



MANAGING A FRAGILE EUROZONE

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The origin of the fragility of a monetary union

Countries that join a monetary union lose more than an instrument of economic policy (interest rate or exchange rate). When entering the monetary union, they lose 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 (see Kopf 2011). The reason why this happens can be described as follows. Suppose that investors fear a default by, say, the Spanish government. They sell Spanish government bonds, raising the interest rate. 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. 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.

This is not the case for countries that are capable of issuing debt in their own currency. Let us 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 differ-

ently, 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 Britain that could force the UK government into default. There is a superior force of last resort, the Bank of England.

This different mechanism explains why the Spanish government now pays 200 basis points more on its ten-year bonds than the UK government, despite the fact that its debt and deficit are significantly lower than those of Britain. This contrast is shown vividly in Figures 1 and 2.

Because of the liquidity flows triggered by changing market sentiments, member countries of a monetary union become vulnerable to these market sentiments. These can lead to 'sudden stops' in the funding of government debt (Calvo 1988), setting in motion a devilish interaction between liquidity and solvency crises. For the liquidity crisis raises the interest rate, which in turn leads to a solvency crisis. This problem is not unique for members of a monetary union. It has been found to be very important in emerging economies that cannot issue debt in their own currencies – see Eichengreen *et al.* (2005) who have analyzed these problems in great detail.

The previous analysis illustrates an important potentially destructive dynamic 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 correct

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Figure 1

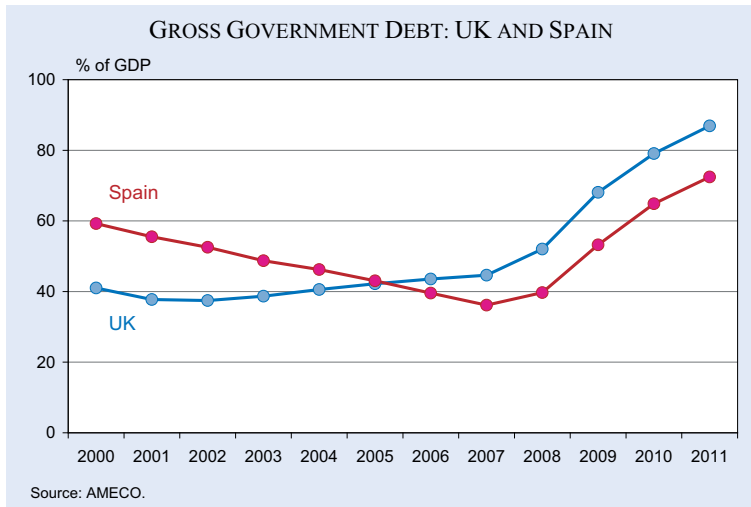
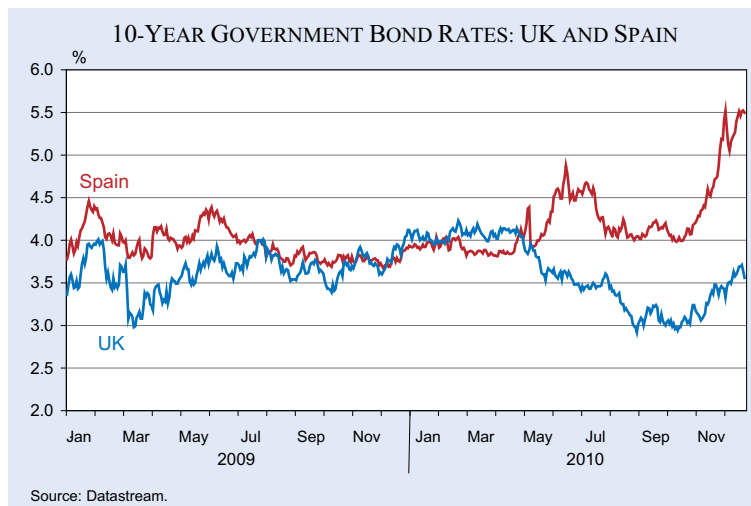


Figure 2



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.

Multiple equilibria

The inherent fragility of a monetary union leads to another fundamental problem. It can give rise to mul-

tiple equilibria, some of them good ones; others bad ones. This arises from the self-fulfilling nature of market expectations.

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. Solvency calculations then show that, indeed, government A is very solvent. Financial markets gently guide the country towards a good equilibrium.

Suppose the market distrusts government B. As a result, investors will 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. Financial markets push the country 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 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 BIS data, for many eurozone countries more than half of government bonds are held outside the country of issue. Thus, when a bad equilibrium is forced on some mem-

ber countries, financial markets and banking sectors in other countries enjoying a good equilibrium are also affected – see Arezki *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 push them 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.

The bad news about a bad equilibrium

There are two features of a bad equilibrium that are worth to be analyzed 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 rises. 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 (i.e. the money stock declines) making it difficult for the domestic banks to roll over 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 a 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 (like Britain) 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 that 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.

Managing fragility

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.

These two problems can in principle be solved by moving into a full-fledged political union. In such a union a common budget leads to automatic transfers. In addition, it allows consolidating the national budgets into one. As a result, the federal government of the union achieves the status of ‘stand-alone’ countries that are able to issue debt in a currency over which it has full control. The prospects for such a full political union in the eurozone are, however, non-existent. This will continue to make the eurozone fragile.

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 policymakers in moving forward in the direction of more political union. I distinguish between three steps that each requires institutional changes. Some of these steps have already been taken. Unfortunately, as I will argue below, they have been loaded with features that threaten to undermine their effectiveness

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) that 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 and 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 percent. This high interest rate has a very unfortunate effect. First, this high interest rate 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 percent above the risk-free rate enjoyed by the German, Dutch and Austrian governments, 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 to 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 it does not truly believe in the success of its own lending program.

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 action clauses' (CACs) 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.

Although the intention may be good, the effect will be negative (see De Grauwe 2010). When private bondholders know that in the future their bonds will automatically lose 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.

The 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.

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 and Tremonti 2010). In addition, by pooling the issue of government bonds, the member countries protect themselves against the destabilizing liquidity crises that arise from 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, which 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 and von Weizsäcker 2010) and the one made by De Grauwe and Moesen (2009). It would work as follows: countries would be able to participate in the joint Eurobond issue up to 60 percent of their GDP, thus creating 'blue bonds'. Anything above 60 percent 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. The 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). 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 second feature of our proposal works on the pricing of the Eurobonds and it follows the proposal made by De Grauwe and 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 join 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 approximate-

ly 50 basis points (Gourinchas and Rey 2007). A similar premium could be enjoyed by the euro. This would make it possible for the eurozone countries to lower the average cost of borrowing, very much like the United States has been able to do.

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).

Conclusion

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.

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