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EUROFORUM

Design Failures in the Eurozone

Can They Be Fixed?

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ABSTRACT

What are the design failures of the Eurozone? This is a central question I analyze in this paper². First there is the endogenous dynamics of booms and busts that are endemic in capitalism. These continued to work at the national level in the Eurozone. The monetary union in no way disciplined these into a union-wide dynamics. On the contrary the monetary union probably exacerbated these national booms and busts, and led to large imbalances within the Eurozone. Second, the existing stabilizers that existed at the national level prior to the start of the union were stripped away from the member-states without being transposed at the monetary union level. This left the member states “naked” and fragile, unable to deal with the coming national disturbances. I study the way these failures can be overcome. This leads me to stress the role of the ECB as a lender of last resort and the need to make macroeconomic policies more symmetric as a way to eliminate the macroeconomic imbalances without introducing a deflationary bias in the Eurozone. I conclude with some thoughts on political and budgetary unification, and I argue that the proposed banking union can only be successful if it is embedded in a budgetary union.

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1. INTRODUCTION

The Eurozone looked like a wonderful construction at the time it was built. Yet it appeared to be loaded with design failures. In 1999 I compared the Eurozone to a beautiful villa in which Europeans were ready to enter. Yet it was a villa that did not have a roof. As long as the weather was fine, we would like to have settled in the villa. We would regret it when the weather turned ugly (De Grauwe(1999)). With the benefit of hindsight, the design failures have become even more manifest as the ones that were perceived before the start. In this paper I analyze these design failures, and I ask the question of whether these can be fixed.

2. A SHORT HISTORY OF CAPITALISM

Capitalism is a wonderful human invention that manages to steer individual initiative and creativity towards capital accumulation and ever more material progress. It is also inherently unstable, however. Periods of optimism and pessimism alternate, creating booms and busts in economic activity. The booms are wonderful; the busts create great hardship for many people.

Booms and busts are endemic in capitalism because many economic decisions are forward looking. Investors and consumers look into the future to decide to invest or to consume. But the future is dark. Nobody knows it. As a result, when making forecasts, consumers and investors look at each other. This makes it possible for optimism of one individual to be transmitted to others creating a self-fulfilling movement in optimism. Optimism induces consumers to consume more and investors to invest more, thereby validating their optimism. The reverse is also true. When pessimism sets in, the same herding mechanism leads to a self-fulfilling decline in economic activity. Animal spirits prevail (Keynes(1936), Akerlof and Shiller(2009)).

The role of banks and financial markets is key to understanding the unstable nature of booms and busts. When during a boom optimism, even euphoria, prevail, households and firms cheerfully take on more debt so as to profit from high perceived rates of return. Bankers, who are equally gripped by euphoria are happy to oblige. As a result, a boom in consumption and investment is set in motion fueled by debt and excessive bank credit (Minsky(1985)).

When it becomes obvious that optimism was excessive and that debt is unsustainable, the inevitable crash occurs. Firms and household have to reduce their debts, banks with bloated balance sheets have to deleverage. The economy turns into a downward spiral.

This dynamics of booms and busts has been repeated so many times in history that it comes as a surprise that so many people are surprised when the crash occurs. This may have something to do with the fact that during the boom and the bubble, many people think “this time is different” as Reinhart and Rogoff(2009) argued (see also the wonderful classic of Kindleberger(2005)).

Since the Great Depression of the 1930s many countries have introduced stabilizing features in their economies. I will discuss two of these, i.e. the role of the central bank as a lender of last resort and the automatic stabilizers in the government budgets. These will also play a central role when I discuss the fragility of the Eurozone.

Central Banks were originally created to deal with the inherent instability of capitalism. They were not primarily set up to maintain price stability. The concern for price stability came only much later. As argued earlier, the instability of capitalism arises because of the involvement of financial institution in the booms and busts. Thus, the central bank was given the role of lender of last resort, i.e. a backstop needed to inject liquidity in financial markets when panic after a crash leads everybody to sell assets and to scramble for liquidity (Goodhart and Illing(2002)).

Right from the start the role of lender of last resort was not restricted to injecting liquidity in the banking sector. It also extended to the government bond markets. The reason is very simple and quite fundamental. It has to do with the existence of a “deadly embrace” between the sovereign and the banks. When the sovereign gets into problems the falling government bond prices threaten the banks, which are the main holders of government debt. When the banks collapse, governments that do not want to let down the banks are threatened with insolvency. If one of the two falls off the cliff the other one is pulled down also. As a result, when central banks took on the responsibility of lenders of last resort it was understood that restricting this responsibility to the banks would be unworkable and would not stabilize the financial system. I will return to this issue when I discuss the European Central Bank as this idea was totally disregarded when that institution was created.

There is another reason why the lender of last resort commitment of the central bank was given to both the banks and the sovereign. This has to do with the fact that both suffer from a similar fragility. Their balance sheets have a similar unbalanced maturity structure. Banks borrow short and lend long, i.e. their liabilities (demand and saving deposits) are highly liquid while their assets (mortgages, long-term loans) are illiquid. As a result, in the absence of a lender of last resort, distrust in banks can trigger a run on the bank. Such a collective movement of distrust will bring down the banks even those that are solvent.

The government balance sheet has a similar unbalanced maturity structure. The liabilities of the government consist mainly of bonds that are highly liquid and can be sold almost instantaneously³. The assets consist of infrastructure and more importantly of tax claims. The latter however are illiquid, i.e. the government has to go through a democratic decision process to increase tax revenues; a process that can take a lot of time. As a result, in the absence of a lender of last resort, a collective movement of distrust can lead to a liquidity crisis that can push the government into default.

The second stabilizing feature of the dynamics of booms and busts in capitalism was gradually introduced through the government budget that increasingly built in stabilizing features. These stabilizing features were essential to stabilize an otherwise unstable system for the following reason. When after the crash the private sector is in need to deleverage there is a high potential for a deflationary dynamics. This was first recognized by Keynes(1936) and by Fisher(1933).

When the private sector is in need to reduce its debt it will try to do two things. First it will attempt to save more. But as Keynes stressed this will lead to the savings paradox. By saving more (and consuming less) output declines and so does national income. In the end less can be saved by the

³ Note that we use the term liquidity in the sense of market liquidity, i.e. that bond can be turned into cash very quickly irrespective of their maturity. Thus, in this sense 10-year government bonds are liquid. As a result, governments like banks are vulnerable to runs if their assets are illiquid.

private sector, increasing the desire to save more. This can only be solved if the government sector is willing to save less, i.e. to increase its borrowing. Put differently if some (the private sector) wishes to save more, others (the government sector) must be willing to borrow more. If the latter does not want to do this, it prevents the former to save more and to unwind its debt.

The second way to reduce the debt is by selling assets. Thus if the private sector as a whole sells assets so as to reduce its debt, asset prices decline, thereby creating solvency problems of agents that were in no need to deleverage. These will now have to do the same and sell assets. In order to stop this downward spiral somebody (the government) has to be willing to take over the debt of private agents. In doing so, it helps the private sector to deleverage and puts a floor on the downward deflationary forces that follow a crash.

These two stabilizers, the lender of last resort and the automatic budget stabilizers, were introduced in the system at the national level. They are now relatively well organized at the level of nation states. They were not organized at the international level, nor at the level of a monetary union such as the Eurozone. This has led to the major design failures of the Eurozone, to which we now turn our attention. These design failures were only recognized after the financial crisis, also because mainstream theory about how to organize a monetary union (the optimal currency area theory) was pre-occupied with exogenous shocks not with the endogenous dynamics that is embedded in capitalism. And even then in many countries, especially in Northern Europe these design failures are still not recognized mainly because of a dramatic diagnostic failure that focuses on government profligacy as the sole source of the euro-crisis. (I will have more to say about this diagnostic failure in section 4).

3. THE EUROZONE'S DESIGN FAILURES

The design failures of the Eurozone find their origin in the two factors discussed in the previous section. In this section I will argue first that the endogenous dynamics of booms and busts continued to work at the national level and that the monetary union in no way disciplined these into a union-wide dynamics. On the contrary the monetary union probably exacerbated these national booms and busts. Second, the existing stabilizers that existed at the national level prior to the start of the union were stripped away from the member-states without being transposed at the monetary union level. This left the member states "naked" and fragile, unable to deal with the coming national disturbances. Let us expand on these two points.

A. BOOMS AND BUSTS DYNAMICS

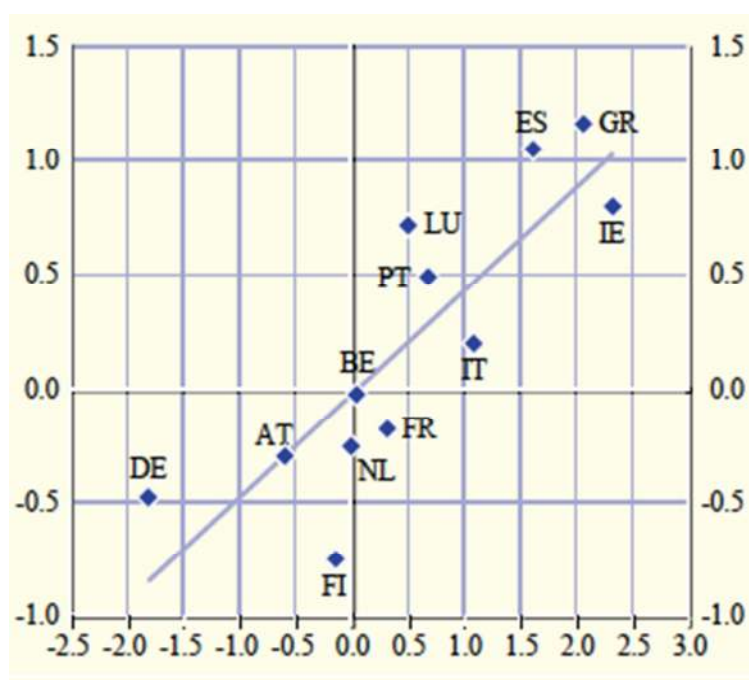
In the Eurozone money and monetary policy are fully centralized. However, the rest of macroeconomic policies has remained firmly in the hands of national governments, producing idiosyncratic movements unconstrained by the existence of a common currency. As a result, there is very little in the monetary union that can make the booms and busts converge at the Eurozone level. The effect of all this is that booms and busts originate at the national level and have a life of their own at the national level without becoming a common boom-and-bust dynamics at the Eurozone level.

In fact it is even worse. The existence of the monetary union can exacerbate booms and busts at the national level. The reason is that the single interest rate that the ECB imposes on all the member countries is too low for the booming countries and too high for the countries in recession. Thus, when in Spain, Ireland, Greece the economy started to boom, inflation also picked up in these countries. As a result, the single nominal interest rate led to a low real interest rate in the booming countries, thereby aggravating the boom. The opposite occurred in the countries experiencing low growth or a recession.

Thus, the fact that only one interest rate exists for the union exacerbates these differences, i.e. it leads to a stronger boom in the booming countries and a stronger recession in the recession countries than if there had been no monetary union.

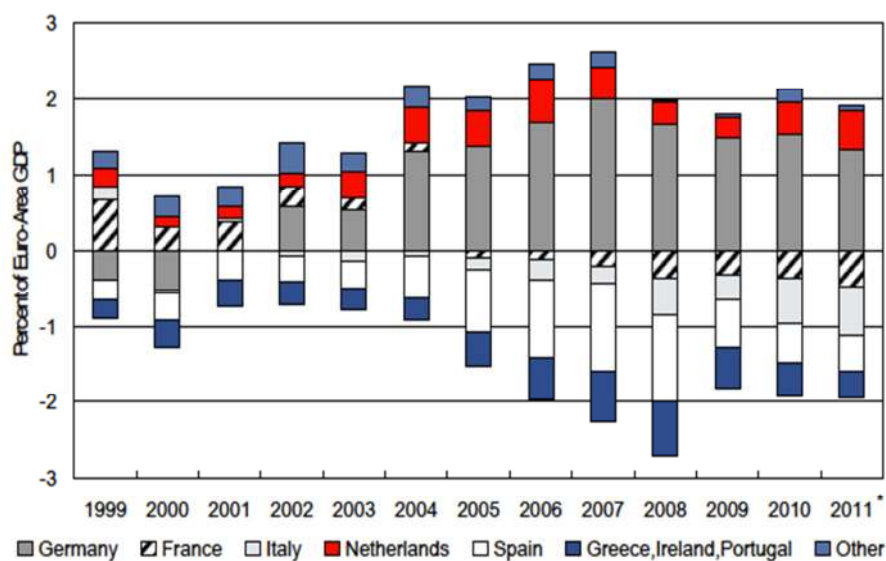
The effects of these divergent macroeconomic movements have by now been well documented. In figures 1 and 2 I show how these led to divergences in inflation and relative unit labour costs and to current account imbalances. Figure 1 shows how the booming Southern European countries (including Ireland) experienced systematically higher inflation rates and increases in unit labour costs than in the rest of the Eurozone. Figure 2 shows how these booms led to large current account deficits in the South and surpluses in the North. It is important to stress here that the booms in the South allowed the Northern European countries to accumulate large current account surpluses. These were financed by credit that the Northern European countries granted to the South. Thus in a way it can be said that Northern Europe behaved like the automobile salesman who sells cars to his customers by providing them with cheap credit. It is important to recognize this because in the North of Europe the irresponsibility of Southern countries to take on too much debt is often stressed. The truth is that for every foolish debtor there must be a foolish creditor.

Figure 1: Average yearly inflation differential (y-axis) and average change in relative unit labour cost (x-axis) from 2002 to 2008



Source: ECB, Monthly Bulletin, Nov. 2012

Figure 2: Euro-area current accounts



Source: Citigroup, Empirical and Thematic Perspectives, 27 January, 2012

B. NO STABILIZERS LEFT IN PLACE

When the Eurozone was started a fundamental stabilizing force that existed at the level of the member-states was taken away from these countries. This is the lender of last resort function of the central bank. Suddenly, member countries of the monetary union had to issue debt in a currency they had no control over. As a result, the governments of these countries could no longer guarantee that the cash would always be available to roll over the government debt. Prior to entry in the monetary union, these countries could, like all stand-alone countries, issue debt in their own currencies thereby giving an implicit guarantee that the cash would always be there to pay out bondholders at maturity. The reason is that as stand-alone countries they had the power to force the central bank to provide liquidity in times of crisis.

What was not understood when the Eurozone was designed is that this lack of guarantee provided by Eurozone governments in turn could trigger self-fulfilling liquidity crises (a sudden stop) that would degenerate into solvency problems. This is exactly what happened in countries like Ireland, Spain and Portugal⁴. When investors lost confidence in these countries, they massively sold the government bonds of these countries, pushing interest rates to unsustainably high levels. In addition, the euros obtained from these sales were invested in “safe countries” like Germany. As a result, there was a massive outflow of liquidity from the problem countries, making it impossible for the governments of these countries to fund the rollover of their debt at reasonable interest rate.

This liquidity crisis in turn triggered another important phenomenon. It forced countries to switch-off the automatic stabilizers in the budget. The governments of the problem countries had to scramble for cash and were forced into instantaneous austerity programs, by cutting spending and raising taxes. A deep recession was the result. The recession in turn reduced government revenues

⁴ Elsewhere I have argued that Greece does not fit this diagnosis. Greece was clearly insolvent way before the crisis started, but this was hidden to the outside world by a fraudulent policy of the Greek government of hiding the true nature of the Greek economic situation (see De Grauwe(2011)).

even further, forcing these countries to intensify the austerity programs. Under pressure from the financial markets, fiscal policies became pro-cyclical pushing countries further into a deflationary cycle. As a result, what started as a liquidity crisis in a self-fulfilling way degenerated into a solvency crisis.

Thus, we found out that financial markets acquire great power in a monetary union: they can force countries into a bad equilibrium characterized by increasing interest rates that trigger excessive austerity measures, which in turn lead to a deflationary spiral that aggravates the fiscal crisis. Countries pushed into such a bad equilibrium now face long periods of economic recession that will test the political and social acceptability of a monetary system that had been presented as heaven but is now perceived to be a hell for millions of people (see De Grauwe(2011)).

The Eurozone crisis that we now witness is the result of a combination of the two design failures identified here. On the one hand booms and busts continued to occur at the national level. In fact these were probably intensified by the very existence of a monetary union. On the other hand the stripping away of the lender of last resort support of the member state countries allowed liquidity crises to emerge when the booms turned into busts. These liquidity crises then forced countries to eliminate another stabilizing feature that had emerged after the Great Depression, i.e. the automatic stabilizers in the government budgets. As a result, some countries were forced into bad equilibria (Gros(2011)).

The latter then exposed a third important design failure. Countries pushed into bad equilibria were immediately confronted with banking crises. This had to do with the “deadly embrace” between the sovereign and the banks, that we identified earlier. The collapse of the government bond prices in the countries pushed into a bad equilibrium also deteriorated the balance sheets of many banks which were holding these bonds. They were threatened by insolvency. Remarkably, only when the banks were at risk (not when the sovereigns were) did the ECB start acting and provided massive liquidity support to the banking systems of the troubled countries.

The result of the interaction between these three design failures is that the crisis in the Eurozone has degenerated into an existential crisis about the future of the union. If this existential crisis is not stopped by major structural decisions, it will work as an unstoppable dynamics destroying the Eurozone.

What should be done to stop this dynamics? This is the question I want to address next. Before doing so, it is important to understand why European policies have been particularly inept at stopping the crisis. In the next section I argue that this is due to a misdiagnosis of the crisis.

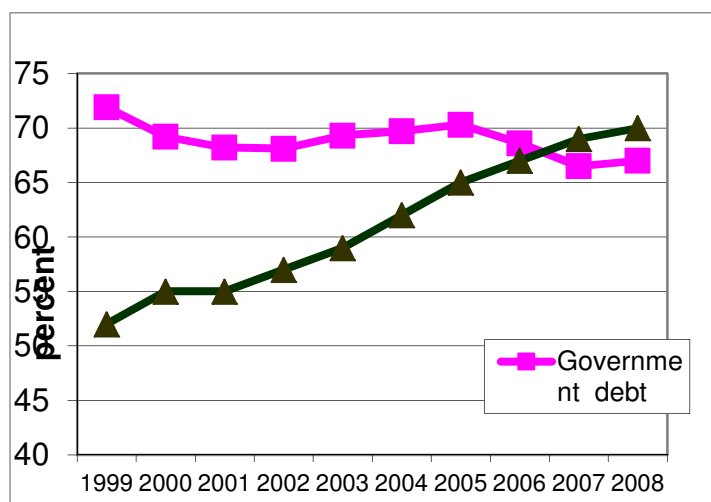
4. MISDIAGNOSIS OF THE SOVEREIGN DEBT CRISIS

The diagnosis of the Eurozone crisis that was made by political leaders, especially by those from Northern European countries was that the sovereign debt crisis arose as a result of profligacy of governments in general and of governments in the Southern European countries in particular. However, with the exception of Greece, the reason why countries got into a sovereign debt crisis has little to do with public profligacy. The cause of the debt problems in the Eurozone is to be found in the unsustainable debt accumulation of the *private* sectors in many Eurozone countries. I show the

evidence in Figures 3 and 4. It can be seen that household and bank debt were increasing fast prior to the debt crisis. Surprisingly, the only sector that did not experience an increase in its debt level (as % of GDP) was the government sector.

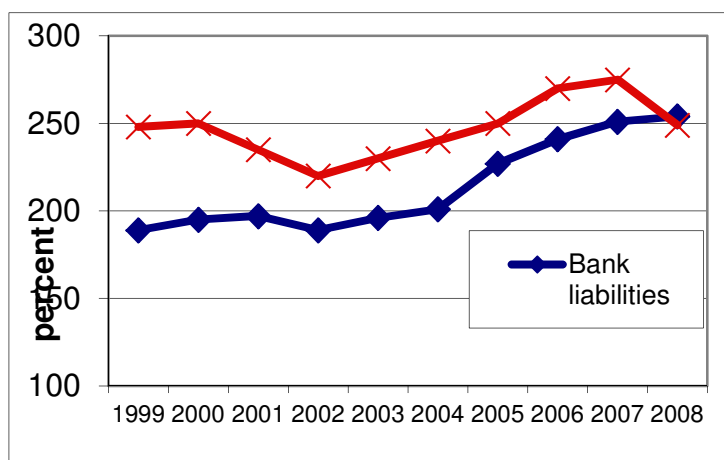
The private debt accumulation in the Eurozone allowed booms and bubbles to develop. When these became unsustainable and crashed, a large number of banks, firms and households, found themselves unable to repay their debts. As a result, they were forced to deleverage, i.e. to reduce their debt levels. This set in motion the debt deflation dynamics discussed earlier (Irving Fisher(1932) and Minsky(1982)). As the private sector attempts to deleverage, assets are sold, pushing down their prices. As a result, other agents are pushed into solvency problems as the value of their assets declines. More and more private agents then are forced to deleverage. But as everybody is doing this at the same time, nobody succeeds in improving its own solvency. On the contrary the solvency of private agents continues to deteriorate. The economy is pushed into a deflationary spiral. The only way out is for governments to increase their own debt levels. This is necessary to make it possible for the private sector to deleverage without bringing the economy into a deep depression.

Figure 3: Household and government liabilities in Eurozone prior to crisis (percent of GDP)



Source: European Commission, AMECO database and CEPS

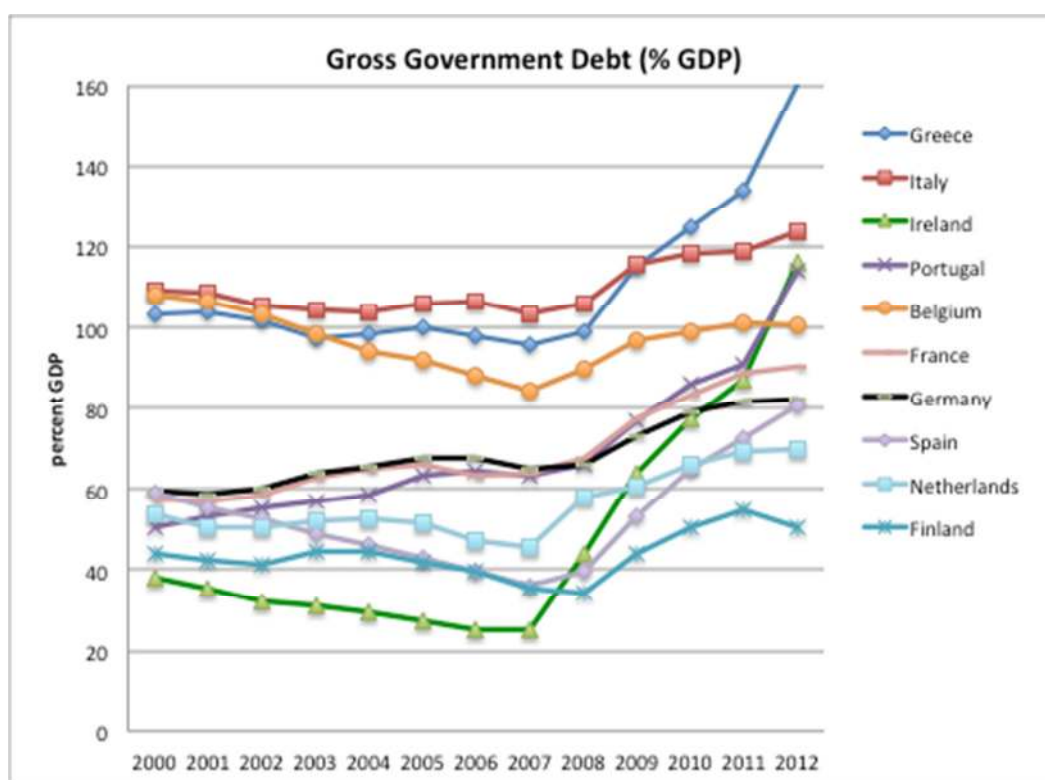
Figure 4: Bank and corporate liabilities in the Eurozone prior to crisis (percent of GDP)



Source: European Commission, AMECO database and CEPS

The initial response of European governments to the banking crisis of October 2008 was the correct one. These governments allowed their own debt levels to increase. This was achieved through two channels. The first one consisted in governments actually taking over private debt (mostly bank debt). The second one operated through the automatic stabilizers set in motion by the recession-induced decline in government revenues. As a result, the government debt/GDP ratios started increasing very fast *after* the eruption of the financial crisis. In figure 5 we show the government debt to GDP ratios before and after the crisis for the Eurozone countries. The most surprising feature of figure 5 is that except for Germany and Portugal, the government debt ratios of the other Eurozone countries were all declining prior to 2008. Even more striking is to find that in two countries that have experienced severe government debt problems recently, Ireland and Spain, the government debt ratios were declining spectacularly prior to the crisis. These were also the countries where the private debt accumulation has been the strongest.

Figure 5: Government debt in the Eurozone countries (% of GDP)



Source: European Commission, AMECO database

Thus with the possible exception of Greece, the fundamental cause of the sovereign debt crisis was to be found in unsustainable *private* debt accumulation forcing governments to step in to help out (in some cases to save) large segments of the private sector. It is interesting to note that, as documented by Schularick (2012), most of the financial crises of the last century in the industrialized world have been caused by excessive private debt accumulation, not by excessive accumulation of government debt. Yet the diagnosis that was made by the Eurozone leaders, i.e. the German government, the ECB and the European Commission, is that government profligacy was to blame. The effect of this misdiagnosis was that budgetary austerity was imposed as the cure to solve the crisis. Governments were forced to deleverage while the private sectors in many Eurozone countries, especially those that had experienced excessive private debt accumulation, were still frantically

trying to deleverage. As a result, the Southern Eurozone countries that were forced to swallow most of the wrong medicine pushed their economies in deep economic depressions. The latter, instead of improving the fiscal situations of the governments of these countries made these worse. It also led to an increasing social and political rejection of the austerity strategy and weakened the social acceptability of the Eurozone itself.

Thus it matters to correctly identify the source of the increase in the government debt. If, as I have argued the origin of the problem is private debt accumulation in a large number of countries, then it is important that the public sector actually allows its debt to increase so as to make the deleveraging of the private sector possible. If the public sector also reduces its debt while the private sector tries to reduce its own debt, we get into a debt deflation dynamics described by Fisher(1936).

As long as such misdiagnosis continues to form the basis of political action by European leaders the chances of stopping the destructive dynamics are slim. Instead political action should be based on a correct diagnosis that as was argued in the previous sections result from a number of design failures that have little to do with government profligacy.

What are the policy implications of these insights? We analyze three of them. The first one relates to the role of the ECB; the second one has to do with macroeconomic policies in the Eurozone; the third one relates to the long-run need to move into a fiscal union.

5. THE ECB AS A LENDER OF LAST RESORT IN THE GOVERNMENT BOND MARKETS

The ECB is the only institution that can prevent market sentiments of fear and panic in the sovereign bond markets from pushing countries into a bad equilibrium. As a money creating institution it has an infinite capacity to buy government bonds. The European Stability Mechanism (ESM) that became operational in October 2012 has limited resources and cannot credibly commit to such an outcome. The fact that resources are infinite is key to be able to stabilize bond rates. It is the only way to gain credibility in the market.

The ECB did buy government bonds in 2011 in the framework of its SMP program. However it structured this program in the worst possible way. By announcing it would be limited in size and time, it mimicked the fatal problem of an institution that has limited resources. No wonder that strategy did not work (De Grauwe(2012)).

The only strategy that can work is the one that puts the fact that the ECB has unlimited resources at the core of that strategy. On September 6, 2012 the ECB finally recognized this point and announced its “Outright Monetary Transactions” (OMT) program, which promises to buy unlimited amounts of sovereign bonds during crises. It is interesting to quote Mario Draghi who justified the OMT program as follows: “you have large parts of the euro area in a bad equilibrium in which you may have self-fulfilling expectations that feed on themselves” ... So, there is a case for intervening ... to “break” these expectations, which ... do not concern only the specific countries, but the euro area as a whole. And this would justify the intervention of the central bank” (Financial Times(2012))

Thus, the ECB has made the right decision to become a lender of last resort, not only for banks but also for foreigners, thereby re-establishing a stabilizing force needed to protect the system from the

booms and bust dynamics. The role of the central bank as a lender of last resort is more than buying time to make the necessary fundamental adjustments, as is sometimes said. As is argued in De Grauwe(2011) and implicitly recognized by Mari Draghi in the earlier citation, by preventing a liquidity crisis from erupting, the central bank can also prevent countries from being drawn into a vicious circle in which the liquidity crisis degenerates into a solvency crisis, pushing the country into a bad equilibrium. By preventing such a dynamics from taking hold the central bank does more than buying time. In this sense, liquidity provision by the central bank affects the fundamentals⁵.

The credibility of the OMT program announced by the ECB suffers because of continuing vehement criticism. Many arguments continue to be voiced against the view that the ECB should be a lender of last resort in the government bond markets. Some of them are phony, in particular the inflation risk argument (see De Grauwe(2011), Wyplosz(2011)). Others are serious like the moral hazard risk. The latter, however, should be taken care of by separate institutions aimed at controlling excessive government debts and deficits. These are in the process of being set up (European Semester, Fiscal Pact, automatic sanctions, etc.). This disciplining and sanctioning mechanism then should relieve the ECB from its fears for moral hazard (a fear it did not have when it provided €1,000 billion to banks at a low interest rate in the context of the LTRO program at the end of 2011 and early 2012).

The continuing fierce criticism against the notion that the ECB should be a lender of last resort in the government bond markets explains why the ECB attached a number of conditions to its OMT-program. These conditions are likely to reduce the effectiveness of that program. First, the ECB will restrict its bond purchases to bonds with a maturity of 3 years or less. There is no good economic argument to impose such a restriction. In fact, it may even increase the fragility of the sovereigns. These will now have an incentive to issue bonds with shorter maturities than they would have done otherwise, making them more vulnerable to liquidity crises.

Second, the ECB has attached as a condition to the use of the OMT-program that the countries concerned apply to the ESM which may then subject these countries to additional austerity programs. This creates the problem that countries are pushed further into a recession as a condition to obtain relief from the ECB. It is difficult to understand the economic logic of such an approach. It is in my view the result of a moralistic approach to the problem that is very popular in the North of Europe and that wishes countries applying for support to be punished first for their sins.

There is an additional danger to this second condition. The ESM will be at the centre of the procedure for triggering the ECB's liquidity provision in the context of the OMT program. The decisions of the ESM, however, will de facto be subject to a veto power of Germany and other countries. The popular opposition in Germany against the ECB's lender of last resort activities may in the end prevail making it impossible for the ECB to exert these activities.

From the preceding it appears that the governance that is now being created goes against the principle of separation between liquidity provision and moral hazard control. As I argued earlier, the proper separation of responsibilities is for the ECB is to act as a lender of last resort, and for the European Commission to control the moral hazard risk produced by this lender of last resort

⁵ I would not apply this analysis to Greece that is clearly insolvent. In such a case debt restructuring is called for, not liquidity provision. It holds for most of the other member countries of the Eurozone that are solvent nations but that have been hit by a liquidity crisis that threatens to become a solvency crisis (see De Grauwe(2011)).

activities. The OMT program however, makes it clear that the ECB both wants to provide liquidity and for policing moral hazard risk. This also appears from the fact that the ECB is actively involved in the Troika that monitors the countries budgetary policies. This monitoring, however, is highly political. Thus the ECB gets involved in decisions about how much governments should spend, which spending cuts to apply, what taxes to raise. These are highly political decisions. A central bank that cherishes its political independence endangers this independence if it is involved in political decision-making processes in member-countries.

6. SYMMETRIC MACROECONOMIC POLICIES

Macroeconomic policies in the Eurozone have been dictated by financial markets (see De Grauwe and Ji(2013)). Financial markets have split the Eurozone in two, forcing some (the Southern European countries, the “periphery”) into bad equilibria and others (mainly Northern European countries, the “core”) into good equilibria. The Southern European countries (including Ireland) are also the countries that have accumulated current account deficits, while the Northern European countries have built up current account surpluses.

The first best policy would have been for the debtor countries to reduce spending and for the creditor countries to increase spending. The Southern European countries have no other option than to continue reducing spending relative to output (or to increase output relative to spending) so as to eliminate their current account deficits and to reduce their external debt. At the same time, however, the Northern creditor countries that spend too little relative to their output should do the reverse. As a result, the inevitable deflationary forces arising from budgetary austerity in the South can be offset by demand stimulus in the Northern European countries.

Instead, under the leadership of the European Commission, tight austerity was imposed on the debtor countries, while the creditor countries continued to follow policies aimed at balancing the budget. This has led to an asymmetric adjustment process in which most of the adjustment has been done by the debtor nations. The latter countries have been forced to reduce wages and prices relative to the creditor countries (an “internal devaluation”) without compensating wage and price increases in the creditor countries (“internal revaluations”). We show the evidence in Figures 6 and 7.

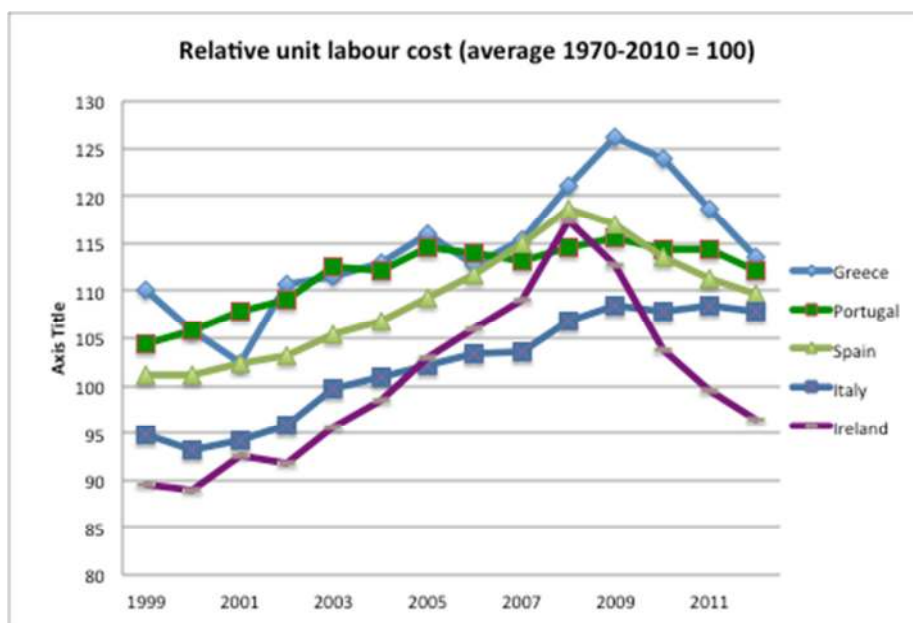
In Figure 6, we show the evolution of the relative unit labour costs of the peripheral debtor countries (where we use the average over the 1970-2010 period as the base period). Two features stand out. First, from 1999 until 2008/09, one observes the strong deterioration of these countries’ relative unit labour costs. Second, since 2008/09 quite dramatic turnarounds of the relative unit labour costs have occurred (internal devaluations) in Ireland, Spain and Greece, and to a lesser extent in Portugal and Italy.

These internal devaluations have come at a great cost in terms of lost output and employment in the debtor countries. As these internal devaluations are not yet completed (except possibly in Ireland), more losses in output and employment are to be expected.

Is there evidence that such a process of internal revaluations is going on in the surplus countries? The answer is given in Figure 7 that presents the evolution of the relative unit labour costs in the

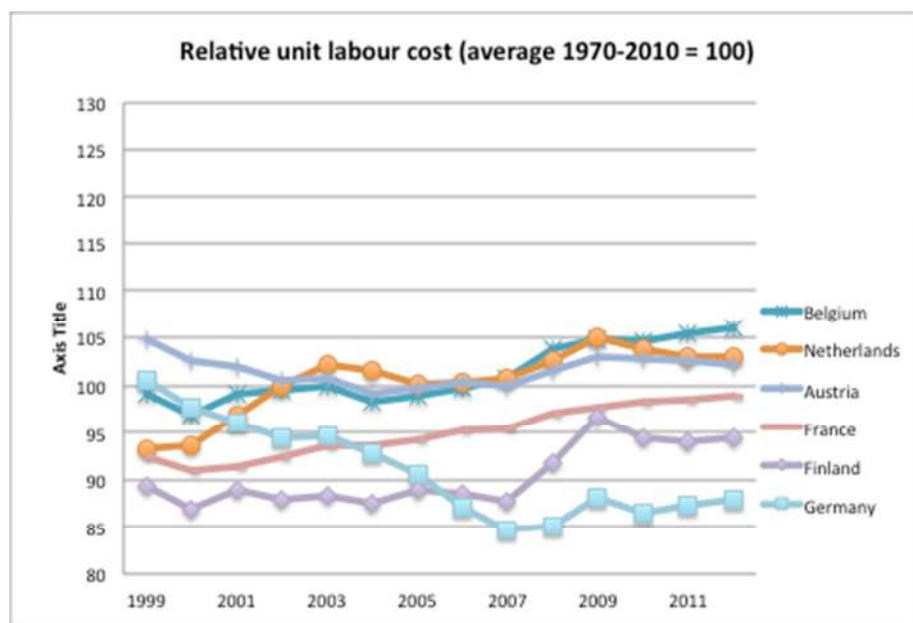
creditor countries. We observe that since 2008/09 there is very little movement in these relative unit labour costs in these countries. The position of Germany stands out. During 1999-2007 Germany engineered a significant internal devaluation that contributed to its economic recovery and the build-up of external surpluses. This internal devaluation stopped in 2007/08. Since then no significant internal revaluation has taken place in Germany. We also observe from Figure 8 that the other countries remain close to the long-run equilibrium (the average over 1970-2010) and that no significant changes have taken place since 2008/09.

Figure 6



Source: European Commission, Ameco

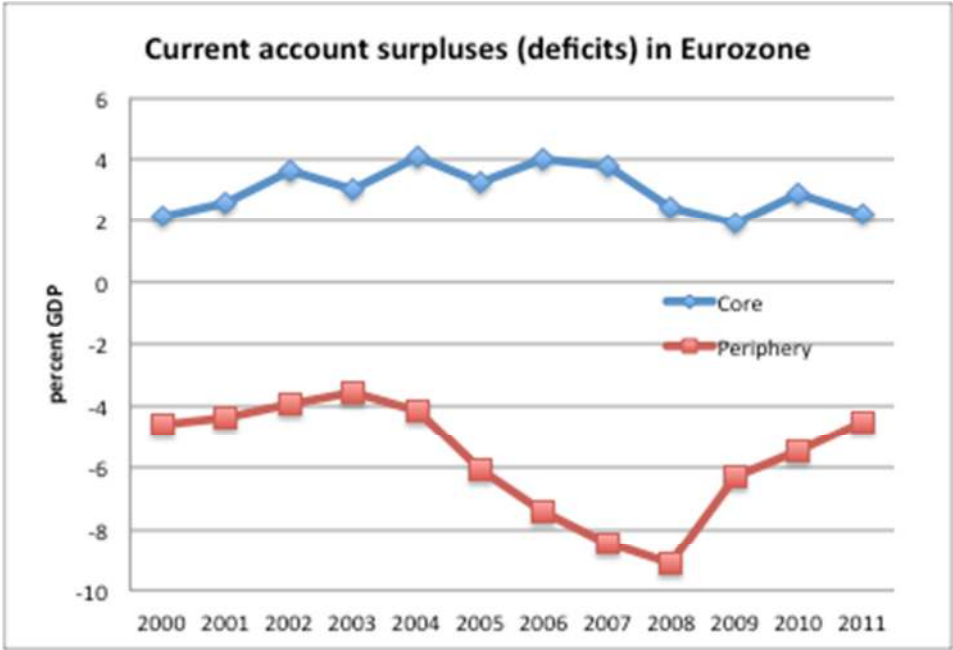
Figure 7



Source: European Commission, Ameco

We obtain a similar conclusion from Figure 8. There we see that the Periphery countries have started a process of reduction of current account deficits that is much more spectacular than the decline in the current account surpluses of the Core countries.

Figure 8

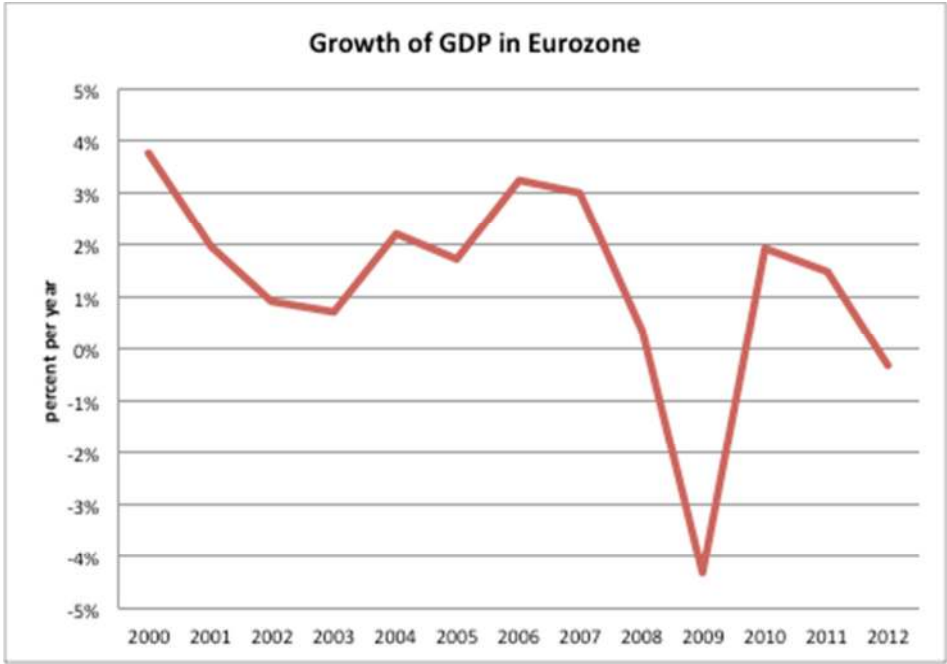


Source: European Commission

Note: Core countries are Austria, Belgium, France, Germany, Netherlands, Finland; Periphery is Greece, Italy, Ireland, Portugal, Spain

From the preceding analysis one can conclude that the burden of the adjustments to the imbalances in the Eurozone between the surplus and the deficit countries is borne almost exclusively by the deficit countries in the periphery. This creates a deflationary bias that explains why since 2012 the Eurozone has been pulled into a double-dip recession as can be seen from Figure 9.

Figure 9



Source: European Commission, AMECO

Yet macroeconomic policies in the Eurozone could be organized differently. A more symmetric macroeconomic policy could be implemented. This symmetric approach should start from the different fiscal positions of the member countries of the Eurozone. In figures 10 and 11 I show this difference. I present the government debt ratios of two groups of countries in the Eurozone, the debtor and the creditor countries. (These are the same data as in figure 5). One observes from figures 10 and 11 that while the debtor countries have not been able to stabilize their government debt ratios (in fact these are still on an explosive path), the situation of the creditor countries is dramatically different. The latter countries have managed to stabilize these ratios. This opens a window of opportunity to introduce a rule that can contribute to more symmetry in the macroeconomic policies in the Eurozone.

Here is the proposed rule. The creditor countries that have stabilized their debt ratios should stop trying to balance their budgets now that the Eurozone is entering a new recession. Instead they should stabilize their government debt ratios at the levels they have achieved in 2012. The implication of such a rule is that these countries can run small budget deficits and yet keep their government debt levels constant. Germany in particular which in 2013 is close to achieving a balanced budget could afford to have a budget deficit of close to 3% of GDP while keeping its debt to GDP ratio constant. This would provide a significant stimulus for the Eurozone as a whole.

It would also make it easier to deal with the current account imbalances between the North and the South of the Eurozone noted earlier. By stimulating spending the Northern countries would wind down the surpluses they have accumulated against the South. This is a necessary condition for the South to be able to reduce its current account deficits vis-à-vis the North.

Whether the symmetric rule proposed here will be implemented very much depends on the European Commission. The latter should invoke exceptional circumstances, i.e. the start of a recession that hits the whole Eurozone and threatens to undermine the stability of the Eurozone, and urge the creditor countries to temporarily stop trying to balance their budgets. As an alternative rule, the European Commission should convince the creditor countries that it is in theirs and the Eurozone's interests that they stabilize their government debt ratios instead.

Figure 10: Gross Government debt ratios in creditor countries of the Eurozone

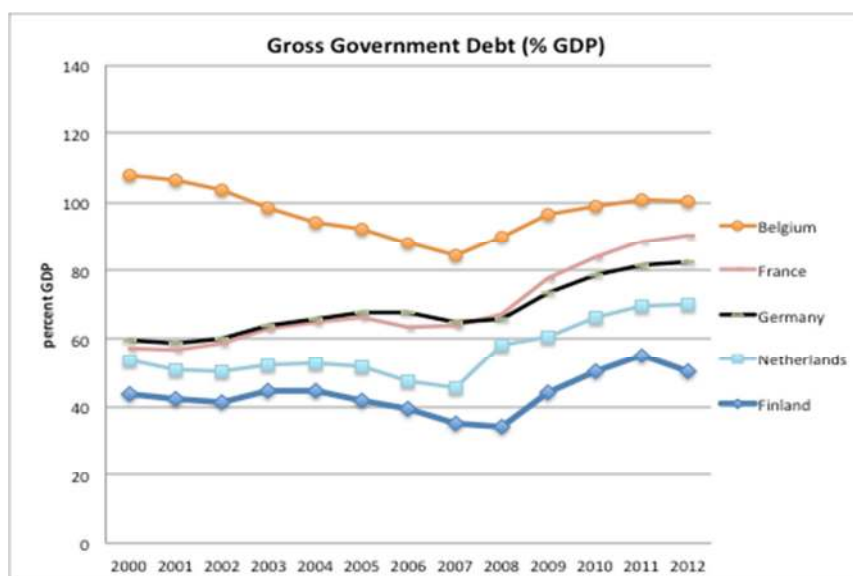
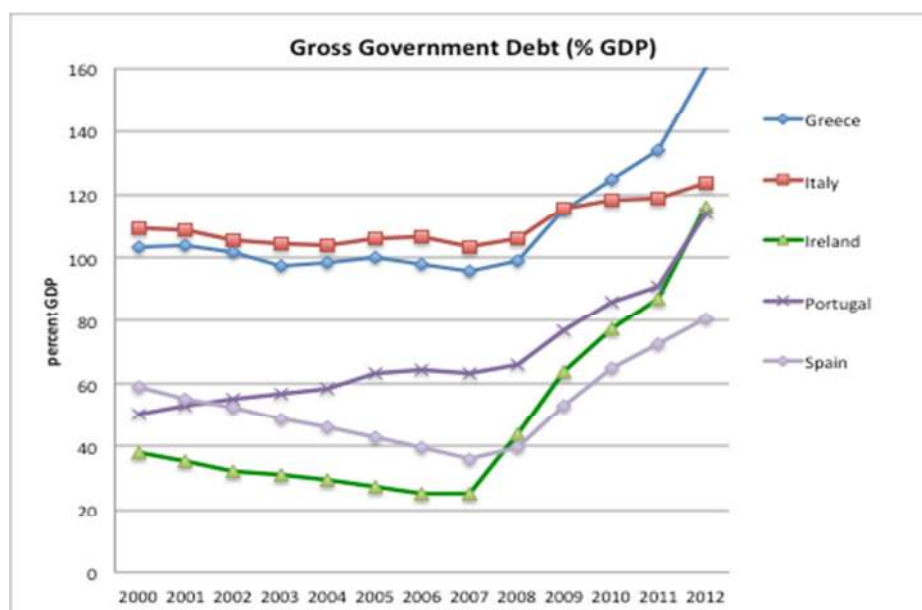


Figure 11: Gross Government debt ratios in debtor countries of the Eurozone



Source: European Commission, AMECO

7. ASYMMETRY NOW AND THEN

The asymmetry in the adjustment mechanism in the Eurozone that we have documented in the previous section is reminiscent of similar asymmetries in the fixed exchange rate regime of the European Monetary System. In this exchange rate regime the burden of adjustment to external disequilibria was borne mostly by the deficit countries.

The asymmetry of the fixed exchange rate regime arose because deficit countries at some point where hit by balance of payments crises that depleted their stock of international reserves. Empty handed they had to turn to creditor nations that imposed their conditions, including an adjustment process to eliminate the deficits. Creditor nations ruled supremely (see Williamson (1990)).

The European Monetary Union would change all that. This appears to have been an idle hope. The adjustment process within the Eurozone seems to be as asymmetric as the adjustment mechanisms of the fixed exchange rate regimes. Why is this? The answer is not because of balance of payments crises. There can be no balance of payments crises in the sense as those that occurred in fixed exchange rate systems because in a monetary union internal foreign exchange markets have disappeared. Another mechanism is at work in a monetary union.

This mechanism arises from the inherent fragility of a monetary union that I analyzed in this paper. When in such a system the fiscal position of a country deteriorates, e.g. due to the deflationary effects of an internal devaluation, investors may be gripped by fear leading to a collective movement of distrust. The ensuing bond sales lead to a liquidity squeeze in the country concerned. This “sudden stop” in turn leads to a situation in which the government of the distressed country finds it impossible to fund its outstanding debt except at prohibitively high interest rates.

In order to avoid default, the crisis-hit government has to turn hat in hand to the creditor countries that like their fixed exchange rate predecessors impose tough conditions. As the creditor countries

profit from the liquidity inflow from the distressed country and are awash with liquidity, no pressure is exerted on these countries to do their part of the adjustment. The creditor countries reign supremely and impose their rule on the system.

8. A MONETARY UNION EMBEDDED IN A FISCAL AND BANKING UNION

Economists have long recognized that the monetary union will ultimately have to be embedded in a fiscal union. Put differently, the euro is a currency without a country. To make the euro sustainable, a country will have to be created. An essential component of a country is a central authority capable of raising taxes and spending for the whole of the union. Such a fiscal union, however, is so far off that we have to think of other embedding procedures that are less ambitious, yet achieve the result of making the Eurozone sustainable in the long run. Do such procedures that will strengthen the Eurozone and make it sustainable in the long run exist? I believe they do. Let me list what the necessary ingredients are of such embedding procedure.

A. PARTIAL DEBT POOLING

First, as the previous diagnosis of the design failure of the Eurozone has made clear, one has to look at measures that will make the national government less fragile and less subject to movements of distrust. One cannot ask the ECB to continuously extinguish fires.

This leads to the idea that some form of pooling of government debts is necessary to overcome this fragility. By pooling the government debts one shields the weakest in the union from destructive movements of fear and panic that regularly arise in financial markets of a monetary union and that can hit any country. Those who are strong today may become weak tomorrow and vice versa.

Of course, not any type of pooling of national debts is acceptable. The major concern of the strong countries that are asked to join in such an arrangement is moral hazard, i.e. the risk that those who profit from the credibility of the strong countries exploit this to reduce their efforts aimed at reducing debts and deficits. This moral hazard risk is the single most important obstacle for pooling debts in the Eurozone. The second obstacle is that inevitably the strongest countries will pay a higher interest rate on their debts as they become jointly liable for the debts of governments with lesser creditworthiness. As a result, debt pooling must be designed in such a way as to overcome these obstacles.

Here are three principles that should be followed to design the right type of debt pooling. First it should be partial, i.e. a significant part of the debt must remain the responsibility of the national governments, so as to give them a continuing incentive to reduce debts and deficits. Several proposals have been done to achieve this (e.g. Delpla and von Weizsäcker(2010)). Second, an internal transfer mechanism between the members of the pool must ensure that the less creditworthy countries compensate (at least partially) the more creditworthy ones (De Grauwe and Moesen(2009)). Third, a control mechanism on the progress of national governments in achieving sustainable debt levels must be an essential part of debt pooling. The Padoa-Schioppa group(2012) has recently proposed a gradual loss of control over their national budgetary process for the sinners against budgetary rules. However, as I stressed in the previous section, this disciplining mechanism

should not escape the rigours of democratic legitimacy. If it does, as the present two-pack legislation, it will be rejected by large parts of the population, and rightly so.

B. AN INSURANCE MECHANISM

A second embedding mechanism is an insurance mechanism. It has long been stressed by economists that a successful monetary union needs to have an insurance mechanism that will protect member-countries against temporary asymmetric shocks. Such a mechanism reduces the costs of a monetary union and makes it more acceptable. In addition, it signals something important. This is a willingness to help each other out when hit by bad economic developments.

Key to the successful implementation of an insurance mechanism is that it deals with the moral hazard risk that is popping up each time agents take an insurance. This is the risk that agents will exert less effort to avoid the risk. Some insurance mechanisms may even give incentives to seek more risk. When that happens the mechanism becomes too expensive and breaks down.

Apart from dealing with the moral hazard risk, a successful insurance mechanism must also be self-sufficient, i.e. it should not rely on the transfer of resources from outside the mechanism. The latter is important because it makes it possible to design a mechanism that avoids the transfer of taxing power to a central European institution.

Here is a possible scheme that combines these two conditions. It has been inspired by Drèze and Durré(2013). Each member country issues bonds that promise to pay out an interest rate equal to the national growth rate of GDP. These bonds are deposited into a common debt agency (CDA). The CDA in turn issues bonds that promise to pay an interest rate equal to the average growth rate of the Eurozone. The latter bonds are held by the member states in the same proportion as those that were issued and are held by the CDA.

The effect of this mechanism is that countries whose growth rates exceed the Eurozone average make a net payment to the CDA while member countries whose growth rates are below the average receive a net payment from the CDA. These payments will be such that the CDA breaks even. Note also that the member countries do not increase their net debt. The issue of new bonds is compensated by the holding of an equal amount of CDA-bonds. Thus this is a pure insurance mechanism that does not require a transfer of resources from outside the system.

A potential criticism is that this scheme does not solve the moral hazard risk. Some countries may have structurally higher growth rates than others. As a result, the net payments would originate from the same countries much of the time and would be transferred to the same (low growth) countries. Such a mechanism would quickly become politically unsustainable. One way to deal with this problem would be to make the interest rate dependent on only the cyclical component of the growth rate of GDP. Thus in order to compute the interest rates, the trend component (structural component) would be taken out of the growth rate and only the cyclical component would be used.

C. A BANKING UNION

A third ingredient of an embedding procedure is a banking union. Such a banking union is necessary for two reasons. First, since the ECB is the lender of last resort for the Eurozone banking system, the

regulation and the supervision cannot be kept at the national level anymore. Liquidity provisions by the central bank create moral hazard risk. These risks must be controlled at the same level as the level at which they are created, i.e. the European one. This does not necessarily mean that the ECB should be the supervisor (probably not). It implies that supervision should be organized at the European level by a European institution. The EBA was created to become such an institution. Unfortunately, it has received insufficient resources to implement its supervisory role.

The second reason why a banking union is necessary is that it allows to cut “deadly embrace” between sovereign and banks that we have stressed earlier. A common bank resolution mechanism allows the cost of resolving banking crises to be spread over the whole union. This is a key ingredient of the banking union that exists in the United States. It has allowed states like Nevada that had experienced a similar real estate boom and bust as Ireland, to escape from the deadly embrace. Many Nevada banks that, as their Irish counterparts, were heavily involved in the real estate boom, faced bankruptcy when the crash occurred. The resolution of the crisis was taken care of by the US federal government thereby shielding the Nevada state government from the budgetary fallout of these resolutions. Daniel Gros(2012) has estimated that this centralization of the cost of resolving the Nevada banking crisis amounted to a transfer from the Federal Government of more than 10% of Nevada GDP. No such central mechanism existed in the case of Ireland. As a result, the Irish government had to bear the whole burden of the costs of bank resolution. This pulled the Irish government into a default crisis, forcing extreme austerity and depression like increases in unemployment. The same happened in Spain.

The previous discussion makes clear that a workable banking union also implies some form of fiscal union. In times of crisis there must exist one or more European institutions with sufficient resources that can be mobilized immediately to intervene and to recapitalize banks. At this moment, the only existing institution that could fulfill this role is the European Stability Mechanism (ESM). One can doubt, however, whether this institution has sufficient resources to act in times of crisis. Surely, it can deal with individual cases, but probably not with systemic banking crises, involving large parts of the Eurozone banking system.

In addition, the governance structure of the ESM risks paralyzing that institution during crises. Important rescue operations need the support of each individual member-country. The fact that countries can exert a veto, is likely to make the decision making process unworkable during crises. From an intergovernmental organization, the EMS will have to be transformed into a true European institution in which qualified majority will be the rule. In order to do this, the amount of trust within the Eurozone will have to increase. The fact that member-countries of the Eurozone have insisted on maintaining unanimity within the EMS expresses the deep distrust that exists between these countries.

The recent Cyprus-crisis and the way this has been resolved does not bode well for the future of the banking union. At the insistence of mainly Germany, Cyprus has been forced to accept large bail-ins by the creditors of the main Cypriote banks, including the deposit holders above €100,000. This was imposed to protect German taxpayers from the financial implications of the resolution of the banking crisis in Germany. The implication of this is double. First the idea underlying the banking union that the cost of banking resolutions will be spread over the large pool of European taxpayers does not have a political support and is unlikely to be implemented. As a result, one can say that the

banking union is dead before arrival. Second, by imposing large bail-ins on deposit holders a signal has been given that in the future sovereign and banking crisis (both are always linked) will be paid by deposit holders. Thus fear of such crises will trigger runs on banks thereby precipitating the crisis. The solution given to the Cyprus crisis makes future crises in the Eurozone more likely.

9. CONCLUSION

The recent decision by the ECB to act a lender of last resort is a major regime change for the Eurozone. It has significantly reduced the existential fears that slowly but inexorably were destroying the Eurozone's foundations.

The ECB's new role although necessary is not sufficient, however, to guarantee the survival of the monetary union. Signals must be given that the Eurozone is here to stay. These signals are, first a partial debt pooling that ties the hands of the member countries of the Eurozone and shows that they are serious in their intentions to stick together.

Second, it implies that macroeconomic policies be made more symmetric. The asymmetric nature of the macroeconomic adjustments that puts most of the adjustment burden on the deficit countries has created a deflationary bias in the Eurozone. It also explains the double dip recession into which the Eurozone has been pushed at the end of 2012. More symmetric macroeconomic adjustment mechanisms not only will make it easier to eliminate the macroeconomic imbalances in the Eurozone, they are key to avoid a long and protracted deflation that will not be accepted by large parts of the Eurozone population. Indeed the greatest risk for the survival of the Eurozone today is the risk emanating from social and political upheavals in countries that are forced into a deflationary spiral. Thus while the ECB's decision to act as a lender of last resort has reduced the risk of a financial implosion, this risk has been substituted by a new risk, i.e. the risk of implosion due to uncontrollable social and political disturbances in the South of Europe.

Finally, in the long run the monetary union will have to be embedded in a significant fiscal union. This is probably the hardest part of the process to make the Eurozone sustainable in the long run, as the willingness to transfer significant spending and taxing powers to European institutions is very limited. It remains a necessary part, though. Without significant steps towards fiscal union there is no future for the euro. I have highlighted a number of small steps that can be taken now and that create a signal about the political commitment to move forward on the road to more integration. These steps have to be taken now as they act as signals of the resolve of the Eurozone countries that the union is here to stay.

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