

THE MONETARY POLICY STRATEGY OF THE EUROPEAN CENTRAL BANK

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The European Central Bank (ECB) published its new monetary policy strategy statement in July 2021. The strategy review process was launched in January 2020 but was interrupted by the pandemic. Over 2020-2021, the Governing Council held eleven seminars to discuss the individual topics of the review. In turn, these discussions drew on a considerable work effort across the Eurosystem: there were thirteen workstreams and the many individual background notes are synthesised in the eighteen occasional papers that were released in Autumn 2021.¹ The strategy review also benefited from the earlier phases in the development of the ECB's monetary policy strategy, both in terms of the initial design in 1998 and the 2003 review.²

The strategy review exercise had three broad objectives, within the context of meeting the ECB's Treaty mandate.³ First, while the Treaty mandate is to deliver price stability, it is important to have a clear operational target for monetary policy. In particular, it was necessary to assess whether the aim identified in the 2003 review (below, but close to, 2%) should be revised. Second, for any given target, the policy approach and policy instruments to deliver the target also should be reviewed on a regular basis, given the implications of various structural changes for the conduct of monetary policy. Third, climate change and

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The views expressed in this article are personal. The monetary policy strategy review exercise benefited from the dedication and expertise of a large group of staff at the ECB and across the Eurosystem, together with the inputs from many academics and other external observers. Thanks to Fabian Eser and Christophe Kamps for comments and Janina Desoi for her assistance in preparing this article.

the carbon transition are set to exert first-order influences on macroeconomic outcomes (with attendant implications for nominal developments) in the coming years, such that a forward-looking monetary policy strategy should incorporate these considerations.

In what follows, I focus on these three elements. First, I discuss the inflation target. Second, I discuss the setting of monetary policy to deliver this target. Third, I outline the approach adopted to incorporate climate change and the carbon transition.

THE INFLATION TARGET

The new strategy aims for 2% inflation over the medium term. It takes a symmetric perspective on deviations from this target: overshoots and shortfalls are viewed as equally undesirable.

This target replaces the previous aim of delivering inflation “below, but close to, 2%”, which had been adopted in the 2003 review. It also supersedes the 1998 formulation by which price stability was defined as a year-on-year increase in the HICP of below 2% (that is the definition of price stability corresponded to an inflation rate bounded between 0% and 2%). Rather, the new monetary policy strategy is based on a qualitative general definition: price stability can be viewed as a state in which changes in the general level of prices need not be factored into consumption and investment decisions. In turn, price stability can best be achieved by aiming to stabilize inflation at 2% over the medium term.

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One basic reason for adopting a specific target is that it makes for clearer communication. More generally, the strategy review identified the importance of a simpler communication style as highly desirable. In addition to providing a clearer anchor for inflation expectations, a strategic commitment to simplifying the communication of monetary policy also makes it easier to hold the ECB accountable and to build trust with the general public.⁴

The strategy review assessed that the three long-standing arguments in favour of a positive inflation target (as opposed to simply trying to keep the price level constant) remain valid.⁵ These are: (1) measurement bias in constructing price indices; (2) downward nominal wage rigidity; and (3) the facilitation of real exchange rate adjustments within a multi-country monetary union. Indeed, the severe macroeconomic impact of the twin crises episode (the global financial shock during 2008-2009 and the euro area sovereign debt crisis during 2010-2012) provides robust evidence that nominal rigidities are pervasive and that relative price adjustment across member countries is inhibited by a low inflation environment.⁶

Moreover, the case for a positive inflation buffer has been reinforced by the trend decline in the equilibrium real interest rate: this was not a factor in the 2003 review but was a central theme in the 2021 review.⁷ In general, the constraint of the effective lower bound means that there is an inverse relation between the equilibrium real interest rate and the optimal inflation target: over the cycle, monetary policy space is protected by ensuring that the steady-state nominal interest rate is high enough to enable monetary policy to respond effectively to adverse shocks. In turn, the steady-state nominal interest rate is simply the sum of the equilibrium real interest rate and the inflation target: all else equal, if the former declines, the latter should be raised. Directionally, it follows that the case for a 2% inflation target compared to a lower target has been reinforced by the trend decline in the equilibrium real interest rate. An additional consideration is that in the context of an integrated global economy and global financial system, the exact value of the inflation target should take into account the inflation targets of other major central banks. Inflation targets that are broadly similar mean that if the targets are met, trends in nominal exchange rates should broadly reflect trends in real exchange rates.

In terms of the symmetry of the inflation target, the recognition that shortfalls and overshoots are equally undesirable is important for monetary policy. In addition to clarifying that 2% should be viewed as the focal point (rather than a ceiling), the symmetry of the target means that risks to the inflation target in both directions should be seen as equally undesirable, which in turn should be incorporated in a risk-management approach to the calibration of monetary policy. Accordingly, the symmetry of the target does not necessarily imply symmetry in policy responses to these risks, in view of the effective lower bound: I will return to this topic in the next section of this article.

Finally, the strategy review also concluded that, while the Harmonised Index of Consumer Prices (HICP) remains the appropriate price measure for assessing the achievement of the price stability objective, its measurement should be revised to more fully include the costs related to owner-occupied housing, based on the net acquisition approach. Since this is only possible in the context of a multi-year project (led by Eurostat), the Governing Council will in the meantime take into account inflation measures that include initial estimates of owner-occupied housing costs in its wider set of supplementary inflation indicators. Moreover, it is recognised that, in principle, monetary policy decisions should, as far as possible, differentiate between the consumption and investment components of the owner-occupied housing price index, since it is the former component that is relevant.

DELIVERING THE INFLATION TARGET

The strategy commits the ECB to ensuring that inflation stabilizes at its 2% target over the medium term. Although the target is symmetric, the effective lower bound means that policy reactions to negative and positive shocks should not necessarily be symmetric.⁸ In particular, when the economy is close to the lower bound (either as a result of a sequence of adverse shocks or simply due to a sufficiently-low equilibrium real interest rate such that even the steady-state nominal interest rate is close to the lower bound), monetary policy measures should be especially forceful or persistent to avoid negative deviations from the inflation target becoming entrenched. Adopting forceful or persistent measures may also imply a transitory period in which inflation is moderately above target, since a persistently-accommodative stance that successfully lifts inflation towards the target may involve hump-shaped adjustment dynamics for the inflation path.

Starting at the steady state, an initially-forceful response to a negative shock can limit the risk of approaching the effective lower bound. Adopting a forceful reaction function stands in contrast to an incrementalist approach to policy easing measures, which is based on the supposition that it is possible to take further easing measures if the initial steps prove to be insufficient. The effective lower bound limits the scope for incrementalism. In turn, maintaining some policy measures on a persistent basis represents an acknowledgement that a commitment to maintaining monetary policy accommodation into the future can provide a partial substitute for sharper near-term policy easing measures.

In terms of the policy instruments that can be deployed to deliver the target, the set of policy interest rates take primacy and should be sufficient so long as the economy is not operating in the shadow of the effective lower bound and if financial conditions are non-stressed. In this respect, the lowering of policy rates into negative territory has been an effective way to expand the policy space. In addition, forward guidance can play an important role in underpinning a persistent policy stance if the effective lower bound is a constraint. Additional reinforcement can be provided by asset purchase programmes and (targeted) longer-term refinancing operations.⁹ Moreover, these different instruments have proven to reinforce each other. More generally, the ECB will continue to respond flexibly to new challenges as these arise and consider, as needed, new policy instruments in the pursuit of its price stability objective. At any given point in time, the optimal mix of instruments should be designed to take into account the relative effectiveness and the side effects of each instrument.¹⁰

The design of monetary policy measures in the shadow of the effective lower bound is well illustrated by the revised interest rate forward guidance that was announced by the ECB in the wake of the new monetary policy strategy.¹¹ It describes three key conditions that should be met before interest rates are raised: (1) the first condition “until we see inflation reaching 2% well ahead of the end of our projection horizon” provides reassurance that the convergence of inflation towards the new target should be sufficiently advanced and mature at the time of policy rate lift off. Moreover, requiring the inflation target to be reached “well ahead of the end of the projection horizon” helps to hedge monetary policy against the risk of reacting to forecast errors, which tend to be larger at longer horizons; (2) the second condition that we expect inflation to reach 2% not only well ahead of the end of the projection horizon but also “durably for the rest of the projection horizon” telegraphs that reaching the inflation target should be lasting and not just the result of short-lived forces that lead to one-time increases in prices, unlikely to lead to persistently higher year-over-year inflation; and (3) the third condition “progress in underlying inflation is sufficiently advanced to be consistent with inflation stabilizing at 2% over the medium term” signals that policy rates should not be lifted unless underlying inflation is also judged to have made satisfactory progress towards the target. This condition is based on realized data and provides an extra safeguard against a policy tightening in the face of cost-push shocks that might elevate headline inflation temporarily but fade within the projection horizon. It is important to keep in mind that underlying inflation is a broad concept and refers to the persistent component of inflation that filters out short-lived reversible movements in the inflation rate and provides the best guide to the medium-term inflation developments.

The new rate forward guidance is motivated by the importance of robustness in making good policy decisions and seeks to balance two considerations. First, it is appropriate to put a significant weight on realized progress in underlying inflation. In a world of myriad forms of uncertainty in relation to the size and propagation of shocks, various structural changes, the quality and timeliness of data and the design and calibration of models, it makes sense to take into account data outcomes, rather than exclusively rely on multi-year forecasts.¹² This consideration is especially pertinent in the neighbourhood of the effective lower bound, in view of the importance of avoiding tightening decisions that could turn out to be premature, resulting in a weakening of inflation dynamics and a de-anchoring of inflation expectations to the downside. At the same time, temporary shocks mean that the realized data may not provide a sufficiently-accurate guide: the detec-

tion of underlying inflation (the persistent component that is the relevant guide for future inflation developments) is subject to considerable uncertainty, especially during non-standard episodes (such as the current pandemic).

Second, given the limitations of realized inflation outcomes, it would be unwise to fail to take into account forward-looking information, as captured in macroeconomic projections and other indicators, despite the inherent difficulties in making forecasts. In one direction, if current inflation is below the target level but the forecasts indicate that the inflation target will be reached within the projection horizon, waiting for realized inflation to climb to the target before tightening might be excessively costly, especially if inflation expectations become de-anchored to the upside. Under this scenario, excessive delay in monetary tightening runs the risk of a sharper subsequent hike in interest rates and a greater loss in output. In the other direction, if current inflation is above the target level but the forecasts indicate that inflation will fall below the target level over the projection horizon (as was the case in the December 2021 projections), tightening policy in response to temporarily-high inflation would be counterproductive.

Accordingly, the rate forward guidance strikes a balance between outcome-based and forecast-based indicators. It follows that the successful implementation of this rate forward guidance will require expert judgement by the Governing Council. Amongst other factors, humility is required in assessing the dynamics of inflation expectations. In general, it is well known that the properties of macroeconomic models are quite sensitive to the exact process determining the formation of inflation expectations (see, amongst many others, Honkapohja and McClung, 2021). In the context of the euro area, the short history of the euro area as a monetary union, together with the diverse longer-term historical inflation experiences of the different member countries, further complicate the assessment of inflation expectations.

In line with the Treaty mandate and without prejudice to price stability, the medium-term orientation allows for inevitable short-term deviations of inflation from the target, as well as lags and uncertainty in the transmission of monetary policy to the economy and to inflation. It also provides room for monetary policy to take into account considerations such as balanced economic growth, full employment and financial stability. Under many scenarios, balanced economic growth, full employment and price stability are mutually consistent objectives. In particular, so long as longer-term inflation expectations are anchored at the target level, inflation will be at the target level if economic activity and employment are equal to their potential levels. However, in the event of an adverse supply shock, the horizon over

which inflation returns to the target level could be lengthened in order to avoid pronounced falls in economic activity and employment, which, if persistent, could jeopardise medium-term price stability.¹³

In view of the price stability risks generated by financial crises, there is a clear conceptual case for the ECB to take financial stability considerations into account in its monetary policy deliberations.¹⁴ At a general level, the conceptual case has received much attention in the research literature in recent years (see, amongst others, Woodford, 2012; Smets, 2014; Woodford, 2016; Akinici *et al.*, 2020; Stein 2021).

It is worthwhile to highlight some fundamental issues in thinking about the inter-relation between monetary policy and financial stability. First, macroprudential policies can do much to mitigate financial stability risks.¹⁵ Any analysis of the potential inter-relation between monetary policy and financial stability should be conditioned on the prevailing macroprudential policy stance, at both national and area-wide levels. Since the implementation of macroprudential policy in Europe is relatively recent, there is only a limited span of data to guide the empirical assessment of the effectiveness of macroprudential policy and the implications for optimal monetary policy. At the same time, the modelling of monetary policy should take into account the impact of the macroprudential policy framework.

Second, financial stability considerations are most easily incorporated if inflation expectations are robustly anchored at the target. Otherwise, there is a risk that any monetary policy move motivated by financial stability considerations could de-anchor inflation expectations, with possibly substantial long-term consequences for the effective delivery of the inflation target.

Third, proximity to the effective lower bound reduces the scope of the traditional argument that monetary policy easing in response to a financial crisis may be more efficient than preventive tightening: this implies that, conceptually, there may be scenarios in which there is indeed a tension between price stability over the traditional monetary policy horizon (up to three years) and price stability over longer horizons (the financial cycle is typically assessed as about twice that length).

At the same time, it is easier to identify this potential trade off at a conceptual level than to pin down the exact circumstances in which the longer-horizon risk might call for a monetary policy adjustment. In particular, especially since financial crises are rare events, it is difficult to design and calibrate macro-financial models that at the same time are capable of capturing business cycle fluctuations (including inflation dynamics) and financial cycle fluctuations.¹⁶ Moreover, the quantita-

tive effectiveness of monetary policy measures in materially mitigating financial stability risks requires careful assessment, especially in view of the role of other factors (such as the level of the equilibrium real rate, leverage dynamics and investor beliefs) in driving asset prices and investment patterns. Moreover, holding fixed its impact on price stability, the quantitative impact of a monetary policy measure on financial stability has to be assessed side-by-side with its impact on other factors, such as employment.

For these reasons, it is important to adopt a context-specific approach in taking account of financial stability considerations. Any monetary policy reaction to financial stability concerns will depend on prevailing circumstances and will be guided by the implications for medium-term price stability. It should also be recognized that monetary policy can take into account financial stability considerations through the design of policy instruments, even if the monetary policy stance is unaffected. Currently, the design of the tiering system and the exclusion of residential mortgages from the eligible loan pool for TLTROs are partly motivated by financial stability considerations.

The ECB's December 2021 monetary policy statement included an assessment of the interrelation between monetary policy and financial stability.¹⁷ It identified that an accommodative monetary policy underpins growth, which supports the balance sheets of companies and financial institutions, as well as preventing risks of market fragmentation. At the same time, it is recognised that the impact of accommodative monetary policy on property markets and financial markets warrants close monitoring as a number of medium-term vulnerabilities have intensified. Still, macroprudential policy remains the first line of defense in preserving financial stability and addressing medium-term vulnerabilities.

This assessment is one component of a more general commitment under the new monetary policy strategy to base monetary policy decisions, including the evaluation of the proportionality of its decisions and potential side effects, on an integrated assessment of all relevant factors.¹⁸ Compared to the previous two-pillar analytical approach, there is an emphasis under the new integrated framework on taking into account the inherent macro-financial links between the real economy, the monetary system and the financial system in terms of the underlying structures, shocks and adjustment processes. The strategy review provided an important opportunity to review priorities for research and model development, especially given the structural changes observed since the last review in 2003.¹⁹

An important type of macro-financial risk in the euro area is that, under stressed conditions, self-fulfilling cross-border flight-to-safety

episodes can impair the monetary policy transmission mechanism and threaten price stability. This is an inherent risk in a multi-country monetary union, since geographical portfolio shifts are facilitated by the absence of currency risk (compounded by the incomplete nature of the EMU architecture in relation to fiscal union and banking union) and can be reinforced by the lack of country-specific monetary policy instruments.²⁰ Although monetary policy can be implemented in a uniform way most of the time, the ECB has demonstrated its capacity to design flexible instruments in reaction to stressed conditions through policy responses such as the Securities Market Programme (SMP), the Outright Monetary Transactions (OMT) Programme and the Pandemic Emergency Purchase Programme (PEPP).

At the December 2021 monetary policy meeting the Governing Council decided to end net asset purchases under the PEPP by the end of March 2022, but the monetary policy statement also stated: “Within our mandate, under stressed conditions, flexibility will remain an element of monetary policy whenever threats to monetary policy transmission jeopardise the attainment of price stability.” In addition to this general recognition of the value of flexibility under stressed conditions, the monetary policy statement also noted that, even after the end of net purchases, the accumulated PEPP portfolio can play a stabilising role: “In particular, in the event of renewed market fragmentation related to the pandemic, PEPP reinvestments can be adjusted flexibly across time, asset classes and jurisdictions at any time.”

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CLIMATE CHANGE AND THE CARBON TRANSITION

The carbon transition represents a major structural change for the global and European economies, with a significant economic transformation embedded in the commitments to significantly reduce carbon emissions by 2030 and attain net zero by 2050.²¹ In principle, a sustained and predictable transition might be accomplished without significant macroeconomic volatility. However, both the physical risks and transition risks related to climate change may generate cyclical shocks that could require a monetary policy response. Indeed, in recent years, it has already proven important to take into account in our macroeconomic assessments both severe weather events that disrupt global production (such as floods and droughts around the world) and the implications of the carbon transition for industries such as the automotive sector. In addition, there are tail risk scenarios in which severe physical shocks or disorderly transition dynamics could threaten financial stability. At an institutional level, climate change and the carbon transition also affect the value and the risk profile of the assets held on the Eurosystem’s balance sheet.

For these reasons, the Governing Council has committed to an ambitious action plan to further include climate change considerations in its monetary policy framework.²² First, the ECB will significantly enhance its analytical and macroeconomic modelling capacities and develop statistical indicators to foster the understanding of the macroeconomic impact of climate change and carbon transition policies. In particular, the ECB will accelerate the development of new models and will conduct theoretical and empirical analyses to monitor the implications of climate change and related policies for the economy, the financial system and the transmission of monetary policy through financial markets and the banking system to households and firms. Second, the Governing Council will adapt the design of its monetary policy operational framework in relation to disclosures, risk assessment, corporate sector asset purchases and the collateral framework.

CONCLUSION

The 2021 strategy review lays the foundations for monetary policy decisions in the coming years. At the same time, a commitment to a regular review cycle provides assurance that the monetary policy framework will not become fossilised.²³ Already, it is clear that some incipient trends may call for further revisions in the coming years. These include: possible advances in terms of a digital currency; improvements in the EMU architecture; the increasing role of non-banks in the euro area financial system. More generally, there may also be unanticipated economic or financial shocks to the euro area and/or global economies; and additional structural changes that affect the potential output growth, the equilibrium real interest rate or the inflation process. Against this background, the Governing Council intends to assess periodically the appropriateness of its monetary policy strategy, with the next assessment expected in 2025.

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NOTES

1. In addition to the formal monetary policy strategy statement (https://www.ecb.europa.eu/home/search/review/html/ecb.strategyreview_monpol_strategy_statement.en.html), the Governing Council also published an explanatory overview note (https://www.ecb.europa.eu/home/search/review/html/ecb.strategyreview_monpol_strategy_overview.en.html). This article draws on this overview note. The intellectual context for the review was also informed by prior studies, including Hartmann and Smets (2018) and Rostagno *et al.* (2021).

2. See Issing (2010).

3. See Ioannidis *et al.* (2021) on the mandate of the ECB.

4. See Work stream on Monetary Policy Communications (2021). The modernisation of monetary policy communication is already evident in the structure of the monetary policy statement that is released after each monetary policy meeting (replacing the introductory statement), together with the roll out of visual formats for the key messages in the monetary policy decisions.

5. See Consolo *et al.* (2021), Work Stream on Price Stability Objective (2021) and Work Stream on Inflation Measurement.
6. See also Koester *et al.* (2021) for an analysis of the drivers of low inflation during the 2013-2019 post-crisis period.
7. See, for instance, Andrade *et al.* (2019).
8. See Work Stream on Price Stability Objective (2021).
9. As was evident in Spring 2020, asset purchasing can also play an important market stabilization role under stressed conditions.
10. See Altavilla *et al.* (2021). The optimal monetary policy response should also take into account the stance of fiscal policy and the cyclical stance of macroprudential and supervisory policy measures. As detailed in the report of the Work stream on monetary-fiscal policy interactions (2021), the strategy review included an extensive analysis of monetary-fiscal interactions, concluding that countercyclical fiscal policy (underpinned by sustainable fiscal positions) can be especially effective in the neighbourhood of the lower bound. During the pandemic, countercyclical macroprudential and supervisory measures amplified the support from countercyclical monetary and fiscal measures.
11. See also Lane (2021a).
12. See Faust and Leeper (2015).
13. See Work Stream on Employment (2021).
14. See Work Stream on Macroprudential Policy, Monetary Policy and Financial Stability (2021).
15. See also Martin and Philippon (2017) and Lane (2021b).
16. For the current state-of-the-art in this area, see Adrian *et al.* (2021).
17. Under the new strategy, it is planned that in-depth assessments of the interrelation between monetary policy and financial stability will be conducted twice a year (in June and December), in alignment with the calendar for the ECB's Financial Stability Review. The December 2021 assessment was the first in this series.
18. See Holm-Hadulla *et al.* (2021).
19. See Work Stream on Monetary-Fiscal Policy Interactions (2021), Work Stream on Non-Bank Financial Intermediation (2021), Work Stream on Productivity (2021), Work Stream on Eurosystem Modelling (2021), Work Stream on Digitalization (2021), Work Stream on Globalization (2021) and Work Stream on Inflation Expectations (2021).
20. See, amongst many other contributions, Bianchi and Mondragon (2021).
21. See Network for Greening the Financial System (2020), McKibbin *et al.* (2021) and Work Stream on Climate Change (2021).
22. A more detailed description of the ECB action plan is available at https://www.ecb.europa.eu/press/pr/date/2021/html/ecb.pr210708_1-f104919225.en.html.
23. In any event, it is also essential for the ECB to pay attention on a continuous basis to external assessments of its strategy. See, for example, Reichlin *et al.* (2021).

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