

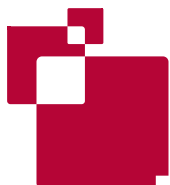
THE EURO CRISIS AND THE NEW IMPOSSIBLE TRINITY

JEAN PISANI-FERRY

Highlights

- The search for solutions to the euro crisis is based on a partial diagnosis that over-emphasises the lack of enforcement of existing fiscal rules. Europe's leaders should rather address the euro area's inherent weaknesses revealed by the crisis.
- At the core of euro-area vulnerability is an impossible trinity of strict no-monetary financing, bank-sovereign interdependence and no co-responsibility for public debt. This Policy Contribution assesses the corresponding three options for reform: a broader European Central Bank (ECB) mandate, the building of a banking federation, and fiscal union with common bonds. None will be easy.
- The least feasible option is a change to the ECB's mandate; changing market perceptions would require the ECB to credibly commit overwhelming forces, and the ECB is simply not in a position to make such a commitment. The building of a banking federation, meanwhile, involves reforms that are bound to be difficult. Incremental progress is likely, but a breakthrough less so.
- This leaves fiscal union. It faces major obstacles, but a decision to move in this direction would signal to the markets and ECB a commitment to stronger Economic and Monetary Union. One possibility would be to introduce a limited, experimental scheme through which trust could be rebuilt.

This Policy Contribution draws on presentations made at the XXIV *Moneda y Crédito Symposium*, Madrid, 3 November 2011, at the Asia-Europe Economic Forum conference in Seoul, 9 December, and at De Nederlandsche Bank in Amsterdam on 17 December. I am very grateful to Silvia Merler for excellent research assistance. I thank participants in these seminars and Bruegel colleagues for comments and criticisms.



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JEAN PISANI-FERRY, JANUARY 2012

1 INTRODUCTION

Since the euro crisis erupted in early 2010, the European policy discussion has mostly emphasised its fiscal roots. Beyond short-term assistance, reflection on reform has focused on the need to strengthen fiscal frameworks at European Union and national levels. The sequence of decisions and proposals is telling:

- In 2011, the EU adopted new legislation, effective from 1 January 2012, that reinforces preventive action against fiscal slippages, sets minimum requirements for national fiscal frameworks, toughens sanctions against countries in excessive deficit and tightens up enforcement through a change in the voting procedure¹.
- On 26 October 2011, the euro-area heads of state and government decided to go further and committed themselves to adopting constitutional or near-constitutional rules on balanced budgets in structural terms, to basing national budgets on independent forecasts and, for countries in an excessive deficit procedure, to allowing examination of draft budgets by the European Commission before they are adopted by parliaments². A few weeks later, in November 2011, the European Commission put forward proposals for new legislation requiring euro-area member states to give the Commission the right to assess, and request revisions to, draft national budgets before they are adopted by parliament.
- Speaking in the European Parliament in early December, European Central Bank President Mario Draghi asked for a 'new fiscal compact' which he defined as "a fundamental restatement of the fiscal rules together with the mutual fiscal commitments that euro-area governments have made," so that these

commitments "become fully credible, individually and collectively"³.

- On 9 December 2011, EU heads of states and government, with the significant exception of the United Kingdom, committed themselves to introducing fiscal rules stipulating that the general government deficit must not exceed 0.5 percent of GDP in structural terms. They also agreed on a new treaty that would allow automatic activation of the sanction procedure for countries in breach of the 3 percent of GDP ceiling for budgetary deficits. Sanctions as recommended by the European Commission will be adopted unless a qualified majority of euro-area member states is opposed⁴.

The question is, are the Europeans right to see the strengthening of the fiscal framework as the main, possibly the only, precondition for restoring trust in the euro? Or is this emphasis misguided?

It is striking that in spite of a growing body of literature drawing attention to the non-fiscal aspects of the development of the crisis, other problems that emerged during the euro crisis have almost disappeared from the policy discussion at top level⁵. Credit booms and the perverse effects of negative real interest rates in countries where credit to the non-traded sector gave rise to a sustained rise in inflation were the focus of policy discussions in the aftermath of the global crisis, but these issues have largely disappeared from the policy agenda at head-of-state level. Real exchange rate misalignments within the euro area, and current-account imbalances, are largely considered to be of lesser importance, or mere symptoms of the underlying fiscal imbalances. Finally, the role of capital flows from northern to southern Europe and their sudden reversal, are merely discussed by academics and central bankers, though the sudden reversal of north-south capital flows inside the euro area is fragmenting

1. These provisions are part of the so-called 'six-pack', a set of legislative acts resulting from proposals made by the European Commission and from the report on economic governance in the EU prepared by Herman Van Rompuy, the president of the European Council. The 'six-pack' was adopted by the European Parliament and the Council on 16 November 2011.

2. See the 'Euro Summit Statement' of 26 October 2011.

3. Speech by Mario Draghi, 1 December 2011.

4. Statement by euro-area heads of state and government, 9 December 2011.

5. Interestingly, the European Commission report on the first ten years of EMU (European Commission, 2008) emphasised the errors resulting from the neglect of non-fiscal dimensions such as competitiveness, credit booms and current-account deficits. For this reason the six-pack legislation introduced a new procedure called the *Excessive Imbalances Procedure* to address external imbalances. However subsequent policy discussions have refocused on fiscal issues.

the single market and creating major imbalances within the Eurosystem of central banks⁶.

To address the issue I start in section 2 by briefly reviewing the evidence on the link between fiscal performance and market tensions. I then turn to presenting in section 3 why the crisis has revealed a more fundamental weakness in the principles underpinning the euro area. In section 4, I discuss options for the way out. Policy conclusions are presented in section 5.

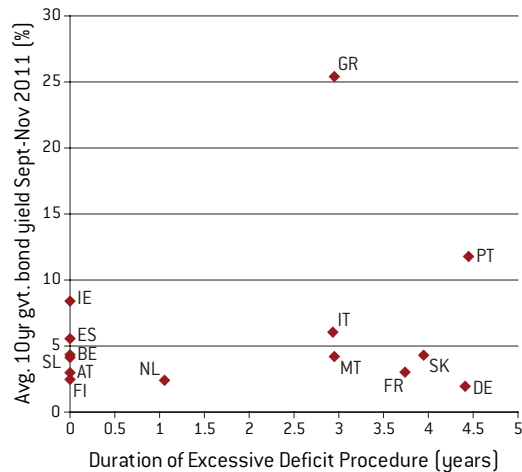
2 IS FISCAL DISCIPLINE THE ISSUE?

It is undoubtedly true that the euro area in its first ten years suffered from a lack of fiscal discipline, that from the standpoint of sustainability of public finances good times were wasted, and that the credibility of fiscal rules was compromised [Schuknecht *et al*, 2011]. Greece notoriously misreported budgetary data and flouted the European fiscal-discipline rules. In spite of having promised that they would avoid 'excessive deficits', and in spite of the thorough monitoring done by the European Commission, from 1999 to 2008 six countries out of twelve (excluding recent additions to the euro area) found themselves in an 'excessive deficit' position. And the now-infamous Council decision of 25 November 2003 to hold the excessive deficit procedure for France and Germany 'in abeyance' is rightly regarded as having weakened significantly the credibility of the European fiscal framework.

Two observations however caution against an exclusive emphasis on strengthening fiscal discipline through tougher and more automatic rules.

First, behaviour vis-à-vis the rules of the European fiscal framework (the Stability and Growth Pact or SGP) is a very poor predictor of the difficulties experienced nowadays by euro-area countries. Figure 1 shows recent spreads vis-à-vis the German Bund against past infringements of the SGP⁷. It is apparent that there is no relationship between the two: countries such as Ireland and

Figure 1: SGP infringements (1999-2008) and current bond yields (Sep-Nov 2011)



Source: Bruegel based on European Commission, Datastream.

Spain that were never found to have infringed the rules, suffer from large spreads, whereas Germany and the Netherlands, which were found guilty of it, enjoy remarkably low rates. This suggests that the simplistic view that a thorough enforcement of the rules would have prevented the crisis should be treated with caution.

The second piece of evidence is that several euro-area countries are experiencing elevated government-borrowing costs in spite of being in much sounder positions than the US, the UK or Japan. Calculations by the International Monetary Fund [2011] suggest that future adjustments facing non-euro area countries are of the same order of magnitude as those confronting euro-area countries in trouble. Pairwise, Japan and Ireland seem to be in similar situations, as do the US and Portugal. However, only the two euro-area countries have experienced a rise in bond yields (Figure 2).

As observed by Paul De Grauwe [2011], the comparison between Spain and the UK is particularly telling. Even taking into account the potential cost of recapitalising Spanish banks, the two countries face broadly similar fiscal challenges (Figure 3), yet at the end of November

6. Recent contributions to the literature on the non-fiscal roots of the euro crisis include De Grauwe [2011], Gros [2011], Lane and Pels [2011], and Sinn and Wollmershaeuser [2011].

7. In order to avoid the result being biased by political weight (for example, a country could have escaped being singled out as infringing the SGP because of political clout within the Council of Ministers, which votes on sanctions and the steps leading to them), I take instead the number of years between the European Commission recommendation that the country be declared to be in excessive deficit, up to its recommendation of abrogation of the excessive deficit procedure. Data relating to the excessive deficit procedure is taken from the European Commission's website.

'The euro area in its first ten years suffered from a lack of fiscal discipline, while from the standpoint of sustainability of public finances good times were wasted, and the credibility of fiscal rules was compromised.'

2011, Spanish 10-year bond rates were 6.5 percent against 2.3 percent in the UK. Yields on UK gilts even reached a lower level than those on comparable German bonds.

This comparison is *prima facie* evidence that the fiscal situation *per se* fails to explain tension in the euro-area government bond markets. Or, to put it slightly differently, although their levels of deficit and public debt are the same, euro-area countries seem to be more vulnerable to fiscal crises than non-euro area countries. Explanations for this need to be considered.

3 THE NEW IMPOSSIBLE TRINITY

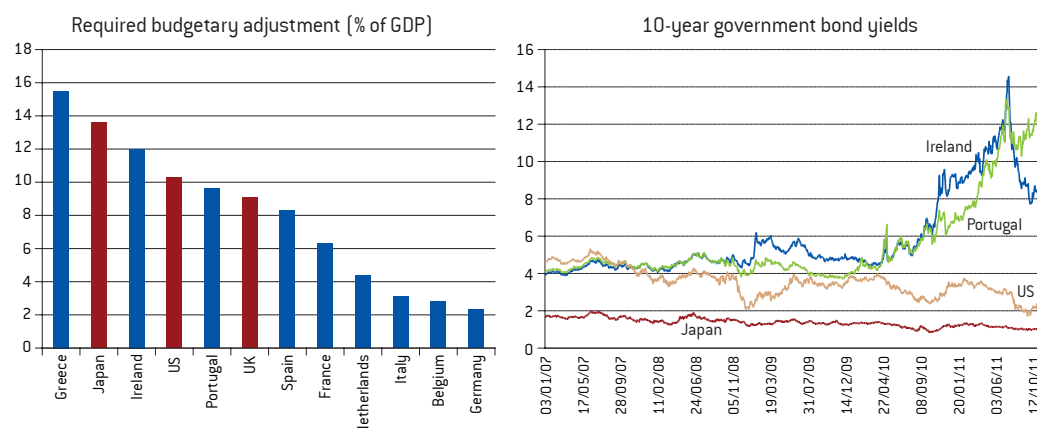
To understand what makes euro-area states more fragile, it is best to start from the basic tenets on which the European currency is based. Three are

especially relevant: the absence of co-responsibility for public debt; the strict no-monetary financing rule; and bank-sovereign interdependence, ie the combination of state responsibility for supervising (and if necessary rescuing) banking systems and the holding by these very banks of large stocks of debt securities issued by their sovereigns.

No co-responsibility for public debt

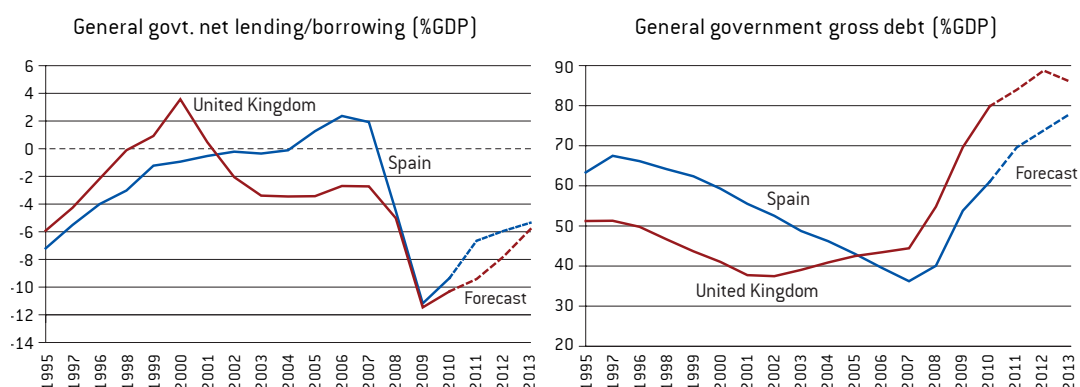
Governments in the euro area are individually responsible for the debt they have issued. It is even prohibited for the EU or any of the national governments to assume responsibility for the debt issued by another member country. This principle, known as the 'no bail-out clause', is enshrined in the EU treaty, the relevant article of which (Art. 125) deserves to be quoted in full: "The Union

Figure 2: Required 2010-2020 budgetary adjustments and government bond yields



Source: Left panel: IMF (2011). The bar represents the adjustment in the cyclically-adjusted primary balance required to reduce the debt ratio to 60 per cent in 2030, assuming constant CAPB between 2020 and 2030. Calculation assumes a uniform interest rate-growth rate differential. Right panel: Datastream

Figure 3: Government deficit and public debt in Spain and the UK, 1995-2013



Source: AMECO database and European Commission forecasts of November 2011.

shall not be liable for or assume the commitments of central governments, regional, local or other public authorities, other bodies governed by public law, or public undertakings of any Member State, without prejudice to mutual financial guarantees for the joint execution of a specific project. A Member State shall not be liable for or assume the commitments of central governments, regional, local or other public authorities, other bodies governed by public law, or public undertakings of another Member State, without prejudice to mutual financial guarantees for the joint execution of a specific project”.

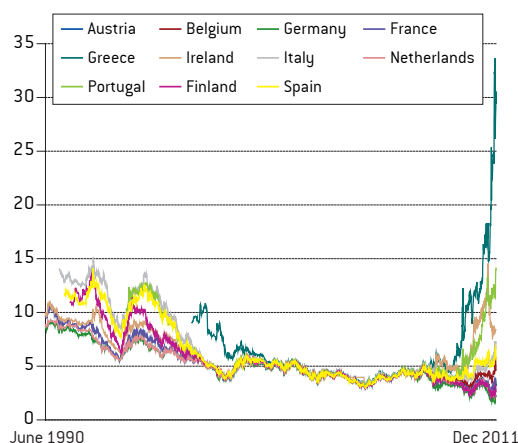
In plain English this means that sovereign default is a risk to consider, and the rationale for this provision was indeed to set the rules of the game clearly and ensure that markets would price sovereign risk accordingly. Unlike in the US, where the no bail-out principle emerged over a long period (Henning and Kessler, 2012), the aim was to prevent moral hazard and thereby to provide from the start clear incentives for governments to abide by fiscal discipline.

No provision unfortunately stated what would happen in the event of a euro-area sovereign losing access to the market. One possible interpretation of the treaty was that it would have to restructure its public debt. A second one is that it would have to turn to the IMF and be subject to standard procedures for conditional support or, if needed, insolvency. A third one was that despite the lack of an instrument to this end, the other euro-area member states would find ways to provide temporary conditional assistance. There was therefore significant ambiguity in the interpretation of one of the treaty's fundamental principles⁸.

For ten years, from 1999 to 2008, markets in fact did not differentiate euro-area borrowers significantly (Figure 4).

Anecdotal evidence suggests that there was a widely held view that in case of problems, the no bail-out principle would not be strictly enforced⁹. Why markets failed to price sovereign risk appropriately is a matter for discussion; however it is clear that from banking regulation (until Basel II started to be implemented in the late 2000s,

Figure 4: Yields on 10-year government bonds, selected euro-area countries, 1990-2011



Source: Datastream.

sovereign bonds were deemed risk-free) to ECB collateral policy (bonds issued by all euro-area sovereigns were treated similarly), policy in the first decade of Economic and Monetary Union (EMU) contributed to the narrowing of spreads¹⁰. It is only when the Greek crisis erupted and markets realised that Greece might have to default on part of its debt, that perceptions changed and the sovereign risk began to be priced in the bond market.

Strict no-monetary financing

The second tenet is the strict prohibition of monetary financing. Art. 123 of the EU Treaty states that “*Overdraft facilities or any other type of credit facility with the European Central Bank or with the central banks of the Member States [hereinafter referred to as ‘national central banks’] in favour of Union institutions, bodies, offices or agencies, central governments, regional, local or other public authorities, other bodies governed by public law, or public undertakings of Member States shall be prohibited, as shall the purchase directly from them by the European Central Bank or national central banks of debt instruments*”.

This article can be read as a prohibition of institutionalised fiscal dominance in the form of explicit agreements between a government and a central bank similar to the Fed-Treasury agreement of 1942, which set the US central bank the goal of maintaining “relatively stable prices

8. Marzinotto, Pisani-Ferry and Sapir (2010) discuss why the EU could not rely on its traditional balance-of-payment assistance instruments and explain why the exclusion of euro-area members from this assistance cannot be regarded as resulting from the no-bail-out clause.

9. Shortly after Greece joined the euro in 2001, rating agencies upgraded its status to upper investment-grade levels. According to Sara Bertin, then Greece analyst at Moody's, this was done in “the belief that Greece was now part of the euro zone and that nobody was ever going to default”. See Julie Creswell and Graham Bowley, ‘Ratings firms misread signs of Greek woes’, *The New York Times*, 29 November 2011.

10. See Buiter and Sibert (2005) for an early discussion of ECB collateral policy.

and yields for government securities”¹¹. The ECB still has the option of buying government bonds on the secondary market and actually it made use of this with the launch of the so-called *Security Markets Programme* in May 2010, first to purchase Greek and Portuguese bonds and later, in August 2011, to purchase Italian and Spanish bonds (for a total amount of about €200 billion at end-November 2011). But the provision is indicative of a broader philosophy of strict separation between fiscal and monetary policy, and the purchase of government securities makes the ECB clearly uncomfortable.

Furthermore, the ECB does not have a strong financial-stability mandate that could justify intervention to prevent turmoil on the bond market. Its mandate is only to “*contribute to the smooth conduct of policies pursued by the competent authorities relating to the prudential supervision of credit institutions and the stability of the financial system*” (Art. 127-5). The reason given by the ECB for the launch of the *Security Markets Programme* was in fact not the preservation of financial stability, but rather the prevention of disruption to the proper transmission of monetary policy decisions.

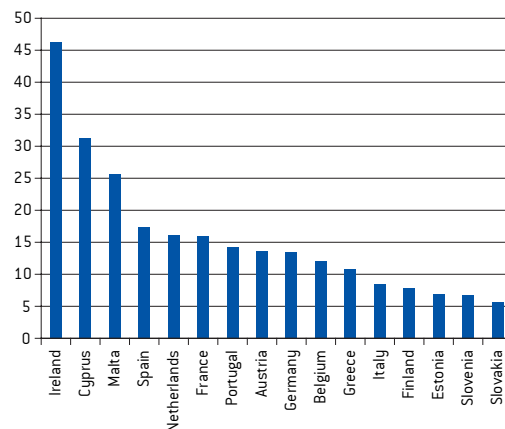
In this respect the ECB is a very special type of central bank compared to other monetary institutions that are not constrained by the prohibition of purchases of government bonds and have often been given an explicit financial stability mandate. To the extent that such central banks are seen by markets as ready to embark on wholesale bond purchases if required in the name of financial stability, they provide an implicit insurance to the sovereign and contribute to the avoidance of multiple equilibria¹². This is not the case with the ECB.

Banks-sovereign interdependence

The third important tenet is bank-sovereign interdependence, which results from both policy principles and the inherited structures of national financial systems.

Whereas the euro area is integrated monetarily, banking systems are still largely national. To start with, states are individually responsible for

Figure 5: Ratio of total bank assets to government tax receipts, 2010



Source: Bruegel based on Eurostat, ECB.

rescuing banks in their jurisdictions. As a consequence, states are highly vulnerable to the cost of banking crises – especially when they are home to banks with significant cross-border activities. In 2010, total bank assets amounted to 45 times government tax receipts in Ireland, and the ratio was very high in several other countries (Figure 5).

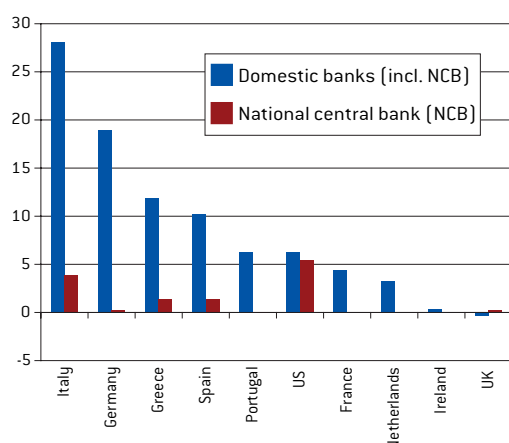
The consequences of this situation became apparent when Ireland had to rescue its banking system after it suffered heavy losses in the credit boom of the 2000s. Ireland at the end of 2007 had a 25 percent debt-to-GDP ratio and it was deemed a fiscally super-sound country. At the end of 2011 its debt ratio was evaluated at 108 percent and the country had had to file for an IMF-EU conditional assistance programme. But Ireland is only an extreme case: in fact, all western European sovereigns in the euro area (but much less so the new member states, where banks are largely foreign-owned) are heavily exposed to the risk of having to rescue domestic banks.

The other side of the coin is that banks are exposed to their own governments through their holdings of debt securities. Figure 6, which reports data for 2007, the last year before the global financial crisis, shows that this was at least true for the continental European countries, where banks held large sovereign-debt portfolios, though much less so for Ireland where, as in the UK and the US, banks do not (or at least did not) hold much government debt.

11. See for example Woodford (2009).

12. Whether or not this insurance amounts to an implicit guarantee of debt monetisation is a matter for discussion. Central banks generally maintain that they would not preserve the sovereign from funding crises in case of unsustainable fiscal policy but that they would act to prevent self-fulfilling debt crises.

Figure 6: Bank holdings of debt issued by their sovereign as % of GDP, selected countries, 2007



Source: Bruegel, based on national data.

Bank holdings of government securities would not represent a risk if they were diversified, but in fact they are heavily biased towards the sovereign (Figure 7). This home bias is apparent in most euro-area countries and it implies that whenever the sovereign finds itself in a precarious situation, banks are weakened as a consequence. This for example happened in Greece, where banks are relatively strong but are highly vulnerable to the risk of default of the Greek sovereign.

Home bias diminished after the introduction of the euro eliminated currency risk, and regulations that treated foreign euro-denominated bonds differently from national bonds were scrapped. As pointed out by Lane (2005, 2006) and Waysand, Ross and de Guzman (2010), EMU triggered a significant increase in cross-border bond investment

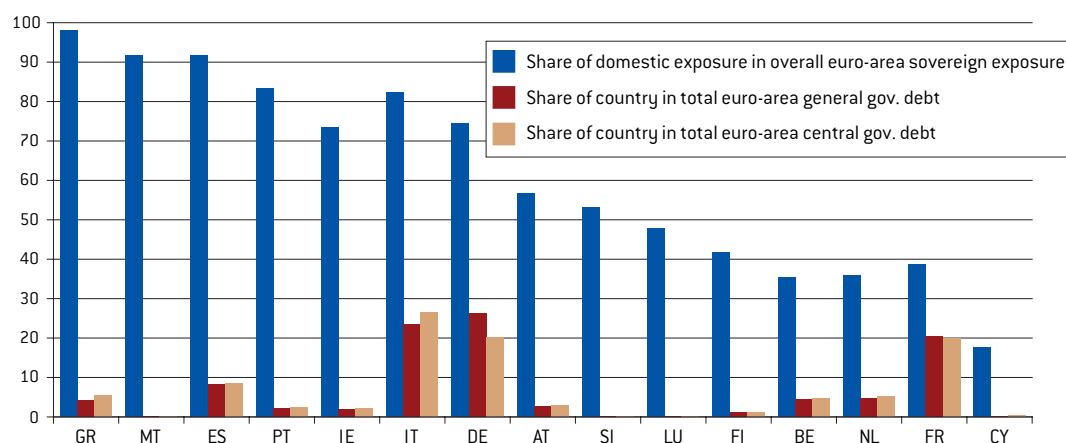
within the euro area, beyond the diversification of portfolios resulting from financial globalisation. Nevertheless, as late as in 2010 domestic home bias persisted to a surprising degree¹³.

As banks held significant government bond portfolios, and as these portfolios exhibited a home bias, in 2007 about one-fourth of the bonds issued by the state were held by domestic banks in Germany, Italy, Spain and Portugal (Table 1). The proportion was less, but still noticeable, in France, the Netherlands and Greece. Only in Ireland were banks negligible holders of government securities.

Furthermore, the exposure of domestic banks to sovereign risk increased in recent times as they largely substituted non-residents in countries subject to market pressure. In fact, between 2007 and mid-2011 the share of outstanding debt held by domestic banks increased markedly in Greece, Portugal and Ireland, and to a lesser extent in Spain and Italy, while it decreased significantly in Germany (Figure 8).

The exposure of governments to 'their' banks and of banks to 'their' governments makes public finances in the euro area particularly prone to liquidity and solvency crises. Markets have realised that such a configuration is a source of significant vulnerability and they are pricing the risk that governments go further into debt as a consequence of bank weaknesses, or that banks incur heavy losses as a consequence of their sovereign holdings.

Figure 7: Indicator of home bias in bank holdings of government debt, 2010



Source: Bruegel based on EBA, Eurostat.

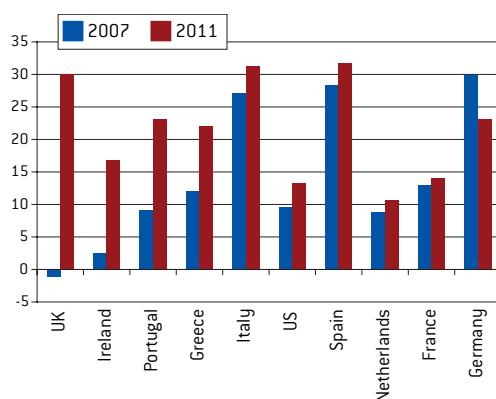
13. Data in figure 7 is for 2010. Data for prior years are not available.

Table 1: Breakdown of govt debt. by holding sectors (% of total), selected countries, mid-2011

	Domestic banks	Central bank	ECB	Other public institutions	Other residents	Non-residents (excl. ECB)
Greece	19.4	2.6	22.9	10.1	6.5	38.5
Ireland	16.9	n/a	16.1	0.9	2.43	63.8
Portugal	22.4	0.8	11.2	-	13.5	52.1
Italy	27.3	4.0	5.3	-	26.7	36.7
Spain	28.3	3.5	4.8	-	30.2	33.2
Germany	22.9	0.3	-	0.0	14.1	62.7
France	14.0	n/a	-	-	29.0	57.0
Netherlands	10.7	n/a	-	1.1	21.4	66.8
UK	10.7	19.4	-	0.1	39.5	30.2
US	2.0	11.3	-	35.5	19.9	31.4

Source: Bruegel. Note: The variable considered is central government marketable debt for Greece (2011Q2); central government long-term bonds for Ireland (2011Q2); general government debt for Portugal (2010Q4); general government debt for Italy (2011Q2); general government debt for Spain (2011Q2); central, state and local government debt for Germany (2011Q1); OATs for France (2011Q2); federal government treasury securities for the US (2011Q2) and central government gilts for the UK (2011Q1). For Ireland, holdings by the National Central Bank are included in 'domestic banks' and not in 'public institutions', due to data availability.

Figure 8: Share of domestic banks in total holdings of government debt, selected countries, 2007 and mid-2011



Source: Bruegel based on national data. Note: data for Portugal is end-2010. National central bank holdings are aggregated with domestic-bank holdings.

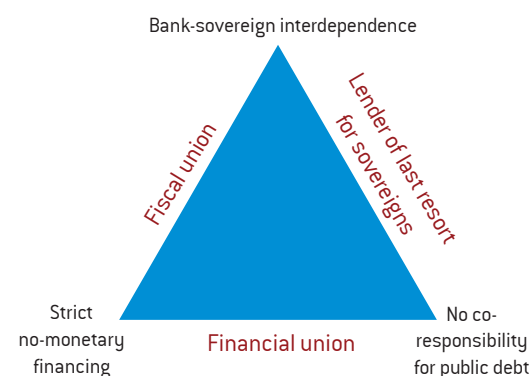
Implications

The coexistence of these three tenets makes the euro area unique. Existing federations may or may not apply the no-coresponsibility principle (arrangements in this respect vary); they may or may not prevent the central bank from purchasing government bonds (in fact they rarely do); but they do not leave to states the responsibility for rescuing banks, which in turn do not hold large amounts of state and local government paper. In the US in particular, (a) banks hold very little federal, let alone state and local debt; (b) the Federal

Reserve would be able to intervene to avoid the federal government losing access to markets; (c) the federal government has no responsibility for state debt, and the federal government, not state governments, is responsible for rescuing banks.

These features can be summarised in the form of a trilemma. The euro was imagined in the late 1980s in response to what was known as Mundell's trilemma, according to which no country can enjoy at the same time free capital flows, stable exchange rates and independent monetary policies. Twenty years later the euro area faces another trilemma between the absence of co-responsibility over public debt, the strict no-monetary financing rule and the national character of banking systems (Figure 9).

Figure 9: The new trilemma



Source: Bruegel.

This impossible trinity renders the euro area fragile because adverse shocks to sovereign solvency tend to interact perversely with adverse shocks to bank solvency, and because the central bank is constrained in its ability to provide liquidity to the sovereigns in order to stem self-fulfilling debt crises. Like the 'old' trilemma, the question about the new one is which of the constraints will give way.

4 WHICH WAY FORWARD?

The euro area's stated strategy to escape the trilemma is budgetary consolidation. The goal is for states to reach debt levels low enough to ensure that solvency is beyond doubt. It is indeed indisputable that public finances have to be brought under control and that this requires sustained budgetary consolidation. The question is if this strategy is likely to deliver at a close enough horizon. The already-mentioned IMF simulations (Figure 2) suggest that this is unlikely: to reach in 2030 a 60 percent of GDP debt ratio, several countries have to implement adjustments of unprecedented magnitude amounting to 5 to 10 percent of GDP in France, Spain and Portugal, and exceeding 10 percent of GDP in Greece and Ireland. The economic slowdown that started in the second half of 2011 and the acute recessions experienced by several southern European countries only add to the challenge¹⁴.

Furthermore, 60 percent of GDP is a very arbitrary target. As discussed by the debt crisis literature, defaults in emerging economies actually exhibit lower 'debt intolerance' thresholds. Reinhart, Rogoff and Savastano (2003) report that from 1971 to 2001, more than half of the default episodes in middle-income countries took place despite the debt ratio being lower than 60 percent of GDP, while Eichengreen, Hausmann and Panizza (2008) point out that a country's public-finance record may not be the only motive for low levels of debt intolerance: inability to borrow in one's own currency (the 'original sin') matters quite a lot too. Another factor is the size of the implicit liabilities a state may have to take on. On the basis of the recent experience, especially of Spain and Ireland, it might well be that the safe threshold is significantly below 60 percent of GDP. This would

postpone even further the landing on safe territory.

Ultimately budgetary consolidation is indispensable, but it is an illusion to assume that by itself it will restore stability to the euro area. To count on it would leave the euro area vulnerable for many years. Furthermore precipitated adjustments of the kind implemented in 2011 by countries under market pressure tend to rely on quick fiscal fixes and for this reason to be detrimental to medium-term growth, thereby adding to sustainability concerns. To ward off threats to stability and cohesion, Europe needs to move on other fronts too and to consider three non-competing options corresponding to the three points of the triangle.

Give the ECB the role of lender-of-last-resort for sovereigns

The first solution, which was widely discussed in the autumn of 2011, is to give the ECB the role of lender of last resort in relation to the sovereigns. As in the case of a central bank vis-à-vis commercial banks, this would not amount to giving it the task of making insolvent countries solvent. Rather, the ECB could either lend for a limited period to a sovereign at a rate that is above the risk-free rate but below the rate the sovereign has to pay on the market; or, as in the Gros-Mayer (2011) proposal, it would provide a credit line to a public entity (the European Financial Stability Facility, or EFSE, in the Gros-Mayer proposal) in order to leverage its capital and give it enough firepower. This entity would then intervene in the market, preferably following a policy rule of some sort. Either way, the ECB would provide liquidity to prevent states from being cut off from financing, and it would help put a ceiling on what they have to pay to borrow, thereby stemming potentially self-fulfilling debt crises. In a way, ECB support would serve as a deterrent and it could well be that governments would never have to draw on it.

There have been intense discussions in the euro area about this approach, which was advocated by many experts, expected by markets, endorsed by several European governments, including France, supported by the US, but in the end resisted by Germany. The ECB has taken a step

14. These calculations were made before the 26 October agreement on Greek debt reduction.

towards it with the launch of the Security Markets Programme, but its action has not been demonstrably effective, in part because the central bank acted half-heartedly and without clear policy objectives.

As a permanent device, and even leaving aside objections of principle, the 'lender of last resort for sovereigns' approach however raises a number of difficulties.

- First, the ECB does not have an explicit mandate for it. Changing the mandate to include financial stability would raise considerable difficulties as it would require unanimous agreement (of the 27 EU members, because the ECB mandate is defined by a provision of the Maastricht treaty).
- Second, beyond the mandate a key reason why the ECB is uncomfortable buying government paper is that unlike the Fed when it buys US treasury bonds or the Bank of England when it buys gilts, such a move inevitably involves distributional dimensions. Should it incur losses on its bond portfolio (not an abstract possibility since it has already incurred losses on its purchases), the ECB would have to request from its shareholders the injection of additional capital, thereby becoming the vehicle for a transfer in favour of the countries benefitting from the purchases.
- Third, the ECB does not have the right governance for deciding on such actions. Within its governing council, all governors of national central banks have the same vote, unlike in a shareholder-based organisation. A coalition of small-country governors could thus theoretically trigger intervention in favour of their countries at the expense of the larger countries which would contribute the bulk of recapitalisation.
- Fourth, unconditional support, or support associated with weak conditionality, is a recipe

for creating moral hazard, as illustrated by the Italian parliamentary coalition's response to the initiation of bond purchases by the ECB: it took only days for it to backtrack (temporarily at least) on its fiscal commitments. The problem for the ECB, however, is that it is not equipped to exercise conditionality. Venturing into this field is a risky strategy for an institution whose independence hinges on the specified character of its mandate.

None of these arguments is final enough to prevent action in emergencies. But taken together they suggest that there are significant legal and political obstacles to giving the ECB a role equivalent to those played by other major central banks. Even assuming the Governing Council would agree on playing this role, its commitment would most probably lack the credibility that is required to make this strategy effective, because markets would anticipate the obstacles and the limitations they would imply.

Break the banking crisis-sovereign crisis vicious circle: (a) regulatory reforms

It has been long known that because it rules out the possibility of inflating away crises, monetary union necessarily increases the risk of sovereign default. In the same way that countries that borrow in foreign currency are more prone to default, a country that borrows in a currency that it does not control is also more prone to default. This was indeed the very rationale behind the prohibition of excessive deficits and the surveillance of national budgetary policies. Long before the fact, however, scholars such as Barry Eichengreen and Charles Wyplosz (1998) had described how a sovereign crisis in the euro area would spill over into the banking system and the other sovereigns. Their conclusion was that the efficient policy response would be "to tighten supervision and inspection of European banks rather than placing fiscal authorities in a straightjacket".

'There are significant legal and political obstacles to giving the ECB a role equivalent to those played by other major central banks. Even assuming the Governing Council would agree to play this role, its commitment would most probably lack the credibility that is required.'

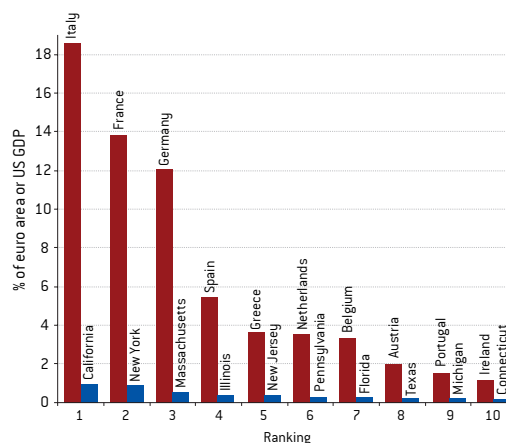
Until very recently, however, bank and insurance regulation overlooked this logic. As already discussed, exposure to a sovereign was considered safe but there were furthermore no limits to exposure to a particular sovereign and as a consequence, banks and insurers were not given incentives to diversify. Consistent with the recognition that sovereign bonds are not risk-free, a case can therefore be made for reforming prudential regulation in order to limit bank (and insurance) exposure to a single borrower.

Several caveats must however be introduced:

- First, such a reform amounts to a fundamental transformation of the financial systems of euro-area countries. These are mostly bank-based systems (rather than market-based systems) and banks were used to considering the government bond as the ultimate safe asset. A different treatment of the government bond would entail a chain of transformations of major significance, affecting for example the entire structure of pension funds assets.
- Second, diversification would merely distribute the risk more widely within the euro area. While it would help break the national banks-sovereign vicious circle, it would not make default innocuous. The often-made comparison with the US and the suggestion that adequate regulation would allow the euro area to treat a sovereign debt restructuring as a minor event is largely misleading. The default of California, the largest US state, would indeed be a relatively minor financial event as its total debt amounts to less than one per cent of US GDP. By contrast the default of Italy, the country with the largest debt in the euro area, would be a major shock whatever the distribution of Italian bond holdings because its debt amounts to 18 per cent of euro-area GDP (Figure 10). In fact even Ireland, which ranks tenth in the euro area by size of its public debt, has a greater debt as a proportion of the monetary area's GDP than California. No financial tinkering will make the default of a medium-sized euro-area member a minor financial event.

At any rate this diversification is far from proceeding smoothly. As discussed in the

Figure 10: Relative size of state/country public debts, US and euro area



Source: Bruegel based on Eurostat, US Census.

previous section, by mid-2011 banks had become more, rather than less exposed to their own sovereigns. Since they were asked in autumn 2011 by the European Banking Authority to disclose their holdings of government debt and value them at market prices, many bankers in the euro area have embarked on a precipitous disposal of government securities, which they now see as reputationally damaging as well as a source of earning volatility. As a consequence, concerns have mounted about the ability of southern European sovereigns to refinance themselves on bond markets.

It may therefore be desirable to change the status of government debt in the euro-area financial system but it would be a mistake to assume that this can be a quick, easy and adequate process.

Break the banking crisis-sovereign crisis vicious circle: (b) a banking federation

The other aspect to banking reform would be to move both the supervision of large banks and the responsibility for rescuing them to European level, as advocated for several years by many independent observers and scholars (see for example Véron, 2007). Mutualisation would end the mismatch between tax revenues and the states' potential responsibilities, would help reduce states' vulnerability in the face of banking crises, and would therefore alleviate concerns about their solvency.

This reform would require creating fiscal capacity at European level, firstly by assigning to the European Financial Stability Facility the responsibility for backstopping national deposit insurance schemes (Véron, 2011), and secondly by creating a permanent European Deposit Insurance Corporation financed by banks but benefitting from a backstop provided by the official sector. To this end Marzinotto, Sapir and Wolff (2011) propose to give the euro area the right to levy taxes within the limit of 1 or 2 percent of GDP. If exclusively devoted to this end, a limited tax capacity of this sort would suffice to provide a large enough and therefore credible backstop.

The dispute over the distribution of supervisory and rescue responsibilities has been going on for two decades. Advocates of European integration and outside observers who assess arrangements from an consistency perspective, have consistently argued in favour of giving the European level more responsibilities for banks of pan-European dimension, without any significant impact until the 2008 crisis. The creation of the European Banking Authority and the European Systemic Risk Board are significant steps in the direction of a banking federation but thus far, governments have consistently rejected any move that potentially implies mutualising budgetary resources. There is no indication that they are willing to change attitude.

Establish a fiscal union

The third solution is to create a fiscal union among the members of the euro area. This is an old proposal, indeed a very old one as it was part of the 1970 Werner report, the first blueprint for creating a monetary union in Europe. At the time it was thought, essentially on stabilisation and distribution grounds, that a monetary union could only be sustained if accompanied by the creation of a federal budget. When the euro was created, however, it was not accompanied by any increase in the (very small) EU budget.

The fiscal union idea has now come back in very different clothes. The question policymakers have been debating since spring 2011 is not whether to increase public spending at euro-area level, but rather if there should be both a tighter common

fiscal framework and a mutual guarantee of part of the public debt. Instead of maintaining the responsibility of each country for its own debt, as enshrined in the current treaty, debt would be issued in the form of 'Eurobonds' benefitting from mutual guarantee (all participating states would technically be joint and several liable). As a quid pro quo, states would have to lose the freedom to issue debt at will (subject only to ex-post sanction in case of infringement of common rules) and they would need to accept submission of their budgets for ex-ante approval. Should a draft budget fail to respect common principles, it could be vetoed by partner countries before entering into force.

Different variants of Eurobonds have been proposed, from the original Blue Bond/Red Bond proposal of Delpa and von Weizsäcker (2010) to the Redemption bonds of the German Council of Economic Experts (2011) and the Eurobills of Hellwig and Philippon (2011). The European Commission (2011) has outlined what it calls 'stability bonds'. What these proposals have in common is that they all envisage the creation of a class of assets benefitting from the joint guarantee of participating governments¹⁵. In the case of default by one, the guarantee would be invoked and the other governments would assume the corresponding liability. This would make these assets both super-safe and representative of the euro area as whole. They would also be liquid because of the large size of the corresponding market. It is therefore expected that overseas investors would, eventually at least, find them attractive.

Eurobonds would in principle have three types of benefits. First a new, safer asset class would be created. Eurobonds should constitute the prime investment vehicle for banks and other investors in search of safety. Second, states able to issue under the scheme would benefit from favourable borrowing conditions. Banks would be more secure and states would be protected from self-fulfilling solvency crises. Third, by subscribing to Eurobonds and their necessary counterpart – a thorough scrutiny of national public finances – the members of the euro area would signal their willingness to accept the full consequences of participation in the monetary union.

15. The Commission considers also limited guarantee as an option.

It should be noted that the first benefit could also be secured without Eurobonds through the creation of synthetic asset-based securities, as proposed by Brunnermeier *et al* (2011) under the name of *ESBies*. As for the second, it should be observed that (abstracting from liquidity and incentive effects) a Blue Bond scheme à la Delpla-Weizsäcker would not change a sovereign's total cost of borrowing: the yield on the blue part would decrease and that on the red part would increase, leaving the average constant¹⁶. However it would protect states from acute funding crises as they would always retain access to issuance, at least for amounts corresponding to the redemption of maturing blue debt.

There are significant obstacles to Eurobonds. First, Eurobonds and ex-ante approval would represent a major step in the process of European integration. Such a step would require a significant revision of the treaty in order to substitute for the current 'no-responsibility principle' a different principle based on the combination of solidarity and ex-ante approval. This ex-ante approval would have to be legally and effectively enforceable in case of disagreement between the European and national levels.

Second, the potential benefits from Eurobonds would be unevenly distributed. Germany in particular benefits from a safe-haven effect and would almost certainly experience higher borrowing costs, with consequences for its public finances. From a German perspective such a choice could therefore only make sense as an investment into the sustainability and the stability of the euro area. For Germany to agree on making such an investment, firm guarantees from its partners would inevitably be required, starting with the acceptance of a surrender of budgetary sovereignty.

Third and not least, a system of ex-ante control and veto, without which no Eurobond could be lastingly stable, requires political integration. The body exercising the veto could not possibly be a

partner country, but would rather be an EU/euro-area body, either the Court of Justice or a parliamentary body consisting of representatives from the European Parliament and national parliaments. This EU body would rely on the primacy of European law over public law, but a degree of political integration would also be required to confer legitimacy on the potential veto of a national parliament vote. In order to provide stability, Eurobonds would therefore need to be supported by a new institutional framework. Without an agreement to create such a framework, Germany's reluctance about Eurobonds – or at least its great caution – is therefore understandable, especially in view of France's refusal to contemplate federalist solutions¹⁷.

Against this background proposals such as those of the German Council of Economic Experts (2011) and of Hellwig and Philippon (2011) have the significant advantage of being reversible. Unlike the move to a fully-fledged Blue Bonds scheme, they could be implemented on an experimental basis and be used to build trust – arguably the scarcest commodity on the European scene.

5 CONCLUSIONS

The euro area is fighting for survival and its leaders have given every possible indication that they intend to do 'whatever it takes' to save it. Yet their discussions and the search for solutions are based on a partial diagnosis that puts excessive emphasis on the lack of enforcement of the existing fiscal rules. True, poor enforcement has been one of the causes of the current difficulties. True, ambitious budgetary consolidation is required. But the budgetary dimension is by no means the only one, not even the most important one¹⁸. Europe's fiscal obsession has deep roots in the history of EMU, but to look at the problems through the fiscal lens only is a recipe for disappointment.

The European leaders would be well advised to

16. This is a consequence of the Modigliani-Miller theorem.

17. This reluctance was very explicitly stated in Nicolas Sarkozy's speech in Toulon on 1 December 2011.

18. One should also distinguish between problems in the enforcement of the SGP and problems in the design of the fiscal rule. Arguably, the latter are at least as important as the former.

'The euro area is fighting for survival, yet the search for solutions is based on a partial diagnosis that puts excessive emphasis on the lack of enforcement of the existing fiscal rules. But the budgetary dimension is by no means the only one, not even the most important one.'

take a broader view and contemplate reforms that would address the inherent weaknesses of the euro area that were revealed by the crisis.

In this paper I have emphasised that an impossible trinity of no-coresponsibility over public debt, strict no-monetary financing and bank-sovereign interdependence is at the core of euro-area vulnerability. I have assessed the corresponding three options for reform – a broader mandate for the ECB, the building of a banking federation, and fiscal union with common bonds – and I have argued that none is easy. Economic, legal and political obstacles make all three difficult. This explains why Europe is agonising over reform choices.

The two important questions for the future are, first, if it would be sufficient to concentrate on one of the three options only and, second, what is their relative feasibility.

Progress on any of the three fronts would help address the fragility of EMU. But the options outlined in this paper are by no means contradictory. At the stage the crisis has reached, comprehensive action is desirable, if only because of inevitable delays in the transition to a new regime. The only change that can be introduced almost overnight is the introduction of a new ECB policy stance, but such a stance without a change in the mandate and/or the governance of the central bank would hardly be regarded as permanent by markets. The other changes, the building of a banking federation and the establishment of a fiscal union, are of a medium-term nature. Political agreement to act can be reached in the short term, but implementation is bound to take years and credibility will only build up gradually. Against the background of widespread doubts about the viability of the euro area, the unavailability of clear-cut solutions contributes to lingering policy uncertainty. A strong case can therefore be made for comprehensive reform involving simultaneous moves on more than one front.

Turning to the feasibility of the three options, the least feasible is probably to change the mandate of the ECB in a way that would lastingly affect the rules of the game and their perception by markets. It is one thing for the ECB to possibly step up its intervention in response to an escalation of financial tensions, and it is another to let markets understand that it would permanently behave in a way that ensures continued access to liquidity for solvent sovereigns. Even a change in the mandate, to include financial stability, would not be enough to quell impediments to future action resulting from strong reservations in important parts of the Eurosystem, and tensions between the governance structure and the nature of the decisions to be taken. Effective deterrence implies that one is able to credibly commit overwhelming forces, and the ECB is simply not in a position to give such a commitment.

The building of a banking federation involves more than one reform. The setting of regulatory limits on bank exposure to any single borrower, euro-area or EU supervision of large banks, the creation of a common deposit insurance scheme backstopped by a common fiscal resource, and, in the medium run, support for national insurance schemes by the EFSF/ESM, are important aspects. None of these reforms amounts to an overhaul of the EMU structure; rather they are mostly natural consequences of the single currency that have been delayed for political reasons. However, the process of financial reform is bound to be complex and political economy obstacles are significant. Governments have strong incentive to resist this move. As noted by Carmen Reinhart and Belen Sbrancia (2011), periods of public deleveraging have historically been accompanied by financial repression, which is exactly opposite to what the envisaged transformation is about. Furthermore, any reform in this field raises the sensitive issue of EU versus euro-area responsibility. For these reasons incremental progress is likely, but a breakthrough is less likely.

This leaves fiscal union as the field in which

'Against the background of widespread doubts about the viability of the euro area, the lack of clear-cut solutions contributes to lingering policy uncertainty. A strong case can therefore be made for comprehensive reform involving simultaneous moves on more than one front.'

decisions by European leaders could change the game and create the basis for a return to stability. True, there are major political obstacles on the road, not least because, as indicated in this paper, the issuance of Eurobonds implies ex-ante approval of national budgets, which in turn implies a form of political union. By the same token, however, a decision to move in this direction would portend a stronger EMU and would be regarded in this way by markets and the ECB. One possibility

would be to introduce a limited, experimental scheme that would rebuild trust. This would also leave time for negotiations on political union.

There is not only one way out of the euro crisis. There are several possible choices, or at least several possible short-term priorities. But one at least has to be selected for implementation, because to not choose any would amount to keeping the euro area in a state of dangerous fragility.

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