

The ECB's Monetary Policy Strategy: Lessons from the Financial Crisis, Debt Crisis and Coronavirus Crisis*

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The monetary policy framework of the European Central Bank (ECB) has developed a lot during the last two decades as the ECB has made significant changes in response to the 2008-2009 global financial crisis, the 2010-2012 European sovereign debt crisis and the recent coronavirus crisis. To pursue its primary objective of price stability over the medium term, the ECB uses a 'two-pillar strategy' based on economic and monetary analysis. Its monetary policy stance used to be indicated by the interest rate on main refinancing operations and implemented through liquidity operations. However, the use of large-scale liquidity operations during the global financial crisis has affected the de facto monetary policy stance. And the communication of monetary policy is further complicated by a plethora of large-scale asset purchase programs.¹ So, a review of the ECB's monetary policy strategy is overdue. After considering lessons from the financial crisis, sovereign debt crisis and coronavirus crisis, the ECB's monetary policy transparency and strategy are reviewed and recommendations for improvements are provided.

Lessons from the Financial Crisis

The 2008-2009 global financial crisis has taught central banks the crucial lesson that price stability does not guarantee financial stability. Although the ECB had mostly achieved low inflation close to 2% until 2007, this was followed by an episode of serious financial instability.

When the US subprime mortgage crisis led to turmoil in interbank markets on 9 August 2007, the ECB swiftly responded by conducting liquidity injections. It repeatedly stated its aim to keep very short-term money market rates close to the interest rate on main refinancing operations.² The latter "constitutes the main signal of the monetary policy stance", so it is important that "very short-term market interest rates remain appropriately aligned with the policy stance signalled by the Governing Council", because an "excessively wide or volatile spread would undermine the clarity of the signal provided by the [main refinancing rate] and, ultimately, the credibility of the operational framework in its implementation of Governing

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¹ This includes the Securities Markets Program (SMP); Covered Bond Purchase Programs (CBPP1, CBPP2); Outright Monetary Transactions (OMT); Asset Purchase Program (APP), consisting of Public Sector Purchase Program (PSPP), Corporate Sector Purchase Program (CSPP), Asset-Backed Securities Purchase Program (ABSPP) and CBPP3; and the Pandemic Emergency Purchase Program (PEPP).

² See the ECB's ad hoc communications related to monetary policy implementation, including its general announcements on liquidity policy on 8 October and 30 November 2007, and also on 8 October 2008.

Council decisions” (ECB 2008, p. 69). It was also emphasized that these liquidity operations are conducted to preserve the proper functioning of money markets, but do not influence the determination of the monetary policy stance.³

Following the collapse of Lehman Brothers on 15 September 2008, the ECB continued to provide additional liquidity and reduced the main refinancing rate in several steps (of mostly 50 basis points) from 4.25% in early October 2008 to 1% in May 2009. But its strategy was quite different compared to other major central banks, such as the US Federal Reserve and Bank of England. The ECB did not engage in ‘quantitative easing’ (QE) through large-scale asset purchases. Instead, it pursued balance sheet policies by engaging in large-scale liquidity operations through supplementary fixed-rate, full-allotment Longer-Term Refinancing Operations (LTROs).

These LTROs allow the ECB to quickly provide cheap and abundant liquidity to the banking sector on demand.⁴ Their fixed horizon makes them very suitable for injecting temporary liquidity, while they also allow for a gradual and natural unwinding through shorter-term roll-overs or early repayments.⁵ Thus, the amount of liquidity provided (and the size of the ECB’s balance sheet) adjusts in line with the needs of the banking system.

However, a problem with providing a lot of liquidity is that banks may not use it as intended. It may not boost bank lending or otherwise benefit the real economy. In fact, it could end up increasing financial fragility as banks use it to buy higher-yielding, riskier assets, such as euro-area periphery sovereign debt. So, when the debt crisis hit, the fallout was no longer confined to the euro area periphery, but it had become a systemic problem for the euro area, which greatly complicated the ECB’s response.

The ECB has attempted to deal with this pernicious problem by introducing Targeted LTROs (TLTROs), in which the amount of long-term funding available to banks is tied to their lending to the euro area non-financial private sector (excluding loans for house purchases), with more generous conditions offered to banks that exceed their net lending benchmarks.⁶ The TLTROs provide incentives for banks to get cheap liquidity to boost lending and thereby provide greater monetary stimulus, with interest rates for banks as low as 50 basis points below the rate on the ECB’s standing deposit facility. But TLTROs may induce banks to engage in risky lending that results in non-performing loans, so financial stability concerns remain.

Another problem caused by the large amount of liquidity provided by fixed-rate full-allotment LTROs (and since 2015 QE) is that it has pushed the euro area overnight interbank rate well below the ECB’s main refinancing rate, close to the deposit facility rate. As a result, since 2009 the main refinancing rate has no longer been a good indicator of the ECB’s monetary policy stance and very short-term money market rates have mostly been substantially below it. Thus, the ECB has effectively engaged in ‘monetary policy easing by stealth’ (see also Geraats 2011),

³ See the introductory speech by ECB President Trichet at the hearing of the Economic and Monetary Affairs Committee of the European Parliament in Brussels on 26 March 2008.

⁴ For instance, the one-year LTRO of June 2009 and the three-year LTROs of December 2011 and February 2012 resulted in allotments of €442bn, €489bn and €530bn, respectively.

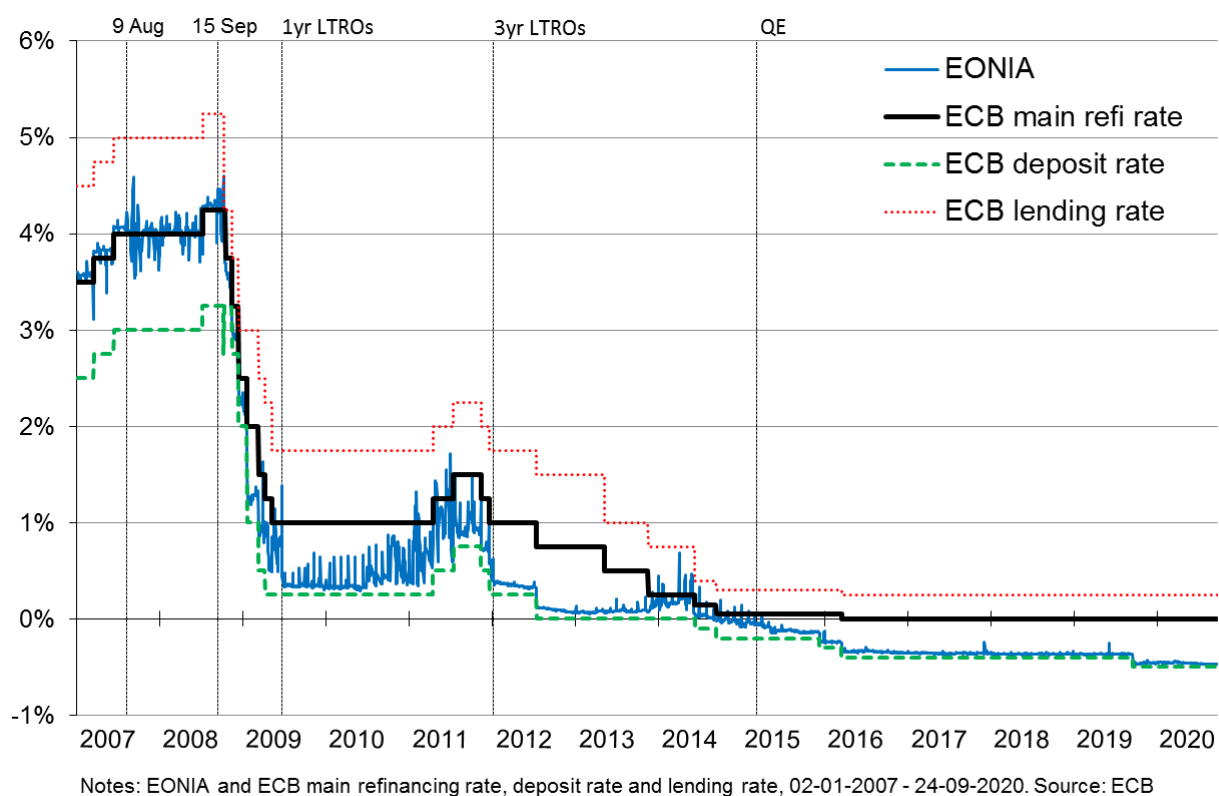
⁵ The ECB has often rolled over its LTROs and allowed for early repayments of the three-year LTROs (after one year) and all the TLTROs (I, II and III, after two years).

⁶ The ECB has conducted three rounds of TLTROs, starting in September 2014, June 2016 and September 2019, each with different conditions, including a maturity up to four years.

and the ECB's liquidity operations to preserve the proper functioning of money markets have significantly influenced its de facto monetary policy stance.

The ECB's monetary policy easing by stealth is illustrated in Figure 1, which shows the ECB's key interest rates, namely the main refinancing (refi) rate and the interest rates on its standing lending and deposit facilities. The latter form an interest rate 'corridor' for the euro area overnight interbank rate, EONIA, which is an indicator of the de facto monetary policy stance. Before the financial crisis, the main refinancing rate was clearly providing a good signal of the monetary policy stance, as EONIA fluctuated around it, although fluctuations became much larger after 9 August 2007 when money market turmoil broke out. But following the collapse of Lehman Brothers on 15 September 2008, there has been a persistent discrepancy, with EONIA generally far below the main refinancing rate. After the introduction of one-year LTROs in June 2009 and three-year LTROs in December 2011, EONIA mostly stayed close to the ECB's deposit rate, except for a period of volatility when the ECB started to phase out its 'enhanced credit support' and euro area sovereign debt turmoil started developing.

Figure 1: ECB Monetary Policy Easing by Stealth



In the aftermath of the global financial crisis, the ECB was often criticized for not providing further monetary easing as it kept the main refinancing rate at 1% for nearly two years. However, euro area monetary conditions were much looser as the euro overnight interbank rate was around 0.30% until mid-2010, very close to the ECB's deposit rate of 0.25%. In this sense, the ECB provided more monetary easing than the Bank of England, as the sterling overnight rate was very close to Bank Rate at 0.50%. So, this criticism of the ECB was unfair, but it deserves to be criticized for its policy opacity.

This lack of transparency about the ECB's monetary policy stance following the global financial crisis is problematic for public communications. For instance, Figure 1 shows that the reductions in the main refinancing rate in May and November 2013, when the deposit rate was left unchanged, did not lead to a loosening of monetary conditions through lower overnight interbank rates. In contrast, when the ECB cut its deposit rate in September 2019, when the main refinancing rate was kept unchanged, it led to a loosening of monetary conditions as EONIA declined as well. Unfortunately, the terminology 'main refinancing rate' gives the misleading impression that it is the ECB's main policy rate. However, that is no longer the case and the ECB does little to dispel this misinterpretation in its monetary policy communications.

Although EONIA fluctuated closer to the main refinancing rate during 2014, Figure 1 shows that following the adoption of 'quantitative easing' (QE) through the ECB's Asset Purchase Program (APP) in March 2015, the euro area overnight rate has been pushed down to the floor of the interest rate 'corridor' and has remained very close to the ECB's deposit rate. As a result, the ECB has effectively operated a so-called 'floor system' since the financial crisis because of the abundant liquidity it has provided through its fixed-rate full-allotment large-scale liquidity operations (LTROs) and more recently its large-scale asset purchases (QE). Although this is well-known among ECB watchers and monetary specialists, it could easily confuse others, including the general public, who are more likely to focus on the main refinancing rate instead. So, the ECB should consider the explicit adoption a floor system, or at least be transparent about which of its 'key interest rates' is actually the main policy rate that signals the ECB's monetary policy stance.

Negative Interest Rates

Since June 2014, the ECB has had a negative deposit rate. Although this led to slightly negative overnight interbank rates during the last months of 2014, negative short-term money market rates have become prevalent in the eurozone since 2015.

Negative yields on euro area sovereign debt have also been driven by the ECB's Asset Purchase Program (APP), which started in March 2015.⁷ Since 2015, negative yields on government bonds have gradually become common in the eurozone, initially only for short-term maturities and core eurozone countries, but they have subsequently extended their reach to longer-term maturities and periphery countries. For instance, at the end of September 2020 the yields on five-year and ten-year German government bonds were around -0.7% and -0.5%, respectively. The latter is the same as the ECB deposit facility rate; using the expectations theory of the term structure, this suggests financial markets are expecting this negative deposit rate to prevail for the next 10 years. The current prevalence of negative bond yields in Europe is truly remarkable. Textbooks used to state that nominal interest rates cannot be negative. However, the notion of a zero lower bound on nominal interest rates has been resoundingly refuted by the facts.⁸

A benefit of negative deposit rates and yields is that they reduce appreciation pressure on the currency, which can be very useful for small open economies.⁹ In addition, negative yields provide relief for governments because they reduce the interest rate burden of bonds and make

⁷ Around 80% of APP purchases have been part of the ECB's Public Sector Purchase Program (PSPP), which includes euro area government bonds.

⁸ The market value of debt with a negative yield hit a record high of more than \$17tn in early November 2020, amounting to just over a quarter of the world's investment-grade debt (Stubbington, 2020).

⁹ Switzerland and Denmark are good examples in this respect.

high levels of debt more sustainable. However, that could also result in moral hazard and reduce pressure on governments to maintain fiscal discipline, so it is a mixed blessing.

Another problem with negative rates is that they are effectively a tax on the banking system. Banks must hold reserve balances at the central bank to conduct their business. The ECB's large-scale liquidity operations and asset purchases imply that euro area banks have very large reserve balances. Negative deposit rates effectively impose a tax on them, which is likely to weaken the banking system, especially in the aftermath of a financial crisis. As a result, negative rates could increase financial fragility for banks. This problem could be mitigated by reducing the average 'tax' through tiered rates, which the ECB announced in September 2019.

A more fundamental problem is that reducing interest rates to negative levels may not boost bank lending and thus stimulate the economy due to the existence of a 'reversal interest rate' (Brunnermeier and Koby, 2018). Lower rates compress loan interest rate margins and could reduce banks' net worth, so banks curtail their lending when interest rates fall below their 'reversal rates'. Although there is still a lot of uncertainty about its level, the possible existence of a positive reversal rate is a serious complication for central banks pursuing negative rates.

Furthermore, negative yields can endanger financial stability. Investors are likely to buy riskier assets in their 'search for yield'. In addition, it is really peculiar that investors are currently buying bonds with negative yields. It means that the bond price is so high that investors who hold the bond to maturity are sure to receive less in coupon and redemption payments than the price they paid for the bond. Nevertheless, banks and institutional investors (such as pension funds) may be forced to purchase bonds with negative yields to meet regulatory requirements, so negative yields basically impose a tax on them. Another reason for buying bonds with a negative yield is that investors expect bond prices to rise even further, so that they will be able to sell their bonds to somebody else with a positive expected return. Usually, it would be extraordinary to expect prices to rise further for an asset with a negative payoff – that makes it an asset price bubble. But we are living in unusual times in which there is a very large buyer in the form of a central bank engaging in large-scale asset purchases. That is perpetuating what is essentially a bond market bubble. The problem with bubbles, however, is that they usually don't gradually deflate, but tend to burst as they suddenly collapse.

So, the process of unwinding negative rates and large-scale asset purchases, including the ECB's Asset Purchase Program (APP) and its recent Pandemic Emergency Purchase Program (PEPP), needs to be done extremely carefully, because there is a serious risk that it will all abruptly unravel and bond yields will suddenly surge, which could kill an incipient recovery.

As a result, negative rates need to be used with great care and effective macroprudential policy is required to mitigate the risks of negative yields.

Lessons from the Sovereign Debt Crisis

The 2010-2012 euro area sovereign debt crisis has taught the ECB the crucial lesson that the euro area is definitely not an 'optimum currency area'. The eurozone is an imperfect monetary union of heterogeneous countries with a 'single market' that provides factor mobility in theory, but not in practice (due to cultural and language barriers for workers), and it suffers from highly incomplete risk sharing across countries. So, countries require sufficient fiscal flexibility to stabilize asymmetric, country-specific shocks, and adequate fiscal space for public investment to allow them to pursue structural improvements and reforms.

Furthermore, the sovereign debt crisis showed that serious problems can arise for a monetary union that lacks a proper banking union. The global financial crisis had left many banks nursing large losses, so national governments were forced to intervene to bail out banks, which came at a very high fiscal cost for some countries and substantially increased their government bond yields. This in turn reduced the value of government bonds held by banks, thus further worsening banks' balance sheets and increasing bailout costs, leading to a vicious circle or 'doom loop'.

Moreover, the European sovereign debt crisis revealed that the eurozone as a multi-country currency union faces financial fragmentation risks due to differences in sovereign debt spreads that are potentially self-fulfilling, making it susceptible to crises.

So, the ECB is the central bank of an incomplete, potentially fragile multi-country monetary union, which makes its job uniquely challenging.

Fortunately, in response to the European sovereign debt crisis, some steps have been taken to address these imperfections and potential weaknesses. The European Union (EU) has strengthened its fiscal policy framework through the Fiscal Compact, which addresses some shortcomings of the Stability and Growth Pact, although there is still much scope for improvement, including more fiscal space for public investment.

In addition, significant progress has been made on a European banking union. So far, it includes the Single Supervisory Mechanism (SSM, since 2014), which makes the ECB the direct prudential supervisor of 'significant' banks; and the Single Resolution Mechanism (SRM, since 2015), which makes the Single Resolution Board responsible for the orderly restructuring of 'significant' failing banks, and gives it access to a Single Resolution Fund that is financed in advance by contributions from banks; with national supervisors and resolution authorities responsible for other banks, based on a single rulebook. However, an important gap remains in the European banking union due to the lack of a European deposit insurance scheme. In addition, the new institutional setup of SSM and SRM is yet to be properly tested in a crisis.

Concerning financial fragmentation risks, the ECB has taken crucial steps to mitigate it. First, at the height of the euro area sovereign debt crisis in July 2012, ECB President Draghi dramatically stated in a speech: "Within our mandate, the ECB is ready to do whatever it takes to preserve the euro. And believe me, it will be enough." (Draghi, 2012) In addition, he made clear that the financial fragmentation that the eurozone was suffering from, which manifested itself in large differences in sovereign debt premia, was increasingly due to the risk of (lack of) convertibility (into the euro, due to a breakup), so these premia fall within the ECB's mandate.

Second, at its September 2012 press conference the ECB announced a framework of Outright Monetary Transactions (OMTs) in secondary markets for euro area sovereign bonds, with potentially unlimited sterilized purchases of shorter-term bonds, subject to strict conditionality.¹⁰ It aims to "preserve the singleness of our monetary policy and to ensure the proper transmission of our policy stance to the real economy throughout the area", and "will enable us to address severe distortions in government bond markets which originate from, in particular, unfounded fears on the part of investors of the reversibility of the euro. Hence, under

¹⁰ More specifically, OMTs are sterilized purchases of sovereign bonds with a maturity of one to three years, with no ex ante quantitative limits, but subject to strict and effective conditionality attached to an appropriate European Financial Stability Facility (EFSF)/European Stability Mechanism (ESM) program (ECB, 2012).

appropriate conditions, we will have a fully effective backstop to avoid destructive scenarios with potentially severe challenges for price stability in the euro area”.¹¹ This serves to clarify that OMTs are within the ECB’s mandate.

President Draghi’s statement and the subsequent announcement of the OMT framework proved so effective at reducing euro area periphery sovereign debt yields that OMTs remain unused! Thus, the ECB learned the incredible power of central bank communications.

But to be effective, it is vital to have a credible backstop and to provide appropriate reassurance. And when poorly phrased, communications can be very damaging. This was shown by ECB President Lagarde’s answer at the ECB press conference of 12 March 2020 in response to a question about potentially activating OMTs: “we are not here to close spreads. This is not the function or the mission of the ECB.” Such a statement is very problematic considering the fragile situation that the eurozone finds itself in as an incomplete multi-country monetary union, especially during a pandemic crisis. President Lagarde tried to contain the damage before it further infected financial markets by stating in a CNBC interview after the press conference that she is “fully committed to avoid any fragmentation in a difficult moment for the euro area. High spreads due to the coronavirus impair the transmission of monetary policy.” In addition, she stated that the flexibility embedded in the APP will be used, and that the additional package that was approved “can be used flexibly to avoid dislocations in bond markets.”¹² It is important to carefully maintain a credible backstop in this way to prevent fragmentation risks from flaring up again.

In addition, the ECB should focus on further improving the fundamentals of the European Economic and Monetary Union (EMU) so that it is better equipped to deal with future crises. This includes:

- Completing the banking union, with a European deposit insurance scheme to complement effective bank supervision and resolution through the SSM and SRM.
- Improving the framework for macroprudential policy, with better analytical tools to assess emerging risks, effective instruments to manage risks, including those associated with prolonged periods of loose monetary policy with negative interest rates, and a robust system to detect and mitigate systemic risks, coordinated by the European Systemic Risk Board (ESRB).
- Reforming the fiscal policy framework so that it offers greater flexibility to engage in macroeconomic stabilization, especially when the monetary policy rate is near its effective lower bound, and provides adequate fiscal space for public investment, to enable structural improvements and reforms.

The ECB routinely comments on fiscal policy and structural reforms in its Introductory Statement to the press conference. But after imploring governments to show fiscal discipline for so long, it appeared that it had been so effective that when the need for expansionary fiscal policy arose in crisis time, countries appeared too afraid to actually do it, leaving ECB monetary policy to do the heavy lifting. So, the ECB would benefit from using its platform to support much needed changes in the fiscal framework that will improve the monetary union.

¹¹ Introductory Statement to the ECB press conference on 6 September 2012.

¹² President Lagarde’s statement in the CNBC interview is - in a highly unusual rectification - included as a footnote to her answer in the transcript for the Q&A session of the ECB press conference of 12 March 2020.

Lessons from the Coronavirus Crisis

The ECB has responded to the eruption of the coronavirus crisis in Spring 2020 by engaging in strong monetary easing measures. With the ECB's main refinancing rate already at 0% and the deposit facility rate at -0.50%, there is little scope for conventional monetary policy stimulus, so the ECB has used large-scale asset purchases and liquidity operations instead. Although the measures decided at its monetary policy meeting of 12 March 2020 were underwhelming,¹³ less than a week later the ECB suddenly announced its Pandemic Emergency Purchase Program (PEPP),¹⁴ consisting of private and public sector securities and an initial 'overall envelope' of €750bn, which was extended to a total of €1,350bn and then €1,850bn on 4 June and 10 December 2020, respectively. In addition, at its monetary policy meeting of 30 April 2020, the ECB decided to introduce a new series of fixed-rate full-allotment, non-targeted Pandemic Emergency Longer-Term Refinancing Operations (PELTROs) to ensure smooth money market conditions during the pandemic period by providing an effective liquidity backstop.

However, monetary policy is poorly equipped to address the coronavirus crisis, which has caused a large negative shock to output and demand due to lockdowns and other restrictions. So, a strong fiscal policy response is vital to support real demand. This is bound to lead to a large increase in fiscal deficits and public debt, exacerbating the very high levels of government debt in some countries.

In addition, companies that are already highly indebted are now forced to take on even more debt to stay afloat. Many of them are unlikely to survive when bills finally come due and debts must be repaid. Although the ECB is currently using TLTROs to stimulate banks to continue their lending, large loan losses are going to be inevitable. As the prudential supervisor of significant banks in the SSM, the ECB may thus have some qualms about banks using ultra cheap TLTROs to make risky loans. This means a delicate balancing act for the ECB in its dual role of monetary policymaker and bank supervisor. With a robust regulatory and supervisory regime, banks should be able to maintain appropriate lending standards and have enough capital to withstand substantial losses due to non-performing loans. So, this will be a useful test of the effectiveness of the SSM, and probably the SRM as well.

The coronavirus crisis is likely to lead to a large deterioration of the balance sheets of many households, firms, banks and governments, thereby increasing financial fragility. So, macroprudential policy is likely needed as well.

In short, the coronavirus crisis requires effective fiscal, monetary, microprudential and macroprudential policies. So, the macroeconomic and new prudential policy frameworks of the eurozone are going to be seriously tested by this crisis.

When it comes to effective macroeconomic policy, it takes two to tango - both fiscal and monetary policy are needed. Hopefully, the ECB President will be able to persuade governments that fiscal policy has to play its part to prevent a prolonged economic slump.

¹³ They included additional LTROs, more favorable terms for TLTRO III, and a 'temporary envelope' of €120bn additional net asset purchases.

¹⁴ "ECB announces €750bn Pandemic Emergency Purchase Programme (PEPP)", ECB press release, 18 March 2020.

ECB Monetary Policy Transparency

Having noted the power of the ECB's communications at the height of the European sovereign debt crisis, we will now discuss the ECB's use of forward guidance and evaluate an important aspect of its monetary policy strategy, which is the transparency of its monetary policymaking.

Although the ECB has always provided a prompt announcement and explanation of its monetary policy decisions, including a press conference, it long remained opaque about its policy inclination, often declaring that it would never precommit. Instead, it used fuzzy guidance in the form of a traffic light system of code-word communications to convey its intentions, using the terms 'monitor (very) closely' and most notably 'strong vigilance' to signal upcoming policy rate hikes (see Geraats, Giavazzi and Wyplosz, 2008, box 6).

In response to the money market turmoil in August 2007 and subsequent financial crisis, however, the ECB regularly provided explicit forward guidance about additional liquidity measures as it often announced its supplementary LTROs with considerable advance notice, which helped to stabilize money market conditions for longer maturities. Likewise, the ECB pre-announced some of its unconventional asset purchase programs several months in advance (including its first covered bond purchase program in 2009 and its asset-backed securities purchase program in 2014), sometimes providing scant details initially.¹⁵ But such announcements could still be useful and help stabilize asset prices before the full modalities of the program are known, as illustrated by President Draghi's statement 'to do whatever it takes'.

For its Asset Purchase Program (APP), which was announced on 22 January 2015, but started in March 2015, the ECB has generally provided explicit calendar-based forward guidance about its intended minimum horizon for monthly asset purchases.

The ECB only started using explicit forward guidance about its key interest rates in July 2013, when it introduced qualitative guidance in its Introductory Statement to the press conference that its key rates are expected "to remain at present or lower levels for an extended period of time". The ECB introduced quantitative forward guidance about its key rates in its monetary policy announcement of July 2016, where it tied the prospect for low rates to the horizon of its net asset purchases, for which it was already providing calendar-based guidance. This was turned into direct calendar-based guidance about its key interest rates in June 2018.¹⁶

Since September 2019, however, the ECB's monetary policy announcement has provided threshold guidance about its key rates, in particular that it "expects the key ECB interest rates to remain at their present or lower levels until it has seen the inflation outlook robustly converge to a level sufficiently close to, but below, 2 per cent within its projection horizon, and such convergence has been consistently reflected in underlying inflation dynamics." This is a very fuzzy formulation. Unlike the Federal Reserve, the ECB's threshold guidance is not based on inflation, which is easily observable, but on the 'inflation outlook', which is more difficult to ascertain. In addition, it is not clear how to interpret the terms 'robustly converge' and 'sufficiently close to', and how to assess whether convergence has been "consistently reflected in underlying inflation dynamics". As a result, it is hard to figure out from this when the ECB is likely to increase rates.

¹⁵ See the case study on the ECB in Dincer, Eichengreen and Geraats (2019).

¹⁶ For a more extensive general discussion of (different forms of) forward guidance, see Geraats (2014).

In general, state-contingent guidance can be very useful because it provides much greater flexibility than calendar-based guidance. As the economic outlook deteriorates, people know that the threshold is less likely to be reached, so they reduce their expectations for future policy rates, which lowers longer-term interest rates and provides additional stimulus to the economy. Thus, state-contingent forward guidance acts like an automatic stabilizer.

Unfortunately, the way the ECB currently formulates its state-contingent forward guidance is very fuzzy. It would be useful to clarify it, or to provide more comprehensive time-dependent forward guidance through the publication of a projected policy path, supplemented by state-contingent guidance through scenario analysis. Central bankers would greatly benefit from using scenarios, especially during a pandemic, both for their policymaking and communications. It would allow the private sector to understand potential monetary policy reactions and thereby better anticipate them, thus speeding up monetary policy transmission.

In addition to the adoption of explicit forward guidance in 2013, the ECB has significantly improved its monetary policy transparency in other respects during the last two decades. This includes the biannual publication of its staff macroeconomic projections in 2000, which became quarterly in 2004; the publication of the ECB's euro-area-wide macroeconomic model in 2001; and more recently, the release of the minutes (or 'account') of the ECB's monetary policy meetings in 2015.

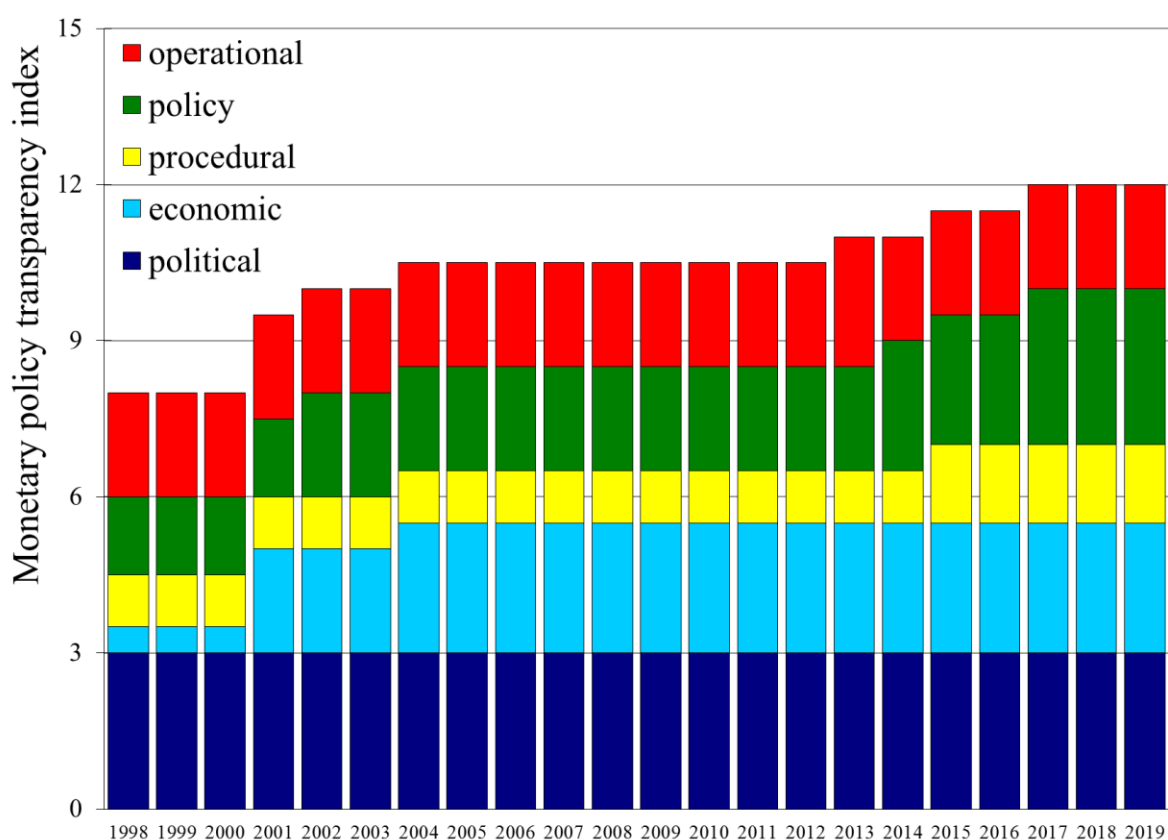
These improvements in ECB transparency are illustrated in Figure 2, which shows the monetary policy transparency index of Dincer, Eichengreen and Geraats (2019), from 1998 updated to 2019. This index basically measures the extent to which central banks disclose information about several aspects of the monetary policymaking process. Figure 2 shows that in its early years, the increase in ECB transparency was primarily driven by economic aspects, such as the publication of ECB staff projections and the model, whereas the more recent increase in transparency was caused by greater policy transparency, in particular the use of forward guidance. Nevertheless, with a score of 12 out of 15, there still appears to be quite some scope for the ECB to improve its monetary policy transparency according to this index.

It would be beneficial for the ECB to significantly improve its monetary policy transparency in several ways.¹⁷

First, the ECB's quantitative definition of price stability is "a year-on-year increase in the Harmonised Index of Consumer Prices (HICP) for the euro area of below 2%", which it aims to maintain over the medium term. Following its monetary policy strategy review (ECB 2003), the ECB has clarified that it aims to maintain inflation rates 'below, but close to, 2%' over the medium term. This inflation goal is asymmetric and lacks precision. It is not clear how long the 'medium term' is or whether the aim is 1.5% (in line with the monetary reference value that the ECB published in its early years), or 1.7%, or perhaps 1.9%. The current inflation goal is opaque, and its asymmetry suggests that the ECB is more concerned about inflation levels above 2%. A symmetric target (range) with an explicit (mid)point would therefore be better.

¹⁷ For a review of the benefits of greater monetary policy transparency, see Geraats (2014).

Figure 2: ECB Monetary Policy Transparency



Source: Dincer, Eichengreen and Geraats (2020)

In addition, the ECB would benefit from a timelier release of its account of monetary policy meetings. Currently, it is published after three to five weeks, so the information it contains is stale, especially in times of volatility, which makes it harder to interpret. It would be desirable to release the minutes within two weeks to make it easier for the private sector to better understand the ECB's monetary policy considerations and inclinations. With a bit of effort this should be feasible, and the minutes could be agreed through a remote meeting.

However, it is not recommended to release the minutes at the same time as the monetary policy announcement, as the Bank of England has done since 2015. The problem is that approved minutes cannot be produced overnight. So, releasing the minutes at the same time as the policy decision means that the genuine deliberation must take place much earlier - in the case of the Bank of England it is a full week before the policy announcement. But a lot can happen in a week, especially in times of turmoil or crisis. Then the central bank either has to re-deliberate, in which case it faces the problem of quickly producing agreed minutes, or it has to disregard the new developments, which means its monetary policy is already out of date when it is announced and therefore also harder to interpret. So, it is not advisable to distort the monetary policymaking process to release the minutes at the same time as the decision. Transparency should improve the effectiveness of monetary policymaking, but not pervert it.

Another useful way to improve transparency is to disclose the voting balance for monetary policy decisions. Although the release of individual voting records may not be desirable if there are concerns about undue political pressures from national governments on their central bank governors, the balance of votes is already very informative. Revealing the degree of agreement makes it easier to understand and thus predict the monetary policy decisions, not just in the short run, as dissenting votes tend to provide an indication of the policy inclination, but also in the medium term, through more accurate learning of the monetary policy reaction.

Finally, the ECB would greatly benefit from an annual evaluation of its staff projections and its monetary policy. This is particularly important for the ECB because its inflation goal of ‘below, but close to, 2%’ has often been persistently missed. A regular evaluation of its forecast errors would help the ECB to improve its macroeconomic projections and thereby its monetary policymaking. This increases the transparency, accountability and credibility of the ECB’s monetary policy. An annual independent evaluation of its monetary policy could provide useful feedback and improve accountability,¹⁸ which is vital for the ECB to maintain legitimacy as an independent central bank.

ECB Monetary Policy Strategy

The initial version of the ECB’s ‘two-pillar strategy’ was rather opaque and confusing, because it was not clear how the two pillars were used by the ECB for its monetary policy decisions. But its strategy review in 2003 clarified the role of each pillar. The ‘two-pillar strategy’ is currently based on (i) economic analysis, which focuses on the short to medium term, and (ii) monetary analysis, which mainly serves as a ‘cross-check’ from a medium- to long-term perspective (see ECB 2003).

Nevertheless, a review of the ECB’s monetary policy strategy is overdue for several reasons. The large-scale liquidity operations in the form of fixed-rate full-allotment LTROs in response to the global financial crisis have significantly altered the ECB’s monetary policy stance, so the main refinancing rate is no longer the main policy rate. This is very confusing for non-specialists, who will naturally think that the interest rate on main refinancing operations is the main policy rate that indicates the monetary policy stance. But the ECB has effectively moved to a floor system in which the overnight interbank rate remains very close to the deposit facility rate. As a result, the ECB’s monetary policy strategy and communications need to be urgently updated and clarified to reflect this significant change in monetary operating system, to prevent giving a misleading impression to non-specialists and the general public.

The interpretation and communication of monetary policy is further complicated by the different ‘non-standard monetary policy measures’ that the ECB has developed, which include large-scale liquidity operations (3-year LTROs, PELTROs), targeted lending support (TLTROs), and unconventional monetary policy through ‘quantitative easing’ (PSPP), ‘credit easing’ (CBPP3, CSPP, ABSPP), or a mix of both (APP and PEPP). The current monetary policy strategy, however, was designed for a pre-crisis world in which there was only one main monetary policy instrument - a policy rate. So, it cannot explain how the ECB chooses between its different (standard and non-standard) monetary policy measures, and how it decides to adjust the settings of each, all based on the same two-pillar analysis or using specific indicators

¹⁸ A good example is Norges Bank Watch, the independent annual evaluation of the Norwegian central bank.

for each measure. In short, the monetary policy strategy should explain how the ECB decides on the adjustment of its different (standard and non-standard) monetary policy measures.

Another issue pertains to the ‘economic’ and ‘monetary’ analysis that is included in the two pillars, which also appear to reflect a pre-crisis world. Following the financial and sovereign debt crises, it would be appropriate to give greater prominence to financial variables (such as asset prices, interest rate spreads and net worth), and to include financial stability considerations. The latter are likely to remain important until the eurozone has fully developed an effective, tried and tested system for microprudential and macroprudential policy, which is likely to take considerable time.

Finally, it is important to assess whether the ECB’s two-pillar strategy has been effective at achieving the ECB’s primary objective of price stability over the medium term. In this respect, it is striking that euro area inflation dropped from an average of 2.2% before the financial crisis, to 1.2% afterwards (since 1/2009), which is clearly well below the ECB’s goal of ‘below, but close to, 2%’. This experience is not unique to the ECB; inflation has also been persistently below the inflation goal for other central banks, most notably the Bank of Japan. So, the subdued levels of inflation may be due to structural factors, such as globalization, digitization, demographics, and an expansion of the low-wage gig economy.

Nevertheless, monetary policy strategies or macroeconomic models may be to blame. They are unlikely to (correctly) incorporate new (non-standard) monetary policy measures and (financial) frictions that are relevant in the post-crisis world, so they may lead to highly suboptimal outcomes. As a result, the ECB should make sure that its new monetary policy strategy is tailored to its needs.

An important question is whether the ECB should follow the Federal Reserve and adopt average inflation targeting. Although average inflation targeting sounds very attractive in theory (especially in New Keynesian forward-looking models in which inflation expectations quickly adjust), in practice it may be hard to achieve the higher level of inflation that is required to compensate for past undershoots. For instance, since 2013 the Bank of Japan has engaged in quantitative and qualitative easing (QQE), including a rapid and large expansion of its balance sheet, to increase inflation and achieve its new 2% target, but the latter remains out of reach.¹⁹

Another problem with average inflation targeting is the uncertainty it creates about the size and duration of inflation overshoots after a prolonged period of undershooting the inflation target. This uncertainty risks unanchoring inflation expectations, which in turn further increases the volatility of inflation, on top of the inflation overshoot that the central bank aims to achieve.

Finally, with a symmetric average inflation target, the problem is that inflationary supply shocks would require even more painful tightening. So, an oil price shock similar to the 1970s, with inflation reaching double digits, would require the central bank to implement tremendous monetary tightening to get inflation sufficiently below the target to achieve the average inflation target, which does not sound like a sensible idea.

¹⁹ See Nakata (2019) for further details.

Conclusions

The ECB's monetary policy framework has significantly developed during the last two decades, often in response to crises. Several lessons can be learned from the global financial crisis. First, price stability does not guarantee financial stability. In addition, large-scale liquidity operations in the form of Longer-Term Refinancing Operations (LTROs) can provide a useful and flexible alternative to large-scale asset purchases, although they may still give rise to financial stability concerns, even for Targeted LTROs (TLTROs) tied to bank lending. Furthermore, the ECB's large-scale liquidity injections have led to 'monetary policy easing by stealth' and the main refinancing rate can no longer be considered the ECB's main policy rate.

The sovereign debt crisis exposed serious weaknesses in the eurozone's institutional framework, which have yet to be fully addressed. But the ECB discovered the power of central bank communications through President Draghi's statement 'to do whatever it takes' and the announcement of the OMT framework, which proved highly effective at reducing euro area periphery sovereign debt yields. It is crucial for the ECB to maintain such a credible backstop.

Although negative interest rates and yields have become prevalent in the euro area since 2015, they require effective macroprudential policy to mitigate their risks. It is also vital to carefully unwind negative rates and large-scale asset purchases to prevent a sudden surge in bond yields. In addition, the coronavirus crisis is going to provide a useful test of the effectiveness of the eurozone's fiscal, monetary, microprudential and macroprudential policy frameworks.

Although the ECB has significantly increased its monetary policy transparency during the last two decades, it would greatly benefit from pursuing further improvements in several respects. First, the ECB should adopt a symmetric target (range) for inflation with an explicit (mid)point. In addition, it should make clear in its monetary policy communications which of its 'key interest rates' is really the main policy rate that signals its monetary policy stance. The ECB has often provided forward guidance about liquidity operations and asset purchases, which could be useful and help stabilize asset prices even before the full details are known. But it would benefit from clarifying its current threshold guidance for the policy rate (based on the inflation outlook). Or it could consider providing more comprehensive time-dependent forward guidance by publishing the projected policy path, supplemented by state-contingent guidance through scenario analysis.

It would also be beneficial for the ECB to publish its account of monetary policy meetings within two weeks (instead of three to five weeks), before information becomes stale and harder to interpret. The release of the balance of votes for monetary policy meetings would also improve understanding of the ECB's monetary policy reaction, and thereby predictability.

Furthermore, since the ECB has persistently missed its inflation goal, it would greatly benefit from an annual evaluation of its forecast errors and monetary policy, to help improve them, while at the same time increasing its transparency and accountability.

Regarding the ECB's monetary policy strategy, it needs to be updated to incorporate the de facto change in monetary operating system and main policy rate. In addition, it should explain how the ECB decides the settings for each of its (nonstandard) monetary policy measures. Greater emphasis on financial variables and financial stability considerations is also desirable. A strategy of average inflation targeting, however, is not to be recommended.

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