

*“Now, here, you see, it takes all the running you can do to keep in the same place,”* said the [Red] Queen in Lewis Carroll’s *Through the Looking Glass*.

In 2008 and 2009, the spectre of global economic catastrophe triggered an internationally-coordinated fiscal stimulus<sup>1</sup>. Virtually every government in the euro area joined to revive economic activity by either lowering tax rates or increasing public spending. This much-needed stimulus was reflected in larger fiscal deficits (Figure 1(a) displays the size and timing of the stimulus by the United States and the euro area). Within the euro area, Ireland was an exception, as it was already dealing with its banking crisis (Figure 1(b)).

In October 2009, the spectacular magnitude of the Greek fiscal deficit was revealed. The initial reaction was to treat it as a Greek problem, which would be addressed by Greek fiscal austerity. But Greece had an important cognitive effect: it served to emphasise the growing concern with rising public debt in the ‘advanced’ economic world.

There was reason to be concerned. The public debt-to-GDP ratios rose in most advanced countries once the crisis started. And the debt ratios in several euro area economies were heading rapidly towards the 100 percent mark (Figure 2) – that threshold being significant because lowering the ratio to below 100 percent has historically presented important policy challenges (IMF, 2012).

The debt burden can be lowered either by raising inflation and GDP growth or by pursuing fiscal austerity. In 2010, the Americans continued a substantial fiscal stimulus to sustain their economic recovery. In contrast, virtually every country in the euro area started tightening the fiscal belt – the important exception was Germany, where consolidation started a year later. Although the euro area’s shift to austerity was prompted by Greece, it was reinforced during the course of 2010 by the perception that the global near-economic-disaster had been averted and further stimulus was unnecessary – and, as such, could no longer be politically sustained. Many economists warned that it was too early to declare victory, but the fears of a Greece-like economic collapse were invoked and spread rapidly across the euro area, and beyond.

For three crucial years – between 2011 and 2013 – fiscal tightening caused a severe drag on the euro area’s economic growth and thus nullified the intended goal of reducing public debt burdens. The consequences were severe for three reasons. First, the euro area’s fiscal austerity came in the context of global austerity and economic weakness. Hence, the ability to grow by exporting to others was compromised. Secondly, European economies are heavily engaged in trade with each other (Figure 3); hence, as any one country slowed down, its weaker import demand hurt growth elsewhere. And, finally, while the US and the UK were able to partly offset the contractionary fiscal consolidation with

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<sup>1</sup> The stimulus is measured as the change in the so-called ‘structural’ fiscal balance. When a country faces economic distress, its fiscal balance naturally deteriorates since the tax obligations to the government decline and the government’s spending on social safety nets increases. The ‘structural’ balance nets out such automatic changes. Hence, the change in the structural balance measures the government’s extra injection to stimulate economic recovery.

aggressive monetary policy and efforts to rehabilitate their banking sectors, the euro area's monetary policy was passive and banking sector problems were allowed to fester<sup>2</sup>.

Thus, the euro-area economies, especially those that experienced the greatest market stress, are in something of a trap. Slow growth and low inflation have kept their debt ratios rising or high. But precisely for that reason, they are expected to maintain fiscal austerity, which will dampen growth and inflation and keep debt ratios elevated.

Although prompted by Greece, the euro-area's fiscal policy response to the crisis reflected the constraints imposed by the Maastricht Treaty. That political contract, which gave birth to the euro, did not prepare for the risk that a member state may experience deep fiscal distress. In principle, there was a provision. Because a member state was prohibited from repaying another's member state's debt obligations, one possibility was that private creditors would bear losses and thus relieve some of the distressed country's debt burden. But the framers of the Treaty viewed financial markets as fickle and untrustworthy and so created fiscal rules intended to ensure steadfast discipline. The subtext of the Treaty was that the rules would eliminate the likelihood of fiscal stress – and hence there would be no need for a financial safety net or for default on obligations to private creditors. But that finely balanced construction left no latitude for the possibility that a country may live beyond its means or circumstances may unexpectedly turn adverse.

In this sense, the euro was set up as a common currency of an incomplete monetary union. The sovereign member states of this union surrendered the exercise of independent monetary policy to the European Central Bank without clear domestic alternatives to deal with economic distress. When faced with high unemployment risk at home, workers in Europe have traditionally not moved in significant numbers to other European nations with better employment prospects. And for fear of having to pay for the mistakes of others, the members of the monetary union were unwilling at Maastricht to contribute to a pool of sizeable centralised resources to alleviate acute pressures in member nations. Thus, monetary sovereignty was given up but fiscal responsibility remained firmly with the nation state.

This had profound implications for macroeconomic management. To maintain national fiscal insulation, member nations were required to wear a fiscal straitjacket overlaid on the monetary straitjacket of a common currency. Thus, precisely when fiscal policy was needed to dig an economy out of its economic troubles, the rules required the opposite.

Some had expected (hoped) that, as the crisis unfolded, the sense of European solidarity would foster greater tolerance for sharing the distress of other euro-area member states. However, that did not happen. Moreover, the fuzzy option of imposing losses on private creditors was taken off the table. The absence of any vent for the stress created an untenable situation. After much hesitation and delays, help came in the form of official loans. The legal requirement was that those receiving the assistance would repay the debt and, thus, bear the ultimate burden of their distress.

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<sup>2</sup> In May 2014, over five years after the US Federal Reserve had brought its policy rate to near zero and started the first of its three quantitative easing programs, and well after deflationary tendencies in the euro area were evident, the ECB was still publicly debating if it needed to do more. Through the crisis, the ECB provided virtually no stimulus but rather acted as a safety net against bank and sovereign insolvency (Mody, 2014c).

Thus, instead of initiating meaningful change, the crisis reinforced the national interests and preferences that had led to the euro area's creation as an incomplete monetary union. Indeed, the emphasis on national fiscal discipline – austerity – was emphasised through several initiatives after 2010. And every effort towards sharing risks within a fiscal union was eventually discarded or has remained in limbo.

But the combination of official loans and fiscal austerity proved insufficient at critical points in the crisis. That led to a further improvisation. The repayment terms of official loans were eased. Once again, the strategy was to spread out the help in dribbles, preventing a decisive resolution of the stress. Finally, with Germany remaining fiercely protective of its pocketbook, an uneasy alliance evolved between the German Chancellor, Angela Merkel, and the President of the ECB, first Jean-Claude Trichet and then his successor, Mario Draghi. This alliance now effectively governs euro-area macroeconomic policy. In deference to the ECB, Chancellor Merkel had to rein in her correct instinct that debt restructuring must be a necessary element of euro area's fiscal adjustment. In turn, the ECB offered its deeper pockets as financial safety nets. As a consequence, the ECB has acquired an intrusive role in the fiscal management of member states.

The rest of this essay is divided into two main parts. The next section documents the extraordinary austerity in the euro area after 2010. That austerity materially lowered economic growth, with the consequence that – for many countries – the challenge of reducing debt is greater today than in 2010. Continuation of an austerity-only policy promises continued anaemic growth, low inflation, and high debt burdens, contributing to persistent financial vulnerabilities in the euro area. The other substantive section describes the evolution of the crisis management framework. Because debt restructuring remains anathema and a fiscal union is politically impossible, the financial safety net is a combination of financial assistance through the European Stability Mechanism (ESM), backstopped by the ECB's Outright Monetary Transactions Programme. The OMT is untested – and, given its economic, political, and legal weaknesses, it is best that it remains untested. In the meantime, a new Europhoria may cause imprudent lending and create new financial fragilities. By way of conclusion, the paper speculates on future scenarios.

## Austerity

Before the onset of the crisis, euro-area countries were prone to somewhat greater austerity than other advanced economies. Specifically, they had a mildly stronger tendency to increase their primary budget surpluses – the fiscal balances that do not include interest payments – in response to higher debt ratios. But after 2010, the euro-area countries dramatically increased their response to higher debt. Indeed, while the euro-area aversion to debt went up, other advanced economies, on average, paid less attention to debt reduction.

The focus on debt reduction in the euro area was not restricted to countries with higher debt ratios. Even the Netherlands, which had a modest debt ratio of around 75 percent of GDP, engaged in the same austerity drive as did the more heavily-indebted Italy<sup>3</sup>. In the euro area, austerity was a deeply ingrained instinct.

The fiscal rules crafted at Maastricht require that the budget deficit be less than 3 percent of GDP and the public debt ratio remain below 60 percent of GDP (or, if it is above, it should be declining to that level). Before the crisis, the benchmarks were flouted all the time and created a system of continuous game-playing and deception. Nevertheless, the countries did internalise a deficit reduction norm. One the crisis started, that norm was geared up as the 'creditor' countries made clear that they would not pay for the mistakes of others.

To be clear, austerity does eventually reduce the debt burden. But it does so at a cost. The cost can be especially high if the austerity is deep and persistent. Economic growth is reduced and inflation is dampened, both of which weaken the ability to repay debt. And because the debt burden remains elevated, the austerity continues, reinforcing the counterproductive cycle. Extended austerity can also cause long-term damage since workers' skills atrophy and the incentives to invest decline. These considerations are all the more serious in countries with high economic distress and low growth potential.

In two important papers, Henning Bohn [1995, 1998] proposed a framework to assess the deference accorded to debt reduction. This requires taking account of the country's output gap, the difference between its actual and potential output. When the output gap increases, the economic strength generates more fiscal revenues and public spending on social safety nets declines: the primary surplus increases. Over and beyond this automatic tendency for temporary movements in the primary surplus, Bohn pointed out, the primary balance must rise to repay a rising debt-to-GDP ratio. A higher primary surplus in response to increased debt ensures that the country is 'solvent', that it will eventually repay its debts.

Table 1 reports the regression estimates for a panel of advanced economies for the years before and after the Great Recession. The primary balance is regressed on the output gap in the same year and the public debt-to-GDP ratio at the end of the previous year. All data are from the IMF's *World Economic*

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<sup>3</sup> The debt-to-GDP ratios for the Netherlands were revised downwards to below 70 percent. Because the subsequent analysis uses earlier projections, for which revised figures are not available, all data on the Netherlands are based on the IMF's WEO Database through April 2014. Since this analysis relies on changes over time, the presumption is that the past and forecast changes would have been the same even with the revised series.

*Outlook*<sup>4</sup>. The econometric estimates correct for autocorrelation. While the results are influenced to some extent by the exclusion or inclusion of particular countries, the spirit of the results and the inferences drawn remain valid.

Consider first the period before the crisis. The years 2002-07 were economically buoyant, sometimes described as the Greenspan Put era, when many believed that monetary policy would contain prospective damage to the economy and financial markets. Even during these years, there was a tendency for the primary surplus to rise in response to higher debt. Figure 4 reports the 'rolling' coefficients on the debt-to-GDP ratio (based in the regression specification in Table 1), with the coefficient plotted for the five-year period ending in that year. A ten percentage point increase in the debt ratio was accompanied by about a ½ percentage point increase in the primary surplus-to-GDP ratio. The countries in the euro area tended to be just slightly more responsive to a rise in the debt ratio. However, that minor difference was not statistically significant.

As noted above, the period after the crisis started had two policy phases. The coordinated stimulus was injected in 2009 and the world's major economies continued it in 2010. However, from 2011-15, the evidence is clear: the euro area responded with ever greater austerity as public debt increased. The euro-area primary surplus response to increased debt rose to 0.2 in 2014, before falling in 2015.

Elsewhere in the advanced economies, the rise was considerably smaller, as if in recognition of the extraordinary times and the costs that austerity imposes when the economy is already stressed. To be sure, there were variations among the non-euro area countries. But where the fiscal stimulus was pulled back, as in the United States in 2011 and (even earlier) in the United Kingdom, other stimulative policies (monetary policy and bank recapitalisation) were pursued more aggressively to compensate.

Figure 5 explores the euro-area response more closely. Controlling for the influence of the output gap, the figure shows the (partial) relationship between the primary surplus and public debt ratio during 2008-13. To compare the responses across countries with different debt ratios, the mean debt-to-GDP ratio for each country is set to zero. Notice that the proportionate increase in primary surplus to rising debt was the same in the Netherlands as in Italy. This was so even though the Dutch debt ratio (reported at the time at about 75 percent of GDP) was much lower than the Italian debt ratio (about 135 percent of GDP). In both cases, even as they implemented greater austerity, their debt ratios continued to rise. It is, as if, they were running faster but yet falling behind.

The extent to which the debt continues to rise despite an increase in the primary surplus is determined by the so-called 'fiscal multiplier.' The multiplier measures the contraction in growth due to the austerity. Today, the overwhelming evidence is that these multipliers are large especially in conditions of deep economic stress.

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<sup>4</sup> The euro-area countries in the sample are: Austria, Belgium, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, Portugal, and Spain. Slovenia is in the euro area from 2007, the Slovak Republic from 2009, and Estonia from 2011. The non-euro area countries include: Australia, Canada, Denmark, Japan, Korea, Netherlands, New Zealand, Slovak Republic, Slovenia, Sweden, United Kingdom, and United States.

In October 2012, Olivier Blanchard and Daniel Leigh of the International Monetary Fund published the finding that austerity had caused a significant reduction in the euro area's growth. The near instantaneous reaction of European authorities was to discredit that conclusion. The conclusion could not be right, they said, because austerity builds 'confidence' in the sustainability of public finances and, thereby, stimulates investment and growth. Olli Rehn, Vice President of the European Commission, in an open letter, complained that the IMF research had *"not been helpful"*. Even more than the logic and evidence, he was concerned that the European institutional process would be undermined. By questioning the premise that austerity delivers, the IMF, he said, had worked to *"erode the confidence that we have painstakingly built up over the past years in numerous late-night meetings"*.

But the empirical evidence was clear: any confidence-boosting effect was overwhelmed by the sharp contraction in incomes and demand. Blanchard and Leigh (2013a) published a more detailed analysis that confirmed their original findings. Several other studies also find that fiscal multipliers are high during recessions and, therefore, fiscal tightening will cause a sharp slowdown in growth (Auerbach and Gorodnichenko, 2012; Batini *et al*, 2012; and Baum *et al*, 2012). Riera-Crichton *et al* (2014) go one step further. Because multipliers are large during recessions, fiscal stimulus can help, but tightening can cause particularly severe output loss. The central theme of these studies is that when the economy is weak, adjusting to that weakness through normal market mechanisms is compromised. Thus, efforts to revive employment through lower wage growth can hurt the ability of households to repay previously contracted debt; to meet their obligations, households save more, which reduces consumption demand and growth. Moreover, if the central bank has reduced interest rates to zero, its ability to provide stimulus is limited. For this reason, if fiscal spending is also cut back sharply, the decline in output can be large.

If, in addition, the fiscal tightening is attempted in a sustained drive, a simple arithmetic leads to persistently high (and rising) debt ratios (as Eyraud and Weber, 2013, demonstrate). Growth never gets a chance to reduce the debt burden. And, beyond that arithmetic, there are deeper long-term consequences. Blanchard and Leigh (2013b) point out that prolonged fiscal coordination causes various 'vicious cycles' to set in: higher long-term unemployment and a persistent fall in investment reduce the economy's growth capacity, causing debt ratios to remain elevated.

It is early to judge the long-term effects, but the evidence on the short-term consequences of fiscal austerity in the euro area is clear. The analysis reported here is a graphical presentation of the Blanchard and Leigh (2012 and 2013a) procedure. The first step of their analysis is to note that growth projections have been steadily lowered: these are shown for the euro area, Italy and the Netherlands (Figure 6a-6c). In April 2011, the expectation was that the economic slowdown would be modest and the GDP growth rate would bounce back. Not only did the short-term projections prove to be optimistic, but the longer-term growth outlook has also been gradually scaled down.

Blanchard and Leigh ask if the 'unexpected' slowdown could, in part, be explained by the pace of fiscal consolidation. In other words, could the failure to predict the severity of the growth slowdown in 2012 and 2013 be related to larger than anticipated consequences ('multipliers') of fiscal austerity? That

question is posed in Figure 7, which shows the relationship between fiscal consolidation from 2011 to 2013 and the 'unexpected' slowdown during this period (the 'unexpected' slowdown being measured as the difference between annual average growth rate anticipated in April 2011 over the years 2011-13 and the actual growth rate). The negative relationship confirms that the shortfall in growth was greater where fiscal consolidation was larger.

Notice that both Italy and the Netherlands fall on this regression line. In other words, both had about the same-sized fiscal multiplier. With both displaying the same tendency to respond to rising debt – albeit at very different ratios – they both sacrificed short-term growth to the same extent. In contrast, fiscal consolidation in the US was not as costly in terms of lost short-term growth. This was possibly because monetary policy was more aggressive and because the effort to heal banks came early in the crisis. The United Kingdom is also somewhat above the regression line, perhaps for the same reasons.

Some might argue that growth in the euro area was held back for reasons other than fiscal austerity. In particular, a sharp reversal occurred in capital flows that had been financing large current account deficits. The argument, thus, is that countries that had received large financial inflows before the onset of the crisis were suddenly required to repay the amounts due and had no choice but to reduce domestic spending.

Blanchard and Leigh (2013) examined this possibility and found that controlling for the size of the pre-crisis current account deficit does not change the conclusion that fiscal austerity was amplified by a large fiscal multiplier. This is not a surprise. The outflow of private capital flows was compensated for by public capital inflows. Accominotti and Eichengreen (2013) find: *“In 2011 indeed, net official inflows to the GIIPS [Greece, Ireland, Italy, Portugal, and Spain] amounted to 12.4% of their collective GDP and more than compensated for net private outflows (8.3% of GDP). This explains how these countries could continue to run current account deficits, at least temporarily, despite the crisis”*. Thus, in 2011, when the most intense phase of austerity started, the pressure was not from large capital outflows.

Thus the evidence is clear and the assessment is rather pessimistic. After the enormously costly austerity, the debt ratios have gone up in most euro-area countries (Figure 8 reports the rise for the Netherlands and Italy). And just as growth has been lower than projected, the debt ratios have been higher than projected. The latest projections continue to suggest that the debt ratios will soon stabilise and decline; but these projections presume a further increase in the primary surplus, maintained over a longer period. Ghosh *et al* (2013) warn that the presumption of persistent high primary surpluses runs counter to the history of the most indebted countries and therefore may not be politically viable. They find that *“...while fiscal effort is generally increasing in the debt level, it eventually peters out as it becomes increasingly difficult to keep raising taxes or cutting non-interest expenditures”*<sup>5</sup>.

A further consequence of the single-minded focus on austerity is that private debt burdens have tended to remain high. Again, a comparison with the United States is helpful. Households in the United States have traditionally been more indebted relative to their incomes than euro-area households

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<sup>5</sup> Ghosh *et al*, (2013), p. F5.

(Figure 9). This reflects easier lending practices in the US but is also sustained by the expectation of higher growth. Since the onset of the crisis, the average household debt ratio in the US has fallen substantially and is now approaching the ratio in the euro area, where it has remained unchanged.

Three factors have contributed to lowering the debt ratio in the United States. First, the US has traditionally had greater tolerance for default: and some households were able to walk away from their some of their debt obligations. Second, although extensive official relief for homeowners facing foreclosure did not materialise, a limited aid programme helped ease the terms of unaffordable loans. And, third, greater economic stimulus helped raise disposable incomes. Hence, in the United States, households now have lower per capita debt and higher per capita income, both contributing to lower debt-to-income ratios virtually across the entire country (Figure 10a).

In all these respects, the euro area lagged far behind. There was little direct relief to make a dent in mortgage debt; and due to the austerity-induced slowdown in growth, household disposable incomes stagnated or fell. Thus, while Irish and Spanish households worked to repay their debt obligations, their debt-income ratios rose in the initial phase of the crisis because disposable incomes fell. Even after the subsequent decline, the debt-to-disposable income ratios in 2012 were close to their 2008 levels (Figure 10b). In the Netherlands, households have taken on more debt even as their incomes have fallen.

Altogether, then, the euro-area crisis persisted in significant measure because of the single-minded focus on austerity. This focus on austerity comes from the German-inspired fiscal rules agreed to at Maastricht in 1992 and implemented with the framework of the Stability and Growth Pact (SGP) agreed to in 1997. While more refined rules were formulated during the course of the crisis, the requirement that fiscal deficits not exceed 3 percent of GDP remained unchanging and binding. This focal point was secured by the German-ECB alliance. For Germany, the limit on fiscal deficits was the presumed protection against the risk of paying the bills of other profligate governments. The ECB was influenced by both the traditional central bank aversion to fiscal indiscipline plus the German influence in its operation.

But, of course, the SGP rules were known to be economic nonsense. As Eichengreen (2003) noted, they bore no relationship to the goal of achieving debt sustainability. Moreover, they imposed a one-size-fits-all austerity in times of distress. The former President of the European Commission, Romano Prodi, described them as “*stupid.*” Prodi was, of course, seeking discretionary authority for the Commission to make judgements appropriate to country and European economic conditions<sup>6</sup>. For some member nations, such loss of control to the Commission was, and is, unacceptable. Stupid though the rules may be, they are the only feasible equilibrium that balances national interests.

Thus, with weak monetary policy stimulus and delays in healing the banks, fiscal austerity was asked to shoulder the burden of controlling the rise in public debt. The Netherlands, in particular, engaged in gratuitous austerity. The pressure to lower the public debt ratio was not acute. And with high household debt burdens, fiscal stimulus was needed to spur income growth, strengthen debt repayment

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<sup>6</sup> See Osoborn (2002), Richeter (2002) and Paterson (2003).



capacity, and invigorate private spending. The one-size-fits-all fiscal policy, unmindful of the needs and capabilities of the country, added to the area-wide economic weakness. And the heavy trade traffic between the countries caused them to pull each other down.

### **Crisis management**

Between Greece in October 2009 and ECB President Mario Draghi's "*whatever it takes*" speech in July 2012, a make-shift emergency room was created to prevent a meltdown. But born of compromises and self-imposed constraints, the structure retains economic, political, and legal fragilities.

A reliable euro-area emergency management framework is not feasible because there are political limits to paying for the 'mistakes' of others. Even the Werner Report, the first blueprint for the monetary union, emphasised that central fiscal resources were needed to deal with events of national economic distress. But such a fiscal union to accompany the monetary union was politically impossible. National fiscal insulation is required by the 'no bailout' commitment in the Maastricht Treaty (Treaty of European Union) later incorporated in the current legal operational framework, the Lisbon Treaty (the Treaty on the Functioning of the European Union, the TFEU).

The Treaties do allow for – even encourage – imposing losses on private creditors. The ability to do so would simulate a fiscal union since it would provide relief to countries in distress. A reduction in debt repayment obligations is rightly perceived as – and, in practice is – unfair. But it allows both borrowers and lenders to abandon a fractious relationship and begin afresh (see Mody, 2013, for a review of the relevant literature and Mian and Sufi, 2014 for a recent application of this principle). This ability to start again with reduced debt burdens is all the more important in conditions of weak economic growth. However, this option was also forsaken in the euro area, typically on the grounds of contagion – financial markets would panic causing indiscriminate damage.

This dual restraint – no fiscal union and no losses on private creditors – has had three implications. First, as discussed extensively above, fiscal austerity is central to crisis management in the euro area. It is as if the treatment for the heart attack is principally a strict diet to reduce weight. Second, because this is an untenable basis for recovery from a crisis, rhetoric plays an unusually important role in the European policy process. Thus, with limited options for dealing with the real problems, the tendency is to delay action while cloaking the delays with high-minded projections of progress and sentiments of European solidarity. And when the limits to rhetoric run out, *ad-hoc* technocratic solutions without political legitimacy are the outcome. Finally, the political economy of the crisis management has centred on Germany, the euro area's presumptive paymaster and the European Central bank, the entity with virtually unlimited financing capability.

These themes are illustrated by Greece. The continuing effort to resolve the Greek crisis also created the precedents for the euro area's crisis management framework.

That Greece needed help was clear by late-2009. However, German Chancellor Angela Merkel, facing regional elections, remained steadfastly resistant to a Greek bailout (Schneider and Slantchev, 2014). The rhetoric was that Greece was taking necessary corrective actions and a bailout would not be necessary. Every sign of good news was viewed as a turning point. In early March, 2010, after the Greek government was able to sell its bonds to private investors, albeit at an increased premium, the *Wall Street Journal* reported:

*“The sale suggests that the European Union’s strategy for dealing with the Greek crisis by relying on rhetoric instead of direct intervention is working. [...] policy makers are concerned that rescuing Greece too soon would damage the euro in the long run by encouraging other countries to flout deficit rules. Though the EU has signaled it would step in to save Greece from default if necessary and has drawn up plans to do so, officials insist that such a step will be taken only as a last resort”<sup>7</sup>.*

That was only the first of other critical junctures when rhetoric did not work. A large financial package for Greece was assembled in April and the assistance was delivered on 10 May. The full package drew on the IMF’s resources but was mainly funded by euro-area member states, each contributing according to its equity share in the ECB’s capital. In July 2010, Christine Lagarde, who was France’s finance minister at the time, recognised the damage due to those initial delays, *“If we had been able to address it right from the start, say in February, I think we would have been able to prevent it from snowballing the way that it did”<sup>8</sup>.*

Greece was decisive. Along with the Greek bailout came a new financing facility – the European Financial Stability Facility (EFSF) – to lend to countries unable to borrow from private creditors and also a new crisis management team, the ‘troika’ – the European Commission, the ECB, and the IMF. This basic structure would be used for the unfolding crises in Ireland, Portugal, and Spain.

Greece also defined the application of the euro area’s ‘no bailout’ rules and asserted the primacy of fiscal austerity. The ‘no bailout’ criterion required that any official assistance be in the form of loans to be repaid. The loans were initially justified under Article 122 of the TFEU, which allowed for emergency assistance when a member state was faced with circumstances under beyond its control. This argument was obviously not tenable in the Greek case – after all, the Greeks had lived beyond their means and wilfully cooked the fiscal books for years – but that legal route had to do until a sounder structure was put in place.

Thus, Greece defined an important principle: loans would be provided to tide a country over its most stressful phase but because this did not reduce the country’s debt burden, the loans would be accompanied by redoubled fiscal austerity. The ‘no-bailout’ principle was technically maintained because the loans were to be repaid.

The Greek rescue should have been used to forcefully establish the other implication of the ‘no-bailout’ requirement: enforce quick and substantial losses on private creditors. The closest historical analogy is a similar decision by the US Congress in the 1840s to not bailout US states, which were then not able to repay their private creditors. The decision had unpleasant consequences. Even the states that did not default saw their interest rates rise. Dutch and British bankers cried ‘foul’ when the US federal government stood aside: they cut off the federal government’s credit in 1842 and declared it a rogue debtor for not meeting its ‘implicit’ obligations. But, as Henning and Kessler (2012, p. 12) write: *“The fiscal sovereignty of states, the other side of the no-bailout coin, was established.”*

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<sup>7</sup> Mollenkamp and Bryan-Low (2010).

<sup>8</sup> Schneider and Faiola (2010).

But the idea that private creditors should bear the risks of lending was never taken seriously in European policy circles – and, hence, not taken seriously by markets. The problem grows out of an essential distrust of financial markets. The official view was stated well by the Delors Committee, whose report in March 1989 became the guiding document for the design of the incomplete monetary union. Prepared under the chairmanship of Jacques Delors, the President of the European Commission, the Committee's Report said that markets are unreliable:

*"[...] market views about the creditworthiness of official borrowers tend to change abruptly and result in the closure of access to market financing. The constraints imposed by market forces might either be too slow and weak or too sudden and disruptive<sup>9</sup>.*

Hence, the report concluded, it was essential that countries operate under fiscal restraint under the European Commission's surveillance.

The emphasis on centralised surveillance signalled that some was in charge and that it would be an embarrassment if the system failed. Thus, in the years before the crisis, it made sense for financial markets to assume that countries would be bailed out by other member states and private creditors would be paid in full. For this reason, the risk premia on sovereign bonds – relative to German sovereign bonds – were virtually zero in the months before the crisis began. In mid-2007, the Irish sovereign actually paid a lower interest rate than the German sovereign, and Greece paid virtually no premium.

In early 2010, even after it was clear that the Greek problems would not be solved merely by fiscal discipline, the restructuring of private debt remained taboo. Many commentators urged a prompt restructuring of Greek public debt<sup>10</sup>. Among the clearest statements came from the *Wall Street Journal* on 30 April:

*"[Those] who dominate today's economic decision-making seem to believe that Greece merely has a liquidity problem that EU cash can solve. The unhappy reality is that Greece is busted and its political-economic model has reached a dead end<sup>11</sup>.*

Having concluded that Greece was insolvent, the article went on to say:

*"If a debt restructuring is inevitable, then it's far better to accept the pain now and get it over with. German and French banks would take losses, but those would be more bearable now that the world economy is recovering. If the banks do falter, then our guess is that European taxpayers would rather spend their money recapitalising those banks instead of backstopping the retirement benefits of Greek civil servants."*

Notice that this, coming from the well-known left-leaning financial newspaper, was not a cry for 'burning bondholders' to ease the burden on the most beleaguered Greeks who would otherwise bear the burden. No, it was a simple economic calculation: when debt restructuring is needed, it is better to do so early rather than let the problem fester. Otherwise, all suffer.

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<sup>9</sup> Delors (1989).

<sup>10</sup> The list of these commentators is ably documented in the IMF's *mea culpa* that came three years too late. See IMF (2013, p. 29, footnote 17).

<sup>11</sup> Wall Street Journal (2010).

On 9 May 2010, the IMF's Executive Directors protested when they gathered to approve the IMF's loan to Greece. Among them, the Indian Director, Arvind Virmani, submitted a stunningly prescient written statement:

*"The scale of the fiscal reduction without any monetary policy offset is unprecedented... (It) is a mammoth burden that the economy could hardly bear. Even if, arguably, the programme is successfully implemented, it could trigger a deflationary spiral of falling prices, falling employment, and falling fiscal revenues that could eventually undermine the programme itself. In this context, it is also necessary to ask if the magnitude of adjustment... is building in risk of programme failure and consequent payment standstill... There is concern that default/restructuring is inevitable"<sup>12</sup>.*

Susan Schadler, formerly a senior official in the IMF's European Department, later wrote that by lending to Greece without restructuring privately-held debt, the IMF had violated its own rules (Schadler, 2013). The IMF's staff had constructed 'baselines' in which debt could be deemed sustainable. But the staff also felt obliged to report that the baseline was implausible. That should normally have prevented the IMF from proceeding.

But at this stage, the claim was that markets would irrationally spread havoc. Falling in with the European orthodoxy, the IMF's management used a dodge to finesse the institution's rules. The plea was that restructuring Greek debt would have "systemic consequences." In other words, financial markets would conclude that other sovereigns will rush to default on their debts, creating a contagious panic and global disruption. The spectre of contagion loomed – and continues to loom – large.

A collective miasma of denial descended among decision makers, with steadfast opposition to debt restructuring between late 2009 and mid-2011. An IMF study (Cottarelli *et al*, 2010) made this a matter of principle: restructuring of advanced countries' public debt, that study said, was "*unnecessary and undesirable*." The premise was that the euro-area economies were institutionally strong and a quick resumption of growth would defang the debt crisis.

Some months later, in a brief – and much misunderstood – interlude, an opportunity was missed. At their Deauville summit on 19 October 2010, Chancellor Merkel and President Nicolas Sarkozy of France acknowledged the reality of unsustainable debts and agreed to a forward-looking debt restructuring process. They agreed that from 2013, distressed sovereigns who sought official financial assistance should also be required to negotiate a reduction in their debt repayment obligations to private creditors.

The Deauville proposal was met with instant fury, not least from euro-area finance ministers and other officials assembled that same day in Luxembourg (Forelle *et al*, 2010). That gathering learned of the Merkel-Sarkozy proposal from the German Deputy Finance Minister Jorg Asmussen, who read from an email he received late in the afternoon. With no warning that this was coming, the ECB President Jean-Claude Trichet, yelled at the French delegation: "*You are going to destroy the euro.*"

The drumbeat of criticism continued, and Deauville was quickly identified as the universal cause of many ills. Amazingly, George Papandreou, the Greek Prime Minister – whose nation was, for all intents

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<sup>12</sup> Wall Street Journal (2013).

and purposes, bankrupt – claimed that the German insistence on investors accepting losses was driving his nation to bankruptcy (Bastasin, 2012, p. 243). The IMF also pinned the blame for Greek woes on Deauville. In its July 2011 review of the Greek programme, just days before the inevitability of Greek debt restructuring was officially acknowledged, it said (IMF, 2011a, pp. 32-33):

*“[...] the very public debate on this issue [imposing losses on private creditors] has been a major problem for securing confidence around the [Greek] programme.”*

The presumed evidence for a virulent Deauville effect is the market pressure experienced by distressed sovereigns in late 2010 and early 2011. The risk premia they paid increased rapidly. But was that rise due to Deauville? To answer that question, we cannot rely on the general increase in spreads; we must shine the spotlight on the days surrounding 19 October 2010.

When that is done, the impact of Deauville is, at best, modest (Mody 2014a). A brief increase in Irish spreads (relative to trend in the days before the announcement) was followed by fall on the fourth and fifth days after the announcement. There was no noticeable change in Italian and Spanish spreads. Hence, there is no evidence of panic or contagion, the two charges against Deauville.

Risk spreads did rise in October and November 2010 – but the reason for that rise is clear. The strategy of using official loans to repay private debt did not change the debt burden of the distressed nation. However, private creditors who had yet to be repaid assumed that the official loans would be repaid first. In the other words, they assumed that they would be 'junior' to the now substantial official debt. Chamley and Pinto (2011) pointed out that private creditors now faced a higher risk of an arbitrary and disorderly restructuring of their debt and would reasonably demand higher risk spreads. Steinkamp and Westermann (2014) and Mody (2014b) have since traced the rise in risk premia during this phase to the expansion of senior official debt. In contrast, Deauville had a comparatively minor effect.

Hence, if there was a villain, it was the strategy of out-sized official loans alongside the expectation that the debt burden would be brought down through fiscal austerity.

In the days that followed Deauville, Chancellor Merkel and her Finance Minister, Wolfgang Schäuble, continued to defend their position. At the European Council meeting on 28 October 2010, Merkel refused to back down when directly pressed by Trichet; and even Sarkozy tried to put Trichet in place (Bastasin, 2012, p. 240). At the G-20 summit in Seoul on 11 November, Merkel said: *“Let me put it very simply: We cannot keep constantly explaining to our voters and our citizens why the taxpayer should bear the cost of certain risks and not those people who have earned a lot of money from taking those risks”*<sup>13</sup>. The economic and political logic of this direct statement is compelling.

However, over the following months, Merkel was worn down in a series of meetings with Trichet, who seems to have persuaded her against the initiative (Bastasin, 2012, p. 243). The Deauville proposal was eventually abandoned. Merkel needed the ECB for extending the euro-area financial safety net that the German taxpayer could not – would not – provide.

The characterization of Deauville as a Lehman-like moment for Europe has cast a pall over all discussion of sovereign debt restructuring, rare voices notwithstanding (Portes, 2011 and Buchheit *et*

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<sup>13</sup> Spiegel and Oakley (2010).

a/, 2013). In early April, Olli Rehn said that a Greek debt restructuring was “*out of the question*” [Souninen and Kirschbaum, 2011]; a month later the ECB President, Jean-Claude Trichet, said “*it was not on the cards*” [Reuters, 2011b]. On 6 June, Lorenzo Bini Smaghi, a member of the European Central Bank’s Executive Board, devoted an entire speech to this subject. A “*rational analysis*” had led him to conclude that “*Greece should be considered solvent and should be asked to service its debts.*”

Meanwhile, the July 2011 troika review of the Greek 'bailout' recognised that the Greek economy was deteriorating, but projected that Greece would resume growth in 2012 (IMF, 2011a). A customary 'debt sustainability analysis' did show that things could go badly wrong and a text box clinically described the historical experience with debt restructuring. However, the 'baseline' – the basis for the policy decision – showed that Greek public debt-to-GDP ratio would peak at that year’s level of 170 percent and start falling smoothly thereafter.

By mid-2011, the favoured strategy of austerity-cum-official financing had been applied also to Ireland and Portugal. Once again, official money was being used to pay private creditors. And risk spreads for Irish and Portuguese debt continued to spiral out of control because creditors who had not yet been repaid were being placed further back in the hierarchy of repayments. By early July, Irish sovereign debt carried a risk premium of 11 percent over the German sovereign (Figure 11). As the panic spread, Spain and Italy were also drawn into this maelstrom. Italian sovereign yields crossed the 6 percent mark on 18 July 2011.

Something had to give. Larry Summers (2011) – who had recently stepped down from his position in the US administration – was among those who called for more vigorous official action to deal with Europe’s “*dangerous new phase.*” Summers warned against imposing losses on private creditors, lest that cause a systemic crisis and, instead, proposed that the official loans be restructured. The specific proposal was to lower the interest rates on official loans to the level at which European authorities, using their collective credit, could borrow. The International Monetary Fund (IMF, 2011b) also called for more official support: by purchasing sovereign debt on secondary markets and providing more resources to recapitalise banks. It was time, the IMF said, for European officials to show up with more money, and not just words.

The leaders of the euro-area member countries met at an unscheduled summit on 21 July (Council of the European Union, 2011). They faced a dilemma: the continuing use of official funds to repay private creditors was reaching political limits but Greece was not ready to fend for itself. The solution was to finally abandon the fiction that Greece would fully repay its private creditors. Negotiations took months. An initially timid restructuring proposal was untenable. It took until February 2012 to negotiate the historically-large private debt restructuring – at which point, creditors would be paid only half their claims. Even so, Zettelmeyer, Trebesch, and Gulati (2013) conclude, that the agreement left money on the table from the Greek perspective. Also, the generous treatment of the 'holdouts' (those who refused to accept the reduced payments) created future risks for Greek taxpayers and will complicate restructurings elsewhere.

When the dust settled, Lee Buchheit, the veteran sovereign debt attorney who represented the Greek government, remarked: “*I find it hard to imagine they will now man up to the proposition that they delayed – at appalling cost to Greece, its creditors and its official sector sponsors – an essential debt*

*restructuring...*" (Bases, 2012). It was only much later that the IMF offered its *mea culpa* (IMF, 2013). There has been no European recognition that delays in debt restructuring had, once again, inflicted great economic harm and inequity. Greece had borne an intolerable burden of austerity, which sent the economy into a tailspin and made the debt burden much greater. And while many creditors were paid with official funds (the creditors of arguably-insolvent Greek banks were repaid even in the final settlement), others were subjected to large losses, amounting to more than half their claims.

At the 21 July 2011 summit, the euro-area leaders were anxious to emphasise that Greece was an exception and, going forward, debt restructuring was not euro-area policy. But a further problem arose. Even after the reducing the claims of private creditors, Greece would not be able to repay its official creditors on the terms agreed. Thus, the repayment terms on official debt also needed to be eased. Crucially, at that meeting, these easier terms were extended to Ireland and Portugal, whose interest rate was lowered from 5.5 to 3.5 percent and the repayment period extended from 7 to 15 years.

Thus, the need to forgive some of Greece's official debt triggered a pre-emptive restructuring of Irish and Portuguese official debt – and set an important new precedent. The message was that henceforth if sovereign debts were to become unsustainable, the official component would bear the first brunt of restructuring. Official debt – so long presumed to be 'senior,' now became effectively 'junior' to private debt, and a new approach to protecting private creditors was established.

The markets correctly read the signal – subsequently reinforced by continued rounds of forgiveness of Greek debt – that private creditors would be protected even if that required accepting reduced repayment of official debt. The response was immediate (Figure 11). Irish spreads started falling on 18 July, the day the drumbeat of calls for official debt relief began. Franklin Templeton is thought to have started buying Irish sovereign debt around this date (Walsh, 2012), and Irish spreads were set on a strong downward course. Figure 11 shows a striking match between the decline in Irish spreads and the rise in official European credits, the credits most likely to be restructured if needed. Private creditors were right in interpreting that their risk had been lowered. In April 2013, the burden of official Irish debt was further lowered when concessions were made on the repayment of Ireland's Promissory Notes, providing more space for repaying private debt.

Thus, by July 2011, the contours of euro-area risk management were beginning to take shape. Austerity would do the hard work of restoring debt sustainability while official loans supported the distressed economies until they were able to return to fiscal health. Private creditors would be bailed out unless the circumstances were exceptional.

This framework required that financial safety nets be strengthened. The EFSF, which had been the prime source of official funds, stood on shaky financial and legal grounds. In September 2012, the European Stability Mechanism (the ESM) was established. The ESM borrows from international markets (backed by repayment guarantees from member states); and it uses those funds to lend to euro-area countries unable to access international markets.

The legality of official financing was not tested until July 2012, when Irish parliamentarian, Thomas Pringle, claimed before the Irish Supreme Court that the then-proposed ESM violated Article 125, the 'no-bailout' clause in TFEU. The Supreme Court referred the matter to the European Court of Justice (ECJ). In November 2012, the ECJ determined that the ESM did not violate Article 125 since it provided

*“financial assistance,”* which would be paid back with an *“appropriate margin”*<sup>14</sup>. The ESM, in other words, was not making a prohibited fiscal transfer; instead, it was lending on the basis that the loans would be repaid. The fact that the repayment terms could be diluted over time was known to the ECJ but the dilution was not regarded as a fiscal transfer. The ECJ judgement stretched the interpretation of the TFEU – but any other finding at that critical moment in the crisis could have been destabilising.

The task, however, was still incomplete. In the summer of 2012, spreads on Italian and Spanish bonds again began to levitate. That led to the last – and, arguably, the most decisive – feature of the crisis architecture.

On 26 July 2012, Mario Draghi, the President of the ECB, declared that the ECB would do *“whatever it takes”* to preserve the integrity and stability of the euro area. He was extending a process that had been ongoing since the early phase of the crisis. The ECB had been providing a controversial life line to insolvent banks – or banks on the borderline of insolvency. In turn, the banks purchased government debt, supporting stressed sovereigns. On 2 August 2012, Draghi announced the Outright Monetary Transactions (OMT) Programme to directly support the prices of euro-area sovereign bonds by buying them in potentially 'unlimited' quantities conditional on economic and fiscal reform efforts by the sovereign. And on 7 September the day after he announced more details about the programme, Chancellor Merkel lent the programme her support. Merkel's support was crucial since the OMT was fiercely – and publicly – opposed by Jens Weidmann, President of the Bundesbank and member of the ECB's Executive Board [see Mody, 2015, for details].

The ECB's deep pockets worked: the seemingly-uncontrollable rise of Spanish and Italian spreads was reversed, and the threat to the euro area was once again warded off. Merkel had made a political bargain. She could not ask more of the German taxpayer. The only way to create a secure financial safety net was through the ECB's 'unlimited' financing prowess. But that raised the question: had the ECB acquired a fiscal authority? Had a fiscal union been created without a political agreement?

On 14 January 2014, the German Constitutional Court – relying to a large extent on the testimony of the Bundesbank – determined that the OMT was likely in contravention of the TFEU's Article 123 (which prevents the central bank from financing governments) and Article 125, which prohibits bailout. In Mody (2015), I have argued that the German Court's assessment had both legal and economic merit; the Court's decision to request the ECJ's opinion was also the right procedural step before reaching a final judgment. A year after the German Court's challenge to the OMT, the ECJ's Advocate General concluded that the challenge was largely without merit (European Court of Justice, 2015). A final ECJ decision and the face-off between the German Court and the ECJ could have potentially important implications.

Some have viewed the OMT as the instrument by which the ECB performs its lender-of-last-resort function. That the euro area needs such a function is clear; the question is whether the OMT serves that purpose. As early as 1999, Christopher Sims pointed out that the lack of a lender of last resort for its euro-area sovereigns was a liability. But that gap was not accidental: it arose from the political contract in the Maastricht Treaty placing restrictions on ECB action. The problem is a simple one: if the ECB were to act as a lender-of-last resort to a particular sovereign, any losses resulting from that support would

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<sup>14</sup> European Court of Justice [2012].



need to be shared by other sovereigns, as Sims noted more pointedly in a 2012 paper. Not only was there no agreement on sharing the losses – to the contrary, the political contract sought fiscal insulation from the fiscal problems of other member states.

Even viewed from a central banking tradition, the OMT is not a lender-of-last resort instrument. It is an IMF-style conditional lending programme. The ECB promise is to support a sovereign's bond price conditional on that sovereign agreeing to an austerity programme with the ESM. Former Bank of England historian Forrest Capie (2002) writes that a lender-of-last resort's function is *"to provide the market with liquidity in times of need, and not to rescue individual institutions. Such rescues involve too much moral hazard."* International institutions, such as the IMF, he says, *"are invariably focused on one 'customer' – a country in difficulties – and so violate this rule of the lender-of-last-resort."* Former senior officials of the IMF, Fischer (1999) and Rogoff (1999), emphasise, IMF-style lending must be accompanied by a clear and credible strategy for ensuring that private creditors share the burden. Bottom line: the distinction must be made between insolvency – which requires default (or centralised fiscal resources and Eurobonds) – and illiquidity, which requires a lender-of-last resort. The OMT conflates solvency and liquidity (Mody, 2015).

A final defence of the OMT invokes market irrationality. The ECB claimed that prices of similar securities varied widely across the euro area, and the OMT would help correct that distortion. However, the German Court correctly pointed out that it is not possible to distinguish market distortion from genuine differences in the riskiness of the securities.

Others have inferred market arbitrariness from the wild swings in risk spreads, which spiralled from near-zero pre-crisis levels to unmanageable heights during the crisis, only to fall back down again (De Grauwe and Ji, 2012). But these swings are as much the result of policy ambiguity as of market irrationality. The euro-area authorities have sent mixed signals of their intent to enforce losses on private creditors. Before the crisis, the authorities welcomed the market's view that default would not be permitted, even though the policy said otherwise. Between 2008 and 2011, the market grew increasingly concerned that the authorities would not be able to deliver on their implicit bailout promise. This required a new, and more tangible, commitment to safeguard private creditors. On 21 July 2011, the new policy signaled that official debt would take the first hit before private creditors bore losses. That promise proved insufficient to help Italy and Spain – and hence the ECB's 'unlimited' promise was required a year later.

Once again the incentives are being created for private creditors to lend with abandon. The yields on sovereign bonds have fallen sharply. They are near-historic lows even for Italy and Spain even though the debt ratios of these sovereigns are historically high and still rising. Altogether, the current rescue efforts could well be sowing the seeds of a future build-up of debt. Buchheit and Gulati (2012) rightly warn that the sense of calm and confidence can quickly change. Speculators may 'mercilessly' test the ECB's resolve to buy unlimited quantities of a distressed sovereign's bonds.

## Looking ahead

In October 2013, euro-area officials were in a quietly triumphal mood. The interest rates on sovereign bonds had fallen and the economy had stopped contracting. On 9 October, five senior policymakers wrote in the *Wall Street Journal*: “Our approach to the crisis, which is based on an integrated approach by member states and European institutions, is beginning to deliver results” (Dijsselbloem, Rehn, Asmussen, Regling, and Hoyer, 2013). A month later, Draghi repeated the same upbeat message in a speech at Harvard University’s Kennedy School (Draghi, 2013).

The achievements are clear. The euro area has held together. Between 2010 and 2013, enhanced fiscal governance systems – the six-pack, fiscal compact, and two-pack – were established. Although some countries resented the pressure applied, all adhered broadly to the fiscal framework. In the matter of repaying debts, Greece was an exception; the other sovereigns have honoured their obligations in a timely manner. The ESM and OMT financial safety nets are in place, and the interest rates that governments pay on their new borrowings are at, or near, historical lows. Although promise of economic growth in late 2013 proved elusive, today there is again a perception that growth is around the corner. If growth continues, the pressures will be released and a sense of normality could return.

But the legacy of the crisis years is deeply entrenched and will influence the fiscal and economic outlook. The public debt burdens are well above pre-crisis levels and private debt burdens are at or above pre-crisis levels. The fiscal belts are projected to remain tight everywhere – and may tighten further where the stress levels are highest. Collectively, the euro-area fiscal position will continue to act as a brake on renewed growth and inflation. That will perpetuate a tendency for financial fragility.

For this reason, the drumbeat of structural reforms to spur growth is not surprising. But the evidence in favour of this policy elixir is scant. German success with labour market reforms is often cited – and often by the German authorities. The so-called Hartz reforms, implemented during the years 2003-05, were contemporaneous with a revival of the German economy from several years in the doldrums. But the macroeconomic significance of the Hartz reforms remains inconclusive (Hertweck and Sigrist, 2012). Instead, as Dustmann *et al* (2014) argue, the source of Germany’s renewed economic strength must be sought in the years before the Hartz reforms. Over the 1990s, German industry and labour cooperated to harness and adapt traditional strengths. German manufacturing firms reinforced their innovation capabilities, made strategic moves to outsource from emerging Europe, and renegotiated wage contracts.

Attributing German success to the Hartz reforms is misleading at best; more likely, it is downright wrong. Germany’s historical manufacturing prowess and business-labour relationships cannot be easily replicated. The value of the Hartz reforms – if they had value – cannot be isolated from Germany’s history and institutions. Thus, a superficial transplant of Hartz-like reforms will have little impact. Italy, for example, does no worse than Germany on the measurable labour market indicators: the real Italian problem lies with abysmal productivity performance (Hassan and Ottaviano, 2013).

The vent of world trade could also be elusive. Between 2003 and 2007, world trade grew at about 8 percent a year, and European nations rode that global tide of prosperity. After 2010, world trade has

been growing at about 3 percent a year. And while projections continue to foresee a pickup, the shift to higher global trade growth is taking much longer than anticipated.

Through much of Europe, growth is also pulled down by weak private balance sheets. Households must lower their debt ratios and hence are reluctant to spend. Weak business profitability and economic outlook make businesses reluctant to invest. Public investment has been the most important casualty of the austerity drive.

If these legacies constrain growth, the challenges faced by the euro area's austerity-only fiscal framework become serious. The new risk for countries in the euro-area periphery is a spiral of higher debt ratios and lower inflation, including entrenched deflation. Inflation rates have fallen sharply across the periphery. Moreover, inflation rates are lower – and for some countries considerably lower – in 2014 than had been expected in 2011. This unanticipated fall in inflation is strikingly correlated with the unanticipated rise in debt-to-GDP ratios. In other words, the factors pushing inflation down are the related to those that are pushing debt ratios up. And there is no natural self-correcting process through which this tendency will be reversed, except in the medium-term when eventually the gain in international competitiveness will help a significant revival of exports and growth. Until that happens, the debt ratios will remain high, which will reinforce fiscal austerity and postpone economic recovery.

At this point, the Greek problems have become pathological. But it is also premature to declare victory elsewhere. With debt restructuring ruled out, the challenges brewing in Italy are particularly serious. The Italian economy is extraordinarily fragile and an Italian financial crisis could have far reaching effects on Europe and the world economy.

A renewed crisis could challenge the integrity of the financial safety nets. So far, the ESM and the OMT have delivered a period of calm. Together, the insurance they provide may prove sufficient to deal with adversities. If, however, the legality of the OMT is successfully challenged – or its deployment proves politically contentious – a scaled-back alternative may prove insufficient. A market test of the OMT could prove unpleasant.

If a period of calm does descend, it would be wise to not waste it as in the heady first decade of the euro. The euro area is still an incomplete monetary union that is ill-prepared for deep and persistent economic distress. While technocratic fixes have been found, they are unreliable because they have clear limits and lack political legitimacy. The same national interests that led to the creation of the incomplete monetary union have held back the creation of reliable safeguards against crises. Every effort to create anything resembling a fiscal union has been thwarted. Crudely-stated, countries were and remain unwilling to 'pay' for the mistakes of others.

In addition, by closing the option of imposing losses on private creditors, the policy choices have been further narrowed. Despite a sensible German-French effort to incorporate an orderly debt restructuring process into the crisis management framework, the ECB push-back was successful. That left all the heavy-lifting to be done by a one-size-fits-all fiscal framework that targets the same numerical limits on deficits and debt across countries with very divergent levels of economic stress and growth potential. Instead of helping, such a straitjacket reinforces economic divergence across countries. The risks of continued anaemic growth, social stress, and renewed instability are the direct consequence of the constraints within which the euro-area countries operate.

What does history tell us about the mechanisms to sustainably reduce high debt burdens? In a recent paper, Reinhart, Reinhart, and Rogoff (2015) answer just that question. Three of their findings are especially relevant for the present conditions in the euro area. First, one in five instances of high debt end with a debt restructuring during peace times; the ratio is slightly higher for war-related debts. Second, the recent fall in nominal interest rates on government debt could – history warns – represent a refuge from an impending storm; if so, the reprieve from the debt service burden could be short-lived. And, finally, what matters is the real interest rate. Where inflation rates are low, the real interest rate will be high even with low nominal rates. Resolution of debt burdens is virtually impossible in deflationary conditions.

The balance needs to be changed. A lighter emphasis on austerity needs to be accompanied by greater recourse to imposing losses on private creditors. Today, despite new proposals (Buchheit *et al*, 2013), the ambivalence towards debt restructuring continues alongside the generous regulatory risk treatment of sovereign debt. Where debt is unsustainable, wishing it away is not wise policy. Deauville would have initiated a move away from reactive debt restructuring, when left with no other choice, to a proactive approach. It was a necessary first step to re-establishing a credible 'no bailout' regime, crucial to the original intent and architecture of the euro area (Mody, 2013). Ultimately, it will be necessary to go further. Debt restructuring must occur through an automated system of contractually-determined contingent debt repayments that leaves little room for policy discretion (Mody 2014d).

The greater reliance on debt restructuring will require a careful, possibly painful, transition. In the short-run, the legacy debt – the debt inherited from the past excesses – will need to be dealt with. But steps towards a new balance will increase the incentives for lower debt ratios in the future. Markets will, undoubtedly, often get things wrong. But why would market discipline be worse than central surveillance, which has had interminable problems? Getting from here to there will be hard, but waiting will make it ever harder.

And as the economics becomes harder, political risks will increase. With weak euro-area institutions, Germany and the ECB operate a *de-facto* governing alliance. The German Chancellor gives the ECB political cover and the ECB provides the financial safety net. And while the alliance has prevented a euro area meltdown, its insulation from political accountability is weakening hard-won European solidarity. In January-February 2015, when the new Greek government came to power on the pledge that it would negotiate a lower burden of austerity, the German-ECB alliance once again ensured order. The ECB decided to remove the waiver on Greek sovereign debt and shifted funding of Greek banks to the Central Bank of Greece. This was interpreted by some as a not-so-veiled threat that the ECB would stop funding Greek banks – and thus accelerated the flight of deposits from the banks; the German authorities ensured that Greeks stayed broadly within their preferred framework of austerity alongside structural reforms. If by some luck, Greece and Europe grow again, all may be forgiven and forgotten. The greater likelihood is that national divisions and resentments will deepen.

The euro area has lived dangerously through this crisis without a fiscal union, and survived. How much longer will that remain true?