



Covered Bond & SSA View

NORD/LB Markets Strategy & Floor Research

5 May 2021 🔶 16/2021

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



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NORD/LB:

Floor analysts:

NORD/LB:

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

Markets Strategy & Floor Research

norman.rudschuck@nordlb.de

NORD/LB: Covered Bond Research

SSA/Public Issuers

Dr Norman Rudschuck, CIIA

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

SSA/Public Issuer Research

Bloomberg: RESP NRDR <GO>



Market overview Covered Bonds

Author: Henning Walten, CIIA

Two new ten-year deals

The EUR benchmark segment has recorded two new issues over the past five trading days. Crédit Mutuel kicked things off on last Wednesday, returning to the primary market for the first time in a little over a year. A total of EUR 1.25bn changed hands for ten years, making this deal one of the five biggest new issues in 2021. However, with an order book of EUR 1.7bn and consequently a bid-to-cover ratio of 1.4, the deal was also one of the four deals in 2021 so far to not be oversubscribed by at least 1.5 times. Nevertheless, the bond was placed on the market 4bp narrower than the guidance. The domestic market took up 55% of the volume, while around a quarter went to buyers from Germany and Austria. Asian and Northern European investors each received 6% of the deal. Central banks and official institutions (44%) were also more active in the placement alongside bank treasuries (38%). A further 16% went to asset managers. Yesterday, BAWAG from Austria was next to come to market, having already appealed for investors in mid-March for a covered bond (EUR 500m; 20y; ms +4bp). While the latest volume offered was also EUR 500m, the maturity was just ten years. Based on a guidance of ms +3bp, the deal could also be issued on the market 4bp narrower. With an oversubscription rate of 3.4, the transaction met with a high level of interest on the market as well. The issue yield amounted to +0.122%.

Issuer	Country	Timing	ISIN	Maturity	Size	Spread	Rating	ESG
BAWAG	AT	04.05.	XS2340854848	10.0y	0.50bn	ms -1bp	- / Aaa / -	-
CM Home Loan SFH	FR	28.04.	FR0014003BW0	10.0y	1.25bn	ms -1bp	AAA / Aaa / AAA	-
Source: Bloomberg, NORD/I	B Markets Strat	egv & Floor R	esearch. (rating: Fitch/N	/loodv's/S&P)				

NATIXIS Pfandbriefbank active with a sub-benchmark

Last Wednesday, NATIXIS Pfandbriefbank was also active on the market with a EUR subbenchmark. Mandated on 23 April, the deal was issued with a volume of EUR 250m. The order books of the 10y bond amounted to EUR 600m, meaning the deal was significantly oversubscribed. Interest was also reflected in the spread narrowing during the bookbuilding process. While the guidance had been in the region of ms +4bp, the pricing was ultimately fixed at ms +1bp. The issue yield amounted to +0.133%. Just over half of the deal (55.8%) was allocated to German investors, while a notable 20.2% went to Scandinavia. With regard to the type of investor, banks dominated (46.6%), followed by central banks and official institutions (37.6%). The transaction of NATIXIS Pfandbriefbank increases the number of EUR sub-benchmark deals issued in 2021 to six. The volume issued amounts to EUR 1.70bn. Making a comparison with 2020, around 83% of the previous year's total volume has now already been issued in 2021. This is a markedly different picture to that in the EUR benchmark segment at present.



NORD/LB digital Capital Market Conference on 06 May 2021: New Stars on the Horizon

It surely does not bear repeating again, but in case you haven't heard: the covered bond market did not exactly get off to a flying start at the beginning of 2021. Although the primary market has rediscovered a certain degree of dynamism of late, the volume of new issuances continues to lag behind original expectations in some established jurisdictions. There are a variety of reasons behind this situation, including alternative refinancing options. In our view, this makes it all the more pleasing that we have still seen both new issuers and inaugural deals from new jurisdictions making an appearance on the market and approaching investors during this phase of relative scarcity. Our NORD/LB digital Capital Market Conference will present a handful of the "New Stars on the Horizon" from 2pm to 4pm on 06 May 2021. With the SMBC Group, Komerční banka and the Luminor Group, successful issuers from Japan, the Czech Republic and Estonia will provide insights into their covered bond programmes, while the EMF-ECBC (European Mortgage Federation -European Covered Bond Council) will highlight global market impacts from the European harmonisation initiative and Nordea Investment Management will underline the importance of covered bonds for investors around the world. The digital event will be rounded off by a panel discussion on the issue of "Expanding the covered bond universe - new issuers, new markets = more opportunities". If you are interested in taking part in this event, please drop us a line at: <u>events-markets@nordlb.de</u>.



Market overview SSA/Public Issuers

Author: Dr Norman Rudschuck, CIIA

NRW ratings confirmed at high level in 2021

The three big rating agencies, Fitch, Moody's and S&P, are in agreement and have reaffirmed their approval of the budgetary course adopted by the government of North Rhine-Westphalia (NRW) in Düsseldorf. Back in February of this year, S&P certified the Bundesland's strong creditworthiness with an AA rating. Moody's and Fitch have now also followed suit with their recent announcement affirming their rating. As such, NRW is in the upper segment with all three agencies. In spite of the current challenges posed by the coronavirus pandemic, all three agencies also rate the outlook for NRW's credit worthiness as stable. As a reminder: in 2019, S&P upgraded the Land's credit rating from AA- to AA. This was the first time in 15 years that NRW was assigned this rating. "The assessments of the independent rating agencies confirm once again that this government has embarked on the right path with its solid and reliable budget policy," according to Finance Minister Lutz Lienenkämper. "The budget turnaround, record investment in the future of our Land and the NRW rescue mechanism provide a strong response to the current challenges. We have laid stable foundations to support ourselves, especially during the present coronavirus pandemic. North Rhine-Westphalia is still a Land in an economic transition phase." The current budget for 2021 amounts to EUR 84.1bn and once again sets out main areas of focus: the regional government will be investing a record sum of around EUR 8.7bn mainly in areas such as children and families, homeland security, education and training, digitalisation and infrastructure, science and research, the healthcare system and the Rheinische Revier (charged with steering NRW's transition process away from coal). By maintaining its rescue mechanism, NRW aims to ensure that it can preserve the flexibility to respond to the challenges of the pandemic and to finance its direct and indirect consequences. At the same time, the regional government is keeping an eye on its long-term development and already plans to stop drawing on the rescue mechanism from 2023 onwards. From 2024, the NRW government then plans to start repaying the loans it has taken from the rescue mechanism for NRW.

Belgium	EUR 8,200m	Latvia	EUR 305m
Bulgaria	EUR 511m	Lithuania	EUR 957m
Croatia	EUR 1,000m	Malta	EUR 421m
Cyprus	EUR 604m	Poland	EUR 11,200m
Czech Rep.	EUR 2,000m	Portugal	EUR 5,900m
Estonia	EUR 230m	Romania	EUR 4,000m
Greece	EUR 5,200m	Slovakia	EUR 631m
Hungary	EUR 504m	Slovenia	EUR 1,100m
Ireland	EUR 2,473m	Spain	EUR 21,300m
Italy	EUR 27.400 Mio.		

SURE: financial support approved for 19 member states (EUR 94.3bn)

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



Update on the EU's SURE Programme: EUR 75.5bn already raised

As an issuer, the EU has raised EUR 75.5bn out of a target EUR 100bn from nine bonds across six separate transactions. In total, EUR 94.3bn of expected volume was approved. Overall, a total of EUR 39.5bn was placed in 2020, with EUR 36bn accordingly placed in the year to date. This leaves around EUR 19bn leftover since there are not enough applications for the funds on the table for the full EUR 100bn. Even so, a SURE social curve has emerged in a very short space of time. All the bonds in question have performed strongly since they were issued. Although the new issue premium for each transaction has fallen slightly over time, this has by no means reduced interest in the bonds, as illustrated by the level of oversubscription. So far, 17 member states have received funds. As soon as all SURE disbursements have been completed, Italy will have received a total of EUR 27.4bn, followed by Spain (21.3bn) and Poland (11.2bn; see table on previous page). As a reminder: support in the form of loans at favourable conditions is aimed at helping member states to cope with a sharp rise in public spending in order to support employment. In particular, the loans are intended to cover the indirect cost of financing national short-time working programmes introduced in response to the pandemic, especially for the self-employed. Germany and France, both heavyweight economies in the EU, are two of the countries not to have applied for SURE funding.

Primary market

There was also a lot of activity in the primary market, even though not every week attracts the kind of attention generated by a token-based transaction. More on this subject can be found in our leading SSA article on the EIB's digital debut. Successively, we have seen large and small deals, but we propose to start with the Canadian Province of Quebec. This was the week's biggest deal in the SSA segment, raising EUR 2.5bn. The final spread was at ms +16bp while the deal was still guided at ms +18bp area. It attracted orders of EUR 6.6bn. With a term of 20 years, BREMEN brought an interesting deal to the market from a maturity perspective. This was priced at ms +3bp. This was not the longest-dated bond during the trading week; this was issued by the Paris Metro (SOGRPR) with a 25-year bond. This issuer only issues green bonds in any case, meaning that it comes as little surprise that the deal was oversubscribed, attracting EUR 4.7bn for an issue of EUR 2bn. The spread was at OAT +20bp as the interpolated average of the two French reference bonds FRTR 0.5% 06/25/44 and FRTR 2% 05/25/48. The agency Bpifrance SACA was also active in the ESG segment, likewise issuing a green bond under its own ticker OSEOFI. The seven-year EUR 1.25bn bond was placed at OAT +18bp. In this case, the order book amounted to as much as EUR 4.8bn and the reference bond is FRTR 0.75% 05/25/28. SAXONY issued a 15-year benchmark bond at ms flat – no further details were given. From today (05 May), NRW (see above) is preparing investor calls for a new sustainability bond and a global call on 11 May. The German government is planning something similar for green bonds. Neither is likely to generate the sort of spread seen in the case of Andorra (ms +115bp) for ten years.

Issuer	Country	Timing	ISIN	Maturity	Size	Spread	Rating	ESG
SAXONY	DE	03.05.	DE0001789345	15.0y	0.50bn	ms flat	- / - / AAA	-
OSEOFI	FR	29.04.	FR0014003C70	7.1y	1.25bn	ms +4bp	AA / Aa2 / -	х
SOGRPR	FR	29.04.	FR0014003CJ5	25.0y	2.00bn	ms +41bp	- / Aa2 / -	х
BREMEN	DE	28.04.	DE000A3H2YH5	20.0y	0.50bn	ms +3bp	AAA / - / -	-
Q	CA	27.04.	XS2338991941	10.0y	2.50bn	ms +16bp	- / - / AA-	-

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



Covered Bonds Austria implements requirements of the covered bond directive and harmonises existing legal framework

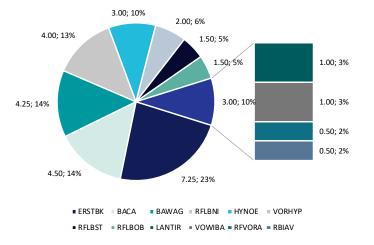
Authors: Dr Frederik Kunze // Henning Walten, CIIA

Austria's legislator presents draft law

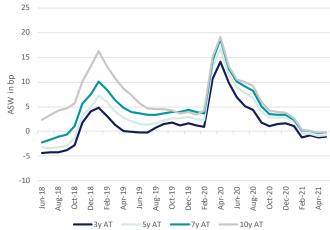
On 31 March, a draft for a new law on the issuance of covered bonds was published in Austria. The consultation period for comments on the draft law recently expired on 30 April. The aim of the new draft is to standardise the currently inconsistent rules laid down in different laws, while at the same time transposing the requirements of the covered bond directive into national law in the context of the harmonisation of the European covered bond market. For example, the proposed law seeks to widen the circle of potential issuers, as the issuance of covered bonds currently follows the special banking principle and is therefore reserved only for credit institutions with certain legal forms. Standardisation is also the aim as regards the range of eligible cover assets, which is currently to some extent different due to the three frameworks that exist. The Austrian legislator's timetable foresees that the new requirements will be transposed into national law by 8 July 2021 and that they will be applied by 8 July 2022, in parallel with the amendments to the CRR resulting from the harmonisation package. In the following, we will provide a brief overview of the national market in Austria and outline the latest developments as well as the expectations for the further course of the year with regard to the primary market. We will then reflect on the proposed draft law.

Austria's EUR benchmark segment likely to grow in 2021 despite crisis

In the current year up to yesterday (Tuesday), only Hypo Bank Tirol (EUR 500m; 10y) and BAWAG (EUR 500m; 20y) were active in the EUR benchmark segment from Austria. The transaction of Hypo Tirol Bank was also the first benchmark from Austria to be issued as an ESG covered bond in the form of a social bond. With BAWAG making a second market appearance in 2021 on Tuesday, placing a bond of EUR 500m with a maturity of ten years, the EUR benchmark volume issued out of Austria in 2021 has increased by 50% to EUR 1.50bn. The country placed retained covered bonds amounting to EUR 2.75bn in the first four months of the year. However, despite what could presently be described as more than restrained issuance activity compared with previous years, we are currently expecting issuances of EUR 5.0bn for the full year on account of the size of the Austrian market for EUR benchmarks (cf. paragraph below). This means a further EUR 3.5bn is to be placed over the remainder of the year. Based on benchmark maturities of EUR 4.5bn, Austria is one of the few global sub-markets that will have a positive net supply in 2021 and will also be able to maintain the issue volume to match the previous year's level. This forecast continues to be based, among other things, on the assumption that - with further vaccination successes and the removal of restrictions – economic recovery will continue and that primary activity picks up again in the second half of the year.



AT: EUR benchmark segment (EUR bn)



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

Austria among the top 10 jurisdictions

Currently, the EUR benchmark segment in Austria consists of 12 issuers, which together have 56 corresponding bonds with a volume of EUR 31.00bn. This puts the country behind the UK (EUR 32.03bn) and ahead of Sweden (EUR 30.33bn) in ninth place of the largest EUR benchmark jurisdictions. In terms of the number of outstanding EUR benchmarks, it is even ranked sixth; between the Netherlands (59) and Norway (55). Erste Group Bank is the largest issuer with a volume of EUR 7.25bn and ten outstanding benchmarks. It is followed by BAWAG (EUR 4.75bn; 9) and UniCredit Bank Austria (EUR 4.50bn; 9). By contrast, RLB Vorarlberg and Raiffeisen Bank International have only one benchmark bond of EUR 500m each. In addition to Germany, Belgium and France, Austria is among the few markets in which bonds backed by public sector assets are also outstanding alongside mortgage-backed benchmarks, although only seven (EUR 3.50bn; 4 issuers) of the 56 bonds are accounted for by this class.

AT: spread trend (BMK)

"Federal Law on Pfandbriefe" as a single legal basis for covered bonds

The draft for a <u>Federal Law on Pfandbriefe</u> (Pfandbriefgesetz; PfandBG) submitted for consultation also includes amendments to the legal texts on banking, financial market supervision and the insolvency regulations (<u>overview of amendments</u>). The explanatory notes to the draft law also highlight that this is about more than simply implementing the Directive (EU) 2019/2162 (covered bond directive). Rather, as mentioned at the start, a single legal basis for covered bonds is to be created at the same time. This is intended to replace the three previously applicable national and in part inconsistent covered bond frameworks in Austria (Hypothekenbankgesetz [mortgage banking act], Gesetz über die Pfandbriefe und verwandten Schuldverschreibungen öffentlich-rechtlicher Kreditanstalten [law on Pfandbriefe and similar instruments issued by public credit institutions] and Gesetz über fundierte Bankschuldverschreibungen [law on covered bank bonds]). In this regard, Article 1 of the draft Federal Law on Pfandbriefe also includes definitions of the structural characteristics of covered bonds, such as "dual recourse" and "bankruptcy remote" and details of permissible cover assets. In the following, we will discuss some of the interesting aspects of the new law draft, with a particular focus on the matter of dealing with liquidity risks.

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Four measures of the draft law

Before doing so, we would like to briefly address the objective of the draft and identify the associated measures. Four measures can be attributed to the aim of "creating a modern and single legal basis for the issuance of covered bonds". As mentioned above, the circle of banks authorised to issue covered bonds under Austrian law is to be formally extended to include all credit institutions (measure 1). Measure 2 defines the standardisation of consistent eligible cover assets. Appointing an internal trustee for the ongoing monitoring of the cover pool is the focus of measure 3. Measure 4 deals with the creation of a mandatory liquidity buffer.

Mandatory liquidity buffer

The draft law meets the requirements as regards maintaining a liquidity buffer as per the covered bond directive (Article 16). In accordance with Section 21(1) of the PfandBG, the cover pool liquidity buffer must cover the maximum cumulative net liquidity outflow over the next 180 days. The drafting of Paragraphs 2 and 3 of Section 21 on the permissible assets to cover the liquidity buffer is also commented on by the Austrian legislators in that the covered bond directive does specify the assets to be used (levels 1, 2A or 2B of Delegated Regulation (EU) 2015/61 and exposures under Article 129(1) CRR), but does not go into any detail about the structure (cf. explanatory notes on the draft). In this respect, Section 21(2) of the PfandBG refers to the general and operational requirements of Articles 6 to 8 and Article 9 of Delegated Regulation (EU) 2015/61. The basis for calculating the liquidity buffer is also the final maturity, taking into account any potentially triggered maturity extensions (cf. following paragraph and Section 22 of the PfandBG). In addition, in the course of the covered bond directive being transposed into Austrian law, the right under Article 16(6) of the covered bond directive is exercised, so that the liquidity buffer does not have to be held for covered bonds with congruent refinancing (see also PfandBG, Section 21(6)). The introduction of the liquidity buffer into Austrian law is seen by Scope's risk experts as the amendment to the legal framework that will make the greatest contribution to improving credit quality. In addition, analysts predict an increased use of soft bullet covered bonds as a result of the amendments.

Soft bullet structures will be regulated by law

Maturity structure is another important issue that will be addressed by the Austrian legislator in the course of consolidating the three existing laws and implementing the requirements of the covered bond directive. With regard to the EUR benchmark segment, there are currently issuers with outstanding hard bullet bonds (BAWAG, Hypo Vorarlberg Bank, RLB Steiermark, RLB Vorarlberg, UniCredit Bank Austria and Volksbank Wien) and those that have opted for only soft bullet structures (Hypo Tirol Bank and Raiffeisen Bank International). At the same time, Erste Group Bank, HYPO NOE, RLB Niederösterreich-Wien and RLB Oberösterreich are four EUR benchmark issuers that initially placed hard bullets on the market but have since switched to issuing EUR benchmarks with a soft bullet structure. Accordingly, the draft PfandBG in Austria exercises the right of the member states, so that covered bonds can (continue to) be issued with maturity extensions (cf. Section 22 of the PfandBG).



Trigger for maturity extensions

Article 17 of the Covered Bond Directive provides that the triggers for covered bonds with extendable maturity structures must be specified in national law. Accordingly, potential triggers for the maturity extension are defined in Section 22(2), in particular. The maturities of covered bond issuances can therefore be extended by up to 12 months "subject to objective triggers", which at the same time allows the redemption of affected bonds before the end of the maximum extension period. The draft provides for exactly three possible such events. First, a maturity extension can be initiated if the bank can demonstrate to the FMA Austria (Financial Market Authority) that the 180-day liquidity buffer cannot be fulfilled without a corresponding extension. Second, the maturity may be extended if approved by the resolution authority when the issuer is in resolution. As a third trigger, the draft provides for the triggering of a maturity extension by the insolvency administrator used to manage the covered bond programme, provided they are satisfied that debt obligations can be honoured after the end of the extension period. The ranking and sequence of investor claims remains unaffected regardless of the maturity extension. Alongside the maturity extension option, other transparency obligations are included within the framework of the contractual terms, such as the role of the FMA, the resolution authority and the insolvency administrator.

Other aspects of the new legislation in Austria

In addition to the above-mentioned amendments, the legislation also unsurprisingly formulates the customary requirements for covered bonds and the minimum requirements for specific aspects of bond issuances from Austria (e.g. on the basis of exercise rights under the covered bond directive). Examples include the minimum requirements for the use of internal group structures of pooled covered bonds. In deviation from previous regulations, internal risk management units independent of the operational business must be established.

Conclusion

The present draft law could meet the objective of standardising the legal basis for the issuance of covered bonds in Austria, which has been pursued for some time. In future, the new Pfandbrief Act (NB: risk of confusion with German Pfandbrief law) is intended to replace the three regimes currently in force, which in our view will make the market in Austria much more transparent and is therefore to be welcomed from an investor's point of view. The reason for the new law is the need to implement the requirements of the covered bond directive by 8 July 2021, although the importance of making the Austrian legal framework more consistent should not be underrated. The most important new aspect of the law induced by the harmonisation of the European covered bond market is likely to be the first legal regulation regarding soft bullet structures and the introduction of a 180-day liquidity buffer. However, with the deadline for comments on the draft law only ending on 30 April, the final law may be preceded by quite a lot more debate.



SSA/Public Issuers EIB goes Blockchain

Author: Dr Norman Rudschuck, CIIA

EIB issues its first digital bond on a public blockchain

Last week, the EIB issued its first digital bond on a blockchain platform, using what is known as distributed ledger technology for the registration and settlement of digital bonds. In a partnership with Banque de France (BDF), the payment of the issue monies from the syndicate banks has been represented on the blockchain in the form of Central Bank Digital Currency (CBDC). In this respect, the EIB is once again playing a pioneering role in the digitalisation of the capital markets, as has already been the case with the world's first green bond and €STR bonds, for example. As a reminder: the EIB already issued its first climate awareness bond (CAB) back in 2007; this was the world's first green bond, laying the foundations for what has been at times exponential growth in this segment. The same was also true in 2019 with the first €STR bond in the form of a EUR-denominated debut benchmark. The two-year, EUR 100m bond which has now been placed is the market's first multi-dealer led, primary issuance of digitally native tokens using public blockchain technology. The project was selected by the French central bank (BDF) as part of its CBDC segment. The EIB is of the view that the digitalisation of capital markets may bring benefits to market participants in the coming years. These will include a reduction in intermediaries and fixed costs, improved market transparency through an increased capacity to see trading flows and identify asset owners, as well as much faster settlement speed. Similarly to the role played by the EIB in the case of green bonds or risk-free interest rates, the new digital bond issue could pave the way for market participants to use blockchain technology for the issue of financial stocks.

Ethereum emerges from the shadow of Bitcoin

Ether, the second most important digital currency, recently broke past the USD 3,000 mark, rising once again by almost 14% to a record high of USD 3,150.15. This means an increase of around 350% since the beginning of the year. During the same period, bitcoin "only" rose by 100%. In contrast to bitcoin, ethereum is seen as far more than a mere digital means of payment. It is regarded as a crypto ecosystem on which other applications and dapps (decentralised applications) can run their functions based on a modular principle. It is therefore especially suitable for DeFi or NFT transactions. The currency of this ecosystem is the ether. Decentralized Finance (DeFi), according to experts, describes financial applications based on blockchain technology such as lending operations and other banking services. NFT, on the other hand, stands for non-fungible tokens, which make an asset unique. These can be used for various purposes: e.g. for certification purposes, or to verify the authenticity of drugs or even certifying crypto artworks.



Institutionalisation of crypto currency

Moreover, according to experts, many investors are betting on a technical renewal in the ethereum system: in mid-July, an upgrade should reduce the quantity of ether in circulation and reduce transaction fees. It is thought that high transaction costs in particular have recently angered investors and users of crypto currencies. A tighter supply is also likely to lead to rising prices in the next few months. Moreover, a further institutionalisation of the crypto currency is leading to heightened demand. The EIB deal is thought to account for a large part of the current price rise. Investors are also looking for alternatives to bitcoin. "Innovation at the EIB goes beyond the projects we are supporting. As a global leader in the green and sustainability bond markets, the EIB is clearly well-placed to lead the way now in the issuance of digital bonds on blockchain. These digital bonds will play a role in giving the Bank a quicker and more streamlined access to alternative sources of finance to boost finance for projects across the globe," according to EIB Vice President Mourinho Félix.

What is tokenisation?

Tokenisation refers to the process of converting assets into digital form. This alone is nothing new in principle. Giro money for example is to some extent also a digital conversion of money. The following definition is taken from FinCompare: What is new is that, in the wake of tokenisation, the rights and obligations tied to assets along with the transferability of those assets will also be digitalised. One simple example of this is the tokenisation of shares. The holder of a share has a voting right at the AGM and is entitled to a share of the dividends. Long ago, such rights were securitised on paper and these certificates had to be presented in order to be exercised. This had already become obsolete long before blockchain and tokenisation. Anyone holding securities in an account with their bank automatically receives dividend credits and an invitation to the AGM along with a voting card. Anybody selling a share therefore also sells the rights. The rights are transferred to the buyer. In future, in the wake of the tokenisation of assets, this process could become largely digitalised. Buying and selling shares will no longer take place via the stock market but rather through a decentralised blockchain. The payment of dividends and exercise of voting rights will also take place via this blockchain. As part of this process, smart contracts may be used.

Summary

Some would say that the EIB is entering virgin digital territory in this respect. Even the author of the present article is getting to grips with the topic one step at a time. "The boom feeds the boom" is also a view espoused by, among others, the Emden Research portal which specialises in tokenisation. Along with the EIB deal, Canadian Ethereum ETFs which have now started would also underline growing (institutional) interest. As a bank, we have also already been digitally active in the market in the past with SSD transactions (enercity, among others). Founded at the initiative of NORD/LB, <u>finpair</u> now operates entirely autonomously. The core of the finpair vision is the development of an independent digital platform for SSD deals, which is entirely devoted to the interests of investors and issuers. A truly exciting innovation from the EIB!



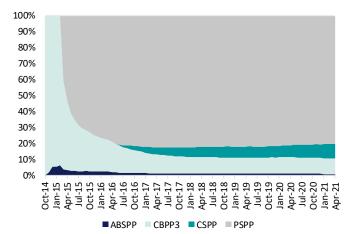
ECB tracker

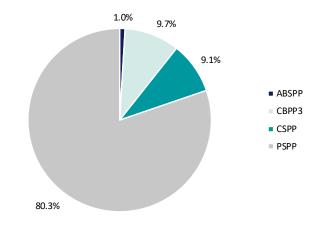
Asset Purchase Programme (APP)

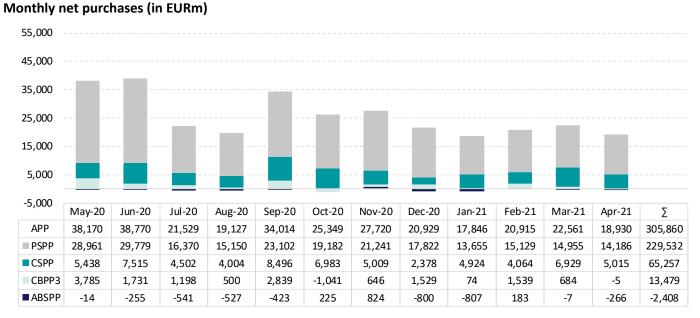
Holdings (in EURm)

	ABSPP	СВРРЗ	CSPP	PSPP	АРР
Mar-21	28,709	289,424	266,060	2,379,053	2,963,246
Apr-21	28,443	289,418	271,075	2,393,239	2,982,176
Δ	-266	-5	+5,015	+14,186	+18,930

Portfolio structure

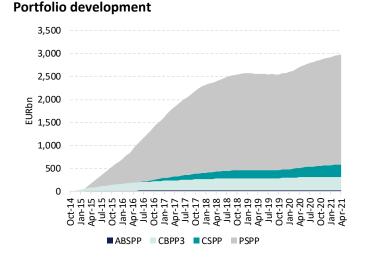




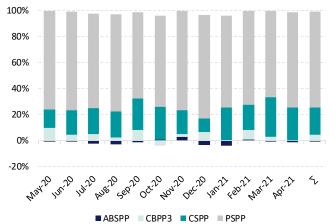


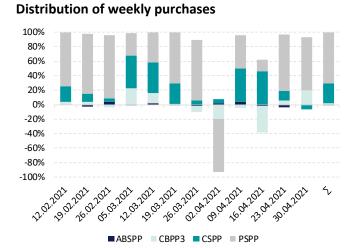
Source: ECB, NORD/LB Markets Strategy & Floor Research





Distribution of monthly purchases

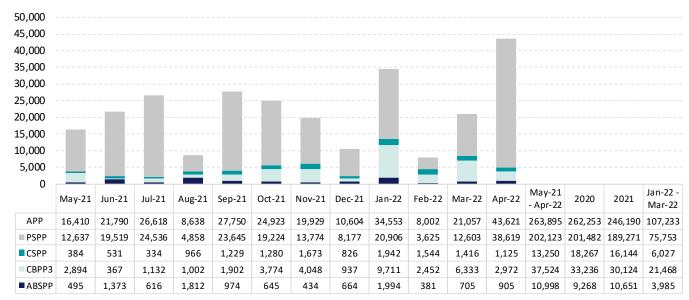




Weekly purchases



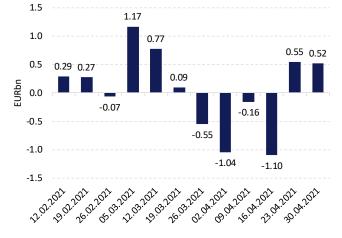
Expected monthly redemptions (in EURm)



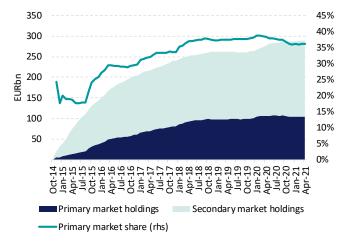
Source: ECB, Bloomberg, NORD/LB Markets Strategy & Floor Research

Weekly purchases

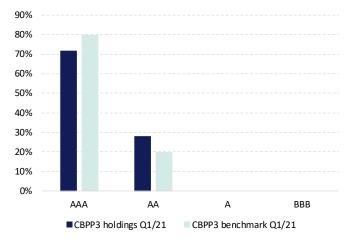
Covered Bond Purchase Programme 3 (CBPP3)



Primary and secondary market holdings

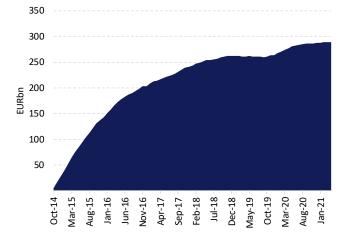


Distribution of CBPP3 by credit rating



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

Development of CBPP3 volume



Change of primary and secondary market holdings

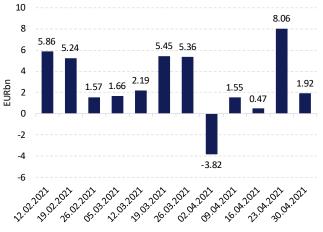


Distribution of CBPP3 by country of risk



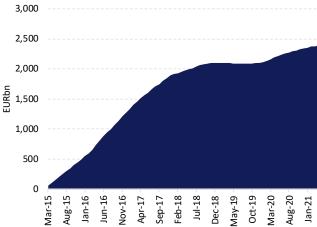
Public Sector Purchase Programme (PSPP)

Weekly purchases



Overall distribution of PSPP buying at month-end

2,500 2,000 EURbn 1,500



Development of PSPP volume

Jurisdiction	Adjusted distribution key ¹	Purchases (EURm)	Expected purchases (EURm) ²	Difference (EURm)	Avg. time to maturity ³ (in years)	Market average ³ (in years) ³	Difference (in years)
AT	2.7%	70,653	68,094	2,559	7.5	7.6	-0.1
BE	3.4%	89,126	84,760	4,366	8.0	10.2	-2.2
CY	0.2%	3,611	5,006	-1,395	9.9	8.8	1.1
DE	24.3%	598,996	613,295	-14,299	6.6	7.6	-1.0
EE	0.3%	372	6,554	-6,182	9.2	7.5	1.7
ES	11.0%	296,991	277,424	19,567	8.0	8.4	-0.4
FI	1.7%	36,318	42,734	-6,416	6.9	7.7	-0.8
FR	18.8%	494,566	475,168	19,398	7.2	8.1	-0.9
GR	0.0%	0	0	0	0.0	0.0	0.0
IE	1.6%	38,881	39,396	-515	8.5	10.1	-1.6
IT	15.7%	424,762	395,235	29,527	7.1	7.9	-0.8
LT	0.5%	4,927	13,465	-8,538	10.2	10.6	-0.4
LU	0.3%	3,301	7,664	-4,363	5.6	7.2	-1.7
LV	0.4%	2,808	9,065	-6,257	11.3	10.4	0.9
MT	0.1%	1,229	2,440	-1,211	9.5	9.2	0.3
NL	5.4%	122,372	136,342	-13,970	7.7	9.0	-1.4
PT	2.2%	46,005	54,451	-8,446	7.0	7.2	-0.2
SI	0.4%	9,112	11,202	-2,090	9.9	10.2	-0.3
SK	1.1%	15,494	26,644	-11,150	8.2	8.3	-0.1
SNAT	10.0%	261,517	252,104	9,413	7.7	8.9	-1.2
Total / Avg.	100.0%	2,521,042	2,521,042	0	7.3	8.2	-0.9

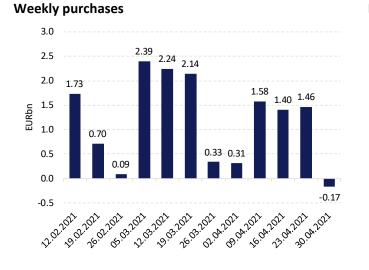
 $^{\rm 1}$ Based on the ECB capital key, adjusted to include supras and the disqualification of Greece

² Based on the adjusted distribution key

³ Weighted average time to maturity of the bonds eligible for purchasing under the PSPP (semi-annual data, Q1/2021)

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



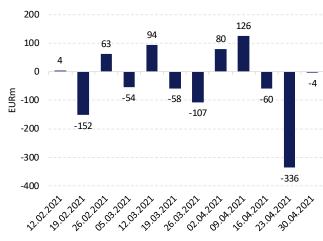


Corporate Sector Purchase Programme (CSPP)

Development of CSPP volume



Weekly purchases



Asset-Backed Securities Purchase Programme (ABSPP)

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

Development of ABSPP volume





Pandemic Emergency Purchase Programme (PEPP)

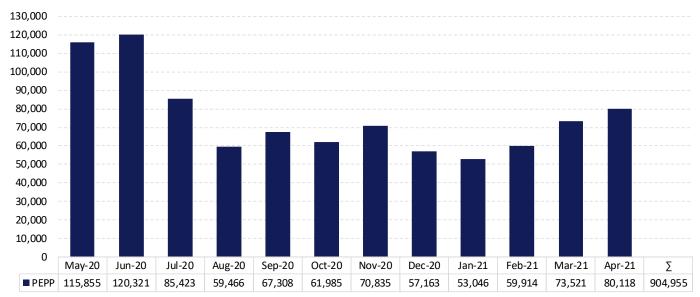
Holdings (in EURm)

	PEPP											
Mar-21	943,647		55.0%		45.0%							
Apr-21	1,023,766											
Δ	+80,118	0	185	370	555	740	925	1,110	1,295	1,480	1,665	1,850

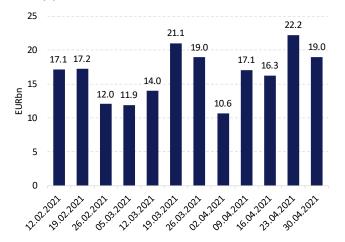
Estimated portfolio development

Assumed pace of purchases	Weekly net purchase volume	PEPP limit hit in
Average weekly net purchase volume so far	EUR 17.9bn	47 weeks (25.03.2022)

Monthly net purchases (in EURm)



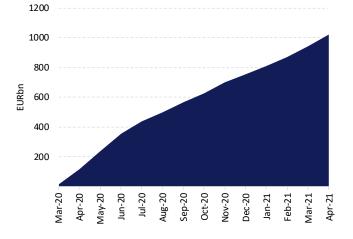
Weekly purchases



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

Development of PEPP volume

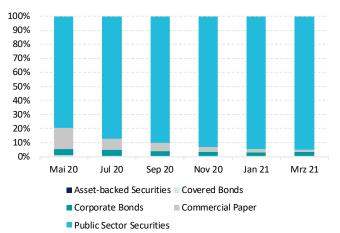
Volume already invested (in EURbn)

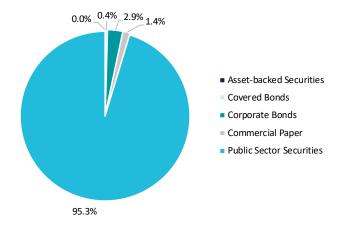


	Asset-backed Securities	Covered Bonds	Corporate Bonds	Commercial Paper	Public Sector Securities	PEPP
Jan-21	0	3,120	22,315	16,611	764,710	806,756
Mar-21	0	4,055	27,058	12,766	893,844	937,723
Δ	0	+935	+4,743	-3,845	+129,134	+130,967

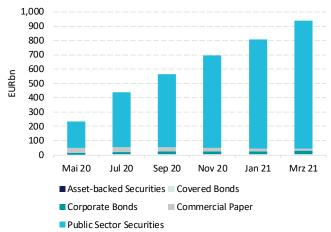
Holdings under the PEPP (in EURm)

Portfolio structure

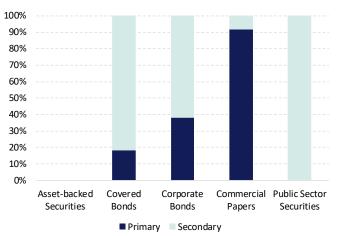




Portfolio development



Share of primary and secondary market holdings



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

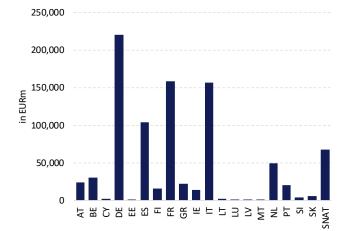
	Asset-back	ed securities	Covered bonds		Corpora	ite bonds	Commercial papers		
	Primary	Secondary	Primary	Secondary	Primary	Secondary	Primary	Secondary	
Holdings in EURm	0	0	745	3,310	10,333	16,725	11,716	1,050	
Share	0.0%	0.0%	18.4%	81.6%	38.2%	61.8%	91.8%	8.2%	

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

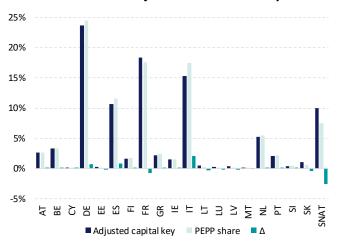
Jurisdiction	Holdings (in EURm)	Adj. distribution key ¹	PEPP share	Deviations from the adj. distribution key ²	ø time to maturity (in years)	Market average ³ (in years)	Difference (in years)
AT	24,225	2.6%	2.7%	0.1%	9.7	7.0	2.7
BE	30,478	3.3%	3.4%	0.1%	6.7	9.3	-2.6
CY	1,899	0.2%	0.2%	0.0%	10.1	8.4	1.7
DE	220,519	23.7%	24.5%	0.8%	5.6	6.7	-1.1
EE	255	0.3%	0.0%	-0.2%	8.8	7.5	1.4
ES	104,227	10.7%	11.6%	0.9%	8.4	7.5	0.9
FI	15,347	1.7%	1.7%	0.1%	7.2	7.1	0.1
FR	158,231	18.4%	17.6%	-0.8%	8.4	7.5	0.9
GR	21,936	2.2%	2.4%	0.2%	8.8	10.1	-1.3
IE	14,162	1.5%	1.6%	0.0%	9.0	9.4	-0.4
IT	156,819	15.3%	17.4%	2.1%	6.8	7.0	-0.2
LT	2,365	0.5%	0.3%	-0.3%	11.5	10.2	1.3
LU	1,371	0.3%	0.2%	-0.1%	6.6	6.7	-0.2
LV	1,105	0.4%	0.1%	-0.2%	9.7	9.9	-0.3
MT	290	0.1%	0.0%	-0.1%	7.7	8.1	-0.4
NL	49,023	5.3%	5.4%	0.2%	5.1	7.9	-2.8
РТ	20,126	2.1%	2.2%	0.1%	6.7	6.8	-0.1
SI	4,224	0.4%	0.5%	0.0%	9.6	9.5	0.1
SK	5,892	1.0%	0.7%	-0.4%	8.8	8.3	0.6
SNAT	67,236	10.0%	7.5%	-2.5%	10.3	8.2	2.1
Total / Avg.	899,731	100.0%	100.0%	0.0%	7.3	7.4	0.0

Breakdown of public sector securities under the PEPP





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

NORD/LB

Aggregated purchase activity under APP and PEPP

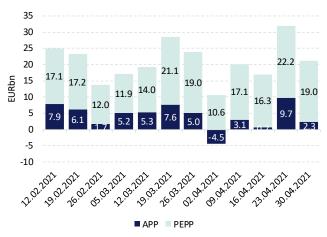
Holdings (in EURm)

	АРР	PEPP	APP & PEPP
Mar-21	2,963,246	943,647	3,906,893
Apr-21	2,982,176	1,023,766	4,005,942
Δ	+18,930	+80,118	+99,048

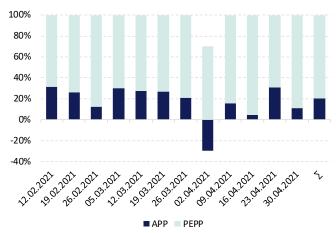
Monthly net purchases (in EURm)



Weekly purchases



Distribution of weekly purchases

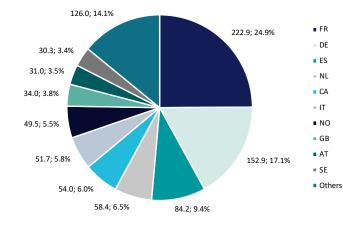


NORD/LB

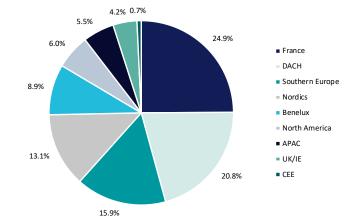
Source: ECB, Bloomberg, NORD/LB Markets Strategy & Floor Research

Charts & Figures Covered Bonds

EUR benchmark volume by country (in EURbn)



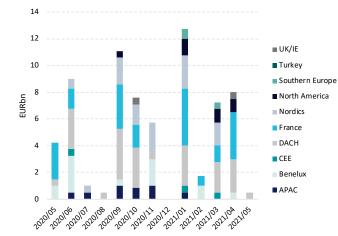
EUR benchmark volume by region (in EURbn)



Top-10 jurisdictions

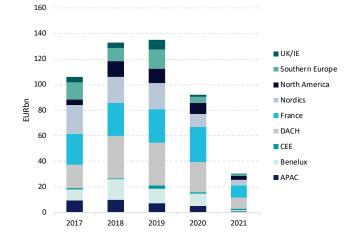
Rank	Country	Amount outst. (EURbn)	No. of BMKs	There of ESG BMKs	Avg. issue size (EURbn)	Avg. initial maturity (in years)	Avg. mod. Duration (in years)	Avg. coupon (in %)
1	FR	222.9	206	8	0.96	10.2	5.6	1.10
2	DE	152.9	228	13	0.60	8.3	4.8	0.44
3	ES	84.2	69	3	1.13	11.2	3.9	1.77
4	NL	58.4	59	0	0.93	11.2	7.4	0.90
5	CA	54.0	47	0	1.12	6.1	3.2	0.27
6	IT	51.7	60	1	0.83	9.1	4.3	1.41
7	NO	49.5	55	7	0.90	7.3	3.8	0.53
8	GB	34.0	40	0	0.88	8.5	3.6	1.02
9	AT	31.0	57	1	0.54	9.7	6.3	0.65
10	SE	30.3	36	0	0.84	7.5	3.5	0.47

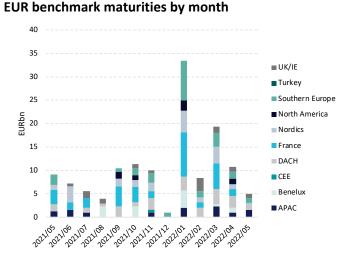
EUR benchmark issue volume by month



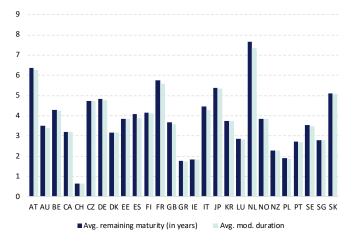
Source: Market data, Bloomberg, NORD/LB Markets Strategy & Floor Research

EUR benchmark issue volume by year

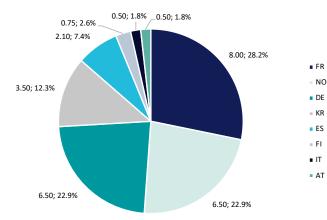




Modified duration and time to maturity by country



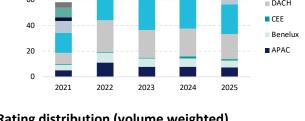
EUR benchmark volume (ESG) by country (in EURbn)



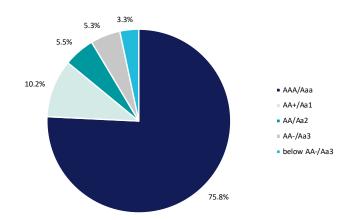
Source: Market data, Bloomberg, NORD/LB Markets Strategy & Floor Research

160 140 ■ UK/IE 120 Turkey Southern Europe 100 North America EURbn Nordics 80 France 60 DACH CEE 40 Benelux 20 APAC 0 2021 2022 2023 2024 2025

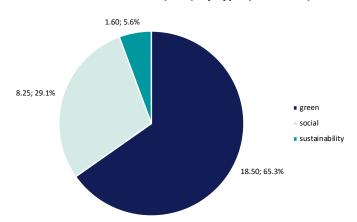
EUR benchmark maturities by year



Rating distribution (volume weighted)

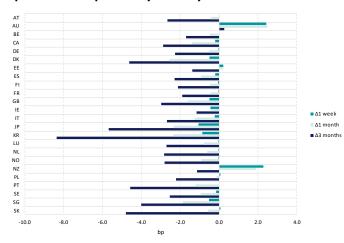


EUR benchmark volume (ESG) by type (in EURbn)



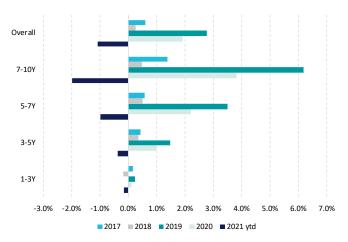




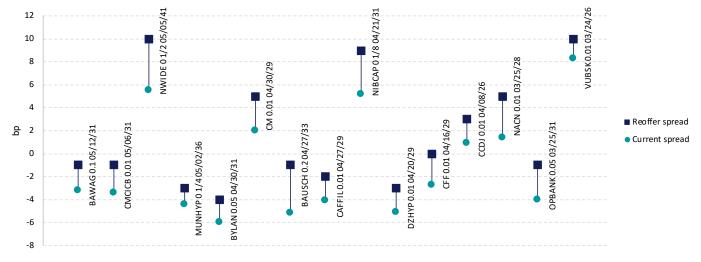


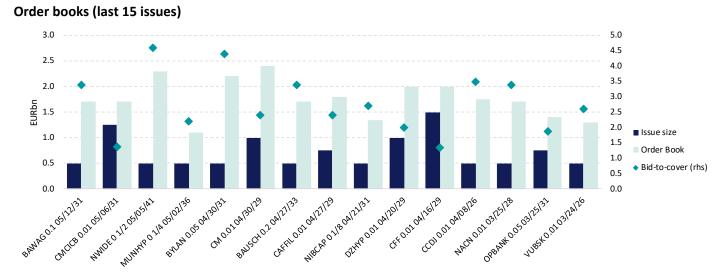
Spread development by country





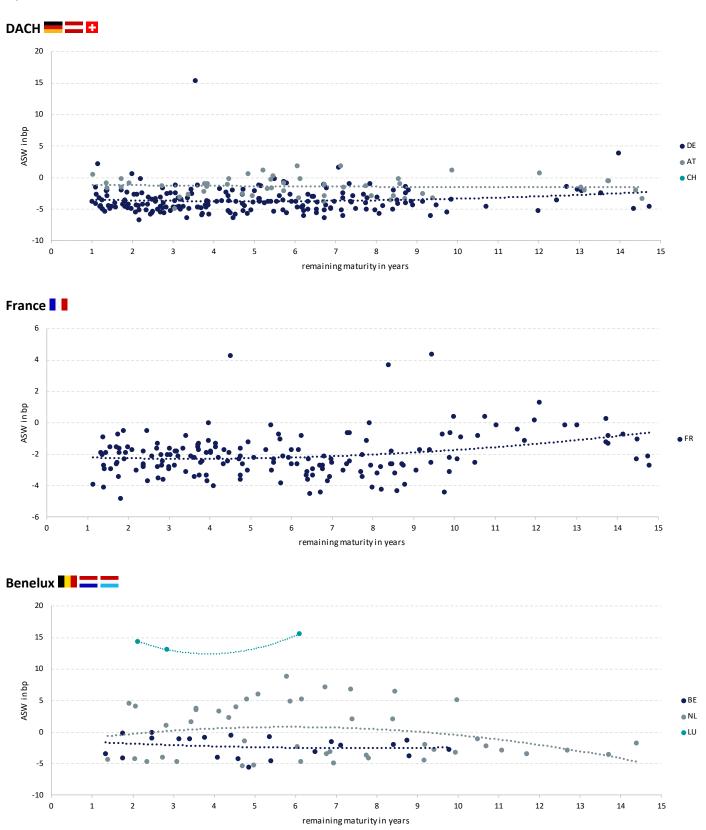
Spread development (last 15 issues)





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

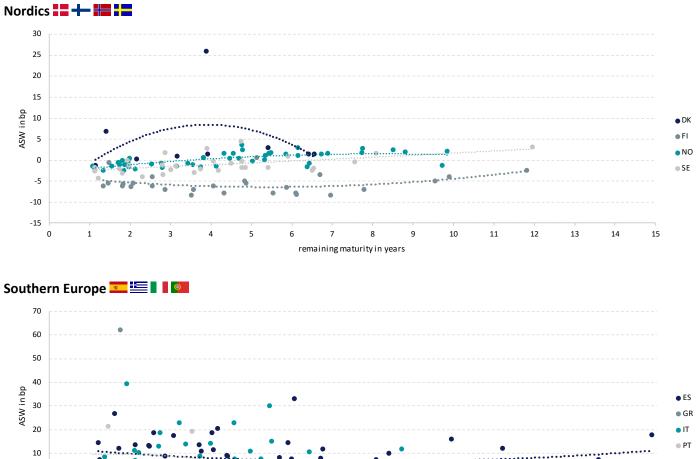


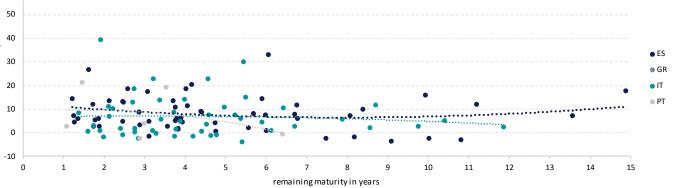


Spread overview¹

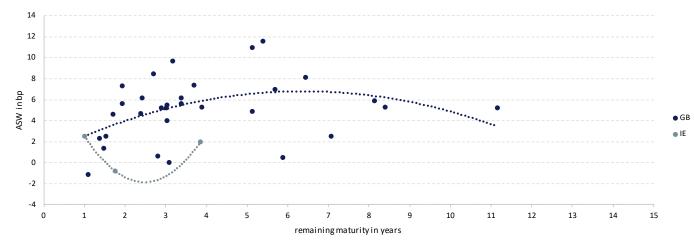
Source: Market data, Bloomberg, NORD/LB Markets Strategy & Floor Research ¹Time to maturity $1 \le y \le 15$





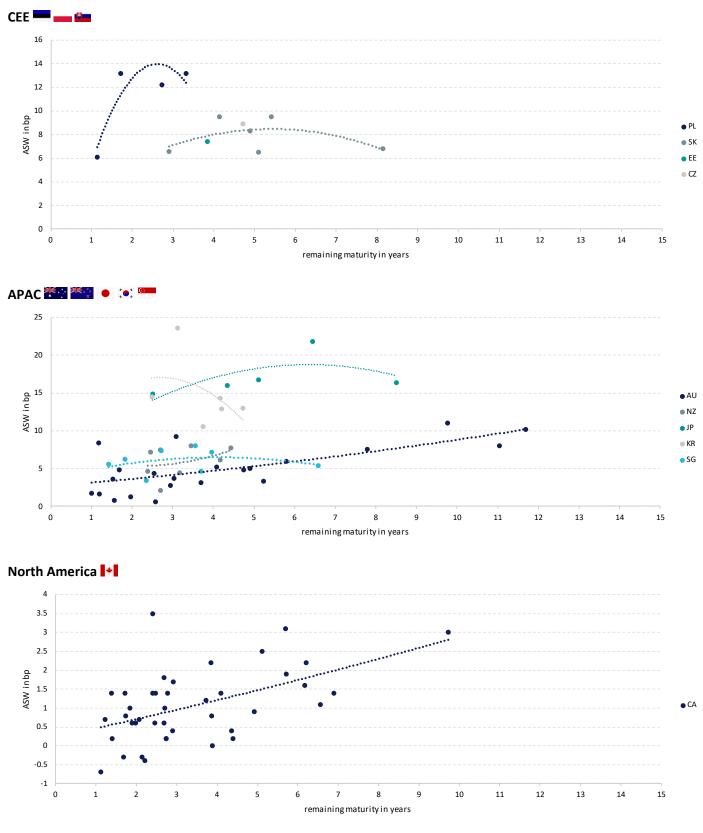


UK/IE 🗮



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

NORD/LB

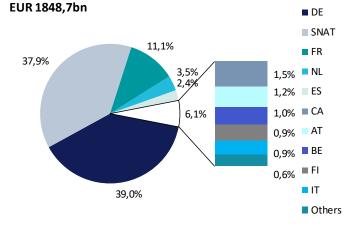


Source: Market data, Bloomberg, NORD/LB Markets Strategy & Floor Research



Charts & Figures SSA/Public Issuers

Outstanding volume (bmk)



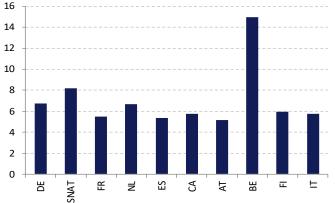
Top 10 countries (bmk)

Country	Vol. (€bn)	No. of bonds	ØVol. (€bn)	Vol. weight. ØMod. Dur.
DE	720,4	559	1,3	6,7
SNAT	701,2	187	3,7	8,2
FR	205,7	141	1,5	5,5
NL	64,4	65	1,0	6,7
ES	44,4	54	0,8	5,4
CA	27,5	19	1,4	5,7
AT	21,8	23	0,9	5,2
BE	18,7	22	0,9	15,0
FI	17,0	22	0,8	5,9
IT	15,8	20	0,8	5,8

Issue volume by year (bmk)



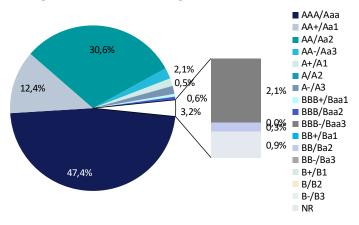
Avg. mod. duration by country (vol. weighted)



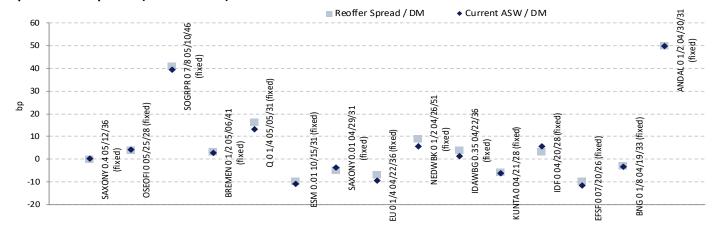
Maturities next 12 months (bmk)



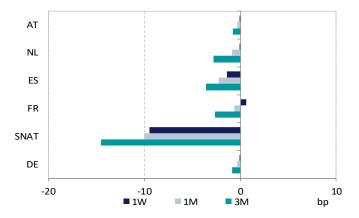
Rating distribution (vol. weighted)



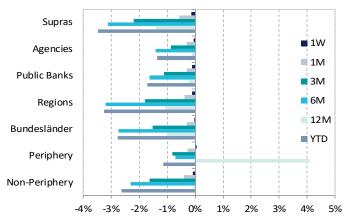
Spread development (last 15 issues)



Spread development by country

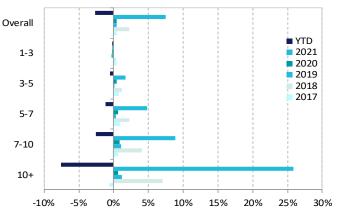


Performance (total return) by regions

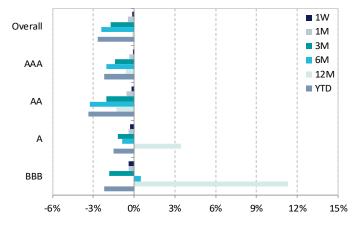


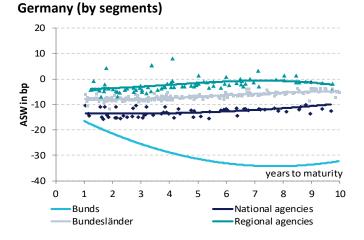
Source: Bloomberg, NORD/LB Markets Strategy & Floor Research

Performance (total return)

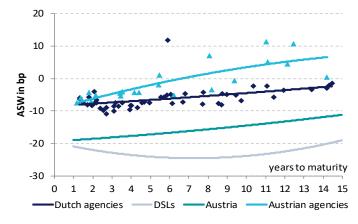


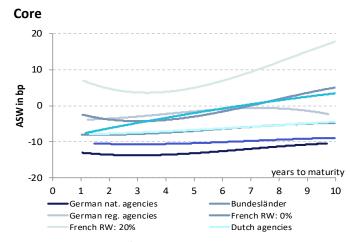
Performance (total return) by rating



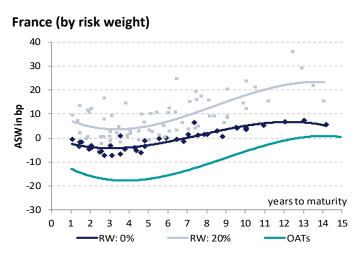


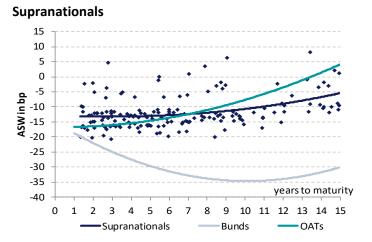
Netherlands & Austria



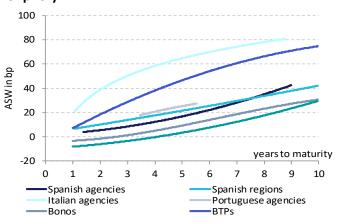


Source: Bloomberg, NORD/LB Markets Strategy & Floor Research





Periphery





Appendix Overview of latest Covered Bond & SSA View editions

Publication	Topics
15/2021 🔶 28 April	 EU Taxonomy meets the market for sustainable covered bonds
14/2021 🔶 22 April	 LCR levels and risk weights of EUR benchmarks
	 NextGenerationEU: NGEU is taking shape
13/2021 🔶 14 April	 Predominant ECB strategy: wait-and-see but remain proactive
	 PEPP reporting: First year done; a second (at least) now follows
	 OSFI abandons temporarily increased 10% limit with immediate effect: (in)direct implications for Canadian benchmarks
12/2021	 Unusual Q1 and revised supply forecast for 2021
	 Collective Action Clauses (CACs)
11/2021	 Surprising dynamic: Eurosystem lends EUR 331bn to EMU banks via TLTRO III.7
	 German Pfandbrief savings banks in Q4 2020
10/2021	 Transparency requirements §28 PfandBG Q4/2020
	 Credit authorisations for German Bundeslaender in 2021
09/2021	 Moody's covered bond universe – an overview
	 Oldenburgische Landesbank expands sub-benchmark segment
08/2021 ♦ 03 March	 Repayment structures on the covered bond market
	• ECB in a tight spot: litmus test for PEPP flexibility and preview of the second interest rate meeting of the
	year
07/2021 🔶 24 February	 An overview of the EUR sub-benchmark segment
	 ECB: crowding-out effects take hold
	PEPP vs. PSPP: Similarities and differences
06/2021	Insights into the iBoxx EUR Covered
	 Development of the German property market
05/2021 🔶 10 February	 PEPP reporting: upswing in public sector assets continues; covered bonds inconsequential
04/2021 ♦ 03 February	 Argenta Spaarbank expands Belgian market for EUR benchmarks
	 An overview of the Fitch covered bond universe
	 January 2021 packs a punch to kick off the new year
03/2021	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	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



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



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



Sales

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

Trading

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

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

Origination & Syndicate

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

Sales Wholesale Customers

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

Treasury

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

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Additional information

Time of going to press: 05 May 2021 08:46h (CET)

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Positive: Positive expectations for the issuer, a bond type or a bond placed by the	Positive:	37%	
issuer.	Neutral:	55%	
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Issuer / security	Date	Recommendation	Bond type	Cause