

Covered Bond & SSA View

NORD/LB Markets Strategy & Floor Research



Agenda

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Market overview Covered Bonds

Author: Dr Frederik Kunze

Primary market: NIBC targets investors with a CPT covered bond

The last five trading days were again characterised by a dearth of activity on the primary market, with the Dutch providing the only new issue. Accordingly, NIBC bank successfully placed its second benchmark in the current year. The deal worth EUR 500m (WNG), which was structured as a CPT covered bond, was initially marketed at guidance of ms +13bp area and was ultimately priced – four basis points lower – at ms +9bp (bid-to-cover: 2.0). Together with Van Lanschot Kempen, NIBC ranks among those Dutch issuers that only use the CPT structure (see <u>NORD/LB Covered Bond & SSA View 03. November</u>). In the current year, issuance volume in the Netherlands therefore totals EUR 4.6bn. With maturities for 2021 as a whole of EUR 3.8bn, the Netherlands already ranks among those jurisdictions that offer a positive net supply. For 2022 we expect issues of EUR 5bn (maturities: EUR 5.3bn) and only a modestly negative net supply (see the separate <u>article</u> in this issue).

Two Pfandbrief taps of EUR 250m each

During the last five trading days, issuers again opted to top up outstanding bonds as a means of targeting their investors. Last Wednesday, Münchener Hypothekenbank increased its mortgage Pfandbrief (MUNHYP 0.01 10/19/39), which will mature in 2039, by EUR 250m. At ms +2bp, the reoffer spread matched the initial guidance (reoffer yield: 0.338%). At the beginning of the new trading week, this was followed by a tap (also for EUR 250m) from Berlin Hyp, which increased its mortgage Pfandbrief (BHH 0.01 08/24/26), which will mature in 2026. The order book totalled a respectable EUR 1.25bn, while the reoffer spread was ms -4bp. At -0.129%, the issue yield was in negative territory.

lssuer	Country	Timing	ISIN	Maturity	Size	Spread	Rating	ESG
NIBC Bank	NL	16.11.	XS2411638575	9.0y	0.50bn	ms +9bp	AAA / - / AAA	-

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

Rating agency Scope comments on the trend in property prices in Germany

Property prices in Germany are still trending upwards, as is confirmed by the highly regarded vdp Property Price Index in the third quarter of 2021. As usual, we focus on the details in a separate <u>article</u> in our weekly publication. The rating agency Scope recently commented on the dangers in relation to possible financial market stability risks in a <u>re-</u><u>search paper</u>. As part of the study, the Scope Covered Bond Team highlighted the room for improvement with regard to macroprudential instruments for the German property market and the credit institutions. In Scope's opinion, this is required to protect not only the institutions providing finance but also homeowners. For some years, it has been apparent that household borrowings are also trending upwards. Scope is convinced that, in comparison with other countries, German regulations regarding macroprudential instruments (including the debt ratios that borrowers must comply with) require more work.

Covered bond legislation in Europe I: Estonia and Austria are achieving progress albeit somewhat belatedly

As we reported a few weeks ago, by no means all the national legislators have made the adjustments to their frameworks required by the Covered Bond Directive. With Estonia (resolution in the plenary session expected on 17 November) and Austria (<u>19 November</u>), a further two covered bond jurisdictions have reached the home straight. In Estonia, amendments to the law are pending, which both result from the Directive as such and are part of the establishment of a pan-Baltic covered bond market (together with Latvia and Lithuania) (see <u>Bill on Amendments to the Covered Bonds Act and Other Acts</u>). In Austria, the adjustments will result in bringing together the three covered bond acts currently in force in the country, which will, in our opinion, also increase the transparency of the established covered bond market. However, for non-partisan discussions in the legislative process, the need to obtain borrowers' consent to inclusion in the cover pool recently became a subject for <u>discussion</u>, in particular.

Covered bond legislation in Europe II: DBRS acknowledges amendments to Spain's covered bond law

In our weekly publication last week, we focused on the Spanish covered bond market and the amendments announced by the legislator. The rating agency DBRS recently issued a Commentary on the new Spanish Covered Bond Framework and, in doing so, again referred to the fact that for Spain, in particular, the Covered Bond Directive required significant changes. DBRS finished by stating that the positive effects of the new legislation included the more stringent LTV ratios, the valuation requirements for properties, the liquidity buffer and the newly created option for deferring maturities. DBRS also welcomed the creation of the role of cover pool monitor and – in the event of liquidation – the function of the cover pool administrator. Among the more negative changes, DBRS sees the reduction in the OC requirements, the absence of any requirement to separate loans in default and the lack of detail with regard to stress tests. DBRS is also of the opinion that the need to obtain the consent of the Spanish central banks to any deferment of maturities may pose the risk of delays. In this context, DBRS also refers to the possibility in principle that the cover pool monitor may be an employee of the issuing bank. It also cites the risk of premature repayment – known as acceleration risk – in the event of the issuer becoming insolvent.

Foreign currencies I: AMAG Leasing AG issues a Swiss 'speciality'

We would describe the CHF covered bond issued by AMAG Leasing AG as a Swiss 'speciality'. The issuer – which is not bank but a lessor – has issued a contractual covered bond in CPT format, which in turn introduces a new asset class in the form of lease contracts. In a pre-sale report, Fitch has indicated that it expects an AAA rating. At CHF 0.35bn, the specified cover pool is comparatively small; the weighted residual term of the cover assets is short, at 2.3 years, which is, however, hardly surprising given the assets involved. Even though it is a notable innovation that highlights the basic advantages of dual recourse products, we do not see it marking the start of a new internationally significant covered bond subsegment.

Fitch: commentary on Australia's big four banks

A few days ago, the risk experts at Fitch presented an up-to-date commentary on the state of the big four Australian banks – Australia and New Zealand Banking Group (ANZ), Commonwealth Bank of Australia (CBA), National Australia Bank (NAB) and Westpac Banking Corporation (WBC). The economic recovery in "Down Under" has helped support both the earnings and asset quality of the four leading banks – and this is despite existing challenges in the form of low interest rates, intense competition and increased investment costs. At the same time, Fitch also expects a certain pressure on the banks' net interest margins (NIM) for fiscal year 2022 and attributes this to, among other factors, the loss of favourable refinancing conditions. Fitch also thinks that the banks are very sound in terms of their capitalisation. They are not exposed to significant funding pressure either, according to Fitch. We still expect a certain return to normality with regard to the covered bond market "Down Under". Accordingly, funding via covered bonds should gain somewhat more ground than in 2021, which should have an impact on the EUR benchmark segment in particular. We provide detailed information on our expectations for the covered bond primary market in a <u>separate article</u> in today's issue of the NORD/LB Covered Bonds & SSA View.

Foreign currencies II: Westpac active in US dollars

Australian issuers are also among those institutions that raise a significant share of their funding in covered bonds denominated in currencies other than the euro. The latest example of this is Westpac. The bank recently placed a deal for USD 1.75bn on the market after a long absence. The covered bond has a five-year maturity and was priced at ms +45bp (IPT: ms +46bp area) and extended the bank's own USD curve. Accordingly, Westpac is represented in the iBoxx USD Covered with two USD benchmarks, which will mature in 2024 (WSTP 3.15 01/16/24; USD 2.0bn) and in 2025 (WSTP 2 01/16/25; EUR 1.75bn) respectively.

ECB Economic Bulletin: property market in the eurozone since the outbreak of the pandemic

In its current Economic Bulletin, the ECB also presented an analysis of developments on the property market in the single currency area and, in so doing, focused on the period after the outbreak of the pandemic. According to its analysis, the pandemic has not – in contrast to other crises in the past – had a sustained impact on the upwards trend in terms of either prices or lending policies. In addition to fiscal and macroprudential factors, monetary policy is – hardly surprisingly – seen as crucial. We find the reference to the fact that TLTRO III also had an impact on setting the terms for property loans, although these loans cannot be used for calculating the lending benchmark of relevance for achieving the best rate, quite remarkable. With regard to the outlook for the property market, the accumulated savings and the recovery suggest prices will remain strong. On the other hand, the uncertainty factors associated with the lack of clarity as to the future course of the pandemic make forecasting difficult. The timing of any withdrawal of support by the public sector must also be mentioned in this context. The article in the Bulletin also raises the issue of whether there has been a permanent change in preference structures – triggered by the pandemic and lockdowns.

Market overview SSA/Public Issuers Author: Dr Norman Rudschuck, CIIA

Results of the 161st tax revenue estimate

Today, we would like to briefly focus on the following press release by the Federal Ministry of Finance: "The Federal Government's determined aid policy to cope with the consequences of the pandemic is having an effect; income taxes in particular are higher than previously expected. Compared to the estimate in May 2021, tax revenues up to and including 2025 will be a good EUR 35bn higher on average per year and therefore almost EUR 180bn higher overall. This benefits all levels of government, Federal government, Laender and local authorities." The difference compared to the result of the May tax revenue estimate is due almost entirely to deviations from the estimate owing to a significantly improved starting position in view of upward revisions of relevant macroeconomic parameters and positive tax revenues as well as the improved outlook for further macroeconomic development. The tax revenue estimate was based on the key macroeconomic figures of the Federal Government's autumn projection 2021. Accordingly, the German government expects real GDP to increase by 2.6% year on year this year, somewhat less than in the spring projection, in particular due to the longer than expected supply bottlenecks. However, owing to the (upward) revision of relevant variables for previous years in the summer, real GDP this year is roughly at the level of the spring projection, despite the lower GDP growth rate now projected. Given the high volume of orders in industry and resulting stimulus, a significant increase of 4.1% year on year is anticipated in 2022. In 2023, GDP is expected to grow more moderately again at 1.6% year on year. In the medium term, i.e. from 2024 to 2026, annual average growth is expected to be 0.8% year on year. According to the estimate, the federal government alone will collect EUR 11.7bn more next year than initially expected. The picture is similarly rosy for the following years. By 2025, more than EUR 14bn per year on average will flow into the federal budget. The government can expect a total of EUR 71.7bn more during this period. For the Laender, the increase will be even higher in the coming year. According to the updated estimate, they can expect EUR 22.5bn in additional revenues, and the local authorities EUR 8.1bn. The current COVID-19 wave, with new highs every day, is not making us particularly upbeat about the tax estimate. And what is worse, in the midst of the coalition negotiations for a possible redyellow-green alliance ("traffic light coalition"), a warm tax shower could bring about disincentives. According to the Tagesschau, an additional EUR 50bn per year is to be invested in climate protection, digitalisation and education - with a debt brake and without increasing taxes significantly. According to the report, the negotiators are therefore struggling to find ways to mobilise more funds, for example through the promotional bank KfW, through public enterprises or investment companies. The budget situation is tense due to the pandemic. To recap: in 2020 and 2021, the federal government approved new debt of more than EUR 370bn. According to preliminary plans, almost another EUR 100bn could be borrowed in the coming year with the debt brake suspended. The Federal Audit Office has just warned that the federal government's mountain of debt threatens to rise to almost EUR 1,500bn by the end of 2022. "The federal government has thus exhausted its financial leeway," it said. We would also point the finger at the federal government and the Laender.

ECB keeps internal operational limits on bond purchases, report says

What we have always kind of suspected and been the subject of much discussion was confirmed on Monday by the Bloomberg news agency. The European Central Bank is conducting its asset purchases subject to an internally held overall cap of just under 50% of the bonds issued by each euro member, people familiar with the matter report. To recap: we have regularly commented on the ECB's quantitative easing programmes since 2015. This primarily refers to the older asset purchase programme (also known as APP), and since 2020, also the pandemic emergency programme PEPP. The cap on bond purchases is above the 33% limit that officially applies to the APP, insiders say. However, no legal limits apply to the PEPP, which we have been complaining about for 20 months. For supranational bonds, the cap is 60%, while the cap for these assets at the APP is 50%, it said. According to Bloomberg, the ceilings serve as a guideline for bond purchases without being a formal limit on the ECB's freedom to act. The figures give an indication of the extent of support the central bank intends to provide to the Eurozone economy following the launch of the PEPP in March 2020. They were part of a presentation the Governing Council recently made to members examining how much room for manouevre the ECB still has in terms of purchasing activity, the informants said. This is part of the preparation for the crucial discussions in December, when Council members, led by Christine Lagarde, will decide on the future of bond purchases.

Primary market

We are once again seeing increased primary market activity: in Austria, preparations are underway for a green debut issue next year, and Cyprus is already inviting for calls for next year's funding strategy. Other issuers still have demand in the current year: KOMMUN was able to raise EUR 750m for eight years at ms -1bp. The Nordics' books were more than EUR 1.8bn. EUR-denominated bonds are rare from the Nordics and regularly in high demand. The guidance had started at ms +2bp area. BNG recently announced an investor call on the subject of social issues and has now brought EUR 1.5bn to market for 15 years at ms +4bp. The books were at EUR 1.8bn and pricing was exactly on guidance. Next, HAMBRG showed up on the primary market with a Land Treasury note: EUR 500m for 30 years at ms +9bp were possible here. The books closed at more than EUR 1.2bn. Société Du Grand Paris opted for a green dual tranche: EUR 1.75bn for ten years at +23bp over the French benchmark and EUR 1.25bn for 30 years also +23bp over OAT. Both tranches were slightly oversubscribed. The Spanish ICO also successfully placed EUR 500m for three years in a social bond. The books were just over EUR 1.3bn. The bond came in 7bp above the Spanish benchmark. The Madrid Region mandated a Green Bond Call (planned: EUR 500m WNG, 7y). Not an agency for us, but still worth mentioning is always Ontario Teachers' Finance, which is planning a Green Bond.

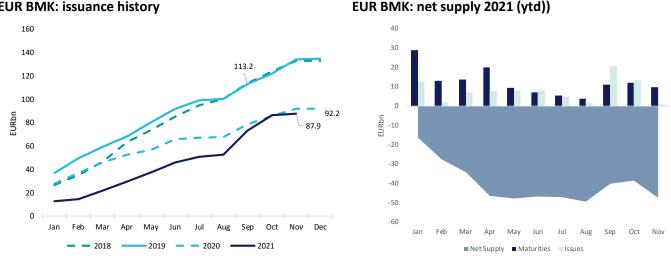
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Issuer	Country	Timing	ISIN	Maturity	Size	Spread	Rating	ESG
ICO	ES	16.11.	XS2412060092	3.4y	0.50bn	ms -14bp	A-/Baa1/A	Х
SOGRPR	FR	15.11.	FR0014006OB0	30.0y	1.25bn	ms +65bp	- / Aa2 / -	Х
SOGRPR	FR	15.11.	FR0014006NV0	10.0y	1.75bn	ms +14bp	- / Aa2 / -	Х
HAMBRG	DE	15.11.	DE000A2LQPL2	30.0y	0.50bn	ms +9bp	AAA / - / -	-
BNG	NL	15.11.	XS2408981103	15.0y	1.50bn	ms +4bp	AAA / Aaa / AAA	Х
KOMMUN	Other	09.11.	XS2408460041	8.0y	0.75bn	ms -1bp	- / Aaa / AAA	-

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

Covered Bonds Primary market forecast 2022: time for a comeback? Author: Dr. Frederik Kunze

Covered Bonds in 2022: a completely different market environment to 2021?

As 2021 draws to a close, once again the ECB's monetary policy is leaving its mark on the covered bond primary market. This applies on both the supply and the demand front. While supply from the single currency area has been dampened by the attractively conditioned refinancing options via TLTRO III, the Eurosystem has simultaneously acted as a major consumer or largely price-sensitive buyer via the CBPP3. In addition, there have been crowding-out effects with regard to funding via covered bonds, triggered in particular by high customer deposits but also a stronger focus on unsecured capital market refinancing. In the current issue of our weekly publication, after a brief review of 2021 so far, the focus will be on 2022. We expect a certain comeback in 2022 and forecast an overall new issuance volume of EUR 119bn for EUR benchmarks, but there is no indication of an outright trend reversal on the covered bond market. The benchmark segment is actually shrinking, not least due to the high maturities.



EUR BMK: issuance history

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

Primary market 2021: catch-up effect in September and October

While 2021 was characterised by a primary market that lagged behind previous years, September and October were surprisingly dynamic. We also expect some more market appearances in the remaining trading weeks. Nevertheless, we consider an issuance volume of EUR 90bn or a maximum of EUR 92.5bn for the year as a whole a realistic figure. Ideally, net supply in 2021 would be around EUR -44bn.

A look back: what did we actually expect initially?

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In retrospect, following the outbreak of the pandemic, we were a little bit too progressive in our forecast of EUR 105bn (as at December 2020) for the year, underestimating not least the substitution effects through alternative funding, but also the generally lower funding requirement. When we lowered the forecast in March 2021 to EUR 79.5bn, we were ultimately quite restrained, although on the odd occasion we had exaggerated expectations in the more detailed country analysis. We should mention the unexpectedly strong issuance activity in Germany, France, Norway as well as Canada and Australia. It is also striking in this context that Germany, Norway and Canada are among the jurisdictions that will ultimately report positive net supply in 2021. By contrast, Spain, France, the UK and Sweden will see significant contractions in 2021 in the form of negative net supply. In both the UK and Sweden, the central banks, for their part, launched monetary policy instruments that reduced primary market supply. In terms of the APAC region, we should stress that 2021 is already turning out to be the strongest issuance year with EUR 11.1bn to date (so far in 2012: EUR 10.5bn); we were particularly surprised by the primary market activity in Australia and in South Korea.

Jurisdiction	Maturities	Issues 2021e	Issues 2021	Δ expected	Net supply 2021
Junsaiction	2021e	as of Mar-21	ytd	vs. actual	(no more issues)
AT	4.5	5.0	4.0	-1.0	-0.5
AU	5.5	2.0	3.9	1.9	-1.7
BE	3.3	2.0	1.0	-1.0	-2.3
CA	7.5	6.5	9.8	3.3	2.3
СН	3.5	0.0	0.0	0.0	-3.5
CZ	0.0	0.5	0.5	0.0	0.5
DE	13.4	12.5	16.5	4.0	3.2
DK	2.5	1.0	1.0	0.0	-1.5
EE	0.0	0.5	0.0	-0.5	0.0
ES	15.9	3.0	0.7	-2.3	-15.2
FI	3.5	3.5	1.3	-2.3	-2.3
FR	29.9	17.0	20.8	3.8	-9.1
GB	13.1	2.0	1.8	-0.3	-11.4
GR	0.0	0.0	0.0	0.0	0.0
HU	0.0	0.5	0.0	-0.5	0.0
IE	1.3	0.0	0.0	0.0	-1.3
IT	7.1	2.0	3.3	1.3	-3.9
JP	0.0	1.0	0.8	-0.3	0.8
KR	0.0	1.5	2.6	1.1	2.6
LU	0.5	0.0	0.0	0.0	-0.5
NL	3.8	5.0	4.6	-0.4	0.9
NO	7.8	4.5	8.3	3.8	0.5
NZ	2.0	3.4	2.5	-0.9	0.5
PL	0.6	0.5	0.0	-0.5	-0.6
PT	0.0	0.5	0.0	-0.5	0.0
SE	10.0	2.2	2.5	0.4	-7.5
SG	0.5	1.5	1.5	0.0	1.0
SK	0.0	1.5	1.0	-0.5	1.0
Total	136.4	79.5	87.9	8.4	-48.5

NORD/LB forecast: deviations in March forecast vs. actual issues (ytd)

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

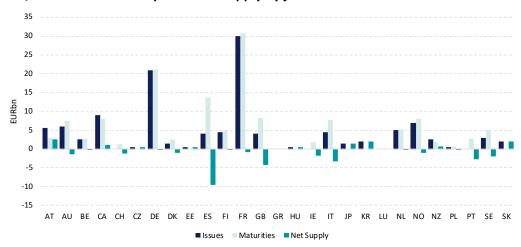
Primary market 2022: maturities drive issuance volume more strongly again

For 2022, we at least anticipate a normalisation where maturities should again lead to more refinancing via covered bonds. On the other hand, we do not yet see new funding through TLTRO III repayments and/or maturities as a defining issue in 2022, and so there will not be positive net supply across the board in the EMU jurisdictions. We expect dynamic growth in the APAC region and overseas markets, but also in the CEE region, because of the newcomers. We again expected large contractions in Spain, not least due to the ongoing bank consolidation. We definitely see the finalisation of the EU covered bond harmonisation as a supportive element, whereas the ESG trend should be more neutral to supportive. Uncertainty remains as to the further course of the pandemic, but also the expectations on the financial and capital markets with regard to monetary policy in the euro area.

Jurisdiction	Issues 2021	Outstanding volume	Maturities 2022	Issues	Net supply
Jurisalction	as at 16. November 2021	as at 16. November 2021	Maturities 2022	2022e	2022e
AT	5.5	32.5	3.0	5.5	2.5
AU	6.0	27.9	7.5	6.0	-1.5
BE	2.5	17.3	2.8	2.5	-0.3
CA	9.0	58.3	8.0	9.0	1.0
СН	0.0	1.3	1.3	0.0	-1.3
CZ	0.5	0.5	0.0	0.5	0.5
DE	21.0	158.4	21.1	21.0	-0.1
DK	1.5	7.0	2.5	1.5	-1.0
EE	0.5	0.5	0.0	0.5	0.5
ES	4.0	80.0	13.7	4.0	-9.7
FI	4.5	29.0	4.8	4.5	-0.3
FR	30.0	218.8	30.8	30.0	-0.8
GB	4.0	30.9	8.3	4.0	-4.3
GR	0.0	0.5	0.0	0.0	0.0
HU	0.5	0.0	0.0	0.5	0.5
IE	0.0	3.5	1.8	0.0	-1.8
IT	4.5	51.9	7.8	4.5	-3.3
JP	1.5	4.9	0.0	1.5	1.5
KR	2.0	5.6	0.0	2.0	2.0
LU	0.0	1.5	0.0	0.0	0.0
NL	5.0	60.3	5.3	5.0	-0.3
NO	7.0	51.0	8.0	7.0	-1.0
NZ	2.5	9.5	1.8	2.5	0.8
PL	0.5	2.7	0.6	0.5	-0.1
PT	0.0	5.8	2.8	0.0	-2.8
SE	3.0	29.6	5.0	3.0	-2.0
SG	1.5	7.3	1.5	1.5	0.0
SK	2.0	3.5	0.0	2.0	2.0
Total	87.9	899.6	138.0	119.0	-19.0

NORD/LB Forecast 2022: issues and maturities by jurisdiction

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



NORD/LB forecast 2022: expected net supply by jurisdiction

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

Negative net supply of EUR 19bn with new issues of EUR 119bn

All in all, based on this bottom-up analysis, we expect an issuance volume of EUR 119bn and would definitely call this a comeback in terms of the "headline" figure. Nevertheless, the maturities (EUR 138bn) should also not be ignored, and so with net supply of EUR - 19bn we are still talking about a shrinking market.

Conclusion

With a new issuance volume of EUR 119bn, we can certainly talk about a comeback for 2022, although a trend reversal cannot really be assumed when it comes to technical market data or net supply by maturity. However, we would consider it a welcome minimum of normality if maturities were to lead to more new placements of covered bonds. The dampening effect of TLTRO III is noticeably diminishing, although we would not rule out the announcement of a TLTRO IV programme. In our view, however, it is important to bear in mind that the expected conditioning will be far less attractive for the banks. A new wave of retained issues as a substitute for publicly placed bonds is therefore not likely to be imminent - at least in our baseline scenario.

Covered Bonds Development of the German property market

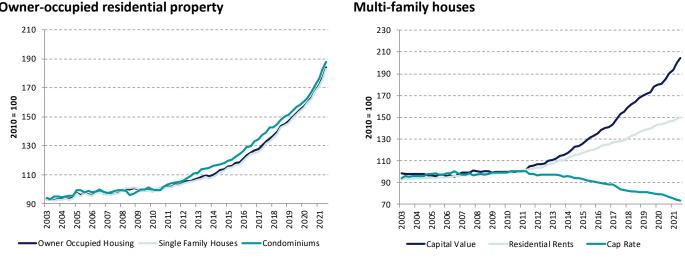
Author: Dr Frederik Kunze

vdp Property Price Index remains on the up

The Association of German Pfandbrief Banks (vdp) published the development of its property price indices on 10 November 2021. The most recent reporting period now includes the third quarter of 2021. The index refers to the base year 2010 and has now reached a new high of 184 points. The relative increase was +8.7% year on year. For vdp Managing Director Jens Tolckmitt, the performance of the index - also at the level of the segmentspecific indices - is quite remarkable. He continues to see that fundamental factors are behind the extraordinary upward pressure on residential property prices (+11.4% Y/Y). In terms of office properties (+0.3% Y/Y), a rapid stabilisation could also be observed, as expected, while the German real estate market continues to be "attractive and in demand". In the following, we would like to present the price developments on the German property market in detail based on the vdp property price index, as is customary on a quarterly basis.

Extreme increase in the price of residential property thanks to surplus demand

When commenting on the vdp property price index figures for the second quarter of 2021, we already highlighted the change in the preference structure for private households and considered this to be a significant demand-side price driver. When commenting on the development of the sub-index for "owner-occupied residential property", the vdp thus also unsurprisingly refers to the "increased appreciation" for residential property since the start of the pandemic. Since the third quarter of 2020, prices for owner-occupied residential property have risen by 12.5%, with an increase of 12.6% for owner-occupied homes and 12.2% for owner-occupied flats. In terms of index increases, the current data base has once again hit a record high since the introduction of the indices in 2003. It is also worth noting in this context that all three growth rates are now at double-digit levels for the second quarter in a row. A comparison with the previous period also reflects the current dynamic with values of +3.6% guarter on guarter (owner-occupied residential property), +4.0% quarter on quarter (owner-occupied homes) and +2.5% quarter on quarter (owneroccupied flats). Important influencing factors remain the continued favourable financing conditions and the still partly limited new construction activity. In this context, we also believe that an additional price-determining factor is the supply on the market for existing properties. A lack of investment alternatives as well as expected price increases are dampening supply and/or causing (potential) property sellers to adjust their asking prices upwards. The vdp also points to the overall increase in the number of households or inhabitants as a demand-driving factor.



Owner-occupied residential property

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

Rents and prices for multi-family houses

The influence on the market development for multi-family houses is comparably strong here. With a price increase over the past twelve months of +10.4% (previous quarter: +10.5% Y/Y), prices rose sharply for the second quarter in a row. The previous record of +10.9% year on year in Q1 2018 remains within reach. The same reasons apply as for owner-occupied residential property; favourable financing conditions as well as a high excess demand. Despite prices continuing to rise significantly, multi-family houses are in demand among domestic and foreign investors. The increase in new rental contracts was even more dynamic in the third quarter at +4.0% year on year. The property rate, which is in this analysis represents net income in relation to the purchase price (excluding additional purchase costs), reflects with a decline of -5.9% year on year that the rent increase is more than compensated for by the price increase.

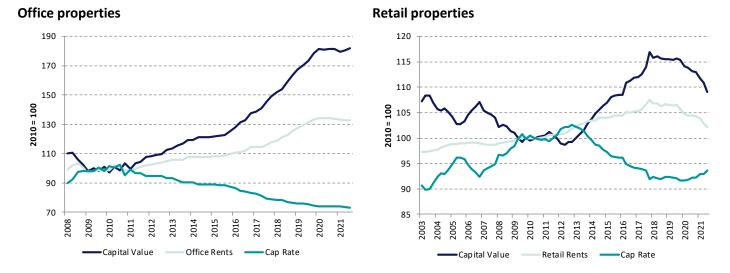
NORD/LB

Commercial property market: countermovement on prices for office properties

Overall, the burdens on the commercial property market as a result of the pandemic have continued over the past weeks and months. Compared with the third quarter of 2020, commercial property therefore posted an index decline of -0.9% year on year, although office property is now bucking this trend. The corresponding sub-index posted a gain of 0.3% year on year, following declines in the first (-1.2% Y/Y) and second quarters of 2021 (-0.4% Y/Y). Quarter-on-quarter, the increase was even more pronounced (+1.0% Q/Q). The vdp identifies quite contrary trends behind the price increases. The general trend towards opening up or withdrawing pandemic-related restrictions, but also the increasing number of vaccinated people, favours the utilisation of space. On the other hand, a greater role of the home office can also be observed. The effects on the demand for office space cannot yet be conclusively assessed in detail, but the vdp says there are no indications of "markedly declining prices" at present.

Prices for retail properties: structural change accelerated by pandemic

As we have often noted in this space, the retail sector has also been facing numerous challenges for some time. The COVID-19 pandemic has acted and continues to act as an additional catalyst here - also in terms of changing consumer purchasing behaviour. Prices fell by -3.6% over the year, again significantly and even faster than in the previous quarters of the year (Q1: -2.1% Y/Y; Q2: -2.6% Y/Y). This is actually the sharpest decline since the introduction of the index and also the eighth decline in a row. The earnings component also continues the negative trend. New rental contracts have also been declining for eight quarters in a row (decline in Q3 2021: -2.1 Y/Y).



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

Top seven housing market: due to surplus demand, another quarter with high price increases!

The separate index for the development of the residential property market in the top seven cities of Berlin, Hamburg, Munich, Cologne, Frankfurt am Main, Stuttgart and Düsseldorf remains on its upwards trajectory (+9.9% Y/Y after +7.5% Y/Y in Q2 2021), only just falling short of double-digit growth. In addition, prices for owner-occupied residential property rose by +10.9% year on year overall, once again stronger than in the previous quarter (+9.0% Y/Y). The largest increase was recorded in the sub-index for owneroccupied homes in the top seven cities (+11.0% Y/Y and +3.8% Q/Q). The price trend was most pronounced in Cologne (+14.9% Y/Y) and Düsseldorf (+14.6% Y/Y). Once again, the significant excess demand is driving this trend.

Conclusion

As indicated by the movements in the highly regarded vdp property price index, the upwards price trend in the German property market continues unabated. Essentially, the spread in prices for residential properties and commercial buildings remains unchanged, although office properties have recovered somewhat. The pandemic continues to affect the sub-markets differently. Monetary policy, but also the lack of alternatives for capital investment, continue to be among the influences that determine the direction of the German property market.

SSA/Public Issuers Beyond Bundeslaender: Spotlight on Belgian regions

Author: Dr Norman Rudschuck, CIIA

Introduction and structure of Belgium

As we have done several times over recent years, we will be taking another look at the regional governments and local authorities of Belgium in this publication. We have also included five issuer profiles in our analysis which were kind of missing in the previous but which were included in our specials such as Portugal and Spain. Due to the variety of issuers and significant pick-ups in comparison with Belgian government bonds and German Bundeslaender, these represent interesting investment alternatives. The focus here will once again be on the levels below the federal state and the communities, namely the regions and provinces. There are three regional institutions which take the name of their respective territory. From North to South, they are as follows: the Flemish Region (Flanders), the Brussels-Capital Region and the Walloon Region (Wallonia). Aside from these three regions, Belgium also comprises three communities defined by their language: these are the Flemish, French and German-speaking communities. Whereas the Flemish-speaking community exercises its competencies in the Flemish Province and Brussels, the French community is located in the Walloon Provinces and, likewise, in the Brussels-Capital Region. The German-speaking territory is by far the smallest. It covers nine municipalities in the extreme east of the Walloon province of Liège. The communities were introduced following the first state reform (1970). Their areas of responsibility have been extended over the course of various reforms. Following the second state reform (1980), the Flemish and Walloon Regions were each given a parliament and government of their own. In contrast, the region around the capital, Brussels, did not obtain its institutions until the third state reform in 1988/89. The members of the regional parliaments are directly elected every five years by the Belgian people. In addition to the regional parliament and regional government, in Wallonia there are also parliaments and governments dedicated to the Frenchspeaking and German-speaking communities. There are therefore three separate parliaments and governments in the region of Wallonia. In turn in Flanders, the Flemish community and regional institutions are merged, which is why there is just a single parliament and one government here. Both regions and communities can exercise constitutional powers in certain areas. Federal elections took place in Belgium on 26 May 2019 simultaneously with European elections. Elections to the Flemish parliament in addition to the parliaments of Wallonia and the Brussels-Capital Region also took place on the same day. Due to the strong regional associations and strengths of the majority of the political parties in Belgium, forming governments at regional level tends to be somewhat easier than is the case at national level. In this regard, the respective regional parliaments are dominated by lobbyists associated with the local communities in each case.

Belgian provinces

Since the fourth state reform, Belgium has been split into a total of ten provinces. In the wake of this reform, the province of Brabant was abolished and replaced by two new provinces: Flemish Brabant and Walloon Brabant. After the provincial split took effect in 1995, the territory of the Brussels-Capital Region was kept separate from the classification of provinces. The provinces are autonomous institutions, but remain under the supervision of the Federal State, the communities and above all, the regions. Provincial Councils have been established, whereby the members are directly elected for terms of six years. The council takes decisions of a general nature, votes on provincial regulations and draws up the budget for the province. The Provincial Council appoints six members of the Standing Deputation, which implements the resolutions of the Provincial Council and ensures day-to-day management. It is chaired by a Governor; this is not an elected position, rather the Governor is appointed or dismissed by the King under the responsibility of the Minister for Foreign Affairs.

Organisation of the provinces

The five Flemish provinces are: Antwerp, Limburg, East Flanders, Flemish Brabant and West Flanders. There are also five Walloon provinces: Walloon Brabant, Hainaut, Liège, Luxembourg and Namur. The arrondissements represent the next administrative subdivision under the provinces (arrondissement in French and arrondissementen in Flemish). The term 'Arrondissement' is sometimes used in German, although the official designation is 'Bezirk'. A closer analysis at this point would involve too much minor detail for the present publication.

Inter-community tensions place a strain on Belgian politics

The political and societal landscape of Belgium has been shaped by near-permanent conflict between the regions of Flanders and Wallonia ever since the country gained independence from the Netherlands in 1830. Starting with a dispute centred on the official language, contemporary tensions are mainly related to economic issues, with the fundamental conditions having been reversed since the end of the Second World War. While Wallonia assumed the mantle for a flourishing coal and steel industry at the beginning of the 20th century, its northern counterpart, Flanders, was regarded as structurally weak. Following the demise of industry in the 1950s and sluggishly implemented structural reforms in the French-speaking regions of Belgium, the economic strength ratio was reversed to the benefit of Flanders. The driver of growth and prosperity in this context was above all the tertiary sector. This discrepancy is, among other aspects, today reflected in the unemployment rate, which in Wallonia stood at 13.1% as at the end of 2019 (and therefore prior to the outbreak of the coronavirus pandemic), more than twice as high as in Flanders (5.9%). At this time, unemployment on a national level in Belgium amounted to 9.2%. As a result, the independence movement within the Flemish Community not only focuses on aspects of culture and language, but also on the welfare state, which benefits the Walloon population in particular. Over recent years, these separatist tendencies have intensified further, despite the fact that the regions are, to a large extent, already administered by the respective local governments on an autonomous basis. This is also the result of a complex distribution of powers between the individual administrative levels. With no real prospect of breaking the deadlock in the debate about the future structure of Belgium and potential Flemish independence in sight, it is to be expected that nationalist tendencies will rise further and the two regions in question will continue to drift further apart.

Current political situation

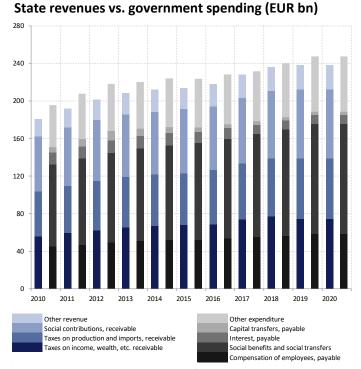
Ultimately, the political extremes have increasingly benefited from the simmering conflict. This was particularly noticeable in the last election, with Flanders voting for the far right and Wallonia electing political representatives from the extreme left. While the Workers' Party of Belgium (Parti du Travail de Belgique [PTB]) secured 13.8% of the vote in Wallonia, the far-right Flemish nationalist party Vlaams Belang gained a vote share of 18.7% in Flanders. It is significant that two separatist Flemish parties were able to unite the highest percentage of votes nationwide. Due to the fractured nature of the party-political landscape in Belgium, no government could be formed after the election, despite tough rounds of negotiations. Following the outbreak of the coronavirus pandemic in March 2020, a transitional government headed up by acting Prime Minister Sophie Wilmès was formed, which remained in office for six months. However, this government was severely restricted in its competencies. In this context, only legislation to combat the economic and financial impacts of the pandemic was allowed to be passed. Given the rifts between the political factions, it was unclear for several months just how the political standstill could be circumvented and the power vacuum filled. On 30 September 2020, seven parties (Open VLD, the Reformist Movement, the Socialist Party, Socialist Party Differently, Christian Democratic and Flemish, Ecolo and Green) agreed to work together and govern in what was dubbed the "Vivaldi coalition", with Alexander De Croo (Open VLD) nominated as Prime Minister. On 01 October 2020, a mere 494 days following the previous general election, Belgium therefore had a government with a parliamentary majority for the first time since December 2018. The coalition is composed of Christian Democrats, Social Democrats, Liberals and Greens, and unifies 53% of the seats in Parliament. Key issues on the agenda of this coalition government include, for example, the nuclear phaseout by 2025, the promotion of sustainable mobility solutions and – in the context of the coronavirus crisis – an expansion of healthcare. In any case, difficulties in forming governments in Belgium are nothing new: following the 2010 general election, it took more than 18 months before a coalition government could be formed. In view of the different positions within the government and the strengthening of the forces on the left and right in parliament, large parts of the Belgian population are sceptical about the upcoming legislative period. For example, Flemish separatists have already accused the government of being "anti-Flemish" and protests against the Vivaldi coalition have been launched. Any relaxation of the situation following the long-awaited govt. formation will also depend on how the societal division is handled. Current polls relating to the next parliamentary elections in 2024 point most strongly towards Vlaams Belang (15.11.2021). Another important factor is certainly how the Belgian state is able to overcome the economic and societal effects of the COVID-19 pandemic.

COVID-19 in Belgium: Significant adverse impacts on the healthcare system

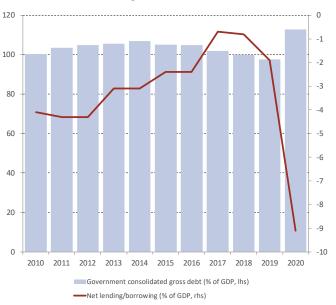
Belgium was comparatively hard hit by the first wave of the coronavirus pandemic. With a 7-day incidence rate in excess of 1,000, by the beginning of November, Belgium was in fact one of the most severely impacted countries anywhere in the world. In the meantime, approximately 20% of doctors and nursing staff were infected and hospitals across the country were on the verge of collapse, with hospitalised patient numbers also continuing to rise daily. The Minister of Health even talked of a "loss of control" in terms of the dynamic of infection rates. Although GDP declined sharply by 12% in the first half of 2020, Q3 saw an unexpected increase of the same amount. Due to the immunisation rating (74.1% fully immunised), which stands above the EU average (66.3% fully immunised) (as at 15.11.2021), the Federal Planning Bureau is expecting GDP growth of 5.7% year on year over the course of 2021 as well as +3% year on year in 2022.

Belgian economy – an overview: return to pre-crisis levels expected by the end of 2021

With real GDP per capita of EUR 39,110 in 2020 (preliminary data), Belgium is above average in comparison with the European Union (EU) as a whole (EUR 29,860). The regional disparities discussed in greater detail above are, however, again apparent here: with per capita GDP of EUR 30,236, in 2019, Wallonia lagged well behind Flanders (EUR 42,249) and the Brussels-Capital region (EUR 71,412). According to preliminary data from the National Bank of Belgium (NBB) for 2020, the service sector remains by far the most important with a share of 70% in GDP. Only 0.7% is attributable to agriculture. Belgium is highly dependent on exports, which at EUR 251bn in Q3 2021 (preliminary data) put it among the top five exporters in the EU. The export and import ratios are very high at around 81% of GDP (2020) in each case. At 48.4%, consumer spending on the part of private households accounts for nearly half of Belgium's GDP. Over the last few years, a slight decline in national debt in relation to GDP has been observed. However, as at the end of 2020, Belgium had the seventh highest debt level in the EU after Greece, Italy, Portugal, Spain, Cyprus and France, with a debt level of 114.1%. The government measures taken to overcome the pandemic had significant adverse effects on government finances: the export-orientated economy was hit especially hard by the coronavirus crisis. As a result, national debt is expected to increase from 98.1% of GDP in 2019 to 115.5% in 2022. A year-on-year increase of 5.7% is expected for GDP in 2021, with a budget deficit of 6.8% of GDP also expected. The NBB also forecast that economic output would return to pre-crisis levels in the current calendar year 2021. It is still anticipating GDP to stabilise over the next two years.



National debt vs. budget balance



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



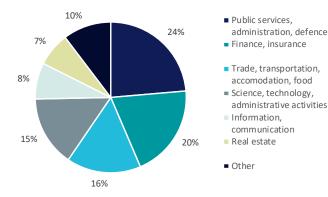
General information Population (2020) 1,218,255 Capital Brussels GDP (2019) EUR 86.7bn GDP per capita (2019) EUR 71.412 Unemployment ratio (2020) 12.3% Budget deficit (% revenues, 2020) 25.8% **Bloomberg ticker** BRUCAP Amount outstanding EUR 6.6bn Ratings

	Long-term	Outlook
Fitch	-	-
Moody's	-	-
S&P	AA-	stab

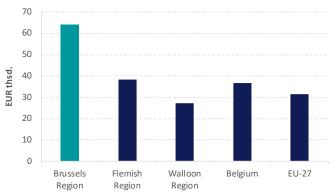
Brussels-Capital

With approximately 1.2 million inhabitants, the Brussels-Capital region (referred to in French as the Région de Bruxelles-Capitale and in Flemish as Brussels Hoofdstedelijk Gewest) is home to approximately 10% of the Belgian population. This makes it the smallest of the three Belgian regions, and it is located close to the centre of the country in Flemish territory. Both French and Flemish are official languages. With a total of 19 associated municipalities, including the City of Brussels itself, the region has de facto coalesced into a single city. The largest municipalities, after the City of Brussels, are Schaerbeek with around 133,000 inhabitants and the municipality of Anderlecht with just short of 121,000 inhabitants. The Brussels-Capital region has existed in its current form since 1 January 1995. The composition of the government apparatus and its division of competences are comparatively complex. The government consists of a French-speaking Prime Minister and four ministers (two French and two Flemish speaking), who are elected by the regional parliament. Unlike Wallonia and Flanders, the Brussels-Capital region does not have any special or constitutional autonomy and can, therefore, not regulate the election processes for the regional parliament independently. In addition to the regional government, the French and Flemish-speaking communities exercise rights in Brussels. There is also a governor, who acts as the central government's commissioner. The level below the regional parliament is again divided into municipal parliaments. With a GDP per capita of around EUR 71,412 (2019), the region is very wealthy compared with the national average (EUR 39,110) and the EU27 average (EUR 29,860). Given that Brussels is the headquarters of the European Union and NATO, this substantial figure is mainly attributable to the administrative and business headquarters of European institutions and multinational companies. This is reflected in a very service-oriented economy: over the course of 2021 to date, 91% of employment was attributable to the tertiary sector. According to information provided by EURES (2020), up to 162,000 jobs in Brussels are attributable to international institutions, which equates to approximately 23% of employment in the region. Like other major urban agglomerations, the Brussels-Capital region is one of the richest in Europe in terms of GDP. However, this is accompanied by a concentration of social risks. For instance, the unemployment ratio of 12.3% at the end of 2020 was above the national (9.1%) and the European average (7.2%).





GDP per capita compared (provisional data, 2021)



Source: Eurostat, FPB, NBB, NORD/LB Markets Strategy & Floor Research



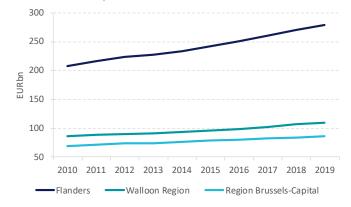
General information Population (2020) 6.629.143 Capital Brussels GDP (2019) EUR 279.2bn GDP per capita (2019) EUR 42,249 Unemployment ratio (2020) 3.5% Budget deficit (% revenues, 2020) 10.9% **Bloomberg ticker** FLEMSH Amount outstanding EUR 15.2bn Ratings

	Long-term	Outlook
Fitch	AA	stab
Moody's	Aa2	neg
S&P	-	-

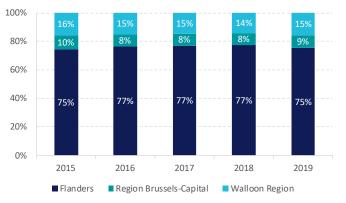
Flanders

With 6.6 million inhabitants, approximately 58% of the Belgian population live in Flanders (referred to in French as Flandre and in Flemish as Vlaanderen). Flanders borders France in the south-west, the Dutch provinces of Zeeland, Nordbrabant and Limburg in the north and east as well as the Wallonian provinces Hennegau, Walloon-Brabant and Liège in the south. The Brussels-Capital region is an official enclave within the Flemish region. Following Antwerp, which has approximately 530,000 inhabitants, Ghent and Bruges are the next largest cities with 263,000 and 283,000 inhabitants, respectively. Legislative authority is exercised by the Flemish parliament and the regional government. The parliament consists of 124 directly elected council members and six members of the parliament of the Brussels-Capital region. At present, those seeking to achieve more autonomy for Flanders are coalescing under the Flemish Movement, which demands greater independence from the Belgian government. The Flemish Movement has grown ever stronger in recent history as a consequence of the political crisis in Belgium from 2007 to 2011. Since 2010, the strongest party has been the separatist party Nieuw-Vlaamse Alliantie (New Flemish Alliance), while Vlaams Belang (Flemish Interests) became the second largest power in the federal and regional elections in 2019. Compared with the other regions, Flanders ranked second, with GDP per capita of EUR 42,249, behind the Brussels-Capital region (EUR 71,412). In 2020, 60% of Belgian GDP was attributable to Flanders. A total of 76% of Flemish gross value added was attributable to services, followed by industry (23%) and agriculture at 1% (2019). For 2020, a fall in annual GDP of -6.2% year on year (provisional data) was determined, and growth of 4.1% year on year is expected for 2021. Due to its central location and highly developed transport infrastructure, Flanders is an important logistics centre in Europe, which is also of benefit to multinational automotive companies. The Volvo plant in Ghent is regarded as the largest employer in Flemish industry with over 6,000 employees. Following on from this, the corporate landscape is dominated by small and medium-sized suppliers. The leading exports are from the subsectors Chemicals and Pharmaceuticals, which account for a share of around 23% of all Flemish exports. More than half the exports are destined for Germany, followed by the Netherlands, France and the UK. Flanders is rated Aa2 by Moody's, which is one notch above Belgium. Fitch also rates Flanders one notch above the Belgian state, giving it a rating of AA, and raised the outlook from "negative" to "stable" in October 2021.

Gross domestic product over time



Comaprison of export contribution of Belgian regions



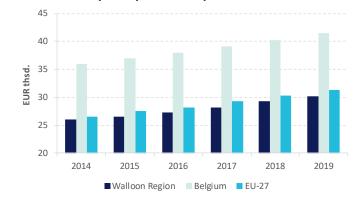
Source: Eurostat, FPB, NBB, NORD/LB Markets Strategy & Floor Research



General information Population (2020) 3.660.071 Capital Namur BIP (2019) EUR 110,0 Mrd. GDP (2019) EUR 110.0bn GDP per capita (2019) EUR 30,236 Unemployment ratio (2020) 7.3% Budget deficit (% revenues, 2020) 11.6% Bloomberg ticker WALLOO Amount outstanding Outlook Long-term Fitch _ Moody's Aa2 neg S&P

Wallonia

In terms of area, Wallonia is the largest of the three Belgian regions, at 16,844 km², and comprises the southern half of Belgian territory. However, the approximately 3.7 million inhabitants of Wallonia only account for just under a third of the Belgian population. Officially, Wallonia is bilingual and comprises the German-speaking community, to which only 2% of the inhabitants in the far east of the region belong, in addition to Belgium's French-speaking community. Charleroi and Liège are Wallonia's largest cities with approximately 200,000 inhabitants each. The latter is the economic and cultural centre of the region. Namur, which has 110,000 inhabitants, is the capital of Wallonia. There have always been conflicts between Wallonia and Flanders, its neighbouring, Flemish-speaking region in the north, which historically started with a dispute about the official language and are largely dominated by economic issues today. While Wallonia operated as a flourishing location of the coal and steel industry at the beginning of the 20th century, northern Flanders was regarded as structurally weak. Following the decline of these branches of industry in the 1950s and the sluggish implementation of structural change in the French-speaking part of Belgium, economic power shifted in favour of Flanders. The regions' areas of responsibility have been extended through various reforms in recent decades, meaning that they are largely administered autonomously by respective local governments. Wallonia ranks third within the Belgian regions with GDP per capita of EUR 30,236 (2019), compared with a figure of EUR 41,460 at national level. Wallonian GDP per capita therefore equates to 86% of the EU average, while Belgium as a whole achieved a figure of 118%. Following a long phase of growth in the regional discrepancies from the EU average since the global economic crisis in 2008/09, the gap has slowly reduced in recent years. The region is heavily focused on the services sector, which accounted for approximately 79% of employment in 2019 (compared with 78% in Belgium and 72% in the EU 27 average). The agricultural sector's contribution to GDP is similar to that at national level (1%), while the industrial sector is slightly below the national figure (around 20% in Wallonia and 21% in Belgium). Wallonia is rated Aa2 by Moody's, which like the Flanders region, is one notch higher than the Belgian national rating (Aa3).

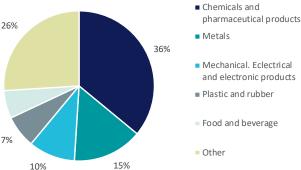


Trend in GDP per capita: a comparison

Exports by sector

6%

7%



Source: Eurostat, IWEPS, NBB, NORD/LB Markets Strategy & Floor Research



General information Population (2020) 4,663,724 Administrative headquarters Brussels Revenues (2020) EUR 9.7bn Budget deficit (% revenues, 2020) 19.6% Bloomberg ticker LCFB Amount outstanding EUR 7.0bn

Ratings

	Long-term	Outlook
Fitch	-	-
Moody's	A1	neg
S&P	-	-

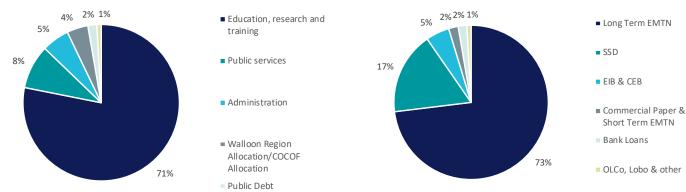
Wallonia-Brussels Federation

Like the other two linguistic communities, Belgium's French community (referred to in French as the Fédération Wallonie-Bruxelles) constitutes a sub-state of the Belgian federal state. Its legal existence is codified in Belgium's constitution. Responsibility extends over all people resident in the territory "Region of the French language". On the one hand, it covers Wallonia with the exception of members of the Germanspeaking community. On the other hand, its competence also covers French-speaking institutions in the officially bilingual Brussels-Capital region. Specifically, the Wal-Ionia-Brussels Federation is responsible for education, culture, sport, youth welfare, scientific research and legal advice centres. The community's parliament consists of a chamber with 94 indirectly elected deputies; of whom 75 are Wallonian and 19 are French speaking deputies from Brussels. The parliament exercises its legislative responsibility through decrees and votes, which relate to the budget and the financial report, among others. Since the last elections in 2019, the existing government, which consists of five members, represents the coalition of the PS (socialist party), MR (reform movement) and Ecolo (green party), which accounts for 73% of the seats in parliament. The government exercises executive power through edicts for implementing decrees. In the sixth government reform in 2014, the Belgian government boosted the powers of the community and guaranteed the funds to exercise them. Since the Wallonia-Brussels Federation does not generate any direct revenues from taxes, its main funding source consists of tax revenues collected by federal authorities and redistributed. Since the Special Financing Act was enacted in 1989, the Federation has enjoyed far-reaching autonomy in managing the budget and has retained 99% of general revenues. A support mechanism is also codified in Article 54 of the Financing Act, which guarantees the communities a government loan, for which the interest is borne by the government if they default on their payments or fall into arrears. The French community raises funding selectively on the capital market. In November 2020, it returned to the primary market with its first benchmark issue since 2011 in the amount of EUR 600m with a maturity of nine years. The French community is rated A1 by Moody's, which is one notch down on that of the Belgian state (Aa3).

Debt by instrument (2020)

NORD/LB

Breakdown of budget expenses (2020)



Source: Eurostat, IWEPS, NBB, NORD/LB Markets Strategy & Floor Research

RÉGION DE BRUXELLES-CAPITALE FONDS RÉGIONAL BRUXELLOIS DE REFINANCEMENT DES TRÉSORERIES COMMUNALES

General information

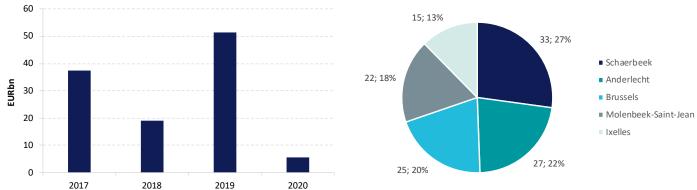
Administrative headquarters Brussels Bloomberg ticker FRBRTC Amount outstanding EUR 0.3bn

Ratings

	Long-term	Outlook
Fitch	-	-
Moody's	-	-
S&P	-	-

Brussels Regional Fund for Funding Municipal Budgets

The Fonds régional bruxellois de refinancement des trésoreries communales (FRBRTC) is an autonomous administrative entity of the City of Brussels and reports to the Minister responsible for local authorities. Since the Ordinance of 8 April 1993, the FRBRTC has been responsible for funding communities that have got into financial difficulties. Specifically, this refers to the municipalities that can no longer comply with the requirements of Article 252 of the new Belgian Municipalities Act (which enshrines a requirement for a balanced budget). The liabilities of the Regional Fund are guaranteed by the Brussels-Capital region. To apply for financial aid, municipalities are required to prepare a financial plan, which must contain specific measures to improve the financial situation in structural terms. The schedules must be sent with the application to the government of the Brussels-Capital region, which is responsible for approving the loan application and issuing the corresponding loan agreement. The loans provided by the FRBRTC have a term of 20 years and a fixed annual interest date. Among others, the measures associated with the loan for monitoring its implementation are described in the loan agreement. The 1993 ordinance states explicitly that a regional inspector is responsible for monitoring implementation of the financial plan. A monitoring committee, which meets regularly and consists of representatives of the municipalities and supervisory authorities, constitutes an additional supervisory and monitoring body. The role of the Fund was expanded in 2002; since then, it has operated as the financial coordination centre for municipalities and the public institutions tasked with safeguarding social services. In November 2011, the responsibilities of the Fund were extended once more. Since then, the Fund has also been able to grant loans to municipalities to finance investments. They can also apply to the FRBRTC to transfer administration of their municipal activities, as happened in 1995 with the restructuring of hospitals. In 2011 (for budget year 2012) and 2012 (for financial years 2013-2014), two submissions of applications for a project financing were published. The majority (70%) of the funds available at the time were made available for projects in the education sector. Recently, two new municipalities -Molenbeek-Saint-Jean and Evere – received loans amounting to EUR 27.1m and EUR 6.5m respectively between 2014 and 2019.



Financing aid for Belgian municipalities per year

Source: Bruxelles Pouvoirs Locaux, FRBRTC, NORD/LB Markets Strategy & Floor Research

Top five recipient municipalities since 2011 (EURbn)

Capital market activities

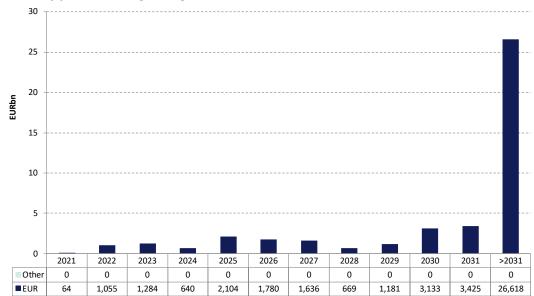
The following administrative units below the Belgian Federal State (officially: the Kingdom of Belgium; Bloomberg ticker: BGB; colloquial: OLOs) are listed or have bonds outstanding, in alphabetical order:

- ANTWRP (Province of Antwerp)
- BLMBRB (Province of Vlaams-Brabant)
- **BRUCAP** (Region Bruxelles-Capitale)
- BRUGGE (City of Brugge)
- DGBE (German speaking community in Belgium)
- FLEMCT (City of Aalst, Beringen, Boom, Bree, Brugge, Lier, Wachtebeke, Zaventem)
- **FLEMSH** (Ministeries of the Flemish community)
- FRBRTC (Brussels Municipalities Regional Fund; guaranteed by BRUCAP)
- GHENTB (City of Ghent ASBL)
- HASSLT (City of Hasselt)
- HOGENT (Hogeschool Gent)
- IZEGEM (City of Izegem)
- LCFB (Communaute Francaise de Belgique [Francophone community])
- MECHLN (City of Mechelen)
- REGWAL (Caisse d'Investissement de Wallonie [Wallonia investment fund)
- VILLIE (City of Liege)
- VLNAMR (City of Namur)
- WALLOO (Region Wallonne [Wallonia])
- ZAVENT (Gemeente Zaventem [Community of Zaventem])
- ZOTTGM (City of Zottegem)

Highlighted: Already purchased as part of the PSPP/PEPP) Source: Bloomberg, NORD/LB Markets Strategy & Floor Research

Outstanding volumes on the Belgian sub-sovereign market

Altogether, the regional market currently amounts to EUR 43.6bn compared with EUR 33.1bn around one year ago. Here, FLEMSH with EUR 15.2bn and WALLOO with EUR 13.4bn are significantly ahead of the other issuers. These are followed by LCFB with EUR 7.0bn and BRUCAP with EUR 6.6bn. The subsequent places are occupied by DGBE and FRBRTC with EUR 522m and EUR 333m respectively. FLEMSH has topped this ranking for years. Due to the strong issuance activity using benchmark bonds, WALLOO has climbed the rankings and is now the second largest regional Belgian issuer. Due to private placements up to 100 years in duration, the overall Belgian sub-sovereign structure can be described as very granular. This situation is also illustrated by the following graphic. Liquidity is suffering, although there is a pick-up as an illiquidity premium. Incidentally, issuers SOCWAL and FRBRTC are defined as agencies, which have been included on the purchase list of the Eurosystem. Both are classified as local public-sector issuers (Société Wallone du Credit Social and Brussels Municipalities Regional Fund [FRBRTC guaranteed by BRUCAP]).



Maturity profile of Belgian regions

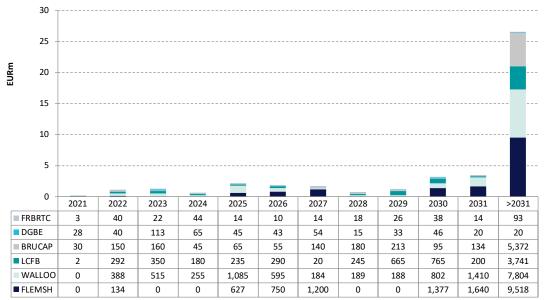
Source: Bloomberg, NORD/LB Markets Strategy & Floor Research

Outstanding volume

Not all the tickers listed above are regions. Some regional governments and local authorities or other regional vehicles or agencies are also active in the capital market. Nevertheless, the above breakdown reveals 622 bonds now outstanding - compared with 558 around one year ago. When we first looked at this in September 2016, there were around 300 bonds. However, this underpins the granularity of the Belgian regional bonds: there is now a total of EUR 43.6bn outstanding, against marginally under EUR 12bn in September 2016 and EUR 20.1bn in 2019. Back then, just as now, there were hardly any foreign currency deals to discuss; accordingly, the FX segment has no share of the composition of the liabilities, meaning that any diversification of the composition is provided by different maturity segments. Roughly EUR 26.6bn will only mature after 2031, which shows that the issuers in question are opting for very long-term funding. Whereas in 2016, there were only three bonds outstanding that amounted to more than or equal to EUR 500m and which were therefore designated as benchmark bonds, there is presently a total of 25 bonds outstanding with a volume of between EUR 500m and EUR 2bn. Alongside a total of nine bonds from the region of Wallonia (WALLOO), these now include 13 bonds issued by the Flemish Community (FLEMSH) in addition to a single bond placed by the LCFB in June. In 2020 alone, a total of eight bonds in benchmark size (at least EUR 500m) were issued. Incidentally, the Belgian state has also already been active in the segment of green bonds, as is the case for Germany and France too.

Belgian regions issue predominantly fixed-rate bonds

The majority of bonds issued by the Belgian regions featured fixed coupons. Of the bonds we have counted (662), 546 have a fixed coupon. This equates to 87.8%. These are followed by FRNs (floating rate notes; 6.6%), and then by variable-rate bonds, which account for only a marginal share. Zero-coupon bonds and step-up coupon bonds are hardly worth mentioning. In this respect, Bloomberg makes a distinction between floaters (classic FRNs, e.g. 3-M Euribor +70bp) and inflation-linked bonds (variable). The proportion of fixed-rate bonds is fairly high in relation to German Bundeslaender (69%), for example. All in all, Belgian regions are open to niche products when it comes to their funding (PP's).

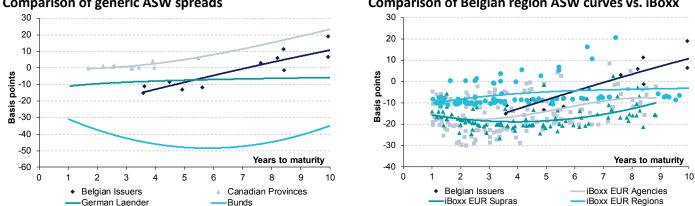


Outstanding bonds of select Belgian regions

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

Belgian regions offer pick-up vs. OLOs and German peers

It should not come as any great surprise that Belgian regions are trading at the widest spreads to Belgian government bonds and the German peer group. The Flemish Community is rated AA / Aa2 / -, while Wallonia has been awarded a rating of - / A2 / -. Belgian sovereign bonds are rated AA- / Aa3 / AA. From a regulatory point of view, Belgian regions and government bonds can be seen as identical to their German counterparts (LCR Level 1; RW 0%, Solvency II: preferred), although the latter almost all have a triple-A rating and can generally be traded on a far more liquid basis on the secondary market. In view of limited liquidity, including in a peer-group comparison, we have declined to look at these bonds in any more detail. In addition, Belgian regions are open to private placements and custom maturity requests from institutional investors.



Comparison of generic ASW spreads

Comparison of Belgian region ASW curves vs. iBoxx

Source: Bloomberg, NORD/LB Markets Strategy & Floor Research; data from 09/11/2021 eod

Regulatory overview of RGLAs*/ **

Risk weighting	LCR classification	NSFR classification	Solvency II classification
0%	Level 1	0%	preferred (0%)
0%	Level 1	0%	preferred (0%)
20%	Level 2A	15%	preferred (0%)
20%	Level 2A	15%	non-preferred (individual test)
0%	Level 1	0%	preferred (0%)
0%	Level 1	0%	preferred (0%)
	Risk weighting 0% 0% 20% 20% 0%	Risk weightingLCR classification0%Level 10%Level 2A20%Level 2A20%Level 1	Risk weightingLCR classificationNSFR classification0%Level 10%0%Level 10%20%Level 2A15%20%Level 2A15%0%Level 10%

NORD/LB

*Regional governments and local authorities

** Note: In the absence of an explicit guarantee from the respective nation state, the current LCR level is dependent on the relevant rating (see CQS classification and LCR classification of assets).

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

Exemptions from the scope of application of the Leverage Ratio (pursuant CRD IV Art. 2 (5)) (Examples)

EU	Central banks of member states
Belgium	Institut de Réescompte et de Garantie/- Herdiscontering- en Waarborginstituut
Denmark	Eksport Kredit Fonden, Eksport Kredit Fonden A/S, Danmarks Skibskredit A/S and KommuneKredit
Germany	Kreditanstalt für Wiederaufbau (KfW), undertakings which are recognised under the "Wohnungsgemeinnützigkeitsgesetz" as bodies of state housing policy and are not mainly engaged in banking transactions, and undertakings recognised under that law as non-profit housing undertakings (e.g. Rentenbank, L-Bank, IFBHH, IBSH etc.)

Source: CRD IV, NORD/LB Markets Strategy & Floor Research

Regional and local authorities (0% stress factor possible (example))

Country	Regional and local governments
Belgium	Municipalities (Communauté/Gemeenschappen), regions (Régions/Gewesten), towns (Communes, Gemeenten) & provinc- es (Provinces, Provincies)
Germany	Laender, municipalities & municipal associations
France	Regions (région), municipalities (commune), "Départements"

Source: (EU) 2015/2011, NORD/LB Strategy & floor Research

Summary of Belgian regions

Risk weighting	0%
LCR classification	Level 1 (EBA list)
NSFR classification	0%
Solvency II classification	Preferred (0%)

lssuer	Inhabitants (2020)	Unemployment rate (2020)	GDP per capita (2019)	Outstanding volume	Number of bonds	Rating
FLEMSH	6.6m	3.5%	EUR 42,249	EUR 15.2bn	31	(AA / Aa2 / -)
WALLOO	3.7m	7.3%	EUR 30,236	EUR 13.4bn	173	(-/A2/-)
LCFB	4.7m	-	-	EUR 7.0bn	146	(-/A1/-)
BRUCAP	1.2m	12.3%	EUR 71,412	EUR 6.6bn	161	(- / - / AA-)
DGBE	0.1m	2.7%	EUR 37,833	EUR 0.5bn	27	(-/-)
FRBRTC	-	-	-	EUR 0.3bn	40	(-/-)
Belgium	11.5m	5.6%	EUR 41,460	EUR 362.4bn	30	(AA- / Aa3 / AA)

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

Liability mechanism

Interestingly, the Belgian regions enjoy neither horizontal financial equalisation nor an explicit guarantee from the Kingdom of Belgium. Consequently, the federal state is charged with making corresponding transfer payments (vertical structure). Tensions between Flanders and Wallonia can be described as significant. It can therefore be stated that no support or liability mechanisms are in place either between the regions and communities or in relation to the federal state. However, Moody's believes it is "highly probable" that the federal government would provide support in the event of payment difficulties.

ECB purchase programme

It is worth taking a look at the Eurosystem's purchase activities: this reveals that there are four Belgian names among the agencies: FRBRTC, SOCWAL, FONWAL und SWLBEL. Some of these do not even have any outstanding bonds eligible for purchase under ECB criteria. To date, the Eurosystem has still only purchased one bond issued by the Brussels Municipalities Regional Fund (FRBRTC) and three deals placed by the Société Wallonne du Crédit Social. In contrast, over time, nine bonds with the WALLOO ticker, 14 with the FLEMSH ticker in addition to seven and four ISINs respectively from LCFB and BRUCAP have been included on the Eurosystem's purchase list. SOCWAL bonds in particular are very small, with an outstanding volume of EUR 18-50m. However, the single FRBRTC bond to have been purchased is even smaller, coming in at just EUR 10m. As such, the bonds in question are among the smallest ISINs acquired under the PSPP/EAPP and PEPP. In particular, the FLEMSH bonds tend to be far more liquid at up to EUR 1.25bn. The same also applies to WALLOO bonds (largest found at EUR 1bn). Even so, the size of the bonds is still small in relation to bonds issued by the German Laender, of which the Eurosystem has already purchased more than 510 various ISINs.

Conclusion

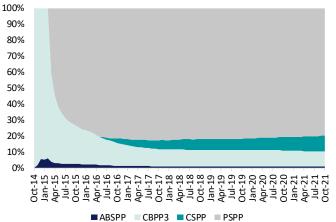
Bearing in mind a further escalation of the low interest rate environment in 2020, there are still interesting investment opportunities cropping up in certain niche areas – in some cases amplified by the rampant coronavirus pandemic. Our studies on the Canadian provinces, the Australian states and on Auckland Council in New Zealand are also to be interpreted in this light. They enhance the classical SSA portfolio to include maturity and/or yield, but contribute to diversification in any case. The fact that the outstanding volumes increased again significantly compared with 2020 reflects the fact that opportunities continue to arise here. It is worth paying closer attention to FLEMSH and WALLOO regarding their issued volumes. Even though at "only" EUR 43.6bn after EUR 33.1bn last year, and despite growth in recent years, the Belgian market for sub-sovereign bonds can certainly be described as small, Flemish bonds account for the largest volume. It is interesting to note that there is no FX diversification. Second and third tier issuers are regularly the focus of attention when it comes to rare investment alternatives, not least because the Eurosystem has already purchased Belgian regional bonds as part of the PSPP and PEPP. All issuers are therefore interesting from a yield and regulatory point of view and are also open for private placements. It is worth observing how and with which measures Belgium is able to continue tacking the pandemic and its effects. In light of current developments, the longterm effects on politics and society could harm the economy more than previously anticipated.

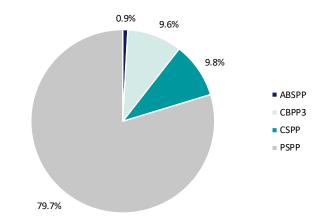
ECB tracker

Asset Purchase Programme (APP)

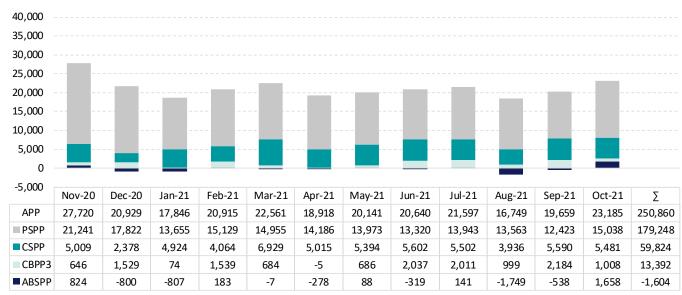
	ABSPP	СВРРЗ	CSPP	PSPP	АРР
Sep-21	26,013	296,590	296,403	2,449,278	3,068,284
Oct-21	27,671	297,598	301,885	2,464,316	3,091,470
Δ	+1,658	+1,008	+5,481	+15,038	+23,185

Portfolio structure





ABSPP CBPP3 CSPP

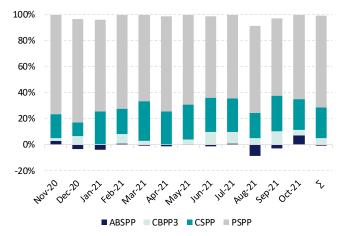


Monthly net purchases (in EURm)

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

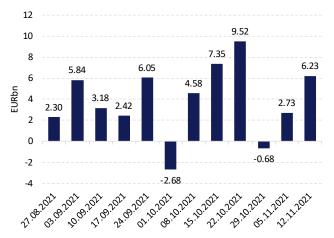
3,500 3,000 2,500 1,500 1,000

Distribution of monthly purchases



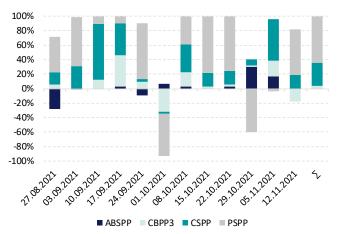
Weekly purchases

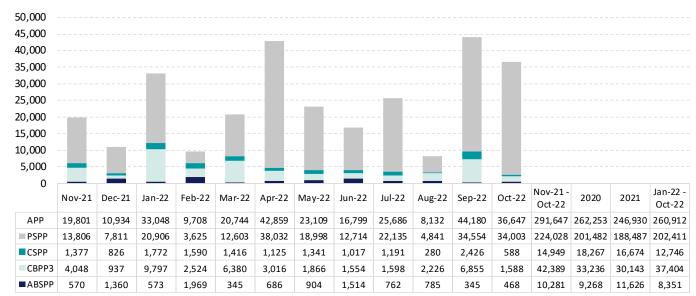
Portfolio development



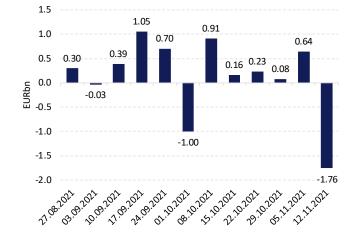
Expected monthly redemptions (in EURm)

Distribution of weekly purchases





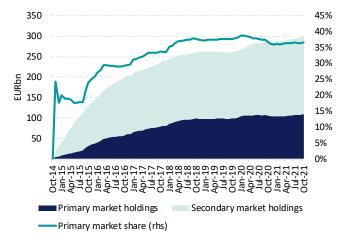
Source: ECB, Bloomberg, NORD/LB Markets Strategy & Floor Research



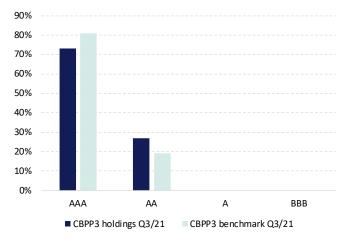
Covered Bond Purchase Programme 3 (CBPP3)

Weekly purchases

Primary and secondary market holdings

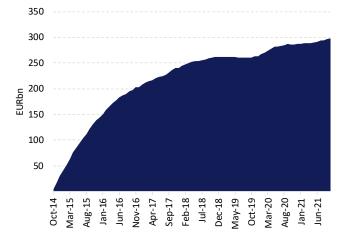


Distribution of CBPP3 by credit rating



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

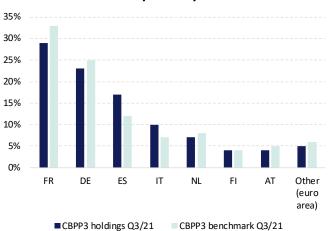
Development of CBPP3 volume



Change of primary and secondary market holdings

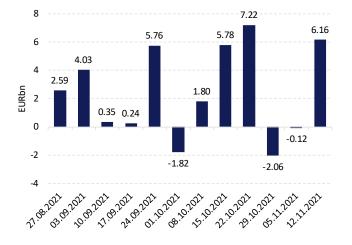


Distribution of CBPP3 by country of risk



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 (EURm) (EURm) (in years)³ (in years) key¹ (EURm)² (in years) AT 2.7% 71,416 70,316 1,100 7.5 7.6 -0.1 ΒE 3.4% 89,945 87,525 2,420 8.0 10.2 -2.2 CY 0.2% 4,040 -1,129 9.9 8.8 1.1 5,169 -9,929 -1.0 DE 24.3% 623,378 633,307 6.6 7.6 1.7 EE 0.3% 406 6,767 -6,361 9.2 7.5 ES -0.4 11.0% 305,248 286,476 18,772 8.0 8.4 FΙ 1.7% 40,185 44,129 -3,944 6.9 7.7 -0.8 FR 507,890 490,673 17,217 7.2 -0.9 18.8% 8.1 GR 0.0% 0 0 0 0.0 0.0 0.0 IE 1.6% 40,502 40,682 -180 8.5 10.1 -1.6 IT 15.7% 433,577 408,131 25,446 7.1 7.9 -0.8 LT 0.5% 5,345 13,904 -8,559 10.2 10.6 -0.4 LU 0.3% 3,777 7,914 -4,137 5.6 7.2 -1.7 LV 0.4% 3,191 9,361 -6,170 11.3 10.4 0.9 MT 0.1% 9.5 9.2 0.3 1,268 2,520 -1,252 NL 5.4% 124,615 140,791 -16,176 7.7 9.0 -1.4 PT 2.2% 49,790 56,228 -6,438 7.0 7.2 -0.2

-1,477

-10,732

11,526

0

9.9

8.2

7.7

7.3

10.2

8.3

8.9

8.2

-0.3

-0.1

-1.2

-0.9

2,603,303 ¹ Based on the ECB capital key, adjusted to include supras and the disqualification of Greece

10,091

16,781

271,856

² Based on the adjusted distribution key

SI

SK

SNAT

Total / Avg.

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

11,568

27,513

260,330

2,603,303

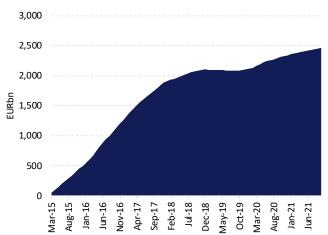
Source: ECB, NORD/LB Markets Strategy & Floor Research

0.4%

1.1%

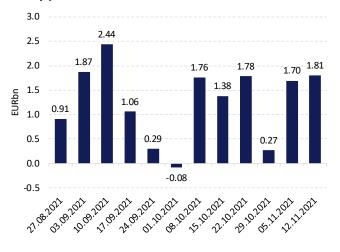
10.0%

100.0%



NORD/LB

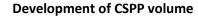
Development of PSPP volume

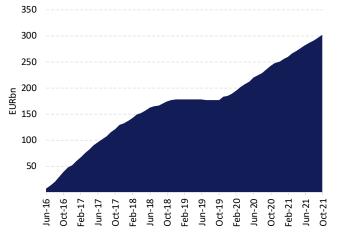


Asset-Backed Securities Purchase Programme (ABSPP)

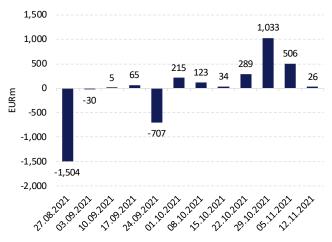
Corporate Sector Purchase Programme (CSPP)

Weekly purchases





Weekly purchases



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

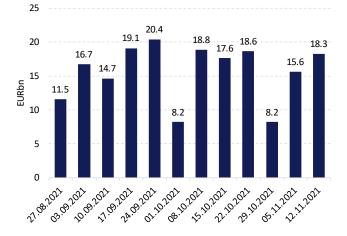
Development of ABSPP volume



Pandemic Emergency Purchase Programme (PEPP)

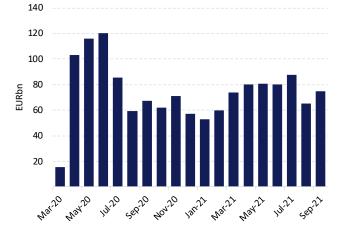
Holdings (in EURm) Volume already invested (in EURbn) PEPP Sep-21 1,412,291 81.2% 18.8% Oct-21 1,480,146 Δ +67,855 0 185 370 555 740 925 1,110 1,295 1,480 1,665 1,850 **Estimated portfolio development** Assumed pace of purchases Weekly net purchase volume PEPP limit hit in ... Average weekly EUR 17.7bn 20 weeks (01.04.2022) net purchase volume so far Monthly net purchases (in EURm) 130,000 110,000 90,000 70,000 50,000 30,000 10,000 -10,000 Nov-20 Dec-20 Feb-21 Mar-21 Apr-21 May-21 Jun-21 Jul-21 Oct-21 Σ Jan-21 Aug-21 Sep-21 Σ 98,555 78,092 70,892 80,829 96,082 99,036 100,841 100,808 109,154 81,799 94,710 91,040 1,101,83 PEPP 70,835 57,163 53,046 59,914 73,521 80,118 80,700 80,168 87,557 65,050 75,051 67,855 850,978 APP 27,720 22,561 18,918 20,640 20,929 17,846 20,915 20,141 21,597 16,749 19,659 23,185 250,860

Weekly purchases



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

Development of PEPP volume

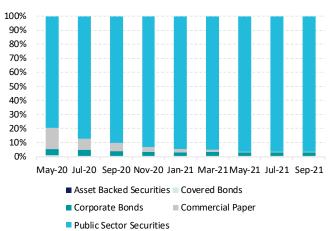


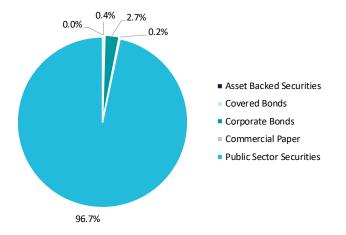


	Asset-backed Securities	Covered Bonds	Corporate Bonds	Commercial Paper	Public Sector Securities	PEPP
Jul-21	0	5,379	33,684	3,861	1,220,424	1,263,348
Sep-21	0	6,079	37,139	3,314	1,353,076	1,399,609
Δ	0	+707	+3,489	-545	+136,451	+140,101

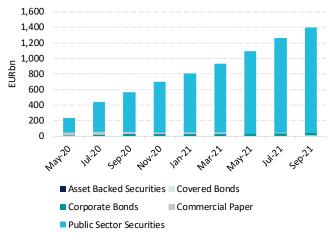
Holdings under the PEPP (in EURm)

Portfolio structure

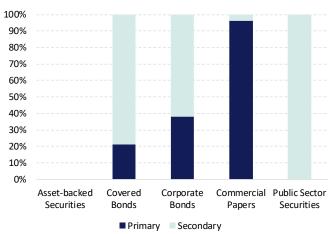




Portfolio development



Share of primary and secondary market holdings



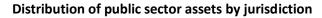
Breakdown of private sector securities under the PEPP

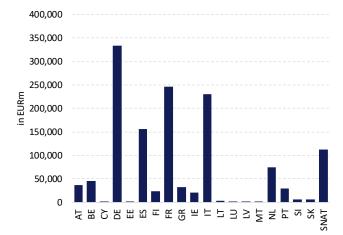
Sep-21	Asset-backed securities		Covered bonds		Corporate bonds		Commercial paper	
	Primary	Secondary	Primary	Secondary	Primary	Secondary	Primary	Secondary
Holdings in EURm	0	0	1,298	4,781	14,113	23,026	3,191	123
Share	0.0%	0.0%	21.4%	78.7%	38.0%	62.0%	96.3%	3.7%

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

Adj. Deviations ø time to Holdings PEPP Market average³ Difference Jurisdiction distribution from the adj. maturity (in EURm) (in years) (in years) share distribution key² key¹ (in years) AT 36,922 2.6% 2.7% 0.1% 8.5 7.2 1.4 ΒE -2.4 46,226 3.3% 3.4% 0.1% 6.7 9.1 CY 2,308 0.2% 0.2% 0.0% 9.0 8.0 1.0 DE 334,500 23.7% 24.5% 0.8% 6.2 6.8 -0.6 EE 256 0.3% 0.0% -0.2% 8.7 7.0 1.7 ES 155,773 10.7% 11.4% 0.7% 8.1 7.5 0.6 FI 23,292 1.7% 1.7% 7.4 7.6 -0.2 0.1% FR 246,513 18.4% 18.1% -0.3% 8.4 7.6 0.8 2.4% GR 32,185 2.2% 0.1% 9.2 9.7 -0.5 IE 21,486 1.5% 1.6% 0.0% 8.8 9.2 -0.4 IT 230,234 15.3% 16.9% 7.0 6.9 0.0 1.6% LT 2,767 0.5% 0.2% -0.3% 11.5 10.4 1.1 1,854 0.3% -0.2% 6.8 6.2 0.5 LU 0.1% 1,532 0.4% 0.1% -0.2% 9.3 9.3 0.0 LV MT 383 0.1% 0.0% -0.1% 9.7 9.0 0.7 NL 74,352 5.3% 5.4% 0.2% 7.2 8.2 -1.1 PT 30,245 2.1% 2.2% 0.1% 7.0 7.2 -0.3 SI 6,003 0.4% 0.4% 0.0% 9.5 9.3 0.2 SK 6,892 1.0% 0.5% -0.5% 9.1 8.2 0.9 SNAT 2.4 111,925 10.0% 8.2% -1.8% 10.9 8.5 Total / Avg. 1,365,650 100.0% 100.0% 0.0% 7.7 7.5 0.2

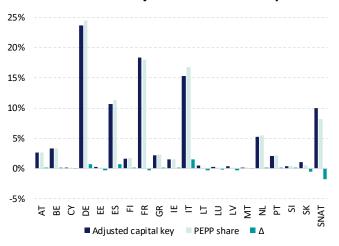
Breakdown of public sector securities under the PEPP





Deviations from the adjusted distribution key

NORD/LB



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

Aggregated purchase activity under APP and PEPP

Holdings (in EURm)

	APP	PEPP	APP & PEPP
Sep-21	3,068,284	1,412,291	4,480,575
Oct-21	3,091,470	1,480,146	4,571,616
Δ	+23,185	+67,855	+91,040

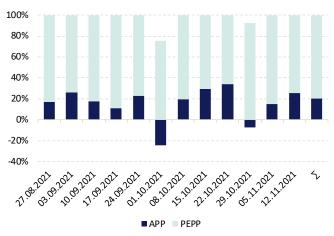
Monthly net purchases (in EURm)



Weekly purchases



Distribution of weekly purchases

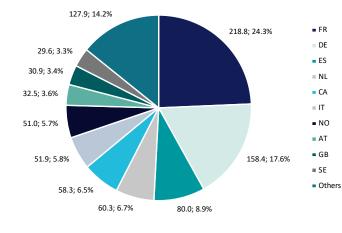


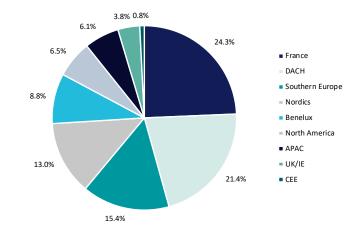
NORD/LB

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

Charts & Figures Covered Bonds

EUR benchmark volume by country (in EURbn)



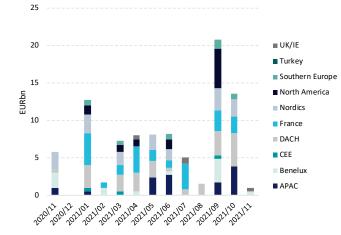


EUR benchmark volume by region (in EURbn)

Top-10 jurisdictions

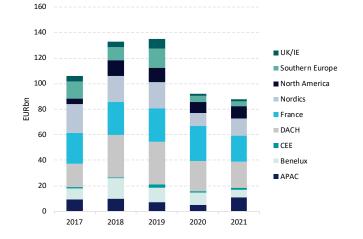
Rank	Country	Amount outst. (EURbn)	No. of BMKs	There of ESG BMKs	Avg. issue size (EURbn)	Avg. initial maturity (in years)	Avg. mod. Duration (in years)	Avg. coupon (in %)
1	FR	218.8	208	10	0.94	10.2	5.6	0.94
2	DE	158.4	234	16	0.61	8.4	4.6	0.42
3	ES	80.0	65	4	1.13	11.6	3.7	1.80
4	NL	60.3	63	0	0.90	11.6	7.6	0.81
5	CA	58.3	51	0	1.11	6.1	3.2	0.22
6	IT	51.9	61	1	0.82	9.0	4.0	1.30
7	NO	51.0	58	9	0.88	7.3	4.0	0.37
8	AT	32.5	60	2	0.54	9.9	6.3	0.60
9	GB	30.9	37	1	0.86	8.5	3.7	0.91
10	SE	29.6	36	0	0.82	7.6	3.6	0.41

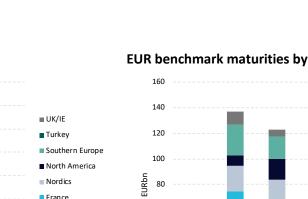
EUR benchmark issue volume by month



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

EUR benchmark issue volume by year





France

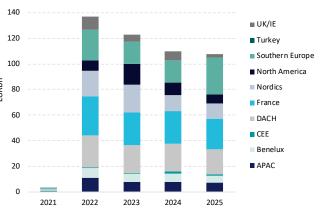
DACH

Benelux

APAC

CEE

EUR benchmark maturities by year



40 35

2022104

2022105 2022/06 2022/07 2022/08 2022109 2022/10 2022/11

2022/03

2022/02

EUR benchmark maturities by month

30

25

15

10

5

0

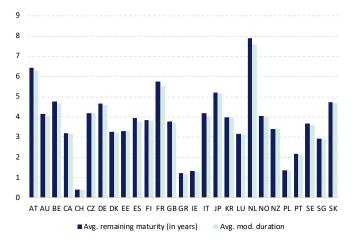
2021/12

2021/12

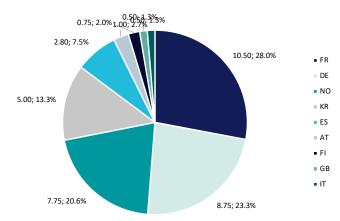
2022/01

EURbn 20



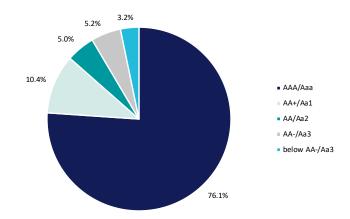


EUR benchmark volume (ESG) by country (in EURbn)

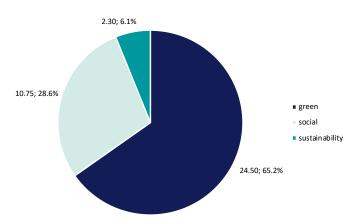


Source: Market data, Bloomberg, NORD/LB Markets Strategy & Floor Research

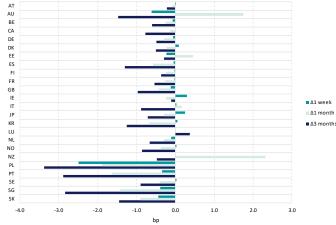
Rating distribution (volume weighted)



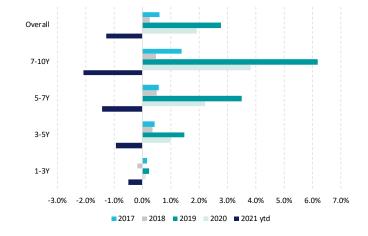
EUR benchmark volume (ESG) by type (in EURbn)



NORD/LB



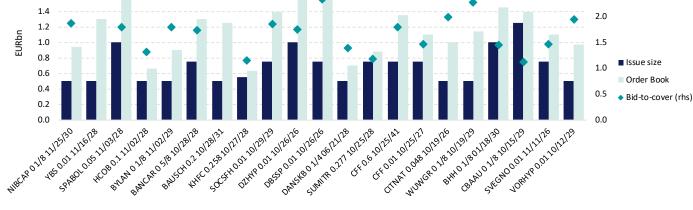
Spread development by country



Covered bond performance (Total return)

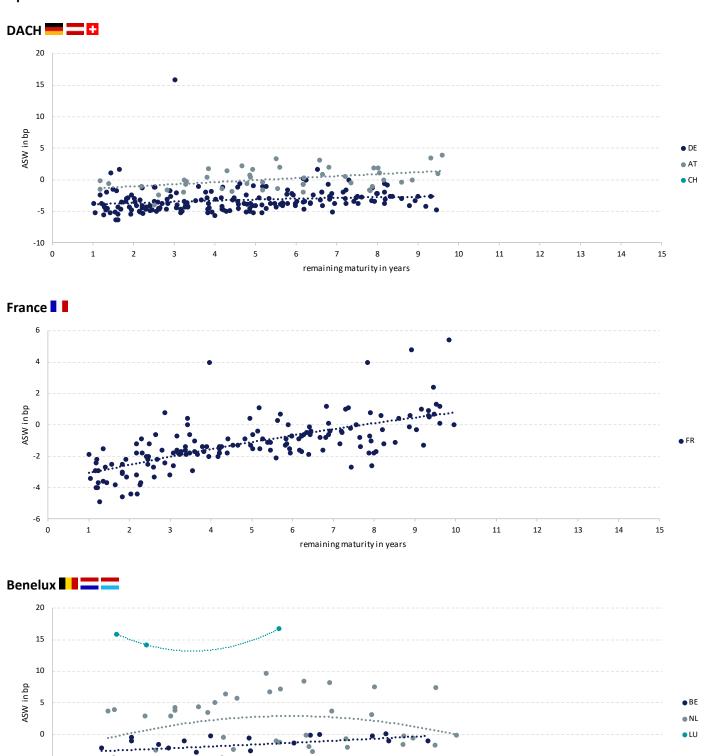
Spread development (last 15 issues)

BANCAR 0 5/8 10/28/28 70 60 50 DANSKB 0 1/4 06/21/28 40 SUMITR 0.277 10/25/28 Reoffer spread Current spread d 30 KHFC 0.258 10/27/28 CITNAT 0.048 10/19/26 NIBCAP 0 1/8 11/25/30 20 YBS 0.01 11/16/28 DBSSP 0.01 10/26/26 SPABOL 0.05 11/03/28 SOCSFH 0.01 10/29/29 CFF 0.6 10/25/41 BYLAN 0 1/811/02/29 BAUSCH 0.2 10/28/31 DZHYP 0.01 10/26/26 HCOB 0.1 11/02/28 10 CFF 0.01 10/25/27 0 -10 Order books (last 15 issues) 2.0 3.0 1.8 2.5 1.6 1.4 2.0 1.2



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





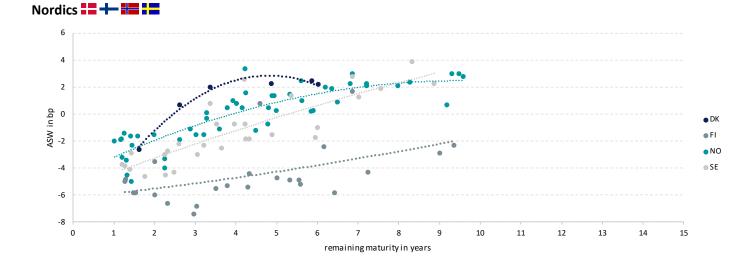
Spread overview¹

-5

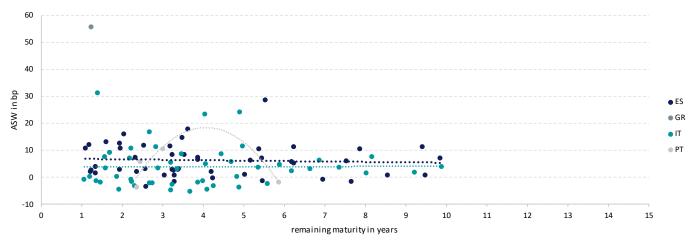
-10 |-

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

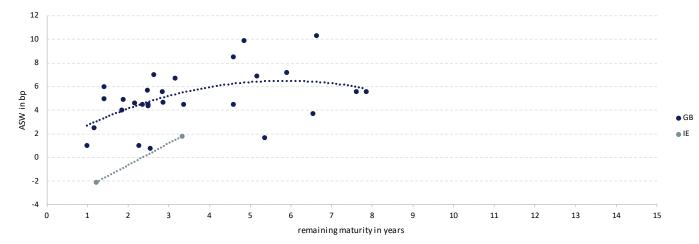
remaining maturity in years



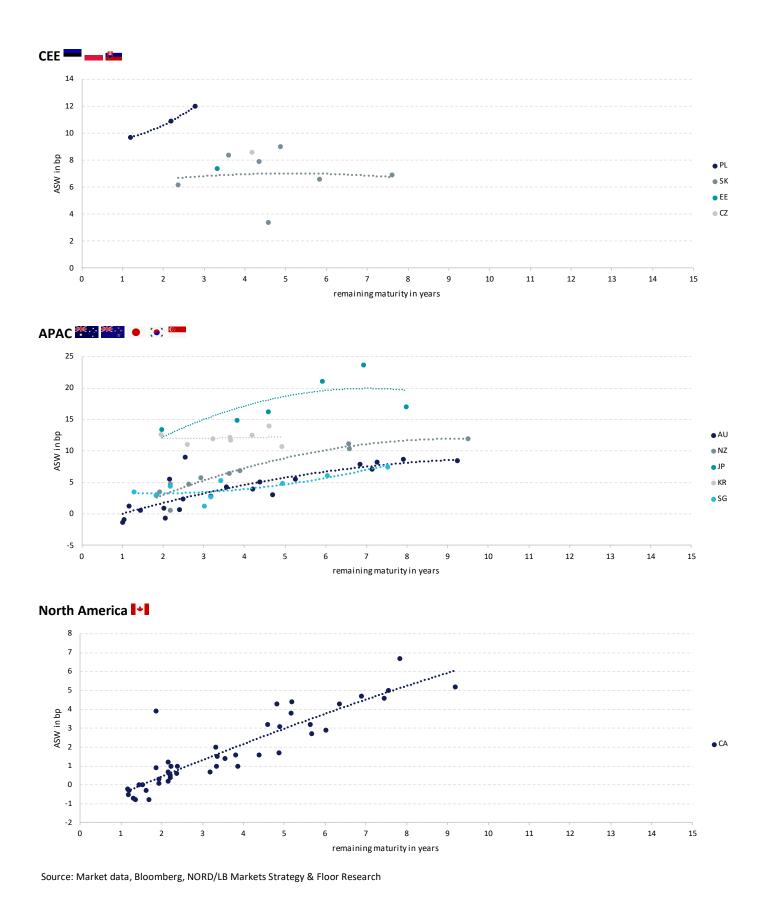
Southern Europe 🔤 📕 🚺



UK/IE 🗮

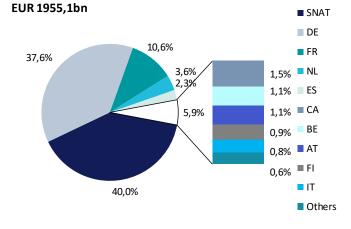


Source: Market data, Bloomberg, NORD/LB Markets Strategy & Floor Research



Charts & Figures SSA/Public Issuers

Outstanding volume (bmk)



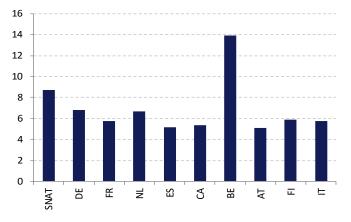
Top 10 countries (bmk)

•	-	-		
Country	Vol. (€bn)	No. of bonds	ØVol. (€bn)	Vol. weight. ØMod. Dur.
SNAT	781,5	193	4,0	8,7
DE	734,3	572	1,3	6,8
FR	207,1	146	1,4	5,8
NL	70,9	68	1,0	6,7
ES	45,8	57	0,8	5,2
CA	28,5	20	1,4	5,4
BE	21,7	25	0,9	13,9
AT	21,2	23	0,9	5,1
FI	16,8	21	0,8	5,9
IT	15,0	19	0,8	5,8

Issue volume by year (bmk)



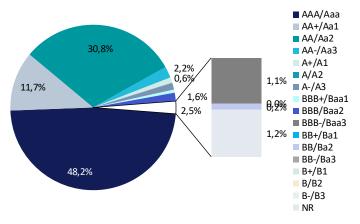
Avg. mod. duration by country (vol. weighted)



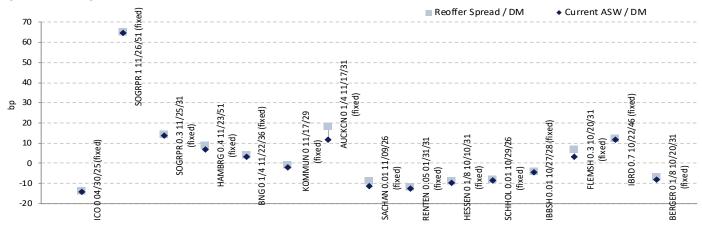
Maturities next 12 months (bmk)



Rating distribution (vol. weighted)

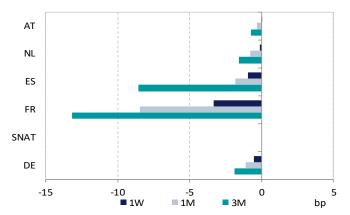


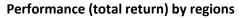
Source: Bloomberg, NORD/LB Markets Strategy & Floor Research

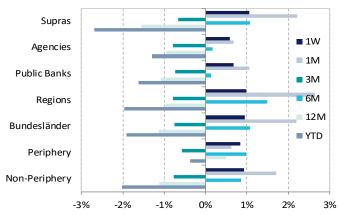


Spread development (last 15 issues)

Spread development by country

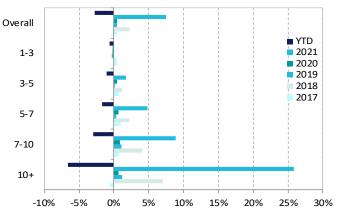






Source: Bloomberg, NORD/LB Markets Strategy & Floor Research

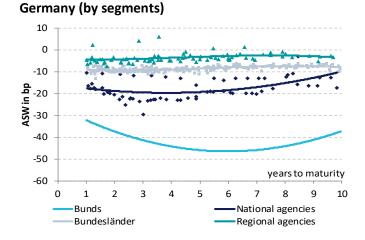
Performance (total return)



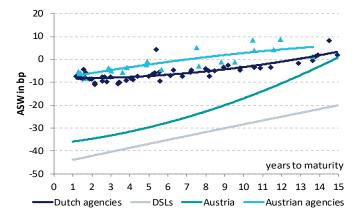
Performance (total return) by rating



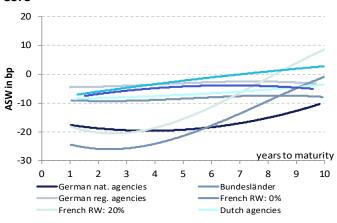
NORD/LB



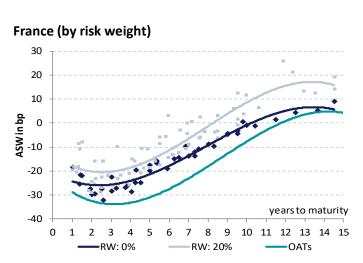
Netherlands & Austria



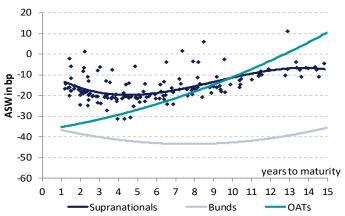
Core



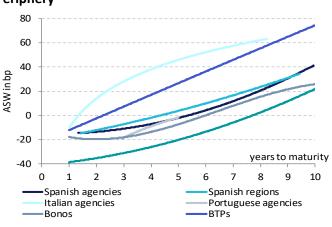








Periphery



Appendix Overview of latest Covered Bond & SSA View editions

Publication	Topics	
35/2021 🔶 10 November	PEPP approaching notional end – will the APP be pepped up?	
	Spain's major move – will the amended covered bond legislation breathe new life into the market?	
34/2021 03 November	 Repayment structures on the covered bond market: EU harmonisation is already leaving its mark 	
	Beyond Bundeslaender: Spanish regions in the spotlight	
33/2021 ♦ 27 October	Insurance firms as covered bond investors: A look at Solvency II and EIOPA statistics	
	The Scope rating approach	
32/2021 ♦ 20 October	ECB preview: interim step before a landmark December?	
	 ECBC publishes annual statistics for 2020 	
	 Covered bonds in the context of the ECB collateral framework 	
31/2021	 Covered bond primary market: a September to remember 	
	Announcement: Issuer Guide German Laender 2021	
30/2021 ♦ 15 September	Transparency requirements § 28 PfandBG Q2 2021	
	Fitch: rating approach covered bonds	
	 Update: Joint Laender (Ticker: LANDER) 	
29/2021	New dynamic on the Canadian covered bond market: Two debut EUR issuers	
	 Development of the German property market 	
	NGEU in the starting blocks: 3, 2, 1 EU auctions!	
28/2021	ECB preview: focus on the pace of PEPP purchases?	
	France – largest jurisdiction in EUR benchmark bond segment: a covered bond overview of the "Grande	
	Nation"	
27/2021 🔶 28 July	 NORD/LB Issuer Guide Covered Bonds 2021: A constant during turbulent times 	
	 Beyond Bundeslaender: Madeira and the Azores 	
26/2021 🔶 21 July	 Summer break just around the corner – a glance at covered bonds in USD and GBP 	
25/2021 ♦ 14 July ■ New ECB strategy – communication remains the be-all and end-all		
	 ECB preview: the first meeting under the "new" regime 	
24/2021 ♦ 07 July	 Covered Bonds: Review of H1 and outlook for H2 2021 	
	 Half-time report 2021 – how will the SSA segment fare in the second half? 	
23/2021 🔶 30 June	 Return of the Australian covered bond market: National Australia Bank issues first EUR benchmark since 201) 	
22/2021 🔶 23 June	TLTRO III.8 neither really strong nor extraordinarily weak: implications for the covered bond market	
	 Realignment of the German real property tax 	
21/2021 ♦ 16 June	ICMA Green and Social Bond Principles: 2021 update	
	The covered bond universe of Moody's: an overview Covered bonds vs. senior unsecured bonds	
20/2021 ♦ 09 June	PEPP reporting: increased pace of purchases in Q2	
-	 Covered bonds vs. senior unsecured bonds 	
19/2021 ♦ 02 June	ECB preview: Spectre of inflation fuelling tapering thoughts	
	 FX covered bonds: Same symptomatology as EUR benchmarks? 	
NORD/LB:	NORD/LB: NORD/LB: Bloomberg:	
Markets Strategy & Floo	r Research Covered Bond Research SSA/Public Issuer Research RESP NRDR <go></go>	

Appendix Publication overview

Covered Bonds:

Issuer Guide Covered Bonds 2021 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 2021 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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Additional information

Time of going to press: 17 November 2021 08:46h (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.

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Recommendation system	Breakdown of recommendations (12 months)		
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%	

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Issuer / security	Date	Recommendation	Bond type	Cause