

IN-DEPTH ANALYSIS

Requested by the ECON committee



Monetary Policy in the Euro Area after Eight Years of Presidency of Mario Draghi: Where Do We Stand?

Monetary Dialogue September 2019



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Abstract

Against the backdrop of slowing growth and subdued inflation in the euro area, we address the question to what extent additional monetary stimulus can be expected from the ECB if needed. We find that “more of the same” policies will probably not be effective and that there are no attractive alternatives there. After more than ten years of exceptionally loose monetary policy it is now the turn of fiscal and structural policies to reinvigorate the European economies.

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LIST OF ABBREVIATIONS

ABSPP	Asset-backed Securities Purchase Programme
CBPP	Covered Bonds Purchase Programme
CSPP	Corporate Sector Purchase Programme
ECB	European Central Bank
ELA	Emergency Liquidity Assistance
ELB	Effective Lower Bound
EONIA	Euro OverNight Index Average
FRFA	Fixed-rate Full Allotment
GDP	Gross Domestic Product
HICP	Harmonized Index of Consumer Prices
LTRO	Long-term Refinancing Operations
NCB	National Central Bank
OMT	Outright Monetary Transactions
PSPP	Public Sector Purchase Programme
SMP	Securities Markets Programme
SRF	Single Resolution Fund
TLTRO	Targeted Longer-term Refinancing Operations
US	United States
USD	United States Dollar

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EXECUTIVE SUMMARY

- In the aftermath of the global financial crisis and especially after the euro area was hit by a second crisis centred on euro area sovereign debt, the ECB used a range of unconventional monetary policy measures in addition to its interest rate tool which led to a massive expansion of its balance sheet.
- However, credit growth did not respond to the dramatic increase in the monetary base. The apparent breakdown of the money multiplier, which is evident in the rapid accumulation of excess reserves, is showing that the response of the economy to an increase of central bank money has changed after the financial crisis.
- Available empirical evidence suggests that currently very large unconventional programmes would be needed to achieve even modest effects on inflation. At the same time, there are considerable risks from side effects associated with these policies, including the build-up of financial imbalances, misallocation of resources, or “zombification” of the economy, and these risks may increase with the duration of the expansionary policies. Some of the ECB’s extraordinary measures specifically reduced the risk premia on certain government bonds which may have delayed the adoption of needed structural reforms. Finally, large scale asset purchases expose the central bank to the risk of considerable losses, which may impair the independent conduct of monetary policy in the future.
- In the context of serious concerns that central banks will be unable to achieve their inflation targets going forward with their current tools, a number of farther reaching proposals have been made. It is, however, either not clear how alternative strategies could actually be implemented (higher inflation target, price level targeting) or associated with serious drawbacks such as the risk of a loss of confidence in the currency (abolishing cash) and loss of control (helicopter money). The possibility suggested by Neo-Fisherian theory that raising interest rates may lead to higher inflation seems to depend on critical assumptions that may not hold in reality.
- All in all, it seems there are not many attractive options left for the ECB to effectively loosen its policy stance further in case the economy deteriorates further. After more than ten years of exceptionally loose monetary policies, other policy makers will have to contribute much more decisively to reinvigorate the European economy.
- The problems in the architecture of the Eurozone with its combination of centralized monetary policy and decentralized fiscal policies have raised demands for increased fiscal risk sharing. Proposals to introduce or broaden elements of risk-sharing are, however, suffering from the suspicion that they would lead to permanent one-sided transfers, given the legacy of fiscal or structural problems in some countries.
- An alternative way to go would be to strengthen self-responsibility as the increasingly complex European system of macroeconomic monitoring and fiscal supervision is deficient. Policies such as fiscal consolidation or structural reforms on goods and labour markets to increase the growth potential can be expected to be more successful if they are owned by national decision makers and their voters. An important prerequisite to re-establish the no-bailout rule is a reduction of the home bias in bank’s bond portfolio to reduce the vulnerability of banks to their own sovereign and a financial backstop on the European level which is responsible to stabilise the domestic financial sector.

1. INTRODUCTION

In October 2019, the term as of Mario Draghi as President of the European Central Bank (ECB) will end. Faced with an exceptional economic environment after the Global Financial Crisis and the successive European sovereign bond crises, over the past eight years the ECB has not only reduced interest rates to zero (and below), but also applied a whole spectrum of non-conventional monetary policy tools in an increasingly aggressive manner. Eventually economic recovery in the euro area broadened and inflation increased, although only hesitantly.

However, in the course of 2018 and into 2019 the euro area economy has decelerated as external demand weakened and the German economy faltered. While the euro area economy is still expanding, business sentiment is declining and the probability of recession has increased. At the same time inflation in the euro area is still below target – at around 1.2 percent when underlying inflation is measured as headline inflation excluding prices for energy and fresh food – raising concerns about the prospects for a return to the ECB’s target of close to 2 percent in the medium term.

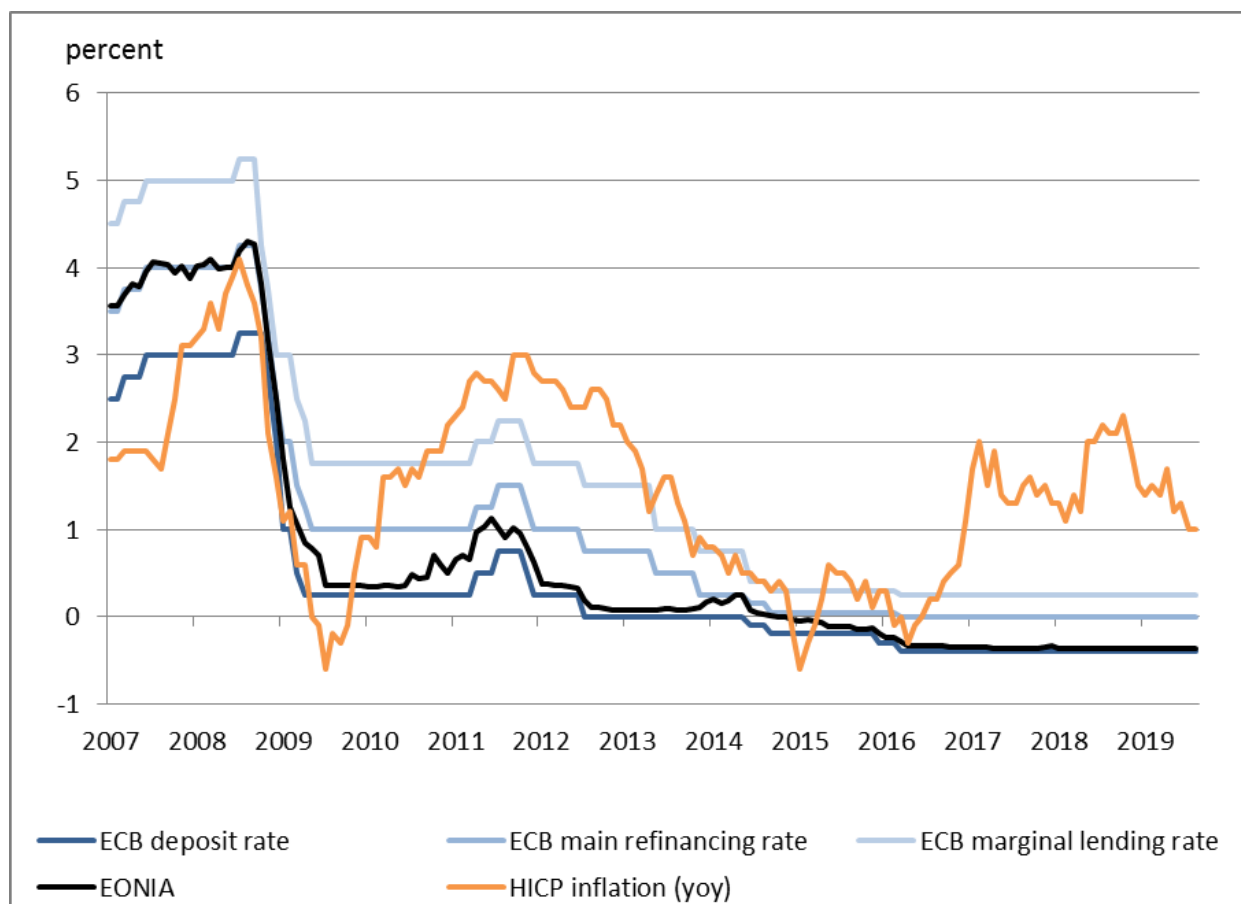
Against this backdrop, in this note we address the question to what extent additional monetary stimulus can be expected from the ECB if needed. We briefly give an account of unconventional monetary policy measures after the Financial Crisis (section 2). We ask whether “more of the same” policies will be effective (section 3), and what other options are left (section 4). Finally, we point to some policy inconsistencies in the euro area framework that need to be addressed to get the ECB into a more comfortable position (section 5).

2. UNCONVENTIONAL MONETARY POLICY MEASURES OF THE ECB SINCE THE FINANCIAL CRISIS

After the introduction of the euro, the ECB first used standard interest rate setting as the main instrument in conducting its monetary policy. In order to achieve price stability (defined since 2003 as a year-on-year increase in the Harmonised Index of Consumer Prices (HICP) for the euro area of below, but close to, 2 percent over the medium term) the ECB would use adjustments in three interest rates, namely those on its main and marginal lending as well as deposit facilities. These policy rates are the rates at which banks can borrow (deposit) base money from (at) the ECB. To provide expansionary (contractionary) monetary policy impulses the ECB would cut (raise) policy rates.

The financial crisis of 2007/08, which originated in the United States but affected economies worldwide, including those in the euro area, led the ECB to cut its policy rates to a record low (see figure 1). While some may argue that the ECB's rate cuts still were not bold enough, one needs to keep in mind that the decision makers in 2008 were also confronted with quite substantial price inflation (which was above 2 percent even if one excludes the volatile energy component).

Figure 1: ECB Policy Rates and Inflation



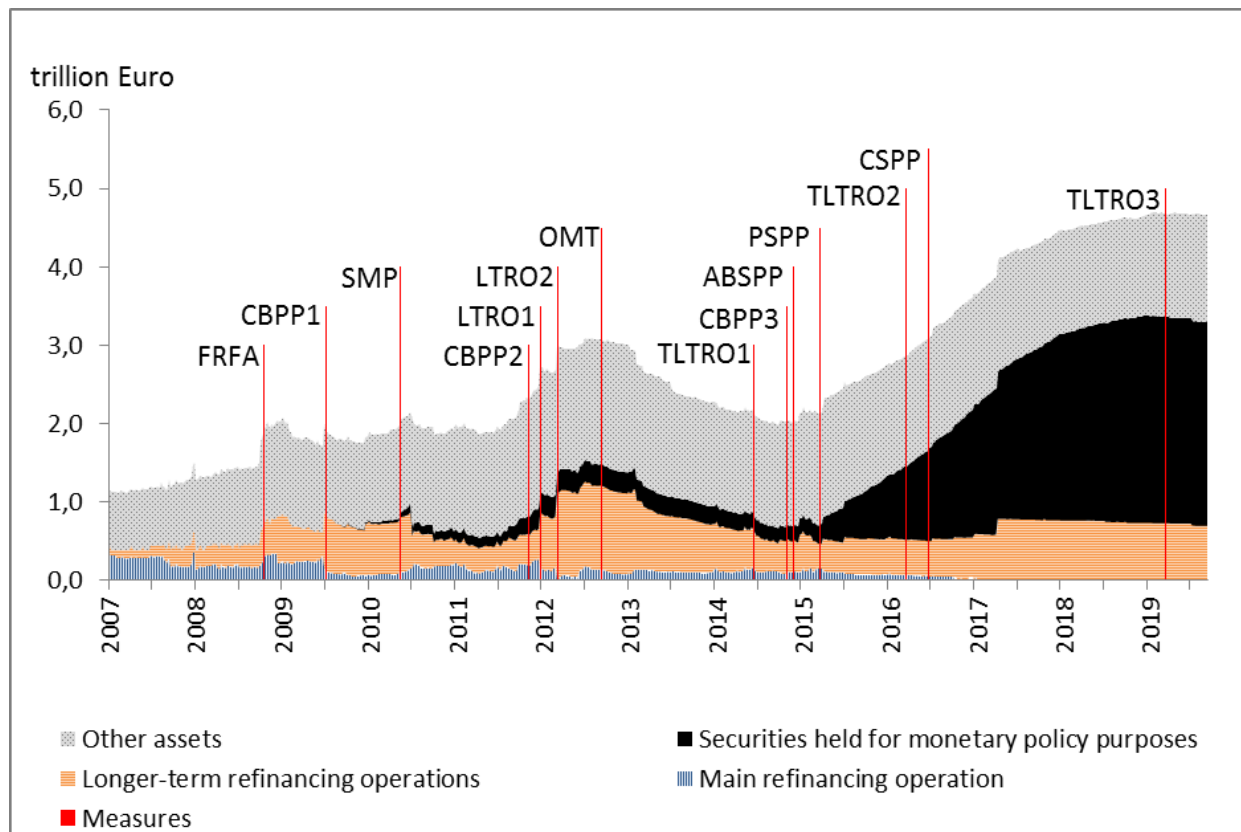
Sources: Bundesbank, Eurostat.

In the aftermath of the global financial crisis and especially after the euro area was hit by a second crisis centred on euro area sovereign debt, the ECB started to use a range of unconventional monetary policy measures in addition to its interest rate tool. These unconventional measures were implemented

because the ECB believed they could more accurately achieve (side-)objectives, with a number of measures that aimed to stabilize struggling banks and sovereigns. A second reason for the turn towards unconventional measures is the so-called Effective Lower Bound (ELB) on interest rates. Since there is the alternative of holding zero-yielding cash, interest rates cannot be pushed too much below zero. Unconventional measures were thus seen as the solution in a situation in which policy rates already were quite close to this lower bound but the ECB still saw the need for further monetary stimulus.

Figure 2 shows the announcement dates of a number of unconventional policy measures as well as the central bank balance sheet. In particular, it can be seen how these measures expanded the monetary base via longer-term refinancing provided to banks as well as the outright purchase of securities. Note that there usually is a lag between announcement and implementation of the measures. At the same time, the main refinancing operations, which were the primary way to provide central bank money before the crisis, became relatively less important.

Figure 2: Eurosystem Balance Sheet and Selected Unconventional Policy Measures



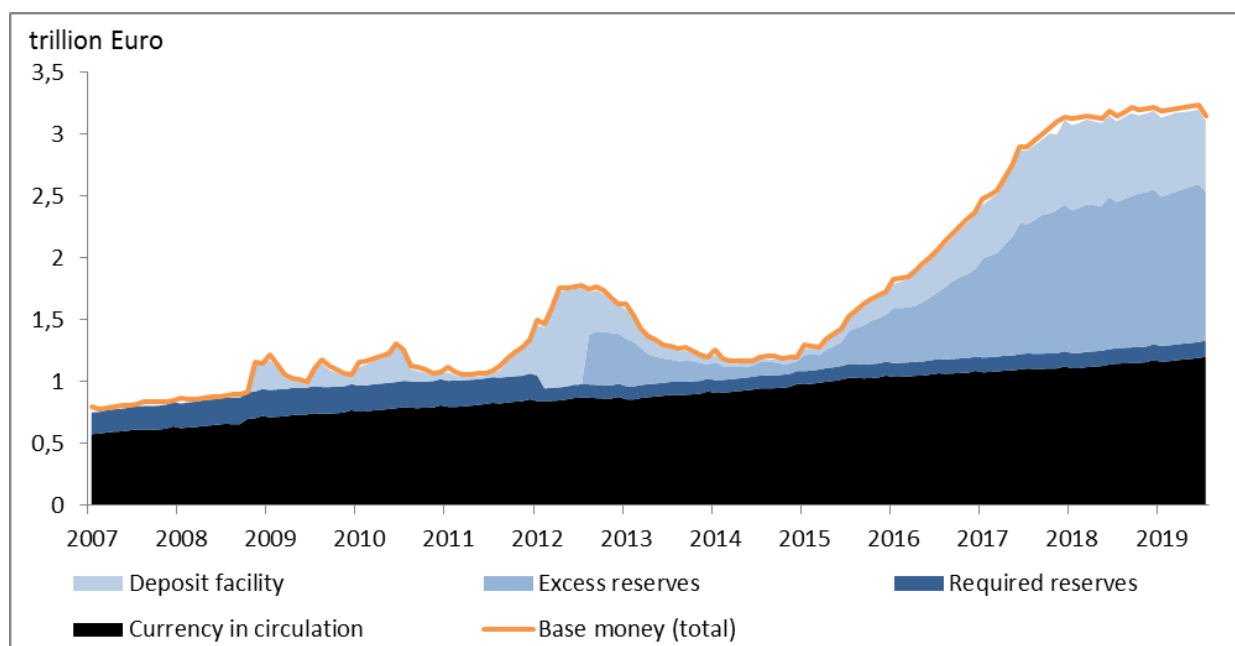
Notes: 'Securities held for monetary policy purposes' contains asset purchase programmes, 'Longer-term refinancing operations' contains ordinary 3-month tenders as well as extraordinary LTRO and TLTRO, 'Main refinancing operations' are ordinary tenders which can be modified (e.g. fixed-rate full allotment, reduced collateral requirements); TLTRO1, 2, and 3: announcement dates, implementation happens later and in steps;

Sources: ECB Eurosystem balance sheet, ECB, own calculations.

Although the ECB increased the amount of base money substantially, this did not translate into a commensurate rise of money circulating in the economy at large. Figure 3 shows that the amount of currency in circulation as well as the required reserves followed a relatively stable trajectory before, during, and after the crisis (the sudden fall of required reserves in January 2012 is due to the halving of

reserve requirements by the ECB at that time). The required reserves represent the amount of base money that commercial banks are obligated to hold at the central bank. They are calculated as a percentage of customer deposits and certain other bank liabilities, so if commercial banks created additional money for the non-monetary sector, this would show up as an increase in required reserves. However, because commercial banks did not increase their lending and deposit creation activities in line with the increase in base money, most of it flowed into excess reserves (official statistics distinguish between the deposit facility and excess reserves but for the interpretation here there is no difference between the two). Thus, the expansionary effects from the monetary policy measures via the credit channel remained limited. The overabundance of base money can also be inferred from interest rates on interbank markets (e.g. EONIA as shown in Figure 1): interbank rates detached from the ECB's main refinancing rate and moved close to the deposit rate.

Figure 3: Eurosystem Base Money and Excess Reserves



Source: ECB, own calculations.

The rest of this chapter will provide an overview over the diverse set of unconventional monetary policy measures used by the ECB.

Longer-term refinancing operations

Since 2011, the ECB introduced a number of Long-term and Targeted Longer-term Refinancing Operations (LTRO1, LTRO2, TLTRO1, TLTRO2, and TLTRO3). In these, banks could receive central bank money for periods of up to four years. The interest rates on these operations were also very favourable in general, and under some of the operations, they were reduced further if a bank exceeded some benchmark with respect to the increase of the loans it provided to its customers.

Outright asset purchases

In 2009, the Eurosystem started to purchase securities outright on primary and/or secondary markets under a number of different programmes. At first, it purchased covered bonds (CBPP), aiming to

support bank funding. In 2010, as certain sovereigns found it increasingly difficult to fund themselves on capital markets, the Eurosystem branched out into the purchase of government bonds of certain crisis countries (Securities Markets Programme, SMP). However, until 2014 the purchases under the SMP were sterilised by the Eurosystem and therefore did not provide additional liquidity. In 2012, the SMP was replaced by the Outright Monetary Transactions programme (OMT) which promised unlimited purchases of government bonds, with the aim to reduce risk premia. However, no actual purchases were made under OMT.

The last five years, finally, saw the stepwise implementation of an Extended Asset Purchase Programme (APP), which was less concerned with the type of asset bought but focused more on the overall volume of purchases and combined a diverse set of different purchase programmes. The lion's share of purchases were of public sector bonds from across the euro area (PSPP), but covered bonds, asset-backed securities, and bonds of non-financial corporations were also acquired (CBPP3, ABSPP, and CSPP).

Communication and Forward Guidance

The ECB started to reveal more about its future intentions to the public. Not only did it promise, in 2012, to do "whatever it takes" to preserve the euro, but since 2013 it also has provided forward guidance. In particular, it committed to keep policy rates low for a dedicated period of time and also gave information on the planned future states of its purchase programmes.

Full Allotment

Already in 2008, the ECB changed the rules of its standard tenders to Fixed-rate, Full Allotment (FRFA). This means that the central bank would set its interest rates on refinancing operations and then provide any amount of liquidity demanded by commercial banks.

Minimum Reserve Requirements

In 2012, the ECB also cut the minimum reserve ratio from 2 to 1 percent in order to allow for an increased credit creation at any given amount of reserves at the central bank.

Collateral

Furthermore, there were adjustments to the ECB's collateral framework. In order to obtain base money via borrowing from the central bank, commercial banks need to provide acceptable collateral. The ECB accepts a wide range of asset classes as collateral. It sets credit rating requirements to define which assets can be used as collateral and applies haircuts (meaning that a bank can borrow less than the current assessed value of some collateral asset since its price may well be lower by the time the loan comes due) depending on the perceived riskiness of these assets in order to protect the central bank against losses. The ECB reduced the minimum ratings required several times, such that for many asset classes it is now sufficient to have a rating equivalent to investment grade (equivalent to BBB- or higher) from only one of the four accepted rating agencies. There even was a special waiver allowing the use of Greek government bonds rated below investment grade as collateral. Furthermore, individual National Central Banks (NCBs) accepted assets violating the ECB's collateral rules in the course of so-called Emergency Liquidity Assistance (ELA) to prevent bank insolvencies. Of course, haircuts cannot be applied on outright asset purchases, since these have the central bank buy securities at prevailing prices, thereby exposing it to the full risk of price changes.

Remuneration System for Excess Reserves

Most recently, in September 2019, the ECB decided to introduce a two-tiered remuneration system for excess reserves. Rather than applying the negative deposit rate to all excess reserves, a certain portion of every bank's holdings are now exempt and remunerated at zero percent. The exempt amount is currently set at six times the respective bank's required reserves. According to the ECB, this measure is supposed to support the bank-based transmission of its monetary policy. However, it will most likely lead to a higher marginal deposit rate for some banks, thereby lessening the desired impact from negative interest rates.

3. EFFECTIVENESS AND SIDE-EFFECTS OF UNCONVENTIONAL MONETARY POLICY

The debate on the effectiveness of unconventional monetary policy measures in the economic literature is not settled. On the one hand, some papers find that the Federal Reserve's ability to impact economic variables did not change between the times before and after the Effective Lower Bound became binding (e.g. Wu and Xia 2016, Debortoli et al. 2018). On the other hand, work such as Hamilton and Wu (2012) finds that asset purchase programmes might need to be very sizeable to achieve even small effects. Fiedler et al. (2016) provide an overview of quantitative estimates from the literature for the effects of unconventional policy measures. Most research focuses on the United States. Figure 4 shows estimated effects of unconventional measures from a range of studies. To make them comparable, they are scaled to an asset purchase volume of one trillion US dollars. Estimates for the effect on consumer prices of a programme of such size range between zero and 4.3 percentage points. However, the study by Weale and Wieladek (2015) is an outlier. If it is excluded, then the average estimate of the peak effect is 0.5 percentage points.

There are also some studies for the euro area (Fiedler et al. 2016 provides an overview here, too). Once again, the found effects of monetary policy are quite heterogeneous across studies. Those papers that rely on model-based simulations are generally found to report larger effects than those using purely empirical approaches. Furthermore, the effects of unconventional policy measures may differ across time (Borio and Hofmann 2017). Borio and Zabai (2016) find that effects of unconventional monetary policy measures decrease over time and Janssen et al. (2015) show that monetary policy in general, including unconventional instruments, is most effective in the acute phase of a financial crisis but does not have a significant effect on output and prices in the aftermath of the crisis. While unconventional policies can be effective tools in times of elevated financial stress and credit constraints, imbalances accumulated before the crisis may impair the transmission after the acute phase of the crisis is over (Hesse et al. 2018). Estimates based on VAR approaches (e.g. Gambacorta et al. 2014, Boeckx et al. 2018, or Elbourne et al. 2017), which suggest that the expansion of the ECB's balance sheet has been effective in stimulating the euro area economy, have shown not to be reliable (Elbourne and Ji 2019).

As shown in chapter 2, credit growth and the associated minimum reserve requirement did not respond to the dramatic increase in the monetary base. Also, money aggregates such as M1 or M2 did not accelerate substantially in response to the strong expansion of the central bank balance sheet. The apparent break down of the money multiplier, which is evident in the rapid accumulation of excess reserves, is showing that the response of the economy to an increase of central bank money has changed after the financial crisis. Further expansion of the monetary base cannot be expected to stimulate credit and nominal GDP because, contrary to before the crisis, banks are not reserve constrained.

All in all, the evidence suggests that currently very large unconventional programmes would be needed to achieve even modest effects on inflation. It is even possible that credit to the private sector will be reduced in response to additional asset purchases if asset purchases by the ECB from nonbanks, such as insurers or pension funds, leads to an extension of the bank balance sheets. Banks are subject to Basel III limits on leverage ratios, and if they face difficulties in raising additional tier 1 capital they may react with a reduction of their provision of loans to the private sector (Homburg 2017).

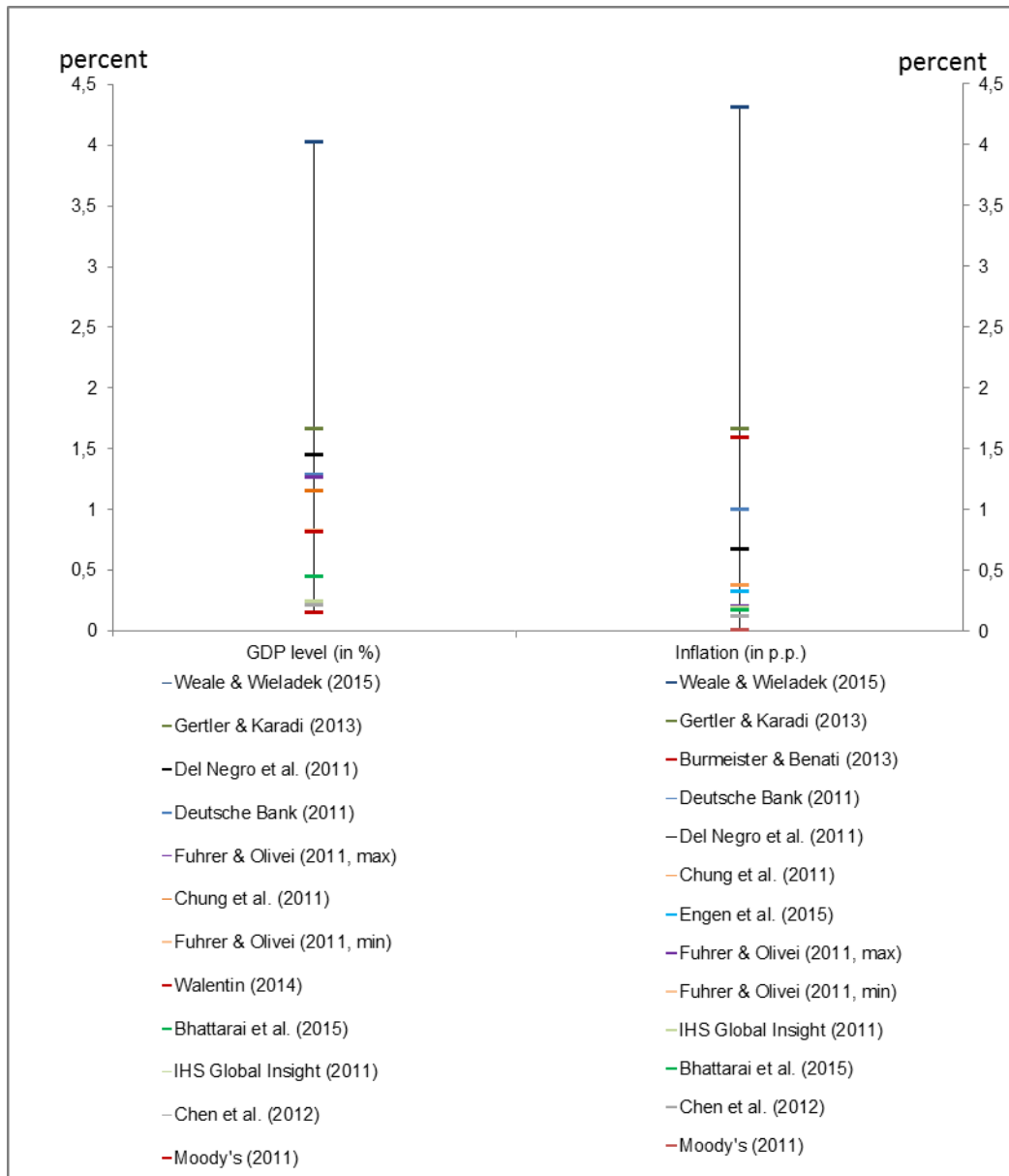
At the same time, there are considerable risks from side effects associated with these policies. For one, expansionary monetary policy could contribute to financial imbalances and weaken financial stability by increasing the propensity to take risks (Rajan 2005, Maddaloni and Peydro 2011, Drehmann et al. 2012), and these risks may increase with the duration of the expansionary policies (Kahn 2010,

Maddaloni and Peydro 2012). Furthermore, expansionary monetary policies and loose financial conditions may lead to a misallocation of resources: if interest rates are low and loans readily available, less productive firms may receive more than their optimal share of funding compared to more productive firms. Needed structural change can be hindered when firms that are for all intents and purposes bankrupt still receive renewed loans from banks, because these banks do not want to face write-offs (the “zombification” effect, achieved by “evergreening” of loans). Early evidence of such “zombification” came from Japan which faced extraordinary monetary conditions even before the financial crisis of 2007/08 (Hoshi and Kashyap 2004, Caballero et al. 2008). For the euro area, Albertazzi and Marchetti (2010) already found some evidence for evergreening behaviour by small Italian banks following central banks’ reactions to the bankruptcy of Lehman Brothers, and Acharya et al. (2019) show that the primary beneficiaries from the announcement of the OMT programme were firms in peripheral countries with a low credit-worthiness and that the increased credit provision to these firms did not improve investment or employment.

Asset purchases on a large scale by central banks may also have undesirable distributional effects raising income and wealth inequality through different channels. This aspect is not extensively covered in the literature, but available studies suggest that ECB’s unconventional policies have increased wealth inequality (Horvath 2017) as different income groups typically have different exposure to asset markets and different levels of activity in financial markets.

In addition, some drawbacks are particular to the euro area. Some of the ECB’s extraordinary measures specifically reduced the risk premia on certain government bonds. This may have delayed the adoption of needed structural reforms, thereby reducing growth and employment, and reduced the need for fiscal consolidation, leaving government finances on a less sustainable path. Finally, unconventional policies such as asset purchase programmes expose the central bank to the risk of considerable losses which may impair the independent conduct of monetary policy in the future, either because the central bank conducts a suboptimal policy in order to avoid losses or because it is unable to reabsorb enough liquidity (since the prices of the assets it would need to sell to do that have fallen too much; see also Boysen-Hogrefe et al. 2016 for a further discussion).

Figure 4: Effects of Balance Sheet Measures in the United States



Notes: The impacts on GDP and consumer price inflation are scaled to USD 1 trillion of asset purchases to allow for comparison across studies. Some of the studies provide the impact only for real GDP.

Sources: Studies quoted in the chart, Constancio (2015), calculations in Fiedler et al. (2017).

4. OTHER POSSIBLE OPTIONS FOR THE ECB

With its decision on 12 September 2019 to resume its asset purchases for an unspecified period of time, although at a reduced scale, the ECB risks to sooner or later run against its self-imposed limits for eligible bonds.¹ One obvious solution would be to raise the share of outstanding government paper it is prepared to acquire. Such a move would, however, increase the default and interest risks of the Eurosystem further, with the associated potential negative repercussions on the central bank's independence as it increases the incentives for the ECB to in the future choose an inferior monetary policy strategy in order to avoid losses from asset devaluations. Alternatively, the ECB could ratchet up its asset purchases by buying more risky assets, such as equities, corporate bonds, or senior bank debt. Similar arguments apply. In addition, difficult questions would arise as to the precise rules underlying these investments, which would have even more delicate aspects of equity than the purchase of government bonds. While there is still scope to intensify the asset purchases, i.e. do more of the same, the expansionary effects that can be expected appear quite limited as discussed above. At the same time, the associated risks and unintended side effects can be expected to become more prominent.

In the context of serious concerns that central banks such as the ECB will be unable to achieve their inflation targets going forward with their current tools, a number of farther reaching proposals have been made (see Constâncio 2017).²

First, Blanchard et al. 2010 and Ball 2014, among others, propose to increase the inflation target. Because higher inflation increases the spread between nominal and real interest rates, the central bank could reduce real rates further below zero, increasing the room for expansionary impulses. But at the same time, the costs of inflation – such as distortions between relative prices and from the taxation of nominal returns, as well as menu and shoe leather costs – could also increase. There is also the question of whether the ECB, already struggling to achieve its current target, would even be able to reach such a higher inflation rate in a timely fashion. Otherwise, there would be the risk of a (further) loss of its credibility and de-anchoring of inflation expectations (see also Laubach and Williams 2015).

Second, the central bank could introduce a level target (for prices or nominal GDP), promising to always return to some target path. This means that past deviations from the target would have to be made up in the future. For example, if inflation fell short in some period such that the price level was now below the target path, the ECB would need to produce higher inflation in the future until the shortfall in the price level had been corrected. This further commitment is supposed to help the central bank through an improved management of expectations (Vestin 2006, Schmidt 2011), in particular if the ELB becomes binding (Eggertsson and Woodford 2003). To attain the theoretical benefits from level targeting, several assumptions need to hold. The private sector would need to fully understand the new regime and form largely forward-looking expectations, and the level target would also need to be credible.³ If these conditions do not hold, then the change to level targeting could yield worse results (Kryvtsov et al. 2008).

Third, cash could be abolished altogether. This would remove a zero-yielding substitute of reserve money and allow even lower policy rates to be set (Buiter 2009). But because cash is still widely used in transactions (not least because it provides valuable anonymity), this would risk severe economic

¹ For a discussion of these rules see Boysen-Hogrefe et al. 2016.

² These are also discussed in Fiedler et al. (2019).

³ This would not only include having to believe that the central bank would conduct an extended contractionary policy after some time of excess inflation, but also mean that the central bank could no longer look through temporary supply shocks such as oil price rises if it wants to maintain that credibility (see also Wessel 2018).

disruptions. Furthermore, trust in the central bank could deteriorate after such a drastic measure and ultimately people might substitute from central bank money into other media.

Fourth, the central bank could increase money in circulation via “helicopter drops” (Buiter 2014), meaning the central bank would hand out money without taking any assets in return. This increases consolidated government debt, providing additional stimulus, especially through lower borrowing costs if the additional debt does not impact the creditworthiness of the governments in question (Muellbauer 2016). However, the last point is by no means guaranteed. Furthermore, such a policy would to a large extent irreversible. If the central bank would want to tighten its policy at some point in the future, it would not be able to reabsorb the helicopter money as it is the case with central bank money that is backed by assets which could be sold to reduce the monetary base. Rather, fiscal policy would need to tighten.

Fifth, there are some quite different policy prescriptions if one follows the Neo-Fisherian theory (Bullard 2010, Schmitt-Grohé and Uribe 2017). It is based on the observation that, at least in the long run, increasing interest rates will be followed by higher inflation, because the nominal interest rate is the sum of the real rate and expected inflation. But it is unclear whether Neo-Fisherian policies could work in practice. For example, there is quite some reliance on perfectly forward-looking agents to make the theory work (García-Schmidt and Woodford 2019 and Garin et al. 2018).

All in all, it seems there are not many attractive options left for the ECB to effectively loosen its policy stance further in case the economy deteriorates further. After more than ten years of exceptionally loose monetary policies, other policy makers will have to contribute much more decisively to reinvigorate the European economy.

5. POLICY INCONSISTENCIES AND THE ROLE OF THE ECB

The Global Financial Crisis in 2007/2008 and the subsequent Great Recession 2008/2009 brought to the surface a number of inconsistencies in the institutional setup of the euro area. Strained government finances as a result of the outcome of domestic mal-investments during the preceding boom (bust in the construction sector, counter-cyclical deficit spending, bank bail outs) triggered a confidence crisis in several euro area Member States. In this situation, the Eurosystem took drastic actions to provide extra liquidity in the crisis countries, effectively involving it in monetary balance-of-payments financing as reflected in accelerating TARGET2-imbalances. At the height of the crisis (and at the beginning of President Draghi's term), the announcement of the OMT programme allowing for unlimited purchases of distressed countries' bonds (although conditioned on the implementation of reform programmes) together with the famous "whatever that it takes" assurance successfully contained the first wave of the confidence crisis.

The unprecedented monetary policy measures were meant to be of temporary nature, buying time to allow governments to implement appropriate amendments to the institutional framework of the euro area and structural reforms on a national basis.

At the national level, important structural reforms have been made especially in distressed countries with support from European rescue funds and associated obligations. In other countries, progress with reforms has been slow, partly facilitated by the beneficial impact of lower interest rates on government finances. Also, banks are still fragile in a number of countries, with low profitability and non-performing loans declining only slowly. Thus, it can be argued that the attempt of the ECB to support fiscal and structural reforms in euro area member countries by maintaining an extremely accommodative monetary environment has contributed to slow reform progress.

At the European level policy makers responded with a reform of the European fiscal architecture. The European Stability Mechanism was established, effectively suspending the Maastricht no-bailout principle. In order to limit moral hazard, deficit rules were strengthened with the Fiscal Compact and economic policy supervision and coordination was increased with the introduction of the Macroeconomic Imbalance Procedure. In the past years the European system of macroeconomic monitoring and fiscal supervision has been extended in the form of the European Semester and has become increasingly complex. However, strengthening fiscal rules and conditional fiscal support risk reducing the political fabric of the Union. Policies such as fiscal consolidation or structural reforms on goods and labour markets to increase the growth potential can be expected to be more successful if they are owned by national decision makers and their voters. Therefore, reforms should lead into the direction of more self-responsibility.

To re-establish the no-bailout rule, sovereign default of a Member State must no longer trigger a currency crisis. Prerequisites to get there are a debt restructuring mechanism, a diversification of risk, in particular to reduce the home bias in bank's bond portfolio and to reduce the vulnerability of banks to their own sovereign, and a financial backstop on the European level which is responsible to stabilize the domestic financial sector. To this end some progress has been made to create a European Banking Union. In order to prevent regulatory arbitrage and help break adverse feedback loops between government finances and the banking sector (the infamous sovereign-bank-nexus), a Single Supervisory Mechanism (SSM) was implemented and a Single Resolution Fund (SRF) was introduced. The Banking Union is, however, not complete with a common deposit insurance missing and the SRF still in its infant stage.

The problems in the architecture of the Eurozone with its combination of centralized monetary policy and decentralized fiscal policies have raised demands for increased fiscal risk sharing. Proposals

abound, including a meaningful Eurozone budget, a rainy day fund, a common basic unemployment insurance scheme, or joint debt instruments at the Eurozone level (Gern et al. 2019). While these proposals may be appealing in theory, their implementation is unlikely given the lack of a necessary consensus among Eurozone governments (and people) on a common policy paradigm. In addition, proposals to introduce or broaden elements of risk-sharing are suffering from the suspicion that they would lead to permanent one-sided transfers, given the legacy of fiscal or structural problems in some countries.

QUESTIONS FOR MEPS

Given the realised inflation rates in recent years and current inflation expectations, reasonable observers might argue that the ECB has fallen and continues to fall short of its target of an inflation rate close to, but below, two percent (do you disagree?).

Given this

1. Do you think inflation and/or inflation expectations below target are damaging to euro area welfare? If so: in which way and how much?
2. Why does the ECB not do more to increase consumer price inflation?
 - Do you think that the ECB currently does not have any effective tools to increase inflation?
 - Do you think that the side-effects of policies that would be effective in raising inflation would be too bad to justify their use?
 - Which side-effects are relevant in your opinion and can they be quantified?
3. Do you think a fiscal union is a necessary element of a functioning monetary union?

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Against the backdrop of slowing growth and subdued inflation in the euro area, we address the question to what extent additional monetary stimulus can be expected from the ECB if needed. We find that “more of the same” policies will probably not be effective and that there are no attractive alternatives there. After more than ten years of exceptionally loose monetary policy it is now the turn of fiscal and structural policies to reinvigorate the European economies.

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