The European Central Bank in the COVID-19 crisis: Whatever it takes, within its mandate

Grégory Claeys

Executive summary

- Central banks have taken drastic steps to keep their economies afloat during the COVID-19 lockdowns. In the euro-area, the European Central Bank (ECB) has eased significantly the conditions of its refinancing operations and has announced a new asset purchase programme. This response has triggered fears of a significant increase in inflation, and concerns about whether the ECB measures are compatible with its price-stability mandate and with the limits set by the EU Treaties.

- Accelerating inflation is not an immediate threat, as the euro area will experience in 2020 its deepest recession ever recorded. Initially, the pandemic took the form of a supply shock, but second-round effects have now generated a massive aggregate demand shock. The overall impact on prices will depend on which of these two shocks dominates, but at this stage, it seems that deflationary forces are likely to dominate and bring headline inflation into negative territory in the near future.

- An expansionary monetary policy is thus clearly warranted for the ECB to fulfil its price-stability mandate. Moreover, given the severity of the shock, there is currently no trade-off between the ECB’s primary mandate and its secondary macroeconomic objectives, which all point in the same direction. New measures implemented by the ECB also seem to respect the legal boundaries set by the EU Treaties and the criteria set by the EU Court of Justice in its rulings on previous ECB asset purchase programmes.

- However, the legal situation has been complicated by the 5 May 2020 ruling of the German Constitutional Court (GCC) on the ECB’s 2015 Public Sector Purchase Programme. The ECB is not under the GCC’s jurisdiction and it is difficult to predict how the legal situation will evolve, but from an economic perspective, if the ECB were to abide by the more stringent rules dictated by the GCC, it would make it harder for the ECB to fulfil its primary mandate and secondary objectives.

- The ECB’s current actions and the increase in the size of its balance sheet, even if it were to prove permanent, should not restrict significantly its ability to increase rates to fulfil its price-stability mandate. The ECB would have enough tools at its disposal to counter a surge in inflation if it were to happen.

- While the ordering is clear between the ECB’s primary price-stability mandate and its secondary objectives, the secondary goals are not ranked by priority, possibly creating difficult trade-offs. Dealing with these is a political task and the ECB should welcome some clear guidance from the European Parliament and EU Council on which secondary objectives are the most relevant for the EU in a particular situation.

Recommended citation
1 Introduction

Central banks and governments have taken a number of drastic steps to keep the economy afloat during the COVID-19 lockdowns, and to try to avoid a depression. This massive response from public authorities has triggered fears of a significant increase in inflation (see for instance Goodhart and Prahdan, 2020). In Europe, the question has been asked of whether the current measures implemented by the European Central Bank are compatible with the mandate given to it by the European Union Treaties.

The ECB’s, and the Eurosystem’s, primary objective is clearly spelled out in the EU Treaty: the ECB must ensure price stability in the euro area (Article 127.1 of the TFEU, see Annex). However, although the treaty clearly establishes price stability as the ECB’s main objective, it does not give a precise definition of what price stability means in practice. That is why the ECB’s Governing Council has explained since 2003 that it intends to maintain inflation “below, but close to, two percent over the medium term”.

Beside this primary mandate, the same article of the TFEU also assigns secondary objectives to the ECB. These should be pursued as long as they are not at the expense of price stability. The ECB must in particular contribute to financial stability in the euro area by ensuring the “smooth operation of payment systems”, and also because it has been tasked by EU member states with “the prudential supervision of credit institutions” since 2014. In addition, the ECB should “promote general economic policies” and “contribute to the objectives of the Union”. These objectives, enshrined in Article 3.3 of the TEU, include in particular “sustainable growth”, “full employment”, and the “improvement of the quality of the environment” (see relevant excerpts of the EU Treaties in Annex).

Despite a narrower focus in its primary mandate than its counterpart in the United States (where the Fed shall “promote effectively the goals of maximum employment, stable prices, and moderate long-term interest rates”1), the ECB considers that price stability is best achieved through broad macroeconomic stability. Most of the time, there is essentially no trade-off between the ECB’s various objectives set out in the EU Treaties, because growth, high employment and financial stability are all necessary conditions to achieve price stability in the medium term.

This “divine coincidence” (as put by Blanchard and Galí in 2005) allows the ECB to write on the webpage that explains its objective that: “given that monetary policy can affect real activity in the shorter term, the ECB typically should avoid generating excessive fluctuations in output and employment if this is in line with the pursuit of its primary objective”2. That is why, in practice, the literature (see for example Castro, 2011) generally suggests that the ECB’s decisions are guided by inflation developments but also contribute to minimising the output gap in the euro area. During the previous crisis, in particular, some of its decisions reflected the broad concerns of the ECB Governing Council and showed that it considered that playing the role of lender of last resort (for banks as soon as August 2007, and for sovereign debt markets with the announcement of the OMT in 2012) was necessary to safeguard financial stability and to ensure the transmission of monetary policy to all parts of the monetary union, in order to be able to deliver price stability in the euro area.

The relevant question today is thus how current ECB decisions, taken in the midst of the COVID-19 crisis, fit with its primary mandate and its secondary objectives, both in the short and the long-run.

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2 The COVID-19 crisis and the ECB’s mandate

What has the ECB announced since the beginning of the COVID-19 crisis?
The ECB has been very active since the beginning of the COVID-19 crisis and has announced a large number of measures, including some announcements outside of its regular governing council meetings:

- On 12 March: as lockdown measures began to be implemented in various euro-area countries, the ECB announced a package of measures: liquidity provision through eased conditions on its targeted longer-term refinancing operations (TLTROs) (with a rate cut by 25 basis points (bps) below the deposit rate for banks fulfilling their benchmarks on lending to the real economy) and additional LTROs, and an increase in the envelope of its main asset purchase programme by €120 billion until the end of the year. On the same day, the ECB banking supervision arm announced measures to provide capital and operational relief to banks during the crisis.
- On 15 March: the ECB announced that it was ready to provide US dollars to the euro-area banking sector thanks to its currency swap lines with Fed.
- On 18 March: after an emergency governing council meeting following an undesirable and significant increase in the yields of some countries over the previous week, the ECB announced the creation of a new Pandemic Emergency Purchase Programme (PEPP), amounting to €750 billion until the end of 2020 (ECB, 2020a). The purchases are allocated by the ECB’s executive board in a flexible way, with respect to capital keys in the short term, are not constrained by the issuer limits of other asset purchase programmes, and reinstate a waiver to include Greek sovereign bonds (ECB, 2020b). The Corporate Sector Purchase Programme (CSPP) was also expanded to new asset classes, such as commercial papers. Moreover, the Governing Council made it clear that it was ready to do more and increase the size and adjust further the composition of its asset purchases if needed.
- On 20 March: the ECB started providing euros to the Danish Central Bank through swap lines (these lines were extended on 15 April to the Croatian central bank and on 22 April to Bulgaria’s central bank). The ECB also changed the timing of its USD swap operations from weekly to daily.
- On 7 April: the ECB announced collateral easing measures (with in particular a 20 percent reduction in collateral haircuts).
- On 15 April: the ECB endorsed macroprudential policy measures taken by national authorities.
- On 22 April: the ECB announced it would freeze credit ratings as of 7 April as far as its collateral framework is concerned to avoid the pro-cyclical effect of potential downgrades on collateral.
- On 30 April: the ECB announced that it would further ease the conditions of its TLTROs by cutting the applicable rate between June 2020 and June 2021 by a further 25 bps to as low as -1 percent (ie at 50 bps below the deposit facility rate), and introduced new refinancing Pandemic Emergency Longer-Term Refinancing Operations (PELTROs) for banks hitting the TLTRO bidding limits, banks with non-eligible lending (real estate, loans to public entities), and banks for which the TLTROs are operationally too complex.

The quick rise in spreads in the previous week, during which the spread between Italian and German yields almost reached 300 basis points, was in part self-inflicted by the ECB, after ECB President Christine Lagarde declared during the ECB’s 12 March press conference that “we are not here to close spreads”. This created some doubt among market participants about the readiness of the ECB to honour its 2012 promise to do “whatever it takes” to safeguard the euro area and to ensure the adequate transmission of monetary policy in all countries.
As a result, the balance sheet of the ECB increased by almost €700 billion in only two months (from €4,702 billion on 6 March to €5,395 billion on 1 May, see Figure 1). Given the volume of asset purchases and the potential take-up of the ECB’s refinancing operations, the size of the ECB’s balance sheet could reach around €7 trillion (the equivalent of around 60 percent of euro-area GDP) by the end of 2020 (Ducrozet and Gharbi, 2020).

Figure 1: Eurosystem’s consolidated balance sheet, assets (in € billions)

Source: Bruegel based on ECB. Notes: The left-hand side panel shows the evolution of the Eurosystem’s balance sheet since 1999, while the right-hand side panel zooms in on the developments since the beginning of 2020; MRO: Main Refinancing Operations, LTRO: Long Term Refinancing Operations (includes all types of LTROs, including VLTROs and TLTROs), SMP: Securities Market Programme, ABSPP: Asset Backed Securities Purchase Programme, CBPP: Covered Bond Purchase Programme, PSPP: Public Sector Purchase Programme, CSPP: Corporate Sector Purchase Programme, PEPP: Pandemic Emergency Purchase Programme.

What is the outlook for inflation?

In the short to medium-term (i.e. in the ECB’s policy horizon), taking into account the first estimates available for the first quarter of 2020, it is now very likely that the euro area will experience its deepest recession ever recorded4. As for what will happen after that, although it is difficult to make precise forecasts because of the high uncertainty and the exceptional nature of the current shock, some elements suggest that, after the initial free fall of the economy, there are elevated risks that the euro area will experience a slow recovery. The ECB’s early forecasts (Battistini and Stoevsky, 2020) predict that, even in their more optimistic scenario, output is not going to reach its pre-crisis trend before the end of 2022. In their mild and severe scenarios, output will not even return to its pre-crisis level by then.

There are good reasons to forecast such a dire outcome. In particular, a protracted demand shortfall is to be expected given the situation. Consumption from households will probably be subdued because of precautionary saving, continued social distancing, higher unemployment and low wage growth. Meanwhile, because of high uncertainty about possible relapses and new lockdowns, and because of the large increase in corporate debt during lockdown and the possible failure of some companies, corporate investment will probably trend lower in the next few months, possibly until a vaccine or a cure for COVID-19 is found.

What does that mean for inflation? Even if the pandemic took initially the form of a supply shock through the breakdown of global value chains and disruptions to production caused by the lockdowns, second-round effects have now generated a massive aggregate demand shock. The overall impact on prices will depend on which of these two shocks dominates. At this stage, it seems that the fall in aggregate demand is probably going to be larger than the fall in productive capacity (see Guerrieri et al, 2020, for an explanation on how this is theoretically

4 The IMF (2020) expects GDP in the euro area to fall by 7.5 percent in 2020 in its central scenario, while the European Commission (2020) expects a fall of 7.7 percent.
possible). Combined with the direct effect of the substantial fall in the prices of oil and non-food commodities, this means that deflationary forces are likely to dominate and bring headline Harmonised Index of Consumer Prices (HICP) inflation into negative territory in the near future.

There might be some significant relative price changes with increases in the prices of some indispensable goods, including food and medical equipment, and some increases in some other prices arising from pent-up demand when lockdowns are eased. However, prices of services and other goods could decline because of the fall in aggregate demand and more structural behavioural changes resulting from the pandemic (eg in entertainment services, tourism, mobility, etc). In fact, HICP estimates for March and April 2020 (even if these must be taken with a pinch of salt given the difficulty of collecting prices during the lockdowns and the changes in consumption patterns) already point towards a decrease in overall inflation in the euro area5.

Moreover, this downward pressure on consumer prices has resulted in falling inflation expectations since the beginning of the crisis. Markets have heavily revised downwards their expectations. They now expect headline inflation to fall into negative territory over the next 12 months, and, more worryingly, to stay below 1 percent – ie well below the ECB’s definition of price stability – for the next decade (Figure 2).

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**Are the recent ECB decisions guided by its price-stability mandate?**

Given the short-term outlook for inflation, and with deflation risks mounting in the ECB policy horizon, potentially leading inflation expectations further downwards, we think that an expansionary monetary policy is clearly warranted today for the ECB to fulfil its price-stability mandate, as defined by an inflation rate “below, but close to, two percent in the medium term”, and by the ECB’s “commitment to symmetry”.

To ease its monetary policy, the ECB is following two main paths: easing financial

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5 Headline HICP inflation in the euro area in April fell to 0.4 percent year-on-year while core inflation fell to 0.9 percent y-o-y. See [https://ec.europa.eu/eurostat/documents/2995521/10294996/2-30042020-AP.EN.pdf/695df4c4-1a67-bb92-3a06-69534046c8fe](https://ec.europa.eu/eurostat/documents/2995521/10294996/2-30042020-AP.EN.pdf/695df4c4-1a67-bb92-3a06-69534046c8fe).
conditions to support the real economy, and ensuring that there is no liquidity crisis either in the private or in the public sector. Are these the appropriate tools to fulfil its mandate?

First, the ECB decided to provide accommodative financing conditions and encourage credit provision to companies to limit the destruction of productive capacity during the lockdowns. Cutting the TLTRO lending rate below the deposit facility rate (as the ECB did on 12 March and again on 30 April), conditional on banks reaching a benchmark volume for loans, provides a new way for the ECB to cut its rates to ease financial conditions. This allows the ECB to take a more expansionary stance without lowering its deposit rate further, thus avoiding the negative impact on banks’ profits and therefore, possibly, on bank lending. It indeed gives banks a strong incentive to take out long-term loans from the ECB, given that the rate is lower than what they will pay to deposit excess liquidity there. This allows them to make more loans, which in turn will mechanically increase their reserve requirements, since these are calculated as a ratio of a bank’s liabilities – mainly its customers’ deposits.

Considering the new tiering system on reserve remuneration, their exempted reserves would also be increased, even more than proportionally. This ultimately should create a virtuous cycle for bank profitability and incentivise banks to lend to the economy, despite negative policy rates (or more precisely thanks to a negative spread between the deposit rate and the TLTRO rate).

The only caveat comes from the fact that the ECB will actually lose money on these operations. However, this should not be a major source of concern, given that, as discussed in Chiacchio et al. (2018), while it is preferable for central banks to achieve profits rather than to record losses, they are not profit-maximising institutions and their overriding mandate is price stability. As such, recording losses in the short-to-medium term when seeking to fulfill its macroeconomic function should not stop the ECB from using such a policy if it is effective.

Second, the ECB decided to adopt significant measures to avoid liquidity issues that would impede the transmission of monetary policy and endanger financial stability and ultimately price stability. In particular, the ECB launched on 18 March a new asset purchase programme, the PEPP, aimed at diminishing “any risks to the smooth transmission of its monetary policy in all jurisdictions of the euro area” (ECB, 2020a). The objective is clearly to avoid a bad equilibrium in some national sovereign debt markets that would break down the monetary policy transmission channel, and to ensure that euro-area governments can borrow massively to limit the fall both in aggregate demand and in aggregate supply (to maintain them as much as possible at the pre-crisis level), which in turn ensures both price stability and financial stability.

In our view, at the current juncture, a new form of ‘divine coincidence’ is taking place as the various macroeconomic objectives of the ECB (its primary mandate of price stability, as well as its secondary objectives, ie financial stability, and the need support growth and employment) all point in the same direction and towards the same policies.

Do these decisions respect the limits set by the EU Treaties?

In addition of complying with its mandate, the ECB’s actions must respect two main legal constraints in the EU Treaties. First, the ECB is prohibited from financing directly member states or EU institutions (see Article 123 of TFEU in Annex). Second, like all EU institutions, the ECB should not act beyond its assigned competences and should thus be constrained by the proportionality and subsidiarity principles, ie it may only exercise the powers granted to it to the extent necessary to fulfil its mandate (Article 5 of the TEU, Annex).

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6 Assuming that the negative spread of 50 basis points between the deposit rate and the TLTRO rate would in the end apply to a volume of between €500 billion and €1 trillion in loans, this would lead to losses on these operations of between €2.5 and 5 billion, compared with an average of €14 billion of distributable profits per year for the Eurosystem from 1999 to 2017 (Chiacchio et al., 2018).

7 The unwarranted loss of market access or default of a euro-area country in the midst of the crisis would have very damaging implications in terms of financial stability, clearly endangering price stability.
Refinancing operations, as an ECB tool, have never been challenged in courts and thus pose no problem at this stage, but two ECB asset purchase programmes – Outright Monetary Transactions (OMT) announced in 2012, but never implemented, and the Public Sector Purchase Programme (PSPP) launched in 2015 – have been legally challenged in Germany. The Court of Justice of the EU (CJEU), which was consulted in both cases, considered that asset purchases are a legitimate tool of the ECB as long as there are “sufficient safeguards”. The CJEU considered that the safeguards present in OMT and in PSPP ensured that the Treaties were respected. The safeguards were: no certainty about ECB buying and holdings, no disincentive for sound fiscal policy, no selective purchases, stringent eligibility criteria for the selection of assets, temporary and limited nature of the programme, and purchase limits (CJEU, 2015 and 2018).

What does that mean for the PEPP? Does the new programme include sufficient safeguards? The technical details of the PEPP are actually quite similar to the PSPP and it thus fulfils mechanically most of the criteria listed above. However, the one notable difference is that, to be credible in the current dire situation and to have enough flexibility and possibly increase significantly the volume of asset purchases in the next months, the ECB announced in the PEPP legal act that the programme would not be subject to its self-imposed 33 percent issuer limit.

Could that make the PEPP illegal in the eyes of the EU Court? In our view, relaxing the 33 percent limit should be considered legal by the CJEU. As noted by Grund (2020), in its judgement on the PSPP (CJEU, 2018) the EU Court did not prescribe a specific share for the purchase limits. In fact, it seemed to consider that, in theory, the relevant limit of the ECB’s public-sector purchase programme compatible with the EU Treaty is not to buy all the bonds issued. The ruling stated that the European System of Central Banks (ESCB) is “not permitted to buy either all the bonds issued by such an issuer or the entirety of a given issue of those bonds” and that monetary financing is avoided when “a private operator necessarily runs the risk of not being able to resell them to the ESCB on the secondary markets, as a purchase of all the bonds issued is in all cases precluded”. The 33 percent issuer limit was thus seen by the CJEU as a sufficient safeguard, but not as a necessary one, and could thus be relaxed significantly in our view.

However, the current situation has been complicated by the 5 May ruling of the German Constitutional Court (GCC) on the ECB’s PSPP (BVerfG, 2020). The German Court considered that the CJEU did not assess sufficiently well the proportionality of the ECB’s actions. To keep the German Bundesbank participating in the ECB asset purchase programme, the GCC gave three months to the Eurosystem to produce a proportionality assessment justifying that the “economic and fiscal policy effects” of its programme do not outweigh its objectives.

First, from an economic perspective, the German Court’s argument that the ECB has taken insufficient account of the economic effects of the PSPP appears to be relatively weak, given the large number of papers, speeches by ECB’s executive board members and discussions during the Governing Council’s meetings (visible in the accounts of these meetings published by the ECB) dedicated to the effects of its asset purchase programmes since 2015. Moreover, a strict proportionality assessment of the sort requested by the GCC appears to be logically inconsistent with the strict ordering of the objectives of the ECB in the EU Treaties, in which price stability comes first and other goals after, and only as long as they do not affect price stability. This ordering does not allow a trade-off between price stability and other objectives. The fact that quantitative easing might have side effects (in particular on “savers or insurance policy holders” or by “keeping afloat economically unviable companies”, BVerfG,

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8 See Grund (2020) for a detailed analysis.
9 “The consolidated holdings under Article 5 of Decision (EU) 2020/188 of the European Central Bank (ECB/2020/9) should not apply to PEPP holdings” (ECB, 2020b).
10 It is also noteworthy that the OMT programme, which passed the CJEU’s assessment (CJEU, 2015), had no such feature.
Such a proportionality appraisal would imply that the ECB would have to constantly balance price stability with other – potentially conflicting and not well-defined – objectives, exactly the kind of political trade-off that the EU Treaties wanted to take out of the hands of independent unelected policymakers. On the other hand, the interpretation of the proportionality principle by the CJEU is quite different, and in our view more consistent with the ECB’s obligations under the EU Treaties. The CJEU indeed considers that the ECB’s actions would be disproportionate if they were on a scale beyond what is needed to fulfil its mandate (eg sustained monetary easing when price stability is achieved) or if some legal constraints on its action (eg monetary financing) were not respected, but not because a particular interest would not have been taken into account in the ECB’s decision.

More generally, as an EU institution, the limits on the ECB’s actions should be arbitrated by the CJEU and not by national courts, as dictated by Article 267 of the TFEU and Article 35(4) of ESCB statute (see the Annex), and as confirmed by the CJEU (2020) in its reaction to the GCC ruling. The ECB itself is not under the jurisdiction of the German Constitutional Court, and should not comply directly in order to avoid setting a dangerous precedent. However, the German Constitutional Court ruling puts the Bundesbank in a very delicate position as it is legally obliged to apply the ECB Governing Council’s decisions (Article 14.3 of the ESCB statutes) and could be requested to do so by the CJEU (Article 35.6 of the ESCB statutes). But, as a German public institution, it must also respect the rulings of the German Constitutional Court.

Nevertheless, aside from the more general problem that this ruling might pose to the EU legal order, and the principle of supremacy of EU law and of the EU Court of Justice as its sole guardian (which is outside of the scope of this paper), the more direct issue in terms of monetary policy is that the GCC ruling intends to reduce further than the CJEU the ECB’s margin of manoeuvre. In particular, the issuer limit would be more stringent, as the 33 percent limit might no longer be considered as a sufficient condition (as it was for the CJEU), but as a necessary one. Moreover, the GCC also considers that the holding of the bonds purchased by the ECB can only be temporary, in order to respect the prohibition of monetary financing.

The legal situation is unfolding at time of writing and it is difficult to predict how it will be resolved. However, if the ECB were to abide by the more stringent rules dictated by the GCC, it would make it more difficult for the ECB to fulfil both its primary mandate and secondary objectives. In particular, we believe that it is crucial for the ECB to be able to avoid sovereign liquidity crises in stress periods to ensure financial stability and thus price stability (as this is necessary to maintain a homogenous transmission of monetary policy through the whole euro area).

The GCC ruling applies only to the PSPP and not to the PEPP, which was not the object of the case. But the principles applied to the PSPP in the ruling would certainly apply to the PEPP if it was challenged in courts and if the GCC had to reach a verdict about it, which is likely to be the case in the future.

More importantly, the GCC ruling also highlights a more fundamental problem of the euro architecture: two decades after the ECB was created, there is still some uncertainty about what the central bank is allowed or not allowed to do to fulfil its mandate. This is damaging...
because this reduces the credibility of its policies (and in the current situation of the PEPP) in the eyes of the markets. This could lead to the re-emergence of bad self-fulfilling equilibria in euro-area sovereign bond markets, similar to what happened during the euro crisis before the ECB's OMT was established.

3 Could current ECB's actions endanger price stability in the future?

The ECB's major increase in the monetary base (similarly to other major central banks around the world) has raised fears about a future acceleration of inflation. As discussed in section 2, this will probably not be the case in the short-term, during which deflationary forces will dominate. However, some fear that it could be a risk in the medium-term as the economy picks up, especially if the ECB decides to keep the assets purchased on its balance-sheet for a long period, to avoid introducing too much volatility into euro-area sovereign debt markets. In fact, the debate on the size of the ECB's balance sheet and the potential risks associated with a large balance sheet when the economy recovers is not new and pre-dates the COVID-19 crisis (Claeys and Demertzis, 2017).

Will a larger central bank balance sheet inevitably result in higher inflation in the long run?

The most intuitive argument brought forward against having a large balance sheet is the classical monetarist argument. A high level of central bank liquidity could result in rapid credit creation by the banking sector and ultimately in an acceleration of inflation above target, which would endanger the price-stability mandate of the ECB.

In theory, according to the money multiplier principle, the relationship between the central bank’s monetary base (M0) and the broad monetary aggregate (M3) should be relatively stable, because holding more reserves should enable banks to provide more loans to firms and households, which should in turn boost inflation (according to the quantity theory of money).

However, empirically, the money multiplier is not a mechanical relationship and has not been stable over time. In particular, since 2007 and the significant injections of liquidity into the system by the ECB, first through its refinancing operations and later through its asset purchases, the multiplier has fallen considerably, with the two variables clearly decoupling. The increase in M0 during the crisis has not led to a proportional increase in M3, nor has the ECB's 2012 decision to divide by two the reserve requirements led to a doubling of broad money through a quick expansion of credit in the euro area.

The causal relationship between the monetary base and broad monetary aggregates is often misunderstood. As explained by the ECB (2017), the increased provision of central bank reserves before 2007 was in fact demand-driven and mirrored the increase in broad money because of the rise in the supply of credit to the non-financial sector that was taking place at the time. The increase in M0 after 2007 was of a different nature. From 2007 to 2012 it was related to an increase in banks’ demands for reserves in refinancing operations, not because they were increasing credit (quite the opposite), but because they were seeking to insure themselves against liquidity shortfalls when short-term money markets were dysfunctional.

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16 The creation of an ad-hoc programme - the PEPP - to purchase assets during the pandemic instead of using an existing instrument such as the PSPP, opens up the possibility of distinguishing them clearly from the assets previously purchased and rolling it over indefinitely if necessary.
After asset purchases began and expanded greatly in 2015, with the inclusion of sovereign assets, the increase in base money was entirely supply-driven and induced mechanically by the creation of reserves by the ECB to pay for its asset purchases. In such a scenario, minimum requirements are not binding and increasing the reserves does not steer credit automatically. In the end, trying to increase credit by increasing $M_0$ could be seen as ‘pushing on a string’ because the money multiplier is a mathematical inequality – i.e. a limit on money creation – not an equality.

In fact, QE does not work through the money multiplier channel but through other indirect channels (such as portfolio rebalancing, wealth effects, signalling effects or the easing of financing conditions through a flattening of the yield curve). This explains to a great extent the smaller effect on inflation than some predicted when such programmes were first launched a decade ago. In any case, if really needed, in a strong upturn, the ECB could reduce the size of its balance sheet by reducing the volume of refinancing operations, which still represent a major share of its assets (Figure 1). In addition, even though they have not been deployed to this end in recent decades, reserve requirements could also be used to avoid a quick expansion of credit if they become binding (rationing reserves could be seen as ‘pulling on a string’). The ECB could thus increase minimum reserve requirements to drain excess reserves and provide a disincentive to deter money creation by banks.

However, in practice, in modern economies credit creation by banks is mainly determined by the level of interest rates and the corresponding demand for loans from firms and households, the credit risk assessment of banks, their financial health and the prudential regulation affecting them. Overall, reserves play a marginal, if any, role. Therefore, a high level of liquidity should not prevent the ECB from influencing credit creation or from tightening its policy if required by the inflation outlook, as long as the ECB retains control over short-term interest rates and is able to influence the benchmark risk-free yield curve.

**Will the ECB's current actions prevent it from raising rates in the future if needed?**

The most relevant question is thus whether the ECB can control short-term market rates with a large balance sheet. In particular, the question is whether today’s ECB decisions could constrain its ability to raise rates if inflation surges in the future. This could happen not necessarily because of the increase in the monetary base during the crisis itself, but for other reasons, including possible structural changes induced by the pandemic, such as deglobalisation, which, if it were to happen, could lead to higher prices and lower productivity in the medium term.

Before 2007 the ECB controlled the short-term (EONIA) rate through its variable-rate fixed-volume refinancing operations (weekly MRO and monthly 3-month LTRO), the corridor rates of its deposit and marginal lending facilities, a relatively small balance sheet and reserve requirements for banks at 2 percent. This was a very simple and efficient operational framework in which the interbank rate fluctuated very close to the MRO rate, the ECB’s main instrument at the time. However, a large balance sheet prevents the ECB from conducting monetary policy in the same way. The existence of excess liquidity reduces the influence of

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18 It is also important to realise that if the ECB were to decide to keep the bonds purchased until maturity, or even if they were to decide to roll over the current purchases indefinitely, current excess liquidity would gradually be absorbed by the growth of currency in circulation and reserve requirements that increase mechanically with the size of economy.

19 As explained in ECB (2011), in the pre-GFC operational framework, the role of the ECB’s reserve requirements was to contribute to the creation of a structural liquidity shortage vis-à-vis the central bank in order to push the banks to participate in the ECB’s main refinancing operations and control better the interest rate inside the corridor of ECB rate and bring it closer to the MRO rate.

20 Other possibilities for draining liquidity from the system that could be considered by the ECB include using reverse repo operations or issuing ECB securities that would be sold to the banks via weekly tenders.
MROs on the EONIA rate. For banks to bid for a rate near the MRO rate, it is necessary for the banking system to have a liquidity deficit relative to the central bank. Otherwise banks can just use their own reserves to fulfill their reserve requirements and the interbank market rate will clear at a level close to the deposit facility rate.

If excess liquidity becomes a permanent feature of the system, the ECB would need to continue using the deposit rate (ie the rate paid on excess reserves) as its main tool to ensure that the monetary policy stance is correctly transmitted to the economy through short-term interest rates. But what really matters is that the ECB controls the benchmark short-term market rate (in particular the €STR, which has recently replaced the EONIA as the short-term interest rate benchmark), not the way it does it.

However, a potential side effect of increasing its deposit rate while having a large balance sheet and a lot of excess liquidity, is that the increase could reduce the ECB’s profits and increase the risk of financial losses, as highlighted recently by Blanchard and Pisani-Ferry (2020). This will happen if the central bank holds a large portfolio of long-term, low-yielding assets, while its liabilities are short-term and remunerated (which is the case for reserves) and the interest rate paid on these liabilities is increasing\textsuperscript{21}. Even though central banks are not profit-maximising institutions, positive profits ensure the financial independence of central banks and facilitate their operational independence (Sims, 2016) from a political perspective\textsuperscript{22}.

Nevertheless, central-bank losses should only be a transitional problem during the interest rate ‘normalisation’ because in the long run, if the central bank were to decide to maintain permanently a large balance sheet by reinvesting the principal from maturing assets in new bonds, these assets would benefit from higher yields so there should be a positive spread between medium to long-term bonds on its asset side and the short-term reserves on its liability side. In addition, in the short-run (and actually during the whole period preceding the rate increase, which could last a while), the Eurosystem would also make significant profits as a result of the current purchases as the assets being purchased have higher returns than the deposit rate applied to the reserves created to make the purchases. Given the Eurosystem’s usual practice of setting aside significant buffers, and more generally of smoothing its distributable profits over time thanks to its accounting practices to ensure they are always positive and relatively steady (documented by Chiaccio et al, 2018, and visible in Figure 3 on the next page), this could allow the ECB to avoid reporting actual financial losses during the transition, which would limit the risks to its independence.

As a last resort, a simple solution to avoid central-bank losses altogether during the transition could be to increase the banks’ reserve requirements (to make liquidity scarce again) and to stop remunerating these required reserves. The drawback would be that the opportunity cost for banks could be significant. Ultimately the shortfall for banks resulting from such a measure could be higher than the cost of the negative deposit rate currently, but would have the advantage of being counter-cyclical: when policy rates are high the opportunity cost from holding high, unremunerated required reserves would be high, but when rates fall to 0, the cost would be nil. This would not be unprecedented – the Fed did not remunerate required reserves until October 2008.

\textsuperscript{21} By contrast, when a central bank has a small balance sheet, the liability side is predominantly composed of non-interest-bearing cash and required reserves (remunerated at the MRO rate), while on the asset side (as Figure 1 shows), as liquidity is scarce, commercial banks need to participate in refinancing operations for which they will pay interest (approximately the MRO rate). The difference between the two leads to positive seigniorage profits for the central banks.

\textsuperscript{22} The net profits of central banks are generally transferred to governments (see Chiaccio et al, 2018, for the details on how this is done in the euro area). Politicians might not like policies that result in lower or even no transfers from the central bank to the budget for a long period of time (even if these transfers are quite marginal compared to the overall size of budgets), which could potentially endanger central bank independence and/or reduce their ability to use unconventional monetary policies in the future.
An alternative scenario: the possibility of a low-inflation/low-interest rate environment for a long period

Finally, it is also important to consider another scenario: it is perfectly possible that inflation will remain very low for many years for pre-existing structural reasons, which could even be amplified by the crisis. In that case, the ECB would not face the problems described above as it would have to leave its rates at a low level and keep its balance sheet large for a long time to fulfil its price-stability mandate.

23 This would nevertheless create other problems for the ECB as this would drastically reduce its room for manoeuvre to use the interest rate as a main instrument in the case of future negative shocks (see details in Claeys et al., 2019).

For governments, on the contrary, this scenario could help with debt sustainability and increase the fiscal space to mitigate the consequences of the pandemic and boost the recovery.
Jordà et al (2020) found some evidence that pandemics have long-lasting effects. In particular, they show that, following previous pandemics, the natural rate of interest – the interest rate compatible with low and stable inflation and an economy at its potential – tended to decline for decades, reaching its low point about 20 years after the health crisis, with the natural rate around 150 basis points lower than if the pandemic had not taken place. They also show that pandemics have very different macroeconomic effects to wars which tend to increase the natural rate.

It is of course possible that the COVID-19 pandemic will prove to be radically different to previous pandemics, and that its macroeconomic effects will be different. However, the view that the fall in the neutral interest rate is going to be long-lasting appears to be supported by the fall in expectations for short-term interest rates since the beginning of the crisis. Markets now expect overnight rates to stay negative until 2030 (Figure 4). Combined with the long-run inflation expectations shown in Figure 1, this implies that markets now believe that in the long-run (ie in equilibrium), the real interest rate is negative, as expected inflation is around 1 percent and the expected nominal rate is around 0 percent in 2030.

4 Concluding remarks: how can the ECB deal with trade-offs when they arise?

It appears from our discussion that accelerating inflation is not an immediate threat, and that in any case the ECB would have enough tools at its disposal to counter a surge in inflation if it were to happen. Our discussion suggests that the ECB’s current actions and the increase in the size of its balance sheet, even if it proves permanent, do not restrict significantly its ability to fulfil its price-stability mandate in the future. In addition, given the severity of the shock, there seems to be no trade-off between the ECB’s primary mandate and its secondary macroeconomic objectives, which all point towards putting in place a very accommodative monetary policy at the current juncture.

In the long term, however, a potential threat for inflation-targeting central banks is the risk of a harmful form of fiscal dominance, a situation in which the central bank would be forced by the government to change its reaction function and accept to inflate the government debt away at the expense of its price-stability objective. This could destroy the credibility of the central bank and of the money which value it defends. We believe this outcome is unlikely in the euro area given the current institutional framework, the independence of the ECB (ensured by article 130 of TFEU, Annex) and its clear Treaty-based mandate.

On a more general note, and moving away from the current crisis, it is nevertheless true that the EU Treaties offer some degree of discretion to the ECB, in particular over how to deal with secondary objectives to support EU goals, as long as they are compatible with price stability. As we have seen, most of the time, this is not problematic when there is a ‘divine coincidence’ and all objectives can be served by the same policies. But what should the ECB do when there is a trade-off between different objectives?

To take an example that was at the heart of the pre-COVID-19-crisis debate, this problem could arise if the ECB had to choose between supporting the EU in pursuing its ‘full employment’ goal and its ‘quality of the environment’ goal. A solution, in that particular case, could be for the ECB to use different tools or to tweak its tools slightly so it can pursue apparently conflicting goals. For instance, Schoenmaker (2019) recommended that the ECB

24 Keeping the assets purchased during the crisis on the ECB’s balance sheet for a long period to avoid destabilising euro-area sovereign debt markets could be considered as a benign (welfare-improving) form of fiscal dominance, as long as price stability is not threatened.
participate in the EU fight against climate change by imposing higher haircuts on brown assets when they are taken as collateral by the ECB in its refinancing operations, and by over-allocating green assets in its corporate bond purchases (when these are needed to fulfil its price-stability mandate) in order to internalise negative externalities from brown investments (which makes sense for a public institution).

Using multiple tools to achieve multiple objectives can also sometimes be used to achieve primary and secondary objectives at the same time. For instance, if neutral rates have really fallen to low or even negative levels, this will force central banks to keep their rates low for a very long time to fulfil their price-stability mandates. However, this could, in turn, lead to the rise of financial stability risks. That is why central banks would need to use other tools to prevent these risks from materialising. In that case, supervision and macro-prudential policies will be crucial to achieve financial stability.

But what if using different tools to achieve different objectives is not possible? Then, who should rank the objectives of the ECB? Dealing with difficult trade-offs is essentially a political task and should, as much as possible, be taken out of the hands of unelected policymakers such as central bankers. That is why, in these particular cases, the ECB should seek some guidance from elected policymakers. The ECB is primarily accountable to the European Parliament as the representative of EU citizens, but also has to report regularly to the Council of the EU, which represents Member State governments. These two European institutions could thus play a role in establishing a ranking of objectives to guide the ECB. The European Parliament could use its yearly report on the ECB annual report to do that, while the Council could issue clear statements to indicate which secondary objectives are the most relevant for the EU in a particular situation.

References


Excerpts from relevant articles of the EU Treaties

- Article 3 (3) of the TEU: The Union shall establish an internal market. It shall work for the sustainable development of Europe based on balanced economic growth and price stability, a highly competitive social market economy, aiming at full employment and social progress, and a high level of protection and improvement of the quality of the environment. It shall promote scientific and technological advance. It shall combat social exclusion and discrimination, and shall promote social justice and protection, equality between women and men, solidarity between generations and protection of the rights of the child. It shall promote economic, social and territorial cohesion, and solidarity among Member States. It shall respect its rich cultural and linguistic diversity, and shall ensure that Europe’s cultural heritage is safeguarded and enhanced.

- Article 5 (1) of the TEU: The limits of Union competences are governed by the principle of conferral. The use of Union competences is governed by the principles of subsidiarity and proportionality.

- Article 5 (2) of the TEU: Under the principle of conferral, the Union shall act only within the limits of the competences conferred upon it by the Member States in the Treaties to attain the objectives set out therein. Competences not conferred upon the Union in the Treaties remain with the Member States.

- Article 5 (3) of the TEU: Under the principle of subsidiarity, in areas which do not fall within its exclusive competence, the Union shall act only if and in so far as the objectives of the proposed action cannot be sufficiently achieved by the Member States, either at central level or at regional and local level, but can rather, by reason of the scale or effects of the proposed action, be better achieved at Union level. The institutions of the Union shall apply the principle of subsidiarity as laid down in the Protocol on the application of the principles of subsidiarity and proportionality. National Parliaments ensure compliance with the principle of subsidiarity in accordance with the procedure set out in that Protocol.

- Article 5 (4) of the TEU: Under the principle of proportionality, the content and form of Union action shall not exceed what is necessary to achieve the objectives of the Treaties. The institutions of the Union shall apply the principle of proportionality as laid down in the Protocol on the application of the principles of subsidiarity and proportionality.

- Article 123 (1) of TFEU: Overdraft facilities or any other type of credit facility with the European Central Bank or with the central banks of the Member States (hereinafter referred to as “national central banks”) in favour of Union institutions, bodies, offices or agencies, central governments, regional, local or other public authorities, other bodies governed by public law, or public undertakings of Member States shall be prohibited, as shall the purchase directly from them by the European Central Bank or national central banks of debt instruments.

- Article 125 (2) of the TFEU: The Council, on a proposal from the Commission and after consulting the European Parliament, may, as required, specify definitions for the application of the prohibitions referred to in Articles 123 and 124 and in this Article.

- Article 127 (1) of TFEU: The primary objective of the European System of Central Banks (hereinafter referred to as “the ESCB”) shall be to maintain price stability. Without prejudice to the objective of price stability, the ESCB shall support the general economic policies in the Union with a view to contributing to the achievement of the objectives of the Union as laid down in Article 3 of the Treaty on European Union. The ESCB shall act in accordance with the principle of an open market economy with free competition, favouring an efficient allocation of resources, and in compliance with the principles set out in Article 119.

- Article 127 (2) of TFEU: The basic tasks to be carried out through the ESCB shall be [...] to promote the smooth operation of payment systems.
• Article 127 (5) of TFEU: The ESCB shall contribute to the smooth conduct of policies pursued by the competent authorities relating to the prudential supervision of credit institutions and the stability of the financial system.

• Article 127 (6) of TFEU: The Council, acting by means of regulations in accordance with a special legislative procedure, may unanimously, and after consulting the European Parliament and the European Central Bank, confer specific tasks upon the European Central Bank concerning policies relating to the prudential supervision of credit institutions and other financial institutions with the exception of insurance undertakings.

• Article 130 of TFEU: When exercising the powers and carrying out the tasks and duties conferred upon them by the Treaties and the Statute of the ESCB and of the ECB, neither the European Central Bank, nor a national central bank, nor any member of their decision-making bodies shall seek or take instructions from Union institutions, bodies, offices or agencies, from any government of a Member State or from any other body. The Union institutions, bodies, offices or agencies and the governments of the Member States undertake to respect this principle and not to seek to influence the members of the decision-making bodies of the European Central Bank or of the national central banks in the performance of their tasks.

• Article 267 of the TFEU: The Court of Justice of the European Union shall have jurisdiction to give preliminary rulings concerning: (a) the interpretation of the Treaties; (b) the validity and interpretation of acts of the institutions, bodies, offices or agencies of the Union; Where such a question is raised before any court or tribunal of a Member State, that court or tribunal may, if it considers that a decision on the question is necessary to enable it to give judgment, request the Court to give a ruling thereon. Where any such question is raised in a case pending before a court or tribunal of a Member State against whose decisions there is no judicial remedy under national law, that court or tribunal shall bring the matter before the Court. If such a question is raised in a case pending before a court or tribunal of a Member State with regard to a person in custody, the Court of Justice of the European Union shall act with the minimum of delay.

• Article 284 (3) of TFEU: The European Central Bank shall address an annual report on the activities of the ESCB and on the monetary policy of both the previous and current year to the European Parliament, the Council and the Commission, and also to the European Council. The President of the European Central Bank shall present this report to the Council and to the European Parliament, which may hold a general debate on that basis. The President of the European Central Bank and the other members of the Executive Board may, at the request of the European Parliament or on their own initiative, be heard by the competent committees of the European Parliament.

• Article 14 (3) of the Statute of The European System of Central Banks and of the European Central Bank: The national central banks are an integral part of the ESCB and shall act in accordance with the guidelines and instructions of the ECB. The Governing Council shall take the necessary steps to ensure compliance with the guidelines and instructions of the ECB, and shall require that any necessary information be given to it.

• Article 35 (4) of the Statute of The European System of Central Banks and of the European Central Bank: The Court of Justice of the European Union shall have jurisdiction to give judgment pursuant to any arbitration clause contained in a contract concluded by or on behalf of the ECB, whether that contract be governed by public or private law.

• Article 35 (6) of the Statute of The European System of Central Banks and of the European Central Bank: The Court of Justice of the European Union shall have jurisdiction in disputes concerning the fulfilment by a national central bank of obligations under the Treaties and this Statute. If the ECB considers that a national central bank has failed to fulfil an obligation under the Treaties and this Statute, it shall deliver a reasoned opinion on the matter after giving the national central bank concerned the opportunity to submit its observations. If the national central bank concerned does not comply with the opinion within the period laid down by the ECB, the latter may bring the matter before the Court of Justice of the European Union.