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ECB: THE FUTURE OF QE

TOWARDS A FLEXIBLE RECALIBRATION OF THE APP AFTER THE PEPP ENDS

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SUMMARY

- The ECB is on track to end its pandemic emergency purchase programme (PEPP) in March 2022 against the backdrop of broadening inflationary pressures. We forecast that PEPP purchases will be reduced to EUR50 bn per month in Q1 2022 before being wrapped up entirely in March. That will leave EUR100bn of the original EUR1,850bn PEPP allocation unused.
- Meanwhile, we expect the ECB to double its regular asset purchase programme (APP), to EUR40n per month from April 2002 on, but its commitment to open-ended QE is likely to weaken. We expect the ECB to review the pace of asset purchases every quarter, and to scale them back to EUR20bn per month by 2023.
- In an alternative scenario, the ECB could launch a new "bridge" programme aimed at preventing an unwarranted widening in peripheral bond spreads. This could take the form of an envelope of around EUR200bn, including the EUR100bn left over from the PEPP, to be spent in a flexible way throughout 2022. We remain skeptical of this solution, if only because any unconditional QE programme targeting a single country may be too close to Yield Curve Control.
- Either way, we forecast the ECB's asset purchases to halve to EUR570bn in 2022, compared with EUR1,100bn in both 2020 and 2021. Net purchases of sovereign bonds would drop to EUR320bn in nominal terms, from EUR700bn in 2021, but this would still be enough to absorb the bulk of the net issuance of sovereign bonds in 2022. This is a feature, not a bug of ECB QE, in our view, as the ECB has become the effective backstop for fiscal policy.
- Other dimensions of ECB QE "flexibility" refer to capital keys as a guideline for asset purchases and the 33% issuer share limit on public debt holdings. We expect no change on either front. Our analysis suggests that the APP is flexible enough to cope with bond scarcity until at least the end of 2023. Greece could become eligible to the APP, and the share of supranational debt could be raised above 10% in 2022.
- With the focus increasingly shifting to the possibility of rate hikes, the ECB needs to make sure that the recalibration of its asset purchases remains consistent with its forward guidance. We think that the easiest way to strengthen forward guidance is to keep the existing sequencing between QE tapering and the timing of lift-off. The ECB could drop "shortly" from its commitment to end the APP "shortly before" it starts raising rates, but we see no ECB rate hike before 2024.
- Last but not least, the ECB seems to be leaning towards less generous targeted longer-term refinancing operations (TLTRO) in 2022, which may require some adjustments to the programme's incentives and to the tiering multiplier.

Nothing is certain in life, not even ECB QE

The ECB will need to decide the future of asset purchases at the 16 December meeting of its Governing Council (GC). The GC meeting on 28 October will be all about paving the way for a December decision and pushing back against market pricing of early rate hikes.

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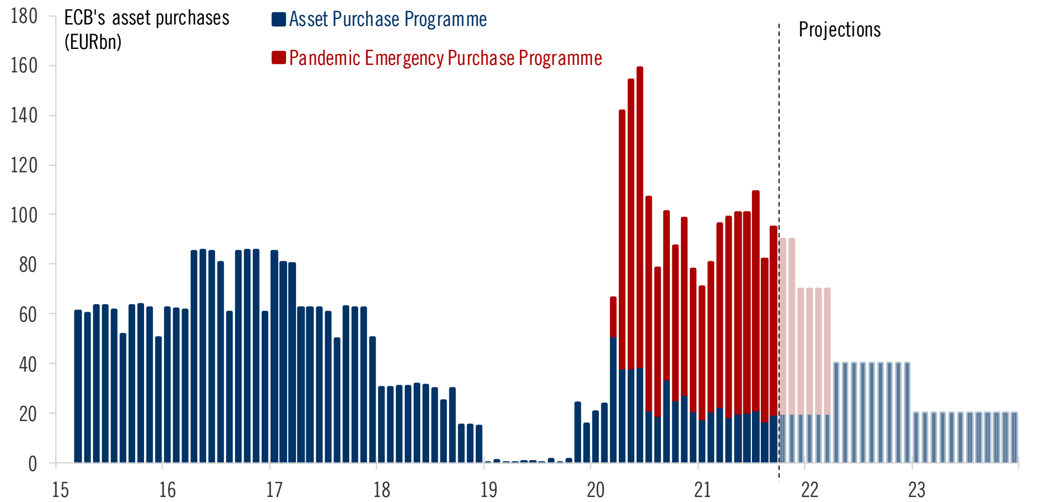
Recent ECB commentary remains consistent with our expectation that the PEPP will end in March 2022 and that the APP will be recalibrated as a result, but there are lots of moving variables. In addition to a potential boost to the APP, **ECB officials have been vocal in insisting on the need to remain "flexible"—whatever that means**.

There are several ways to ensure that the ECB's quantitative easing remains "flexible". These include an open-ended commitment to APP purchases, deviations from capital keys and issuer share limits, making Greece eligible to APP purchases, or raising the share of supranational debt purchases. All these options are on the table.

Meanwhile, the balance of risks has shifted as inflationary pressures have broadened. The ECB will continue to look through what it sees as a one-off adjustment in the price level rather than persistent inflation, but "vigilance" has increased with respect to wage growth and inflation expectations. The new forward guidance provides ample justification for the ECB to remain patient, but it might well be challenged soon.

We have long expected the ECB to double the size of its regular APP purchases, from EUR20bn to EUR40n per month, starting in Q2 2022, while transferring some flexibility from the PEPP to the APP. The objective will be to avoid any "cliff effect", and any unwarranted tightening in financial conditions, from an abrupt end of the PEPP in March 2022. However, **risks are now tilted towards a smaller boost to asset purchases than we had expected, while increased "flexibility" may weaken the ECB's commitment to open-ended QE**.

CHART 1: ECB'S ASSET PURCHASES INCLUDING PROJECTIONS



Source: PWM - AA&MR, ECB (October 2021)

A sudden shift in the inflation outlook

There is little doubt that the balance of risks to the inflation outlook has shifted to the upside. While long-term inflation risks are arguably less pronounced in the euro area than in the US, virtually all measures of underlying price pressures have converged towards 2% (*see Chart 2*). Importantly, while downside risks to growth have increased, ECB staff projections for inflation are still likely to be revised higher in December.

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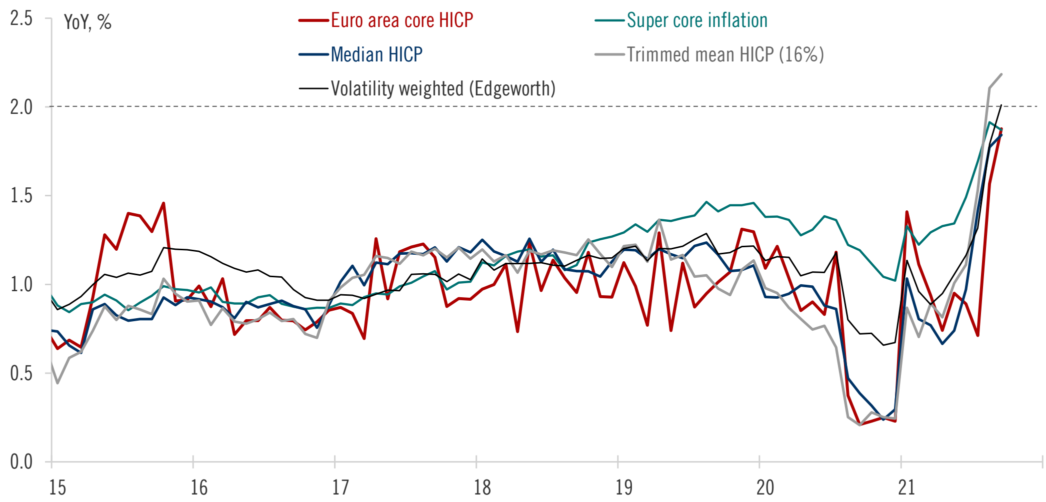
CHART 2: MEASURES OF EURO AREA CORE INFLATION



Source: PWM - AA&MR, Eurostat, ECB (September 2021)

So far, ECB officials have been unanimous in describing this acceleration in consumer prices as the result of temporary global factors, including the surge in energy costs, supply-side bottlenecks for physical goods, and the reopening of the services sector. But the pressure is rising. Importantly, other central banks' stance has been slowly shifting away from the 'it's all transitory' towards a more balanced and flexible approach. The ECB will be monitoring collective wage negotiations in Germany for early signs of second-round effects on inflation.

That said, **the ECB may be in a less uncomfortable situation than most other central bank**s. Indeed, it is slightly ironic that European policymakers should be worried about rising inflation, having failed to generate sustained inflation for the past decade. The ECB could have the luxury to wait for evidence of inflation persistence while other central banks start to tighten, with uncertain implications for the economy and for markets.

Staff projections should also buy the ECB more time. In December, the ECB staff will publish its 2024 inflation projection for the first time, which we expect to come up at around 1.7%. It will take time before the 2% inflation target is reached over the medium-term.

Crucially, for all the uncertainty over the persistence of inflation and the monetary policy response, **euro area financial conditions have remained broadly accommodative**. The ECB will take comfort from the relative stability of sovereign and credit spreads following the ("moderate") reduction in the pace of PEPP purchases, despite growing concerns over inflation pressures and slowing Chinese growth.

More flexible asset purchases could imply a weaker commitment

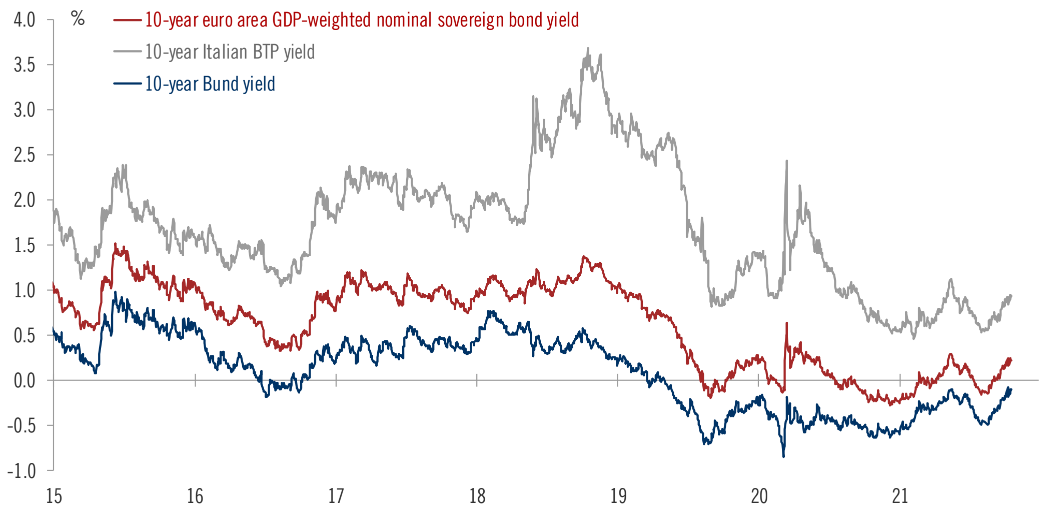
Given the factors outlined above, risks are tilted towards even lower asset purchases in 2022 and beyond. Moreover, **central banks no longer view QE as the most efficient policy tool in 'normal times'** – that is outside episodes of financial stress. The ECB and other major central banks have shifted their stance on QE, focusing on the signaling effect and putting more emphasis on the importance of the stock of government bonds they have already built up rather than the flow of new purchases. Executive Board member Isabel Schnabel gave a speech recently that we think will shape the debate and ultimately the ECB's decisions on future asset purchases. Her main argument is that **the central bank should continue to buy assets at a slower pace but for a longer period of time** in order to maintain accommodative financial conditions, building on the large stock of public debt held by the ECB as well as additional signaling effect for policy rates.

To be sure, there are several options available to provide a QE "bridge" after March 2022.

One option recently hinted at in the media would be for the ECB to launch a new asset purchase programme on top of the APP, building on the amounts unspent from the PEPP, with the objective to prevent any unwarranted tightening of sovereign bond spreads and broader financial conditions. Our projections (based on PEPP purchases of around EUR70bn per month in Q4 2021 and EUR50bn per month in Q1 2022) suggest that there will be about EUR100bn unused from the PEPP's original EUR1,850bn allocation when it is wrapped up early next year. Adding another EUR100bn would provide **a total of EUR200bn to be spent throughout 2022, or close to EUR20bn per month** in additional firepower alongside the EUR20bn from the APP.

In the end, how the ECB gets to EUR40bn of asset purchases per month does not matter as much as the way these purchases are made and assessed down the road.

CHART 3: EURO AREA GOVERNMENT BOND YIELDS



Source: PWM - AA&MR, Bloomberg (21 October 2021)

The problem is, any targeted and unconditional QE programme would resemble the old Securities Markets Programme (SMP) of 2010-2012 in its spirit, and therefore we doubt it would find agreement among a majority of the GC. The hawks could argue that the Outright Monetary Transactions (OMT) programme remained available to address financial fragmentation, although it would have to come with a financial assistance programme. **Any other unconditional QE programme targeting a single country may be too close to Japan-style Yield Curve Control, or even monetary financing.**

There is another, more appealing alternative, in our view. The ECB could boost APP purchases to EUR40bn as we expect (or to EUR30bn in a less dovish scenario), while

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committing to **a quarterly review of the programme based on a "joint assessment" of financial conditions and the inflation outlook**, as it has been doing under the PEPP.

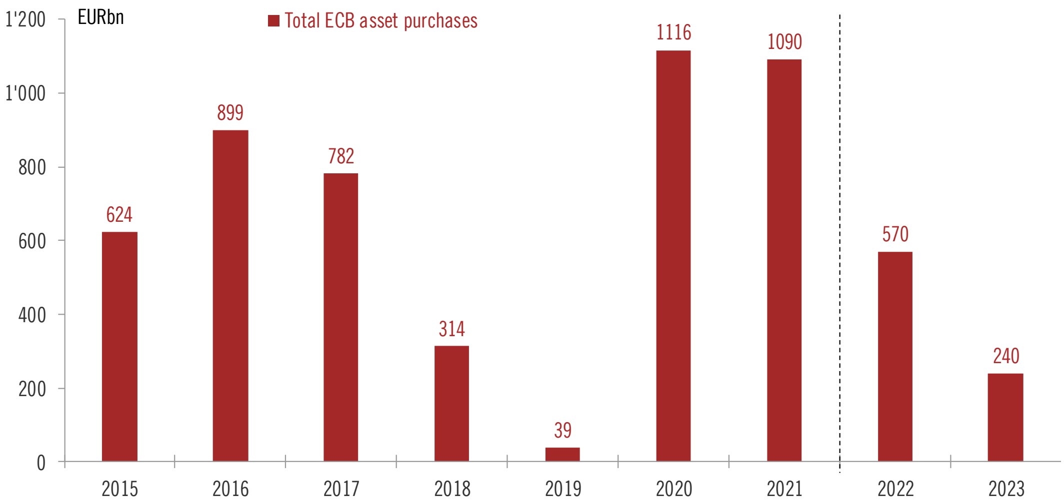
This would be less dovish than an open-ended commitment to APP purchases based solely on inflation criteria. It would also raise questions about the ECB's commitment to pursue the APP until "shortly before" the first rate hike, for which the criteria are stricter. Any decoupling between asset purchases and policy rates would make markets more data dependent, with the risk that higher-for-longer inflation numbers trigger an unwarranted tightening in financial conditions that the ECB would have to address.

In the end, **we expect the ECB to maintain the existing sequencing between QE and the timing of lift-off**, although it could drop "shortly" from its commitment to end the APP "shortly before" it starts raising rates. **Either way, we see no ECB rate hike before 2024.**

Back to fiscal QE: ECB asset purchases to cover the bulk of net bond supply

In an interview with Reuters this summer, ECB chief economist Philip Lane mentioned the net supply of government bonds as an important "consideration" when it comes to QE, saying that "you cannot think about the volume of the APP independently of the volume of net bond supply". We expect ECB's asset purchases to broadly cover euro area governments' net funding requirements in 2022, after having exceeded net bond supply for the past six years.

CHART 4: TOTAL ECB ASSET PURCHASES



Source: PWM - AA&MR, ECB (September 2021)

Indeed, we forecast total ECB asset purchases to halve next year, from EUR1.1tn in both 2020 and 2021 to EUR570bn in 2022. This would translate into EUR320bn of net purchases of sovereign debt (in nominal terms, excluding short-dated bills), down from EUR700bn in 2020 and 2021. Meanwhile, net supply of sovereign bonds is expected to decline by more than one-third, to about EUR350bn.

That net purchases would still be large enough to absorb the bulk of new government bonds issuance is a feature of ECB QE and not a bug, in our view, as the ECB has become the effective backstop for fiscal policy.

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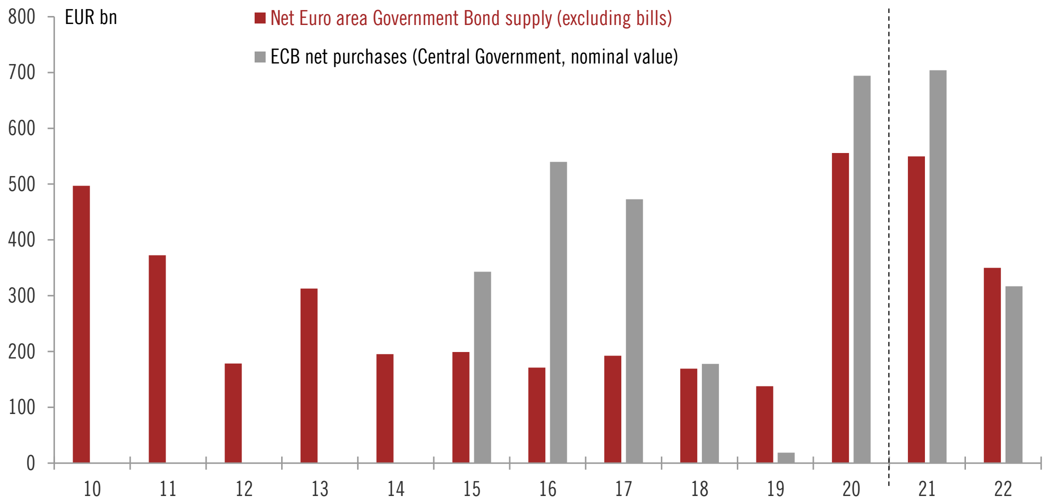
CHART 5: NET SUPPLY OF EURO AREA SOVEREIGN BONDS AND ECB PURCHASES



Source: PWM - AA&MR, ECB, Bloomberg (September 2021)

Other shades of QE flexibility

There are several dimensions of "flexibility" when it comes to the implementation of ECB's asset purchases.

First, **ECB capital keys** have been used as a guideline for asset purchases since QE started in 2015. Ironically, while in theory the PEPP allows for larger deviations from capital keys than the APP, in practice these deviations have been very small, except in the first few months of 2020. There is also some degree of flexibility embedded in the APP, for which purchases are "guided by the ECB capital key on a stock basis". This means that alignment with capital keys can be postponed to the end of the reinvestment horizon. In fact, cumulative deviations from capital keys have been larger under the APP than under the PEPP. **We see no need, and no political appetite, to make the APP more flexible with respect to capital keys.**

Second, the ECB has imposed a 33% issue and issuer share limit on public debt holdings under the APP. **We expect no change to APP issuer limits, either**. Our analysis (*see below*) is that **the APP is flexible enough to cope with bond scarcity and the issuer limits until at least the end of 2023.**

Third, **Greece could become eligible for the APP**. There might be conditions attached (e.g. some degree of supervision and respect of sovereign ratings criteria) but, on balance, we think it is more likely than not that Greece will qualify for APP purchases. The waiver ensuring Greek bonds are eligible as collateral in refinancing operations should be maintained. Note that Greece is 'underpurchased' to the tune of EUR58bn under the APP, leaving room for substantial purchases in the future.

Fourth, the share of **supranational debt** could be increased above the current 10%, thus making room for larger purchases of Next Generation EU (NGEU) bonds.

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Appendix: how much of a constraint are issuer limits?

The ECB's aggregate holdings of public debt securities under the ECB's Public Sector Purchase Programme (the PSPP, part of the APP) and the PEPP are published on a monthly and bi-monthly basis, respectively, with breakdowns of asset purchases for each across jurisdictions. But the proportion that these debt holdings represent as a share of the total universe of eligible securities is not public information.

One needs to make a number of assumptions to estimate these issuer shares. The issuer share of each member state in the ECB's QE programmes is calculated as the ratio of the nominal value of Eurosystem holdings (i.e. the ECB and the 19 national central banks (NCB), bearing in mind that the ECB is responsible for 10% of total public bonds purchases split into central government and national agencies) of public debt securities with a residual maturity of one to 30 years relative to the total eligible QE universe.

The first source of uncertainty comes from the breakdown of public debt purchases between **central government and general government**, including local government and public entities that are included in the Maastricht definition of public debt. NCBs have some degree of discretion in that regard, especially in Germany, where non-central government debt represents up to 40% of total (general government) debt.

The second 'known unknown' relates to the difference between the market (cash) and the nominal (face) value of the bonds purchased. As bond yields have declined since QE started in 2015, the value of the bonds purchased by the ECB has increased above par, meaning that for any given quantity of bonds they buy in the secondary market today, their nominal value is lower than it would have been in the past. Since **issuer shares are calculated using nominal values**, the amount of monthly debt purchases published by the ECB (in cash terms) overstates the actual issuer shares. We use Bloomberg data to compute both the market and nominal values of the outstanding amount of eligible government debt on a monthly basis. As for our projections, we use official estimates from the IMF and the European Commission for general government debt.

A third source of uncertainty is **the share of so-called 'dead purchases'**, that is to say the share of purchased bonds whose residual maturity has dropped below one year and thus are no longer included in the calculation. Moreover, Treasury bills with a residual maturity of at least 70 days are eligible for purchase under the PEPP and must be excluded from the issuer share calculation as well – yet the breakdown of bills and bonds is not available across countries. Note that this provides NCBs with an additional degree of discretion to reduce their purchases of longer-dated bonds if and when necessary.

In theory, one should remove dead purchases from both the numerator (Eurosystem holdings) and the denominator (QE eligible universe), but the former needs to be estimated. We assume that the distribution of QE holdings has converged toward the maturity distribution across the whole outstanding market, resulting in a share of dead purchases of around 10% on average. In Germany, the share of outstanding government bonds with a residual maturity below one year currently represents 12% of the total universe excluding bills (source).

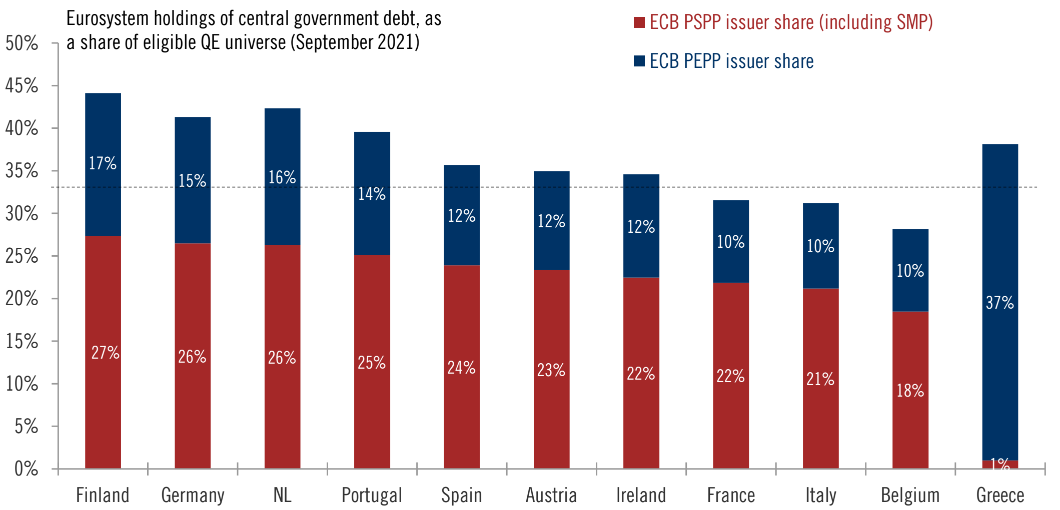
Alternatively, dead purchases can be included in the Eurosystem holdings *and* in the QE universe, assuming that once QE reaches cruising speed, the share of dead purchases remains broadly stable. In Germany, our analysis confirms that this approach does not change the conclusion. Another approach consists in using the monthly data for PSPP bond redemptions (which are available on an aggregate basis only) to try and estimate the share of dead purchases consistent with the published profile of redemptions.

Last but not least, issuer-share calculations include **legacy holdings** of government debt that the NCB acquired before the euro (as part of the Agreement on Net Financial Assets) and, more recently, during the 2010-12 sovereign debt crisis (as part of the now terminated Securities Market Programme). Data for the former are not available on a timely basis and have to be estimated while the latter are only available on a yearly basis and have to be extrapolated for higher frequencies.

Where do the PSPP and the PEPP programmes stand?

We estimate that **in September 2021, the Eurosystem's holdings of German central government debt under the PSPP represented 26% of the total eligible universe of German debt, down from 30% at the beginning of the pandemic**. This issuer share was close to other core countries with low levels of indebtedness such as Finland and the Netherlands. At the lower end of the spectrum are higher indebted countries such as France, Italy and Belgium. Greece is an outlier, being excluded from PSPP purchases, and the only holdings included are legacy SMP bonds about to mature completely.

CHART 6: ECB'S SHARE OF PSPP AND PEPP HOLDINGS OF CENTRAL GOVERNMENT DEBT



Source: Pictet Wealth Management, ECB, Bloomberg (September 2021)

While the pace of PSPP purchases of central government debt has remained limited in recent years, running at about EUR10bn per month in nominal terms recently, the PEPP has grown very rapidly over the past 18 months. In our estimate, PEPP holdings now represent between 10% and 15% of the eligible QE stock, excluding short-term bills and dead purchases. The outlier is again Greece because the amount of marketable debt securities (the denominator in the ratio) has been slowly rising from very low levels since the country regained market access. Remarkably, our 37% estimate for Greece's PEPP issuer share suggests that the 33% limit may not strictly apply to this programme.

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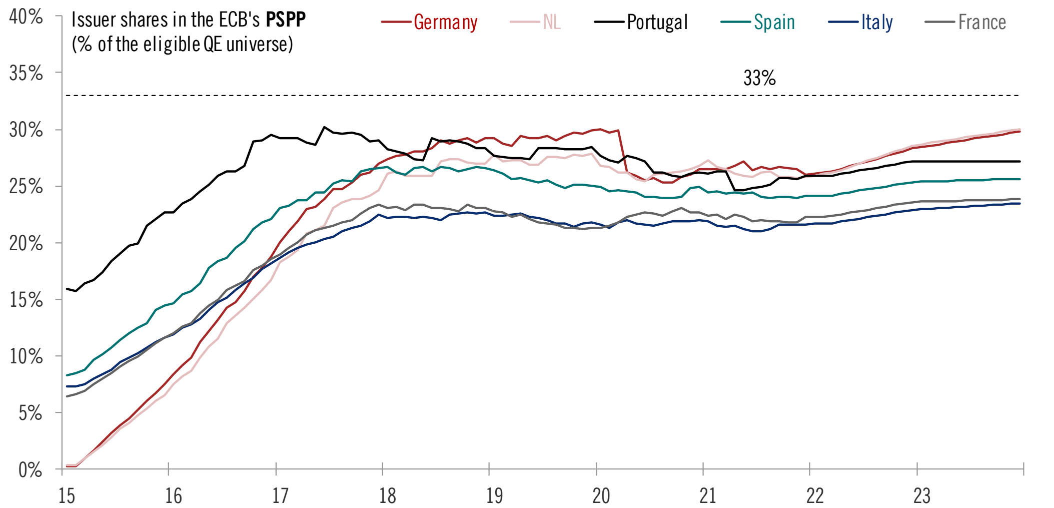
When would issuer limits become binding?

The transition from the PEPP to an expanded APP will have important implications for issuer limits depending on the pace of APP purchases, their end-date, and the degree of flexibility embedded in the programme. We focus on Germany, not only because it is the largest member state but more importantly because it is the jurisdiction where bond scarcity is the most acute. Purchases of German bonds are the ECB's largest based on capital keys, but even larger relative to the outstanding amount of marketable debt and projections for future net debt issuance. The ECB will continue to face similar constraints in smaller member states, but they are easier to mitigate with limited implications.

In our baseline scenario, we find that **an increase of APP purchases to EUR40bn per month along with some modest deviations from capital keys and an increase in the share of supranational debt to 15%, would still leave Germany's issuer share comfortably below 33% by the end of 2023**.

CHART 7: ECB'S SHARE OF PSPP HOLDINGS OF CENTRAL GOVERNMENT DEBT INCLUDING PROJECTIONS



Source: Pictet Wealth Management, ECB, Bloomberg, IMF, European Commission (September 2021)

While this may be manageable, scarcity would remain an issue if the APP were to be expanded more significantly, including in the next crisis. Indeed, risks to these projections include larger QE purchases unmet by rising government debt supply in core countries. Here again, Germany may be at risk of "underspending" relative to QE purchases that would continue to be guided by the capital keys.

If the APP were to increase to EUR60bn per month with no additional flexibility, we estimate that the 33% limit could be hit in Germany by the end of 2023. Alternatively, a more expansionary and protracted fiscal stance in the euro area would lead to a larger increase in the stock of government debt while issuer shares could stay close to the 25% average, all else being equal.

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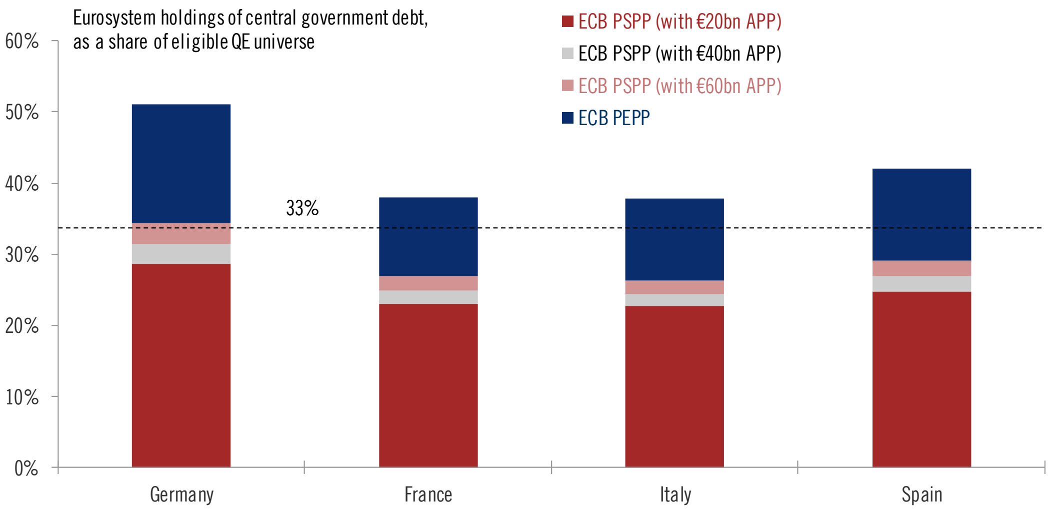
CHART 8: PROJECTIONS OF ECB'S DEBT HODLINGS BY DECEMBER 2023



Source: PWM - AA&MR, ECB, Bloomberg, European Commission (September 2021)

For all the uncertainty about the implications of the rulings of the European Court of Justice on ECB QE programmes, we believe that the ECB still has considerable room to expand its balance sheet further if needed. In 2019, ECB President Mario Draghi and Executive Board member Benoît Coeuré made it clear that issuer limits would not prevent the ECB from deploying its policy tools to the extent necessary, adding that these legal constraints depended on specific contingencies. In plain English, there should be no limits to ECB's interventions within its mandate.

For now, there seems to be little appetite to raise issuer limits to 40% or 50%. Our understanding is that the 33% threshold will remain a hard constraint on PSPP holdings for now, while PEPP holdings will remain "deconsolidated", i.e. separate from the PSPP. In addition, we could see fresh legal complaints to the German constitutional court, this time against the PEPP. Still, a strict interpretation of ECJ rulings may be that aggregate Eurosystem holdings of PSPP and PEPP purchases together should not exceed 50% in an extreme case.

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