THE EUROPEAN CENTRAL BANK IN THE AGE OF BANKING UNION

ZSOLT DARVAS AND SILVIA MERLER

Highlights

• During the crisis the European Central Bank's roles have been greatly extended beyond its price stability mandate. In addition to the primary objective of price stability and the secondary objective of supporting EU economic policies, we identify ten new tasks related to monetary policy and financial stability.

• We argue that there are three main constraints on monetary policy: fiscal dominance, financial repercussions and regional divergences. By assessing the ECB's tasks in light of these constraints, we highlight a number of synergies between these tasks and the ECB's primary mandate of price stability.

• But we highlight major conflicts of interest related to the ECB's participation in financial assistance programmes. We also underline that the ECB's government bond purchasing programmes have introduced the concept of 'monetary policy under conditionality', which involves major dilemmas. A solution would be a major change towards a US-style system, in which state public debts are small, there are no federal bail-outs for states, the central bank does not purchase state debt and banks do not hold state debt. Such a change is unrealistic in the foreseeable future.

Zsolt Darvas [zsolt.darvas@bruegel.org] is a Senior Fellow at Bruegel. Silvia Merler [silvia.merler@bruegel.org] is a Bruegel Affiliate Fellow. This paper was prepared for the European Parliament Economic and Monetary Affairs Committee ahead of the European Parliament's Monetary Dialogue with ECB President Mario Draghi on 23 September 2013. The paper benefited from comments and suggestions from Francesco Papadia, Guntram B. Wolff and other Bruegel colleagues, for which the authors are grateful. Copyright remains with the European Union at all times.
THE EUROPEAN CENTRAL BANK IN THE AGE OF BANKING UNION

ZSOLT DARVAS AND SILVIA MERLER, OCTOBER 2013

INTRODUCTION

Before the crisis, the European Central Bank (ECB) focussed on price stability and gained a strong reputation as its guardian in the euro area. The average actual inflation rate was very close to the two percent per year target, and long-term inflationary expectations were anchored at this level. With the start of the global financial and economic crisis in the summer of 2007 and the intensification of the euro crisis in early 2010, the ECB’s tasks have been significantly extended, partly at its own initiative, and partly by legislation adopted by EU member states, in relation to monetary policy and beyond.

The ECB adopted wide-ranging measures to support financial stability and repair the monetary transmission mechanism, by providing banks with ample liquidity under revised collateral rules and by launching two government bond purchasing programmes. The latter programmes introduced the concept of ‘monetary policy with conditional- ity’. The ECB conducted two small-scale quantitative easing programmes [purchasing of covered bonds] to promote credit growth. The ECB became a member of the Troika, along with the European Commission and the IMF, and as a consequence it has been actively involved in the design and monitoring of the economic conditionality in the context of EU/IMF macroeconomic adjustment programmes in euro-area countries. Such competencies for the ECB have been formalised and broadened by the Treaty on the European Stability Mechanism (ESM), the euro area’s permanent rescue fund. The ECB started to take on board macro-prudential roles by becoming a key participant in the European Systemic Risk Board (ESRB). Also, the ECB agreed to act as an agent for the secondary market activities of the European Financial Stability Facility (EFSF) and the European Stability Mechanism (ESM), the rescue funds of the euro area, and it can play a role in surveillance mis-

sions within the Macroeconomic Imbalances Procedure (MIP).

Most of these tasks and roles will remain permanent and major new tasks are being added because of the development of the Single Supervisory Mechanism (SSM), the first element of the European Banking Union. This will probably be the biggest change in the history of the ECB and will give it both micro-prudential and macro-prudential competences. Before assuming the day-to-day supervisory role, the ECB will have to conduct a comprehensive asset-quality review of those financial institutions that will fall under its umbrella.

Beyond taking stock of the ECB’s new tasks, this Policy Contribution assesses the possible synergies and conflicts of interests between these various tasks. It is important to emphasise that our goal is not the evaluation of the ECB’s response to the crisis; instead, we take a forward-looking perspective to assess the interaction between various ECB tasks. We first describe the tasks in the next section. This is followed by a discussion of the three main potential constraints to the effective implementation of monetary policy. After that, we assess the possible synergies and conflicts. The final section offers some conclusions.

1. TWELVE TASKS FOR THE ECB

Based on its mandates as defined in the Treaty on the Functioning of the EU (TFEU) and in other European legislation, the ECB has several tasks in the euro area, some of which have implications for non-euro area EU countries. Among the various tasks we highlight the twelve that are the most relevant for monetary policy and financial stability1.

Task 1: Maintaining price stability

The core monetary function of the European
System of Central Banks (ESCB), which is governed by the decision-making bodies of the ECB, is laid down in Article 127(1) of the TFEU, according to which: “The primary objective of the European System of Central Banks [...] shall be to maintain price stability”. The numerical definition of price stability (“below but close to 2 percent inflation over the medium-term”) is not laid down in the Treaty, but was set by the ECB’s Governing Council.

In pursuing its task to preserve price stability, the ECB acts in full independence from any EU institutions, bodies, offices and agencies and from member state governments. In normal times, the main tools for achieving price stability are interest rate policy, short-term liquidity management and communication.

Task 2: Supporting EU economic policies

Article 127(1) of the TFEU continues by stating that “Without prejudice to the objective of price stability, the ESCB shall support the general economic policies in the Union with a view to contributing to the achievement of the objectives of the Union”. The latter are listed in Article 3 of the TFEU and include inter alia “balanced economic growth” and “a highly competitive social market economy, aiming at full employment and social progress”.

The specific price-stability mandate and these rather broad other Treaty-based mandates paved the way for the ECB to venture into unconventional monetary policy during the global and euro-area crises. Most of the measures are still operational and could remain in the toolkit for some time.

Task 3: Lender of last resort for banks

Unlike the Federal Reserve (Fed), the Bank of England (BOE) and the Bank of Japan (BOJ), which relied extensively on asset purchase interventions, the ECB’s unconventional monetary operations have been mostly concentrated on ensuring the necessary supply of liquidity to euro-area banks (Pisani-Ferry and Wolff, 2012a), at a time when the interbank market had become dysfunctional and several countries in the south of the euro area were undergoing a sudden stop in external financing (Merler and Pisani-Ferry, 2012a). In October 2008, the ECB introduced a policy of ‘full allotment’, for all ECB liquidity-providing operations. Under this procedure, the control of central bank liquidity is effectively moved from the central bank to the banking system, as banks can access all the central bank liquidity they need at a fixed rate (if they provide sufficient eligible collateral). The maturity of liquidity operations were initially extended from three months to six and twelve months, and in December 2011 and in February 2012 the ECB also conducted two extraordinary Longer Term Refinancing Operations (LTROs) with maturities of three years, from which banks in the euro area borrowed almost €1 trillion. These operations, along with the collateral policy (see below) allowed liquidity-strained banks to refinance a large portion of their balance sheets through central bank lending, available at a low interest rate and long-term maturity. In a heavily bank-based system, such as the euro area’s (Darvas, 2013a), these measures were essential to avoid financial and economic meltdown.

Another crucial element during the crisis was Emergency Liquidity Assistance (ELA), an emergency liquidity line provided by national central banks to solvent banks that exceptionally and temporarily do not have enough (or sufficiently high quality collateral) to access normal Eurosystem operations. The ECB’s Governing Council can at any time order an ELA programme to be stopped. The ELA statistics are opaque, yet most likely the central banks of Greece, Ireland and Cyprus have used ELA extensively, while it was used for a few days in Belgium. Recent rumours suggest that Portugal also made use of ELA.

Task 4: Collateral policy

Complementing its credit operations, the ECB has changed its collateral framework several times.

‘The price-stability mandate and the other Treaty-based mandate to support the general economic policies in the EU paved the way for the ECB to venture into unconventional monetary policy during the crisis, which was essential to avoid financial and economic meltdown.’
since 2008, expanding and changing assets' eligibility requirements in order to mitigate possible constraints arising from collateral shortage. It is worth mentioning that certain credit claims have been included among eligible collaterals. Also, while initially the ECB denied the need for country-specific collateral rules, credit-rating requirements were completely abolished for government bonds of countries under financial assistance programmes.

Task 5: Quantitative easing: targeted credit easing through asset purchases

The ECB introduced two asset purchase programmes – though at a much smaller scale than the Fed, BOE and BOJ. Under the first Covered Bond Purchase Programme (CBPP), launched in 2009 and terminated in June 2010, the Eurosystem committed to buy covered bonds up to €60 billion, while in November 2011 the second CBPP commitment was up to €40 billion until October 2012. The goals of these programmes were “[a] easing funding conditions for credit institutions and enterprises; and [b] encouraging credit institutions to maintain and expand lending to their clients”.

Task 6: Sterilised government bond purchases

The ECB launched two government bond purchasing programmes: the Securities Market Programme (SMP) on 10 May 2010, which on 6 September 2012 was terminated and replaced by the Outright Monetary Transactions (OMTs). While monetary financing of governments is strictly prohibited, Article 18(1) of the ESCB Statute allows national central banks and the ECB to buy or sell (among others) marketable instruments on the financial markets. Both programmes had similar aims: the SMP’s “objective is to address the malfunctioning of securities markets and restore an appropriate monetary policy transmission mechanism” and the OMTs “aim at safeguarding an appropriate monetary policy transmission and the singleness of the monetary policy.” In the framework of the SMP, the Eurosystem bought on the secondary market about €220 billion of the sovereign bonds of Greece, Ireland, Portugal, Italy and Spain. At the end of 2011, the ECB’s holding was estimated to amount to about 23 percent of total outstanding in Greece, 16 percent in Ireland, 11 percent in Portugal, 6 percent in Italy and 5 percent in Spain [Merler and Pisani-Ferry 2012b]6. All the purchases were sterilised (ie the liquidity provided was re-absorbed by the Eurosystem) to ensure that the monetary stance was not affected. The SMP could not bring definitive relief to markets, while the OMT has to date been more successful [see Darvas, 2012]. It is based on explicit conditionality: compliance with a full or precautionary macroeconomic adjustment programme by either the European Financial Stability Facility (EFSF) or the European Stability Mechanism (ESM). Countries exiting current adjustment programmes could also be considered. ECB intervention will not be automatic, but the Governing Council will decide on a case-by-case basis when and to what extent it will intervene. OMTs will be unlimited in principle; limited only by the outstanding stock of eligible bonds, which should have residual maturity of between one and three years (the relevant horizon for monetary transmission). The ECB will not have any preferential treatment in the case of a credit event (ie pari passu treatment with other creditors). Since the programme’s inauguration, no country has qualified for OMT.

Task 7: Designing, approving and monitoring financial assistance programmes

The Troika of the IMF, the EU and the ECB was inaugurated in spring 2010 to negotiate the Greek financial assistance programme. The participation of the ECB, and of the IMF, was demanded by the heads of state or government in their 25 March 2010 statement. The Troika also negotiated the financial assistance programmes for Ireland, Portugal and Cyprus, and the new programmes for Greece, and concluded joint missions to assess compliance.

The ESM Treaty formalises the ECB’s role in covering the whole process of granting and monitoring financial assistance programmes. “The European Commission, in liaison with the ECB, shall be entrusted with” several tasks, such as “assessing the existence of a risk to the financial stability of the euro area as a whole or of its Member States; Assessing whether public debt is sustainable; Assessing the actual or potential financing needs
of the ESM Member concerned” [Article 13(1)], “...the task of negotiating, with the ESM Member concerned, a memorandum of understanding [...] detailing the conditionality attached to the financial assistance facility” [Article 13(3)], and “monitoring compliance with the conditionality attached to the financial assistance facility” [Article 13(7)]. Wherever appropriate and possible, the IMF’s involvement will be sought.

When emergency voting is needed, it “shall be used where the Commission and the ECB both conclude that a failure to urgently adopt a decision to grant or implement financial assistance [...] would threaten the economic and financial sustainability of the euro area” (Article 4).

The ECB will be also involved in forming an opinion on other aspects of ESM operations, including possible secondary market support: “decisions on interventions on the secondary market to address contagion shall be taken on the basis of an analysis of the ECB recognising the existence of exceptional financial market circumstances and risks to financial stability” (Article 18).

**Task 8: Micro-prudential supervision**

Arguably, the most significant change to the ECB’s structure has been brought about by the decision to give it significant supervisory responsibilities in the framework of the Single Supervisory Mechanism (SSM), which is the first element of the European Banking Union. The legal basis is provided by Article 127(6) of the TFEU: “The Council, acting by means of regulations in accordance with a special legislative procedure, may unanimously, and after consulting the European Parliament and the European Central Bank, confer specific tasks upon the European Central Bank concerning policies relating to the prudential supervision of credit institutions and other financial institutions with the exception of insurance undertakings”.

After extensive negotiations between various stakeholders, on 12 September 2013 the European Parliament gave its consent with the amended draft Council Regulation on conferring the aforementioned tasks “with a view to contributing to the safety and soundness of credit institutions and the stability of the financial system within the EU and each Member State” (Article 1 of the Regulation).

Starting in Autumn 2014, the ECB will supervise “significant” credit institutions [as defined by the regulation; see eg Darvas and Wolff, 2013], and will have exclusive competence for those “specific supervisory tasks which are crucial to ensure a coherent and effective implementation of the Union’s policy relating to the prudential supervision of credit institutions”. Such tasks include in particular: authorising (and withdrawing authorisation) of credit institutions; assessing the implications for the acquisition and disposal of qualifying holdings in credit institutions [except in cases of bank resolution]; ensuring compliance with the EU rules on own funds requirements, securitisation, large exposure limits, liquidity, leverage, and reporting and public disclosure of information on those matters; ensuring compliance with governance rules, risk management processes, internal control mechanisms, remuneration policies and practices and effective internal capital adequacy assessment processes; carrying out supervisory reviews, including stress tests, on the basis of which to impose on credit institutions specific requirements; carrying out supervisory tasks in relation to recovery plans, and early intervention where a supervised entity does not meet or is likely to breach the applicable prudential requirements.

**Task 9: Comprehensive balance-sheet assessment**

Related to assuming the role of the single supervisor, the ECB should perform “a comprehensive assessment, including a balance-sheet assessment, of the credit institutions” [Article 27(4) of the SSM draft regulation], before actually taking on the new supervisory responsibilities. We high-

Arguably, the most significant change to the ECB’s structure has been brought about by the decision to give it significant supervisory responsibilities in the framework of the Single Supervisory Mechanism, which is the first element of the European Banking Union.'
light this role, because this is a major task that will likely have an impact on the reputation of the ECB for its supervisory mandate and beyond.

Task 10: Macro-prudential supervision

The ECB’s macro-prudential tasks are related to the European Systemic Risk Board (ESRB) and the SSM.

The ESRB was set up in 2010, gathering representatives from national central banks and supervisors from all EU countries. The ESRB became part of the European System of Financial Supervision (ESFS) and it will be required to cooperate closely with the other participants in the ESFS. The ESRB, according to its mandate, “shall be responsible for the macro-prudential oversight of the financial system within the Union in order to contribute to the prevention or mitigation of systemic risks to financial stability [...] that arise from developments within the financial system and taking into account macro-economic developments, so as to avoid periods of widespread financial distress”. The ESRB was not given any direct authority over policy instruments, but it has the power to issue recommendations and warnings about systemic risks to national authorities. The decision-making body of the ESRB, the General Board, is chaired by the president of the ECB. The ESRB Secretariat is located at the ECB.

The SSM Draft Regulation provides a role for both the ECB and national supervisors in macro-prudential policy, under the principle of ‘the stronger wins’. While the ECB can express objections to measures proposed by a national authority, the authority concerned only has to “duly consider the ECB’s reasons prior to proceeding with the decision” [Article 4a(1)]. The ECB cannot block such measures. On the other hand, the ECB is given the power to apply higher requirements for capital buffers and more stringent measures than those set by the national authorities, with the aim of addressing systemic or macro-prudential risks. And again the ECB is only obliged to “duly consider” the objections of national supervisor, if any, but these objections do not have blocking power. It is important to highlight that the macro-prudential tools available to the ECB will be more limited than the arsenal available to national supervisors. National supervisors can apply “any [other] measures aimed at addressing systemic or macro-prudential risks provided for, and subject to the procedures set out, in the Directives 2006/48/EC and 2006/49/EC”, but the ECB can only apply “higher requirements for capital buffers ... in addition to own funds requirements ... including countercyclical buffer rates”. Therefore, the ECB can apply those tools seeking to influence lenders’ behaviour, as categorised by Blanchard, Dell’Ariccia and Mauro (2013), but the ECB cannot apply tools aimed at controlling borrowers’ behaviour, such as loan-to-value ratios and debt-to-income ratios.

Task 11: Possible participation in macroeconomic surveillance missions

The so-called six-pack, which governs the EU’s new Macroeconomic Imbalances Procedure (MIP), foresees a possible role for the ECB in macroeconomic surveillance missions. Article 9 of Regulation No 1176/2011 dealing with “Monitoring of corrective action” says that: “The Commission may carry out enhanced surveillance missions to the Member State concerned, in order to monitor the implementation of the corrective action plan, in liaison with the ECB when those missions concern Member States whose currency is the euro...”. Article 13(3) clarifies the role of the ECB in these surveillance missions: “Where the Member State concerned is a Member State whose currency is the euro or is participating in ERM II, the Commission may, if appropriate, invite representatives of the European Central Bank to participate in surveillance missions”.

Therefore, it seems that the ECB will have only a low profile in macroeconomic surveillance missions, but no specific tasks and responsibilities are related to such missions, nor to other elements of the MIP process.

Task 12: Agent for the secondary market activities of the ESFS and ESM

In December 2011, the ECB agreed to act as an agent for the secondary market activities of the EFSF and the same role is foreseen for the ESM. The ESCB statute allows such operations [under the prohibition of overdraft or any other kind of
In this role, the ECB would merely execute the EFSF/ESM’s decisions on secondary market operations.

All in all, beyond the primary objective of price stability, the ECB has a Treaty-based mandate to support the EU’s broader goals related to growth, competitiveness, employment, social progress, the soundness of credit institutions and financial stability, while the ESM Treaty broadened the responsibilities of the ECB in financial assistance programmes. The ECB’s role in macroeconomic surveillance will have a low profile, while it can also act as the agent of the EFSF and ESM on the secondary government bond markets.

2 MONETARY POLICY CONSTRAINTS

There are at least three main constraints on monetary policy, which all have a bearing on the assessment of the various tasks of a central bank: fiscal dominance, financial repercussions and regional divergences. We highlight these constraints before assessing the ECB’s tasks in the next section.

Fiscal dominance

Fiscal dominance describes a situation in which there is a threat to fiscal sustainability due to large public debt and budget deficit, potentially endangering financial and macroeconomic stability. This limits the freedom of the central banks (either indirectly by internalising the threat from fiscal unsustainability, or directly by pressure from the government) in pursuing the price-stability goal freely. The central bank can influence government borrowing costs in various ways and under fiscal dominance it may act to help fiscal sustainability, to the detriment of its core price stability mandate.

Financial repercussions

Financial sector vulnerability is a key constraint. The period in the run-up to the global financial and economic crisis has clearly indicated that price stability (defined as low and stable inflation) in itself is insufficient to promote stable and durable economic growth. On both sides of the Atlantic, major financial vulnerabilities were built up, which erupted suddenly, leading to major economic contractions, high unemployment and undershooting of the inflation target during the crisis. In Europe, banking fragility continues to constrain monetary transmission even five years after the demise of Lehman Brothers.

Regional divergences

Regional divergences, such as the build-up of macroeconomic imbalances (diverging external positions and price competitiveness) were particularly notable in the euro area, where there is no centralised fiscal authority to smooth regional shocks, and where intra-regional adjustment mechanisms work much less effectively than in federal states, like the United States. Particularly weak economic conditions in some regions of a monetary union, in the absence of proper adjustment mechanisms, undermine the ‘one size fits all’ property of monetary policy (Figure 1 on the next page, panels B, C and D). But the vicious circle between banks and sovereigns (whereby banks hold a large amount of the debt of the government of their home country and are expected to be bailed out by the same government) in some euro-area countries further pushed both banks and governments to the abyss, thereby leading to major differences in the transmission of monetary policy across the members of the euro area. While at the present economic juncture the optimal rates warranted for, eg Spain [and also for a number of other euro-area countries], would be much lower than in Germany, actual lending rates are much higher in Spain, partly because of the fragmentation of euro-area financial markets, and partly because of higher risks and weaker economic outlook in Spain, which in turn are related to the build-up of the pre-crisis macroeconomic imbalances. Therefore, macroeconomic imbalances can hamper the proper transmission of the ECB’s monetary policy.

3 SYNERGIES AND CONFLICTS BETWEEN THE ECB’S TASKS

The key take-away from the previous section is that the conditions for proper conduct of monetary policy across the regions of a monetary union are sound public finances, sound banks and financial stability and balanced economic development. We assess the various tasks assigned to, or adopted
by the ECB in light of this lesson. There are several interactions between the ECB’s task. Here we focus on five issues that we regard as most important, starting with the easiest to solve, and ending with the most difficult.

**Long-term liquidity operations: easy to remedy the dangers**

In normal times, central banks did not engage in really long-term liquidity operations (recall that before the crisis, the maturity of ECB’s LTROs was three months). A reason for this is related to moral hazard: long-term central bank financing at rates below what banks could get from the market might encourage excessive risk taking. Also, such operations may keep alive otherwise insolvent banks. The ECB’s 3-year LTROs reduced the risk that solvent banks could become insolvent because of liquidity constraints, and it also contributed, though only temporarily, to the stabilisation of Italian and Spanish government bond markets (see Darvas and Savelin, 2012), which was a major achievement at that time. But they did little to trigger lending to the private sector. To a great extent, banks either deposited the cheap central bank...
funding at the ECB for rainy days, or purchased higher yielding government bonds. Thereby, the LTROs in effect supported liquidity, ensured stable long-term [3-year] financing, subsidised the banking system and helped to restore profitability, and temporarily supported distressed government bond markets. When the alternative was a potentially escalating financial crisis, these achievements were beneficial.

But Belke (2012) and Pill (2013) rightly argue that the LTROs delayed the bank restructuring efforts and prolonged the existence of non-viable banks, with major negative side effects. The remedies for this are obvious: the ECB can foster bank restructuring by performing in the toughest possible way the comprehensive balance-sheet assessment (task 9 in section 2) before it takes over the single supervisory role. After that, the ECB’s micro-prudential supervisory powers (task 8) should be used to ensure that all banks receiving liquidity support have indeed only a liquidity problem, and not a solvency problem.

This is even more relevant in the context of the ELA, where the dividing line is less clear and where the pressure is the highest, because the impact of a decision for or against the granting of emergency liquidity can have significant financial stability consequences. The case of Cyprus, where the existence of major banking problems was probably known well before the dramatic days in March 2013 (when banks were closed down for several days and uninsured depositors suffered massive losses), but where ELA was provided to banks on a massive scale, is exemplary in this respect. Furthermore, to dispel all doubts that liquidity provision to banks is back-door financing of public debt (whereby banks borrow cheap from the ECB to purchase government bonds), longer-term ECB financing could be conditioned that banks do not increase their net lending to the government and/or increase their net lending to the real economy (see Darvas, 2013b).

Monetary, micro- and macro-prudential policies: good siblings

There is a potential synergy between monetary, micro-prudential and macro-prudential policies, i.e. tasks 1, 8 and 10 (section 2). As we argued, risk may be building up in the financial sector and asset prices deviate upward from fundamental levels even without significant movement in CPI inflation. The potential for monetary policy to react would be limited in that case, because monetary policy does not take asset prices into account but generally targets consumer-price inflation. On the other hand, low interest rates, which are needed to stimulate demand in an economic downturn, may encourage excessive risk taking by the financial sector, which could be counteracted by strong micro-prudential supervision and macro-prudential tools (Farhi and Tirole, 2012).

The synergy between these policies can be even stronger in a heterogeneous monetary union, like EMU, in which there are divergences in inflation dynamics at the regional [or country] level. The counteractive role of monetary policy is even more limited in this case, because the central bank targets the average inflation rate. As Blanchard et al (2013) argue, in such a heterogeneous union, macro-prudential tools have to contribute to the management of aggregate demand too.

Yet as Blanchard et al (2013) highlight, the key questions is the organisation of these policies: should they belong to a single institution or independent institutions? We agree with their conclusion that when none of them works perfectly, combining them in the same institution brings more benefits than possible costs.

Certainly, there are associated risks. For example, a main argument against giving the same institution both price and financial stability mandates is that the latter might undermine the former: when monetary policy considerations may necessitate increasing the interest rate, the merged institution may be reluctant to raise interest rates, if it endangers financial stability, and therefore the inflation rate may overshoot the target. At least so far, this risk is not shared by market participants, as the five-year ahead inflationary expectations in the euro area continue to be anchored to the two percent target, even though more recently the ECB’s supervisory role became a certainty (Figure 2 on the next page).

Another main risk would be reputational. The possibility of supervisory failures or, more generally,
of negative events occurring within the remit of banking supervision, cannot be excluded, and the risk is that any blow to the central bank as supervisor could negatively spill over to the credibility of the central bank as the guardian of price stability (Goodhart, 2000).

An additional risk pointed out by Goodhart (2000) is the possibility that the central bank could lose independence and become politically captured, by taking up a role that is particularly sensitive from a political perspective. It could be argued that the SSM structure can potentially mitigate this risk with respect to a decentralised system, by bringing national supervisors together and subjecting them to a certain degree of peer pressure.

Overall, the risk that the ECB's financial supervisory role may undermine its monetary policy does not seem too high.

There is a synergy between micro-prudential supervision and the assessment of risk to the financial system as a whole, which falls within the macro-prudential remit of the ECB. Information about the financial system – including at the institution-level – is a crucial variable for the effective conduct of macro-prudential policy.

Concerning the macro-prudential tools available to the ECB, their limitations may constrain effectiveness. The ECB cannot impose, for example, limitations on loan-to-value ratios. This is a major shortcoming, because housing is a very important source of macro risk and housing bubbles have frequently been associated with financial crises. The national supervisory authorities will have such tools: it will to be seen if national supervisors will be as vigilant as the ECB in pinpointing housing bubbles. While the housing sector is typically politically sensitive, it would have been better to entrust the ECB with direct tools to include this sector.

One way to circumvent this limitation would be to involve the ECB more in macroeconomic surveillance. As highlighted by task 11 in section 2, the ECB will have negligible role in the Macroeconomic Imbalances Procedure, which is also designed to identify similar vulnerabilities.

More generally, to the extent that the evolution of the financial cycle – which is generally agreed to be the ‘target’ of macro-prudential policy – can be driven by the development of underlying macroeconomic imbalances in the economy, the involvement of the ECB in the field of macroeconomic surveillance seems complementary to the conduct of macro-prudential competences that it has been assigned.

Overall, we regard it a wise decision to entrust the ECB with micro- and macro-prudential competences, yet the limitations to the ECB's macro-prudential tools may constrain effectiveness.

Monetary policy and bank supervision: internal separation within the ECB to be reconsidered

The draft SSM Regulation requires as much separation as possible of financial supervision from monetary policy within the ECB. But is this separation needed? We highlighted some points in favour of separation in the previous section and concluded that they are not decisive.

Also, there is not a unanimous agreement in the literature on whether the two functions should be kept separate [see Beck and Gros, 2012, for an overview of the literature]. It is not unusual for central banks to be in charge of supervisory responsibility. Fourteen out of the seventeen national central banks in the euro area have a role in supervision and so do several major central banks elsewhere in the world (Draghi, 2012).
There can be significant synergies between monetary policy and supervision. ECB president Draghi himself has stressed that "it is an established fact that stronger supervision facilitates the conduct of monetary policy" [Draghi, 2012]. One reason for this is that the banking system plays a crucial role in the transmission of monetary policy impulses to the economy and therefore in the achievement of the central bank's goal. This is especially the case in times of crisis, when the banking system comes under heightened stress, the monetary transmission mechanism can be impaired and the standard monetary policy tools (the short-term interest rate) can become powerless. This synergy constitutes a rationale for the central bank to have an interest in the stability of the financial system [Constâncio, 2013] and therefore in its effective supervision, as the latter "contributes to a stable financial system [and] can only benefit the smooth transmission of monetary policy" [Draghi, 2012]. Therefore, if it is true that in crisis times the line between (unconventional) monetary policy and financial supervision becomes less clear, it is also true that in such a situation output and inflation are subject to downside risks, and financial stability and price stability actions would go in the same direction, making a conflict unlikely.

Also, as we concluded at the start of this section, using supervisory information will help the ECB in deciding which banks are solvent but illiquid, and which banks are insolvent, which would be essential for its function as the lender of last resort to banks. As pointed out by Whelan [2012], the experience with Northern Rock in 2007 shows how coordination of different authorities can be insufficient to solve the problems associated with the lender of last resort not being involved in supervision. The fact that the removal of banking supervision from the Bank of England — decided in 1997 — is now being reversed, can perhaps be taken as a sign that strictly separating bank supervision and monetary policy may be suboptimal.

A more practical question is if a full organisational separation of the two functions within the ECB is possible. The Supervisory Board will consist of five representatives of the ECB and potentially the representatives of all euro-area central banks. As pointed out by Beck and Gros [2012], it is very difficult to imagine how national central bank representatives could not be in very close contact, especially since one [the governor] would be hierarchically superior to the other [the head of supervision]. The final decision will anyway remain with the Governing Council, even though the latter is supposed to operate "in a completely differentiated manner" when dealing with monetary policy and with supervision. But it would be the same people deciding and it is hard to see how they would not use all the information at their disposal, when taking a decision.

It is also noteworthy that in the Bank of England, such a separation was not sought:

"The new system ... encourages co-operation and co-ordination across the different policy bodies. [...] There is overlap between the memberships of the FPC, the PRA Board and the MPC, including the Governor and the Deputy Governor for Financial Stability both being members of all three policymaking bodies. This will support the flow of information across the different bodies and an understanding of their approaches and likely reactions to events" [BoE 2013, page 26].

Certainly, the ECB is accountable in different ways for monetary policy and financial supervisory decisions, and the European Parliament rightly requested more detailed information about supervisory decisions10. But it would be too difficult to ensure that supervisory decisions are more transparent for the Parliament even when there is greater information sharing within the ECB between the two areas.

We therefore conclude that the efforts made in the draft SSM regulation to separate monetary policy and financial supervision within the ECB may not have been so important.

Designing and monitoring of financial assistance programmes: a dangerous liaison

The role played by the ECB in the Troika is ambiguous11 and difficult to assess. The local central bank is always included in negotiations on IMF financial assistance programmes, but since the central banks of programme countries in the euro area are

10. In their final agreement before the 12 September 2013 vote of the European Parliament, EP President Martin Schulz and ECB President Mario Draghi agreed over transparency, under which the ECB will send detailed confidential accounts of the minutes of its bank supervisory board meetings.

11. For an extensive evaluation of the Troika’s operate and set-up see Pisani-Ferry, Sapir and Wolff [2013]. Preliminary assessments of the specific role played by the ECB and of the potential conflicts of interest for the central bank had been conducted also by Merler, Pisani-Ferry and Wolff [2012]. This section is largely based on these two works.
part of the Eurosystem, the ECB could not have been left out. However, the ECB sits on the same side of the table with lenders [IMF and the European Commission], while in a typical IMF programme, the central bank of a country with its own currency would sit with the national authorities.

There are three additional reasons for ECB involvement (Pisani-Ferry, Sapir and Wolff, 2013). First, the European leaders trusted the ECB and wanted it to be part of the European negotiation team alongside the Commission. Second, European leaders feared possible recommendations from the IMF that would have challenged ECB policies and therefore wanted to make it possible for the central bank to participate in the policy discussions. Third, the ECB had a very significant exposure to programme countries (through its liquidity operation with banks) without having any legal hold over the supervisory assessment of its banking system. Participation in the Troika gave to the ECB the possibility to perform a better assessment of potential risks to its balance sheet, and to have a say over decisions that might affect it.

All of these reasons will likely characterise future ESM programmes. But the ECB’s participation in the design and monitoring of financial assistance programmes creates potential conflicts of interest with the other mandates of the ECB.

First, there is a potential conflict with the ECB’s prime activity of monetary policy, and in particular, price stability. In the implementation phase of programmes, the ECB might be tempted to deviate from its price stability objective in order to help improve fiscal sustainability in a given programme country. Ex ante, the fear that fiscal unsustainability in a particular country might result in pressure on the central bank to soften its monetary stance might lead the ECB to overemphasise the need for fiscal consolidation. However, it should be stressed that this problem is not specific to the participation of the ECB in the Troika, because fiscal dominance coming from non-programme euro-area countries can also undermine the price stability mandate [see section 3]. In this context, we note that fiscal sustainability in larger euro-area countries, such as Italy and Spain, provides a greater threat to financial stability than fiscal sustainability in current programme countries (which are all much smaller). Therefore irrespective of the ECB’s participation in the Troika, it may be tempted to opt for higher inflation than the target.

The experience so far has clearly demonstrated that this is not the case, even though Greek public debt became unsustainable and so far two rounds of public debt restructuring have been implemented. On the contrary, the major risk at the moment is that inflation undershoots the target in the coming years (even the ECB’s own forecast for 2013-14 is well below the target), while the ECB does not act to counterbalance it. This will make the adjustment of countries in southern Europe much more difficult, because when average euro-area inflation undershoots the two percent target, the conflict between intra-euro relative price adjustment and debt sustainability is more severe (Darvas, 2013c).

Second, there is a potential conflict of interest with the ECB’s function of lender of last resort to banks. Banks in programme countries are typically under high stress and may need to rely heavily on ECB liquidity. Ex ante, the ECB might seek to minimise liquidity operations that constitute a risk to its own balance sheet, and to label banking problems as solvency problems that would need to be addressed through state bail-out or through bail-in of private shareholders and creditors. Ex post however, the ECB might actually be inclined to provide liquidity on soft terms, as would any central bank interested in the success of the programme, by acting on the strictness of its collateral framework or of the ELA provision. Again, this possible conflict is not specific to financial assistance programmes, as the ECB may act similarly with respect to non-programme countries. But the ECB’s participation in the design of financial assistance programmes may bias programme conditionality.

‘The ECB’s participation in the design and monitoring of financial assistance programmes creates potential conflicts of interest with its other tasks, which may bias programme conditionality and exposes the ECB to pressure from the other Troika institutions.’
Third, there is a potential conflict of interest with the ECB’s bond-purchase programmes. By buying bonds of vulnerable countries in the context of the SMP or OMT, the ECB becomes formally a creditor of the governments receiving financial assistance, and this may influence its position in the negotiations. Fear of losses stemming from its bond holdings might lead the ECB to be especially tough on fiscal consolidation or especially timid on debt restructuring – if the latter were needed – to reduce the likelihood of losses on its holdings. The Greek case, in which the ECB loudly rejected debt restructuring even a few weeks before such a decision was made by euro-area heads of state, and then negotiated a special position so that ECB holdings of Greek government bonds were not restructured, clearly underlines this threat. Also, a highly problematic issue with respect to the ECB’s OMT is the introduction of an explicit conditionality set-up in the conduct of monetary policy, which is particularly delicate and dangerous, and is dealt with in the next section.

In conclusion, the unclear nature of the ECB’s hybrid role in the Troika raises concerns about possible conflicts of interest that the ECB could experience in relation to the conduct of its other functions. This role, which the ECB took on in emergency at the time of the first Greek programme, is now being crystallised into a permanent competence by the ESM Treaty (see task 7 in section 2). The ECB will have a say both ex ante, in the preliminary assessment of the decision to grant support, and ex post, in the monitoring of conditionality, thus being in the delicate position of having to balance considerations of financial and fiscal stability.

A better option would have been a ‘light’ participation of the ECB in financial assistance programmes, such as voicing concerns, beyond obtaining information, which is in line with the conclusions of Pisani-Ferry, Sapir and Wolff (2012). However, this option is not feasible without a change to the ESM Treaty.

**Monetary policy with conditionality: major dilemmas**

Government bond purchases by the ECB, which reduce the yields and increase the price of government bonds, can help the transmission of monetary policy through three main channels (see ECB, 2012a):

1. **Price channel:** ‘excessive’ government bond yields increase the yields for the private sector, because government yields are typically taken as a benchmark, and therefore a reduction in the government bond yield reduces the yields for the private sector;
2. **Balance-sheet channel:** government bond purchases can lead to a fall in government bond yields/increase in the price of government bonds, which improves bank balance sheets and thereby the ability of banks to lend to the non-financial sector, because they hold significant amounts of government bonds;
3. **Liquidity channel:** pressure on the sovereign bond markets makes it substantially more difficult for banks to access liquidity on the interbank market, when government bonds are used in repo markets as collateral and as a benchmark for the haircut applied to other instruments. Government bond purchases by the ECB can reduce such pressure.

While these benefits and their link to monetary policy transmission are straightforward, and it is fair to say that without the SMP and OMT the euro area would have likely been engulfed by a financial meltdown, there are number of concerns with ECB government bond purchases:

a. Even if purchases are conducted on the secondary market, they are on the ‘borderline’ with debt monetisation. There may be investors who purchase bonds on the primary market only because they know that they can sell these bonds to the ECB on the secondary market, thereby they ‘intermediate’ the ECB’s secondary market purchases to the primary market.

b. Such an implicit debt monetisation may endanger the ECB’s reputation.

c. The ECB may suffer losses in the event of sovereign default.

d. Moral hazard: by reducing the market pressure on the beneficiary countries, the bond-buying programme would simultaneously reduce the incentives to consolidate and reform.

The ECB itself seems to have anticipated the latter
concern and made it very clear in the announce-
ment of the SMP that the Governing Council, in
making its decision, had “taken note of the state-
ment of the euro area governments that they
[would] ‘take all measures needed to meet [their]
fiscal targets [that] year and the years ahead in
line with excessive deficit procedures’ and of the
precise additional commitments taken by some
euro area governments to accelerate fiscal con-
solidation and ensure the sustainability of their
public finances”12.

Certainly, the policies adopted by governments
have a bearing on the effectiveness of the actions
of central banks. But the fact that the SMP
announcement formally refers to governments’
fiscal commitments raises important issues. First,
it suggests that a decision taken in the remit of
monetary policy had been to some extent subject
to fiscal considerations – despite the ECB not
being a fiscal policy-making institution. Second,
although the tone is vague enough not to estab-
lish any direct link (“taken note”), the statement
still seems to convey the message that without
such commitments, the ECB might have acted dif-
ferently. Since the SMP was subject to the full dis-
cretion of the Governing Council, the result seems
to be a sense of embryonic (and implicit) condi-
tionality: the ECB adopts measures to improve
monetary transmission, and thereby achieve its
Treaty-based primary objective of price stability,
only if governments do their homework.

The intervention was successful in easing the
pressure on Italian sovereign bonds [at least in
the short term], but by the end of the month the
Italian government publicly announced the inten-
tion to scrap a previously proposed ‘solidarity tax’.
For those critics of the SMP who had been warning
against the risk of moral hazard, this was a night-
mare coming true: the ECB had provided relief from
market pressure to a country whose government
was now backtracking on its commitments.

The OMT framework marks a shift to an entirely dif-
ferent level, in two respects. First, it introduces
explicit conditionality for the bond buying, which
is made subject to the activation of an ESM/EFSF
programme. Second, and most important, it
assigns to the ECB an equally explicit and active
role in the monitoring and assessment of compli-
ance with such conditionality, thus blurring even
more the thin red line between monetary and
fiscal policy and increasing the potential for con-
licts of interests.

This setting puts the ECB in an extremely delicate
position. In the words of ECB president Mario
Draghi, the objective of the OMT is to “safeguard
the monetary policy transmission mechanism in
all countries of the euro area. [...] to preserve the
singleness of [...] monetary policy and to ensure
the proper transmission of our policy stance to the
real economy throughout the area”. As such, it
qualifies as a tool fully within the ECB’s monetary
policy scope. At the same time, however, it is a
monetary policy instrument, the activation and
use of which is made subject to considerations
that would not strictly pertain to a central bank in
the exercise of its monetary policy competences.
The ECB explicitly commits to terminate the OMT
not only – as would be logical – in case the latter
is no longer warranted from a monetary policy per-
spective, but also in case the beneficiary country
fails to comply with the required conditionality.

It therefore introduces an idea of monetary policy
with conditionality. As Nielsen (2012) points out,
this idea is quite unheard of and not easily justifi-
able from a theoretical perspective, not to mention
that it creates confusion about the ECB action. The
specific way in which this conditionality is struc-
tured is indeed problematic not just for the ECB’s
independence, but also for the survival of the euro.

12. ECB press release:
http://www.ecb.int/press/pr/
date/2010/html/pr100510.
en.html.
First, it is unclear how compliance with the conditionality would be assessed. The ECB will be involved, with the European Commission and possibly the IMF, in future ESM-funded financial assistance programmes, according to the ESM Treaty (see task 7 in section 2). This would make it very difficult for the ECB to conduct a fully independent assessment of conditionality fulfilment and it could expose it to pressure from other institutions, even if the Governing Council will decide “in full discretion”.

Second, in a case in which the OMT was warranted from a monetary perspective, but the conditionality was not met, the ECB would face the dilemma between (a) interrupting the OMT at the risk of possibly endangering the stability of the euro area, and (b) continuing the OMT at the risk of inflicting a fatal blow to its own credibility. The latter could also undermine the political support for the euro in creditor countries. The choice would be very tough one, and consequences could be dismal in either case.

A possible – though imperfect – solution could be to remove the ECB’s own assessment of the fulfilment of the conditionality, and also to remove the ECB’s contribution to the ESM’s assessment. In turn, the latter would require changes to the ESM Treaty, as we discussed in the previous section. Therefore, the decision on compliance with the conditionality would be based solely on the ESM Board of Directors, and the ECB would need to assess only if the OMT is warranted from a monetary policy perspective, if the ESM Board of Directors gives the green light. In such a system, the responsibility for starting, and once started, stopping or continuing the OMT when compliance is either not met or on the borderline, would lie with the Governors of the ESM Board, ie the representatives of euro-area governments, who have, in the first place, created a financial assistance system in the euro area. This is because in uncertain situations when compliance is at question, markets will likely behave nervously and therefore there would be a need for an OMT from a monetary policy perspective.

On the other hand, such a system would undermine the ECB’s monetary policy independence, because it would make it possible for monetary policy measures to be taken based on the decisions of a body other than the Governing Council. Also, leaving the decision on compliance entirely to a more political body is not without risks. The ECB is in a privileged position to assess the financial risks facing member states and the euro area. ESM Governors would not be able to have the same information on their own, and if they receive this information from the ECB in an informal way, they may not take it sufficiently into account when making decisions that can have political repercussions. ECB involvement in the assessment of compliance is therefore problematic and valuable at the same time. Excluding it entirely from the process of evaluating financial assistance programmes may not be the best way to square the circle.

Consequently, there is no correct solution to the aforementioned dilemmas. When members of a monetary union have large public debts, a lender of last resort for governments is necessary to avoid a bad equilibrium in which financial markets force an otherwise solvent country into default (De Grauwe, 2011). This cannot be unconditional, as it would create moral hazard. But as the experience of the SMP indicates, informal conditionality does not work, while formal conditionality exposes the ECB to the major dilemmas discussed in the two points above.

The best we can hope is that the OMT will never need to be used, but if used, the country in question will comply with the conditionality.

The alternative to the OMT would be to revise completely the framework for euro-area sovereign-debt crisis management, by moving toward a new “framework...” (De Grauwe, 2012).
US-style system, in which state-level pubic debt is small, there is no federal financial bail-out for states, the central bank does not purchase state debt and banks do not hold state debt. Under such conditions, markets would discipline state public finances well and an eventual default of a state government would not undermine financial stability. Since public debts in most euro-area countries are high, steps toward such a system should involve a much higher level of fiscal integration, including the mutualisation of a significant share of public debt (like the ‘Blue bonds’ of von Weizsäcker and Delpla, 2010). Holding the remaining national debt (‘Red Bonds’) could be prohibited for banks, or at least higher capital requirements could apply. This would reduce the impact of a sovereign default on the country itself and reduce contagion fears (Darvas, 2011). However, by drawing a parallel with US history, O’Rourke and Taylor (2013) remind us that even after the US political integration, it took a very long and painful process to reach a high level of fiscal integration. It is unfortunately unrealistic for the euro-area to embark on such an immense change in the foreseeable future.

4 CONCLUSION

After gaining a strong reputation as the guardian of price stability in the euro area, the European Central Bank’s roles have been greatly extended during the crisis, taking in monetary policy and other areas. The good news is that the new tasks have not endangered (at least so far) the ECB’s ability to anchor the inflation expectations of market participants: five-year-ahead expectations continue to be anchored at the two percent target.

Nevertheless, the new tasks pose major challenges for the ECB and give rise to both synergies and conflicts of interests. We have reviewed the new tasks and assessed five major interactions between them.

First, while liquidity provision to banks at a massive scale can stabilise financial markets in a stress situation, it can keep alive otherwise insolvent banks, encourage excessive risk taking and indirectly finance governments (when banks borrow cheaply from the ECB to purchase government bonds). The new EMU architecture has the potential to limit these adverse side-effects: the ECB can foster bank restructuring by performing in the toughest possible way the comprehensive balance sheet assessment before it takes over the single supervisory role and, after that, micro-prudential supervisory powers can be used to ensure that all banks receiving liquidity support have indeed only a liquidity problem, and not a solvency problem. The architecture could be further extended to dispel all doubts that liquidity provision to banks is backdoor financing of public debt: longer-term ECB financing could be conditional on banks not increasing their net lending to the government and/or increasing their net lending to the real economy.

Second, there is a potential synergy between monetary, micro-prudential and macro-prudential policies. Risks can build up in the financial sector even when the price stability mandate is achieved; monetary policy, on its own, is not able to counterbalance such risks. This is especially true in a heterogeneous monetary union like the EMU. Micro- and macro-prudential tools can help to limit the build-up of such risks, leading to synergies. But there is a potential for conflicts of interest too, for example, in a situation when an interest rate increase is needed for monetary policy purposes but such an increase would have a critical impact on the balance sheet of banks. Monetary policy credibility may also be undermined by eventual supervisory failures. In our view, these risks are not high and also not shared by markets, because long-term inflationary expectations continue to be anchored. We also note, however, that the limitations on the ECB’s macro-prudential tools (e.g. the ECB cannot impose requirements for loan-to-value ratios) may constrain effectiveness.

Third, the strict organisational separation of monetary policy and bank supervision within the ECB, which was a major goal of SSM regulation, is not so important. On the contrary, because of synergies between monetary policy and financial supervision, an appropriate flow of information would facilitate the achievements of the goals of price and financial stability, even if the transparency and accountability requirements of monetary policy and supervisory decisions are different. Recent organisational changes at the
Bank of England also encourage co-operation and co-ordination across the different policy areas.

Fourth, the roles played by the ECB in financial assistance programmes as a partner of the European Commission and the IMF in the Troika is ambiguous. The ECB's participation in future assistance programmes, which is formalised by the treaty on the European Stability Mechanism, creates potential conflicts of interest with the other tasks of the ECB, such as price stability, liquidity provision to banks and the new bond purchasing programme, the Outright Monetary Transactions (OMTs). While the ECB's expertise could bring valuable input into programme design and monitoring, the conflicts of interest may alter the ECB's positions and could be exposed pressures from the other institutions of the Troika. An informal role in the design and monitoring of financial assistance would lessen the possible conflicts of interests.

Fifth, the ECB's government bond purchasing programmes were essential to avoid financial meltdown in the euro area. But this cannot be unconditional, as it would create moral hazard and other risks. The informal conditionality of the Securities Markets Programme did not work and the formal conditionality of the OMTs exposes the ECB to a major dilemma: if the OMT is warranted from a monetary perspective, but the conditionality is not met, the ECB would face the dilemma between [a] interrupting the OMT at the risk of possibly endangering the stability of the euro area, and [b] continuing the OMT at the risk of inflicting a fatal blow to its own credibility. This could also undermine the political support for the euro in creditor countries. On top of this dilemma, the involvement of the ECB in the negotiation of an EFSF/ESM programme within the Troika would make it very difficult for the ECB to conduct a fully independent assessment of conditionality fulfilment and it could expose it to pressure from the other institutions. There is no proper solution to this quandary of 'monetary policy under conditionality' within the euro area's current economic governance framework. The alternative to the OMT would be a complete revision of the framework for euro-area sovereign debt crisis management and an immense increase in fiscal integration, by moving toward a system similar to the US, in which state-level public debt is small, there is no federal financial bail-outs for states, the central bank does not purchase state debt and banks do not hold state debt. Unfortunately such an immense change for the euro area is unrealistic in the foreseeable future.

REFERENCES

Blanchard, Olivier, Giovanni Dell’Ariccia and Paolo Mauro (2013) ‘Rethinking Macro Policy II: Getting Granular’, Staff Discussion Note No. 13/3, International Monetary Fund
Darvas, Zsolt (2013a) ‘Can Europe recover without credit?’, *Policy Contribution* 2013/03, Bruegel
Darvas, Zsolt (2013b) ‘Banking system soundness is the key to more SME financing’, *Policy Contribution* 2013/10, Bruegel
Darvas, Zsolt (2013c) ‘The euro area’s tightrope walk: debt and competitiveness in Italy and Spain’, *Policy Contribution* 2013/11, Bruegel
Darvas, Zsolt and Guntram B. Wolff (2013) ‘Should non-euro area countries join the single supervisory mechanism?’ *Policy Contribution* 2013/06, Bruegel
Merler, Silvia and Jean Pisani-Ferry (2012a) ‘Sudden stops in the Euro Area’, *Policy Contribution* 06/2012, Bruegel
Merler, Silvia and Jean Pisani-Ferry (2012b) ‘Who’s afraid of sovereign bonds?’ *Policy Contribution* 02/2012, Bruegel
Pisani-Ferry, Jean, André Sapir and Guntram B. Wolff (2013) ‘EU-IMF assistance to euro area countries: an early assessment’, *Blueprint* 19, Bruegel