

Covered Bond & SSA View

NORD/LB Markets Strategy & Floor Research



3 November 2021 ♦ 34/2021 Investment strategy recommendation and marketing communication (see disclaimer on the last pages) **Market overview**



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Market overview Covered Bonds

Author: Dr Frederik Kunze

Covered bond primary market: all good things come to an end

Over the past five trading days, primary market activity was less dynamic than had been the case in recent weeks, particularly over the course of September and October. In fact, just a single bond was placed on the market in the form of the EUR benchmark from SpareBank 1 Boligkreditt. This was the tenth EUR benchmark from Norway so far this year and featured a volume of EUR 1.0bn in addition to a term to maturity of seven years. Following this most recent bond deal, the primary market volume attributable to Norway in the year to-date totals EUR 8.25bn. The covered bond placed by SpareBank 1 Boligkreditt started out with initial guidance in the area of ms +7bp. During the book-building process, however, the re-offer spread tightened by four basis points and was fixed at ms +3bp. The order books came in at EUR 1.8bn overall. In terms of investor breakdown, 36% of the total allocated volume went to investors located in Germany, followed by accounts based in the Nordics (30%) and the Benelux countries (17%). The pronounced uptick of issuance activity in September and October came as a surprise to us. However, at the same time, talk is now increasingly turning towards the question as to whether this influx of primary market activity over the past two months could mean that 2021 is now largely done and dusted in terms of EUR-denominated covered bond benchmarks on the primary market. Based on the observable seasonal patterns over recent years, we would certainly still expect renewed activity in the current month and – albeit to a lesser extent – in December as well. However, we do not anticipate momentum on a comparable scale to that seen in September and October, which we would also attribute to anticipatory effects. Moreover, this outlook stands in the shadow of current capital market developments and the uncertainty associated with inflation expectations. In terms of spread movement, we see little in the way of potential for upwards movements in the context of sustained, significant negative net supply and the continuation of ECB net purchasing activities.

Issuer	Country	Timing	ISIN	Maturity	Size	Spread	Rating	ESG
SpareBank 1 Boligkreditt	NO	27.10.	XS2404591161	7.0y	1.00bn	ms +3bp	- / Aaa / -	-

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

Banking package 2021: EC outlines legal proposal on Basel IV implementation

On 27 October 2021, the European Commission published its <u>proposal</u> for the transposal of Basel III requirements. Key elements of the draft law include the output floor in addition to adjustments to the standardised approach. With the standardised approach, the exposure class for real estate financing is therefore also subject to significant adjustments. In addition, the proposal includes changes with a view to the IRB, market risk or CVA risk. Less relevant for covereds but of importance to senior unsecureds, among other aspects, is the new treatment within the framework of "Subordinated Debt Exposures" (Article 128, CRR). The altered timeline should also be emphasised here. For the most part, the new requirements would then only have to be applied from 01 January 2025. The vdp welcomes the "different treatment of real estate financing" drafted now, but still sees considerable deficits in the design of the corresponding regulation (cf. <u>press release</u>). The opposition of the vdp refers in particular to the inadequate treatment of commercial real estate.

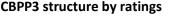


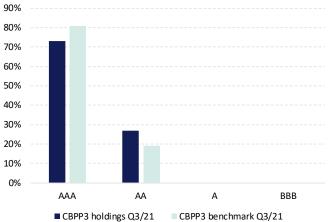
vdp presents long-term study on the Germany property market

On 28 October 2021, the Association of German Pfandbrief Banks (vdp) presented its evaluation of the price trends on the German residential property market for the period running between 2010 and 2020 (cf. <u>press release</u>). After a plus of 0.7% in the period from 2006 to 2010, according to the study, the prices for residential property rose by 4.3% in the period from 2011 to 2015 and rose even more sharply by 7.0% from 2016 to 2020. In the first half of 2021, growth was 9.6%. In essence, the study presented by vdpResearch sees the price development as a direct consequence of rent and interest rate developments across the period under review. For Jens Tolckmitt, Chief Executive of vdp, the upward price trend is still not speculatively driven, but can rather be viewed as a consequence of fundamental demand factors. In this context, possible price paths in the future would also have to be considered. Accordingly, Tolckmitt sees no risk of price collapses in the residential property market even with changing fundamental factors (e.g. rising interest rates on real estate loans); rather, vdpResearch expects prices to taper off at a high level.

CBPP3: ECB updates figures on structural distribution

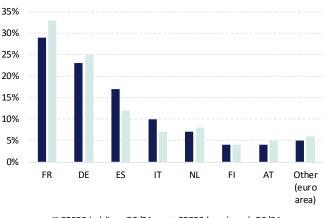
In terms of the specific distribution of the CBPP3 volume (at present: EUR 298bn), the Eurosystem refrains from systematically disclosing details at the level of individual securities. The CBPP3 structure is published every six months and provides one of the few insights into the CBPP3 portfolio. A few days ago, the figures for Q3 2021 were presented. Unsurprisingly, barely any significant changes were reported both in terms of the ratings and the allocation at jurisdiction level. France still boasts the highest share and continues to lag behind the Eurosystem's self-defined benchmark. For Germany, the benchmark was actually raised slightly, meaning that there is now – theoretically at least – a certain degree of catching-up required in terms of suitable Pfandbrief purchases. In actual fact, at 25%, the benchmark for Germany is now at its highest ever level. Spain remains the jurisdiction with the third-highest share. Here, holdings under the CBPP3 portfolio exceed the benchmark quite significantly. As usual, you can find more detailed descriptions on the APP or CBPP3 and PEPP in the <u>ECB Tracker</u> section of this publication.





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

CBPP3 structure by jurisdiction



■ CBPP3 holdings Q3/21 ■ CBPP3 benchmark Q3/21



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

Review of last Thursday's meeting of the ECB Governing Council At the meeting of the European Central Bank (ECB) last Thursday, no changes were made to the most important monetary policy parameters, as had been anticipated. Both key rates and the pace of purchases under the APP again remained unchanged. The announced envelope of EUR 1,850bn under the emergency pandemic programme, the PEPP, was also left untouched. Previously, the ECB Governing Council had only resolved to recalibrate the pace of purchases under the PEPP in September. In the fourth quarter, monthly net purchase activities will accordingly come in (slightly) below the two previous quarters, although this will not jeopardise the maintenance of favourable refinancing conditions. In our view, the latter factor will evidently remain the central decisive factor behind any potential further adjustments of the ECB's monetary policy toolkit in the near future. On the issue of inflation, the ECB is resolutely sticking to its interpretation that the current pronounced increase in the rate of inflation is largely attributable to temporary exceptional factors. According to our NORD/LB Chief Economist, this can be seen as a consequence of economic activity picking up again following the coronavirus-related slump recorded in 2020. As such, energy prices have ticked significantly upwards after the lows seen in the previous year, while an unsynchronised recovery of economic supply and demand is also now resulting in shortages. Christine Lagarde, ECB President, also again pointed to the distortions caused by the basis effect on account of changes in German VAT. The majority of the ECB Governing Council is of the view that all of these effects will dissipate over the course of 2022. However, the current surge in inflation from energy prices is much stronger than originally expected. In October, the inflation rate in Germany climbed to 4.6% year on year, while the decimal point is even expected to be preceded by a 5 for the November value. It would seem that the ECB will be forced to revise its inflation forecast very significantly upwards for the year 2022 at least from 1.7% to a figure likely in excess of 2.0%. The ECB must primarily keep an eye on the risk of potential second round effects. Altered behaviour on the part of economic entities cannot be fully ruled out at this stage. The ECB will have to maintain its flexibility in order to introduce countermeasures if needed so as not to risk ruining its own credibility. The first step is likely to involve allowing the PEPP to expire. For this reason, the attention of market participants is already on the December meeting, with the ECB having already been clearly signalling for some time now that a discussion and potential resolutions on changes to the PEPP and, where appropriate, accompanying measures are earmarked for December. Our expectation is of a fading-out phase with the aim of avoiding cliff-edge effects. The ECB will, however, essentially remain expansionary in its approach to monetary policy. On the issue of inflation, the ECB is currently fighting to claim sovereignty of interpretation, with Lagarde having very clearly opposed expectations regarding interest rate hikes in the markets. These would contradict the central bank's forward guidance. Developments over the next few months look set to reveal whether the markets will have to correct their expectations or whether the ECB will be forced to adjust its forward guidance. The recently published ECB Survey of Professional Forecasters also points in this direction. Its guidance envisages further increasing inflation in addition to more rapidly declining unemployment figures in tandem with stable GDP forecasts.



NGEU: Things always seem to happen when you least expect them – EU springs funding target surprise

Right out of the blue, the EU has revised its 2021 funding target for its NGEU programme from EUR 80bn to EUR 71bn. As such, there will be no further capital market activities under NGEU this year. According to a press release, this decision was taken against the backdrop of an updated assessment of the needs within the framework of the NGEU instrument. On this basis, the European Commission does not intend to carry out further EU bond issuances before the end of the year. However, auctions of EU bills will, as previously announced, be continued. In addition, the European Commission will announce its refinancing target for H1/22 in its next plan, which is scheduled to be published in December.

NRW: crypto auction

Many of us will recall the auctions for UMTS licences back in the year 2000. The Federal Network Agency auctioned licenses for frequency blocks for use by the Universal Mobile Telecommunications System (UMTS) to approved mobile phone providers. The proceeds (which totalled roughly EUR 50.8bn when converted from Deutschmarks used at that time) flowed into the federal budget. The mobile network operators were able to write off the acquired licenses in the following years and in so doing reduce their profit and tax burden. At the time, this poured a lot of money into the treasury's coffers. In 2010, only EUR 4,38bn was achieved. Why are we bringing this up? The Ministry of Justice of North Rhine-Westphalia auctioned off 21 bitcoins that it had seized as a result of criminal activities. The prices paid were above market value and benefited the state treasury. The NRW Ministry of Justice also holds other cryptocurrencies such as Ethereum and Ripple, with NRW operating the country's only centralised online auction portal within the German justice system. For legal reasons, Bitcoins are joined by e.g. stolen bicycles here. The digital keys are secured in an analogue way – in sealed envelopes on paper, so that no hackers can access the data packets. It might look and sound bizarre, but it helps the state treasury. Thanks to blockchain technology, the data packets themselves cannot be copied or falsified.

HSH Finanzfonds: Liquidation of bailout fund will increase Laender debt by EUR 3bn

A little morsel of information from our publication break that we would like to bring to your attention: Hamburg and SchHol will be liquidating their bailout fund for HSH next year. "The remaining debts are now being transferred directly to the state budgets", commented Mayor Tschentscher after a joint meeting of both governments. According to MP Günther, each Land will assume an equal share of the debt burden of EUR 1.5bn once the liquidation process has been finalized. The debts are still gathered in HSH Finanzfonds AöR, which is to be wound down by August. A total of EUR 7bn has already been repaid.

Primary market

As diverse as the issues cropping up in the SSA segment are, new issuances are equally thin on the ground at present. We were only able to identify two benchmark deals, and both tightened by a single basis point against initial guidance during the pricing process. The deal from Rentenbank (9y) was slightly oversubscribed, while the books for the Saxony-Anhalt deal (5y) attracted orders as high as EUR 2.8bn. No fresh mandates were announced, meaning that we have space to briefly mention a private placement from the EU with a volume of EUR 90m under its Macro-Financial Assistance (MFA) programme. With no prospect of any new NGEU benchmark bond issues until the end of this year, this EU placement in our eyes represents something of an EU funding gem.

Issuer	Country	Timing	ISIN	Maturity	Size	Spread	Rating	ESG
SACHAN	DE	01.11.	DE000A3MP7P2	5.0y	1.00bn	ms -9bp	AAA / Aa1 / AA	-
RENTEN	DE	01.11.	XS2405489092	9.0y	0.50bn	ms -12bp	AAA / Aaa / AAA	-

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



Covered Bonds Repayment structures on the covered bond market: EU harmonisation is already leaving its mark

Author: Dr Frederik Kunze

Repayment structures for covered bonds

The market has been preoccupied with the various options for designing a covered bond's repayment structure for some time. While from a fundamental perspective investors tend to focus on the latest possible date for repayment of their investment, issuers often focus on the fact that rating agencies view extendable maturity structures positively when rating their bonds. Having usually opted for hard bullet structures in the past, the soft bullet structure has now become the most frequently chosen form for EUR benchmarks. Occasionally, bonds also appear on the market with the conditional pass-through structure (CPT) introduced by NIBC in the Netherlands in 2013. Until now, the option of postponing the maturity date in connection with specific trigger events was usually anchored in the programme documentation for the bonds or issuance programmes concerned. In the course of EU harmonisation, however, the Covered Bond Directive formulated concrete requirements for legislators if they want to allow maturity deferrals. The amendment to the German Pfandbrief Act therefore put an end to "hard bullet" Pfandbriefe when it came into force this year. Due to the size of the Pfandbrief market alone, this will lead to a lasting shift in how repayment structures are viewed on the covered bond market, both in terms of global volume and with regard to the iBoxx EUR Covered as a benchmark index. Other jurisdictions - such as France, Denmark and Latvia – have also formally implemented the EU Directive. However, the current and prospective impact will be less significant here. In this issue of our weekly publication, we propose to take a look at the currently valid repayment structures – as is customary on a bi-annually basis.

Hard bullet structures: no option for extending the maturity

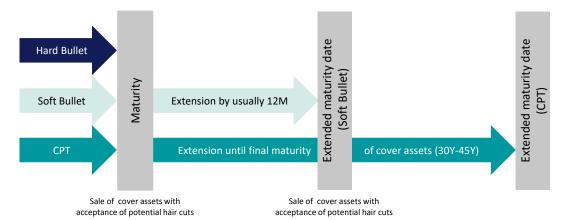
Until a few years ago, hard bullet structures were regarded as standard market practice when it came to structuring the repayment arrangements for a covered bond. If a covered bond issuer is not able to comply with their outstanding payment obligations, investors will obtain access to the respective cover pool of the covered bond programme – regardless of the repayment structure chosen – via the trustee or administrator because of the dual recourse mechanism. If redemption of an issue is pending, the liquid funds available are not sufficient to redeem the bond and liquidity cannot be generated by another means, the collateral in the pool will be sold if the bond has a hard bullet structure. Investors can expect prompt repayment on the one hand, but on the other hand, this carries the risk that due to market turbulence, the market values of the assets may be reduced and, in extreme cases, the full repayment amount will not be covered by the sale proceeds.



Soft bullet structures: maturity extended through trigger events

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

Comparison of the various maturity structures



Source: NORD/LB Markets Strategy & Floor Research

CPT structures: final maturity is not actually certain

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



Special case Poland: soft bullet with conversion option to CPT

Polish legislation can be considered a special case as regards the maturity structure of covered bonds. Covered bonds that cannot be serviced on their maturity date are initially extended by twelve months. During this extension period, a test is carried out at six-month intervals to determine whether sufficient assets are available to service the investor claims and whether sufficient liquidity is also available to service these claims on time. If the two tests are not passed during the extension period, transition to a CPT structure takes place at the end of the twelve-month period. The repayment date is therefore postponed to the latest maturity date of the cover assets plus three years. However, such an extension can be prevented with a two thirds majority of the investors. As a result, Polish covered bonds are initially soft bullet bonds whose final maturity cannot be clearly determined in advance due to the possible conversion to a CPT structure, meaning that their repayment structure cannot be clearly assigned to one of the three repayment forms. As such, we do not take into account the EUR benchmarks of PKO Bank Hipoteczny contained in the iBoxx EUR Covered in the following analysis.

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

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

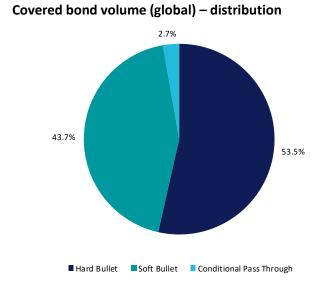
Soft bullet and CPT bonds under CBPP3 and for repo transactions

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

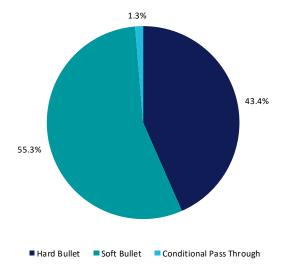


Maturity extension also an issue for harmonisation efforts

As mentioned above, extendable maturity structures were also discussed as part of the harmonisation of the European covered bond market. The aim is to create opportunities to counter risks resulting from mismatching maturities and potential liquidity shortages. In this context, the proposal envisages in the form of Article 17 that the matter of whether to allow extendable maturity structures will be left to the responsible national supervisory authorities. If they are approved, the event that triggers the extension or postponement of maturity is critical for such structures. This trigger event must be included in the national framework and may not be left to the issuer's discretion. Bond investors must be provided with detailed information regarding the trigger, the effects on the maturity structure in the event of insolvency and the role of the supervisory authority and the trustee following any extension to maturity. It is already clear from the above that the refinancing risk can be significantly reduced by means of a soft bullet or CPT structure compared to a hard bullet structure. However, investing in such a covered bond requires prior, detailed examination of the terms of the bond in question since there are currently no uniform market standards either for the trigger event or for interest payments during the extension period. With regard to the refinancing risk following the issuer's insolvency, it must be mentioned that, in the case of hard bullet structures, issuers are already obliged by law in some cases to reduce this risk by maintaining a liquidity buffer. In the wake of the harmonisation efforts, Article 16 also envisages the mandatory introduction of a liquidity buffer to cover the net outflows of liquidity for 180 calendar days for all jurisdictions subject to the regulation.



Covered bond issuances 2020 (global) - distribution



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



ECBC - Repayment structures: soft bullets accounted for largest share of issues in 2020

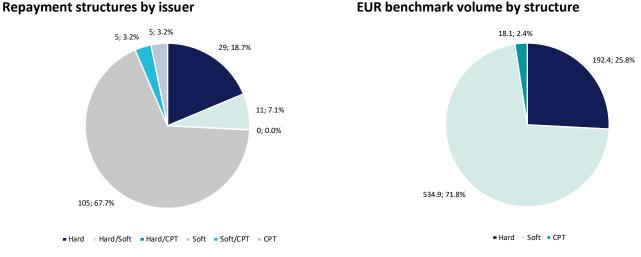
Based on the ECBC annual statistics with a cut-off date of 31 December 2020, the market for all outstanding and newly issued covered bonds can be subdivided in terms of the maturity structure. In this database, hard bullet structures continue to account for the largest share of the volume of bonds outstanding at 53.5% (2019: 54.6%). With regard to newly issued covered bonds in 2020, 55.3% were soft bullets and 43.4% (2019: 40.6%) hard bullets. The CPT bond category accounts for only comparatively small shares, at 2.7% (outstanding volume) and 1.3% (new issues 2020).

iBoxx EUR Covered: influence of EU harmonisation on repayment structures

While the shifts with regard to the weightings of the maturity structures in the iBoxx EUR Covered have been rather generic - as an example, the switch of some issuers in the Netherlands from CPT to soft bullet - a significant driver has been added with the harmonisation of the European covered bond market. This can be clearly seen in the example of the German Pfandbrief market. However, legislative adjustments can also be expected in other jurisdictions in the future. Having said that, the concrete direct impact on the weightings in the iBoxx EUR Covered is difficult to assess as of today, as only a few jurisdictions have complied with the requirements of the EU Directive and had adopted the new regulations by 8 July 2021. Moreover, we have no reason to assume that all national legislators would prefer a "big bang" solution in line with the adjustments to the Pfandbrief Act and would definitely switch to extentable structures. This is currently particularly true for those countries that have active issuers with both hard bullets and extendable structures. Below we refer to the iBoxx composition October 2021.

iBoxx dominated solely by soft bullet issuers

With 105 out of 158 issuers (67.7%), most of the issuers (excl. Spanish multi-cedulas) listed in the iBoxx EUR Covered currently only have outstanding benchmarks with soft bullet structures. Due in particular to the new soft bullet heavyweight Germany, a further 18.7% (29 issuers) is attributable to institutions that only have hard bullet bonds and 3.2% (five issuers) to those which only use CPT structures. Consequently, a clear maturity model can be assigned to 89.7% of institutions with outstanding EUR benchmarks. However, the remaining 10.3% is attributable to issuers that have outstanding benchmarks with two differing maturity structures. The most frequent combination (7.1% or eleven issuers) is hard and soft bullet bonds. In addition to the Italian UniCredit and the NN Bank from the Netherlands, the issuers Achmea Bank, Aegon Bank (both NL) and Deutsche Bank (DE) now also have EUR benchmarks with a soft bullet and CPT structure. In addition to Pfandbriefe placed in accordance with the Pfandbrief Act (previously "hard bullet", now, by law, with a maturity extension possibility), Deutsche Bank also has a CPT benchmark on a contractual basis. This is a unique feature in the market for EUR benchmarks. The EUR benchmarks issued by Poland's PKO Bank Hipoteczny are not taken into account at this point because of their hybrid maturity structure model (soft bullet with option to switch to CPT) to avoid confusing them with those issuers that have both soft bullet and CPT bonds outstanding.

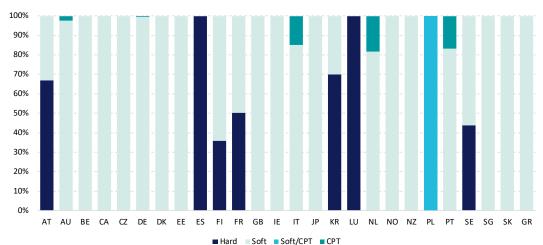


EUR benchmark volume by structure

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

Soft bullet EUR benchmarks with largest outstanding volume

At 71.8% (EUR 534.9bn), covered bonds with a soft bullet structure now account for the largest share by far of the volume of bonds in the iBoxx with a clear maturity structure (i.e. excluding Poland, see above and the following table, as well as Spanish multi-cedulas). In most cases, this provides for a maturity extension of twelve months if a trigger event occurs. EUR benchmarks with a CPT structure continue to represent a niche in the benchmark segment as they only account for 2.4% of the volume of bonds in the iBoxx index. Traditional hard bullet covered bonds with no option for maturity extension account for the remaining 25.8%. Hard bullet issues with a volume of EUR 96.3bn originated in France, while Spain (EUR 52.1bn), Austria (EUR 19.8bn) and Sweden (EUR 10.8bn) accounted for the next-highest volumes. In our view, it is worth mentioning in this context that France and also Austria and Sweden already have significant volumes of soft bullets.



Repayment structures by jurisdiction

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



Numerous jurisdictions feature varying repayment structures

Looking at the spread of the three repayment structures at jurisdiction level, it is also apparent that now only EUR benchmarks from Spain and Luxembourg are exclusively represented in the iBoxx with hard bullet structures. Conversely, with Belgium, Canada, Switzerland, Czech Republic, Estonia, the UK, Ireland, Japan, Norway, New Zealand, Singapore and Slovakia, there are twelve jurisdictions with only soft bullet EUR benchmarks in the iBoxx. Poland's EUR benchmarks also have a standard (hybrid) maturity structure. CPT bonds were issued as well in Australia, Germany, Italy, the Netherlands and Portugal. There is more than one repayment model in 10 out of the 26 EUR benchmark jurisdictions represented in the iBoxx index. In the following, we provide a tabular overview of the individual issuers and the maturity models they use for these jurisdictions. It should be noted that under certain circumstances, repayment structures can be used in the respective jurisdictions, and by the listed issuers, that differ from those of the EUR benchmarks or are no longer listed in the iBoxx due to their residual maturity. For reasons of simplicity, this article is based exclusively on EUR benchmarks in the iBoxx EUR Covered index (excluding Spanish multi-cedulas). The only exception is Denmark, as the iBoxx composition currently does not include bonds from Danmarks Skibskredit, as we will explain below.

Repayment structures in Austria

Although EUR benchmarks with a hard bullet structure continue to dominate in Austria (EUR 19.75bn), there has recently been a certain trend towards soft bullet bonds. Consequently, six out of the total of 13 Austrian issuers have outstanding EUR benchmarks with a maturity extension option (EUR 9.75bn). Due to bond maturities, Raiffeisen Bank International, HYPO NOE and Hypo Vorarlberg only have soft bullet issues.

Repayment structures – Austria

	Hard	Soft
BAWAG PSK	Х	
Erste Group Bank	Х	Х
HYPO NOE		Х
Hypo Tirol Bank		Х
Hypo Vorarlberg Bank	Х	
Raiffeisen Bank International		Х
Raiffeisenlandesbank Niederoesterreich-Wien	Х	Х
Raiffeisenlandesbank Oberoesterreich	Х	Х
Raiffeisen-Landesbank Steiermark	Х	
Raiffeisenlandesbank Vorarlberg	Х	
UniCredit Bank Austria	Х	
Volksbank Wien	Х	

Repayment structures – Italy

	Soft	СРТ
Banca Monte dei Paschi di Siena		Х
Banca Popolare di Sondrio	Х	
Banco BPM	Х	
Banco di Desio e della Brianza	Х	
BPER	Х	
Credit Agricole Italia	Х	
Credito Emiliano	Х	
Intesa Sanpaolo	Х	
Mediobanca Banca di Credito Finanziario	Х	
Iccrea Banca	Х	
UniCredit	Х	Х

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



Repayment structures in Italy

Italy is one of the jurisdictions that has outstanding covered bonds with CPT structures (EUR 6.5bn), even though such bonds play only a minor role in the Italian market for publicly placed EUR benchmarks compared with soft bullet bonds (EUR 37.43bn). While the EUR benchmarks from Banca Monte dei Paschi are exclusively CPT bonds, UniCredit has outstanding soft bullet bonds as well as issues in CPT format.

Repayment structures in Denmark

With regard to the Danish market, we would like to highlight the bonds issued by Danish Ship Finance (Danmarks Skibskredit), which stand out not just because of their cover assets (ship mortgages) but also because of the repayment structure. The bonds are issued as hard bullets. Due to buybacks, there are currently no benchmarks from the issuer in the iBoxx, but since the issuer will be included in the iBoxx again in future with its recently placed benchmark, we think it is worthy of mention. Danske Bank and Jyske Realkredit, on the other hand, have each placed their EUR benchmarks on the market with soft bullet structures (extension by up to twelve months). For soft bullet structures, there are now legal triggers for maturity postponements in Denmark, although we understand that these adjustments (in contrast to the changes for Pfandbriefe) will not take effect until 8 July 2022 and will apply to bonds placed from this date onwards.

Repayment structures – Denmark

Repayment structures – Finland

	Hard	Soft		Hard	Soft
Danmarks Skibskredit	(X) ¹		Aktia Bank		Х
Danske Bank		Х	Danske Mortgage Bank		Х
Jyske Realkredit		Х	Nordea Kiinnitysluottopankki	Х	
			OP Mortgage Bank		х
			SP-Kiinnitysluottopankki		Х

Source: Market data, NORD/LB Markets Strategy & Floor Research; ¹ currently not included in the iBoxx EUR Covered

Repayment structures in Finland

Of the outstanding EUR benchmarks from Finnish issuers currently on the market, only the bonds from Nordea Mortgage Bank (eight bonds) have a hard bullet structure. The remaining four issuers on the other hand have 17 outstanding EUR benchmarks with a soft bullet structure, each with the option to extend maturity by twelve months.

Repayment structures in France

There are nine issuers in France that have structured their bonds with a uniform maturity structure, i.e. exclusively hard or soft bullet bonds. The majority of these issuers (five banks) have chosen extendable maturities. Only CRH, CAFFIL, CFF and Société Générale SCF exclusively have outstanding hard bullet bonds. A further eight issuers have placed EUR benchmarks in the past with both hard and soft bullet structures.

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Repayment structures – France

	Hard	Soft
Arkea Home Loans SFH	Х	Х
Arkea Public Sector SCF		Х
AXA Bank Europe SCF		Х
AXA Home Loan SFH		Х
BNP Paribas Home Loan SFH	Х	Х
BPCE SFH	Х	Х
Caisse de Refinancement de l'Habitat	Х	
Caisse Francaise de Financement Local	Х	
Cie de Financement Foncier	Х	
Credit Agricole Home Loan SFH		Х
Credit Agricole Public Sector SCF	Х	Х
Credit Mutuel Home Loan SFH	Х	Х
HSBC SFH France	Х	Х
La Banque Postale Home Loan SFH	Х	Х
MMB SCF		Х
Societe Generale SCF	Х	
Societe Generale SFH	х	Х

Repayment structures – Germany

	Soft	СРТ
Aareal Bank	Х	
Bausparkasse Schwaebisch Hall	Х	
Bayerische Landesbank	Х	
Berlin Hyp	Х	
Commerzbank	Х	
Deutsche Apotheker-und Aerztebank	Х	
Deutsche Bank	Х	Х
Deutsche Hypothekenbank	Х	
Deutsche Kreditbank	Х	
Deutsche Pfandbriefbank	Х	
DZ HYP	Х	
Hamburg Commercial Bank	Х	
Hamburger Sparkasse	Х	
ING-DiBa	Х	
Landesbank Baden-Wuerttemberg	Х	
Landesbank Hessen-Thueringen Girozentrale	Х	
Muenchener Hypothekenbank	Х	
Norddeutsche Landesbank-Girozentrale	Х	
Santander Consumer Bank	Х	
Sparkasse KoelnBonn	Х	
UniCredit Bank	Х	
Wuestenrot Bausparkasse	Х	

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

Repayment structures in Germany

The adjustment of the legal basis for issuing Pfandbriefe in Germany has implemented maturity extensions for all outstanding and newly issued Pfandbriefe, which we understand as soft bullets. Moreover, since November 2019 Deutsche Bank has had one bond with a CPT structure. To achieve this, Deutsche Bank used a contractual covered bond, which therefore does not constitute a bond pursuant to the German Pfandbrief Act and consequently does not constitute a Pfandbrief.

Repayment structures in Sweden

In Sweden, three of the five issuers use covered bonds with no possibility of maturity extension. In contrast, SCBC and Stadshypotek are currently represented in the iBoxx EUR Covered index exclusively with soft bullet bonds. In terms of volume, hard bullets (EUR 10.75bn) are now lagging behind Swedish soft bullets with a volume of EUR 13.83bn in the iBoxx.

Repayment structures – Sweden

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

Repayment structures – Portugal

	Soft	СРТ
Banco BPI	Х	
Banco Santander Totta	х	
Caixa Economica Montepio		Х

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



Repayment structures in Portugal

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

Repayment structures in the Netherlands

The introduction of the CPT repayment structure by NIBC Bank in 2013 was followed by four more issuers in the shape of Achmea Bank, Van Lanschot, Aegon Bank and NN Bank issuing bonds in CPT format. Consequently, the Netherlands not only has the most CPT EUR benchmark issuers, but also the most outstanding CPT benchmarks (20 deals) in the world by far. At EUR 44.42bn, the volume of soft bullet bonds is more than four times higher than that of the CPT bonds (EUR 10.05bn). However, the gap is smaller when it comes to the number of bonds: 37 soft bullet deals versus 20 bonds in CPT format. With NN Bank's debut soft bullet bond in June 2020 and the subsequent soft bullet launches by Achmea Bank and Aegon Bank, three institutions in the Netherlands now have outstanding EUR benchmarks with two differing maturity structures.

Repayment structures – Netherlands

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

Repayment structures – Australia

т		Hard	Soft	СРТ
	Australia & New Zealand Banking Group	X1	Х	
	Bank of Queensland			Х
	Commonwealth Bank of Australia		Х	
	National Australia Bank		Х	
	Westpac Banking Corp		х	

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

¹Last hard bullet bond no longer in the iBoxx EUR Covered

Repayment structures in Australia

Before ANZ Banking Group's hard bullet covered bond fell out of the iBoxx due to its residual maturity (<1y), Australia was temporarily the only jurisdiction to have all three maturity structures in the index. Currently the Bank of Queensland has bonds in CPT format (outstanding volume EUR 500m). Soft bullet issues account for by far the largest share of the volume at EUR 21.85bn.



Repayment structures in South Korea

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

Repayment structures – South Korea

	Hard	Soft
KEB Hana Bank		Х
Kookmin Bank		Х
Korea Housing Finance Corp	Х	
Source: Market data, NORD/LB Markets Strategy & Floor Research		

Conclusion

Looking at the iBoxx EUR Covered index reveals that bonds with soft bullet structures have now clearly overtaken the former dominant form of hard bullet bonds. One of the reasons for this is that many issuers in France and Austria in particular have already switched to this form of maturity structure for their covered bonds. The "big bang" of the Pfandbrief Act, which, according to our classification, also pushed the Pfandbrief market into the soft bullet segment, is even more significant. In principle, other jurisdictions where hard bullet bonds are still currently issued (e.g. France or in particular Spain) could opt for an at least partially similar route in the context of harmonisation of the European covered bond market, further reducing the share of hard bullet bonds in the near future (as in Germany) or further in the future through the coexistence of both issuance formats. With regard to the niche market for CPT bonds, it should also be noted that CPT issuers in the Netherlands are turning in part to the soft bullet segment. Aegon Bank and Achmea Bank have followed NN Bank's example and, as former CPT issuers, have already placed their most recent EUR benchmarks in soft bullet format.



SSA/Public Issuers Beyond Bundeslaender: Spanish regions in the spotlight

Author: Dr Norman Rudschuck, CIIA

Spain: introduction and classification

In the last few months, we have already looked at the Belgian regions, Greater Paris and the autonomous regions of Portugal; in this edition of our weekly publication, we will now turn the spotlight for the first time on the Spanish regions of relevance for the capital market. Spain is divided into 17 regions, referred to as autonomous communities. These were formed after the end of the Franco dictatorship which lasted from 1936 to 1975. In addition, there are the two autonomous cities of Ceuta and Melilla on the north African coast. The autonomous communities in turn are split into a total of 50 provinces, which are mostly named after the respective provincial capital. These in turn are split into municipalities. Seven of the autonomous communities only consist of one province. In addition, in many places, there are various levels between provinces and municipalities which differ from one another. Although – unlike the German Laender – the autonomous communities do not have state character, their competency scope is similar. Above all, their legislative competence is very similar. One major difference is that, in Spain, there is no provision for the autonomous communities to cooperate on the federal government legislative process, as is the case in Germany through the Bundesrat. In addition, the competencies of the individual autonomous communities within Spain differ significantly for historical reasons. The Basque Country and Navarre have a much stronger financial autonomy than the other communities. The inhabitants of many autonomous communities often have a much greater sense of national pride in relation to their respective region. This is especially true of Catalonia and the Basque Country where separatist movements are promoting greater autonomy or even complete independence from Spain and wish to be recognised as a separate state. There are even autonomous movements in parts of Andalusia and Galicia.

Political system

Spain is a hereditary parliamentary monarchy. After the end of the Franco dictatorship in the mid-1970s, Spain became a democratic constitutional state anchored in the constitution which came into force in 1978. Spain has been a member of the European Union since 1986. The King is the official head of state and commander in chief of the armed forces (currently Philip VI), although, similarly to the German President, he only has a representative function. The Prime Minister (currently the social democrat Pedro Sánchez) holds the most important executive role with policy-making powers for the central government. The Prime Minister is elected by the Congress of Deputies and appointed by the King. Spain's parliament has two chambers: the Congress of Deputies and the Senate. The former is directly elected by the voters, whereas the Senate is chosen partly by the voters and partly by the autonomous communities. Each of the autonomous communities has its own parliament and government, and its own first minister.



Current political situation

For a long time after the end of the dictatorship in 1975, politics in Spain were dominated by the two main parties, the Partido Socialista Obrero Español (PSOE) and Partido Popular (PP), which could get over 80% of the votes in some elections. In the last few years, however, there has been a marked change in the political landscape with many new parties becoming established, both left of the social democratic PSOE and right of the conservative PP. In the last election which took place in 2019, the two main parties attracted less than 50% of the votes. Pedro Sánchez, social democrat and leader of the PSOE, has been the acting prime minister since 2018. He took over from the conservative head of government Mariano Rajoy (PP), who stepped down after losing a vote of no-confidence. At the time, the vote was called by the PSOE against the Rajoy government after it emerged that high-ranking members of the PP were implicated in a corruption scandal. Since January 2020, there has been a coalition with the Socialists' Party of Catalonia (Partit dels Socialistes de Catalunya, PSC), the left-wing populist Podemos party and the communist Izquierda Unida (IU), after Prime Minister Sánchez lost his government majority in the wake of unrest surrounding Catalonia's drive for independence. In October 2020, the rightwing populist Vox party called for a vote of no-confidence against the Sánchez government, which however was only supported by Vox deputies and therefore soundly rejected overall. Sánchez recently carried out the third, and hitherto most extensive, cabinet reshuffle of his time in office, replacing seven out of a total of 17 ministerial posts in July 2021. Regional parties play an important role in the autonomous communities. Efforts by separatists to break away are part of the regular political discourse, especially in Catalonia. The crisis in Catalonia, which has been rumbling on since 2017, was triggered after Spain's constitutional court declared Catalonia's independence referendum illegal. Over 90% of the voters voted in favour of independence for the region (turnout: 42.5%). However, observers reported many irregularities in the election. At the same time, Spain's central government tried to prevent the referendum going ahead through a series of police measures. In response to the parliament in Barcelona approving the independence referendum, the central government in Madrid finally dismissed the Catalonia government. In the subsequent new elections, the separatists in Catalonia won the majority in parliament by a tight margin. Even after more than four years, the political situation remains tense, especially in Catalonia.

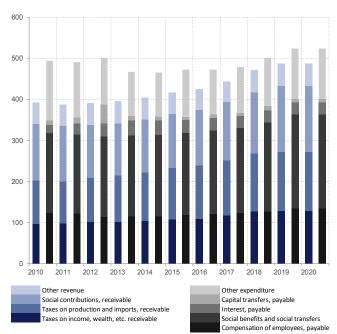
COVID-19 in Spain

During the first wave of the pandemic, Spain was the hardest hit country in Europe with almost 10,000 new infections per day between March and April 2020, leading the government to implement strict containment measures. After low case numbers and a relaxation of measures in the summer of 2020, new infections began to pick up again at a very rapid pace in August. Up to 20,000 new cases per day were reported in October, which once again led the Spanish government to impose strict restrictions on daily life. After a sharp fall in cases by mid-December, the third wave of the pandemic gathered momentum around the turn of the year, leading to over 30,000 new cases every day by mid-January. The national health emergency and draconian measures put in place to bring the pandemic under control lasted until May 2021. These were largely relaxed at the beginning of June and limited to basic hygiene mitigations. At over 1,840 deaths per million inhabitants over-all, Spain is still one of the hardest hit countries in Europe. The ratio of fully vaccinated adults though is above the EU average at <u>79.83%</u> against <u>75.0%</u> (as at 02 November).

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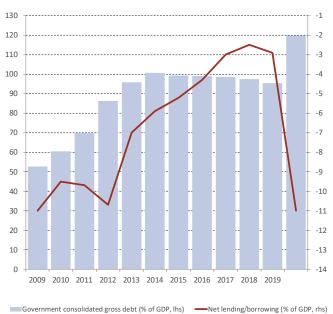
The Spanish economy

A long period of economic upturn in Spain was brought to an end with the bursting of the property bubble and the beginning of the global financial crisis from 2007 onwards. Spanish banks were the hardest hit by the global crisis which brought them to the brink of collapse. As a result of the impact of the crisis, sovereign debt which was still only 35.8% of GDP in 2007 had shot up to 100.7% by 2014. Unemployment reached a high of 26% in 2013 (including 56% youth unemployment). Spain agreed a rescue package worth up to EUR 100bn through the European Financial Stability Facility (EFSF) in 2012, of which approximately EUR 41.5bn had been drawn down by 2014. After years of economic downturn and stagnation, Spain's economy began to grow again from 2014 onwards. The upturn with average GDP growth of 2.6% per annum went on until the beginning of the coronavirus pandemic. The consequences of COVID-19 have hit the country, which had already been impacted by the financial crisis and the situation in Catalonia, like virtually no other in Europe. According to Eurostat, Spain's GDP experienced by far the sharpest fall in Europe in each of Q2, Q3 and Q4 2020. The slump in 2020 was therefore much greater than in other European countries: per capita GDP fell by around 10.6% to EUR 23,640. First and foremost, the economy was hit by the absence of tourists. This key sector for the country's economy which still contributed around 12% to GDP in 2019, collapsed by around 70% in 2020. In October, the IMF revised its growth forecast for real GDP in 2021: The figure has now been set at +5.7%, i.e. 0.5 percentage points lower than it was in April. At the same time, the forecast for 2022 was revised upwards to +6.4% from the previous figure of +4.7%. In addition, the pandemic has led to a surge in Spain's sovereign debt. Whereas it had been reduced from around 101% of GDP to 95% in the last five years, the IMF is forecasting a jump to around 120% of GDP for 2021. Spain already had the fourth highest level of sovereign debt in the EU in 2020 (average: 100.5%).



Govt. revenue vs. spending (EUR bn)

Sovereign debt vs. budget balance (%)



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



Autonomous communities: capital market activities

At present, with the exception of Cantabria, all of Spain's autonomous communities have bonds outstanding. We will be looking in more detail at nine of the 17 issuers (**shown in bold**). The issuers listed under their Bloomberg ticker are as follows:

- ANDAL (Andalusia)
- ARAGON (Aragon)
- BALEAR (Balearic Islands)
- BASQUE (Basque Country)
- CANARY (Canary Islands)
- CASTIL (Castile and León)
- CCANTA (Cantabria)
- GENCAT (Catalonia)
- JUNGAL (Galicia)
- JUNTEX (Extremadura)
- LRIOJA (La Rioja)
- MADRID (Madrid)
- MANCHA (Castile La Mancha)
- MURCIA (Murcia)
- NAVARR (Navarre)
- PRIAST (Asturias)
- VALMUN (Valencian Community)

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

Financial ties between state and autonomous communities

The Spanish regions, i.e. the autonomous communities, benefit from a strong institutional framework and an explicit guarantee from the Spanish state. The financial relationship between the autonomous communities and the state is divided into two models: The general system in which the state is mostly in charge of tax legislation and collection mainly applies to 15 out of the 17 regions. Under the general system, the autonomous communities receive a share of the respective taxes collected in their territory – for example 50% of VAT and income tax revenues along with 100% of revenues from inheritance tax. The so-called foral system applies in the Basque Country and Navarre, allowing these regions much broader autonomy in terms of financial policy in so far as tax legislation and collection is primarily conducted by the regions themselves. The standardised financial system in the autonomous communities (with the exception of the Basque Country and Navarre) envisages an explicit equalisation mechanism (horizontal), which primarily redistributes tax revenues. In addition, these regions receive direct transfer payments from the Spanish state (vertical). As such, the Spanish financial equalisation system consists of three funds:

- The Guarantee Fund for Fundamental Public Services Transfer is the largest fund and aims to ensure that fundamental state services are provided equally in the regions.
- The Global Sufficiency Fund includes additional transfer payments from the state which are tied to the revenues of the respective region.
- The Convergence Funds include a Competitiveness Fund for the support of regions with below-average financing and a Cooperation Fund for regions with below-average per capita GDP.

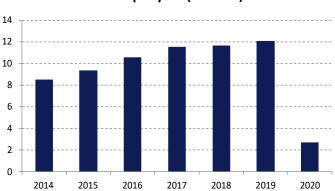




General information Number of inhabitants (2020) 8,501,450 **Capital city** Seville GDP (2019) EUR 165.26bn GDP per capita (2019) EUR 19,633 Unemployment (Q2 2021) 21.6% Debt (as a % of GDP, 2020) 24.1% **Bloomberg ticker** ANDAL **Outstanding volume** EUR 4.2bn Ratings Outlook Long-term Fitch BBBstab Moody's Baa2 stab S&P BBB+ stab

Andalusia (ANDAL)

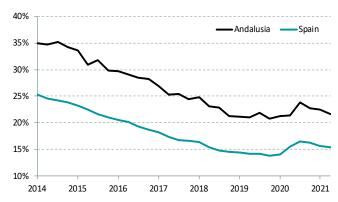
Andalusia is the southern-most autonomous community on the mainland, accounting for around one sixth of the Spanish territory. It is bounded by the Mediterranean, Gibraltar and the Atlantic to the South, and by Portugal to the West. Andalusia is Spain's most populous autonomous community with around 8.5 million inhabitants, and one of the largest regions in Europe. GDP in 2019 stood at around EUR 165bn and therefore ranked third among the Spanish regions. However, per capita GDP of EUR 19,633 (2019) makes Andalusia one of the weakest economic regions of Spain ahead of only its neighbouring community to the north, Extremadura, and the North African exclave of Melilla. In 2020, real GDP slumped by around 10% on account of the pandemic. Unemployment in Andalusia in Q2 2021 was low by comparison with the rest of Spain at 21.6%, but very high by European comparison (7.7%). As a result of the financial crisis in 2008/09, unemployment in Andalusia reached a peak of 36.8% in 2013, but has since been reduced to around 20% over the past few years. Andalusia's economy has traditionally been based on agriculture to a significant extent. At 7.7%, the primary sector accounts for a relatively high share of GDP for a developed country, while the secondary sector is less extensive at just 18.3%. The most important industries are aerospace, food, chemicals and metallurgy. Andalusia attracts many tourists all year round from both home and abroad through its varied landscape and culture. The Costa del Sol on the Mediterranean is one of the favourite destinations for beach holidays, while the Costa de la Luz on the Atlantic attracts water sports fans and the Sierra Nevada caters for winter sports. Apart from the capital Seville, Málaga, Córdoba and Granada are also popular destinations for visitors. The tourism sector is therefore a major earner for the region: whereas Andalusia still attracted over 12 million international tourists in 2019, the COVID-19 pandemic caused a huge slump of almost 80% to just 2.7 million international visitors in 2020. This has caused significant economic damage to the sector and the region. Andalusia's public-sector debt of 24.1% of GDP in Q2 2021 is relatively low compared with that of other autonomous communities. Fitch affirmed its BBB- rating for Andalusia in September 2021.



International tourists per year (millions)

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

Unemployment rate over time

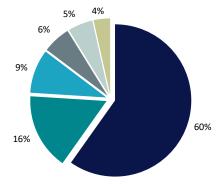




General information Number of inhabitants (2020) 1,320,586 **Capital city** Zaragoza GDP (2019) EUR 38.04bn GDP per capita (2019) EUR 28.727 Unemployment (Q2 2021) 10.7% Debt (as a % of GDP. 2020) 25.5% **Bloomberg ticker** ARAGON Outstanding volume EUR 0.9bn Ratings

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

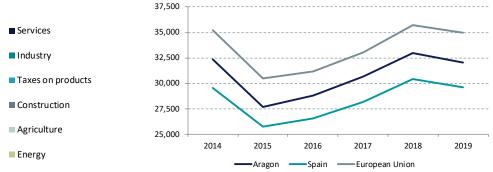
GDP by sector contribution



Aragon (ARAGON)

Aragon is situated in the northeast of the Iberian Peninsula, bordering on France to the north, Catalonia to the east, Valencia to the south-east and Castile-La Mancha, Castile and León, La Rioja and Navarre to the south west. As regards population, Aragon ranks eleventh among the Spanish autonomous communities with around 1.3 million inhabitants. Population density is very low: Only 2.9% of the Spanish people live in Aragon which accounts for just under 10% of Spain's total surface. Slightly more than half the inhabitants (around 680,000) live in the capital Zaragoza - Spain's fifth largest city. Apart from Zaragoza, the region is rather rural. The second largest city, Huesca, has a population of only around 53,000. Although Spanish is the official language, Aragonese and Catalan are also spoken in the region. The former is widespread in the valleys of the Pyrenees and the latter along the border with Catalonia. Aragon's economic output is above the national average with per capita GDP of EUR 28,727 (2019). In the three months from April to June 2021, GDP grew by 19.9% in relation to the period from January to March, on the basis of which Aragon is likely to remain above the national average for the rest of the year. Unemployment in Q2 2021 was relatively low at 10.7% and had continued to come down in the years prior to the pandemic. Major industries in the region are the auto industry, food production, IT and logistics. The biggest companies are to be found in and around Zaragoza. However, the economy is nevertheless dominated by SMEs. Only 17 companies employ more than 1,000 people. The biggest company in Aragon is Spain's Opel factory which has a workforce of over 5,000 staff. The plant has produced a total of over 10 million vehicles since 1982. The logistics sector benefits from extensive infrastructure and Zaragoza's advantageous geographical position as the connecting point for the five cities of Toulouse, Bilbao, Madrid, Valencia and Barcelona. Zara, Decathlon and DHL, among others, all have large logistic centres in the region. Another positive sign, in our view, is that Amazon Web Services (AWS) is planning to invest EUR 2.5bn in three data centres in Aragon, which are likely to go into service in 2022, bringing 1,000 new jobs. Tourism only plays a secondary role in Aragon's economy, but does benefit from the many visitors drawn to the Pyrenees for winter sports.

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Annual GDP per capita over time (USD)

Source: Aragonese Institute of Statistics, NORD/LB Markets Strategy & Floor Research





General information Number of inhabitants (2020) 2,185,605 **Capital city** Vitoria-Gasteiz GDP (2019) EUR 74.49bn GDP per capita (2019) EUR 34,142 Unemployment (Q2 2021) 10.0% Debt (as a % of GDP, 2020) 16.1% Bloomberg ticker BASOUE Outstanding volume EUR 6.6bn Ratings

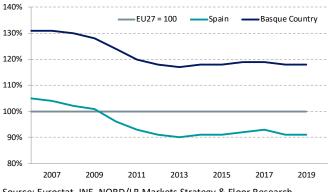
	Long-term	Outlook
Fitch	A-	stab
Moody's	A3	stab
S&P	AA-	neg

Basque Country (BASQUE)

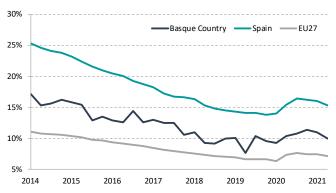
The Basque Country is a region on the Atlantic on the Franco-Spanish boarder. It is important to distinguish between the autonomous community and the Basque Country in the cultural sense, which also includes the French Basque Country and the north of the autonomous community of Navarre. As one of the smallest autonomous communities in Spain, the Basque Country is densely populated with around 2.2 million inhabitants. Around 27% of the inhabitants speak the Basque language, Euskara, which is still recognised today as the official language. Politics within the region are marked by conflicts with central government: Many Basques still want independence from the Spanish state and for the Basque Country to be a separate entity. Up until just a few years ago, the left-wing terrorist organisation ETA was still carrying out repeated attacks aimed at achieving the formation of an independent Basque state. The community's capital is Vitoria-Gasteiz, which is the second largest city in the Basque Country after Bilbao. The region has one of the strongest economies in Spain with per capita GDP of EUR 34,142; it contributes around 6% to the national GDP. At 10%, unemployment remained low in Q2 2021 compared with the national average. The Basque Statistics Office currently projects a slump in GDP of 10.1% (preliminary) in 2020, which means that the region's economy has suffered less from the pandemic than the rest of Spain. Public-sector debt was moderate in 2020 at 16.1% of GDP, and it should remain at a comparable level even after the crisis. The Basque Country has a diversified industry with steel, machinery, energy, automotive and aeronautics. Moreover, it is important to draw attention to the R&D strength of the region through a large number of universities and innovative companies in the field of industry 4.0. As mentioned before, the Basque autonomous community has its own financing system in which the region enjoys almost full autonomy in collecting taxes. Taxes are collected by the provinces which transfer an equalisation portion to the state. The region has adjusted its financing strategy for the next few years in the wake of the pandemic in order to boost liquidity and spread the impact of the crisis fairly across the generations. In future, 50% of the financing volume will be issued as sustainable bonds (maturity of 10-12 years), 30% as private placements with a maturity of 30 years and 20% will be raised in the form of bilateral credits with terms of less than ten years. In addition to longer maturities, the issuer will aim for a 25% share of floaters.

NORD

GDP per capita in comparison with Spain and the EU



Unemployment rate over time



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





General information
Number of inhabitants (2020)
2,381,281
Capital city
Undefined
Seat of government: Valladolid
GDP (2019)
EUR 59.79bn
GDP per capita (2019)
EUR 24,886
Unemployment (Q2 2021)
12.6%
Debt (as a % of GDP, 2020)
24.0%
Bloomberg ticker
CASTIL
Outstanding volume
EUR 3.9bn
Ratings

	Long-term	Outlook
Fitch	-	-
Moody's	Baa1	stab
S&P	-	-

Economic output by sector

6%

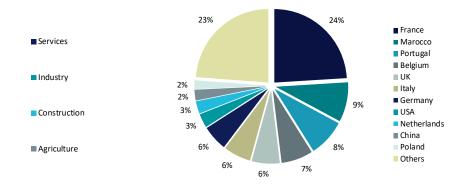
68%

6%

20%

Castile and León (CASTIL)

Castile and León is the largest autonomous community in Spain with a surface area of around 94,000 km². It therefore accounts for almost one fifth of the Spanish territory. The region is even slightly larger than Portugal with which it shares a border to the west. With just under 2.4 million inhabitants and a population density of 25.5 inhabitants per square kilometre, however, Castile and León is very sparsely populated, being home to only 5.1% of the Spanish population. Castile and León has no named official capital; De facto, though, Valladolid is regarded as the capital since it is home to the parliament and the seat of government. Valladolid is moreover the biggest city in the region with some 300,000 inhabitants. Economic output is slightly below the Spanish average with a per capita GDP of EUR 24,886 in Q2 2021. The local statistics office calculates a pandemic-led slump in GDP of 7.9% (preliminary) for the forthcoming publication of 2020 GDP. Unemployment is much lower than the national average with a figure of 12.6% in Q2 2021. One of the most important sectors in Castile and León is the automotive industry which contributes approximately 20% of GDP and accounts for over 60% of the region's exports. Renault and Fiat-Iveco, among other companies, operate plants in the province of Valladolid, while Nissan has a factory in the province of Ávila. Another important sector is the food industry which represents around 30% of the regional industrial production. It is also worth mentioning that Castile and León produces around 12% of Spain's total energy output and that it is therefore regarded as the biggest energy producer among the autonomous communities. The autonomous community is playing a pioneering role, especially in the field of renewable energies. Around 135% of the region's electricity consumption is from renewable energies. Moody's last affirmed its Baa1 rating with stable outlook in November 2020. The autonomous community therefore has the same rating as the Spanish state. Moody's justifies its rating, among other aspects, based on strong capital market access and a relatively low debt. On the other hand, Castile and León faces demographic challenges in view of an ageing population. According to the Spanish Statistics Office, INE, the percentage of people over the age of 65 in the region already stood at 25% in 2018 and this is set to rise to over 30% by the year 2028. In light of this, the rating agency expects the budget to be impaired by higher healthcare costs in the next few years.



Distribution of exports by destination

Source: Castile and León Institute of Statistics, INE, Moody's, NORD/LB Markets Strategy & Floor Research





General information Number of inhabitants (2020) 7,716,760 **Capital city** Barcelona GDP (2020) EUR 224.13bn GDP per capita (2020) EUR 29.034 Unemployment (Q2 2021) 12.3% Debt (as a % of GDP. 2020) 37.2% **Bloomberg ticker** GENCAT Outstanding volume EUR 2.5bn Ratings Long-term Outlook

-

Ba2

Fitch

S&P

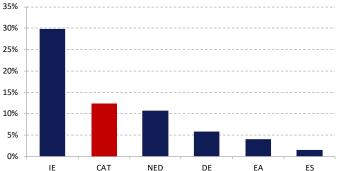
Moody's

Catalonia (GENCAT)

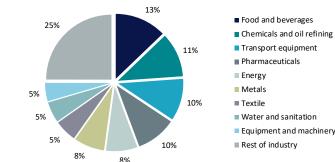
Situated on the Mediterranean in north-eastern Spain, Catalonia constitutes an important economic location in conjunction with its capital Barcelona. At EUR 224.13bn (2020), approximately 20% of national economic output is attributable to some 7.7 million inhabitants (16.1% of the Spanish population). The region's prosperity and autonomy has given rise to separatist movements for many years, which most recently led to a vote for independence in 2017, which was, however, annulled by the Spanish government. Barcelona's strategic location on the Mediterranean Sea not only encourages close economic relations with mainland Europe and Asia but also attracts an international workforce. These factors primarily benefit Catalonia's diversified secondary sector (including food, chemicals, pharmaceuticals, electricity) and contribute 19.8% (2020) to regional gross value added. The vital tertiary sector, which had grown by a steady 3% per annum. In the five years preceding the pandemic, contributes the majority of economic output, accounting for a share of 73.9% (2020). The most important sub-sectors within this sector are the public sector (2020 contribution: 20.9%), followed by vehicle trade and maintenance (18.4%). The international focus of the Catalonian economy is clearly reflected in its external trade balance. Although the volume of Catalonian exports shrank by 22.6% in 2020 due to the repercussions of the pandemic, a foreign trade surplus of 12.3% of GDP was still achieved. Catalonia therefore ranks third in the EU rankings behind Luxembourg (39%) and Ireland (30%). Of all Catalonia's exports, 39.3% (2020) remained within Spain. Despite the tensions in global trade in recent years, including the trade war between the USA and China, Brexit and currently the COVID-19 situation, foreign trade has remained largely stable. Over five years, foreign direct investment has averaged EUR 4.6bn (2020), having grown steadily since 1995. The COVID-19 crisis led to a historic slump in GDP of -21.7% (Q/Q) in the second quarter of 2020, followed by an upturn of 16.9% in the third guarter. Growth in GDP of 4.5% to 7.7% is expected for 2021. In the second guarter of 2021, unemployment stood at 12.3%, with 16-24year-olds being most affected (38.4%). Following a record year in 2019 in which revenues from tourism reached EUR 21.3bn and visitor numbers reached 19.4 million, Barcelona suffered a decline of 59% in 2020. Current global infection rates are likely to continue complicating the situation.

Net exports in an EU comparison (as a % of GDP)

stab



Gross value added by industrial sector



Source: Statistical Institute of Catalonia, INE, Bloomberg, NORD/LB Markets Strategy & Floor Research

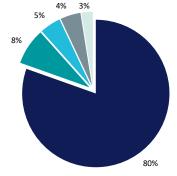




General information Number of inhabitants (2020) 2,701,819 **Capital city** Santiago de Compostela GDP (2019) EUR 64.43bn GDP per capita (2019) EUR 23.873 Unemployment (Q2 2021) 12.4% Debt (as a % of GDP. 2020) 19.9% **Bloomberg ticker** IUNGAI **Outstanding volume** EUR 2.0bn Ratings

	Long-term	Outlook
Fitch	-	-
Moody's	Baa1	stab
S&P	Α	neg

Exports by region



Galicia (JUNGAL)

Situated on Spain's Atlantic north-west coast, Galicia is home to around 2.7 million inhabitants, or 5.5% of the Spanish population, making it the fifth largest autonomous region. In the south and east, it borders both Portugal and the region of Castile and León. Compared with the rest of Spain, it has a particularly high proportion of more elderly inhabitants. This trend is exacerbated by migration from Galicia to other regions of Spain and abroad. Consequently, the burdens on the health system and the financial budget have increased in recent years. The youngest members of the region's population are concentrated in the densely inhabited western coast. The centre of industry and trade is located here in the provinces A Coruña and Pontevedra. The corporate landscape is dominated by SMEs, which are largely engaged in the tertiary sector. In 2019, GDP amounted to EUR 64.4bn or EUR 23,873 per capita. In terms of their contribution to GDP, the most important industries are the textiles industry (37%), the automotive sector (14%), the food and beverages industry (10%) as well as ship construction (5%). The maritime economy benefits, in particular, from its key position on the Atlantic in conjunction with a sophisticated infrastructure. With more than 120 harbours, Galicia has long been an important trading platform in southern Europe. For international merchant shipping, Galicia is also a connection point with the central axis of the European Atlantic corridor. In recent years, the tourism sector has recorded dramatic growth, primarily due to the increasing popularity of the "Camino de Santiago" - the Way of St. James pilgrimage. Galicia's significance for the national textiles industry must also be highlighted. Research and development are being driven forward in the information and biotechnology sectors as well as renewable energies. Self-sufficiency in electricity and heat already stood at 52% in 2015, of which wind power accounted for 29%. Thanks to a stringent budgetary policy, Galicia has largely complied with the budget targets set by central government since 2012. At the end of 2020, Galicia reported an unsubstantial budget deficit of 0.08% of regional GDP. The rating agency Moody's expects a temporary deterioration in the budget for 2021, which will, however, be absorbed by the national liquidity mechanism. Unemployment in the region stood at 12.4% in O2 2021.

130% 120% 110% 100% 90% 80% Galicia Spain

2012

2013

2014

2015 2016

2017 2018

Export/Import ratio: Galicia vs. Spain

Source: Galician Statistical Institute (IGE), INE, Moody's, Bloomberg, NORD/LB Markets Strategy & Floor Research

Europe

Africa

Asia

Latin America

North America

70%

2009

2010

2011





General information Number of inhabitants (2020) 6.752.763 **Capital city** Madrid GDP (2019) EUR 240.13bn GDP per capita (2029) EUR 35.913 Unemployment (Q2 2021) 12.1% Debt (as a % of GDP, 2020) 16.0% **Bloomberg ticker** MADRID **Outstanding volume** EUR 20.0bn Ratings Outlook Long-term Fitch BBB

stab

stab

stab

Madrid (MADRID)

The Spanish capital, which is also the most significant autonomous region in economic terms, is located in the geographical centre of the country on the historical Castilian plateau. As the fourth largest city in Europe and the third largest Spanish region, it is home to around 6.8 million inhabitants (2020), approximately 14% of the Spanish population. At EUR 35,913 (2019), Madrid achieves the highest GDP per capita among the autonomous regions and is therefore approximately 36% above the national average and even 16% or so above the European average. The trend in the unemployment rate has been positive for many years and, at 12.1%, was again below the national average in the second quarter of 2021. The region's international focus means that it is home to a diverse range of companies, with the tertiary sector dominating. Accordingly, 85% of GDP is attributable to the service sector, while 15% of economic output is generated in the secondary sector. The leading sub-segments within the secondary sector, which contribute 24% to sector output, are the wholesale and retail trades as well as the automotive, warehousing and transport sectors. International investors' interest in Madrid is reflected in a share of around 80% of foreign direct investment in Spain. Madrid's flexible tax system, which provides for reliefs in large areas of property tax and trade tax, also helps. The buoyant start-up scene also benefits from this: in 2020, 23% of national start-ups or 21,791 new companies were formed in Madrid. Compared with the rest of Spain, the economy recovered from the slump in Q2 2020 triggered by the COVID-19 pandemic more rapidly than most. A fall in the services sector of -26% year on year was followed by a figure of only -8.2% in Q3. Even in the heavily affected hotel and restaurant industry, the COVID-19 crisis translated into a fall in sector output of up to -55% in Q3 and -18.2% in the third quarter respectively. For 2021, the Madrid Institute of Statistics expects positive growth in GDP of around 7% Y/Y. With its funding via the capital market, the Madrid region focuses on sustainability and therefore plays a pioneering role in Spain. As the largest Spanish issuer of sustainable bonds, Madrid last placed e.g. a benchmark issue worth EUR 1.0bn in March 2021. By ensuring sustainability is part of all public sector activities, it aims to improve the socio-economic situation in the longer term.

FDI in Spanish regions (cumulative up to Q3 2020)

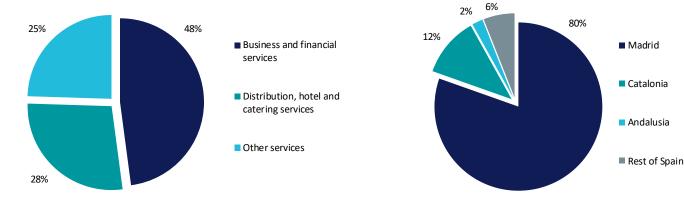


Baa1

Α-

Moodv's

S&P



Source: Madrid Institute of Statistics, INE, NORD/LB Markets Strategy & Floor Research





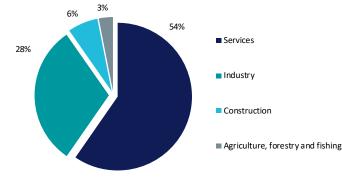
General information Number of inhabitants (2020) 661,197 **Capital city** Pamplona GDP (2019) EUR 20.89bn GDP per capita (2019) EUR 32,141 Unemployment (Q2 2021) 10.3% Debt (as a % of GDP, 2020) 19.1% Bloomberg ticker NAVARR Outstanding volume EUR 1.4bn Ratings

-
-
neg

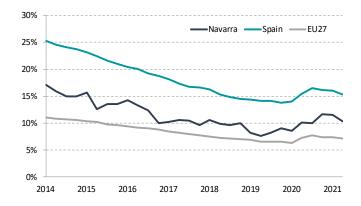
Navarre (NAVARR)

Navarre is located in northern Spain and, with around 661,000 inhabitants, is one of the most sparsely populated of Spain's autonomous communities. The region borders the Basque country in the west, Aragon in the east and La Rioja in the south. In the north, the Pyrenees form the border with France. Pamplona is the capital and by far the largest city in Navarre, with around 204,000 inhabitants. Pamplona is also the only large city in the region, which is otherwise largely rural in character. Tudela, which has only just over 37,000 inhabitants, is the second largest city. In cultural terms, the northern part of Navarre was historically part of the Basque country. The Basque language "Euskara" is still widely spoken and is even still the official language in some municipalities. Roughly 12% of Navarre's inhabitants speak Euskara and 64 of the 272 municipalities are regarded as mainly Basque-speaking zones. Compared with the rest of Spain, the regional economy is very strong and, with GDP per capita of EUR 32,141, Navarre reported the fourth highest figure among Spain's 17 autonomous communities in 2019. In the second quarter of 2021, it reported a very low unemployment rate (10.3%) compared with the rest of Spain. Having been primarily dominated by agriculture for many years, the primary sector no longer plays such a significant role in the region as is still the case in some southern Spanish regions, for example. The overwhelming majority of the workforce is employed in the services sector (62.8%), followed by industry (33.0%) and the primary sector (4.2%). The Volkswagen plant in Pamplona is one of the region's most important employers: in 2018 alone, over 270,000 vehicles rolled off the conveyor belt of which the vast majority were small cars. The economy also benefits from a dense network of various local automotive suppliers. Among other sectors, further key industries include food production, health care and renewable energies. As mentioned previously, Navarre also benefits, in addition to the Basque country, from the foral system combined with almost complete tax autonomy. Accordingly, Navarre can have a significant impact on the region's corporate taxation and, by doing so, create a supportive environment for companies. Despite the coronavirus crisis, Navarre generated a foreign trade surplus of EUR 3.28bn. However, the rating agency S&P revised the outlook from stable to negative in September 2020. The rating of AA- was confirmed again, given the highly diversified economy and the advantageous tax system.





Unemployment rate over time



Source: INE, S&P Global, NORD/LB Markets Strategy & Floor Research

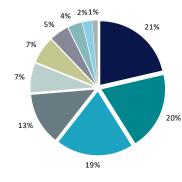




General information Number of inhabitants (2020) 1,022,205 **Capital city** Oviedo GDP (2019) EUR 23.77bn GDP per capita (2019) EUR 23.299 Unemployment (Q2 2021) 13.6% Debt (as a % of GDP, 2020) 20.8% **Bloomberg ticker** PRIAST **Outstanding volume** EUR 0.6bn Ratings

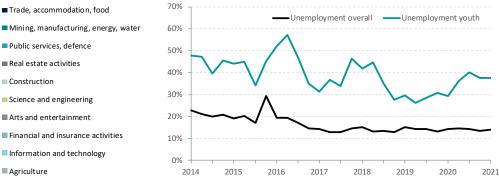
	Long-term	Outlook
Fitch	-	-
Moody's	Baa1	stab
S&P	-	-

GDP by sector contribution



Asturias (PRIAST)

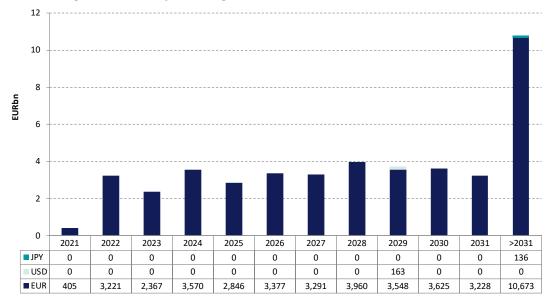
Asturias is located in north-western Spain and borders Galicia to the west, Castile and León to the south and Cantabria to the east. With an area of around 10,600 km² and just over one million inhabitants, Asturias ranks as one of Spain's smallest regions. It is moderately densely populated with inhabitants being mainly concentrated in the central cities of Gijón and the capital Oviedo. The region's geography leads to an oceanic climate, which differs significantly from the generally dry, hot climate prevailing in the rest of the country. The Costa Verde owes its name to the green landscape. With a share of 2.1% (EUR 23.8bn, 2019), Asturias only contributes a fraction to Spanish gross domestic product. Compared with the rest of Spain, the figure for GDP per capita is average at around EUR 23,300. In terms of its unemployment rate, which has been trending virtually sideways for a few years and stood at 13.6% in the second quarter of 2021, Asturias comes in somewhat below the national average (15.3%). However, at almost 40%, unemployment is particularly high among those aged 25 and below. Since the financial crisis in 2008, the debt of the Autonomous Community of Asturias has risen from around 3% of GDP to 20% of GDP (EUR 5.1bn) in 2020 and is therefore still moderate compared with the rest of the country. According to Eurostat, the majority of gross value added pre-coronavirus, at 71.7%, was accounted for by the tertiary sector, followed by the secondary sector (including construction) at 26.9% and the primary sector with the remaining 1.4%. The most significant contributions to GDP are made by tourism, followed by industry and the public sector as well as construction and the real estate sector. Before the pandemic, Asturias was distinguished by increasing levels of entrepreneurship, which has been expanding continuously since 2016 to over 68,000 start-ups in 2020. This is making an ever more important contribution to the growth of the region. The majority of these companies are engaged in the tertiary sector and employ fewer than ten employees. The restructuring of the mining industry, which severely hampered economic growth in the last 30 years, is still a major influence on the Asturias region. However, the restructuring measures are expected to be largely completed over the course of 2021. The long-term strategic refocusing of the Asturian energy sector envisages a transition from previously exporting energy to largely importing it in future.



70%

Unemployment rate over time

Source: Asturias Institute of Statistics, INE, NORD/LB Markets Strategy & Floor Research



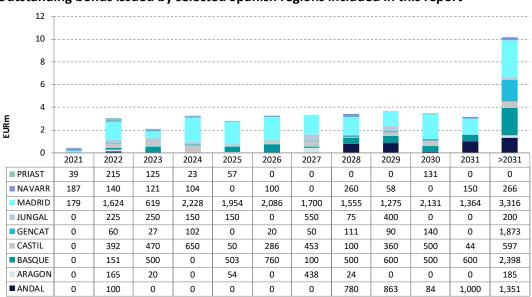
Outstanding bonds of all Spanish regions

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

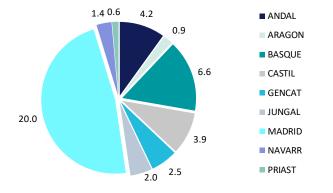
Volume of the Spanish regions sub-segment

The total market of Spanish regions comprises EUR 44.4bn (EUR equivalent) spread across 198 bonds. Of this figure, 196 bonds (EUR 44.1bn) are denominated in EUR, with one bond each denominated in USD and JPY respectively. MADRID dominates market activity, at EUR 20.0bn, followed by BASQUE (EUR 6.6bn), ANDAL (EUR 4.2bn) and CASTIL (EUR 3.9bn). In total, 33 of the 198 bonds are in benchmark format, meaning that they are worth EUR 500m or more. MADRID has issued two bonds of just under EUR 2bn, while the smallest bond in the universe of Spanish regions is worth just EUR 5m.

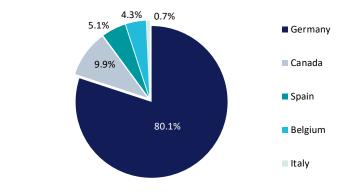
Outstanding bonds issued by selected Spanish regions included in this report



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



Breakdown of the regions included in EUR bn

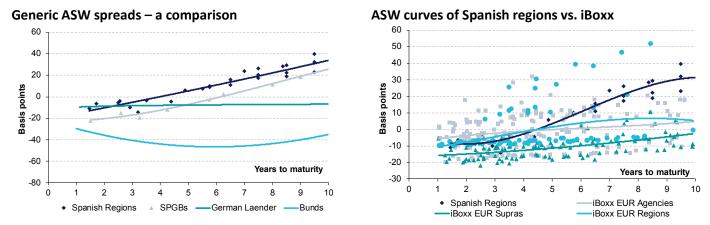


Country weighting within the iBoxx € Regions

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

Spanish regions in the iBoxx Regions and review of spreads

As shown above, the entire Spanish market for regional bonds amounts to EUR 44.4bn, of which EUR 20.0bn is attributable to the MADRID ticker. Globally, the ultimate issuer group is still the German Laender, which make up 80.1% of the composition of the iBoxx EUR Regions. After Canada (9.1%), Spanish regions are ranked third on 5.1%, followed by Belgium and Italy in the rankings. Apart from the amounts, the spread levels are also suitable: compared with the iBoxx EUR Regions, the Spanish regions trade at premiums from maturities of five years. At the long end, the spread difference amounts to almost +30bp. The differences compared with agencies and supras are more marked. Compared with the supras that are better rated on average and the fact that the bonds issued by these regular issuers are usually far more liquid, this is not surprising. Overall, Spanish regions feature the widest spreads compared with their peers and could therefore – with restricted liquidity – generate pickups for investors. All investors are also probably open for private placements and certain expectations concerning yields among institutional investors. Our "Beyond Bundeslaender" event in March 2021, during which various regions introduced themselves as investment alternatives, also provided a good overview.



Source: Bloomberg, NORD/LB Markets Strategy & Floor Research; data as at 28 Oct. 2021 eob



Regulatory overview for RGLAs* / ** (Examples)

Issuer	Risk weighting	LCR classification	NSFR classification	Solvency II classification
Belgian regions	0%	Level 1	0%	preferred (0%)
German Bundeslaender	0%	Level 1	0%	preferred (0%)
French regions	20%	Level 2A	15%	preferred (0%)
Italian regions	20%	Level 2A	15%	non-preferred (individual review)
Spanish regions	0%	Level 1	0%	preferred (0%)

*Regional governments and local authorities

** NB: 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: NORD/LB Markets Strategy & Floor Research

Exceptions to scope of application of the Leverage Ratio (CRD Art. 2 no. 5) (examples)

EU	Central banks of member states
Belgium	Institut de Réescompte et de Garantie/- Herdiscontering- en Waarborginstituut
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.).
France	Caisse des Dépôts et Consignations (CDC)
Italy	Cassa Depositi e Prestiti (CDP)
Spain	Instituto de Crédito Oficial (ICO)

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

Regional governments and local authorities (solvency stress factor allocation of 0% possible; examples)

Regional and local governments
Municipalities (Communauté/Gemeenschappen), regions (Régions/Gewesten), towns (Communes, Gemeenten) & provinces (Provinces, Provincies)
Bundeslaender, municipalities & municipal associations
Regions (région), municipalities (commune), "Départements"
Autonomous regions (comunidades autónomas) and local government (corporación local)

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

Summary of Spanish regions

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

Source: NORD/LB Markets Strategy & Floor Research

Liability mechanism

The Kingdom of Spain provides an explicit guarantee for the autonomous communities – which is something that not even German Laender can offer (principle of Bundestreue (federal loyalty) is implicit). The vertical and horizontal financial equalisation mechanism through the three elements described above ensures financial stability. As economically strong autonomous communities, the Basque country and Navarre also benefit from the foral system, which is also described above and gives both regions far-reaching autonomy in deciding financial policy.

NORD/LB

lssuer (Ticker)	Number of inhabitants (2020)	Unemployment (Q2 2021)	GDP per capita (2019)*	Outstanding volume	No. of bonds	Ratings
ANDAL	8,501,450	21.58%	19,633	EUR 4.2bn	18	(BBB- / Baa2 / BBB+)
ARAGON	1,320,586	10.73%	28,727	EUR 0.9bn	10	(- / - / BBB+)
BALEAR	1,219,423	15.17%	23,299	EUR 0.6bn	3	(- / - / BBB+)
BASQUE	2,185,605	10.02%	34,142	EUR 6.6bn	18	(A- / A3 / AA-)
CANARY	2,244,423	24.71%	21,244	EUR 0.4bn	5	(BBB- / - / A)
CASTIL	2,381,281	12.59%	24,886	EUR 3.9bn	22	(-/Baa1/-)
CCANTA	581,078	11.79%	24,383	-	-	(BBB-/-/-)
GENCAT	7,716,760	12.28%	34,645	EUR 2.5bn	19	(-/Ba2/-)
JUNGAL	2,701,819	12.40%	23,873	EUR 2.0bn	8	(-/Baa1/A)
JUNTEX	1,057,999	19.15%	19,454	EUR 0.5bn	9	(- / Baa2 / BBB)
lrioja	316,197	11.52%	28,200	EUR 0.03bn	1	(BBB-/-/-)
MADRID	6,752,763	12.09%	35,913	EUR 20.0bn	50	(BBB / Baa1 / A-)
MANCHA	2,049,455	16.58%	21,004	EUR 0.6bn	6	(BBB- / Ba1 / -)
MURCIA	1,513,161	13.15%	21,642	EUR 0.1bn	3	(BBB- / Ba1 / -)
NAVARR	661,197	10.30%	32,141	EUR 1.4bn	15	(- / - / AA-)
PRIAST	1,022,205	13.64%	23,299	EUR 0.6bn	8	(-/Baa1/-)
VALMUN	5,045,885	16.37%	23,206	EUR 0.1bn	3	(BBB- / Ba1 / BB)
Spain	47,394,223	15.26%	26,426	EUR 1,021bn	53	(A- / Baa1 / A)

*Data for 2020 not yet available for all autonomous communities of Spain. Spain (2020): EUR 23,640

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

ECB purchase programme

It is worth looking at the purchasing activities of the Eurosystem. To date, it has purchased securities issued by eight of the nine issuers examined in more detail in this article, namely ANDAL, ARAGON, BASQUE, JUNGAL, CASTIL, NAVARR and MADRID and latterly also GEN-CAT. There is also the issuer BALEAR, meaning that in total nine of the 16 Spanish autonomous regions represented on the capital market have been purchased under the APP or PEPP. It was striking that, until recently, there were no GENCAT bonds to be found in the Eurosystem's portfolio. Their rating meant that the Catalonian bonds did not meet the Eurosystem's purchase conditions for the PSPP (see Covered Bond & SSA View 07/2021), which was also the case for Greece. However, non-investment grade bonds are also purchased under the PEPP. In terms of the number of ISINs purchased, the Spanish autonomous communities are the most frequently purchased sub-sovereign issuers after the German Laender. For comparative purposes: in total, 514 different ISINs of German Bundeslaender have been purchased, 49 ISINs of Spanish autonomous communities and 41 from Belgian regions.

Madrid is following a global trend with sustainable bonds

With Madrid's strategic focus on sustainable bonds for its funding, the region is following a growing trend on the primary market, but it is playing a pioneering role at a national level. The cumulative volume of new issues in ESG bond classes (green, social and sustainable bonds) grew significantly last year as well. Accordingly, in 2020, the issue of bonds in the ESG segment totalling EUR 425bn exceeded the figure for the previous year by 60%. The NORD/LB ESG Update (Feb. 2021) identifies social bonds as the fastest growing sub-segment with an increase in the amount of new issues from EUR 16bn in 2019 to EUR 138bn at the end of December 2020, a development driven by the pandemic. Since 2016, Madrid has sought to position itself on the capital market as the leading issuer in Spain in the segment of ESG bonds. Madrid's securities portfolio already includes social, sustainable and green bonds across various maturity segments and features some hefty volumes.

NORD/LB

Conclusion

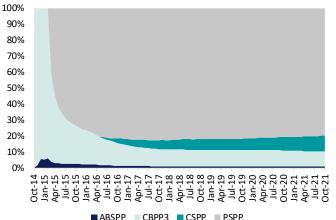
Against the backdrop of a further intensification in the low interest environment in 2020, which has only recovered slightly in 2021, attractive opportunities for investment emerge repeatedly in certain niches – in some cases amplified by the still rapidly evolving infection rates in the coronavirus pandemic. Our reports on the Canadian provinces and Down Under (Australian states and territories plus Auckland Council) must also be interpreted in this light. They supplement the traditional SSA portfolio in terms of maturity and/or yield but contribute to diversification in any case. Increasing interest in Spanish and Portuguese regions is evidence that opportunities can be found here on a consistent basis. Although the Spanish market for regional bonds – i.e. not including sovereign bonds – must still be classified as a niche market at EUR 44.4bn, despite its growth in recent years. Bonds issued by the Madrid region account for the largest volume, which should hardly come as a surprise. The fact that there is scarcely any currency diversification (two of 198 bonds in USD and JPY respectively) is of interest. Not least because the Eurosystem has already acquired substantial amounts of Spanish bonds under the PSPP and PEPP, second or third tier issuers are at the forefront of unusual investment alternatives every now and again. These securities are of interest from a yield perspective and for regulatory reasons and the issuers are accessible for private placements. It remains to be seen how successfully Spain can continue to cope with the occurrence of infection in the coronavirus pandemic. Some autonomous communities, in particular the regions with strong economies, have recovered far more rapidly from the historic collapse in economic output during 2020 than expected. A point of criticism for our part is the quality of many autonomous communities' investor relations. The internet presence of various issuers requires significant development and presentations to investors - if even available - are often outdated and/or unclear. We would like to see far more information made accessible to analysts and investors in future to be able to tackle the diversity of the various issuers adequately.

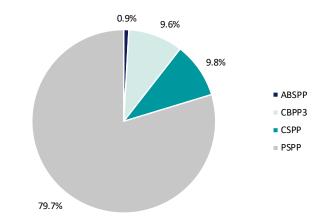
ECB tracker

Asset Purchase Programme (APP)

	ABSPP	СВРРЗ	CSPP	PSPP	APP
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

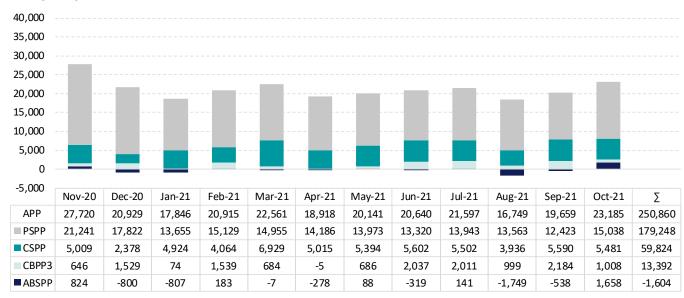
Portfolio structure





NORD/LB

■ ABSPP ■ CBPP3 ■ CSPP ■ PSPP



Monthly net purchases (in EURm)

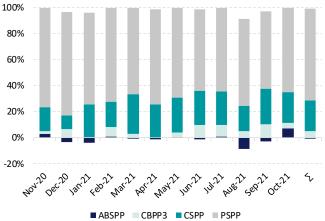
Source: ECB, NORD/LB Markets Strategy & Floor Research



Portfolio development



Distribution of monthly purchases



Distribution of weekly purchases

10.09.2021 17.09.2021

03.09.2021

01.10.2021

08.10.2021 15:10:2021 2.10.2021 29.10.2021

4

24.09.2022

■ ABSPP ■ CBPP3 ■ CSPP ■ PSPP

100% 80%

60%

40%

20%

0%

-20%

-40%

-60%

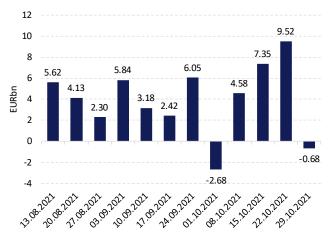
-80%

-100%

20.08.2022 27.08.2021

13.08.202

Weekly purchases



Expected monthly redemptions (in EURm)

50,000 45,000 40,000 35,000 30,000 25,000 20,000 15,000 10,000 5,000 0 Nov-21 -Jan-22 -Nov-21 Dec-21 Jan-22 Feb-22 Mar-22 Apr-22 May-22 Jun-22 Jul-22 Aug-22 Sep-22 Oct-22 2020 2021 Oct-22 Oct-22 9,708 APP 19,801 10,934 33,048 20,744 42,859 23,109 16,799 25,686 8,132 44,180 36,647 291,647 262,253 246,930 260,912 PSPP 13,806 7,811 20,906 3,625 12.603 38,032 18,998 12,714 22,135 4.841 34,554 34.003 224,028 201,482 188,487 202.411 CSPP 1,377 826 1,772 1,590 1,416 1,125 1,341 1,017 1,191 280 2,426 588 14,949 18,267 16,674 12,746 CBPP3 4,048 937 9,797 2,524 6,380 3,016 1,866 1,554 1,598 2,226 6,855 1,588 42,389 33,236 30,143 37,404

1,514

686

904

785

345

468

10,281

9,268

11,626

8,351

762

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

573

1,969

345

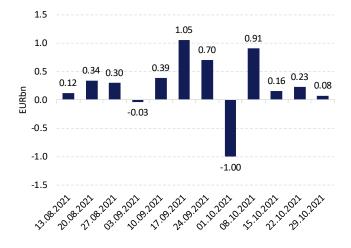
1,360

ABSPP

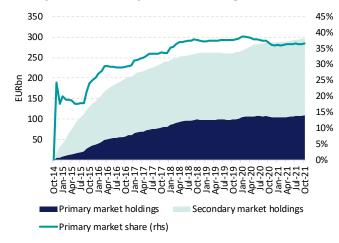
570

Covered Bond Purchase Programme 3 (CBPP3)

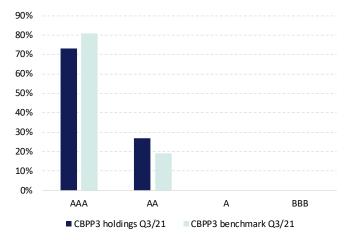
Weekly purchases



Primary and secondary market holdings

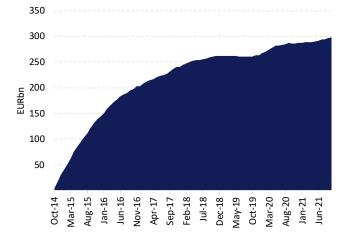


Distribution of CBPP3 by credit rating



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

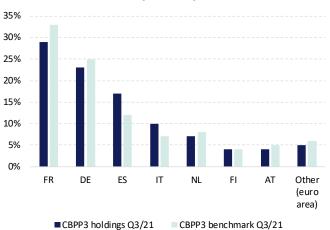
Development of CBPP3 volume



Change of primary and secondary market holdings



Distribution of CBPP3 by country of risk



8 7.22 5.76 5.78 6 4 78 4.03 4 3.08 2 59 EURbn 1.80 2 0.35 0.24 0 -2 -1.82 -2.06 -4 01.10.2021 2.10.2021 24.09.2021 08.10.2021 15.10.2021 29.10.2021 13.08.2021 21,08,2021 1,09,2021 20:08:2021 03.09.2021 10.09.2021

Public Sector Purchase Programme (PSPP)

Weekly purchases

Overall distribution of PSPP buying at month-end

Adjusted Avg. time Purchases Difference Market average³ Difference distribution Jurisdiction 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 DE -9,929 -1.0 24.3% 623,378 633,307 6.6 7.6 6,767 1.7 EΕ 0.3% 406 -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 -8,559 LT 0.5% 5,345 13,904 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 SI 0.4% 10,091 11,568 -1,477 9.9 10.2 -0.3 SK 1.1% 16,781 27,513 -10,732 8.2 8.3 -0.1 SNAT 10.0% 271,856 260,330 7.7 8.9 -1.2 11,526

0

7.3

8.2

-0.9

Expected

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

² Based on the adjusted distribution key

Total / Avg.

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

2,603,303

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

100.0%

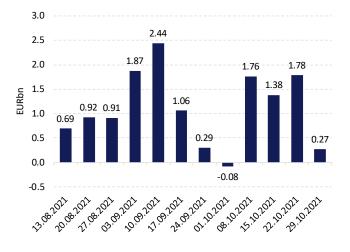


Development of PSPP volume



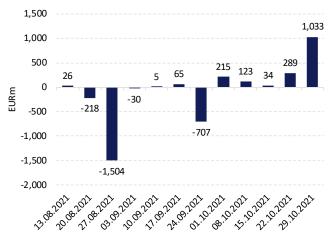
Corporate Sector Purchase Programme (CSPP)

Weekly purchases



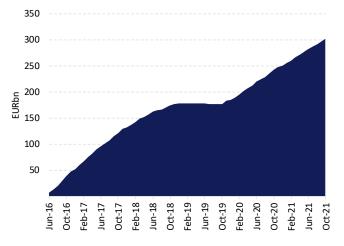
Asset-Backed Securities Purchase Programme (ABSPP)

Weekly purchases



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

Development of CSPP volume



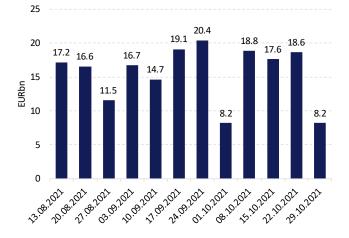
Development of ABSPP volume



Pandemic Emergency Purchase Programme (PEPP)

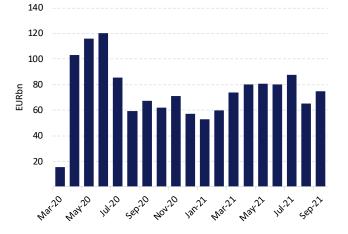
Holdings (in EURm) Volume already invested (in EURbn) PEPP Sep-21 1,412,291 79.3% 20.7% Oct-21 1,480,146 Δ +67,855 0 185 370 555 740 925 1,110 1,295 1,480 1,665 1.850 **Estimated portfolio development** Assumed pace of purchases Weekly net purchase volume PEPP limit hit in ... Average weekly EUR 17.7bn 22 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 Jan-21 Feb-21 Mar-21 Apr-21 May-21 Jun-21 Jul-21 Sep-21 Oct-21 Σ Aug-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 20,929 22,561 18,918 20,640 19,659 23,185 17,846 20,915 20,141 21,597 16,749 250,860

Weekly purchases



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

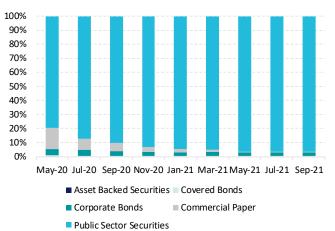
Development of PEPP volume

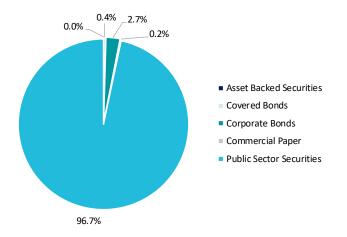


Public Sector Asset-backed Covered Corporate Commercial PEPP **Securities** Bonds Bonds Paper Securities Jul-21 0 5,379 33,684 3,861 1,220,424 1,263,348 Sep-21 0 6,079 37,139 3,314 1,353,076 1,399,609 Δ 0 +707 +3,489 -545 +136,451 +140,101

Holdings under the PEPP (in EURm)

Portfolio structure





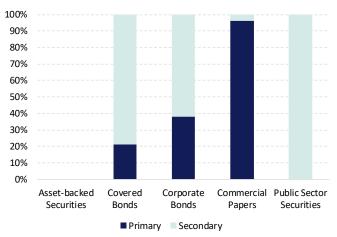
/LB

NORD

Portfolio development 1,600 1,400 1,200 1,000 EURbn 800 600 400 200 0 141-20 sep?20 H04.20 May21 141.22 Marzo Jan 21 Maril sep?2 Asset Backed Securities Covered Bonds Corporate Bonds Commercial Paper

Public Sector Securities

Share of primary and secondary market holdings



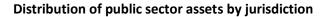
Breakdown of private sector securities under the PEPP

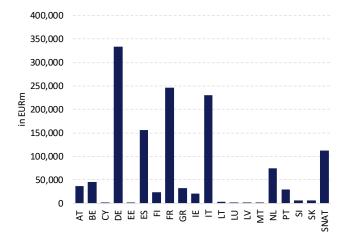
Son 21	Asset-back	ed securities	Covere	d bonds	Corporate bonds		Commercial paper	
Sep-21	Primary	Secondary	Primary	Secondary	Primary	Secondary	Primary	Secondary
Holdings in EURm	0	0	1,298	4,781	14,113	23,026	3,191	123
Share	0.0%	0.0%	21.4%	78.7%	38.0%	62.0%	96.3%	3.7%

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

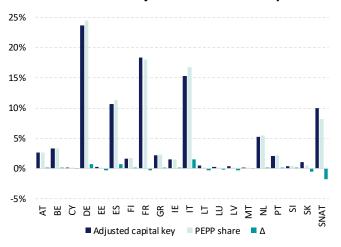
Jurisdiction	Holdings (in EURm)	Adj. distribution key ¹	PEPP share	Deviations from the adj. distribution key ²	ø time to maturity (in years)	Market average ³ (in years)	Difference (in years)
AT	36,922	2.6%	2.7%	0.1%	8.5	7.2	1.4
BE	46,226	3.3%	3.4%	0.1%	6.7	9.1	-2.4
CY	2,308	0.2%	0.2%	0.0%	9.0	8.0	1.0
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%	0.1%	7.4	7.6	-0.2
FR	246,513	18.4%	18.1%	-0.3%	8.4	7.6	0.8
GR	32,185	2.2%	2.4%	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%	1.6%	7.0	6.9	0.0
LT	2,767	0.5%	0.2%	-0.3%	11.5	10.4	1.1
LU	1,854	0.3%	0.1%	-0.2%	6.8	6.2	0.5
LV	1,532	0.4%	0.1%	-0.2%	9.3	9.3	0.0
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	111,925	10.0%	8.2%	-1.8%	10.9	8.5	2.4
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



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

NORD/LB

Aggregated purchase activity under APP and PEPP

Holdings (in EURm)

	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

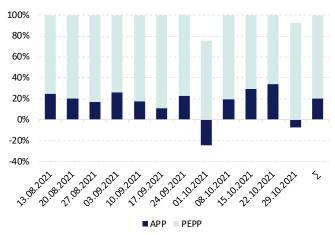
Monthly net purchases (in EURm)



Weekly purchases



Distribution of weekly purchases

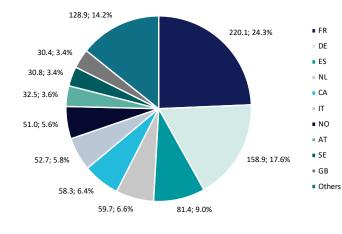


NORD/LB

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

Charts & Figures Covered Bonds

EUR benchmark volume by country (in EURbn)

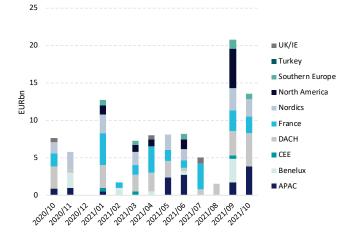


3.7% 0.8% 6.2% 24.3% 6.4% France DACH Southern Europe 8.7% Nordics Benelux = North America APAC 13.0% UK/IE 21.3% CEE

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	220.1	209	10	0.94	10.1	5.6	0.94
2	DE	158.9	236	16	0.61	8.4	4.6	0.41
3	ES	81.4	66	4	1.14	11.5	3.7	1.79
4	NL	59.7	62	0	0.91	11.7	7.6	0.82
5	CA	58.3	51	0	1.11	6.1	3.2	0.22
6	IT	52.7	62	1	0.82	9.0	4.0	1.29
7	NO	51.0	58	9	0.88	7.3	4.1	0.37
8	AT	32.5	60	2	0.54	9.9	6.3	0.60
9	SE	30.8	37	0	0.83	7.6	3.6	0.42
10	GB	30.4	36	0	0.87	8.5	3.6	0.93

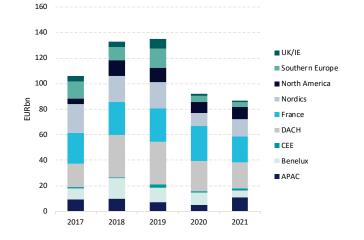
EUR benchmark issue volume by month



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

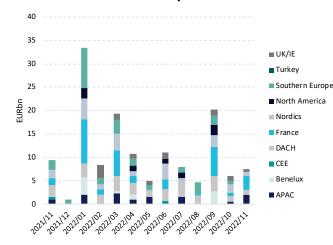
EUR benchmark issue volume by year

15.5%



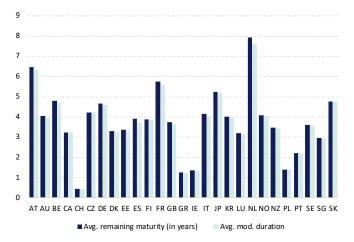
EUR benchmark volume by region (in EURbn)



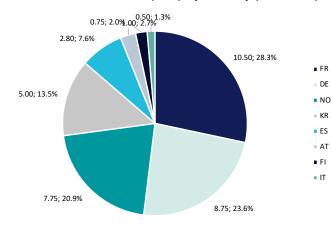


EUR benchmark maturities by month

Modified duration and time to maturity by country



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



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

EUR benchmark maturities by year

120

100

80

60

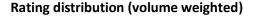
40

20

0

2021

EURbn

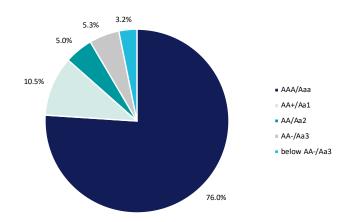


2023

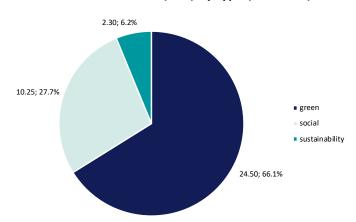
2024

2025

2022



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



NORD/LB

Turkey

Nordics

France

DACH

Benelux

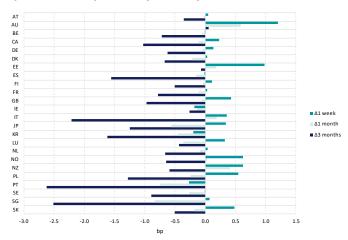
APAC

CEE

Southern Europe

North America

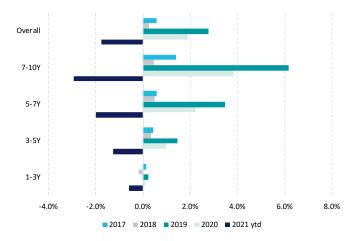


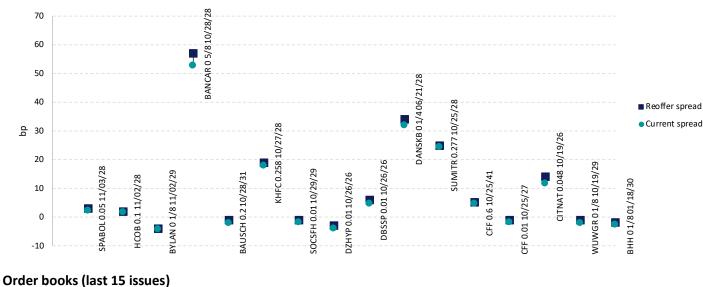


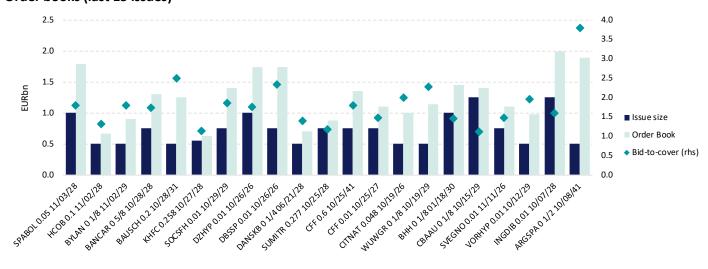
Spread development by country



Covered bond performance (Total return)

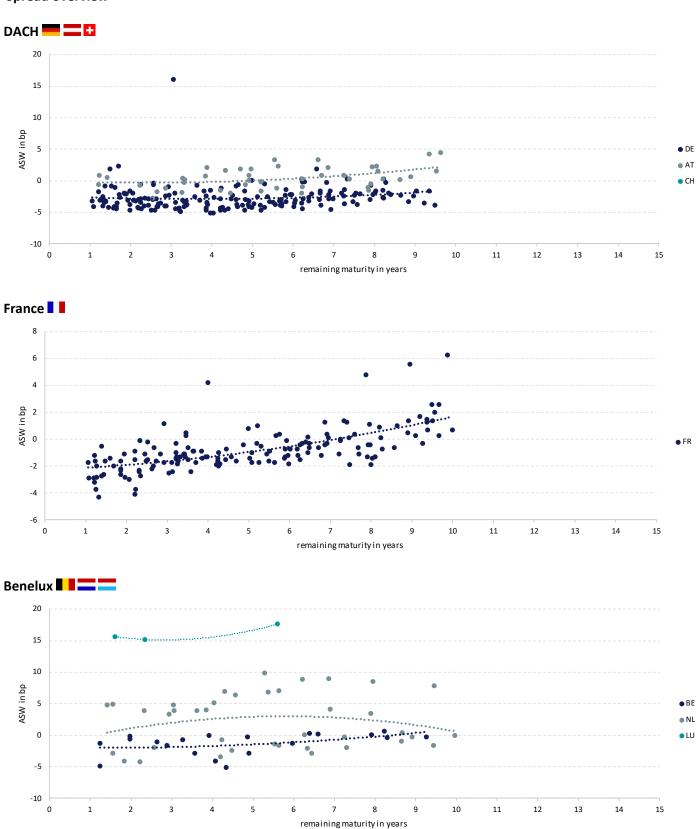






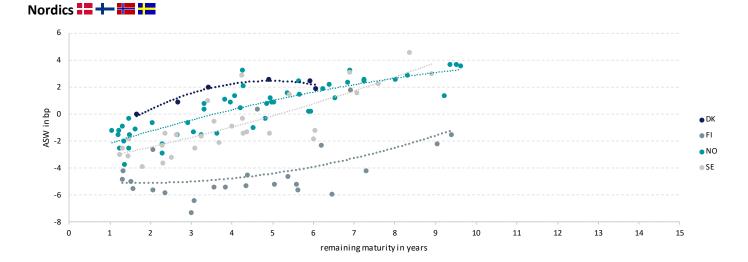
Source: Market data, Bloomberg, NORD/LB Markets Strategy & Floor Research



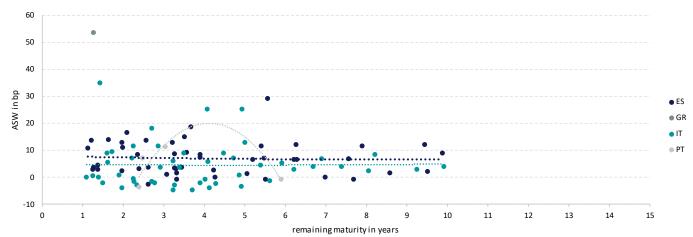


Spread overview¹

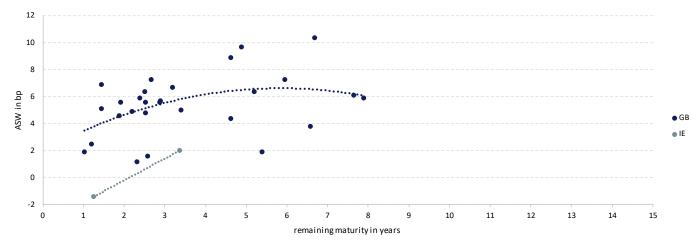
Source: Market data, Bloomberg, NORD/LB Markets Strategy & Floor Research ¹Time to maturity $1 \le y \le 15$



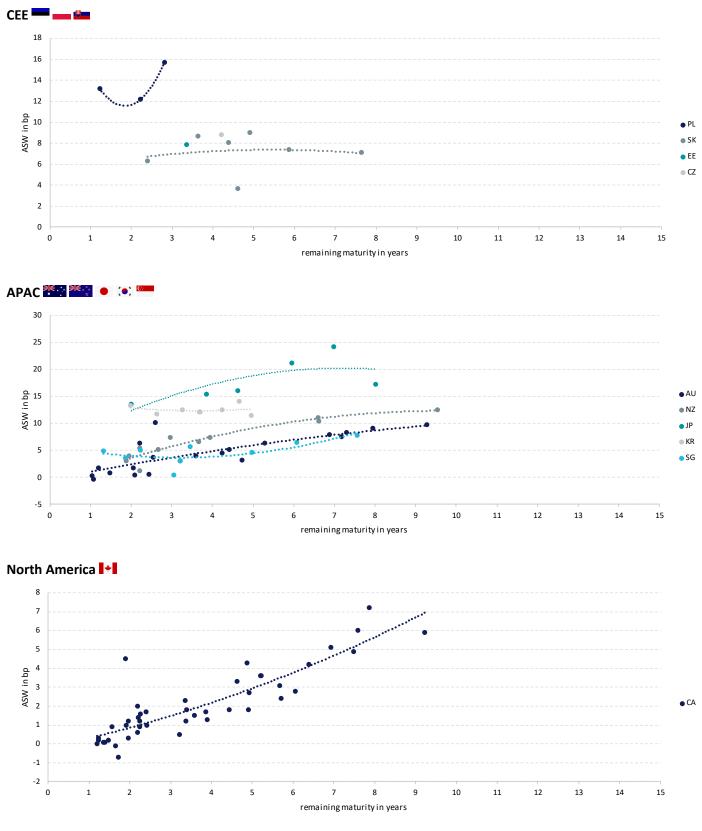
Southern Europe 🔤 📕 🛙 🛛





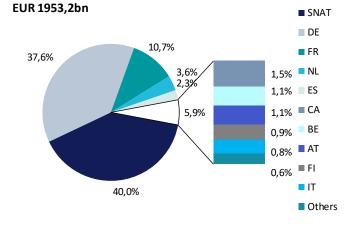


Source: Market data, Bloomberg, NORD/LB Markets Strategy & Floor Research



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

Charts & Figures SSA/Public Issuers

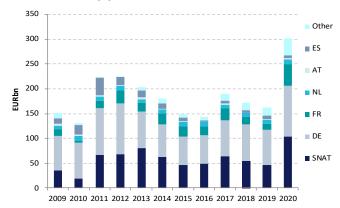


Outstanding volume (bmk)

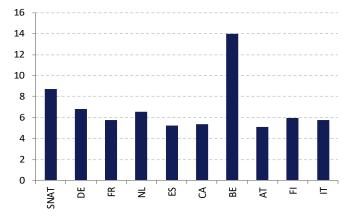
Top 10 countries (bmk)

-				
Country	Vol. (€bn)	No. of bonds	ØVol. (€bn)	Vol. weight. ØMod. Dur.
SNAT	781,5	193	4,0	8,7
DE	733,5	572	1,3	6,8
FR	208,4	147	1,4	5,8
NL	69,4	67	1,0	6,5
ES	45,3	56	0,8	5,2
CA	28,5	20	1,4	5,4
BE	21,7	25	0,9	14,0
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)

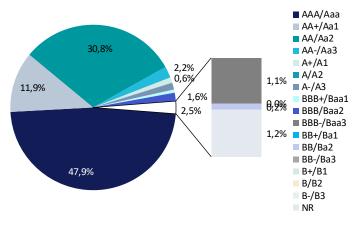


Source: Bloomberg, NORD/LB Markets Strategy & Floor Research

Maturities next 12 months (bmk)



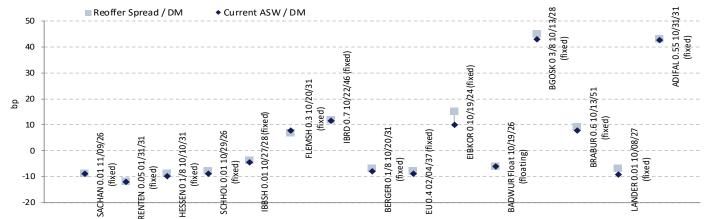
Rating distribution (vol. weighted)



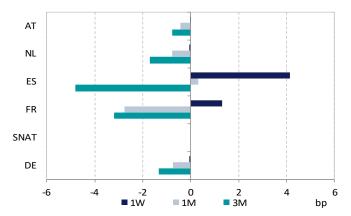


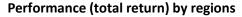


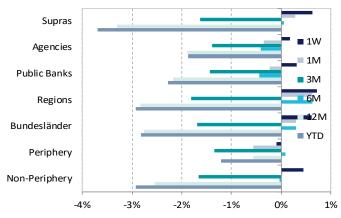
Spread development (last 15 issues)



Spread development by country

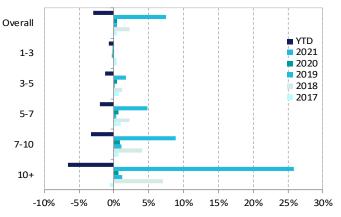




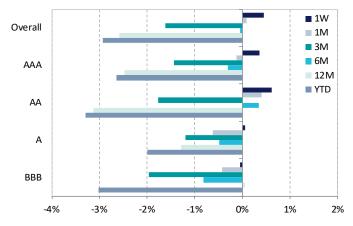


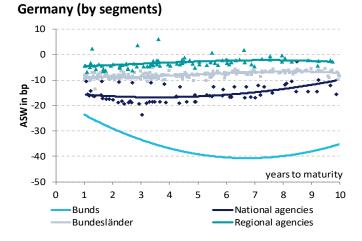
Source: Bloomberg, NORD/LB Markets Strategy & Floor Research

Performance (total return)

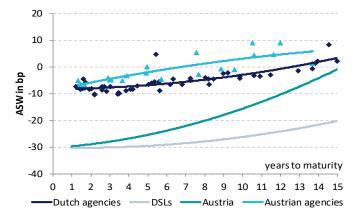


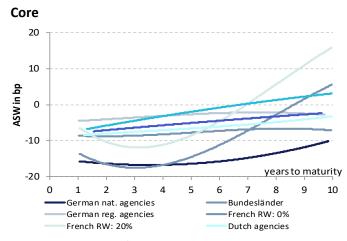
Performance (total return) by rating



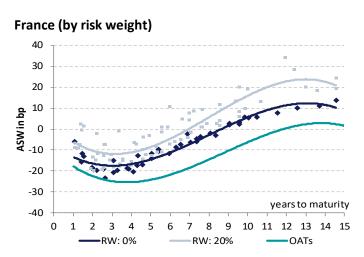


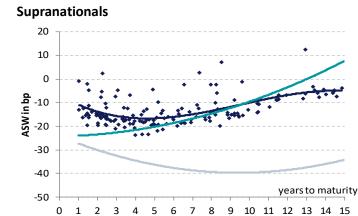
Netherlands & Austria





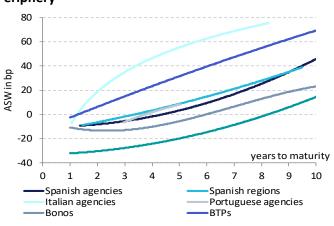






Supranationals

Periphery



Bunds

OATs



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

33/2021	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? 						
	 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 Bundeslaender 2021 						
30/2021	 Transparency requirements § 28 PfandBG Q2 2021 						
	 Fitch: rating approach covered bonds 						
	 Update: Joint Laender (Ticker: LANDER) 						
29/2021 ♦ 08 September	 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?						
18/2021 🔶 19 May	 United Overseas Bank reinvigorates the market in Singapore 						
	 Transparency requirements §28 PfandBG Q1 2021 						
17/2021 🔶 12 May	 ASB Finance opens primary market "Down Under": Our outlook for the rest of the year 						
, + may	 Development of the German property market 						
	· · · ·						

NORD/LB: Covered Bond Research

NORD/LB: SSA/Public Issuer Research

Bloomberg: RESP NRDR <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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Sales MM/FX	+49 511 9818-9460
Sales Europe	+352 452211-515

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

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Origination Corporates	+49 511 361-2911

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Additional information

Time of going to press: 03 November 2021 08:46h (CET)

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Recommendation system	Breakdown o	f 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