11. The ECB, the banks and the sovereigns

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On the bright side, the euro area economy seems finally to be on the path of a recovery at the time of writing in early 2015; and, after much hesitation, the European Central Bank (ECB) has announced a programme of sovereign bonds purchases to undertake quantitative easing (QE) which has been less divisive than what could have been expected just few months ago. Although the programme is designed so as to decentralize the bulk of credit risk at the level of national central banks, markets have reacted positively to the announcement and, with the exception of Greece, we have seen further compression of spreads. On the dark side, however, the problem of debt overhang is likely to weigh on the euro area economies for the years to come since a low growth, low inflation environment is likely to persist even under the brightest scenario. In this context, and without a realistic prospect of further fiscal integration amongst the members of the European Union (EU), there is a risk that the European Central Bank will be overburdened by excessive responsibilities. To avoid this path, a new grand bargain between monetary policy authorities, governments and euro area institutions has to be achieved.

To understand the dilemma that the ECB is likely to face if such a bargain is not achieved, it is useful to look back and analyse monetary policy in the euro area since the 2008 crisis. This is what I will do in the next section where, by heavily borrowing from my paper with Pill (Pill and Reichlin, 2014) I will present a brief critical narrative of ECB policy since 2009. My effort is to analyse the particular challenge faced by the ECB as a central bank operating in a Union without federal budgetary responsibility and in the context of a large debt overhang, partly legacy of the crisis. I will claim that, gradually since 2012, the institution has started building the intellectual architecture of a new bargain but that both the nature of that bargain and the ability to achieve it are still very unclear.

The following section will address one specific issue: the home bias in the government bond market which emerged as a response to the risks associated to the crisis and which has generated a dangerous correlation

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between sovereign and bank risk (the so-called 'diabolic loop'). This problem is very much related to the central theme of my narrative since is one of the consequence of the problem of debt overhang. The 'diabolic loop' has been discussed extensively by Brunnermeier et al. (2011). The aim of the section is to introduce a proposal, designed with Luis Garicano (Garicano and Reichlin, 2014) which provides a solution to this problem. The proposal has both a regulatory and a monetary policy aspect. It aims at disincentivating banks to cumulate excess asset concentration in their 'own' government bonds while, at the same time, establishing the conditions for the market-driven creation of euro area safe assets that could be targeted by the ECB's QE measures.

11.1 THE ECB AND THE CRISIS: A SHORT NARRATIVE[1]

In the immediate aftermath of the Lehman collapse, the ECB was praised for the speediness and effectiveness of its intervention. In the period since, the ECB has had more mixed reviews, as it has sometimes struggled to maintain the initiative and to convince the markets of the credibility of its policy objectives. Although the scope of its mandate has expanded considerably, with the addition in particular of unified responsibility for banking supervision within the euro zone, the ECB has been forced at times to address problems outside its natural domain – problems of bank and sovereign solvency – for which it had neither appropriate tools nor a clear mandate. This, I will argue, was the natural consequence of conducting monetary policy in a period of large debt overhang, partly accumulated before the crisis and partly resulting as its legacy. The ECB was not the only central bank facing this problem but the difficulties in the euro area have been compounded by the lack of fiscal responsibilities at the federal level and by inadequate crises management tools in the design of the Treaty on the Functioning of the European Union.

How should we interpret and assess the ECB's record over this period of history? As suggested in Pill and Reichlin (2014), it is useful to divide the seven years since the crisis into three phases: (1) a banking crisis (2007–2009), where the immediate focus was on liquidity problems within the financial sector; (2) a sovereign crisis (2010–2012), in which the central issue came to be the inter-related solvency problems of public sector and bank balance sheets in a number of countries within the euro zone; and finally (3) an attempt to establish a new, more workable framework for the governance of the euro area (2012 to date), which started with ECB President Mario Draghi's commitment to do 'whatever it takes' to sustain

the euro, taking institutional form in the announcement of the ECB's Outright Monetary Transactions (OMT) programme.

In the first phase, although the policy tools used were non-standard, the objective was clearly within the central bank's normal remit: responding to a liquidity crisis by acting as lender of last resort. In the immediate aftermath of the fall of Lehman the ECB intervened directly with banks, effectively replacing the interbank market, which had ceased to function after Lehman, as a source of wholesale funding. This was wholly successful. As Tommaso Padoa Schioppa correctly anticipated (Padoa-Schioppa, 2004), it was possible for the ECB to act effectively as lender of last resort via the market operations of the euro system (Reichlin, 2014).

Furthermore, the ECB's intervention appears successful if judged in terms of its effects on both the real economy and on inflation. Several attempts to measure the macroeconomic impact of the ECB's non-standard measures in this phase (see Lenza et al., 2010; Giannone et al., 2012; Peersman, 2011) have reached similar conclusions: by preventing a more severe interruption in the flow of credit, the ECB's actions in this phase had a positive impact on real economic activity. Other studies (see Giannone et al., 2012; Pill and Smets, 2013) show that the path of the interbank rate – three-month Euribor – was lower than it would have been had the ECB not intervened as it did. Both studies show that the ECB managed to maintain an accommodative stance and that the zero lower bound constraint on the interest rate was not bounding during this first phase. The reason that the ECB's policy was effective in this way was due to the fact that inflation rates in the euro area rose to levels above 2 per cent by the end of this period, while unemployment rate did not rise immediately as a consequence of the recession.

Although the ECB in this phase can therefore rightly be judged successful by the standard criteria that we might use to assess monetary policy, it did nothing to address the structural problems underlying the crisis. Specifically, nothing was done to force the necessary recapitalization and restructuring of the banks. Of course, the ECB's actions were not intended to address these issues, which were left to those responsible: national governments and regulators. In some cases those national authorities did act to rescue failing banks (for example, in Germany), but in others, where the size of the problem was larger than the fiscal resources of the national government, the problem was simply put off. And in this context the ECB's accommodative liquidity provision may even have exacerbated the problem, as it reduced the urgency of resolution.

Procrastination may have been inevitable because in many euro area countries the balance sheets of the banks were larger than the national GDP. However, this points to the absence – at the euro area level – of

NOWOTNY (Rebalancing) 9781784719791 \9M3745) (G).indd 151 22/06/2015 12:26

tools or institutions to enable the necessary risk-sharing to resolve bank solvency problems. As a result, and also because of the increasingly close entanglement between solvency and liquidity issues for the banks, the ECB was called upon to address solvency problems despite the fact that they fell outside its natural remit. There was no one else to play this role. The absence of tools and institutions for risk-sharing at the euro area level, and the consequent pressure on the ECB to act beyond its mandate, is at the heart of the problem with which the ECB was grappling during this phase, and with which it has continued to grapple ever since.

The second phase starts in the spring of 2010 when, following the election of a new Greek government and the consequent restatement of the Greek fiscal position, that country's insolvency was laid bare. Soon Greece was unable to raise funds on the market.

Following the logic of the Treaty would have meant allowing the market to find its own solution: that is, allowing Greece to default. However, this could also have led to Greece's exit from the euro and possibly, via a process of contagion, to the exit of other weak countries too. There was also the risk of financial contagion, as banks across the euro area had significant holdings of Greek government bonds. The ECB therefore saw some kind of bailout solution for Greece as fundamental to its own mandate: to protect the euro and the euro system.

The ECB itself lacked the tools to implement a bailout; indeed it was and is expressly forbidden from providing government finance. This had to be done by national governments and some bilateral deals with Greece were struck before eventually the European Financial Stability Facility (EFSF) and subsequently the European Stability Mechanism were established, under the auspices of the 'troika', comprising the European Commission, the ECB and the IMF.

Unfortunately, this approach failed to convince the markets. This was partly because private sector bondholders were concerned that their own holdings were being subordinated to bailout loans. So Greek government bond spreads continued to rise and contagion to other government bond markets increased.

If it was to act, the ECB continued to face the same choice between two unpalatable options: either buying Greek government bonds directly, thereby assuming the credit risk itself and thereby violating the Treaty, or imposing losses ('haircuts') on private sector bondholders and thereby fanning the flames of contagion.

Pragmatically, the ECB found a middle way. It announced the Securities Markets Programme (SMP), which involved purchasing bonds issued by Greek and other peripheral countries' governments on the secondary market. Widening yield spreads on peripheral governments' bonds

NOWOTNY (Rebalancing) 9781784719791 \9M3745) (G).indd 152 22/06/2015 12:26

effectively obstructed the transmission of a unified monetary policy from the ECB in Frankfurt. So the SMP was justified as necessary to maintain effective monetary policy transmission within the euro area, and to prevent the fragmentation of the euro area financial system along national lines. Whatever the stated aim, the positive effect of the SMP was to buy time for the implementation of the troika-led adjustment programme, and to ease the way towards a partial restructuring of Greek government debt in which private sector bondholders did, eventually, accept write-downs. The ECB also used the troika programme as a pretext to relax its requirements for the use of sovereign debt as collateral, further reducing pressure on Greek government bond yields.

The ECB's intervention bought time but, notwithstanding the fact that it did lead to a partial restructuring, it did not address the underlying solvency issues. Nor did it completely defuse the threat of contagion: shortly afterwards both Ireland (in November 2010) and Portugal (in June 2011) went into troika programmes in order to avail themselves of external support.

In the first half of 2011 it briefly looked as though the euro area economy was emerging from its post-crisis malaise. Both gross domestic product (GDP) and inflation were seen to be recovering. The ECB decided to raise its policy interest rate in April and again in July. In retrospect, the ECB may have misjudged the state of the recovery or it may have played excessively tough on inflation in order to gain support on its action with respect to weak banks and governments, driven by financial stability concerns. The second recession, into which the euro area economy fell in the second half of 2011, came as a surprise and, *ex post*, shows that the dynamics of the real economy was affected by the uncertainty about the way in which financial instability caused by the debt problem was going to be addressed.

This downturn helped to reignite concerns about contagion to the larger European economies, specifically Italy and Spain. In Italy the crisis focused new attention on long-standing weakness in public finances. In Spain, despite going into the crisis with a relatively low level of debt, the government's standing in the bond markets was weakened both by the depth of the recession and by its implicit guarantee of the financial sector, which had been badly hit by the collapse of the property boom.

If either of these states needed a bailout, it was doubtful whether the European Stability Mechanism (ESM) would be credible to provide it; the size of these countries' outstanding debts was far larger than the funds committed to the ESM. And recent private sector involvement in the restructuring of Greek debt (the haircuts) set a bad precedent, despite protestations that this was a one-off, exceptional event.

Two further problems loomed over the market's appreciation of these risks. Firstly, the ECB's own actions in relation to Greece and the other peripheral countries were controversial. They sailed close the wind in terms of providing monetary finance to governments. And they also had distributional consequences: transferring risks from private sector balance sheets to the balance sheet of the central bank. These considerations made it harder to see how the ECB would react to a solvency problem on a larger scale.

Secondly, the crisis acted as a catalyst in the emergence of the 'diabolic loop' of interdependence between the credit risks of sovereigns and their banks. In peripheral countries in particular, banks held large quantities of their own governments' bonds on their balance sheets, which meant that concerns over sovereigns' solvency put the banks' balance sheets under pressure. At the same time, sovereigns' implicit guarantees of the banks domiciled in their countries dragged down the creditworthiness of those governments. These were the preconditions for a vicious spiral of deteriorating creditworthiness. And they were exacerbated by the emergence of a perceived danger of exit from the euro area.

Assets in vulnerable countries began to incorporate a 'redenomination' risk premium for fear of depreciation following euro exit (see Battistini et al., 2014, amongst others). This risk premium pushed up yields and bank funding costs, to the detriment of medium-term sustainability of sovereign and bank balance sheets as well as developments in the real economy, which in turn made exit more likely.

This vicious cycle, whereby rising redenomination risk became self-fulfilling, was an example of a multiple equilibria situation akin to developing countries' debt crises. In such circumstances, as it has been forcefully argued by De Grauwe (2012), drawing a hard distinction between liquidity and solvency issues may not be possible.

The ECB's initial response to these widening difficulties was to return to its response to the crisis in the periphery a year earlier, extending the SMP to Italian and Spanish bonds in August 2011. This initiative failed, for reasons directly related to the awkwardness of the ECB's position. Because of sensitivities about the ECB over-reaching its remit and providing monetary finance to governments, the purchases of Italian and Spanish bonds under the SMP were said to be limited and temporary, thereby undermining any possibility that this initiative might have had a strong demonstration effect in the market. For the same reason the ECB said that this intervention would be conditional on policy commitments from the (Italian) national government, which prompted a reaction in Italy (including from the Italian government) against external interference, which in turn further undermined the credibility of the ECB's intervention. And

of course, worries about the subordination of private sector creditors resurfaced.

The immediate threat of a banking crisis only subsided when, at the end of 2011, the ECB (under its newly appointed President, Mario Draghi) announced a programme of longer-term refinancing operations (LTROs), providing bank funding at unusually long (three-year) terms, and using a fixed rate, full allotment (FRFA) tender process. The significance of this initiative was that it allowed the banks to profit from a safe carry trade on holdings of their own governments' bonds, thereby both bolstering the financial position of the banks themselves and indirectly supporting vulnerable sovereigns.

Once again, however, the ECB's pragmatic response to the crisis had averted danger in the short term, but the underlying problems – bank and sovereign solvency – were not addressed. This of course was not a responsibility of the Ecse problems. In this vacuum, the ECB's intervention (the LTROs) had the effect of entrenching the interdependence between bank and sovereign balance sheets.

So again, we can characterize the ECB's approach as 'muddling through'. Facing the difficult choice between sticking to the old rules of the Maastricht set-up (and risking financial and macroeconomic instability) and acting in a pragmatic manner (and risking hitting the institutional and political constraints that Maastricht had set out to manage), the ECB, for understandable reasons, adopted the latter strategy. A major financial crisis was avoided but the incentives for the necessary fundamental changes were not created, and since the strategy lacked credibility, it was eventually tested by the market in the summer of 2011 when contagion spread to Italy and Spain.

Beside the lack of credibility, the strategy failed for two additional reasons. First, it was based on the miscalculation that provision of liquidity, fiscal austerity and an emphasis on supply-side reforms would have led to the stabilization of debt in Greece, Ireland and Portugal, especially in a context in which exchange rate devaluation could not be used in the adjustment. Second, the costs for the real economy of allowing undercapitalized banks to carry on, rather than forcing a recapitalization (as in the United States), was underestimated. The volume of loans to non-financial corporations dropped sharply in this period, much more sharply than in 2008–2009 if you adjust for the relative decline in industrial production (see Colangelo et al., 2014; Reichlin, 2014). Eventually, uncertainty about the repartition of responsibility between the different agencies – the central bank, the governments and the European federal authorities – led to a fragmentation of the financial markets, a credit crunch and a second recession.

The third phase in this history (see Pill and Reichlin, 2014) starts in the summer of 2012 when Mr Draghi committed to do 'whatever it takes' to save the euro, and it continues to the present day. This phase includes a number of specific initiatives, including the announcement of the Outright Monetary Transactions (OMT) programme (at the same time as the 'whatever it takes' speech) and the asset quality review (AQR) which concluded late in 2014. As important, perhaps, are a number of speeches in which Mr Draghi seems to have been attempting to create the basis for a new 'grand bargain', based on commitments to reform by national governments, engendering trust that such adjustment and reform will limit future exposures, and thereby making some sharing of legacy burdens politically feasible. Some such risk-sharing for legacy debt will be necessary to stabilize the euro area and to create conditions conducive to economic growth, without which the euro area will continue to be fiscally and financially unstable. Among the significant comments made by Mr Draghi during this phase were his speech in London in June 2014 in which he called for a euro area framework to coordinate and monitor structural reforms, and his Jackson Hole speech in August 2014 in which he argued for greater coordination of monetary and fiscal policy at the euro area level.

Pill and Reichlin (2014) characterize ECB policy in this phase as:

> an attempt to find a balance between two extreme positions: one emphasizing a strict interpretation of the 'no monetary financing' prohibition; and another calling on the ECB to act as a backstop in a debt crisis (De Grauwe, 2012; Krugman, forthcoming), disregarding moral hazard problems or concerns about the potential fiscal consequences of this action.

We argue that the promise of potentially unlimited liquidity support subject to conditionality under the OMT can be seen as steering a middle way:

> recognition that a bad equilibrium resulting from self-fulfilling crisis is possible, but also containing moral hazard so as to avoid unsustainability and insolvency. In turn, this acts as a mechanism to manage a tradeoff between risks to price stability (stemming from the moral hazard and threat to central bank credibility) and risks to financial instability (stemming from destabilizing self-fulfilling market dynamics). (Pill and Reichlin, 2014)

Concluding this narrative, we can say that, overall, the ECB was effective in the initial phase because – and to the extent that – it was required to address liquidity issues, which clearly fell within its natural remit. But since the related problems of solvency, of both sovereigns and banks, were not addressed at the national level, the ECB was progressively drawn to act

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beyond its natural remit. This was the main story during the second phase of this history, the darkest period. Through this phase the ECB tried, pragmatically, to steer a middle path between on the one hand the 'monetary dominance' enshrined in the Maastricht Treaty, under which default would have been the solution to fiscal unsustainability, and on the other hand, 'fiscal dominance' which would have required it to finance national governments as necessary. But pursuit of the pragmatic middle way has had negative consequences itself, particularly by postponing necessary adjustment. The ECB's actions in the most recent phase of the story can be interpreted – positively – as an attempt to regain the initiative and orchestrate a collective response to the euro area's more fundamental problems. For the euro area to prosper, this will need to include a 'grand bargain' to deal with the debt overhang left by the financial crisis. Without that, the euro itself will remain vulnerable.

11.2 A SAFE ASSET FOR THE EURO ZONE: THE GARICANO–REICHLIN PROPOSAL

The euro area experience of the financial crisis has two distinct phases which mimic the two distinct ('double-dip') recessions in economic activity (Reichlin, 2014). Financial fragmentation is central to both phases, but takes different forms. The initial sudden stop following the failure of Lehman was associated with bank wholesale liabilities becoming overwhelmingly domestic, as cross-border wholesale transactions dried up. But it was only in the second sovereign phase of the crisis from late 2010 that governments were (in some cases) called upon to support banks, while domestic banks increased their holdings of domestic sovereign debt as foreign investors withdrew. Indeed one of the fundamental lessons of the crisis is that, in a monetary union without common fiscal authority, financial fragmentation along national lines emerges as a response to risk. As I have discussed in the previous section, this has been the cause of a dangerous correlation between sovereign and bank risk.

This feature is the consequence of the fact that public finances are a national responsibility. Under these conditions, the sovereign–bank correlation imparts a national character to any resulting market segmentation. Although many of the problems leading to the crisis have been fixed over the last few years (in particular, with the establishment of the Banking Union and the single supervisor) and the recapitalization effort of banks is now well under way, the 'diabolic loop' between banks and sovereigns has not disappeared. On the contrary, given the current regulatory framework on treatment of government bonds for liquidity and capital purposes, and

the ECB collateral policy, banks have an incentive to acquire their own sovereign bonds and use them as collateral to obtain ECB liquidity.

Recently, Luis Garicano and I (Garicano and Reichlin, 2014) have made a proposal to help address this problem while providing an option for QE purchases which has some advantages with respect to the scheme recently announced by the ECB. The proposal has two complementary aspects, related to regulatory and supervisory policy and to monetary policy.

From the regulatory side we propose that the ECB and the Single Supervisory Mechanism (SSM) would announce that only the senior tranche of the security so produced would be counted as risk-free for the purposes of the risk weighting and liquidity coverage ratio calculations. Alternatively, the ECB/SSM would impose a risk concentration limit on own sovereign debt and exempt these senior bonds from such limitations.[2]

As for monetary policy, we suggest that the ECB announce that for its QE operations it would target a bond formed by the senior 60 per cent tranche of a synthetic bond formed of debt of euro area countries in fixed proportions to GDP. The ECB would not be involved in the tranching, but instead simply announce that this is the instrument used. We conjecture that the market would have an incentive to create such asset.

There are several desirable features of this proposal. Firstly, it would most likely reduce the geographic bias in the flight to safety, as the safe asset is (regulatorily) a Europe-wide one. Secondly, it would eliminate the moral hazard induced by the expectation that, in case of crisis, the ECB would intervene to guarantee the debt (see the previous section). Indeed, governments can default in this world, as the banks are protected from the fallout; markets will thus monitor the governments instead of second-guessing the (bailout) intentions of the ECB. Thirdly, it would eliminate the 'diabolic loop', since a sovereign in trouble would not jeopardize its own banks, and it would reduce the geographic segmentation of the euro zone markets. An additional advantage of the proposal is that this would be the first step towards the creation of a large safe asset since it would generate a large euro area-wide security. Such an asset would be a natural target for QE purchases since it would not carry any fiscal risk. Indeed, it is the junior tranches that would harness market discipline by pricing sovereign default risk.

We believe that targeting this asset is a better solution to the problem of risk-sharing within the euro area than buying composite bonds and decentralizing the bulk of the risk at the national central banks level, as is envisaged by the recent ECB QE proposal. Decentralization carries the danger that, under stress, the market could price a lack of commitment to the euro from the ECB.

Let us emphasize that this synthetic debt would not involve any

risk-sharing among different governments or any debt mutualization. Each government would continue to issue its own debt and face its own interest rates in the market, and the junior tranches would reflect default risk.

11.3 CONCLUDING REMARKS

After more than six years of crisis the euro area has gone a long way in strengthening its own governance institutions and, although it has paid a high price in terms of growth and unemployment, it has escaped implosion. This should be no case for complacency. The economy is still weak and a large stock of debt – both private and public – is threatening the recovery and possibly creating problems for financial stability in the future.

In section 11.1 of this chapter I have focused on the challenges faced by the ECB during the crisis. I have argued that ECB policy during the crisis has been dominated by the problem of financial stability posed by the legacy debt in a context in which liquidity and solvency issues have been tightly related. Since 2008, but in particular since the debt crisis of spring 2010, the European Central Bank found itself in uncharted territory, having to implement monetary policy in a situation where the high debt overhang involving almost all member states called for action at several levels: debt restructuring, recapitalization of banks, and coordination of monetary and fiscal policy. In the absence of credible federal institutions other than the central bank, and given the flaws in the euro area-level tools for crisis management, the ECB found itself being overburdened by the need to implement policies which were required for financial stability but had controversial fiscal implications. The evolution of these policies, eventually leading to the recent decision to embark on quantitative easing, cannot be understood without an appreciation of the parallel evolution of the euro area governance at the broader level which eventually saw the establishment of the European Stability Mechanism (ESM), the banking union and the comprehensive review of the asset quality of the systematically important banks. In this context, I have argued that, at least since late 2012, the ECB has strived for a new 'grand bargain' involving different responsibilities for monetary and budgetary authorities. The nature of this bargain and its credibility, however, are still very much uncertain.

Looking ahead, at the heart of the matter is the issue of whether (and, if so, how) the ECB should manage legacy debt problems – which cannot simply be wished away – by taking fiscal and banking risk onto its own balance sheet. In the recently announced QE programme the ECB has opted for a scheme which is based on national decentralization of risk associated to sovereign bonds purchases. This has been a pragmatic

NOWOTNY (Rebalancing) 9781784719791 \9M3745) (G).indd 159 22/06/2015 12:26

solution to the fact that an open-ended QE, if prolonged, would imply warehousing a large part of the legacy debt with significant cross-country distributional effects (since the legacy problems are of different magnitude in different euro area countries). But of course, in this case, the meaning of risk decentralization will be tested by the market.

In section 11.2 of this chapter I have argued for an alternative to such decentralization, consisting in purchases of the senior tranche of a composite asset. This proposal, I have argued, would have to be coupled with changes in the treatment of sovereign bonds for capital and liquidity charges, and with measures which incentivize a geographical diversification of sovereign holdings by financial institutions.

As I have concluded in my paper with Huw Pill, upon which this chapter is based:

> At the end of the matter, however, the ECB and the other parties involved in the euro area economic governance will have to deal with a time consistency problem. The key question is how to enforce commitment to longer-term adjustment while relieving the burden of legacy problems in the short run. The traditional answer to this question is to build economic institutions that underpin the credibility of reform and discipline over the medium term, and thereby give confidence that legacy problems can be addressed without creating moral hazard and/or threats to the credibility of the ECB in its pursuit of price stability. Mr Draghi's Jackson Hole initiative, complementing the creation of the banking union, should be seen in this light. At this stage, whether his efforts will be successful remains an open question. (Pill and Reichlin, 2014)

NOTES

1. This section borrows heavily from Pill and Reichlin (2014) and relies on research published in various papers with Colangelo, Giannone and Lenza.
2. Unlike in the Brunnermeier et al. (2011) proposal, no European debt agency or any other intermediary need be involved. Instead, a (small) ECB office would declare senior synthetic bonds as 'conforming euro-safe bonds' when they fulfil these criteria, similar to the Fannie Mae and Freddie Mac role in the US in declaring some mortgages with certain loan-to-value ratios, ratings, and so on as conforming.

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