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Is Monetary Policy Overburdened?

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Abstract:
Following the experience of the global financial crisis, central banks have been asked to undertake unprecedented responsibilities. Governments and the public appear to have high expectations that monetary policy can provide solutions to problems that do not necessarily fit in the realm of traditional monetary policy. This paper examines three broad public policy goals that may overburden monetary policy: full employment; fiscal sustainability; and financial stability. While central banks have a crucial position in public policy, the appropriate policy mix also involves other institutions, and overreliance on monetary policy to achieve these goals is bound to disappoint. Central Bank policies that facilitate postponement of needed policy actions by governments may also have longer-term adverse consequences that could outweigh more immediate benefits. Overburdening monetary policy may eventually diminish and compromise the independence and credibility of the central bank, thereby reducing its effectiveness to preserve price stability and contribute to crisis management.

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1 Introduction

Following the experience of the global financial crisis, central banks around the developed world have been called to undertake unprecedented responsibilities, and governments have high expectations that monetary policy can provide solutions to numerous problems. To some observers, monetary policy is the "only game in town." Exceptionally low interest rates and unprecedented liquidity provision by major central banks for several years has eased the burden of adjustment following the crisis. But these policies do not come without potential costs. In a number of dimensions, monetary policy has become overburdened and is expected to achieve goals that do not necessarily fit in the realm of traditional monetary policy. Despite the crucial position central banks occupy in public policy, overreliance on monetary policy is bound to disappoint when the appropriate policy mix for successful resolution of challenges involves other public policies and institutions. Failing to appreciate the limits of what central banks can reliably do poses risks. Long-term adverse consequences could outweigh more immediate and more visible benefits. Careful intertemporal calculus is needed to assess the merits of continuing to overburden monetary policy going forward.

This paper looks at three issues that contribute to the overburdening of monetary policy beyond what ought to be understood as its primary goal—to preserve and defend price stability. The first of these public policy goals is the achievement of full employment and related nebulous concepts of real economic activity where outcomes over the past five years are deemed unsatisfactory in many economies. The second is the achievement of fiscal sustainability, facilitating the repair of public sector balance sheets over time. And the third is the continued preservation of financial stability, taking into account the weakened private sector balance sheets in many economies, and the need to strengthen banking sectors weakened by the crisis, worldwide. For each of these issues, apparent benefits and potential side effects of the unprecedented monetary policy that has been implemented over the past few years are discussed.

To assess whether monetary policy is overburdened requires an understanding of

the primary task that monetary policy is entrusted to do. This is to achieve and maintain price stability over time. One metric for evaluating how significant the overburdening of monetary policy may become is framed in terms of the risk that current policies may threaten the central bank's ability to deliver on price stability in the future. There can be little dispute that the authority that controls the supply of the medium of exchange in any economy can also control the general price level over time and should be responsible for price stability. And yet, over the past century, a period when monetary policy has been practiced with a fiat currency, the record of central banks in achieving and maintaining price stability has been less than stellar. Episodes of deflation and inflation have been observed, undermining price stability and wrecking havoc on real economic performance in the process.

Before the crisis, a consensus had evolved on the main lessons from the previous experiences and on the basic features of what constitutes good monetary policy. Among major central banks, a convergence of practices had been broadly observed, and many of these features had been codified in the practice of inflation targeting (IT), a framework built to emphasize the primacy of price stability as a policy objective.

Placing price stability first helped central banks to depoliticize the monetary policy process and gain credibility as independent institutions, key elements that allowed central banks to contribute towards greater overall stability and effective crisis management. The success central banks had achieved in anchoring inflation expectations is what enhanced their flexibility to respond promptly and aggressively in crisis situations. In 2008 and 2009, such aggressive action by central banks averted a collapse of Great Depression dimensions. This was feasible precisely because there were few questions about the credibility of the central banks to maintain price stability. The crisis-handling episode highlighted the value of independent central banks focused on price stability.

Ultimately, overburdening monetary policy may lead to the repoliticization of central banking. As more responsibilities are allocated to the central bank, the incentives for political capture and misuse by governments increase. Overburdening monetary

policy may eventually diminish and compromise the independence and credibility of a central bank, thereby reducing its effectiveness to preserve price stability and contribute to crisis management.

2 Disappointing growth in the aftermath of the great moderation

A common thread that has raised expectations for monetary policy on a number of fronts can be identified with the disappointing growth following the first stages of the global financial crisis. In much of the developed world, economic activity seems anemic compared to the growth prospects the citizens in our democracies had become accustomed to before the crisis. Figure 1 compares real GDP for the United States, the euro area, Japan, and the United Kingdom to a trend fitted over a decade ending in 2007Q4. Six years after the turbulence of the summer of 2007, none of these economies has come even close to retracing the prosperous path suggested by the trend growth line prevailing before the crisis. Initial hopes of a V-shaped recovery were dashed long ago. More appropriate questions now seem to be how much lower the trend of output should be expected to be going forward and how many economies will join the "lost decade" or the "lost generation" club.

Following the great moderation era, expectations regarding what monetary policy can achieve in terms of both price stability and economic stability were extremely high. As a result, averting a repetition of the Great Depression, which central banks managed to achieve with prompt and decisive monetary policy actions, was hardly considered sufficient success.

The lack of satisfactory growth in the aftermath of the global financial collapse has a number of implications. In the industrialized world as a whole, employment growth has not been sufficient to limit unemployment to tolerable rates. In some economies, historically high unemployment rates among young adults raise the prospect of a lost generation in the making. Furthermore, government revenues have lagged behind pre-

crisis long-term projections. Coupled with initial conditions of excessive government debt, lower growth has exposed a vulnerability of debt dynamics in a number of countries. In addition, private sector balance sheets have been weakened and banks remain more vulnerable to write-downs of legacy assets than they appeared to be during the boom years.

Under these conditions, propping up the economy, facilitating an easing of financing costs for governments, and easing the pain of balance sheet repair could be seen as added goals to monetary policy. The expectation that monetary policy can provide the solution is overburdening monetary policy.

3 Full employment

There is no question that full employment is a desirable public policy goal. In the aftermath of the crisis, and in part as a consequence of the disappointing growth in developed economies, unemployment rates are considered high in many parts of the world. The experience in the United States, the euro area, Japan, and the United Kingdom is shown in Figure 2. In the United States, the unemployment rate briefly reached double digits and although it is decreasing the Federal Reserve has acknowledged that it remains considerably above what it considers compatible with price stability over time. In Japan, the unemployment rate has receded from its crisis peaks but remains at levels twice as high as what would have been considered normal not too long ago. In the United Kingdom little improvement has been evident since the peaks of the crisis. Finally, in the euro area, unemployment rates are not only unprecedented but in some member states are rising to depression-era levels. Focusing on Spain and Greece, two of the member states hit hardest by the euro area crisis, reveals unemployment rates exceeding 25 percent, with the youth component exceeding 50 percent.

The high, and in some cases, increasing rates of unemployment clearly reflect a major policy failure. Does this make the unemployment rate an appropriate monetary

policy target? Is full employment an appropriate monetary policy objective, on equal footing with price stability?

It is undeniable that monetary policy is one of the factors that may influence employment in the short run through its broader effects on aggregate demand. However, other policies should be seen as more important, both in the short run and, more importantly, in the long run. Consider, for instance, aspects of fiscal policy that can provide better incentives for job creation and investment. And consider structural and labor policies that can greatly enhance the flexibility and efficiency of labor markets. In the cases of Spain and Greece highlighted earlier, for example, the greatest tragedy of the current record high unemployment rates is not primarily a reflection of inadequate aggregate demand but of the deeper failure to reform dysfunctional elements in labor markets that ideally should have taken place before the crisis. The failure to correct these sources of vulnerability before the crisis added rigidity to labor markets and magnified the impact of the crisis on the rate of unemployment. Although monetary policy could help to alleviate the resulting pain by inducing somewhat faster growth in aggregate demand, it cannot solve the underlying problems.

One way to see this is by comparing figures 1 and 2. The disappointing growth following the crisis, seen in figure 1, has similar patterns in the four economies shown. And yet, the patterns of unemployment, including the long-term average of the rate of unemployment but also its movement over the business cycle, differ greatly from one economy to another.

Central banks cannot ensure the sustainable creation of high-quality jobs. Central banks cannot generate sustainable growth and increase the level of potential GDP. These are important public policy concerns that should be seen as belonging squarely in the sphere of other policies for which governments are responsible.

During the great moderation period, when monetary policy is considered to have been generally successful, this separation of responsibilities was usefully highlighted in the inflation targeting framework (IT), developed first at the Reserve Bank of New

Zealand in the late 1980s.[1] IT was practiced by a large number of central banks over the past quarter century. It has been practiced explicitly by a number of central banks that self-describe as inflation-targeting central banks, but it has also been practiced implicitly by other central banks, such as the Federal Reserve since 1979, the European Central Bank (ECB) since its creation, and the Bundesbank before the creation of the euro area. The success can be summarized as ensuring a credible nominal anchor, whose importance has been demonstrated repeatedly through history.

The IT practice has been impressive in helping central banks to achieve an environment of well-anchored inflation expectations around the central banks' price stability objectives. This has been crucial for ensuring the credibility of central banks when exceptional measures had to be taken during the crisis.[2]

But what is IT and why has its practice, be it explicit or implicit, contributed to the success of monetary policy? Macroeconomic model-builders can design model economies where monetary policy can do well not only in achieving price stability but also in simultaneously achieving full employment. But this does not capture the essence of IT. Rather, IT regimes specify that the only primary objective monetary policy should have is price stability. Subject to achieving price stability, to the extent possible, policy can help in other dimensions but only to the extent that the primacy of price stability is not compromised in the medium term. This focus on a single objective is what has provided the clarity and simplicity that allows the monetary authority to be a credible defender of price stability in a symmetric manner, and it protects the central bank from doubts that it could be captured in the pursuit of other objectives. In this way, indirectly, monetary policy can also prove more effective in the attainment of other goals, for example in ensuring that employment is generally

[1] Bernanke and Mishkin (1997) offer an early exposition of the merits of inflation targeting. The volume edited by Bernanke and Woodford (2005) offers an evaluation of the theory and evidence. The recent volume edited by Bordo and Orphanides (2013) highlights the evolution of central banks in this direction following the experience of the Great Inflation. King (2012), and Svensson (2013), offer recent policy perspectives on the practice of inflation targeting in light of the crisis.

[2] Orphanides and Williams (2005) show how the well-anchored inflation expectations resulting from IT practice contributes to greater stability.

close to the economy's natural rate. (Orphanides and Williams, 2005).

Capturing this salient characteristic of IT practice in terms of a model has not been straighforward. It may be convenient to endow the central bank with a quadratic loss function with multiple objectives, price stability, full employment, maximum output, financial stability, etc. But this methodology fails to capture the salient characteristics of the framework. Actually, the multiple-goal way of thinking about policy and tradeoffs seems to describe better the monetary policy regime that was in place in many economies before IT was adopted. As we know, that earlier era was one associated with failure, a failure that IT was created to address.

The case of New Zealand, the pioneer of inflation targeting, is instructive. A decade after it was adopted in New Zealand, Don Brash, the Governor who first implemented the new approach explained the problem the RBNZ faced before IT. He recalled that prior to the mid-eighties New Zealand had one of the worst inflation rates in the OECD, exceeding 10 percent per year for virtually a whole decade. He went on to ask why this was the case. Wasn't low inflation *one* of the aims of the Bank? Apparently, this was the major problem. Price stability was merely *one* of multiple goals. Brash explained the multiple-goal oriented approach pursued by the Reserve Bank before adoption of inflation targeting as follows: "The legislation under which we operated required us, in formulating our advice, to have regard for the inflation rate, employment, growth, motherhood, and a range of other good things" (Brash, 1999, p. 36). He then went on to explain how ditching the multiple-goal approach in favor of recognizing the primacy of price stability helped New Zealand get out of that disastrous period.

The main distinguishing characteristic of inflation targeting is that it puts price stability first. It is not a multiple-goal targeting framework, notwithstanding the convenience of multiple-goal formulations for modelling purposes.

Central bank mandates written for IT, including those of central banks in the European Union, are clear on the primacy of price stability. Thus, for the ECB: "The primary objective ... shall be to maintain price stability." The treaty goes on

to recognize that other objectives that the central bank can help to attain follow: "Without prejudice to the objective of price stability, the ESCB shall support the general economic policies in the Union ..." The hierarchical nature of the mandate is a distinguishing characteristic of inflation targeting. This is in variance to legal mandates written in earlier times, say from the 1950s to the 1970s, that were unduly influenced by the Great Depression and paid insufficient attention to the primacy of price stability over other desirable goals.

An example may be instructive to highlight both the differences in the legal mandates and how IT was implicitly practiced successfully in the United States, even before IT was formally introduced in New Zealand. According to the Federal Reserve Act, the Federal Reserve should "promote effectively the goals of maximum employment and stable prices".

Literal interpretation of this language can be a recipe for trouble. Indeed the literal interpretation of this mandate describes well the experience of the United States, the failure to preserve price stability and the lack of economic stability during the 1970s. One might ask, how was policy practiced in the United States during the Volcker-Greenspan era, from 1979 on, a period that was very successful in achieving price stability.

The answer is that looking back, both Chairmen Volcker and Greenspan effectively interpreted the legal mandate of the Fed as if it put price stability first. That is, the Fed was implicitly acting as an inflation targeting central bank.

Consider for example how Chairman Greenspan explained the success of policy in the post-1979 period. In an address in 2004 he explained this was achieved by: "maximizing the probabilities of achieving our goals of price stability and the maximum sustainable growth that we associate with *it*" (emphasis added). The key, in this interpretation, is that by focusing on price stability, the Federal Reserve could ensure that the real economy could grow along its maximum sustainable growth path that is associated with "*it*," that is with price stability, even though it need not be explicitly identified nor targeted by the central bank.

One may ask why take this roundabout path to help the economy achieve maximum employment over time? The answer is our lack of knowledge regarding the appropriate real targets, concepts such as the natural rate of employment and unemployment and potential or natural output. For example, as Chairman Greenspan noted back in 1994, "while the idea of a national 'threshold' at which short-term inflation rises or falls is statistically appealing, it is very difficult in practice to arrive at useful estimates that would identify such a natural rate." He went on to conclude: "In light of these uncertainties, I do not think that any one estimate of the natural rate is useful in the formulation of monetary policy."

More recently, the Federal Reserve has introduced explicit mention of the rate of unemployment as a guide to its unconventional measures during the crisis. The December 2012 statement noted that the FOMC "currently anticipates that this exceptionally low range for the federal funds rate will be appropriate at least as long as the unemployment rate remains above 6-1/2 percent."

It has been suggested that this form of forward guidance may be helpful to provide additional policy accommodation in light of the zero lower bound and concerns that the rate of inflation is too low. A prolonged period of accommodation may indeed be warranted to ensure that inflation rate does not undershoot the inflation objective for a prolonged period. However, in light of the symmetry of the inflation objective in the IT framework, such a prolonged period of accommodation would be expected if inflation were too low, even without any reference to the rate of unemployment.

A pertinent paragraph from a speech Chairman Volcker made recently highlights the tensions of misinterpreting the recent changes in communication as getting the Fed away from its recognition of price stability as primary to the achievement of other objectives:

> "I know that it is fashionable to talk about a 'dual mandate'—that policy should be directed toward the two objectives of price stability and full employment. Fashionable or not, I find that mandate both operationally

> confusing and ultimately illusory: ... The Federal Reserve, after all, has only one basic instrument so far as economic management is concerned—managing the supply of money liquidity. Asked to do too much—for instance ... to square continuously the hypothetical circles of stability, growth and full employment—it will inevitably fall short. If in the process of trying it loses sight of its basic responsibility for price stability, a matter which is within its range of influence, then those other goals will be beyond reach." (Volcker, 2013.)

Chairman Volcker's unease about the risk of reinterpretation of the mandate is noteworthy. It should also be noted, however, that the December FOMC statement said that the Fed considers its current stance appropriate as long as "longer-term inflation expectations continue to be well anchored," a key feature of IT practice and suggestive that the FOMC is aware of the tension. It is thus unclear whether the introduction of an explicit reference to an unemployment rate in recent FOMC statements justifies concerns regarding a deviation from the successful interpretation of the Fed's mandate during the Volcker-Greenspan, although the tension this language created appears to be unhelpful.

The euro area offers another example of the risks that would have been associated with the targeting of imperfectly measured real variables. Figure 3 presents some estimates of the output gap for the euro area, as produced by the IMF. This is the difference between the notional concept of potential output and actual output. In theory, if potential output could be measured accurately, the output gap could be a useful policy target. The output gap should be about zero, on average, and should help policymakers identify periods of overheating, when it would be positive, and periods of underutilization, when it would be negative. In the chart these periods of positive and negative output gaps can be clearly identified for the history of the euro area, as seen from the estimates prepared this Spring. But in real time, the estimates did not provide the correct signals. Since 1999, the real-time estimates of the output

gap produced by the IMF in the spring of each year have been negative. Almost half the time, the sign of the real-time estimate of the gap was wrong, when evaluated from today's perspective. It should be stressed that this is not a problem specific to this particular example that uses IMF estimates. The problem is endemic to traditional methods of defining full employment and normal output in real time (Orphanides and van Norden, 2002). Perhaps the inclusion of broader conceptual definitions, such as the financial cycle examined in Borio, Disyatat, and Juselius (2013), may improve reliability going forward, but I remain doubtful.

A summary conclusion to draw, based on the available evidence and historical experience, including the success of explicit or implicit IT practice, should be that monetary policy contributes best to the desirable public policy objective of full employment by focusing on price stability. Overburdening the central bank by requiring explicit targeting of a real variable such as employment or output would likely do more harm than good.

4 Fiscal sustainability: The threat of fiscal dominance

A second area where the risk of overburdening monetary policy is evident regards fiscal sustainability. The challenge can be seen in figures 4 and 5 that show the evolution of gross and net debt-to-GDP ratios, respectively, for the United States, the euro area, Japan, and the United Kingdom. Not seen in these figures is an additional related and well-known problem, that concerning unfunded implicit liabilities for future ageing related expenditures (pensions and healthcare).

The enormous challenge faced by Japan is clearly evident and puts in perspective the talk about unsustainability in the other three economies. That said, in the aftermath of the crisis, fiscal challenges are present in all four economies. Although the problem is known, governments have yet to adjust the spending path in a manner consistent with their taxing power and long-term growth prospects. Lack of

political consensus, in various forms, complicates the adoption of sensible long-term plans that could ensure simultaneously long-term fiscal sustainability and short-term support for economic growth. Sound fiscal policy is not the responsibility of central banks. However, in the history of central banking there are numerous examples where governments used central banks to finance their spending, invariably leading to a debasement of the currency. Monetary policy can powerfully facilitate the repair of public sector balance sheets over time in a number of ways. The temptation to overburden monetary policy is great, as is the risk of eventual fiscal dominance.

The crisis has led central banks around the world to flatten risk-free yield curves and massively expand the supply of liquidity. Short-term nominal interest rates are effectively zero in all four economies. The level of liquidity per unit of nominal GDP (the Marshallian K of the monetary base) is at historic highs. This is a feature of unconventional monetary policy at the zero bound and as such might not necessarily raise alarms. However, at the zero bound, monetary and fiscal policy become blurred. High-powered money and risk-free short-term government debt become indistinguishable. When viewed in conjunction with the unresolved fiscal challenges facing the governments, concerns about the fiscal implications of the current and future stance of monetary policy are difficult to avoid.

There is a way to implement unconventional monetary policy and enlarge the central bank balance sheet with a smaller risk of inviting fiscal dominance. The expansion could be engineered through the purchase of foreign assets instead of through the purchase of domestic government bonds (or their acceptance for long-term repo operations). The Swiss National Bank offers an example.

Monetary policy can facilitate the financing of government debt in a number of ways. Low interest rates directly benefit all borrowers with access to cheap credit, including governments. The large purchases of government debt associated with quantitative easing provide another almost-as-direct benefit to governments, and one that is not available to private borrowers. The greatest risk for monetization of the debt may be associated with the inflationary consequences of a delayed withdrawal of the

exceptional monetary accommodation now in place. Such a delay may not be intentional on the part of the central bank. Nonetheless, the resulting upward price level adjustment that would follow a delay in withdrawing policy accommodation is as real if unintentional as if intentional. Accepting the risk of overshooting the desired price level path may be a necessary by-product of the massive unconventional monetary policy necessary to help the economy recover. But the situation creates the temptation for governments to attempt to capture the monetary policy process, as monetizing the debt may prove politically much easier than the alternatives as a means of restoring fiscal sustainability.

Even absent these concerns, the availability of cheap credit may have significant adverse effects on the incentives for political authorities to correct fiscal problems. When the central bank provides all the financing a government needs at near zero cost, it is easier to postpone dealing with a problem rather than risk the short-term political cost that would be associated with any solution. The risk of facilitating this postponement, of course, is that the fiscal problem only gets bigger when not tackled in a timely fashion.

The euro area presents additional special challenges. The crisis the euro area has been going through is sometimes referred to as a sovereign debt crisis. Figure 6 shows the path of gross debt to GDP for the six largest euro area member states, representing collectively about 90 percent of the euro area economy. The figure shows that the deterioration from the crisis is forecast to persist, except in Germany. But it also shows that the historical paths of debt for Spain and Italy, both of which have been under significant pressure in terms of their cost of financing in the past three years, compare very favorably with that of Japan, where the government can refinance its debt at near-zero cost and that of Belgium in an earlier period, before the euro area existed. Spain in the euro area, also compared favorably during the crisis to the UK, part of the European Union but outside the euro area, suggesting the presence of a deeper problem with the functioning of the euro area.[3]

[3]De Grauwe (2011) offers a comparison of Spain and the UK in this context.

One of the most critical consequences of the euro area crisis is the divergence in the cost of financing of government debt. Figure 7 shows the evolution of the 10-year government bond yields for the four largest member states. Without getting into a detailed discussion on the causes of the euro area crisis, we can easily understand the risks for the European Central Bank in light of the pressures facing some member states in the euro area. The Treaty prohibits monetary financing and prevents the central bank from serving as a lender of last resort to individual governments in the euro area. It is well understood that the resolution of the euro area crisis is in the hands of the governments of the member states. But what if market tensions appear to threaten the euro area construction and governments need more time to implement solutions? The ECB may be the only institution that has the power to prevent a collapse. On various instances during the crisis, the ECB engaged in purchases of the debt of selected member states through its Securities Market Program (SMP) or provided liquidity to the banking system that could be used for such purchases. Since last year, through the creation of the Outright Monetary Transactions (OMT) program, it has created a framework for additional, potentially unlimited purchases of government debt, subject to conditionality that would result from intergovernmental negotiations. ECB monetary policy decisions of this nature can have a soothing effect on markets with immediate visible effects. This can be seen in figure 8 where the four vertical lines correspond to the announcements regarding SMP (May 10, 2010 and August 7, 2011), the 3-year Long-Term-Refinancing-Operation (LTRO) (December 8, 2011) and the OMT (September 6, 2012). The ECB has the capacity to buy more time for the governments by intervening when the threat of immediate collapse becomes too high. However, these monetary policy actions may inadvertently encourage governments to postpone resolving the crisis (Orphanides, 2013). Unavoidably, the ECB finds itself in the middle of a political crisis with a highly uncertain outcome.

In the short run, the temptation to see the central bank step in and solve sovereign debt sustainability problems can be great. Overburdening monetary policy by expecting that it will facilitate restoring fiscal sustainability and controlling tensions in

sovereign markets is a clear case where current monetary policy has significant and potentially unpleasant intertemporal political economy implications.

5 Financial stability

The third area with the potential for overburdening monetary policy concerns the role of monetary policy in maintaining financial stability. Two sides with somewhat different considerations are of interest—the preventive phase, aiming to avert crises, and the repair phase, following a crisis. What can and what should monetary policy do when financial imbalances appear and asset price misalignments are suspected? That is, what is the role of a central bank in reducing the likelihood of the occurrence of a crisis? And what is the role of monetary policy during the adjustment phase after a crisis erupts?

Regarding crisis prevention, the global financial crisis has reaffirmed that ensuring price stability is not sufficient to avoid major financial crises and maintain financial stability. Most of the time price stability and financial stability may be thought of as reinforcing each other and no general tradeoff exists between them. Avoiding large deviations from price stability, such as high and volatile inflation or deflation contributes to financial stability. However, too narrow a focus on price stability over short horizons may prove counterproductive for maintaining financial stability. Greater short-term stability in prices may raise the risks of an asset boom or bust down the road, leading to instability.

Under these circumstances, the pertinent tradeoff may be viewed as one regarding a comparison of the risks to price stability over shorter horizons against tail risks at longer horizons. For example, persistently high credit growth may be observed together with price stability. If the high credit growth is suspected of contributing to the build up of an imbalance, as was observed in real estate markets in some countries before the crisis, and if somewhat tighter monetary policy could effectively contain this imbalance, then tighter monetary policy could be considered appropriate even

if it leads to a short-run rate of inflation somewhat below the central banks' ideal. Tighter monetary policy under these circumstances may reduce the probability of a crash of an overheated market, which might be followed by an economic slump and the risk of deflation at a longer horizon. Under such circumstances, accepting a somewhat lower inflation rate in the short run should be seen as worthwhile to balance the risks regarding price stability over time. This could be interpreted as an example of the "leaning against the wind" strategy (Borio and White, 2003). The appeal of this approach, however, depends sensitively on the ability of central banks to detect the incipient imbalances and the effectiveness of monetary policy to counteract them. Regarding detection, assessing fair values for asset prices may be as hard as measuring natural rates in real time, although recent analysis on the "financial cycle" suggests some potential for progress (Borio, 2013). Regarding the effectiveness of monetary policy, considerable uncertainty remains. With respect to the housing boom observed in the United States before the crisis, for example, Greenspan (2010) argues that increases in the federal funds rate would have been insufficient to contain the imbalance, as mortgage rates were only loosely related to the stance of monetary policy during the period.

If adjusting the stance of monetary policy is not very effective, however, other tools should be considered. Ideally, macro-prudential levers should be available to the central bank to contain the buildup of imbalances and contain the risk of a potential financial disturbance. In this regard, the global development of institutions involving central banks with the power to implement macro-prudential measures is promising, although it may take decades to assess the effectiveness of such measures in practice. Regarding banks, the overall risks of future crises can be reduced by tightening regulatory requirements so as to demand more and higher-quality capital than was suggested by the Basle II framework, and by reducing the scope for banks to use risk-weighting to evade stronger capital buffers. These micro-prudential measures could lead to considerably stronger capital positions, and it has been argued that the cost of moving in that direction may be small (Admati and Hellwig, 2013). In light of

the promise of micro- and macro-prudential supervision measures, it remains unclear what additional role monetary policy should have in reducing the risk of financial crises, although the case for "leaning against the wind" is stronger than it appeared before the crisis (Bean et al., 2010).

A more direct risk, potentially threatening the credibility and independence of a central bank, is associated with financial stability considerations during the cleanup phase of a crisis. As we have observed during the current crisis, a massive monetary policy easing may be required to avert a collapse of Great Depression proportions. The associated provision of liquidity at near zero interest rates has a number of characteristics that could become unpleasant side-effects for the central banks.

One such characteristic is associated with the role of the central bank as the lender of last resort. In the global crisis central banks stepped into that role in an unprecedented scale. In addition, for some financial markets considered critical for stability, central banks acted as market-makers of last resort. The provision of liquidity can ease the burden of deleveraging in the aftermath of a crisis, and soften the blow the real economy might otherwise suffer.

Provision of emergency liquidity assistance can ease liquidity shortages even in conditions of severe stress. However, during a crisis, the valuation of the collateral pledged against the provided liquidity is harder to assess with precision and a shortfall in liquidity may become difficult to distinguish from an underlying solvency problem. If a solvency issue were to appear, the continued provision of liquidity for extended periods (and at very low interest rates in the aftermath of a crisis) could potentially mask a solvency problem.

Since solvency concerns have fiscal implications, providing liquidity during a crisis could risk the central bank acquiring a fiscal role with distributional effects that it would ordinarily wish to avoid. In a systemic crisis, the robustness of the existing bank recapitalization and resolution framework and its fiscal backstop can become critical considerations and constraining factors for the central bank. If the central bank assesses that a fiscal backstop is weak or insufficient and judges the economic

consequences of one or multiple bank failures to be too severe, it may be indirectly forced to continue to support a bank by providing ample liquidity even after its solvency becomes doubtful. In the extreme, a politically captured central bank could succumb to government pressure to provide emergency liquidity assistance to an insolvent bank, effectively undertaking a fiscal operation by stealth and helping the government hide the problem from public view.

In effect, through its liquidity provision, the central bank may become the backstop to the financial system and may implicitly assume the fiscal risks associated with this role. In these circumstances, continued provision of liquidity at very low rates could nurse a sick bank until it becomes healthy. The central bank can facilitate the strengthening of the capital position of a weak bank through retained earnings. If macroeconomic conditions justify providing liquidity at very low rates for a sufficiently long period, a bank whose solvency was in doubt could strengthen its capital position sufficiently to be considered healthy again, thus avoiding the prospect of resolution.

An unpleasant side-effect of such a sequence of events, however, is that it may subordinate the primary function of monetary policy to the financial stability concerns resulting from a weakened banking sector. If macroeconomic conditions require an increase in interest rates before the banking system is nursed back to health and the fiscal authorities are unwilling or unable to serve the role of a financial backstop, the central bank may be faced with a dilemma: Continue to keep interest rates low to avoid banking problems at the cost of higher inflation, or raise interest rates and accept the risk of one or multiple bank failures and their economic consequences.

Monetary policy always has some distributional and some fiscal consequences. Under ordinary circumstances these consequences may be relatively small and of secondary importance compared to the macroeconomic consequences of monetary policy actions on economic growth and aggregate price developments. In the absence of a well-defined and sufficiently strong fiscal backstop, however, post-crisis cleanup could turn the provision of liquidity at very low rates into a mechanism for recapitalizing banks. Without workable alternatives, this may create doubts about the willingness

of the central bank to exit an environment of exceptionally accommodative monetary conditions when macroeconomic conditions would have warranted such a policy change. Such doubts could compromise the credibility of the central bank.

6 Conclusion

When other policies fail, when other policies are hard to implement, when other policies are politically challenging, it may be appealing to ask central banks to use monetary policy to achieve broader goals, to make up for the gaps in what other institutions and policies should do. The risk is that pursuing multiple objectives simultaneously brings the central bank back into the realm of politics. This can compromise its independence and risk losing sight of price stability.

The result of expecting too much of monetary policy and demanding that monetary policy do more than focus on price stability first, is that it may lead to backsliding to earlier unhappy experiences. Backsliding to the days when governments asked central banks to deliver "growth, motherhood, and a range of other good things" with the result that central banks failed even in the one task monetary policy can achieve—to preserve price stability.

Monetary policy is a poor substitute for other policies needed to restore economic balance around the world. Monetary policy is not a substitute for structural and labor market policies needed for sustainable job creation and growth. It is not a substitute for fiscal, pension, and healthcare reforms that are needed to ensure fiscal sustainability over the long run. It is not a substitute for stronger capital buffers in challenged banking systems nor for shortcomings in micro- and macro-prudential supervision. And it is not a substitute for the political and governance reforms that may be needed to restore the functioning of a monetary union facing an existential crisis.

The desire to push the envelope of what central banks can do and aim to design monetary policy frameworks that provide solutions to multiple problems and improve welfare is admirable. However, expectations must be managed to better reflect reality.

The limits of our knowledge about how central banks can best contribute to society and the limits to what monetary policy can do must continue to be acknowledged and respected. Despite the impressive firepower in their balance sheets, magic bullets are not to be found in central bank arsenals.

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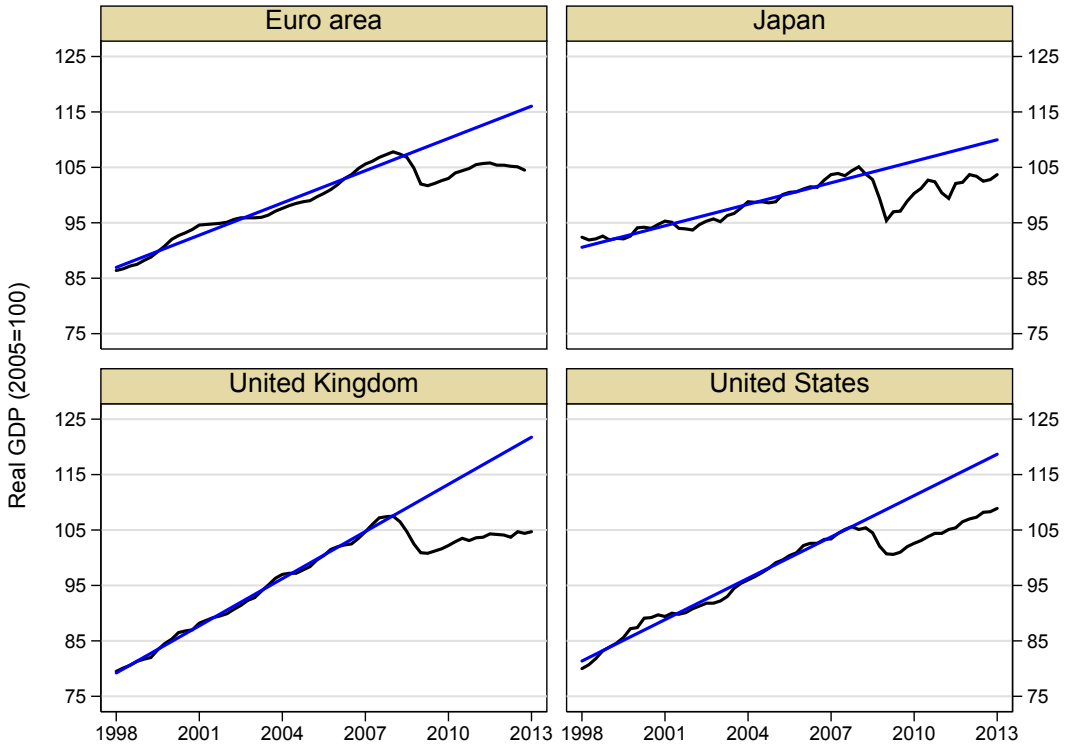
Figure 1

Real GDP and pre-crisis trend



Notes: Real GDP and linear trend fit over decade ending in 2007Q4.

Figure 2

Unemployment rate

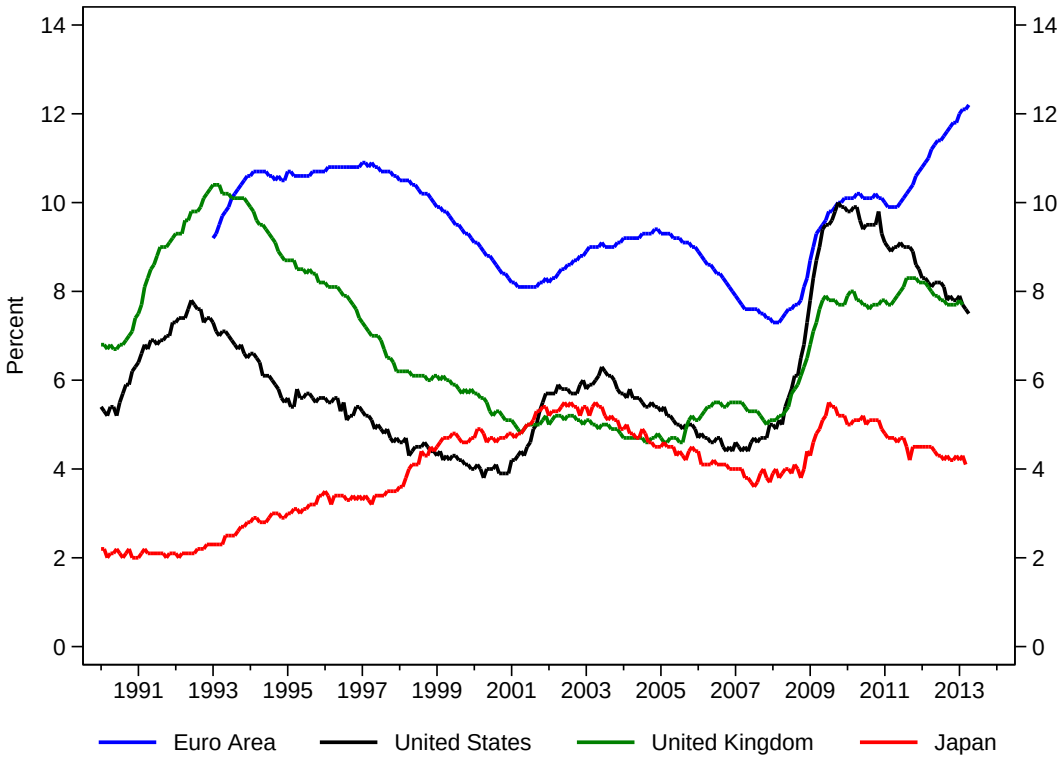
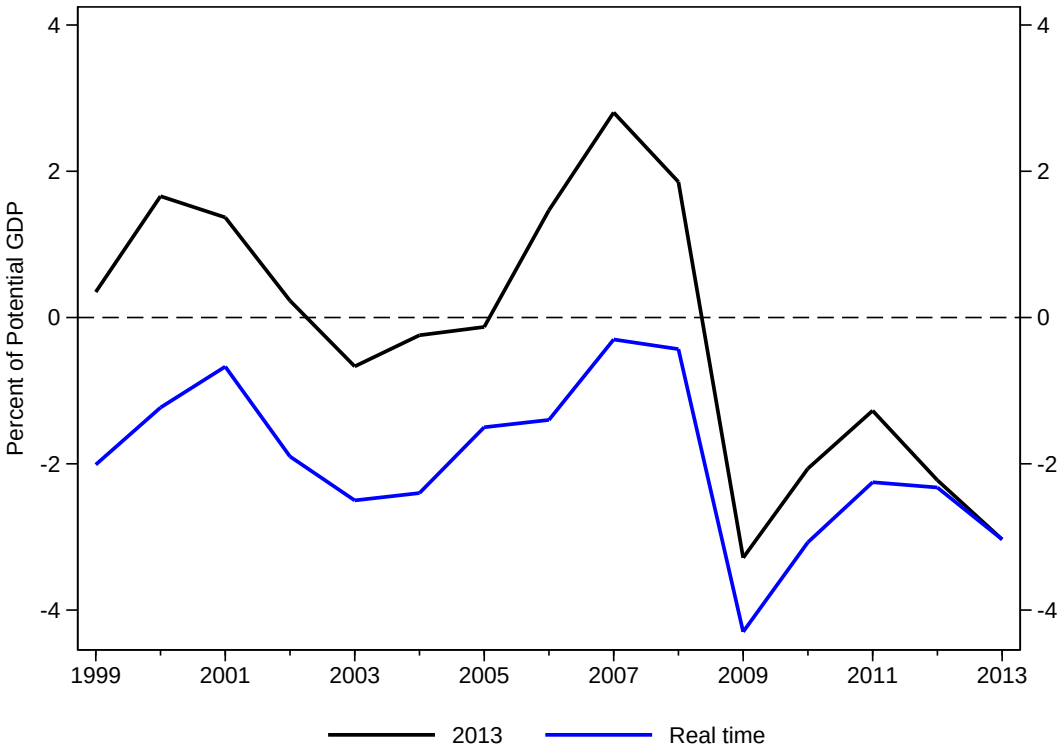


Figure 3

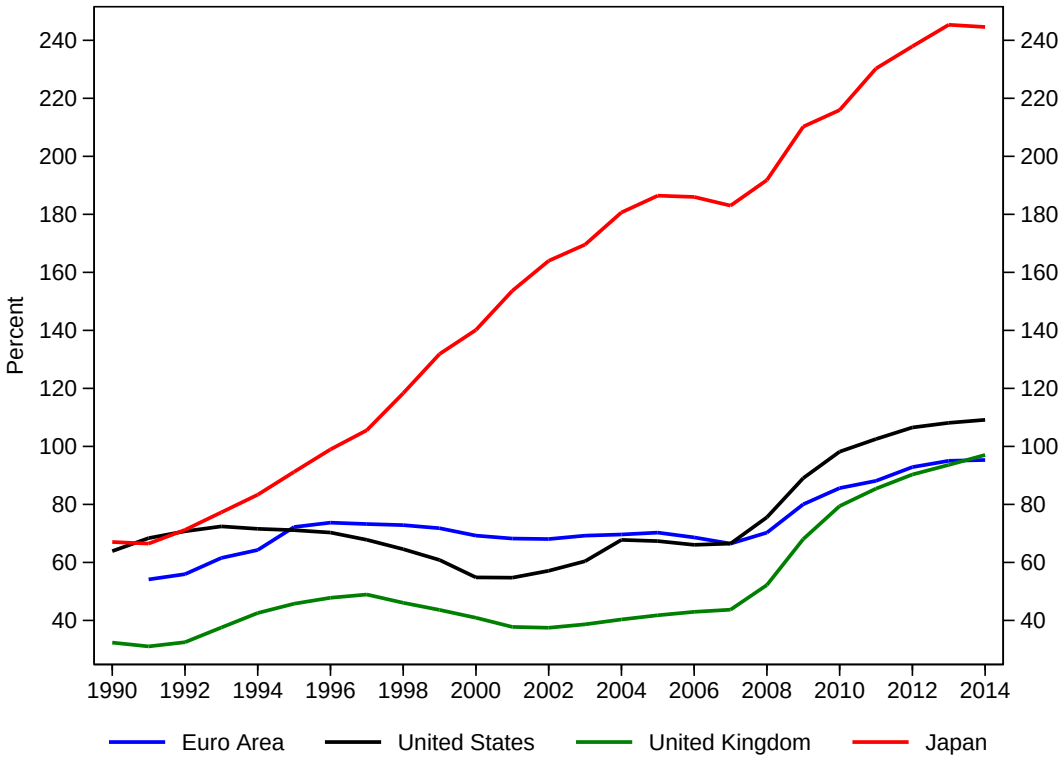
Real-time vs Retrospective Output Gap Estimates



Notes: The Spring 2013 series shows the historical output gap estimates from the latest IMF WEO (Spring 2013). The real-time series shows, in each year, the output gap estimate from the IMF Spring WEO of that year.

Figure 4

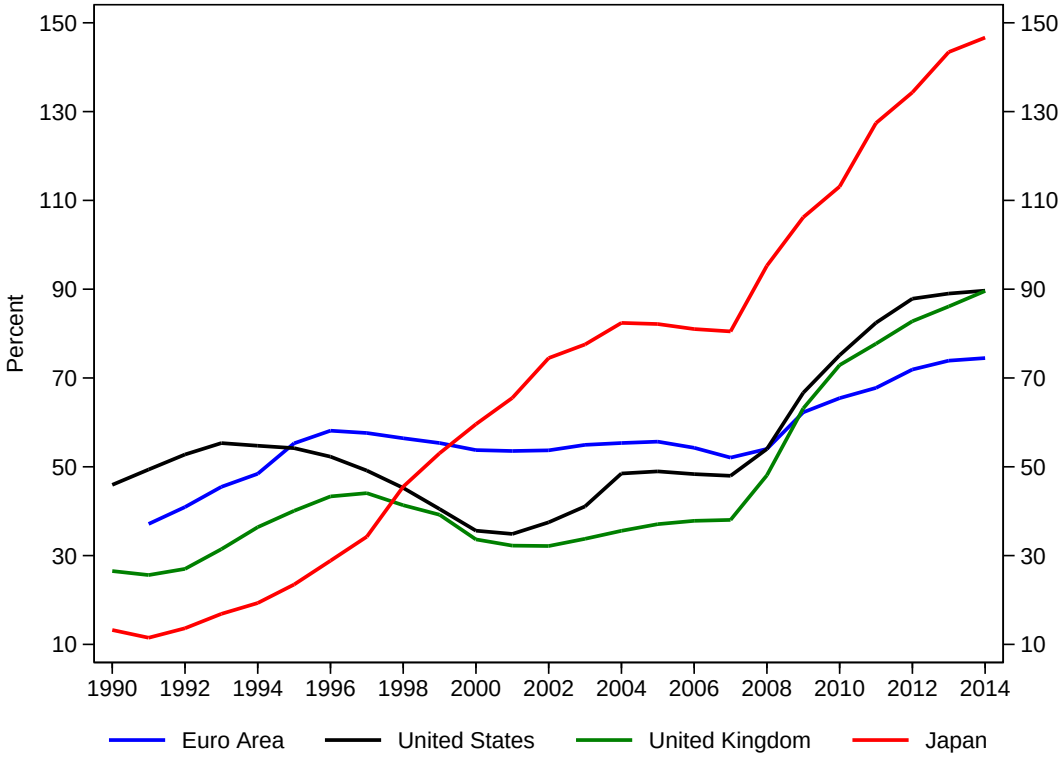
Gross debt



Notes: Gross debt as a percent of GDP, data and forecasts from IMF Spring 2013 WEO.

Figure 5

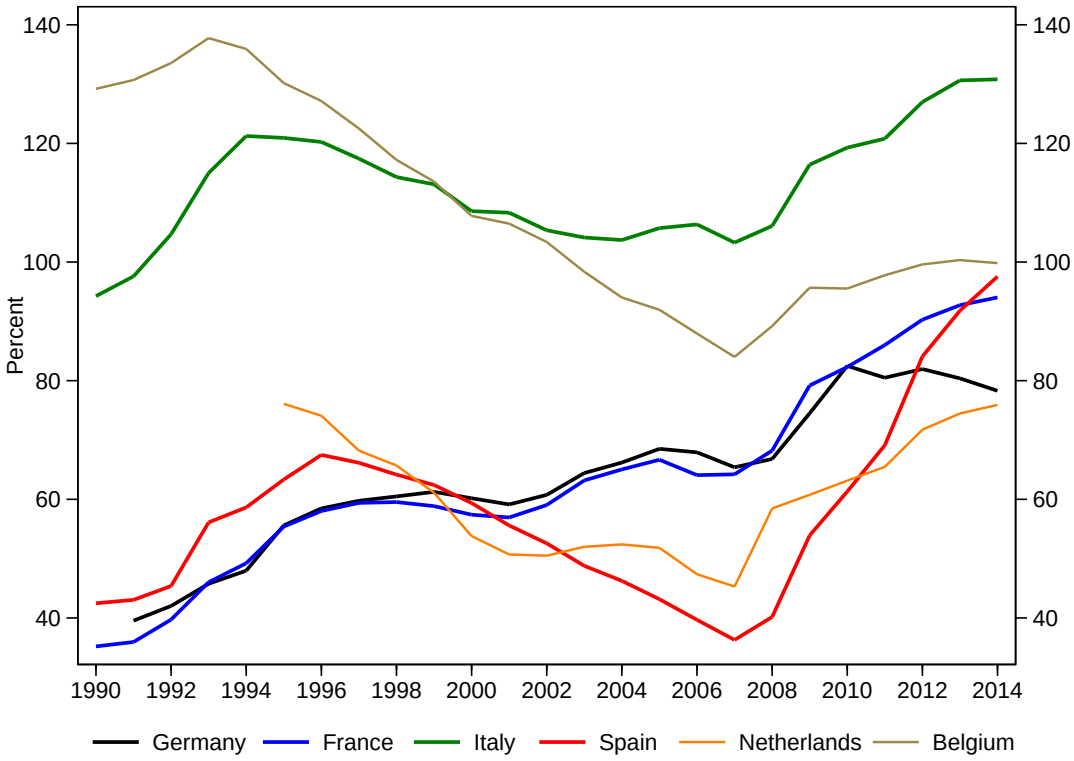
Net debt



Notes: Net debt as a percent of GDP, data and forecasts from IMF Spring 2013 WEO.

Figure 6

Gross debt in the euro area



Notes: Gross debt as a percent of GDP, data and forecasts from IMF Spring 2013 WEO.

Figure 7

Ten-year government bond yields in the euro area

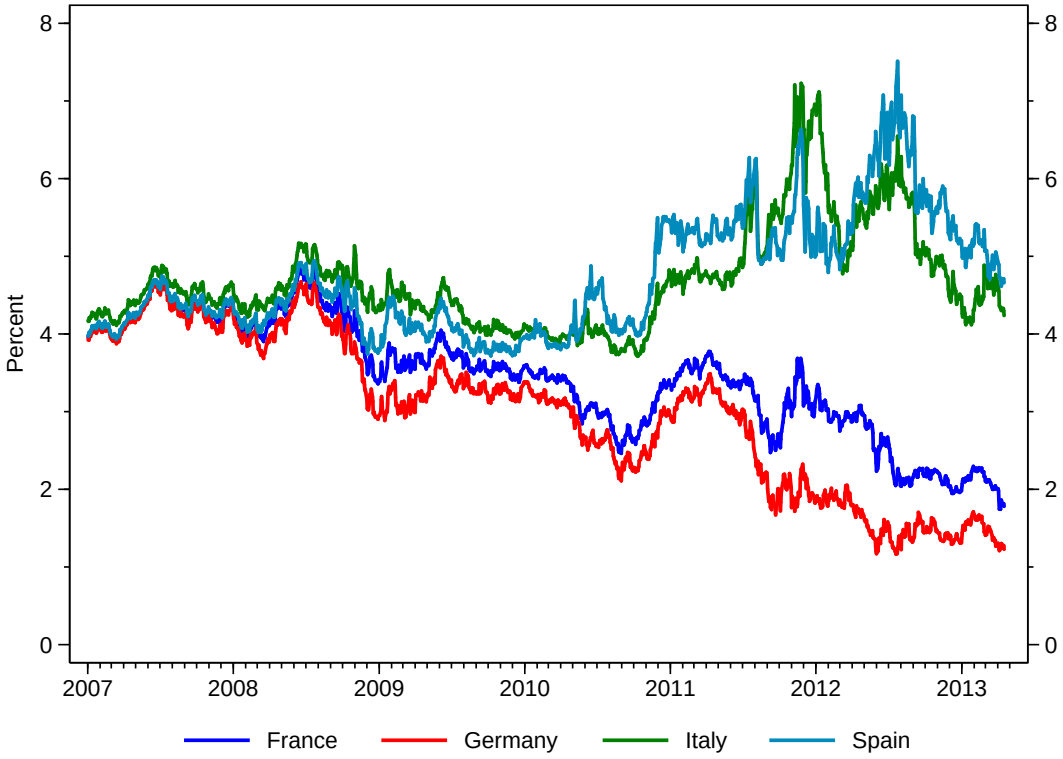
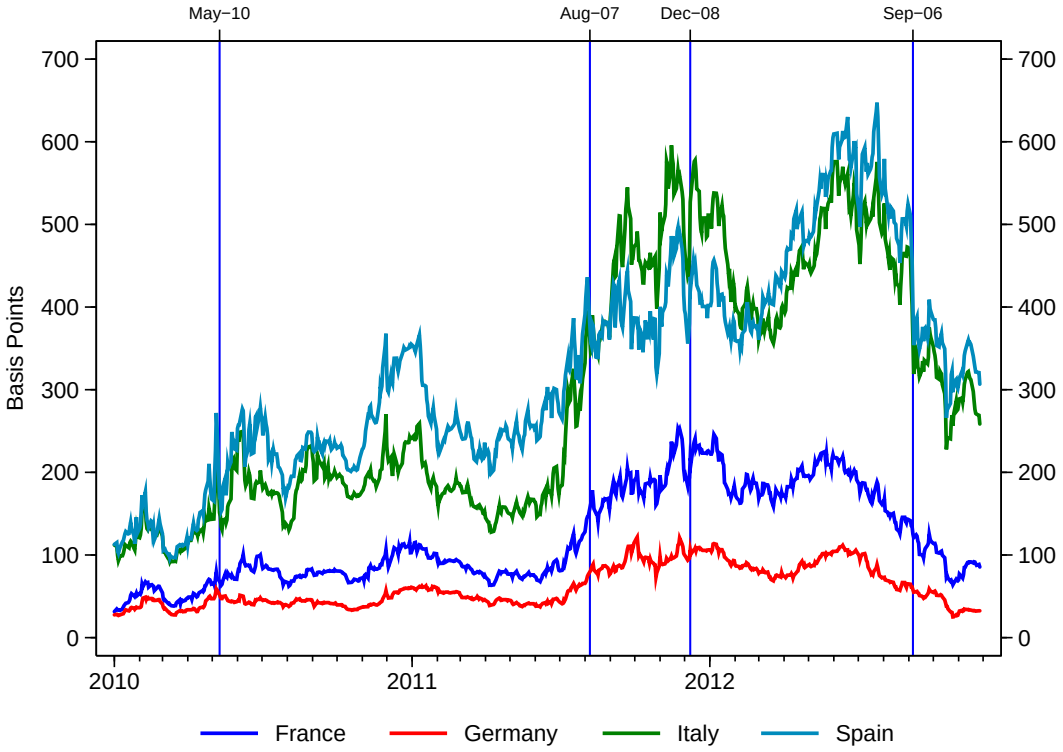


Figure 8

Five-year CDS in the euro area



Notes: Vertical lines denote ECB policy announcements on SMP, LTRO and OMT.