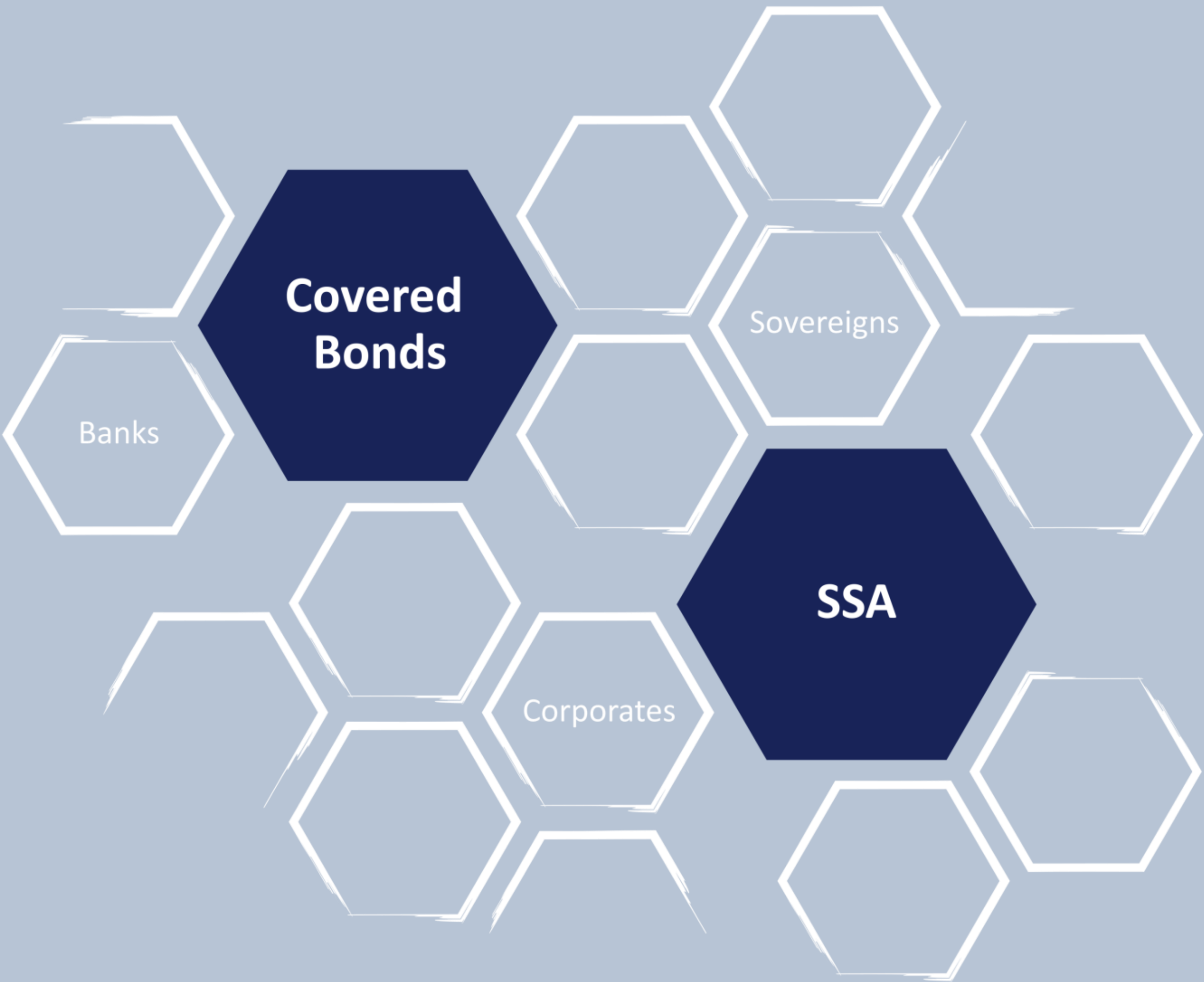

Covered Bond & SSA View

NORD/LB Markets Strategy & Floor Research

31 March 2021 ♦ 12/2021

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

Agenda

Dear readers,

due to the two shortened trading weeks coinciding with the upcoming Easter holidays, there will be no publication on **07 April**.

The **next edition** of the Covered Bond & SSA View will therefore be published on **14 April 2021**.

Your Markets Strategy & Floor Research

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NORD/LB: SSA/Public Issuer Research

Bloomberg: RESP NRDR <GO>

Market overview Covered Bonds

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Desjardins launches the only new bond issue

Following the last placement of new bond issues in the primary market by OP Mortgage Bank and the National Bank of Canada on 18 March, it was another financial institution from Canada which, yesterday, Tuesday, put an end to a gap lasting nearly a fortnight without new issues. Desjardins launched the third CA bond issue of the current year, the bank's first appearance in the market since September 2020. The deal with a fixed volume of EUR 500m from the outset started the marketing phase in the ms +8bp area and was eventually placed at ms +3bp. The 5y bond ultimately generated demand totalling EUR 1.75bn in the market. This deal was also only the fourth bond issue with a maturity of five years to be placed in the market in the current year. In view of 5y swap yields, the yield at issue was in negative range (-0.283%). Last Wednesday, AXA Home Loan SFH was the first issuer in 2021 to increase an outstanding bond issue in the EUR benchmark bond segment. The tap issue worth EUR 250m was implemented at ms +1bp, following an initial guidance that was one basis point wider. The bond issue increased was AXASFH 0 1/8 06/25/35, which was originally placed in June 2020 at ms +16bp for 15 years. Following the tap issue, the volume outstanding rose to EUR 750m. The primary market is set to remain uneventful for now in view of the Easter public holidays, which are shortening two consecutive trading weeks. For this reason, we have taken the decision to suspend the Covered Bond & SSA View publication in the coming week, for one week only. You will receive the next edition of our Covered Bond and SSA View on 14 April 2021.

Issuer	Country	Timing	ISIN	Maturity	Size	Spread	Rating	ESG
Desjardins	CA	30.03.	XS2328625723	5.0y	0.50bn	ms +3bp	AAA / Aaa / -	-

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

Merger of Bankia and CaixaBank completed

The merger of Bankia with CaixaBank has been completed. CaixaBank announced this on 26 March 2021. According to information provided by the bank, this means that CaixaBank now has around 20 million customers and total assets amounting to EUR 623.8bn, making it the biggest bank in the Spanish market. With the legal merger completed on schedule in the first quarter of 2021, the integration at operating level is to be completed by year-end. As a covered bond issuer, Bankia is therefore consigned to history with immediate effect. Its last six EUR benchmark bond issues outstanding (ES0413307127, ES0413307101, ES0413307093, ES0414950685, ES0414950644 and ES0414950628) are already listed with the CaixaBank (CABKSM) ticker at Bloomberg. Furthermore, Moody's, S&P and DBRS have been the first rating agencies to respond and have already issued Aa1, AA and AAA ratings respectively for the six bond issues, in line with the ratings for the pre-merger covered bonds issued by CaixaBank. Fitch, however, has withdrawn its previous ratings of Bankia bonds, as the rating agency does not currently rate the bond issues of CaixaBank. With an aggregated volume of EUR benchmark bonds currently outstanding of EUR 19.54bn, CaixaBank has additionally moved up into the top 10 largest EUR benchmark bond issuers – previously ranked in 24th position (CaixaBank) and 27th place (Bankia) – and just pips Banco Santander (EUR 19.50bn) to the post as biggest Spanish EUR benchmark bond issuer.

ECB buys fewer covered bonds than expected in first quarter

With net purchases amounting to EUR 3.1bn, the ECB purchased significantly fewer covered bonds in the first quarter of 2021 than expected. The starting point for this observation is that we generally assume the ECB will carry out approximately EUR 2bn worth of net investments per month under CBPP3. This figure results from the current share of CBPP3 in relation to the APP (10%) and the – still valid – monthly APP net investments of EUR 20bn. Although in gross terms a considerable EUR 12.1bn was purchased under CBPP3, this approximately only corresponds to the net purchases made in the same period of the previous year (EUR 11.2bn). One of the reasons for the significantly lower volume purchased is the substantially lower level of supply of eligible bonds. This is also reflected in the share of securities purchased in the primary market, which was at a high (38.8%) in February 2020 and has since fallen to 35.9%. Based on an average share of new, eligible EUR benchmark bond issues allocated to central banks/OI of 27.1% in 2021, this represents a volume of EUR 4.1bn. This share corresponds to a primary market share of 33.9% (EUR 4.1bn of the EUR 11.1bn purchased in total) and is therefore in line with the current CBPP3 structure. However, since the investor category of central banks/OI comprises not only the Eurosystem, the share of primary market assets in CBPP3 is likely to decrease further at the end of the month. Purchasing activities under the PEPP are to be expanded considerably in the second quarter of this year. However, to date, only marginal purchases of covered bonds have been made under this programme (cf. ECB tracker). Whether this circumstance has changed in the past two months is likely to be revealed in the PEPP report, which is due for publication after the end of the month.

Moody's sector study on the Polish covered bond market

As part of a current sector study, rating agency Moody's examined the Polish covered bond market and stated that the Polish legal framework for covered bonds, which was significantly enhanced in 2016, is among the comparatively strong regulations (ranked in 5th place of the 20 frameworks assessed by Moody's in total). With regard to macroeconomic conditions, reference was also made to the robust recovery, although this will potentially be dampened when the government's support measures are discontinued. In terms of covered bond programmes, the rating agency points out high asset quality, with one programme (mBank Hipoteczny) having a rating of Aa2 and two programmes (ING Bank Hipoteczny and PKO Bank Hipoteczny) rated Aa1 (and therefore on a par with the country ceiling). In the EUR benchmark segment, covered bonds have not been seen for some time. The most recent bond issue was in January 2019 when the only currently active issuer (PKO) approached investors. For 2021, we expect a further benchmark bond issue with a volume of EUR 500m, which in our opinion should be met with considerable demand from investors. The combination of a non-EMU issuer and an Aa1 rating could certainly offer an understated but welcome pick-up. In the case of ING Bank Hipoteczny, an additional premium could be expected for what would constitute a debut benchmark issue.

Market overview SSA/Public Issuers

Author: Dr Norman Rudschuck, CIIA

ESM and EFSF funding and investor newsletter

The investor newsletter published by the ESM and EFSF bailout funds provided much information again at the end of the first quarter of this year. Approximately ten years ago, or more specifically on 25 January 2011 when the sovereign debt crisis in the Eurozone was worsening, the EFSF launched its first bond issue in support of one of the countries under the programme, namely the Republic of Ireland. Investors now have to steel themselves: according to information provided, the 5y bonds had a coupon of 2.75%, a re-offer yield of 2.892% and a spread of 56.1 basis points in relation to Bunds. The deal was rightly described as a complete success and attracted orders totalling EUR 45bn. At a time of quantitative easing, this was set to be a record. Orders were received from 500 investors worldwide. In total, the EFSF raised EUR 16bn in 2011 and EUR 44.8bn in 2012. It was not until 2013 that the ESM joined in (EUR 10bn). However, at EUR 58bn, the EFSF remained top dog. Today, the ESM remains the only supranational entity and agency with a bill programme. In 2020 alone, a total of EUR 60bn was placed. Following 3M and 6M maturities, 12M were added last year. Another two records were achieved here: on 14 January 2012, 6M at a yield of 0.2664% and on 5 December 2017, 3M at -0.7318% – two extremes at both ends. And the bailout funds have continued to perform brilliantly: the investor base meanwhile comprises 1,700 different accounts, and the order book in excess of EUR 70bn marked yet another new milestone in January 2021.

ESM and EFSF confirm funding planning for the rest of this year

Based on the forward-planning, both players will be active with bond issues in the primary market during the second quarter and the remainder of this year – the total in Q2 is set to be the same as in Q1: an aggregated EUR 9.0bn (of which, the EFSF accounting for EUR 7.0bn and the ESM for EUR 2.0bn). As per the planning, the second quarter of the year will be the period with a high funding level, as indicated in the table below. In contrast with 2019 and earlier years, we do not expect early repayments by some Eurozone countries due to the pandemic. Consequently, the funding requirement in crisis mode is more likely to increase than decrease.

Long-term funding planning 2021 (EUR bn)

	Q1	Q2	Q3	Q4	∑ 2021
EFSF	7.0	7.0	2.5	-	**16.5**
ESM	2.0	2.0	2.0	2.0	**8.0**

Time window for...

…ESM/EFSF bond issuances	
CW 15	12–16 April
CW 17	26–30 April
CW 20	17–21 May
CW 23	07–11 June
CW 25	21–25 June

… ESM Bill auctions (3M, 6M and 12M)			
April	Tue 06	Tue 20	Tue 13
May	Tue 04	Tue 18	Tue 11
June	Tue 01	Tue 15	Tue 08

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

EU plans: interim order following constitutional complaint

On behalf of the people, the following decision was announced at short notice last week in the matter of the constitutional complaint (interim order): ‘It is instructed that the Act on the Council decision of 14 December 2020 on the system of own resources of the European Union and to revoke decision 2014/335/EU, Euratom (Eigenmittelbeschluss-Ratifizierungsgesetz – ERatG, Own funds ratification act), (Bundestag paper 19/26821) will not be executed until a decision is made by the German Federal Constitutional Court on the application for enactment of a temporary order by the German Federal President.’ The grounds pursuant to the BVerfG are to be presented subsequently. The European Commission may only start raising loans and paying out when all 27 EU countries have ratified the decision. Overall, a total of around EUR 1,800bn is to be available to the EU up to the end of 2027. The subject matter is a constitutional complaint linked to an expedited application against the included Coronavirus Recovery Fund worth EUR 750bn, a complaint that was submitted shortly before by an alliance led by former AfD chief Bernd Lucke. The temporary stop is to be in place until a decision is announced on the expedited application. With the interim order, the court is preventing irreversible conditions from occurring until such time as the court is in a position to decide on the expedited application. The definition of interim order is as follows: if the threat of accomplished facts already arises prior to the court’s decision on an expedited application, effective (expedited) legal protection by means of an interim decision must directly be based on Section 19 (4) GG (German Constitution), (‘expedited-expedited legal protection’). If no decision is possible in the short term on a complaint under the temporary legal protection case pursuant to Section 123 (1) VwGO (Rules of the Administrative Courts), the guarantee of effective legal protection required under Section 19 (4) GG calls for the court to which the application was submitted applied to decide on an interim arrangement if the applicant without it would be exposed to unreasonably severe disadvantages that could not be prevented in any other way. The Bundesrat had only resolved the act on Friday morning, following approval of the Bundestag on Thursday. The sum of EUR 750bn is to be used for the EU’s economic recovery after the pandemic. Member states may receive part of the funds as a grant and other parts as loans. In return, joint debt is to be assumed for the programme entitled Next Generation EU (NGEU). The applicants are of the opinion that joint debt is not permissible. Germany would be assuming financial risks that cannot be calculated. The constitutional complaint was brought by 2,281 citizens, as Bündnis Bürgerwille (the citizens’ movement) announced on its website. German Finance Minister Olaf Scholz (SPD) had previously stated that he was confident ratification would be completed in a timely manner, despite the announced constitutional complaints. ‘It is clear that the financing regulated in the Own Funds Decision is based on stable constitutional and European law foundations.’ The package with recovery aid was agreed as early as summer 2020. At present, Germany and the other EU member states are working on plans regarding how the money is to be spent. Plans are to be in place by the end of April. Until then, our unchanged focus will remain on the EU’s funding under the SURE programme. Through SURE, the EFSM (European Financial Stabilisation Mechanism) and MFA (Macro-Financial Assistance) alone, the EU still has funding of around EUR 40bn to manage in 2021. SURE should be completed by mid-year, given the current pace. As part of the EFSM, a total of EUR 9.75bn will be due in two tranches (June and September), which are likely to be funded 1:1. The MFA coronavirus package should comprise a further EUR 2.35bn in 2021. We had expected around EUR 80bn for the NGEU programme in 2021, which is now likely to be less in the second half of the year, with any delays not yet foreseeable. On Monday, 16 member states already signed.

Primary market

Before considering the current primary market deals, we want to take another quick look at the EU as an issuer with its weighty order books: the short maturity (5y) totalled EUR 46.5bn, with 29% going to the UK and 27% to Asia. At 10%, the share going to Germany was only the third biggest. The bond deal was almost eight times oversubscribed. The long maturity (25y) totalled as much as EUR 50bn, with the biggest allocation going to Germany (28%). The UK was next at 18%, with Benelux (15%) taking the final spot on the winner's podium, so to speak, in third place. The largest deal of the current week was a UNEDIC transaction: this was a Social Bond deal, for which EUR 3bn changed hands for ten years. The bond was 13 basis points above the French OAT curve and the reference bond (FRTR 1.5% 05/25/31). Compared with the guidance, tightening of three basis points was possible in view of the fivefold oversubscription (order book of EUR 14.9bn). Further deals came from the north in the form of the state of Schleswig-Holstein (SCHHOL) and the Nordic Investment Bank (NIB), as well as from the wine-growing regions of Rhineland-Palatinate (RHIPAL) and Luxembourg (EIB). SCHHOL chose a six-year format for its Land treasury note and issued EUR 750m at ms -6p. The order book exceeded EUR 1bn. The guidance was at ms -5bp area. NIB increased an environmental bond (April 2027) by EUR 500m (WNG). This tap deal was conducted at ms -11bp. Nevertheless, the order book amounted to more than EUR 1.6bn and the guidance of ms -8bp area initially was relatively high. RHIPAL raised EUR 500m for 20 years at ms flat. This was also precisely in line with the guidance. No information was published about the order book. This leaves one deal looking back and one going forward: the EIB increased its Climate Awareness Bond (CAB) with a maturity of November 2047 by EUR 500m. More than EUR 1.2bn would also have been possible. Accordingly, the issue tightened versus the guidance by two basis points. The Spanish region of Andalusia presented its new Sustainable Finance Framework in investor calls, and we expect an ESG bond issuance under the ANDAL ticker in Q2. In other respects, the pre-Easter calm is setting in. We will therefore suspend one issue of this publication after Easter, so that there then will be something to report on in the following issue when publication resumes.

Issuer	Country	Timing	ISIN	Maturity	Size	Spread	Rating	ESG
RHIPAL	DE	25.03.	DE000RLP1288	20.0y	0.50bn	ms flat	AAA / - / -	-
SCHHOL	DE	24.03.	DE000SHFM790	6.0y	0.75bn	ms -6bp	AAA / - / -	-
UNEDIC	FR	23.03.	FR0014002P50	10.2y	3.00bn	ms +2bp	AA / Aa2 / -	X

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

Covered Bonds
Unusual Q1 and revised supply forecast for 2021

Authors: Dr Frederik Kunze // Henning Walten, CIIA

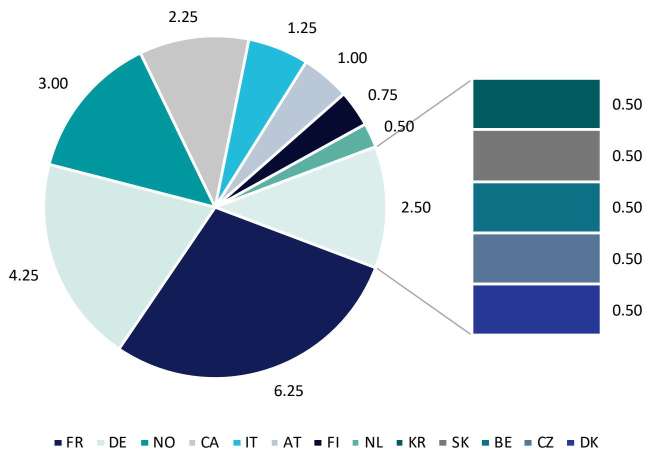
A look back and a look ahead: weak Q1; forecast for covered bond supply in 2021 revised downwards

The COVID-19 pandemic along with directly and indirectly related monetary, regulatory and fiscal measures already had a strong influence on 2020, and the beginning of 2021 has also taken place in market conditions which can only be described as highly unusual – and this is no exaggeration. Q1 2021 ends today (Wednesday) and we see this as an opportunity firstly to look back at the last three months and to evaluate the start of 2021 in an historical comparison. We also propose to clarify our response to general market conditions at present and those expected later on this year as well as to specific conditions applying to the covered bond market, among other things by making a substantial downward revision to our supply forecast for EUR benchmark placements.

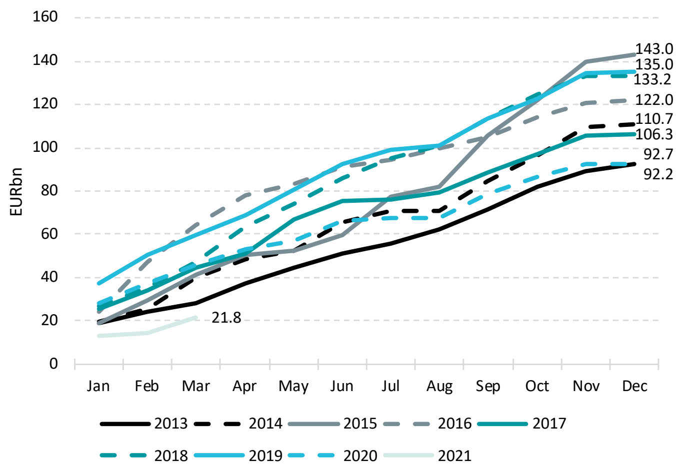
Sharp reduction in volume compared with the same previous-year period

A total of EUR 21.75bn of bonds have been placed so far this year (i.e. in Q1 2021) in the EUR benchmark segment. The 31 bonds came from 13 jurisdictions, dominated by issues from France (EUR 6.25bn) and Germany (EUR 4.25bn), which accounted for around 50% of the issuance volume. Compared with Q1 2020, there has been a clear decline in primary market activity. Last year, the issuance volume was still as high as EUR 46.0bn, split between 52 deals. Whereas the issuance volume was therefore 52.7% lower, the number of covered bonds issued was only 40% below the figure in Q1 2020. In the following, we look at the reasons for this as part of the adjustment of our issuance forecast.

EUR benchmark issuances in 2021 (EUR bn)



Historical issuance pattern (EUR bn)

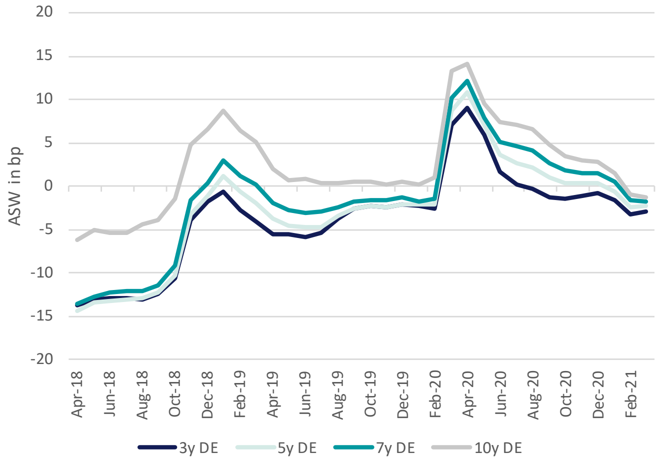


Source: Bloomberg, NORD/LB Markets Strategy & Floor Research

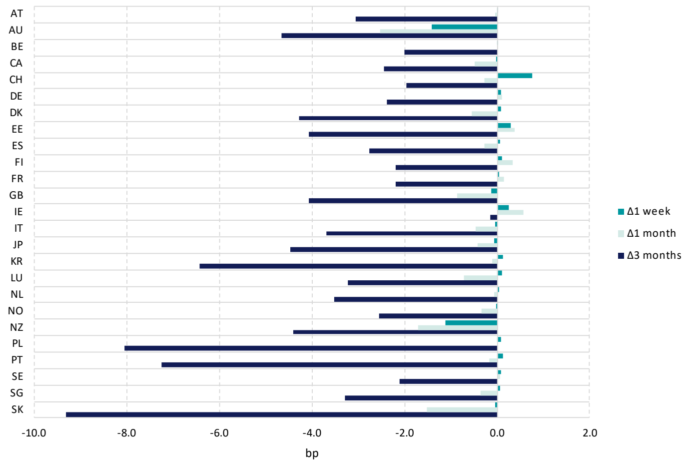
New issuers and ESG jurisdictions

Apart from the fact that the issue volume in the EUR benchmark segment in Q1 was small compared with previous years, there have also been positive developments this year in relation to this segment. Further issuers have come onto the market, namely Komercni Banka from the Czech Republic, South Korea's KEB Hana Bank and Argenta Spaarbank from Belgium. Moreover, the deal from the Czech Republic was the first EUR benchmark issue from the eastern European country since 2014. Apart from new issuers, the EUR benchmark segment also saw a new type of bond in the shape of ESG bonds. KEB Hana Bank went straight for an ESG format for its EUR benchmark debut. Issuers from Austria, Italy and Finland also approached their investors with EUR benchmarks in ESG format for the first time. Whereas Hypo Tirol Bank issued a social covered bond, Credit Agricole Italia and OP Mortgage Bank opted for the most frequent ESG format in the covered bond segment, namely green covered bonds. There were therefore six issues amounting to EUR 4.25bn in a sustainable format in Q1 2021. At the same point in 2020, there had only been two such deals amounting to a total of EUR 2.0bn. The sub-segment of sustainable bonds therefore continues to grow in 2021, a fact which is all the more remarkable in view of a low issuance volume in the market as a whole.

Germany: Spread development over time



Spread development 2021



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

Spread and yield trend in Q1 2021

Spreads have tightened significantly in the last three months, based on a low supply of EUR benchmarks in Q1 and further high demand (among other things from the Eurosystem), as illustrated by the above graphs. Since the beginning of the year, spreads in the iBoxx EUR Covered have tightened by an average of 5.5bp in the 10-year segment, while bonds with a short term to maturity tightened slightly less (7y: 4.2bp; 5y: 3.9bp; 3y: 3.2bp). At the same time, covered bonds were also affected by the general increase in yields: the yield for 10y bonds has increased by an average of 24bp since the turn of the year. The yield on 7y bonds still increased by 16bp. Whereas at the end of 2020 (and also at the end of January 2021), 10y deals in individual jurisdictions still showed negative yields, average 10y yields were in positive territory at the end of March, barring just a few exceptions − albeit often only marginally so.

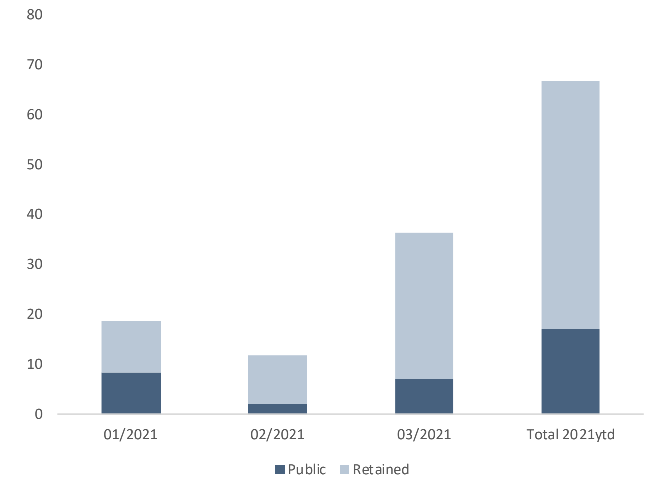
Historical seasonal pattern does not apply to 2021

Whereas at the end of last year, for our first issue forecast for 2021, we still assumed that the normally relatively robust seasonal pattern in the covered bond market would also apply in 2021, the first three months of this year have definitely proved us wrong. Historically, Q1 has accounted for between 30.4% (2013 is the first year in our series) and 52.5% (2016) of the total annual issuance volume − or 39.9% on average. In purely mathematical terms, based on this pattern, we calculate an issuance volume range for the full year 2021 of EUR 41.4bn to EUR 71.5bn. This range shows how the market has fared in the first three months of this year. Compared with the full year 2020 when the issuance volume for EUR benchmarks amounted to EUR 92.2bn, the market would decline by 22.5% in the best-case scenario. In contrast, compared with 2019, the decline would be as much as 47.1%. This is one of the reasons for which we are revaluing the market performance of the last few months in our issue forecast for 2021 and adjusting the latter in line with our findings.

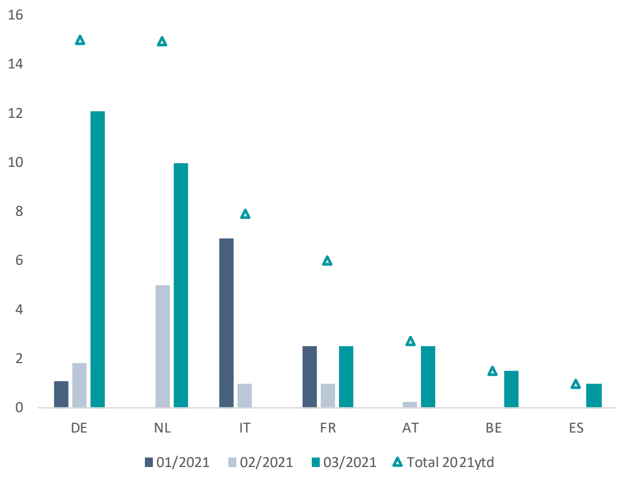
Covered bond supply: course of the pandemic and monetary policy having an impact

In our opinion, more than muted conditions in the primary market, as outlined in the present, are likely to continue for the rest of 2021. We therefore have to revise our supply forecast downwards. The reason for this is mostly that a number of factors which are having a dampening effect on issuance behaviour are more sustained and having a longer impact than we had expected for example at the end of 2020/beginning of 2021. One macroeconomic influence factor worth mentioning in this respect is the sluggish pace of vaccination in Europe by international standards. In the context of the course of the pandemic, we would also rate the mutations in the coronavirus and related rise in the number of covid cases as not being quite the trend we had anticipated. On balance, this is leading to a muted and stalling economic recovery process, which is also having an impact on the business activity of covered bond issuers and is likely to have a dampening impact on funding requirements. In this context, we believe it is worth mentioning among other things large customer deposits resulting not only from caution but also from savings built up because of the lack of opportunities to consume – along with a relatively muted increase in lending. A high take-up in the latest TLTRO III.7 tender (see Covered Bond & SSA View of 24 March 2021) and what we see as a directly related strength in retained covered bonds fits in with the picture of an emerging funding mix, which goes against the trend initially expected. For EMU issuers especially, monetary policy is therefore dampening the supply of publicly placed covered bonds much more and on a greater scale than initially anticipated. These market conditions are blighting the primary market and to some extent can also be mapped onto other regions. Central banks are also leaving their footprint on the covered bond market in non-EMU Scandinavian countries, in the UK and the developed overseas markets of Australia and Canada – among other things through purchases or alternative/unconventional funding options. Even though the Bank of Canada or even Norges Bank, for example, have already taken back a number of direct measures to fight the crisis, we still regard our supply forecast, including for non-EMU markets, as overly progressive. We would also explain this in light of the prospects for the above-mentioned influence factors of a muted economic expansion process and more limited funding requirements in relation to covered bonds.

Retained vs. publicly placed BMK/SBMK



Retained bonds by jurisdictions

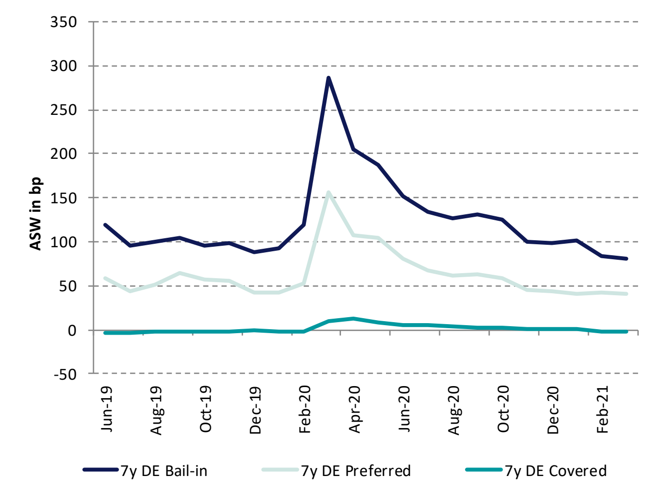


Source: Bloomberg, NORD/LB Markets Strategy & Floor Research

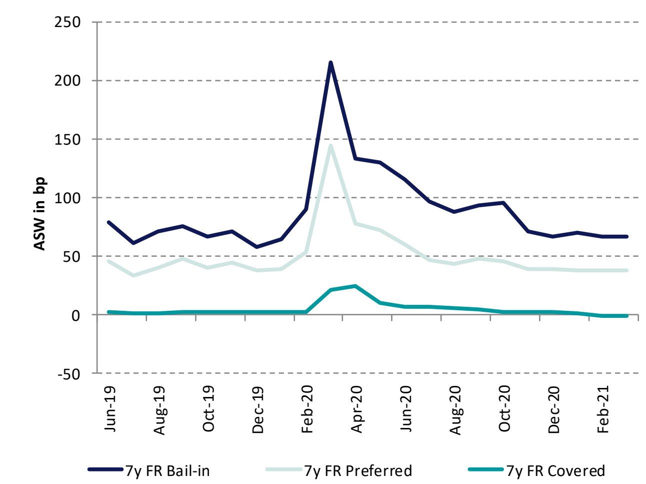
Substitutional relationship also important

More limited funding requirements via covered bonds can also be explained in light of substitution relationships. Accordingly, we could envisage corresponding constellations in relation to (secured) covered bonds and (unsecured) covered bonds for certain issuers. From an issuer point of view, we believe that the yield and spread trend currently in evidence makes unsecured issues seem like a feasible alternative – not least because the current investment emergency is leading to corresponding demand. Consequently, cheap funding costs for unsecured bonds, both historically and relatively, are likely to continue to dampen covered bond issues. At institution level, regulatory requirements (especially MREL/TLAC) can also lead to a preference for senior unsecured issues. This is reflected above all in the relatively high volume of senior non-preferred bonds placed this year (2021 ytd: EUR 36bn), which is well above the level of senior preferred bonds (EUR 17bn).

Covered bonds vs. senior bonds (GER)



Covered bonds vs. senior bonds (FR)



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

Forecast revision: covered bond supply of just EUR 78.5bn

On the basis of the conditions we have outlined, which in our view are likely to last for several months at least, we calculate a significant adjustment requirement in relation to our issue forecast for covered bonds, which in principle covers the entirety of jurisdictions represented in the iBoxx. As part of the process, the influence factors are weighted differently, depending on the respective sub-market. For example, based on the recent momentum demonstrated by retained covered bonds in Germany (DE), the Netherlands (NL) Italy (IT), France (FR) and Austria (AT), we anticipate a lower issuance volume. Funding alternatives should arise – especially in the eurozone – likewise as a result of lower spreads and yields for senior unsecured bonds brought about by second-round effects. Although we cannot assume any automatic trend in this respect, the relatively high proportion of unsecured bonds from Germany and France is especially obvious. Moreover, a combination of monetary policy and above all persistently high deposits and lower funding requirements in the eurozone should lead to possible benchmark issues from overseas markets such as Australia and Canada. On balance, the reflections and forecast parameters outlined here as examples lead to a downgraded issuance volume of EUR 78.5bn (against EUR 105bn previously). Consequently, bearing in mind maturities totalling EUR 136.4bn expected in the full year 2021, we calculate a negative net supply of EUR 57.9bn.

Forecast assumptions

As part of our forecast revision, we have, among other things, made assumptions in relation to the direction of monetary policy likely to be taken by the relevant central banks, the economic recovery process and future course of the pandemic along with the funding behaviour of issuers. We do not expect any lasting change of direction by the ECB, BoE or other central banks. As regards the economic outlook, our baseline scenario is still that of a stop-and-go recovery, factoring in a steady vaccination process which will not be upset seriously by any setbacks in the form of mutations. Consequently, we should see both a recovery in lending and a dwindling of customer deposits/exceptional savings. The lending squeeze as a result of a withdrawal of regulatory/statutory aid is not factored into our baseline scenario. In spite of the recovery mentioned, however, we do not expect any premature reduction in TLTRO III liquidity either; if anything, we would be more likely to expect the use of potential extensions of the current tenders to new TLTRO III tranches.

Outlook in relation to a tightening of spreads

Based on a marked downwards revision in the covered bond supply for this year, we generally derive a tendency towards a corresponding support for covered bond spreads. At the same time, however, it is important to bear in mind that even before the revision of our forecast, we could anticipate scarcity pricing in the covered bond market. This applies especially to the eurozone. To that extent, we definitely anticipate a further tightening of spreads for EUR benchmark bonds. As a result of the supply/demand situation and availability of material, we would even expect the possibility of an asymmetric tightening of spreads with non-EMU covered bonds showing a stronger tightening in the secondary market.

Revised NORD/LB forecast: supply and maturities 2021 (EUR bn)

Jurisdiction	Outstanding volume	Maturities 2021	Issues 2021e (new vs *old*)		Outstanding 12/2021e	Net supply 2021e
AT	30.00	4.50	5.00	***6.50***	30.50	0.50
AU	28.25	5.50	1.00	***2.00***	23.75	-4.50
BE	19.50	3.25	2.00	***2.50***	18.25	-1.25
CA	53.25	7.50	6.50	***9.00***	53.25	-1.00
CH	3.50	3.50	0.00	***0.00***	0.00	-3.50
CZ	0.00	0.00	0.50	***0.50***	0.50	0.50
DE	148.85	13.35	12.50	***17.00***	150.50	-0.85
DK	7.50	2.50	1.00	***1.00***	6.00	-1.50
EE	0.50	0.00	0.50	***1.00***	1.00	0.50
ES	89.26	15.91	3.00	***4.50***	76.35	-12.91
FI	29.75	3.50	3.50	***4.00***	29.75	0.00
FR	217.61	29.87	17.50	***24.00***	208.74	-12.37
GB	36.53	13.10	3.50	***5.00***	26.93	-9.60
GR	0.50	0.00	0.00	***0.00***	0.50	0.00
HU	0.00	0.00	0.50	***0.50***	0.50	0.50
IE	3.96	1.25	0.00	***0.00***	2.71	-1.25
IT	51.43	7.10	2.00	***2.00***	46.32	-5.10
JP	4.10	0.00	1.00	***1.50***	5.10	1.00
KR	3.00	0.00	1.50	***2.00***	4.50	1.50
LU	2.00	0.50	0.00	***0.00***	1.50	-0.50
NL	59.37	3.75	5.00	***7.50***	61.12	1.25
NO	46.95	7.75	4.50	***6.00***	44.20	-3.25
NZ	9.00	2.00	0.50	***0.50***	7.50	-1.50
PL	2.70	0.60	0.50	***0.50***	2.60	-0.10
PT	5.75	0.00	0.50	***0.50***	6.25	0.50
SE	32.08	10.00	3.00	***4.00***	25.08	-7.00
SG	5.75	0.50	1.50	***1.50***	6.75	1.00
SK	2.50	0.00	1.50	***1.50***	4.00	1.50
TR	0.50	0.50	0.00	***0.00***	0.00	-0.50
Total	**894.07**	**136.43**	**78.50**	**105.00**	**844.14**	**-57.93**

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

Conclusion

The market mechanism in the covered bond segment is set to continue to be distorted for the rest of this year, especially by the ECB. The supply side in the eurozone will remain veritably depleted by TLTRO III while influential factors such as a sluggish pace of economic recovery and lower funding requirements will continue to have an impact for longer than we had initially anticipated. Whereas the covered bond year 2020 was shaped by the outbreak of the coronavirus crisis, this year, the EUR benchmark segment is wrestling with the ongoing impact of the pandemic. However, in this respect, it is also important to bear in mind that, to a large extent, a number of factors – such as the ECB's monetary policy – date back to a time when we never could have imagined something like the COVID-19 pandemic arising.

SSA/Public Issuers
Collective Action Clauses (CACs)

Author: Dr Norman Rudschuck, CIIA

Introduction and definition

In this article, we propose to take a closer look at a specific point in the ESM reform which is likely to come into force in 2022 (see Covered Bonds & SSA View of 27 January 2021), namely, the collective action clauses (CACs). A Collective Action Clause is a clause which allows a qualified majority of bondholders to decide changes in the bond conditions which are legally binding for all holders. Unlike in the case of companies, there is no insolvency or resolution process for sovereign issuers. The aim of CACs is therefore to make sovereign debt restructuring processes simpler and more orderly. CACs have recently become the focus of attention through the ESM reform since, in future, a single-tier aggregation mechanism will replace the two-tier aggregation mechanism in place at present. In the following, we propose to look more closely at the background of the CACs and to explain the implications of the change in aggregation mechanism.

Background to the collective action clauses

Traditionally, restructuring clauses have been the norm in UK, Japanese and Luxembourg law. The situation was different e.g. in the case of bonds issued under German law or bonds issues under New York law, where each change in bond terms and conditions had to be negotiated individually with each bondholder. Even if a majority of bondholders agreed to a debt restructuring, it could be prevented by a blocking minority. The legal situation inevitably led to some investors trying to take advantage of such blocking. Investors specialising in this approach would buy the bonds of stricken states at times of crisis with the sole aim of preventing a restructuring at a later date and then demanding a disproportionate payment for their bonds. In order to remove this problem, many market participants called for the introduction of clauses allowing binding collective restructuring decisions. Initially, such clauses were mostly turned down due to fears that the costs of debt-financing would be considerably increased by moral hazard among borrowers. There were fears that making restructuring easier would increase temptation among borrowers to cast off their debt which would then lead to higher borrowing costs. Countries with a lower rating in particular therefore refused to accept such clauses for a long time. In the early 2000s, there was growing support among market participants and policy decision-makers for the introduction of collective action clauses, among other things in view of the Argentine state bankruptcy and resulting legal problems. This led to the introduction of the first CACs, although they were uneven, prompting the G10 to introduce recommendations in relation to harmonisation. The first bond issue with a collective action clause based on G10 recommendations was a Mexican sovereign bond in 2003. By 2005, 95% of all new sovereign bonds issued included such a clause.

CACs in Europe

Unlike many other European states, Greek sovereign bonds did not include any CACs until its debt restructuring in 2012. However, the clauses were introduced retrospectively in the case of bonds issued under Greek law in the wake of the country's bankruptcy. Since 2013, Eurozone states are bound under Article 12 (3) of the ESM contract to include standard CACs for the issues of bonds with a maturity of over one year. According to the German Federal Ministry of Finance, the introduction of CACs has not led to more expensive Eurozone sovereign bonds.

Aggregation mechanisms and changes arising from ESM reform

Since it became mandatory for Eurozone member states to include CACs in bond issues, these have been double-limb CACs, i.e. CACs requiring a two-tier aggregation mechanism. This means that a qualified majority is required both at the level of each individual series and at the level of all series combined in order to approve a restructuring. The ESM reform would introduce single-limb CACs, in other words CACs with a single-tier aggregation mechanism which would only require a single majority at the level of all combined series. This makes it even less likely in future that a blocking majority could be formed among bondholders with the ability to prevent a restructuring. Single-limb CACs would theoretically make restructurings simpler, therefore rendering Italian government bonds for example more risky, which in turn would make borrowing more expensive for Italy. For this reason, the Italian government was against the reform for a long time. However, in an IMF paper, Kay Chung and Michael G. Papaioannou assume that the inclusion of single-limb CACs in bonds will go involve lower costs for borrowers. Market participants will therefore not associate the use of single-limb CACs with misplaced incentives for issuers, but rather, assess the resulting implicit advantages of an efficient debt resolution process in the event of a necessary restructuring. Consequently, market participants would not expect any higher risk from the single-tier mechanism; it would not lead to any substantial risk premium and would not therefore produce any substantial widening of spreads. Italy's recent and former finance minister, Roberto Gualtieri, declared ahead of the decision that he had now overcome his reservations. Since the proposed single-limb aggregation for CACs was a major point of contention ahead of the reform and Italian politicians especially were against the change for a long time, it will be interesting to see what impact the single-tier aggregation mechanism, which has now been approved, will have on the spreads e.g. of Italian government bonds. In our view, potential implications in any case are currently getting lost in noise trading – reflecting both purchases by the Eurosystem and the coalition crisis a few weeks ago.

Blocking minority for the ECB?

Many purchase terms and conditions for the PSPP were gradually eased over the course of the programme. Initially, the purchase limit for the Eurosystem per issue (issue ceiling) was set at 25%, but was already raised to 33% in September 2015. The issuer limit, i.e. the limit applying to the share purchased per issuer, was initially set at 33% and still applies at that level for sub-national and national issuers. However, the issue and issuer limit for Supras was raised to 50% in April 2016. In the case of the PEPP, the ECB has much higher degrees of freedom in relation to the allocation applying to individual asset classes. In their first press conference on the PEPP, the Eurosystem central bankers indicated that they did not want to be restricted by self-imposed limits or rules. Otherwise, the ECB has unfortunately remained silent on this set of issues.

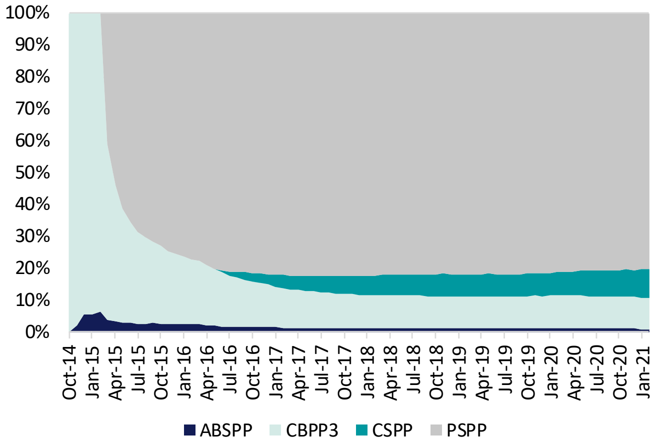
ECB tracker

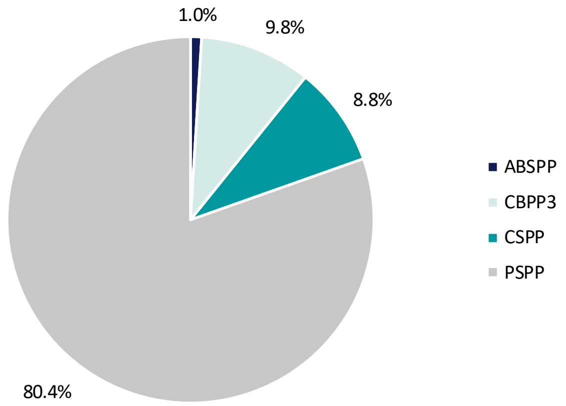
Asset Purchase Programme (APP)

Holdings (in EURm)

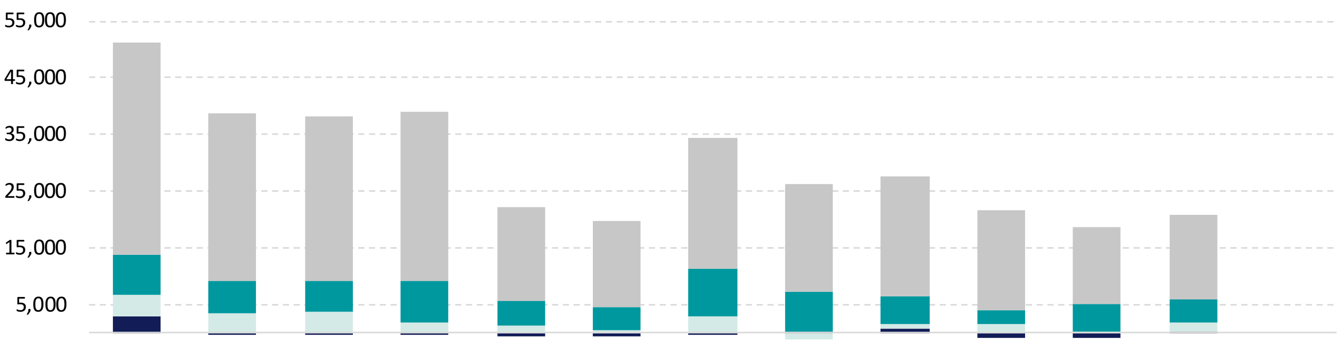
	ABSPP	CBPP3	CSPP	PSPP	APP
Jan-21	28,545	287,619	255,327	2,355,262	2,926,754
Feb-21	28,762	289,158	259,391	2,370,392	2,947,703
Δ	+217	+1,539	+4,064	+15,129	+20,949

Portfolio structure





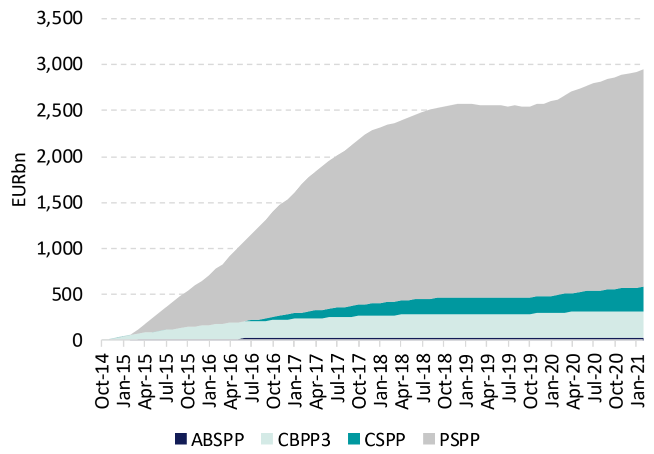
Monthly net purchases (in EURm)



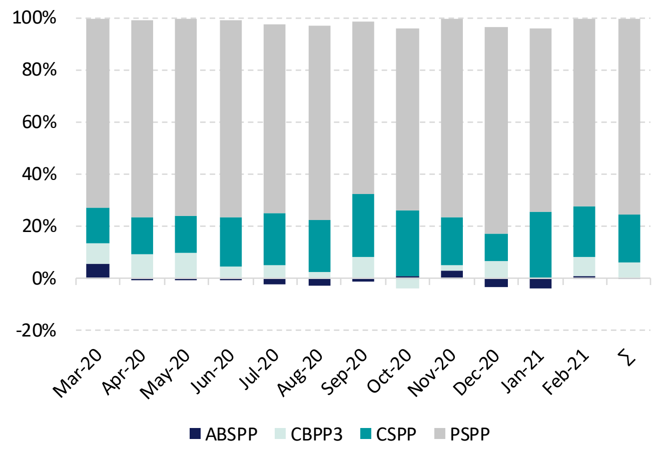
	Mar-20	Apr-20	May-20	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20	Jan-21	Feb-21	∑
APP	51,142	38,441	38,170	38,770	21,529	19,127	34,014	25,349	27,720	20,929	17,846	20,949	353,986
PSPP	37,323	29,624	28,961	29,779	16,370	15,150	23,102	19,182	21,241	17,822	13,655	15,129	267,338
CSPP	6,965	5,560	5,438	7,515	4,502	4,004	8,496	6,983	5,009	2,378	4,924	4,064	65,838
CBPP3	3,931	3,582	3,785	1,731	1,198	500	2,839	-1,041	646	1,529	74	1,539	20,313
ABSPP	2,923	-325	-14	-255	-541	-527	-423	225	824	-800	-807	217	497

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

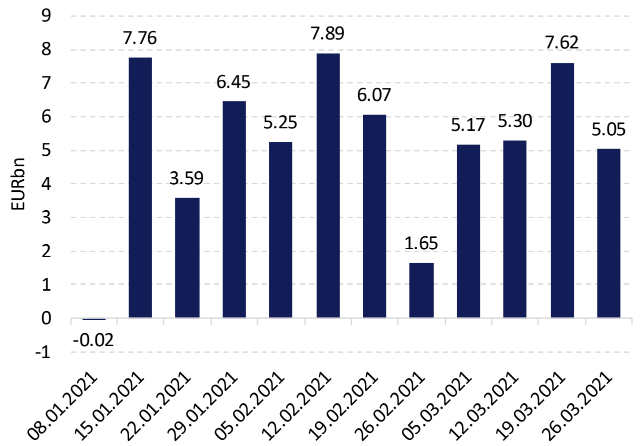
Portfolio development



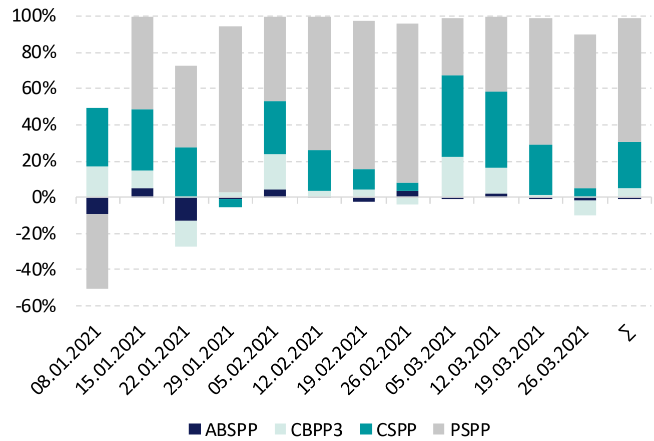
Distribution of monthly purchases



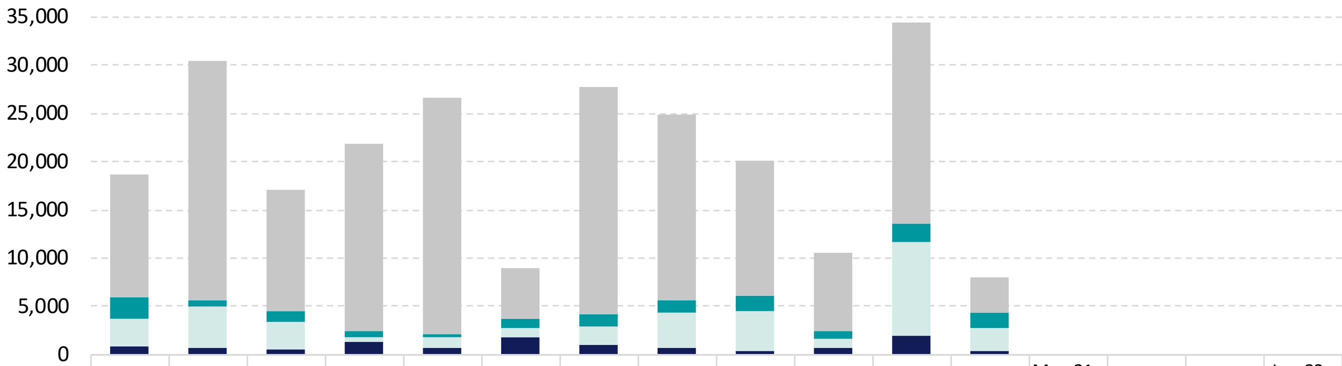
Weekly purchases



Distribution of weekly purchases



Expected monthly redemptions (in EURm)

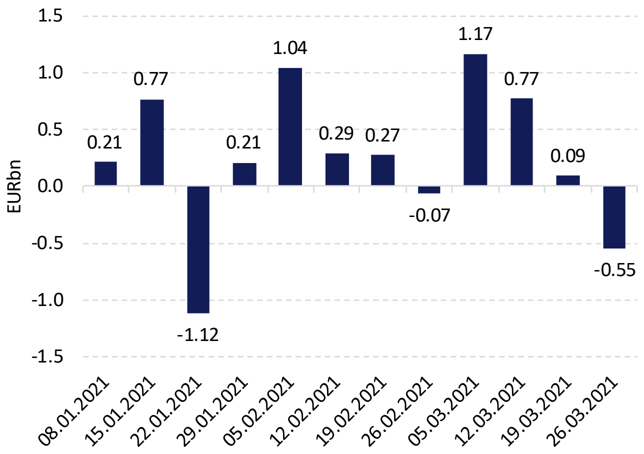


	Mar-21	Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Nov-21	Dec-21	Jan-22	Feb-22	Mar-21 - Feb-22	2020	2021	Jan-22 - Feb-22
APP	18,607	30,466	17,144	21,892	26,593	8,882	27,775	24,846	20,120	10,584	34,430	7,966	249,305	262,253	246,111	42,396
PSPP	12,674	24,919	12,637	19,519	24,532	5,118	23,640	19,227	13,991	8,177	20,906	3,625	188,965	201,482	189,743	24,531
CSPP	2,265	607	1,144	631	334	966	1,272	1,280	1,673	826	1,915	1,544	14,457	18,267	15,943	3,459
CBPP3	2,818	4,278	2,894	367	1,132	1,002	1,902	3,716	4,039	937	9,639	2,433	35,157	33,236	30,057	12,072
ABSPP	850	662	469	1,375	595	1,796	961	623	417	644	1,970	364	10,726	9,268	10,368	2,334

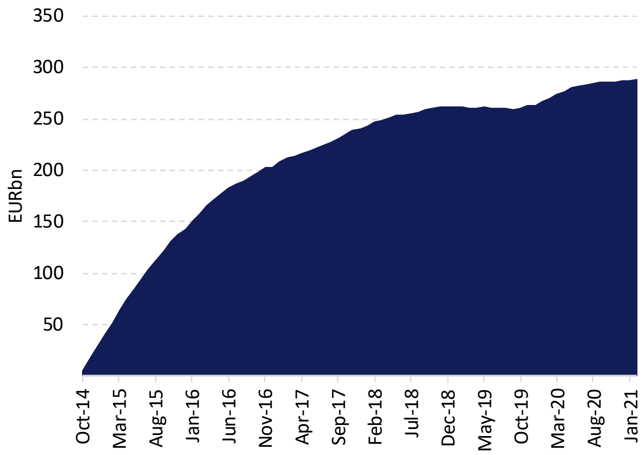
Source: ECB, Bloomberg, NORD/LB Markets Strategy & Floor Research

Covered Bond Purchase Programme 3 (CBPP3)

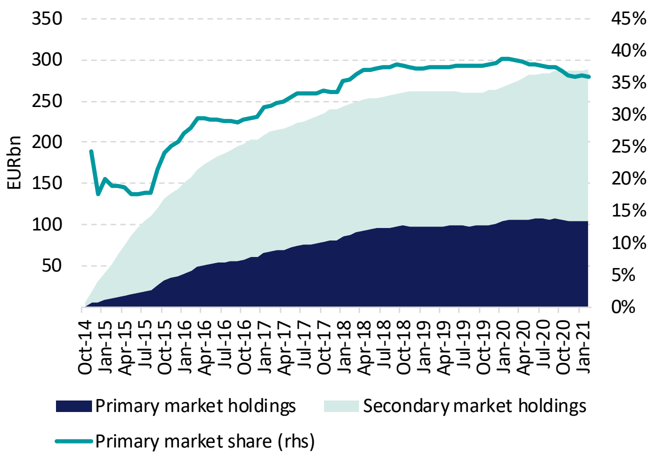
Weekly purchases



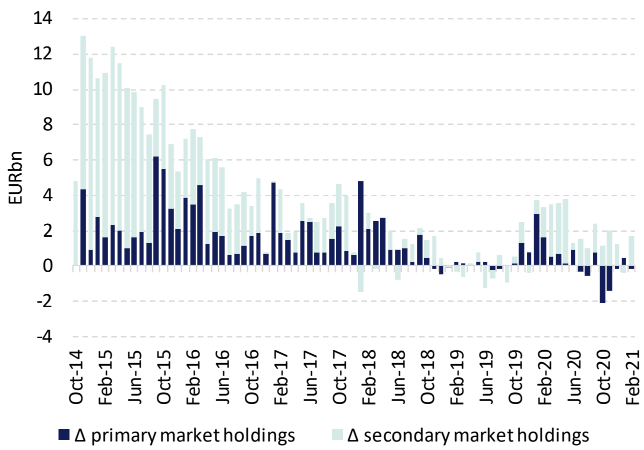
Development of CBPP3 volume



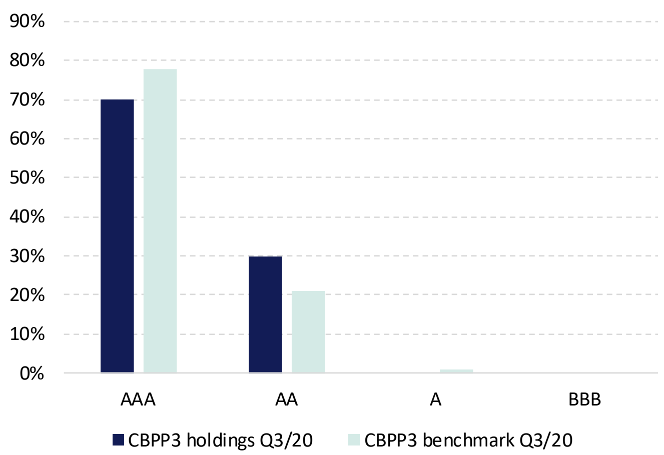
Primary and secondary market holdings



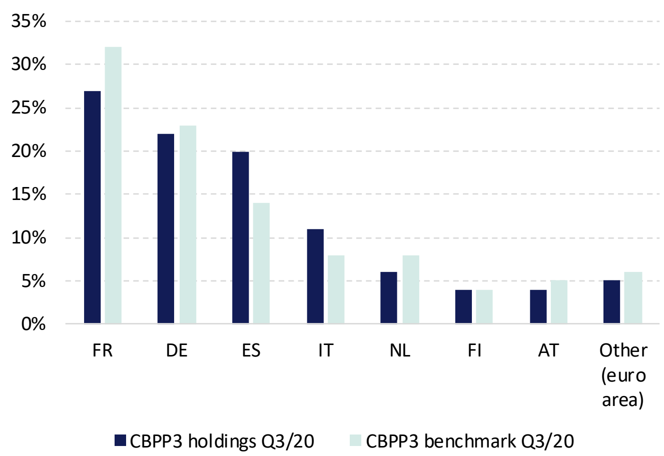
Change of primary and secondary market holdings



Distribution of CBPP3 by credit rating



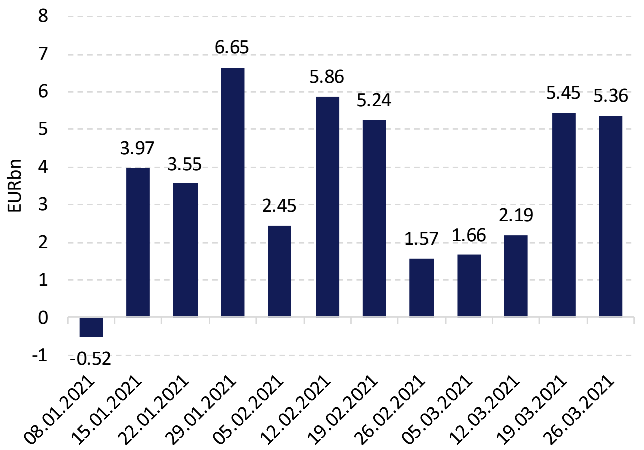
Distribution of CBPP3 by country of risk



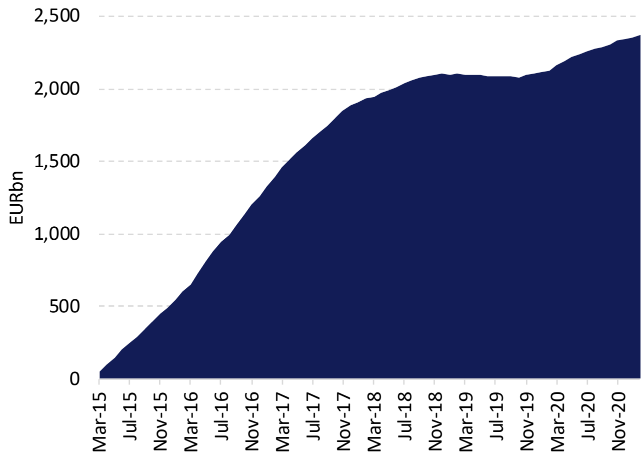
Source: ECB, Bloomberg, NORD/LB Markets Strategy & Floor Research

Public Sector Purchase Programme (PSPP)

Weekly purchases



Development of PSPP volume



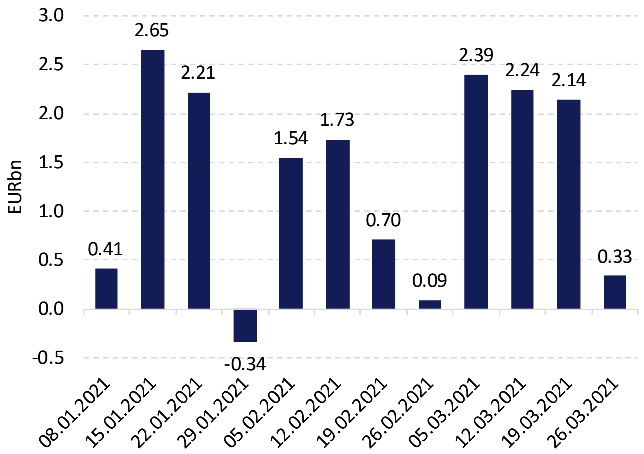
Overall distribution of PSPP buying at month-end

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%	69,357	67,307	2,050	7.8	7.8	0.0
BE	3.4%	87,627	83,780	3,847	8.4	10.2	-1.8
CY	0.2%	3,427	4,948	-1,521	10.0	9.3	0.7
DE	24.3%	588,192	606,206	-18,014	6.5	7.6	-1.1
EE	0.3%	324	6,478	-6,154	9.7	9.7	0.0
ES	11.0%	292,369	274,217	18,152	8.2	8.5	-0.3
FI	1.7%	36,772	42,241	-5,469	7.2	7.9	-0.7
FR	18.8%	492,681	469,676	23,005	7.0	8.1	-1.1
GR	0.0%	0	0	0	0.0	0.0	0.0
IE	1.6%	38,171	38,941	-770	8.6	9.9	-1.3
IT	15.7%	418,790	390,666	28,124	7.1	7.8	-0.7
LT	0.5%	4,683	13,309	-8,626	9.5	11.3	-1.8
LU	0.3%	3,164	7,575	-4,411	5.0	6.5	-1.5
LV	0.4%	2,599	8,960	-6,361	10.1	10.5	-0.4
MT	0.1%	1,222	2,412	-1,190	10.1	9.2	0.9
NL	5.4%	119,658	134,766	-15,108	7.5	8.4	-0.9
PT	2.2%	46,884	53,822	-6,938	7.2	7.6	-0.4
SI	0.4%	9,041	11,073	-2,032	9.4	9.3	0.1
SK	1.1%	15,130	26,336	-11,206	8.4	8.6	-0.2
SNAT	10.0%	261,812	249,190	12,622	7.2	8.3	-1.1
Total / Avg.	**100.0%**	**2,491,902**	**2,491,902**	**0**	**7.2**	**8.1**	**-0.9**

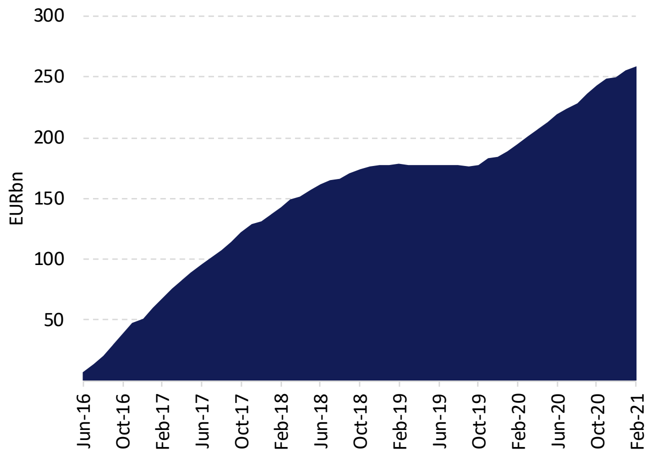
[1] Based on the ECB capital key, adjusted to include supras and the disqualification of Greece
[2] Based on the adjusted distribution key
[3] Weighted average time to maturity of the bonds eligible for purchasing under the PSPP (semi-annual data, Q3/2020)
Source: ECB, NORD/LB Markets Strategy & Floor Research

Corporate Sector Purchase Programme (CSPP)

Weekly purchases

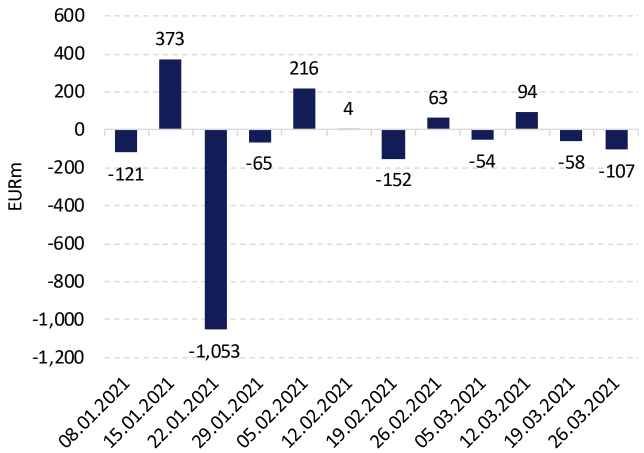


Development of CSPP volume

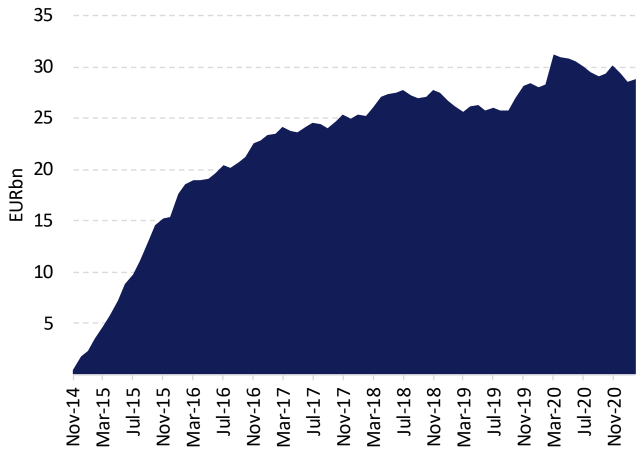


Asset-Backed Securities Purchase Programme (ABSPP)

Weekly purchases



Development of ABSPP volume



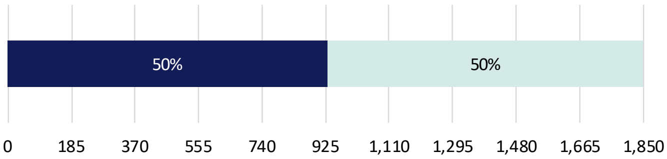
Source: ECB, Bloomberg, NORD/LB Markets Strategy & Floor Research

Pandemic Emergency Purchase Programme (PEPP)

Holdings (in EURm)

	PEPP
Jan-21	810,212
Feb-21	870,126
Δ	+59,914

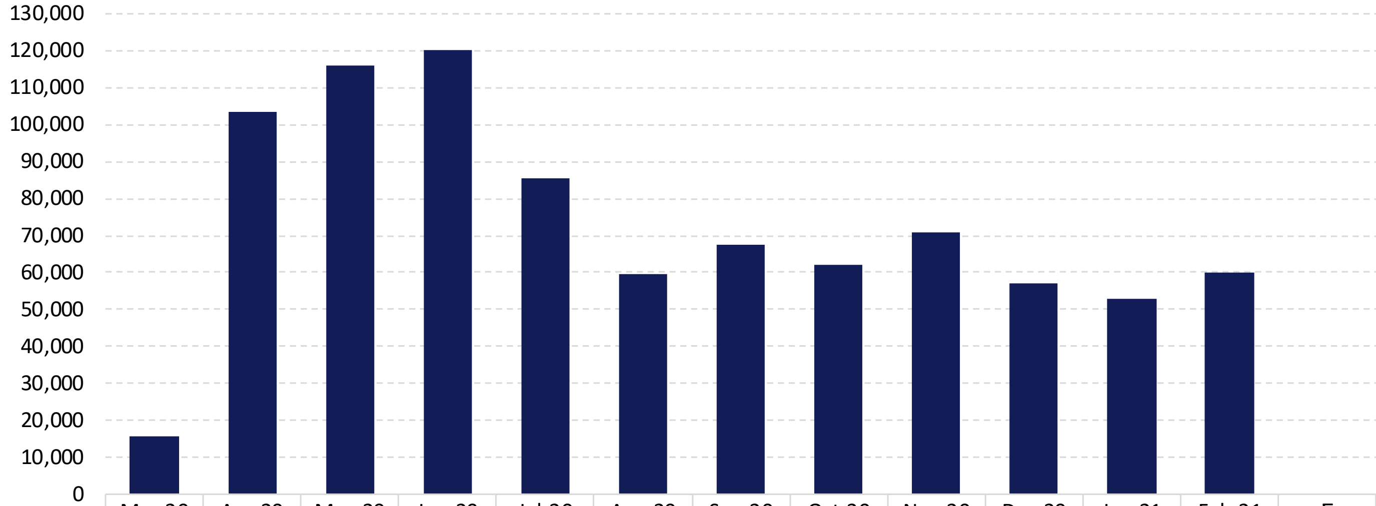
Volume already invested (in EURbn)



Estimated portfolio development

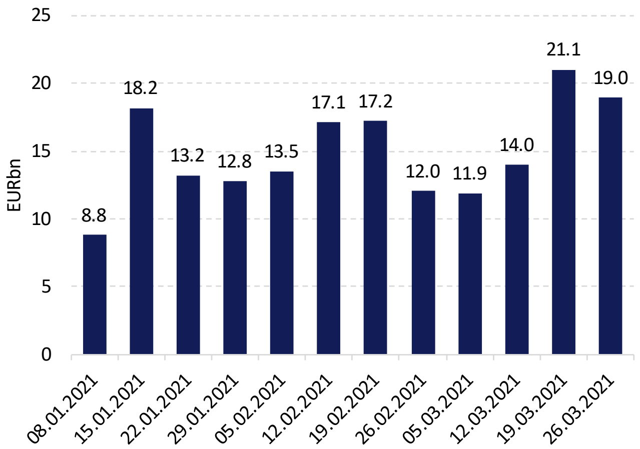
Assumed pace of purchases	Weekly net purchase volume	PEPP limit hit in ...
Average weekly net purchase volume so far	EUR 17.9bn	51 weeks (18.03.2022)

Monthly net purchases (in EURm)

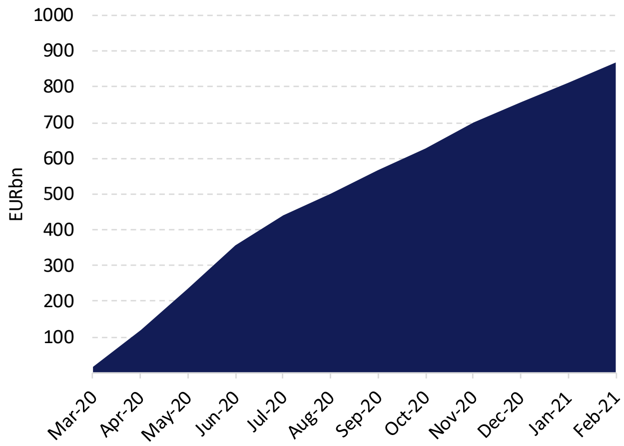


	Mar-20	Apr-20	May-20	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20	Jan-21	Feb-21	∑
PEPP	15,444	103,366	115,855	120,321	85,423	59,466	67,308	61,985	70,835	57,163	53,046	59,914	870,126

Weekly purchases



Development of PEPP volume

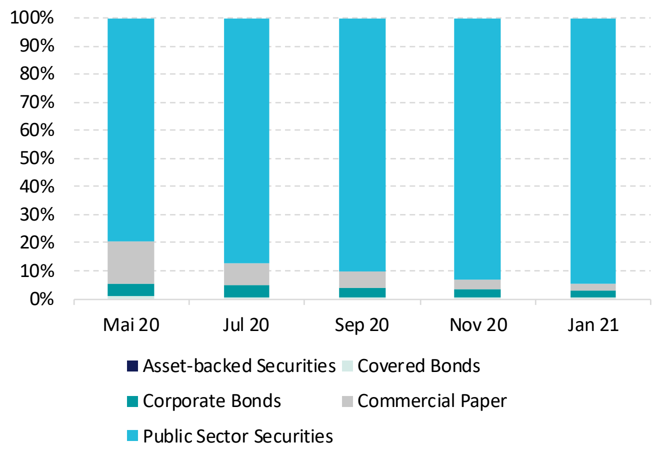


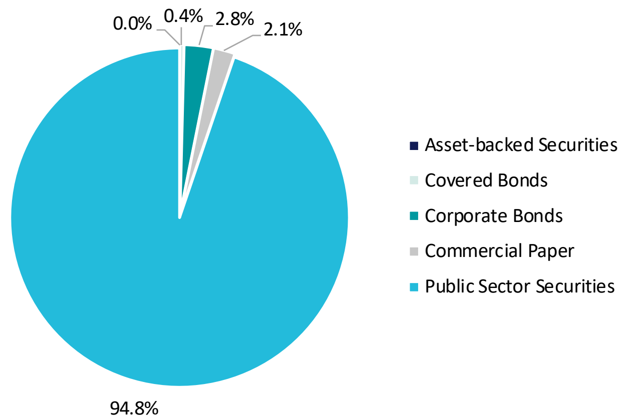
Source: ECB, Bloomberg, NORD/LB Markets Strategy & Floor Research

Holdings under the PEPP (in EURm)

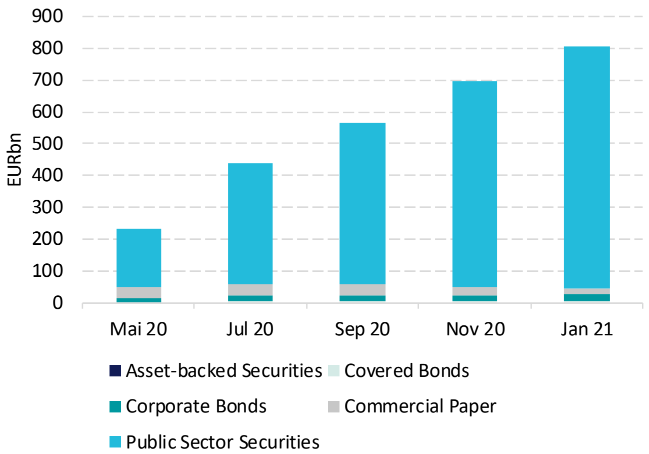
	Asset-backed Securities	Covered Bonds	Corporate Bonds	Commercial Paper	Public Sector Securities	PEPP
Nov-20	0	3,123	20,760	24,306	650,272	698,461
Jan-21	0	3,120	22,315	16,611	764,710	806,756
Δ	0	-3	+1,555	-7,695	+114,438	+108,295

Portfolio structure

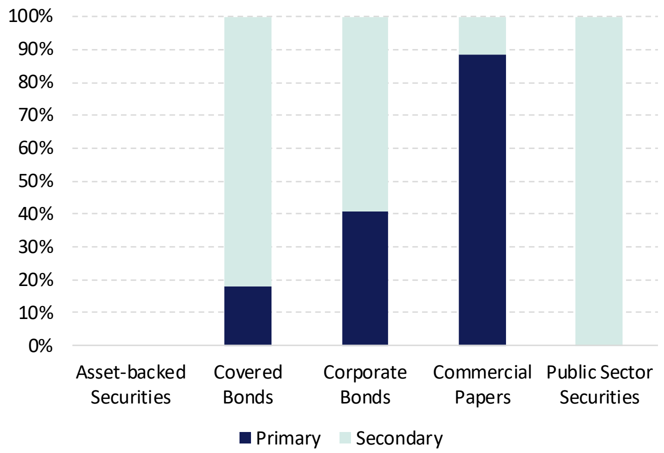




Portfolio development



Share of primary and secondary market holdings



Breakdown of private sector securities under the PEPP as of January 2021

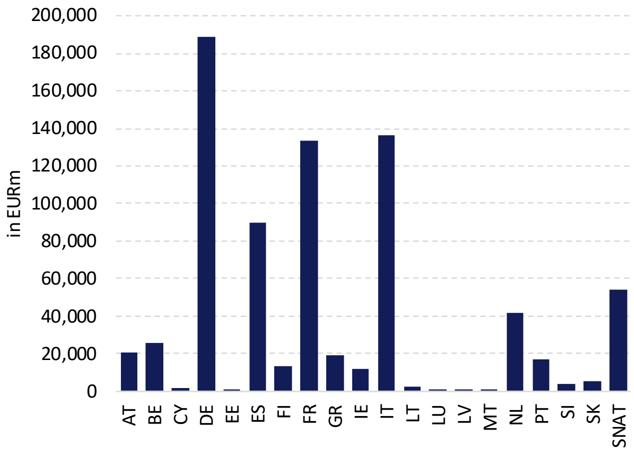
	Asset-backed securities		Covered bonds		Corporate bonds		Commercial papers	
	Primary	Secondary	Primary	Secondary	Primary	Secondary	Primary	Secondary
Holdings in EURm	0	0	557	2,563	9,092	13,223	14,663	1,948
Share	0.0%	0.0%	17.9%	82.2%	40.7%	59.3%	88.3%	11.7%

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

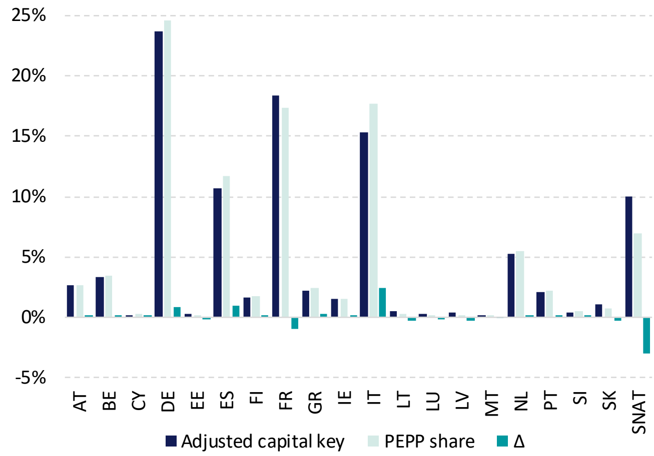
Breakdown of public sector securities under the PEPP

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	20,692	2.6%	2.7%	0.1%	10.0	7.1	3.0
BE	26,084	3.3%	3.4%	0.1%	6.5	9.3	-2.8
CY	1,712	0.2%	0.2%	0.0%	10.4	8.2	2.3
DE	188,751	23.7%	24.6%	0.8%	5.1	6.7	-1.6
EE	211	0.3%	0.0%	-0.2%	8.9	8.2	0.8
ES	89,846	10.7%	11.7%	1.0%	8.5	7.4	1.0
FI	13,103	1.7%	1.7%	0.1%	7.1	6.9	0.2
FR	133,594	18.4%	17.4%	-1.0%	8.4	7.3	1.1
GR	18,950	2.2%	2.5%	0.2%	8.6	9.5	-0.8
IE	12,123	1.5%	1.6%	0.1%	9.0	9.4	-0.5
IT	136,310	15.3%	17.7%	2.5%	6.8	6.9	-0.1
LT	2,183	0.5%	0.3%	-0.2%	11.5	10.3	1.2
LU	1,301	0.3%	0.2%	-0.1%	6.9	6.2	0.6
LV	888	0.4%	0.1%	-0.2%	9.7	10.1	-0.4
MT	266	0.1%	0.0%	-0.1%	7.2	8.0	-0.8
NL	41,956	5.3%	5.5%	0.2%	4.4	7.8	-3.3
PT	17,304	2.1%	2.3%	0.1%	6.6	6.6	0.0
SI	3,644	0.4%	0.5%	0.0%	9.3	9.8	-0.5
SK	5,381	1.0%	0.7%	-0.3%	8.6	8.2	0.4
SNAT	53,849	10.0%	7.0%	-3.0%	9.8	7.9	1.9
Total / Avg.	**768,148**	**100.0%**	**100.0%**	**0.0%**	**7.1**	**7.3**	**-0.2**

Distribution of public sector assets by jurisdiction



Deviations from the adjusted distribution key



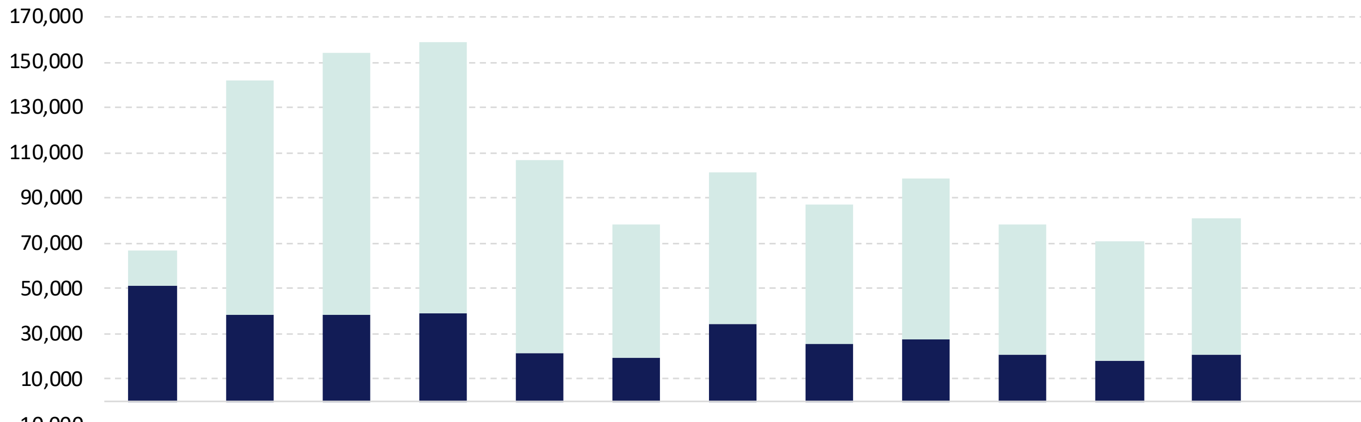
[1] Based on the ECB capital key, adjusted to include supras [2] Based on the adjusted distribution key
[3] Weighted average time to maturity of the bonds eligible for purchasing under the PEPP
Source: ECB, Bloomberg, NORD/LB Markets Strategy & Floor Research

Aggregated purchase activity under APP and PEPP

Holdings (in EURm)

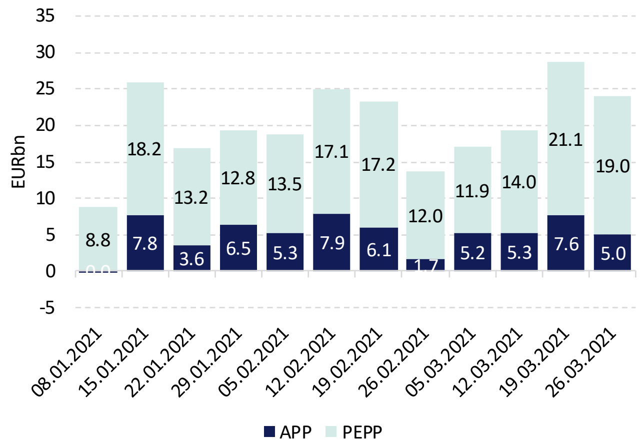
	APP	PEPP	APP & PEPP
Jan-21	2,926,754	810,212	3,736,966
Feb-21	2,947,703	870,126	3,817,829
Δ	+20,949	+59,914	80,863

Monthly net purchases (in EURm)

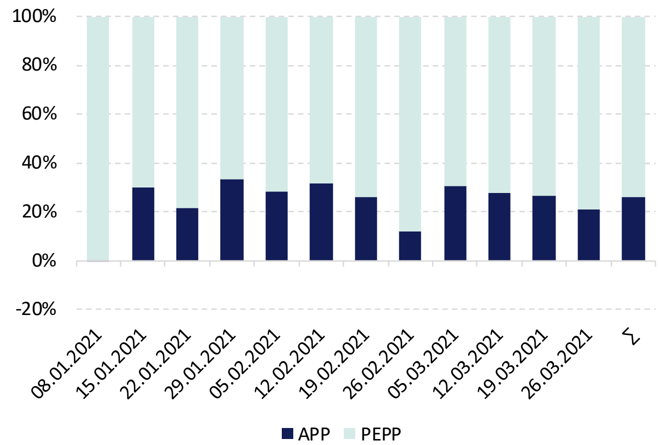


	Mar-20	Apr-20	May-20	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20	Jan-21	Feb-21	∑
∑	66,586	141,807	154,025	159,091	106,952	78,593	101,322	87,334	98,555	78,092	70,892	80,863	1,224,11
PEPP	15,444	103,366	115,855	120,321	85,423	59,466	67,308	61,985	70,835	57,163	53,046	59,914	870,126
APP	51,142	38,441	38,170	38,770	21,529	19,127	34,014	25,349	27,720	20,929	17,846	20,949	353,986

Weekly purchases



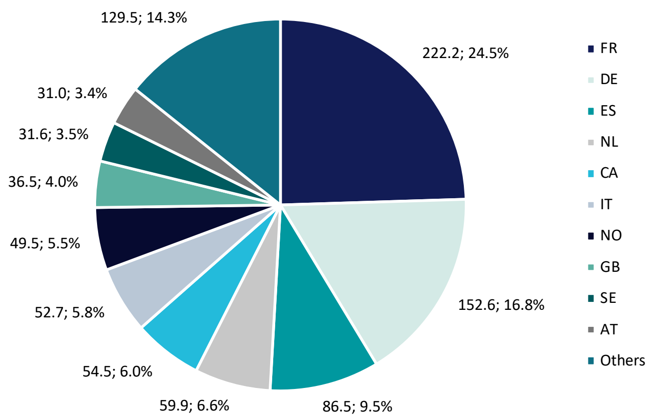
Distribution of weekly purchases



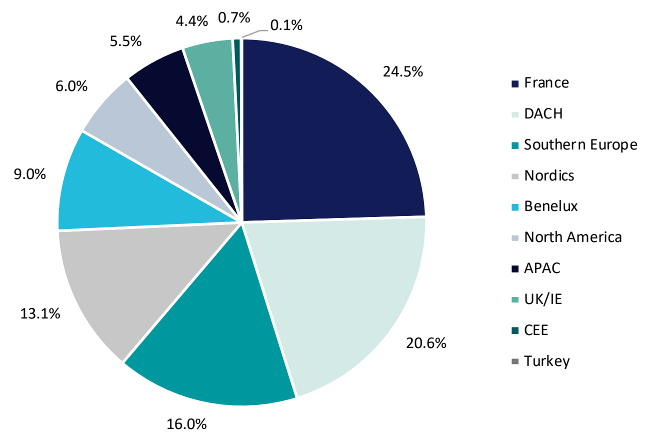
Source: ECB, Bloomberg, NORD/LB Markets Strategy & Floor Research

Charts & Figures
Covered Bonds

EUR benchmark volume by country (in EURbn)



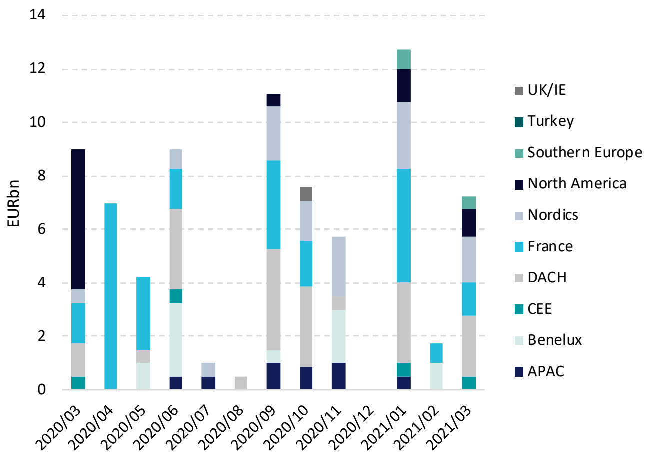
EUR benchmark volume by region (in EURbn)



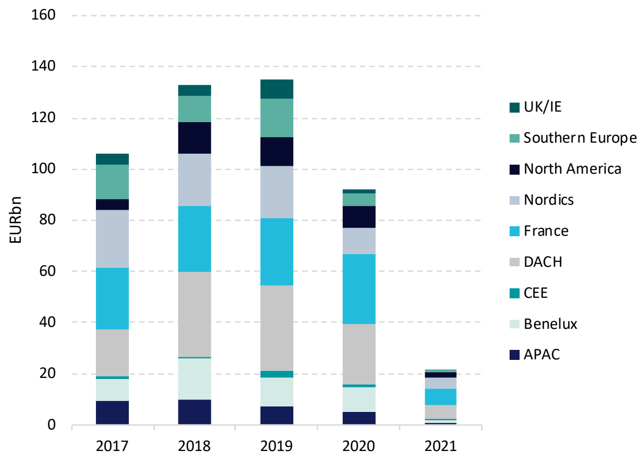
Top-10 jurisdictions

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	222.2	205	7	0.95	10.2	5.5	1.15
2	DE	152.6	228	13	0.60	8.3	4.7	0.47
3	ES	86.5	70	3	1.13	11.3	3.9	1.80
4	NL	59.9	59	0	0.96	11.2	7.3	0.97
5	CA	54.5	47	0	1.13	6.0	3.1	0.27
6	IT	52.7	61	1	0.83	9.1	4.3	1.43
7	NO	49.5	55	7	0.90	7.3	3.9	0.53
8	GB	36.5	41	0	0.90	8.4	3.1	1.12
9	SE	31.6	37	0	0.85	7.5	3.5	0.57
10	AT	31.0	57	1	0.54	9.6	6.2	0.66

EUR benchmark issue volume by month

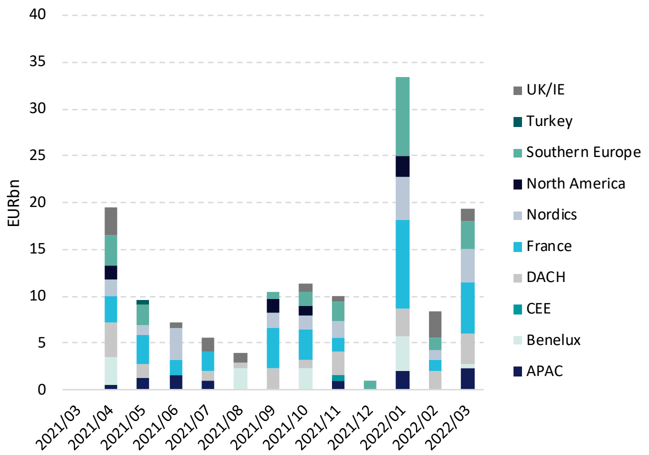


EUR benchmark issue volume by year

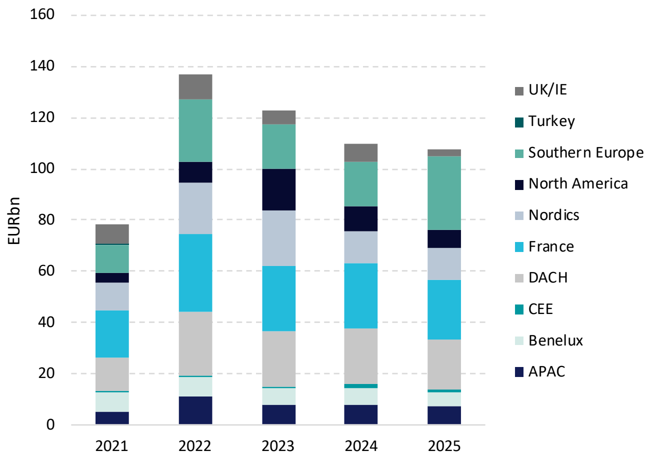


Source: Market data, Bloomberg, NORD/LB Markets Strategy & Floor Research

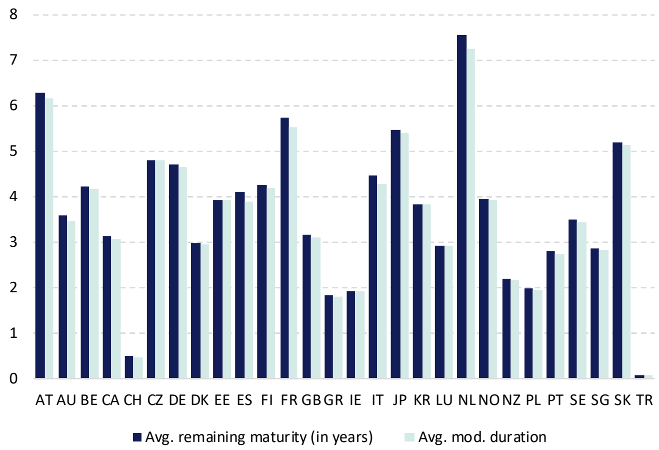
EUR benchmark maturities by month



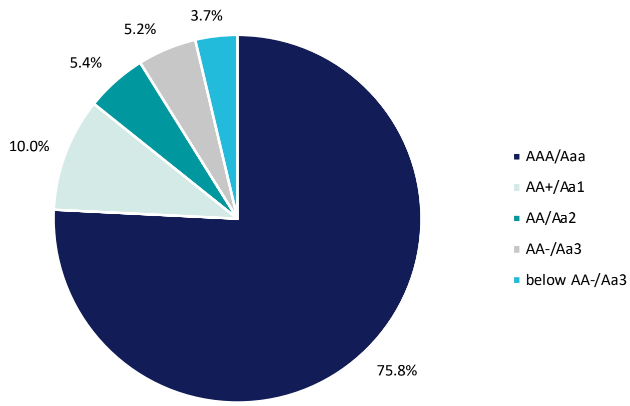
EUR benchmark maturities by year



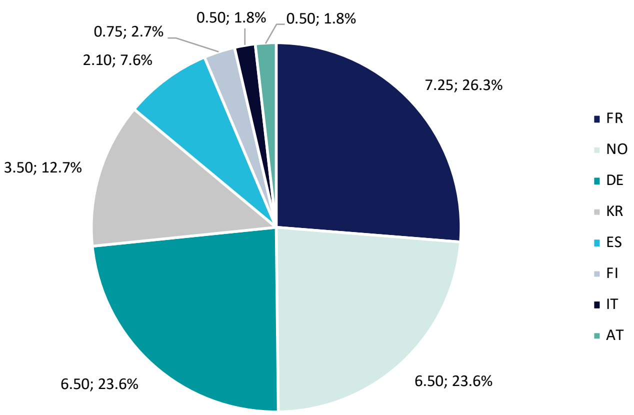
Modified duration and time to maturity by country



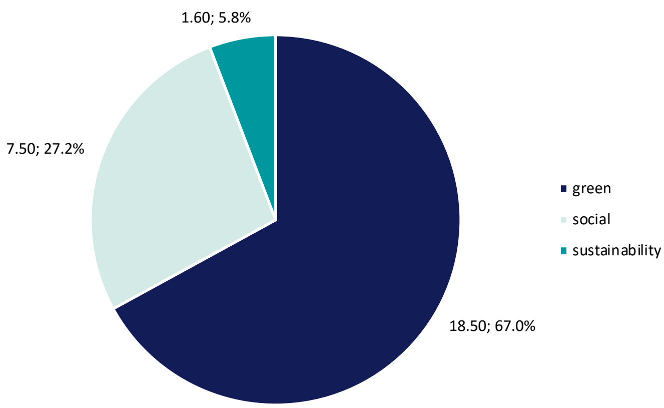
Rating distribution (volume weighted)



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

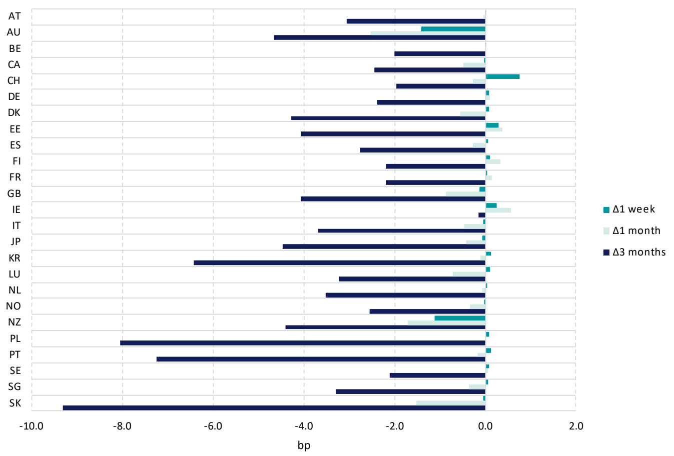


EUR benchmark volume (ESG) by type (in EURbn)

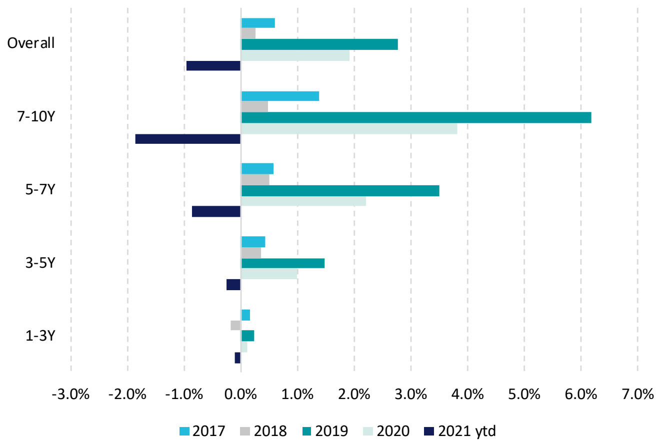


Source: Market data, Bloomberg, NORD/LB Markets Strategy & Floor Research

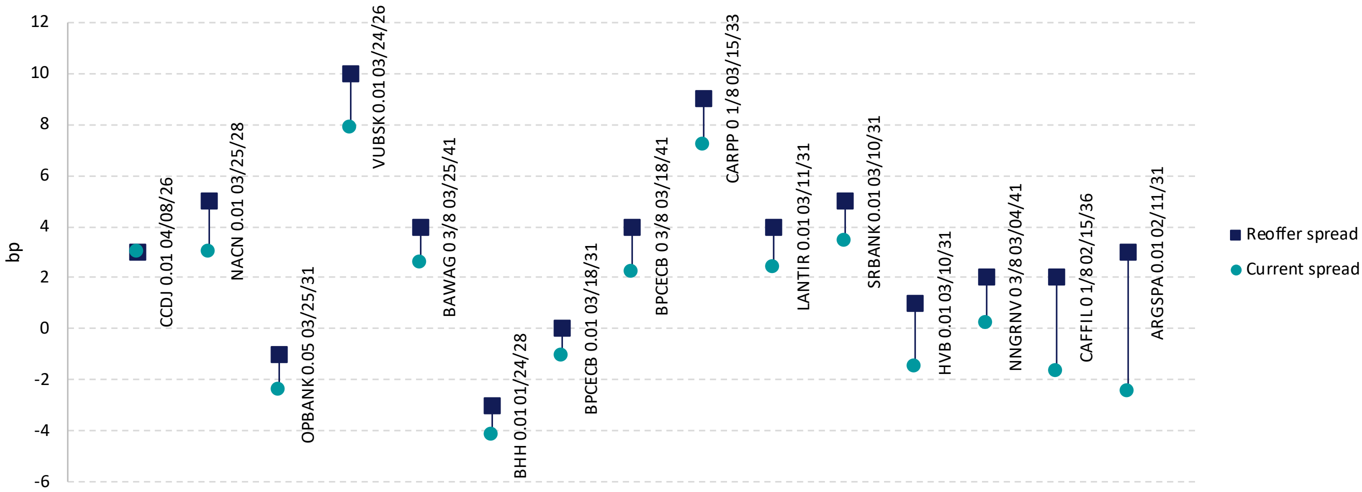
Spread development by country



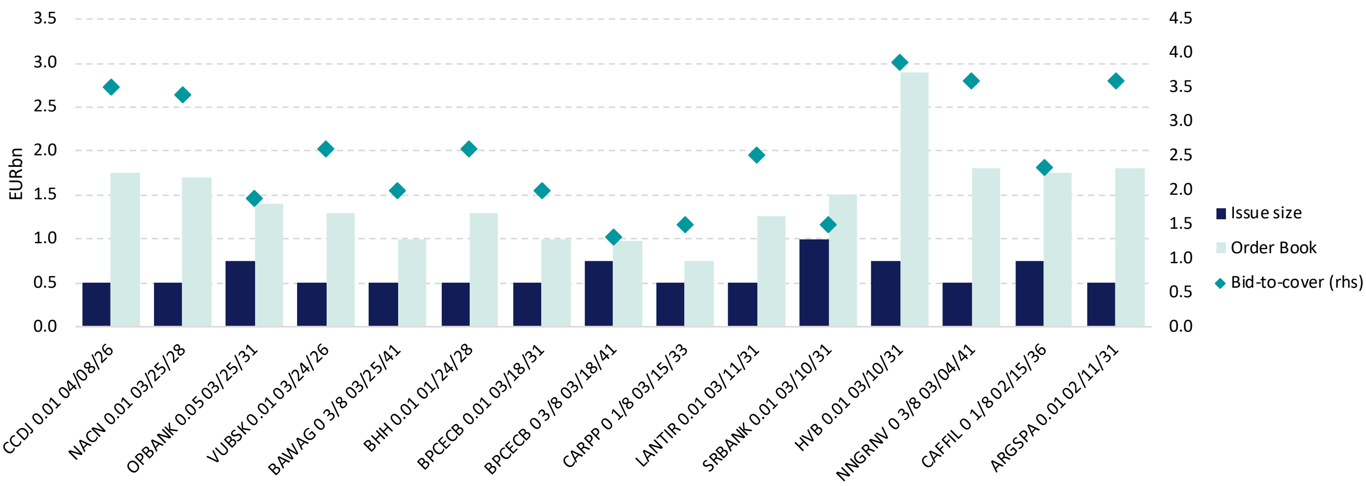
Covered bond performance (Total return)



Spread development (last 15 issues)



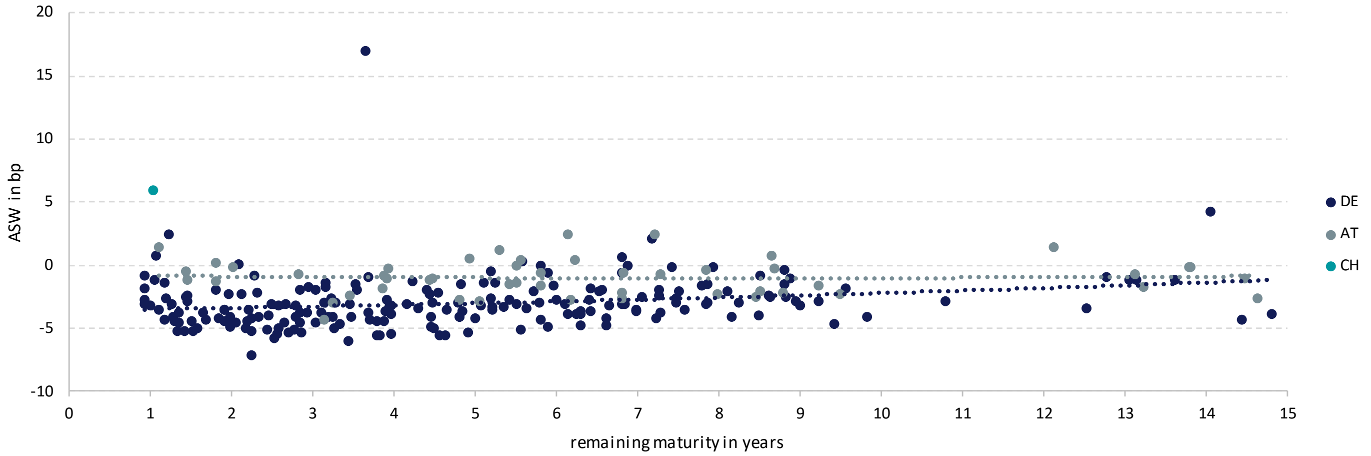
Order books (last 15 issues)



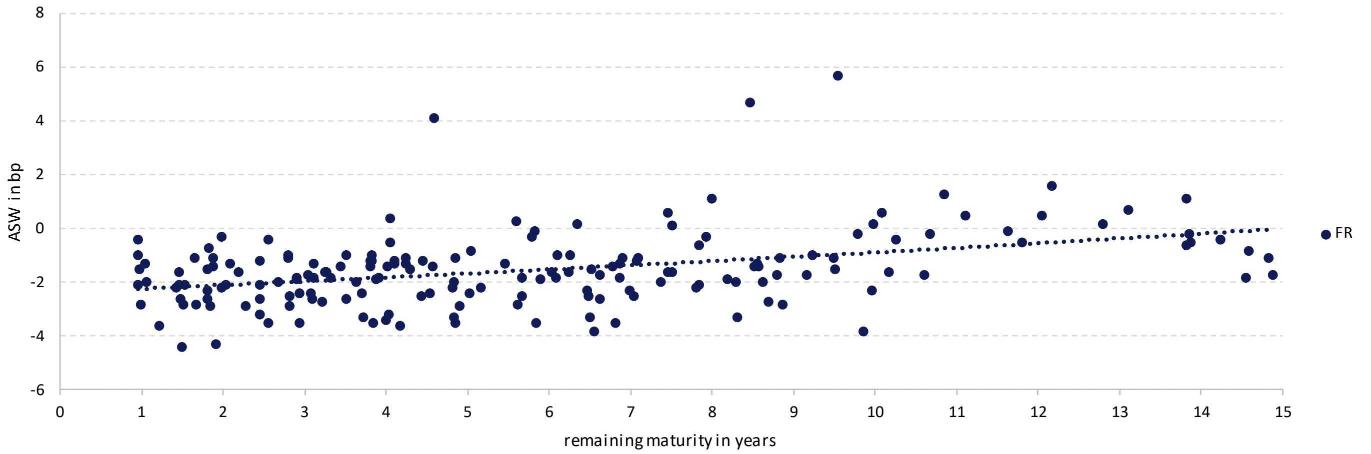
Source: Market data, Bloomberg, NORD/LB Markets Strategy & Floor Research

Spread overview[1]

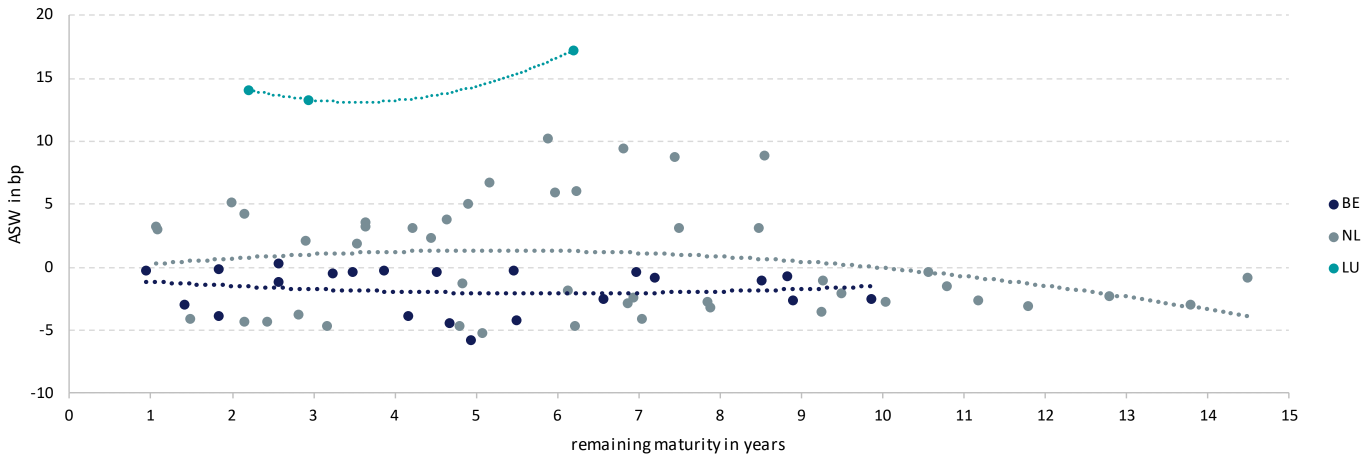
DACH



France

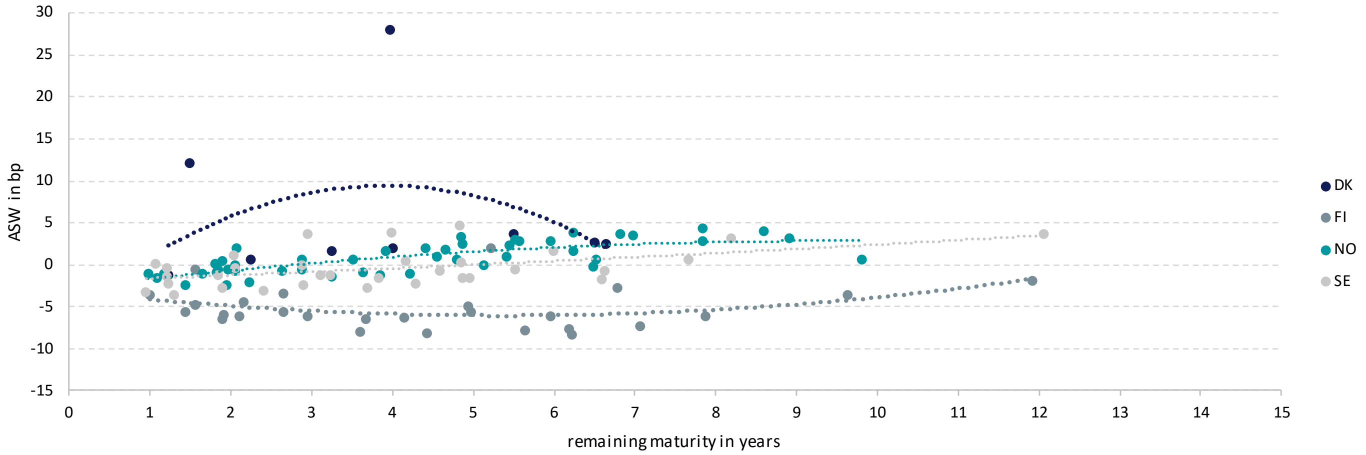


Benelux

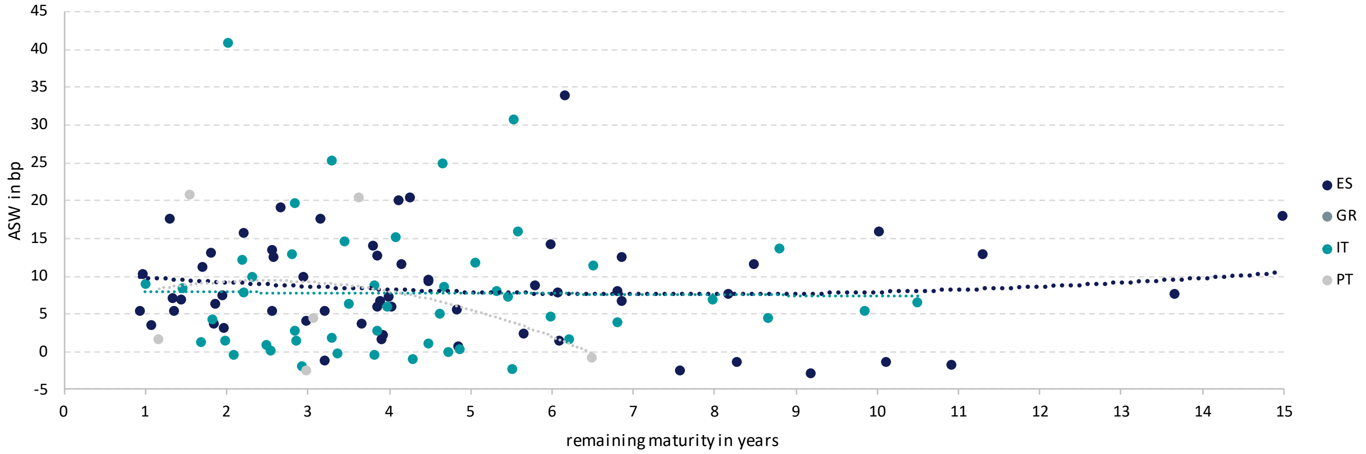


Source: Market data, Bloomberg, NORD/LB Markets Strategy & Floor Research [1]Time to maturity 1 ≤ y ≤ 15

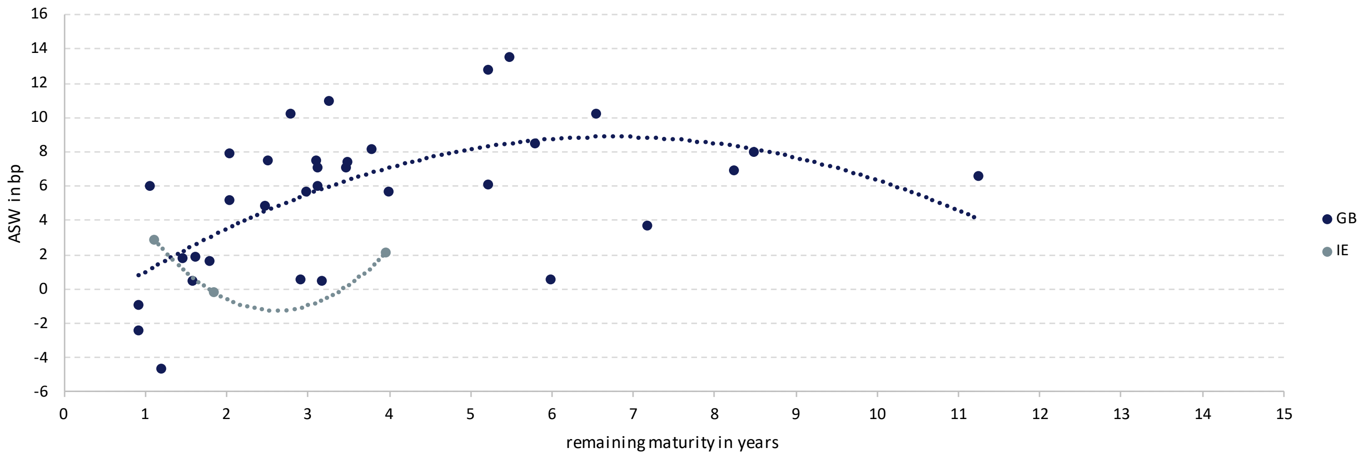
Nordics



Southern Europe

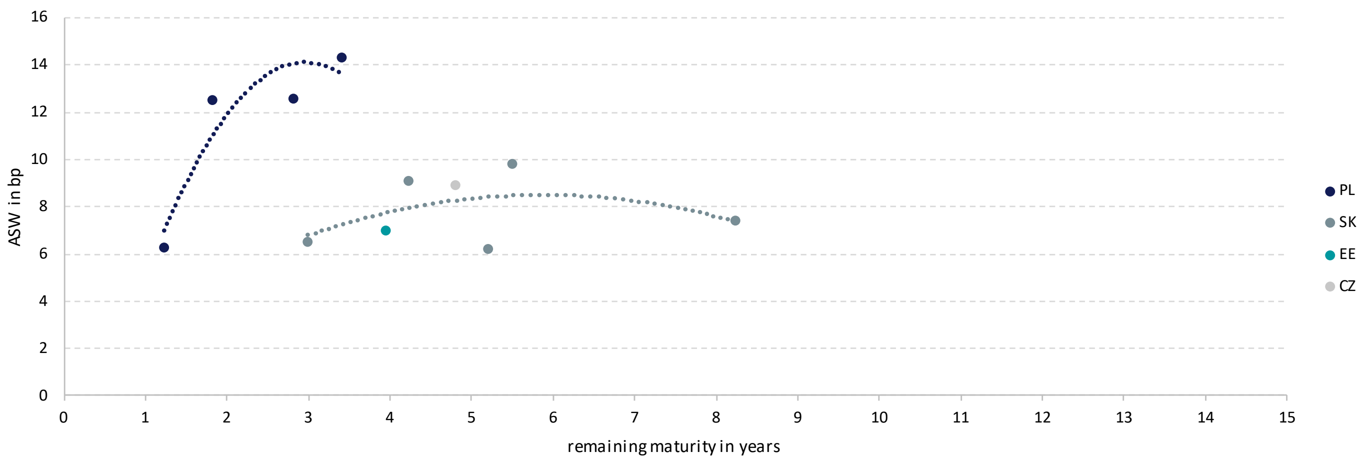


UK/IE

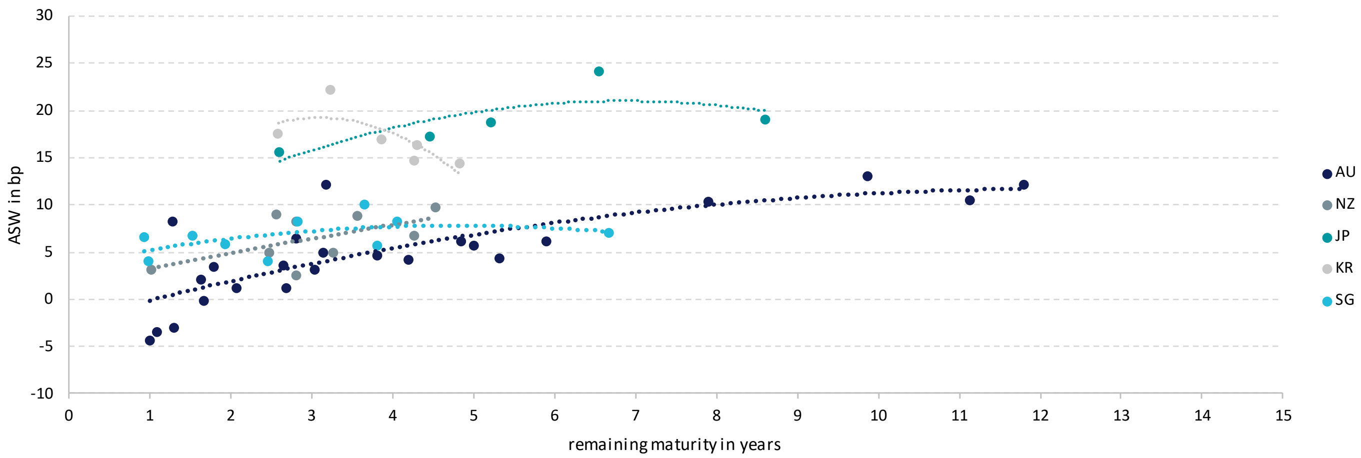


Source: Market data, Bloomberg, NORD/LB Markets Strategy & Floor Research

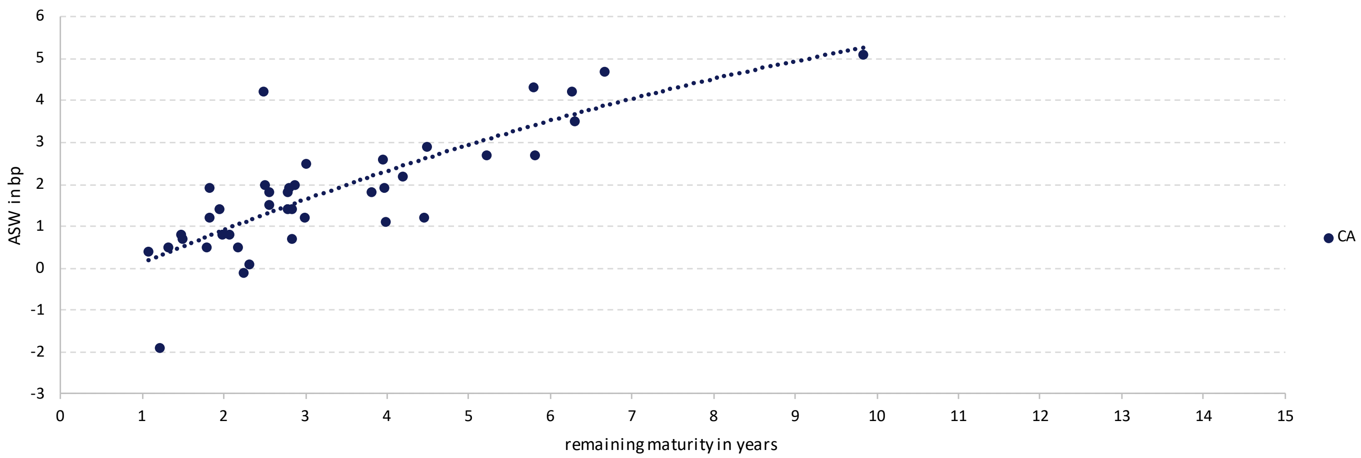
CEE



APAC



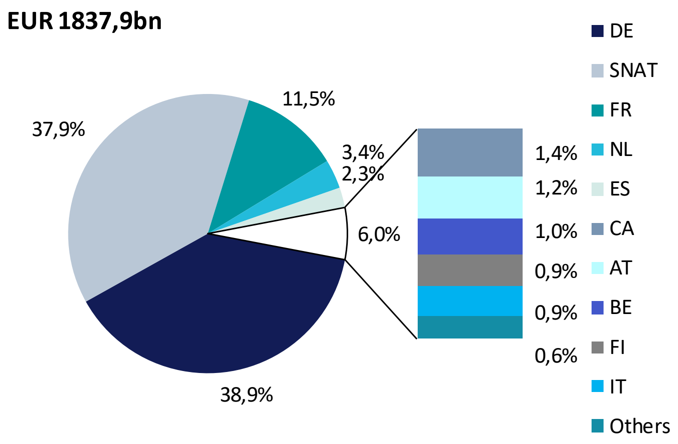
North America



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

Charts & Figures
SSA/Public Issuers

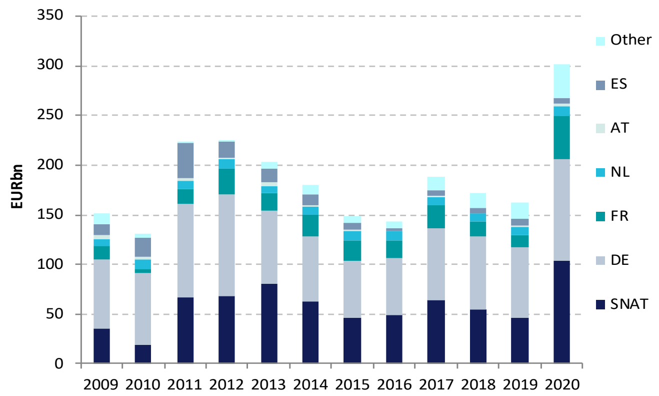
Outstanding volume (bmk)



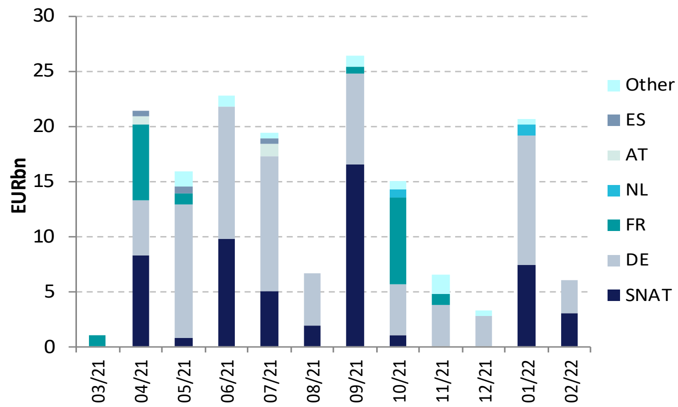
Top 10 countries (bmk)

Country	Vol. (€bn)	No. of bonds	ØVol. (€bn)	Vol. weight. ØMod. Dur.
DE	715,0	560	1,3	6,7
SNAT	696,2	184	3,8	8,1
FR	211,8	142	1,5	5,4
NL	61,9	63	1,0	6,4
ES	42,8	53	0,8	5,1
CA	25,0	18	1,4	5,4
AT	22,5	24	0,9	5,1
BE	18,7	22	0,9	15,1
FI	16,5	21	0,8	6,0
IT	15,8	20	0,8	5,8

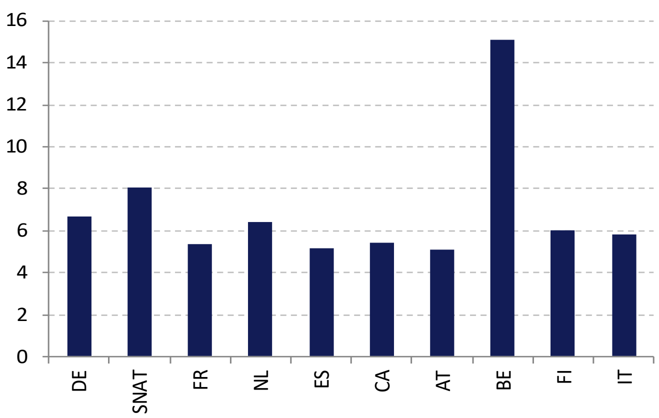
Issue volume by year (bmk)



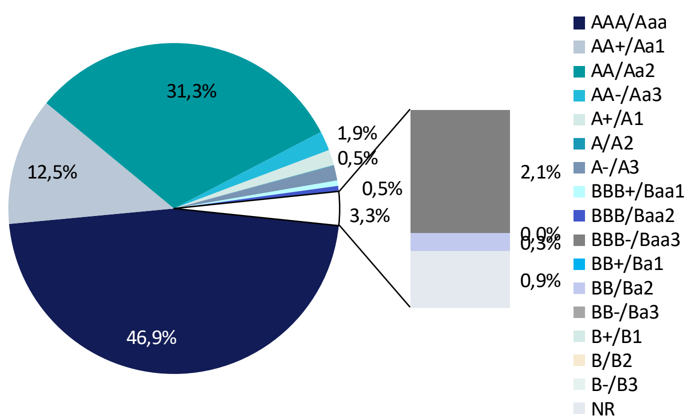
Maturities next 12 months (bmk)



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

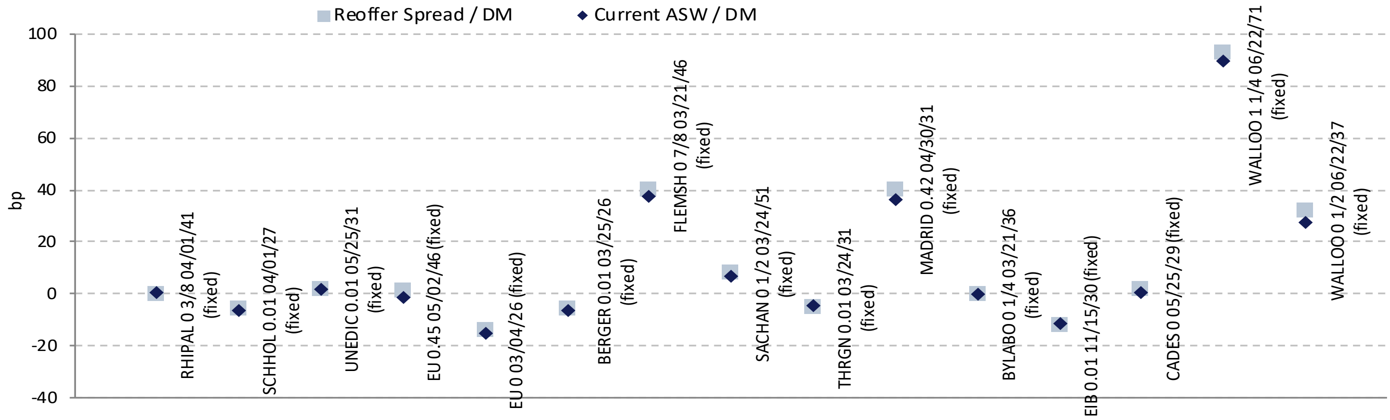


Rating distribution (vol. weighted)

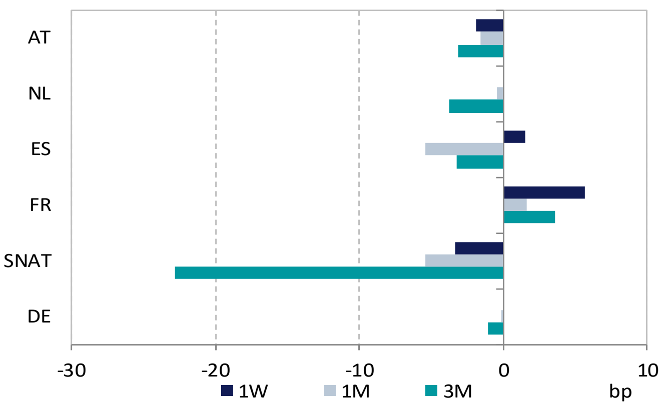


Source: Bloomberg, NORD/LB Markets Strategy & Floor Research

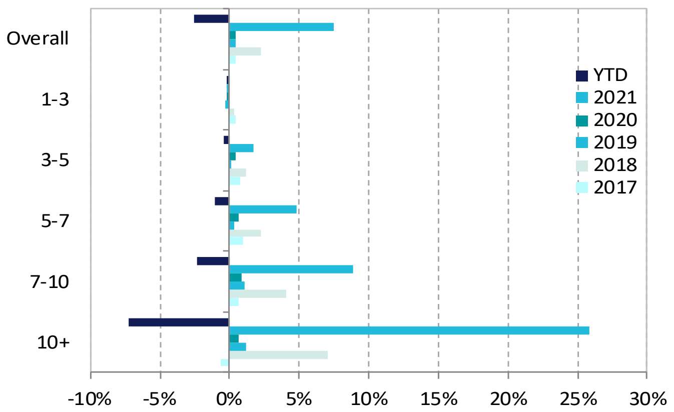
Spread development (last 15 issues)



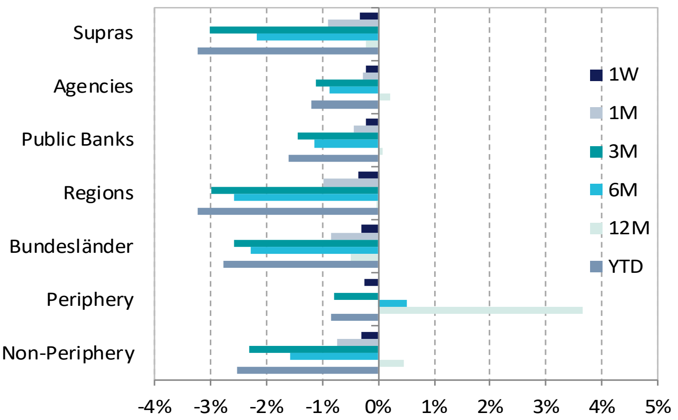
Spread development by country



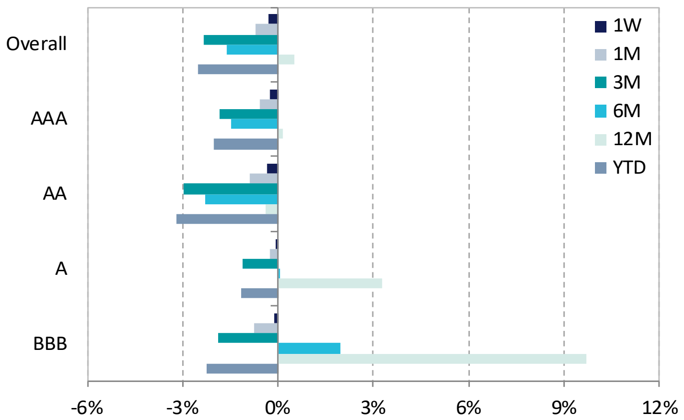
Performance (total return)



Performance (total return) by regions

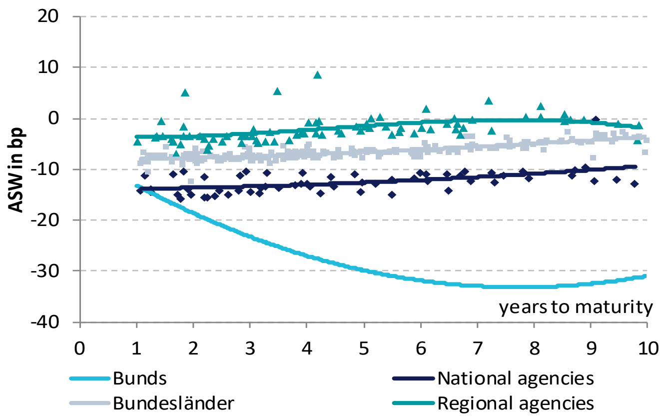


Performance (total return) by rating

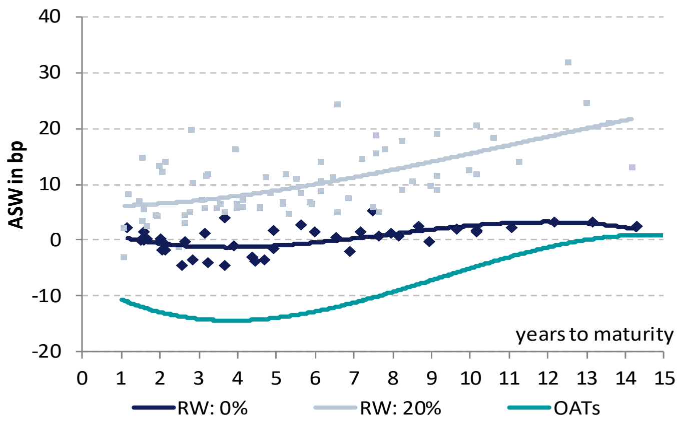


Source: Bloomberg, NORD/LB Markets Strategy & Floor Research

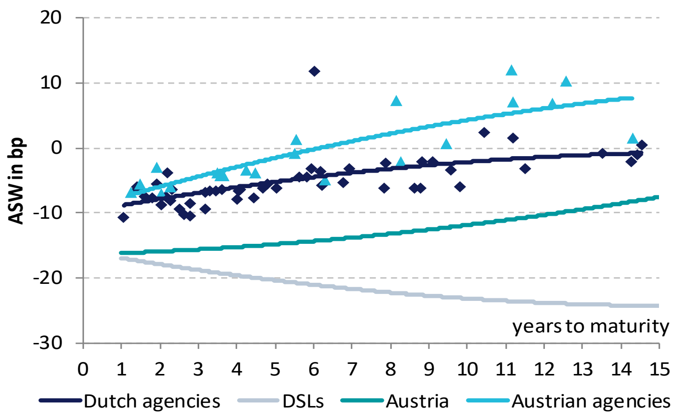
Germany (by segments)



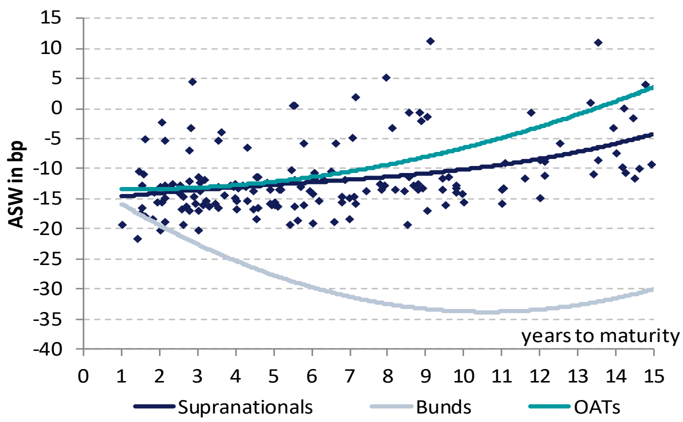
France (by risk weight)



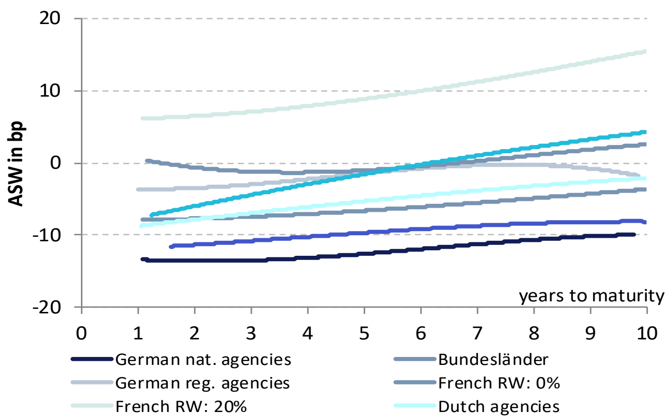
Netherlands & Austria



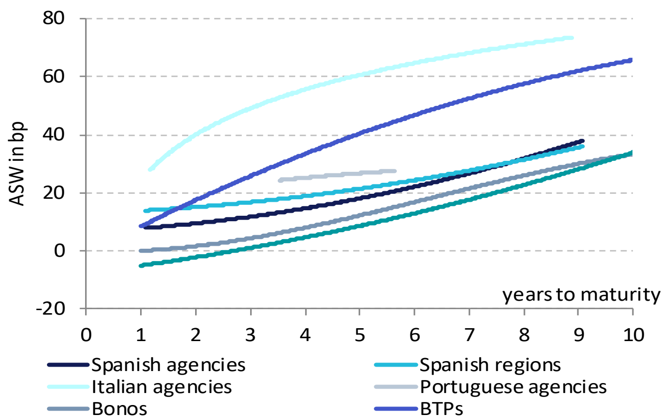
Supranationals



Core



Periphery



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

NORD/LB

Appendix
Overview of latest Covered Bond & SSA View editions

Publication	Topics
11/2021 ♦ 24 March	▪ Surprising dynamic: Eurosystem lends EUR 331bn to EMU banks via TLTRO III.7 ▪ German Pfandbrief savings banks in Q4 2020
10/2021 ♦ 17 March	▪ Transparency requirements §28 PfandBG Q4/2020 ▪ Credit authorisations for German Bundeslaender in 2021
09/2021 ♦ 10 March	▪ Moody's covered bond universe – an overview ▪ Oldenburgische Landesbank expands sub-benchmark segment
08/2021 ♦ 03 March	▪ Repayment structures on the covered bond market ▪ ECB in a tight spot: litmus test for PEPP flexibility and preview of the second interest rate meeting of the year
07/2021 ♦ 24 February	▪ An overview of the EUR sub-benchmark segment ▪ ECB: crowding-out effects take hold ▪ PEPP vs. PSPP: Similarities and differences
06/2021 ♦ 17 February	▪ Insights into the iBoxx EUR Covered ▪ Development of the German property market
05/2021 ♦ 10 February	▪ PEPP reporting: upswing in public sector assets continues; covered bonds inconsequential
04/2021 ♦ 03 February	▪ Argenta Spaarbank expands Belgian market for EUR benchmarks ▪ An overview of the Fitch covered bond universe ▪ January 2021 packs a punch to kick off the new year
03/2021 ♦ 27 January	▪ An unusual – albeit expected – start to the year? ▪ A look at USD benchmarks ▪ ESM reform – restructuring continues
02/2021 ♦ 20 January	▪ Spread considerations – APAC covered bonds riding the wave of ECB purchase programmes? ▪ Return of the Danish market for EUR benchmark bond issues ▪ 22nd meeting of the Stability Council (Dec. 2020)
01/2021 ♦ 13 January	▪ EUR benchmark from the Czech Republic: Komerční Banka launches a new covered bond programme ▪ New covered bond programme from South Korea: Hana Bank ▪ Annual review of 2020 – covered bonds ▪ Annual review of 2020 – SSA
48/2020 ♦ 16 December	▪ TLTRO III: ECB extends tender and also raises the threshold
47/2020 ♦ 09 December	▪ Fourth and final round of PEPP reporting in 2020 ▪ Investment alternative: Paris metropolitan area (IDF and VDP)
46/2020 ♦ 02 December	▪ The ECB ahead of its course-setting meeting for 2021 ▪ Covered Bonds – Outlook 2021: Waiting for the game changer? ▪ SSA – Outlook 2021: Coronavirus and ECB dominate public-sector segment
45/2020 ♦ 25 November	▪ UOB ends the state of hibernation on Singapore's primary market ▪ The covered bond universe of Moody's: an overview ▪ Update: Belgium regions as investment alternatives

Appendix
Publication overview

Covered Bonds:

- Issuer Guide Covered Bonds 2020
- Risk weights and LCR levels of covered bonds
- Transparency requirements §28 PfandBG
- Transparenzvorschrift §28 PfandBG Sparkassen **(German only)**

SSA/Public Issuers:

- Issuer Guide – Supranationals & Agencies 2019
- Issuer Guide – Canadian Provinces & Territories 2020
- Issuer Guide – German Bundeslaender 2020
- Issuer Guide – Down Under 2019

Fixed Income:

- ESG update
- Analysis of ESG reporting
- ECB holds course, but ups the ante – PEPP running until 2022
- ECB launches corona pandemic emergency
- ECB responds to corona risks

Appendix
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Sales

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

Trading

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

Origination & Syndicate

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

Sales Wholesale Customers

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

Treasury

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

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Additional information
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Issuer / security	Date	Recommendation	Bond type	Cause