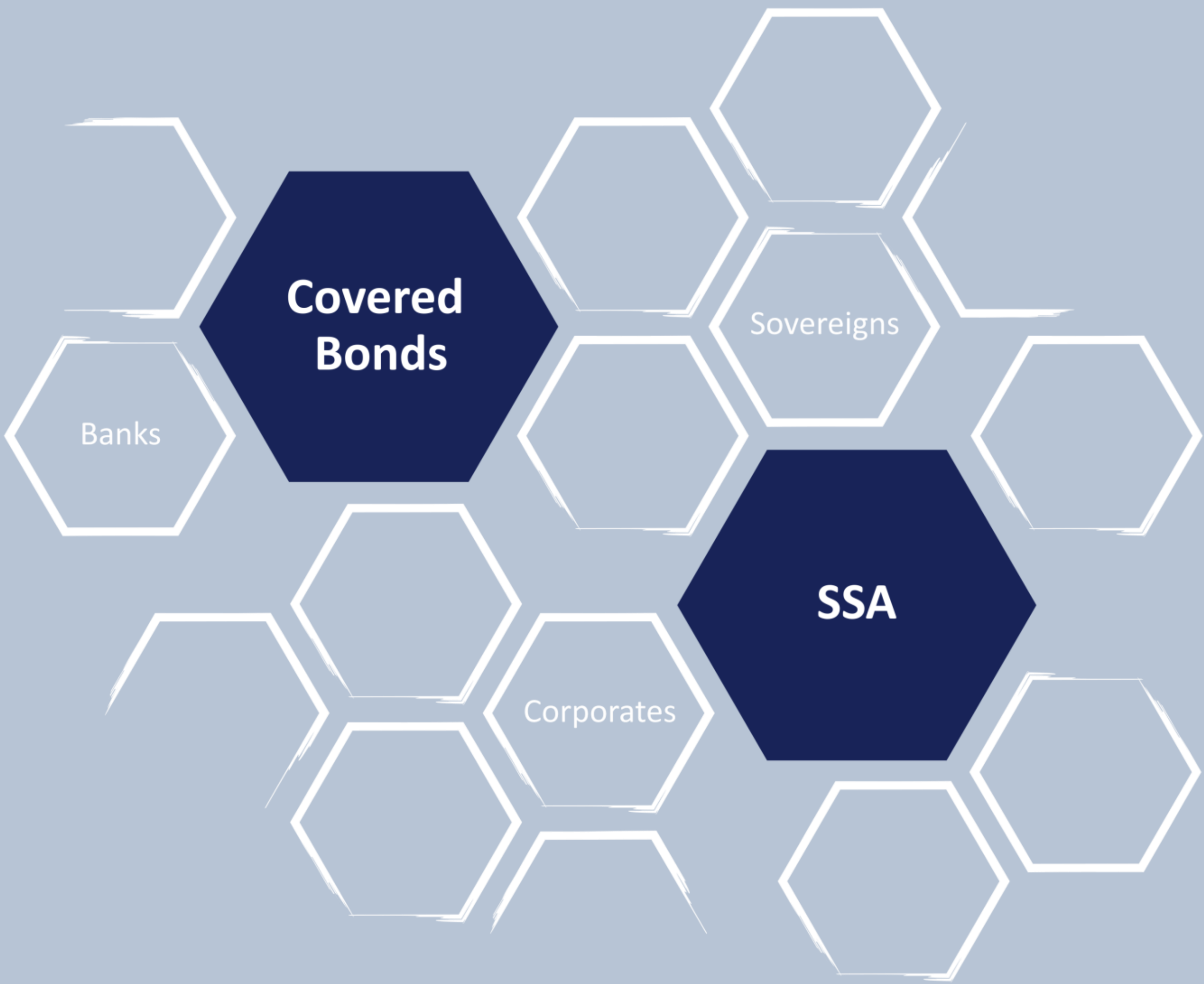
NORD/LB



Covered Bond & SSA View

NORD/LB Markets Strategy & Floor Research

3 February 2021 ♦ 04/2021

Investment strategy recommendation and marketing communication

(see disclaimer on the last pages)

Finanzgruppe

Agenda

Market overview

- **Covered Bonds** 3
- **SSA/Public Issuers** 7

Argenta Spaarbank expands Belgian market for EUR benchmarks 11

An overview of the Fitch covered bond universe 17

January 2021 packs a punch to kick off the new year 23

ECB tracker

- **Asset Purchase Programme (APP)** 26
- **Pandemic Emergency Purchase Programme (PEPP)** 31
- **Aggregated purchase activity under APP and PEPP** 34

Charts & Figures

- **Covered Bonds** 35
- **SSA/Public Issuers** 41

Overview of latest Covered Bond & SSA View editions 44

Publication overview 45

Contacts at NORD/LB 46

Floor analysts:

Dr Frederik Kunze
Covered Bonds
frederik.kunze@nordlb.de

Dr Norman Rudschuck, CIIA
SSA/Public Issuers
norman.rudschuck@nordlb.de

Henning Walten, CIIA
Covered Bonds
henning.walten@nordlb.de

NORD/LB:
Markets Strategy & Floor Research

NORD/LB:
Covered Bond Research

NORD/LB:
SSA/Public Issuer Research

Bloomberg:
RESP NRDR <GO>

Market overview
Covered Bonds

Authors: Dr Frederik Kunze // Henning Walten, CIIA

Primary market in January 2021: False start or just taking a breather?

By historical standards, the market got off to something of a false start in terms of the issuance volume recorded at the start of 2021. At EUR 12.75bn in total, new issuances in January lagged well behind the levels seen in previous years. Even taking into account the issuance patterns observed in the past and seasonality factors, an extrapolation across 2021 as a whole would indicate that a real drought is on the cards here. Under the assumption that around 20% of the full-year volume is traditionally placed in January, it would seem that a total issuance volume of just EUR 65bn is likely for 2021. However, we do not want to put such a dampener on the newly started year. Rather, we would describe the start to this year more in terms of the markets pausing for breath in an environment subject to an unusually high level of political and economic turbulence. In our primary market forecast for 2021 (EUR 105bn), we also took into account fundamental influencing factors such as high levels of customer deposits and the TLTRO.III tenders. With this in mind, the factors dampening issuance activity have in no way come as a surprise. We regard the benchmark debut from Argenta Spaarbank as a pleasant surprise. This soft bullet bond with a term to maturity of 10 years started out in the marketing phase in the area of ms +9bp before eventually tightening to be priced at ms +3bp (yield: -0.135%). With an order book of EUR 1.8bn, the deal was nearly four times oversubscribed and was therefore subject to the expected high level of demand for new issuers in the current market phase. We have taken a closer look at the inaugural issuer in a separate article.

Issuer	Country	Timing	ISIN	Maturity	Size	Spread	Rating	ESG
Argenta Spaarbank	BE	02.02.	BE6326767397	10.0y	0.50bn	ms +3bp	- / - / AAA	-

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

DBRS publishes covered bond outlook for 2021

Another rating agency in the form of DBRS has presented its outlook for the covered bond market. Overall, the risk experts expect that the coronavirus crisis will have a negative impact on the quality of credit portfolios due to increasing levels of loans in arrears as well as – to a lesser extent – a rise in credit defaults. Nevertheless, DBRS believes issuers are well equipped to deal with this scenario and emphasizes the incentives to substitute affected assets in the context of the coverage requirements or asset coverage tests. Moreover, the analysts take the view that a certain degree of heterogeneity can be expected in the developments. This applies both at jurisdiction level as well as in terms of the cover assets themselves. In this way, for example, commercial cover pools may have to deal with a heavier impact from the pandemic. However, the low interest rate environment should provide some relief in this context. In 2021, it is likely that issuances volumes will be more on the modest side, although DBRS is still forecasting a marginal increase versus the level recorded in 2020. In terms of rating developments, the credit quality of the issuers will be particularly key, even though the aforementioned pandemic influences on the cover assets are by no means likely to be negligible. In this context, DBRS is also anticipating a more restrained development of real estate prices, attributing this not least to expectations concerning increased unemployment.

European Mortgage Federation presents quarterly report: "Stop and Go" recovery also reflected in European real estate markets

A few days ago, the European Mortgage Federation (EMF) presented its quarterly report for the European real estate markets. As part of its review of Q3 2020, the study once again highlights the influence of the COVID-19 pandemic with its associated lockdown measures and subsequent lifting of restrictions on the supply and demand situation related to European mortgage markets. For example, during the period under review it was the economic recoveries connected with the lifting of restrictions in particular that shaped developments on European mortgage markets. At the same time, a subtle increase in dynamism on real estate markets could be observed overall, with factors such as the low interest rate environment having a supportive effect. In Q3 2020, the volume of outstanding mortgage loans increased by +2.7% year on year. While new gross residential lending declined further in comparison with the previous year, an increase of +5.4% against the previous quarter was generated, which according to the EMF can certainly be described as a partial summer recovery. In actual fact, a more pronounced dynamic was evident in some countries, while certain weaknesses continued to manifest over the course of Q3 2020 in other jurisdictions. While new gross residential lending increased by +6.3% year on year in Germany, further declines were recorded in France (-14.9% Y/Y), the UK (-16.3% Y/Y) and Denmark (-46.2% Y/Y), among other jurisdictions. In terms of the influences attributable to COVID-19, the EMF also underlined the indications of economic recovery tendencies. However, at the same time, the existing or continuing measures aimed at mitigating the impacts of the crisis may imply that the real effects of the pandemic have yet to truly emerge. We also share this view that both economic activity in general and the mortgage markets in particular must be assessed within the context of the prevailing uncertainty regarding the further course of the pandemic. From our perspective, in this context it is to be expected that the heterogeneity, which is also highlighted in the most recent EMF report, will be even more pronounced over the medium term.

Crisis mode over? – Norges Bank reverses withdrawal of easing for eligible collateral from March 2020

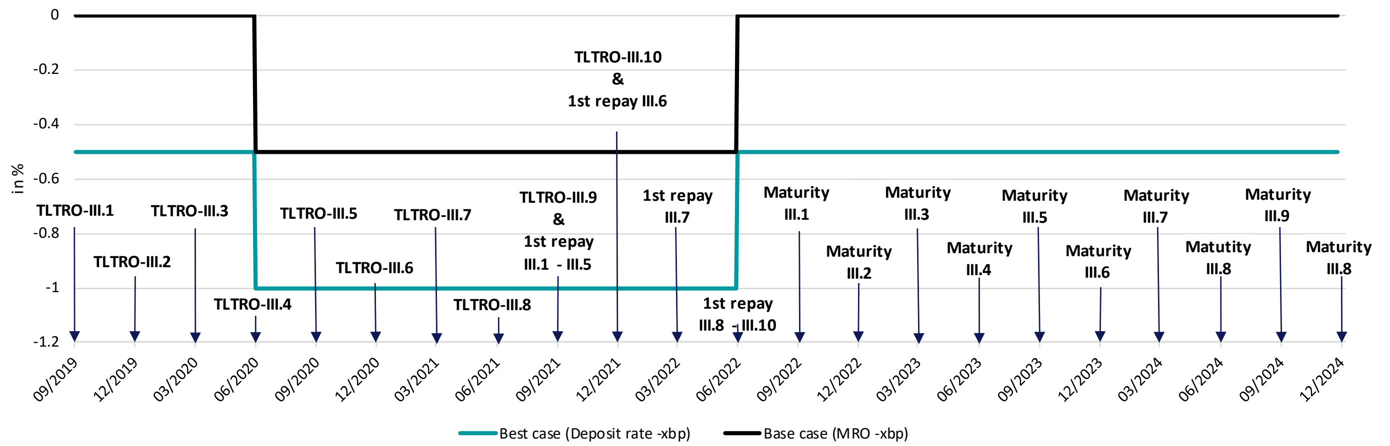
Nearly a year after the outbreak of the coronavirus crisis, the Norwegian central bank (Norges Bank) has announced further changes in 2021 with regard to the relaxation of requirements for determining eligible collateral (cf. press release from 01 February 2021). The changes, which also affect covered bonds denominated in EUR, relate both to the minimum volume of securities (e.g. NOK equivalent of 100m for non-NOK bonds) and ISIN limits (maximum of 20% of the outstanding volume for bonds other than Norwegian government bonds). The adjustments in the context of collateral eligibility will take effect from 31 August 2021, meaning that for this reason alone the direct market reactions should be kept in check. In addition, new guidelines came into force from 1 February 2021 relating to announcements from August last year (cf. press release from August 2020) to regulate the maximum volume per ISIN (maximum of 50% for bonds other than Norwegian government bonds).

ECB provides details on adjustments to TLTRO.III programme

After the ECB resolved to adjust the TLTRO.III programme, among other measures, at its meeting on 10 December 2020, it has now updated the documentation concerning the relevant requirements. In this way, the ECB website will now display not only the updated TLTRO III calendar, including the three new tenders in June, September and December, but also the relevant adjustments to the tender in the form of decision ECB/2021/3. In relation to this, a welcome service in the form of a document has been provided which outlines the changes in comparison with the previous adjustments. The documentation shows that premature repayment of the first seven tenders will continue to be permissible after a term of one year, albeit not before September 2021. The three newly added tenders (III.8 to III.10) can, in contrast, be repaid ahead of time at the start of every quarter beginning from June 2022.

TLTRO III schedule

Tender	Announcement	Allotment	Settlement	Maturity date	Settlement of first voluntary early repayment	Allotted amount (EUR bn)
TLTRO-III.1	17 Sept 2019	19 Sept 2019	25 Sept 2019	28 Sept 2022	29 Sept 2021	3.40
TLTRO-III.2	10 Dec 2019	12 Dec 2019	18 Dec 2019	21 Dec 2022	29 Sept 2021	97.72
TLTRO-III.3	17 March 2020	19 March 2020	25 March 2020	29 March 2020	29 Sept 2021	114.98
TLTRO-III.4	16 June 2020	18 June 2020	24 June 2020	28 June 2023	29 Sept 2021	1,308.43
TLTRO-III.5	22 Sept 2020	24 Sept 2020	30 Sept 2020	27 Sept 2023	29 Sept 2021	174.46
TLTRO-III.6	8 Dec 2020	10 Dec 2020	16 Dec 2020	20 Dec 2023	21 Dec 2021	50.41
TLTRO-III.7	16 March 2021	18 March 2021	24 March 2021	27 March 2024	29 March 2022	
TLTRO-III.8	15 June 2021	17 June 2021	24 June 2021	26 June 2024	29 June 2022	
TLTRO-III.9	21 Sept 2021	23 Sept 2021	29 Sept 2021	25 Sept 2024	29 June 2022	
TLTRO-III.10	14 Dec 2021	16 Dec 2021	22 Dec 2021	18 Dec 2024	29 June 2022	



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

2021 stress test is under way

Last Friday, the European Banking Authority (EBA) and European Central Bank (ECB) together started the EU-wide stress test, which had been postponed by a year due to effects of the coronavirus pandemic in 2020. According to the press release, findings are expected to be published at the end of July. The core of the stress test is based upon assumptions regarding the future macroeconomic development in a stress scenario. Accordingly, GDP decline of 3.6% is assumed for the EU up to 2023, while unemployment will rise by 4.7 percentage points under this scenario. The real estate markets are also expected to experience a stressed phased of market activities. In this regard, the EBA and ECB are working under the assumption that house prices will decline by 16.1%, while commercial real estate assets, which are much more strongly impacted by lockdown measures and the increasing trend towards people working from home, are expected to suffer a price decline totalling 31.2%. The assumed scenario for residential properties is comparable with the assumptions made in 2020 and 2018. However, commercial real estate comes off far worse, with the decline in the most recent scenario almost twice as high as previously assumed. Further information on the stress test can be found in the press release. With regard to the covered bond market, weaknesses revealed in the stress test exercise relating to credit ratings can, in particular, have implications for individual issuers. Due to the dual recourse character of covered bonds, any trend towards spread widening should, in our view, be temporary in nature - if such a trend emerges at all. This should above all apply to benchmark deals.

Market overview SSA/Public Issuers

Author: Dr Norman Rudschuck, CIIA

Rentenbank: strong new promotional business, fresh impetus for sustainable growth
Landwirtschaftliche Rentenbank can look back at 2020 as a year of strong promotional business. It increased its new promotional business to EUR 11.2bn. Its new business in low interest special promotional loans achieved EUR 6bn. Business in the Rural Development business line increased most markedly. According to the press release, it created new impetus for sustainable growth in the agricultural and forestry sectors through funding programmes initiated by the Federal Ministry of Food and Agriculture (BMEL). In March 2020, Rentenbank opened its Liquidity Assistance Programme to agricultural businesses that have been adversely affected by the COVID-19 pandemic. Since April 2020, the bank has also been providing liquidity assistance loans guaranteed by the BMEL. In total, at EUR 55.2m, Rentenbank provided significantly more liquidity assistance loans in 2020 than in 2019 (EUR 10.2m). Nevertheless, the comparatively moderate level has also shown that large sections of the agricultural and forestry sectors have coped better with the economic implications of the pandemic than initially feared. Rentenbank saw particularly strong growth in its Rural Development promotional line. New promotional business rose by just over 7% to EUR 1.9bn. The federal states' development banks called for more global loans from Rentenbank. They use these loans mainly for financing infrastructure projects in rural areas. With a general overview of the core areas now concluded, we can also provide a few figures from the income statement: operating profit before provisions for loan losses and valuation reached EUR 208.9m, about the level of the previous year (EUR 210.1m). Net interest income dropped slightly by 1.2% to EUR 296.9m (EUR 300.6m), mainly due to DZ Bank withholding its dividend. It too has fallen in line with the ECB's urgent recommendation to banks to refrain from distributing dividends in the light of the COVID-19 pandemic. Administrative expenses increased by 4.1% to EUR 75.9m (EUR 72.9m), primarily due to major IT projects being expedited and increased personnel costs. Extraordinarily high capital and collateralisation ratios underline the bank's resilience even during the pandemic: at the end of the 2020 financial year, Rentenbank increased its core capital ratio in accordance with CRR to 31.0% (30.1%). "With our reinforced capital base, a loan portfolio collateralisation ratio of over 90% and a cost/income ratio of under 30%, we kept our banking operations running highly efficiently while at the same time further increasing our resilience in defiance of the pandemic. This makes Rentenbank more crisis-proof than ever," said Dr Horst Reinhardt, Chairman of the Management Board. In addition to the key balance sheet figures, we are, of course, looking more closely at the data from the capital market: in the 2020 financial year, at EUR 11.4bn, Rentenbank raised 11% more funding on the capital market than in 2019 (EUR 10.3bn). It followed a flexible policy of borrowing in various currencies so that it could raise funds for its promotional business as cheaply as possible. In 2020, the USD was its leading issuance currency, accounting for 47% (16%), followed by the EUR at 41% (59%). The proportion in GBP fell to 5% (17%). The key investor groups were still commercial banks and central banks, accounting together for 79% (82%) of the volume placed. We shall look at the recent KfW figures for 2020 in the next issue.

Investitionsbank des Landes Brandenburg (Ticker: ILBB)

The Brandenburg promotional bank ILB pledged promotional loans totalling EUR 2.27bn for 69,684 projects in total last year. For ILB too, 2020 was dominated by the COVID-19 pandemic. It provided assistance for 64,000 companies and sole traders of EUR 579m through its special COVID-19 programmes alone. According to the press release, a large section of the workforce was therefore engaged in processing emergency aid in spring. Excluding the special COVID-19 programmes, approximately EUR 1.7bn was pledged for 5,588 projects. Application figures in this order of magnitude had never been seen in the nearly 30 years the bank has been operating. The figure for promotional lending was supported by strong demand for innovation and technology support, corporate investment, the promotion of business-related infrastructure, significant assistance with the construction of new rental apartments and a surprisingly strong number of start-ups despite the pandemic. Tillmann Stenger, Chairman of the promotional bank's Management Board, stated: "As a result, investment of EUR 2.4bn will be initiated in the federal state of Brandenburg in the next few years and 6,194 new jobs will be created and secured." Another credit programme operated by the bank was its "Corona Mezzanine Brandenburg", which offered subordinate loan especially for start-ups in cooperation with KfW. A further EUR 10m was lent to 20 companies here. Since mid-January, ILB has had technical access to the German government's portal to process the November and December assistance. This ties up over 50 employees again. Infrastructure funding was one of the most important areas promoted by ILB for the fourth year in succession. A crucial component here were the local authority loans with which ILB supports local authorities and municipal special purpose associations in the federal state of Brandenburg with projects involving public administration and security as well as social infrastructure. Despite the pandemic, there were surprisingly high numbers of start-ups. Support totalling EUR 11.4m was provided for 165 people setting up their own companies via the programmes *Gründung innovativ*, *Meistergründungsprämie*, *Brandenburg-Kredit Gründung* and *Mikrokredit Brandenburg*. A further EUR 11.4m was provided as venture capital. Two other topics are of major relevance for us: capital market funding and a possible rating. ILB funds its promotional business through global loans from the EIB, Rentenbank, KfW and the Council of Europe Development Bank. In addition, ILB issues IHS, SSD and registered bonds to raise funding on the capital market. This funding amounted to EUR 225m in 2020. The bank plans to raise EUR 250m in both 2021 and 2022. It also expects to receive a rating from Fitch in 2021. These are all reasons why we will include ILB in this year's issue of the "Supranationals & Agencies" issuer guide as a growing German agency with an increased presence on the capital market. We plan to issue the guide once the weather warms up somewhat. ILB would also like to create an opportunity for those seeking sustainable investments to participate in social investment products and, as a result, support the sustainable development of the federal state of Brandenburg by issuing social bonds. Both the social bond framework and the issue of bonds with a social focus give ILB the opportunity to make its sustainable business model more transparent and more visible. Each euro worth of promotional funding provided by ILB – approximately EUR 46bn since 1990 at least – has generated close to two euros worth of investment. As a result, 178,000 new jobs have been created in Brandenburg. Promotional funding of almost EUR 11bn has been spent on housing construction alone, meaning that over 334,000 residential units have been built or modernised.

EIB: Great Green Wall initiative

The EIB has announced that it will provide financial and technical support to back sustainable agriculture, clean energy, water infrastructure and the private sector in 11 Sahel countries most vulnerable to the changing climate. In our eyes, this fits the evolving structure of the EIB perfectly. Its support will enhance the impact of the Great Green Wall initiative, which aims to improve biodiversity in the Sahel and better tackle climate and environmental challenges facing the region. Targeted high-impact investment will enable more inclusive economic growth and strengthen resilience in the region to foster peace and stability. According to the press release, the EIB aims to back high-impact investment essential to create jobs, improve economic opportunities and increase access to clean energy and clean water through its increased engagement. EIB President Werner Hoyer outlined the expected action to be taken at the *One Planet Summit for Biodiversity* hosted by French President Emmanuel Macron in Paris: "Communities across the Sahel are threatened by climate change, increasingly frequent droughts and floods, and unreliable and limited access to energy, water and food. The European Investment Bank is part of Team Europe and a member of the Sahel Alliance and recognises the need to scale up investment that tackles these challenges, delivers sustainable development and improves stability in the region. The EIB is pleased to join African and international partners in ensuring that the Great Green Wall initiative improves lives and opportunities in the Sahel. The EIB aims to back transformational public and private sector investment in 11 Sahel states most vulnerable to climate change up to 2025 as part of its commitment to accelerate high-impact investment across Africa. This will complement our broader strategic engagement across Africa and 58-year track record of backing transformational investment on the continent." The 11 countries selected for measures under the initiative are Chad, Burkina Faso, Djibouti, Eritrea, Ethiopia, Mali, Mauritania, Niger, Nigeria, Senegal and Sudan. At the *One Planet Summit for Biodiversity*, President Hoyer highlighted the impact of the recent EIB latest support for water investment in Mali and Niger, clean energy across West Africa and private sector support with local microfinance and banking partners. The EIB is currently supporting projects to address land degradation and enhance access to finance by rural communities and smallholders in Mali and Ethiopia as well as to redress and prevent soil erosion in Nigeria, all initiatives that provide a model for successful biodiversity investment elsewhere in Africa. Future EIB investment for sustainable agriculture and environmental projects across Africa will benefit from the EIB being the first international financial institution to issue bonds to support biodiversity investment. The fact that the EIB has included biodiversity in the eligibility criteria of its Sustainable Awareness Bonds (SAB) will be of interest for ESG investors. It aims to provide EUR 1,000bn by 2030.

Incidental news from CDEP: purchase further delayed

We have previously mentioned several times that Italy's CDEP has been planning to make a bid for the toll operator Autostrade, which is owned by Atlantia SpA. This is now set to be launched by the end of February and is estimated at EUR 8.5-9.5bn. There is no sign yet of new bonds being issued on the primary market in 2021; but it is possible that the purchase will be financed by borrowed capital.

Primary market

"Support to mitigate Unemployment Risk in an Emergency": our prediction is that the EU's SURE programme will preoccupy the primary market until around Easter. We will be analysing the 8.3x oversubscription seen recently in greater detail in our SSA article. Incredibly, 829 investors placed an order with the EU, while it was around 200 for the EIB and KfW in January 2021. Order books have never been as oversubscribed as they were this January. This section can now be truly kicked off with the appearance of a rather infrequent issuer: Japan Finance Organization for Municipalities. JFM approached the market with a green bond (7y) at ms +22bp, the IPT was still at ms +26bp area. This bond also stood out very clearly from the crowd with a bid-to-cover ratio of 7.0x. CADES came up trumps with a social bond at the end of January, raising EUR 4bn for ten years. The books reached over EUR 9.3bn. The bond was issued at 16 basis points over the French reference bond (FRTR 1.5% 05/25/31). This equates to approximately ms +6bp. Having sent out an RfP last week, the EFSF deal has now been cut and dried: it raised EUR 2bn with a tap (2027 bond) at ms -11bp. This means that EFSF is already home and hosed in terms of its planned funding for Q1. A further EUR 7.0bn is planned in Q2. In total, it is expected to raise EUR 16.5bn in 2021 and EUR 18bn in 2022. The ESM is currently planning to raise EUR 2.0bn each quarter. In addition to EFSF, NRW, NIESA and KFW also approached the market with taps. NRW needed EUR 100m and chose to tap an exceptionally long maturity until 2057. NIESA increased a 2035 maturity by EUR 500m. This was possible at ms +1bp and the order books exceeded the target volume. The issue tightened by another basis point in the pricing process. KfW chose the shortest maturity among the taps: a 2027 bond was increased by EUR 1bn at ms -12bp. Following JFM's appearance, we welcomed another infrequent player, CAF, which raised EUR 1.25bn for five years at ms +75bp. However, it only achieved an order book of surprisingly low EUR 1.9bn. It was also the largest (EUR) bond ever issued by the Latin American Corporacion Andina de Fomento. The IPT was ms +80bp area. We are happy to show how open we are to side issues in this section: time and again, we discover European local authorities not included in our coverage that independently fund their activities via the market. The Finnish city Mantsala occasionally issues bonds independently under the ticker MTSLAN. This happened in 2020 (EUR 30m) and now again for EUR 20m in 2021 – in each case, both deals were for five years.

Issuer	**Country**	**Timing**	**ISIN**	**Maturity**	**Size**	**Spread**	**Rating**	**ESG**
CAF	SNAT	28.01.	XS2296027217	5.0y	1.25bn	ms +75bp	- / - / A+	-
LANDER	DE	28.01.	DE000A3H3F67	10.0y	1.00bn	ms -2bp	AAA / - / -	-
CADES	FR	27.01.	FR0014001S17	10.3y	4.00bn	ms +6bp	AA / Aa2 / -	X
JFM	Other	26.01.	XS2291905474	7.0y	0.50bn	ms +22bp	- / A1 / A+	X

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

Covered Bonds
Argenta Spaarbank expands Belgian market for EUR benchmarks

Authors: Henning Walten, CIIA // Dr Frederik Kunze

Argenta Spaarbank issues debut EUR benchmark

With the covered bond market having already welcomed two newcomers, namely Komercni Banka from the Czech Republic and KEB Hana Bank from South Korea, to the EUR benchmark segment since the start of the year, Argenta Spaarbank from Belgium recently further expanded the covered bond market. The EUR benchmark placed yesterday (for details, see Covered Bond Market Overview) brings the number of Belgian benchmark issuers up to five. In light of this, we are providing a compact overview of the institution below and looking at the underlying cover pool of the issuance, as well as putting the Belgian EUR benchmark market and the legal basis for issuing covered bonds in Belgium briefly under the spotlight.

Belgian issues in the EUR benchmark segment

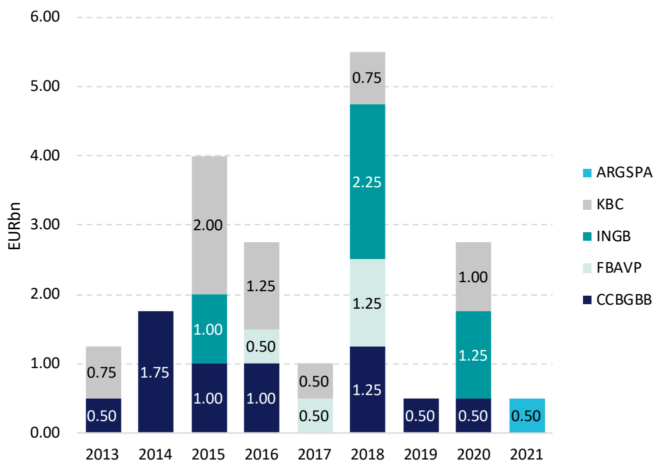
The Belgian covered bond market had four institutions with outstanding EUR benchmarks before the new addition of Argenta Spaarbank. With EUR 19.5bn in outstanding EUR benchmarks, Belgium ranks 13th out of a total of 28 EUR benchmark jurisdictions. The gap between its closest rivals (12th place: Australia (EUR 29.5bn); 14th place: Denmark (EUR 9.0bn)) is in each case around EUR 10bn. The most active issuer in the EUR benchmark segment in terms of outstanding volume is Belfius Bank (CCBGBB) with EUR 6.5bn (ten benchmarks). The institution is also the only issuer in Belgium with two outstanding EUR benchmarks (EUR 2.25bn) backed by public sector assets (see also spread overview for Belgium). KBC Bank (KBC) is almost identical, with seven transactions totalling EUR 6.25bn. It is followed by ING Belgium (INGB) with EUR 4.5bn and BNP Paribas Fortis (FBAVP) with EUR 2.25bn in outstanding EUR benchmarks. KBC Bank was most recently active in the market, issuing a EUR 1.0bn benchmark with a term to maturity of 5.5 years at the end of May 2020. In the current year we are expecting issues from Belgium with a volume of EUR 2.5bn, which, with anticipated maturities of EUR 3.25bn, would result in a negative net supply of EUR 0.75bn.

Belgian EUR benchmark issuers

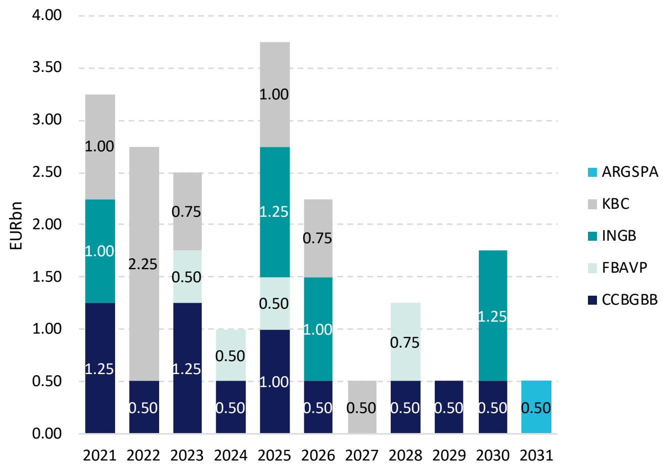
Issuer	Ticker	Type	Cover Pool (EUR)	Total outst. (EUR)	EUR BMK (# / Vol.)	OC	Rating Fitch / Moody's / S&P	Cut-off date	Last BMK
Belfius Bank	CCBGBB	M	8.71bn	7.29bn	7 / 4.25bn	20.5%	AAA / - / AAA	31.12.20	21.01.20
		PS	3.27bn	2.46bn	3 / 2.25bn	33.5%	- / Aaa / AAA	31.12.20	23.09.19
BNP Paribas Fortis	FBAVP	M	2.97bn	2.25bn	4 / 2.25bn	31.9%	- / Aaa / AAA	31.12.20	27.09.18
ING Belgium	INGB	M	11.76bn	7.25bn	4 / 4.50bn	62.2%	AAA / Aaa / -	31.12.20	13.02.20
KBC Bank	KBC	M	17.46bn	12.77bn	7 / 6.25bn	36.7%	AAA / Aaa / -	31.12.20	27.05.20
Argenta Spaarbank	ARGSPA	M	1.47bn	0.50bn	1 / 0.50bn	193.8%	- / - / AAA	11.01.21	02.02.21

Source: Issuers, rating agencies, market data, NORD/LB Markets Strategy & Floor Research (rating: Fitch / Moody's / S&P)

EUR benchmarks: issuance profile of Belgium



EUR benchmarks: maturity profile of Belgium



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

Belgian legislation: framework dates back to 2012

Belgium's covered bond framework is among the earlier frameworks covering the issuance of such bonds. The key legislation and regulations date back to 2012. The framework consists of the Royal Decree of 11 October 2012 which covers the issue of covered bonds by Belgian credit institutions, the Royal Decree for the Cover Pool Administrator, and Banque Nationale de Belgique (NBB) directives 2012-12 and 2012-13 of 29 October 2012, among other measures. Under the legislation, covered bond issuers are universal banks with a relevant NBB licence. It is also important to bear in mind that, apart from the licence issued to institutions, an approval also has to be issued on a programme-by-programme basis by the central bank, acting as regulator. While issuers must ensure that they have adequate available IT systems, risk management and also internal control procedures, when it comes to the programme-specific licensing, issuers will have to explain, among other things, what impact the issue of covered bonds will have on institution-wide funding and liquidity, and give details of the composition of the cover pool and quality of cover assets. Covered bond issuance capacity is limited by an asset encumbrance limit which is specific to each institution. In principle, the legislation envisages a cover pool limit of 8% of total assets. Although the Belgian covered bond framework fundamentally envisages two types of covered bonds which differ in particular in relation to their regulatory treatment ("Belgian Pandbrieven" are CRR compliant, while "Belgian Covered Bonds" merely meet the requirements of UCITS 52(4)), active programmes are exclusively being used to issue "Belgian Pandbrieven". Cover pools for this category of bond issuances may contain cover assets that fall into five categories: 1. Residential mortgage loans and/or senior RMBS, 2. Commercial mortgage loans and/or senior CMBS, 3. Public sector exposures and/or senior public sector ABS, 4. Loans to banks and 5. Derivatives. In this context, we think it is important to point out that in the course of European covered bond harmonisation, securitisations will no longer be included in the range of eligible cover assets and further changes to national legislation are expected.

Mortgage cover limited to the EEA

In principle, cover pools can include assets from all five categories, although the law requires that the nominal value of cover pool assets of one asset type (1, 2 or 3) should be at least 85% of the covered bond balance. On this basis, there are three possible types of programmes, from which one can deduce a substitute cover limit of 15%. As regards the geographical restriction of cover assets from categories 1 and 2, the legislation stipulates the European Economic Area (EEA). Public sector assets (category 3) are limited to OECD countries and development banks.

Belgium: legal framework at a glance

Description	Belgian Pandbrieven
Special legislation	yes
Cover assets (incl. assets serving as substitute cover)	Mortgage loans (up to 40% of mortgage mandates), exposures to public sector entities, ABS/MBS (group-originated), exposures to credit institutions
Holders of the assets	issuer
Specialist bank principle	no
Geographical restrictions - mortgage cover	EEA
Geographical restrictions - public cover	OECD, Development banks
LTV - mortgage cover	Private: 80% Commercial: 60%
Statutory preferential right in bankruptcy	yes
Cover register	yes
Derivatives included in the cover pool	yes
Assets serving as substitute cover	yes
Limit for assets serving as substitute cover	15%
Minimum overcollateralisation	5% nominal
Asset encumbrance (cover pool limit)	8% of total assets (possible exemptions)
Art. 52(4) UCITS compliant	yes
CRD compliant	Covered bonds belges: no; lettres de gage belges: yes
ECB eligibility	yes

Source: National legislation, ECBC, NORD/LB Markets Strategy & Floor Research

Overcollateralisation ratio of 5% prescribed

The LTV for residential mortgage cover assets stands at 80% and at 60% for commercial cover assets. As already mentioned, the Belgian legislation dictates that 85% of outstanding Belgian Pandbrieven can only be ascribed to one category of cover assets in the context of asset-liability management. This asset coverage test is complemented among other things by the 5% nominal overcollateralisation requirement. Issuers are also required to hold a 180-day liquidity buffer. Overall, in our view, it is fair to say that the Belgian covered bond legislation certainly conforms to the new requirements for European covered bonds to a large extent already. We see some need for manageable adjustments, e.g. arising from the requirements in Article 17 of the Directive which notably sets out objective and legally anchored triggers for maturity deferrals.

Argenta Spaarbank: Active in Belgium and the Netherlands

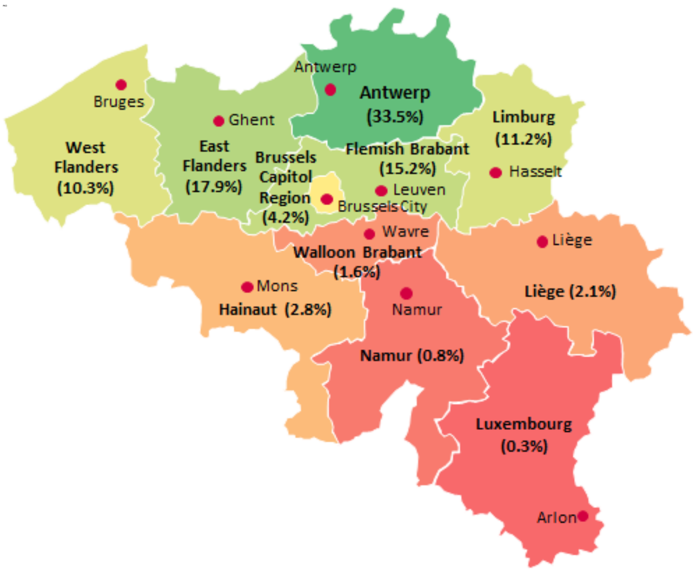
Argenta Spaarbank N.V. is part of the Belgian Argenta Group (Argenta Bank- en Verzekeringsgroep N.V.), which provides retail banking and insurance services in Belgium and the Netherlands. According to its own information, it is the fifth-largest bank in the Belgium with total assets of EUR 44.8bn (H1 2020) and concentrates on the banking business within the group. In terms of funding, deposits currently dominate (loan-to-deposit ratio: 86%). The launch of a covered bond issuance programme and the issuance of the latest EUR benchmark are thus intended to further diversify the funding mix and primarily serve to refinance the Belgian mortgage business. In the first half of 2020, wholesale funding of EUR 3.9bn was made up of securitisation transactions (EUR 2.2bn), senior bonds (EUR 1.0bn), subordinated debt (EUR 0.5bn) and EUR 200m of TLTRO funds. As of 30 June 2020, the loan book amounted to EUR 32bn, of which 44% was in Belgium and 52% in the Netherlands. The remaining 4% represented loans to local and regional authorities and public-private partnerships. A glance at the key financial figures for the first half of 2020 shows that the most important figures are close to or higher than the long-term targets. The return on equity was 6.4%, only slightly below the target of >7%. At 63%, the cost/income ratio also slightly missed its target of <60%, but has already been reduced by six percentage points against 2019. The CET 1 ratio, on the other hand, was above the self-imposed target of 18% at 22.1%, but shows a slight decline compared to 2019, which we would, however, see as being due to the pandemic-related market distortions in the first half of 2020. At 135% and 156% respectively, the liquidity ratios NSFR and LCR were well above the required mark of 100%. With a ratio of 0.45%, the share of non-performing loans in the loan book (H1/20) can also be described as low, although we expect NPL ratios to rise in the current year due to the long to medium-term effects of the coronavirus pandemic.

Cover Pool: Argenta Spaarbank

11 January 2021	**Mortgage**
Covered bonds outstanding	[EUR 500m]
Cover pool volume	EUR 1,469m
Current OC (nominal / legal)	[193.8%] / 5.0%
Type	99.8% Residential
Breakdown by type	96.3% Owner occupied
Main country	100% Belgium
Main region	33.5% Antwerp
Number of mortgage loans	17,015
Share of 10 largest exposures	0.40%
LTV (unindexed / indexed)	64.6% / 59.1%
Fixed interest (Cover Pool / CBs)	36.6% / [100%]
WAL (Cover Pool / CBs)	9.1y / [10y]
Currency (Cover Pool / CBs)	100% EUR / [100% EUR]
CB Rating (Fitch / Moody's / S&P)	- / - / AAA

Source: Issuer, Rating agencies, NORD/LB Markets Strategy & Floor Research

Regional distribution of cover assets



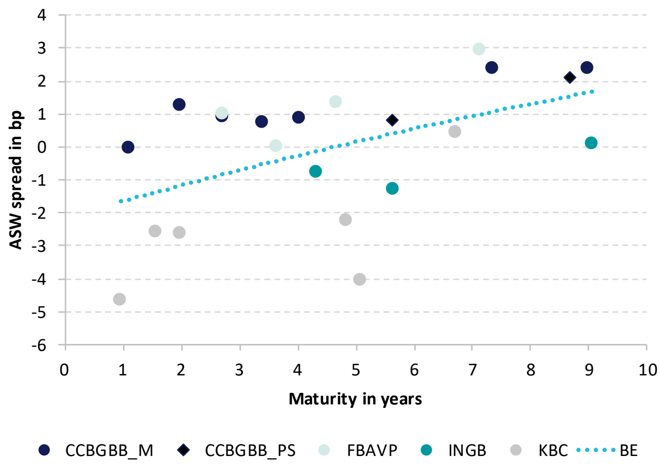
Mortgage cover pool comprises Belgian assets

The cover pool of Argenta Spaarbank consists almost entirely (99.8%) of primary cover assets, which are also exclusively of a residential nature. Furthermore, the collateral is located entirely in Belgium, with a particular focus on the northern regions of Antwerp, East Flanders and Flemish Brabant (see chart). There are currently no bonds outstanding under Argenta Spaarbank's covered bond programme, which amounts to EUR 7.5bn. Furthermore, all loans are denominated in EUR, which means that the cover pool is not exposed to any exchange rate risks. A benchmark debut totalling EUR 500m would result in an overcollateralisation ratio in the range of 190%, which is more than comfortable. In our view, the cover pool can also be described as granular, as it contained a total of around 17,000 loans as at the reporting date of 11 January 2021, with an average volume of EUR 86,300. Approximately 75% of the financing also has a maximum volume of EUR 200,000. In addition, the share of the ten largest exposures in the cover pool is low, at 0.40%. Moreover, 96.3% of the properties are owner-occupied. With regard to a possible risk of changes in interest rates, it should be emphasised that while the debut issue has a fixed coupon, only 36.6% of the cover assets are fixed-rate loans. In terms of cover pool reporting, we should also stress that Argenta has joined the Covered Bond Label Foundation (CBLF) and thus also provides its cover pool reporting in the form of the Harmonised Transparency Template (HTT), a factor that has to be welcomed from an investor's point of view.

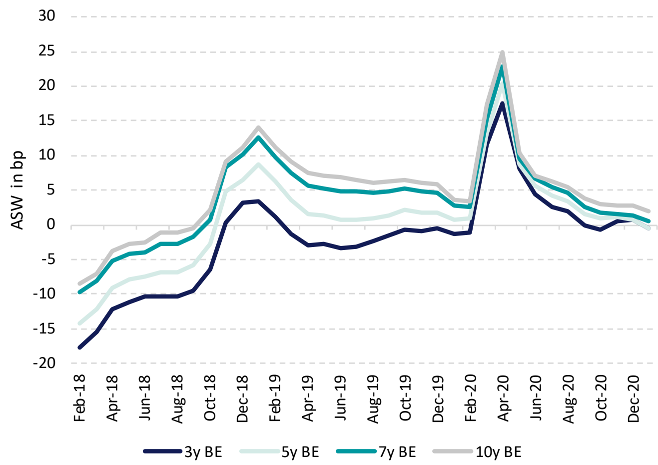
Preferred risk weighting and LCR eligibility for EUR benchmarks

From our perspective, covered bonds from Belgium meet the requirements of Article 129 CRR and benefit from a preferential risk weighting of 10% provided that they are attributable to Credit Quality Step 1. As bonds from a eurozone member state, the bonds are also eligible for purchasing under the CBPP3 or PEPP and are eligible as collateral in repo transactions with the Eurosystem. EUR benchmarks are also suitable as Level 1 assets in the course of LCR management due to their current rating assessment. S&P has stated that the debut issue, which has a soft bullet structure, will be awarded its top rating of AAA.

Belgian spread overview: EUR benchmarks



Belgian spread history: EUR benchmarks



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

Conclusion

Although 2021 got off to a sluggish start in terms of primary market activity, the group of issuers, including Argenta Spaarbank, which has now entered the market, has already expanded to include three new institutions. In 2020 as a whole, there were five newcomers to the market, meaning that we would definitely describe the observed expansion so far this year in terms of EUR benchmark issuers as dynamic. In addition, we expect further institutions to enter the market for EUR benchmarks (e.g. from Singapore, Canada or Hungary) over the course of the year. In our view, this is a sign that covered bonds remain an attractive form of refinancing for credit institutions despite the comparatively low issuance volume in January. As far as the Belgian market is concerned, the debut of Argenta Spaarbank also points to a revival of the national market, for which the last activity dates back to May 2020.

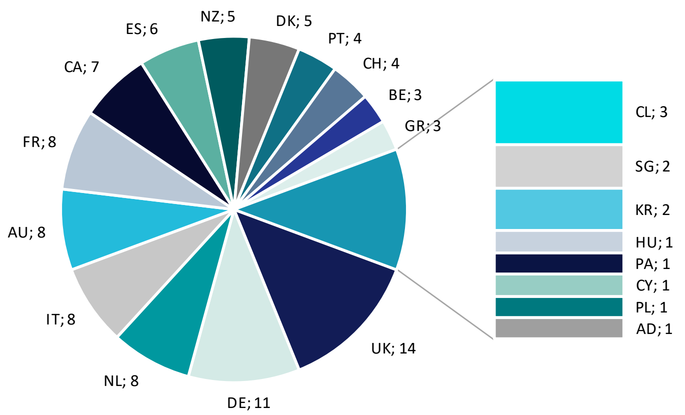
Covered Bonds
An overview of the Fitch covered bond universe

Author: Henning Walten, CIIA

106 programmes from EUR benchmark jurisdictions

The 895 EUR benchmarks in the iBoxx EUR Covered (February) have a total of 1,400 ratings from the three major rating agencies. In addition to Moody's (775 ratings) and S&P (319), Fitch has also rated a significant proportion of the deals (306). For this reason, we examine Fitch's covered bond universe below, based on its recently published Covered Bonds Surveillance Snapshot. In its latest snapshot, Fitch shows a total of 106 rated programmes from 22 countries. In this article, we focus on those programmes that originate from EUR benchmark jurisdictions. Thus, a total of seven programmes from Andorra, Chile, Panama, Hungary and Cyprus are omitted from the following analysis. Fitch does not take into account any multi-cédulas from Spain. Covered bond programmes from the UK and Germany are most widely represented in Fitch's covered bond universe, with 14 and 11 programmes respectively, followed by the Netherlands, Italy, Australia and France with eight programmes each. This means that more than half of the rated programmes are concentrated in these six jurisdictions, which, with the exception of Australia, are also among the top 10 jurisdictions. The programmes assessed are not necessarily those from which EUR benchmarks were also issued. A glance at the ratings assigned in EUR benchmark jurisdictions shows that around three-quarters have the top AAA rating. A further 11.1% are also allocated to the AA segment. Overall, 10 of the 17 EUR benchmark jurisdictions also exclusively have AAA ratings. The two countries on the Iberian Peninsula, on the other hand, each have four different rating characteristics and are therefore the most heterogeneous submarkets in this context. Italian programmes have three different ratings (AA-, A+ and BBB+).

Number of rated programmes



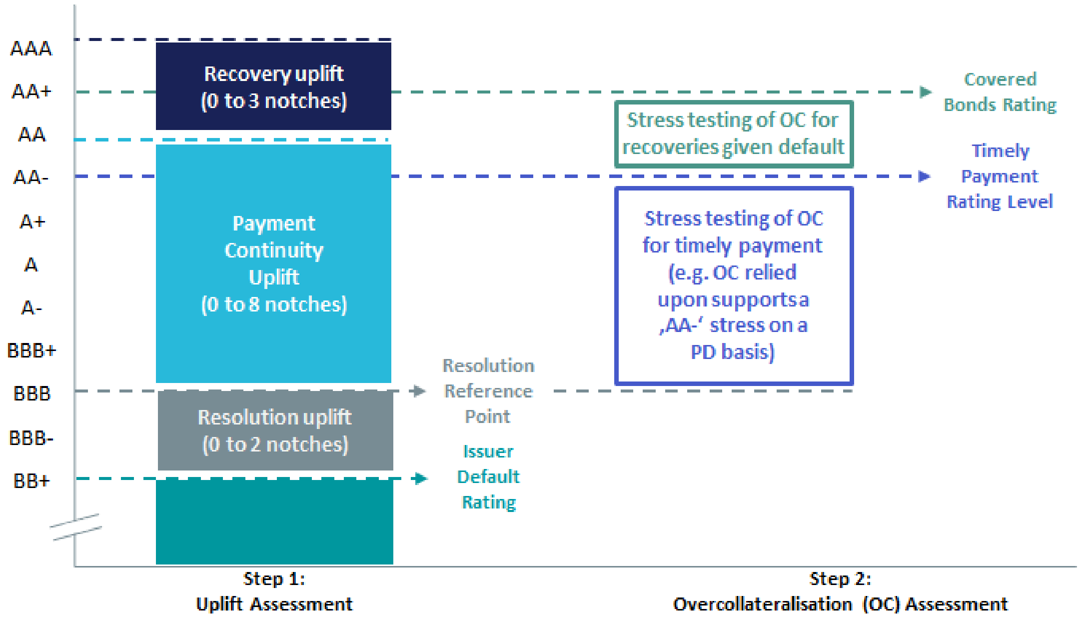
Distribution of ratings at national level

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

Two-stage process to determine ratings

Fitch uses a two-stage process to determine ratings, taking into account both the probability of a default on a bond as well as the recovery given default. As part of the process, Fitch first calculates i) the potential uplift components before ii) it determines the OC levels based on stress tests. The first stage involves determining the IDR uplift against the long-term Issuer Default Rating (IDR). This can amount to two notches overall and expresses the preferred status of a covered bond in comparison with uncovered bonds in the case of a liquidation and creditor participation. Furthermore, Fitch calculates the Payment Continuity Uplift (PCU), which reflects the rating agency's assessment as to how likely a delay or interruption to interest and principal payments is to occur during transfer of the payment flow from the issuer to the cover pool (following issuer insolvency). The PCU can range from zero to eight notches and ultimately reflects the maximum possible covered bond rating based on the default probability. The following rule of thumb applies: the higher the PCU, the lower the disruption to the payment flow is regarded. Where Fitch assumes that an interruption to payment on account of a lack of liquidity mechanisms is likely, the assessed covered bond programme does not receive an uplift, whereas programmes with a soft-bullet structure (and 12-month extension) can be upgraded by up to six notches (above the adjusted IDR rating) as long as they entail standard cover pool assets in mature banking markets. Issuances with a pass-through structure can even be upgraded by up to eight notches. In contrast to the methodology outlined, German mortgage Pfandbriefe benefit from a rating uplift of up to four notches on account of the 180-day liquidity buffer in order to take the various refinancing options into account. Nevertheless, other risks, such as those resulting from insufficient separation of assets or high risks in connection with alternative cover pool management strategies, for example, can lead to a reduction in the outlined uplifts by up to one or two notches, or in some cases, even to a PCU of zero.

Overview of the covered bond rating process

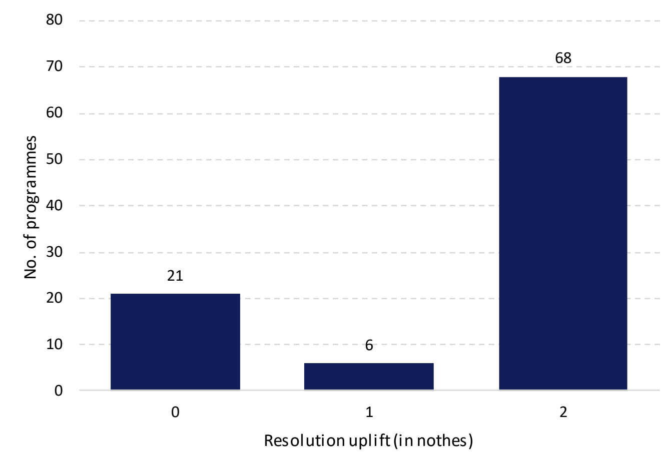


Source: FitchRatings, NORD/LB Markets Strategy & Floor Research

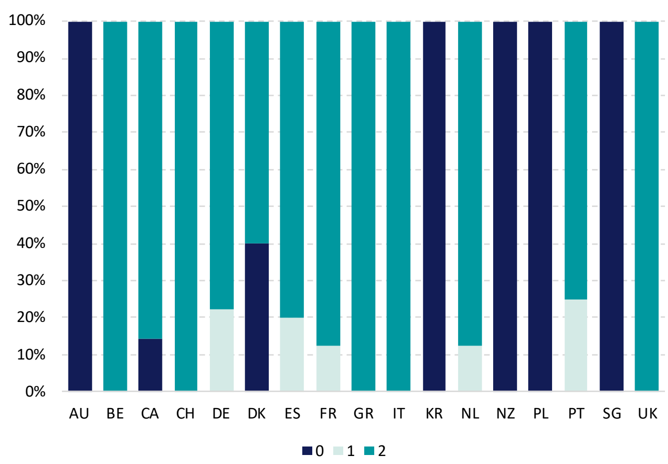
Recovery uplift – additional uplift of two to three notches possible
As covered bonds offer a recovery given default even in the event of a payment default on account of the underlying assets, the respective programmes may receive a further uplift over and above the covered bond rating of up to two notches based on the default probability; for issuers with a non-investment grade rating, this is up to three notches, again on the basis of the default probability. The maximum number of notches is awarded when the programme's long-term overcollateralisation ratio sufficiently covers the credit risk in the relevant rating scenario. However, the uplift can also be limited if, for example, the majority of the assets are denominated in a currency which differs from the covered bonds.

Limit to the maximum rating uplift via requisite breakeven OC
Finally, in a second step, the overcollateralisation ratio (breakeven OC) is determined. This facilitates punctual servicing of outstanding covered bonds during stress scenarios above the adjusted IDR rating. The breakeven OC consists of i) the ALM loss (non-credit loss) and ii) credit loss. The breakeven OC calculated by Fitch is then compared with the OC maintained over the long term by the issuers from the perspective of the rating agency. In cases where the OC maintained by the issuer remains below the breakeven OC for the maximum possible rating, Fitch tests the next-lowest scenario. This remains the approach until the maintained OC level allows for bonds to be serviced in a timely fashion.

Distribution: resolution uplifts



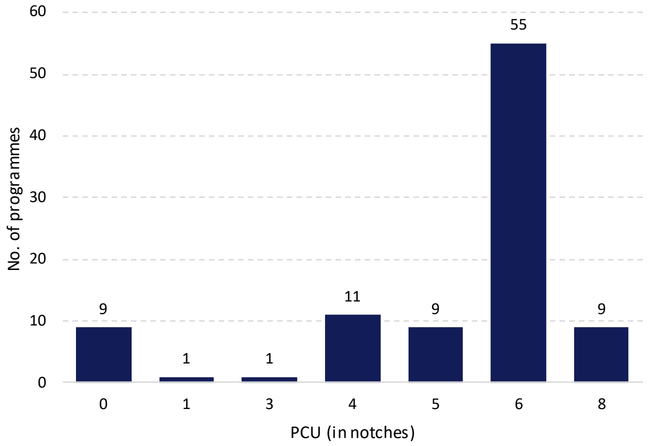
Resolution uplifts at national level



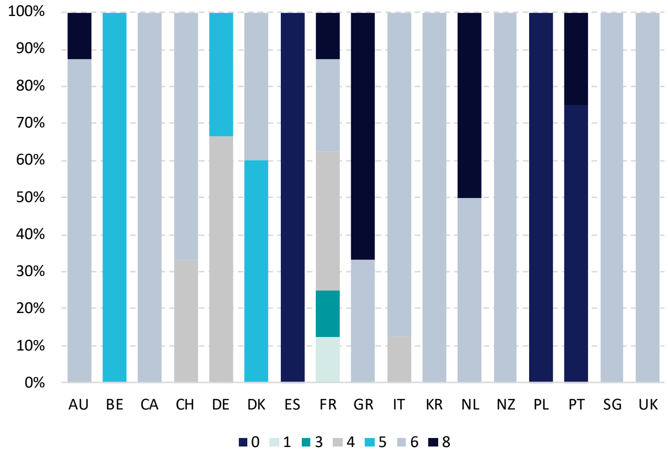
Source: FitchRatings, NORD/LB Markets Strategy & Floor Research

Resolution uplift of two notches in most cases
As part of the resolution uplift, Fitch assesses the extent to which covered bonds are treated in the event of a resolution. The maximum possible uplift is two notches and is currently awarded to 68 programmes. In total, 21 programmes located outside the euro area do not receive an uplift with regard to their treatment in the event of a resolution. The reasons why a programme does not receive the maximum possible uplift vary. For example, programmes from Australia and New Zealand do not receive a resolution uplift, as, according to the analysts, there is no corresponding regime that explicitly exempts covered bonds from bail-in. In jurisdictions where a corresponding regime is in place, but two notches of uplift are not assigned, there are institution-specific reasons in each case.

Distribution: Payment Continuity Uplift (PCU)



PCU at national level

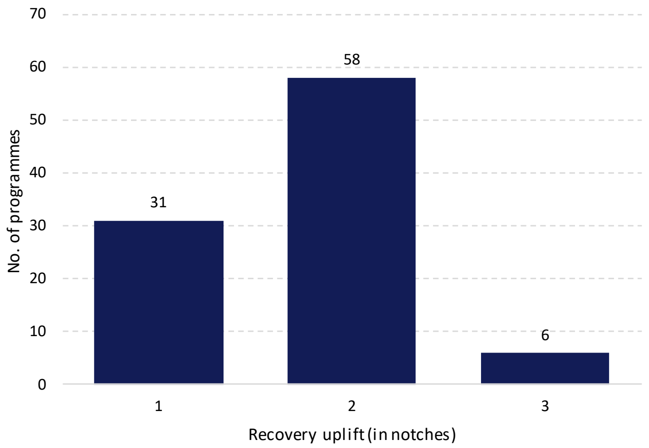


Source: FitchRatings, NORD/LB Markets Strategy & Floor Research

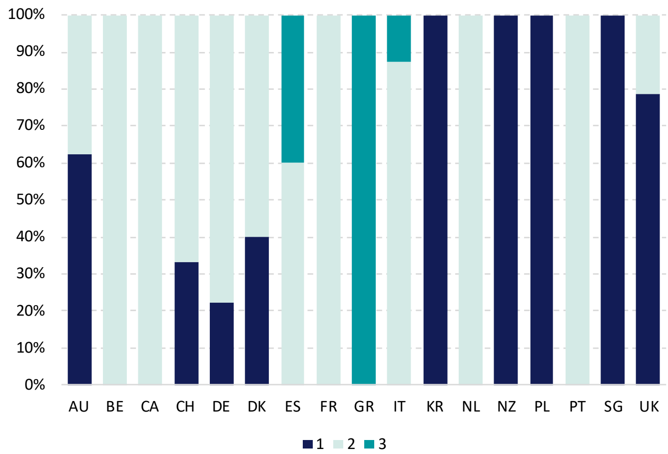
PCU as an indicator of liquidity risk

The payment continuity uplift (PCU) expresses how likely it is that cash flows will be interrupted following an issuer default. The higher the PCU, the lower the probability of such an interruption and therefore the higher the protection against liquidity risks of such programmes. A PCU uplift of six notches occurs most frequently and applies to 55 programmes. However, Fitch does not award a PCU for five Spanish programmes. In Germany, the public sector programmes each receive an uplift of five notches and the mortgage programmes an uplift of four notches, which is mainly due to the statutory 180-day liquidity buffer, which, according to the Fitch analysts, makes a significant contribution to reducing liquidity risk. Among others, four CPT programmes from the Netherlands benefit from the maximum uplift of eight notches, while the four remaining NL programmes are granted a PCU of six notches due to their predominant issuance form as soft bullet bonds.

Distribution: recovery uplift



Recovery uplift at national level



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

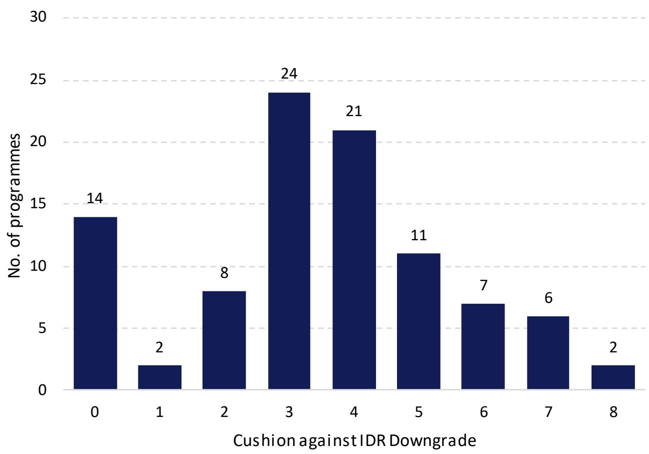
Protection also taken into account in the event of default

The remaining uplift category of the recovery uplift expresses how high the quality of a cover pool is and thus the recovery prospects in the event of a covered bond default. The uplift is limited to two notches for investment grade bonds and three notches for non-investment grade bonds. Overall, Fitch distinguishes between the categories "Average", "Good", "Superior" and "Outstanding" for the recovery expectations of the cover pools and awards an uplift of one notch for investment grade bonds in the two middle categories and one notch lower or higher for the adjacent categories. It is notable that there is no average recovery expectation for any of the programmes from EUR benchmark jurisdictions and therefore that in no instance is no uplift awarded. Most frequently, programmes receive an uplift of two notches, which is also the upper limit for the majority of programmes, as they have an investment grade rating. The six programmes in total with a recovery lift of three notches are consequently all from the non-investment grade segment and are located in Spain, Greece and Italy.

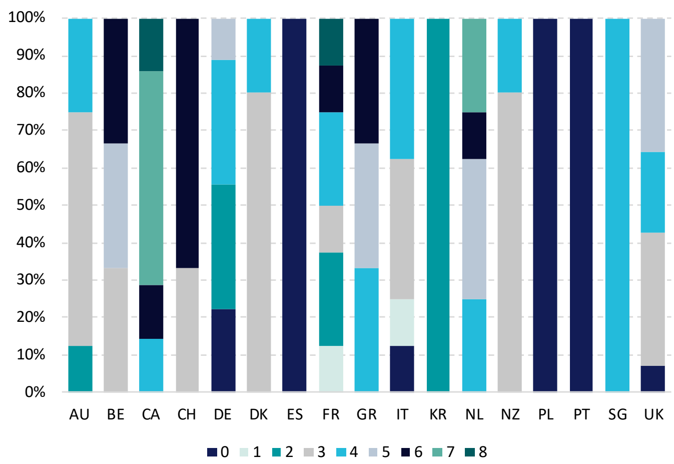
Sufficient buffer against issuer downgrade available in many cases

The long-term issuer default rating (IDR rating) serves as the starting point for covered bond ratings. Depending on the number of uplifts granted, this results in an IDR limit, below which the covered bond is downgraded. The cushion for this rating can be seen in the charts below. For example, most programmes have a buffer of three or four notches, which means that they would only be directly affected after a significant downgrade of the issuer. In some cases, the buffer is even as high as seven or eight notches. However, there are also 14 programmes in the EUR benchmark jurisdictions that would be directly affected in the event of an IDR downgrade. This applies to Spanish and Portuguese programmes in particular, as well as two programmes from Germany. A buffer against an IDR downgrade arises in each case if the uplifts do not have to be used in full, since the IDR rating is closer to the top AAA rating than there are uplifts. Another reason why uplifts are not fully utilised is that the respective OC stands in the way of a higher rating classification, i.e. it is too low for a correspondingly higher rating.

Distribution: buffer against issuer downgrades



IDR downgrade buffer at national level

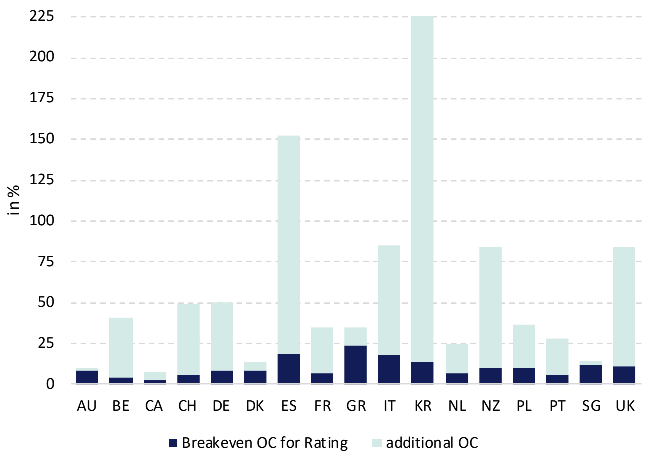


Source: FitchRatings, NORD/LB Markets Strategy & Floor Research

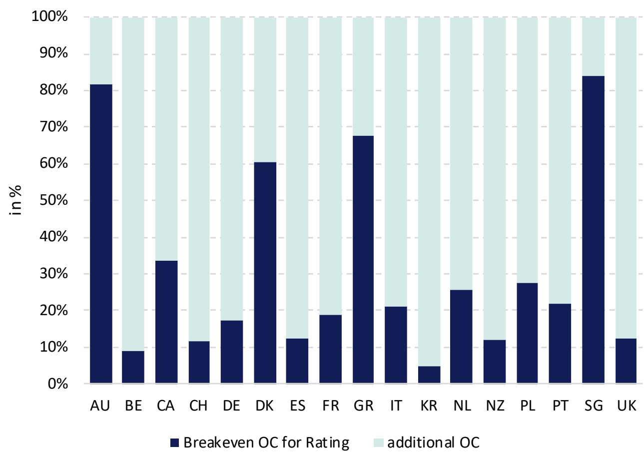
Varying levels of OC

Below, we take a final look at overcollateralisation ratios and the breakeven OC used by Fitch in each case, i.e. in simple terms, the OC that Fitch considers sufficient for the respective rating. It is clear that breakeven OCs are highest in Greece, Italy and Spain. By contrast, the actual overcollateralisation levels are highest on average in South Korea, Spain, New Zealand and the UK. The graph on the right shows another facet of overcollateralisation, namely the proportion of OC that exceeds the breakeven OC. In effect, this shows the breakdown of actual OC into the overcollateralisation required to maintain the rating and the portion that voluntarily exceeds it. This shows that in Singapore and Australia in particular, but also in Greece and Denmark, the OC ratios are close to the required break-even OCs, i.e. they contain a small proportion of additional voluntary OC.

OC levels by country



OC distribution by country



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

Conclusion

While Moody's ratings continue to dominate the iBoxx EUR Covered with 55.4% of all ratings of the three major agencies, Fitch accounts for just 306 ratings or 21.9%. Our look at the covered bond universe is intended to enable a better classification and interpretation of the ratings and rating metrics. In term of potential uplifts, it is apparent that a large number of covered bonds benefit from significant uplifts and consequently have a significant buffer against downgrades of the issuer default rating. Compared to our last review of the Fitch universe based on data from the previous quarter (see Covered Bond & SSA View from 4 November), there are also only minor changes, which suggests a high level of rating stability and can definitely be seen as a positive factor in light of the current macroeconomic situation.

SSA/Public Issuers
January 2021 packs a punch to kick off the new year

Autor: Dr. Norman Rudschuck, CIIA

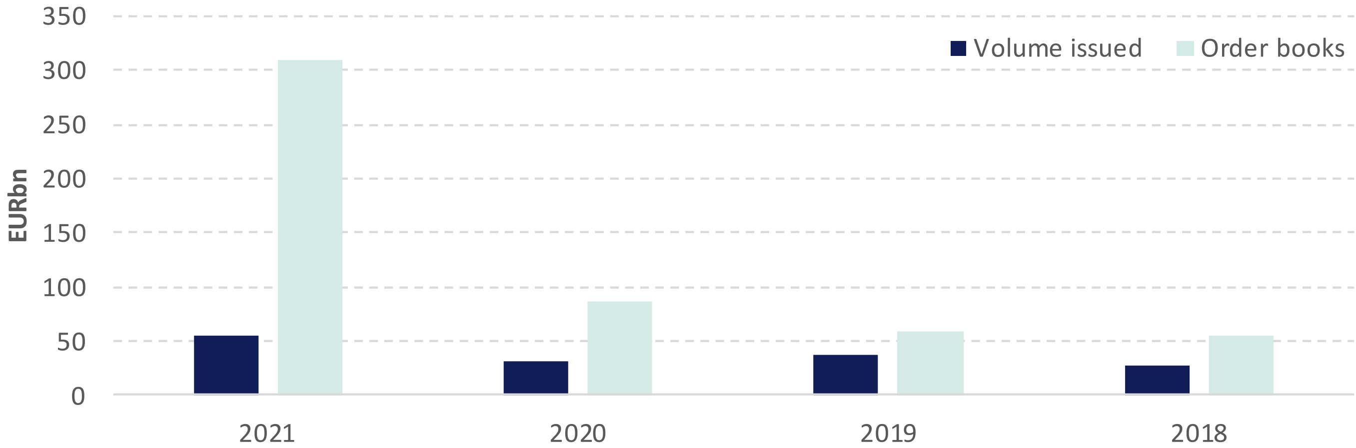
January – always an extraordinarily active month

At the start of each year, we look at what exactly the primary market has in store for us: it is always large and comprehensive. Usually, January is one of the three strongest months in terms of issuance volume. Accordingly, in our definition of the SSA segment – supranationals, sub-sovereigns, agencies, i.e., excluding sovereigns – EUR benchmarks amounting to EUR 55.2bn (2020: EUR 32.0bn; 2019: EUR 36.7bn) were placed in January 2021. The primary market made use of the full month consisting of 20 trading days. To make sure no time was lost, NIESA had already mandated banks for the first trading week of 2021 before 2020 had even come to an end. As a result, activities commenced promptly on 4 January.

January highlights

As expected, the largest bond was issued by the EU (EUR 10bn, 10y). It was followed by KfW with EUR 5bn (10y). The EIB achieved another EUR 5bn (also 10y). The EFSF raised EUR 5bn in two tranches (3+2). To clarify our statistics, our new issues do not include the EU's tap (EUR 4bn, 2050 maturity) or the tap by KfW (EUR 1bn). This is a particular feature of the SSA segment, which makes far more use of taps than the covered bond segment, for example. It is therefore difficult to keep 100% overall statistics. The EU had the largest order book, at EUR 83bn. This was followed by the EFSF with EUR 38.5bn. These two bonds alone accounted for more demand than the order books for the whole month in previous years. We counted 33 new ISINs in benchmark format in total (2020: 20), which equates to an average volume per bond of EUR 1.67bn (2020: EUR 1.6bn). If all order books in the narrow definition (i.e., excluding taps) are aggregated, the volume amounted to EUR 309.2bn. This implies more demand than was recorded in total in the years from 2018 to 2020. The EFSF had the largest bid-to-cover ratio in its longer maturity: the bond was 16 times oversubscribed. For its two bonds, the EIB was oversubscribed by 14.7x and 14.0x, respectively.

EUR benchmarks (EUR bn) in January of the respective years vs. order books



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

Bulging order books despite negative interest rates

If investors wanted to achieve a positive return, they had to invest in BERGER 2041 or BRABUR 2046. The EIB and NRW (each 2051) were also possible, to say nothing of the Methuselah bond issued by Düsseldorf (NRW 100y, but below 1% – this is true of the coupon at least – the yield is currently just over 1%). The non-weighted mean of 33 transactions is 16.5 years (2020: 14.8y). The inaugural EUR deal by BOAD (Banque ouest-africaine de développement) took the biscuit: the new EUR issuer from west Africa came up with a coupon of 2.75% for twelve years at a price of ms +300bp. IPT and guidance respectively had even started at ms +350bp. However, the rating (BBB / Baa1 / -) is more reminiscent of a corporate. This deal, that of the IBRD (40y) and the Methuselah from NRW do not qualify for the ECB's purchase programmes (neither PSPP nor PEPP). Since we constantly receive questions about the purchase conditions of the Eurosystem's purchase programmes, we shall prepare a separate article to remind you of the precise conditions in the next few weeks. This supply, which must be termed hefty by and large, encountered massive demand, not just on the primary market. Chunks were subsequently sought-after on the secondary market as well. As made clear previously, scarcely any of these deals are not eligible for the PSPP and/or PEPP. Accordingly, enormous demand meets the current vast supply.

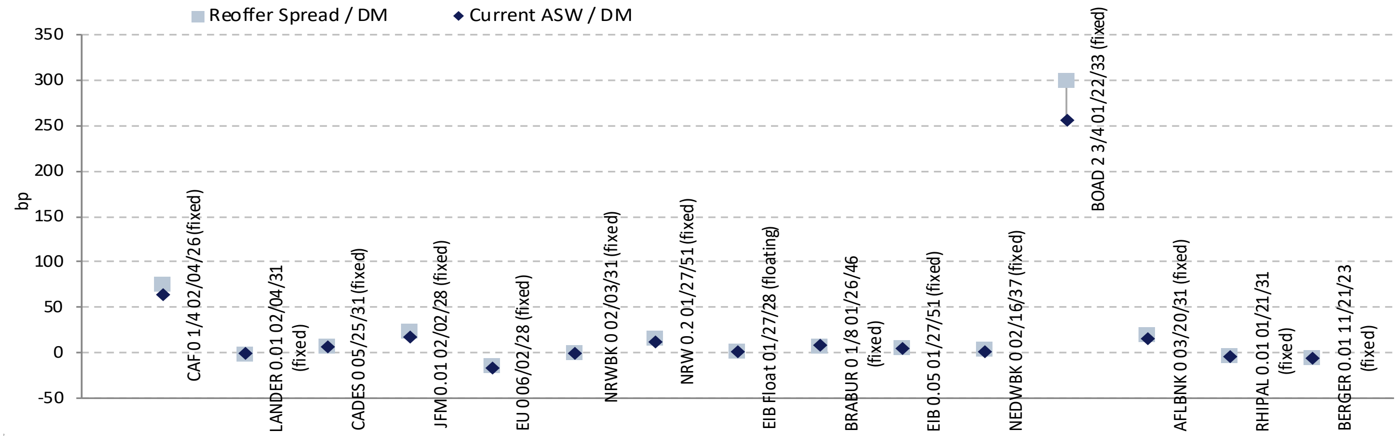
The Eurosystem: demand aside from primary market investors

By way of reminder, at present, the Eurosystem is once again pumping EUR 20bn into the markets every month through the APP (asset purchase programme) alone. In net terms, its interventions have totalled approximately EUR 2,927bn since 2015. Approximately 80.5% of this went to the public issuers segment and consequently the PSPP. The APP consists of covered bonds (CBPP3), ABS (ABSPP), corporate bonds (CSPP) and of course the PSPP (public sector purchase programme). In addition, there is the reinvestment in maturing bonds until after key interest rates are raised for the first time. We do not expect this to happen in either 2022 or the first half of 2023. Coronavirus ensured that January 2020 was not one of the strongest months last year. The issuance level for EUR benchmarks alone came to EUR 32.05bn in January 2020. By way of reminder, a year ago, we were warned by the World Health Organisation that there was "merely" a new wave of flu from China and there were no grounds for concern. An earthquake on the capital markets then followed. Meanwhile, the ECB has countered the pandemic with the PEPP (pandemic emergency purchase programme). A total of EUR 1,850bn could be invested here up to March 2022 – of the EUR 806.8bn already invested, 94.8% is currently attributable to the public segment.

Sustained influence of monetary policy on the entire environment

Consequently, looking forward to the next few weeks and months, we will inevitably continue to grapple with the overarching monetary policy and therefore both the Eurosystem's purchase activities and the indicators for the liquidity supply (in particular, TLTRO III) as well as support in dealing with negative interest rates (key word: tiering). We do not actually expect any significant adjustments to these correcting variables in the first half in particular and would expect – as was the case at the last meeting – the central bankers in Frankfurt to not deviate from their path. This will manifest itself in a sustained presence on the primary and secondary market but also persistent pressure on supply.

Pricing of selected EUR benchmarks



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

Conclusion

The record figures for January on the SSA market mean we can expect a fair amount for the rest of the year. Combined with substantial supply which is met by extremely strong demand from investors (order books) and the Eurosystem (purchase programmes), this tends to support spreads remaining very tight over the course of the year. We had described this both last week for Covered Bonds and made it the subject of a discussion as part of our Outlook. In this context, the Eurosystem will remain the most important purchaser on the market. Even in the wake of economic stabilisation and further extensive success with vaccinations, we are still thinking more in terms of quarters than weeks or months as far as any normalisation of the situation is concerned. Both as a monetary policy authority and as a regulator, the ECB is still in crisis-management mode at present – with corresponding consequences for the SSA market.

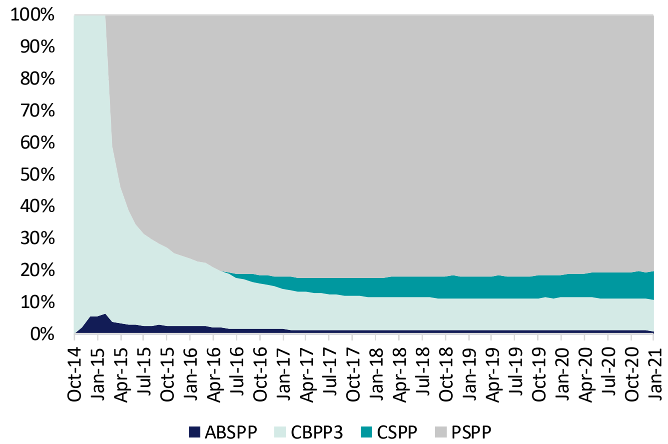
ECB tracker

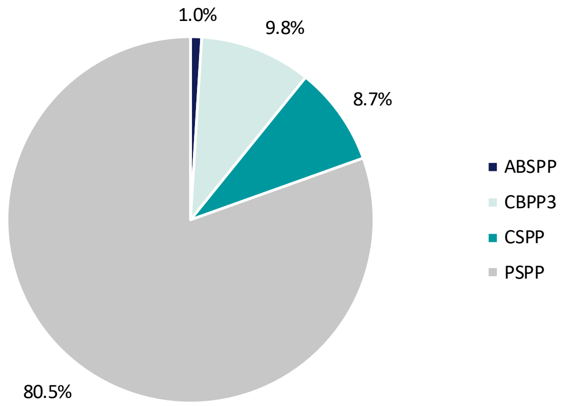
Asset Purchase Programme (APP)

Holdings (in EURm)

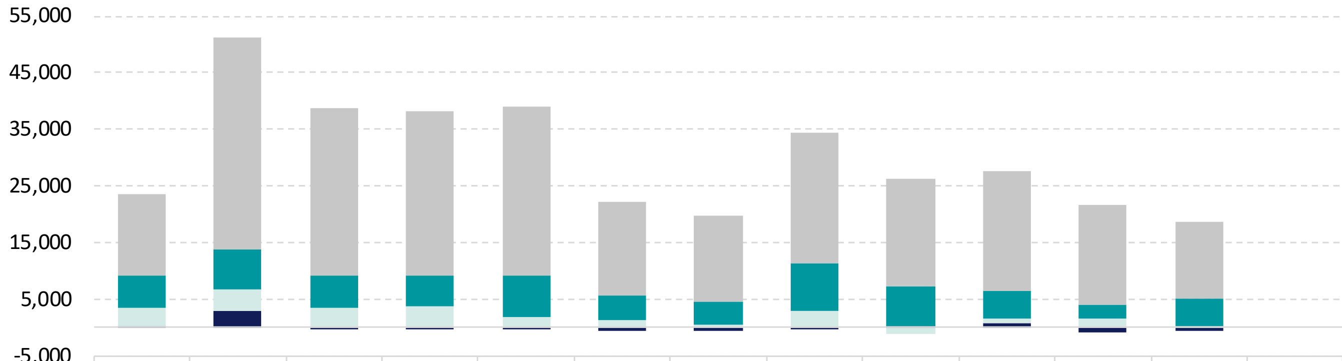
	ABSPP	CBPP3	CSPP	PSPP	APP
Dec-20	29,352	287,545	250,403	2,341,607	2,908,908
Jan-21	28,631	287,619	255,327	2,355,262	2,926,840
Δ	-721	+74	+4,924	+13,655	+17,932

Portfolio structure





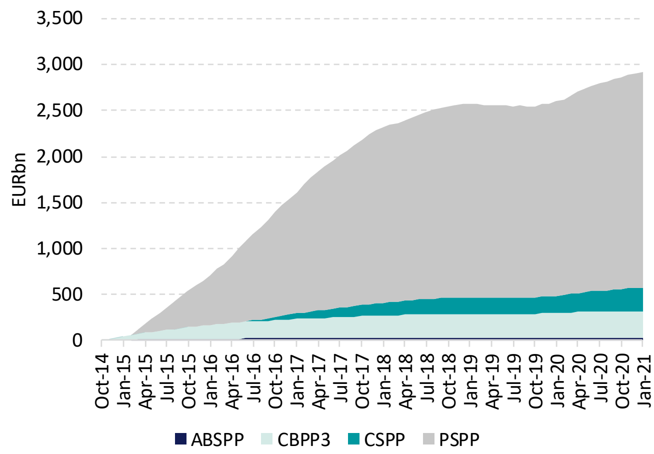
Monthly net purchases (in EURm)



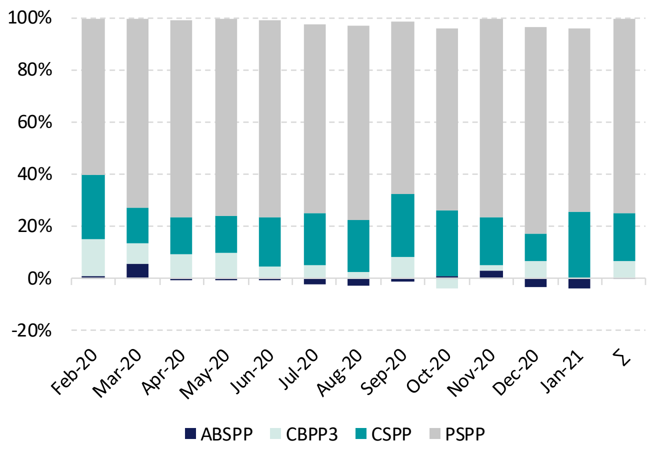
	Feb-20	Mar-20	Apr-20	May-20	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20	Jan-21	∑
APP	23,430	51,142	38,441	38,170	38,770	21,529	19,127	34,014	25,349	27,720	20,929	17,932	356,553
PSPP	14,137	37,323	29,624	28,961	29,779	16,370	15,150	23,102	19,182	21,241	17,822	13,655	266,346
CSPP	5,738	6,965	5,560	5,438	7,515	4,502	4,004	8,496	6,983	5,009	2,378	4,924	67,512
CBPP3	3,334	3,931	3,582	3,785	1,731	1,198	500	2,839	-1,041	646	1,529	74	22,108
ABSPP	221	2,923	-325	-14	-255	-541	-527	-423	225	824	-800	-721	587

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

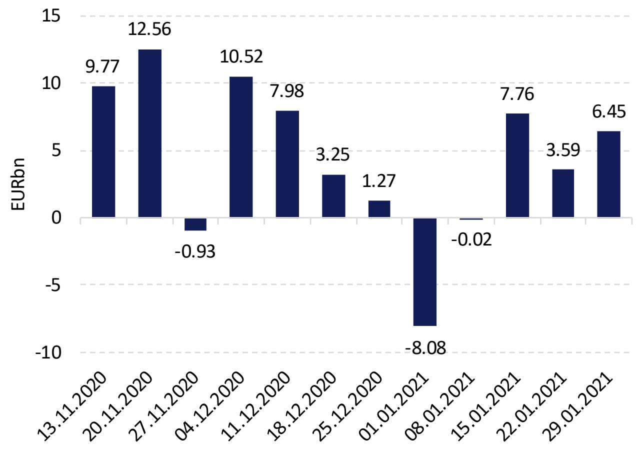
Portfolio development



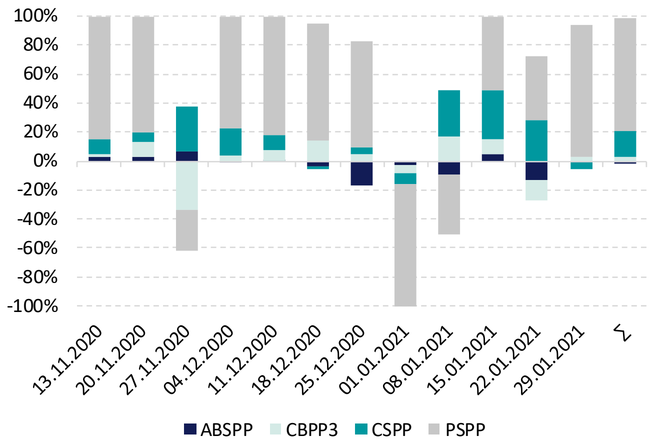
Distribution of monthly purchases



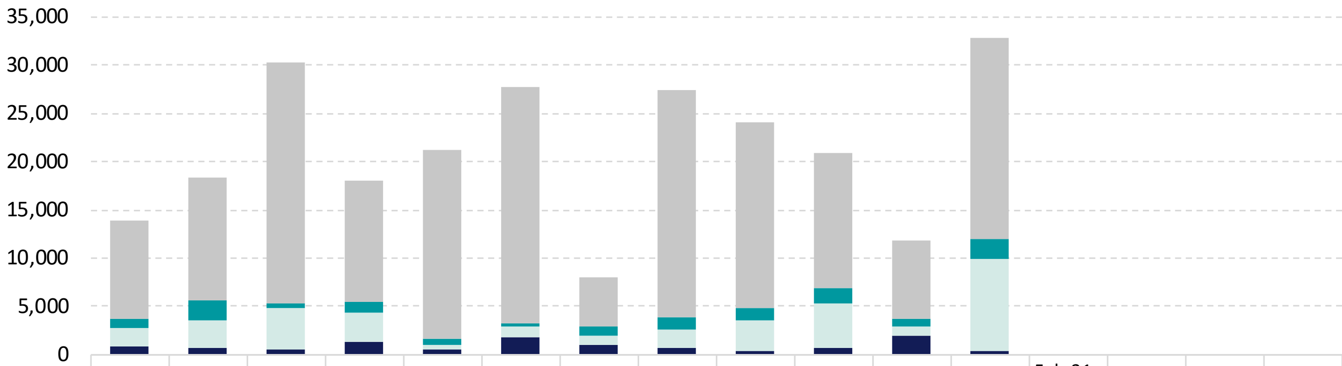
Weekly purchases



Distribution of weekly purchases



Expected monthly redemptions (in EURm)

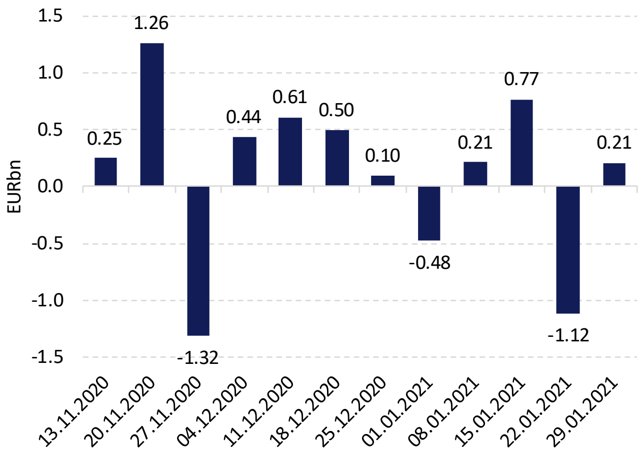


	Feb-21	Mar-21	Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Nov-21	Dec-21	Jan-22	Feb-21 - Jan-22	2020	2021	Jan 22
APP	13,919	18,343	30,273	18,048	21,158	27,791	8,044	27,433	24,071	20,912	11,895	32,843	254,730	262,253	247,423	32,843
PSPP	10,268	12,668	24,947	12,637	19,519	24,528	5,118	23,636	19,227	13,987	8,177	20,906	195,618	201,482	189,753	20,906
CSPP	960	2,209	578	1,144	686	334	966	1,272	1,309	1,673	826	1,981	13,938	18,267	15,942	1,981
CBPP3	1,824	2,818	4,278	2,894	367	1,132	1,002	1,902	3,123	4,625	937	9,605	34,507	33,236	30,050	9,605
ABSPP	867	648	470	1,373	586	1,797	958	623	412	627	1,955	351	10,667	9,268	11,678	351

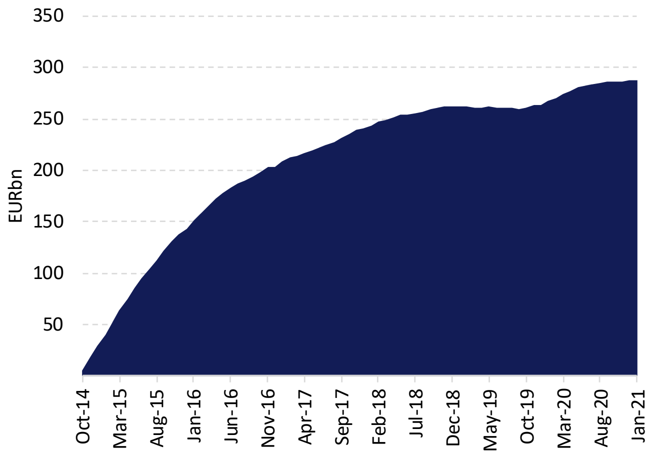
Source: ECB, Bloomberg, NORD/LB Markets Strategy & Floor Research

Covered Bond Purchase Programme 3 (CBPP3)

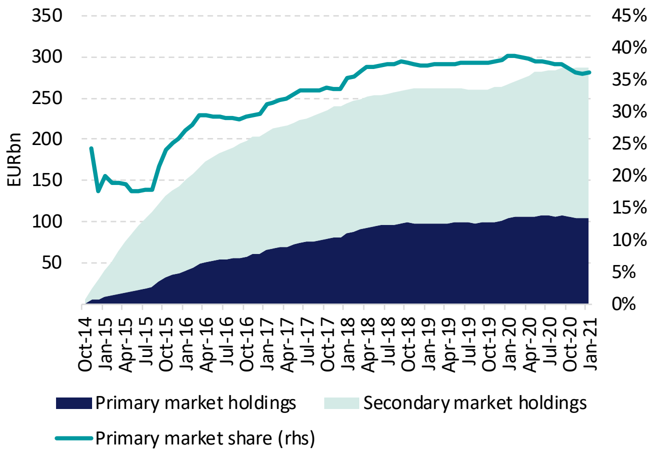
Weekly purchases



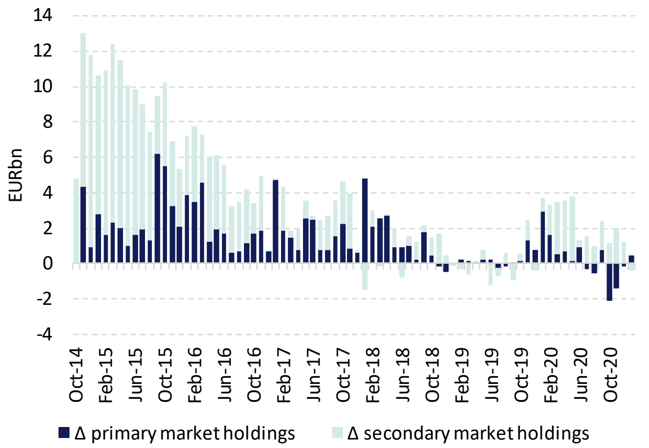
Development of CBPP3 volume



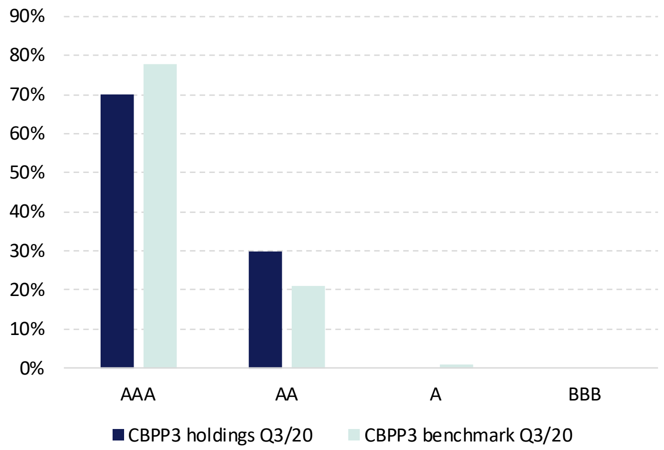
Primary and secondary market holdings



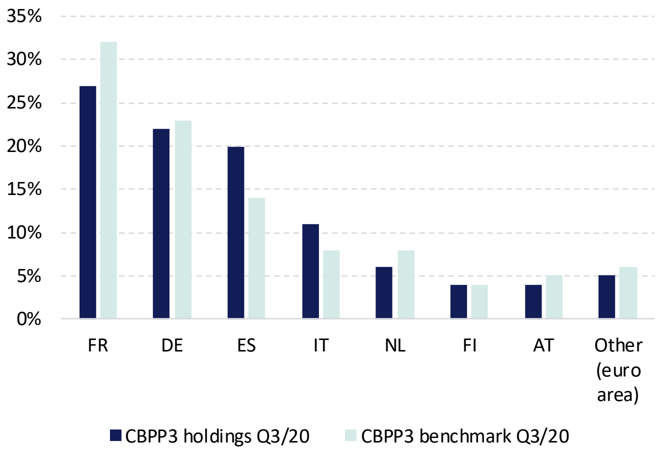
Change of primary and secondary market holdings



Distribution of CBPP3 by credit rating



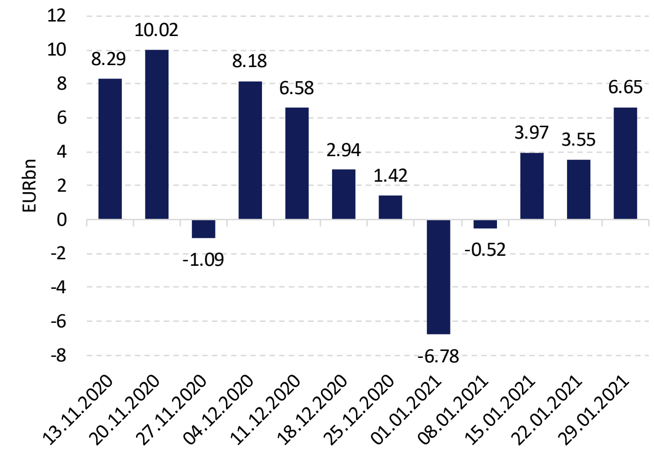
Distribution of CBPP3 by country of risk



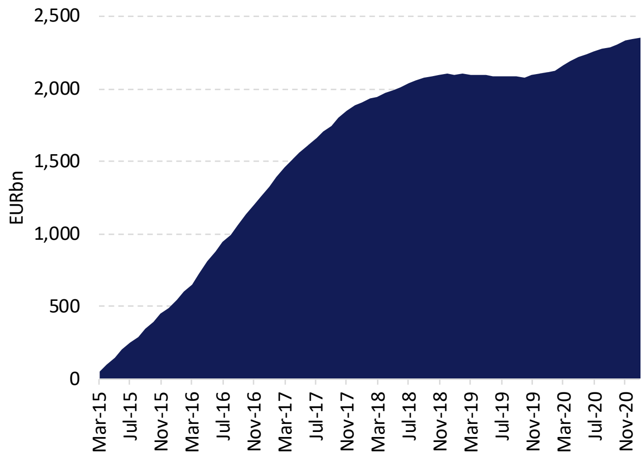
Source: ECB, Bloomberg, NORD/LB Markets Strategy & Floor Research

Public Sector Purchase Programme (PSPP)

Weekly purchases



Development of PSPP volume



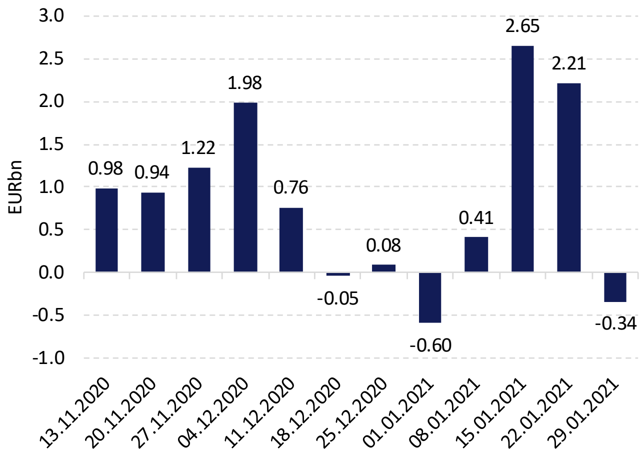
Overall distribution of PSPP buying at month-end

Country	Adjusted distribution key[1]	Purchases (EURm)	Expected purchases (EURm)[2]	Difference (EURm)	Average time to maturity in years	Market average in years[3]	Difference in years
AT	2.701%	67,577	66,048	1,529	7.78	8.04	-0.3
BE	3.362%	85,867	82,213	3,654	8.29	10.10	-1.8
CY	0.199%	3,142	4,856	-1,714	9.98	9.09	0.9
DE	24.327%	575,158	594,868	-19,710	6.52	7.64	-1.1
EE	0.260%	263	6,357	-6,094	9.52	9.51	0.0
ES	11.004%	290,758	269,088	21,670	8.12	8.41	-0.3
FI	1.695%	35,448	41,450	-6,002	7.10	7.95	-0.8
FR	18.848%	484,506	460,892	23,614	7.25	8.25	-1.0
IE	1.563%	36,997	38,212	-1,215	8.75	9.85	-1.1
IT	15.677%	411,971	383,360	28,611	7.28	7.71	-0.4
LT	0.360%	4,471	8,793	-4,322	9.84	11.00	-1.2
LU	0.304%	2,904	7,433	-4,529	5.31	6.36	-1.0
LV	0.534%	2,904	13,060	-10,156	9.71	10.30	-0.6
MT	0.097%	1,215	2,367	-1,152	9.82	9.34	0.5
NL	5.408%	117,408	132,245	-14,837	7.61	8.45	-0.8
PT	2.160%	45,389	52,815	-7,426	7.12	7.38	-0.3
SI	0.444%	8,936	10,866	-1,930	9.33	10.11	-0.8
SK	1.057%	14,259	25,843	-11,584	8.24	8.57	-0.3
GR	0.00%	0	0	0	0.00	15.93	0.0
SNAT	10.00%	256,123	244,530	11,593	7.43	8.74	-1.3
Total / Avg.	**100.0%**	**2,445,296**	**-**	**-**	**7.31**	**8.27**	**-1.0**

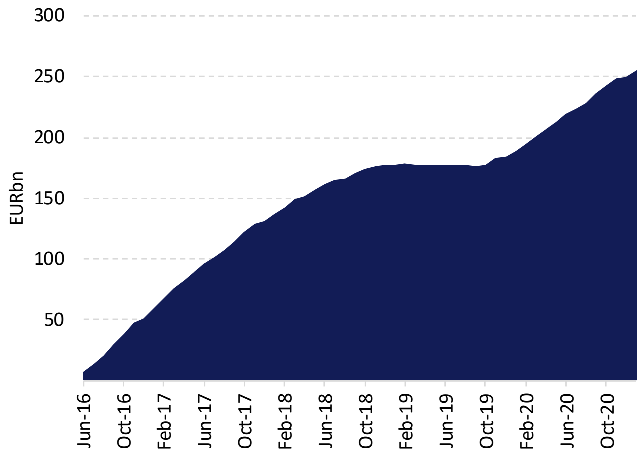
[1] Based on the ECB capital key, adjusted to include supras and the disqualification of Greece
[2] Based on the adjusted distribution key [3] Weighted average time to maturity of the bonds eligible for purchasing under the PSPP
Source: ECB, Bloomberg, NORD/LB Markets Strategy & Floor Research

Corporate Sector Purchase Programme (CSPP)

Weekly purchases

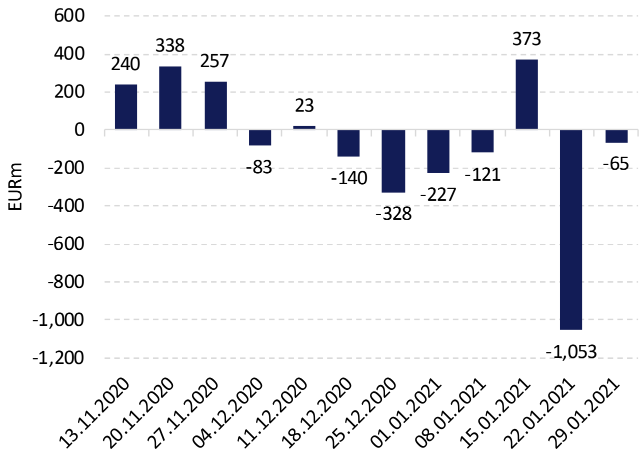


Development of CSPP volume

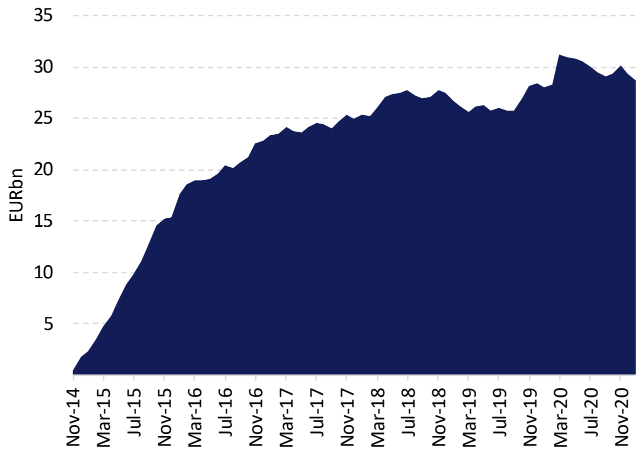


Asset-Backed Securities Purchase Programme (ABSPP)

Weekly purchases



Development of ABSPP volume



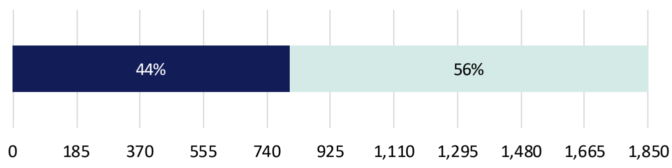
Source: ECB, Bloomberg, NORD/LB Markets Strategy & Floor Research

Pandemic Emergency Purchase Programme (PEPP)

Holdings (in EURm)

	PEPP
Dec-20	757,166
Jan-21	810,212
Δ	+53,046

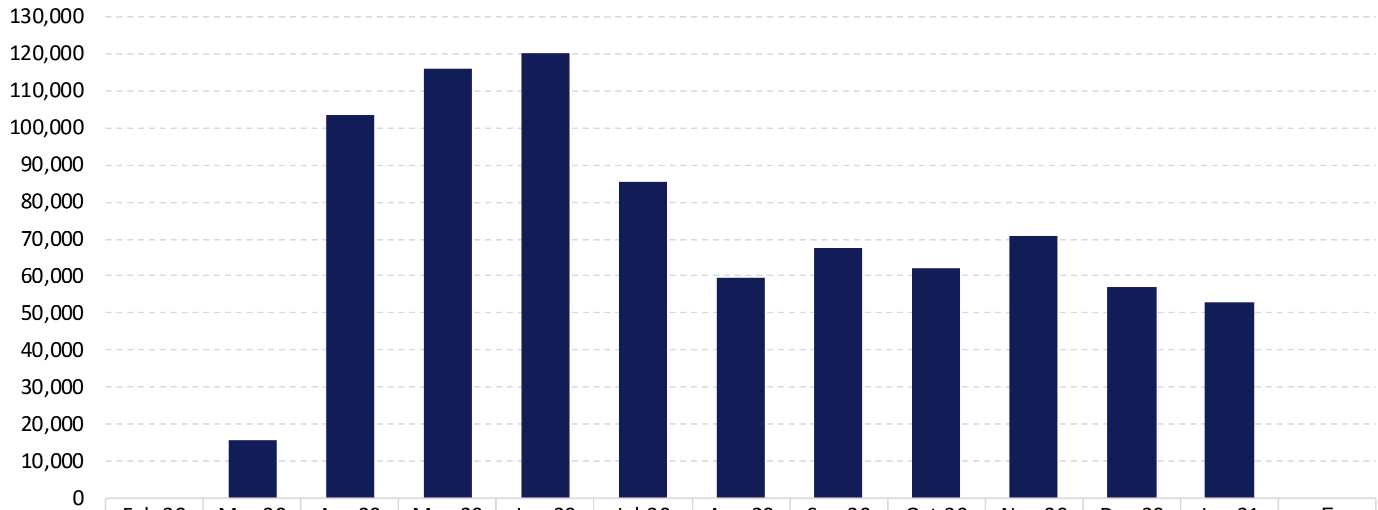
Volume already invested (in EURbn)



Estimated portfolio development

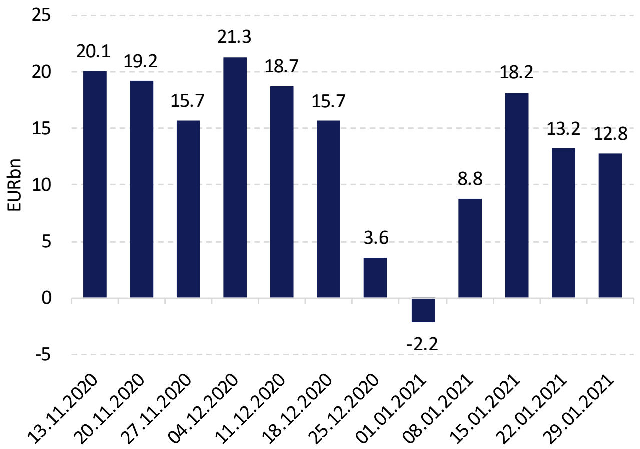
Assumed pace of purchases	Weekly net purchase volume	PEPP limit hit in ...
Average weekly net purchase volume so far	EUR 18.3bn	57 weeks (04.03.2022)

Monthly net purchases (in EURm)

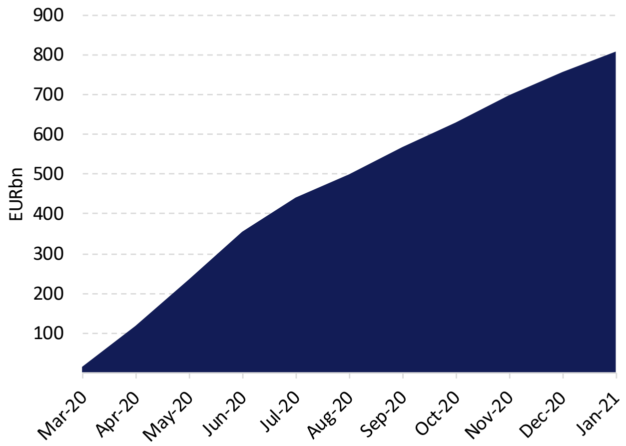


	Feb-20	Mar-20	Apr-20	May-20	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20	Jan-21	∑
PEPP	0	15,444	103,366	115,855	120,321	85,423	59,466	67,308	61,985	70,835	57,163	53,046	810,212

Weekly purchases



Development of PEPP volume

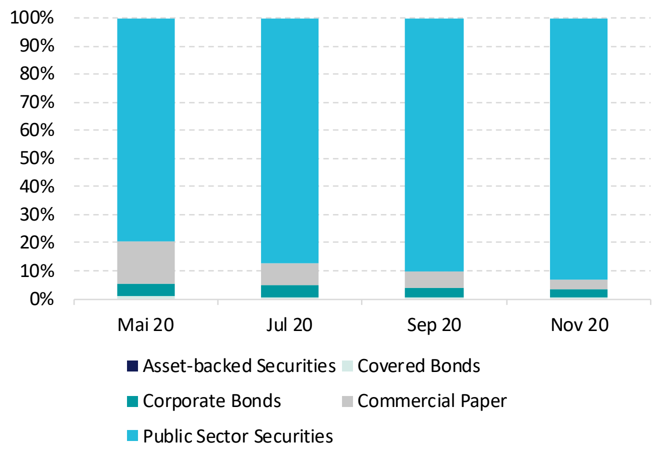


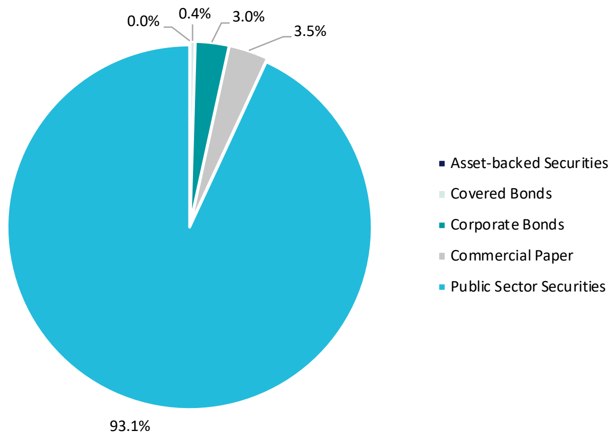
Source: ECB, Bloomberg, NORD/LB Markets Strategy & Floor Research

Holdings under the PEPP (in EURm)

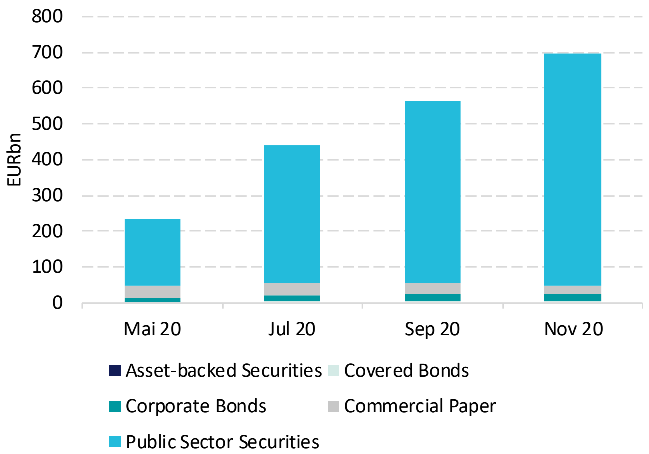
	Asset-backed securities	Covered bonds	Corporate bonds	Commercial paper	Public sector securities	PEPP
Sep-20	0	3,123	20,418	31,988	510,112	565,641
Nov-20	0	3,123	20,760	24,306	650,272	698,461
Δ	0	0	342	-7,682	140,160	132,820

Portfolio structure

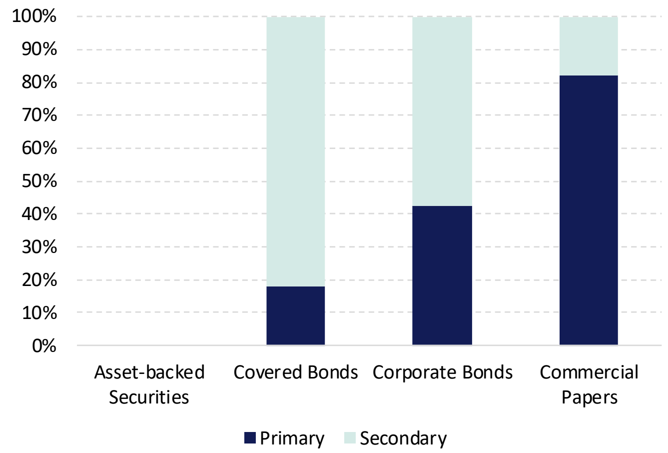




Portfolio development



Share of primary and secondary market holdings



Breakdown of private sector securities under the PEPP as of July 2020

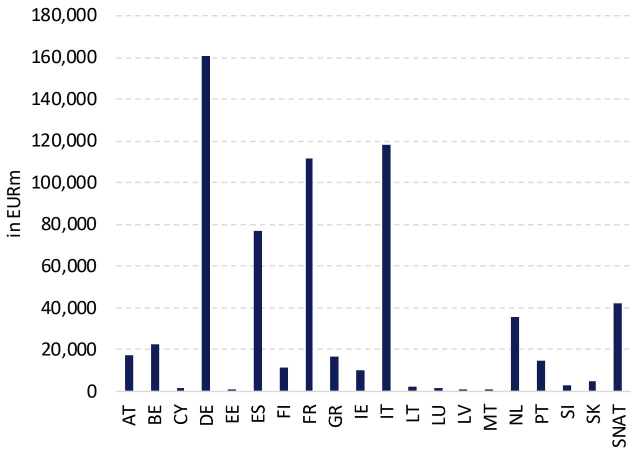
	Asset-backed securities		Covered bonds		Corporate bonds		Commercial papers	
	Primary	**Secondary**	**Primary**	**Secondary**	**Primary**	**Secondary**	**Primary**	**Secondary**
Bestand in EURm	0	0	557	2,566	8,842	11,918	20,001	4,305
Anteil	0.0%	0.0%	17.8%	82.2%	42.6%	57.4%	82.3%	17.7%

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

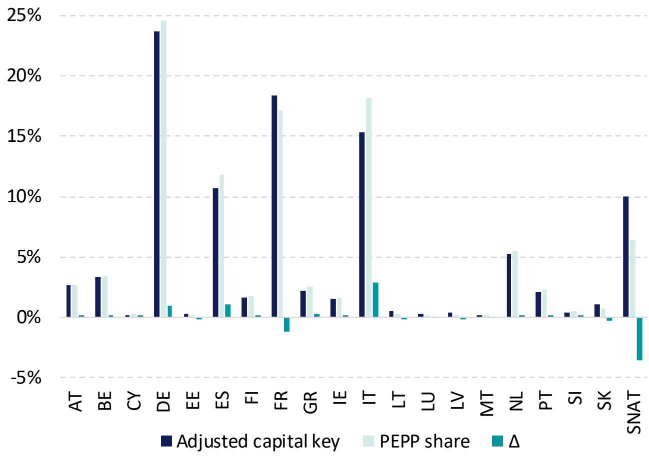
Breakdown of public sector securities under the PEPP

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	17,567	2.6%	2.7%	0.1%	10.9	7.1	3.9
BE	22,197	3.3%	3.4%	0.1%	6.3	9.4	-3.1
CY	1,484	0.2%	0.2%	0.0%	10.9	8.3	2.5
DE	160,619	23.7%	24.6%	0.9%	4.8	6.7	-1.9
EE	207	0.3%	0.0%	-0.2%	9.1	7.5	1.6
ES	77,128	10.7%	11.8%	1.1%	8.5	7.4	1.0
FI	11,169	1.7%	1.7%	0.1%	7.2	7.0	0.3
FR	111,810	18.4%	17.2%	-1.2%	8.6	7.3	1.4
GR	16,307	2.2%	2.5%	0.3%	8.4	9.4	-1.0
IE	10,317	1.5%	1.6%	0.1%	8.9	9.6	-0.7
IT	118,169	15.3%	18.1%	2.8%	6.8	6.9	0.0
LT	2,080	0.5%	0.3%	-0.2%	11.8	10.6	1.2
LU	1,244	0.3%	0.2%	-0.1%	7.1	6.4	0.8
LV	907	0.4%	0.1%	-0.2%	9.1	10.3	-1.2
MT	261	0.1%	0.0%	-0.1%	7.5	8.1	-0.7
NL	35,705	5.3%	5.5%	0.2%	4.1	7.3	-3.2
PT	14,809	2.1%	2.3%	0.2%	6.8	6.6	0.2
SI	3,131	0.4%	0.5%	0.0%	8.3	9.5	-1.2
SK	4,707	1.0%	0.7%	-0.3%	7.8	8.2	-0.4
SNAT	41,991	10.0%	6.4%	-3.6%	8.9	7.6	1.3
Total / Avg.	**651,810**	**100.0%**	**100.0%**	**-**	**7.0**	**7.2**	**-0.3**

Distribution of public sector assets by jurisdiction



Deviations from the adjusted distribution key



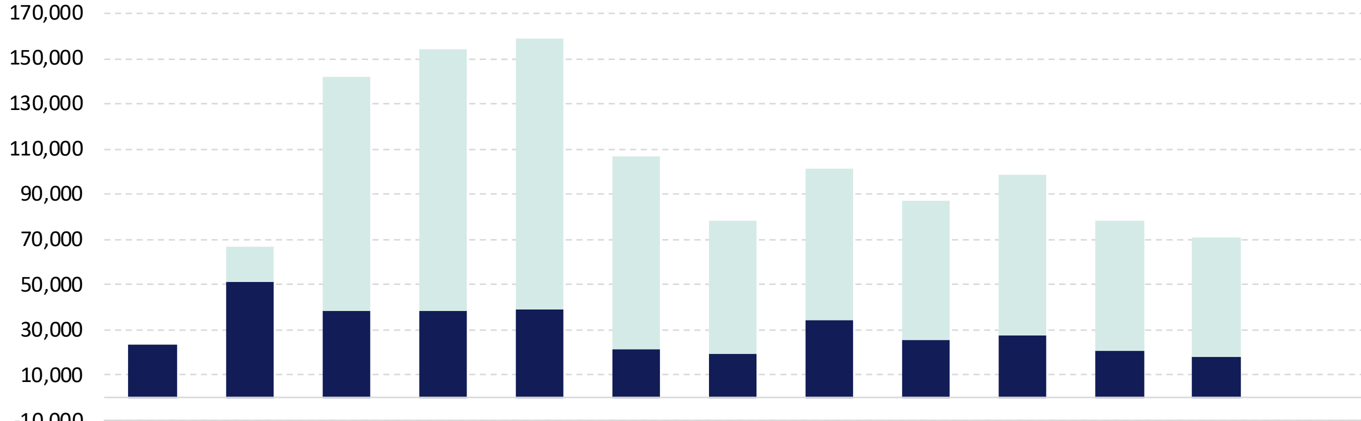
[1] Based on the ECB capital key, adjusted to include supras [2] Based on the adjusted distribution key
[3] Weighted average time to maturity of the bonds eligible for purchasing under the PEPP
Source: ECB, Bloomberg, NORD/LB Markets Strategy & Floor Research

Aggregated purchase activity under APP and PEPP

Holdings (in EURm)

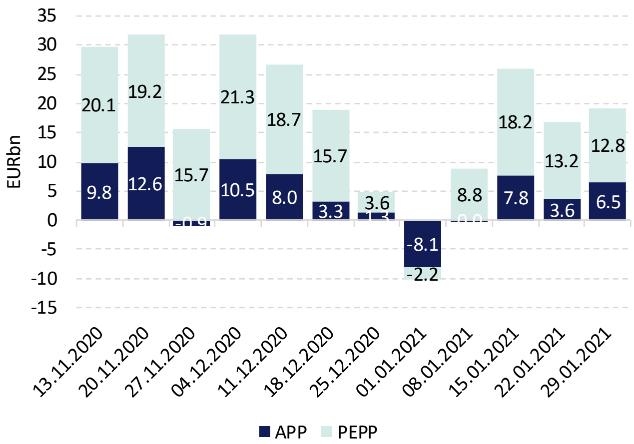
	APP	PEPP	APP & PEPP
Dec-20	2,908,908	757,166	3,666,074
Jan-21	2,926,840	810,212	3,737,052
Δ	+17,932	+53,046	+70,978

Monthly net purchases (in EURm)

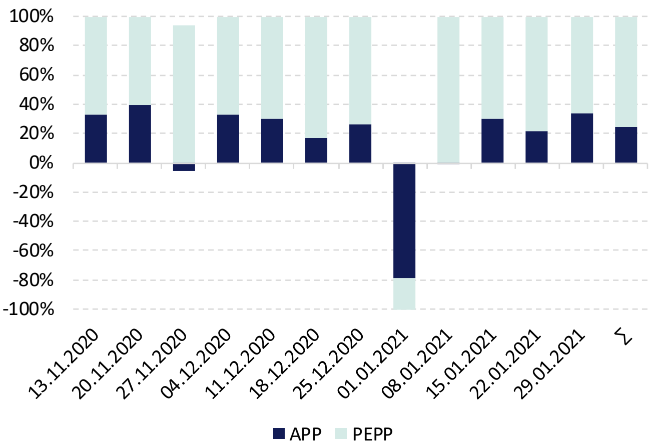


	Feb-20	Mar-20	Apr-20	May-20	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20	Jan-21	∑
∑	23,430	66,586	141,807	154,025	159,091	106,952	78,593	101,322	87,334	98,555	78,092	70,978	1,166,76
PEPP	0	15,444	103,366	115,855	120,321	85,423	59,466	67,308	61,985	70,835	57,163	53,046	810,212
APP	23,430	51,142	38,441	38,170	38,770	21,529	19,127	34,014	25,349	27,720	20,929	17,932	356,553

Weekly purchases



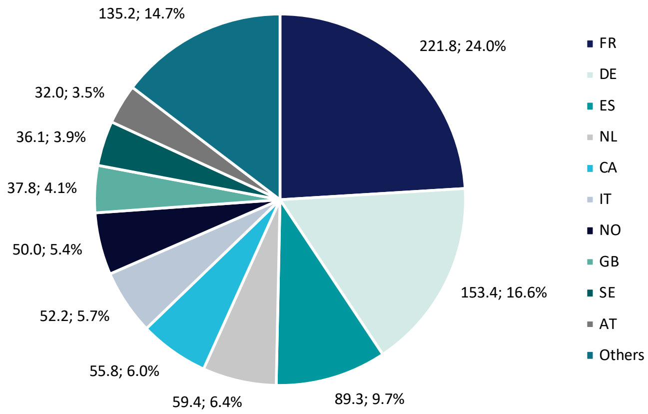
Distribution of weekly purchases



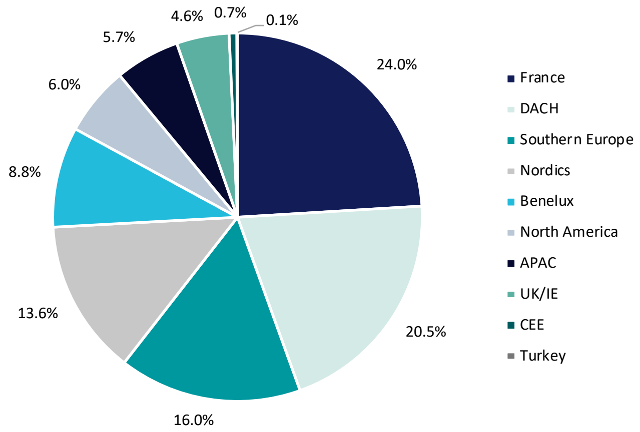
Source: ECB, Bloomberg, NORD/LB Markets Strategy & Floor Research

Charts & Figures
Covered Bonds

EUR benchmark volume by country (in EURbn)



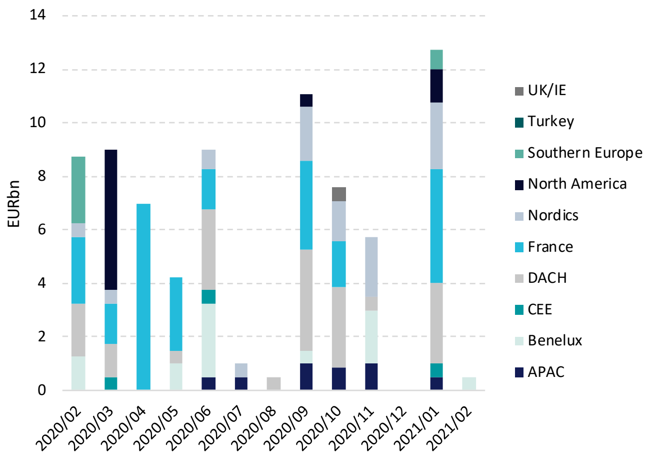
EUR benchmark volume by region (in EURbn)



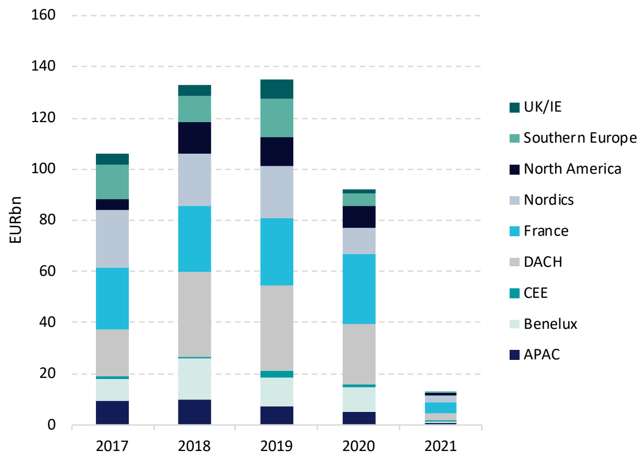
Top-10 jurisdictions

Rank	Country	Amount outst. (EURbn)	No. of BMKs	There of ESG BMKs	Avg. issue size (EURbn)	Avg. initial maturity (in years)	Avg. mod. Duration (in years)	Avg. coupon (in %)
1	FR	221.8	203	7	0.96	10.1	5.6	1.18
2	DE	153.4	229	12	0.60	8.3	4.7	0.49
3	ES	89.3	72	3	1.13	11.4	4.0	1.86
4	NL	59.4	58	0	0.97	11.1	7.2	0.98
5	CA	55.8	47	0	1.16	6.0	3.0	0.30
6	IT	52.2	60	0	0.84	9.0	4.3	1.45
7	NO	50.0	57	7	0.88	7.2	3.8	0.55
8	GB	37.8	42	0	0.91	8.4	3.2	1.21
9	SE	36.1	41	0	0.88	7.4	3.3	0.57
10	AT	32.0	58	0	0.55	9.3	5.7	0.75

EUR benchmark issue volume by month

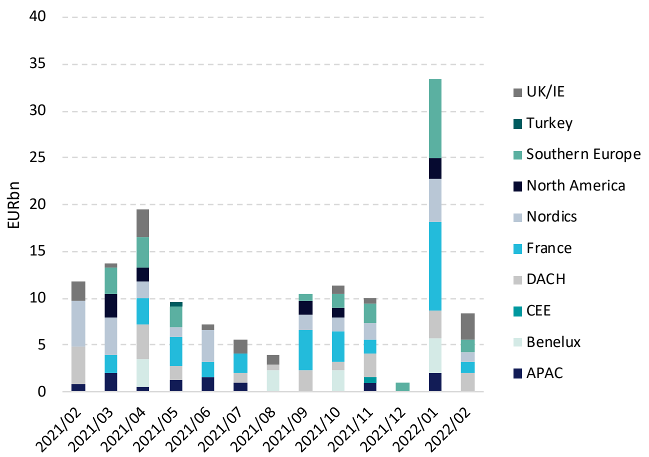


EUR benchmark issue volume by year

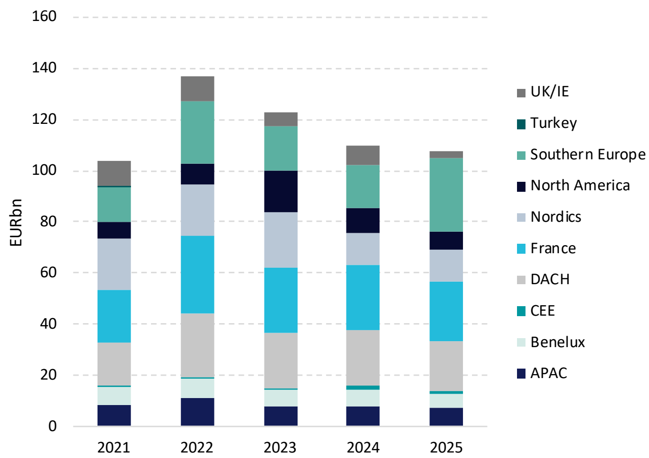


Source: Market data, Bloomberg, NORD/LB Markets Strategy & Floor Research

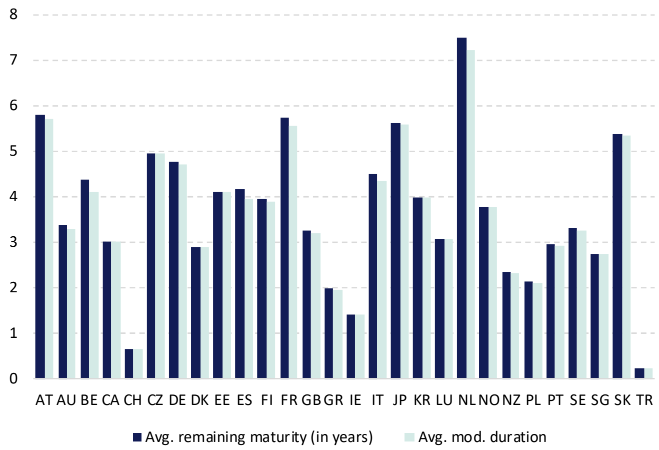
EUR benchmark maturities by month



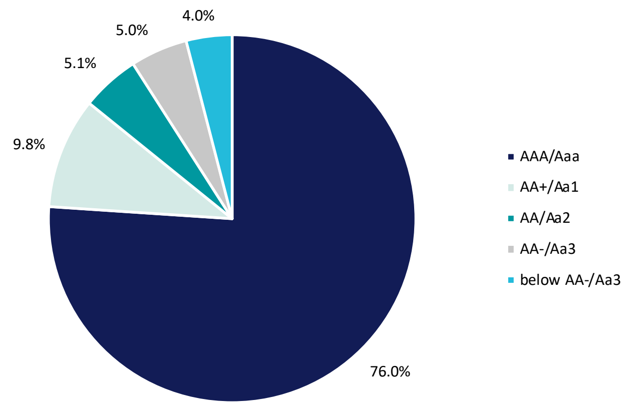
EUR benchmark maturities by year



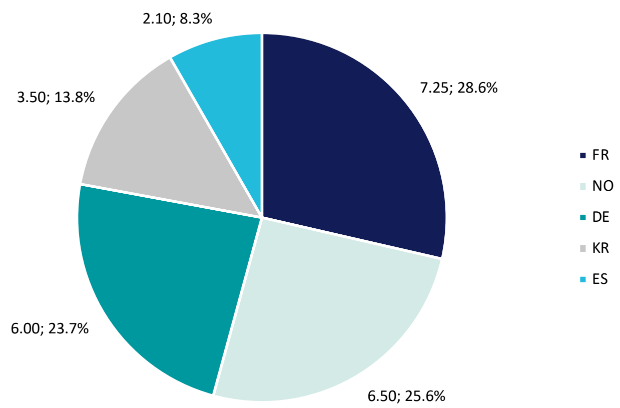
Modified duration and time to maturity by country



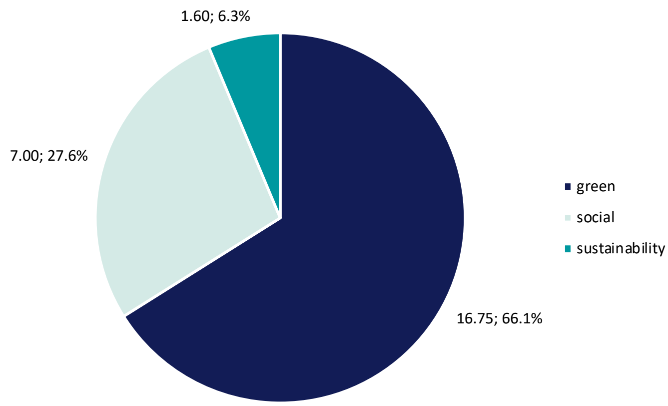
Rating distribution (volume weighted)



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

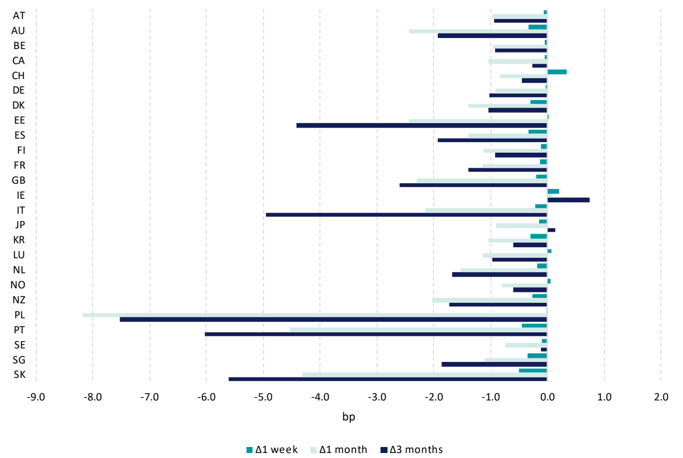


EUR benchmark volume (ESG) by type (in EURbn)

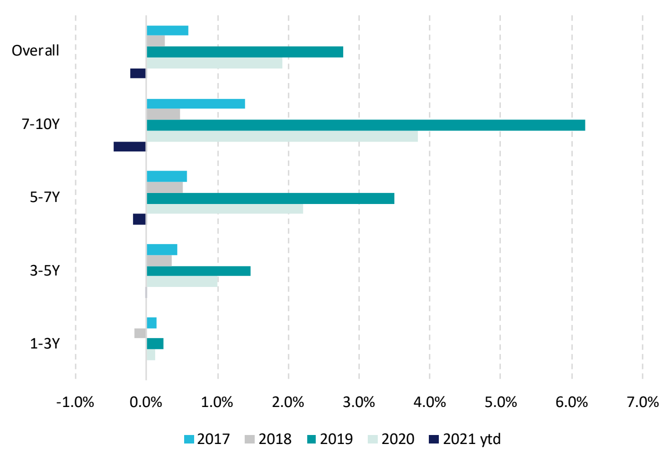


Source: Market data, Bloomberg, NORD/LB Markets Strategy & Floor Research

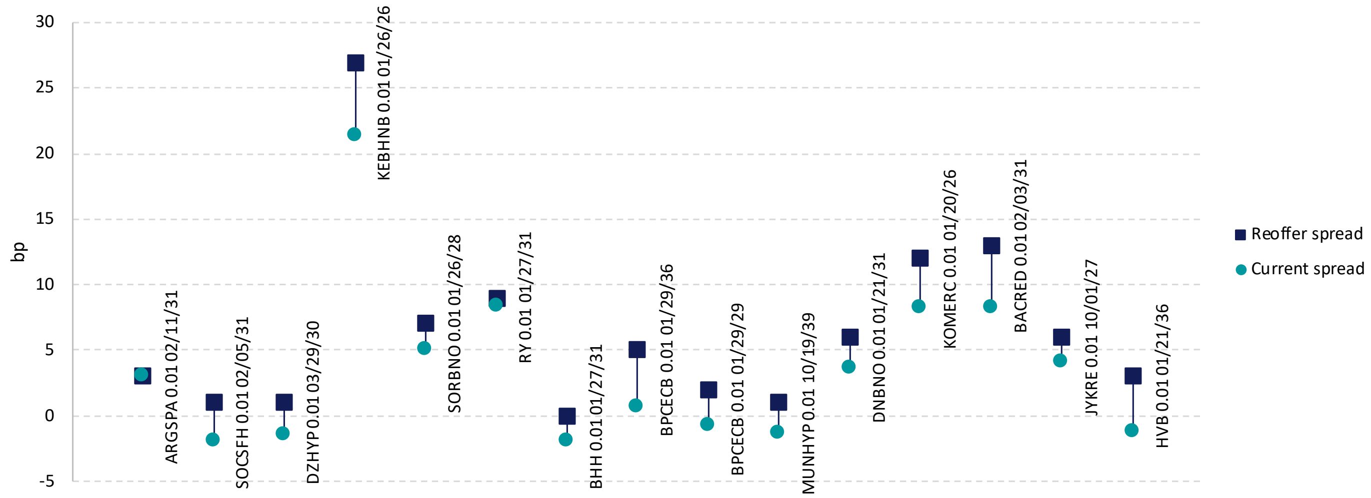
Spread development by country



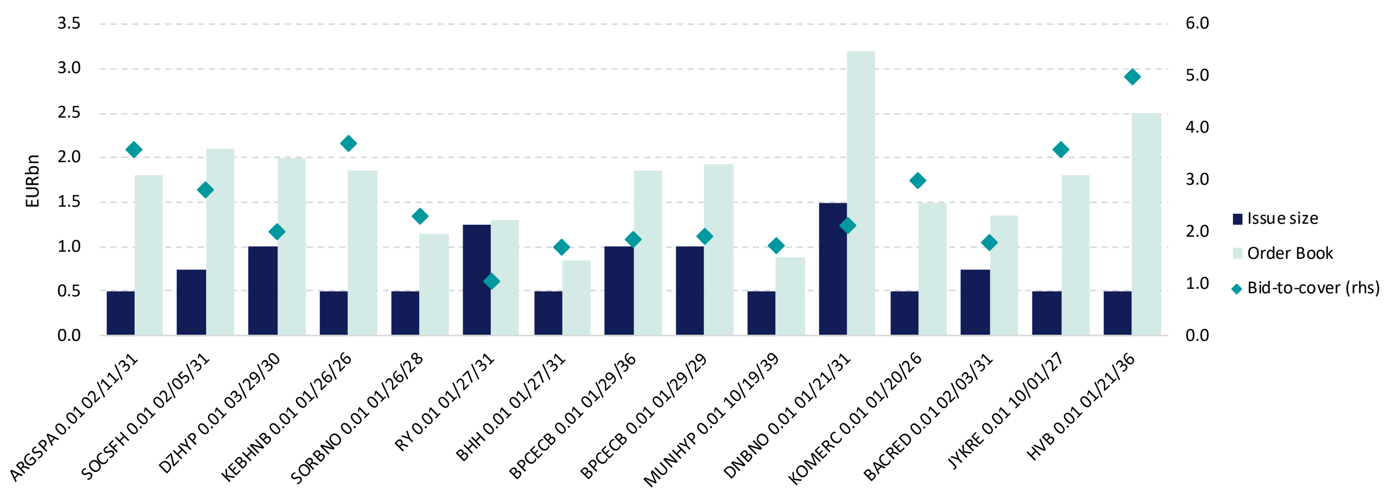
Covered bond performance (Total return)



Spread development (last 15 issues)



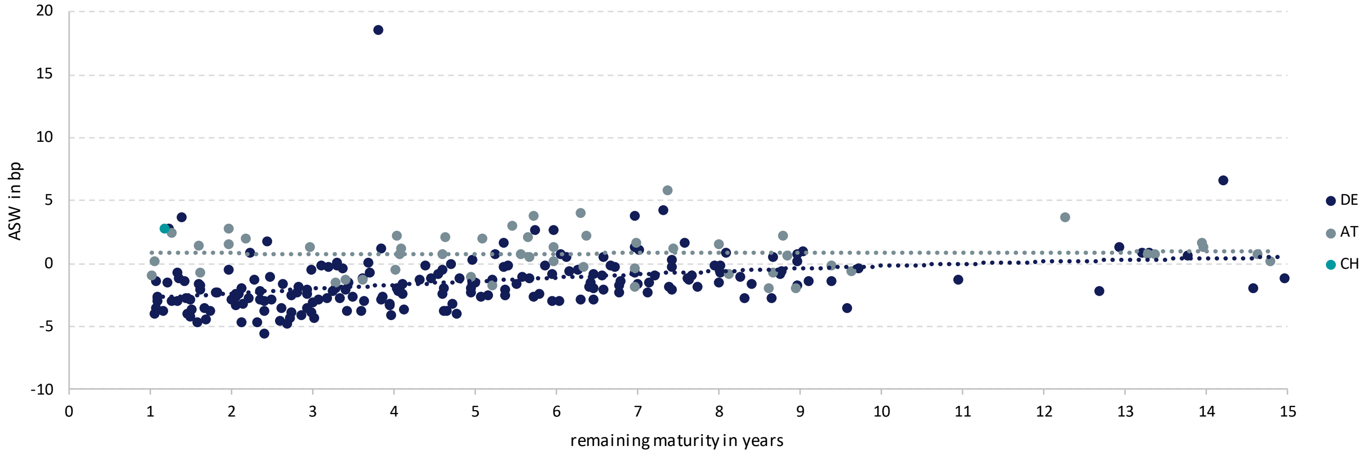
Order books (last 15 issues)



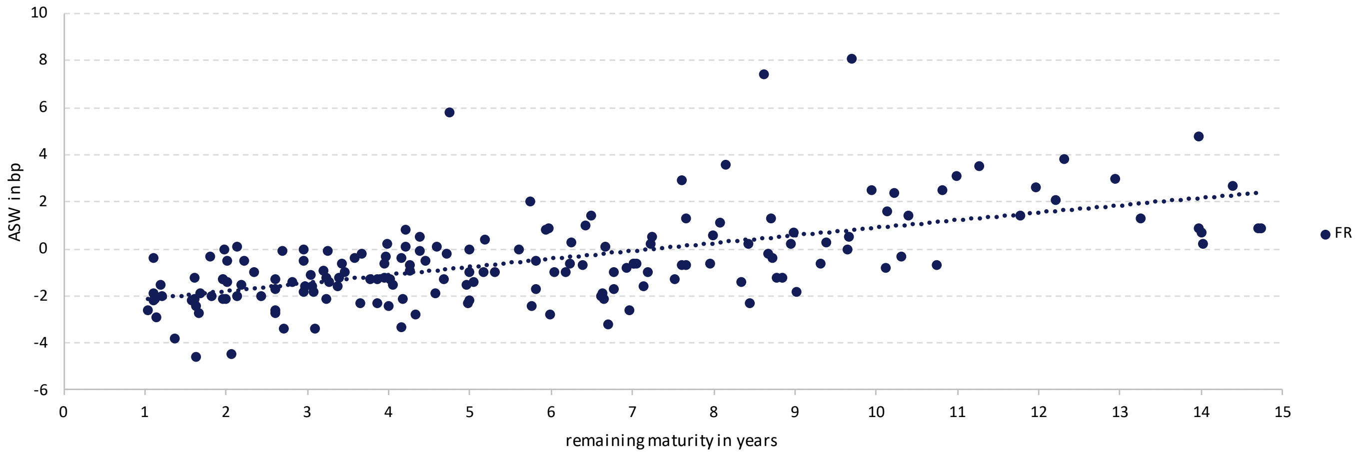
Source: Market data, Bloomberg, NORD/LB Markets Strategy & Floor Research

Spread overview[1]

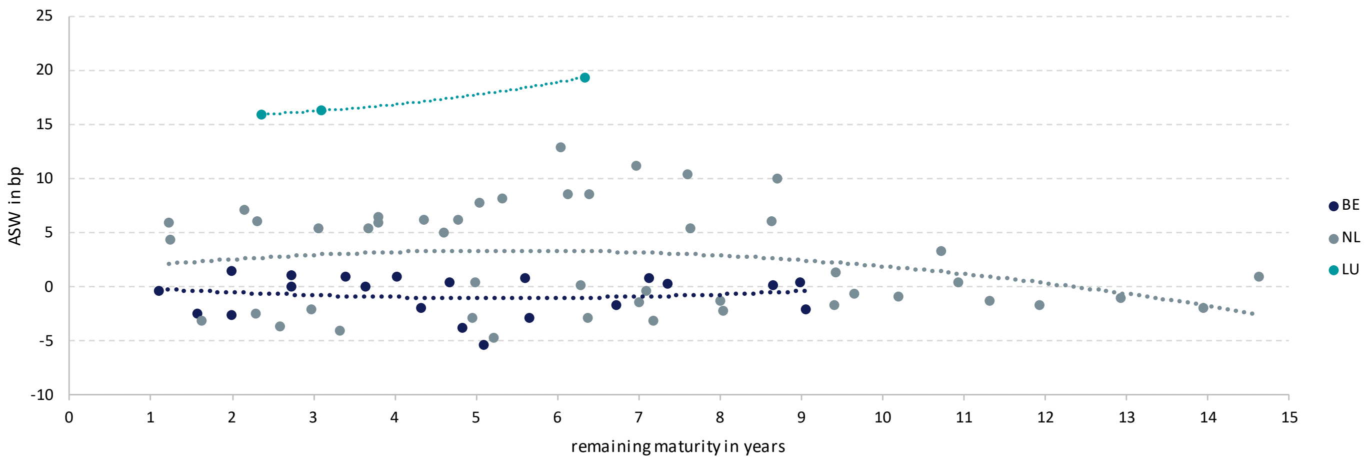
DACH



France

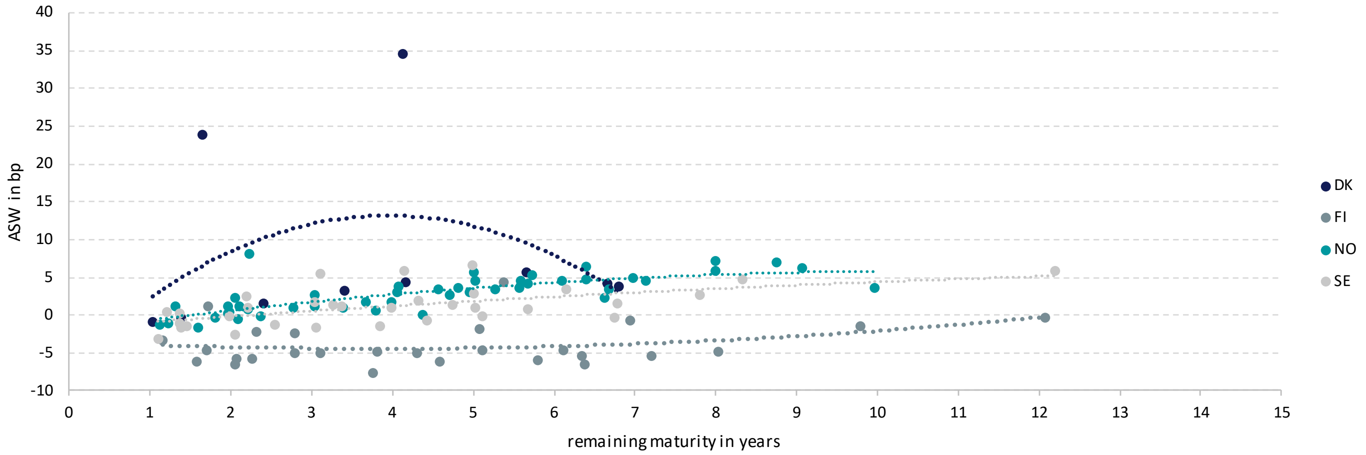


Benelux

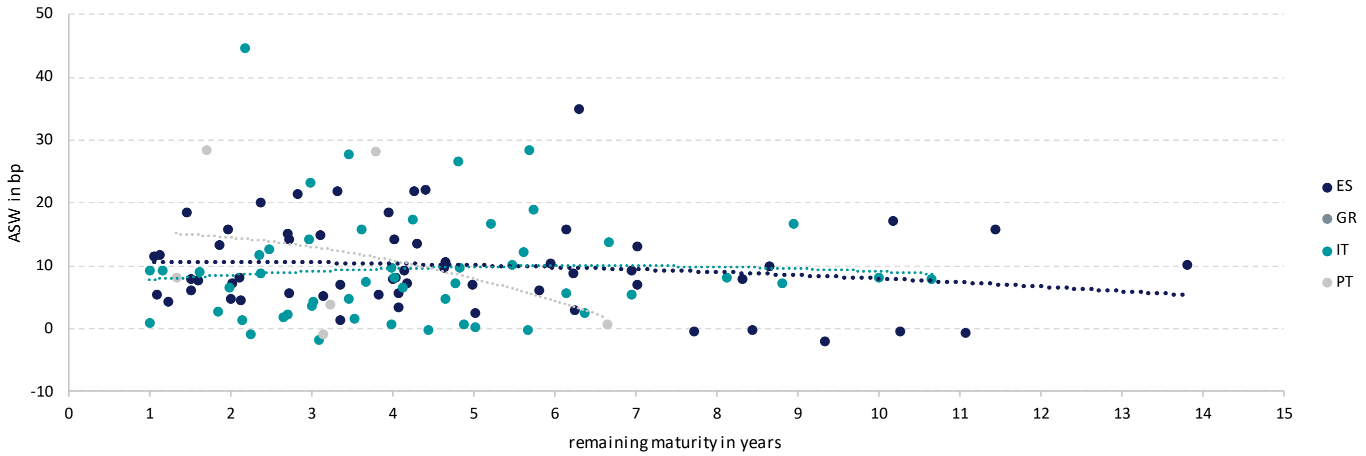


Source: Market data, Bloomberg, NORD/LB Markets Strategy & Floor Research [1]Time to maturity 1 ≤ y ≤ 15

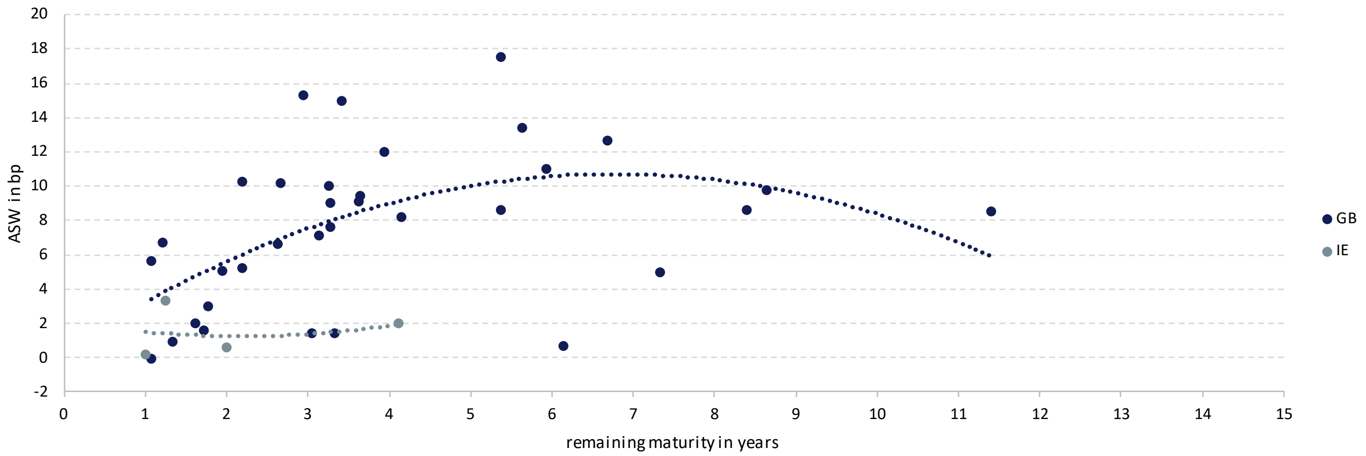
Nordics



Southern Europe

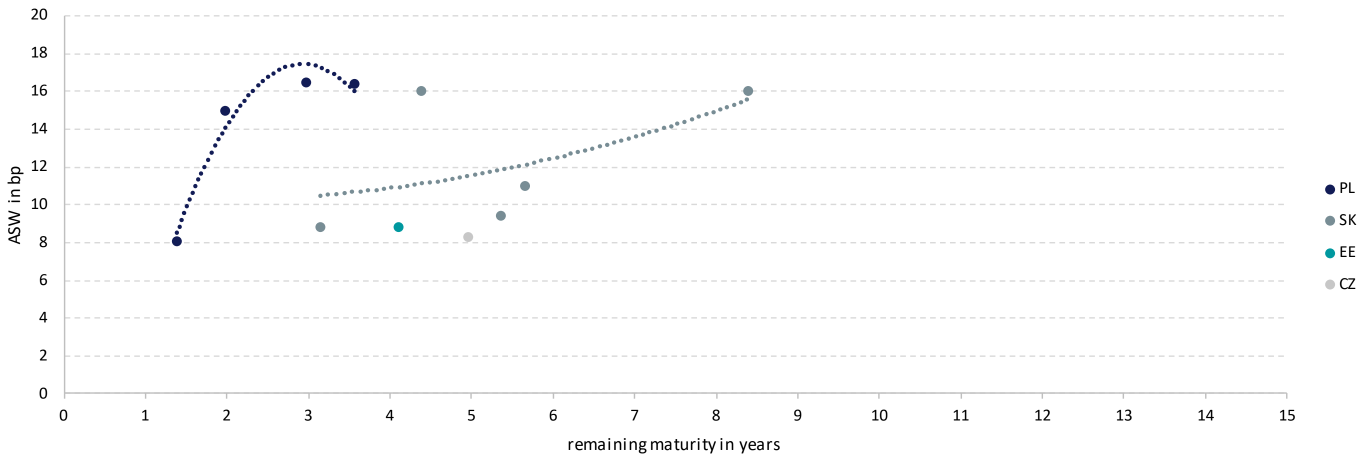


UK/IE

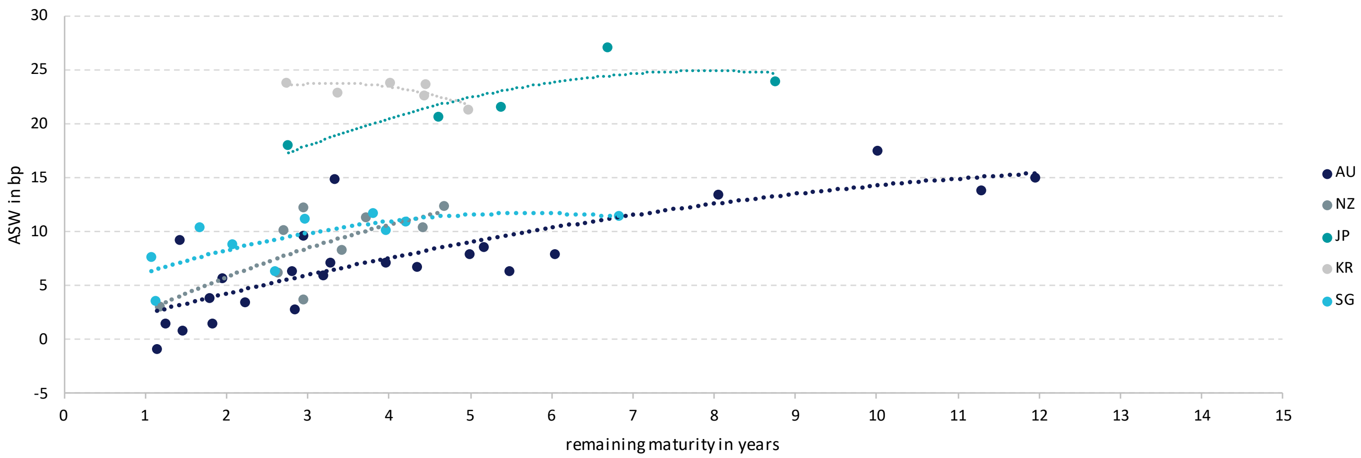


Source: Market data, Bloomberg, NORD/LB Markets Strategy & Floor Research

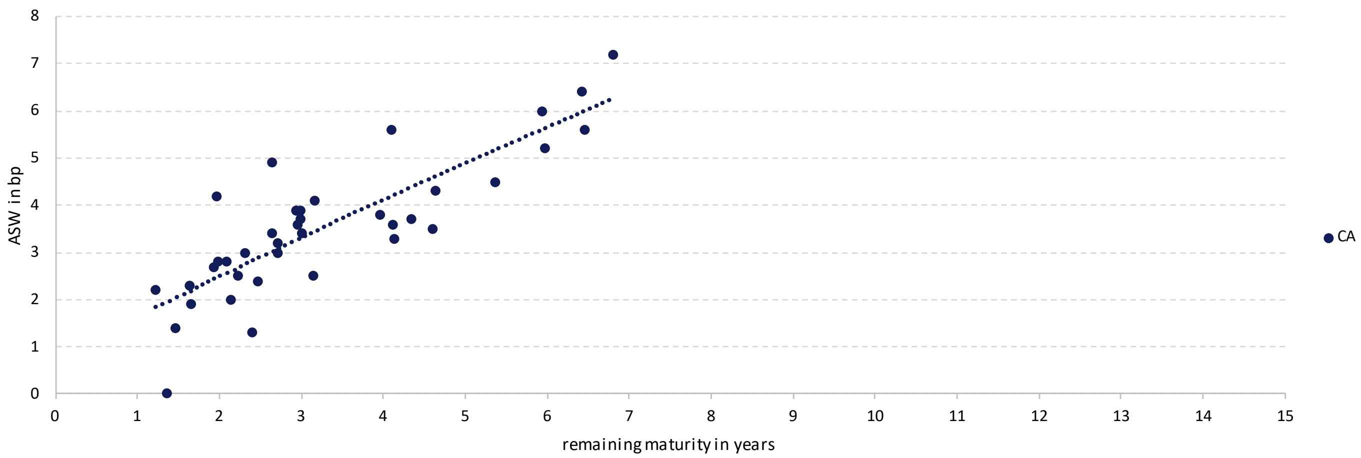
CEE



APAC



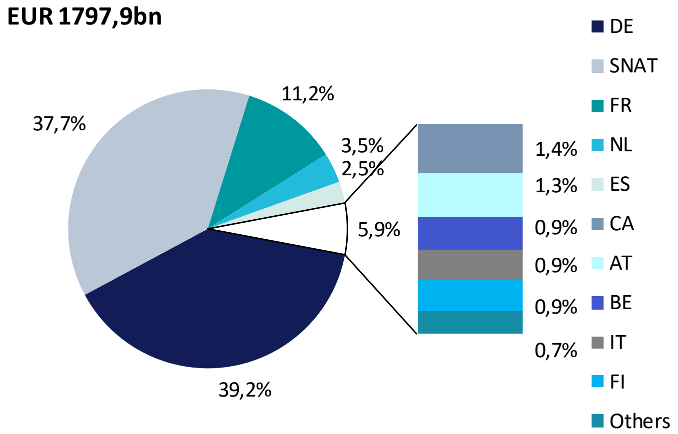
North America



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

Charts & Figures
SSA/Public Issuers

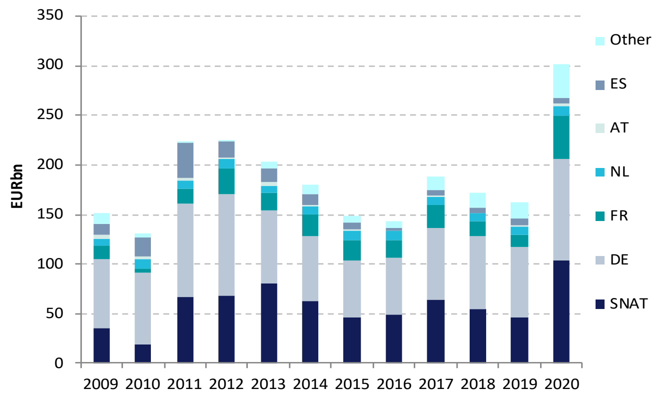
Outstanding volume (bmk)



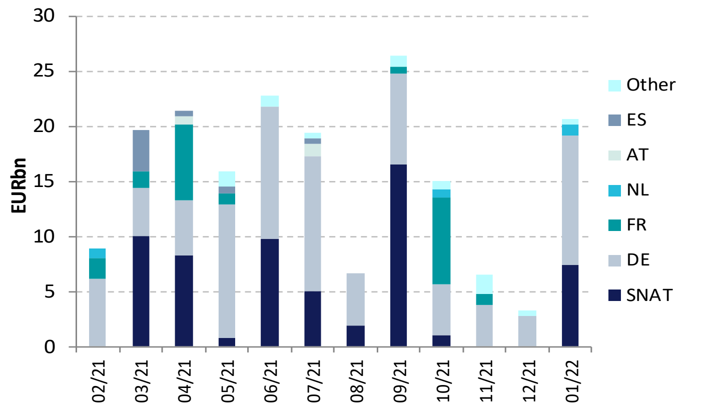
Top 10 countries (bmk)

Country	Vol. (€bn)	No. of bonds	ØVol. (€bn)	Vol. weight. ØMod. Dur.
DE	704,4	553	1,3	6,6
SNAT	677,1	178	3,8	7,9
FR	202,1	143	1,4	5,2
NL	62,4	64	1,0	6,5
ES	45,1	53	0,9	4,5
CA	25,0	18	1,4	5,6
AT	22,5	24	0,9	5,3
BE	16,3	19	0,9	14,1
IT	15,8	20	0,8	6,0
FI	15,5	20	0,8	5,9

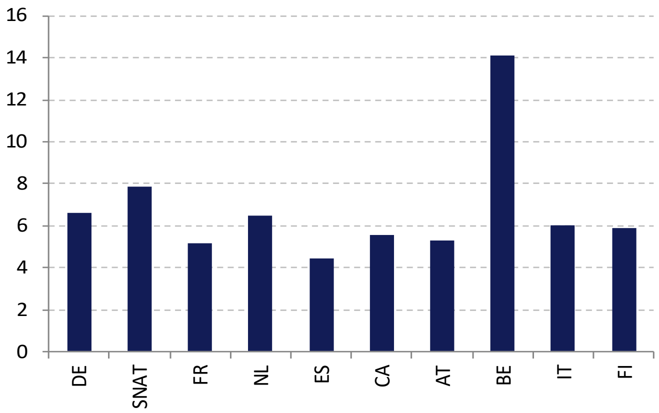
Issue volume by year (bmk)



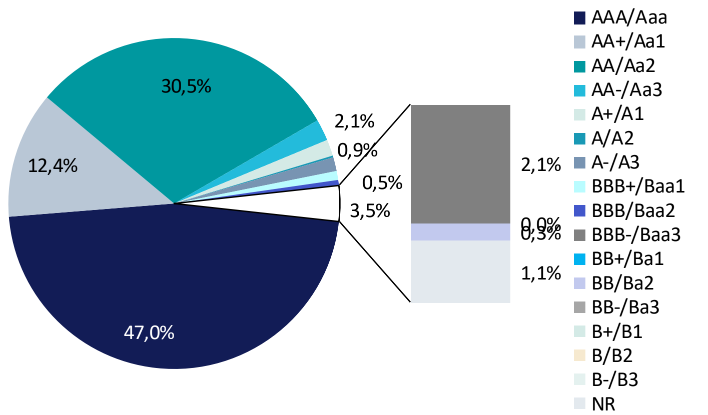
Maturities next 12 months (bmk)



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

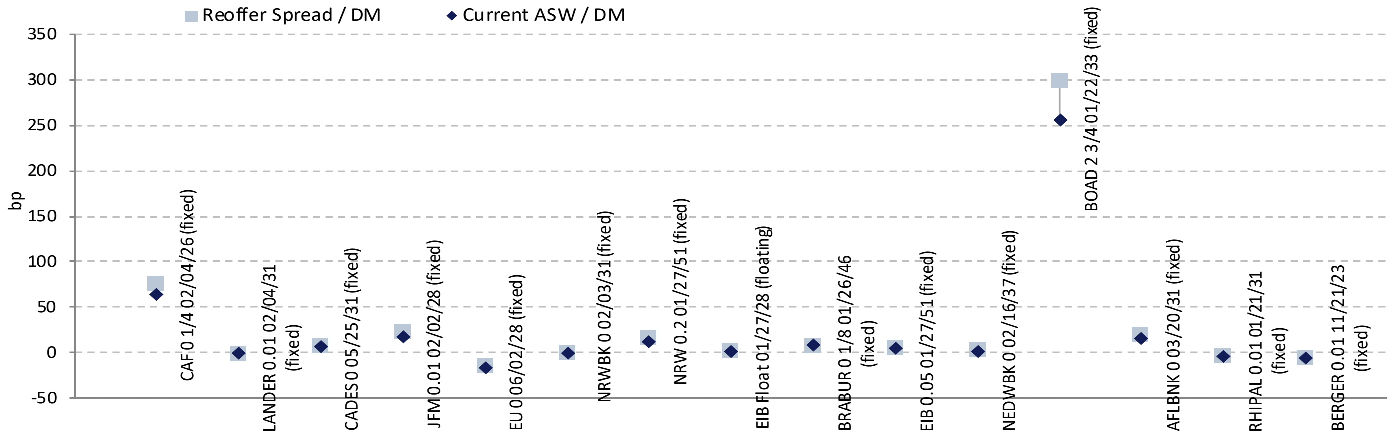


Rating distribution (vol. weighted)

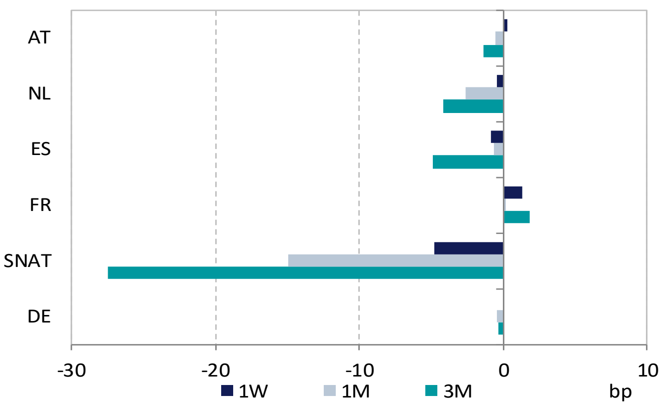


Source: Bloomberg, NORD/LB Markets Strategy & Floor Research

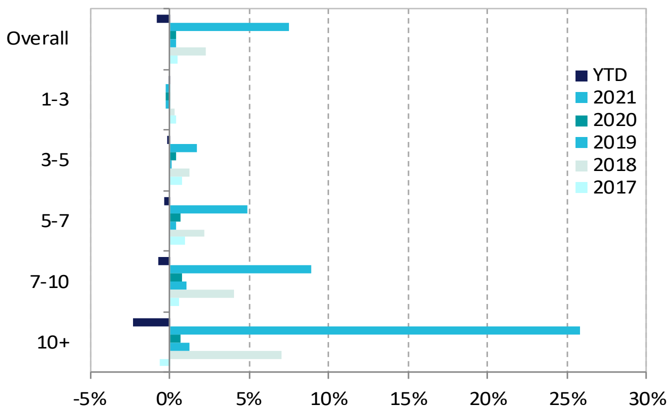
Spread development (last 15 issues)



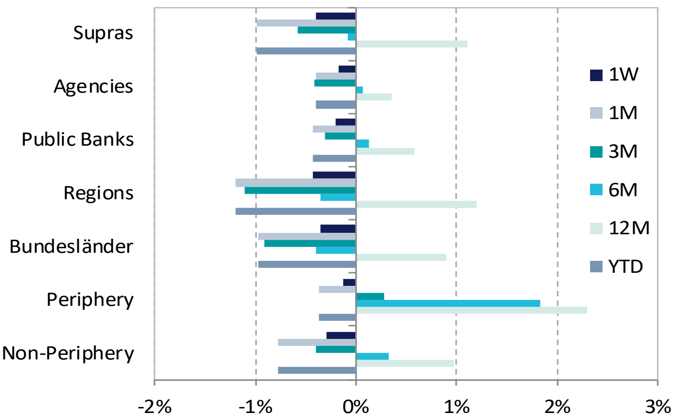
Spread development by country



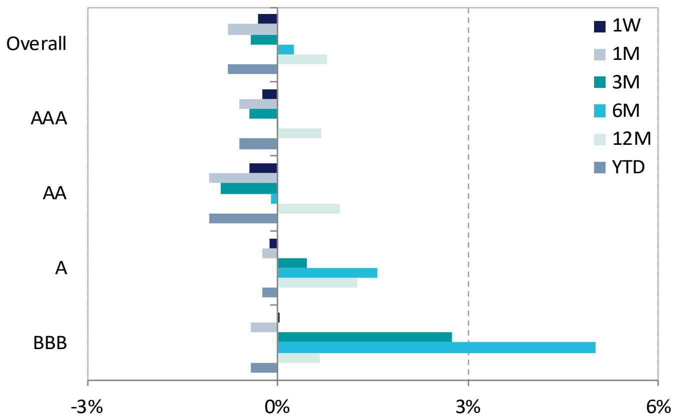
Performance (total return)



Performance (total return) by regions

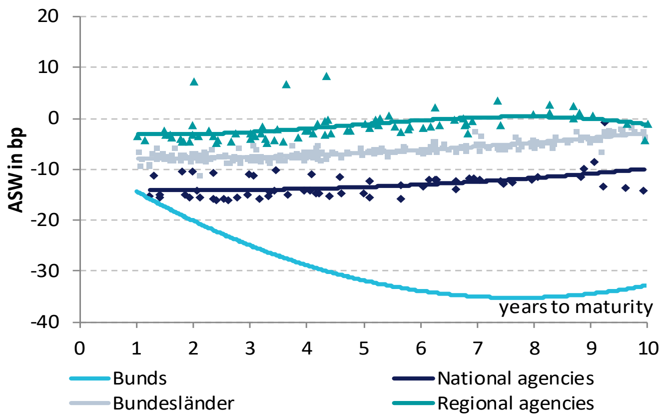


Performance (total return) by rating

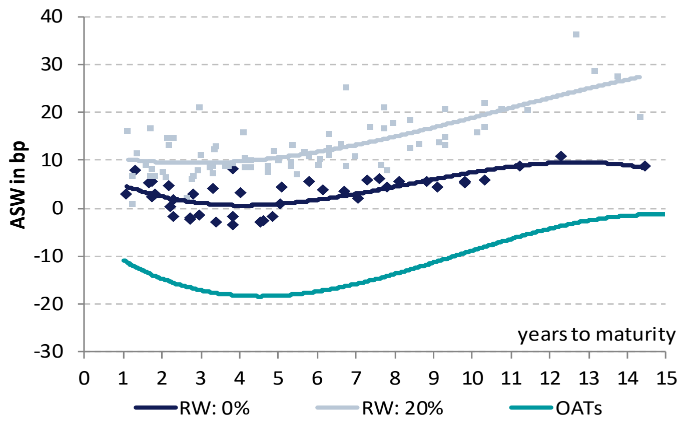


Source: Bloomberg, NORD/LB Markets Strategy & Floor Research

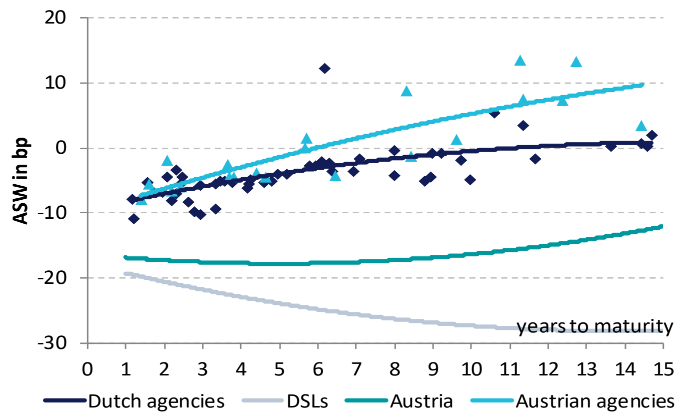
Germany (by segments)



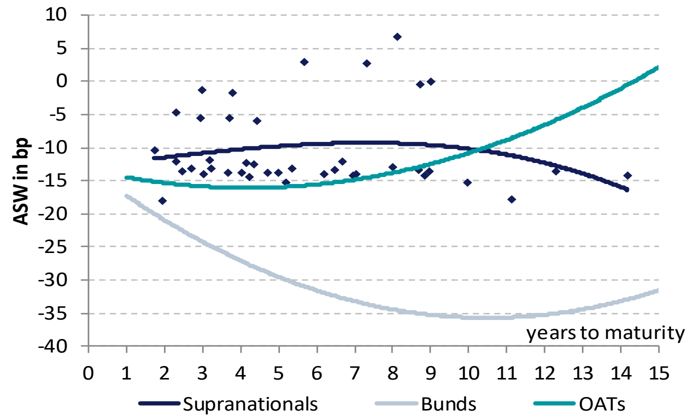
France (by risk weight)



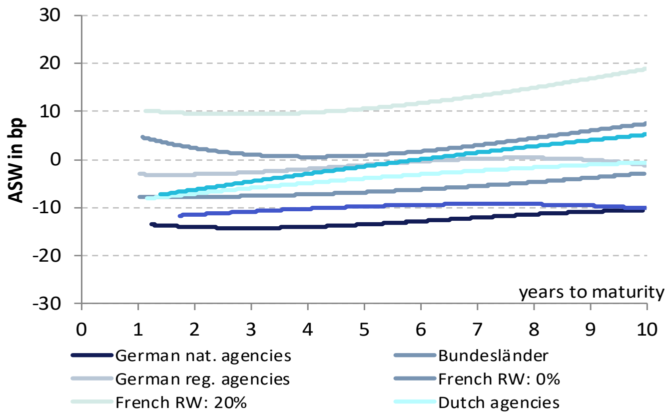
Netherlands & Austria



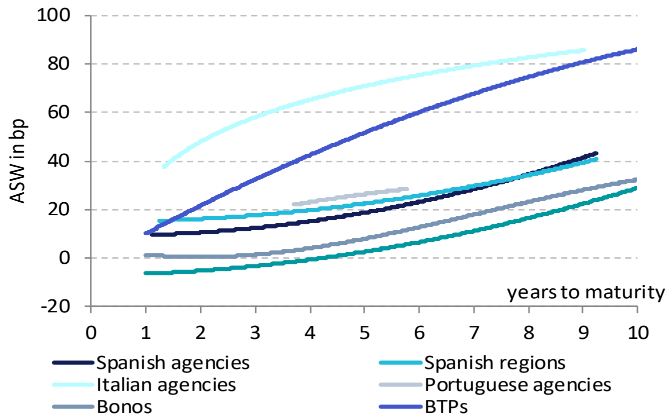
Supranationals



Core



Periphery



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

Appendix
Overview of latest Covered Bond & SSA View editions

Publication	Topics
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
44/2020 ♦ 18 November	▪ Primary market 2021: real prospect of Hungarian EUR benchmarks? ▪ German Pfandbrief savings banks in Q3 2020 ▪ Development of the German property market
43/2020 ♦ 11 November	▪ Newcomer to the benchmark segment: HSBC Bank Canada sets sights on EUR debut ▪ OP Mortgage Bank: First green covered bond from Finland ▪ Transparency requirements §28 PfandBG Q3/2020
42/2020 ♦ 04 November	▪ Covered Bond Framework and Liquidity Coverage Ratio: European Commission presents draft version of amendments to LCR regulation ▪ An overview of the Fitch covered bond universe
41/2020 ♦ 28 October	▪ ECB: The year of the owl – review and outlook ▪ Yield developments on the covered bond market
40/2020 ♦ 21 October	▪ German building societies: EUR benchmark debuts and requirements for investing in soft bullet bonds ▪ NPLs in cover pools – lack of unified approach at national level
39/2020 ♦ 14 October	▪ Spain: Issuer consolidation ahead? ▪ PfandBG to include extendable maturity structures ▪ The EU has big plans – "SURE" and "Next Generation EU"
38/2020 ♦ 07 October	▪ New issuer from Japan – Sumitomo Mitsui Trust Bank places inaugural EUR benchmark bond ▪ PEPP – taking stock six months on

NORD/LB: Markets Strategy & Floor Research

NORD/LB: Covered Bond Research

NORD/LB: SSA/Public Issuer Research

Bloomberg: RESP NRDR <GO>

Appendix
Publication overview

Covered Bonds:

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

SSA/Public Issuers:

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

Fixed Income:

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

Appendix
Contacts at NORD/LB

Markets Strategy & Floor Research

Michael Schulz
Head
+49 511 361-5309
+49 172 740 4123
michael.schulz@nordlb.de

Melanie Kiene
Banks
+49 511 361-4108
+49 172 169 2633
melanie.kiene@nordlb.de

Dr Frederik Kunze
Covered Bonds
+49 511 361-5380
+49 172 354 8977
frederik.kunze@nordlb.de

Dr Norman Rudschuck
SSA/Public Issuers
+49 511 361-6627
+49 152 090 24094
norman.rudschuck@nordlb.de

Henning Walten
Covered Bonds
+49 511 361-6379
+49 152 545 67178
henning.walten@nordlb.de

Sales

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

Origination & Syndicate

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

Treasury

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

Trading

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

Sales Wholesale Customers

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

Disclaimer

The present report (hereinafter referred to as "information") was drawn up by NORDDEUTSCHE LANDESBANK GIROZENTRALE (NORD/LB). The supervisory authorities responsible for NORD/LB are the European Central Bank (ECB), Sonnemannstraße 20, D-60314 Frankfurt am Main, and the Federal Financial Supervisory Authority in Germany (Bundesanstalt für Finanzdienstleitungsaufsicht; BaFin), Graurheindorfer Str. 108, D-53117 Bonn and Marie-Curie-Str. 24-28, D-60439 Frankfurt am Main. The present report and the products and services described herein have not been reviewed or approved by the relevant supervisory authority.

The present information is addressed exclusively to Recipients in Austria, Belgium, Canada, Cyprus, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Indonesia, Ireland, Italy, Japan, Korea, Luxembourg, the Netherlands, New Zealand, Poland, Portugal, Singapore, Portugal, Spain, Sweden, Switzerland, the Republic of China (Taiwan), Thailand, the United Kingdom and Vietnam (hereinafter referred to as "Relevant Persons" or "Recipients"). The contents of the information are disclosed to the Recipients on a strictly confidential basis and, by accepting such information, the Recipients shall agree that they will not forward it to third parties, copy and/or reproduce this information without the prior written consent of NORD/LB. The present information is addressed solely to the Relevant Persons and any parties other than the Relevant Persons shall not rely on the information contained herein. In particular, neither this information nor any copy thereof shall be forwarded or transmitted to the United States of America or its territories or possessions, or distributed to any employees or affiliates of Recipients resident in these jurisdictions.

The present information does not constitute financial analysis within the meaning of Art. 36 (1) of the Delegate Regulation (EU) 2017/565, but rather represents a marketing communication for your general information **within the meaning of Art. 36 (2) of this Regulation. Against this background, NORD/LB expressly points out that this information has not been prepared in accordance with legal provisions promoting the independence of investment research and is not subject to any prohibition of trading following the dissemination of investment research.** This information also constitutes an investment recommendation or investment strategy recommendation within the meaning of Market Abuse Regulation (EU) No. 596/2014 and complies with the applicable provisions of this regulation and Delegated Regulation (EU) 2016/958 as well as the Securities Trading Act (see the supplementary details at the end of this information).

This information has been prepared by the Markets Strategy & Floor Research division, which is organisationally assigned to the Markets trading division within NORD/LB and which offers comprehensive securities services to the clients of the bank. Information may therefore be exchanged between the Floor Research and Trading divisions which may influence the content of this information. Against this background, the possibility cannot be ruled out that NORD/LB has its own holdings in the financial instruments described herein or in the issuers described herein and participates in the issue of such financial instruments as well as providing other services to such issuers or has other financial interests in these financial instruments or issuers. It also cannot be ruled out that the remuneration of the employees of the Markets Strategy & Floor Research division is indirectly linked to the overall performance of the Markets division, however, a direct linking of remuneration to transactions in investment services or trading fees is prohibited. Against this background, there are potential conflicts of interest that could fundamentally influence the objectivity of the recommendations contained herein.
NORD/LB has, however, taken extensive precautions to deal with potential conflicts of interest and to avoid them:

Arrangements for dealing with and avoiding conflicts of interest and for the confidential treatment of sensitive client and business data:
Business areas that may have regular access to sensitive and confidential information are classified as confidentiality areas by the Compliance Office and separated from other areas in terms of function, location and technical data processing measures. The trading division (Markets) is classified as such a confidentiality area. The exchange of information between individual confidentiality areas requires the approval of the Compliance Office.
The forwarding of confidential information which may have an impact on securities' prices is monitored by the NORD/LB Compliance Office, which is independent of the trading, business and settlement departments. The Compliance Office can issue any trading prohibitions and restrictions which may be necessary to ensure that information which may have an influence on securities' prices is not misused and to prevent confidential information from being passed on to areas which may only use publicly accessible information. Employees of the Markets Strategy & Floor Research unit are obliged to inform the Compliance Office of all transactions (including external) that they carry out for their own account or on behalf of a third party or in the interests of a third party. This will enable the Compliance Office to identify any unauthorised transactions by these employees.
Further information on this can be found in our Conflict of Interest Policy, which is available on request from the NORD/LB Compliance Office.

Supplementary important information:
This information and the details contained herein have been prepared and are provided for information purposes only. It is not intended to be an incentive for investment activities. It is provided for the personal information of the Recipient with the express understanding, acknowledged by the Recipient, that it does not constitute a direct or indirect offer, an individual recommendation, solicitation to buy, hold or sell, an invitation to subscribe or acquire any securities or other financial instruments, nor any measure by which financial instruments might be offered or sold.

All actual details, information and statements contained herein were derived from sources considered reliable by NORD/LB. However, since these sources are not verified independently, NORD/LB cannot give any assurance as to or assume responsibility for the accuracy and completeness of the information contained herein. The opinions and prognoses given herein on the basis of these sources constitute a non-binding evaluation of the employees of the Markets Strategy & Floor Research division of NORD/ LB. Any changes in the underlying premises may have a material impact on the developments described herein. Neither NORD/LB nor its governing bodies or employees can give any assurances as to or assume any responsibility or liability for the accuracy, appropriateness and completeness of this information or for any loss of return, any indirect, consequential or other damage which may be suffered by persons relying on the information or any statements or opinions expressed in the present Report (irrespective of whether such losses are incurred due to any negligence on the part of such persons or otherwise).

Past performance is not a reliable indicator of future performance. Exchange rates, price fluctuations of the financial instruments and similar factors may have a negative impact on the value and price of and return on the financial instruments referred to herein or any instruments linked thereto. Fees and commissions apply in relation to securities (purchase, sell, custody), which reduce the return on investment. An evaluation made on the basis of the historical performance of any security does not necessarily give an indication of its future performance.

The present information neither constitutes any investment, legal, accounting or tax advice nor any assurance that an investment or strategy is suitable or appropriate in the light of the Recipient's individual circumstances, and nothing in this information constitutes a personal recommendation to the Recipient thereof. The securities or other financial instruments referred to herein may not be suitable for the Recipient's personal investment strategies and objectives, financial situation or individual needs.

Moreover, the present report in whole or in part is not a sales or other prospectus. Accordingly, the information contained herein merely constitutes an overview and does not form the basis for any potential decision to buy or sell on the part of an investor. A full description of the details relating to the financial instruments or transactions which may relate to the subject matter of this report is given in the relevant (financing) documentation. To the extent that the financial instruments described herein are NORD/LB's own issues and subject to the requirement to publish a prospectus, the conditions of issue applicable to any individual financial instrument and the relevant prospectus published with respect thereto as well NORD/LB's relevant registration form, all of which are available for download at www.nordlb.de and may be obtained free of charge from NORD/LB, Georgsplatz 1, 30159 Hanover, shall be solely binding. Furthermore, any potential investment decision should be made exclusively on the basis of such (financing) documentation. The present information cannot replace personal advice. Before making an investment decision, each Recipient should consult an independent investment adviser for individual investment advice with respect to the appropriateness of an investment in financial instruments or investment strategies subject to this information as well as for other and more recent information on certain investment opportunities.

Each of the financial instruments referred to herein may involve substantial risks, including capital, interest, index, currency and credit risks in addition to political, fair value, commodity and market risks. The financial instruments could experience a sudden and substantial deterioration in value, including a total loss of the capital invested. Each transaction should only be entered into on the basis of the relevant investor's assessment of his or her individual financial situation as well as of the suitability and risks of the investment.

NORD/LB and its affiliated companies may participate in transactions involving the financial instruments described in the present information or their underlying basis values for their own account or for the account of third parties, may issue other financial instruments with the same or similar features as those of the financial instruments presented in this information and may conduct hedging transactions to hedge positions. These measures may affect the price of the financial instruments described in the present information.

If the financial instruments presented in this information are derivatives, they may, depending on their structure, have an initial negative market value from the customer's perspective at the time the transaction is concluded. NORD/LB further reserves the right to transfer its economic risk from a derivative concluded with it to a third party on the market by means of a mirror-image counter transaction.

More detailed information on any commission payments which may be included in the selling price can be found in the "Customer Information on Securities Business" brochure, which is available to download at www.nordlb.de.

The information contained in the present report replaces all previous versions of corresponding information and refers exclusively to the time of preparation of the information. Future versions of this information will replace this version. NORD/LB is under no obligation to update and/or regularly review the data contained in such information. No guarantee can therefore be given that the information is up-to-date and continues to be correct.

By making use of this information, the Recipient shall accept the terms and conditions outlined above.

NORD/LB is a member of the protection scheme of Deutsche Sparkassen-Finanzgruppe. Further information for the Recipient is indicated in clause 28 of the General Terms and Conditions of NORD/LB or at www.dsgv.de/sicherungssystem.

Additional information for Recipients in Australia
NORD/LB IS NOT A BANK OR DEPOSIT TAKING INSTITUTION AUTHORISED UNDER THE 1959 BANKING ACT OF AUSTRALIA. IT IS NOT SUPERVISED BY THE AUSTRALIAN PRUDENTIAL REGULATION AUTHORITY.
NORD/LB does not provide personal advice with this information and does not take into account the objectives, financial situation or needs of the Recipient (other than for the purpose of combating money laundering).

Additional information for Recipients in Austria
None of the information contained herein constitutes a solicitation or offer by NORD/LB or its affiliates to buy or sell any securities, futures, options or other financial instruments or to participate in any other strategy. Only the published prospectus pursuant to the Austrian Capital Market Act should be the basis for any investment decision of the Recipient. For regulatory reasons, products mentioned herein may not be on offer in Austria and therefore not available to investors in Austria. Therefore, NORD/LB may not be able to sell or issue these products, nor shall it accept any request to sell or issue these products to investors located in Austria or to intermediaries acting on behalf of any such investors.

Additional information for Recipients in Belgium
Evaluations of individual financial instruments on the basis of past performance are not necessarily indicative of future results. It should be noted that the reported figures relate to past years.

Additional information for Recipients in Canada
This report has been prepared solely for information purposes in connection with the products it describes and should not, under any circumstances, be construed as a public offer or any other offer (direct or indirect) to buy or sell securities in any province or territory of Canada. No financial market authority or similar regulatory body in Canada has made any assessment of these securities or reviewed this information and any statement to the contrary constitutes an offence. Potential selling restrictions may be included in the prospectus or other documentation relating to the relevant product.

Additional information for Recipients in Cyprus
This information constitutes an analysis within the meaning of the section on definitions of the Cyprus Directive D1444-2007-01 (No. 426/07). Furthermore, this information is provided for information and promotional purposes only and does not constitute an individual invitation or offer to sell, buy or subscribe to any investment product.

Additional information for Recipients in the Czech Republic
There is no guarantee that the invested amount will be recouped. Past returns are no guarantee of future results. The value of the investments may rise or fall. The information contained herein is provided on a non-binding basis only and the author does not guarantee the accuracy of the content.

Additional information for Recipients in Denmark
This Information does not constitute a prospectus under Danish securities law and consequently is not required to be, nor has been filed with or approved by the Danish Financial Supervisory Authority, as this Information either (i) has not been prepared in the context of a public offering of securities in Denmark or the admission of securities to trading on a regulated market within the meaning of the Danish Securities Trading Act or any executive orders issued pursuant thereto, or (ii) has been prepared in the context of a public offering of securities in Denmark or the admission of securities to trading on a regulated market in reliance on one or more of the exemptions from the requirement to prepare and publish a prospectus in the Danish Securities Trading Act or any executive orders issued pursuant thereto.

Additional information for Recipients in Estonia
It is advisable to closely examine all the terms and conditions of the services provided by NORD/LB. If necessary, Recipients of this information should consult an expert.

Additional information for Recipients in Finland
The financial products described herein may not be offered or sold, directly or indirectly, to any resident of the Republic of Finland or in the Republic of Finland, except pursuant to applicable Finnish laws and regulations. Specifically, in the case of shares, such shares may not be offered or sold, directly or indirectly, to the public in the Republic of Finland as defined in the Finnish Securities Market Act (746/2012, as amended). The value of investments may go up or down. There is no guarantee of recouping the amount invested. Past performance is no guarantee of future results.

Additional information for Recipients in France
NORD/LB is partially regulated by the "Autorité des Marchés Financiers" for the conduct of French business. Details concerning the extent of our regulation by the respective authorities are available from us on request.
The present information does not constitute an analysis within the meaning of Article 24 (1) Directive 2006/73/EC, Article L.544-1 and R.621-30-1 of the French Monetary and Financial Code, but does represent a marketing communication and does qualify as a recommendation pursuant to Directive 2003/6/EC and Directive 2003/125/EC.

Additional information for Recipients in Greece
The information contained herein gives the view of the author at the time of publication and may not be used by its Recipient without first having confirmed that it remains accurate and up to date at the time of its use.
Past performance, simulations or forecasts are therefore not a reliable indicator of future results. Investment funds have no guaranteed performance and past returns do not guarantee future performance.

Additional information for Recipients in Indonesia
This report contains generic information and has not been tailored to the circumstances of any individual or specific Recipient. This information is part of NORD/LB's marketing material.

Additional information for Recipients in the Republic of Ireland
This information has not been prepared in accordance with Directive (EU) 2017/1129 (as amended) on prospectuses (the "Prospectus Directive") or any measures made under the Prospectus Directive or the laws of any Member State or EEA treaty adherent state that implement the Prospectus Directive or such measures and therefore may not contain all the information required for a document prepared in accordance with the Prospectus Directive or the laws.

Additional information for Recipients in Japan
This information is provided to you for information purposes only and does not constitute an offer or solicitation of an offer to enter into securities transactions or commodity futures transactions. Although the actual data and information contained herein has been obtained from sources which we believe to be reliable and trustworthy, we are unable to vouch for the accuracy and completeness of this actual data and information.

Additional information for Recipients in South Korea
This information has been provided to you free of charge for information purposes only. The information contained herein is factual and does not reflect any opinion or judgement of NORD/LB. The information contained herein should not be construed as an offer, marketing, solicitation to submit an offer or investment advice with respect to the financial investment products described herein.

Additional information for Recipients in Luxembourg
Under no circumstances shall the present information constitute an offer to purchase or issue or the solicitation to submit an offer to buy or subscribe for financial instruments and financial services in Luxembourg.

Additional information for Recipients in New Zealand
NORD/LB is not a bank registered in New Zealand. This information is for general information only. It does not take into account the Recipient's financial situation or objectives and is not a personalised financial advisory service under the 2008 Financial Advisers Act.

Additional information for Recipients in the Netherlands
The value of your investment may fluctuate. Past performance is no guarantee for the future.

Additional information for Recipients in Poland
This information does not constitute a recommendation within the meaning of the Regulation of the Polish Minister of Finance Regarding Information Constituting Recommendations Concerning Financial Instruments or Issuers thereof dated 19 October 2005.

Additional information for Recipients in Portugal
This information is intended only for institutional clients and may not be (i) used by, (ii) copied by any means or (iii) distributed to any other kind of investor, in particular not to retail clients. The present information does not constitute or form part of an offer to buy or sell any of the securities covered by the report, nor should it be understood as a request to buy or sell securities where that practice may be deemed unlawful. The information contained herein is based on information obtained from sources which we believe to be reliable, but is not guaranteed as to accuracy or completeness. Unless otherwise stated, all views contained herein relate solely to our research and analysis and are subject to change without notice.

Additional information for Recipients in Sweden
This information does not constitute (or form part of) a prospectus, offering memorandum, any other offer or solicitation to acquire, sell, subscribe for or otherwise trade in shares, subscription rights or other securities, nor shall it or any part of it form the basis of or be relied on in connection with any contract or commitment whatsoever. The present information has not been approved by any regulatory authority. Any offer of securities will only be made pursuant to an applicable prospectus exemption under the EC Prospectus Directive (Directive (EU) 2017/1129), and no offer of securities is being directed to any person or investor in any jurisdiction where such action is wholly or partially subject to legal restrictions or where such action would require additional prospectuses, other offer documentation, registrations or other actions.

Additional information for Recipients in Switzerland
This information has not been approved by the Federal Banking Commission (merged into the Swiss Financial Market Supervisory Authority (FINMA) on 1 January 2009). NORD/LB will comply with the Directives of the Swiss Bankers Association on the Independence of Financial Research (as amended). The present information does not constitute an issuing prospectus pursuant to article 652a or article 1156 of the Swiss Code of Obligations. The information is published solely for the purpose of information on the products mentioned herein. The products do not qualify as units of a collective investment scheme pursuant to the Federal Act on Collective Investment Schemes (CISA) and are therefore not subject to supervision by FINMA.

Additional information for Recipients in Singapore
This information is directed only at accredited investors or institutional investors under the Securities and Futures Act in Singapore. This information is intended for general distribution only. It does not constitute investment advice and does not take into account the specific investment objectives, financial situation or particular needs of the Recipient. It is recommended that advice be obtained from a financial adviser regarding the suitability of the investment product in light of the specific investment objectives, financial situation and special needs of the Recipient before agreeing to purchase the investment product.

Additional information for Recipients in the Republic of China (Taiwan)
This information is provided for general information only and does not take into account the individual interests or requirements, financial status and investment objectives of any specific investor. Nothing herein should be construed as a recommendation or advice for you to subscribe to a particular investment product. You should not rely solely on the information provided herein when making your investment decisions. When considering any investment, you should endeavour to make your own independent assessment and determination on whether the investment is suitable for your needs and seek your own professional financial and legal advice.
NORD/LB has taken all reasonable care in producing this report and trusts that the information is reliable and suitable for your situation at the date of publication or delivery. However, no guarantee of accuracy or completeness is given. To the extent that NORD/LB has exercised the due care of a good administrator, we accept no responsibility for any errors, omissions, or misstatements in the information given. NORD/LB does not guarantee any investment results and does not guarantee that the strategies employed will improve investment performance or achieve your investment objectives.

Information for Recipients in the United Kingdom
NORD/LB is subject to partial regulation by the Financial Conduct Authority (FCA) and the Prudential Regulation Authority (PRA). Details of the scope of regulation by the FCA and the PRA are available from NORD/LB on request. The present information is "financial promotion". Recipients in the United Kingdom should contact the London office of NORD/LB, Investment Banking Department, telephone: 0044 / 2079725400, in the event of any queries. An investment in financial instruments referred to herein may expose the investor to a significant risk of losing all the capital invested.

Additional information
Time of going to press: 03 February 2021 08:55h (CET)

Disclosure of possible conflicts of interest at NORD/LB in accordance with Section 85 (1) of the German Securities Trading Act (WpHG) in conjunction with Article 20 of the Market Abuse Regulation (EU) No. 596/2014 and Articles 5 and 6 of Regulation (EU) 2016/958.
None

Sources and price details
For the preparation of investment recommendations, we use issuer-specific financial data providers, our own estimates, company information and publicly available media. Unless otherwise stated in the information, price information refers to the closing price of the previous day. Fees and commissions are incurred in connection with securities (purchase, sale, custody), which reduce the return on the investment.

Basis of valuation and frequency of updates
For the preparation of investment recommendations, we use company-specific methods from fundamental securities' analysis, quantitative / statistical methods and models as well as from technical information processes. It should be noted that the results of the information are snapshots and past performance is not a reliable indicator of future returns. The basis of valuation may change at any time and in an unforeseeable manner, which may lead to divergent assessments. The recommendation horizon is 6 to 12 months. The above information is prepared on a weekly basis. Recipients have no right to publish updated information. For more detailed information on our assessment bases, check under: www.nordlb-pib.de/Bewertungsverfahren.

Recommendation system
Positive: Positive expectations for the issuer, a bond type or a bond placed by the issuer.
Neutral: Neutral expectations for the issuer, a bond type or a bond of the issuer.
Negative: Negative expectations for the issuer, a type of bond or a bond placed by the issuer.
Relative Value (RV): Relative recommendation to a market segment, an individual issuer or a range of maturities.

Breakdown of recommendations (12 months)

Positive:	36%
Neutral:	50%
Negative:	14%

Recommendation record (12 months)
For an overview of our overall pension recommendations for the past 12 months, please visit www.nordlb-pib.de/empfehlungsuebersicht_renten. The password is "renten/Liste3".

Issuer / security	Date	Recommendation	Bond type	Cause