CEPS WORKING DOCUMENT
Thinking ahead for Europe

The Governance of a Fragile Eurozone

Paul De Grauwe*

No. 346, May 2011

Abstract

When entering a monetary union, member countries change the nature of their sovereign debt in a fundamental way, i.e. they cease to have control over the currency in which their debt is issued. As a result, financial markets can force these countries' sovereigns into default. In this sense, member countries of a monetary union are downgraded to the status of emerging economies. This makes the monetary union fragile and vulnerable to changing market sentiments. It also makes it possible that self-fulfilling multiple equilibria arise.

This paper analyzes the implications of this fragility for the governance of the eurozone. It concludes that the new governance structure – the European Stability Mechanism (ESM), which is intended to be successor starting in 2013 of the European Financial Stability Mechanism (EFSF), created in May 2010 – does not sufficiently recognize this fragility. Some of the features of the new financial assistance are likely to increase this fragility. In addition, it is also likely to present member countries from using the automatic stabilizers during a recession. This is surely a step backward in the long history of social progress in Europe. The author concludes by suggesting a different approach for dealing with these problems.

* Paul De Grauwe is Professor of Economics at the University of Leuven and Senior Associate Research Fellow at CEPS. The author is grateful to Daniel Gros, Martin Wolf and Charles Wyplosz for comments and suggestions.

CEPS Working Documents are intended to give an indication of work being conducted within CEPS' research programmes and to stimulate reactions from other experts in the field. The views expressed in this paper are those of the author and do not necessarily represent any institution with which he is affiliated.

ISBN 978-94-6138-096-8
Available for free downloading from the CEPS website (http://www.ceps.eu)
© Centre for European Policy Studies, 2011

Contents

Introduction 1
1. A Paradox 1
2. On the nature of sovereign debt in a monetary union 2
3. Multiple equilibria 6
4. The bad news about a bad equilibrium 6
5. Competitiveness and sovereign debt 7
6. Governance issues 10
7. What kind of governance? 10
8. A Strategy of small steps 11
   8.1 A European Monetary Fund 11
   8.2 Joint issue of Eurobonds 14
   8.3 Coordination of economic policies 15
9. Conclusion 18
References 20
Appendix I. A model of good and bad equilibria 22

The Governance of a Fragile Eurozone

CEPS Working Document No. 346/ May 2011

Paul De Grauwe

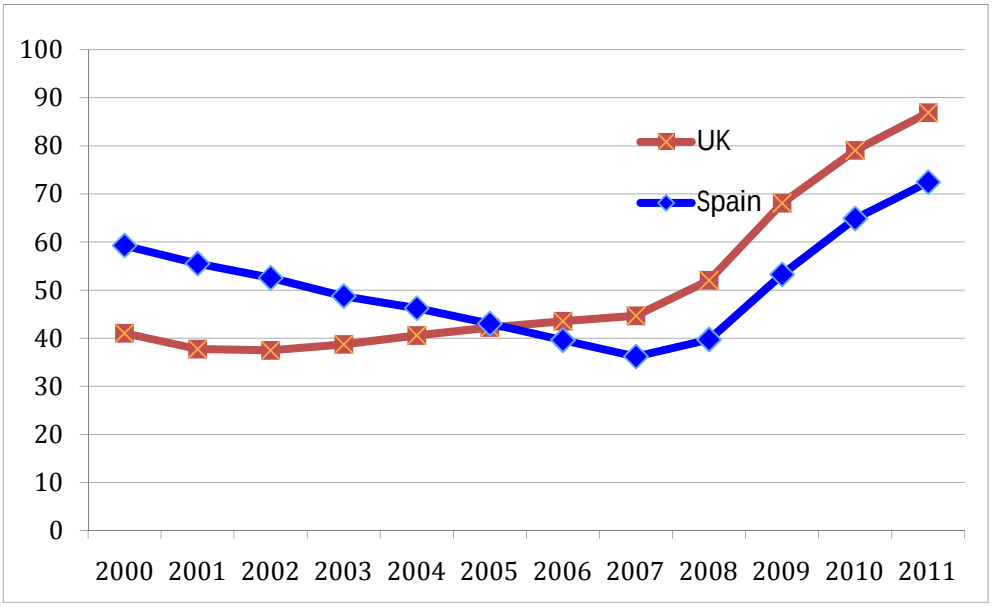
Introduction

In order to design the appropriate governance institutions for the eurozone it is important to make the right diagnosis of the nature of the debt crisis in the eurozone. Failure to do so, can lead to designing a governance structure that is inappropriate for dealing with the problems of the eurozone. In this paper I argue that the governance structure that has emerged after a series of decisions of successive European Council meetings, although an important step forwards, fails to address some fundamental problems in a monetary union.

1. A Paradox

I start with the paradox that is immediately visible from a comparison of Figures 1 and 2. Figure 1 shows the debt to GDP ratios of the UK and Spain. It can be seen that since the start of the financial crisis the government debt ratio of the UK has increased more than that of Spain. As a result, in 2011 as a percent of GDP the UK government debt stood 17% higher than the Spanish Government debt (89% versus 72%). Yet from Figure 2 it appears that the financial markets have singled out Spain and not the UK as the country that could get entangled in a government debt crisis. This can be seen from the fact that since the start of 2010 the yield on Spanish government bonds has increased strongly relative to the UK, suggesting that the markets price in a significantly higher default risk on Spanish than on UK government bonds. In early 2011 this difference amounted to 200 basis points. Why is it that financial markets attach a much higher default risk on Spanish than on UK government bonds government bonds, while it appears that the UK faces a less favourable sovereign debt and deficit dynamics?

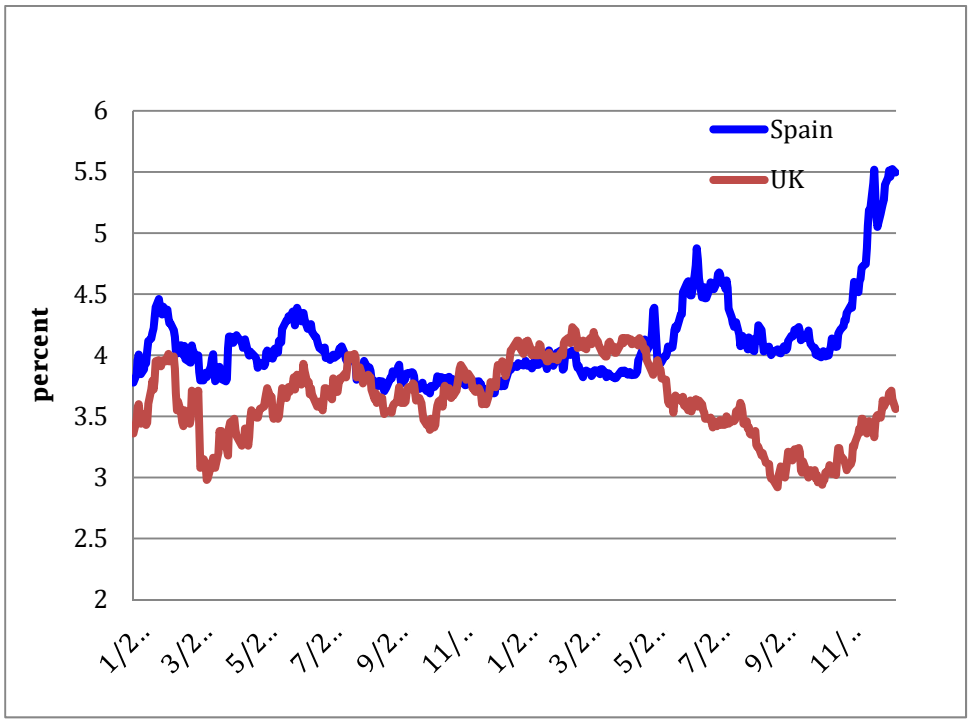
Figure 1. Gross government debt (% of GDP)



Source: European Commission, Ameco.

One possible answer is that it may have something to do with the banking sector. This is unconvincing, though. The state of the UK banking sector is certainly not much better than the one of Spain. I will argue that this difference in the evaluation of the sovereign default risks is related to the fact that Spain belongs to a monetary union, while the UK is not part of a monetary union, and therefore has control over the currency in which it issues its debt.

Figure 2. 10-year government bond rates Spain and UK



Source: Datastream.

2. On the nature of sovereign debt in a monetary union

In a nutshell the difference in the nature of sovereign debt between members and non-members of a monetary union boils down to the following. Members of a monetary union issue debt in a currency over which they have no control. It follows that financial markets acquire the power to force default on these countries. This is not the case in countries that are not part of a monetary union, and have kept control over the currency in which they issue debt. These countries cannot easily be forced into default by financial markets.

Let me expand on this by considering in detail what happens when investors start having doubts about the solvency of these two types of countries. I will use the UK as a prototype monetary "stand-alone" country and Spain as a prototype member-country of a monetary union (see Kopf, 2011) for an insightful analysis).

The UK scenario

Let's first trace what would happen if investors were to fear that the UK government might be defaulting on its debt. In that case, they would sell their UK government bonds, driving up the interest rate. After selling these bonds, these investors would have pounds that most probably they would want to get rid of by selling them in the foreign exchange market. The price of the pound would drop until somebody else would be willing to buy these pounds. The effect of this mechanism is that the pounds would remain bottled up in the UK money market to be invested in UK assets. Put differently, the UK money stock would remain

unchanged. Part of that stock of money would probably be re-invested in UK government securities. But even if that were not the case so that the UK government cannot find the funds to roll over its debt at reasonable interest rates, it would certainly force the Bank of England to buy up the government securities. Thus the UK government is ensured that the liquidity is around to fund its debt. This means that investors cannot precipitate a liquidity crisis in the UK that could force the UK government into default. There is a superior force of last resort, the Bank of England.

The Spanish scenario

Things are dramatically different for a member of a monetary union, like Spain. Suppose that investors fear a default by the Spanish government. As a result, they sell Spanish government bonds, raising the interest rate. So far, we have the same effects as in the case of the UK. The rest is very different. The investors who have acquired euros are likely to decide to invest these euros elsewhere, say in German government bonds. As a result, the euros leave the Spanish banking system. There is no foreign exchange market, nor a flexible exchange rate to stop this. Thus the total amount of liquidity (money supply) in Spain shrinks. The Spanish government experiences a liquidity crisis, i.e. it cannot obtain funds to roll over its debt at reasonable interest rates. In addition, the Spanish government cannot force the Bank of Spain to buy government debt. The ECB can provide all the liquidity of the world, but the Spanish government does not control that institution. The liquidity crisis, if strong enough, can force the Spanish government into default. Financial markets know this and will test the Spanish government when budget deficits deteriorate. Thus, in a monetary union, financial markets acquire tremendous power and can force any member country on its knees.

The situation of Spain is reminiscent of the situation of emerging economies that have to borrow in a foreign currency. These emerging economies face the same problem, i.e. they can suddenly be confronted with a “sudden stop” when capital inflows suddenly stop leading to a liquidity crisis (see Calvo et al., 2006).

There is an additional difference in the debt dynamics imposed by financial markets on member and non-member countries of a monetary union. In the UK scenario we have seen that as investors sell the proceeds of their bond sales in the foreign exchange market, the national currency depreciates. This means that the UK economy is given a boost and that UK inflation increases. This mechanism is absent in the Spanish scenario. The proceeds of the bond sales in Spain leave the Spanish money market without changing any relative price.

In Figure 3 and 4 I show how this difference has probably affected GDP growth and inflation in the UK and Spain since the start of the sovereign debt crisis in the eurozone. It can be seen that since 2010 inflation is almost twice as high in the UK than in Spain (2.9% versus 1.6%). In addition the yearly growth of GDP in the UK averages 2% since 2010 against only 0.2% in Spain. This is certainly not unrelated to the fact that since the start of the financial crisis the pound has depreciated by approximately 25% against the euro.

Figure 3. Inflation in UK and Spain

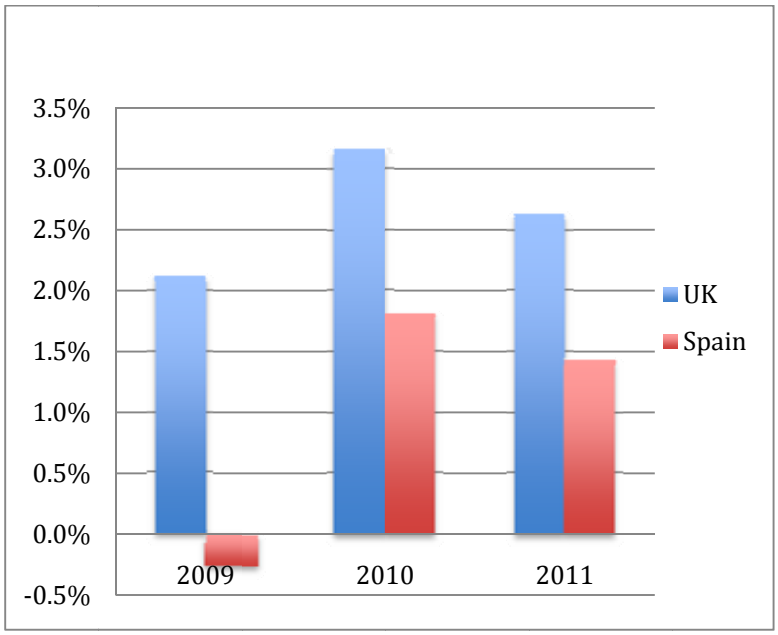
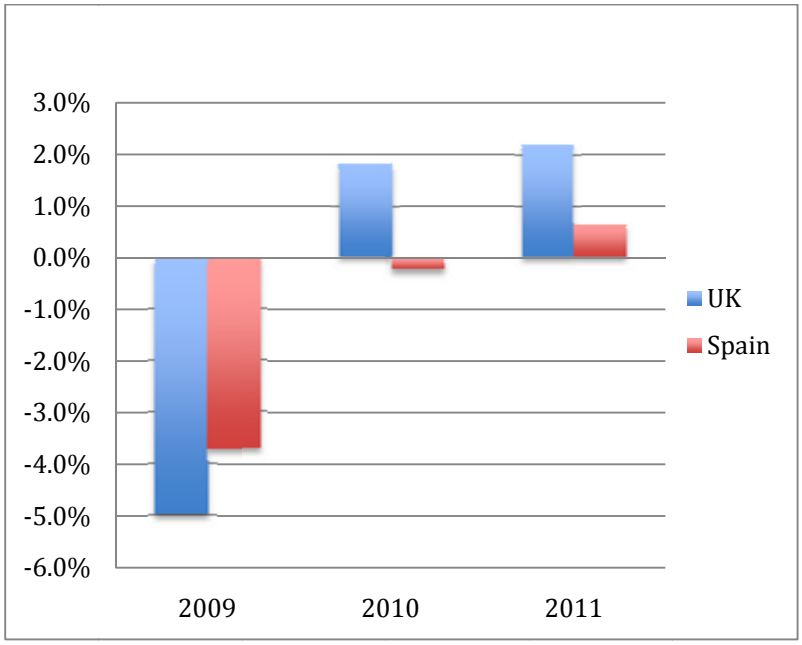


Figure 4. Growth GDP in UK and Spain



Source: European Commission, Ameco.

This difference in inflation and growth can have a profound effect on how the solvency of the governments of these two countries is perceived. It will be remembered that a necessary condition for solvency is that the primary budget surplus should be at least as high as the difference between the nominal interest rate and the nominal growth rate times the debt ratio[1]. I apply this condition and show the numbers in table 1. I assume that Spain and the

[1] The formula is $S \geq (r - g)D$, where S is the primary budget surplus, r is the nominal interest rate on the government debt, g is the nominal growth rate of the economy and D is the government debt to GDP ratio.

UK will continue to face the long-term interest rates that the markets have imposed since the last 6 months (on average 3.5% in the UK and 5% in Spain). Applying the average nominal growth rates since 2010 (4.9% in the UK and 1.8% in Spain) we can see that in the UK there is no need to generate a primary surplus in order to stabilize the debt to GDP ratio (and assuming these growth rates will be maintained). In Spain the primary surplus must be more than 2% to achieve this result. Thus, Spain is forced to apply much more austerity than the UK to satisfy the solvency condition. Put differently, Spain could not get away with the UK budgetary policy without being branded as insolvent despite the fact that it has a substantially lower debt level.

Table 1. Primary surplus needed to stabilize debt at 2011 level (percent of GDP)

UK	-1.21
Spain	2.30

The previous analysis illustrates an important potentially destructive dynamics in a monetary union. Members of a monetary union are very susceptible to liquidity movements. When investors fear some payment difficulty (e.g. triggered by a recession that leads to an increase in the government budget deficit), liquidity is withdrawn from the national market (a 'sudden stop'). This can set in motion a devilish interaction between liquidity and solvency crises. Once a member country gets entangled in a liquidity crisis, interest rates are pushed up. Thus the liquidity crisis turns into a solvency crisis. Investors can then claim that it was right to pull out the money from a particular national market. It is a self-fulfilling prophecy: the country has become insolvent because investors fear insolvency.

Note that I am not arguing that all solvency problems in the eurozone are of this nature. In the case of Greece, for example, one can argue that the Greek government was insolvent before investors made their moves and triggered a liquidity crisis in May 2010. What I am arguing is that, in a monetary union, countries become vulnerable to self-fulfilling movements of distrust that set in motion a devilish interaction between liquidity and solvency crises.

This interaction between liquidity and solvency is avoided in the "stand-alone" country, where the liquidity is bottled up in the national money markets (there is no "sudden stop"), and where attempts to export it to other markets sets in motion an equilibrating mechanism, produced by the depreciation of the currency. Thus, paradoxically, distrust leads to and equilibrating mechanism in the UK, and to a potentially disequilibrating mechanism in Spain.

From the preceding analysis, it follows that financial markets acquire great power in a monetary union. Will this power be beneficial for the union?

Believers in market efficiency have been telling us that this power is salutary, as it will act as a disciplining force on bad governments. I have lost much of my faith in the idea that financial markets are a disciplining force. The financial crisis has made abundantly clear that financial markets are often driven by extreme sentiments of either euphoria or panic. During periods of euphoria investors, cheered by rating agencies, collectively fail to see the risks and take on too much of it. After the crash, fear dominates, leading investors, prodded by rating agencies, to detect risks everywhere triggering panic sales much of the time.

3. Multiple equilibria

The inherent volatility of financial markets leads to another fundamental problem. It can give rise to multiple equilibria, some of them good ones; others bad ones. This arises from the self-fulfilling nature of market expectations. In appendix, I present a simple theoretical model showing more formally how multiple equilibria can arise.

Suppose markets trust government A. Investors then will show a willingness to buy government bonds at a low interest rate. A low interest rate embodies a belief that the default risk is low. But the same low interest rate also has the effect of producing a low risk of default. This is made very clear from our solvency calculations in Table 1. Markets trust that the UK government will not default (despite its having a high debt ratio). As a result, the UK government enjoys a low interest rate. Our solvency calculation then shows that indeed the UK government is very solvent. Financial markets gently guide the UK towards a good equilibrium.

Suppose market distrusts government B. As a result, investors sell the government bonds. The ensuing increase in the interest rate embeds the belief that there is a default risk. At the same time this high interest rate actually makes default more likely. Thus in our calculation from table 1 it appears that the market's distrust in the Spanish government in a self-fulfilling way has made default more likely. Financial markets push Spain towards a bad equilibrium.

The occurrence of bad equilibria is more likely with members of a monetary union, which have no control of the currency in which they issue their debt, than with stand-alone countries that have issued debt in a currency over which they have full control. As mentioned earlier, the members of a monetary union face the same problem as emerging countries that because of underdeveloped domestic financial markets, are forced to issue their debt in a foreign currency (see Calvo et al., 2006 and Eichengreen et al., 2005). In the words of Eichengreen et al. (2005) this works as the "original sin" that leads these countries into a bad equilibrium full of pain and misery.

There is an additional complication in a monetary union. This is that in such a union financial markets become highly integrated. This also implies that government bonds of member countries are held throughout the union. According to the BIS data, for many eurozone member countries more than half of government bonds are held outside the country of issue. Thus when a bad equilibrium is forced on some member countries, financial markets and banking sectors in other countries enjoying a good equilibrium are also affected (see Azerki et al., 2011) who find strong spillover effects in the eurozone).

These externalities are a strong force of instability that can only be overcome by government action. I will return to this issue when I analyze the governance question of the eurozone.

To wrap up the previous discussion: members of monetary union are sensitive to movements of distrust that have self-fulfilling properties and that can lead them to be pushed into a bad equilibrium. The latter arises because distrust can set in motion a devilish interaction between liquidity and solvency crises. Being pushed into a bad equilibrium has two further consequences. I analyze these in the following section.

4. The bad news about a bad equilibrium

There are two features of a bad equilibrium that are worth analyzing further. First, domestic banks are affected by the bad equilibrium in different ways. When investors pull out from the domestic bond market, the interest rate on government bonds increases. Since the domestic banks are usually the main investors in the domestic sovereign bond market, this

shows up as significant losses on their balance sheets. In addition, domestic banks are caught up in a funding problem. As argued earlier, domestic liquidity dries up (the money stock declines) making it difficult for the domestic banks to rollover their deposits, except by paying prohibitive interest rates. Thus the sovereign debt crisis spills over into a domestic banking crisis, even if the domestic banks were sound to start with. This feature has played an important role in the case of Greece and Portugal where the sovereign debt crisis has led to a full-blown banking crisis. In the case of Ireland, there was a banking problem prior to the sovereign debt crisis (which in fact triggered the sovereign debt crisis). The latter, however, intensified the banking crisis.

Second, once in a bad equilibrium, members of monetary union find it very difficult to use automatic budget stabilizers: A recession leads to higher government budget deficits; this in turn leads to distrust of markets in the capacity of governments to service their future debt, triggering a liquidity and solvency crisis; the latter then forces them to institute austerity programs in the midst of a recession. In the stand-alone country (UK) this does not happen because the distrust generated by higher budget deficit triggers a stabilizing mechanism.

Thus, member countries of a monetary union are downgraded to the status of emerging economies, which find it difficult if not impossible to use budgetary policies to stabilize the business cycle. This feature has been shown to produce pronounced booms and busts in emerging economies (see Eichengreen et al., 2005).

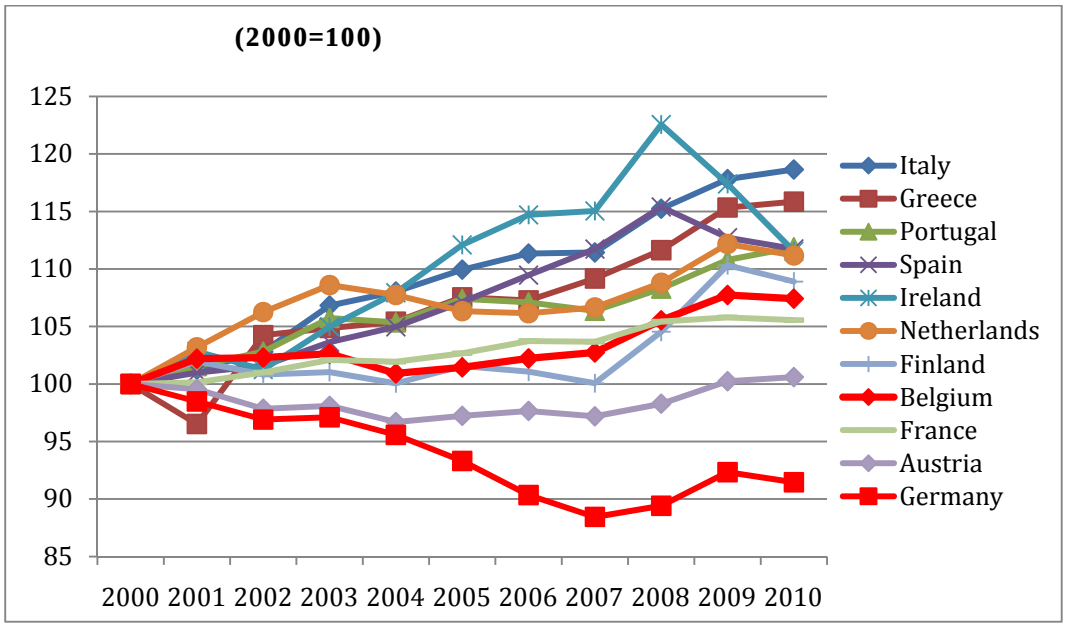
This feature of a monetary union makes it potentially very costly. The automatic stabilizers in the government budget constitute an important social achievement in the developed world as they soften the pain for many people created by the booms and busts in capitalist societies. If a monetary union has the implication of destroying these automatic stabilizers, it is unclear whether the social and political basis for such a union can be maintained. It is therefore important to design a governance structure that maintains these automatic stabilizers.

5. Competitiveness and sovereign debt

The previous analysis allows us to connect sovereign debt dynamics and competitiveness problems.

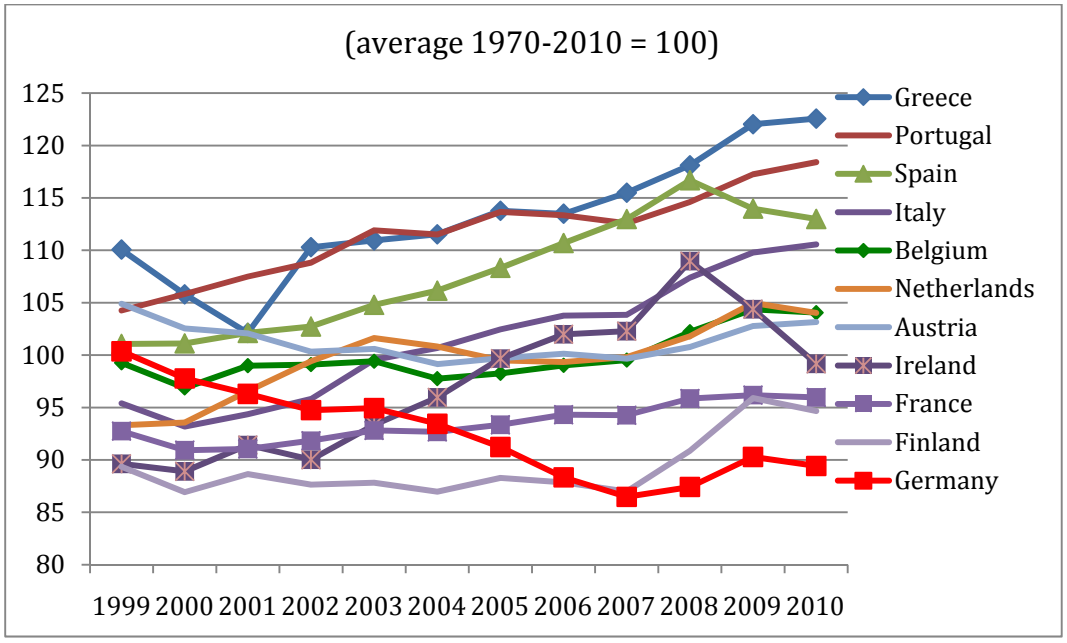
It is now widely recognized that one of the fundamental imbalances in the eurozone is the increased divergence in competitive positions of the members of the eurozone since 2000. The phenomenon is shown in figure 5, which I am confident most readers must have seen somewhere. One may criticize this figure because of the choice of 2000 as the base year. Indeed, this choice assumes that in 2000 there were no imbalances in competitive positions, so that any movement away from the 2000-level is a departure from equilibrium and thus problematic. This is surely not the case (see Alcidi & Gros, 2010). A number of countries may have been far from equilibrium in 2000 so that movements observed since that date could conceivably be movements towards equilibrium. In order to take this criticism into account I present relative unit labour costs of the member countries using the long-term average over the period 1970-2010 as the base. The results are shown in figure 6. The divergence is less spectacular, but still very significant. Figure 7 confirms this: the standard deviation of the yearly indices increased significantly since 1999.

Figure 5. Relative unit labour costs in the eurozone



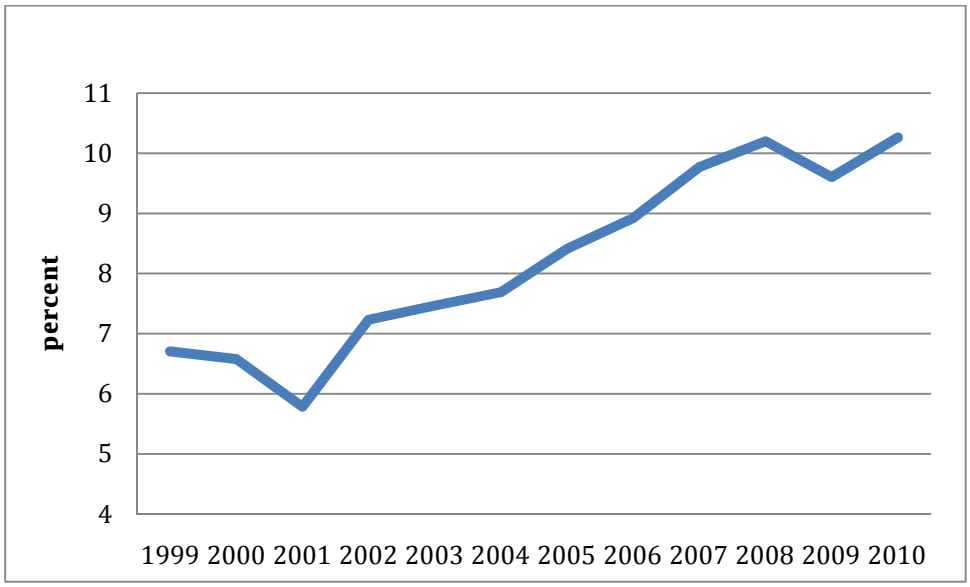
Source: European Commission, Ameco.

Figure 6. Relative unit labour costs in the eurozone



Source: European Commission, Ameco.

Figure 7. Standard deviation relative unit labour costs in the eurozone (per cent)



Note: Computed using data of Figure 6.

The countries that lost competitiveness from 1999 to 2008 (Greece, Portugal, Spain, Ireland) have to start improving it. Given the impossibility of using a devaluation of the currency, an internal devaluation must be engineered, i.e. wages and prices must be brought down relative to those of the competitors. This can only be achieved by deflationary macroeconomic policies (mainly budgetary policies). Inevitably, this will first lead to a recession and thus (through the operation of the automatic stabilizers) to increases in budget deficits.

Most of the analyses in textbooks now stop by noting that this is a slow and painful process. The analysis of the previous sections, however, allows us to go a little further and to link it with the debt dynamics described earlier. As countries experience increasing budget deficits while they attempt to improve their competitiveness, financial markets are likely to get nervous. Distrust may install itself. If strong enough, the latter may lead to a liquidity crisis as described before. This then inevitably triggers a solvency crisis.

Thus the period during which countries try to improve their competitiveness is likely to be painful and turbulent: Painful, because of the recession and the ensuing increase in unemployment; turbulent, because during the adjustment period, the county can be hit by a sovereign debt and banking crises. If the latter occur, the deflationary spiral is bound to be intensified. For in that case the domestic long term interest rate increases dramatically, forcing the authorities to apply even more budgetary austerity, which in turn leads to an even more intense recession. The banks that are trapped in a funding crisis reduce their credit to the economy. The country finds itself stuck in a bad equilibrium, characterized by austerity programs that fail to reduce budget deficits because they lead to a downward economic spiral and punishing interest rate levels. The path towards recovery for members of a monetary union is likely to be crisis-prone.

The contrast with stand-alone countries that have the capacity to issue debt in their own currency is stark. When these countries have lost competitiveness, they will typically try to restore it by allowing the currency to drop in the foreign exchange market. This makes it possible not only to avoid deflation, but also to avoid a sovereign debt crisis. As we have seen earlier, these countries' governments cannot be forced into default by triggering a

liquidity crisis. What is more the whole adjustment process involving currency depreciation is likely to boost output and inflation, thereby improving the solvency of the sovereign.

6. Governance issues

The debt crisis has forced European leaders to set up new institutions capable of dealing with the crisis. The most spectacular response has been the creation of the European Financial Stability Mechanism (EFSF) in May 2010 to be transformed into a permanent European rescue fund, the European Stability Mechanism (ESM) from 2013 on. Surely these were important steps that were necessary to maintain the stability of the eurozone.

Yet the opposition against these decisions continues to be high especially in Northern European countries. Opposition is also strong among economists of these countries (see the statement of 189 German economists warning about future calamities if the EFSF were to be made permanent, Plenum der Ökonomen, 2011).

This opposition is based on an incomplete diagnosis of the sovereign debt problem in the eurozone. For the 189 German economists the story is simple: some countries (Greece, Ireland, Portugal, and Spain) have misbehaved. Their governments have irresponsibly spent too much, producing unsustainable debt levels. They are now insolvent through their own mistakes. There is no point in providing financial assistance because this does not make them solvent. It only gives them incentives to persevere in irresponsible behaviour (moral hazard). Thus in this diagnostics, the problem is a debt crisis of a limited number of individual countries, that can only be solved by an orderly debt default mechanism. The latter is crucial to avoid that German taxpayers have to foot the bill.

While this analysis may be correct in the case of Greece, it fails to understand the nature of the debt crisis in other eurozone countries, because it treats the debt problem as a series of individual problems; not as the outcome of a systemic problem in the eurozone, which I have described earlier. This systemic problem has several ingredients. First, by acquiring the status of emerging countries, the sovereigns of the member states in a monetary union become vulnerable, as unfavourable market sentiments can force them into default. This has the effect of pushing the country into a bad equilibrium, characterized by punishingly high interest rates, chronically high budget deficits, low growth and a domestic banking crisis. Second, the degree of financial integration in the monetary union is such that when some sovereigns are pushed in a bad equilibrium, this affects the other countries. In particular it makes the banking systems in these other countries more fragile. Thus, strong externalities are created, making it impossible to isolate a financial problem of one country from the rest of the eurozone. Put differently, when one country experiences a debt problem, this becomes a problem of the whole eurozone. It is my contention that the governance structure that is now being designed does not sufficiently take into account the systemic nature of the debt problem.

7. What kind of governance?

I identified two problems of a monetary union that require government action. First, there is a coordination failure. Financial markets can drive countries into a bad equilibrium that is the result of a self-fulfilling mechanism. This coordination failure can in principle be solved by collective action aimed at steering countries towards a good equilibrium. Second, the eurozone creates externalities (mainly through contagion). Like with all externalities, government action must consist in internalizing these.

Collective action and internalization can be taken at two levels. One is at the level of the central banks; the other at the level of the government budgets.

Liquidity crises are avoided in stand-alone countries that issue debt in their own currencies mainly because the central bank can be forced to provide all the necessary liquidity to the sovereign. This outcome can also be achieved in a monetary union if the common central bank is willing to buy the different sovereigns' debt. In fact this is what happened in the eurozone during the debt crisis. The ECB bought government bonds of distressed member-countries, either directly, or indirectly by the fact that it accepted these bonds as collateral in its support of the banks from the same distressed countries. In doing so, the ECB rechanneled liquidity to countries hit by a liquidity crisis, and prevented the centrifugal forces created by financial markets from breaking up the eurozone. It was the right policy for a central bank whose *raison d'être* is to preserve the monetary union. Yet, the ECB has been severely criticized for saving the eurozone in this way. This criticism, which shows a blatant incomprehension of the fundamentals of a monetary union, has been powerful enough to convince the ECB that it should not be involved in such liquidity operations, and that instead the liquidity support must be done by other institutions, in particular a European Monetary Fund. I return to this issue in the next section.

Collective action and internalization can also be taken at the budgetary level. Ideally, a budgetary union is the instrument of collective action and internalization. By consolidating (centralizing) national government budgets into one central budget a mechanism of automatic transfers can be organized. Such a mechanism works as an insurance mechanism transferring resources to the country hit by a negative economic shock. In addition, such a consolidation creates a common fiscal authority that can issue debt in a currency under the control of that authority. In so doing, it protects the member states from being forced into default by financial markets. It also protects the monetary union from the centrifugal forces that financial markets can exert on the union.

This solution of the systemic problem of the eurozone requires a far-reaching degree of political union. Economists have stressed that such a political union will be necessary to sustain the monetary union in the long run (see European Commission, 1977) and De Grauwe, 1992). It is clear, however, that there is no willingness in Europe today to significantly increase the degree of political union. This unwillingness to go in the direction of more political union will continue to make the eurozone a fragile construction.

This does not mean, however, that one should despair. We can move forward by taking small steps. Such a strategy of small steps not only allows us to solve the most immediate problems. It also signals the seriousness of European policy-makers in moving forward in the direction of more political union.

8. A strategy of small steps

I distinguish between three steps that each requires institutional changes. Some of these steps have already been taken. Unfortunately, as I will argue they have been loaded with features that threaten to undermine their effectiveness

8.1 A European Monetary Fund

An important step was taken in May 2010 when the European Financial Stability Facility (EFSF) was instituted. The latter will be transformed into a permanent fund, the European Stabilization Mechanism (ESM), which will obtain funding from the participating countries and will provide loans to countries in difficulties. Thus, a European Monetary Fund will be in existence, as was first proposed by Gros & Mayer (2010).

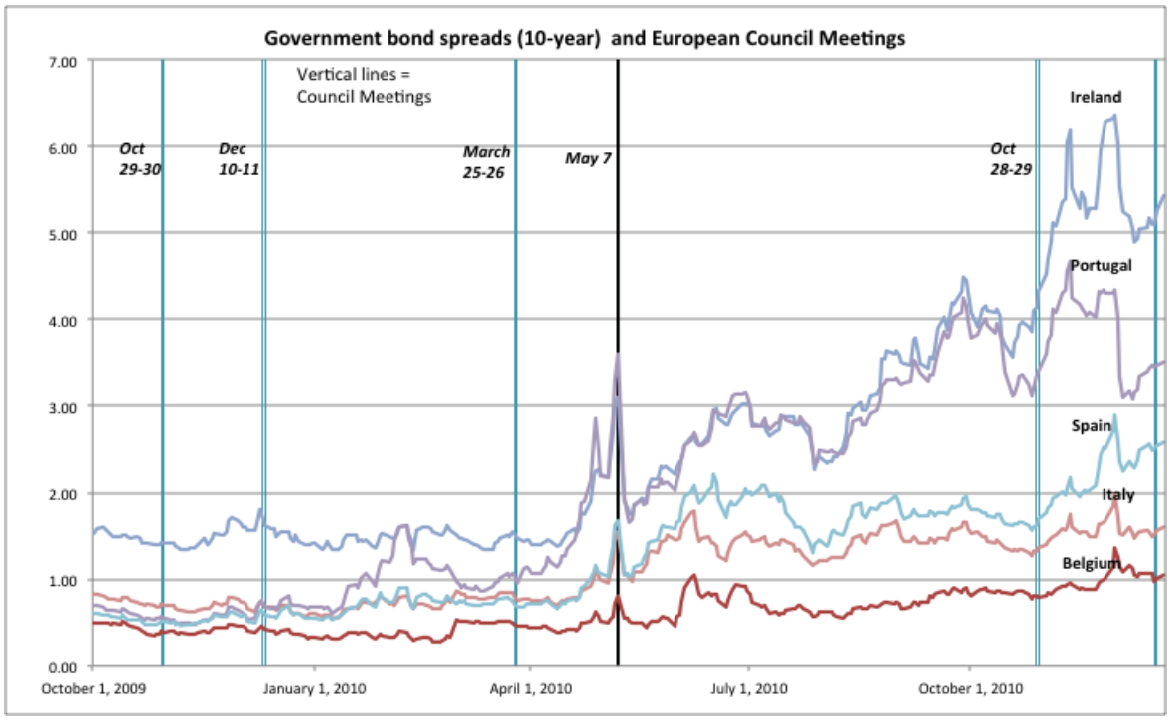
It is essential that the ESM take a more intelligent approach to lending to distressed countries than the EFSF has been doing up to now. The interest rate applied by the EFSF in the Irish rescue program amounts to almost 6%. This high interest rate has a very unfortunate effect. First, by charging this high interest rate it makes it more difficult for the Irish government to reduce its budget deficit and to slow down debt accumulation. Second, by charging a risk premium of about 3% above the risk free rate that the German, Dutch and Austrian governments enjoy, the EFSF signals to the market that there is a significant risk of default, and thus that the Irish government may not succeed in putting its budgetary house in order. No wonder that financial markets maintain their distrust and also charge a high-risk premium. All this, in a self-fulfilling way, increases the risk of default.

The intelligent approach in financial assistance consists in using a policy of the carrot and the stick. The stick is the conditionality, i.e. an austerity package spelled out over a sufficiently long period of time, so that economic growth gets a chance. Without economic growth debt burdens cannot decline. The carrot is a concessional interest rate that makes it easier for the country concerned to stop debt accumulation. A low interest rate also expresses trust in the success of the package; trust that financial markets need in order to induce them to buy the government debt at a reasonable interest rate. Unfortunately, the future ESM will apply an interest rate that is 200 basis points above its funding rate. There is no good reason for the ESM to do this. By applying such a risk premium, the ESM will signal to the market that is does not truly believe in the success of its own lending programme.

There are other features of the ESM that will undermine its capacity to stabilize the sovereign bond markets in the eurozone. From 2013 on, all members of the eurozone will be obliged to introduce “collective actions clauses” when they issue new government bonds. The practical implication of this is the following. When in the future, a government of the eurozone turns to the ESM to obtain funding, private bondholders may be asked to share in the restructuring of the debt. Put differently, they may be asked to take some of the losses. This may seem to be a good decision. Bondholders will be forced to think twice when they invest in government bonds, as these bonds may not be as secure as they thought.

The intention may be good; the effect will be negative (see De Grauwe, 2010). In fact we have already seen the effects. When the German government made the first proposal to introduce collective action clauses at the European Council meeting of October 2010, the immediate effect was to intensify the crisis in the eurozone sovereign bond markets. I show evidence for this in Figure 8, which presents the government bond spreads of a number of eurozone countries. It can be seen that immediately after the European Council meeting of October 28-29, when the first announcement was made to attach collective action clauses (CACs) to future government bond issues, the government bond spreads of Ireland, Portugal and Spain shot up almost immediately. Since then these spreads have remained high. This contrasts with the previous European Council meetings, which either did not seem to affect the spreads, or as in the case of the May 2010 meeting was followed by a (temporary) decline in the spreads.

Figure 8. Government bond spreads (10-year) and European Council meetings



Source: Datastream.

The reaction of the markets to the announcement of future CACs should not have been surprising. When private bondholders know that in the future their bonds will automatically loose value when a country turns to the ESM, they will want to be compensated for the added risk with a higher interest rate. In addition, and even more importantly, each time they suspect that a country may turn to the ESM for funding they will immediately sell their bonds, so as to avoid a potential loss. But this selling activity will raise the interest rate on these bonds, and will make it more likely that the government will have to ask for support from the ESM.

Thus the collective action clauses will make the government bond markets more fragile and more sensitive to speculative fears. I argued earlier that the systemic problem of the eurozone lies in the fact that in a monetary union the national governments are more vulnerable to liquidity crises triggered by movements in confidence in financial markets. Instead of alleviating this problem the collective action clauses will intensify it, because with each decline in confidence bondholders will 'run for cover' to avoid losses, thereby triggering a crisis.

CACs downgrade the members of the monetary union to the status of emerging markets for which these clauses were invented. In a way it is quite extraordinary that the European leaders have designed a 'solution' to the systemic problem that will turn out to make that problem more severe.

There is another feature of the ESM that instead of solving a problem may actually make it more pronounced. I argued earlier that when the member countries of a monetary union are pushed into a bad equilibrium, they lose much of their ability to apply the automatic stabilizers in the budget during a recession. Countries that apply for financing from the ESM will be subjected to a tough budgetary austerity programme as a condition for obtaining finance. Thus, with each recession, when a number of eurozone countries may be forced to

turn to the ESM they will be obliged to follow pro-cyclical budgetary policies, i.e. to reduce spending and increase taxes. A sure way to make the recession worse.

The pro-cyclicality of government budgets is an important achievement in the developed world. It has led to greater business cycle stability and to greater social welfare, shielding people from the harshness of booms and busts in capitalist systems. The way the ESM has been set up, however, risks undermining this achievement.

All this is quite unfortunate. Especially because the existence of a financial support mechanism in the eurozone is a great idea and a significant step forwards in the building of an integrated Europe (Peirce et al., 2011). Unfortunately, by introducing all kinds of restrictions and conditions, the ESM has been transformed into an institution that is unlikely to produce more stability in the eurozone.

8.2 Joint issue of Eurobonds

A second step towards political union and thus towards strengthening the eurozone consists in the joint issue of Eurobonds. A joint issue of Eurobonds is an important mechanism of internalizing the externalities in the eurozone that I identified earlier.

By jointly issuing Eurobonds, the participating countries become jointly liable for the debt they have issued together. This is a very visible and constraining commitment that will convince the markets that member countries are serious about the future of the euro (see Verhofstadt, 2009, Juncker & Tremonti, 2010). In addition, by pooling the issue of government bonds, the member countries protect themselves against the destabilizing liquidity crises that arise form their inability to control the currency in which their debt is issued. A common bond issue does not suffer from this problem.

The proposal of issuing common Eurobonds has met stiff resistance in a number of countries (see Issing, 2010). This resistance is understandable. A common Eurobond creates a number of serious problems that have to be addressed.

A first problem is moral hazard. The common Eurobond issue contains an implicit insurance for the participating countries. Since countries are collectively responsible for the joint debt issue, an incentive is created for countries to rely on this implicit insurance and to issue too much debt. This creates a lot of resistance in the other countries that behave responsibly. It is unlikely that these countries will be willing to step into a common Eurobond issue unless this moral hazard risk is resolved.

A second problem (not unrelated to the previous one) arises because some countries like Germany, Finland and the Netherlands today profit from triple A ratings allowing them to obtain the best possible borrowing conditions. The question arises of what the benefits can be for these countries. Indeed, it is not inconceivable that by joining a common bond mechanism that will include other countries enjoying less favourable credit ratings, countries like Germany, Finland and the Netherlands may actually have to pay a higher interest rate on their debt.

These objections are serious. They can be addressed by a careful design of the common Eurobond mechanism. The design of the common Eurobonds must be such as to eliminate the moral hazard risk and must produce sufficient attractiveness for the countries with favourable credit ratings. This can be achieved by working both on the quantities and the pricing of the Eurobonds.

Thus, my proposal would be to seek a combination of the Eurobond proposal made by Bruegel (Delpla & von Weizsäcker, 2010) and the one made by De Grauwe & Moesen (2009). It would work as follows. Countries would be able to participate in the joint Eurobond issue

up to 60% of their GDP, thus creating "blue bonds". Anything above 60% would have to be issued in the national bond markets ("red bonds"). This would create a senior (blue) tranche that would enjoy the best possible rating. The junior (red) tranche would face a higher risk premium. This existence of this risk premium would create a powerful incentive for the governments to reduce their debt levels. In fact, it is likely that the interest rate that countries would have to pay on their red bonds would be higher than the interest rate they pay today on their total outstanding debt (see Gros, 2010 on this). The reason is that by creating a senior tranche, the probability of default on the junior tranche may actually increase. This should increase the incentive for countries to limit the red component of their bond issues.

The Bruegel proposal can be criticized on the following grounds. To the extent that the underlying risk of the government bonds is unchanged, restructuring these bonds into different tranches does not affect its risk. Thus, if the blue bond carries a lower interest rate, the red bond will have a higher interest rate such that the average borrowing cost will be exactly the same as when there is only one type of bond (see Gros, 2011). This is an application of the Modigliani-Miller theorem which says that the value of a firm is unaffected by the way the liabilities of that firm are structured.

All this is true to the extent that the underlying risk is unchanged. The point, however, is that the common bond issue is an instrument to shield countries from being pushed into a bad equilibrium. If the common bond issue succeeds in doing so, the underlying risk of the bonds of these countries does indeed decline. In that case these countries are able to enjoy a lower average borrowing cost. At the same time the marginal borrowing cost is likely to be higher than the average. This is exactly what one wants to have: a decline of the average debt cost, and an increase in the marginal cost of the debt. The former makes it easier to service the debt; the latter provides strong incentives towards reducing the level of the debt. This feature is important to reduce the moral hazard risk.

The second feature of our proposal works on the pricing of the Eurobonds and it follows the proposal made by De Grauwe & Moesen (2009). This consists in using different fees for the countries participating in the blue bond issue. These fees would be related to the fiscal position of the participating countries. Thus, countries with high government debt levels would face a higher fee, and countries with lower debt levels would pay a lower fee. In practical terms this means that the interest rate paid by each country in the blue bond tranche would be different. Fiscally prudent countries would have to pay a somewhat lower interest rate than fiscally less prudent countries. This would ensure that the blue bond issue would remain attractive for the countries with the best credit rating, thereby giving them an incentive to joint the Eurobond mechanism.

It should be noted that if successful, such a common Eurobond issue would create a large new government bond market with a lot of liquidity. This in turn would attract outside investors making the euro a reserve currency. As a result the euro would profit from an additional premium. It has been estimated that the combined liquidity and reserve currency premium enjoyed by the dollar amounts to approximately 50 basis points (Gourinchas & Rey, 2007). A similar premium could be enjoyed by the euro. This would make it possible for the euro zone countries to lower the average cost of borrowing, very much like the US has been able to do.

8.3 Coordination of economic policies

A third important step in the process towards political union is to set some constraints on the national economic policies of the member states of the eurozone. The fact that while monetary policy is fully centralized, the other instruments of economic policies have remained firmly in the hands of the national governments is a serious design failure of the

eurozone. Ideally, countries should hand over sovereignty over the use of these instruments to European institutions. However, the willingness to take such a drastic step towards political union is completely absent. Here also small steps should be taken.

The European Commission has proposed a scoreboard of macroeconomic variables (private and public debt, current account imbalances, competitiveness measures, house prices) that should be monitored, and that should be used to push countries towards using their economic policy instruments so as to create greater convergence in these macroeconomic variables. Failure to take action to eliminate these imbalances could trigger a sanctioning mechanism very much in the spirit of the sanctioning mechanism of the Stability and Growth Pact (European Commission, 2010).

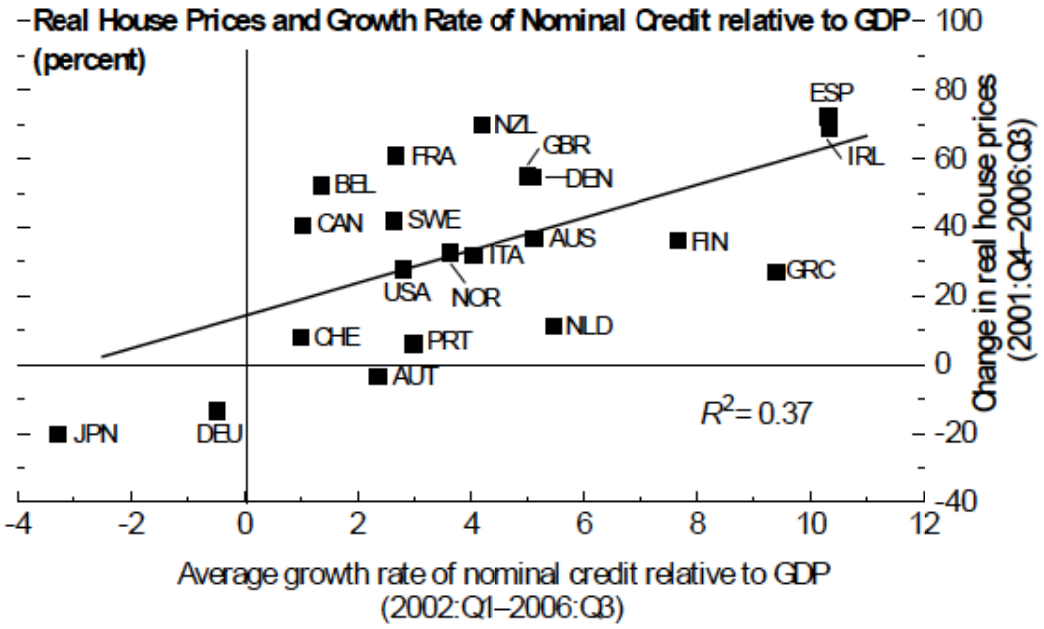
While an important step forward, this approach is incomplete. National governments have relatively little control over many of the macroeconomic variables targeted by the European Commission. In fact the evidence we have of the pre-crisis divergence dynamics is that much of it was produced by monetary and financial developments over which national governments had little control. Local booms and bubbles developed in the periphery of the eurozone. These were driven mainly by bank credit expansion. This is vividly shown in Figure 9. It is the combination of bubbles (especially in the housing markets) and credit expansion that makes bubbles potentially lethal (see Borio, 2003). This has been made vary clear by the experience of Spain and Ireland.

Thus, any policy aimed at stabilizing local economic activity must also be able to control local credit creation. It is clear that because the member states of the eurozone have entered a monetary union they lack the instruments to deal with this. Put differently, if the movements of economic activity are driven by credit-fuelled animal spirits the only instruments that can effectively deal with this are monetary instruments. Members of a monetary union, however, have relinquished these instruments to the European monetary authorities.

The next question then becomes: can the European monetary authorities, in particular the ECB, help out national governments? We have been told that this is impossible because the ECB should only be concerned by system-wide aggregates. It cannot be made responsible for national economic conditions. The reason is that it has one objective which is the maintenances of price stability in the eurozone as a whole, and because it has only one instrument to achieve this goal.

This I believe is too cheap an answer. The ECB is not only responsible for price stability but also for financial stability. The financial crisis that erupted in the eurozone in 2010 had its origin in a limited number of countries. It is therefore important that the ECB focuses not only on system-wide aggregates but also on what happens in individual countries. Excessive bank credit creation in a number of member countries should also appear on the radar screen of the ECB in Frankfurt upon which the ECB should act.

Figure 9. Real house prices and growth rate of nominal credit relative to GDP



Source: Kannan et al. (2009).

One may object that the ECB does not have the instruments to deal with excessive bank credit in parts of the eurozone. This, however, is not so. The Eurosystem has the technical ability to restrict bank credit in some countries more than in others by applying differential minimum reserve requirements, or by imposing anti-cyclical capital ratios. These can and should be used as stabilizing instruments at the national level.

Another objection is that it is the responsibility of the financial supervisors to deal with excessive risk taking by banks. When banks extend too much credit and thereby increase the risk of their balance sheets, national supervisors should intervene. This is undoubtedly so. At the same time it does not absolve the Eurosystem from its responsibility in maintaining financial stability. When a credit-fuelled boom emerges in some member states, it is also the responsibility of the Eurosystem to act. The Eurosystem also has the most powerful toolkit in controlling the macroeconomic consequences of booms and busts.

The recent reforms in the supervisory landscape in the eurozone increase the scope for action by the Eurosystem. The European Systemic Risk Board (ESRB) which was created in 2010 is of particular importance here. Very pointedly, the president of the ECB will also preside over the ESRB. Thus the creators of the ESRB have clearly understood that the ECB is at the centre of the monitoring of emerging systemic risks in the eurozone. It would be quite paradoxical that the president of the ESRB (ECB) would emit warning signals about systemic risk and would then not follow-up this warning by action to reduce the risks, leaving it to the national supervisors to act alone.

The steps described in this and the previous sections, involving the responsibilities of national governments, the European institutions and the Eurosystem, are important in order to move towards political union. They also give an important signal in the financial markets that the member countries of the eurozone are serious in their desire to guarantee the survival of the eurozone. These steps are also to be seen as commitment devices that enhance the credibility of the monetary union. They are crucial in stabilizing the financial markets in the eurozone.

9. Conclusion

A monetary union is more than a single currency and one central bank. Countries that join a monetary union loose more than an instrument of economic policy (interest rate or exchange rate). When entering the monetary union, they loose their capacity to issue debt in a currency over which they have full control. As a result, a loss of confidence of investors can in a self-fulfilling way drive the country into default. This is not so for countries capable of issuing debt in their own currency. In these countries the central bank can always provide the liquidity to the sovereign to avoid default. This may lead to future inflation, but it shields the sovereign from a default forced by the market.

Thus, member-countries of a monetary union become more vulnerable. Changing market sentiments can lead to "sudden stops" in the funding of the government debt, setting in motion a devilish interaction between liquidity and solvency crises. There is an important further implication of this increased vulnerability. This is that member-countries of a monetary union loose much of their capacity to apply counter-cyclical budgetary policies. When during a recession the budget deficits increase, this risks creating a loss of confidence of investors in the capacity of the sovereign to service the debt. This has the effect of raising the interest rate, making the recession worse, and leading to even higher budget deficits. As a result, countries in a monetary union can be forced into a bad equilibrium, characterized by deflation, high interest rates, high budget deficits and a banking crisis.

These systemic features of a monetary union have not sufficiently been taken into account in the new design of the economic governance of the eurozone. Too much of this new design has been influenced by the notion (based on moral hazard thinking) that when a country experiences budget deficits and increasing debts, it should be punished by high interest rates and tough austerity programs. I have argued that this approach is usually not helpful in restoring budgetary balance.

In addition, a number of features of the design of financial assistance in the eurozone as embodied in the ESM, will have the effect of making countries even more sensitive to shifting market sentiments. In particular, the 'collective action clauses' which will be imposed on the future issue of government debt in the eurozone, will increase the nervousness of financial markets. With each recession government bondholders, fearing haircuts, will run for cover, thereby making a default crisis more likely. All this is likely to increase the risk that countries in the eurozone lose their capacity to let the automatic stabilizers in the budget play their necessary role of stabilizing the economy.

A monetary union creates collective problems. When one government faces a debt crisis this is likely to lead to major financial repercussions in other member countries. This is so because a monetary union leads to intense financial integration. Whether one likes it or not, member countries are forced to help each other out. Surely, it is important to provide the right incentives for governments so as to avoid profligacy that could lead to a debt crisis. Discipline by the threat of punishment is part of such an incentive scheme. I have argued, however, that too much importance has been given to punishment and not enough to assistance in the new design of financial assistance in the eurozone.

This excessive emphasis on punishment is also responsible for a refusal to introduce new institutions that will protect member countries from the vagaries of financial markets that can trap countries into a debt crisis and a bad equilibrium. One such an institution is the collective issue of government bonds. I argued that such a common bond issue makes it possible to have a collective defence system against the vagaries of euphoria and fears that regularly grip financial markets.

A monetary union can only function if there is a collective mechanism of mutual support and control. Such a collective mechanism exists in a political union. In the absence of a political union, the member countries of the eurozone are condemned to fill in the necessary pieces of such a collective mechanism. The debt crisis has made it possible to fill in a few of these pieces. What has been achieved, however, is still far from sufficient to guarantee the survival of the eurozone.

References

Alcidi, C. and D. Gros (2010), The European Experience with Large Fiscal Adjustments, CEPS Policy Brief (http://www.ceps.eu/book/european-experience-large-fiscal-adjustments).

Arezki, R., B. Candelon and A. Sy (2011), "Sovereign Rating News and Financial Markets Spillovers: Evidence from the European Debt Crisis", IMF Working Paper, 11/69, March.

Borio C. (2003), Towards a Macroprudential Framework for Financial Supervision and Regulation?, BIS Working Paper, No. 128

Borio C. (2005), The Search for the Elusive Twin Goals of Monetary and Financial Stability, National Institute Economic Review.

Calvo, Guillermo (1988), Servicing the Public Debt: The Role of Expectations, American Economic Review, Vol. 78, No. 4, pp. 647-661.

De Grauwe, P. (1992), The Economics of Monetary Integration, 1st Edition, Oxford University Press.

De Grauwe, P. and W. Moesen (2009), Gains for All: A Proposal for a Common Eurobond, Intereconomics, May/June.

De Grauwe, P. (2010), A Mechanism of Self-destruction of the Eurozone, CEPS Policy Briefs (http://www.ceps.eu/book/mechanism-self-destruction-eurozone).

Delpla, J. and J. von Weizsäcker (2010), The Blue Bond Proposal, Bruegel Policy Brief, May.

EC Commission (1977), Report of the Study Group on the Role of Public Finance in European Integration (MacDougall Report), Brussels.

European Commission (2010), A Structured Framework to Prevent and Correct Macroeconomic Imbalances: Operationalizing the Alert Mechanism, Brussels, November.

Eichengreen, B., R. Hausmann, U. Panizza (2005), "The Pain of Original Sin", in Eichengreen, B., and R. Hausmann, Other people's money: Debt denomination and financial instability in emerging market economies, Chicago University Press.

Gourinchas, P.-O. and H. Rey (2007), From world Banker to World Venture Capitalis: the US External Adjustment and the Exorbitant Privilege, in Clarida, R., G7 Current Account Imbalances: Sustainability and Adjustment, University of Chicago Press.

Gros, D. (2010), The Seniority Conundrum: Bail out countries but bail in private short-term creditors, CEPS Commentary, 10 November.

Gros, D. and T. Mayer (2010), Towards a European Monetary Fund, CEPS Policy Brief (http://www.ceps.eu/book/towards-european-monetary-fund).

Gros, D. and T. Mayer (2011), Debt Reduction without Default, CEPS Policy Briefs (http://www.ceps.eu/book/debt-reduction-without-default).

Issing, O. (2009), Why a common Eurozone bond isn't such a good idea, Europe's World, Summer, 77-79.

Juncker, J.-C. and G. Tremonti (2010), E-bonds would end the crisis, Financial Times, December, 5.

Kannan, K., P. Rabanal and A. Scott (2009), Macroeconomic Patterns and Monetary Policy in the Run-Up to Asset Price Busts, IMF Working Paper, 09, 252.

Kopf, Christian (2011), Restoring financial stability in the euro area, 15 March 2011 , in CEPS Policy Briefs.

Peirce, P., S. Micossi and J.Carmassi (2011), On the Tasks of the European Stability Mechanism, CEPS Policy Brief, March.

Plenum der Ökonomen (2011), Stellungnahme zur EU-Schuldenkrise (http://www.wiso.uni-hamburg.de/lucke/?p=581).

Verhofstadt, G. (2009), De Weg uit de Crisis. Hoe Europa de wereld kan redden, De Bezige Bij, Amsterdam.

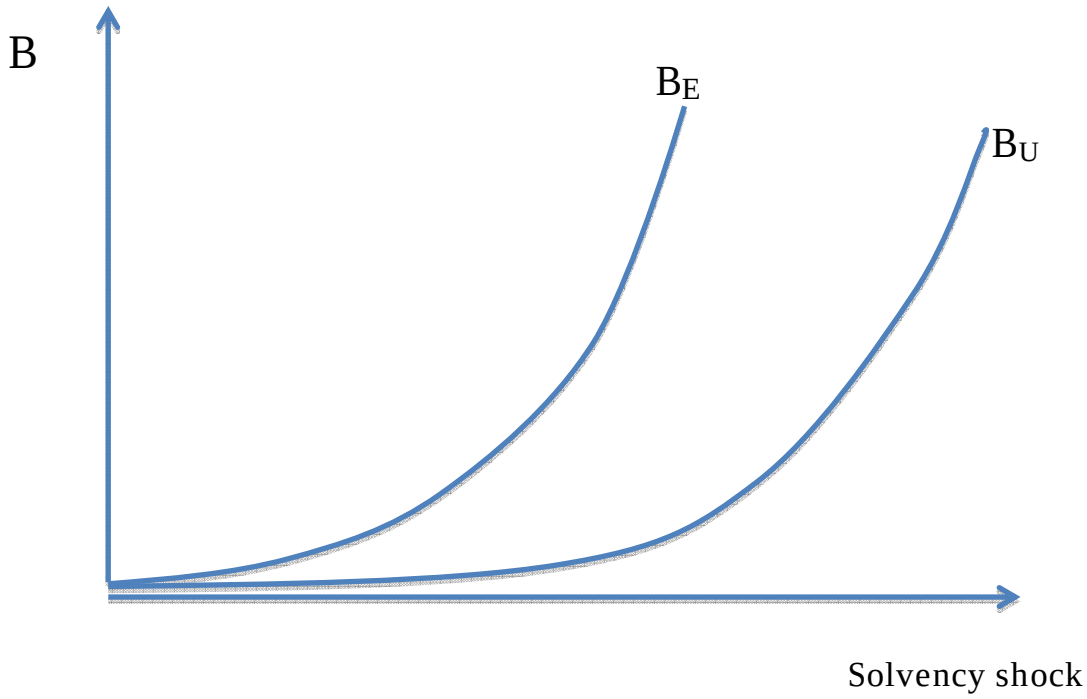
Appendix I. A model of good and bad equilibria

In this section I present a very simple model illustrating how multiple equilibria can arise. The starting point is that there is a cost and a benefit of defaulting on the debt, and that investors take this calculus of the sovereign into account. I will assume that the country involved is subject to a shock, which takes the form of a decline in government revenues. The latter may be caused by a recession, or a loss of competitiveness. I'll call this a solvency shock. I concentrate first on the benefit side. This is represented in Figure A1. On the horizontal axis I show the solvency shock. On the vertical axis I represent the benefit of defaulting. There are many ways and degrees of defaulting. To simplify I assume this takes the form of a haircut of a fixed percentage. The benefit of defaulting in this way is that the government can reduce the interest burden on the outstanding debt. As a result, after the default it will have to apply less austerity, i.e. it will have to reduce spending and/or increase taxes by less than without the default. Since austerity is politically costly, the government profits from the default.

A major insight of the model is that the benefit of a default depends on whether this default is expected or not. I show two curves representing the benefit of a default. B_U is the benefit of a default that investors do not expect to happen, while B_E is the benefit of a default that investors expect to happen. Let me first concentrate on the B_U curve. It is upward sloping because when the solvency shock increases, the benefit of a default for the sovereign goes up. The reason is that when the solvency shock is large, i.e. the decline in tax income is large, the cost of austerity is substantial. Default then becomes more attractive for the sovereign. I have drawn this curve to be non-linear, but this is not essential for the argument. I distinguish three factors that affect the position and the steepness of the B_U curve:

- *The initial debt level*. The higher is this level, the higher is the benefit of a default. Thus with a higher initial debt level the B_U curve will rotate upwards.
- *The efficiency of the tax system*. In a country with an inefficient tax system, the government cannot easily increase taxation. Thus in such a country the option of defaulting becomes more attractive. The B_U curve rotates upwards.
- *The size of the external debt*. When external debt takes a large proportion of total debt there will be less domestic political resistance against default, making the latter more attractive (the B_U curve rotates upwards).

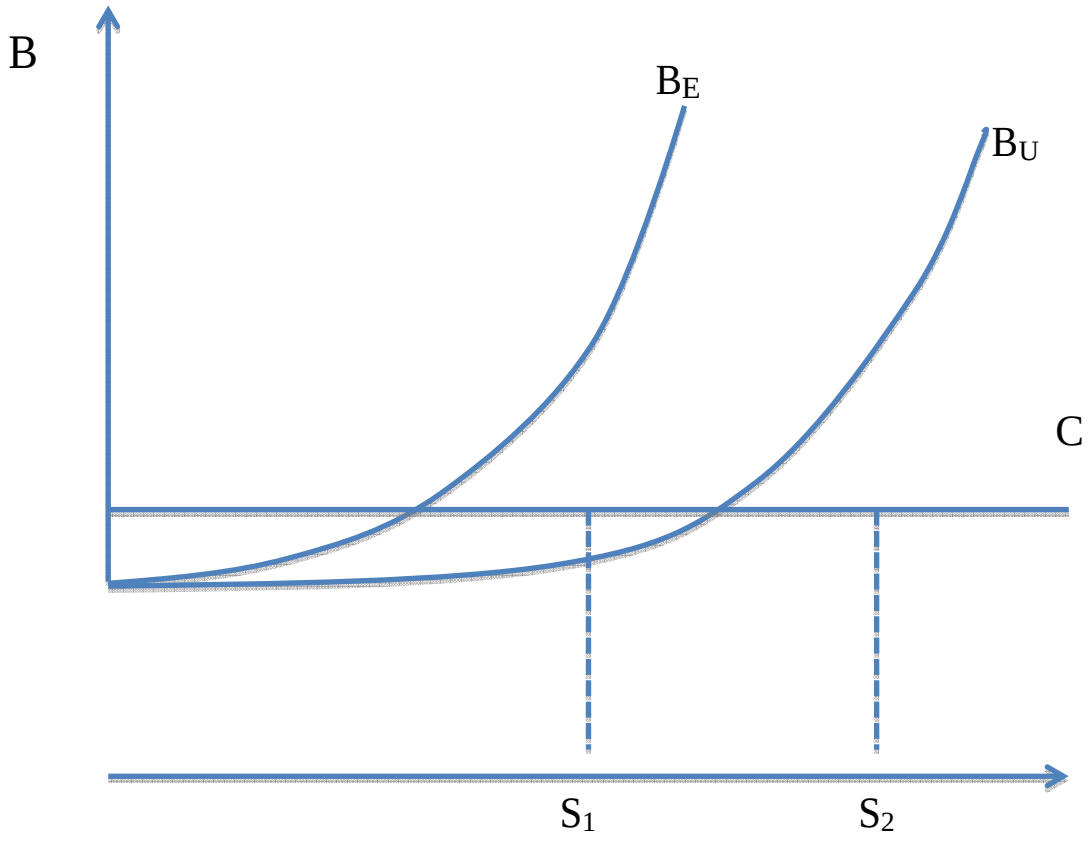
Figure A1. The benefits of default after a solvency shock



I now concentrate on the B_E curve. This shows the benefit of a default when investors anticipate such a default. It is located above the B_U curve for the following reason. When investors expect a default, they will sell government bonds. As a result, the interest rate on government bonds increases. This raises the government budget deficit requiring a more intense austerity program of spending cuts and tax hikes. Thus, default becomes more attractive. For every solvency shock, the benefits of default will now be higher than they were when the default was not anticipated.

I now introduce the cost side of the default. The cost of a default arises from the fact that, when defaulting, the government suffers a loss of reputation. This loss of reputation will make it difficult for the government to borrow in the future. I will make the simplifying assumption that this is a fixed cost. I now obtain Figure A2 where I present the fixed cost (C) with the benefit curves.

Figure A2. Cost and benefits of default after a solvency shock



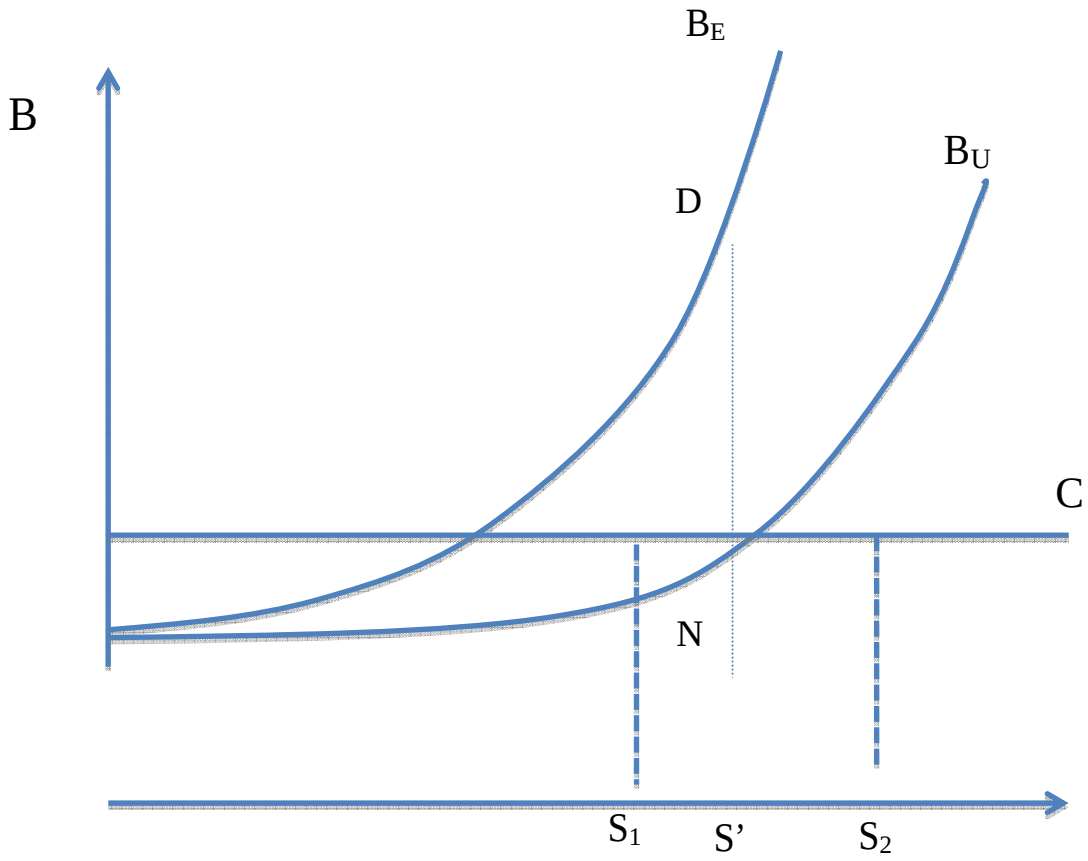
I now have the tools to analyze the equilibrium of the model. I will distinguish between three types of solvency shocks, a small one, an intermediate one, and a large one. Take a small solvency shock: this is a shock $\mathbf{S < S_1}$ (This could be the shocks that Germany and the Netherlands experienced during the debt crisis). For this small shock the cost of a default is always larger than the benefits (both of an expected and an unexpected default). Thus the government will not want to default. When expectations are rational investors will not expect a default. As a result, a no-default equilibrium can be sustained.

Let us now analyze a large solvency shock. This is one for which $\mathbf{S > S_2}$. (This could be the shock experienced by Greece). For all these large shocks we observe that the cost of a default is always smaller than the benefits (both of an expected and an unexpected default). Thus the government will want to default. In a rational expectations framework, investors will anticipate this. As a result, a default is inevitable.

I now turn to the intermediate case: $\mathbf{S_1 < S < S_2}$. (This could be the shocks that Ireland, Portugal and Spain experienced). For these intermediate shocks I obtain an indeterminacy, i.e. two equilibria are possible. Which one will prevail only depends on what is expected. To see this, suppose the solvency shock is S' (see Figure A3). In this case there are two potential equilibria, D and N. Take point D. In this case investors expect a default (D is located on the B_E line). This has the effect of making the benefit of a default larger than the cost C. Thus, the government will default. D is an equilibrium that is consistent with expectations.

But point N is an equally good candidate to be an equilibrium point. In N, investors do not expect a default (N is on the B_U line). As a result, the benefit of a default is lower than the cost. Thus the government will not default. It follows that N is also an equilibrium point that is consistent with expectations.

Figure A3. Good and bad equilibria



Thus we obtain two possible equilibria, a bad one (D) that leads to default, a good one (N) that does not lead to default. Both are equally possible. The selection of one of these two points only depends on what investors expect. If the latter expect a default, there will be one; if they do not expect a default there will be none. This remarkable result is due to the self-fulfilling nature of expectations.

Since there is a lot of uncertainty about the likelihood of default, and since investors have very little scientific foundation to calculate probabilities of default (there has been none in Western Europe in the last 60 years), expectations are likely to be driven mainly by market sentiments of optimism and pessimism. Small changes in these market sentiments can lead to large movements from one type of equilibrium to another.

The possibility of multiple equilibria is unlikely to occur when the country is a stand-alone country, i.e. when it can issue sovereign debt in its own currency. This makes it possible for the country to always avoid outright default because the central bank can be forced to provide all the liquidity that is necessary to avoid such an outcome. This has the effect that there is only one benefit curve. In this case the government can still decide to default (if the solvency shock is large enough). But the country cannot be forced to do so by the whim of market expectations.

ABOUT CEPS

Founded in Brussels in 1983, the Centre for European Policy Studies (CEPS) is widely recognised as the most experienced and authoritative think tank operating in the European Union today. CEPS acts as a leading forum for debate on EU affairs, distinguished by its strong in-house research capacity, complemented by an extensive network of partner institutes throughout the world.

Goals

- Carry out state-of-the-art policy research leading to innovative solutions to the challenges facing Europe today,
- Maintain the highest standards of academic excellence and unqualified independence
- Act as a forum for discussion among all stakeholders in the European policy process, and
- Provide a regular flow of authoritative publications offering policy analysis and recommendations,

Assets

- Multidisciplinary, multinational & multicultural research team of knowledgeable analysts,
- Participation in several research networks, comprising other highly reputable research institutes from throughout Europe, to complement and consolidate CEPS' research expertise and to extend its outreach,
- An extensive membership base of some 132 Corporate Members and 118 Institutional Members, which provide expertise and practical experience and act as a sounding board for the feasibility of CEPS policy proposals.

Programme Structure

In-house Research Programmes

Economic and Social Welfare Policies
Financial Institutions and Markets
Energy and Climate Change
EU Foreign, Security and Neighbourhood Policy
Justice and Home Affairs
Politics and Institutions
Regulatory Affairs
Agricultural and Rural Policy

Independent Research Institutes managed by CEPS

European Capital Markets Institute (ECMI)
European Credit Research Institute (ECRI)

Research Networks organised by CEPS

European Climate Platform (ECP)
European Network for Better Regulation (ENBR)
European Network of Economic Policy Research Institutes (ENEPRI)
European Policy Institutes Network (EPIN)