

Euro area: Easing policy would not be straightforward but the ECB has some room for manoeuvre

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1. Introduction

The ECB's room for manoeuvre, or lack of it, may become increasingly relevant as an anaemic euro area economy seems vulnerable to external risks and inflation remains well below target. The composite PMI is hovering just above contraction territory (Chart 1) and industrial production in Germany, Europe's largest economy, fell by 1.9% MoM in April, the most in almost four years. Mario Draghi, the outgoing president of the ECB, said on Tuesday in Sintra that "additional stimulus will be required" if conditions do not improve, emphasising that both further rate cuts and a restart of the quantitative easing (QE) programme remain on the table.

However, with interest rates still at historical lows (Chart 2) and net asset purchases halted just before reaching self-imposed holding limits there are concerns about just how much monetary policy space actually remains under the current framework. Draghi said that the ECB is prepared to "use flexibility" to fulfil its mandate, and in this report we consider which changes are most likely to be implemented in order to overcome the hurdles to interest rates cuts and a resumption of net asset purchases. We also consider some less likely options to stimulate demand if a downturn were to become a crisis.

Chart 1: Euro Area Composite PMI and MRO Rate Changes

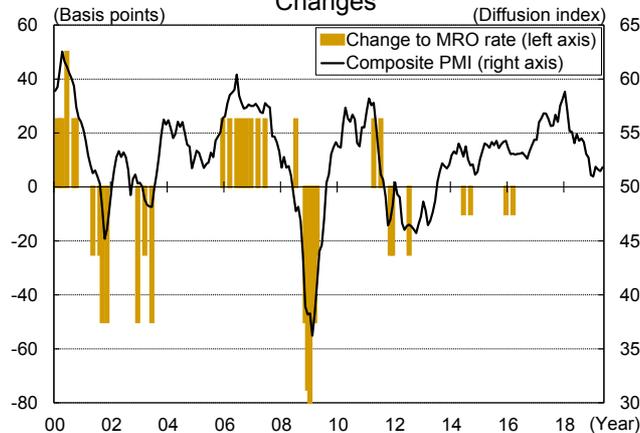
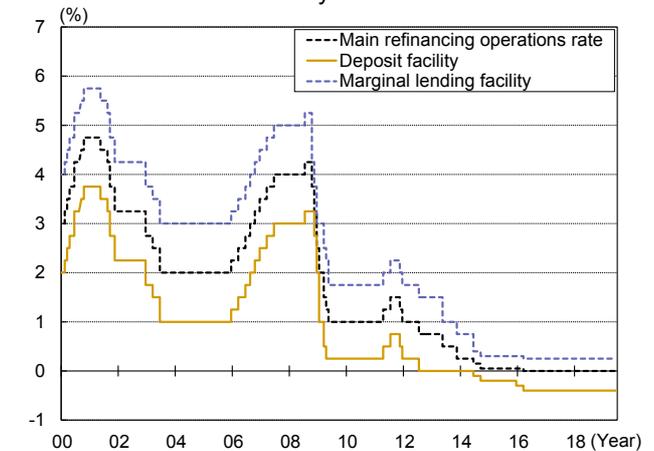


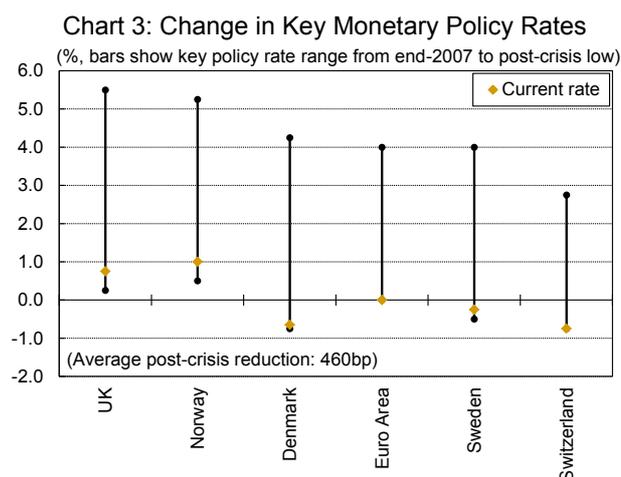
Chart 2: Key ECB Rates



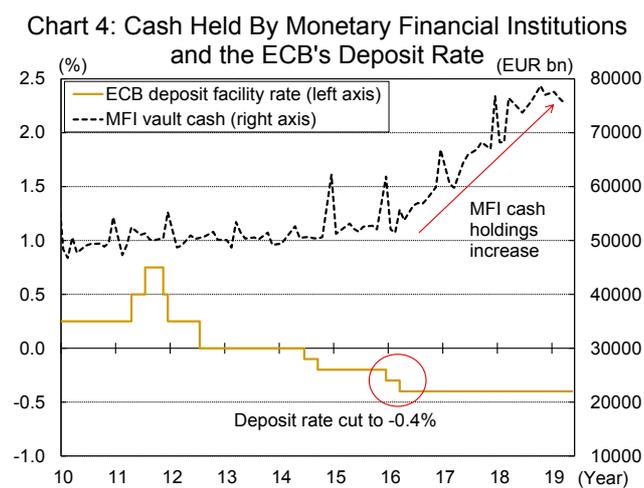
2. Further interest rate cuts

(1) The problem: rates are close to the effective lower bound

After the global financial crisis (GFC) European central banks cut their key interest rates to record lows (Chart 3). In the euro area, the ECB's main refinancing rate (MRO, the interest rate banks pay to borrow from the ECB for one week) was eventually cut to zero, and the deposit facility rate, which banks receive on overnight deposits, now stands at -0.4%. This negative rate means that banks effectively pay to park excess liquidity (reserves in excess of the minimum requirement) at the ECB. In theory, negative rates should enable the smooth transmission of monetary policy by prompting banks to lend money to businesses and individuals rather than pay for the privilege of holding it. However, there are limits to how far interest rates can be cut before banks might consider substituting liquidity for cash (which has a nominal rate of return of zero, but plenty of storage, transport and insurance costs). Chart 4 suggests that some euro monetary financial institutions (MFIs) have already opted to increase cash holdings after the deposit rate was lowered from -0.2% to -0.4% in March 2016. This means that there may be very limited scope for the ECB to cut further into negative territory. It will certainly be impossible for the ECB (and other major central banks) to implement the scale of cuts to key rates shown in Chart 3 before the zero rate of return on cash becomes more relevant.



Source: BIS, MUFG Bank Economic Research Office



Source: ECB, MUFG Bank Economic Research Office

Moreover, low or negative interest rates weigh on banks' profitability by compressing the margin between the interest charged on loans and the interest paid on deposits (assuming customers would not tolerate negative rates). This can be a risk for financial stability as 1) banks could be prevented from building sufficient buffers to absorb any losses, and 2) unprofitable banks could be lured into taking on more risk in a hunt for better returns. This would concern the ECB as reduced financial stability can increase market volatility and weigh on business sentiment more broadly.

(2) What the ECB could do: tiered deposit rates

Draghi emphasised at Sintra that "further cuts in policy interest rates and mitigating measures to contain any side effects" remain part of the ECB's toolbox. He had previously said that the ECB "will continue monitoring how banks can maintain healthy earning conditions while net interest margins are compressed" and "reflect on possible measures that can preserve the

favourable implications of negative rates for the economy, while mitigating the side effects, if any". This can be interpreted as a hint that the ECB would consider a system of tiered deposit rates under which banks would be exempt in part from paying the negative rate on excess reserves to alleviate pressure on bank profitability. This type of policy was announced in Japan in January 2016 when the BOJ moved rates into negative territory for the first time. Under that system, each financial institution's reserves are divided into three parts, to which either a positive interest rate, a zero interest rate or a negative interest rate (-0.1%) are applied.

In the euro area, such a system could simply allow the ECB to leave rates unchanged for longer as it would probably reduce any adverse effects for the financial sector of the current -0.4% deposit rate (and, in fact, such implicit forward guidance that low rates would persist for a long time would likely be tantamount to easing in itself). Alternatively, **tiered deposit rates would make it more feasible for the ECB to cut rates** further into negative territory without a wide scale substitution to cash. A tiered system may well mitigate the risks to MFIs from further cuts, but in doing so would reduce the incentive for banks to lend rather than pay a negative rate and so drag on the transmission of lower interest rates to bank lending. However, such a move may produce a useful signalling effect that rates would remain low for an extended period and that the ECB was doing its utmost to stimulate the euro area.

The ECB would face some communication challenges. Some may perceive the change to be a sop to the banking sector. Another issue is that liquidity is not spread evenly throughout the euro area. Around 80% of excess liquidity is held in Germany, the Netherlands, France, Finland and Luxembourg, so banks in these countries would stand to benefit the most from tiered rates. It has been harder for some banks in peripheral countries with weaker financial sectors to build up capital buffers so any upside from tiered deposit rates for these banks might be limited. Because of these problems of fairness, the ECB would probably need to emphasise the monetary policy case for such a policy change. On the one hand, it is not controversial to say that low profitability can impair banks' function as financial intermediaries (the IMF has written that "there is a growing consensus that frictions in the banking system may affect the transmission of negative rates through banks"). However, the current case is weakened as there is little suggestion in the ECB's most recent bank lending survey that euro area banks have been reducing lending to enterprises as banks' credit standards remained broadly unchanged and loan demand from enterprises is stable.

3. Restarting net asset purchases

(1) The problem: self-imposed rules limit the available universe of assets

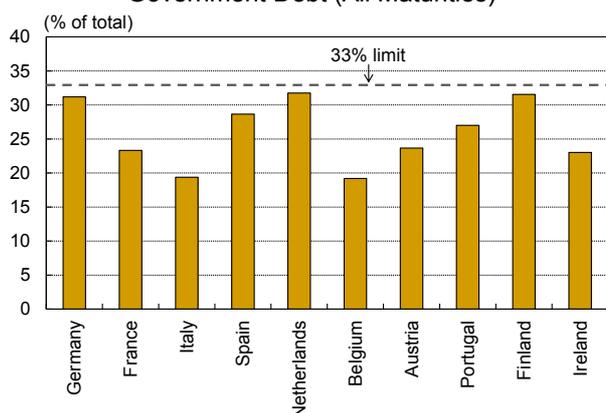
The ECB gradually tapered its monthly net purchases under its asset purchase programme (APP) from EUR 80 billion in March 2017 to zero by the end of 2018. Now, it continues to reinvest principal payments from maturing securities purchased under the APP. In this reinvestment phase, as in the net purchase phase, the ECB buys assets "in a gradual and broad-based manner, aiming to achieve market neutrality in order to avoid interfering with the market price formation mechanism". In order to comply with this aim, the ECB has a set of self-imposed rules and limits that continue to apply during the reinvestment phase. These include:

- 1) The **33% issue limit** (the maximum share of a single security that the ECB is prepared to *hold*) and the **33% issuer limit** (the maximum share of an issuer's outstanding securities that the ECB is prepared to *buy*).
- 2) **The capital key** which guides the split of purchases between each euro area country. It reflects a combination of each country's share in GDP and population.
- 3) **The 1 to 30-year maturity restriction**. The ECB will only purchase securities with a remaining maturity of at least 1 year but less than 31 years.
- 4) Additionally, priority is given to purchases of **assets with yields above the deposit rate**, but purchases of securities with yields below -0.4% are undertaken "to the extent necessary".

There have been concerns that the ECB was close to reaching these limits to its APP for some time. Indeed, the ECB has relaxed the rules above over the course of the APP and so has made the implicit admission that it is worried about reaching the limits. Most notably, the minimum remaining maturity for PSPP (Public Sector Purchase Programme) securities was reduced from two years to one year from 2 January 2017. Purchases of securities with a yield below the deposit rate also became permitted ("to the extent necessary") and the issuer limit for EU supranational bonds has been increased from 33% to 50% to provide "additional flexibility in the implementation of the PSPP."

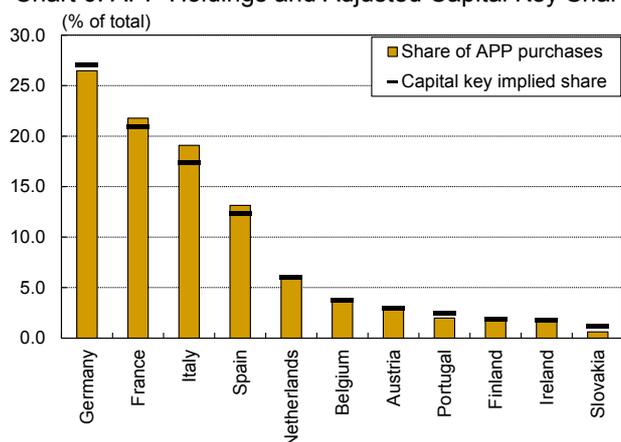
However, it is hard to know exactly how close the ECB is to these limits as it does not reveal the precise composition of its holdings. Chart 5 shows one rough approximation: ECB APP holdings for each country to total outstanding government debt. Note that this chart shows outstanding public debt of *all* maturities (rather than the 1 to 30-year range that is bought by the ECB). However, it does indicate how euro area countries with relatively low debt issuance but high shares in the capital key such as Germany and the Netherlands are very close to the 33% limit.

Chart 5: ECB APP Holdings to Total Outstanding Government Debt (All Maturities)



Source: ECB, BIS, MUFG Bank Economic Research Office

Chart 6: APP Holdings and Adjusted Capital Key Share



Source: ECB, MUFG Bank Economic Research Office

On the capital key constraint, we note that the key was updated from January 2019 as part of a five-yearly adjustment cycle. It is based on euro area countries' share in GDP and population so there is a pro-cyclical effect: the countries that experienced highest GDP growth over the previous five years will see their share of asset purchases *increase*, while those countries that have had weak growth (and would probably benefit most from asset purchases) have their

share reduced. Indeed, Chart 6 shows that, relative to the new capital key, the ECB has under-bought German debt and over-bought Italian debt. Although this may seem appropriate given the relative health of the economies, these imbalances will gradually be addressed as the ECB will reinvest maturing assets “so that the stock of holdings over time is brought closer into line with the ECB capital key”. By purchasing relatively more German debt (and less Italian debt) to do this, this will add to the pressure on the German debt limit.

(2) What the ECB could do: loosen the rules to expand the eligible universe of assets

Despite the APP being close to the limits, there is probably still *some* room to resume net asset purchases under the current rules. The longer that net asset purchases remain at zero, the greater scope there is for resumption on the current rules due to new government bond issuance in the euro area. **A return to a pre-taper monthly pace (EUR 60-80 billion) might be possible for a short period under the current parameters**, but we are sceptical of Draghi’s claim in Sintra that there is “considerable headroom” to restart net purchases. Market participants would question whether purchases were sustainable or sufficient under unchanged parameters. However, we note that the political resistance from several euro area countries to the initial QE measures did eventually dissipate once the necessity became clear. Similarly, we think there would be acceptance if the ECB’s rules were bent further should conditions require it. Broader questions over the legality of bond-purchasing have now also been dispelled after the European Court of Justice (ECJ)’s ruling in 2018 that the current PSPP “does not exceed the ECB’s mandate”.

What could change to enlarge the purchasable universe? First, **an obvious tweak would be to increase the share of the corporate sector purchase programme (CSPP) in the APP**. This would have precedent – from commencement, the CSPP averaged 10% of monthly net purchases until December 2017, which increased to 15% in 2018. A move higher (to 20%, say) would ease some of the constraints on monthly PSPP purchases. Meanwhile, it may also be relatively straightforward to increase the maturity limit on the PSPP beyond thirty years (many euro area countries now issue ultra-long dated debt). This would help to maintain – or increase – the average maturity of the portfolio which has steadily decreased from over eight years in 2015 to 7.3 in April this year. While the ECB has already shown willingness to relax the limits (as mentioned above) further loosening might be possible, but would be difficult, both legally and politically.

On the legal constraints, the ECJ’s ruling was helpful, but it did refer to the “strict purchase limits per issue and issuer” and referenced the capital key allocation. We think **it would be difficult to increase the issue(r) limit**. Since 2013, all bonds issued by euro area countries with a maturity of more than one year must have a collective action clause (CAC). If the ECB were to hold a certain amount of any CAC bond (the exact clauses vary) then it would be able to block any future debt restructuring, which would raise the question of neutrality. To mitigate the problem, the ECB could possibly raise the limit for purchases of non-CAC bonds, as it has done with supranational bond purchases to 50%. Again, this would likely entail a twist towards purchases at the longer end of the yield curve (as more long-dated paper issued before 2013 would become eligible). But such a move would likely result in further legal challenges, so might require extra political cover from the European Commission.

Similarly, **any meaningful deviation from the capital key allocation for each country's share of purchases would also be politically tricky.** It would allow better transmission of monetary policy (as countries which require it the most would have relatively larger purchases) but it may be seen as a sign of the ECB financing more indebted member states. A more passive approach might be to continue net purchases under the current rules until the issue(r) limit is reached in a member state. Then, the ECB could in turn distribute that country's original allocation among the other euro area countries (but still in proportion to the capital key). This would mean that other countries would not be specifically chosen to receive higher purchases.

Adjustments to the current PSPP and CSPP would enable further net purchases but would not be a 'bazooka' option. If economic conditions deteriorate significantly, could other asset classes be introduced? The most obvious addition to the APP would be equities (which would prompt investors to purchase equities from other jurisdictions, weaken the euro and help to 'import' inflation). There would be clear parallels; the Bank of Japan (BoJ) has purchased domestic stocks through exchange-traded funds for some time. However, we think **it would be very controversial for the ECB to start purchasing equities** given the distributional implications amid direct consequences for household wealth. Again, we do note that there was great resistance to the current purchases before eventual acceptance that they were necessary. In that sense, we cannot rule out that the ECB would expand its asset purchases into different asset classes if economic conditions were to deteriorate significantly.

Lastly, **a resumption of QE would also have a strong signalling effect.** The ECB had long stated as part of its forward guidance that interest rates would remain on hold until "well past the horizon of net asset purchases". If net purchases were resumed there would be clear implications, whether implicit or explicit from the ECB, for future rate path expectations.

4. There is only so much that monetary policy alone could do

The ECB may have some headroom to reduce rates and restart QE in the event of deteriorating economic conditions, as discussed above, but there would only be so much that monetary policy tools could do. In the event of a serious downturn, there is a clear consensus that **counter-cyclical fiscal policy would be required to support the economy.** The euro area fiscal stance is mildly accommodative at the moment, but there is plenty of scope for increased government spending. This is especially true for core member states which have relatively low government debt and structural surpluses (such as Germany). While Draghi has continually called for more support for fiscal policy for some time, this is a matter for national governments.

However, an extreme option if all else fails there might need to be some recourse to truly unconventional policy which would involve the ECB in order to increase aggregate demand. This could be some form of 'helicopter money' which would involve distributing money to the public in order to increase aggregate demand and inflation. In reality, helicopter 'drops' would more likely entail government-implemented tax cuts for households and businesses rather than direct deposits. The ECB could then purchase the equivalent amount of government debt in secondary markets (similar to the current QE program). The main difference to QE would be that, while asset purchases can be reversed, helicopter drops would be permanent.

Communication would be important for it to be effective. There could be no expectation that the tax cuts would be offset later by tax hikes (the so-called ‘Ricardian equivalence’ proposition), and the public would have to spend rather than save some of the additional income. There would also be plenty of political and legal challenges, so it would need to be driven by politicians (but facilitated by the central bank) in order to prevent any risks to the ECB’s operational independence. With high legislative hurdles, a form of helicopter money is unlikely to be a quick policy response in response to a downturn, but it is possible to envisage its use some years after another deep crisis if there is little sign of recovery.

5. Could a new framework help with untethered inflation expectations?

“Just as our policy framework has evolved in the past to counter new challenges, so it can again” said Draghi in Sintra. This comes after “concern was expressed that market-based inflation expectations had shifted downwards in parallel with actual inflation and across all maturities” in the ECB’s April meeting. An assessment of its current approach – with no commitment to change – would not be an unusual step for a major central bank. The US Federal Reserve announced a comprehensive review of its “strategies, tools, and communication practices” in November 2018, while the Bank of Canada reviews its monetary policy framework every five years.

It may also be a suitable moment for the ECB to ponder using a different framework as Draghi will step down as president in October this year. Indeed, a lot could hinge on the selection of his successor. We note that Olli Rehn, one of the leading contenders to be next ECB president, recently said “central banks should thoroughly explore the potential impacts of these deep structural changes on monetary policy” and advocated “a review of the ECB’s monetary policy strategy, without prejudice as to where it should lead.” However, other candidates may well be less enthusiastic about the idea, and we cannot find any remarks in support of the idea from Philip Lane, the ECB’s new chief economist (an influential role).

From a theoretical point of view, tweaks to the policy framework could both raise the ECB’s policy space and help to increase inflation expectations. Options range from formally allowing inflation to deviate in a range around the target to the more extreme option of changing the nominal anchor to the price level or nominal GDP (we consider some in more detail in **Box 1** at the end of this document). However, any new framework would come with its own issues. We are sceptical about whether a shift to a formal inflation target range would be sufficient to increase inflation expectations (but it might help the ECB maintain credibility if inflation were to continue to hover around the lower bound of the range). A higher target, meanwhile, would raise questions about the disadvantages of higher inflation, and there would be a clear credibility risk for the ECB if inflation were to remain low. After all, the ECB has not been able to bring underlying inflation to 2%, so may it well have similar difficulties reaching a higher target. Lastly, price level or nominal GDP targeting might be alluring to economists when monetary policy is close to the lower bound but there would be plenty of communication challenges after the relative simplicity of an inflation targeting framework. For nominal GDP targets we would also be wary that estimates of GDP are reported with lags and are prone to revision, which would complicate decision making.

More broadly, **we would be concerned about the effect on forward guidance**, which is an important tool for the ECB, as market participants and members of the public would have to relearn the ECB's reaction function. Any change may also raise expectations that there would be future changes, increasing uncertainty about the future of the 'nominal anchor'. However, several more years of the ECB undershooting the current inflation target – and losing credibility about its ability to reach it along the way – could well increase the chances of a change in tack.

6. Conclusion – the ECB has opened the door for further measures

The ECB has signalled that it is ready to cut its deposit rate and resume net asset purchases if necessary. Given the lack of bias in the ECB's communication between these two options it seems reasonable to assume that both could well be implemented together if conditions required. Interest rates cuts would probably need a tiered deposit rate system to mitigate the drag on the banking sector. This could limit the direct effectiveness of cuts, but it would provide a clear signalling effect that monetary policy would remain loose for some time. However, while such a move might help at the margin, the ECB's QE programme would be required to do most of the monetary policy heavy lifting in a downturn. Net asset purchases could be restarted under current rules but changes to the ECB's eligibility criteria would be needed for the programme to run for an extended period.

In the event of a severe economic or financial crisis, changes to the rules to widen the eligibility of bonds may not be sufficient. In such a case, the ECB might consider the addition of other assets to its purchase program. The inclusion of equities, most likely in the form of exchange-traded funds (ETFs), would be very contentious – even though other central banks do it – but would greatly enhance the ECB's eligible universe for purchases. An even more extreme option would be some form of helicopter money which would see the ECB facilitating the distribution of money to citizens in order to increase aggregate demand. To our minds, this is especially unlikely as it would require a high degree of political cover, but it seems practicable, eventually, if it was deemed a matter of necessity.

More broadly, measures of inflation expectations remain intractably muted despite some signs of stronger wage growth. With that in mind, the new ECB president may consider a review of the current monetary policy framework to consider whether a change in approach might help to raise inflation expectations. Such changes may seem sensible from a theoretical point of view but in practice there would be plenty of communication challenges. We would also worry about the effect on the ECB's forward guidance if market participants lose their handle on the central bank's reaction function as a result of any change to the framework.

Box 1: Alternative monetary policy frameworks

(1) Target an inflation *range*

Draghi has stated that current target (inflation rates “below, but close to, 2% over the medium term”) is symmetrical in the medium term, meaning that inflation can deviate in either direction. This idea could be formalised, perhaps as a ± 1 p.p. range (as in Sweden where the Riksbank has introduced a variation band of 1-3% to indicate that inflation will deviate around the 2% target to some extent). We are sceptical about whether or not such a shift would be sufficient to increase inflation expectations, though (but it might help the ECB maintain credibility if inflation were to continue to hover around the lower bound of the range).

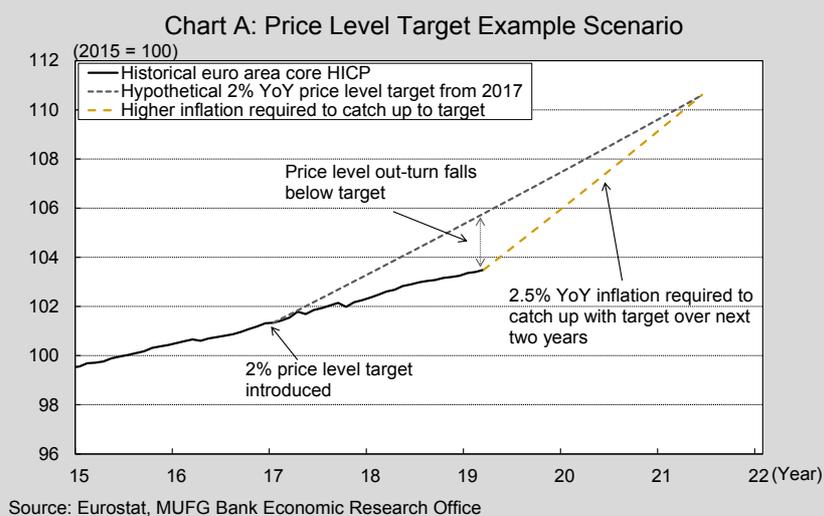
(2) Increase the inflation target

A higher target inflation rate (such as 4%) could be a long-run solution to reduce the constraints on policymakers from being too close to the effective lower bound. Increasing the target above 2% would entail a higher long-run level of nominal interest rates, which can be seen as the sum of R^* , or “natural” rate of interest (which is independent of monetary policy), and the inflation target. This would mean that central banks would have additional room to cut rates during a future crisis. However, we judge it unlikely that the ECB would raise its inflation target. First, while it should allow a central bank more room to cut over the long-term, it would not be much help if there was a severe crisis in the near-term as interest rates would still be close to the effective lower bound. More fundamentally, there would be plenty of concerns that the disadvantages of higher inflation (such as the so-called ‘shoe-leather costs’ of holding less cash and the distributional impact on savers and borrowers) would outweigh any monetary policy benefits. There would also be a clear credibility risk for the ECB if inflation were to remain low (after all, it has not been able to bring underlying inflation to 2%, so may well have similar difficulties reaching a higher target). Lastly, a change to the target may raise expectations that it would be changed again, increasing uncertainty about the future of the ‘nominal anchor’.

(3) Price level targeting

A traditional inflation rate target, whether 2% or otherwise, allows bygones to be bygones. Any past deviation from the target has no bearing on its future. This would not be the case with a price level target system, under which the central bank would try to keep the *level* of prices increasing at a steady rate over time. A period of too-low inflation would need to be off-set with higher inflation so that the price level returns back towards the target. This is perhaps best explained graphically. Chart A shows a hypothetical 2% price-level target applied from the start of 2017 in the euro area. Since then, inflation has fallen well short of 2% and so the price-level would have fallen below the hypothetical target. The central bank would therefore need to aim for higher rates of inflation to converge with the target. 2.5% inflation, for example, would see the target reached by 2022. In terms of monetary policy, a price-level target would commit the central bank to an extended period of accommodative policies after a period of below-target inflation. Members of the public and market participants would be more certain that such a period would be followed by supportive monetary policy so that the price level could catch up to the target, which might both mitigate the extent of any downturn and help to increase longer-term inflation expectations. There are also wider benefits to increased certainty about the future value of money in the long-run. A price level target system would reduce the risk

premium on non-indexed financial contracts meaning that the cost of capital would decrease and the economy would stand to benefit from higher investment.



However, while a price-level target might seem appealing from a theoretical point of view, there would be some challenges. First, there would be some clear communication challenges, both to the public – such a framework is more complicated to explain than a simple inflation target – and to market participants, who may struggle to adapt to the central bank’s new reaction function. In particular, there would be the problem of adverse aggregate supply shocks which reduce output but push up prices (such as higher oil prices or bad weather). Unlike under an inflation targeting regime, policymakers would no longer be able to look past deviations from the target prompted by transitory factors. In this type of scenario, tighter policy would not be appropriate if economic conditions are weak, but the price level may move above the target. We suspect there would be a degree of flexibility in how fast the central bank would seek to return to the target level, but any prolonged deviations would risk credibility relating to the central bank’s commitment to the policy.

(4) Nominal GDP targeting

A nominal GDP growth could be more robust to such supply shocks. Nominal GDP is the total of all spending in an economy, and its growth rate can be split into inflation and economic growth. For the euro area, a suitable nominal GDP growth target might be 4% YoY, split into a long-run average target of 2% inflation (the current anchor) and 2% real GDP growth (which is slightly above the crisis-affected 1.75% average since 2000). Such a target would have a clear signalling effect during a period of muted growth as the central bank would aim for prices to increase by >2%, necessitating very accommodative monetary policy. However, a supply shock which increases prices but drags on output would not require excessive tightening, so nominal GDP-targeting central banks would be more likely to avoid making policy mistakes than those strictly adhering to an inflation target mandate. For example, the ECB increased rates in July 2008 after higher oil prices had dragged inflation to 3.9% in the previous month, but nominal GDP growth was just 3.7% in Q2 2008 as global growth conditions rapidly deteriorated. However, as with a price-level target, there would be clear communication challenges about a departure from the relative simplicity of an inflation targeting framework. There would also be technical concerns. In particular, we note that estimates of GDP are reported with lags and are prone to revision, which would complicate decision making.

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