



Covered Bond & SSA View

NORD/LB Markets Strategy & Floor Research

Agenda

Market overview	
Covered Bonds	3
SSA/Public Issuers	4
Repayment structures on the covered bond market	7
ECB in a tight spot: litmus test for PEPP flexibility and preview of the second interest rate meeting of the year	16
ECB tracker	
Asset Purchase Programme (APP)	21
Pandemic Emergency Purchase Programme (PEPP)	26
Aggregated purchase activity under APP and PEPP	29
Charts & Figures	
Covered Bonds	30
SSA/Public Issuers	36
Overview of latest Covered Bond & SSA View editions	39
Publication overview	40
Contacts at NORD/LB	41

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

Author: Henning Walten, CIIA

UniCredit Bank places mortgage Pfandbrief

After the only new issuance to discuss in last week's edition came from NN Bank, this week we have a mortgage Pfandbrief from UniCredit Bank as the only new deal to report on from the EUR benchmark segment. This was UniCredit Bank's first market appearance since September 2020, when the Munich-based bank opted for a deal worth EUR 1.0bn over eight years at ms +7bp. Yesterday (Tuesday), however, a deal for EUR 750m was issued at ms +1bp. At 15 years, the term to maturity was nearly twice as long as the bank's previous market appearance. With demand in the area of EUR 2.85bn, this deal was likewise significantly oversubscribed (bid-to-cover ratio: 3.8x), thereby accurately reflecting the present situation on the covered bond market where low supply continues to meet substantial demand. Accordingly, pricing tightened by four basis points versus the guidance. The issuing yield of +0.002% scraped the zero line, which can be explained by the most recent decline in the 10y swap yield. On 25 February, this had been a full 10 basis points higher, although it has still increased by just over 30 basis points since the start of the year. In terms of the geographical investor distribution, the largest share went to investors in Germany (59%), followed by Austria and Switzerland (10%), the Nordics and Asia (both 7%) and the UK/Ireland (5%). Regarding investor groups, banks dominated proceedings here (60%), followed by central banks/OI (26%) and funds (13%). In addition to UniCredit Bank, RLB Vorarlberg also placed a bond on the market, albeit this was attributable to the sub-benchmark segment. This deal, which was finalised last Wednesday, comprised a volume of EUR 300m and was issued with a term of 15 years. Following initial guidance in the area of ms +8bp, the final pricing was fixed 4 basis points tighter at ms +4bp. The order books reached more than EUR 950m, producing a bid-to-cover ratio of 3.2x. Overall, 69% of the transaction volume went to Germany and Austria. In terms of investor type, banks and funds were predominant (38% each). This was also just the second EUR sub-benchmark seen in the current year.

Issuer	Country	Timing	ISIN	Maturity	Size	Spread	Rating	ESG
UniCredit Bank	DE	02.03.	DE000HV2AYD5	10.0y	0.75bn	ms +1bp	- / Aaa / -	-

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

Hypo Tirol Bank set to issue Austria's first ESG bond in the EUR benchmark segment

Yesterday (Tuesday), there was a noteworthy announcement coming from the direction of Austria. Hypo Bank Tirol, which currently has one benchmark (LANTIR 0.01 10/19/26) and one sub-benchmark (LANTIR 0 1/2 05/23/24) bond outstanding, mandated for a [social covered bond](#) in the amount of EUR 500m (no grow) with a term to maturity of 10 years. Investor calls are, however, held before this transaction will be executed. This deal would make Hypo Bank Tirol the first covered bond issuer from Austria to place a sustainable bond in the EUR benchmark segment, albeit not the first Austrian issuer with a publicly placed ESG covered bond. Back in July 2017, Kommunalkredit Austria had placed a social covered bond in the form of a EUR sub-benchmark. We expressly welcome the imminent Austrian ESG debut in the EUR benchmark segment.

Market overview

SSA/Public Issuers

Author: Dr Norman Rudschuck, CIIA

The spectre of inflation or a real danger?

The inflation rate in Germany – measured as the year-on-year change in the consumer price index (CPI) – is expected to total +1.3% in February 2021. As reported by the Federal Statistical Office (Destatis), consumer prices are expected to rise by +0.7% compared to January 2021, according to results available so far. The ongoing coronavirus crisis again led to difficulties in surveying prices in February 2021 due to the fact that some goods were not available on the market, Destatis explains. The quality of the preliminary overall results is nevertheless still guaranteed. The final results for February 2021 will be published on 12 March 2021, one day after the upcoming ECB meeting, which is the focus of our [Cross Asset article](#) today. The spectre of inflation is currently dominating the interest rate landscape and is also likely to be the theme of Lagarde's press conference.

Second-highest deficit since German reunification

According to preliminary calculations, the coronavirus crisis led to a government financing deficit of EUR 139.6bn in 2020. This was the first deficit since 2011 and the second-highest deficit since German reunification, surpassed only by the record deficit of 1995, when trust debts (“Treuhandanstalt”) were transferred to the state budget. Measured against GDP in current prices, the deficit ratio for 2020 is 4.2%. The reference value of the European Stability and Growth Pact – commonly known as the Maastricht criterion – of 3% was unsurprisingly missed by a large margin. However, its application has been suspended for the years 2020 and 2021. The financing deficit in 2020 results from the difference between government revenues, which decreased by 3.0% compared with 2019 to EUR 1,563.0bn (2019: EUR 1,610.6bn), and the 9.3% increase in expenditure to EUR 1,702.6bn (2019: EUR 1,558.1bn). The good fiscal starting position from 2019, in which all sub-sectors of the state recorded a surplus, deteriorated in 2020 in the wake of the coronavirus crisis – in some cases drastically. According to Destatis, the federal government's net lending/net borrowing deteriorated considerably by more than EUR 100bn to EUR -86.6bn. Social security funds posted a deficit of EUR 33.7bn and the Laender also closed the year with a deficit of EUR 18.0bn. The municipalities recorded a comparatively low deficit of EUR -1.3bn in 2020, also due to higher transfers from Bund and Laender. According to the press release, the main contributors to the Bund and Laender deficit were the expenses for state emergency and interim aid as well as the procurement and provision of protective equipment. The monetary social benefits paid increased significantly by 8.7% to EUR 593.1bn. In addition to the significant increases in unemployment and short-time working benefits, higher pension and child benefit payments also had an impact here. Social security thus acted as an automatic economic stabiliser during the coronavirus crisis. In contrast, the continuing very low interest rate level dampened government interest expenses. They fell by 20.7% to EUR 21.8bn.

Tax revenues down by -6.5% versus 2019

On the income side, tax revenues in particular remained well below the previous year's level with a decline of -6.5%. While wage tax revenues fell moderately by -2.3% according to Destatis, revenues from corporate taxes declined massively by -13.5%. As a result of weak private consumption and the temporary reduction of VAT rates from 1 July 2020, revenue from taxes on goods also decreased by -6.9%. Revenues from social contributions alone increased slightly by +1.7%. In other respects, too, the statistical values for 2020 are rather horrific; here are a few brief excerpts that quickly sum up the difficult revenue situation in a nutshell: in the German tourism sector in 2020, overnight stays were down 39% versus 2019, while start-ups of larger businesses fell by 4.5% in 2020. Beer sales dropped significantly during the coronavirus crisis and airline passenger numbers fell by 74.5% in 2020. Turnover in the travel industry was down 61% in the first three quarters, while for the hospitality sector this is expected to be 38% lower in real terms in 2020 than was the case for 2019. In December 2020, overnight stays were down 78.4% on the same month in the previous year.

Second global investor call by International Investment Bank

Considering its "size", the Budapest-based International Investment Bank (IIB) is doing surprisingly refreshing investor work. With its second global investor call (the first was in September 2020), it once again underlined its business model and its steadily improving ratings: Fitch (A-), Moody's (A3) and S&P (A-), each with a stable outlook. A fly in the ointment, however, is that the sounder the ratings and the business model, the lower the pick-up for investors who are desperately looking for returns. Whether and when negative returns can be achieved is anybody's guess. In our view, IIB successfully occupies a niche, but will never (be able to) become a benchmark issuer, which at the same time is not necessary. The issuer is responsive towards private placements and currency diversification.

Canadian budgets in the starting blocks – fiscal year begins on 1 April

The fiscal year of Canadian provinces ends on 31 March. Currently, there is increased activity across the country. The COVID-19 pandemic and the associated impact on provincial expenditure and revenue are in some cases leading to a larger deficit than previously expected. For example, in Alberta this means that the government will no longer be able to balance the budget by the end of its first term in office in 2022/23. At the same time, however, the economy is beginning to recover. In particular, according to the Bloomberg ticker, even more caution is needed in ALTA than in other provinces, where the (conservative) budget projections are additionally based on crude oil prices, adding an extra dimension of contingency. While the ongoing pandemic has meant that a new timetable for balancing the budget cannot yet be announced, the Finance Minister reiterated his commitment to keeping the debt-to-GDP ratio below 30%. At the same time, per capita expenditure is to be brought in line with the average of other large provinces and a timetable for returning to an even keel is to be worked out. A factor for recovery and sustainability will nevertheless also be investments, which have been increased once again in the planning process. Currently, three out of four rating agencies have a negative rating outlook for the province. Alberta is always a candidate for a EUR benchmark and still has one of the lowest debt burdens among the Canadian provinces measured in terms of its GDP.

BADWUR goes green

As announced last week, the German state of Baden-Wuerttemberg has gone green and issued its first green bond for EUR 300m (WNG). Modest as the Swabians undoubtedly are, IPT came to ms -1bp area, guidance at ms -2bp area and final pricing at ms -4bp. The books were more than five times oversubscribed. The upcoming elections and the 2020 down-grade did not undermine the successful capital market performance. Exemplary projects are also mentioned: With particularly energy-efficient new building projects, whose primary energy consumption is more than 20% below the standard of the German Energy Saving Ordinance, additional greenhouse gas emissions are avoided in new buildings compared to conventional new buildings. With the promotion of municipal broadband investments, the foundations are being laid to change mobility behaviour – be it through home office or telemedicine. Silvicultural measures help forest owners to make their forests climate change-resistant and support reforestation, which directly contributes to climate protection.

Primary market

The EU has already raised a total of EUR 53.5bn under its SURE programme since the autumn. This corresponds to 53.5% of the planned volume. The order books totalled EUR 654bn and were therefore oversubscribed 12.2 times. Another RfP has now been submitted, but no consortium has been mandated to date. In our opinion, the EU is in a comfortable situation, as even an oversubscription of less than 10 times is still a complete success and it also influences market conditions in terms of volume alone. In any case, the EU as an issuer will have soon overtaken the EIB or KfW as regards outstanding market volume. It will probably not quite reach EUR 46.5bn by Easter, but that was just an educated guess on our part based on expected good to very good market conditions. In the first half of the year, the EU should have no problem raising funds for the SURE programme. Anyway, let's move on to discuss laid eggs instead of mandates: Kommunekredit, EIB and KfW all showed up on the market. In chronological order, we start with KOMMUN, which raised EUR 1bn at ms +4bp. The order books amounted to more than EUR 2.6bn, meaning two basis points of movement were recorded compared to the guidance (ms +6bp area). The EIB's deal was similarly successful, but very different: In its special EARN format, it chose the 15-year maturity and priced at ms -6bp. Owing to the largest order book of the trading week (EUR 21.8bn), a reduction of two basis points compared to the guidance was also possible here (ms -4bp area). Since we have already considered BADWUR separately above, we are left with the KfW transaction. EUR 5bn changed hands for five years. Here, too, two basis points of movement versus guidance were possible (ms -9bp area), as the order book totalled in excess of EUR 19bn. Last week we reported at some length on EURDEV – the Eurasian Development Bank – and held out the prospect of its first EUR benchmark due to its “de-dollarisation” policy. The EDB conducted investor calls on 1 March and decided on a five-year term. A bond of up to seven years was under consideration. Saxony-Anhalt has opted for the standard segment (10y) and plans to raise a total of EUR 1bn (no-grow).

Issuer	Country	Timing	ISIN	Maturity	Size	Spread	Rating	ESG
KfW	DE	02.03.	DE000A3H3E76	5.3y	5.00bn	ms -11bp	- / Aaa / AAA	-
EIB	SNAT	24.02.	XS2308323661	15.0y	3.00bn	ms -6bp	AAA / - / AAA	-
KOMMUN	Other	24.02.	XS2308329783	10.0y	1.00bn	ms +4bp	- / Aaa / AAA	-

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

Covered Bonds

Repayment structures on the covered bond market

Author: Henning Walten, CIAA

Three different repayment structures established in the market

The market has been preoccupied with the various options for designing a covered bond's repayment structure for some time. While investors focus on the last possible date for repayment of their investment, issuers often focus on the fact that rating agencies view extendable maturity structures positively when rating their bonds. Having usually opted for hard bullet structures in the past, the soft bullet structure has now become the most frequently chosen form for EUR benchmarks. Occasionally, bonds also appear on the market with the conditional pass-through structure (CPT) introduced by the NIBC in the Netherlands in 2013.

Hard bullet structures: no option for extending the maturity

Until a few years ago, hard bullet structures were regarded as market practice when it came to structuring the repayment arrangements for a covered bond – or to be more exact – the options for extending an issue if a trigger event occurred (such as an issuer becoming insolvent). This means that if the respective covered bond issuer is not able to comply with his outstanding payment obligations, investors will obtain access to the respective covered bond programme's cover pool – regardless of the repayment structure chosen – via the trustee or administrator because of the dual recourse mechanism. If redemption of an issue is pending and the liquid funds available are not sufficient to redeem the bond and liquidity cannot be generated by another means, the collateral in the pool will be sold if the bond has a hard bullet structure. This means that investors can expect prompt repayment on the one hand but this is associated on the other hand with the risk that market turbulence means that the market values of the assets may be reduced and, in extreme circumstances, the full repayment amount is not covered by the sales proceeds.

Soft bullet structures: maturity extended through trigger events

Soft bullet structures and, more rarely, CPT structures as well, exist to counter this risk. If investors' claims can be serviced when they originally fall due, there are no differences between the three payment structures as far as investors are concerned. Since no uniform trigger events have so far become established on the market to trigger an extension, different variants are currently possible, which lead to the repayment date originally agreed under a soft bullet structure being postponed. Examples of various models within the soft bullet variant include (i) the issuer's insolvency and postponement of redemption to a later repayment date by an independent trustee or (ii) the postponement of the original repayment date by the issuer. With regard to possible extension periods, a postponement of maturity by twelve months has become established in most cases under soft bullet structures. Interest payments during the extended maturity are largely based on 1-month or 3-month Euribor plus a premium or discount but are also defined as a fixed coupon in some cases.

Comparison of the different maturity structures



Source: NORD/LB Markets Strategy & Floor Research

Conditional pass-through structures: final maturity is actually uncertain

The original repayment date can be postponed for far longer in the case of bonds which feature a CPT structure. This also reduces the refinancing risk to a minimum at the same time. In contrast to the soft bullet structure, once the pass-through structure is triggered (for which, like soft bullet structures, there are currently no uniform trigger events), the outstanding covered bond issues are redeemed firstly from the inflows generated from the assets associated with them and also from the sale of assets, if they can be sold at adequate market prices. However, in contrast to the soft bullet structure, the date at which investors can expect the outstanding claims to be serviced cannot be determined ex ante. Rather, in the worst-case scenario, they can only be determined upon maturity of the assets with the longest term. Rating agencies view soft bullet, and even more so CPT structures because the refinancing risk is lower, as positive factors in assessing their ratings.

Special case Poland: soft bullet with the option to convert to CPT

With regard to the maturity structure of covered bonds, Polish legislation can be viewed as a special case. Covered bonds that cannot be serviced on maturity are initially extended by twelve months. During this extension period, a test is carried out every six months to check whether sufficient assets are available to service investors' claims and also whether there is sufficient liquidity to service these claims on time. If the two tests are not passed within the extension period, the bond is converted to a CPT structure once the period of twelve months expires. The repayment date is therefore postponed to the latest date on which the cover assets mature plus three years. However, a 2/3 majority of the investors can prevent such an extension. Polish covered bonds are therefore initially soft bullet bonds, for which the final maturity cannot be clearly determined in advance because of the possible conversion to a CPT structure, meaning that their repayment structure cannot be clearly assigned to one of the three forms of repayment. Therefore, we do not take into account the five EUR benchmarks issued by PKO Bank Hipoteczny included in the iBoxx EUR Covered in the following article.

Special case Slovakia: soft bullet with a possible second extension of maturity

Slovakia also deviates to a certain extent from current market standards as far as maturity extending structures are concerned, which is due to a change in legislation that came into effect on 1 January 2018. Accordingly, in the event of an institution becoming insolvent, the new legislative framework initially provides for postponing the due date by twelve months. Should there be no sign that investors' claims will be serviced when the extension period expires, the programme may be transferred to one or several other Slovakian banks. If such a transfer is not possible within the first extension period, a further postponement of the due date by another twelve months may be approved by the regulator. The renewed extension of maturity will affect both those bonds that were extended because of the first postponement and those whose due dates fall within the second 12-month period. The Slovakian EUR benchmark covered bonds included in the iBoxx EUR Covered are therefore soft bullet issues, whose structures differ, however, from other soft bullet issues in the index because their due dates may be postponed twice. Unlike Polish issues, Slovakian issues may, in our opinion, clearly be assigned to the soft bullet bond segment.

Soft bullet and CPT bonds under CBPP3 and for repo transactions

Given that their maturities may, under certain circumstances, be very long, covered bonds with a conditional pass-through structure are subject to special requirements. Accordingly, the ECB currently purchases no covered bonds with this structure under CBPP3. CPT bonds also have a particular feature in the context of repo transactions with the ECB. Adjustments to valuation discounts are relevant for own-use soft bullet and CPT structures. Accordingly, in the course of recognition, it is the extended maturity that is used to determine the discount and not that originally envisaged. In the case of a soft bullet, the maturity would have to be extended by a year as a rule, while all CPT structures fall into the maturity range of ">10 years" when determining any haircut because of their theoretically very long extension period.

Maturity extension also an issue for the harmonisation efforts

Extendable maturity structures are also the subject of discussion as part of the harmonisation of the European covered bond market. The aim is to create opportunities to counter risks resulting from mismatching maturities and potential liquidity shortages. In this context, the proposal envisages in the form of article 17 that it will be left to the respective national supervisory authorities to allow the issue of covered bonds with extendable maturity structures. The event that triggers the extension or postponement of maturity is critical for such structures. This trigger event must be included in the national framework and may not be left to the issuer's discretion. Bond investors must be provided with detailed information regarding the trigger, the effects on the maturity structure in the event of insolvency and the role of the supervisory authority and the trustee in the course of any extension to maturity.

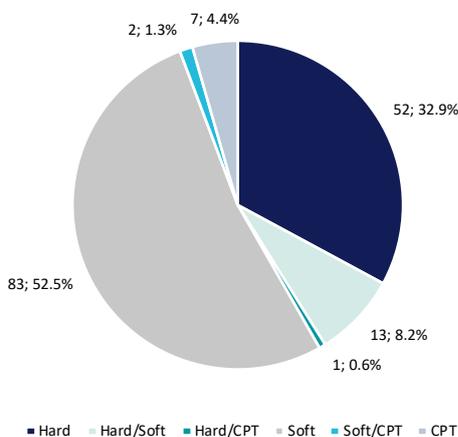
Liquidity buffer aims to mitigate market value risks

It is clear from the statements above that the refinancing risk can be significantly reduced compared with a hard bullet structure by means of a soft bullet or conditional pass-through structure. However, investment in such a covered bond requires prior, detailed examination of the terms of the bond in question since there are currently no uniform market standards either for the trigger event or for interest payments during the extension period. With regard to the refinancing risk following the issuer’s insolvency, it must be mentioned that, in the case of hard bullet structures, issuers are already obliged by law in some cases to reduce this risk by maintaining a liquidity buffer. In the wake of the harmonisation efforts, Article 16 also envisages the mandatory introduction of a liquidity buffer to cover the net outflows of liquidity for 180 calendar days for all jurisdictions subject to the Regulation.

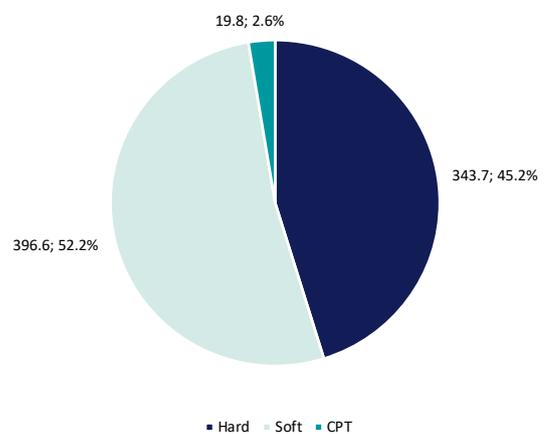
iBoxx dominated by pure soft bullet issuers

With 83 out of 158 issuers (52.5%), most of the issuers (excluding Spanish multi-cedulas) listed in the iBoxx EUR Covered currently only have outstanding benchmarks with soft bullet structures. A further 32.9% (52 issuers) is attributable to institutions that only have hard bullet bonds and 4.4% (7 issuers) to those which only use CPT structures. Consequently, a clear maturity model can be assigned to 89.9% of institutions with outstanding EUR benchmarks. However, the remaining 10.1% is attributable to issuers that have outstanding benchmarks with two differing maturity structures. The most frequent combination (8.2% or 13 issuers) is hard and soft bullet bonds. The only banks with EUR benchmarks with soft bullet and CPT structures are Italy’s UniCredit and recently NN Bank from the Netherlands, making them a rarity. This is even truer of Deutsche Bank, which in addition to Pfandbriefe placed in accordance with the Pfandbrief Act also has a CPT benchmark on a contractual basis, a unique feature in the market for EUR benchmarks. The EUR benchmarks issued by Poland’s PKO Bank Hipoteczny are not taken into account at this point because of their hybrid maturity structure model (soft bullet with option to switch to CPT) to avoid confusion with those issuers that have both soft bullet and CPT bonds outstanding.

Repayment structures by issuer



EUR benchmark volume by structure



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

EUR benchmarks with soft bullet structures account for largest outstanding volume

At 52.2%, over half of the bond volume in the iBoxx with a clear maturity structure (i. e. excluding Poland, see above or table below, as well as Spanish multi-cedulas) relates to covered bonds with a soft bullet structure. In most cases this provides for a maturity extension of 12 months if a trigger event occurs. EUR benchmarks with a CPT structure continue to represent a niche in the benchmark segment as they only account for 2.6% of the volume of bonds in the iBoxx index. Traditional hard bullet covered bonds with no option for maturity extension account for the remaining 45.2%. This share is primarily due to the fact that France, Germany and Spain are presently the biggest markets for EUR benchmarks, while legal regulations meant that these jurisdictions made greater use of hard bullet structure in the past.

Repayment structures by jurisdiction



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

Numerous jurisdictions feature varying repayment structures

Looking at the spread of the three repayment structures at jurisdiction level reveals that only EUR benchmarks from Spain and Luxembourg are exclusively represented in the iBoxx with hard bullet structures. Conversely, with Belgium, Canada, Switzerland, Czech Republic, Estonia, the UK, Ireland, Japan, Norway, New Zealand, Singapore and Slovakia, there are 12 jurisdictions with only soft bullet EUR benchmarks in the iBoxx. Poland's EUR benchmarks also have a standard (hybrid) maturity structure. CPT bonds were issued as well in Australia, Germany, Italy, the Netherlands and Portugal, whereby Australia is the only jurisdiction where all three maturity models can be found. There is more than one repayment model in 11 out of the 26 EUR benchmark jurisdictions represented in the iBoxx index. In the following, we provide a tabular overview of the individual issuers and the maturity models they use for these jurisdictions. It should be noted that under certain circumstances, repayment structures can be used in the respective jurisdictions, and by the listed issuers, that differ from those of the EUR benchmarks or are no longer listed in the iBoxx due to their residual maturity. For reasons of simplicity, this article is based exclusively on EUR benchmarks in the iBoxx EUR Covered index (excluding Spanish multi-cedulas).

Repayment structures in Austria

Although EUR benchmarks with a hard bullet structure continue to dominate in Austria (EUR 18.75bn), there has been a recent trend towards soft bullet bonds. Consequently, six out of the total of 13 Austrian issuers have outstanding EUR benchmarks with a maturity extension option (EUR 8.25bn). Apart from Raiffeisen Bank International, these banks still have outstanding hard bullet bonds, but their respective most recent placements in the EUR benchmark segment were in the form of soft bullet bonds. Looking ahead, these banks are likely to become pure soft bullet issuers.

Repayment structures – Austria

Repayment structures – Italy

	Hard	Soft		Soft	CPT
BAWAG PSK	X		Banca Monte dei Paschi di Siena		X
Erste Group Bank	X	X	Banca Popolare di Sondrio	X	
HYPONOE	X	X	Banco BPM	X	
Hypo Tirol Bank		X	Banco di Desio e della Brianza	X	
Hypo Vorarlberg Bank	X		BPER	X	
Raiffeisen Bank International		X	Credit Agricole Italia	X	
Raiffeisenlandesbank Niederoesterreich-Wien	X	X	Credito Emiliano	X	
Raiffeisenlandesbank Oberoesterreich	X	X	Intesa Sanpaolo	X	
Raiffeisen-Landesbank Steiermark	X		Mediobanca Banca di Credito Finanziario	X	
Raiffeisenlandesbank Vorarlberg	X		UniCredit	X	X
UniCredit Bank Austria	X		Unione di Banche Italiane	X	
Volksbank Wien	X				

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

Repayment structures in Italy

Italy is one of the jurisdictions that has outstanding bonds with CPT structures (EUR 6.5bn), even though such bonds play only a minor role in the Italian market compared with soft bullet bonds (EUR 37.68bn). While the EUR benchmarks from Banca Monte dei Paschi are exclusively CPT bonds, UniCredit has outstanding soft bullet bonds as well as issues in CPT format.

Repayment structures in Denmark

With regard to the Danish market, the bonds issued by Danish Ship Finance stand out, and not just because of their cover assets (ship mortgages). The two bonds it has issued also differ from other Danish EUR benchmarks in their repayment structure, in that they do not feature an extendable maturity. Danske Bank and Jyske Realkredit placed their EUR benchmarks with soft bullet structures (extension up to 12 months).

Repayment structures – Denmark

Repayment structures – Finland

	Hard	Soft		Hard	Soft
Danmarks Skibskredit	X		Aktia Bank		X
Danske Bank		X	Danske Mortgage Bank		X
Jyske Realkredit		X	Nordea Kiinnitysluottopankki	X	
			OP Mortgage Bank		X
			SP-Kiinnitysluottopankki		X

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

Repayment structures in Finland

Of the outstanding EUR benchmarks from Finnish issuers, only the bonds from Nordea Mortgage Bank (9 bonds) have a hard bullet structure. The remaining four issuers have 18 outstanding EUR benchmarks with a soft bullet structure, each with the option to extend maturity by 12 months.

Repayment structures in France

There are nine issuers in France that have structured their bonds with a uniform maturity structure, i.e. exclusively hard or soft bullet bonds. The majority of these issuers (five banks) have chosen extendable maturities. Only CRH, CAFFIL, CFF and Societe Generale SCF exclusively have outstanding hard bullet bonds. A further eight issuers have placed EUR benchmarks in the past with both hard and soft bullet structures. As in Austria, the most recent deals were placed as soft bullet bonds, whereby these institutions are set to become pure soft bullet issuers in the future.

Repayment structures – France**Repayment structures – Germany**

	Hard	Soft		Hard	CPT
Arkea Home Loans SFH	X	X	Aareal Bank	X	
Arkea Public Sector SCF		X	Bausparkasse Schwaebisch Hall	X	
AXA Bank Europe SCF		X	Bayerische Landesbank	X	
AXA Home Loan SFH		X	Berlin Hyp	X	
BNP Paribas Home Loan SFH	X	X	Commerzbank	X	
BPCE SFH	X	X	Deutsche Apotheker-und Aerztebank	X	
Caisse de Refinancement de l'Habitat	X		Deutsche Bank	X	X
Caisse Francaise de Financement Local	X		Deutsche Hypothekenbank	X	
Cie de Financement Foncier	X		Deutsche Kreditbank	X	
Credit Agricole Home Loan SFH		X	Deutsche Pfandbriefbank	X	
Credit Agricole Public Sector SCF	X	X	DZ HYP	X	
Credit Mutuel Home Loan SFH	X	X	Hamburg Commercial Bank	X	
HSBC SFH France	X	X	Hamburger Sparkasse	X	
La Banque Postale Home Loan SFH	X	X	ING-DiBa	X	
MMB SCF		X	Landesbank Baden-Wuerttemberg	X	
Societe Generale SCF	X		Landesbank Hessen-Thueringen Girozentrale	X	
Societe Generale SFH	X	X	Muenchener Hypothekenbank	X	
			Norddeutsche Landesbank-Girozentrale	X	
			Santander Consumer Bank	X	
			Sparkasse KoelnBonn	X	
			UniCredit Bank	X	
			Wuestenrot Bausparkasse	X	

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

Repayment structures in Germany

Although the legal basis for issuing Pfandbriefe in Germany does not provide for any maturity extension, since November 2019 Deutsche Bank has had one bond with a structure that does permit this option. To achieve this, Deutsch Bank used a contractual covered bond, which therefore does not constitute a bond pursuant to the German Pfandbrief Act and consequently does not constitute a Pfandbrief.

Repayment structures in Sweden

In Sweden, three of the five issuers use covered bonds with no maturity extension. In contrast, SCBC and Stadshypotek are currently represented in the iBoxx EUR Covered index exclusively with soft bullet bonds. In terms of volume, hard bullets are still just ahead (EUR 13.75bn) while the volume of Swedish soft bullet bonds in the iBoxx stands at EUR 13.33bn.

Repayment structures – Sweden

	Hard	Soft
Lansforsakringar Hypotek	X	
Skandinaviska Enskilda Banken	X	
Stadshypotek		X
Sveriges Sakerstallda Obligationer		X
Swedbank Hypotek	X	

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

Repayment structures - Portugal

	Soft	CPT
Banco BPI	X	
Banco Comercial Portugues	X	
Banco Santander Totta	X	
Caixa Economica Montepio		X

Repayment structures in Portugal

Alongside Australia, Germany, Italy and the Netherlands, Portugal is the fifth national market with EUR benchmarks featuring CPT structures. However, three of the four Portuguese EUR benchmark issuers represented in the iBoxx exclusively use soft bullet structures. Only the two bonds issued by Montepio have maturity extension options in CPT form, which in this specific instance provides for a maturity extension of up to 45 years.

Repayment structures in the Netherlands

The introduction of the CPT repayment structure by NIBC Bank in 2013 was followed by four more issuers in the shape of Achmea Bank, Van Lanschot, Aegon Bank and NN Bank issuing bonds in CPT format. Consequently, the Netherlands not only has the most CPT EUR benchmark issuers, but also the most outstanding CPT benchmarks (21 deals) in the world by far. At EUR 42.32bn, the volume of soft bullet bonds is around four times higher than that of the CPT bonds (EUR 10.55bn). However, the gap is considerably smaller when it comes to the number of bonds: 33 soft bullet deals versus 21 bonds in CPT format. With its debut soft bullet bond in June 2020, NN Bank in the Netherlands also has outstanding EUR benchmarks with two differing maturity structures.

Repayment structures – Netherlands

	Soft	CPT
ABN AMRO Bank	X	
Achmea Bank		X
Aegon Bank		X
Cooperatieve Rabobank	X	
de Volksbank	X	
ING Bank	X	
Nationale-Nederlanden Bank	X	X
NIBC Bank		X
Van Lanschot Kempen		X

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

Repayment structures – Australia

	Hard	Soft	CPT
Australia & New Zealand Banking Group	X	X	
Bank of Queensland			X
Commonwealth Bank of Australia		X	
National Australia Bank		X	
Westpac Banking Corp		X	

Repayment structures in Australia

Australia is the only jurisdiction with bonds outstanding in all three maturity structures. However, five of the benchmark issuers currently included in the iBoxx use soft bullet structures for nearly all of their covered bond issues. The exceptions here are the two issuers ANZ Banking Group and the Bank of Queensland. While the former still has one hard bullet structure from 2012 outstanding (ANZ 3 ½ 07/18/22) alongside soft bullet bonds, the two EUR benchmarks issued by Bank of Queensland have a conditional pass-through structure with a maturity extension of 31.5 years.

Repayment structure in South Korea

Since the inaugural EUR benchmark bond from Kookmin Bank, South Korea has been part of the group of jurisdictions with covered bonds featuring different maturity structures. While the four EUR benchmarks from KHFC do not include any maturity extension option and are therefore hard bullet bonds, Kookmin Bank issued its debut EUR benchmark in soft bullet format. The market entry of KEB Hana Bank saw another South Korean issuer of soft bullet bonds join the ranks.

Repayment structure – South Korea

	Hard	Soft
KEB Hana Bank		X
Kookmin Bank		X
Korea Housing Finance Corp	X	

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

Conclusion

Looking at the iBoxx EUR Covered index reveals that bonds with soft bullet structures have overtaken the former dominant form of hard bullet bonds. One of the reasons for this is that many issuers in France and Austria in particular have already moved over to this form of maturity structure for their covered bonds. The proportion is also likely to increase in the first half of the year as Germany will bid farewell to the hard bullet structure as part of implementation of the Covered Bond Directive and outstanding bonds will feature a maturity extension option in line with the legislation, albeit in a very narrow legal framework. In principle, other jurisdictions where hard bullet bonds are still issued (e.g. France or in particular Spain) could opt for a similar route in the context of harmonisation of the European covered bond market, further reducing the share of hard bullet bonds in the near future (as in Germany) or further in the future through the coexistence of both issuance formats. With regard to the niche market for CPT bonds, it should also be noted that CPT issuers in the Netherlands are turning in part to the soft bullet segment. As a former CPT issuer, NN Bank placed its most recent EUR benchmarks in soft bullet format. Two other CPT issuers, Achmea Bank and AEGON Bank, could also change sides in the future and structure their EUR benchmarks as soft bullet structures.

Cross Asset – SSA/Covered Bonds

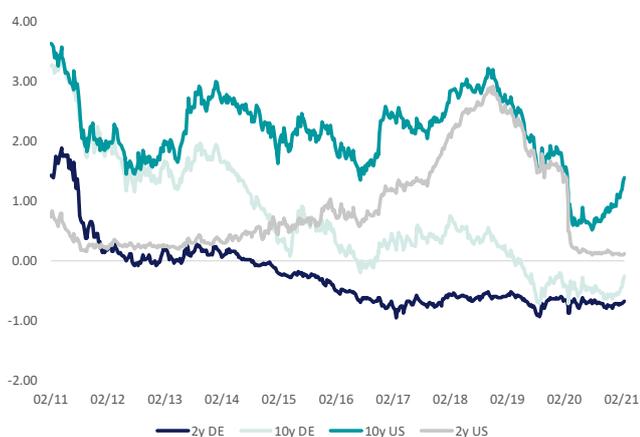
ECB in a tight spot: litmus test for PEPP flexibility and preview of the second interest rate meeting of the year

Authors: Dr Norman Rudschuck, CIAA // Dr Frederik Kunze

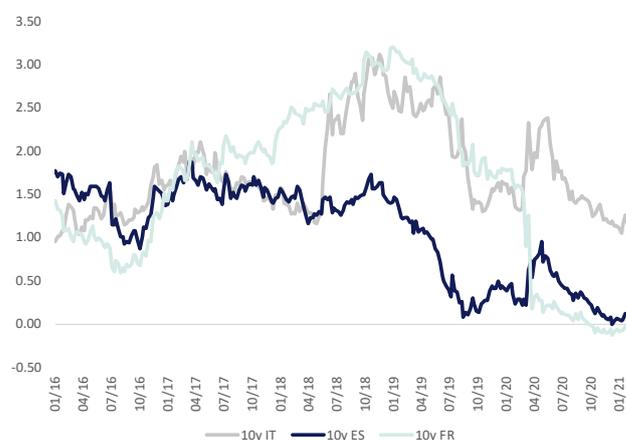
Next ECB interest rate decision on 11 March 2021 – yield rises will inevitably shape discussions

In the past few trading days, the international bond markets were noticeably characterised by yield fluctuations – above all in the longer maturities. In the course of the market movements, which started in the US government bond segment, this became particularly evident in the increasing steepness of the yield curves in Europe as well. In light of the capital market movements, senior representatives of the ECB also felt compelled to point out their own possibilities for action. This is not without implications for the asset classes we are looking at. After all, the monetary policy of the European Central Bank has had a decisive influence on the bond markets in the common currency area in recent years. This also applies in particular to the covered bond market and the SSA universe. Accordingly, both EUR benchmark segments – in addition to the corporate bond sector – were and are in the focus of the ECB's ongoing purchase programmes. In this respect, the factors currently influencing the bond market and the pace of the ECB's monetary policy are also of fundamental importance for covered bonds and public issues. On 11 March 2021, the ECB's next rate decision is due. We still do not expect any further adjustments to the monetary policy instruments in use. Nevertheless, in our view, the recent increases in yields and the handling of the swings on the capital markets in the EUR currency area should help shape the Governing Council's debate. Within the framework of our ECB preview, we would like to outline the debate from the perspective of the asset classes we are looking at and present our assessments with a view to the medium-term decisions to be taken by the central bankers in Frankfurt.

Yield development USA and Germany



Yield differences versus bunds (10y in %)



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

Current inflation discussion taking Germany as an example

According to the Federal Statistical Office, consumer prices in Germany increased by 0.5% on average in 2020 compared to 2019, which is significantly lower than in the previous year (2019: +1.4%). If the prices of goods and services in general increase, and not just the prices of individual products, this is called inflation. In the eurozone, general consumer price inflation is measured by the Harmonised Index of Consumer Prices (HICP). "Harmonised" in this context means that all countries in the EU apply the same method. This ensures comparability of the data between the different countries. The main task of the European Central Bank is to ensure stable prices. The ECB defines price stability as an annual HICP inflation rate below, but close to, 2% over the medium term. As Destatis further reports, the last time a lower annual rate of inflation was recorded was during the financial and economic crisis in 2009 (+0.3%). In December 2020, the inflation rate – measured as the change in the consumer price index (CPI) compared to the same month of the previous year – was still -0.3%. It was negative for the fifth time in 2020 at that time. One reason for the low annual rate of inflation was the temporary reduction in VAT rates. This measure from the federal government's economic stimulus package was implemented on 1 July 2020 and had a dampening effect on consumer prices overall in the second half of the year and to varying degrees on the individual groups of goods. Energy products fell significantly in price by -4.8% year-on-year in 2020, following a +1.4% increase in 2019. Price decreases were recorded in particular for light heating oil (-25.9%) and fuels (-9.9%). Apart from the reduction in VAT rates, the main reason was the drop in oil prices on the world market in the first few months of the year. In contrast, the price of electricity went up by 3.0%. Now comes the unexpected part: excluding energy prices, the annual inflation rate would have been +1.1% in 2020. It should come as little surprise that, according to Destatis, no price collection was possible in 2020 for some goods and services at times due to the coronavirus pandemic. These price losses were imputed by means of European coordinated procedures. The term imputation covers mathematical-statistical procedures for filling in missing data in statistical surveys – known as non-responses – in the data matrix. The (data) quality was thus still guaranteed. Even without taking into account the goods sectors that were heavily imputed in the course of 2020, the annual inflation rate would have been +0.6%.

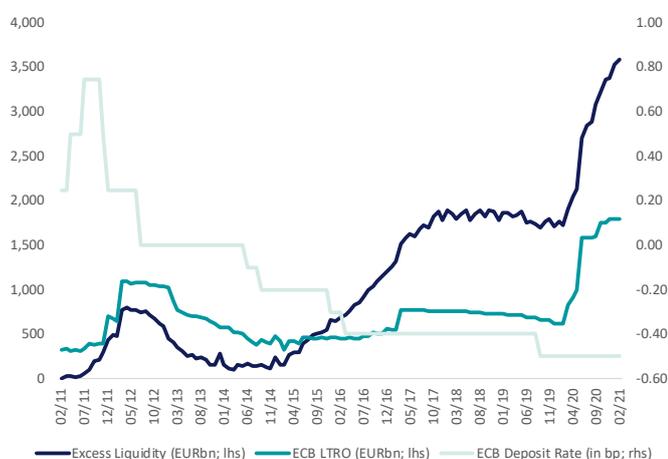
Inflation jumps in January 2021

The inflation rate in Germany was +1.0% in January 2021, after the aforementioned rate of -0.3% in December 2020 (both compared to the same month of the previous year). The last time the inflation rate was positive was in June 2020 (+0.9%). Consumer prices rose by +0.8% compared to the previous month of December 2020. It is common knowledge that the temporary reduction of VAT rates as a measure of the federal government's economic stimulus package ended on 31 December 2020. Only restaurant and catering services continue to be subject to the reduced tax rate. The passing on of the higher tax rates, which have been in force again since January 2021, accounts for part of the increase in consumer prices. As with the reduction of VAT rates in the summer, the return to standard tax rates must take into account that the actual effects do not have to correspond to the purely arithmetical effects. In addition to the end of the VAT rate reduction, the CO₂ levy introduced at the beginning of the year particularly impacted on prices. Excluding energy prices, the inflation rate would have been +1.4% in January 2021. This has had a noticeable impact on yields over the past few trading days.

Inflation expectations, growth prospects and spread increases: Will the flexible use of PEPP soon be put to the test?

While US central bankers have linked the rise in ten-year Treasury yields primarily to improving growth prospects, which have been given an additional boost by the government's stimulus programme, in the common currency area the focus has also been on the issue of excessively rising inflation expectations and the risks to growth associated with the rise in yields. In this respect, it is not surprising that the ECB decision-makers already repeatedly referred to the flexibility of the PEPP last week (cf. e.g. [Interview with ECB chief economist Philip R. Lane](#)) and that these statements were also repeated several times at the start of the week. In the run-up to the approaching key rate meeting, the debate about the actual flexibility of securities purchases (the focus here is primarily on the PEPP) will gather momentum. In this context, capital market participants are likely to focus on financial market indicators of inflation expectations in addition to the reported inflation figures. Even if improving growth prospects and rising inflation rates taken in isolation are by no means bad news for the ECB, some observers rightly see the deteriorating financing conditions with rising capital market interest rates as an impediment to the already fragile economic recovery due to the pandemic situation. According to reports, the ECB could prevent an outright stalling of the dynamics of the economic expansion process with the help of additional securities purchases within the framework of the PEPP. In this respect, it is not surprising that François Villeroy de Galhau, Governor of the Bank of France, recently raised the issue of ECB intervention. ECB Vice-President Luis de Guindos also referred [at the beginning of the week](#) to the opportunities offered by the PEPP in terms of responding to rising nominal yields in the eurozone. At the same time, however, he made it clear that the purchase programme was indeed fulfilling its purpose. The central banker justified this, among other things, by saying that although yields were rising, this development was by no means limited to the periphery. In this way, de Guindos also identifies the factors behind the observed rise in yields as an important decision variable behind possible action to be taken by the ECB over the coming weeks.

ECB: Excess reserve, key interest rate and LTRO



EUR swap rates (weekly)



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

Current PEPP purchases: Have words already been translated into deeds?

In addition to Philip R. Lane and Luis de Guindos, Isabel Schnabel, the person responsible for market operations and thus also QE, has also commented on the current developments, pointing out that it is ultimately to be welcomed if improved growth prospects are behind the increases in yields. The actual purchases under the PEPP could in principle provide an insight into the Eurosystem's changed purchasing behaviour, which could ultimately indicate a link to current market developments. In this context, net purchases under the PEPP amounted to EUR 12.0bn (cf. [ECB tracker](#)), the lowest level in more than six weeks (gross: EUR 16.9bn). With relation to the current PEPP figures reported on Monday, they should be interpreted with some caution. After all, the figures only include purchases up to Wednesday of the previous week, so an adjusted purchasing behaviour that could be directly justified by the rise in yields would not yet be discernible. In fact, however, we are of the opinion that the ECB will first want to wait and see – as indicated – before assessing the causes behind the capital market movements in order to then intervene on an ad hoc basis if necessary.

ECB decision on 11 March 2021 – low expectations

Based on this consideration, we also come to the conclusion that the central bankers are by no means likely to feel compelled to adjust the monetary policy course next Thursday. In this respect, we rule out interest rate measures as well as adjustments to the PEPP framework or the TLTRO III conditions. The PEPP framework is currently not exhausted and thus favours the flexibility that has been highlighted several times. The adjustments to the TLTRO III tenders also have to take effect first. One subject for discussion could be the multiplier in the context of tiering, although here too we would initially expect a further “wait and see” approach. In fact, however, the increase in excess reserves (not least due to securities purchases) is likely to indicate an increasing burden for some credit institutions. The agreed wording of the ECB's press release may well ultimately have the potential to provide indications for the future. The flexibility of the PEPP is likely to be emphasised again in this context. We also think references to the necessary real economic impulses from the ECB measures (such as in a prior press release with regard to the best possible interest rate in the context of TLTRO III) are very likely.

SSA segment: general conditions unchanged

The unchanged high supply from issuers meets the undiminished strong demand from investors (primary market) and the ECB (secondary market). The EU is already in the starting blocks, and the German Laender are also permanently represented on the market. In addition, there are the usual representatives of the other e-supras (especially EIB, but also EFSF and ESM) as well as KfW. The PSPP, with EUR 20bn in fresh cash every month, is also unjustly regularly overshadowed by the younger but faster-growing PEPP. We are concerned about the discussions on the ISIN limits that the ECB has imposed on itself for the APP and PSPP. Here, as already explained several times, the limit of 33% per issuer or issue applies as a rule; only in the case of supranationals is it 50%. The ECB does not take a position here within the framework of the PEPP. An enquiry from us went unanswered. However, the issue of blocking minority is important should tensions arise again in the public sector. Here, the ECB would do well to provide more transparency, as it lives by its credibility and market confidence.

Covered bonds: EUR benchmark segment will continue to be under the spell of the ECB

With regard to the covered bond segment, we hardly expect any significant impulses from the upcoming ECB meeting. This assessment is based on the fact that the simultaneous influence on the supply and demand side of this sub-market will be maintained, especially in the form of favourable refinancing (TLTRO III) and massive purchases of securities. Should there be a surprise adjustment of the multiplier, this could give a negative impulse to the demand for covered bonds coming from the direction of bank treasuries, but in our assessment, this should be marginalised in light of the massive purchases under the CBPP3. Current market developments, on the other hand, could well rearrange the structure of the covered bond market to a significant extent. In this context, we should mention in particular the noticeable increase in swap rates, which has resulted in a return to positive yield territory for a growing proportion of covered bonds. Should risks be priced in more strongly again as a result of the yield increases in recent days, covered bonds would be largely shielded from spread increases, with spreads for senior unsecured issues expected to widen, especially for bail-in eligible papers. This is also consistent with our view that covered bonds are in an even better position than senior unsecured bonds from a relative value point of view. Overall, however, we do not expect a regime change that would result in massive re-pricing.

Conclusion and comment

In the run-up to next week's ECB meeting, senior ECB officials have commented several times on yield rises, flexible options and the current upward pressure on prices. We are also not ignoring the currently increasing special effects in some tax rates as well as rising transport and raw material costs seen not only in Germany, but across the rest of Europe and the world too. We see certain temporary inflation drivers here. Moreover, after the (partial) lockdown (unsatisfied online) consumption is coinciding with limited capacities, but also full warehouses, especially in stationary retail. While spring is beckoning, old collections still lie like lead on the shelves. Pandemic, lockdowns and sustained inflation can be ruled out in our view, as we do not expect a long-term boom. On the one hand, this may be because of the mutations and the "new normal" for co-existing in terms of travel, concerts and stadium visits, but also the expected wave of bankruptcies in 2021/22. We are not glorifying the scenario that is currently being played out in the market, but it is highly likely that Christine Lagarde will face questions about inflation (and thus the currently rising yields) at the press conference in eight days' time. According to the December forecasts, the ECB expects to miss its inflation target by 2023 (+1.4%). For the years before that, inflation rates are also expected to be well below the ECB's target (2021: +1.0%; 2022: 1.1%). Moreover, at the turn of the year, nothing at all unforeseen happened with regard to the return to the previously applicable tax rates and other possibly price-driving elements. Monetary policy is therefore likely to remain untouched in its current form, while the wording of the press release is once again likely to be very important.

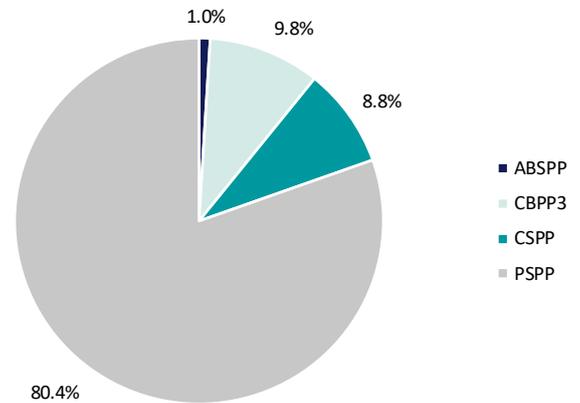
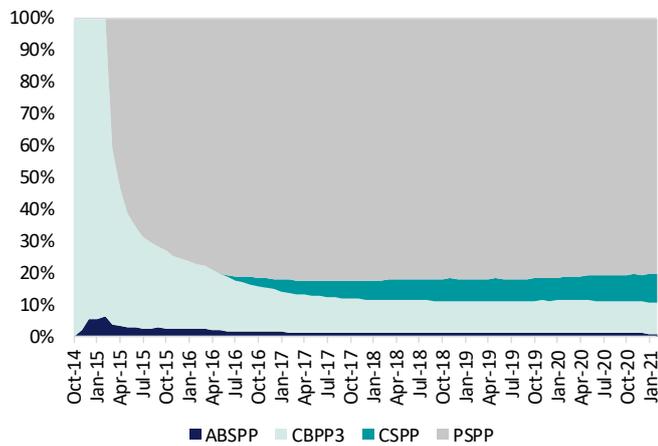
ECB tracker

Asset Purchase Programme (APP)

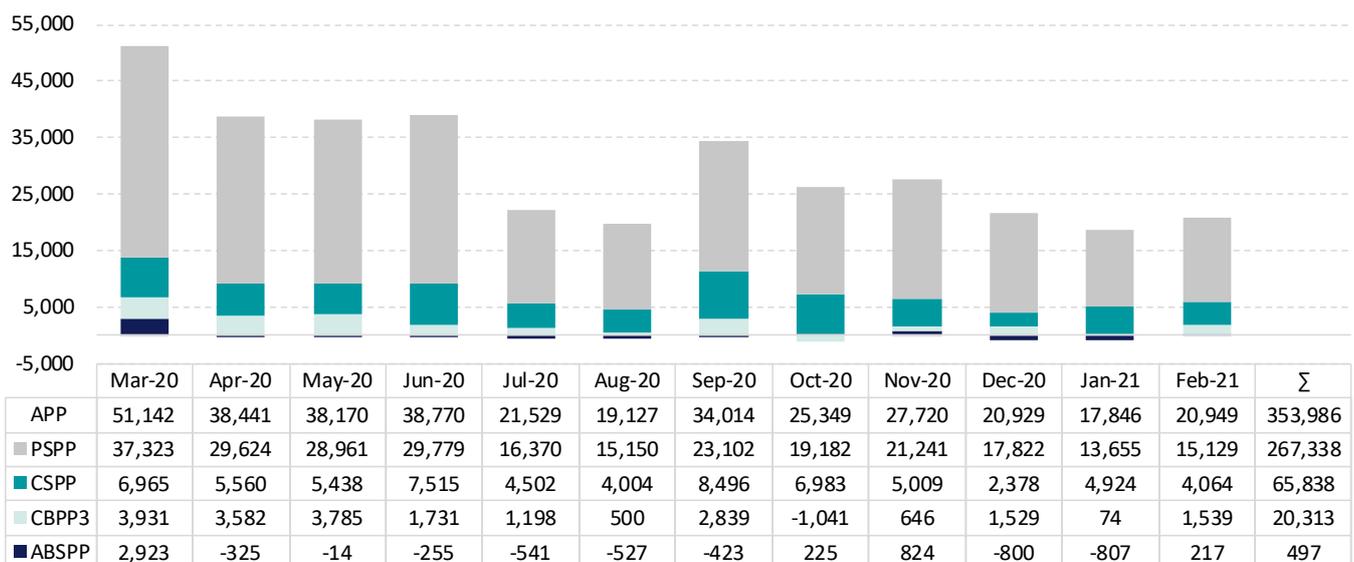
Holdings (in EURm)

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

Portfolio structure

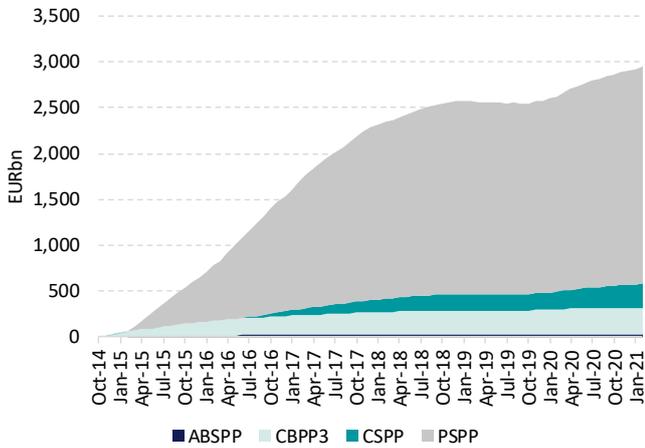


Monthly net purchases (in EURm)

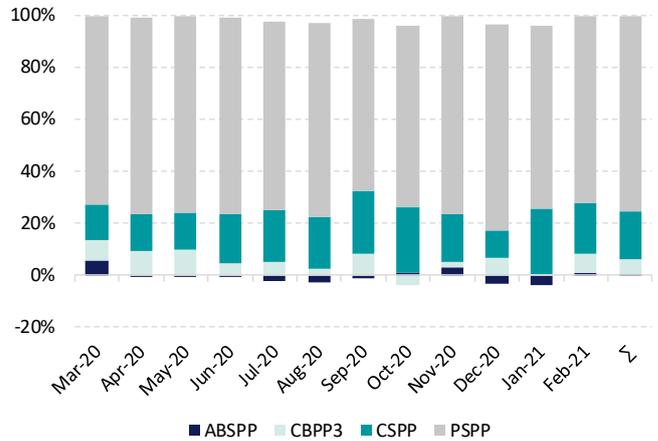


Source: ECB, NORD/LB Markets Strategy & Floor Research

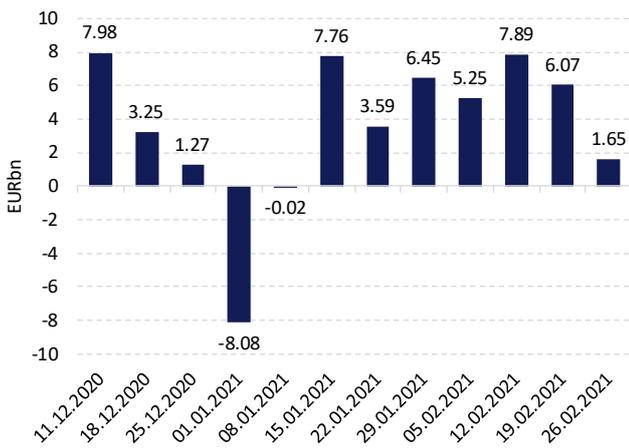
Portfolio development



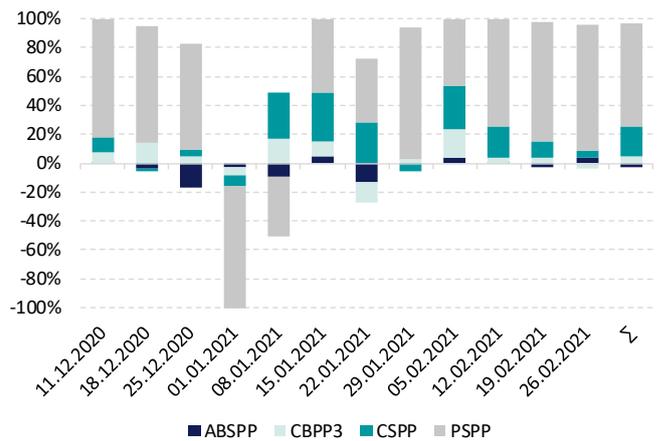
Distribution of monthly purchases



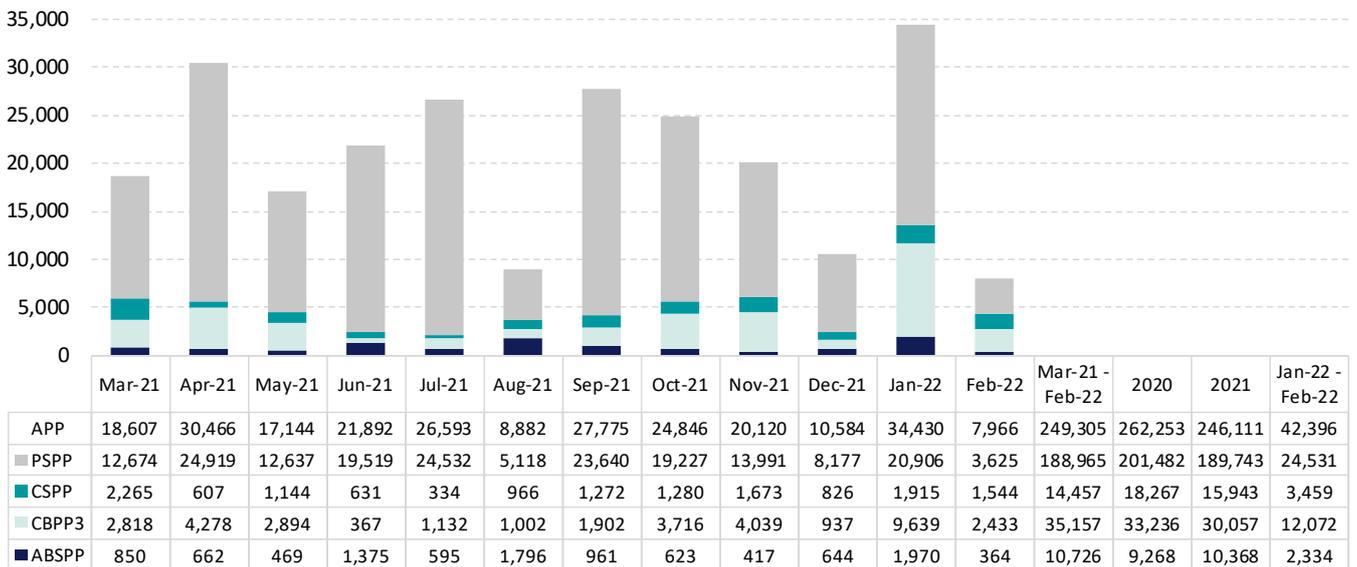
Weekly purchases



Distribution of weekly purchases



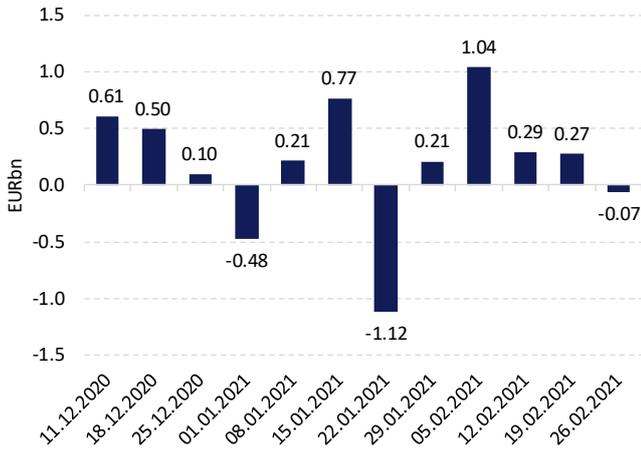
Expected monthly redemptions (in EURm)



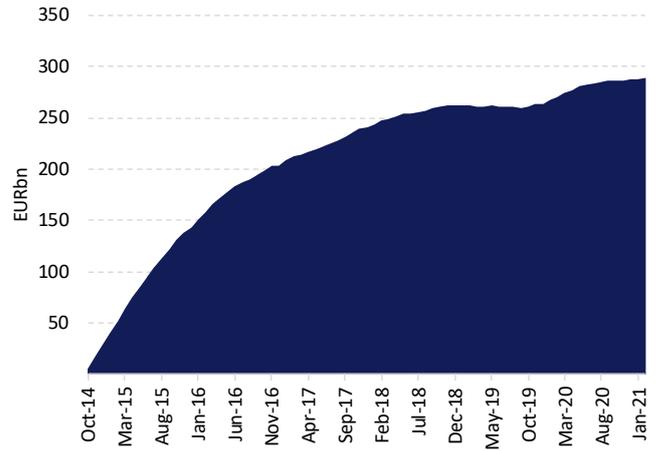
Source: ECB, Bloomberg, NORD/LB Markets Strategy & Floor Research

Covered Bond Purchase Programme 3 (CBPP3)

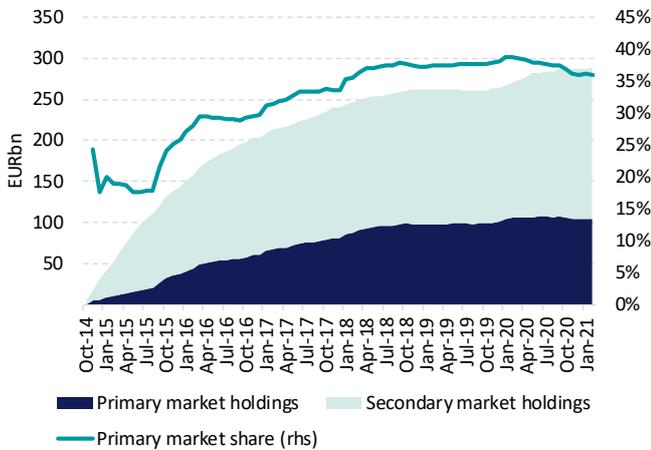
Weekly purchases



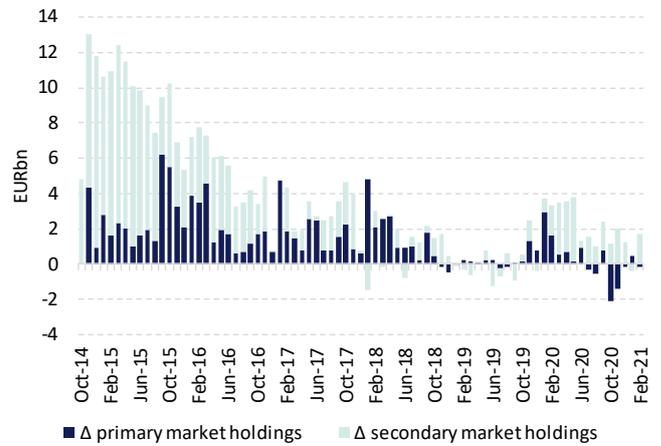
Development of CBPP3 volume



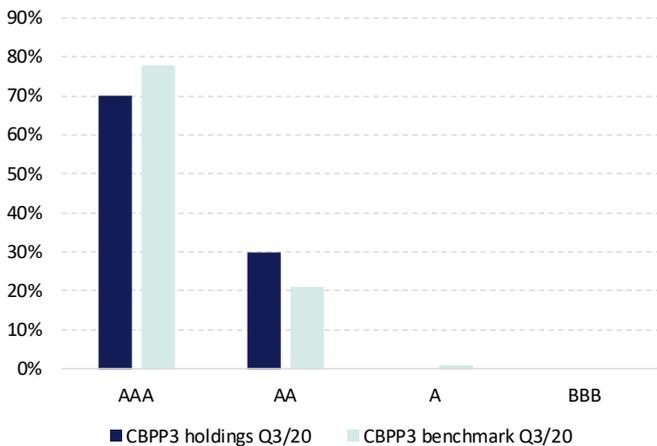
Primary and secondary market holdings



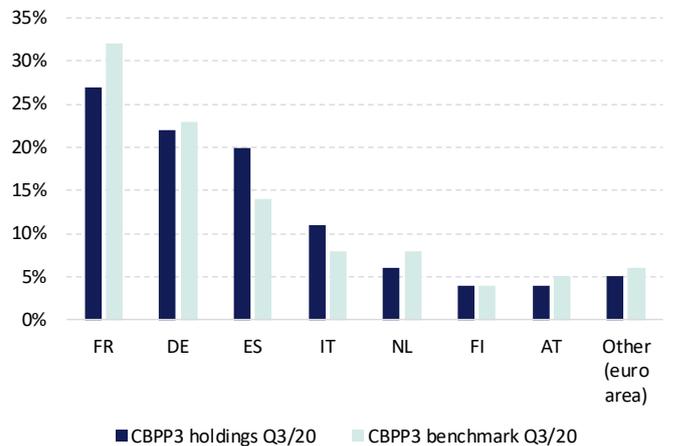
Change of primary and secondary market holdings



Distribution of CBPP3 by credit rating

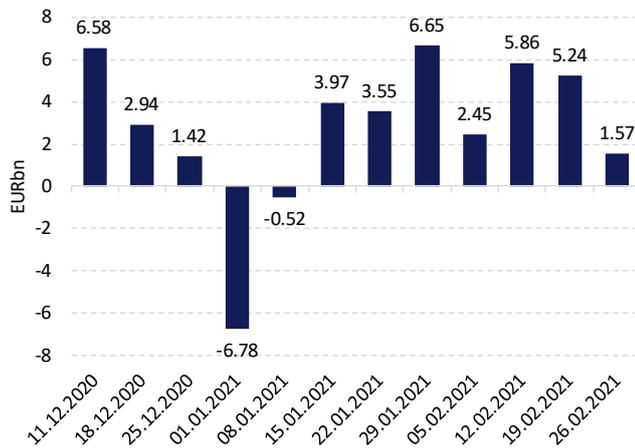


Distribution of CBPP3 by country of risk

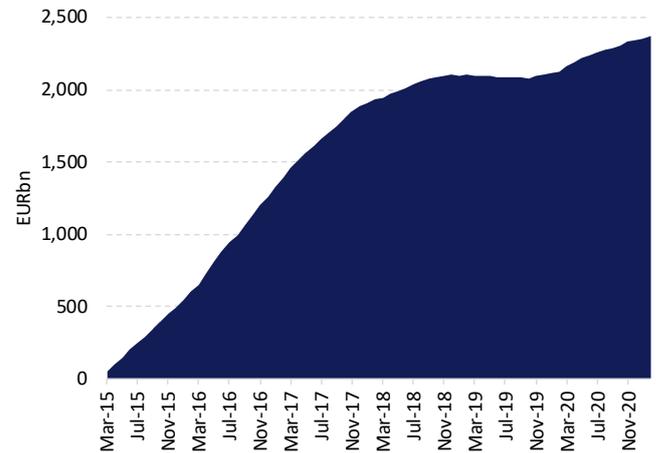


Public Sector Purchase Programme (PSPP)

Weekly purchases



Development of PSPP volume



Overall distribution of PSPP buying at month-end

Jurisdiction	Adjusted distribution key ¹	Purchases (EURm)	Expected purchases (EURm) ²	Difference (EURm)	Avg. time to maturity ³ (in years)	Market average ³ (in years) ³	Difference (in years)
AT	2.7%	69,357	67,307	2,050	7.8	7.8	0.0
BE	3.4%	87,627	83,780	3,847	8.4	10.2	-1.8
CY	0.2%	3,427	4,948	-1,521	10.0	9.3	0.7
DE	24.3%	588,192	606,206	-18,014	6.5	7.6	-1.1
EE	0.3%	324	6,478	-6,154	9.7	9.7	0.0
ES	11.0%	292,369	274,217	18,152	8.2	8.5	-0.3
FI	1.7%	36,772	42,241	-5,469	7.2	7.9	-0.7
FR	18.8%	492,681	469,676	23,005	7.0	8.1	-1.1
GR	0.0%	0	0	0	0.0	0.0	0.0
IE	1.6%	38,171	38,941	-770	8.6	9.9	-1.3
IT	15.7%	418,790	390,666	28,124	7.1	7.8	-0.7
LT	0.5%	4,683	13,309	-8,626	9.5	11.3	-1.8
LU	0.3%	3,164	7,575	-4,411	5.0	6.5	-1.5
LV	0.4%	2,599	8,960	-6,361	10.1	10.5	-0.4
MT	0.1%	1,222	2,412	-1,190	10.1	9.2	0.9
NL	5.4%	119,658	134,766	-15,108	7.5	8.4	-0.9
PT	2.2%	46,884	53,822	-6,938	7.2	7.6	-0.4
SI	0.4%	9,041	11,073	-2,032	9.4	9.3	0.1
SK	1.1%	15,130	26,336	-11,206	8.4	8.6	-0.2
SNAT	10.0%	261,812	249,190	12,622	7.2	8.3	-1.1
Total / Avg.	100.0%	2,491,902	2,491,902	0	7.2	8.1	-0.9

¹ Based on the ECB capital key, adjusted to include supras and the disqualification of Greece

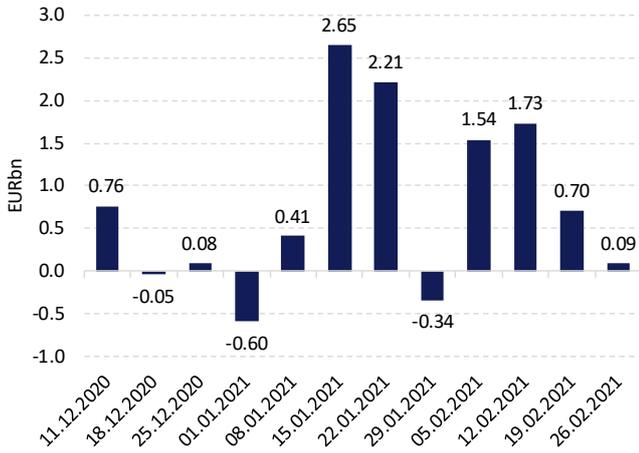
² Based on the adjusted distribution key

³ Weighted average time to maturity of the bonds eligible for purchasing under the PSPP (semi-annual data, Q3/2020)

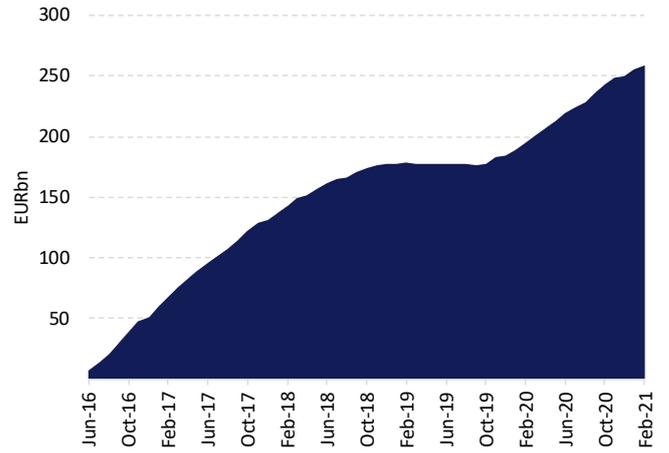
Source: ECB, NORD/LB Markets Strategy & Floor Research

Corporate Sector Purchase Programme (CSPP)

Weekly purchases

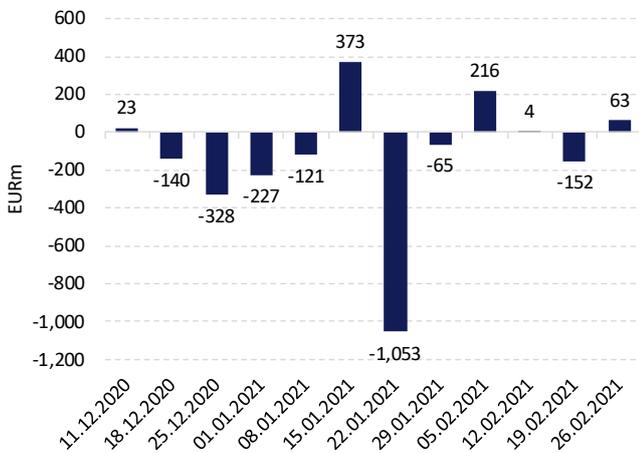


Development of CSPP volume

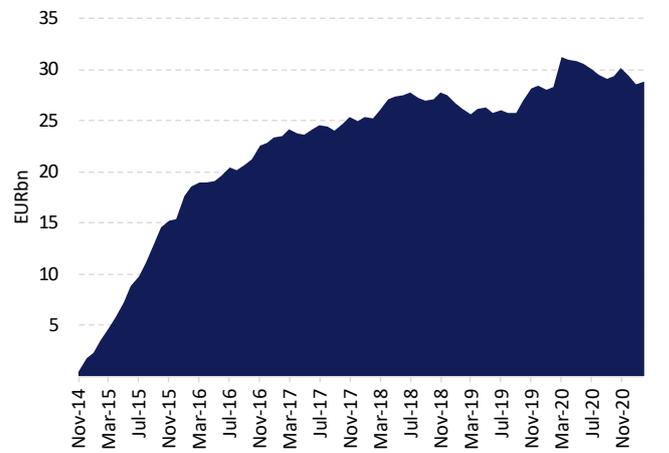


Asset-Backed Securities Purchase Programme (ABSPP)

Weekly purchases



Development of ABSPP volume



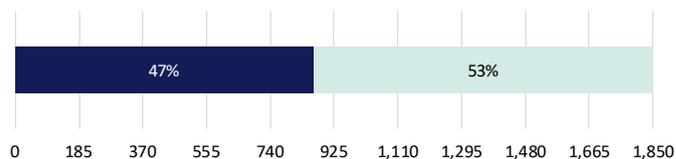
Source: ECB, Bloomberg, NORD/LB Markets Strategy & Floor Research

Pandemic Emergency Purchase Programme (PEPP)

Holdings (in EURm)

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

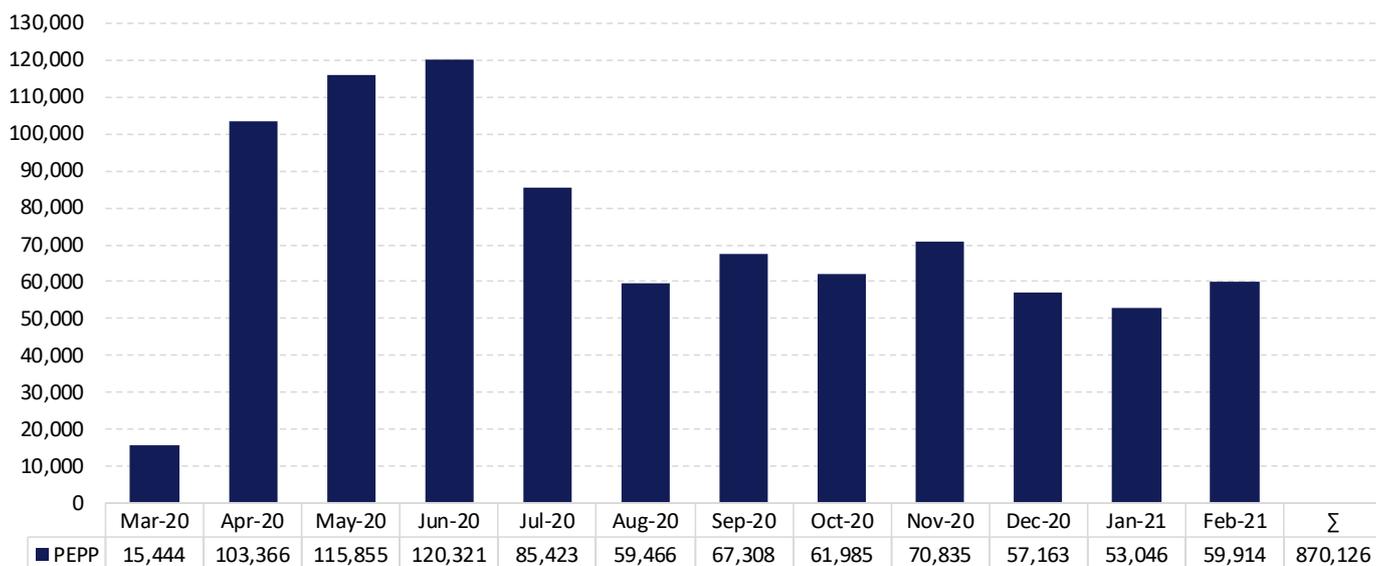
Volume already invested (in EURbn)



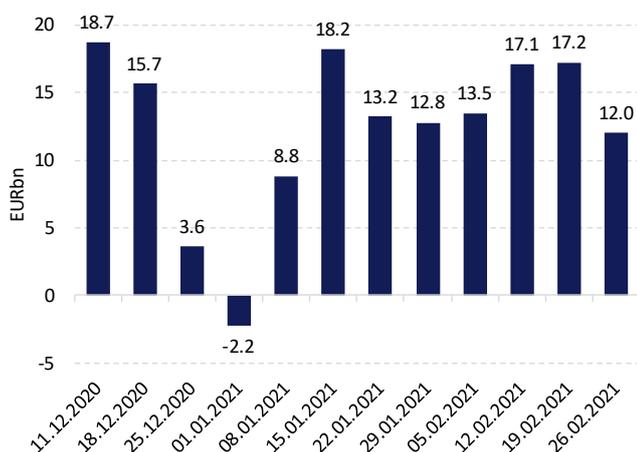
Estimated portfolio development

Assumed pace of purchases	Weekly net purchase volume	PEPP limit hit in ...
Average weekly net purchase volume so far	EUR 18.1bn	54 weeks (11.03.2022)

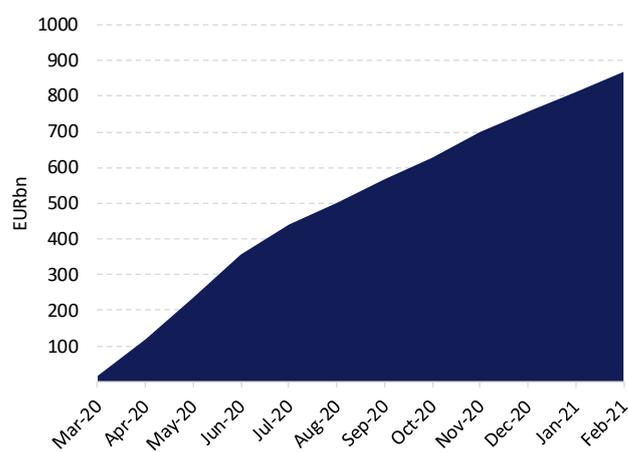
Monthly net purchases (in EURm)



Weekly purchases



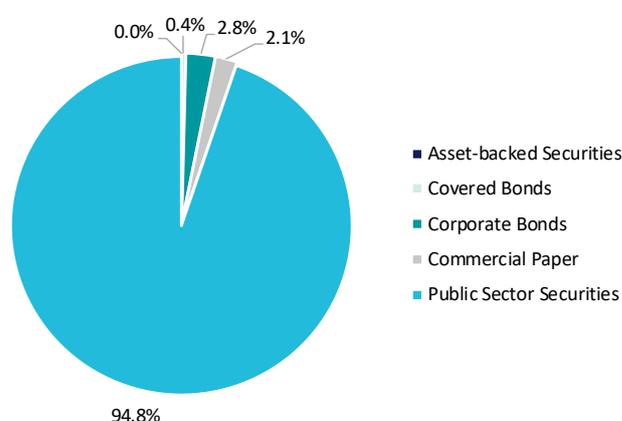
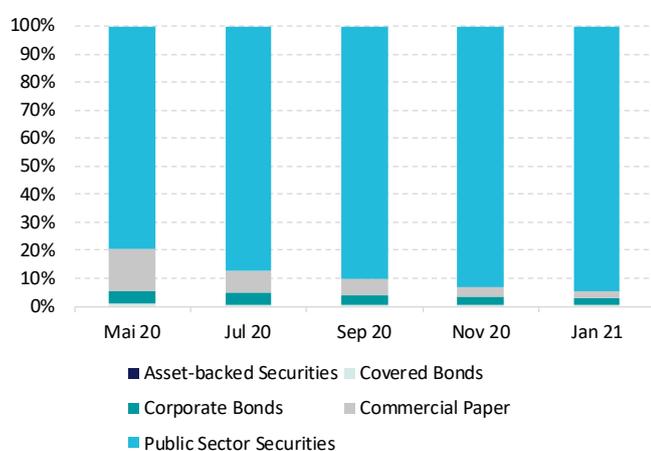
Development of PEPP volume



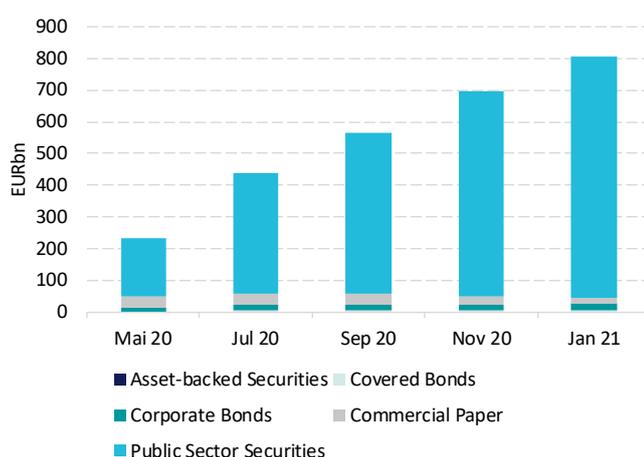
Holdings under the PEPP (in EURm)

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

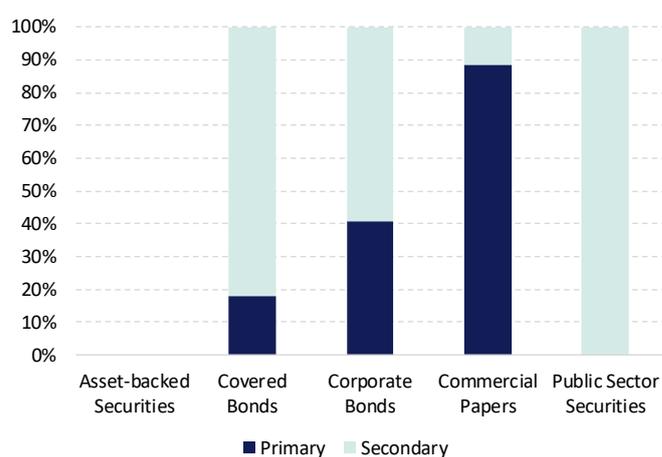
Portfolio structure



Portfolio development



Share of primary and secondary market holdings



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

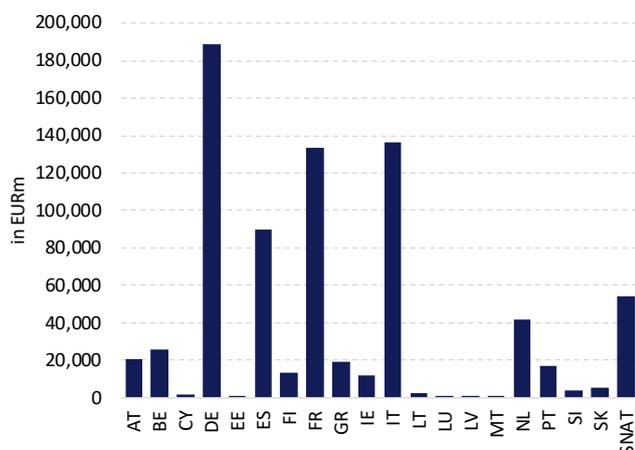
	Asset-backed securities		Covered bonds		Corporate bonds		Commercial papers	
	Primary	Secondary	Primary	Secondary	Primary	Secondary	Primary	Secondary
Holdings in EURm	0	0	557	2,563	9,092	13,223	14,663	1,948
Share	0.0%	0.0%	17.9%	82.2%	40.7%	59.3%	88.3%	11.7%

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

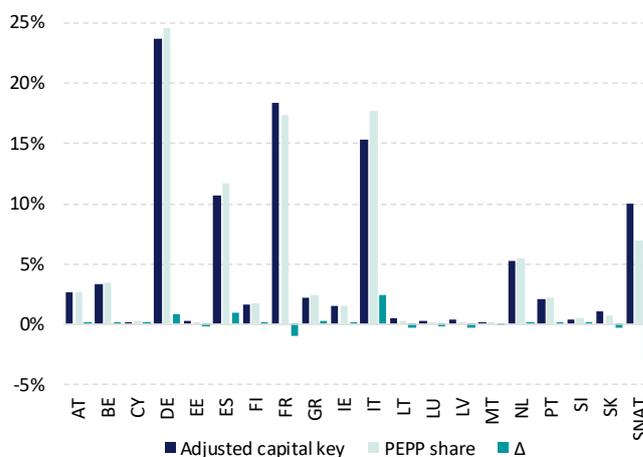
Breakdown of public sector securities under the PEPP

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

Distribution of public sector assets by jurisdiction



Deviations from the adjusted distribution key

¹ Based on the ECB capital key, adjusted to include supras ² Based on the adjusted distribution key³ Weighted average time to maturity of the bonds eligible for purchasing under the PEPP

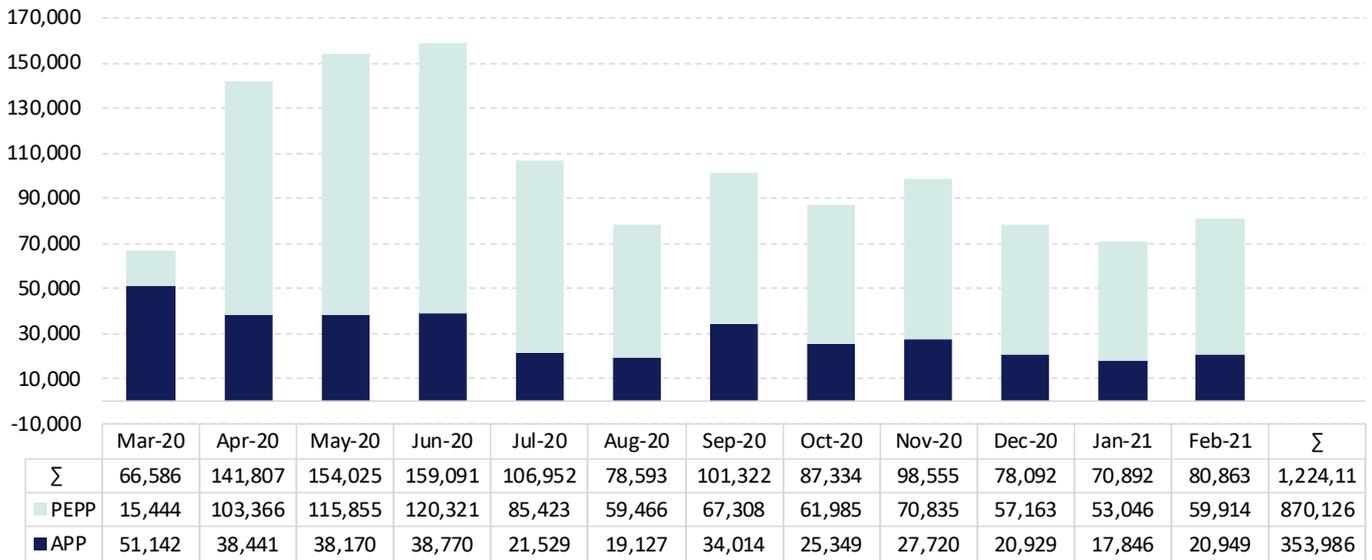
Source: ECB, Bloomberg, NORD/LB Markets Strategy & Floor Research

Aggregated purchase activity under APP and PEPP

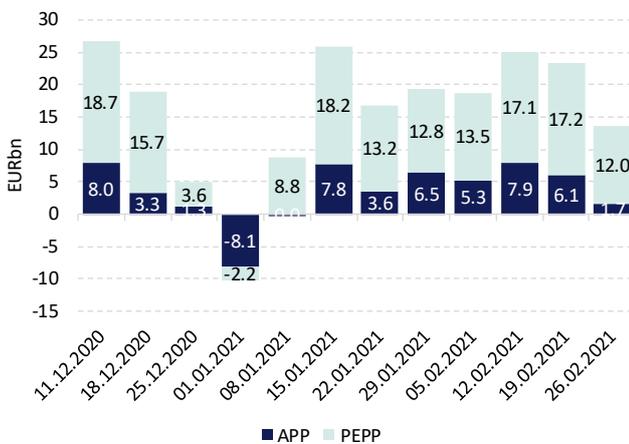
Holdings (in EURm)

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

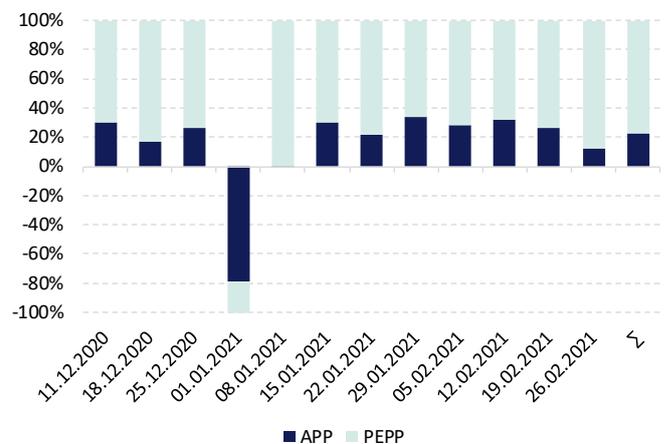
Monthly net purchases (in EURm)



Weekly purchases



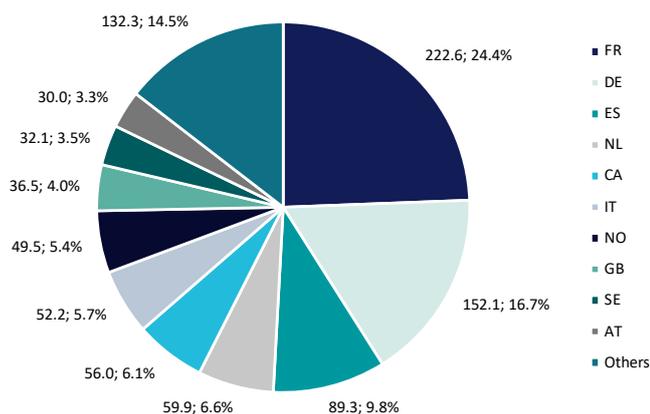
Distribution of weekly purchases



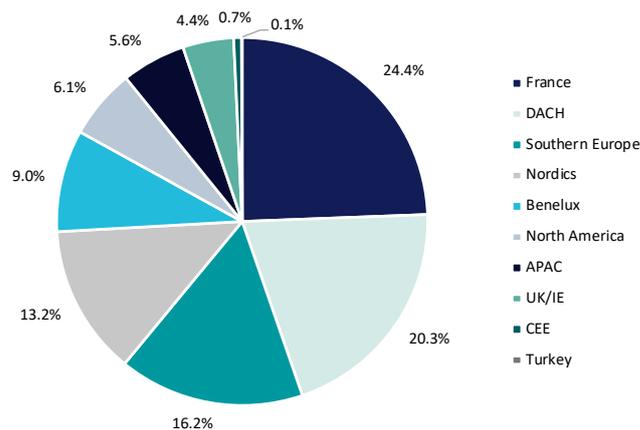
Source: ECB, Bloomberg, NORD/LB Markets Strategy & Floor Research

Charts & Figures Covered Bonds

EUR benchmark volume by country (in EURbn)



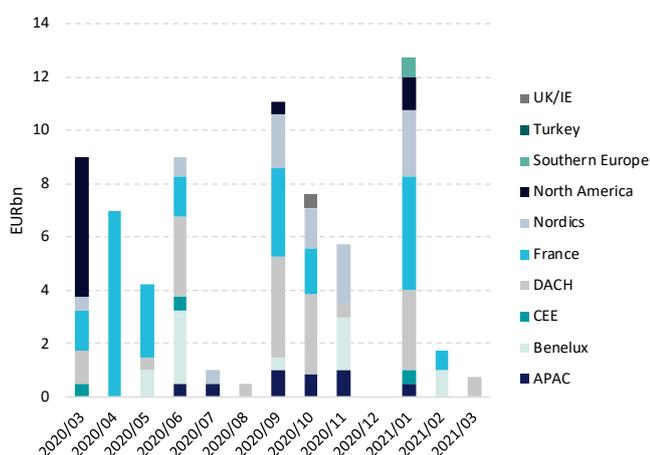
EUR benchmark volume by region (in EURbn)



Top-10 jurisdictions

Rank	Country	Amount outst. (EURbn)	No. of BMKs	There of ESG BMKs	Avg. issue size (EURbn)	Avg. initial maturity (in years)	Avg. mod. Duration (in years)	Avg. coupon (in %)
1	FR	222.6	204	7	0.96	10.1	5.5	1.17
2	DE	152.1	227	12	0.60	8.3	4.7	0.47
3	ES	89.3	72	3	1.13	11.4	3.9	1.86
4	NL	59.9	59	0	0.96	11.2	7.4	0.97
5	CA	56.0	47	0	1.16	6.0	2.9	0.30
6	IT	52.2	60	0	0.84	9.0	4.3	1.45
7	NO	49.5	56	7	0.88	7.2	3.8	0.56
8	GB	36.5	41	0	0.90	8.4	3.2	1.12
9	SE	32.1	38	0	0.84	7.5	3.5	0.60
10	AT	30.0	55	0	0.54	9.5	6.0	0.68

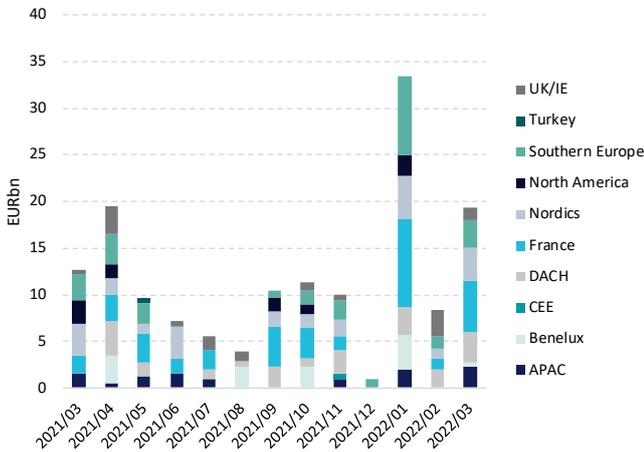
EUR benchmark issue volume by month



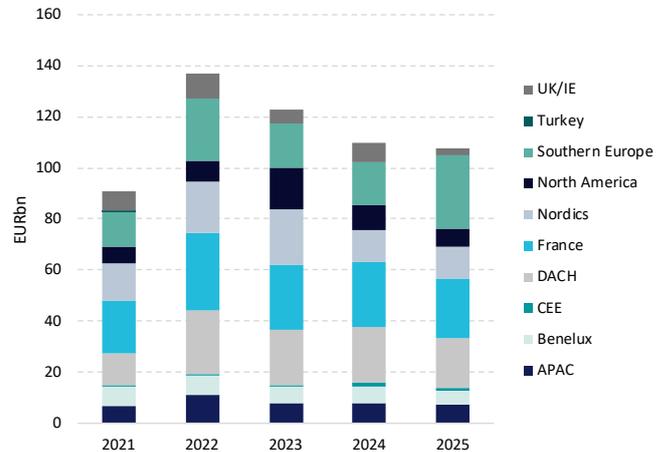
EUR benchmark issue volume by year



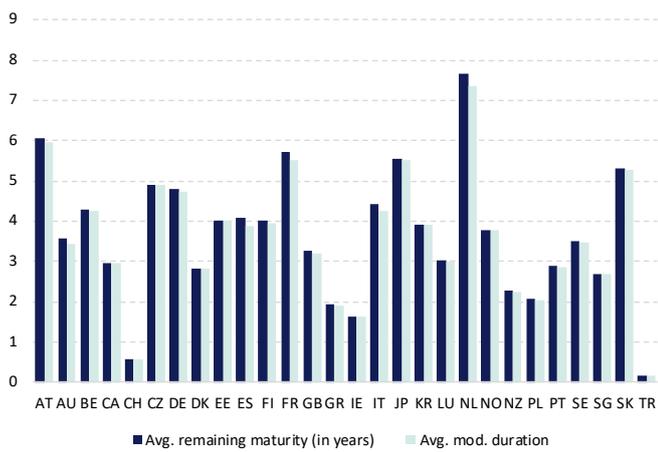
EUR benchmark maturities by month



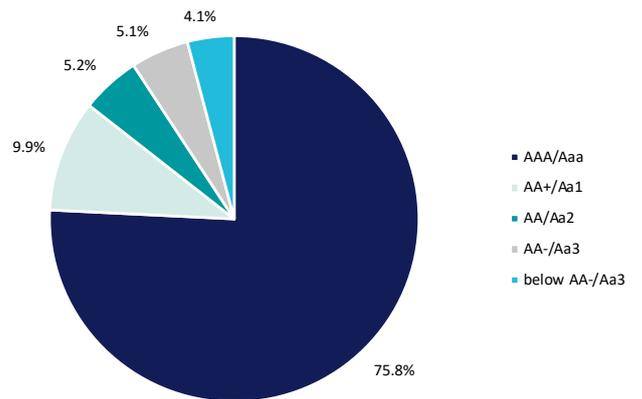
EUR benchmark maturities by year



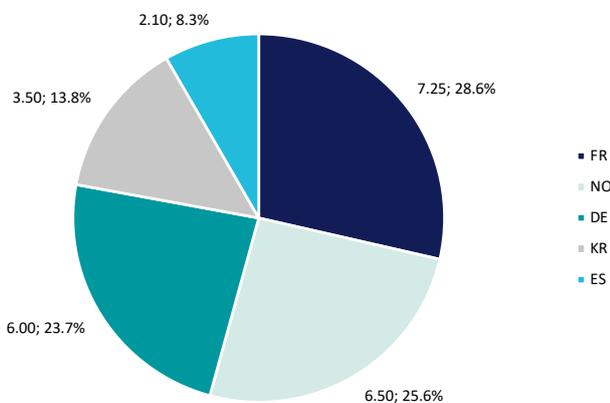
Modified duration and time to maturity by country



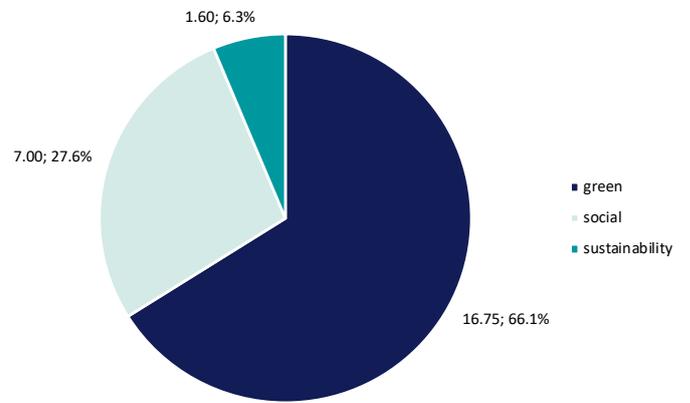
Rating distribution (volume weighted)



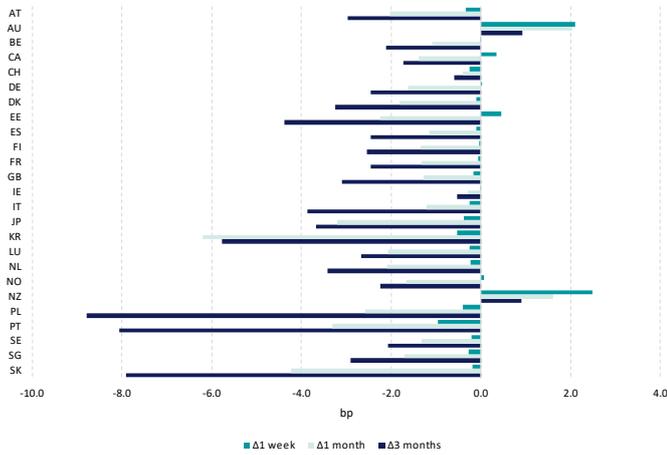
EUR benchmark volume (ESG) by country (in EURbn)



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



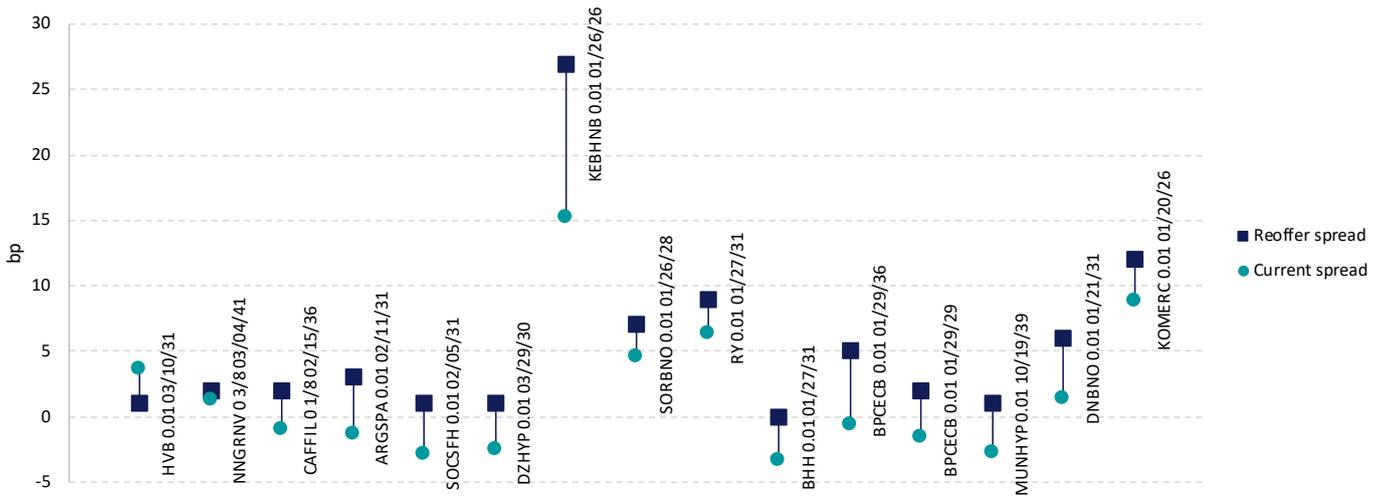
Spread development by country



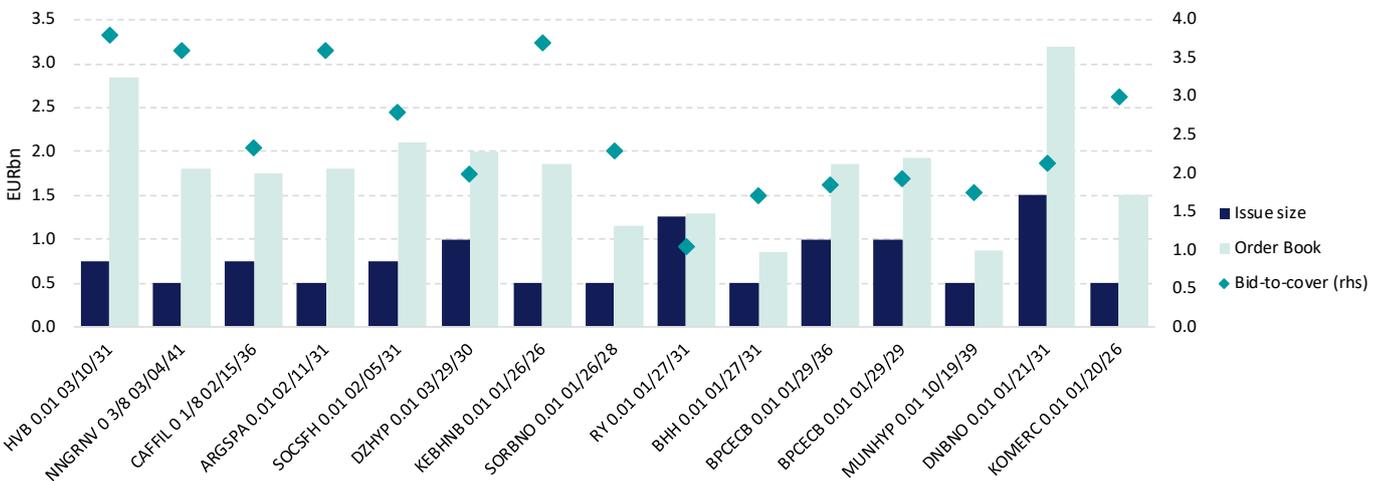
Covered bond performance (Total return)



Spread development (last 15 issues)

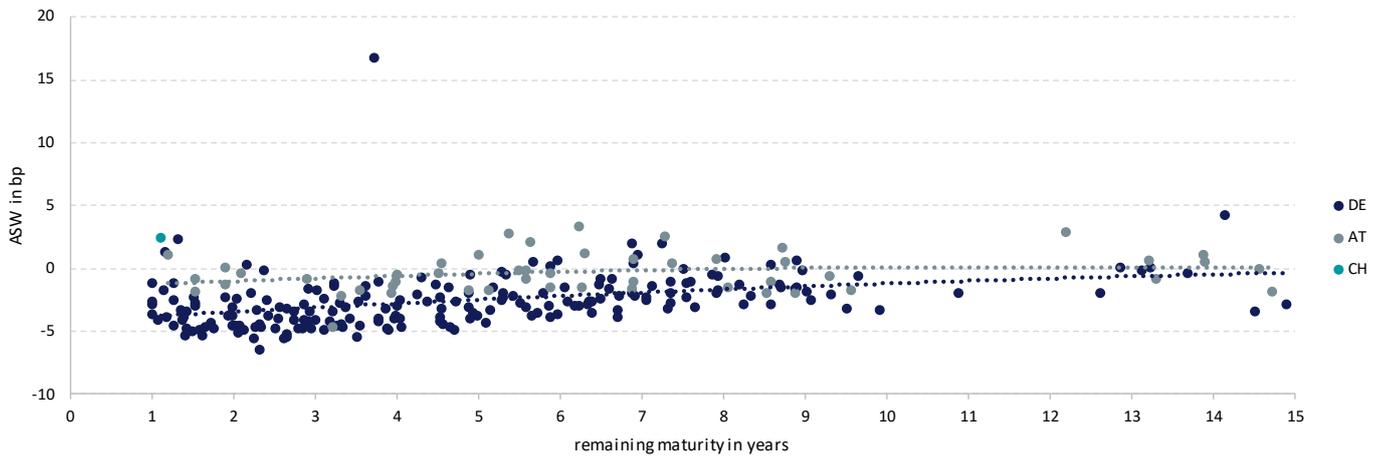


Order books (last 15 issues)

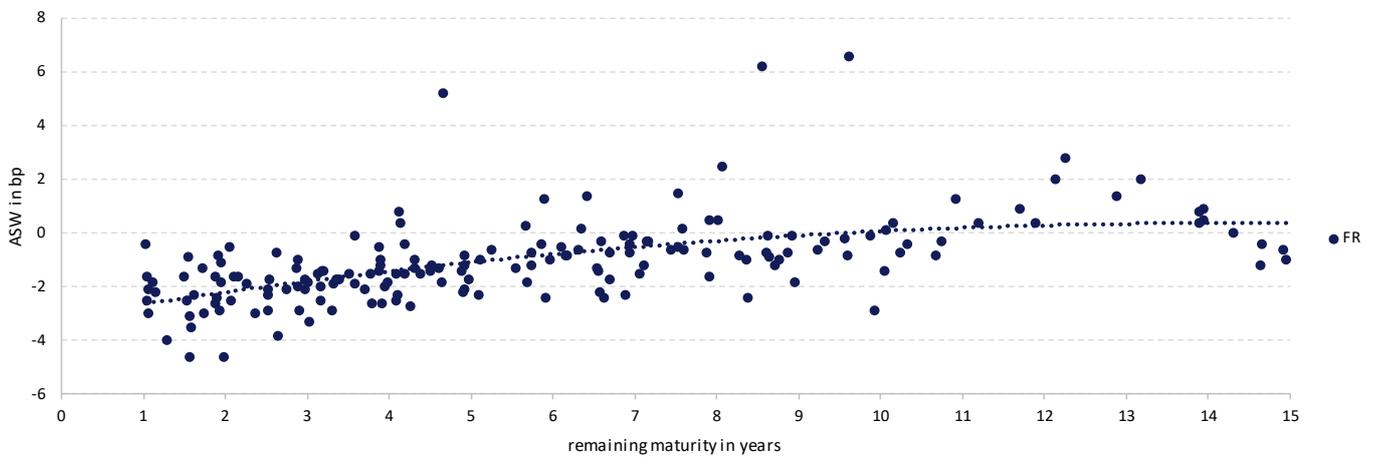


Spread overview¹

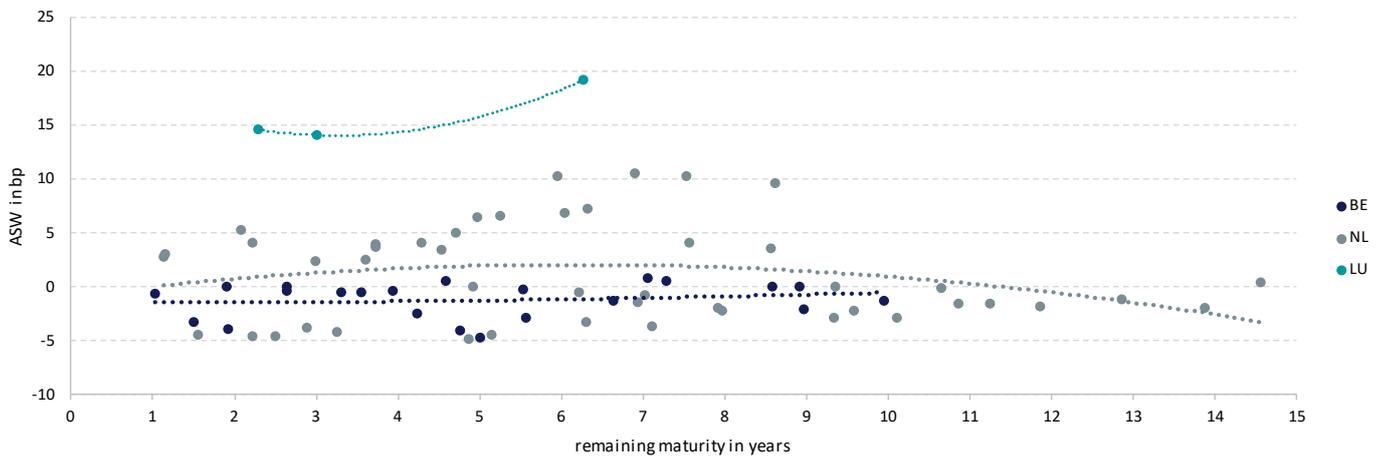
DACH



France

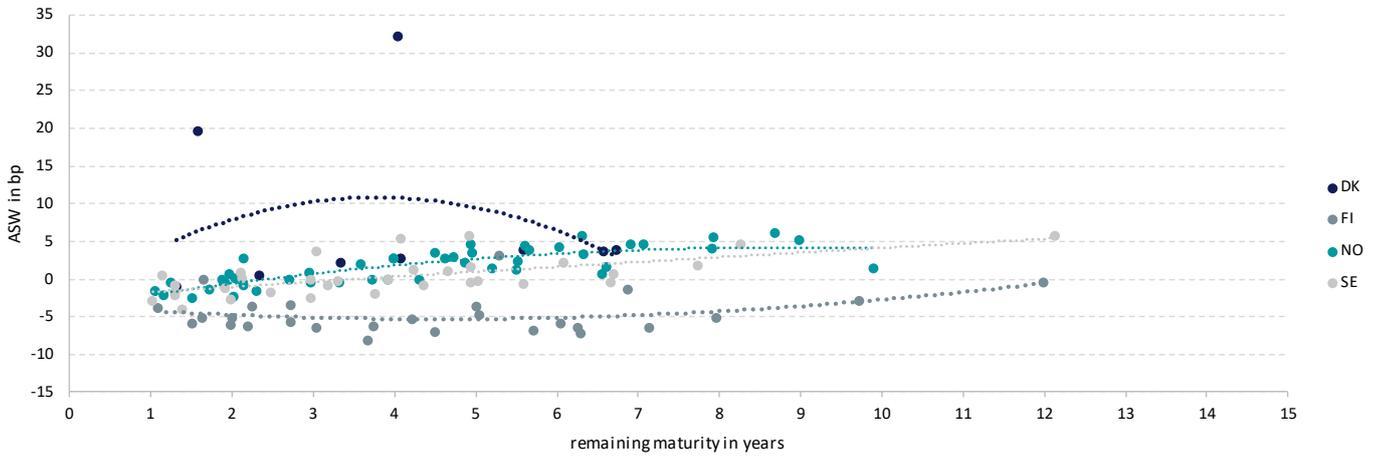


Benelux

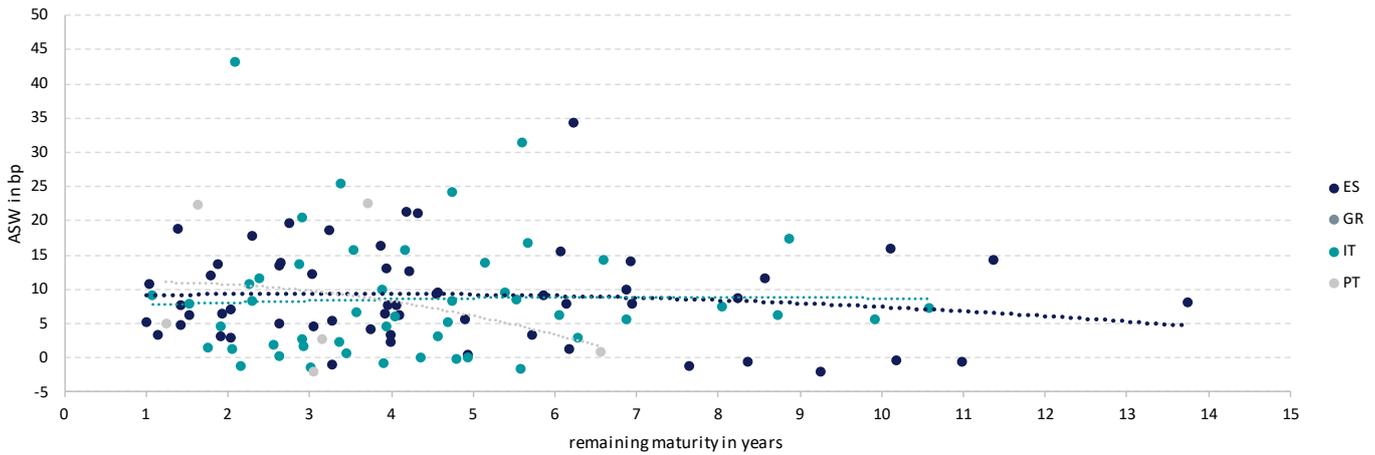


Source: Market data, Bloomberg, NORD/LB Markets Strategy & Floor Research ¹Time to maturity 1 ≤ y ≤ 15

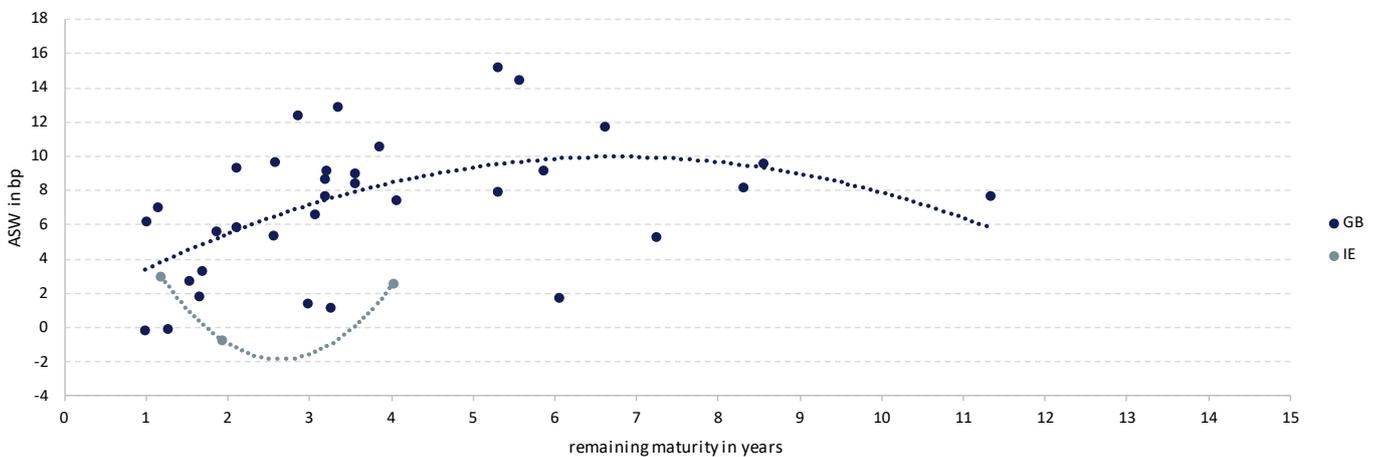
Nordics 🇩🇰 🇫🇮 🇳🇴 🇸🇪



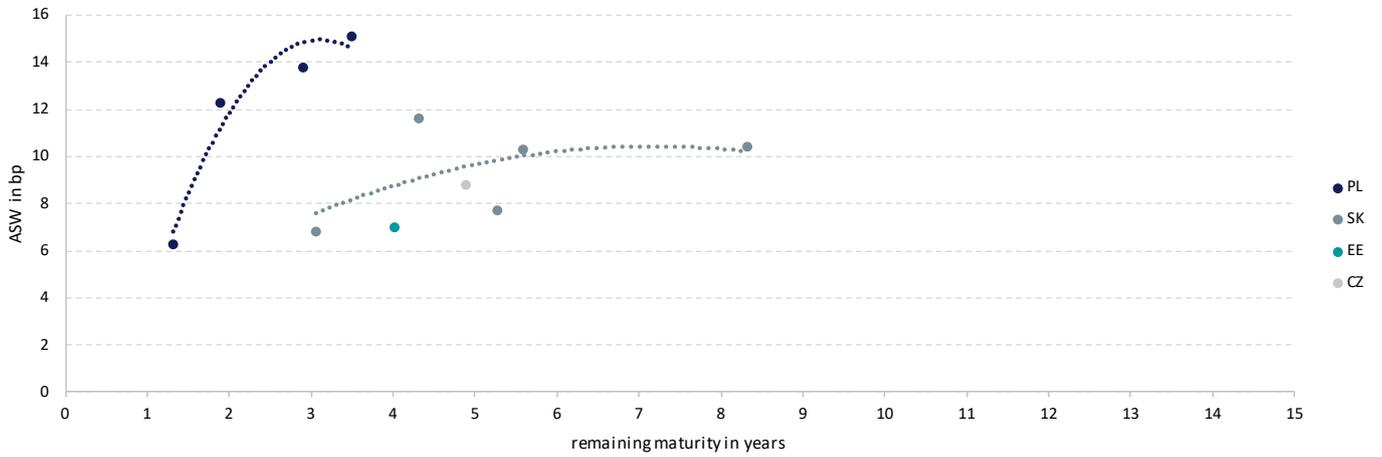
Southern Europe 🇪🇸 🇬🇷 🇮🇹 🇵🇹



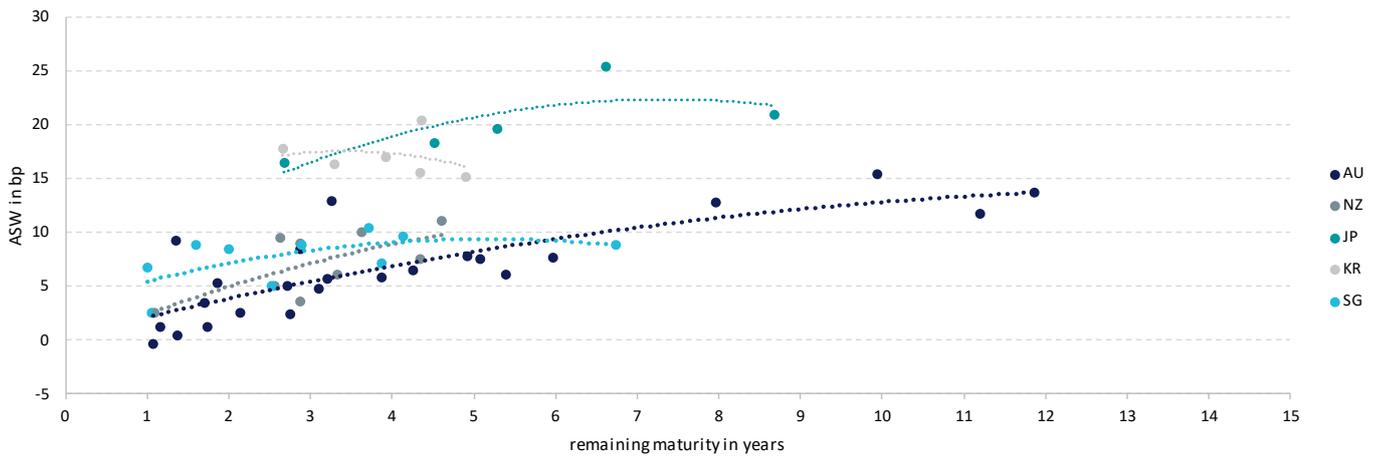
UK/IE 🇬🇧 🇮🇪



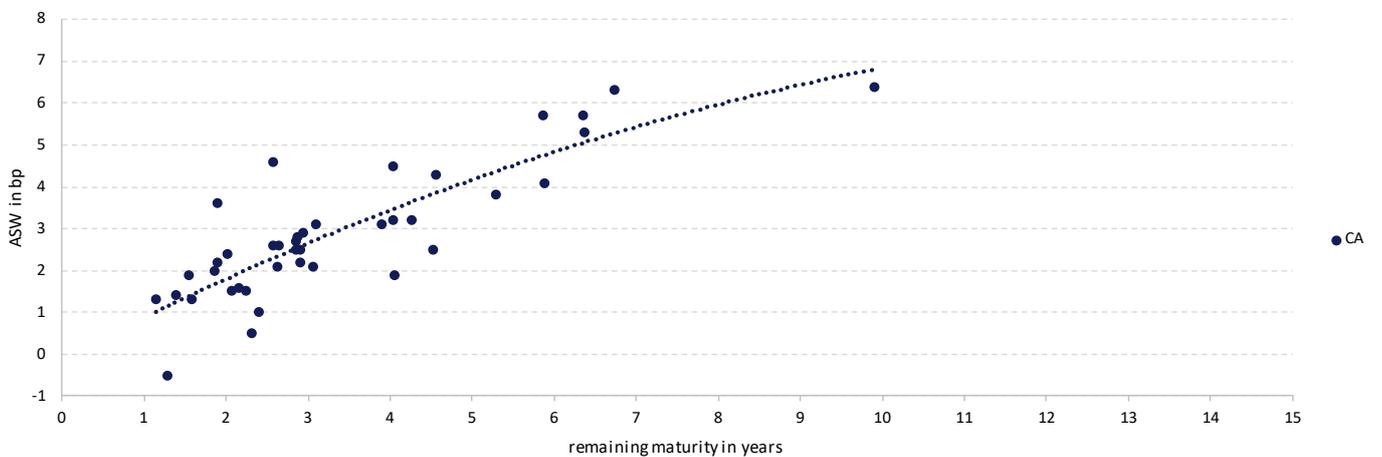
CEE 



APAC 



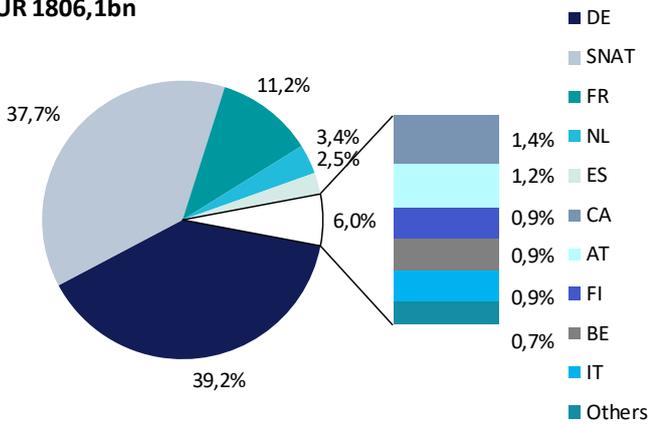
North America 



Charts & Figures SSA/Public Issuers

Outstanding volume (bmk)

EUR 1806,1bn



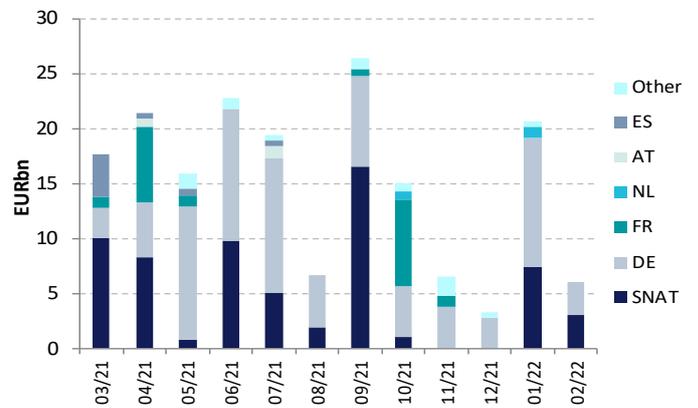
Top 10 countries (bmk)

Country	Vol. (€bn)	No. of bonds	ØVol. (€bn)	Vol. weight. ØMod. Dur.
DE	708,6	554	1,3	6,7
SNAT	680,1	179	3,8	7,8
FR	202,8	140	1,4	5,3
NL	61,7	63	1,0	6,5
ES	45,1	53	0,9	4,3
CA	25,0	18	1,4	5,5
AT	22,5	24	0,9	5,2
FI	16,5	21	0,8	6,1
BE	16,3	19	0,9	14,0
IT	15,8	20	0,8	5,9

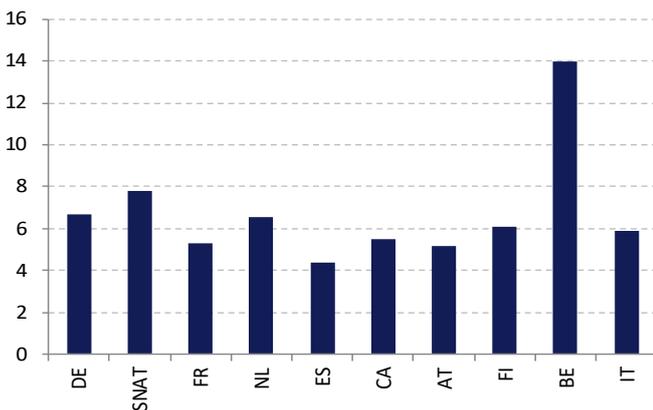
Issue volume by year (bmk)



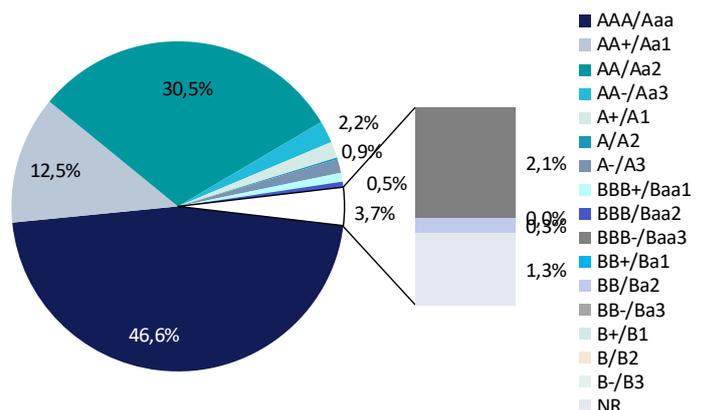
Maturities next 12 months (bmk)



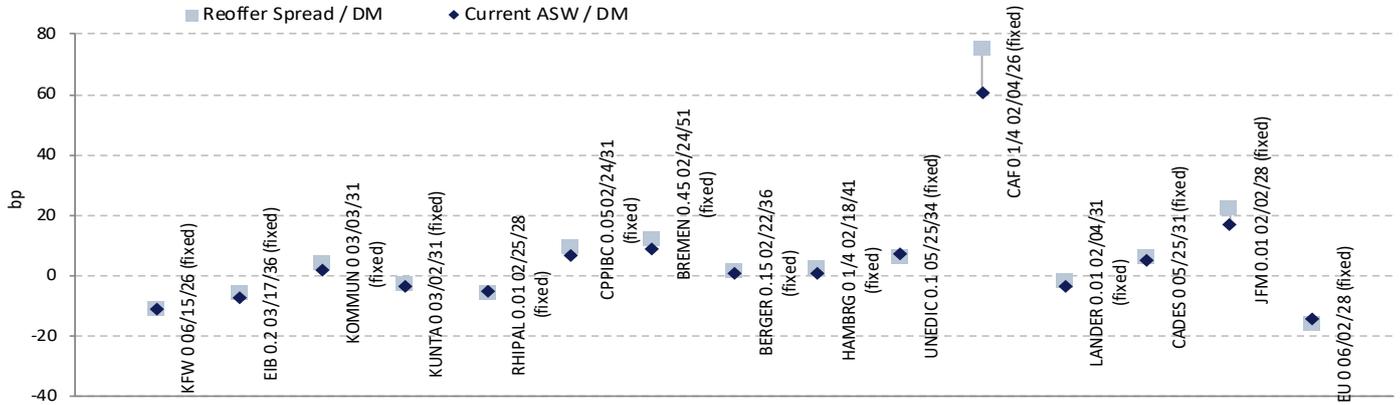
Avg. mod. duration by country (vol. weighted)



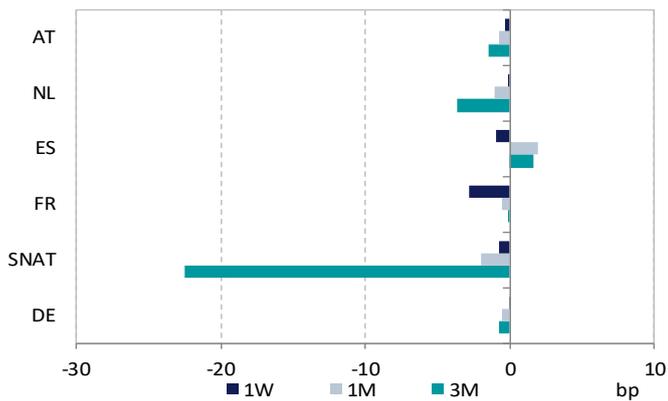
Rating distribution (vol. weighted)



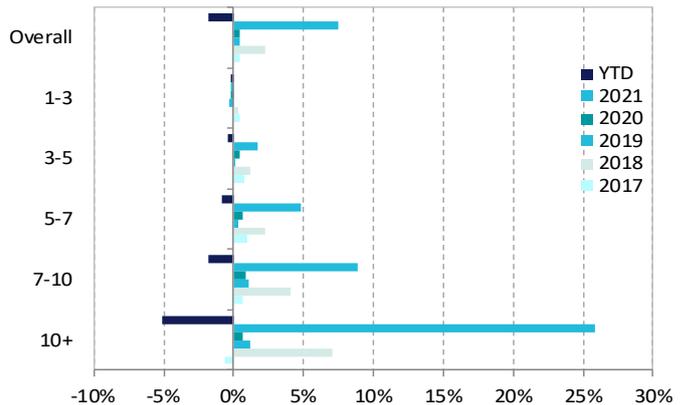
Spread development (last 15 issues)



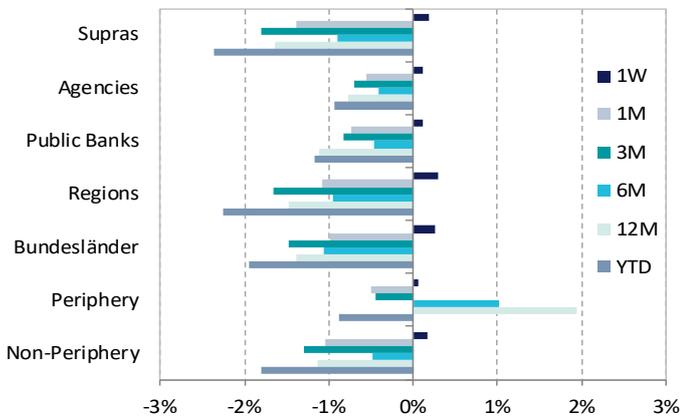
Spread development by country



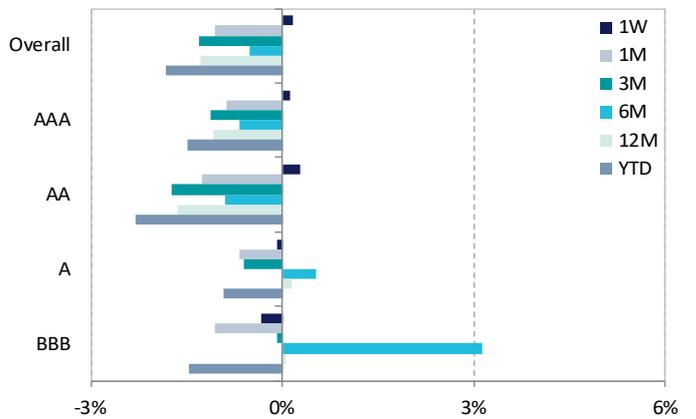
Performance (total return)



Performance (total return) by regions

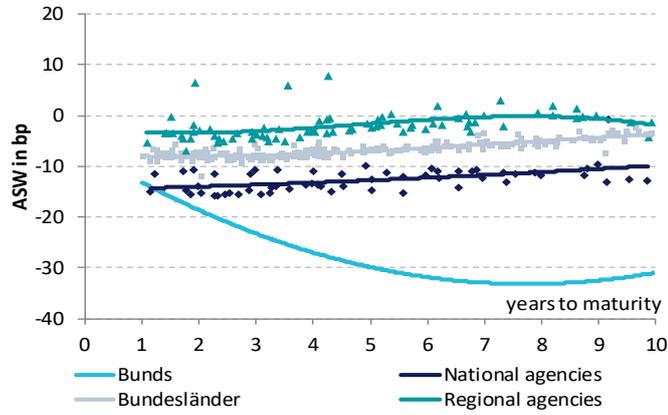


Performance (total return) by rating

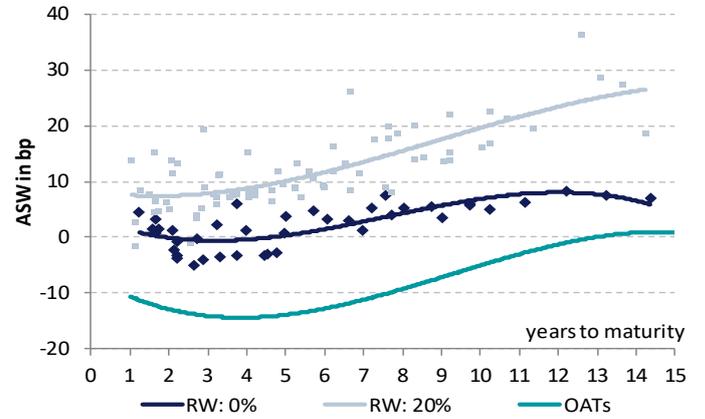


Source: Bloomberg, NORD/LB Markets Strategy & Floor Research

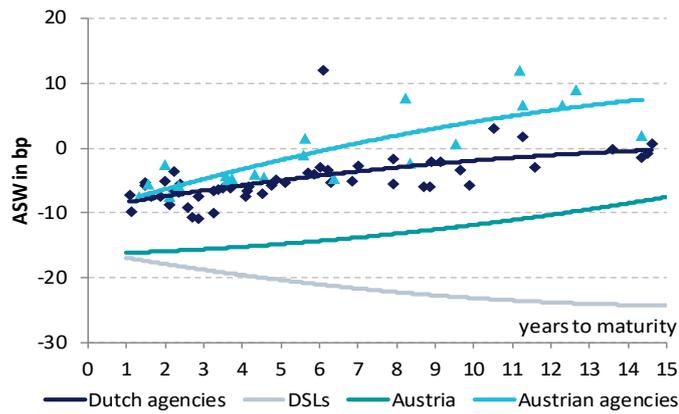
Germany (by segments)



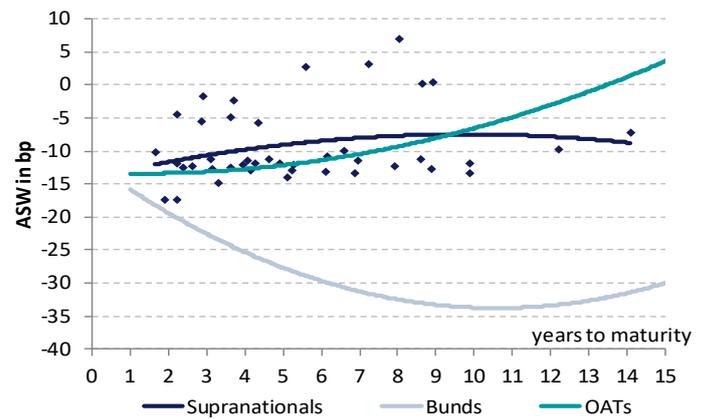
France (by risk weight)



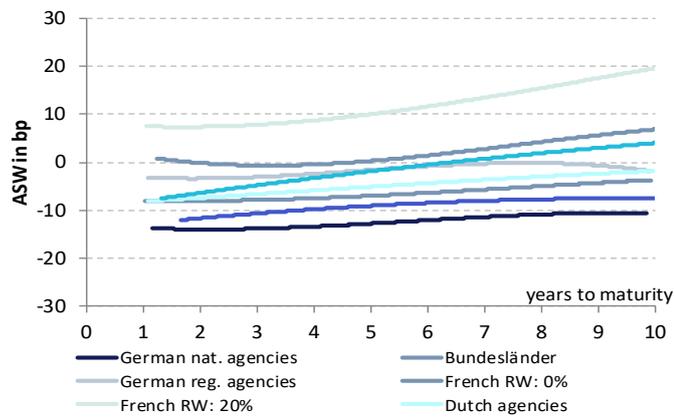
Netherlands & Austria



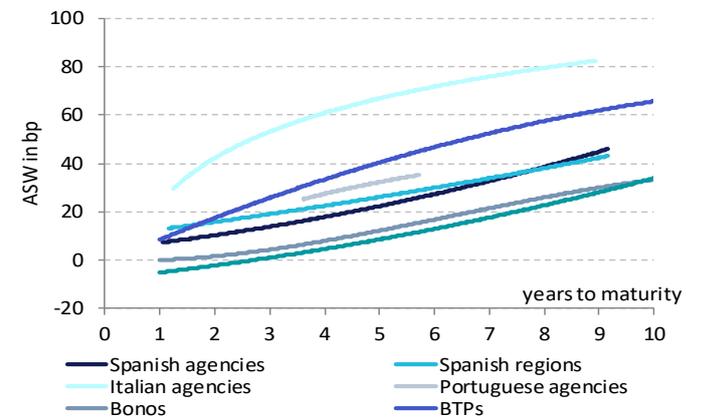
Suprationals



Core



Periphery



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

Appendix

Overview of latest Covered Bond & SSA View editions

Publication	Topics
07/2021 ♦ 24 February	<ul style="list-style-type: none"> An overview of the EUR sub-benchmark segment ECB: crowding-out effects take hold PEPP vs. PSPP: Similarities and differences
06/2021 ♦ 17 February	<ul style="list-style-type: none"> Insights into the iBoxx EUR Covered Development of the German property market
05/2021 ♦ 10 February	<ul style="list-style-type: none"> PEPP reporting: upswing in public sector assets continues; covered bonds inconsequential
04/2021 ♦ 03 February	<ul style="list-style-type: none"> Argenta Spaarbank expands Belgian market for EUR benchmarks An overview of the Fitch covered bond universe January 2021 packs a punch to kick off the new year
03/2021 ♦ 27 January	<ul style="list-style-type: none"> An unusual – albeit expected – start to the year? A look at USD benchmarks ESM reform – restructuring continues
02/2021 ♦ 20 January	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> TLTRO III: ECB extends tender and also raises the threshold
47/2020 ♦ 09 December	<ul style="list-style-type: none"> Fourth and final round of PEPP reporting in 2020 Investment alternative: Paris metropolitan area (IDF and VDP)
46/2020 ♦ 02 December	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> 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

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



Dr. Norman Rudschuck

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



Dr. Frederik Kunze

Covered Bonds
 +49 511 361-5380
 +49 172 354 8977
frederik.kunze@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 Finanzdienstleistungsaufsicht; 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 as 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 March 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
-------------------	------	----------------	-----------	-------