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Article

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European Journal of Economics and Economic Policies: Intervention (EJEEP)

Provided in Cooperation with:

Edward Elgar Publishing

Suggested Citation: Bofinger, Peter (2021) : The European Central Bank: the time is ripe for a major revision of its strategy, European Journal of Economics and Economic Policies: Intervention (EJEEP), ISSN 2052-7772, Edward Elgar Publishing, Cheltenham, Vol. 18, Iss. 2, pp. 163-176,
<https://doi.org/10.4337/ejeep.2021.02.05>

This Version is available at:

<https://hdl.handle.net/10419/277508>

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The European Central Bank: the time is ripe for a major revision of its strategy

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A revision of the European Central Bank's (ECB) strategy is urgently needed. For the new strategy, it is important to define the inflation target explicitly in symmetrical terms. Environmental policy objectives can in principle be reconciled with the ECB's mandate as long as they do not conflict with the objective of monetary stability. An essential element of any strategy is a heuristic that makes it relatively easy for the public to monitor whether monetary policy decisions are in line with the mandate. Among the possible heuristics, monetary targeting and the Taylor rule have to be ruled out while 'inflation targeting' offers a relatively simple navigation system for monetary policy discussions.

Keywords: *monetary policy, European Central Bank, monetary policy strategies, inflation targeting*

JEL codes: *E42, E52, E58*

1 AN OVERDUE STRATEGIC REVIEW

In her first press conference as president of the European Central Bank (ECB) (on 12 December 2019), Christine Lagarde (2019) was already announcing a comprehensive strategic review. This, she said, 'needs to look at all and every issue, will turn each and every stone and will take its time but will not take too much time.' As 'core and centre of the strategy,' the president mentioned the following:

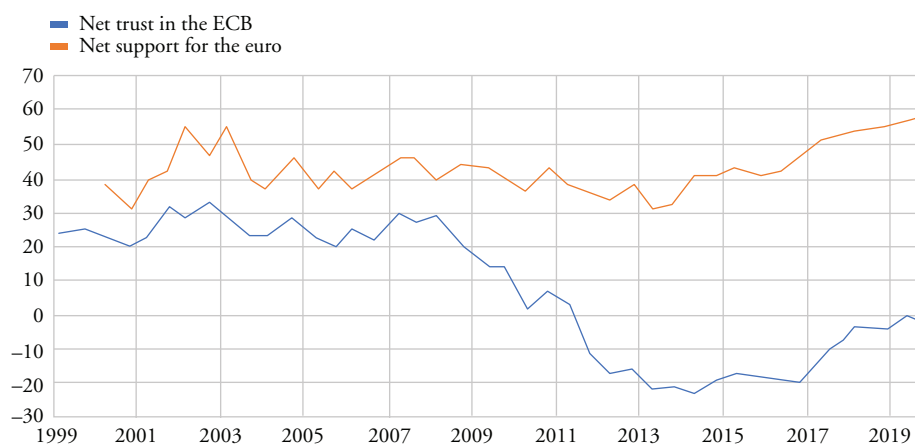
It is the point of every strategic review by all central banks that are conducting this exercise to actually look at their objective, how they define their medium-term objective in particular, how they give content to the price stability that is in their mandate, and it is the only objective that we have in our mandate ourselves. (Ibid.)

But for Christine Lagarde, the objective of the strategic review is more ambitious as she plans to extend it far beyond the traditional targets of monetary policy:

Indeed it will also address the major changes that have taken place over the course of the last 16 years, and by that I include the massive technological change that our societies are facing. It will include the immense challenge that climate change is addressing to each and every one of us, wherever located, and whatever our mission and duties. It will include aspects of inequality that are certainly rising in our economies, and all of those will be addressed with a view to exploring each and every corner of the business that we conduct as a central bank (Ibid.)

There is no doubt that such a review is overdue. The actual strategy was developed in 1998, and, in the review undertaken in 2003, it was only slightly modified. An important argument for a review is the declining trust of the citizens in the ECB. According to

Received 19 April 2021, accepted 4 May 2021



Source: Bergbauer et al. (2020)

Figure 1 Net trust in the ECB and net support for the euro

Eurobarometer, that trust fell during the eurozone crisis and has since only partially recovered. At the same time, support for the euro is at an all-time high (see Figure 1).

Especially in Germany, the ECB has been unable to communicate in such a way as to allow its policy to be accepted by the broader public. This is regrettable as, under the presidency of Mario Draghi, the ECB has been rather successful in meeting its mandate, containing the risk of a collapse of the euro, and at the same stimulating the euro-area economy (Bofinger 2020).

The problems of the existing strategy were obvious from the very beginning. In a paper for the European Parliament (Bofinger 1999: iii), I made the following assessment:

The ECB's navigation system which is based on the two pillars of a reference value for broad money and the broadly based assessment of the outlook for future price developments needs major modifications. In its present form, it meets neither the criterion of transparency nor the criterion of accountability. In addition, there is a risk that it is not able to detect demand or supply shocks as early as possible. The reference value for money can be regarded as a rudimentary form of monetary targeting. But it is not clear which role such a reference value will play if it cannot be controlled by the ECB. The broadly based assessment reminds of an inflation forecast but the ECB pretends that this is not the case. ... The interrelationship between the two pillars is unclear. Compared with these ambiguities of the SOMPS [stability-oriented monetary policy strategy] the strategy of inflation targeting as it is practiced by the BoE [Bank of England] and other central banks is more transparent.

2 WHAT IS THE ROLE OF A CENTRAL-BANK STRATEGY?

Although there is a great deal of discussion about central-bank strategies, there is rarely any explicit explanation of the concrete functions of a strategy and the elements it must have to meet these functions.

From a theoretical point of view, the function of a strategy can be derived from the *expectations-augmented Phillips curve*. In this theory, the inflation rate results from the output gap and the expected inflation rate. Ideally, the expected inflation rate corresponds to

the inflation target announced by the central bank. The central bank is then said to be credible. Credibility has the decisive advantage for monetary policy that the inflation target emerges, as it were, of its own accord, in the sense of a self-fulfilling prophecy.

The central function of a strategy is thus to give the central bank the necessary credibility among households and firms. On the one hand, this requires that the central bank's objective be communicated as clearly as possible. On the other hand, the central bank must use the strategy to demonstrate on an ongoing basis that all its policy decisions are consistently geared to meeting the target, or, in the event of deviations from the target, to reaching it again as quickly as possible. This requires an easy-to-communicate framework for action, in the sense of a *heuristic*, that can be used to check the correspondence of monetary policy decisions with the target at any time. Such a navigation system makes the decision processes of the central bank transparent, which is a crucial prerequisite for its credibility.

In the following, these main elements of a strategy will be discussed in detail. After the definition of the ECB's target, different heuristics for monetary policy and their suitability for the ECB will be discussed.

3 DEFINING AND CLARIFYING THE INFLATION OBJECTIVE OF THE ECB

In the case of the ECB, its mandate is given by Article 127 of the Treaty on the Functioning of the European Union (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.

Thus, the starting point for the strategy is a concrete definition of price stability and the relation of price stability to the other objectives mentioned in Article 3 of the TFEU.

In a strict sense, price stability could be understood as a zero inflation rate. But if a central bank tries to achieve zero inflation in normal times, any negative demand or supply shock will drive the economy onto the *terrain of deflation*. As is well known, the zero lower bound of interest rates makes it very difficult to fight deflation, which could then become a chronic disease. In addition, in a monetary union, an average inflation rate of zero would require permanent deflation in several member states, even in normal times.

The risk of deflation also speaks against an inflation target of 1 percent. Therefore, in developed countries, most central banks have decided on a mid-point inflation target of 2 percent. In its 1998 strategy, the ECB (1998) formulated its target as: 'Price stability shall be defined as a year-on-year increase in the Harmonised Index of Consumer Prices (HICP) for the euro area of below 2%.'

This definition left open whether inflation rates between zero and 2 percent were also compatible with the ECB's target. Therefore, in its 2003 strategic review, the ECB (2003) clarified 'that in the pursuit of price stability it will aim to maintain inflation rates close to 2% over the medium term.'

It is not obvious whether a revision of the definition is required. It might be preferable to give up 'below, but close to' and instead define a target of simply '2 percent over the medium term.' But this might cause useless debates about the stability orientation of the ECB.

In its 2003 review, the ECB did not make explicit whether the target was symmetric or asymmetric. But already the focus on the ‘medium term’ made it clear that the bank was not trying to fine-tune inflation. In the more recent past, the ECB made the symmetry of the target more explicit. For example, at a press conference in March 2016 the then president, Mario Draghi (2016), noted:

[O]ur mandate is defined as reaching an inflation rate which is close to 2 percent but below 2 percent in the medium term, which means that we’ll have to define the medium term in a way that, if the inflation rate was for a long time below 2 percent, it will be above 2 percent for some time. The key point is that the Governing Council is symmetric in the definition of the objective of price stability over the medium term.

In the same way, Christine Lagarde (2020) has stated: ‘And, to underpin inflation expectations, we need to ensure that our aim is perceived to be symmetric by the public.’

The need for symmetry was very well explained by the President of the Federal Reserve, Jerome Powell (2020):

However, if inflation runs below 2 percent following economic downturns but never moves above 2 percent even when the economy is strong, then, over time, inflation will average less than 2 percent. Households and businesses will come to expect this result, meaning that inflation expectations would tend to move below our inflation goal and pull realized inflation down.

Apart from such clarifications, there is no discernible need for fundamental change in the definition of the ECB’s inflation target. The repeatedly heard demand to include the cost of owner-occupied housing in the price index for the standard of living would pose serious conceptual problems. Private households who bought a property ten years ago may have lived mostly for free or even made a profit when taking into account the appreciation achieved.

4 IS THERE A TRADE-OFF BETWEEN PRICE STABILITY AND UNEMPLOYMENT?

While the mandate of the ECB is focused one-dimensionally on price stability, the dual mandate of the Federal Reserve includes price stability and employment. Section 2A of the Federal Reserve Act states:

The Board of Governors of the Federal Reserve System and the Federal Open Market Committee shall maintain long run growth of the monetary and credit aggregates commensurate with the economy’s long run potential to increase production, so as to promote effectively the goals of maximum employment, stable prices, and moderate long-term interest rates.

While the ECB is unable to change its mandate in the strategic review, the one-dimensional mandate raises the question of a potential trade-off between price stability and unemployment. The trade-off depends on the nature of macroeconomic shocks.

For example, in the case of a negative *demand shock*, the inflation rate is lower than the inflation target of the central bank. At the same time, the shock causes a negative output gap that leads to unemployment. Thus, if the central bank deals with the shock by lowering interest rates, the inflation rate is moved back to its target, and unemployment is reduced. Thus, there is no trade-off.

This is different in the case of a *supply shock*. For example, a positive supply shock shifts the inflation rate above its target value and generates a negative output gap which leads to unemployment. This confronts the central bank with a trade-off. It can reduce interest

rates to remove the output gap, but this causes even higher inflation. If it fights inflation, it increases the negative output gap.

The trade-off is mitigated by the medium-term orientation of the inflation target. It allows accommodating temporary price increases that are caused by higher energy prices. As long as they do not lead to an increase in inflation expectations (so-called second-round effects), there is no need for the central bank to cope with the shock by increasing interest rates.

5 A GREEN FOCUS FOR THE ECB'S STRATEGY?

At the press conference on 12 December 2019, Lagarde (2019) promised to give the ECB strategy a green focus, saying that 'we will take up climate change, we will take up the fight that is taken up by the European Commission and I hope other European institutions, and see where and how we can participate in that particular endeavour.' In contrast, the president of the Bundesbank, Jens Weidmann (2021),¹ warned that a monetary policy that explicitly followed environmental targets would risk being overburdened: 'Climate change must be tackled first of all by governments, not central banks. Governments have effective tools for the fight, including carbon taxes and subsidies for renewable energies, carbon-free mobility, and more energy-efficient housing and manufacturing.'

The ECB's responsibility for climate policy can be derived from Article 3 of the Treaty on European Union, which mentions 'a high level of protection and improvement of the quality of the environment' as a core objective of the union. But from Article 127 TFEU, this responsibility can only be exercised if it does not conflict with the objective of price stability.

In any case, the ECB's place should *not* be at the forefront of the fight against climate change. First and foremost, that is up to the governments of the member states and the existing development banks, which have strong weapons at their disposal. If the public expenditures to resist climate change cannot be financed from current revenues, they could and should be financed by budget deficits: as the benefits of climate policies accrue to the younger generations there is no reason to exclude deficit financing. In the euro area, this will require a more flexible interpretation or, better still, a fundamental revision of the Stability and Growth Pact; but this is not an insurmountable obstacle.

For the financing of public and private green projects, powerful public banks already exist, such as the Kreditanstalt für Wiederaufbau in Germany. At the European level, the European Investment Bank (EIB) is a strong institution which finances a broad spectrum of green investments. With the NextGenerationEU, large funds are made available for dealing with climate change.

With which instruments could the ECB support the fight against climate change? There are two main options: its framework for collateral in refinancing commercial banks and its purchases of bonds in asset-purchase programs.

The Eurosystem – the central banks of the member states and the ECB – provides credit only against adequate collateral. The eligibility of assets is assessed by the national central banks, according to the criteria specified in the Eurosystem's legal framework for monetary policy instruments. One option to support 'green corporations' could be to

1. In his view, 'broadening the tasks of central banks could raise the impression that we are striving for multiple or fuzzy objectives, jeopardising the focus that is needed to establish credibility in the first place. It might also weaken accountability as discretionary decisions could then be justified by referring to one or the other of various objectives.'

reduce the requirements for the quality of such collateral. But this would create a trade-off between financial stability and climate policy which should be avoided.

Another avenue would be excluding assets associated with certain ‘brown corporations’ from the catalog of those eligible. For banks without a sufficient amount of ‘green collateral’ as a substitute, this would reduce their refinancing from the ECB, with negative consequences for their lending and the real economy. In this case, a trade-off between climate policy and macroeconomic stability exists, which could even impair the main target of price stability. Discriminating against ‘brown corporations’ in collateral policy thus cannot be achieved overnight. But if the ECB announces this early, it will have a strong impact on bank lending policies.

As for the purchase of green bonds, Paul de Grauwe (2019) has proposed that the ECB should purchase EIB bonds and thus indirectly finance a €1 trillion green investment program by the EIB. But, given the excellent rating of this institution and an overall EIB balance sheet of more than €500 billion, it is not clear why the EIB might need such support from the ECB.

In its purchases of corporate bonds, the ECB could decide to buy only ‘green bonds,’ according to an assessment made by a third institution. Again, the discrimination against ‘brown bonds’ could at least in the short run lead to a conflict between climate policy and macroeconomic stability if there were not a sufficient supply of green bonds. And, given the growing interest of many private investors in the latter, it is again questionable whether such support from the ECB is needed. Weidmann (2021) argued that a reduction of the ECB’s bond portfolio would have negative effects on the ‘green’ companies.

This raises the more general problem of whether the ECB should become a permanent financing institution for green private investments. It would be very difficult to do this in a ‘market-neutral’ way, so that the ECB would have to replicate functions of the EIB. In addition to a blurred division of labor between these two European institutions, the ECB would become a competitor of private banks, for which financing the ecological restructuring of the whole economy is a promising business model.

Overall, it seems sensible for the ECB to pay attention to a clear division of labor. The main responsibility for climate policy should lie with governments and state development banks such as the EIB. The ECB should only become active when these institutions are no longer in a position to refinance themselves on the market at appropriate interest rates. The ECB’s purchases of corporate e-bonds are not unproblematic in any case, as the central bank thus enters into competition with private banks.

6 STRATEGIES AS HEURISTICS

The second and equally important element of a strategy is to provide a heuristic that guides the policy decisions of a central bank. Heuristics play an important role in our everyday life. Gigerenzer/Gaissmaier (2011: 451) define heuristics as ‘efficient cognitive processes, conscious or unconscious, that ignore part of the information.’ Their research indicates that

- (a) individuals and organizations often rely on simple heuristics in an adaptive way, and
- (b) ignoring part of the information can lead to more accurate judgments than weighting and adding all information, for instance for low predictability and small samples. (Ibid.: 451)

In the case of monetary policy, a heuristic would ideally allow the determining of the optimum policy decisions based on only a few easily observable variables. Such a reduction of

complexity would facilitate internal as well as external communication. With an effective heuristic, the public could permanently assess whether the decisions of the central bank are still in line with its mandate. This would increase the transparency and thus the credibility of the central bank.

It is therefore not surprising that, for a long time, central banks have been trying to base their policies on simple heuristics. There are also many academics propagating different heuristics. The most prominent heuristics for monetary policy are the following:²

- monetary targeting;
- the Taylor rule; and
- inflation targeting.

With each of these strategies, the complexity of monetary policy decisions is reduced to a simple rule of thumb:

- the strategy of *monetary targeting* determines the stance of monetary policy by comparing the actual growth rate of the money stock with the target rate for monetary growth;
- the *Taylor rule* determines the optimum interest rate by adding or subtracting the weighted sum of the inflation gap (that is, the difference between the actual inflation rate and the central bank's inflation target) and the output gap from a 'neutral interest rate'; and
- the strategy of *inflation targeting* determines the stance of monetary policy by comparing inflation forecasts with the inflation target of the central bank.

6.1 The strategy of monetary targeting

The experience of this heuristic is mixed. The strategy of monetary targeting came in fashion with the surge of inflation in the 1970s and the breakdown of the Bretton Woods System which ended the strategy of exchange-rate targeting for many central banks. This paved the way for *monetarism* which was preached above all by Milton Friedman, Karl Brunner, and Allan Meltzer. However, only a very few central banks had been willing to implement this heuristic.

In the United States, a very short period of monetarism at the beginning of the 1980s led to excessively high short-term interest rates. The federal funds rate reached a monthly peak of 19.1 percent in June 1981. This policy caused a severe recession in the United States and it led to the savings and loans crisis. It was also the trigger for the debt crises in Latin America, as many developing countries were indebted in the US dollar with variable interest rates based on short-term US money market rates.

The only central bank that pretended to use this heuristic for a prolonged period was the Deutsche Bundesbank. It started with monetary targeting in 1975 and held onto this strategy until 1998, the last year before all monetary policy responsibilities were transferred to the ECB.

The track record of the Bundesbank's monetary targeting is far from convincing. In the 23 years of monetary targeting (1975–1998), it reached its rather broadly defined targets in 12 years only. Above all, it did not practice monetary targeting in the way Milton Friedman had recommended it. For Friedman, the long-term orientation of monetary targeting was paramount. The Bundesbank, however, practiced monetary targeting by announcing

2. For small open economies, there is also the strategy of exchange-rate targeting.

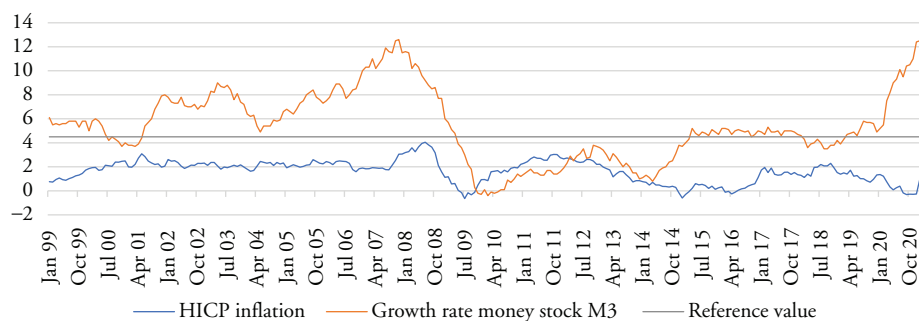
corridors for the money stock M3 *every year*. What is even worse, when the growth rate of the money stock exceeded the annual target at the end of the year, the new target was not based on the target level from one year ago but on the actual level of M3.

It is therefore not surprising that no other major central bank had been willing to adopt this caricature of monetary targeting. However, despite the dismal performance of the Bundesbank's monetary targeting, the ECB decided to follow the Bundesbank's approach.³ In its strategy, which was presented in 1998, monetary targeting was given a prominent role in the form of the so-called 'first pillar':

[M]oney will be assigned a prominent role. This role will be signalled by the announcement of a quantitative reference value for the growth of a broad monetary aggregate. The reference value will be derived in a manner which is consistent with – and will serve to achieve – price stability. Deviations of current monetary growth from the reference value would, under normal circumstances, signal risks to price stability. (ECB 1998)

In line with the Bundesbank's practice, a reference value for the growth rate of the money stock M3 of 4.5 percent was announced in December 1998, that is, before the start of the monetary union.

The outcome was predictable, and it was predicted.⁴ From the very beginning, the growth rate of the money stock M3 showed strong divergences from the reference value (Figure 2). As this did not lead to inflationary tendencies, in the ECB's first strategic review undertaken in 2003, the monetary pillar became the second pillar and the reference value was gradually removed from the ECB's monthly bulletins, the statements at press conferences, and the speeches of the ECB board members.



Source: ECB, Statistical Data Warehouse.

Figure 2 Growth rate of the money stock M3, reference value for M3 and inflation (Harmonized Index of Consumer Prices)

3. This can be attributed to the influence of Otmar Issing. He was Chief Economist of the Deutsche Bundesbank from 1990 until mid 1998 and became the first Chief Economist of the ECB.

4. In Bofinger (1999: 15) I wrote: 'The lack of controllability seems to be a general problem of monetary targeting. This applies even to the Bundesbank which was – besides the Swiss Nationalbank – the most fervent adherent of this approach. The German experience shows that the control problem exists not only in the short run but also in the medium and long run.'

6.2 The strategy of the Taylor rule

In principle, the Taylor rule is a showcase for a heuristic as it cannot only help to assess the stance of monetary policy but to determine the precise value of the short-term interest rate which is the operating target of all central banks. The rule was derived by John Taylor (1993), who searched for a simple formula that would help to describe the interest-rate decisions of the Federal Open Market Committee. The original Taylor rule is as follows:

$$i = 2 + \pi + 0.5(\pi - \pi^*) + 0.5y.$$

The nominal short-term interest rate (i) is calculated as the sum of the neutral interest rate (assumed to be equal to 2) plus the inflation rate (π) plus the 0.5 times inflation gap (inflation rate minus inflation target (π^*)) plus 0.5 times the output gap (y).

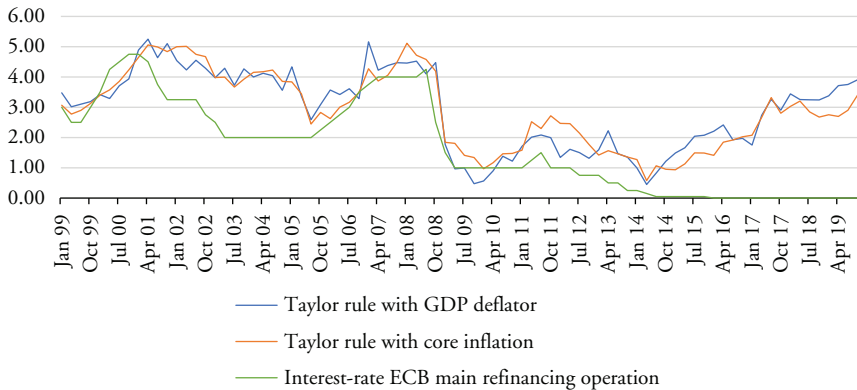
The Taylor rule derives its attractiveness not only from its simplicity but also from the fact that one can show with economic models that the rule has positive stabilization features (Bofinger et al. 2006).

While the Taylor rule did well during the period for which it was detected by John Taylor and also in the 2000s when it indicated a too-expansionary policy stance for the United States and the euro area in the years preceding the global financial crisis, it completely failed in the 2010s. For the euro area, it already indicated the need to increase interest rates by 2014. By the end of 2019, the Taylor rule indicated a short-term interest rate of 4 percent (Figure 3).

Based on the Taylor rule, the majority of the German Council of Economic Experts misjudged the ECB’s policy stance for many years. Its gloomy forecasts of risks for financial stability and price stability never materialized.⁵

The problems with the Taylor rule can be explained by the fact that, while its formula looks simple, its application is fraught with serious difficulties. They relate to:

- the level of the *neutral real interest rate* which anchors the rule – an intensive discussion on the rate, often referred to as r^* , highlights the difficulty of determining such a rate and the broad error bands surrounding equilibrium interest rate (German Council of Economic Experts 2016: chart 54); and



Source: German Council of Economic Experts (2020).

Figure 3 Taylor rule for the euro area and ECB policy rate (rate for main refinancing operations)

5. See the quotes in Bofinger (2020).

- the *output gap*, which is very difficult to identify in real time, so that *ex post* huge revisions are required.

Thus, while it is always useful to look at the Taylor rule, it is not qualified as the main navigation system of central banks.

These problems of the Taylor rule can be avoided by a rule that was developed by Orphanides/Wieland (2013). This rule determines, every month, the required change of the short-term interest rate with a formula based on short-term forecasts for inflation and output growth. Like the original Taylor rule, the formula was derived from the observation of the ECB's interest-rate policy in the past. This rule is defined as follows:

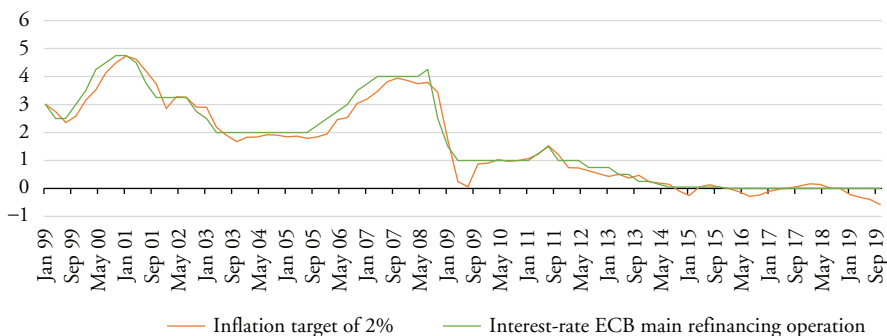
$$i_t = i_{t-1} + 0.5(\pi^p - \pi^*) + 0.5(\Delta q^p - \Delta q^*).$$

i_t denotes the estimated ECB key interest rate, depending on the key interest rate of the previous period, i_{t-1} , on the deviation of the inflation forecast from the central-bank target ($\pi^p - \pi^*$), and on the deviation of the growth forecast, Δq^p , from the estimated potential growth, Δq^* .⁶

While the rule uses variables that can be easily identified, it suffers from two major flaws. First, there is no justification for why the reaction of the ECB in the years for which Orphanides/Wieland (2013) identified this rule is still adequate in a very different macroeconomic environment. Second, as the rule only prescribes interest-rate changes without taking into account their levels, it lacks an absolute anchor. Thus, as Figure 4 shows, over time the rule is more or less identical to the actual interest rate. Even in the short term, deviations from the rate prescribed by the rule and the actual rate are very small. The rule adjusts itself to the actual interest-rate level and thus becomes meaningless.

6.3 The strategy of inflation targeting

The strategy of inflation targeting was introduced by central banks (Reserve Bank of New Zealand, Bank of England, Sveriges Riksbank) in early 1990. It was developed as a



Source: German Council of Economic Experts (2020).

Figure 4 Orphanides–Wieland rule and ECB policy rate (main refinancing operation)

6. The estimates of the potential growth are based on real-time data from the European Commission. The forecasts are based on data from the Survey of Professional Forecasters. The forecast value in three quarters is used for the inflation, and the forecast value in two quarters for the growth.

pragmatic approach without a comprehensive theoretical framework. Since then, many central banks in developed and emerging-market economies have adopted this strategy. Today, one can say that inflation targeting is the common practice of a monetary policy strategy, for countries that do not target the exchange rate. This applies not only to high-income countries but also to middle-income and low-income countries (Table 1). Unfortunately, there is only very limited evidence on the advantages of inflation targeting (Arđakania et al. 2018; Famiglietti/Garriga 2021). This could be attributed to the fact that most studies analyse the effect of inflation targeting on the inflation rate without taking into account the output costs of reducing inflation (the so-called sacrifice ratio).

At its core, inflation targeting is a simple heuristic. It allows us to identify the stance of monetary policy by comparing short-term and medium-term inflation forecasts with the inflation target of the central bank. While there could be the risk that a central bank produces biased inflation forecasts, there are always many forecasts available from official institutions (that is, the International Monetary Fund, OECD, European Commission),

Table 1 Central banks practicing inflation targeting

Country	Inflation targeting adoption date	Target inflation rate at time of adoption	Country	Inflation targeting adoption date	Target inflation rate at time of adoption
New Zealand	1990	1–3	Philippines	2002	4+/-1
Canada	1991	2+/-1	Guatemala	2005	5+/-1
United Kingdom	1992	2 (point target)	Indonesia	2005	5+/-1
Australia	1993	2–3	Romania	2005	3+/-1
Sweden	1993	2 (point target)	Serbia, Republic of	2006	4–8
Czech Republic	1997	3+/-1	Turkey	2006	5.5+/-2
Israel	1997	2+/-1	Armenia	2006	4.5+/-1.5
Poland	1998	2.5+/-1	Ghana	2007	8.5+/-2
Brazil	1999	4.5+/-2	Uruguay ^a	2007	3–7
Chile	1999	3+/-1	Albania	2009	3+/-1
Colombia	1999	2–4	Georgia	2009	3
South Africa	2000	3–6	Paraguay	2011	4.5
Thailand	2000	0.5–3	Uganda	2011	5
Hungary	2001	3+/-1	Dominican Republic	2012	3–5
Mexico	2001	3+/-1	Japan	2013	2
Iceland	2001	2.5+/-1.5	Moldova	2013	3.5–6.5
Korea, Republic of	2001	3+/-1	India	2015	2–6
Norway	2001	2.5+/-1	Kazakhstan	2015	4
Peru	2002	2+/-1	Russia	2015	4

Source: Jahan (2017).

Note: Countries are classified as inflation targeters based on the IMF's Annual Report on Exchange Arrangements and Exchange Restrictions (AREAER) database.

a. Adoption date is based on the starting point when the interest rate became the main monetary policy instrument.

research institutes (Survey of Professional Forecasters), and private financial institutions (that is, Consensus Forecasts by Consensus Economics). This allows us to identify outliers so that a central bank producing biased forecasts is under pressure to justify this.

Above all, inflation targeting takes into account the long time-lags that are associated with monetary policy decisions and their effect on the actual inflation rate. Inflation targeting helps to structure discussions on the stance of monetary policy. Critics of the central bank's monetary policy course are thus forced to concretize their assessment in a concrete inflation forecast.

7 IMPLICATIONS FOR THE ECB'S STRATEGY: SUBSTITUTE CAMOUFLAGED WITH EXPLICIT INFLATION TARGETING

What does this imply for the ECB's two-pillar strategy? As already mentioned, the original strategy developed in 1998 was flawed from the very beginning. The main flaw was the prominent role of monetary targeting in the first pillar, which was more or less silently corrected by first downgrading and then *de facto* abolishing the reference value.

But by discarding this heuristic, the ECB strategy became more or less devoid of content, as the other pillar, the *real analysis*, does not provide a heuristic in the sense of reducing complexity. Instead, it presents a long enumeration of all the indicators that the ECB will take into account in its policy decisions.⁷ In other words, the so-called two-pillar strategy states the obvious fact that the ECB will look at many real and financial variables. Thus, it is useless as a heuristic.

The void created by the two-pillar strategy has led the ECB to practice *camouflaged inflation targeting*. Mainly because of its initial preference for monetary targeting, the ECB has a strange attitude towards inflation targeting. In its strategic papers (ECB 2011), it explicitly distanced itself from this strategy: 'While there are many similarities between the ECB's strategy and strategies of other central banks, the ECB decided not to pursue a direct inflation targeting strategy' (ibid.: 70). And: '[T]he ECB takes the view that relying on a single forecast would not be appropriate, given the considerable uncertainty relating to the structure of the euro area economy' (ibid.: 71).

However, *de facto* the ECB is already practicing inflation targeting. Every quarter, its staff is producing 'inflation projections,' which are regularly presented at the ECB's press conferences. In addition, the ECB organizes a Survey of Professional Forecasters, which collects information on the expected rates of inflation and other macroeconomic variables in the euro area on various horizons, ranging from the current year to the longer term. This allows a comparison of the internal projections with outside forecasts and provides an objective benchmark for inflation targeting.

Therefore, the most important step in the ongoing strategy review should be a dismissal of the two-pillar strategy in favor of an outright adoption of inflation targeting. Above all, this would force the ECB's critics to present their inflation forecasts, which can be evaluated *ex post* instead of making general statements on the inflationary risks of the ECB's policy.

Prioritizing inflation targeting does not mean that monetary and financial indicators are irrelevant for central banks. As the experience of the 2000s has shown, growth rates of the money stock and credit aggregates are not only necessarily early indicators of inflationary pressures, but are also useful as indicators for excessive developments in the banking system and housing markets.

7. The ECB (2021) describes the real analysis as follows: 'To do so, the ECB regularly reviews, inter alia, developments in overall output, demand and labour market conditions, a broad range of price and cost indicators, fiscal policy, and the balance of payments for the euro area.'

Instead of the two pillars, the ECB could use a dashboard with important monetary and financial indicators. In the case of unusual developments, the ECB should comment on them and explain whether or not they signal a risk for price stability or financial stability. Especially in the current situation, where the growth rate of the money stock M3 is very high, this would help to dampen inflation fears.

8 SUMMARY

A revision of the ECB strategy is urgently needed. The strategy, which essentially dates back to 1998, was fraught with problems from the outset. It assigned a prominent role to a monetarist money supply rule and relied on a banal list of various macroeconomic variables as a ‘real analysis.’ Moreover, the target definition of ‘below 2 percent’ left room for price developments on the verge of deflation.

For the new strategy, it must first be important to define the inflation target explicitly in symmetrical terms. This is the only way to guarantee that long-term inflation expectations remain close to 2 percent. Environmental policy objectives can in principle be reconciled with the ECB’s mandate as long as they do not conflict with the objective of monetary stability. However, it should always be ensured that the primary responsibility for climate policy lies with governments.

An essential element of any strategy is a heuristic that makes it relatively easy for the public to see the extent to which monetary policy decisions are in line with the mandate. This contributes significantly to the transparency and thus the credibility of central banks.

Among the possible heuristics, monetary targeting and the Taylor rule have to be ruled out. Neither of them has proven its worth in monetary policy practice. By contrast, ‘inflation targeting’ offers a relatively simple navigation system for monetary policy discussions. One of the ECB’s special features is that it *de facto* uses all the elements of ‘inflation targeting’ without explicitly committing itself to it. In the new strategy, this ‘camouflaged inflation targeting’ should be replaced by ‘explicit inflation targeting.’ This will make the ECB’s decisions more transparent and the commitment of the ECB to its mandate more credible.

POSTSCRIPT

After the final completion of this paper, the ECB published its Strategy Review on 8 July 2021.

The review is consistent with the change in the inflation target from ‘below but close to 2 percent’ to 2 percent proposed in this paper. This also applies to the emphasis on the symmetry of this target in the strategic review.

Regrettably, the ECB continues to adhere to an analytical framework that ultimately only expresses self-evident truths. This has not been changed by the fact that real analysis and monetary analysis with ‘cross-checking’ have now been replaced by an ‘integrated analytical framework that brings together two analyses: the economic analysis and the monetary and financial analysis.’

The ECB has thus not taken the opportunity to replace its implicit inflation targeting with the explicit inflation targeting which this paper proposes. Especially when addressing the medium-term perspective of its inflation target and the possibility of temporary overshooting, it would be helpful to make the anchoring of expectations explicit based on a medium-term inflation forecast.

It is also surprising that the ECB’s ‘action plan to include climate change considerations in its monetary policy strategy’ refers only to the price stability objective, but not to the commitment to promote other Community objectives within the mandate.

REFERENCES

- Ardakania, O.M., Kishorb, N.K., Song, S. (2018): Re-evaluating the effectiveness of inflation targeting, in: *Journal of Economic Dynamics and Control*, 90, 76–97.
- Bergbauer, S., Hernborg, N., Jamet, J.-F., Persson, E., Schölermann, H. (2020): Citizens' attitudes towards the ECB, the euro and Economic and Monetary Union, in: *ECB Economic Bulletin*, 4/2020, URL: https://www.ecb.europa.eu/pub/economic-bulletin/articles/2020/html/ecb.ebart202004_01-9e43ff2fb2.en.html.
- Bofinger, P. (1999): The Monetary Policy of the ECB under Treaty Article 105, in: *Economic Affairs Series of the European Parliament*, 4/1999, URL: [https://www.europarl.europa.eu/RegData/etudes/etudes/join/1999/168279/DG-4-ECON_ET\(1999\)168279_EN.pdf](https://www.europarl.europa.eu/RegData/etudes/etudes/join/1999/168279/DG-4-ECON_ET(1999)168279_EN.pdf).
- Bofinger, P. (2020): The ECB's policy under the presidency of Mario Draghi: a curse or a blessing for Europe?, in: *European Journal of Economics and Economic Policies: Intervention*, 17(2), 171–182.
- Bofinger, P., Mayer, E., Wollmershäuser, T. (2006): The BMW model: a new framework for teaching monetary economics, in: *Journal of Economic Education*, 37(1), 98–117.
- De Grauwe, P. (2019): Green money without inflation, in: *Vierteljahreshefte zur Wirtschaftsforschung*, 88(2), 51–54.
- Draghi, M. (2016): Introductory statement to the press conference (with Q&A), URL: <https://www.ecb.europa.eu/press/pressconf/2016/html/is160310.en.html>.
- ECB (1998): A stability-oriented monetary policy strategy for the ESCB, URL: https://www.ecb.europa.eu/press/pr/date/1998/html/pr981013_1.en.html.
- ECB (2003): The ECB's monetary policy strategy, URL: https://www.ecb.europa.eu/press/pr/date/2003/html/pr030508_2.en.html.
- ECB (2011): The monetary policy of the ECB, URL: <https://www.ecb.europa.eu/pub/pdf/other/monetarypolicy2011en.pdf>.
- ECB (2021): Economic analysis: real activity and financial conditions, URL: <https://www.ecb.europa.eu/mopo/strategy/ecana/html/index.en.html>.
- Famiglietti, M., Garriga, C. (2021): A simple evaluation of two decades of inflation targeting: lessons for the new monetary policy strategy, in: *Economic Synopses*, 1/2021, URL: <https://research.stlouisfed.org/publications/economic-synopses/2021/01/29/a-simple-evaluation-of-two-decades-of-inflation-targeting-lessons-for-the-new-monetary-policy-strategy>.
- German Council of Economic Experts (2016): *Annual Report 2016*.
- German Council of Economic Experts (2020): *Annual Report 2020*.
- Gigerenzer, G., Gaissmaier, W. (2011): Heuristic decision making, in: *Annual Review of Psychology*, 62(1), 451–482.
- Jahan, S. (2017): Inflation targeting: holding the line, finance and development, Back to Basics Compilation, URL: <https://www.imf.org/external/pubs/ft/fandd/basics/target.htm>.
- Lagarde, C. (2019): Press conference on 12 December 2019, Frankfurt am Main, URL: <https://www.ecb.europa.eu/press/pressconf/2019/html/ecb.is191212-c9e1a6ab3e.en.html>.
- Lagarde, C. (2020): The monetary policy strategy review: some preliminary considerations, Speech by Christine Lagarde, President of the ECB, at the 'ECB and its Watchers XXI' Conference, Frankfurt am Main, 30 September, URL: <https://www.ecb.europa.eu/press/key/date/2020/html/ecb.sp200930-169abb1202.en.html>.
- Orphanides, A., Wieland, V. (2013): Complexity and monetary policy, in: *International Journal of Central Banking*, 9(1), 167–204.
- Powell, J.H. (2020): New economic challenges and the Fed's monetary policy review, URL: <https://www.federalreserve.gov/newsevents/speech/powell20200827a.htm>.
- Taylor, J. (1993): Discretion versus policy rules in practice, in: *Carnegie-Rochester Conference Series on Public Policy*, 39, 195–214.
- Weidmann, J. (2021): What role should central banks play in combating climate change?, URL: <https://www.bundesbank.de/en/press/speeches/what-role-should-central-banks-play-in-combating-climate-change-856904>.