

IN-DEPTH ANALYSIS

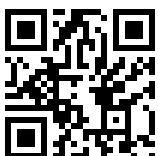
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Monetary Dialogue Papers, September 2023



Big central banks and big public debts

The next challenges



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Abstract

Like most advanced economies, the euro area emerges from a series of historical shocks with larger public debts, a sizeable increase in the already large balance sheets of the Eurosystem central banks, and intensified links between fiscal and monetary policies. The governments and the ECB must now undo what they did. Corrective action must not wait, if only because other shocks may again unexpectedly occur. The paper also presents a procedure to cut public debts.

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LIST OF ABBREVIATIONS

APP	Asset purchase programme
ECB	European Central Bank
EU	European Union
EMU	Economic and Monetary Union
GDP	Gross domestic product
HICP	Harmonised index of consumer prices
PEPP	Pandemic emergency purchase programme
QE	Quantitative easing
QT	Quantitative tightening
TPI	Transmission protection instrument
UK	United Kingdom
US	United States

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EXECUTIVE SUMMARY

- Like most advanced economies, the euro area emerges from a series of historical shocks with larger public debts, a sizeable increase in the already large balance sheets of the Eurosystem central banks, and intensified links between fiscal and monetary policies. **The governments and the ECB must now undo what they did as they dealt with the shocks.**
- **As most other central banks, the ECB has failed to manage inflation twice since 2009. First inflation was too low, now it is too high.** The main reason is that central banks did not recognise the lack of accuracy of their forecasts and of their estimates of the neutral interest rate.
- **Inflation targeting remains the right strategy, but its implementation must be amended.** This includes the use of quantitative easing (QE) and quantitative tightening (QT), and the acceptance that inflation forecasts can become unreliable. This calls for a revision of the monetary policy strategy, which the ECB has announced for 2025.
- **Sustained use of QE over many years has not delivered on its macroeconomic objectives.** Liquidity injections stabilise financial markets when they are hit by crisis and can be used pre-emptively. This does justify sustained QE, which amplifies the quasi-fiscal aspects of monetary policy and strongly affects the behaviour of financial institutions.
- **QT must be implemented without delay once financial stability has been restored.** Delaying QT for fear of financial instability is a case of both fiscal and financial dominance. If financial instability returns during QT, temporary liquidity injections can be used without abandoning QT.
- **The interactions between monetary and fiscal policy are well established but have been overlooked.** In particular, the inflationary impact of strongly expansionary fiscal policies has contributed to the inflation surge of 2021. In general, the respective responsibilities of governments and central banks must be clarified and central banks ought to recognise the quasi-fiscal aspects of monetary policy as they reformulate their strategies.
- **The remuneration of commercial bank deposits at central banks is a legacy of sustained QE.** Central banks have not signalled whether they intend to retain the abundance of liquidity as a permanent feature of the interbank markets or whether to re-establish the previous regime of scarcity. At stake are transfers of income to commercial banks, which ought to be a fiscal decision.
- **Large public debts are a source of fragility.** The conventional strategy is to pare debts down through sustained primary budget surpluses. The experience shows that governments are most unlikely to deliver and that, in any case, it will take decades to achieve the required debt reductions.
- **Within the euro area, the existence of very large public debts hampers the transmission of monetary policy and represent a serious threat.** The conventional strategy must be rethought accordingly.
- **Public debts can be reduced by keeping forever the holdings of Treasury bonds on the books of central banks.** This calls for changing how central banks intervene on the interbank markets. Instead of using Treasury bonds, the central banks can trade in their own bond instruments. This process is not inflationary and does not entail inter-country transfers. The independent Eurosystem can guarantee that this procedure is not abused by member governments.

1. INTRODUCTION

This paper deals with two specific developments. First, central banks have become too large, in many ways. They have expanded their mission. Beyond price stability, they have accepted to protect financial instability, not just in response to crises but also in preventing potential volatility. To that effects they have experimented with new tools. They have kept their interest rates 'low for long', including setting their policy rates at negative levels. They have massively expanded their balance sheets, abandoning the previous tradition of enforcing monetary scarcity. They have also intervened in support of banks and public debts on an unprecedented scale. Second, governments too have become larger. They have extended subsidies to households and firms as never before in peace time. They have intervened in specific markets to manage scarcities. Like the central banks, they have accepted many new responsibilities, including to deal with climate change and to insulate the labour markets from economic shocks. To that effect, they have used tools like imposing lockdowns, supporting work from home or not working at all while remaining employed. As a result, they have allowed their public debts to rise further, reaching levels that are a source of fragility in numerous countries.

Central banks have started to normalise their policies. They have raised their policy interest rates and started to shrink their balance sheets. In so doing, they exert pressure on highly indebted governments, which they previously financed indirectly through low interest rates and quantitative easing (QE). Most governments have started to cut their budget deficits, which had remained large for long, possibly feeding the inflation surge that started in 2021. The planned reduction of budget deficits may help central banks as they seek to bring inflation rates back to target, but it makes monetary policy more difficult to fine tune. These two-way influences raise a number of difficult issues. In most countries, governments and central banks may cooperate in this kind of situation. Within the Economic and Monetary Union (EMU), cooperation is difficult because the European Central Bank (ECB) cannot make arrangements with the governments of 20 member states and also because economic conditions differ among the member countries (Beetsma et al, 2001; de Grauwe and Yi, 2015).

The next section focuses on the short run in the advanced economies. The next couple of years will be defined by the fight against inflation and subsequent reduction of the big central bank balance sheets. While central banks naturally stand at the front, fiscal policies must be adjusted. Governments must stop feeding price pressure and they need to sustain efforts at stopping the debt build-up in an unfavourable environment where major new needs have emerged. Looking at the longer run, Section 3 argues that the monetary policy strategy need to be amended. Inflation targeting remains a valid bedrock, but its implementation has to be corrected. QE has been heralded as a new instrument that operates as a substitute for interest rates when they reach their lower bounds. It has not worked that way. QE is an important tool to quell bouts of financial stability, which means that it should not be used for years on end. Quantitative tightening (QT), the undoing of QE, is necessary, but fraught with risks. A key risk is its impact on government budgets. Section 4 focuses on challenges specific to the euro area. The differences in national public debts distort the transmission of monetary policy and, once again, threaten the financial stability of the monetary union. Large debts are most unlikely to be significantly reduced in the coming years. This is an issue that is studiously ignored by policymakers. The paper offers suggestions to tackle that issue.

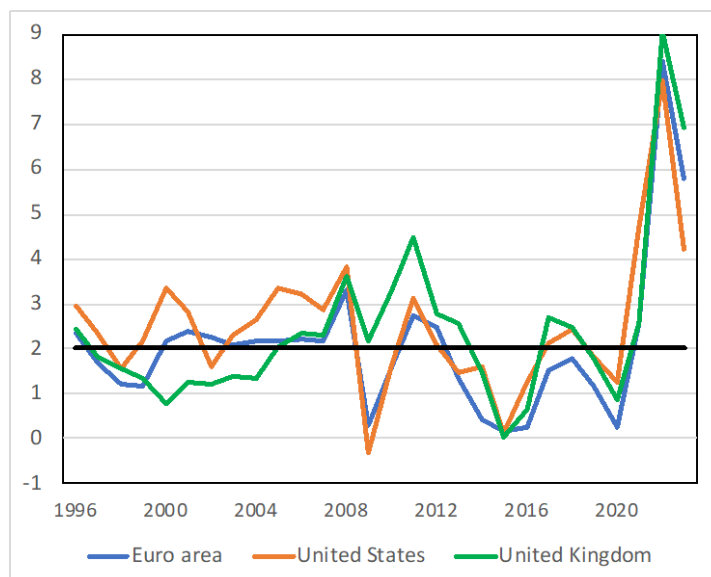
2. MACROECONOMIC POLICIES IN THE SHORTER RUN

2.1. What went wrong at central banks?

In most advanced economies, central banks have good reasons to feel under pressure. They have become very large but failed to bring inflation up when it was too low. They further failed to detect the inflation surge when it took off, so they were late to react. Their reaction was standard in the face of non-standard shocks. Of course, inflation is coming down, but central banks are now different from what they used to be before the global financial crisis, and they need to adapt or revert.

Up until the global financial crisis, most central banks had adopted the inflation targeting strategy. In a nutshell, the strategy calls for adjusting the policy interest rate whenever inflation expectations diverge from the target. For a while, it worked well, but not after 2008 when, as Figure 1 shows, inflation dipped below target. When interest rates hit the lower bound, QE was invented. A large literature has tried to explain this 'inflation puzzle', producing a long list of potential reasons (e.g. demographic change, a flat or non-linear Phillips curve, technological change, a very low equilibrium interest rate, globalisation, and more).¹ Much the same happened when the pandemic hit and, this time, inflation surged. This second failure, on top of the first one, represents a serious challenge.

Figure 1: Headline inflation rates (% per year)



Source: OECD.

A natural conclusion would seem to be that we lack a proper understanding of the inflation phenomenon. A number of commentators have rushed to this conclusion. Adherents of the monetarist tradition see the inflation surge as a consequence of QE during the pandemic (Issing, 2021). But this does not explain why QE did not create inflation in 2010s. Others have proclaimed the Phillips curve to be not just flatter or nonlinear,² or even dead (Cochrane, 2019), but this is not confirmed by a large amount of empirical work. As recently argued by Bernanke and Blanchard (2023), a textbook summary of macroeconomic theory provides a convincing explanation of the events of the last quarter century.

¹ Some of the many surveys are Ciccarelli and Osbat (2017), Sánchez and Kim (2018) and Yellen (2019).

² If the Phillips curve is flat, economic conditions (the output or the unemployment gaps) do not affect inflation. If it is nonlinear, the effects of economic conditions become stronger as the gap becomes smaller.

Central banks have failed for two main technical reasons.³ First, their forecasts have not been accurate. The dynamic stochastic general equilibrium (DSGE) models, which capture the current conventional wisdom, are unable to account for both the impairment of financial markets that followed the 2008 crisis and for the pattern of household savings triggered by the lockdowns enforced during the pandemic (Cochrane, 2023). Second, as explained by Gros and Shamsfakhr (2022), these models require their users to make the crucial assumption of what inflation will be in the medium term? They have assumed that, by then, inflation would have returned to its target level, which amounted to decide that the surge would be temporary. They quoted widespread support from private forecasts of professionals, whose views were shaped by those of the central banks themselves. However, Coibion et al. (2020) have shown that households and firms, which bargain over wages and set prices accordingly, hold very different expectations from those of professionals. The inflation targeting is not to be blamed.

2.2. The fight against inflation

As they realised that their forecasts were seriously misleading because of high uncertainty and changed circumstances, central banks have suspended forward guidance, the practice of signalling their intentions over the coming couple of years in order to shape expectations. The shift to rely on observed/incoming data to make policy decisions undermines inflation targeting, even though inflation targeting based on misleading forecasts is even worse. Given that monetary policy affects actual inflation with a long and variable delay, this shift all but guarantees that the anti-inflation stance will last for too long.

The immediate costs will include a period of below-target inflation and of longer than needed slow growth, possibly negative growth, along with rising unemployment. Central banks are fully conscious of this consequence and rightfully argue that it is better to err in this direction than to allow inflation to remain too high. About a year and a half after policy started to tighten, headline inflation is unsurprisingly declining and the tightening cycle is visibly coming to its end.

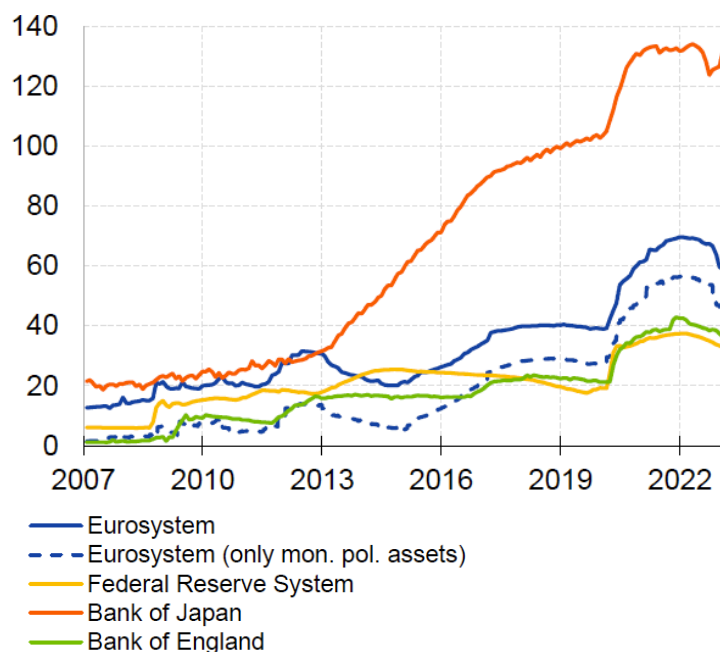
That does not mean that central banks should declare victory. They still face the challenge of coming to terms with the reasons why they failed to achieve their targets since 2008. In the near term, they stand to face three main issues:

- They will eventually have to cut their interest rates. Until recently, the conventional wisdom was that the neutral interest rate – the rate at which monetary policy is neither expansionary nor contractionary – is about 2 to 3% when inflation is at its 2% target. Like much of the pre-existing conventional wisdom, there is surprisingly little support for this assertion.
- In addition, if inflation undershoots its target, central banks may have to go below the neutral rate. That means that there is considerable uncertainty on how far down, and how fast, central banks will have to bring their interest rates. A debate will soon emerge, fed by this uncertainty and by the fiscal considerations presented in Section 2.3.

Most central banks have started to reduce the size of their balance sheets (quantitative tightening, QT). As Figure 2 shows, QT is proceeding relatively slowly. If, as they argued during the QE period, varying the size of balance sheets has a significant effect on inflation, we could have expected them to combine interest rate increases and QT, perhaps raising the interest rates more slowly and proceeding faster with QT, as explained in Wyplosz (2023a). The doctrine on QE and QT needs to be clarified.

³ President Lagarde has recognised these shortcomings in her speech at the Jackson Hole Symposium on 25 August 2023.

Figure 2: Central bank balance sheets (% of GDP)



Source: Schnabel (2023).

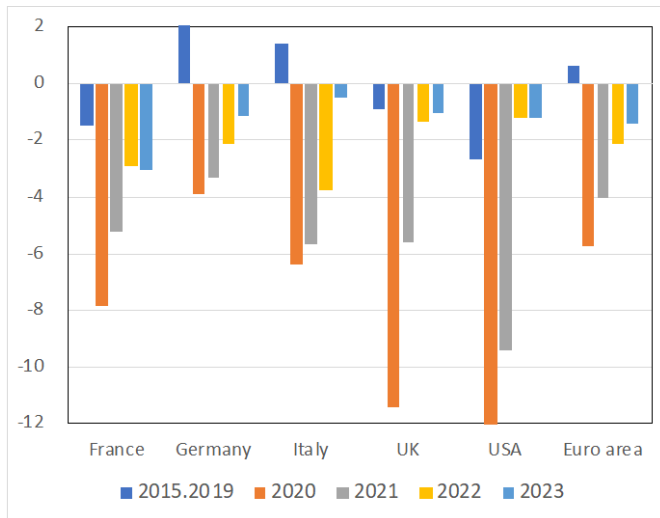
One possibility is that central banks are concerned with financial (in)stability at a time when rising interest rates risks stressing banks and financial institutions. Some relevant events have occurred in the UK, the US and Switzerland but they could be dealt with modest and temporary reversals of QT. Another concern is that QT involves selling public debt instruments, which makes it more difficult for government to finance budget deficits and to serve debt. The delicate relationship between monetary and fiscal policies is examined in Section 2.4 below.

2.3. Fiscal policies

Fiscal policy expansions have been historically strong throughout most of the advanced economies since 2019, and they are slowly being reversed. This is clearly visible in Figure 3, which displays the cyclically-adjusted primary budget balances of large OECD countries and the euro area.⁴ The figure compares the average balance over the pre-Covid period with what happened in the following years. Although the retrenchment in 2022 and 2023 is large, all the balances are expected by the OECD to remain in deficit in 2023. There were good reasons for all countries to adopt emergency measures, although the deficits would have been contained had the measures been carefully targeted toward the intended beneficiaries. Moreover, when growth strongly resumed after the lockdowns, the deficits remained large as governments were anxious not to undercut the budding recovery. Yet, the recovery was brisk, largely because non-targeted subsidies led households to accumulate large savings that started to be spent once lockdowns ended and the pandemic became less severe.

⁴ The purpose of the cyclical adjustment is to measure the discretionary actions of governments since it nets out the automatic effects of cyclical fluctuations and pre-committed interest payments on the existing debt.

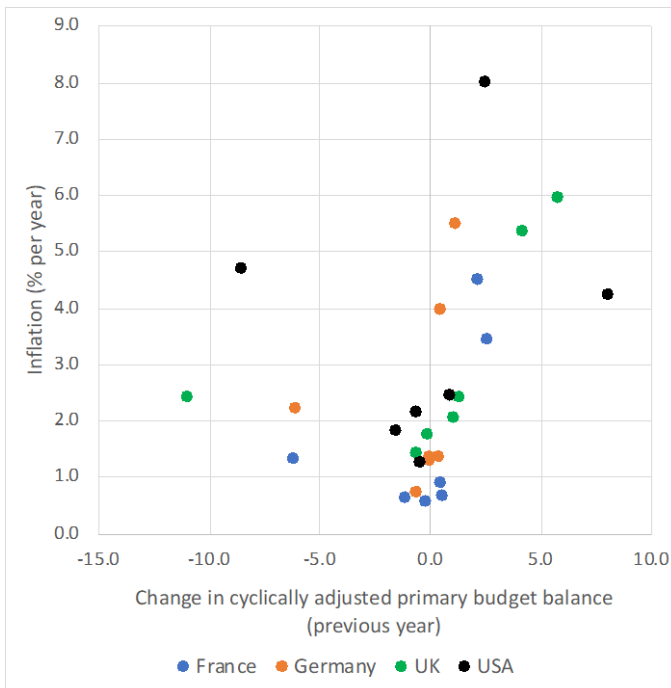
Figure 3: Cyclically adjusted primary budget balances (% of GDP)



Source: *Economic Outlook*, OECD.

The role of fiscal policies in contributing to the inflation surge is not always acknowledged, even though the ECB has repeatedly voiced concern. A good measure of the effect of fiscal policy on the macroeconomy – aggregate demand and, subsequently, inflation – is the change in the cyclically adjusted primary deficit. This change represents how much the government voluntarily adds to, or subtracts from aggregate demand. For each year from 2017 to 2023, Figure 4 plots inflation against the change in the cyclically adjusted primary deficit, lagged by one year to account for the delayed impact. Because fiscal policy is but one of the sources of inflation, the link is not tight, yet it is present. More formal evidence can be found in Bankowski et al. (2023) for the euro area and in Demirel and Wilson (2023) in the US.

Figure 4: Inflation and the cyclically adjusted primary budget balances (% of GDP)



Source: *Economic Outlook*, OECD.

Note: The budget measure corresponds to the previous year.

2.4. Interactions between monetary and fiscal policies

In principle, the separation of tasks between governments and central banks is clear. Central banks are in charge of inflation. Dealing with the impact of the pandemic and subsequent shocks on households and firms is the responsibility of governments. Together governments and central banks are responsible for financial stability. However, these macroeconomic policies are interdependent, a fact that has long been recognised. It is surprising, therefore, that this interdependence has not been taken into account to a greater extent by both central banks and governments.

Fiscal expansions were enacted in 2020 during the acute phase of the pandemic. As Figure 3 shows, the cyclically adjusted primary budgets were pushed into large deficits, with changes ranging from 6% to 11% of gross domestic product (GDP). The impact on GDP growth was bound to be sizeable, even though the lockdowns and other health policy measures worked in the opposite direction. With hindsight, we now know that GDP growth rebounded forcefully in 2020-21, which contributed to the inflation surge. At the time, there were debates about the impact of the Covid shock, which reduced both demand and supply, with an uncertain overall effect. Uncertainty also concerned the duration of the shock and, therefore, the timing and vigour of the eventual recovery. As previously noted, most, if not all forecasting models were unable to clarify the situation and most central banks did not try to counteract the impact of the unusually large fiscal expansions.

Clearly, the central banks were facing considerable uncertainty. In such a situation, however, risks must be balanced. And indeed, there were several risks:

- A clear concern, which central banks shared with governments, was not to undermine the recovery once the pandemic became less threatening. By early 2021, however, vaccines became widely available in the advanced countries and the importance of newly-accumulated household savings suggested the possibility of a strong recovery (Wyplosz, 2021). That, alone, should have alerted central banks to the need of keeping inflation at the top of their list of priorities.
- There were widespread fears of lasting “scarring effects” from the pandemic, due to withdrawals of labour market participations and shifts in consumer behaviours. These effects could harm the recovery, but since they would mostly contributed to a decline in potential GDP, they could be inflationary. Dealing with scars and changing behaviour was a responsibility of governments while central banks had to deal with the inflationary impact.
- Financial stability was another concern. Central banks had learned to quickly inject large amounts of liquidity. Until the end of 2022, though, there was no sign of instability and they kept QE going. Then, they gradually stopped QE and started to shrink the amount of liquidity, which may lead to instability.
- Without a better understanding of why inflation had been too low, central banks in the developed economies were worried of missing a chance of escaping the liquidity trap.

Indeed, several central bankers suggested that they were willing to overshoot the inflation target as a way of exiting the too-low inflation period. Thus, it was a calculated risk, but did it consider the inflationary impact of highly expansionary fiscal policies? No such risk was mentioned as late as November 2021, when the ECB stated that:

“To support the recovery, ambitious, targeted and coordinated fiscal policy should continue to complement monetary policy.” (*Economic Bulletin* 7/2021, ECB, p.3.)

while noting that:

“Inflation is expected to rise further this autumn, but to decline next year. The current increase in inflation is expected to be largely temporary, mainly reflecting the strong increase in oil prices since around the middle of last year, the reversal of the temporary VAT reduction in Germany, delayed

summer sales in 2020 and cost pressures that stem from temporary shortages of materials and equipment. In the course of 2022 these factors should ease or will fall out of the year-on-year inflation calculation. Underlying inflation pressures have edged up. As the economy recovers further, and supported by the Governing Council's monetary policy measures, underlying inflation is expected to rise over the medium term." (*Economic Bulletin* 7/2021, ECB, p.4.)

Note that the inflationary impact of fiscal expansions is not mentioned. It is only after it started to raise the policy rates that the ECB stated in August 2022 that:

"Economic activity continues to benefit from the reopening of the economy, a strong labour market and fiscal policy support. [...] Fiscal policy is helping to cushion the impact of the war in Ukraine for those bearing the brunt of higher energy prices. Temporary and targeted measures should be tailored so as to limit the risk of fuelling inflationary pressures. Fiscal policies in all countries should aim at preserving debt sustainability." (*Economic Bulletin* 5/2022, ECB, p.3.)

The coordination between monetary and fiscal policies is traditionally difficult to organise because the agendas of central banks and governments are rarely aligned. Since 2020, however, the objectives of both authorities were the same. Both acted forcefully, as if they were alone, and they often failed to recognise that many of the required actions were of a fiscal policy nature. In the euro area, the existence of 19 governments⁵ made coordination even more difficult.

⁵ Croatia only joined the euro area in 2023.

3. NEW MONETARY POLICIES

3.1. Quantitative easing: when it makes sense and when it does not

QE was introduced as a response to having reached the effective lower bound of the key policy interest rates. Having lost their standard instrument to conduct expansionary policies, central banks hoped that cash injections would be a substitute instrument. QE worked in two ways. First, on the credit supply side, it was thought that abundant liquidity would lead to increases in bank lending through a relaxation of credit conditions at unchanged interest rates. The assumption was that commercial banks would be eager to find lucrative uses for their abundant deposits at central banks. Second, on the credit demand side, it was believed that, by absorbing large amounts of public debts at varied maturities, QE would lower the whole yield curve, thereby encouraging more borrowings by the private sector. Credit conditions were relaxed and the yield curves became flatter, indeed, but the demand for credit did not rise enough to generate sufficient growth to raise inflation, the ultimate objective of QE. In the event, banks found new ways of using their abundant liquidities in other ways than by supplying more credit. Acharya and Rajan (2022) and Rajan (2023) argue that QE had made some financial institutions “liquidity dependent”, so that continuing QE during a quiet period may have planted the seeds of future difficulties:

- Injecting liquidity serves another purpose. It stabilises financial markets during a crisis. However, if the outcome of QE is to create “liquidity dependence”, the liquidity injections are not achieving their aim of increasing the resilience of banks.
- Before QE, commercial bank reserves were close to the minimum that they wished – or needed – to hold. The scarcity of reserves made it possible for central banks to not remunerate bank deposits. When bank deposits exceed what is desired, central banks must offer remuneration, close to the policy interest rate in order to pin the interbank interest rate at the policy rate chosen by the central bank. Section 3.2 examines the quasi-fiscal implication of QE.
- QT is challenging. After successive waves of QE, liquidity is excessive and must be reduced. However, this process can destabilise banks and other financial institutions. They not only stand to gradually face tighter availability of liquidity but they may become seriously constrained inasmuch as they had become “liquidity dependent”. The larger QE has been, the further QT has to proceed, and the more difficult it becomes.
- Public debts are under pressure. As central banks hold a significant portion of public debts, QT competes with new debt issuance, be it to finance ongoing budget deficits or to roll over maturing debt instruments (next section).

The upshot is that the ability of QE to affect aggregate demand is very much in doubt and that liquidity injections are a powerful tool to deal with financial stability during a crisis. Long lasting QE is largely useless, and potentially detrimental. “Brief QE” in the form of pre-emptive or emergency liquidity injections is a key instrument.

3.2. Fiscal implications of quantitative easing

Monetary policy is supposed to be neutral in the sense that it affects only the nominal economy (all variables expressed in value) not the real economy (all variables expressed in volumes). In practice, this is not the case, at least in the shorter run when prices and wages are not flexible. For instance, raising the interest rate does not reduce inflation quickly. It first reduces private spending, it also typically results in an exchange rate appreciation that reduces exports. The resulting lower aggregate demand is meant to influence price and wage setters as they contemplate weakening sales and higher

unemployment. These real effects, however, are expected to gradually disappear as inflation declines and central banks stop pulling the brakes. Over a business cycle, real interest rates, relative prices and real wages usually settle back to their long-run trends.

During a liquidity crisis, central banks act as lender of last resort. The well-established practice stands to encourage financial institutions to take excessive risks if they are certain to receive help in case of a crisis. This moral hazard is taken seriously by central banks which customarily state that liquidity injections are a possibility, not a commitment. Financial regulation is also designed to make these events rare and costly for institutions when they receive support. However, when it is not a particular institution that becomes illiquid but the whole market, the central bank has no choice but intervene. These interventions, which can be seen as one-off QEs, distort financial markets but their fiscal implications are minimal because, by design, they are rare and temporary, and can be reversed once financial stability is restored. Furthermore, governments can and often do intervene along central banks with their own subsidies.

Sustained QE, on the other hand, is not neutral. It creates lasting and disturbing links with fiscal policy, as explained in Hooley et al. (2023).

The most notable effects are:

- By acquiring large amounts of long-term assets, central banks **flatten the yield curve**, as previously mentioned. By reducing term premia, this is a distorting subsidy and therefore an action that belongs to the fiscal authorities. It encourages long-term risk-taking.
- At the same time, the returns from private assets have become significantly higher than the returns from public debts. This has been explained by investors' heightened search for safe assets. **By providing investors with large amounts of liquidity through purchases of public debts, central banks support the safety of the debts and make it possible for governments to borrow at a discount** (Reis, 2021).
- QE typically involves purchases of public debts. **In the euro area, the ECB holds some 30% of outstanding debts** (see Figure 6 below). **This lightens the borrowing and debt burdens.** Everything else remaining equal, it encourages deficit spending. While help from central banks to governments may be welcome at times – in 2020-21, the ECB indirectly financed almost all the member states' deficits – it should be strictly limited to exceptional situations. QT is a condition for avoiding fiscal dominance.
- In some countries, as in the euro area, **the central bank may also purchase private assets, typically those that are highly rated. This is another source of distortion.** It typically favours large firms from the industrial sector, with no obvious justification.
- In the euro area, **QE benefits more the countries with large public debts.** The ECB argues that it is needed to prevent the kind of segmentation that was observed during the debt crisis over 2010-2012 and thus to maintain the transmission of monetary policy throughout the whole area. Special programmes such the Pandemic Emergency Purchase Programme (PEEP) and Transmission Protection Instrument (TPI) reinforce this aspect. Here again, these distortions may be highly desirable in specific situations, but QT should undo them when the need is no longer justified.
- **QE reduces the maturity of debts of the overall public sector.** Combining balance sheets of the central bank and the government into an overall public sector balance sheet, QE can be seen as replacing some long-term debt instruments with very short-term liabilities of the central bank. Under normal conditions, it is the responsibility of the fiscal authorities to determine the maturity structure of their debts.

- **The abundance of liquidity forces central banks to offer interest on bank deposits, as already noted. Relative to the previous situation, this amounts to transfers to banks.** Whether bank deposits should be remunerated or not is controversial but, in the end, decisions on transfers should belong to the fiscal authorities, if only because they receive the central bank profits and therefore end up bearing the costs of interest payments to banks.
- **Central banks take on board risky assets, including public debts, all of which are not safe.** While central banks are uniquely apt at absorbing risk (since they can always create money as needed to guarantee debt service), this is another distortion. Furthermore, if risks materialise and central banks create money to absorb them, this opens up the risk of inflation, which is their key responsibility.

3.3. Policy implications

The main message is that the distortionary effects of classic monetary policy wash out over a cycle as the effects from periods of tightening are compensated by the opposite effects from periods of loosening. Occasional liquidity injections are not neutral but the effects are limited, while sustained QE creates a large number of distortions and takes over significant fiscal characteristics. QE of past years has also left central banks with large balance sheets. Barring any new major shock – a hope more than a presumption – it is time to envisage the next steps. Two of them, making central banks and public debts smaller, deserve more attention than they currently attract.

As noted above, prompt QT is the necessary counterpart to emergency QE. According to Figure 2, QT is proceeding quite slowly, however.

One reason is the fear that it could usher in financial instability, but QT does not prevent occasional injections of liquidity when needed.⁶ Another reason is financial dominance. Financial institutions have adapted to the abundance of liquidity and shares are currently highly valued, although the rapid rise in interest rates have a depressing effect on share prices. In addition, since banks receive interest on their central bank deposits, the abundant liquidity can be seen as a subsidy to the whole financial sector, which naturally wishes that liquidity remains abundant. Governments also benefit from compressed yield curves, a case of fiscal dominance. All these explicit or implicit subsidies are difficult to withdraw, especially when they have been in place for a long time.

However, the certainty of QT is crucial to minimise the quasi-fiscal aspects of QE presented in Section 3.2. QT should not be an option to be exercised whenever it seems convenient. This concerns both the timing and the quantitative objective. Most central banks have now announced a QT schedule in the form of monthly withdrawals of liquidity over periods of several months. This is an important commitment, but it leaves out two essential questions: what is the destination, and when can we expect the destination to be reached? In particular, will the monetary regime remain characterised by excess liquidity and, therefore, will bank deposits continue to be remunerated at the policy rate? In order to minimise the risk of instability, financial markets need to know the answers to these questions ahead of time to make adequate preparations. These are difficult questions, and central banks may not be able to provide definitive answers. Yet, before the inflation surge, several of them have formulated monetary policy strategies that now need to be updated. These issues clearly belong to the formulation of the next monetary policy strategy.

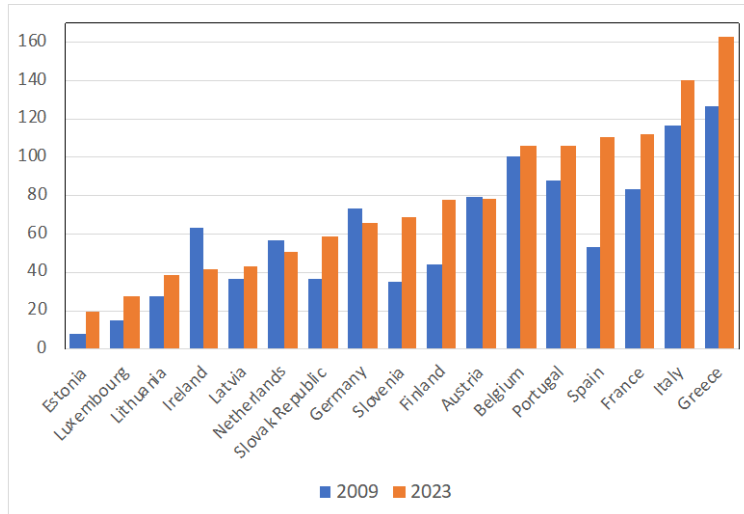
⁶ Indeed, occasional and temporary liquidity injections merely slow down the trend of liquidity absorption.

4. THE EURO AREA IS SPECIAL

4.1. The public debt issue

As can be seen from Figure 5, the gross public debts of several euro area member governments are large, exceeding 100% of GDP in six cases, higher than before the sovereign debt crisis. The debt ratio has declined in only four countries (Ireland, the Netherlands, Germany and Austria), even though interest rates have been close or below zero during much of the intervening period.

Figure 5: Public debts (% of GDP)



Source: *Economic Outlook*, OECD.

The debt increases are partly explained by the shocks of the 2020s, when the general escape clause of the Stability and Growth Pact was activated. However, an effective debt discipline framework would have led to debt reductions during the good years 2012-19, thus making room for the exceptional deficits warranted by the recent shocks. This is what happened in the four countries where debts are lower than in 2009 and in the countries where debts are less than 60% of GDP. These are countries where debt discipline is practiced, quite independently of the Stability and Growth Pact.

The existence of large differences in public debts directly affects monetary policy. Interest rates on public debts tend to reflect indebtedness, which affect private borrowing rates. As a result, the single policy rate set by the ECB does not result in similar borrowing rates across the euro area. Put differently, the transmission of monetary policy is not uniform across member countries. At worst, as it has been the case during the debt crisis, suspicions of debt sustainability can lead to very high interest rates for both the sovereign and the private sector.

This, in turn, translates in divergent national views about the conduct of monetary policy. In the current situation of rapid increases of the policy rates, some governments have started to complain, while others may find that stronger action is needed. Thus, the Italian Prime Minister has warned the ECB against further interest rate increases (*Financial Times*, 28 June 2023), as did Ministers from Portugal and Spain (*Le Monde*, 4 July 2023). In response, the President of the Bundesbank declared that “the image of nearing the interest rate peak is actually wrong” (Speech at the Frankfurt Euro Finance Summit, 3 July 2023).

4.2. The conventional strategy

Can something be done to directly deal with the public debt situation? The conventional answer is that sustained primary budget surpluses is the way to bring public debts down and this is the *raison d'être* of the Stability and Growth Pact. Unfortunately, this logic is most unlikely to deliver significant debt reductions. In a recent survey of the historical evidence, Arslanalp and Eichengreen (2023) make two points:

- Reducing debts through primary surpluses takes considerable times. The evolution of public debts depends on two factors: 1) the primary budget balance; 2) the difference between the interest rate and growth, often referred to as $r-g$. There is considerable uncertainty about the long-run values of r and g , let alone the sign of $r-g$. For the sake of illustration, assume that $r-g=0$. With primary surpluses continuously at 5% of GDP, bringing the debt from 100% of GDP to 60% would take 8 years. For surpluses at 3% of GDP it would take 14 years, and it would take 40 years for surpluses of 1%.
- The experience of the last half-century is that sustained, large primary surpluses are very rarely observed. In modern advanced economies, government budgets are large and include a welfare state with many entitlements, which create political conditions not conducive to the conventional strategy.

Table 1 tallies the evolution of primary surpluses over more than eighty years in OECD countries. No country exhibits an average surplus exceeding 1% of GDP, with two exceptions: Denmark (barely) and Norway, which is an outlier because of its large income for North Sea gas. Surpluses in excess of 3% or 5% of GDP are very rare. Surpluses in excess of 1% would need to be sustained over decades to seriously cut debts in highly indebted countries. The last column indicates the largest spans of consecutive surpluses above 1%. In several cases, they extend over long periods, but never for twenty years or more, except for Norway and for Belgium.⁷

This evidence confirms the conclusion of Arslanalp and Eichengreen (2023) that large debts are here to stay. For the euro area, it means a continuing fragility of some public debts, with an underlying risk of crisis. It also means that the ECB will continue to face contradictory constraints and a challenging policy transmission process. Slow growth may also characterise countries whose governments are fiscally constrained. It may also harm progress on climate change, on health policies, on defence and investment in technological research and development.

The mistaken belief that sustained fiscal retrenchment is the solution means that there is no intention to directly tackle the debt problem. This is the responsibility of governments, not the ECB. But it directly affects the ECB in many ways, as previously explained. The following section sketches an explicit procedure to cut public debts.

⁷ Belgium maintained a surplus in excess of 1% for 21 years, from 1987 to 2008. During that time, its debt went from 142% to 103% of GDP. Today it stands at 105%.

Table 1: Primary surpluses in the OECD area (1960-2023)

	Number of observations	Average balance (% of GDP)	Number of years above 1% of GDP	Number of years above 3% of GDP	Number of years above 5% of GDP	Longest period above 1% (years)
Australia	35	-0.5	12	2	0	6
Austria	64	-0.5	13	0	0	5
Belgium	54	0.3	23	17	6	22
Canada	54	-0.9	14	5	2	12
Denmark	53	1.3	30	17	6	13
Finland	64	0.9	36	19	4	16
France	46	-1.5	3	0	0	3
Germany	33	-0.1	12	0	0	9
Greece	29	-1.5	9	4	0	5
Iceland	44	0.3	18	9	3	6
Ireland	34	-0.1	22	11	3	12
Israel	24	-0.1	8	3	0	5
Italy	64	-0.9	22	7	1	12
Japan	64	-3.1	6	1	0	6
Korea	54	0.3	23	2	0	7
Luxembourg	34	0.9	18	3	0	8
Netherlands	55	-0.1	19	2	0	6
New Zealand	38	1.1	22	12	4	16
Norway	46	5.8	37	31	25	25
Portugal	47	-1.3	8	0	0	2
Spain	60	-2.1	10	1	0	10
Sweden	64	0.8	33	22	2	17
Switzerland	34	0.1	9	0	0	3
UK	54	-1.1	9	3	1	4
USA	64	-1.9	5	1	0	4

Source: Economic Outlook, OECD.

Note: Sample periods vary across countries. The central and east European countries are excluded.

4.3. How to reduce public debts⁸

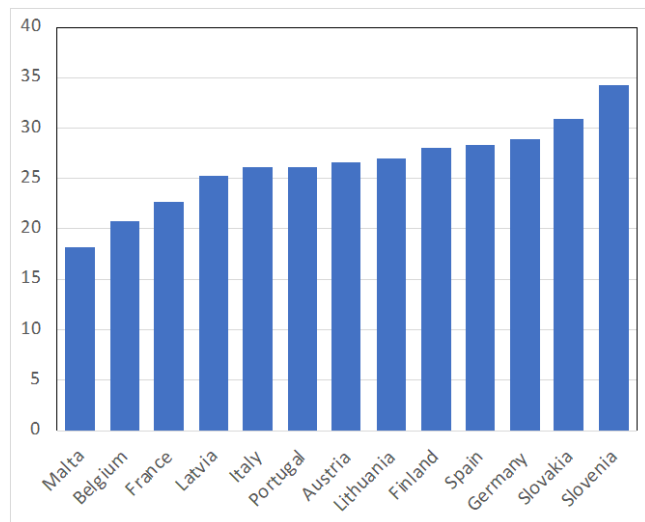
4.3.1. The idea

The national central banks of the Eurosystem currently hold a significant share of their respective central government debts. According to Figure 6, the share is usually ranges between 25% and 30% of total debt. Debt service on these shares is zero for the consolidated public sector since interest payments by governments to central banks are returned to governments as profits. In addition, the debt held by central banks is removed from the financial markets, which reduces their exposure to market instability and makes the debts safer. "Effective debts", therefore, are generally 70%-75% of the corresponding gross debt numbers shown in Figure 5. For example, Italy's "effective public debt" is 109% of GDP instead of 141%.

⁸ This is an updated version of the plan presented in Pâris and Wyplosz (2014).

The problem is that there is no guarantee that the national central banks will keep forever existing debts on their books, which implies that the concept of “effective debt” as defined above is misleading, but so is the commonly used concept of actual debt, which ignores the economic effect of holdings of Treasury bonds⁹ by central banks. Behind this confusing situation lies uncertainty about the evolution of future holdings. QT will certainly reduce debt holdings by central banks, but we do not know how far it will proceed. Removing this uncertainty may provide a solution of the large debt problem.

Figure 6: Central bank holdings of central government debts – end 2022 (% of total debt)



Source: ECB.

Note: Data for some countries are not available. Not reported countries with very low numbers (Croatia, Cyprus).

If the Eurosystem central banks were to keep the existing amounts of debts on their books forever, this would be equivalent to a debt restructuring, whereby the correct measure of indebtedness would be the “efficient debt”. How this can be done requires looking into how central banks routinely manage the money supply through the interbank market.

For decades, central banks have created money by taking on board (through outright purchases or repurchase agreements) public debt instruments.¹⁰ The main reason for using this instrument is that Treasury bonds are deemed safe. Under this assumption, central banks do not take any risk. In so doing, the central banks indirectly finance a fraction of the budget but, until QE, in most countries, the fractions were small. Effective debts were close to actual debts, and the fiscal impact of standard monetary policymaking was irrelevant.

The link between liquidity provision by central banks and public debt financing can be avoided. As central banks provide liquidity to commercial banks (by increasing bank deposits), they must be paid in return. The standard procedure is for the commercial banks to cede Treasury bonds. In other words, the central banks purchase Treasury bonds. The procedure can be changed, however. Instead of purchasing Treasury bond, central banks could buy back their previously issued own bonds held by the commercial banks. Central bank bonds are at least as safe as public debts, both are liabilities of the overall public sector. Were central banks to adopt this procedure, they could conduct routine monetary policy operations while keeping the existing public debts on their balance sheets. Promising to keep existing holdings of Treasury bonds forever would effectively reduce the public debts of governments,

⁹ This paper does not get into the differences between bonds and bills, using instead the generic term bonds.

¹⁰ The ECB also acquires private assets, which raises another set of questions that go beyond the purpose of this paper.

replacing them with central bank debts. It would not change the level of indebtedness of the consolidated public sector, only its composition, with no impact on the money supply. The interbank market would use central bank bonds as it presently uses Treasury bonds.

4.3.2. How to replace Treasury bonds with central bank bonds

The problem is that, currently, commercial banks do not hold central bank bonds, which they would need to hold in sufficient quantity to trade with central banks on the interbank markets. Somehow, the pump must be primed. Two procedures are possible:

- First, the central bank could buy from commercial banks more Treasury bonds in exchange for newly issued central bank bonds. This would not affect commercial bank deposits. In order to separate the procedure from monetary policy through the impact on the yield curve, the central bank bonds should be of equal maturity as the Treasury bonds that are being swapped.
- Second, the central bank could take advantage of QT, which aims at reducing bank reserves. This could be achieved by issuing central bank bonds to be paid for by commercial banks with reserves, without affecting their holdings of treasury bonds.

An objection to the first procedure is that it would increase debt holdings by central banks, which may be considered as too large. This is a policy choice, which must be agreed upon by the central bank and its government. An objection to the second procedure is that, for the interest rate on the interbank market to be equal to the policy rate, central bank bonds will have to serve the same interest as they offer on bank deposits. Consequently, the banks will consider their deposits and the central bank bonds as equivalent, just different forms of reserves, and QT will not achieve its aim. A solution is for the newly issued central bank bonds to have longer maturities than the deposits which are redeemable on demand. In the end, a combination of both procedures can achieve the desired amount of implicit debt write-off.

4.3.3. Objections and answers

Neutralising a part of existing public debts by placing them on the books of the central banks is bound to generate a number of objections. Furthermore, the specifics of the new procedure must be examined in detail. Some of these questions are dealt with as follows.

a. An inflationary financing of budget deficits?

When a central bank absorbs public debts, it amounts to an ex-post financing of past deficit and the monetary financing of deficits is normally thought of as a source of inflation. The link is more subtle. The constant expansion of the money supply to pay for deficits is certainly inflationary because the reserves of the commercial banks rise, which allows them to keep lending and thus support ever more demand. In the present case, it is a one-off operation that does not increase bank deposits. If needed, the existing excessive deposits can be reduced through QT, with central banks issuing their own bonds.

b. Deposits and bonds

Both commercial bank deposits and central bank bonds are liabilities of the central bank and, as already explained, they must be remunerated at the same rate as the policy interest rate. If they are seen by the commercial banks as equivalent financial instruments, which constitute their reserves, open market operations where one instrument is swapped against the other would have no effect at all. As noted above, the central bank bonds could be of longer maturity than the deposits. Another solution would be that the required reserve requirements, which cap the lending capacity of banks, exclude central bank bonds from being counted as reserves.

c. Inter-country transfers

Within the monetary union, low-debt countries sternly oppose any procedure that could imply transfers to high-debt countries. This is not an issue here since monetary policies are carried out by national central banks, which hold Treasury bonds issued by their own governments. Replacing national Treasury debt with national central bank debt would occur exclusively at the national level, thus preventing any transfer between countries.

d. Moral hazard

If it is easy for a central bank to reduce the “effective debt” of the government, it would seem to create a major source of moral hazard. Since both Treasury and central bank bonds are a liability of the consolidated government, there is indeed a risk that some governments will keep running budget deficits and raise their debts, with the procedure being repeated again and again. This calls for solid safeguards, which already exist. Within the euro area, national central banks operate under the control of the ECB. For that reason, their interbank interventions are carried out on behalf of the ECB and they cannot monetise the debt unless they are instructed to. The ECB will have the authority to determine the size of the initial debt write-downs and any other increase of national Treasury bond holding by the national central banks. It is worth recalling that the Treaty on the Functioning of the European Union requires that the ECB and all national central banks be independent, which forbids them from taking orders from governments.

5. CONCLUSIONS

The euro area emerges from a series of historical shocks with 1) much larger public debts, 2) increased central bank balance sheets of the Eurosystem central banks, and 3) intensified links between fiscal and monetary policies. While the actions that led to this situation are justified by the urgent needs to deal with the shocks, their legacy is a source of undesirable economic and political distortions. The governments and the ECB must now work toward facing these consequences. Public debts must be reduced where they are dangerously large – as seen in Figure 5 - and the ECB must promptly reverse QE. Moving in this direction will go a long way toward minimising the quasi-fiscal implications of monetary policy. Corrective action must not wait, if only because other shocks may again unexpectedly occur.

The need to shrink central bank balance sheets is well understood and indeed QT is underway. However, the strategy has not been spelled out in detail and the speed is not well adapted to a deep retrenchment. Monetary policy has shifted from bank reserves being intentionally kept scarce to abundant. Beyond consequences on the functioning of the financial system and, perhaps, the overvaluation of various assets, abundant bank reserves must now be remunerated, which is a quasi-fiscal issue. Is this new *modus operandi* destined to be permanent or does the ECB, and other major central banks, intend to return to reserves scarcity? The answer to this question should determine the speed of QT, which currently seems to be calibrated by fears of financial instability.

Much of the QE of the 2010s had not been significantly undone by the time the new shocks of the 2020s hit. Similarly, the already large levels of indebtedness of some governments have not been reduced generally by the time they had to be raised again. The idea that fiscal discipline, prompted by the Stability and Growth Pact, will bring the large debts down to safe level assumes that the process can be spread out over a very long time, to be measured in decades. Time, however, is a constraint that need to be recognised. The European authorities, the ECB and national governments, must find a way of quickly cutting public debts down. This paper suggests changing the time-honoured monetary policy practice of dealing on the interbank markets with Treasury bonds. Instead, national banks can issue their own debt instruments and keep the public debt that they currently hold on their balance sheets for ever. In this way, the amounts of public debts held by the private sector can be reduced significantly.

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Like most advanced economies, the euro area emerges from a series of historical shocks with larger public debts, a sizeable increase in the already large balance sheets of the Eurosystem central banks, and intensified links between fiscal and monetary policies. The governments and the ECB must now undo what they did. Corrective action must not wait, if only because other shocks may again unexpectedly occur. The paper also presents a procedure to cut public debts

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