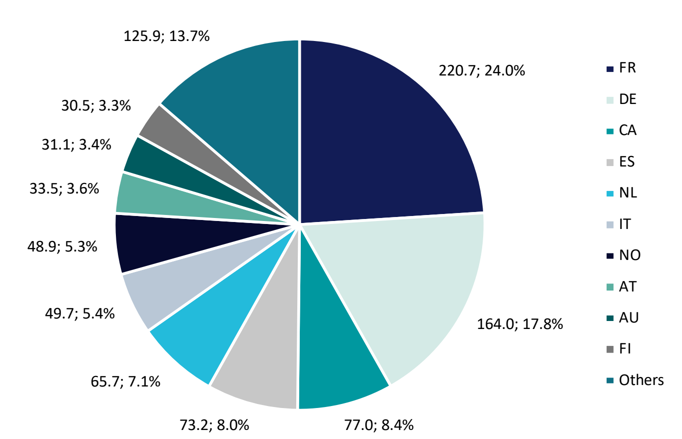


Source: ECB, Bloomberg, NORD/LB Markets Strategy & Floor Research

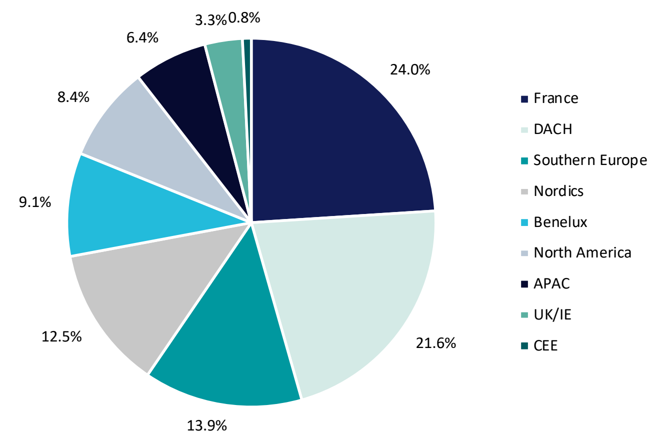
NORD/LB

Charts & Figures
Covered Bonds

EUR benchmark volume by country (in EURbn)



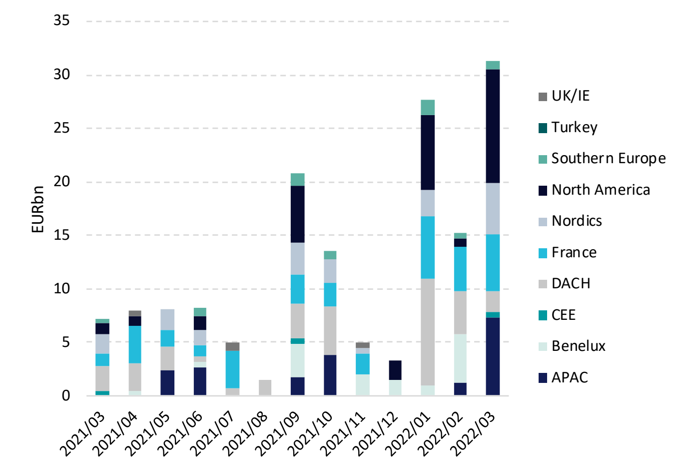
EUR benchmark volume by region (in EURbn)



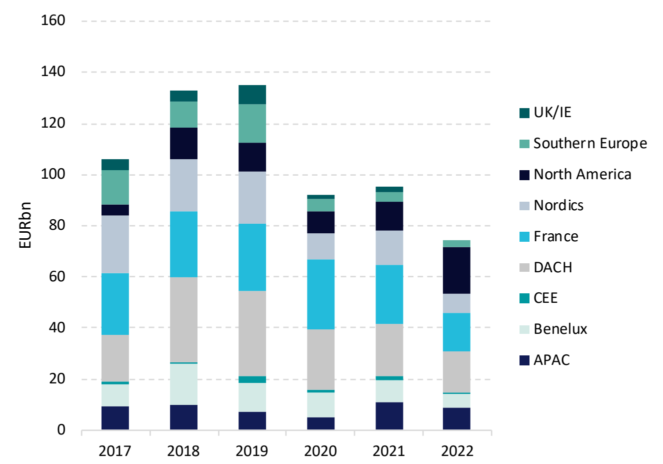
Top-10 jurisdictions

Rank	Country	Amount outst. (EURbn)	No. of BMKs	There of ESG BMKs	Avg. issue size (EURbn)	Avg. initial maturity (in years)	Avg. mod. Duration (in years)	Avg. coupon (in %)
1	FR	220.7	212	11	0.94	10.0	5.6	0.79
2	DE	164.0	238	17	0.63	8.4	4.6	0.41
3	CA	77.0	60	0	1.24	5.9	3.3	0.25
4	ES	73.2	59	5	1.13	11.8	3.8	1.78
5	NL	65.7	67	0	0.93	11.6	7.6	0.71
6	IT	49.7	59	2	0.81	9.2	4.3	1.24
7	NO	48.9	58	9	0.84	7.4	4.0	0.35
8	AT	33.5	62	2	0.54	9.9	6.3	0.53
9	AU	31.1	31	0	1.00	8.4	4.0	0.92
10	FI	30.5	33	2	0.92	7.6	3.9	0.40

EUR benchmark issue volume by month

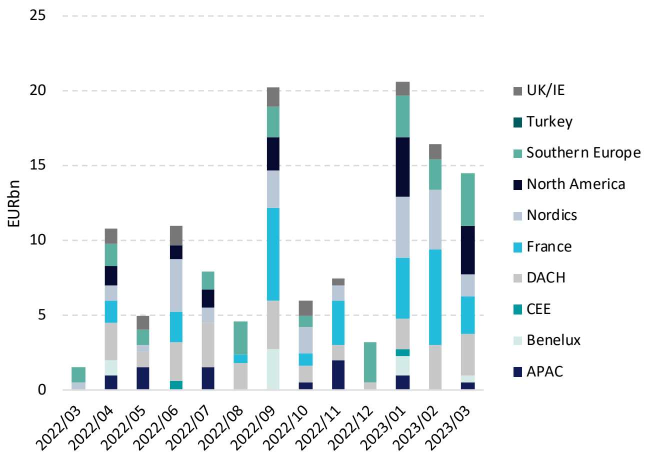


EUR benchmark issue volume by year

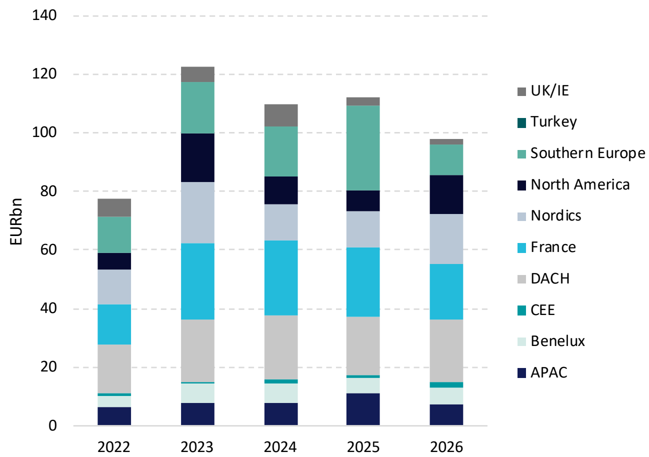


Source: Market data, Bloomberg, NORD/LB Markets Strategy & Floor Research

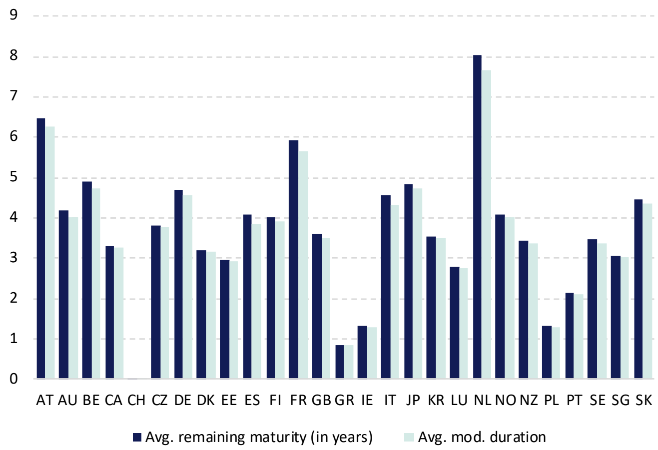
EUR benchmark maturities by month



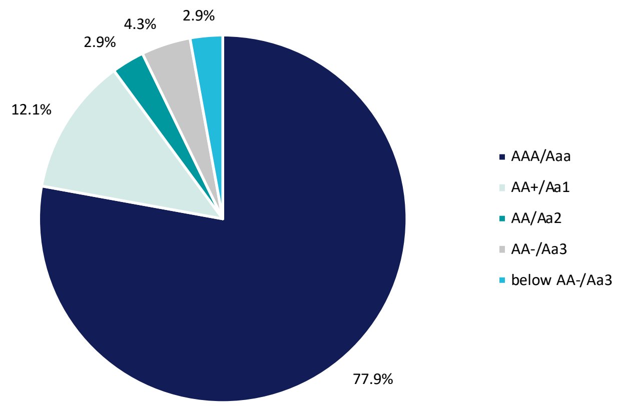
EUR benchmark maturities by year



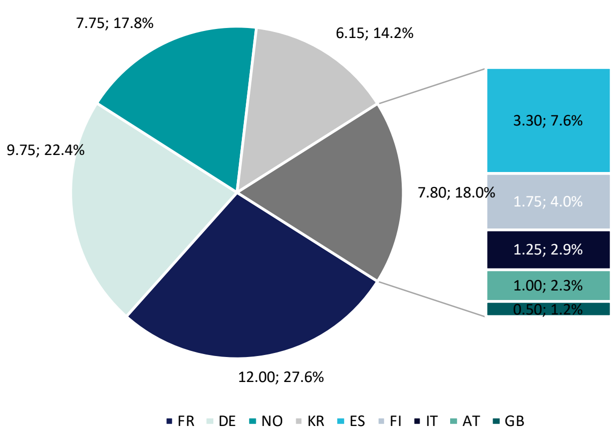
Modified duration and time to maturity by country



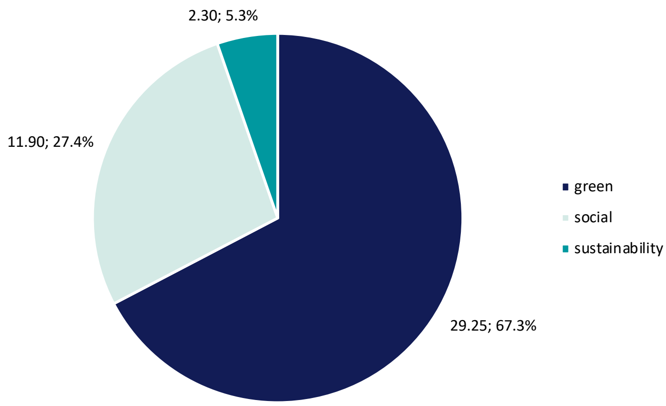
Rating distribution (volume weighted)



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



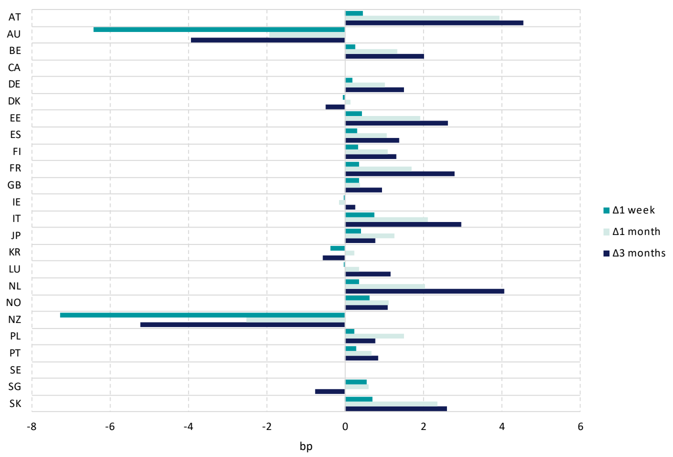
EUR benchmark volume (ESG) by type (in EURbn)



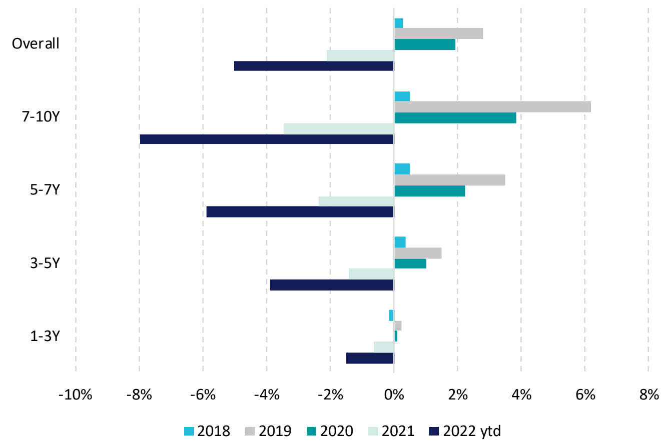
Source: Market data, Bloomberg, NORD/LB Markets Strategy & Floor Research

NORD/LB

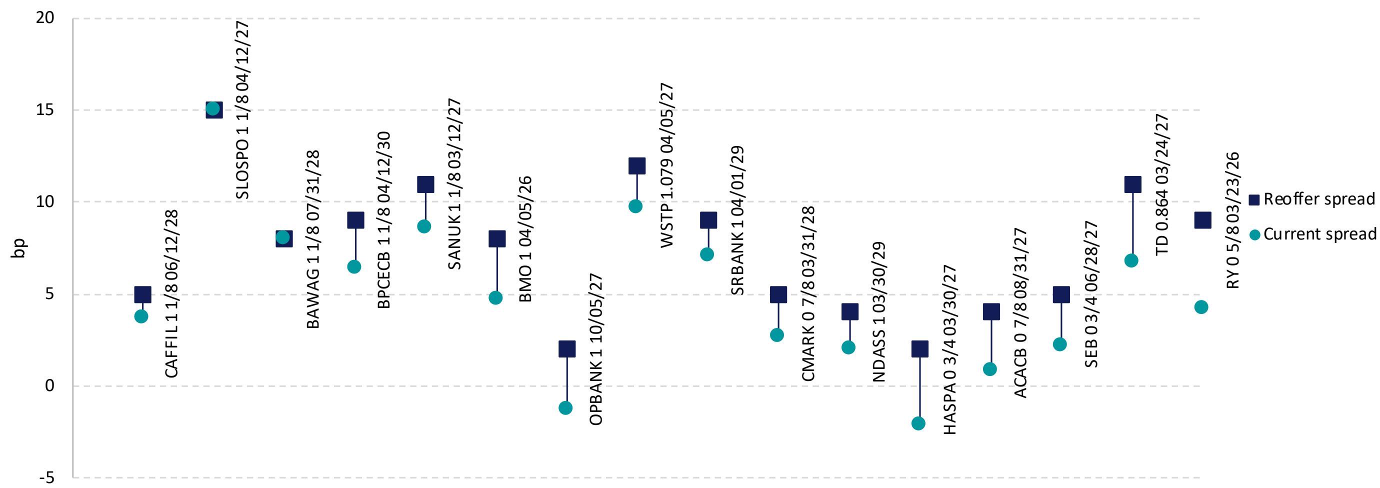
Spread development by country



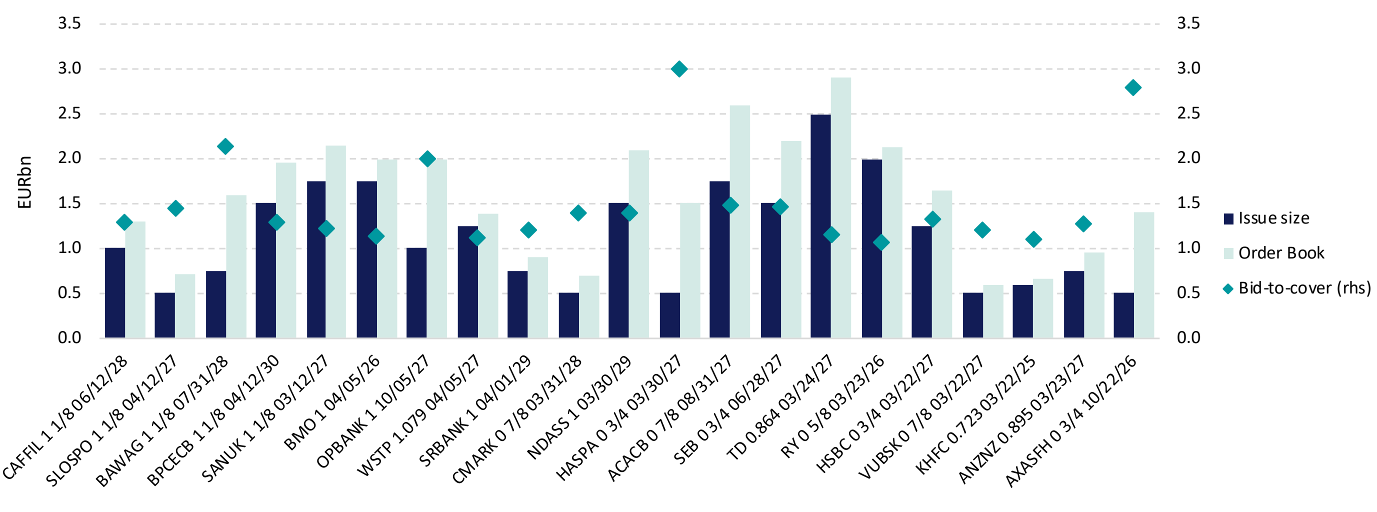
Covered bond performance (Total return)



Spread development (last 15 issues)



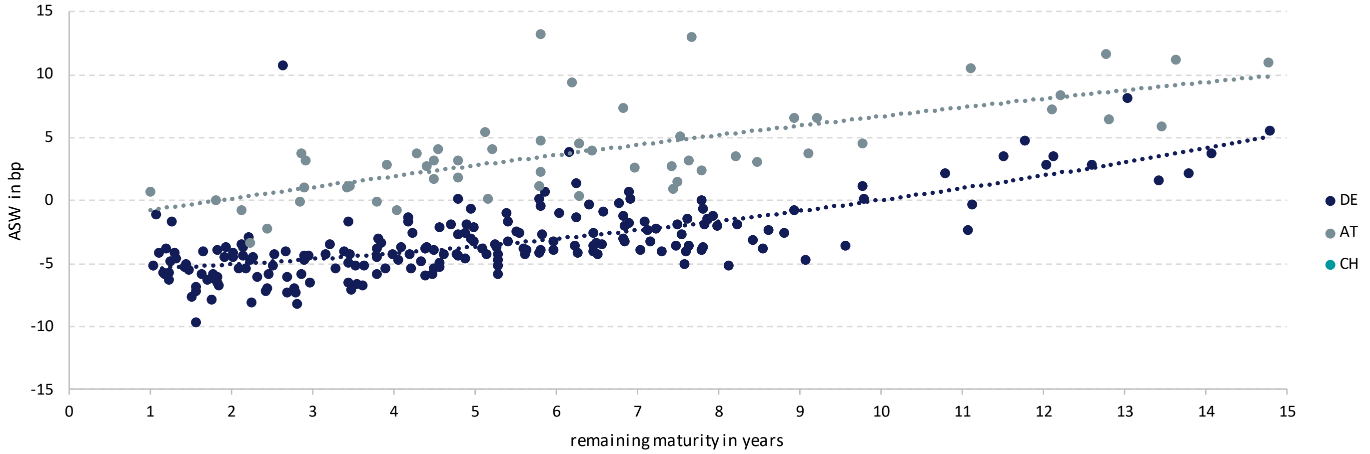
Order books (last 15 issues)



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

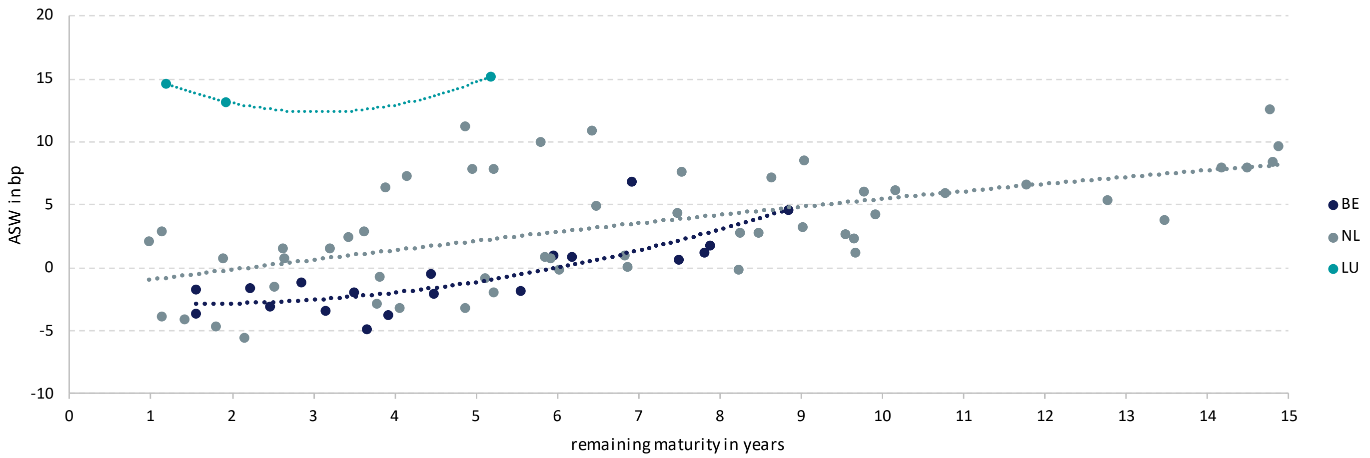
Spread overview[1]

DACH



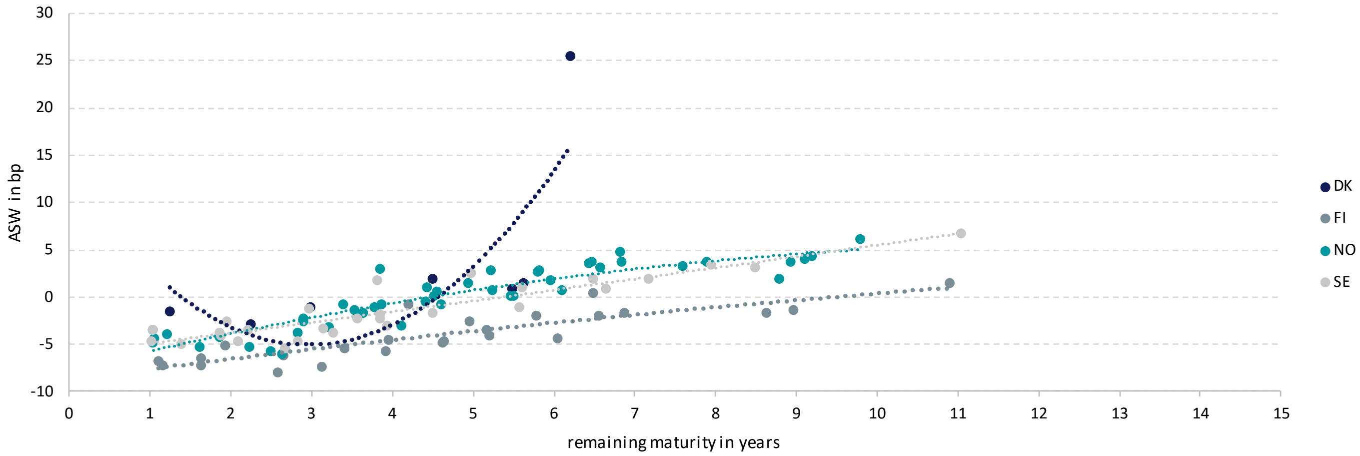
France

Benelux

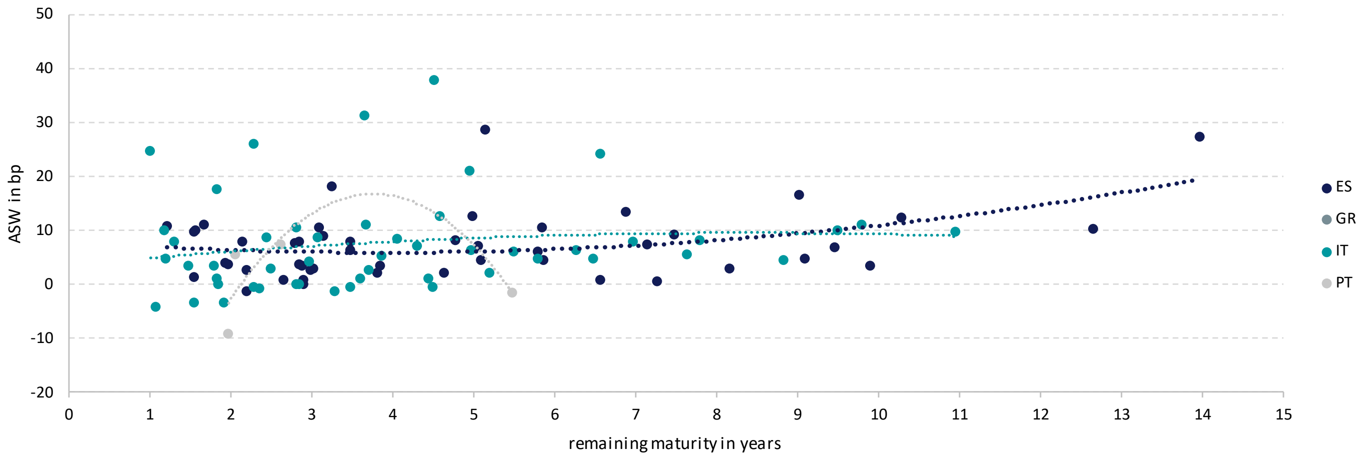


Source: Market data, Bloomberg, NORD/LB Markets Strategy & Floor Research [1]Time to maturity 1 ≤ y ≤ 15

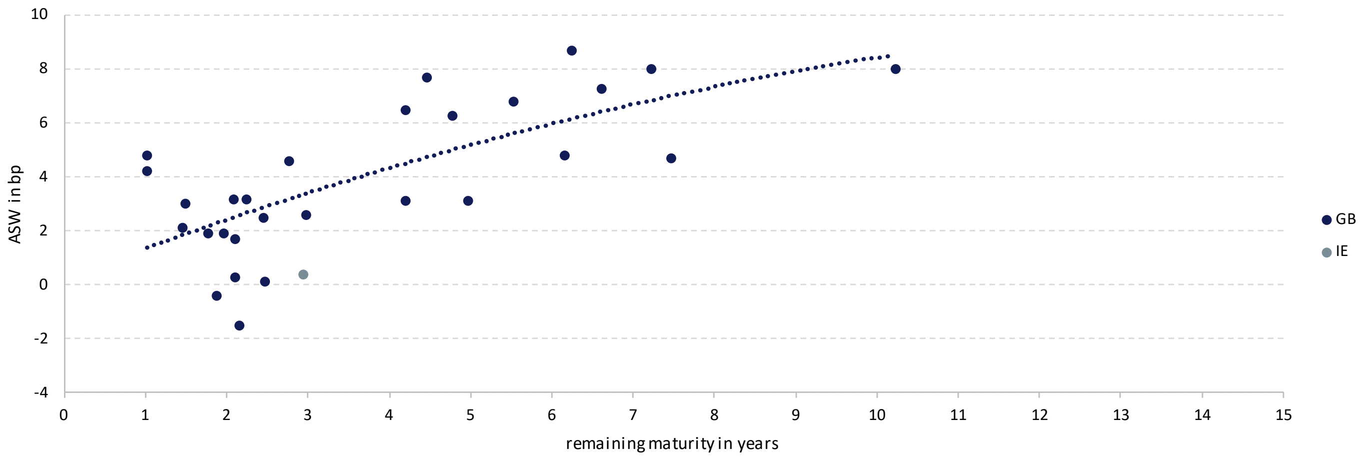
Nordics



Southern Europe

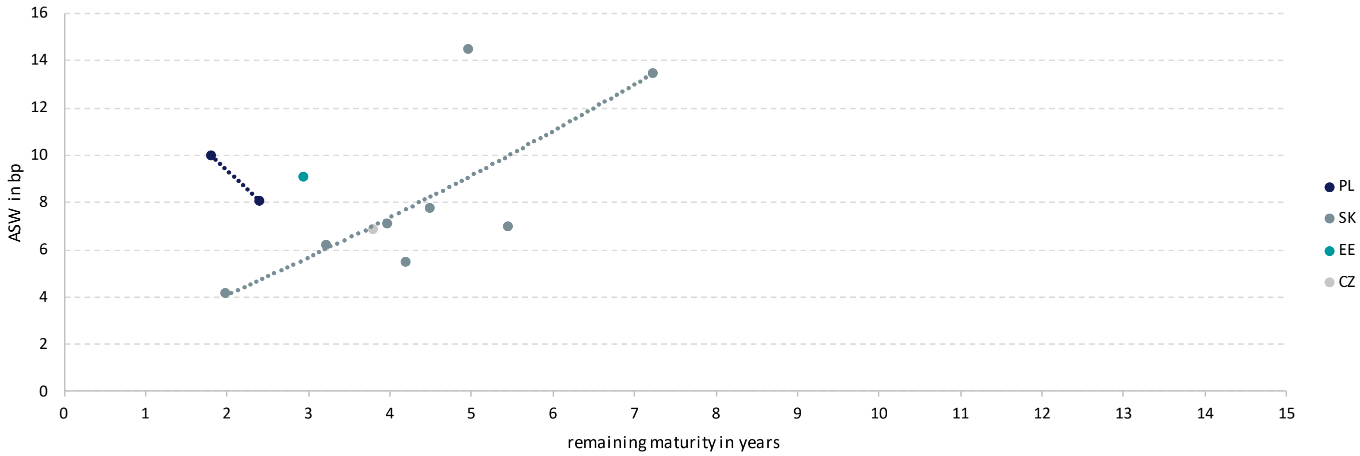


UK/IE

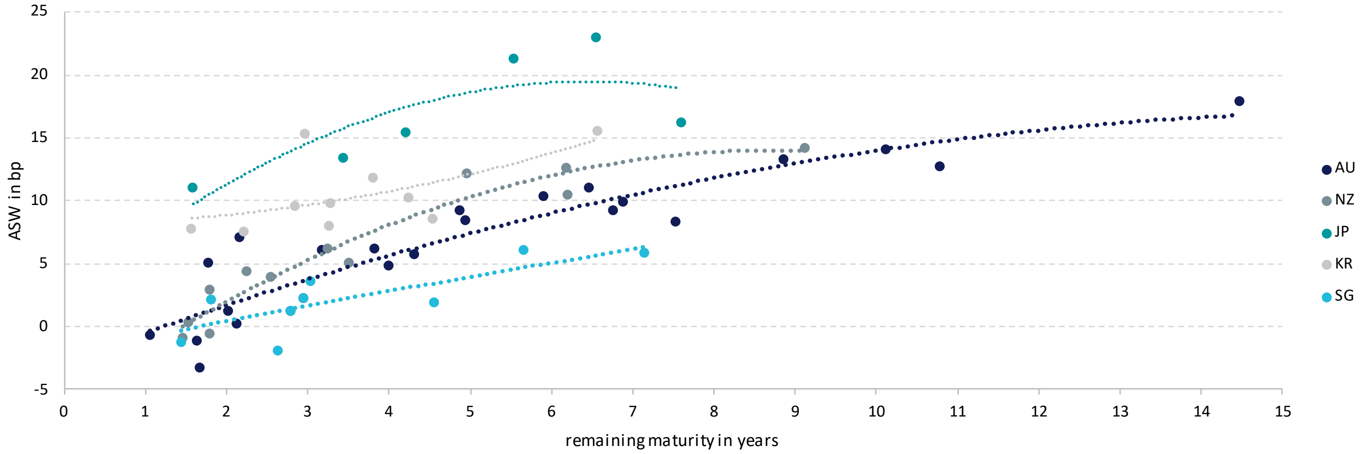


Source: Market data, Bloomberg, NORD/LB Markets Strategy & Floor Research

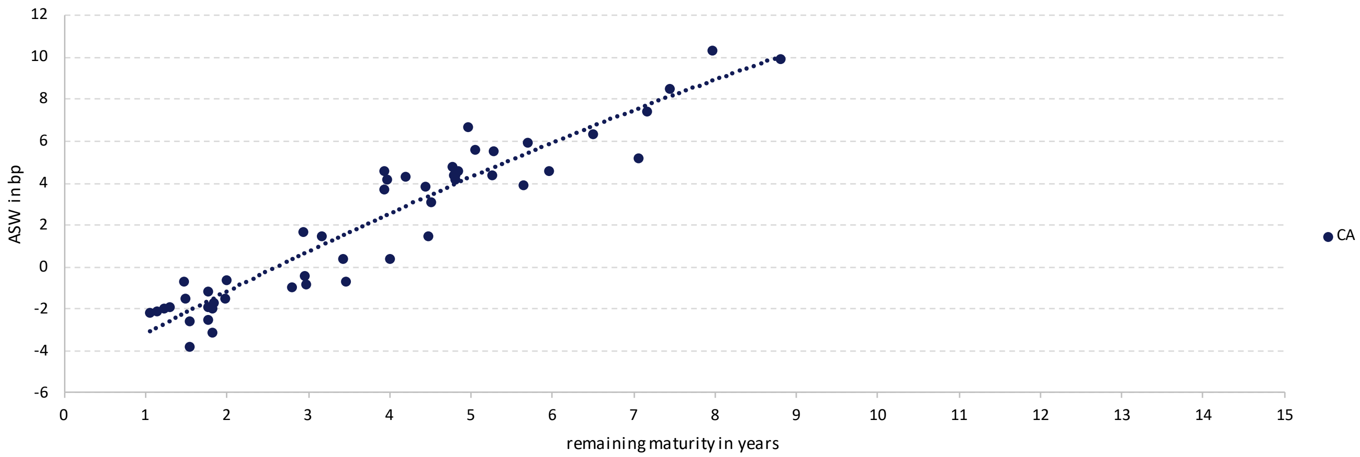
CEE



APAC



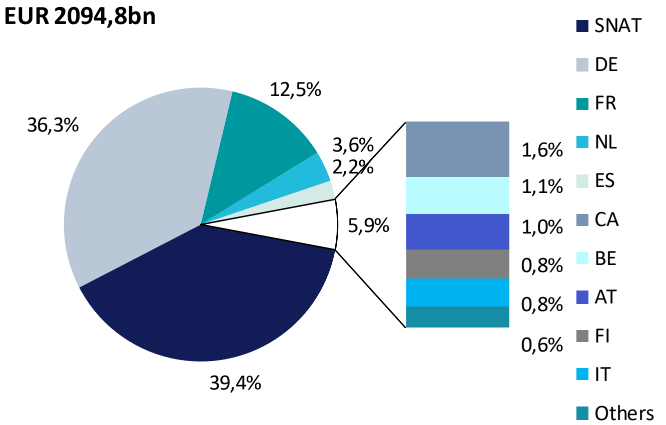
North America



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

Charts & Figures
SSA/Public Issuers

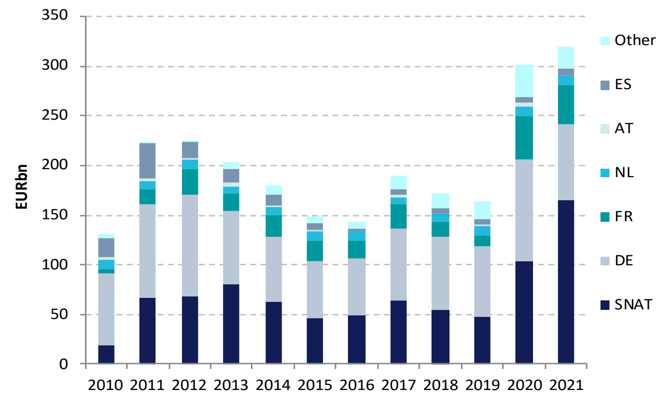
Outstanding volume (bmk)



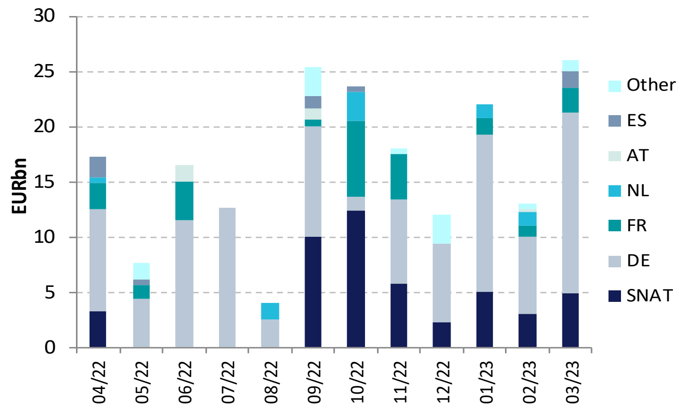
Top 10 countries (bmk)

Country	Vol. (€bn)	No. of bonds	ØVol. (€bn)	Vol. weight. ØMod. Dur.
SNAT	826,3	203	4,1	8,6
DE	761,3	575	1,3	6,7
FR	261,3	182	1,4	6,6
NL	75,5	69	1,1	6,7
ES	46,7	59	0,8	4,9
CA	33,2	22	1,5	5,2
BE	22,7	26	0,9	13,1
AT	21,2	23	0,9	4,6
FI	17,5	21	0,8	5,9
IT	16,8	20	0,8	5,3

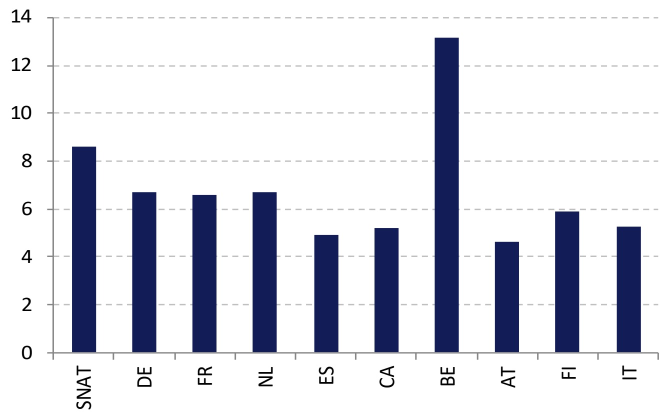
Issue volume by year (bmk)



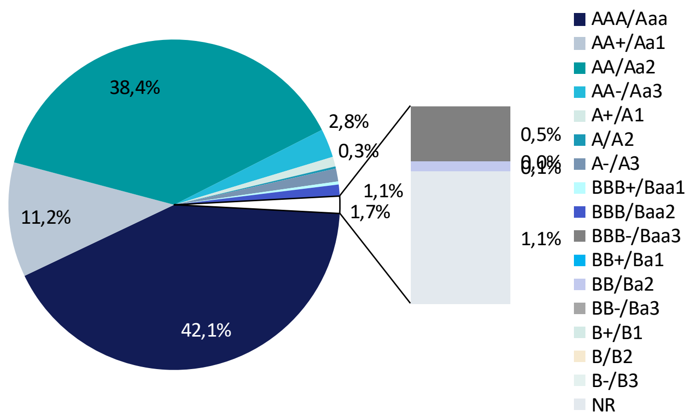
Maturities next 12 months (bmk)



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

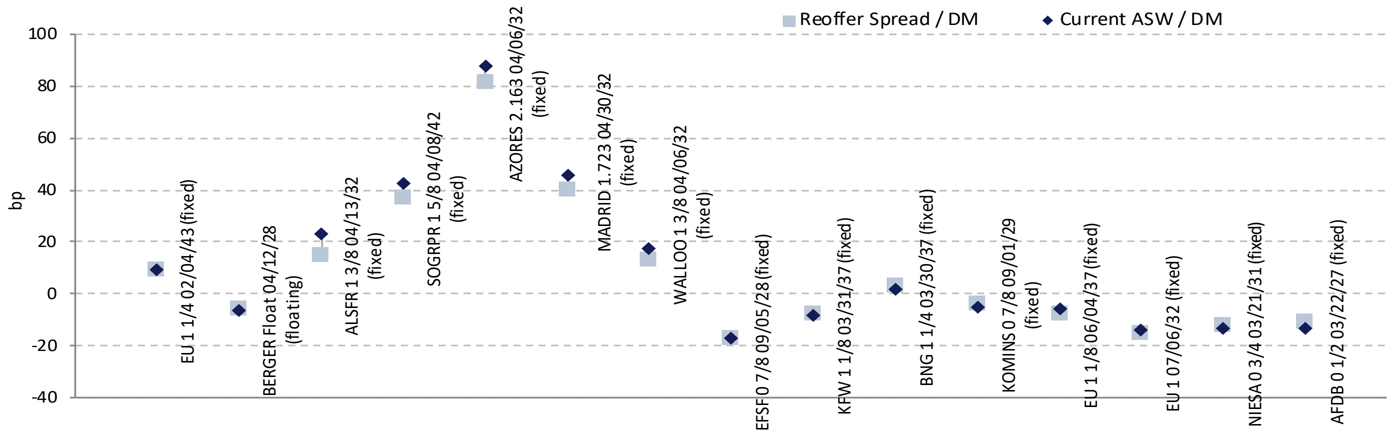


Rating distribution (vol. weighted)

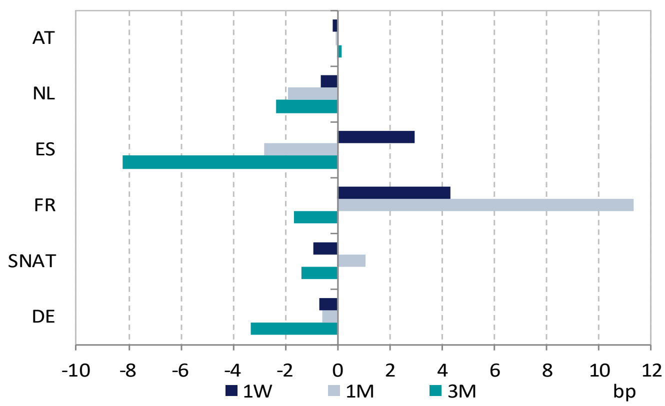


Source: Bloomberg, NORD/LB Markets Strategy & Floor Research

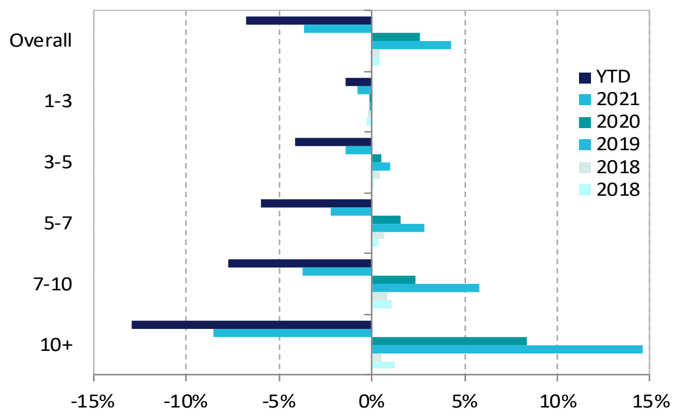
Spread development (last 15 issues)



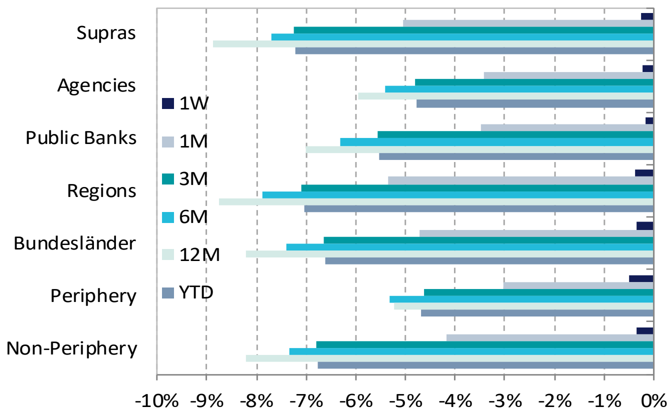
Spread development by country



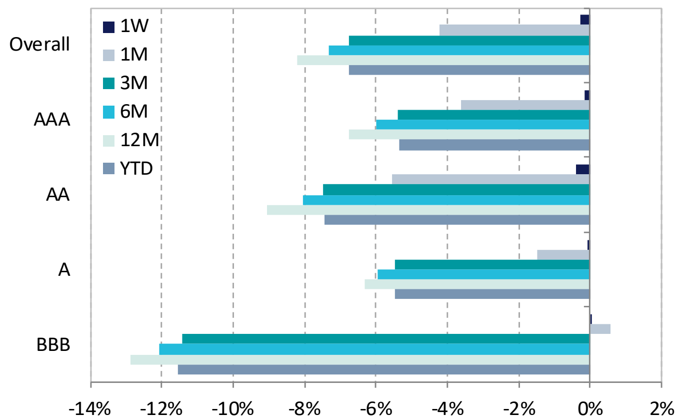
Performance (total return)



Performance (total return) by regions

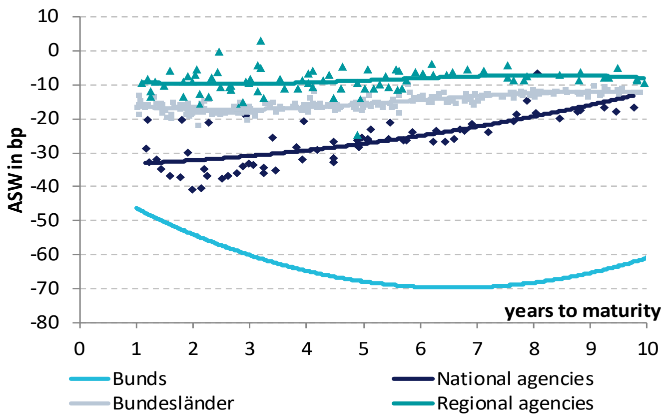


Performance (total return) by rating

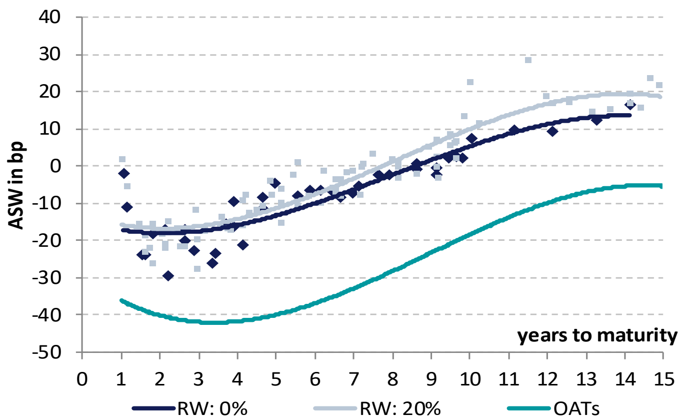


Source: Bloomberg, NORD/LB Markets Strategy & Floor Research

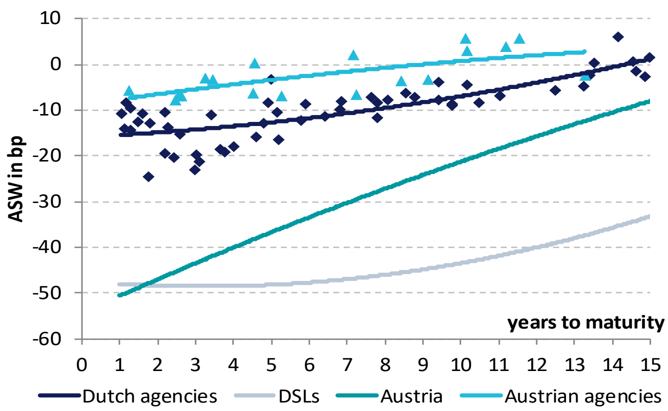
Germany (by segments)



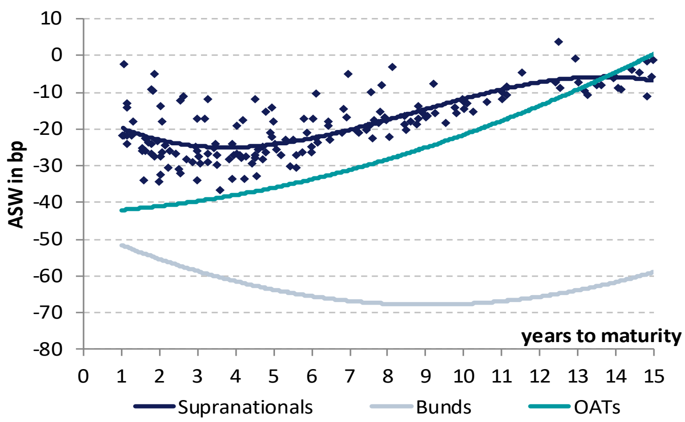
France (by risk weight)



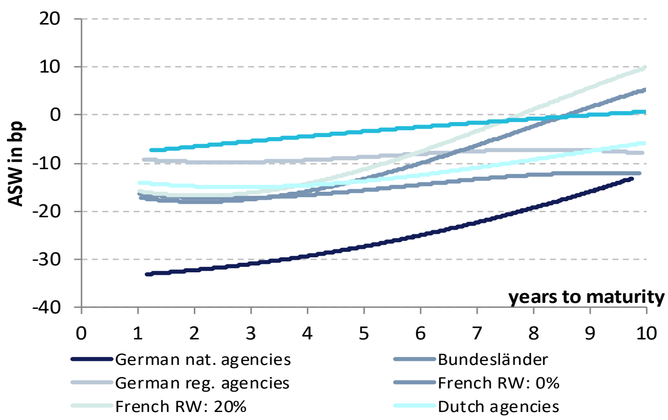
Netherlands & Austria



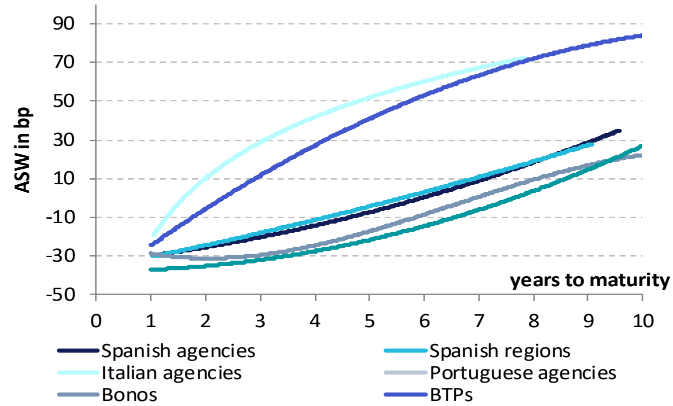
Supranationals



Core



Periphery



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

NORD/LB

Appendix
Overview of latest Covered Bond & SSA View editions

Publication	Topics
12/2022 ♦ 30 March	▪ An overview of the market for ESG covered bonds ▪ Issuer Guide SSA 2022: the Austrian agency market
11/2022 ♦ 23 March	▪ ESG update 2022 in the spotlight ▪ The ratings approach of DBRS
10/2022 ♦ 16 March	▪ What does the recent ECB meeting mean for covered bonds? ▪ Credit authorisations of the German Laender for 2022
09/2022 ♦ 09 March	▪ Transparency requirements § 28 PfandBG Q4/2021 ▪ Issuer Guide SSA 2022: The Dutch agency market
08/2022 ♦ 02 March	▪ ECB: Not everyone can get their act together at a turning point ▪ Welcome expansion of the covered bond ESG universe: Banco BPM green covered bond ▪ War in Ukraine and sanctions on Russia: spotlight on the European banking landscape
07/2022 ♦ 23 February	▪ ECB banking regulator also views the residential real estate market as a potential risk driver for banks ▪ Development of the German property market ▪ Beyond Bundeslaender: Paris metropolitan area (IDF and VDP)
06/2022 ♦ 16 February	▪ PEPP reporting: Finish line in sight, but no photo finish expected ▪ DZ HYP issues inaugural green Pfandbrief: ESG market in Germany continues its growth trajectory
05/2022 ♦ 09 February	▪ ECB: full speed, throttling, U-turn – or wrong turn? ▪ Insurance companies as covered bond investors: the bank-insurer nexus
04/2022 ♦ 02 February	▪ Covered Bonds – Review of January 2022: a reversion to old patterns does not always have to be bad ▪ SSA – New year, new hope? Less oomph to kick off the new year
03/2022 ♦ 26 January	▪ ECB preview: 10y Bund spotted in positive terrain. What's next? ▪ EUR benchmark segment in Canada: our supply forecast already null and void
02/2022 ♦ 19 January	▪ Spotlight on the EUR benchmark segment: a look at the covered bond markets in Belgium and the Nether-lands ▪ 24th meeting of the Stability Council (Dec. 2021)
01/2022 ♦ 12 January	▪ Covered Bonds Annual Review 2021 ▪ The Moody's covered bond universe – an overview ▪ SSA Annual Review 2021: Record after record
40/2021 ♦ 15 December	▪ ECB preview: End of PEPP, booster for APP?! ▪ Our view of the covered bond market in 2022 ▪ SSA Outlook 2022: Public sector caught between ECB & COVID
39/2021 ♦ 08 December	▪ The ECB, monetary policy and covered bond market: Hypothetical "What if...?" considerations ▪ The Moody's rating approach
38/2021 ♦ 01 December	▪ United Kingdom: Spotlight on the EUR benchmark segment ▪ Beyond Bundeslaender: Region Pays de la Loire (PDLL)

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Covered Bond Research

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SSA/Public Issuer Research

Bloomberg:
RESP NRDR <GO>

Appendix
Publication overview

Covered Bonds:

Issuer Guide Covered Bonds 2021

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

Transparency requirements §28 PfandBG (quarterly update)

Covered bonds as eligible collateral for central banks

SSA/Public Issuers:

Issuer Guide – German Laender 2021

Issuer Guide – Canadian Provinces & Territories 2020

Issuer Guide – Supranationals & Agencies 2019 (update planned for 2022)

Issuer Guide – Down Under 2019

Fixed Income Specials:

ESG-Update 2022

Face-saving ECB decision: Hawks have won – for now

ECB decision: PEPP benched for now, APP comes in as Point Guard

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

ECB launches PEPP (Pandemic Emergency Purchase Programme)

Appendix
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Additional information
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None

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Breakdown of recommendations (12 months)

Positive:	37%
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Issuer / security	Date	Recommendation	Bond type	Cause