



Covered Bond & SSA View

NORD/LB Markets Strategy & Floor Research



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Agenda

Market overview	
Covered Bonds	3
SSA/Public Issuers	5
PEPP reporting: increased pace of purchases in Q2	8
Covered bonds vs. senior unsecured bonds	15
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

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Market overview Covered Bonds

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Primary market: four interesting deals

Over the past five trading days, a total of four EUR benchmarks were brought to market. AEGON Bank from the Netherlands was first out of the starting blocks with its first ever soft bullet benchmark (cf. Covered Bond & SSA View on 12 May), and at 15 years, the bank directly selected a term to maturity that would not have been possible for a bond in CPT format. After NN Bank, AEGON Bank is now the second Dutch issuer to switch from CPT deals to soft-bullet transactions. In actual fact, another institute in the form of Achmea Bank is also on the cusp of making the move from CPT bonds to soft-bullet benchmarks (cf. Covered Bond & SSA View on 10 February). Ultimately, on this occasion AEGON Bank opted for a volume of EUR 500m with pricing fixed at ms +8bp. The final books amounted to EUR 1.1bn, meaning that the deal was more than twice oversubscribed. At the beginning of the current trading week, the Swedish Covered Bond Corporation (SCBC) became the first Swedish institute to make an appearance on the market for EUR benchmarks in 2021. Together with the Stadshypotek deal from mid-November 2020, it was also just the second EUR benchmark from this Scandinavian country since May 2019. For the deal, a total of EUR 1.0bn changed hands for long eight years. At ms +7bp, pricing was a single basis point tighter than the guidance. The order book for this transaction also totalled EUR 1.1bn, meaning that this issuance was, in contrast, only marginally oversubscribed. Yesterday (08.06.), Eika Boligkreditt placed its first EUR benchmark in sustainable format. The green covered bond worth EUR 500m initially went into the marketing phase in the area of ms +10bp before finally being priced three basis points tighter at ms +7bp. Demand for this deal reached EUR 1.25bn, which could well have been due to the ESG format, since such transactions include not only the "classic" covered bond investors but also attract buyers pursuing sustainable investment approaches. Following this debut deal by Eika Boligkreditt, six of the seven EUR benchmark issuers in Norway have now issued green covered bonds as well. Only Sbanken does not currently have any outstanding EUR benchmarks in the ESG segment. At EUR 7.0bn in outstanding ESG benchmarks, Norway has therefore – for the time being - claimed second place outright behind France (EUR 9.5bn) in the ESG segment for EUR benchmarks. In third place is Germany with EUR 6.5bn. In addition, it should be mentioned that the Bank of New Zealand (BNZ) also approached its investors yesterday. Together with ASB Finance and Westpac, three banks from New Zealand have therefore been active on the market over the past weeks. However, prior to this spate of issuance activity, the last EUR benchmarks from New Zealand date back to January 2019. In fact, BNZ's appearance on the market brings to an end an absence spanning three years. On this occasion, the bank opted for a deal worth EUR 850m over seven years. Based on decent demand of EUR 1.2bn, the bond tightened by two basis points during the book-building.

Issuer	Country	Timing	ISIN	Maturity	Size	Spread	Rating	ESG
Bank of New Zealand	NZ	08.06.	XS2353483733	7.0y	0.85bn	ms +13bp	AAA / Aaa / -	-
Eika Boligkreditt	NO	08.06.	XS2353312254	10.0y	0.50bn	ms +7bp	- / Aaa / -	Х
SCBC	SE	07.06.	XS2353010593	8.8y	1.00bn	ms +7bp	- / Aaa / -	-
AEGON Bank	NL	02.06.	XS2351073098	15.0y	0.50bn	ms +8bp	- / - / AAA	-

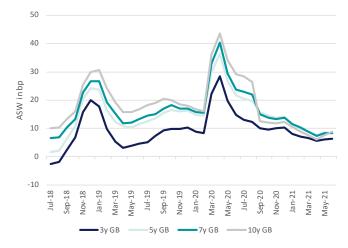
Source: Bloomberg, NORD/LB Markets Strategy & Floor Research, (Rating: Fitch / Moody's / S&P)



United Kingdom: Fitch comments on influence of the pandemic on UK covered bonds

The ratings experts at Fitch have discussed the influence of the coronavirus pandemic on UK covered bonds as part of a Peer Review. As part of its own analysis, Fitch expects the UK's economic output to grow by +5% in 2021, which is mainly due to the signed Brexit agreement and success of the vaccination programme in the country. At their peak in June 2020, payment holidays reached a ratio of 1:6 (i.e. repayments suspended for one in every six mortgage loans), although by January 2021 this had fallen to just 1.6% of mortgage loans. Fitch goes on to explain that after payment holidays were suspended, the majority of mortgage loans continued under the same arrangements without any disruption, which suggests that home-owners were acting with great caution in making use of this option. Increases in loans in arrears, for which Fitch has forecast growth of 1%-2%, should not lead to problems in terms of ratings, in particular for those programmes rated AAA, as issuers tend to regularly remove non-performing loans from the cover pools at regular intervals anyway. Fitch also regards the expected downturn on the property market – triggered as a result of the expiration of tax incentives (key phrase here being the reinstatement of Stamp Duty) – as being far from an overwhelming challenge, which it explains not least by citing the low share of loans with comparatively high LTV ratios. Fundamentally speaking, we would share this assessment of the situation put forward by the ratings experts at Fitch with regard to the stability of UK covered bonds. In terms of primary market activities in the EUR benchmark segment, however, the dynamic is more than a little lacklustre at present. In the current year, only the Nationwide Building Society has so far been active with a benchmark-sized deal on 26 April (NWIDE 0 1/2 05/05/41; 20y; EUR 500m), while in 2020 just two issuers approached investors in this segment: Yorkshire Building Society on 06 October (YBS 0.01 10/13/27; 7y; EUR 500m) and Santander UK (SANUK 0.05 01/12/27; 7y; EUR 1.25bn) back on 08 January. For 2021 as a whole, we anticipate a total issuance volume of EUR 2.0bn. When taking maturities across the full year (EUR 13.1bn) into account, this forecast still implies a negative net supply of EUR -11.1bn. Overall, we continue to regard the spread level for EUR benchmarks from the UK as excessively high, a situation that is not least reflected by a direct comparison of issuance activity from Canada.

ASW spread United Kingdom (GB)



Spread difference: GB vs. CA



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



Market overview SSA/Public Issuers

Author: Dr Norman Rudschuck, CIIA

Focus on the ECB

In today's issue we again devote <u>an article</u> to the business practices of the European Central Bank. In particular, we look through the rear-view mirror and analyse the latest data in the context of reporting on the Pandemic Emergency Purchase Programme (PEPP). These facts and figures are published every two months and are always subject to some criticism. Among other things, the ISIN limits under the PEPP are still too unclear. We are also looking ahead and forecast reduced weekly PEPP purchases in Q4 2021, with a further reduction in Q1 2022. Last week we already focused on tomorrow's ECB Governing Council meeting and the courses of action open to the ECB, which are also debatable.

Further update: NextGenerationEU

Yesterday, the announced European Union investor call (Bloomberg ticker: EU) on the topic of "NextGenerationEU" took place. On 1 June, as we reported, the funding update for the rest of the year was published after all EU member states had ratified the NGEU programme. On 4 June, the EU then sent out its RfP for the upcoming debut transaction. Without further knowledge of the EU's plans, the appropriate window for such a transaction, for example EUR 10bn for ten years, seems to have materialised from the coming calendar week starting on 14 June. The first three transactions before the summer break are to be held as a syndicate and from September onwards also as an auction. The aim is to raise up to EUR 80bn by the end of the year. In addition, there will be at least EUR 20bn in new EU bills from September, although we are actually expecting far more here. By the end of 2026, the EU will have raised EUR +/-800bn on the capital market (i.e. without bills). Of these, 30% will be green bonds (approx. EUR 250bn). In total, EUR 407.5bn in grants and EUR 386bn in loans are planned. In addition, an average of EUR 150bn per year is forecast, although this will certainly be higher in 2022/23 and come in below this figure in 2025/26, according to our estimates. Regardless of the exact values or percentages, the EU will be the largest issuer in the supranational segment in just a few years and will have overtaken many sovereigns. This applies both to the primary market issues per calendar year and to the total market depth. The maturities of the NGEU bonds were also confirmed at three to a maximum of 31 years and are known from the SURE programme (Social Bonds). There, the average announced term was 15 years. This need not be the case here. Moreover, the framework does not have to be exhausted to finance investments in green and digital measures or to haul the economy out of recession. Part of the funding is distributed to member states in the form of grants, which are repaid from the EU's common budget and new taxes. Before the programme even starts, there are calls for a permanent mechanism of joint indebtedness. Germany, Finland and the Netherlands in particular oppose the very idea. The next update is due in September with the 2022 figures and details of the first disbursements.

State elections in Saxony-Anhalt

We prefer not to comment on political issues, so with this in mind we shall focus directly on financial aspects in the wake of the state elections in Saxony-Anhalt. The main features of Saxony-Anhalt's policies are largely determined by the state budgets. The local Ministry of Finance plans and controls the use of financial resources for public services with the help of the budget. The state government submits the draft budget bill to the state parliament. Parliament deliberates and approves the budget. Each budget is for one calendar year; for some time now, budgets spanning two years have regularly been drawn up and adopted at the same time (double budget). The resolution by parliament enters into force as budget legislation upon promulgation. Whether there will be a government reshuffle or even new arrangements in parliament will now become clear in the aftermath of the election. It remains to be seen to what extent there will then be a stocktake by the acting parties and/or a supplementary budget. We therefore do not expect SACHAN, to use the Bloomberg ticker for this issuer, to issue larger bonds on the capital market for the time being. In March, EUR 500m (2051) and EUR 1bn (2031) were already raised on an anticipatory basis.

Hungarian Development Bank (MFB)

A rare guest in the EUR benchmark segment is the Hungarian development bank MFB, Magyar Fejlesztési Bank. It was founded in 1991 and serves as a kick-starter for the Hungarian economy by providing loans to Hungarian companies and public institutions. The state of Hungary is the 100% owner of MFB and executes the share rights through a ministry. In addition, the MFB also served as a vehicle to implement the "Széchenyi 2020" plan agreed between the EU and Hungary. The initiative was intended to create one million new jobs before the coronavirus pandemic and to strengthen transport development, the fishing industry and the agricultural sector. In total, around EUR 22bn was available for the programme, a large share of which was provided by various EU institutions (e.g. ERDF, ESF and EMFF). The significant economic support from the EU is also evident in the numerous project-based loans granted by the CEB, EIB, KfW and NIB. Furthermore, MFB has an explicit state guarantee from the Hungarian state in the amount of HUF 1,900bn (EUR equivalent: 5.45bn). The amount of the guarantee is confirmed or reassessed by the ministry from year to year. Replacement costs for foreign currencies and for interest rate swaps are also covered by the guarantee. Refinancing in foreign currencies with a term of more than one year must therefore be approved by the responsible minister. One focus is on advising Hungarian companies in their efforts to secure European funding. To implement this goal, the MFB has created more than 600 information centres. Since 2001, student loans have been granted at low interest rates, and the student's financial background plays no part in the award process. MFB also has a venture capital holding, which provides equity to Hungarian start-ups and new companies. The growing Garantiqa Hitelgarancia Zrt. secures loans, especially for small businesses, and engages in factoring. Another subsidiary deals with mobile payments for Hungarian local transport and tolls on motorways. For municipalities and local governments, MFB provides financing for infrastructure. The current deal came in at five years at ms +70bp based on EUR 500m (WNG) following initial investor calls. The bond was more than three times oversubscribed and subsequently already narrowed considerably. IPT were around ms +90bp.

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Primary market

Today's trading week report (Wednesday to Tuesday) starts with two RfPs. The first was sent by the EFSF last week for a deal to be placed this week, while the second came from the EU (see above) for the NGEU debut and was therefore sandwiched between the funding plan (01.06.) and the recent investor call (08.06.). We expect a mandate as of next Monday, with pricing certainly finalised in the coming calendar week that commences on 14 June. Back to the EFSF: With its tap (EUR 2.5bn), it has now completed, or rather exceeded, its Q2 funding (EUR 7bn). A 2024 bond was topped up by the aforementioned amount at ms -6bp. The order book came to more than EUR 9.4bn. As only EUR 2bn had originally been envisaged, the funding requirement in Q3 will be reduced by the excess amount of EUR 500m to EUR 2bn. In Q4, the issuer will no longer be represented on the market as planned, so there will be enough room for the EU and its NGEU bonds. Another interesting issuer came from Belgium: LCFB launched a social bond (14y) at OLO +31bp. The deal was almost three times oversubscribed and accordingly tightened by three basis points compared with the guidance. Communauté française de Belgique, to use this issuer's full name, is rated A1 by Moody's, and here we would refer you to our annual update on Belgian regions for further details. The deal by Agence Française de Développement also fell into the ESG segment. Accompanied by investor calls, a seven-year sustainability bond was announced. At EUR 1.5bn, it is even a weighty jumbo, with order books at around EUR 2.75bn. The bond came in at OAT +18bp (vs. FRTR 0.75% 11/25/28), two points tighter than the guidance indicated. The third ESG deal of the week also came from France: CADES raised EUR 4bn for a five-year social bond. Pricing came in at OAT +15bp, while the order books stood at more than EUR 9.4bn. Nevertheless, there was only one basis point movement in the spread versus the guidance. Two other deals came from the Free and Hanseatic City of Hamburg and the Asian Development Bank respectively. HAM-BRG raised EUR 500m (7y) at ms -5bp, in line with the guidance; no information regarding the books was publicly disclosed. ASIA, to use the other issuer's ticker, raised EUR 1bn for ten years at ms +1bp. The guidance was set at this price and the books seem to have been filled to precisely this level. Two more taps were also still to be recorded – firstly, from the beautiful state of Lower Saxony (EUR 125m in a 2029 maturity) and EUR 400m in an EIB Climate Awareness Bond (maturity: 2026; ms -13bp). Having already successfully placed two social bonds (AUD) with maturities of five and ten years, NRW.BANK (Aa1/AA/AAA with stable outlooks in each case) is preparing its market debut in EUR. A volume of EUR 500m (WNG) for 20 years is planned. NRWBK's social bond programme follows the poolto-bond approach. The asset pool consists of loans disbursed in the period from 2018 to 2020 and originating from existing funding programmes (e.g. NRW.BANK. special programmes on "Residential Property", "Universal Credit" and "Good Schools 2020").

	grannies on Residentian roperty, onversarereare and Good Schools 2020 J.										
Issuer	Country	Timing	ISIN	Maturity	Size	Spread	Rating	ESG			
ASIA	SNAT	07.06.	XS2353057123	10.0y	1.00bn	ms +1bp	AAA / Aaa / AAA	-			
CADES	FR	07.06.	FR0014004016	5.4y	4.00bn	ms +1bp	AA / Aa2 / -	Х			
HAMBRG	DE	07.06.	DE000A2LQPJ6	7.0y	0.50bn	ms -5bp	AAA / - / -	-			
AGFRNC	FR	07.06.	FR0014003YN1	7.4y	1.50bn	ms +8bp	AA / - / AA	Х			
MAGYAR	Other	02.06.	XS2348280707	5.0y	0.50bn	ms +70bp	BBB / - / -	-			
LCFB	Other	02.06.	BE0002800812	14.0y	0.50bn	ms +28bp	-/A1/-	Х			

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



Cross Asset PEPP reporting: increased pace of purchases in Q2

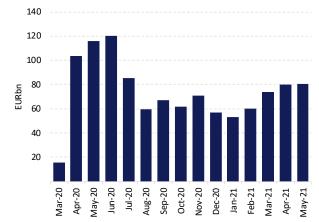
Authors: Dr Frederik Kunze // Dr Norman Rudschuck, CIIA

A year of PEPP reporting: still no prospect of transparency for maturities

Having examined the first full year of purchasing activity under the pandemic programme in our last report on the PEPP (see Covered Bond & SSA View dated 14 April 2021), the anniversary of the ECB's bi-monthly reporting on this programme was reached with the insight published at the end of May (see <u>ECB tracker</u>), since the ECB provided a more detailed insight into its PEPP, which had been launched in March 2020, for the first time at the end of May 2020. While we rate the "transparency offensive" launched at the time positively in principle, as is so often the case, any consideration in the light of day also reveals shadows. The ECB had promised that it would report as it does on the APP, but it has never delivered as far as expected maturities under the PEPP are concerned. With maturities under the programme totalling EUR 138.6bn to date and the highest figure to date of EUR 12.1bn worth of maturities within a week being achieved on 16 April, this component of the programme must not be underestimated. Especially given the fact that maturities under the PEPP are currently to be reinvested until at least the end of 2023. Unfortunately, any improvement in this area is no longer likely from our perspective. A "strategic review" of the ECB's overarching goals will not help here either.

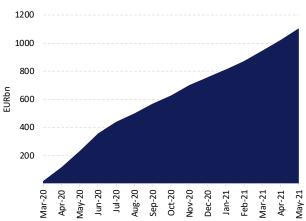
ECB purchasing at a "significantly higher pace" under the PEPP

Following the announcement by the ECB at its meeting on 11 March that it would be purchasing assets at a significantly higher pace in the second quarter, recently published data has now substantiated this plan. Accordingly, assets worth around EUR 80bn were purchased in both April and May, whereas in the first quarter, purchases averaged "only" around EUR 62bn. With regard to volumes purchased, the last two months were also those with the highest volumes purchased since the first four complete PEPP months (April – July 2020). Accordingly, we assume that the volume purchased in June will also come to around EUR 80bn at the end. However, the volume is likely to increase more slowly – primarily due to seasonal factors – as we head towards the summer break.



Monthly purchase volume







Volume exceeds 50% marker; gross purchases over EUR 1,000bn

At the current reporting date (4 June), the volume of the PEPP came to EUR 1,115.4bn, which equates to a 60.3% share of the volume specified of EUR 1,850bn. Since this figure depicts only the current (account) balance of the programme, it is also worth looking at gross purchases and maturities in the last twelve months. This reveals that around EUR 1,240bn gross has already been purchased under the PEPP. The proportion of maturities therefore stands at around 11% of gross purchases and is thus significant and relevant with regard to full reinvestment activity. In 2021, on average assets worth EUR 4.2bn have matured every week. As mentioned previously, with regard to the reinvestment strategy, we are still not clear why the ECB is displaying such a lack of transparency.

Mathematical purchase tempo virtually achieved

Since the PEPP started at the end of March 2020, the ECB has purchased EUR 18.0bn on average per week under the programme. Although the volumes observed each week are definitely subject to significant fluctuations – such as in phases of little market activity (Christmas or summer holidays) – the current mean results in the EUR 1,850bn being used up in full in mathematical terms by mid-March 2022. While the ECB would therefore not quite have reached the earliest possible end of net purchases, we would put this down to the acceleration in tempo, which is unlikely to last right up to the end of the programme. For this reason, we do not believe that this "precision landing" operation is in any jeopardy. Moreover, as things stand at present, we expect the tempo to drop off towards the end of the programme especially. However, the ECB still retains the greatest possible flexibility with regard to the PEPP and once again emphasised at the Governing Council meeting in March that both underutilisation of the EUR 1,850bn volume and a further increase are "equally" likely.

Estimated portfolio development

Assumed future purchase pace	Weekly net purchase volume	PEPP Limit hit in
Average net weekly purchase volume so far	EUR 18.0bn	41 weeks (18 March 2022)

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

Proportion of public sector assets increased again...

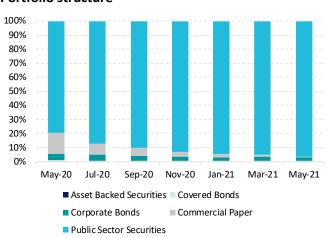
A clear trend is still apparent from the latest PEPP figures: the PEPP is being used to purchase public sector assets. Accordingly, the proportion of public sector assets increased again, rising on this occasion from 95.3% to 96.4%, setting a new record high in the process. The proportion has therefore risen continuously since the programme was launched. In April and May, public sector assets totalling EUR 165.0bn were purchased under the PEPP

...but lack of activity in covered bonds

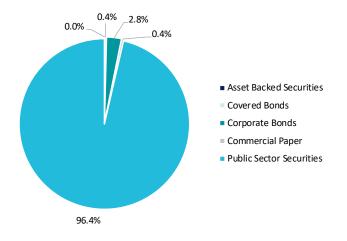
With regard to covered bonds, no activity was recorded over the past two months. This means that the holdings of covered bonds under the PEPP remain at EUR 4,044m. This equates to a share of 0.4%, rendering this asset class practically irrelevant as a result.

	Asset-backed Securities	Covered Bonds	Corporate Bonds	Commercial Paper	Public Sector Securities	PEPP
March 21	0	4,055	27,058	12,766	893,844	937,723
May 2021	0	4.055	31,014	4,590	1,058,882	1,098,541
Δ	0	0	+3,956	-8,176	+165,038	+160,818

Volumes of the asset classes (EUR m)



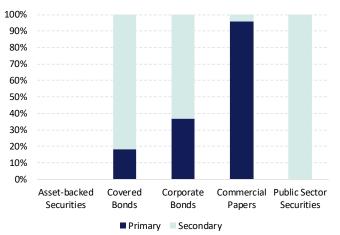
Portfolio structure



1,200 1,000 800 600 400 200 0 May-20 Jul-20 Sep-20 Nov-20 Jan-21 Mar-21 May-21 Asset Backed Securities Covered Bonds Corporate Bonds Corporate Bonds Public Sector Securities

Portfolio development

Share of primary/secondary market purchases



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



Capital key for the PEPP...

To recap, since the structure and set-up of the PEPP differs from that of the PSPP, adjustments to the capital key result as well as maturity-driven purchases, because Greek bonds are eligible to be purchased under the PEPP but excluded from purchases under the PSPP. The capital key for Germany is 23.7%, followed by France (18.4%), Italy (15.3%) and Spain (10.7%). Next are supranationals at 10%. At 2.2%, Greece ranks between Austria (2.6%) and Finland (1.7%). If applicable, the ECB will let us know whether the share of supranationals will be increased in the longer term. The increased supply from the EU as a new mega issuer would suggest, among other aspects, that the ECB will make some adjustments in this respect. At 7.7% (trend rising), the share of supranationals is still sufficiently far away from the 10% envisaged.

... in comparison with the capital key of the PSPP

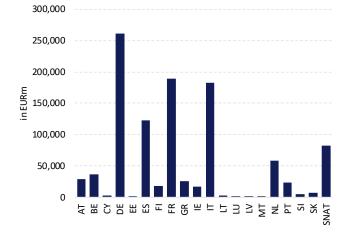
Since the PSPP differs, as explained, from the PEPP in terms of its structure and set-up, adjustments to the capital key result as well as maturity-driven purchases because Greek bonds are not eligible for purchase under the PSPP. The capital key for Germany in relation to this programme is 24.3%, followed by France (18.8%), Italy (15.7%) and Spain (11.0%). Next are supranationals, again at 10%.

Overview of public sector assets under the PEPP

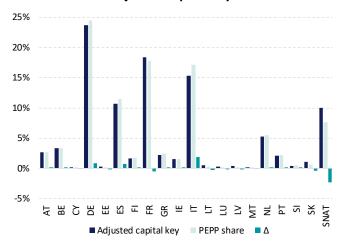
Jurisdiction	Holdings (in EUR m)	Adjusted capital key ¹	PEPP share	∆ vs. ad- justed capital key ²	Ø time to maturity (in years)	Market average ³ (in years)	Difference (in years)
AT	28,731	2.6%	2.7%	0.1%	9.4	6.9	2.6
BE	36,086	3.3%	3.4%	0.1%	6.7	9.1	-2.5
CY	2,060	0.2%	0.2%	0.0%	9.7	8.3	1.4
DE	261,137	23.7%	24.5%	0.8%	6.1	6.8	-0.7
EE	255	0.3%	0.0%	-0.2%	9.0	7.3	1.7
ES	122,583	10.7%	11.5%	0.8%	8.3	7.6	0.7
FI	18,174	1.7%	1.7%	0.1%	7.3	7.5	-0.2
FR	189,672	18.4%	17.8%	-0.6%	8.5	7.7	0.8
GR	25,680	2.2%	2.4%	0.2%	9.5	9.9	-0.5
IE	16,770	1.5%	1.6%	0.1%	9.2	9.5	-0.3
IT	182,946	15.3%	17.2%	1.9%	6.9	7.0	-0.1
LT	2,505	0.5%	0.2%	-0.3%	11.1	9.9	1.2
LU	1,726	0.3%	0.2%	-0.1%	7.0	6.6	0.5
LV	1,344	0.4%	0.1%	-0.2%	9.8	9.7	0.1
MT	305	0.1%	0.0%	-0.1%	7.9	8.7	-0.8
NL	58,043	5.3%	5.5%	0.2%	6.0	8.4	-2.3
PT	23,730	2.1%	2.2%	0.1%	7.4	7.3	0.1
SI	4,838	0.4%	0.5%	0.0%	9.2	9.3	-0.2
SK	6,384	1.0%	0.6%	-0.4%	9.5	8.4	1.1
SNAT	81,801	10.0%	7.7%	-2.3%	10.4	8.4	2.1
Total / Avg.	1,064,769	100.0%	100.0%	0.0%	7.6	7.5	0.1

¹ Based on the ECB capital key, adjusted to include supras

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



Holdings of public sector bonds by jurisdiction



Deviations from adjusted capital key

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

Nominal holdings of public sector bonds

As is clear from the charts shown above and the preceding table, Germany leads the theoretical and actual ranking of purchases, at over EUR 261bn. Accordingly, German bonds have also been overbought according to the current reporting, which means that there is a positive deviation from the adjusted capital key (+0.8 percentage points or around EUR 8.5bn). Italian bonds have also been bought above the limit since the PEPP started (falling, now down to +1.9 percentage points). We have only identified further significant upward deviations in the case of Spain (also falling, now down to +0.8 percentage points). The significant downward variations, meaning that too few bonds have been bought, were identified for France (only -0.6 percentage points) and supranationals (now -2.3 percentage points). All other deviations are around the zero line and do not therefore play a significant role.

Monthly PSPP deviations a frequent topic of discussion

It is our understanding that the PSPP portfolio has been permanently "breathing" since 2015. This is also what the ECB is communicating. In addition, the ECB does not consider itself obligated to meet the capital key exactly for its holdings in any one month. This applies not only to the net purchases made in the reporting month, but also to the figures recorded since the programme was first set up in 2015. This results from the circumstance that there are maturities in specific jurisdictions which may only be replaced subsequently and this means that, in net terms, portfolio outflows can actually occur instead of net purchases, as the word "breathing" would suggest. Discrepancies have occurred and are occurring time and again with regard to the target figures for German, Italian and French as well as supranational bonds. In this respect, market observers are left at a loss as to why purchases were made under the one programme on behalf of the Eurosystem rather than on behalf of the other entity, in order to avoid such discussion in the media (or among market observers). Sometimes the figure is exceeded for the PEPP and there is a shortfall under the PSPP (or vice versa). However, we no longer believe that the ECB will implement any positive changes to its reporting, for example to also facilitate providing information about the volume of reinvestments or to discern certain market shortages in good time. As a result of combating the pandemic, significantly more securities are available for purchase, particularly in the public sector, than was assumed at the end of 2019 when the APP was restarted and prior to the PEPP being launched.



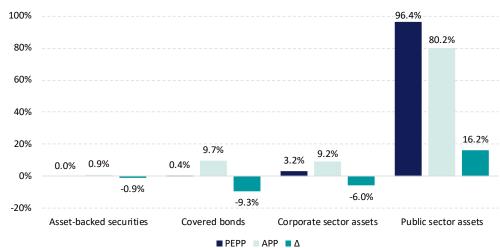
	АРР	PEPP	APP & PEPP
Apr-21	2,982,164	1,023,766	4,005,930
May 2021	3,002,305	1,104,465	4,106,770
Δ	+20,053	+80,700	+100,753

Aggregated purchase activity under the APP and PEPP (EUR m)

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

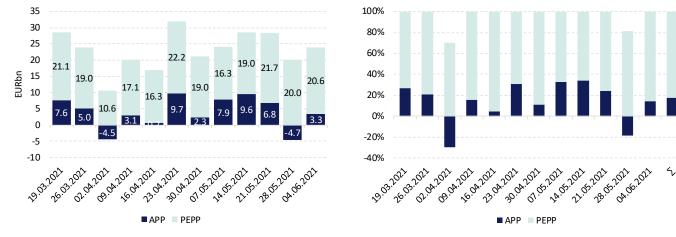
PEPP vs APP – different purposes result in structural differences

A comparison of the two ECB purchase programmes highlights that deviations for the various asset classes have slightly increased again in the past two months. While the difference in the proportion of covered bonds is unchanged, the proportion (non-existent in some cases) of ABS remains around 1.0% for both programmes. In contrast, the difference with regard to the proportions of corporate sector assets in both programmes increased from 4.7 to 6.0 percentage points, whereby proportionately more corporate sector assets are located in the APP. While the proportion marginally increased in the APP, the trend under the PEPP was slightly contrary. With regard to public sector assets, it is clear, as mentioned previously, that the proportion in the PEPP has increased again. At the same time, there was a marginal decrease in the proportion of these assets in the APP from 80.3% to 80.2%. Consequently, the delta between the two programmes increased from 15.0 to 16.2 percentage points. It should be taken into account that these differences are in line with the different objectives of the two purchase programmes. The APP is run with the intention of achieving stability in pricing levels, whereas the purpose of the PEPP is far more focused on the short term and is intended to counteract the negative impacts of the pandemic. Broader market intervention via the APP is therefore just as understandable as the concentration on advantageous funding terms in the public sector, as the relevant offers and measures at state and subnational levels in addition to supranational institutions were taken in this segment, in particular. Support for the financial and corporate sectors, we believe, is provided by the current TLTRO III tender (which was also extended on 10 December 2020) as well as purchasing activities under the APP in the form of the CBPP3 and CSPP.



PEPP vs. APP: portfolio shares

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



Weekly purchase volume

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

Conclusion and outlook

As expected, the ECB has kept its word and significantly increased the pace of its PEPP purchases in the first two months of the second quarter, increasing purchases by around EUR 25bn per month compared with January and February. Tomorrow's meeting of the ECB's Governing Council is likely to focus on the current debate concerning inflation. In contrast, we consider adjustments to the PEPP to be unlikely, although tapering discussions have now just starting cropping up for the first time, with leading representatives of the ECB recently having been at pains to provide reassurance as far as any reversal of PEPP activities is concerned. Rather, in our opinion, purchases by the Eurosystem will remain at the current level in the context of the pandemic programme, but this does not in any way preclude significant volatility in the weekly purchases. In Q4 2021, a systematic reduction to the level of Q1 2021 (EUR 14.6bn weekly) seems reasonable, while we assume that weekly purchases will be reduced again to EUR 12.5bn in Q1 2022.

Distribution of weekly net purchases

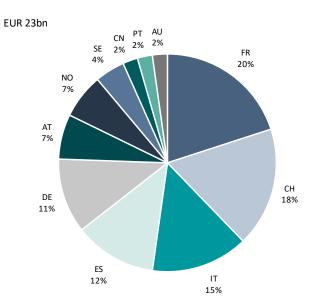


Covered Bonds Covered bonds vs. senior unsecured bonds

Author: Dr Frederik Kunze

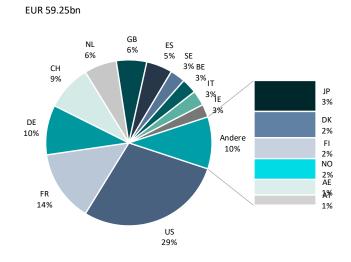
Covereds vs. seniors: More or less a level playing field?

Both the primary market for covered bonds and new placements in the senior unsecured bond segment have been and continue to be significantly influenced by the coronavirus pandemic and the subsequent monetary, fiscal and regulatory reactions. This is apparent not least when looking at the actual acute funding needs of credit institutions. The expansive monetary policy (especially of the ECB but also elsewhere) and the crisis-related significant increase in household savings continue to exert their influence. Thus, the need for new funding in terms of amount is significantly lower on average, while funding costs in the form of underlying yields on bank debt instruments have also declined significantly. As a result, the funding mix has also changed, partly due to a shift within the asset class of senior unsecured bonds, but also in terms of covered bonds – which have been publicly placed to a much lesser extent so far in the current year. In this article, we intend to provide a brief overview of primary market activities, especially for the senior unsecured bond issuances, highlighting the similarities and differences with regard to the covered bond market.



Primary market SP: issuance volume (ytd; EUR bn)

Primary market SNP: issuance volume (ytd; EUR bn)

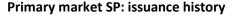


Source: Market data, NORD/LB Markets Strategy & Floor Research

Senior unsecured bonds in the primary market: senior non-preferred bonds dominate

With EUR 29bn in SP issues and EUR 59.25bn in SNP deals placed so far, non-preferred seniors clearly dominate the picture. This is not surprising given the regulatory framework, as many institutions issue SNP bonds with the aim of meeting their MREL ratios. Even though the MREL ratios are of course not directly related to the coronavirus crisis, mone-tary policy in particular ensures a general spread or yield level that makes SNP issues appear attractive to issuers, also based on opportunistic considerations in view of the funding costs. In light of this, the dynamic issuance path of SNP bonds, as seen in the following chart, can also be explained. Inversely, these framework conditions also provide an intuitive justification for the rather more modest levels of activity on the primary market for senior preferred bonds.

Primary market SNP: issuance history



100 100 90 90 80 80 70 70 60 60 URbn 50 EURbr 50 40 40 30 30 20 20 10 10 0 0 Apr Feb Mar May Jun Jul Aug Sep Oct Nov Dec Mar Jan Feb Apr May Jun Jul Aug Sep Oct Nov Dec •••••• 2019 --- 2020 -**-** 2018 2021 --- 2018 ····· 2019 **— — —** 2020 **—** 2021

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

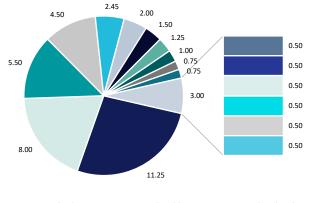
Regulatory aspects: "Minimum requirement for own funds and eligible liabilities" (MREL) The capital requirements for resolution that are imposed on banks differ according to the size and also the geographical classification of the institution. At global level (G20), for example, there is a requirement for total loss-absorbing capacity (TLAC), which prescribes a minimum amount of bail-inable capital. TLAC only applies to the global systemically important banks (G-SIBs). Parallel to this, the MREL ratio was introduced in the European Union (MREL = Minimum requirement for own funds and eligible liabilities). The MREL ratio is set by the authority responsible for the respective institution and thus varies from bank to bank in order to take account of the non-existent homogeneity of the banking landscape in Europe. The SNP funding of the European institutions and the specific dynamics is, as already indicated, due to this stipulation. For example, the binding interim target for individual institution requirements in the MREL context must be achieved by 2022, which has triggered a corresponding need for action among some institutions. The final MREL requirement, which may deviate from the interim targets, is then to be achieved in 2024. In May 2021, the SRB presented a corresponding publication on MREL policy and addressed the specific methodological framework and deadlines.



Primary market: covered bonds well down on previous years

With an issuance volume of EUR 39.6bn so far this year, the covered bond primary market ranks between the SP and SNP submarkets. Historically, 2021 has been an extremely weak year. As we have already stated repeatedly - for example in the context of the adjustment of our forecast for issuance volume in 2021 – the primary market for covered bonds is affected by a large number of factors, most of which are attributable to the ECB's monetary policy. The ECB's TLTRO III tenders are pushing back issuance volumes in the benchmark segment and causing a shift to the retained issues submarket. In addition, issuers are moving towards senior financials in light of the spread and yield levels. Funding needs are also generally declining because, as outlined above, customer deposits have increased significantly at many institutions. In addition, the ECB's purchase programmes are causing liquidity stocks parked at the central banks to surge.

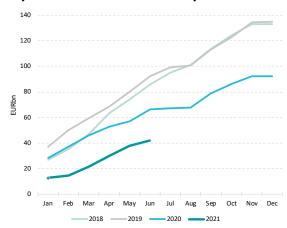




FR DE NO CA NZ AT NL IT SE SG FI BE DK KR SK CZ GB

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

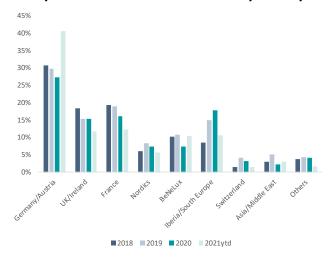
Primary market CB: issuance history



Investor allocation: Seniors as an alternative to covereds?

As a logical consequence of the combination of a very low supply of covered bonds with a persistently high investment demand, there has also been a shift by investors. This crowd-ing-out effect - i.e. the exodus of traditional covered bond investors - is particularly understandable given the investor distribution for senior preferred bonds. This year, there has consequently been a notable increase in the share of investors from Germany and Austria, who represent the dominant investor class for covered bonds. In terms of investor type, this increase also aligns with the higher weight of banks in the current year. This effect is not as obvious in the case of senior non-preferred bonds, although the share of investors from Germany and Austria has increased significantly here as well. All the same, the categories banks and insurance/pension funds also recorded notable increases in shares. This is remarkable as SNP issues are shunned by many bank treasuries, partly due to the regulatory treatment and the non-existent repo capability.

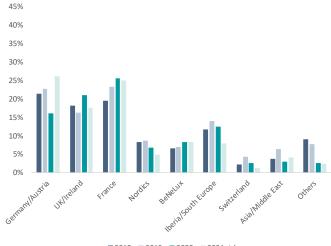
NORD/LB



Primary market SP: Investor allocation by country

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

Primary market SNP: Investor allocation by country



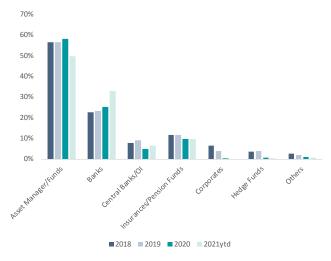
■2018 ■2019 ■2020 ■2021ytd

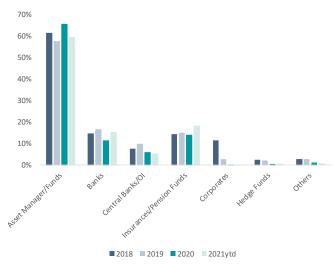
Source: Market data, NORD/LB Markets Strategy & Floor Research

Investor allocation for covered bonds: less meaningful than in previous years?

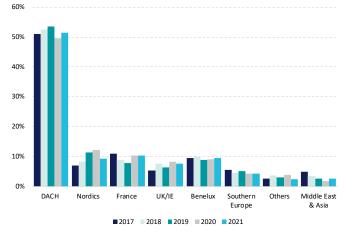
On the covered bond side, for which there is again only a smaller cake to pass around due to the lower issuance volume, there have at least been few noteworthy changes in the shares. The share of the DACH region remains dominant. By investor type, the share of the Central Banks/OI category has subtly increased, although on balance the environment on the covered bond primary market is unchanged. The ECB or the Eurosystem continues to buy into a market that is undersupplied due to upcoming maturities and the trend towards retained issues. The result is a massive negative net supply that supports the spread. Nevertheless, in our view it is a welcome development that currently or in the past weeks an increasing momentum can be observed, especially from the direction of the non-EMU jurisdictions.

Primary market SP: Investor allocation by type

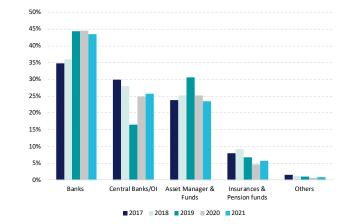




Primary market SNP: Investor allocation by type



Primary market CB: investor allocation by country



Primary market CB: investor allocation by type

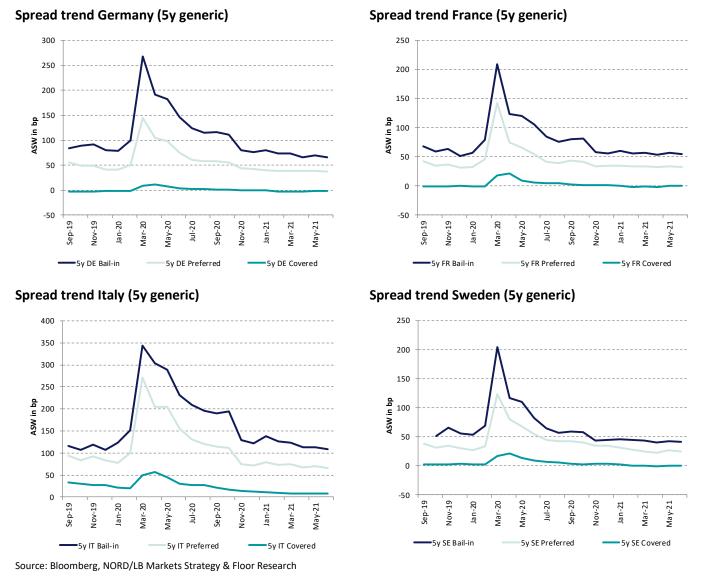
Source: Market data, NORD/LB Markets Strategy & Floor Research

Secondary market: sideways movement for covereds and seniors

The spread developments for covered bonds, SNP and SP issues are quite comparable, both currently and with regard to the immediate reactions to the outbreak of the coronavirus crisis. In the past trading days and weeks, there has rather been intermittent widening; we would say on average the respective markets were able to stabilise at a new level. Although the widening was much more pronounced, it could also be observed in the first half of 2020 that the spreads of all three asset classes found a new level again comparatively synchronously after the widening. As a logical consequence of the observed sideways movement in the three bond types, the spread differences also present as stable.

Widening for covered bonds (unsurprisingly) far smaller

The generic spread curves are shown in the following charts using generic 5y spreads in Germany, France, Italy and Sweden as examples. In terms of the comparison of absolute spread movements, these four examples indicate that covered bonds were characterised by considerably less widening than senior unsecured bonds. This trend is definitely due to the much higher degree of security provided by the dual recourse, but is nevertheless remarkable, as covered bonds experienced swings of a similar magnitude to unsecured seniors in the course of the euro crisis. The risk experts at Fitch attribute this circumstance in a brief analysis (cf. Fitch Ratings Covered Bonds in Charts of 26 May 2021) to, among other things, the regulatory adjustments (including exemption from bail-in), the purchases by the Eurosystem and the option of recognition as assets for meeting liquidity requirements (LCR). In fact, however, a differentiation between senior preferred and senior non-preferred issues reveals a smaller increase in the amount of senior preferred issues. In our view, this development can be explained primarily by the fact that senior preferred issues also have a higher insolvency remoteness than SNP bonds in the regulatory framework now in force.



Conclusion

Even though the market-specific conditions for covered bonds and seniors are the same, the issuing trend, investor distribution and spread development show segment-specific implications. In this context, there would appear to be far less primary market activity for senior preferred and covered bonds, while SNP issues are more dynamic; it can be said that in this case the regulatory environment has a beneficial effect. In the secondary market, the investment shortage, which has been exacerbated by the low supply of covered bonds, is also becoming apparent. Accordingly, a crowding out effect is taking place, in which – according to our hypothesis – bank treasuries from Germany and Austria in particular are demanding senior preferred bonds to a greater extent. In terms of spread developments, a stronger differentiation between covered bonds and SNP and SP bonds could be triggered by a rising level of risk aversion or risk-off in the market. If conditions remain unchanged, we will continue to see a rather low probability of this, with the result that we consider it a baseline scenario that the sideways movement for all three bond types should continue into the second half of the year.

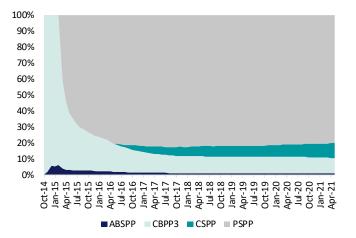


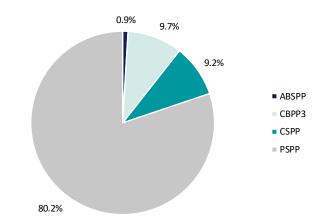
ECB tracker

Asset Purchase Programme (APP)

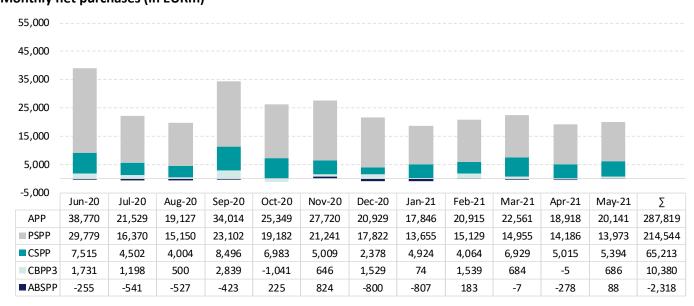
	ABSPP	СВРРЗ	CSPP	PSPP	АРР
Apr-21	28,432	289,418	271,075	2,393,239	2,982,164
May-21	28,520	290,104	276,469	2,407,212	3,002,305
Δ	+88	+686	+5,394	+13,973	+20,141

Portfolio structure

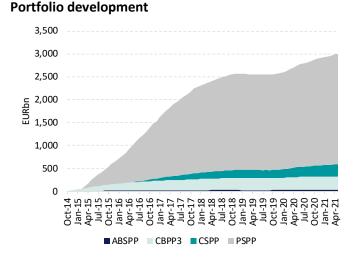




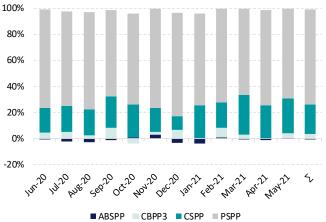
Monthly net purchases (in EURm)







Distribution of monthly purchases



Distribution of weekly purchases

16.04.2021 23.04.2021

07.05.2021

14.05.2021 21.05.2021 28.05.202 04.06.2022

٩

30.04.2021

■ ABSPP ■ CBPP3 ■ CSPP ■ PSPP

09.04.2021

100%

80%

60%

40%

20%

0%

-20%

-40%

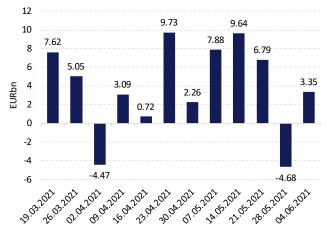
-60%

-80% -100%

26,03,2021 02.04.2021

19.03.202

Weekly purchases



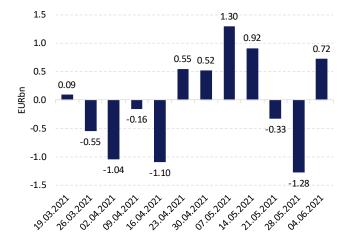
Expected monthly redemptions (in EURm)

50,000 45,000 40,000 35,000 30,000 25,000 20,000 15,000 10,000 5,000 0 Jun-21 lan-22 -Jun-21 Jul-21 Aug-21 Sep-21 Oct-21 Nov-21 Dec-21 Jan-22 Feb-22 Mar-22 Apr-22 May-22 2020 2021 May-22 May-22 7,910 20,010 271,045 262,253 245,608 131,392 APP 22,244 27,140 27,662 24,456 10,231 34,665 8,093 21,113 43,681 23,840 20,906 PSPP 19.519 24,547 4.370 23,655 19,224 13,787 7,811 3,625 12,603 38,619 18,998 207,664 201,482 188,451 94,751 CSPP 942 828 712 1,102 800 1,673 826 1,946 1,590 1,416 1,125 1,341 14,301 18,267 16,189 7,418 CBPP3 367 1,132 1,002 1,915 3,775 4,048 937 9,776 2,452 6,347 2,990 1,844 36,585 33,236 30,138 23,409 2,037 ABSPP 10,830 1.416 633 1,826 990 502 657 426 747 947 1,657 12,495 9,268 5,814 657

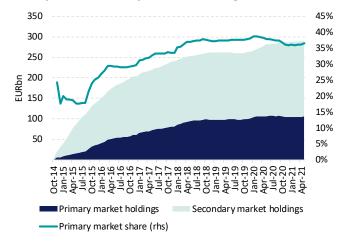


Covered Bond Purchase Programme 3 (CBPP3)

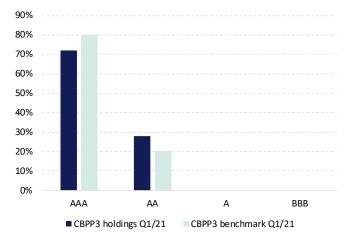
Weekly purchases



Primary and secondary market holdings

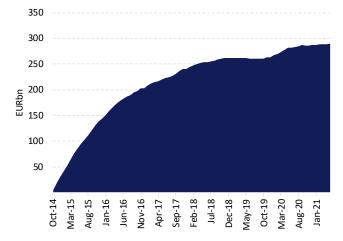


Distribution of CBPP3 by credit rating



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

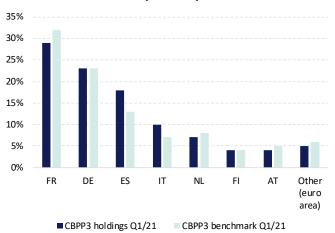
Development of CBPP3 volume

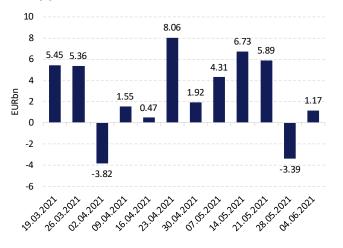


Change of primary and secondary market holdings



Distribution of CBPP3 by country of risk





Public Sector Purchase Programme (PSPP)

Weekly purchases

Overall distribution of PSPP buying at month-end

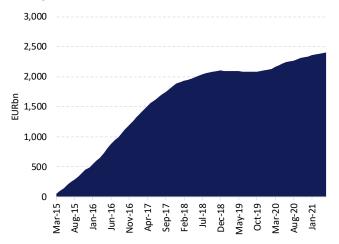
Adjusted Expected Avg. time Purchases Difference Market average³ Difference Jurisdiction distribution purchases to maturity³ (in years)³ (EURm) (EURm) (in years) key¹ (EURm)² (in years) AT 2.7% 71,167 68,471 2,696 7.5 7.6 -0.1 ΒE 3.4% 89,678 85,229 4,449 8.0 10.2 -2.2 CY 0.2% 5,034 -1,357 9.9 8.8 1.1 3,677 DE 24.3% 605,446 -1.0 616,694 -11,248 6.6 7.6 EE 0.3% 387 6,590 -6,203 9.2 7.5 1.7 ES 11.0% 299,019 20,058 8.0 8.4 -0.4 278,961 7.7 FI 1.7% 36,889 42,971 -6,082 6.9 -0.8 FR 491,798 477,802 13,996 7.2 -0.9 18.8% 8.1 GR 0.0% 0 0 0 0.0 0.0 0.0 IE 1.6% 39,118 39,615 -497 8.5 10.1 -1.6 IT 15.7% 425,346 397,425 27,921 7.1 7.9 -0.8 LT 0.5% 4,921 13,539 -8,618 10.2 10.6 -0.4 LU 0.3% 3,356 7,706 -4,350 5.6 7.2 -1.7 LV 0.4% 2,882 9,115 -6,233 11.3 10.4 0.9 MT 0.1% 1,259 2,454 -1,195 9.5 9.2 0.3 NL 5.4% 123,437 137,098 -13,661 7.7 9.0 -1.4 ΡT 46,498 54,753 -0.2 2.2% -8,255 7.0 7.2 SI 0.4% 9,255 11,264 -2,009 9.9 10.2 -0.3 SK 1.1% 15,716 26,791 -11,075 8.2 8.3 -0.1 **SNAT** 10.0% 7.7 8.9 -1.2 265,166 253,502 11,665 Total / Avg. 100.0% 0 7.3 8.2 -0.9 2,535,015 2,535,015

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

² Based on the adjusted distribution key

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

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



Development of PSPP volume



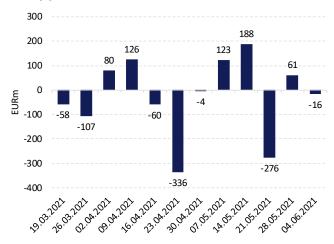


Corporate Sector Purchase Programme (CSPP)

Weekly purchases

Asset-Backed Securities Purchase Programme (ABSPP)

Weekly purchases

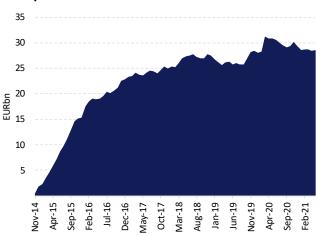


Source: ECB, Bloomberg, NORD/LB Markets Strategy & Floor Research

Development of CSPP volume



Development of ABSPP volume





Pandemic Emergency Purchase Programme (PEPP)

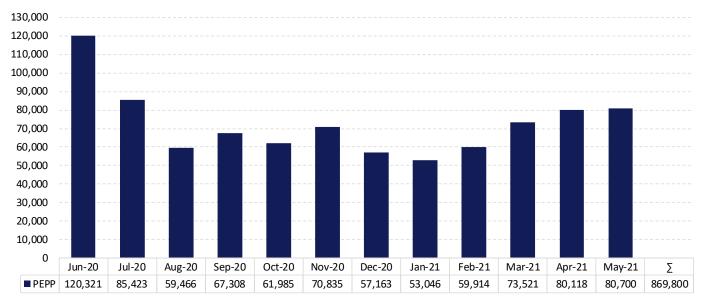
Holdings (in EURm)

	PEPP											
Apr-21	1,023,766	1,023,766 _{60.3%}					39.7%					
May-21	1,104,465											
Δ	+80,700	0	185	370	555	740	925	1,110	1,295	1,480	1,665	1,850

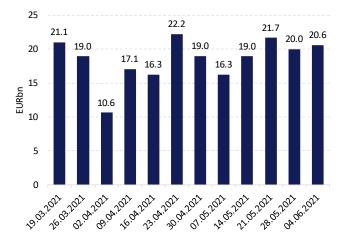
Estimated portfolio development

Assumed pace of purchases	Weekly net purchase volume	PEPP limit hit in
Average weekly net purchase volume so far	EUR 18.0bn	41 weeks (18.03.2022)

Monthly net purchases (in EURm)



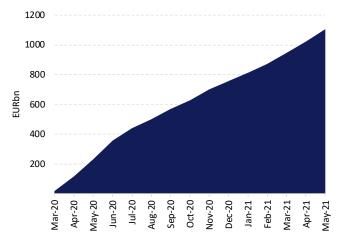
Weekly purchases



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

Development of PEPP volume

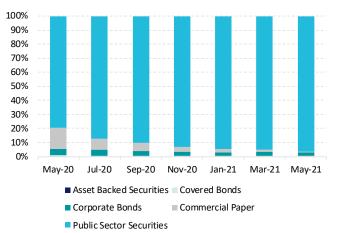
Volume already invested (in EURbn)

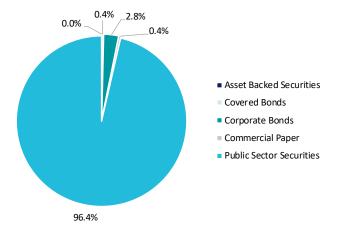


	Asset-backed Securities	Covered Bonds	Corporate Bonds	Commercial Paper	Public Sector Securities	PEPP
Mar-21	0	4,055	27,058	12,766	893,844	937,723
May-21	0	4,055	31,014	4,590	1,058,882	1,098,541
Δ	0	0	+3,956	-8,176	+165,038	+160,818

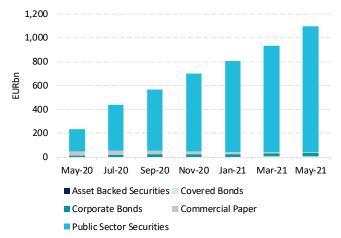
Holdings under the PEPP (in EURm)

Portfolio structure

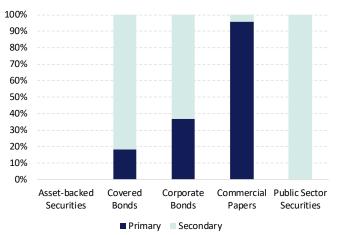




Portfolio development



Share of primary and secondary market holdings



Breakdown of private sector securities under the PEPP

May 21	Asset-back	ed securities	Covered bonds		Corpora	ate bonds	Commercial paper		
May-21	Primary	Secondary	Primary	Secondary	Primary	Secondary	Primary	Secondary	
Holdings in EURm	0	0	745	3,310	11,431	19,583	4,397	193	
Share	0.0%	0.0%	18.4%	81.6%	36.9%	63.1%	95.8%	4.2%	

Adj. Deviations ø time to Holdings PEPP Market average³ Difference distribution Jurisdiction from the adj. maturity (in EURm) (in years) (in years) share key¹ distribution key² (in years) AT 28,731 2.6% 2.7% 0.1% 9.4 6.9 2.6 ΒE 36,086 6.7 9.1 -2.5 3.3% 3.4% 0.1% CY 2,060 0.2% 0.2% 0.0% 9.7 8.3 1.4 DE 261,137 23.7% 24.5% 0.8% 6.1 6.8 -0.7 EE 255 0.3% 0.0% -0.2% 9.0 7.3 1.7 ES 122,583 10.7% 11.5% 0.8% 8.3 7.6 0.7 FI 18,174 1.7% 1.7% 7.3 7.5 -0.2 0.1% FR 189,672 18.4% 17.8% -0.6% 8.5 7.7 0.8 25,680 9.5 GR 2.2% 2.4% 0.2% 9.9 -0.5 IE 16,770 1.5% 1.6% 0.1% 9.2 9.5 -0.3 IT 182,946 6.9 -0.1 15.3% 17.2% 1.9% 7.0 LT 2,505 0.5% 0.2% -0.3% 11.1 9.9 1.2 1.726 0.3% 0.2% -0.1% 7.0 0.5 LU 6.6 LV 1,344 0.4% 0.1% -0.2% 9.8 9.7 0.1 MT 305 0.1% 0.0% -0.1% 7.9 8.7 -0.8 NL 58,043 5.3% 5.5% 0.2% 6.0 8.4 -2.3 PT 23,730 2.1% 2.2% 0.1% 7.4 7.3 0.1 SI 4,838 0.4% 0.5% 0.0% 9.2 9.3 -0.2 SK 6,384 1.0% 0.6% -0.4% 9.5 8.4 1.1 SNAT 81,801 10.0% 7.7% -2.3% 10.4 8.4 2.1 Total / Avg. 1,064,769 100.0% 100.0% 0.0% 7.6 7.5 0.1

Breakdown of public sector securities under the PEPP



300,000

250,000

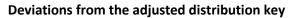
200,000

100,000

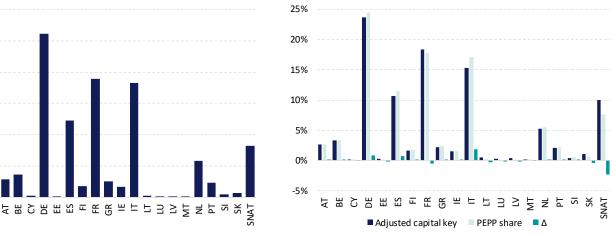
50,000

0

un 150,000



NORD/LB



 $^{\rm 1}$ Based on the ECB capital key, adjusted to include supras $^{\rm 2}$ Based on the adjusted distribution key $^{\rm 3}$ Weighted average time to maturity of the bonds eligible for purchasing under the PEPP

Aggregated purchase activity under APP and PEPP

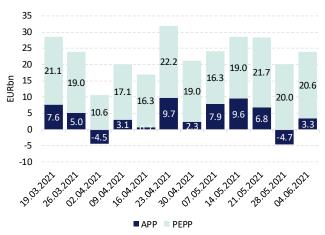
Holdings (in EURm)

	АРР	PEPP	APP & PEPP
Apr-21	2,982,164	1,023,766	4,005,930
May-21	3,002,305	1,104,465	4,106,770
Δ	+20,141	+80,700	+100,841

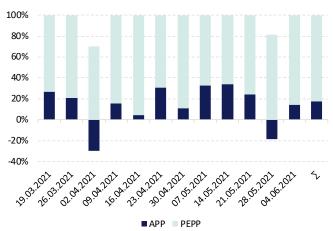
Monthly net purchases (in EURm)



Weekly purchases



Distribution of weekly purchases

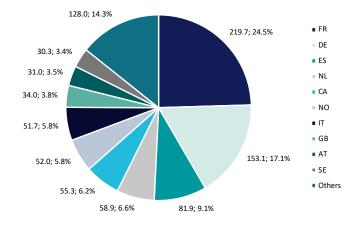


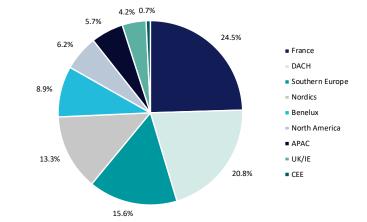
NORD/LB

NORD/LB

Charts & Figures Covered Bonds

EUR benchmark volume by country (in EURbn)



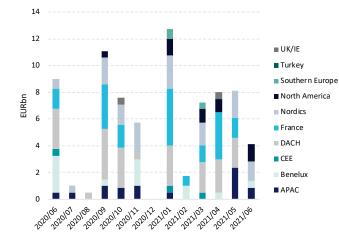


EUR benchmark volume by region (in EURbn)

Top-10 jurisdictions

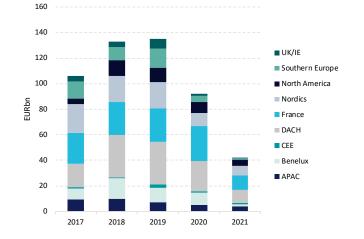
Rank	Country	Amount outst. (EURbn)	No. of BMKs	There of ESG BMKs	Avg. issue size (EURbn)	Avg. initial maturity (in years)	Avg. mod. Duration (in years)	Avg. coupon (in %)
1	FR	219.7	205	205	0.95	10.1	5.5	1.06
2	DE	153.1	229	229	0.60	8.4	4.7	0.43
3	ES	81.9	67	67	1.13	11.4	3.9	1.79
4	NL	58.9	60	60	0.93	11.3	7.4	0.90
5	CA	55.3	48	48	1.12	6.1	3.2	0.26
6	NO	52.0	58	58	0.90	7.4	4.0	0.51
7	IT	51.7	60	60	0.83	9.1	4.2	1.41
8	GB	34.0	40	40	0.88	8.5	3.5	1.02
9	AT	31.0	57	57	0.54	10.0	6.5	0.64
10	SE	30.3	36	36	0.84	7.5	3.6	0.44

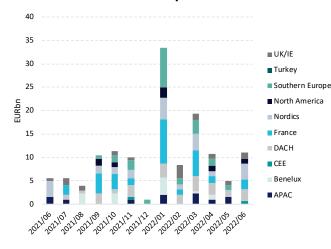
EUR benchmark issue volume by month



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

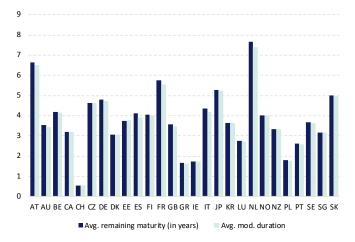
EUR benchmark issue volume by year



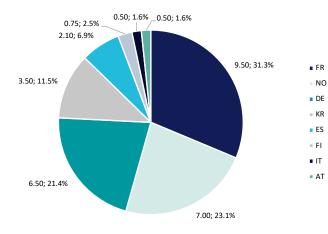


EUR benchmark maturities by month

Modified duration and time to maturity by country



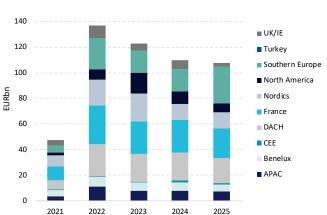
EUR benchmark volume (ESG) by country (in EURbn)



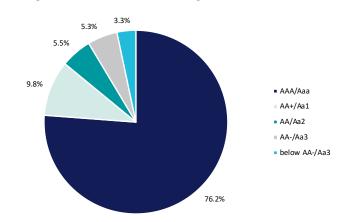
Source: Market data, Bloomberg, NORD/LB Markets Strategy & Floor Research

160 140 UK/IE 120 Turkey 100

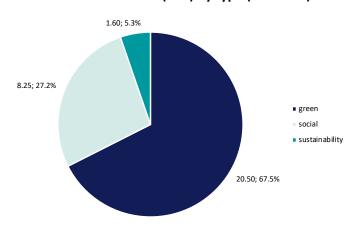
EUR benchmark maturities by year



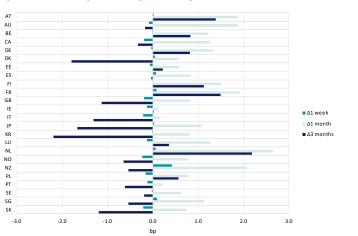
Rating distribution (volume weighted)



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





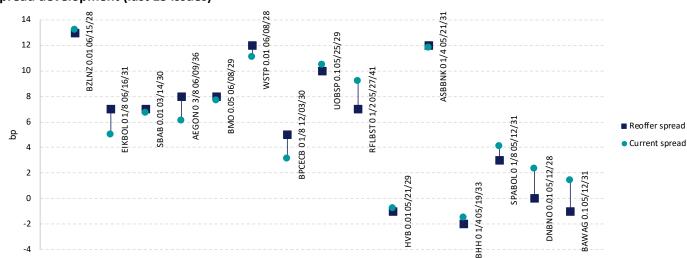


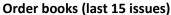
Spread development by country

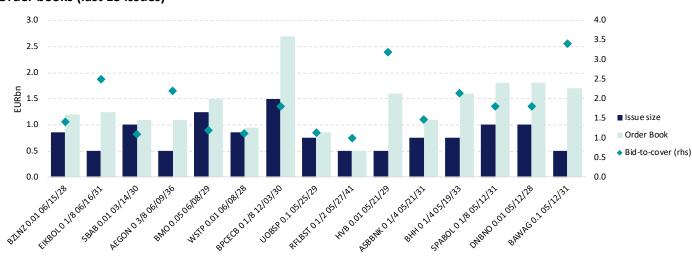


Covered bond performance (Total return)



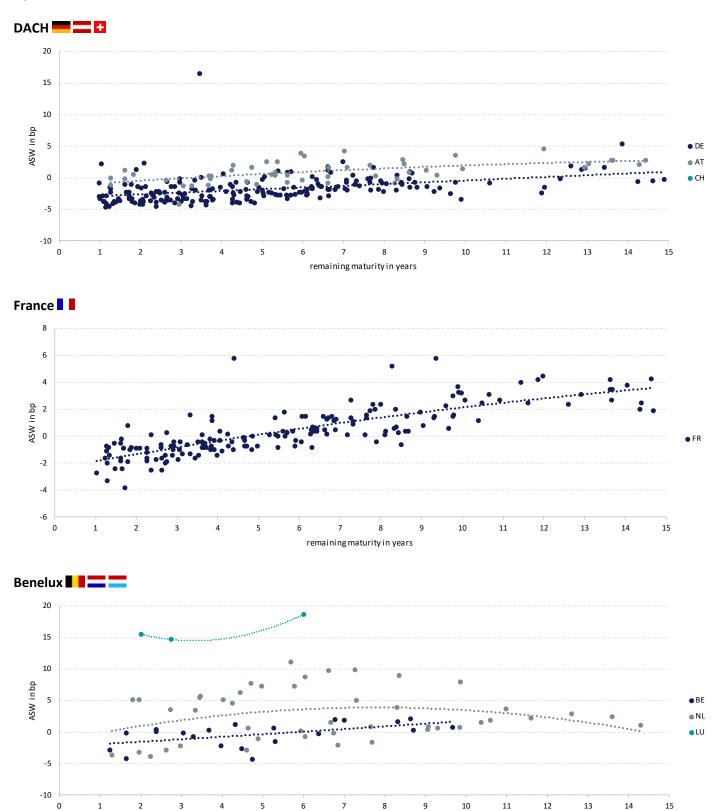






Source: Market data, Bloomberg, NORD/LB Markets Strategy & Floor Research



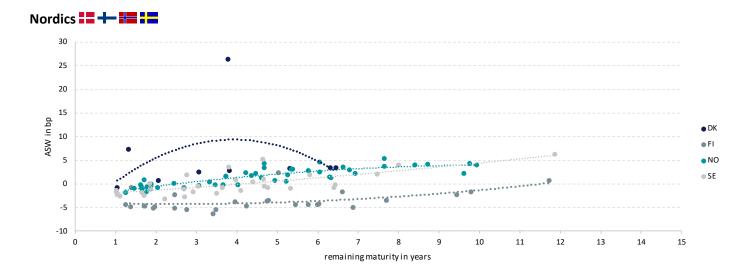


remaining maturity in years

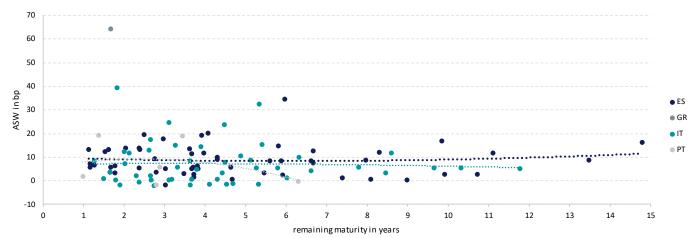
Spread overview¹

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

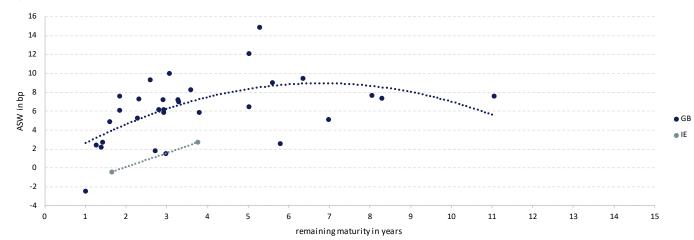




Southern Europe 🔤 🛄 🚺

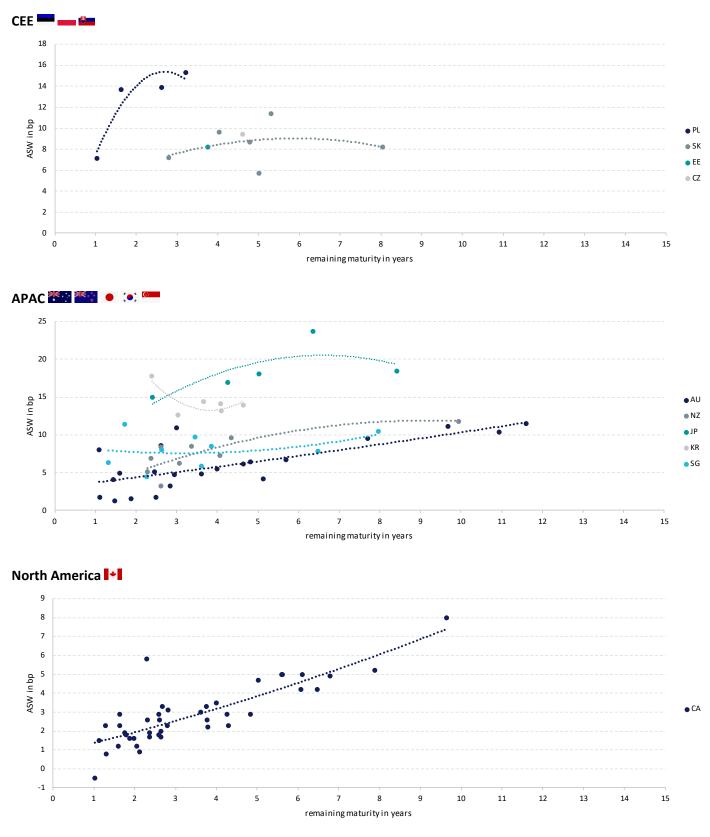


UK/IE 😹



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

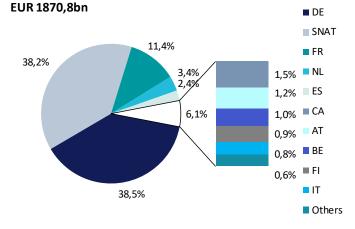




Source: Market data, Bloomberg, NORD/LB Markets Strategy & Floor Research



Charts & Figures SSA/Public Issuers

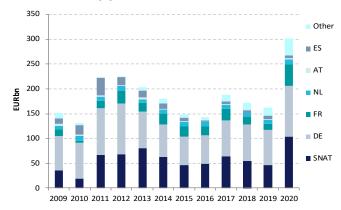


Outstanding volume (bmk)

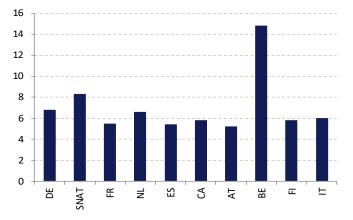
Top 10 countries (bmk)

Country	Vol. (€bn)	No. of bonds	ØVol. (€bn)	Vol. weight. ØMod. Dur.
DE	721,0	561	1,3	6,8
SNAT	715,2	188	3,8	8,3
FR	212,7	145	1,5	5,5
NL	64,4	65	1,0	6,6
ES	44,2	54	0,8	5,4
CA	28,5	20	1,4	5,8
AT	22,3	24	0,9	5,2
BE	19,2	23	0,8	14,9
FI	17,0	22	0,8	5,8
IT	14,5	18	0,8	6,0

Issue volume by year (bmk)



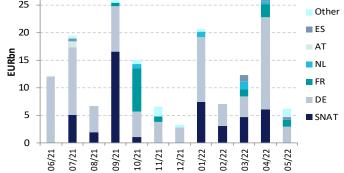
Avg. mod. duration by country (vol. weighted)



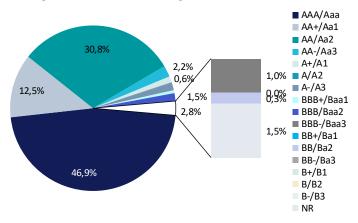
25

30

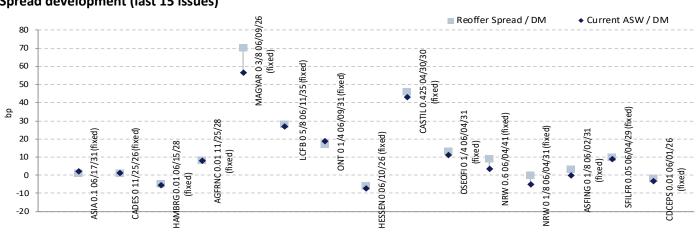
Maturities next 12 months (bmk)



Rating distribution (vol. weighted)

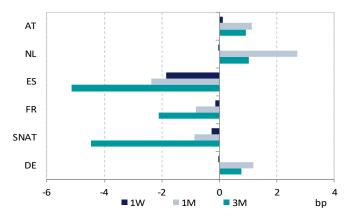


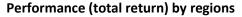


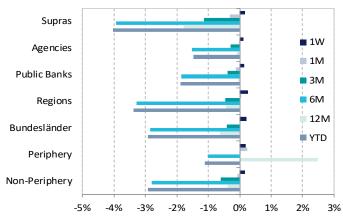


Spread development (last 15 issues)



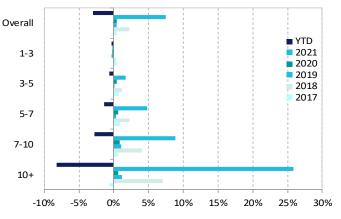




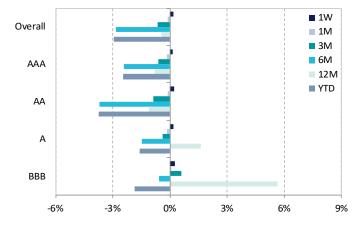


Source: Bloomberg, NORD/LB Markets Strategy & Floor Research

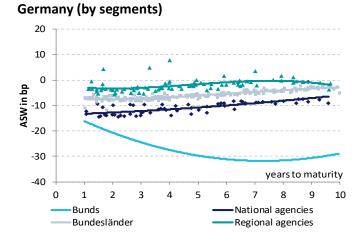
Performance (total return)



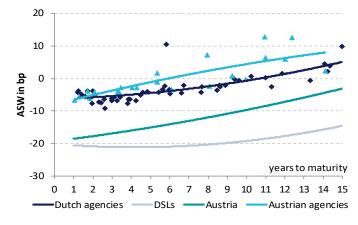
Performance (total return) by rating

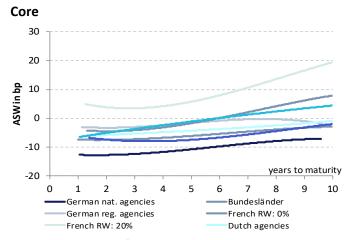


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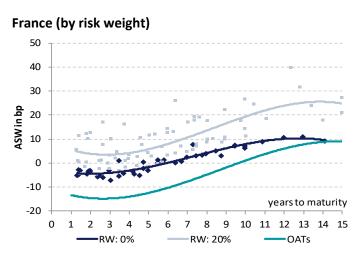


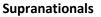
Netherlands & Austria

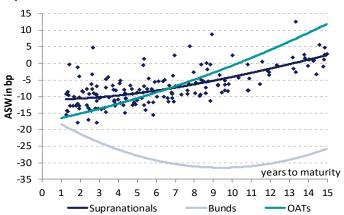




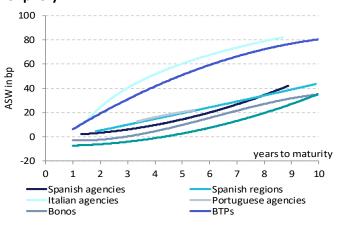
Source: Bloomberg, NORD/LB Markets Strategy & Floor Research







Periphery





Appendix **Overview of latest Covered Bond & SSA View editions**

Publication	Topics
19/2021 🔶 03 June	 ECB preview: Spectre of inflation fuelling tapering thoughts
	FX covered bonds: Same symptomatology as EUR benchmarks?
18/2021 🔶 19 May	 United Overseas Bank reinvigorates the market in Singapore
	 Transparency requirements §28 PfandBG Q1 2021
17/2021 🔶 12 May	 ASB Finance opens primary market "Down Under": Our outlook for the rest of the year
	 Development of the German property market
16/2021 🔶 05 May	Austria implements requirements of the covered bond directive and harmonises existing legal framework
	 EIB goes Blockchain
15/2021 🔶 28 April	 EU Taxonomy meets the market for sustainable covered bonds
14/2021 🔶 22 April	LCR levels and risk weights of EUR benchmarks
	NextGenerationEU: NGEU is taking shape
13/2021 🔶 14 April	 Predominant ECB strategy: wait-and-see but remain proactive
	 PEPP reporting: First year done; a second (at least) now follows
	 OSFI abandons temporarily increased 10% limit with immediate effect: (in)direct implications for Canadiar benchmarks
12/2021	 Unusual Q1 and revised supply forecast for 2021
	 Collective Action Clauses (CACs)
11/2021 ♦ 24 March	 Surprising dynamic: Eurosystem lends EUR 331bn to EMU banks via TLTRO III.7
	 German Pfandbrief savings banks in Q4 2020
10/2021 ♦ 17 March	 Transparency requirements §28 PfandBG Q4/2020
	 Credit authorisations for German Bundeslaender in 2021
09/2021 ♦ 10 March	 Moody's covered bond universe – an overview
	 Oldenburgische Landesbank expands sub-benchmark segment
08/2021 ♦ 03 March	 Repayment structures on the covered bond market
	 ECB in a tight spot: litmus test for PEPP flexibility and preview of the second interest rate meeting of the year
07/2021 24 February	An overview of the EUR sub-benchmark segment
	ECB: crowding-out effects take hold
	PEPP vs. PSPP: Similarities and differences
06/2021 ♦ 17 February	 Insights into the iBoxx EUR Covered
	 Development of the German property market
05/2021	 PEPP reporting: upswing in public sector assets continues; covered bonds inconsequential
04/2021 ♦ 03 February	 Argenta Spaarbank expands Belgian market for EUR benchmarks
	 An overview of the Fitch covered bond universe
	 January 2021 packs a punch to kick off the new year
NORD/LB: Markets Strategy & Floo	NORD/LB: NORD/LB: Bloomberg: or Research Covered Bond Research SSA/Public Issuer Research RESP NRDR <go></go>



Appendix Publication overview

Covered Bonds:

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

SSA/Public Issuers:

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

Fixed Income:

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



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Financials	+49 511 9818-9490
Governments	+49 511 9818-9660
Laender/Regionen	+49 511 9818-9550
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Additional information

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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.

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Recommendation system	Breakdown of recommendations (12 mont	
Positive: Positive expectations for the issuer, a bond type or a bond placed by the	Positive:	37%
issuer.	Neutral:	55%
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.	Negative:	8%

Recommendation record (12 months)

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Issuer / security	Date	Recommendation	Bond type	Cause