



What Else Can the European Central Bank Do?

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Since 2015, the inflation rate in the euro area has remained well below 2%, the target announced by the European Central Bank (ECB). This is despite an extremely accommodating monetary policy, with interest rates in negative territory and an unprecedented asset purchase programme –which has been further increased since the Covid-19 crisis. These monetary policy instruments have been useful and absolutely necessary in preventing deflation, but can they and should they be deployed even more widely? Is there a need for new ones? The current instruments have failed to produce on-target inflation, but they have produced collateral effects that raise questions, including in relation to an increase in wealth inequality, the purchase of assets from polluting industries in order to respect the principle of market neutrality, the exemption of bank deposits at the central bank from negative deposit facility rate (tiering), and the fiscal dominance due to the increasing holding of public debt. The latter could eventually endanger the independence of the ECB.

The strategy review launched by the ECB, which is expected to be completed in autumn 2021, is therefore a welcome initiative to propose new instruments and to do so without taboos. Even if this *Note* does not answer all the questions raised by this review, its aim is to participate to the debate in a constructive way by focusing on the instruments needed to achieve the ECB's inflation target and to consider, where appropriate, the necessary coordination with fiscal policy. In this context, we consider that the ECB should adopt a communication strategy aimed at making credible a symmetric approach to the 2%

inflation target and accept that inflation may temporarily exceed this target. The question that arises, particularly in the euro area, is what instruments should be used to make such a commitment credible.

From an operational point of view, the ECB has virtually no limits within its mandate, as long as its operations do not contradict “free competition” and do not constitute “direct” or “certain” financing of governments. It should implement a clear communication policy on its willingness to overshoot its inflation target –temporarily, or more permanently, as the Fed intends to do– with a more explicit timetable (what is called forward guidance in the language of central banks) and accompany it with specific monetary policy measures.

Among the possible new monetary policy instruments, the option commonly referred to as “helicopter money” should be made available to stimulate inflation in case it remains persistently too low. This would take the form of a direct transfer from the central bank to individuals, renewed as long as the inflation target is not reached, and would be an effective instrument. Indeed, econometric estimates, which should be treated with caution, suggest that a monetary transfer equivalent to 1% of GDP would increase the inflation rate by 0.5 percentage point over a one-year horizon. However, this should remain an instrument of last resort, and one among others in the ECB's toolbox. Adding this instrument to monetary policy would limit the continuous increase of asset purchase programmes with their potential collateral effects. To be effective and legitimate, helicopter money could be implemented only within a framework of coordination between monetary and fiscal policy.

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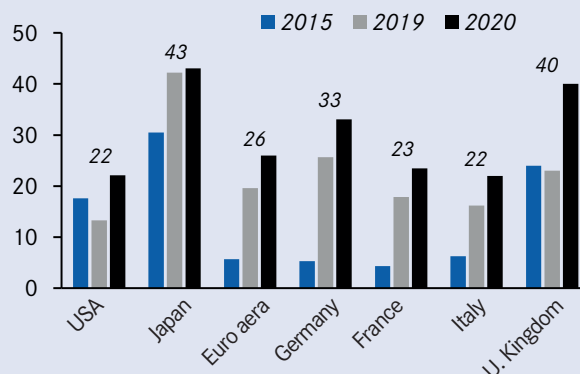
The financial crisis of 2008 led to the introduction of new monetary policy instruments (negative interest rates, massive public asset purchase programmes, etc.) on both sides of the Atlantic. The effectiveness of these monetary policy tools is being increasingly questioned, not only because of sustained low inflation, but also because of their potential collateral effects on other areas of economic policy, and on inequality and asset prices. For example, in the European case, the inflation rate since 2015 has remained well below the central bank's target of 2%.

The Covid-19 crisis calls for an analysis of new instruments that are adapted to the specific economic and political context of the euro area and to the need for greater coordination with fiscal policy.¹ Central banks are usefully reflecting on the best tools to stabilize economic activity within their mandate. In the US, the Fed is supporting massive fiscal stimulus packages by allowing inflation to rise above its long-term target on a transitory basis. The ECB's strategy review, expected to be concluded in autumn 2021, is likely to lead to changes in policies or tools within its mandate.

Inflation remains low despite central bank action

In 2019, central banks were signalling their willingness to return –albeit slowly and gradually– to the “conventional” monetary policy of pre-2008. However, the Covid-19 crisis has amplified the trend of the previous decade, which was characterized by an expansion of central bank operations and an increase in their financial weight as a proportion of national income. In the euro area, the ECB's “Pandemic Emergency Purchase Programme” (PEPP) has led the ECB to further expand its balance sheet, in particular by purchasing around three-quarters of the public debt issued by euro area countries since the start of the pandemic.² The ECB's balance sheet is now close to 60% of euro area GDP, and it holds almost a quarter of the stock of public debt of each European country (Figure 1). By comparison, these amounts are unprecedented in peacetime.³

1. Share of public debt held by the Central Bank, as % of public debt



Sources: National Central Banks, National Accounts, partly based on Blot C. and P. Hubert (2020): “De la monétisation à l’annulation des dettes publiques, quels enjeux pour les banques centrales?”, *OFCE Policy Brief*, no. 80.

Inflation rate persistently below target

Central bank policy since 2008 has helped to avoid a chain of financial crises and a deflationary situation. However, inflation remains too low. The ECB's primary objective is to ensure price stability. The ECB itself has specified its interpretation of price stability: a rate of inflation (in the medium term) below but close to 2%.⁴ Although the term “close” leaves room for interpretation, since 2015 the annual inflation rate has been around 90% below 1.9% (see Figure 2). Moreover, the ECB's forecasts have consistently overestimated inflation: between 2015 and the Covid-19 crisis, the ECB has forecasted every quarter a return to an inflation rate close to 2% within a year or year and a half. In other words, the ECB keeps missing its target while expecting to hit it.⁵

After being negative at the end of 2020, the inflation rate rose to 2% in May 2021. This springtime rise is remarkably weak if we take into account that the price level in March and April 2020 was already affected by the Covid-19 crisis

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¹ This question was already formulated in similar terms before the Covid-19 crisis, particularly in the event of a further negative economic shock. See in particular Ball L., J. Gagnon, P. Honohan and S. Krogstrup (2016): *What Else Can Central Banks Do?*, CEPR Geneva Report; Bartsch E., J. Boivin, S. Fischer and P. Hildebrand (2019): “Dealing with the Next Downturn: From Unconventional Monetary Policy to Unprecedented Policy Coordination”, *SUERF Policy Note*, no. 105. For an implementation of helicopter money in response to the Covid-19 crisis, see also Jourdan S. (2020): « Helicopter Money as a Response to the Covid-19 Recession », *Positive Money*, March.

² We use the terms ECB and Eurosystem interchangeably here, even though monetary policy in the euro area is the responsibility of the latter and not the former.

³ Monnet E. (2021a): *Why Central Bankers Should Read Economic History*, Books and Ideas.

⁴ This definition dates from 2003. Prior to that, price stability was defined simply as an inflation rate below 2%. See Hartmann P. and F. Smets (2018): “The European Central Bank's Monetary Policy During its First 20 Years”, *Brookings Papers on Economic Activity*, September.

⁵ Darvas Z. (2018): *ECB's Huge Forecasting Errors Undermine Credibility of Current Forecast*, Bruegel Blog.

and that a “base effect” therefore exists, which should mechanically lead to higher inflation when the crisis ends. For this reason, in the United States, the annual inflation rates for March and April reached 2.6% and 4.2%. Market participants’ inflation expectations in the euro area Eurozone remain low, despite the better economic outlook due to high vaccination levels and the US stimulus policy (Figure 3). The ECB itself is cautious and –in its June 2021 forecast– anticipates an average inflation rate of 1.5% in 2022 (and 1.4% in 2023).

As ECB’s chief economist Philip Lane concedes, the ECB faces two distinct challenges: to counteract the deflationary impact of the pandemic and to continue to bring the inflation rate back to its target, as it was attempting to do before the Covid-19 crisis.⁶ However, this announcement is risky for the ECB in terms of communication. It is clear that the ECB has so far failed to achieve its inflation target. The inability to achieve its main objective raises a major question of credibility for the central bank: “the longer low inflation persists, the more the credibility of central banks risks being affected” (Coeuré, 2020).⁷

Persistently low inflation is all the more problematic for the ECB as the unemployment rate remains high in the euro area, above 8% of the active population. However, the European System of Central Banks has a mandate, “without prejudice to the objective of price stability”, to “support the general economic policies in the Union” (Art. 127 TFEU), and therefore in particular the fact that the European Union “shall aim at full employment and social progress” (Art. 3 TEU).

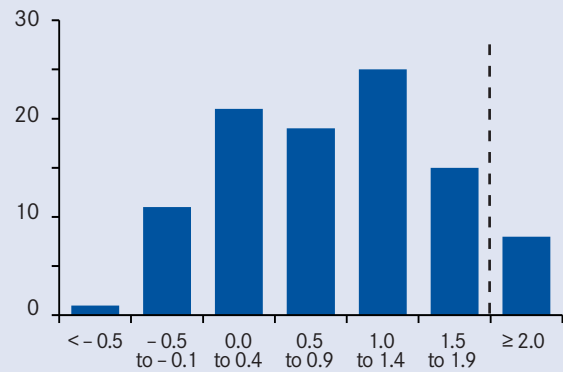
The question facing the ECB and the Eurosystem today –and also the European Parliament, which regularly hears the ECB– is therefore whether monetary policy still has room for manoeuvre to increase inflation to around the 2% target and to move the European economy towards full employment. If these margins exist, it is up to the ECB to use them to respect the mandate it has been given and from which it derives its legitimacy.

Observation 1. The ECB has failed to achieve its inflation target since 2015. Euro area inflation expectations remain well below 2%.

A changing economic and international context

There are many concerns about the state of the economy coming out of the current crisis. In the US, the Biden’s Plan aims to address this (including by issuing vouchers equivalent to \$1,200 per person).

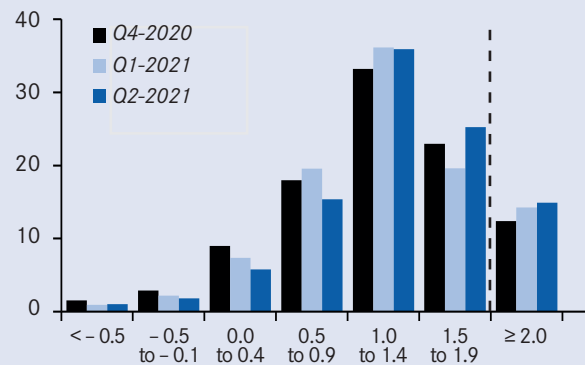
2. Distribution of monthly inflation in the euro area from 2015 to 2021



Note: The horizontal axis represents the average monthly value of the inflation rate and the vertical axis represents the percentage of months in which the inflation rate took this value.

Source: OECD.

3. Distribution of inflation forecasts for 2022 by forecast date



Note: The horizontal axis represents the average monthly value of the inflation rate and the vertical axis the percentage of forecasters who believe the monthly value of inflation projected on the horizontal axis.

Source: Survey of Professional Forecasters, European Central Bank.

However, the adoption of the stimulus packages and the possibility of a stronger than expected recovery has brought back into the public and economic debate the risk of resurgent inflation. Most analysts and international organizations, however, favour the scenario of a temporary and moderate increase in inflation, despite the scale of the fiscal stimulus. The deflationary factors linked to the Covid-19 crisis (unemployment, loss of human capital, risks of bankruptcy) are indeed weighing heavily on the economy. The models used by economists from international institutions

⁶ See the interview by Lane P.R. (2021): “We Have an Ongoing Two-Stage Challenge. Counter the Negative Pandemic Shock to the Inflation Path and Subsequently Finish the Task of Raising Inflation to Our Aim”, *Financial Times*, March.

⁷ Coeuré B. (2020): “Les banques centrales pendant et après la pandémie de Covid-19”, *Revue d’Économie Financière*, vol. 2020/3-4, no. 139-140.

and the expectations of market investors currently indicate that inflation in the United States could reach 2.5-3% by the end of 2021.⁸ Inflation would remain lower in the euro area due to smaller stimulus packages, as confirmed by ECB forecasts. This difference carries a risk: if the US central bank were to raise interest rates to counter domestic inflation, the rate increase would be transmitted to Europe –through the highly integrated financial markets– even though European inflation would remain lower.⁹

The factors of low inflation

Despite much controversy about the determinants of inflation and the relationship between consumer prices and economic conditions (unemployment or output), econometric analyses show that European inflation has remained low in recent years for two main reasons.¹⁰ First, the economic situation has remained gloomy: the unemployment rate is high and wage growth is weak. In addition, two international factors have weighed on price growth: imports of low-cost products, and moderate growth in oil and energy prices since 2015. Monnet and Puy (2021) show that, since 2010, more than 50% of the average volatility of consumer prices in a given country is explained by a global factor, whereas this share is only 25% for GDP.¹¹ Trade and financial globalization have significantly increased the international synchronization of consumer price inflation, while the synchronization of real activity has remained stable outside of brief crisis periods. In other words, the strength of the global cycle makes it more difficult for a country's monetary and fiscal policies to influence the inflation cycle than the GDP cycle.

However, this does not mean that monetary policy is unable to influence the price and business cycle. Without the measures taken by the European Central Bank since 2015, inflation would have been much lower and unemployment higher.¹² Monetary policy has an impact on prices –through various channels, including expectations and asset prices–

and the link between economic activity (unemployment or GDP) and inflation remains significant, even if it is weaker than before.¹³ A recent study by the Banque de France concludes that almost a third of the low inflation over the period 2013-2019 (compared to the period 1999-2007) is explained by higher unemployment.¹⁴ However, the fact that inflation is more dependent on global factors and less on the economic cycle means that the central bank must use ever greater resources to achieve its inflation target.

Observation 2. In order to achieve its inflation target, the ECB will probably have to increase the size of its interventions and therefore of its balance sheet, with the corollary of an ever-increasing share of public debt held by the ECB.

Criticisms of current monetary policy instruments

The monetary response to the Covid-19 crisis also comes in a context where the monetary policy instruments used since 2008 are increasingly criticized, not only for their failure to achieve the inflation target, but also for their collateral effects on the economy. We can distinguish four main criticisms that are frequently made: increasing wealth inequality due to asset purchases, the purchase of assets from polluting industries in order to respect the principle of market neutrality, the exemption of bank deposits at the central bank from negative deposit facility rate (tiering) and fiscal dominance due to the high holding of public debt.¹⁵

The potential effect of quantitative easing on inequality has been the subject of much analysis (for a review of the literature, see Bennani *et al.*, 2021).¹⁶ The objective of

⁸ Ball L., G. Gopinath, D. Leigh, P. Mishra and A. Spilimbergo (2021): "US Inflation: Set for Take-off?", *VoxEU*, 7 May.

⁹ On the impact of the US Central Bank (Fed) rate on other countries' rates, see: Miranda-Agrippino S. and H. Rey (2020): "US Monetary Policy and the Global Financial Cycle", *The Review of Economic Studies*, vol. 87, no. 6; Miranda-Agrippino S., T. Nenova and H. Rey (2020): *Global Footprints of Monetary Policies*, Mimeo Center for Macroeconomics (CFM).

¹⁰ Eser F., P. Karadi, P.R. Lane, L. Moretti and C. Osbat (2020): "The Phillips Curve at the ECB", *The Manchester School*, vol. 88, issue S1; Diev P., Y. Kalanzis, A. Lalliard and M. Mogliani (2021): "Comment expliquer la faiblesse de l'inflation en zone euro depuis 2013?" (article no. 7), *Le Bulletin de la Banque de France*, no. 234.

¹¹ Monnet E. and D. Puy (2021): "One Ring to Rule Them All? New Evidence on World Cycles", *CEPR Discussion Paper*, no. DP15958.

¹² A recent ECB study produces a counterfactual scenario which concludes that inflation in the euro area would have been 0.75 pp lower without all the measures taken since 2013 (negative rates, quantitative easing, forward guidance). Rostagno M., C. Altavilla, G. Carboni, W. Lemke, R. Motto and A. Saint Guilhem (2021): "Combining Negative Rates, Forward Guidance and Asset Purchases: Identification and Impacts of the ECB's Unconventional Policies", *ECB Working Paper*, no. 2564.

¹³ The significance of the link between inflation and unemployment (i.e. the Phillips curve) remains debated, however. See: Geerolf F. (2021): "La courbe de Phillips n'est pas celle que vous croyez", *La Lettre du CEPII*, no. 417, April; Hazell J., J. Herreño, E. Nakamura and J. Steinsson (2020): "The Slope of the Phillips Curve: Evidence from US States", *National Bureau of Economic Research*, no. 28005, for sceptical views on the existence of this relationship. See, by contrast, Hooper P., F.S. Mishkin and A. Sufi (2019): "Prospects for Inflation in a High Pressure Economy: Is the Phillips Curve Dead or is It Just Hibernating?", *Research in Economics*, no. 74.1, for empirical evidence of the Phillips curve.

¹⁴ Diev P., Y. Kalanzis, A. Lalliard and M. Mogliani (2021): "Comment expliquer la faiblesse de l'inflation en zone euro depuis 2013?" (article no. 7), *Le Bulletin de la Banque de France*, no. 234.

¹⁵ Another criticism is that the purchase of private securities increased dividends rather than corporate investment, see Todorov K. (2020): "Quantify the Quantitative Easing: Impact on Bonds and Corporate Debt Issuance", *Journal of Financial Economics*, vol. 135, no. 2.

¹⁶ Bennani H., É. Fize and H. Paris (2021): "Baisse des taux d'intérêt et effets sur les inégalités entre ménages depuis 2012 en France", *Focus du CAE*, no. 061-2021, June.

quantitative easing is to increase the price of assets in order to lower their yield, and thus reduce the cost of borrowing in the economy while generating a wealth effect for asset holders. This policy therefore mechanically leads to an increase in the nominal wealth of individuals who own these assets, and thus potentially increases inequality. However, this inequality effect can be offset by the lower return on capital (interest rate) and by the fact that these asset purchases reduce the unemployment rate. However, by focusing the analysis on financial income and asset prices in the euro area, Tzamourani (2021)¹⁷ shows that the changes in net interest income following a monetary policy shock are much smaller in magnitude than the capital gains/losses arising from the increase/decrease in asset prices. In line with this empirical work, Bennani *et al.* (2021) suggest that capital gains from French data are much higher than the changes in financial income resulting from interest rate cuts. Based on administrative data on incomes in Sweden, Amberg *et al.* (2021)¹⁸ show that an easing of monetary policy affects incomes in the extreme deciles significantly more: the bottom decile benefits from labour income and the top decile – and even more so the top percentile – from capital income. It is therefore legitimate to check whether other monetary policy instruments could achieve the same macroeconomic effect on unemployment and inflation without increasing asset prices as much.

The purchase of assets from polluting industries in order to respect the principle of market neutrality has also been criticized.¹⁹ This problem has now been recognized by the ECB, which has undertaken to announce measures in autumn 2021 as part of its strategy review. The debate on the role of central banks in regulating climate risk and financing the ecological transition is fundamental and goes beyond the scope of this *Note*. This debate is evolving rapidly and implies a reflection on the mandate of the European Central Bank, which could possibly be specified by the European Parliament or the European Council.²⁰

Another criticism of the ECB's asset purchases concerns the system created to compensate for potential losses incurred by banks as a result of the negative rates applied to reserves at the Bank. The ECB buys assets from banks by crediting their accounts. However, the ECB's expansionary

policy has led to remunerate the reserves held by the banks at a negative rate. In order to ensure that this negative remuneration does not damage the banks' profits too much, the ECB has set up a system (called a two-tier system or tiering) that exempts a part of the banks' deposits from this negative rate. In concrete terms, this means that the Central Bank buys assets from banks at a negative rate and then pays a higher rate (equal to zero) on the money that the banks have received in exchange for these assets. It is therefore a financial transfer from the ECB to the banks, which has budgetary consequences since this reduces the profit that the Central Bank pays to the States each year by the same amount. The argument behind this operation is that monetary policy could not work in a world where banks were not sufficiently profitable. To compensate for the banks' loss, they would have to increase their lending rate, contrary to the ECB's expansionary policy. But this argument has been criticised because there is little theoretical or empirical evidence on the impact of negative central bank rates on bank profitability.²¹ A study on Switzerland shows very weak effects of this mechanism on bank lending.²² The fact that the central bank should be concerned with supporting banks' profitability outside periods of financial crisis,²³ and that banks should be treated differently from other financial institutions, is also open to criticism. We consider that it is necessary at least to assess the effectiveness, necessity, and legitimacy of the ECB's tiering system.

Finally, the purchases of public debt (which we do not dispute have been useful to avoid deflation) raise the question of the risk, in the long run, of fiscal dominance. This is a situation where the central bank is constrained by fiscal policy (in particular by a high and growing public debt) in its ability to preserve price stability. The ECB²⁴ insists that it is not in this situation, because monetary policy remains guided by the objective of price stability and not by an objective of reducing the public debt burden. This may be the case today, but there is a risk that the anticipation of an indefinite extension of ECB public debt purchases will lead to inefficient public spending or imprudent tax cuts. On the contrary, Modern Monetary Theory (MMT) advocates suggest that monetary policy should be subject to fiscal policy and that the central bank should buy debt until an inflationary situation is reached.²⁵

¹⁷ Tzamourani P. (2021): "The Interest Rate Exposure of Eurozone Households", *European Economic Review*, vol. 132, no. 103643.

¹⁸ Amberg N., T. Jansson, M. Klein and A. Rogantini Picco (2021): "The Rich, the Poor, and the Others: How Monetary Policy Affects the Distribution of Income", *VoxEU.org*, 23 May.

¹⁹ Campiglio E., Y. Dafermos, P. Monnin, J. Ryan-Collins, G. Schotten and M. Tanaka (2018): "Climate Change Challenges for Central Banks and Financial Regulators", *Nature Climate Change*, vol. 8, no. 6; Bolton P., M. Després, L. Awazu Pereira da Silva, F. Samama and R. Svartzman (2020): *The Green Swan*, BIS Books.

²⁰ For a proposal to strengthen Parliament's ability to specify the ECB's mandate on this issue, see Monnet E. (2021b): "New Central Banking Calls for a European Credit Council", *VoxEU.org*, 26 March.

²¹ Repullo R. (2020): "The Reversal Interest Rate: A Critical Review", *CEPR Discussion Paper*, no. 15367.

²² Fuster A., T. Schelling and P. Tobin (2021): "Tiers of Joy? Reserve Tiering and Bank Behaviour in a Negative-Rate Environment", *Swiss National Bank*, no. 2021-10.

²³ Blot C. and P. Hubert (2019): "Has the ECB Lost its Mind?", *SciencesPo Publications Policy Brief*, no. 61.

²⁴ See speech by Isabel Schnabel (2020): *The Shadow of Fiscal Dominance: Misconceptions, Perceptions and Perspectives*, Berlin, September.

²⁵ On this subject, see Xavier Ragot's post that discusses the MMT proposals through a review of two recent books: Stephanie Kelton S. (2021): *Le mythe du déficit*, Éditions Les liens qui Libèrent, and Tcherneva P.R. (2021): *La garantie de l'emploi*, La Découverte; Ragot X. (2021): "The 'Modern Theory of Money': Is It Useful?", *Le blog de l'OFCE*, English Edition, 29 April.

This perspective poses difficult problems in the framework of the euro area, where different national debts exist, with very different amounts. In addition to the inflationary effects, the uncontrolled redistributive effects between countries make this perspective incompatible with the current state of European construction.

Recommendation 1. Conduct independent assessments for national and European parliaments of the potential impact of ECB instruments on wealth inequality, the financing of the ecological transition, government budgets, and bank profits.

What the European Central Bank can still do

After presenting the ECB's mandate and the legal constraints on its action, we review the various instruments available to the Bank.

Legal framework

The ECB's mandate is to "support the general policies in the EU" "without prejudice to price stability" and acting "accordance with the principle of an open market economy with free competition, favouring an efficient allocation of resources" (Art. 127 TFEU). This is therefore a very broad mandate. The financial operations that the Eurosystem can carry out are defined in its Statute and can be relatively easily extended (i.e. without amending the Treaties), either by the Governing Council itself (by a two-thirds majority) or by supplementary legislation of the European Council if these operations involve obligations for third parties.²⁶ Finally, it should be noted that the Eurosystem can make losses.²⁷

The only operation prohibited by the Treaty is direct lending to States (Article 123 TFEU). The reading and legal value of the article prohibiting the financing of States have been clarified by the Court of Justice of the European Union, in particular in its judgment on the legality of the so-called Outright Monetary Transactions (OMT) scheme (Gauweiler judgment).²⁸ This states that the purchase of government debt securities on the secondary market by the ECB does not interfere with Article 123 provided that "the measures that it entails are proportionate to the objectives of that policy" and

that the Eurosystem provides guarantees "Inasmuch as those safeguards prevent the conditions of issue of government bonds from being distorted by the certainty that those bonds will be purchased by the ESCB after their issue". Uncertainty about repurchases is therefore, according to the Court, the main guarantee that the measures will not be "such as to lessen the impetus of the Member States concerned to follow a sound budgetary policy".

Observation 3. From an operational point of view, the ECB has virtually no limits, as long as its operations do not contradict "free competition" and do not constitute "direct" or "certain" financing of governments. Other operations are possible without the need for a change in the EU Treaties.

Other instruments available to the ECB

The Fed has announced that it will accept some overshooting of inflation in relation to its target to compensate for past low inflation ("makeup strategy"). This debate is also taking place in the euro area,²⁹ but the most discussed and consensual option is a simple symmetrization of the target. Symmetrization would shift from a commitment to avoid inflation above 2% to a commitment by the ECB to act symmetrically if inflation is below or above 2% to bring it back towards this target. We consider such a reform desirable and necessary. However, this commitment would not imply that periods with inflation below 2% would be compensated by periods above (as for the Fed). This symmetrization appears at this stage to be the minimum that the ECB's strategy review can achieve. However, symmetrization and even more so compensation (makeup strategy) require the implementation of credible instruments. The situation in the euro area is not the same as in the United States, where past underperformance on the inflation target has been more pronounced. This makes the issue of credible tools more important here. It is certainly necessary for the ECB to put in place –as it is beginning to do– a clear communication policy on its objective to reach and possibly temporarily exceed the 2% target. But such a general communication policy should be accompanied by concrete monetary policy measures, and should take a precise form with a more explicit target and timetable (what is known as forward guidance in central bank jargon).

²⁶ Consolidated version of the Treaty on the European Union, Protocol no. 4 on the Statute of the European System of Central Banks and of the European Central Bank, Articles 20 and 40.

²⁷ The distribution is defined in Article 33 of the Protocol, see above.

²⁸ Judgment of the Court of Justice of the European Union (Grand Chamber) of 16 June 2015 in case C-62/14.

²⁹ Both Olli Rehn, Governor of the Central Bank of Finland, and Philip Lane, Board Member and Chief Economist of the ECB, have indicated or suggested in the press that they might be in favour.

Recommendation 2. Adopt a communication strategy aimed at making a symmetrical approach to the inflation target around 2% credible and accept that inflation may temporarily exceed this target.

Below we discuss two monetary policy instruments used by other central banks or theoretically possible and on which an ECB communication could use as a basis to guide inflation expectations in a credible manner: increasing risk-taking, or remunerating retail deposits at a negative rate. However, these two measures do not seem to us to be capable of boosting inflation in the short term. After examining these, the next section will therefore explore another avenue.

Increasing risk-taking

This involves purchases or loans with greater risk-taking. This can take the form of buying shares, as the Bank of Japan does, or absorbing the credit risk entirely by guaranteeing bank loans to companies at their request, as the Fed proposed through its Main Street Lending Program (terminated in January 2021). However, in the latter case, the risk was explicitly assumed by the US Treasury, and the central bank was ultimately only the operator. In the euro area, in order to ensure that the purchase of shares does not contravene the principle of free competition recalled in the treaties, it should be carried out systematically and for an entire sector. This would nevertheless pose a significant problem of disruption of competition in sectors where major companies are not listed companies. In any case, this policy has a very pronounced redistributive aspect, especially as the risk of loss is high. Above all, these instruments are more suited to a lender-of-last-resort policy to avoid a financial crisis than to an expansionary policy to increase inflation.²⁹

Accepting deposits at the central bank and paying negative interest on them

Another radical proposal put forward by several prominent economists would be to apply a negative interest rate to deposits by individuals or even to fiat money (cash).³⁰ The creation of central bank digital currency in the form of deposits by individuals at the central bank could facilitate this type of policy, but the creation of such money is not on the agenda in the short term. Moreover, remunerating these deposits negatively –even if theoretically effective– raises the question of the social and political acceptability of such a measure.³¹

Another option discussed especially in France is the cancellation of the public debt held by the ECB. We explain in Box 1 why the option of cancelling the public debt held by the ECB should be rejected.

1. Would cancelling the public debt held by the ECB be beneficial?

Cancelling the public debt held by the ECB is an unnecessary, potentially dangerous, and impossible option under the current treaties. From a legal point of view, such a cancellation would clearly conflict with the European Treaties and the case law of the Court of Justice of the European Union, as it corresponds to a direct and certain transfer to the State. Moreover, the cancellation of the public debt held by the Bank would have no impact on the State budget: the gain linked to the decrease in interest payments (of the cancelled debt) would be compensated by the loss of interest income that the Bank pays to the government.^a From a macroeconomic point of view, this cancellation would have no direct effect: the official debt of the central government would be transformed into central bank debt. From a purely accounting point of view, it would indeed reduce the value of the official public debt in the Maastricht sense, but what would be the point of this accounting reduction? One argument put forward in favour of cancellation is that it would allow the States to reinvest. In other words, the States would borrow back from the financial markets the same amount as the cancelled amount. But there is no evidence that this new debt could be raised at a more favourable interest rate than in the previous situation. Moreover, if the public debt held by the Bank were to be cancelled, it is likely that this would be in return for restrictive conditions (if not a ban) on the bank's future purchases of public debt by the Central Bank. This would deprive the government of room for manoeuvre and increase the risk premium on government debt.

^a Blot C. and P. Hubert (2020): "De la monétisation à l'annulation des dettes publiques, quels enjeux pour les banques centrales?", *OFCE Policy Brief*, no. 80.

²⁹ The Bank of Japan's equity purchases apparently had no effect on the investment of the companies involved: Charoenwong B., R. Morck and Y. Wiwattanakantang (2021): "Bank of Japan Equity Purchases: The (Non-) Effects of Extreme Quantitative Easing", *Review of Finance*, vol. 25, no. 3.

³⁰ Lilley A. and K. Rogoff (2020): "The Case for Implementing Effective Negative Interest Rate Policy", in *Strategies for Monetary Policy*, Cochrane and Taylor (eds), Stanford: Hoover Institution Press; Bordo M.D and A.T. Levin (2017): "Central Bank Digital Currency and the Future of Monetary Policy", *National Bureau of Economic Research*, no 23711.

³¹ This option is thus explicitly excluded by the seven central banks that have written a first report on central bank digital currencies: Bank for International Settlements (BIS) and a group of seven central banks (2020): *Central Bank Digital Currencies: Foundational Principles and Core Features*, Report no. 1.

Helicopter money as a last resort

In this last section, we detail a monetary policy instrument that may be the most effective in boosting inflation in the euro area if it remains too low. This option is commonly referred to as “helicopter money”. Two methods of implementation are usually considered: a direct transfer from the central bank to the government financing public expenditure, or a direct transfer from the central bank to individuals. As the first option is explicitly forbidden in the European legal framework, we discuss the second only. In the current period of exiting the Covid-19 crisis and implementing the European Recovery Plan, discussing the opportunity of implementing such a measure is necessary. In any case, the discussion of this measure is useful today to prepare its implementation in case of a new economic crisis, which cannot be excluded in the next few years.

Although helicopter money has never been implemented, this instrument is considered as possible and interesting by both economists (the term was coined by Milton Friedman) and central bankers.³² Thus, Ben Bernanke, in his speech entitled “Deflation: Making sure ‘it’ doesn’t happen here” in 2002, presented helicopter money as a means of injecting liquidity to fight deflation.³³ The 2016 Geneva Report, co-authored by former Central Bank of Ireland Governor Patrick Honohan, along with a note by former central bankers Bartsch, Boivin, Fischer and Hildebrand (2019),³⁴ also concluded that helicopter money was a radical solution worth considering if quantitative easing and negative interest rates did not allow the central banks to increase inflation sufficiently.³⁵

Objectives and conditions of a helicopter money policy

We view the introduction of helicopter money as a contingent strategy for boosting inflation. There are several cases in which it would be a necessary instrument:

- The recovery of the euro area economy is insufficient, less vigorous than currently predicted, and not strong enough to achieve the ECB’s inflation target. This could be the case, for example, if a significant part of the savings accumulated by households during the crisis turns into precautionary savings;
- This would result in a persistent deficit on the demand side, which could have negative consequences on the supply side, if:

- The European recovery plan is neither accelerated nor reinforced;
- European governments fail to coordinate on national recovery plans with spending commitments.

Martin *et al.* (2020) propose a strategy that aims to calibrate a contingent policy response with a time target in terms of activity and employment.³⁶ This strategy remains appropriate. It has been updated and clarified by Blanchard and Pisani-Ferry (2021).³⁷ These authors spell out a fiscal policy at the level of France. We follow a similar logic, but in the monetary field and at the level of the euro area as a whole. With Biden’s plan, the United States has given itself ambitious objectives and means. This recovery plan cannot be imported *per se* in Europe, but we should be inspired by the objective of not accepting that the crisis generates permanent stigmas (in terms of productivity and employment). More generally, as pointed by Ball *et al.* (2016), a direct transfer to households by the central bank can only be implemented and be fully effective if there is cooperation between monetary and fiscal policies. This cooperation must, however, be based on a clear distinction between what falls under each of these policies. In other words, it is necessary to:

- Emphasize that the purpose of helicopter money is indeed a monetary policy objective (the inflation target) and that this tool will be adjusted and discontinued according to changes in inflation;
- Explain, where appropriate, why this route is preferable and more efficient than a transfer from government to households as in the US (Biden’s Plan);
- Ensure that fiscal and budgetary policy does not contradict central bank action.

A direct cash transfer to households is a powerful tool for controlling inflation, as is highlighted by numerous academic studies.³⁸ First, it allows a direct transfer to households with a high propensity to consume (such as unbanked households). The aggregate demand channel is therefore particularly powerful compared to other methods of money creation, such as open market purchases. Second, the inflation outlook can be anchored by expectations that monetary transfers will occur as long as the inflation target is not reached together with the possibility of stopping these transfers if there is a high probability of a lasting overshoot of the target. As a result, the channel of inflation expectations is also powerful. Empirical work leads to emphasizing these two channels

³² See the summary by Bilbie F., A. Martin-Baillon and G. Saint-Paul (2021): “L’hélicoptère monétaire: au-delà du mythe”, *CEPREMAP Opuscule*, no. 58.

³³ Bernanke B.S. (2002): *Deflation. Making Sure “It” Doesn’t Happen Here*, Speech to the National Club of Economists, Washington.

³⁴ See Bartsch E., J. Boivin, S. Fischer and P. Hildebrand (2019): “Dealing with the Next Downturn: From Unconventional Monetary Policy to Unprecedented Policy Coordination”, *SUERF Policy Note*, no. 105. Unlike the authors, we favour a direct transfer to households rather than to States, which is not compatible with the European treaties.

³⁵ Ball L., J. Gagnon, P. Honohan and S. Krogstrup (2016): *What Else Can Central Banks Do?*, CEPR Geneva Report.

³⁶ Martin P., J. Pisani-Ferry and X. Ragot (2020): “Une stratégie économique face à la crise”, *Note du CAE*, no. 57, July.

³⁷ Blanchard B. and J. Pisani-Ferry (2021): *Une stratégie économique contingente pour la prochaine phase*, Le Grand Continent.

³⁸ Among others: Friedman M. (1969): *The Optimum Quantity of Money, and Other Essays*, Aldline; Buiter W.H. (2014): “The Simple Analytics of Helicopter Money: Why it Works – Always”, *Economics e-Journal*, vol. 8, no. 2014-28; Gali J. (2020): “The Effects of a Money-Financed Fiscal Stimulus”, *Journal of Monetary Economics*, vol. 115, November; Bilbie F.O. and X. Ragot (2020): “Optimal Monetary Policy and Liquidity with Heterogeneous Households”, *Review of Economic Dynamics*, forthcoming.

together rather than the monetarist channel of a mechanical link between the quantity of money and inflation. Finally, what is proposed is to use these transfers when inflation is persistently too low (and not for the normal management of the economic cycle). In terms of communication, this allows to make clear that this is a contingent strategy.

Benefits of the helicopter money policy

The first advantage of a direct transfer to households by the central bank concerns the central bank's communication. The theoretical effect of helicopter money on inflation is better known (see above) than that of quantitative easing, and simpler to explain. It is therefore easier to defend its "proportionate" character as well as to announce an exit strategy: the central bank can easily terminate the programme in case of a return of inflation, without any consequences on the management of the public debt.

A second advantage is that the collateral effects on inequality and on the financial system are smaller (and better known and controlled) than in the case of quantitative easing. A lump sum transfer of an equal amount to all individuals mechanically lowers income inequality (since the poorest receive more in proportion to their income). This has no obvious impact on asset prices or bank profits.

Third, following Biden's plan and the sending of cheques to citizens in the United States, it is necessary to justify why in Europe the central bank would be more efficient and legitimate than the national treasuries or the European Commission for implementing a direct transfer to households. On a theoretical level, it is indeed equivalent for the Bank to provide support to the States (by buying public debt) and the latter makes the transfer, or for the Bank to make the transfer directly (Renault and Savatier, 2021).³⁹ We see three main arguments justifying why, in Europe, the transfer to households could be made by the central bank:

- Some European countries do not currently have the fiscal space to do so, and the programme would therefore have to be financed entirely by the purchase of public debt by the ECB. However, the proportion of public debt held by the central bank is already much higher in the euro area than in the United States (25% compared to 15%);
- The coordination of national demand stimulus plans in the euro area is not without problem. In the case of an aggregate demand deficit, the optimal solution of

coordinated stimulus plans will be difficult to implement. Each country may indeed have an interest in under-calibrating its stimulus plan in order to benefit from the positive spillover effects of its partners' stimulus plans. In equilibrium, this free-rider problem results in the aggregate demand deficit not being absorbed. This issue does not exist in the United States, which can decide on a stimulus policy at the federal level. The ECB is the only European institution that has the means to solve this coordination problem and it proved this during the euro area crisis;

- In contrast to other central banks such as in the US, the ECB has very few constraints in terms of monetary policy instruments. As several observers have already pointed out, the ECB is thus the central bank for which the helicopter money policy makes the most sense:⁴⁰ while inflation has been very low compared to the stated objective, the euro area is very constrained in terms of fiscal policy and much less so in terms of monetary policy instruments.

Finally, the international context is characterized by a marked quantitative difference between the American and European recovery plans, with a possible resurgence of protectionist tensions. These are indeed well predicted (see Delpeuch *et al.*, 2021)⁴¹ by trade imbalances (bilateral and multilateral), which are themselves partly generated by fiscal policy differences as well as by real exchange rate variations. In this context, a policy mix with a more restrictive fiscal policy in the euro area that would need to be offset by a more expansionary ECB policy via an increase in quantitative easing (QE) would be a risky prospect. It is likely that such a policy mix would indeed lead to a depreciation of the euro and worsening trade imbalances. Across the Atlantic, the ECB's monetary policy would be interpreted as a policy of "beggar thy neighbor", i.e. generating a negative spillover effect for the United States, and the fiscal policy would be interpreted as a "free-rider" policy, i.e. Europe would benefit from the expansionary fiscal policy in the US without contributing sufficiently to the recovery of global demand. If helicopter money is interpreted as a combination of expansionary monetary and fiscal policies, one can conclude that it should not generate a depreciation of the euro (or in any case less so than QE). This would be even more the case if it allows markets to anticipate a faster normalization of interest rates because of its effect on inflation. One can also conclude that helicopter money would reduce the euro area's trade surplus, as the boost to demand would translate into an increase in imports.

³⁹ Renault T. and B. Savatier (2021): "What Impact Does Helicopter Money Have on Inflation?", *Focus du CAE*, no. 063bis-2021, June.

⁴⁰ Cohen-Setton J., C.G. Collins and J.E. Gagnon (2019): "Priorities for Review of the ECB's Monetary Policy Strategy", *Monetary Dialogue Papers*, European Parliament, December; Blot C., J. Creel and P. Hubert, D. Gros, A. Capolongo, J. Cohen-Setton, C.G. Collins, J.E. Gagnon, K. Whelan and C.A. Hartwell (2019): *Task Ahead: Review of the ECB's Monetary Policy Strategy. Compilation of Papers*, Policy Department for Economic, Scientific and Quality of Life Policies Directorate-General for Internal Policies, November.

⁴¹ Delpeuch S., É. Fize and P. Martin (2021): "Trade Imbalances and the Rise of Protectionism", *Voxeu.org*, 12 February.

Helicopter money in practice

The form the money transfer takes should be as similar as possible to fiat money, i.e. the paradigmatic case where the central bank gives banknotes directly to each individual. It should therefore be in the form of liquid and anonymous (i.e. transferable) money, and not a voucher with targeted spending. It is also important to reach the entire population, including the unbanked, which means ruling out a unique solution of a cheque to be deposited in a bank account. If central banks were to introduce a form of digital money, the simplest solution would be to fund individual accounts directly with the central bank. If this solution is not available in the very short term, it would be possible to adopt several “money coupon” solutions, leaving individuals the choice between several different forms: cheque, “prepaid” card (which can be withdrawn at government agencies, tobacco shops, etc.) or a virtual wallet with an access code.

Setting a deadline for the use of the money coupon would be useful to encourage consumption. The experiment could be repeated if necessary, until the inflation target is reached. When the central bank ends its helicopter money policy, the money in circulation will have increased, but there would be no new money flow if the coupons have expired. Unused “money coupons” would be destroyed, and their counterpart would disappear. Monnet (2021c)⁴² presents the effects of these different options on the central bank’s balance sheet and the (small) consequences on the revenues that the central bank pays to the government. Renault and Savatier (2021) present estimates of the impact on inflation of a monetary transfer to households, which is summarized in Box 2.

While macroeconomic estimates should be treated with caution, it is noticeable that very different methods lead to similar orders of magnitude: a monetary transfer of 1% of GDP would increase the inflation rate by 0.5 percentage points over a one-year horizon. The following table shows the amounts of transfers required to eliminate the inflation deficit relative to the target. It can be seen that only an inflation deficit of 1.5 percentage points needed to reach the 2% target would require a transfer to households close to the cheques sent by the Biden’s plan (\$1,200 per adult and up to \$3,600 per child, income-tested).

These estimates are based on relatively strong assumptions about the empirical link between a cash transfer and inflation. The amount of the monetary transfer proposed is therefore a low estimate, in order to avoid overshooting the desired target. The amount proposed thus amounts to a first “injection” of helicopter money. To be credible, however, the ECB must announce that it will make the necessary number of money transfers to reach its target and that, once the target is reached, it will immediately stop this policy. In the

2. Estimating the impact of helicopter money on inflation

Two different estimation methods are used to assess the potential impact on inflation of a monetary transfer to households. First, we analyse the joint impact of a standard exogenous monetary policy shock (i.e. on the interest rate) on inflation and consumption. Under the assumption that inflation responds to monetary policy through its effect on aggregate demand (consumption), we can deduce the impact of an exogenous consumption shock on inflation. By then taking into account the effect on consumption of a transfer to households (social benefits, etc.) as estimated in various academic works (i.e. the marginal propensity to consume), we can evaluate how much a monetary transfer would affect consumption and then inflation. From these different estimates, we find that a monetary transfer of 1% of GDP would cause an increase of 0.5% in consumption and 0.5 percentage points in inflation. Second, a monetary transfer to households can be considered equivalent to a tax cut in an environment of accommodating monetary policy. The impact of fiscal policy on inflation is still much debated in the academic literature. However, econometric work that has causally identified tax shocks finds an effect on inflation. Using (confidential) euro area data, van der Wielen (2020)^a estimates that a fiscal expansion of one percentage point increases inflation by 0.43% over a one-year horizon. Using UK data, Cloyne (2013)^b finds an effect of around 0.6% in the 5th quarter after the shock. Renault and Savatier (2021)^c estimate the impact on inflation of German tax shocks using data from Hayo and Uhl (2014).^d In the case where economic activity is below its potential level (which would be the situation of a helicopter money policy), the estimates also show that a tax cut of 1% of GDP increases inflation by 0.5 percentage points after one year.

^a van der Wielen W. (2020): “The Macroeconomic Effects of Tax Changes: Evidence Using Real-Time Data for the European Union”, *Economic Modelling*, vol. 90.

^b Cloyne J. (2013): “Discretionary Tax Changes and the Macroeconomy: New Narrative Evidence from the United Kingdom”, *American Economic Review*, vol. 103, no. 4.

^c Renault T. and B. Savatier (2021): “Quel impact de la monnaie hélicoptère sur l’inflation?”, *Focus du CAE*, no. 063-2021, June.

^d Hayo B. and M. Uhl (2014): “The Macroeconomic Effects of Legislated Tax Changes in Germany”, *Oxford Economic Papers*, vol. 66.

extreme case where the ECB would have to issue five waves of helicopter money in a short period of time, its balance sheet would thus increase by a maximum amount of 10% of

⁴² Monnet E. (2021c): “La monnaie hélicoptère dans le bilan de la Banque centrale”, *Focus du CAE*, no. 062-2021, June.

Amount of transfer to achieve a 2% target

Inflation rate at the time of transfer (in %)	Amount of transfer needed to reach a 2% target (in billion euros)	Minimum necessary transfer amount, per individual (in euros)
0.5	360 (= 3% of GDP)	1,155
1.0	240 (= 2% of GDP)	770
1.5	120 (= 1% of GDP)	385
2.0	0	0

Note: For children under 15 the transfer would be half that of adults.

Source: Authors.

GDP.⁴³ This amount is relatively small compared to the size of its current balance sheet (60% of GDP) and to the scale of the asset purchases that have been necessary to keep inflation close to 1% since 2015 (for a stock that is equivalent to 30% of GDP in 2021). It should also be noted that if the introduction of helicopter money succeeds in bringing the inflation rate back towards its target, it would allow for a more rapid normalization of monetary policy with regard to both asset purchases and interest rates. From this point of view, this monetary instrument might be more acceptable to some countries (e.g. Germany) for which the ECB's unconventional monetary policy is most problematic. Given the uncertainties related to getting out of the Covid-19 crisis, we consider that this contingent strategy should be decided once health restrictions have been lifted.

Helicopter money and fiscal policies

One possible criticism of helicopter money is that, by replacing a massive policy of buying public debt, it could lead to an increase in long-term interest rates and therefore to an increase in the cost of debt for states that want to pursue a more expansionary fiscal policy. Two arguments invalidate this criticism. First, one condition for the implementation of a helicopter money programme is the inability of member countries to coordinate a fiscal response to a persistent situation of demand deficits and low inflation. Helicopter money would therefore be the consequence, not the cause, of the lack of a coordinated fiscal stimulus. Second, it is dangerous to consider that a rise in nominal interest rates per se constitutes a risk for public finances. Indeed, raising inflation to the long-term value of 2% will lead to a rise in nominal interest rates. However, higher inflation will boost tax revenues for the State. The overall effect on the public

finances depends on changes in the difference between the nominal growth rate and nominal inflation. The long-term inflation target is defined precisely to take account of this difference. Questioning this in the current crisis should not turn an assumption of impotence into a political choice.

While the helicopter money policy may be justified in Europe by the greater ease of implementing a common monetary policy, it cannot be accomplished without coordination with fiscal policies. First of all, it would be necessary for the central bank –which already serves as the fiscal agent for governments– to have access to the records of the population and of the tax numbers in order to implement the transfers.⁴⁴ This may require a vote of the European Council in order to provide the ECB with a new monetary policy tool (see above).

Recommendation 3. Give the ECB the power to announce a contingent strategy of direct transfers to households in the event that the 2% inflation target is not achieved on a sustainable basis. These transfers would be stopped once convergence to the inflation target is assured.

The ECB will also have to ask the European Council to coordinate fiscal responses to the Central Bank's policy. This coordination should also be initiated by the European Commission during the European Semester. Like any transfer, the sum paid by the ECB will be taxable in each country. The European Council must commit itself to ensuring that the Member States do not increase their taxes so as not to counteract the immediate impact of the helicopter money on private consumption. In addition to its importance for the effectiveness of the measure on inflation, such coordination will also make it possible to ensure the "fiscal neutrality" of the ECB's helicopter money policy, i.e. it must not modify the tax structure chosen by each State. Thus, giving the same lump sum to all Europeans will mechanically reduce income inequalities and will also be fairer if this sum is subject to a progressive income tax.

Recommendation 4. If the ECB implements a policy of direct transfer to households, coordinate European fiscal policies so as not to counteract the impact of this transfer on inflation.

⁴³ However, this amount would most likely be lower, since money market coupons not used before maturity no longer appear on the balance sheet after maturity, see Monnet (2021b) *op. cit.*

⁴⁴ The fact that central banks serve as "fiscal agents" means that Eurosystem central banks host the Treasury accounts, i.e. the flow of money in and out of the Treasury.

Finally, a common criticism of helicopter money that takes the form of direct transfers to households points to the risk of a harmful confusion between monetary policy and fiscal policy.⁴⁵ On the contrary, we believe that transferring money directly to agents falls within the scope of a central bank's actions. This policy is strictly speaking monetary policy (money creation) and can be conducted essentially in the name of the central bank's main objective: the inflation target. Moreover, unlike purchases of financial assets, it is less likely to conflict with other objectives of the European Central Bank: financial stability and secondary objectives defined by the European Union (notably the fight against inequality and environmental damage). Thus, a direct monetary transfer to households

with clear communication in terms of the inflation target and the exit strategy is a policy that maintains a clear boundary between central bank and governmental action. However, it must be based on explicit coordination between monetary and fiscal policy, as proposed above. Indeed, coordination requires that the objectives and instruments of each policy be clearly defined.⁴⁶ ●

⁴⁵ See in particular Blanchard O. and J. Pisani-Ferry (2019): *The Eurozone Is Not (Yet) Ready for Helicopter Money*, Peterson Institute for International Economics, 20 November.

⁴⁶ The tax revenue from the increased activity and inflation due to helicopter money transfers have to be set against the additional cost of remuneration of reserves due to the increase in reserves and the rate of return on deposits. This difference is small and cannot be used to justify a deviation from the long-term inflation target.



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