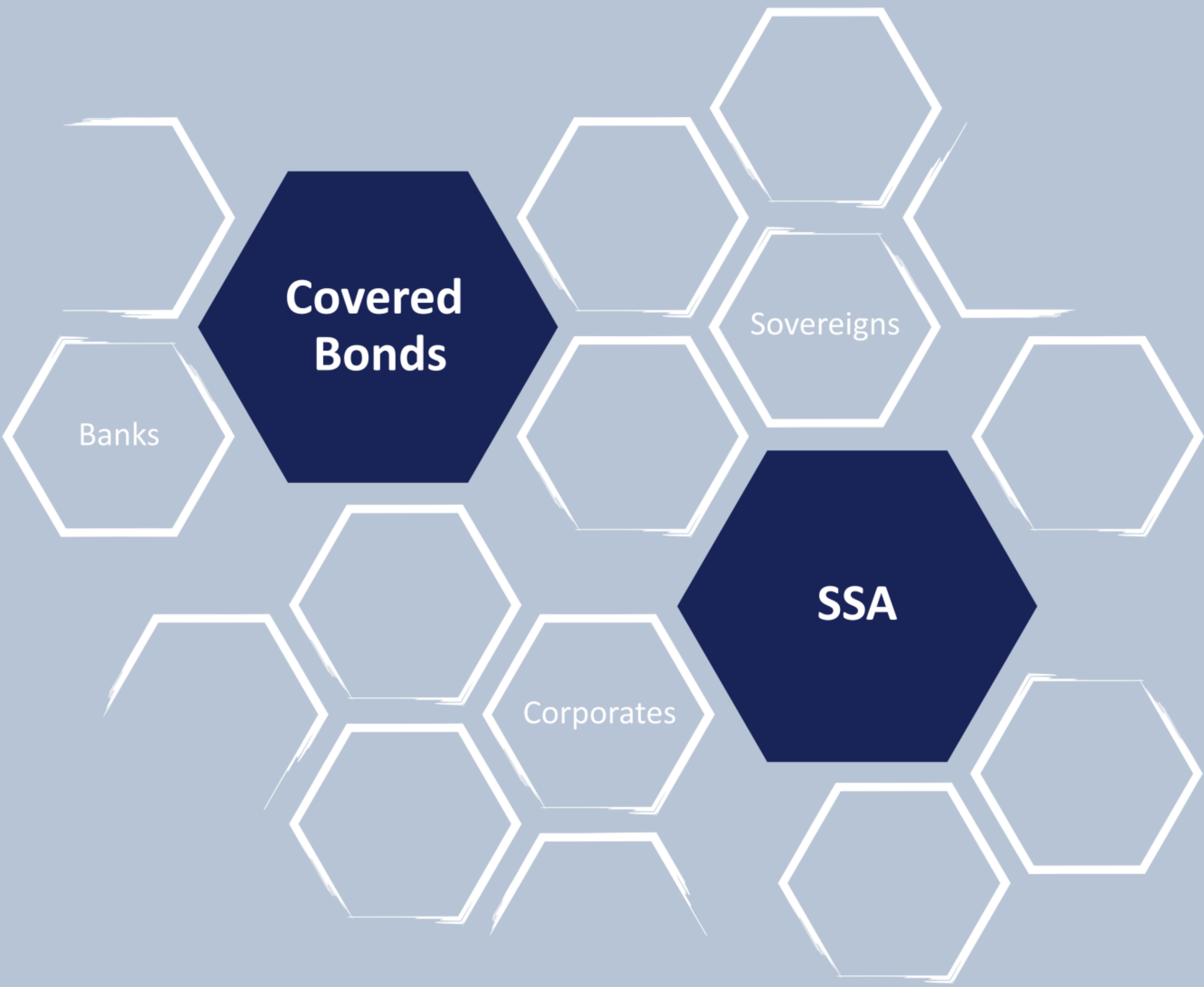

Fixed Income Special

NORD/LB Markets Strategy & Floor Research

16 December 2021

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

Agenda

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Bloomberg: RESP NRDR <GO>

NORD/LB

ECB decision: PEPP benched for now, APP comes in as Point Guard

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

ECB decision: The cards for 2022 are now on the table

At its last regular meeting of the year, the European Central Bank announced – as expected by most market participants in advance – that it will end net purchases under the pandemic emergency program at the end of Q1/2022 and further reduce or keep down the pace of purchases already in the weeks until then. In return, the conventional asset purchase program (APP) will be increased from this date (April 1, 2022) by an initial EUR +20bn per month to EUR 40bn, with the pace of purchases then being successively reduced to EUR 30bn at the beginning of Q3 and to the initial level (EUR 20bn) at the beginning of Q4. The continuation of purchases is then to go on at this level for as long as necessary to strengthen the accommodative effect of the ECB's key interest rates. The Council continues to expect net purchases to end shortly before the start of the policy rate hike. APP reinvestments will continue beyond that point and will be maintained for as long as necessary to thereby maintain favorable liquidity conditions and an ample degree of monetary accommodation. In this respect, ECB President Lagarde remains true to her preliminary commitment with regard to the PEPP, which she announced back in October 2021. At first glance, the worsening of the pandemic situation in some countries of the common currency area has not caused the central bank to deviate from its intended course. On the other hand, the Governing Council did not react to the latest trends in inflation rates in the euro zone by tightening monetary policy. In our view, the ECB's motivation can be read very well from the press release on the interest rate decision. In particular, the increased references to maintaining its own flexibility – especially with regard to securities purchases – allows the Council to keep the reins of action in its hands. Such optionality or flexibility is also represented by today's announcement that PEPP reinvestments will now be made at least until the end of 2024, thus extending the time window by twelve months.

Key interest rates unchanged as expected – watchdog position on TLTRO III and two-tier system for reserve remuneration

As expected, no key interest rate adjustment was decided today (Thursday). Accordingly, the interest rates for the main refinancing operations, the marginal lending facility and the deposit facility remain unchanged at 0.00%, 0.25% and -0.50%. The Governing Council further notes that in order to support the symmetric 2% inflation target as well as in line with its own strategy, the key ECB interest rates will remain at the current or – we consider this remarkable – lower level for such a long time. The press release states once again that this may also imply a temporary overshooting of the 2% mark. As expected, one set screw that the ECB has not moved are the conditions or framework parameters of the third series of targeted longer-term refinancing operations (TLTRO III). In a departure from the December 2020 meeting, the extremely favorable conditions were not extended beyond June 2022. Similarly, there will be no adjustment in the graduated interest rate. Nonetheless, in our view, it is worth emphasizing that both instruments were explicitly named and that reference was made to a possible recalibration.

ECB projections: Inflation revised upward for all years and ...

With a view to the ECB Staff Projections, our focus is once again on the assumptions regarding inflation developments. After all, these expectations serve as a guide for the monetary policy stance in Frankfurt. As expected, some of the projections for 2021, 2022 and 2023 have been revised significantly upward. For the year 2021, which is drawing to a close, the central bank now expects an inflation rate of 2.6% (previously 2.2%), while the ECB projections here are 3.2% for 2022 (previously 1.7%) and 1.8% for 2023 (previously 1.5%). The projection for 2024 is also 1.8%. The ECB thus paints a clear picture with regard to its own assumptions on future price developments and assumes a temporary increase in inflation rates, which will peak in 2022, a year which is less relevant for monetary policy. In this context, however, it is worth emphasizing Lagarde's assessment at the press conference that there have also been significant upward revisions in the projections further into the future. Nevertheless, inflation expectations had remained largely stable at the level prevailing at the time of the October meeting. In terms of risk assessment, rising wages but also a return to full utilization of economic capacity could push inflation upward.

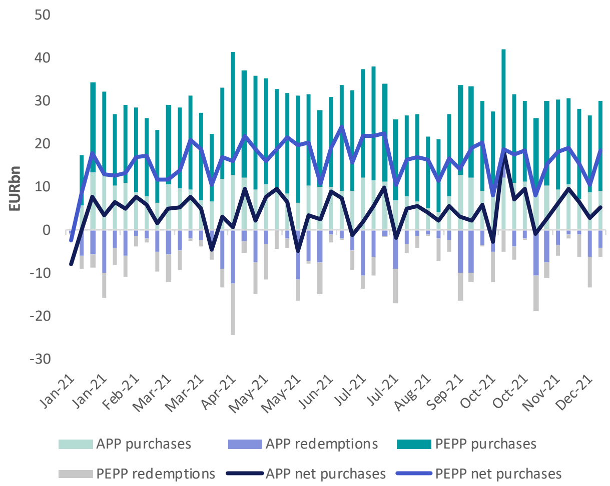
... economic activity burdened by bottlenecks up into 2022

In the assessment of economic activity in the euro area, the central bank points to the dampening effects of recent pandemic developments but also to the negative impact of rising energy costs on consumption. Bottlenecks in the form of tight labor supply in some sectors and shortages of materials and equipment should further dampen the recovery in some areas, but ease in the course of 2022. We would also highlight the nod to fiscal policy. Thus, according to the statement, targeted and growth-friendly fiscal measures should continue to complement monetary policy, as the resulting support would also help to adjust to the ongoing structural change. Explicit reference is made to the NGEU program and the "Fit for 55" package, as the implementations would contribute to a stronger, greener and more even recovery in all euro area countries. However, we certainly see the potential for a contentious issue here. After all, the totality of fiscal measures (including at the supranational, national, or even regional level) is equally likely to provide a fiscal demand stimulus. If the reference to fiscal policy were to be understood, as it were, as a renewal of the requirement of fiscal achievement of the inflation target, this would in turn underscore the Governing Council's conviction that the current price trend is so biased upward that inflationary impulses are more likely to be needed in the years ahead. However, speaking the other way around, market participants convinced of a protracted price increase could speak of rather suboptimal timing of fiscal policy in terms of inflation developments. The ECB considers the risks to growth to be largely balanced. Stronger-than-expected consumer confidence and thus less pronounced savings could mark a surprise move toward more growth, whereas – unsurprisingly – a worsening of the pandemic poses downside risks. Likewise, energy costs mentioned earlier remain a risk factor. Green issues found no further mention worth mentioning today. What was clearly stated today, however, was that there was no unanimity in the resolutions, which we will classify in detail for our readership on the coming pages.

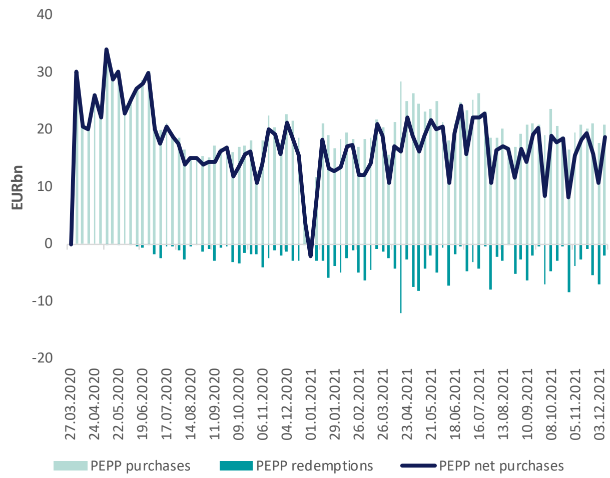
Ending the pandemic emergency program before the pandemic ended

Yesterday, we had outlined a possible course of today's ECB meeting in our weekly publication. In particular, we had anticipated an end to PEPP net purchases at the end of March 2022. In fact, decision-making for the Governing Council was definitely more complex due to the emergence of the new virus variant. As a reminder, for example, the central bank's pandemic emergency program dates back to the outbreak of the coronavirus in 2020 and was intended to help avert the negative shock. This pandemic emergency – in purely medical terms – can by no means be regarded as over today. Nevertheless, the situation at the current margin – in terms of monetary policy – is quite different from what it was in March of 2020, so that a current worsening of the infectious situation need not influence the decision to end the PEPP in a little more than three months. Recent waves have brought to mind that the dramatic simultaneous supply and demand shock from 2020 has not been repeated globally. And while we do not want to minimize the potential dangers, the vaccination campaigns and booster initiatives do provide remedies against the fourth and in some places probably fifth wave, which do not have to be of a monetary nature. And finally, it should not be forgotten that the current price development has significantly changed the basic conditions. As recently as March 2021, Lagarde pointed out in the ECB blog on the pandemic that "the PEPP can provide sufficient support to the euro area economy to offset the pandemic-related downward shift in the projected inflation path." This impetus is certainly no longer needed at the current margin from the direction of the PEPP. By communicating the possibility of revoking the PEPP end date if needed, the Governing Council could also communicate the holding of a specific emergency framework in the future. As Lagarde detailed today, a PEPP restart would require a Council decision, and the duration would ultimately depend on the circumstances. Conceivable other circumstances, or a possible other scenario in which the emergency program could have a dampening effect on inflation contrary to its original implementation, would be the avoidance of renewed bottleneck recessions due to the collapse of value chains or supply chains. Finally, the supportive element of monetary policy could – at least in theory – literally keep real economic activity going in these critical industries or sectors as well, which could prevent price-distorting shortages.

Purchases under the APP and PEPP (2021 ytd)

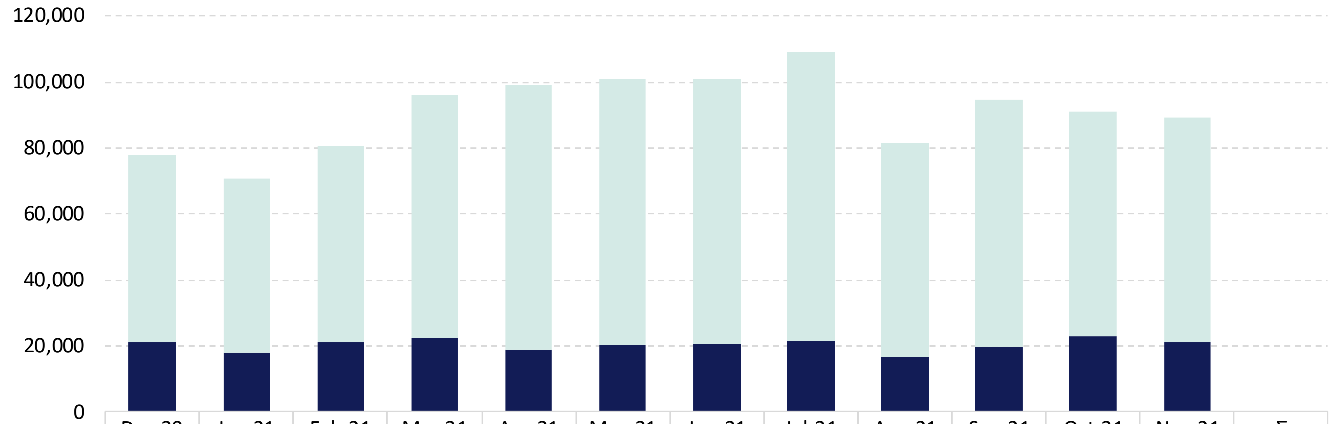


Purchases under the PEPP (since inception)



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

Monthly net purchases (in EURm)



	Dec-20	Jan-21	Feb-21	Mar-21	Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Nov-21	∑
∑	78,092	70,892	80,829	96,082	99,036	100,841	100,808	109,154	81,799	94,710	90,872	89,273	1,092,38
PEPP	57,163	53,046	59,914	73,521	80,118	80,700	80,168	87,557	65,050	75,051	67,855	68,085	848,228
APP	20,929	17,846	20,915	22,561	18,918	20,141	20,640	21,597	16,749	19,659	23,017	21,188	244,160

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

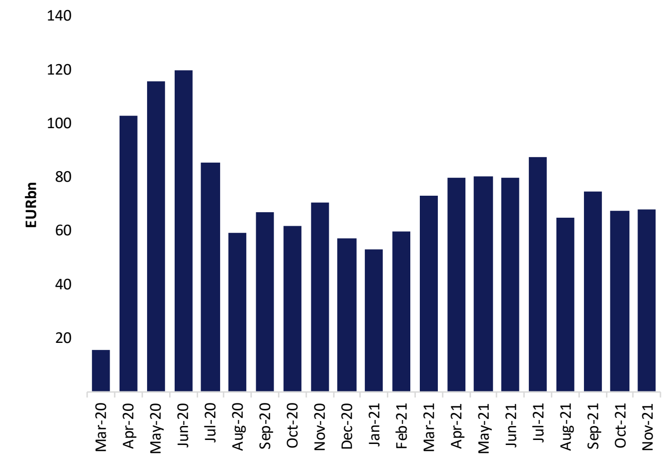
What is the future of the PEPP and the APP in numerical terms?

For our base scenario of no worsening of the pandemic situation and a continued dominance of upward pressure on prices, we expected the ECB to end purchases under the PEPP at the end of March 2022, to continue at its moderate or reduced pace until then and thus not to fully utilize the total framework of EUR 1,850bn in this way. This was confirmed today, although verbally all back doors were always kept open. While full utilization of the purchases would result in an average of around EUR 75bn per month in the months from December 2021 to March 2022, we continue to expect a much more moderate pace of purchases here at EUR 50-55bn on average. In the expiring year, the ECB has been indicating December 21, 2021 as the last trading day with regard to the purchase programs for a few days, while in the new year the purchase activities will already be resumed on January 3, 2022.

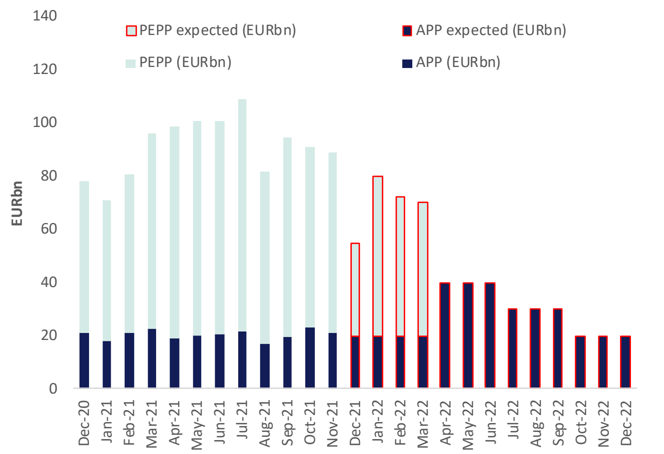
Topped-up APP, unused portion of the PEPP and reinvestments (at least) until the end of 2024

Nevertheless, a different use of the unused part of the "PEPP envelope" does not seem out of the question, as the program entails more freedom in purchasing than the APP (keyword: Greece). In particular, the bright ones actually appear by name in the ECB's statement. The ECB will also continue to reinvest the maturities of the PEPP – now at least until the end of 2024 after previously the end of 2023 – and will again show a notable degree of flexibility. In addition, we had expected the PEPP to be benched, so to speak, and the "old" APP to be boosted and play a striking role as kind of Point Guard as of April. It was therefore to be expected that the APP purchase volume would be temporarily increased. The ECB's baseline scenario envisages no increase in the APP in Q1 (EUR 20bn per month), then a doubling of monthly net purchases to EUR 40bn in Q2, a reduction to EUR 30bn per month in Q3, and a return to the baseline level (EUR 20bn per month) in Q4. This corresponds to EUR +90bn in additional purchase volume in 2022 compared to 2021. There were no far-reaching changes to the purchase programs. In this context, Lagarde clarified that there was no need to adjust or modify the APP.

PEPP: Monthly net purchases



APP and PEPP: Monthly net purchases



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

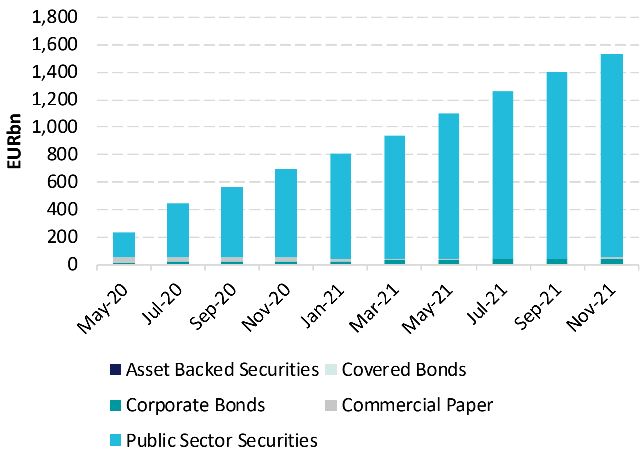
No newsflow: TLTRO and tiering under surveillance at most

With regard to the ECB's TLTRO tenders, we did not expect any specific decisions and would justify this not least with the previous schedule of the current TLTRO III program. TLTRO III.10 was the last allotment today. At just under EUR 52bn (159 bidders, maturity until December 18, 2024), the allotment was at the lower end of the range we had expected, which suggests that the commercial banks did not expect an overall improvement in TLTRO III conditions. In terms of maturities, moreover, the first maturity is not due until September 2022. Nevertheless, the Governing Council may already have mid-2022 in mind, as this is when the best possible interest rate expires according to the current design of the conditions, and the accommodative effect of TLTRO III could thus weaken. Currently, more than EUR 2,200bn in liquidity has been made available to commercial banks via TLTRO III. Here, too, the Governing Council will strive to avoid cliff effects in perspective and possibly announce new tenders under close observation and inclusion of the pandemic situation. Against the backdrop of the current timetable, however, this will not be an issue until the first quarter of 2022, even assuming the need for sufficient lead time. Irrespective of this, we do not foresee such attractive conditions again in our baseline scenario. As with the PEPP, the starting position is just as different here as it was at the beginning of the pandemic. The ECB is also likely to want to ease the burden on commercial banks by making adjustments to the tiering factor in the context of the tiered interest rate, so that a compensating P&L effect, which was observed for many commercial banks under TLTRO III, is no longer likely to be the focus here. We also believe that a possible adjustment of the tiering factor should only be made in the new year and communicated in the context of an expected "TLTRO IV". In fact, we are of the opinion that tactical considerations could also play an increasingly important role in the current circulation, which is characterized by repeated uncertainty with regard to the further course of the pandemic. After all, the decisions not taken today or tomorrow, can to some extent preserve the flexibility of the Governing Council in the future. Here, too, we see a certain charm in the "sequencing" of monetary policy announcements.

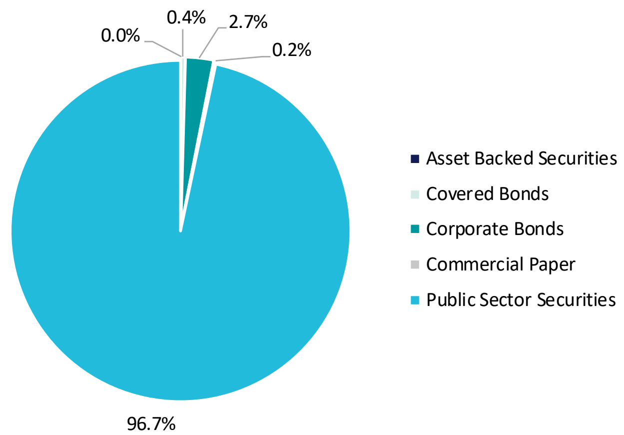
What implications does the ECB decision hold for our coverage?

Both with regard to the SSA/Public Issuers segment and the covered bond market, the December meeting holds a number of possible implications. In terms of our expectations, the upcoming termination of the PEPP and the adjustments to the APP volume will undoubtedly be at the forefront. However, we would not underestimate the relevance of indications regarding the monetary authorities' further handling of the pandemic situation and the associated uncertainty.

Development of PEPP volume



PEPP volume: distribution by asset class



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

SSA segment: High supply continues to meet high demand

For the public sector and the persistence of low interest rates, the Eurosystem's purchase programs were worth their weight in gold. In the PEPP in particular, 96.7% of the volume purchased now comes from the public sector. Thus, even the fresh bonds issued by the EU did not result in an oversupply of eligible material. Of particular relevance for the SSA segment will be how the EU and the German states handle their funding in 2022. The EU is expected to raise around EUR 120-150bn in fresh money in 2022 to refinance its NGEU program. This issuer alone would thus exceed the entire market for EUR-covered bonds. The German federal states are also likely to have a positive net supply, although the states are still stingy with details on their borrowing authorizations and we do not expect any concretizations before mid-January. Therefore, especially in Q1, high supply meets unchanged high demand for today's resolutions. Although Eurosystem demand is somewhat diminishing, asset managers and bank treasuries in particular still have sufficient dry gunpowder for the upcoming new issues. Moreover, we firmly expect reinvestments of maturing Eurosystem bonds by the end of 2024, all of which argues for sideways-trending spreads. We do not yet see a return of funding volumes to the lower pre-pandemic level in 2022; the Corona burdens on budgets, which are the main constitutional reason for the renewed suspension of debt brakes in Germany at all levels of government, weigh too heavily. The rating agencies will also do their homework in 2022 and see which European regions can still sustainably shoulder the consequences of the pandemic.

Covered Bonds: The end of the PEPP brings changes, but the covered bond market looks rather spellbound to the meetings in Q1/2022

As part of our weekly publication, we have regularly made reference to the distorting effects of the APP or the CBPP3 on the covered bond market, while at the same time pointing out the quantitative insignificance of covered bonds in the context of the PEPP. In this respect, the direct implications of a PEPP end for this segment remain manageable. However, if the APP is continued in the form we have outlined, we do foresee a significant increase in covered bond purchases under the CBPP3. This circumstance alone would have a certain spread-supporting effect. Nevertheless, we do not expect that the doubling of APP volumes in the months following the end of PEPP will necessarily lead to a corresponding doubling of purchases under CBPP3. Again, the mantra of flexibility should apply. In 2021, too, the Eurosystem's demand in the covered bond market was lower than in previous years. While CBPP3 accounts for 9.6% of total APP, covered bonds come in at just 5.2% in 2021 ytd (January to November 2021). In any case, the bigger risk – at least in theory – comes from the decisions we expect in 2022. New TLTRO rounds could once again permanently reduce the supply of publicly placed covered bonds. However, we explicitly see this as our baseline scenario. On the contrary, a "TLTRO IV" could additionally exist in the market, but could not again cause such a distorting result due to a less market-unrelated condition design. Also, not making decisions today provides the Governing Council with the much desired degree of flexibility. We continue to hope that, at best, only a soft "TLTRO IV" will be announced in 2022. It is rarely bad to have options, but sometimes better if they remain unused.

Conclusion and comments

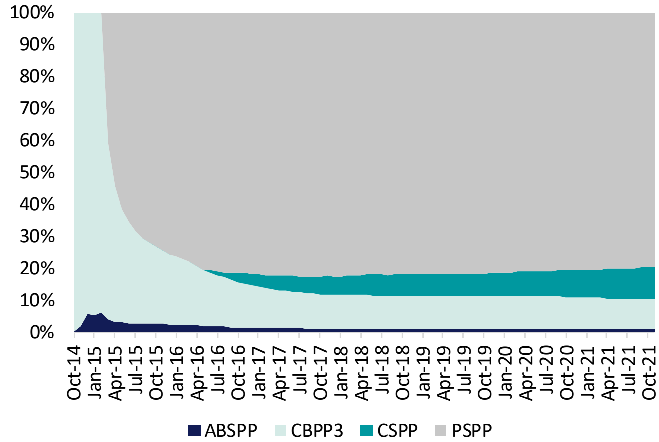
Yesterday we hummed at least half the trading day Christmas Carols like “Tomorrow, Children, Something’ Happening” today we have the certainty: “PEPP benched for now, APP comes in as Point Guard”. Summary of the highlights of today's ECB decision, which boil down to the facts outlined above: End of PEPP at the end of March 2022, moderate pace of purchases until then and, according to our calculation, no utilization of the framework set, adjustment of APP in 2022 with staggered pace of purchases (booster), no decisions on TLTRO IV or tiering, and no interest rate turnaround in 2022. The meeting was, in sum, multi-layered, the decisions taken complex. While an end to the pandemic purchase program at least gives hope that other issues will again dominate market activity in 2022, the APP in particular will seem like a kind of booster in its realignment. The ECB's inflation target is likely to move back into the spotlight in the coming year and pandemic control further into the background. The Eurosystem will nevertheless remain dominant, as the APP will be temporarily boosted in 2022 and PEPP maturities will be reinvested at least until the end of 2024. This argues in favor of a sideways movement, especially for yields and spreads in the public sector, as this asset class dominates all other asset classes in terms of volume under the purchase programs. In addition, it should be noted: The APP still has no end date, and interest rate hikes will only occur thereafter. Jens Weidmann will leave a gap at the Bundesbank at the end of the year – six years before the regular end of his term. We also wish ECB Vice President Luis de Guindos, who is ill with Corona, a speedy and full recovery. We bid farewell by thanking our loyal readership!

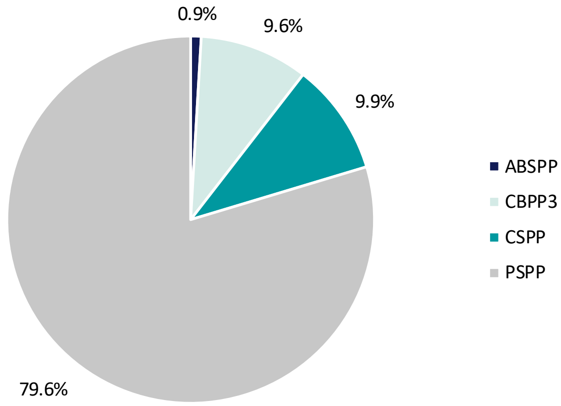
ECB tracker

Asset Purchase Programme (APP)

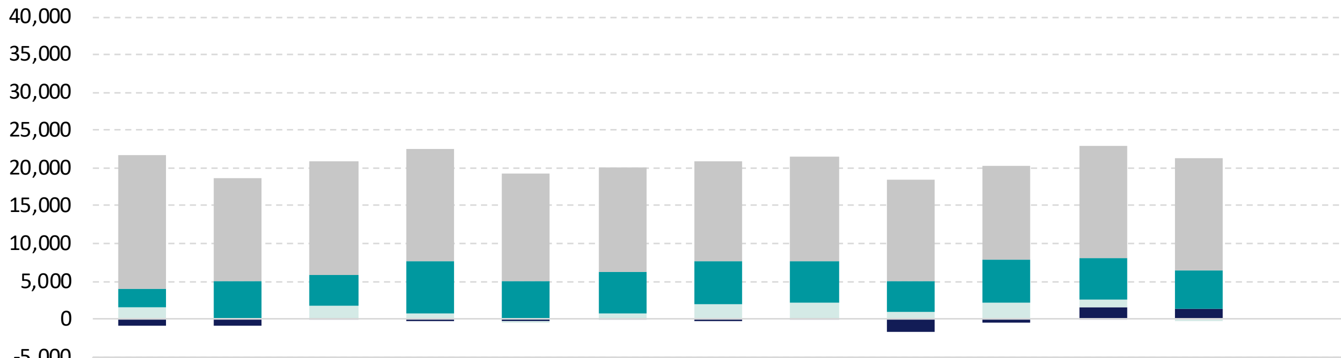
	ABSPP	CBPP3	CSPP	PSPP	APP
Oct-21	27,502	297,598	301,885	2,464,316	3,091,301
Nov-21	28,786	297,586	307,026	2,479,090	3,112,488
Δ	+1,284	-12	+5,142	+14,774	+21,188

Portfolio structure





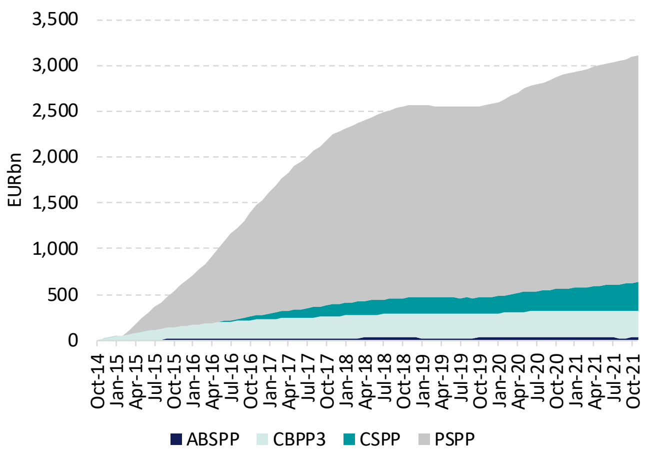
Monthly net purchases (in EURm)



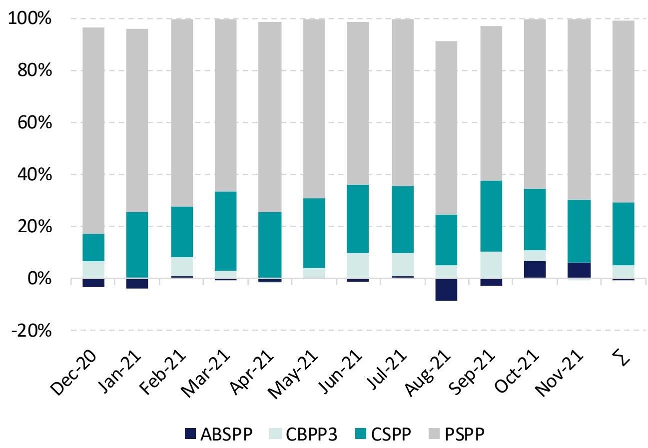
	Dec-20	Jan-21	Feb-21	Mar-21	Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Nov-21	∑
APP	20,929	17,846	20,915	22,561	18,918	20,141	20,640	21,597	16,749	19,659	23,017	21,188	244,160
PSPP	17,822	13,655	15,129	14,955	14,186	13,973	13,320	13,943	13,563	12,423	15,038	14,774	172,781
CSPP	2,378	4,924	4,064	6,929	5,015	5,394	5,602	5,502	3,936	5,590	5,481	5,142	59,957
CBPP3	1,529	74	1,539	684	-5	686	2,037	2,011	999	2,184	1,008	-12	12,734
ABSPP	-800	-807	183	-7	-278	88	-319	141	-1,749	-538	1,490	1,284	-1,312

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

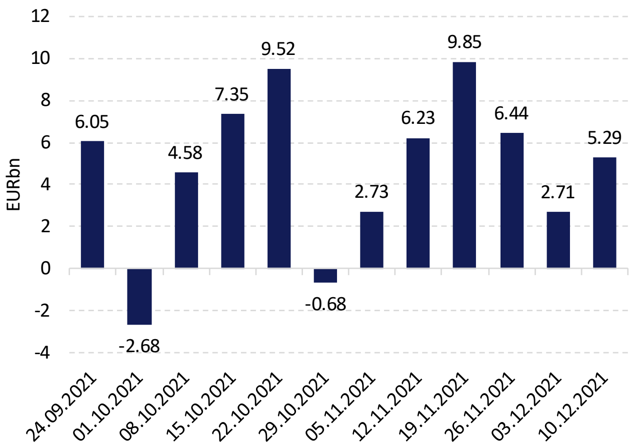
Portfolio development



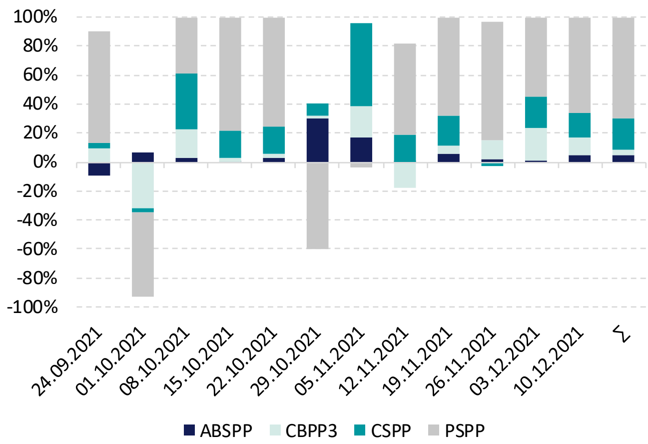
Distribution of monthly purchases



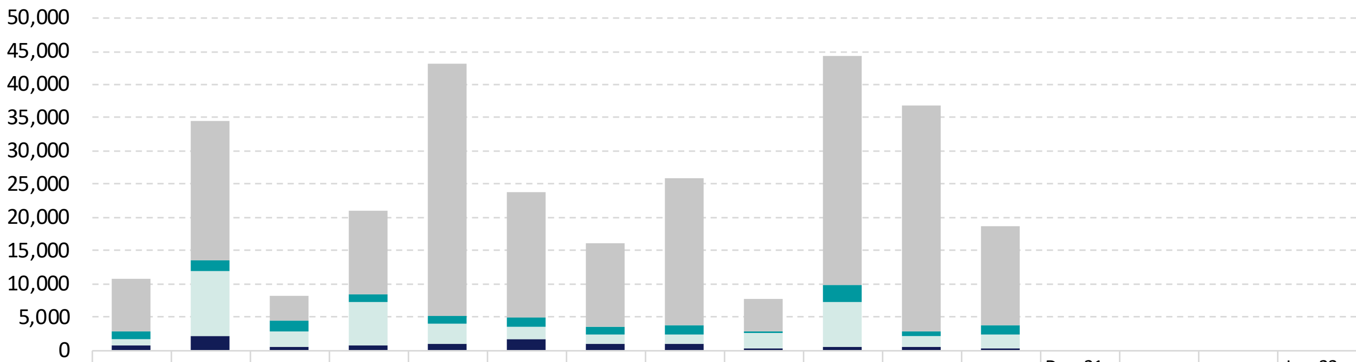
Weekly purchases



Distribution of weekly purchases



Expected monthly redemptions (in EURm)

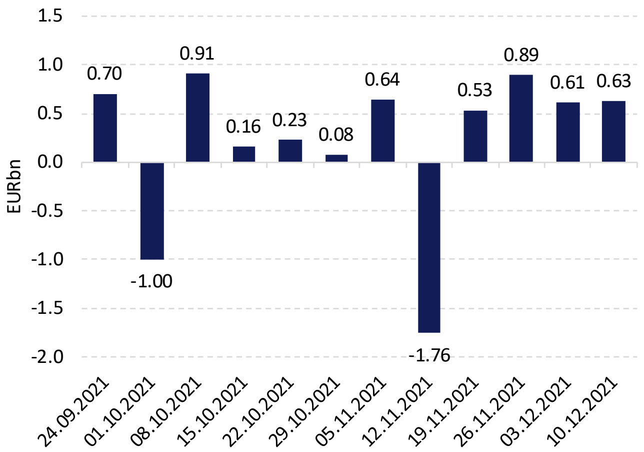


	Dec-21	Jan-22	Feb-22	Mar-22	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-21 - Nov-22	2020	2021	Jan-22 - Nov-22
APP	10,665	34,550	8,171	21,026	43,162	23,879	16,202	25,844	7,731	44,354	36,770	18,751	291,105	262,253	246,877	280,440
PSPP	7,811	20,906	3,625	12,603	38,018	18,999	12,714	22,158	4,841	34,554	34,003	14,945	225,177	201,482	188,494	217,366
CSPP	1,208	1,768	1,590	1,220	1,125	1,341	1,017	1,198	280	2,426	588	1,332	15,093	18,267	17,056	13,885
CBPP3	937	9,800	2,524	6,419	3,018	1,866	1,560	1,613	2,227	6,866	1,611	2,150	40,591	33,236	30,143	39,654
ABSPP	709	2,076	432	784	1,001	1,673	911	875	383	508	568	324	10,244	9,268	11,184	9,535

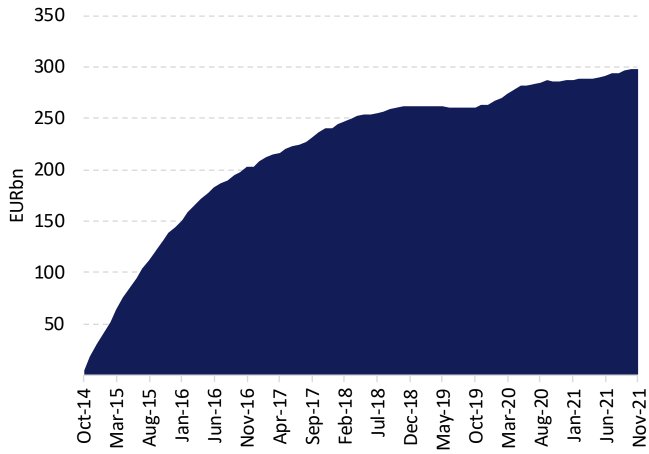
Source: ECB, Bloomberg, NORD/LB Markets Strategy & Floor Research

Covered Bond Purchase Programme 3 (CBPP3)

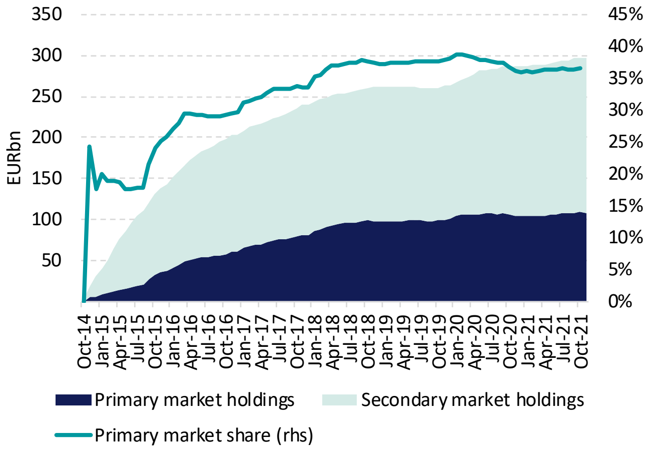
Weekly purchases



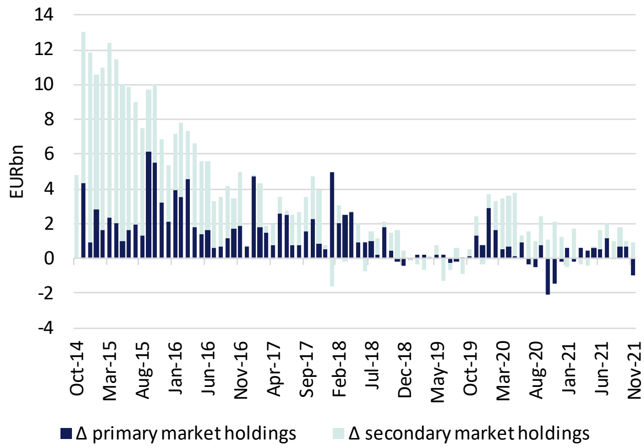
Development of CBPP3 volume



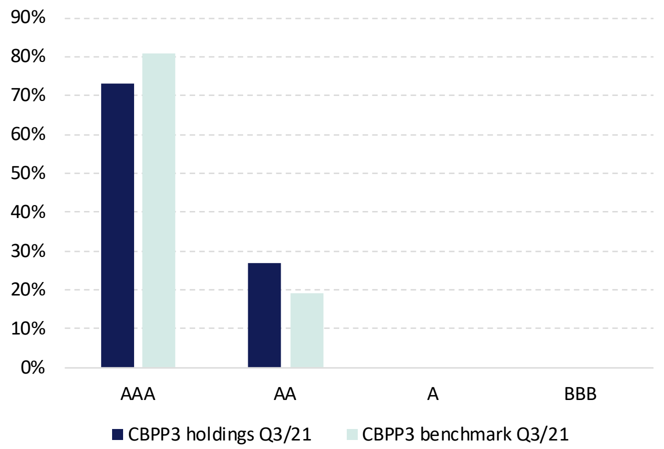
Primary and secondary market holdings



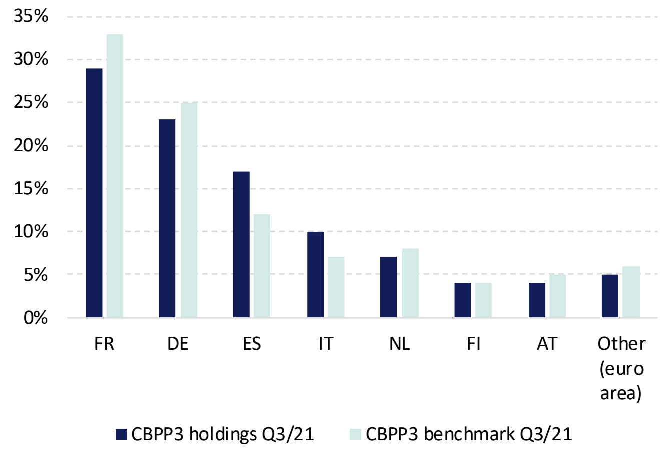
Change of primary and secondary market holdings



Distribution of CBPP3 by credit rating



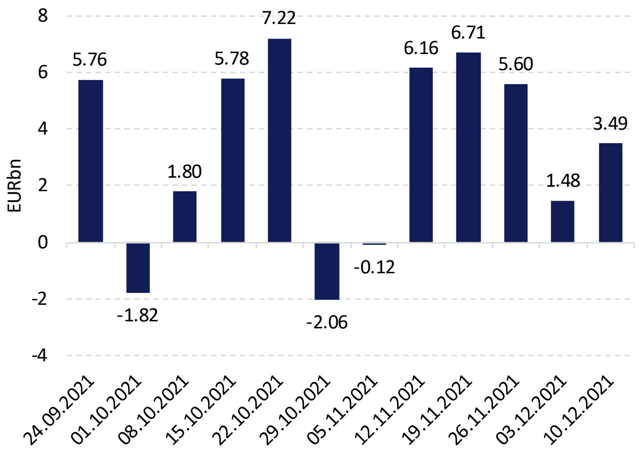
Distribution of CBPP3 by country of risk



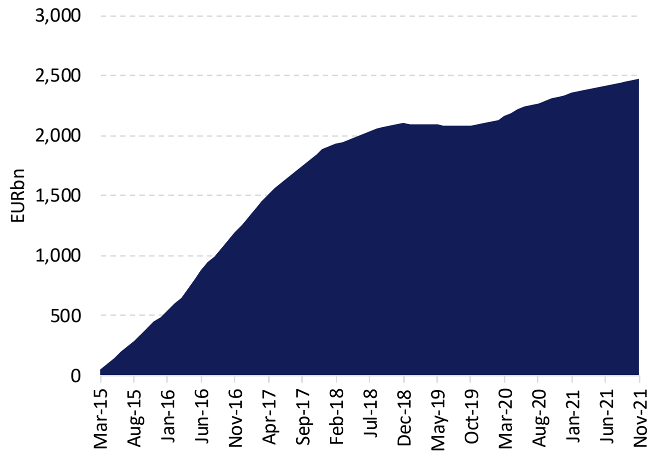
Source: ECB, Bloomberg, NORD/LB Markets Strategy & Floor Research

Public Sector Purchase Programme (PSPP)

Weekly purchases



Development of PSPP volume



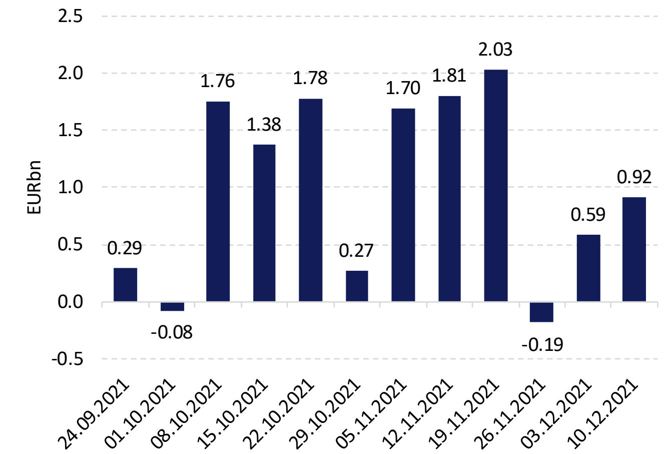
Overall distribution of PSPP buying at month-end

Jurisdiction	Adjusted distribution key[1]	Purchases (EURm)	Expected purchases (EURm)[2]	Difference (EURm)	Avg. time to maturity[3] (in years)	Market average[3] (in years)[3]	Difference (in years)
AT	2.7%	71,973	70,715	1,258	7.5	7.6	-0.1
BE	3.4%	90,539	88,022	2,517	8.0	10.2	-2.2
CY	0.2%	4,093	5,199	-1,106	9.9	8.8	1.1
DE	24.3%	632,164	636,901	-4,737	6.6	7.6	-1.0
EE	0.3%	408	6,806	-6,398	9.2	7.5	1.7
ES	11.0%	303,516	288,102	15,414	8.0	8.4	-0.4
FI	1.7%	40,616	44,379	-3,763	6.9	7.7	-0.8
FR	18.8%	512,340	493,457	18,883	7.2	8.1	-0.9
GR	0.0%	0	0	0	0.0	0.0	0.0
IE	1.6%	40,771	40,913	-142	8.5	10.1	-1.6
IT	15.7%	429,794	410,447	19,347	7.1	7.9	-0.8
LT	0.5%	5,422	13,983	-8,561	10.2	10.6	-0.4
LU	0.3%	3,815	7,959	-4,144	5.6	7.2	-1.7
LV	0.4%	3,281	9,414	-6,133	11.3	10.4	0.9
MT	0.1%	1,311	2,534	-1,223	9.5	9.2	0.3
NL	5.4%	125,899	141,590	-15,691	7.7	9.0	-1.4
PT	2.2%	50,457	56,547	-6,090	7.0	7.2	-0.2
SI	0.4%	10,233	11,633	-1,400	9.9	10.2	-0.3
SK	1.1%	16,912	27,669	-10,757	8.2	8.3	-0.1
SNAT	10.0%	274,533	261,808	12,725	7.7	8.9	-1.2
Total / Avg.	**100.0%**	**2,618,077**	**2,618,077**	**0**	**7.3**	**8.2**	**-0.9**

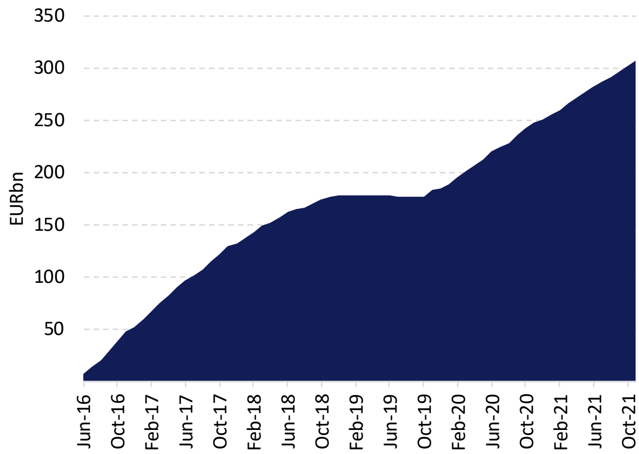
[1] Based on the ECB capital key, adjusted to include supras and the disqualification of Greece
[2] Based on the adjusted distribution key
[3] Weighted average time to maturity of the bonds eligible for purchasing under the PSPP (semi-annual data, Q1/2021)
Source: ECB, NORD/LB Markets Strategy & Floor Research

Corporate Sector Purchase Programme (CSPP)

Weekly purchases

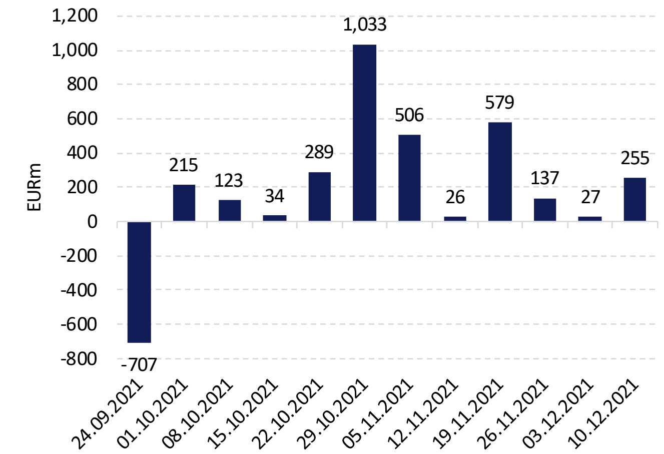


Development of CSPP volume

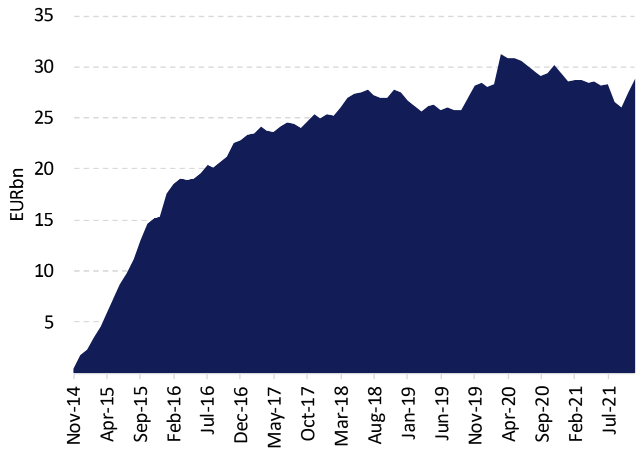


Asset-Backed Securities Purchase Programme (ABSPP)

Weekly purchases



Development of ABSPP volume



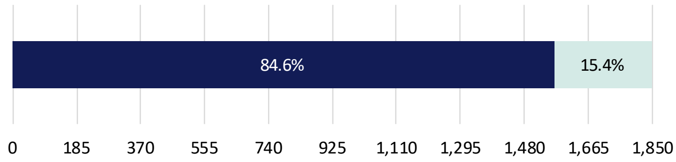
Source: ECB, Bloomberg, NORD/LB Markets Strategy & Floor Research

Pandemic Emergency Purchase Programme (PEPP)

Holdings (in EURm)

	PEPP
Oct-21	1,480,146
Nov-21	1,548,231
Δ	+68,085

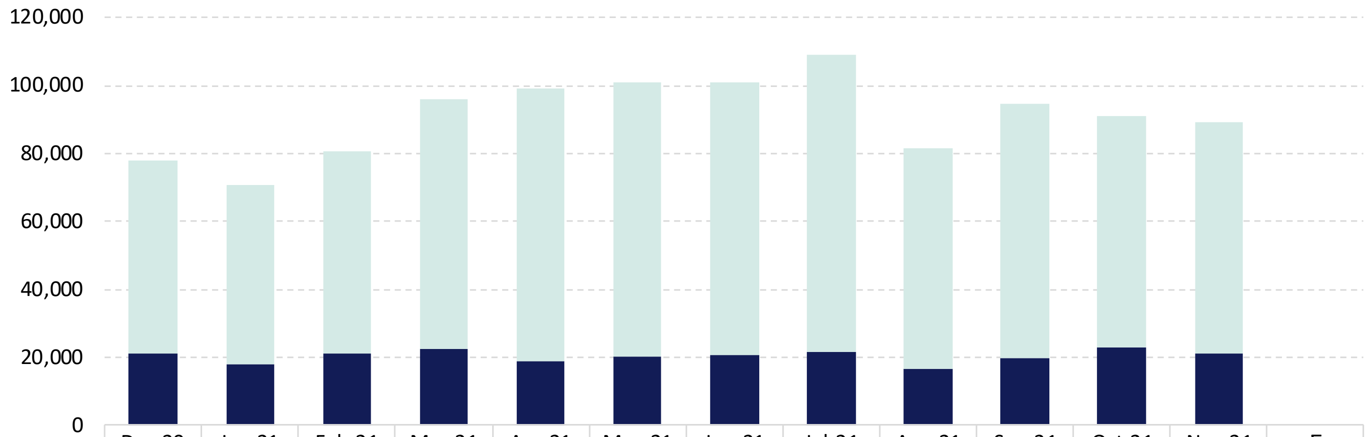
Volume already invested (in EURbn)



Estimated portfolio development

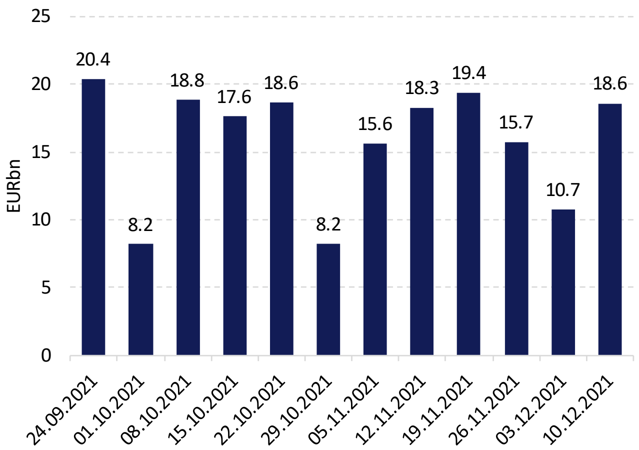
Assumed pace of purchases	Weekly net purchase volume	PEPP limit hit in ...
Average weekly net purchase volume so far	EUR 17.6bn	16 weeks (01.04.2022)

Monthly net purchases (in EURm)

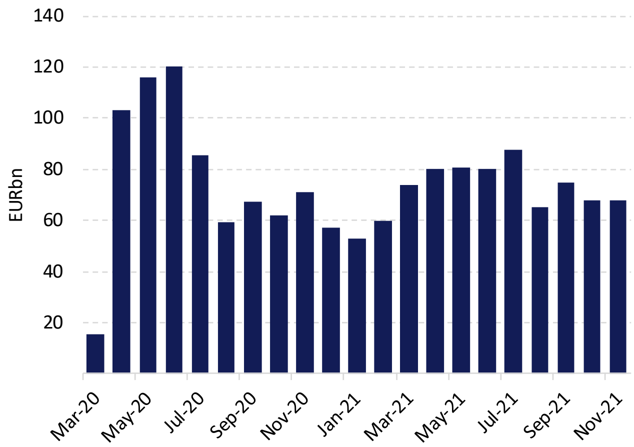


	Dec-20	Jan-21	Feb-21	Mar-21	Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Nov-21	∑
∑	78,092	70,892	80,829	96,082	99,036	100,841	100,808	109,154	81,799	94,710	90,872	89,273	1,092,38
PEPP	57,163	53,046	59,914	73,521	80,118	80,700	80,168	87,557	65,050	75,051	67,855	68,085	848,228
APP	20,929	17,846	20,915	22,561	18,918	20,141	20,640	21,597	16,749	19,659	23,017	21,188	244,160

Weekly purchases



Development of PEPP volume

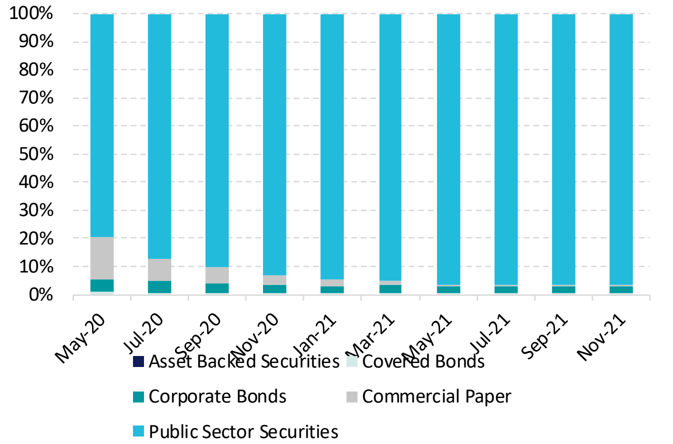


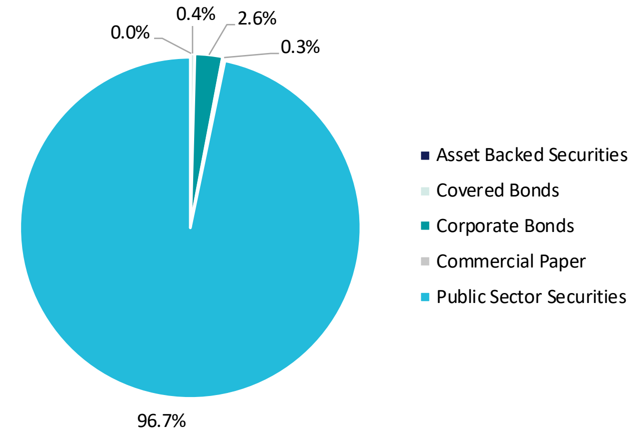
Source: ECB, Bloomberg, NORD/LB Markets Strategy & Floor Research

Holdings under the PEPP (in EURm)

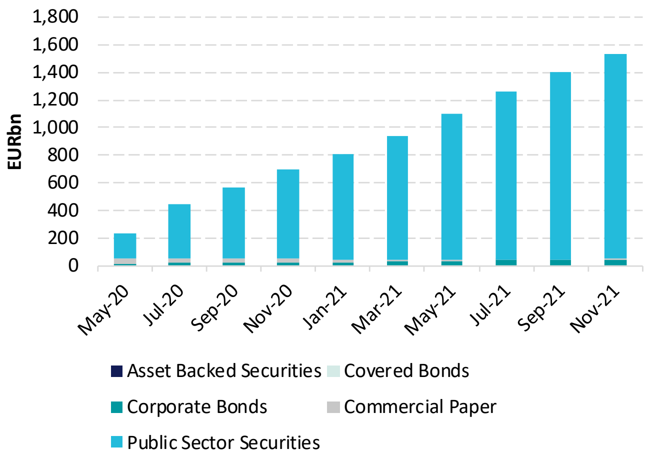
	Asset-backed Securities	Covered Bonds	Corporate Bonds	Commercial Paper	Public Sector Securities	PEPP
Sep-21	0	6,079	37,139	3,314	1,353,076	1,399,609
Nov-21	0	6,079	39,871	4,032	1,485,567	1,535,549
Δ	0	0	+2,732	+717	+132,491	+135,940

Portfolio structure

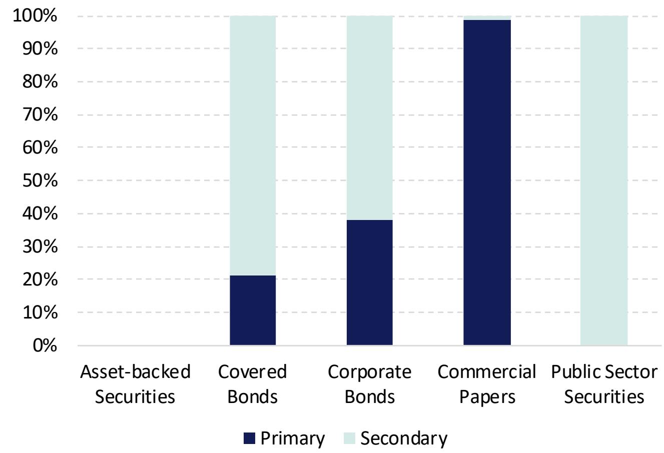




Portfolio development



Share of primary and secondary market holdings



Breakdown of private sector securities under the PEPP

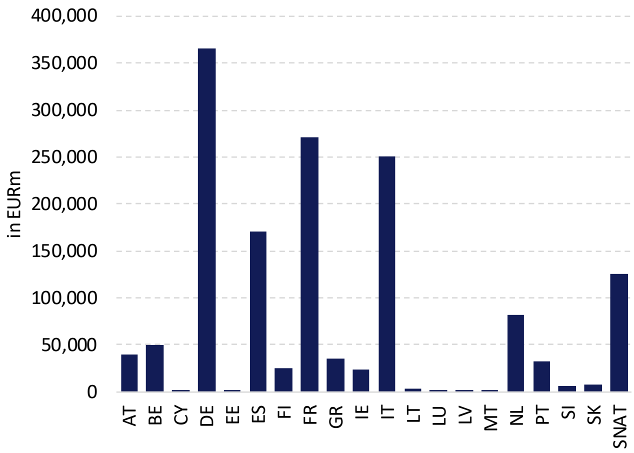
Nov-21	Asset-backed securities		Covered bonds		Corporate bonds		Commercial paper	
	Primary	Secondary	Primary	Secondary	Primary	Secondary	Primary	Secondary
Holdings in EURm	0	0	1,298	4,781	15,101	24,770	3,989	43
Share	0.0%	0.0%	21.4%	78.7%	37.9%	62.1%	98.9%	1.1%

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

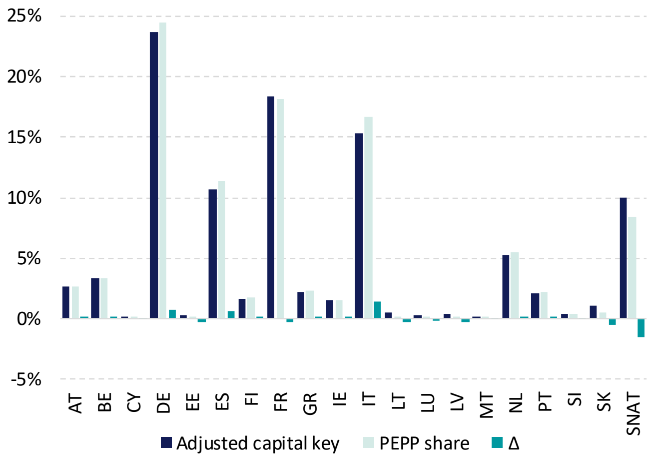
Breakdown of public sector securities under the PEPP

Jurisdiction	Holdings (in EURm)	Adj. distribution key[1]	PEPP share	Deviations from the adj. distribution key[2]	ø time to maturity (in years)	Market average[3] (in years)	Difference (in years)
AT	40,331	2.6%	2.7%	0.1%	8.4	7.0	1.3
BE	50,666	3.3%	3.4%	0.1%	6.7	9.1	-2.4
CY	2,418	0.2%	0.2%	0.0%	8.7	8.1	0.6
DE	366,630	23.7%	24.5%	0.7%	6.2	6.8	-0.6
EE	256	0.3%	0.0%	-0.2%	8.5	6.8	1.7
ES	170,306	10.7%	11.4%	0.6%	8.0	7.6	0.4
FI	25,499	1.7%	1.7%	0.0%	7.1	7.4	-0.3
FR	271,410	18.4%	18.1%	-0.3%	8.2	7.5	0.7
GR	34,935	2.2%	2.3%	0.1%	8.9	9.6	-0.7
IE	23,549	1.5%	1.6%	0.0%	8.8	9.1	-0.3
IT	250,889	15.3%	16.7%	1.5%	7.1	6.9	0.2
LT	2,939	0.5%	0.2%	-0.3%	11.0	10.1	0.9
LU	1,904	0.3%	0.1%	-0.2%	6.5	6.1	0.4
LV	1,625	0.4%	0.1%	-0.2%	9.5	9.2	0.3
MT	480	0.1%	0.0%	-0.1%	10.8	9.1	1.7
NL	81,494	5.3%	5.4%	0.2%	7.4	8.6	-1.2
PT	33,097	2.1%	2.2%	0.1%	6.8	7.2	-0.4
SI	6,143	0.4%	0.4%	0.0%	9.4	9.2	0.1
SK	7,262	1.0%	0.5%	-0.5%	7.5	8.5	-1.0
SNAT	126,308	10.0%	8.4%	-1.6%	10.5	8.5	2.0
Total / Avg.	**1,498,141**	**100.0%**	**100.0%**	**0.0%**	**7.6**	**7.5**	**0.1**

Distribution of public sector assets by jurisdiction



Deviations from the adjusted distribution key



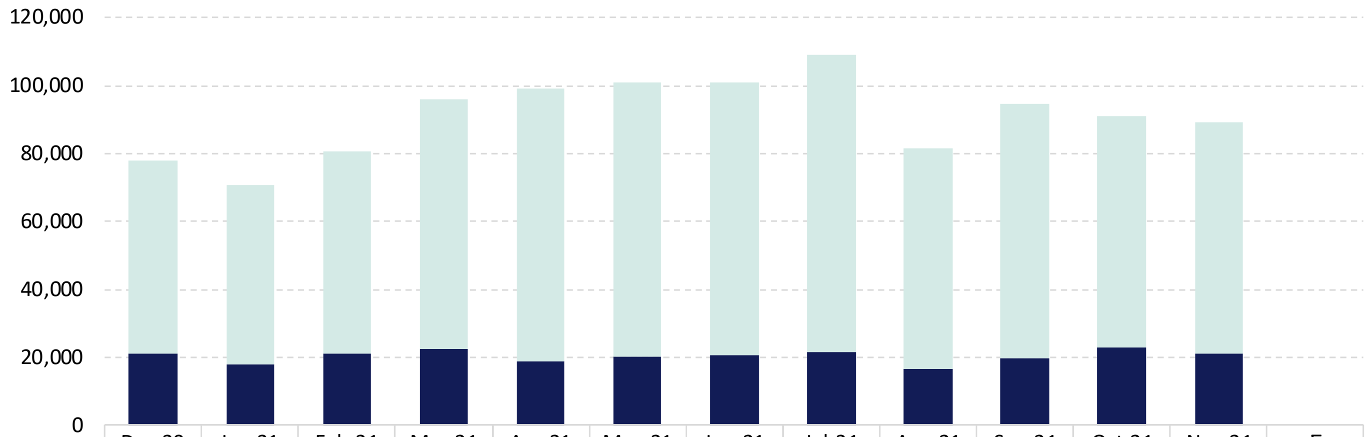
[1] Based on the ECB capital key, adjusted to include supras [2] Based on the adjusted distribution key
[3] Weighted average time to maturity of the bonds eligible for purchasing under the PEPP
Source: ECB, Bloomberg, NORD/LB Markets Strategy & Floor Research

Aggregated purchase activity under APP and PEPP

Holdings (in EURm)

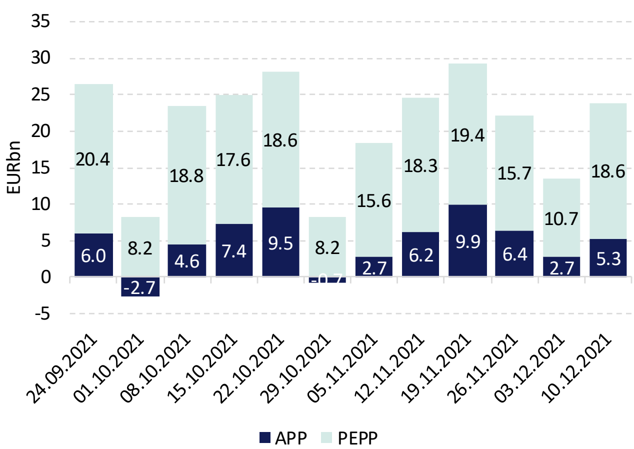
	APP	PEPP	APP & PEPP
Oct-21	3,091,301	1,480,146	4,571,447
Nov-21	3,112,488	1,548,231	4,660,719
Δ	+21,188	+68,085	+89,273

Monthly net purchases (in EURm)

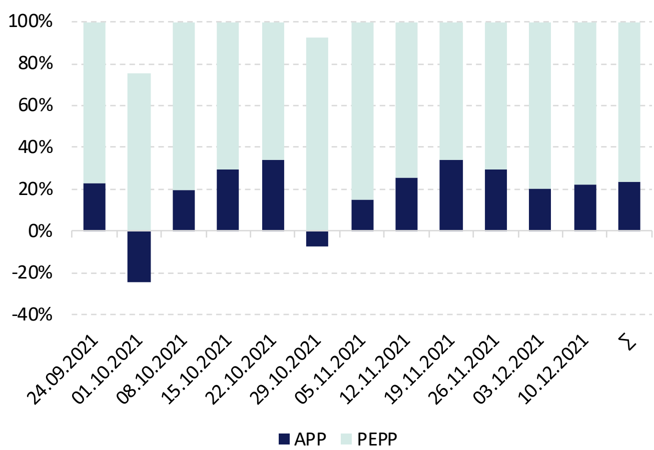


	Dec-20	Jan-21	Feb-21	Mar-21	Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Nov-21	∑
∑	78,092	70,892	80,829	96,082	99,036	100,841	100,808	109,154	81,799	94,710	90,872	89,273	1,092,38
PEPP	57,163	53,046	59,914	73,521	80,118	80,700	80,168	87,557	65,050	75,051	67,855	68,085	848,228
APP	20,929	17,846	20,915	22,561	18,918	20,141	20,640	21,597	16,749	19,659	23,017	21,188	244,160

Weekly purchases



Distribution of weekly purchases



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

Appendix
Overview of latest Covered Bond & SSA View editions

Publication	Topics
40/2021 ♦ 15 December	▪ ECB preview: End of PEPP, booster for APP?! ▪ Our view of the covered bond market in 2022 ▪ SSA Outlook 2022: Public sector caught between ECB & COVID
39/2021 ♦ 08 December	▪ The ECB, monetary policy and covered bond market: Hypothetical "What if...?" considerations ▪ The Moody's rating approach
38/2021 ♦ 01 December	▪ United Kingdom: Spotlight on the EUR benchmark segment ▪ Beyond Bundeslaender: Region Pays de la Loire (PDLL)
37/2021 ♦ 24 November	▪ Benchmark deals outside the euro: momentum has returned! ▪ Transparency regulations under Section 28 of the Pfandbriefgesetz (PfandBG - German Pfandbrief Act) Q3 2021 ▪ Beyond Bundeslaender: Auvergne-Rhône-Alpes Region (ARA)
36/2021 ♦ 17 November	▪ Primary market forecast 2022: time for a comeback? ▪ Development of the German property market ▪ Beyond Bundeslaender: Spotlight on Belgian regions
35/2021 ♦ 10 November	▪ PEPP approaching notional end – will the APP be pepped up? ▪ Spain's major move – will the amended covered bond legislation breathe new life into the market?
34/2021 ♦ 03 November	▪ Repayment structures on the covered bond market: EU harmonisation is already leaving its mark ▪ Beyond Bundeslaender: Spanish regions in the spotlight
33/2021 ♦ 27 October	▪ Insurance firms as covered bond investors: A look at Solvency II and EIOPA statistics ▪ The Scope rating approach
32/2021 ♦ 20 October	▪ ECB preview: interim step before a landmark December? ▪ ECBC publishes annual statistics for 2020 ▪ Covered bonds in the context of the ECB collateral framework
31/2021 ♦ 22 September	▪ Covered bond primary market: a September to remember ▪ Announcement: Issuer Guide German Laender 2021
30/2021 ♦ 15 September	▪ Transparency requirements § 28 PfandBG Q2 2021 ▪ Fitch: rating approach covered bonds ▪ Update: Joint Laender (Ticker: LANDER)
29/2021 ♦ 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 ♦ 01 September	▪ 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

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 – German Laender 2021

Issuer Guide – Canadian Provinces & Territories 2020

Issuer Guide – Supranationals & Agencies 2019

Issuer Guide – Down Under 2019

Fixed Income:

ESG update

Analysis of ESG reporting

ECB holds course, but ups the ante – PEPP running until 2022

ECB launches corona pandemic emergency

ECB responds to corona risks

Appendix
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Sales

Institutional Sales	+49 511 9818-9440
Sales Sparkassen & Regionalbanken	+49 511 9818-9400
Sales MM/FX	+49 511 9818-9460
Sales Europe	+352 452211-515

Trading

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

Origination & Syndicate

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

Sales Wholesale Customers

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

Treasury

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

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Additional information
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None

Sources and price details
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Breakdown of recommendations (12 months)

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Neutral:	55%
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Issuer / security	Date	Recommendation	Bond type	Cause