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THE EUROPEAN SOVEREIGN DEBT CRISIS: CAUSES, POLICY REACTIONS, AND OBSTACLES TO A SWIFT SOLUTION

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Abstract: The paper describes the course of the European sovereign debt crisis and the policy reactions of the European Central Bank and European governments until summer 2012. We focus on policy trade-offs and conflicts of interests faced by authorities which made it difficult to coordinate a common policy reaction. In particular, we stress conflicting interests between member states of the Eurozone and nonmember countries. We also consider diverging interests between fiscal and monetary policy, between donating and receiving countries, and between legislative and executive powers within countries.

Key words: Sovereign debt crisis, Bail-out, Quantitative/qualitative easing, European Stability Mechanism (ESM), Fiscal compact.

JEL Classification Number: G01, G28, H63.

1. INTRODUCTION

The recent financial crisis began in 2007 and progressed in two phases. The first was a private debt crisis (“subprime crisis”) which originated in the US markets for private subprime mortgage loans. Already in the 1990s, banks had begun granting loans to borrowers with a credit score below an acceptable level. This subprime lending was the result of public support programs, in combination with both low interest rates and increasing housing prices which, in turn, followed from an over expansionary monetary policy in the US, a global savings glut and a housing price bubble. Excessive lending was further promoted by the increasing use of securitization and the ‘originate-to-distribute business’ model in banking, which allowed for a separation between lending, and risk-taking and removed any incentive for banks to assess the solvency of their borrowers (Acharya *et al.*, 2009; Dewatripont *et al.*, 2010).

The second, more recent step in the financial crisis was a public debt crisis that originated in the European markets for sovereign debt (“sovereign debt crisis”). In October

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2009, early signals of a new phase of the financial crisis emerged when Greece repeatedly revised its budget deficit data and the European Commission questioned the authenticity of fiscal statistics officially reported by Greek authorities (*European Commission*, 2010a). In consequence, CDS spreads for Greek government bonds started to rise, indicating increasing mistrust among market participants that the Greek government was able to pay back its public debt obligations or even to make interest payments. Furthermore, interest rate spreads between 10-year Greek and German government bonds increased, and rising interest payments further exacerbated the Greek public budget deficit. Over the course of 2010, CDS spreads and interest rate spreads also began to rise for certain other European countries, such as Ireland, Portugal, Italy and Spain, indicating a potentially common reason for the public debt crisis.¹

The European governments and the Eurosystem began reacting in May and June 2010, but only slowly and rather hesitantly. While the delay in policy reaction was in part due to the fact that policy makers needed time to understand what was happening, they also faced severe difficulties in coordinating a common policy response. These coordination problems were not only the result of monetary and fiscal policy tools being placed in the hands of various different institutions. They also occurred because the fiscal consequences of any form of policy response were scattered among authorities in different countries. Therefore, the European debt crisis did not occur in a centralized national state, but in a monetary union between independent states, in a federation of states with a common monetary policy, but which retained national fiscal policies.

The purpose of the present paper is to explain why the crisis emerged and in particular to describe the policy reactions by the European Central Bank (ECB) and by the European governments in an attempt to solve the crisis and prevent a reoccurrence of a similar one in future. We do not intend to conduct a welfare analysis or to address the question whether the policy measures taken were beneficial from a social perspective or suitable for solving the crisis. We rather consider why these particular decisions were taken and others rejected. To answer these questions, we focus on policy trade-offs and conflicts of interests in the political decision-making process, with special reference to the fact that the crisis emerged within a currency union. We hence conduct an exploratory case study and adopt a research strategy which focuses on individual contemporary events within a real-time context. As in other case studies, we aim at investigating a set of decisions and analyze why these decisions were taken, how they were implemented, and with what results (*Gerring*, 2004; *Yin*, 2003).²

The paper is structured as follows. Part 2 briefly describes the origins of the sovereign debt crisis and presents some hypotheses about the factors which are likely to induce a debt crisis. Part 3 analyzes the policy reactions of European monetary and fiscal policy authorities, and Part 4 discusses the conflicts of interest within Europe, which made it so difficult to find a viable solution. Part 5 concludes.

¹ Countries with large public budget deficits on the European periphery are sometimes called GIPS countries.

² For a comparable case study on the Japanese financial crisis during the 1990s see *Nakaso* (2001).

2. CAUSES OF THE SOVEREIGN DEBT CRISIS

2.1. *Run-up to the crisis*

The European Monetary Union (EMU) commenced on January 1st, 1999, when the Eurosystem resumed its work and began to implement monetary policy, initially in eleven member countries of the European Union (EU).³ Participating countries were Austria, Belgium, Finland, France, Germany, Ireland, Italy, Luxembourg, the Netherlands, Portugal, and Spain. Greece joined the EMU in 2001, followed by Slovenia (2007), Malta and Cyprus (2008), Slovakia (2009), and Estonia (2011). These countries form the “Eurozone”, i.e., a subgroup of the European Union (EU) which, in addition, covers ten more countries which have retained their national currencies.⁴

Although these countries pursue a common monetary policy, fiscal policies remain a national responsibility. This scenario raised concerns from the beginning that the monetary union could result in a “transfer union” in which highly-indebted countries would have to be bailed-out by minimally indebted countries. In consequence, the ‘no-bail-out clause’ became a fundamental principle of the EMU. According to Article 125 of the ‘Treaty on the Functioning of the European Union’, neither the European Union nor individual member countries could be made liable for outstanding debt of any other member state. The purpose of the clause was to prevent moral hazard on the part of national governments and to avoid individual countries from issuing too much public debt. The no-bail-out clause was supplemented by the ‘Stability and Growth Pact’ (SGP), which was based on Articles 121 and 126 of the ‘Treaty’ and stipulated a fiscal monitoring of all EU member countries by the EU Commission and the Council of Ministers. The purpose of the SPG was to ensure that member countries continue to follow the Maastricht criteria even after joining the European Union. That is a country’s annual public budget deficit was not to exceed 3% of GDP and its total public debt was limited to 60% of GDP.

The SGP stipulates that member countries provide annual reports about their budget deficits and their total public debt. Reports must be submitted to the Council of Economic and Finance Ministers (Ecofin).⁵ If a country’s annual budget deficit threatens to exceed the 3% limit of GDP, the European Commission may issue an early warning to the country. If the country’s deficit in fact does exceed 3% of GDP, the Commission must start a deficit procedure and demand the respective country to submit a precise schedule on how it will reduce the excessive deficit. If the provisions of the plan are not fulfilled, the European Commission may impose sanctions on the deficit country. Such sanctions, however, are determined by the Council of the European Union, with decisions taken by a qualified majority rule and the country under the procedure having

³ The Eurosystem consists of the European Central Bank (ECB), as a truly European institution, and the National Central Banks (NCBs) of the participating countries. In what follows, however, we will use the terms Eurosystem and ECB interchangeably.

⁴ Bulgaria, Czech Republic, Denmark, Hungary, Latvia, Lithuania, Poland, Romania, Sweden, and the UK.

⁵ This and the following information is from the website of the EU Commission. ECOFIN is an acronym for the Council of Economics and Finance Ministers within the EU.

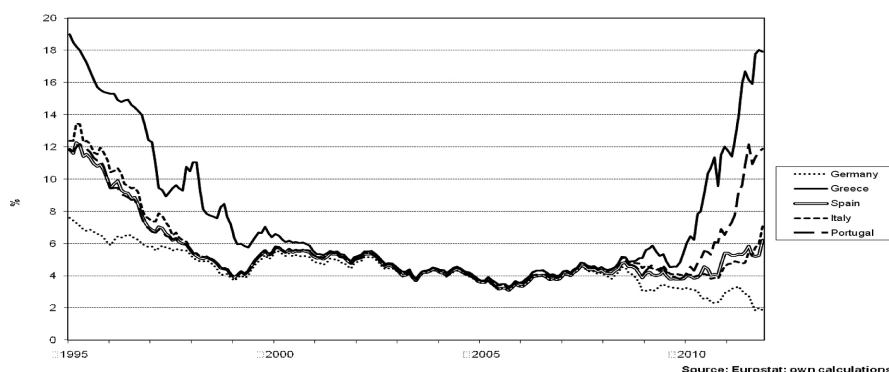


Figure 1. Long-term rate of return (10 yr) on government bonds for selected countries since 1995.

no right to vote.⁶

The common monetary policy resulted in a rapid and almost complete convergence of interest rates within Europe. These narrowing interest rate differentials had already commenced during the 1990s and led to a general decline in European interest rates to the German level (Fig. 1). While this convergence followed in part from the abolition of exchange rate risks within EMU countries and a decrease in inflationary expectations, market participants also seemed to believe in the effectiveness of the SGP, thus demanding a decreasing risk premium. The decrease in interest rates was accompanied by the deteriorating competitiveness of some European countries which resulted in a deflection of European commodity and capital flows from the center to the periphery of the European Union. In particular, German capital exports into European countries on the Southern periphery increased, which was reflected in positive current account surpluses of Germany with respect to these countries (*Sinn, 2011; Gibson, Hall and Tavlas, 2012*).

Despite the provisions of the SGP, the fiscal authorities in all member countries of EMU did not show much fiscal discipline. On the contrary, public budget deficits in almost all countries and for several years between 1999 and 2011, exceeded the 3% limit set by the SGP. Since 1999, the EU commission opened a total of 60 deficit procedures against almost all EU member countries, including France and Germany, which also exceeded the 3% deficit limit in 2002 and 2003. The deficit procedures against both countries, however, were suspended by Ecofin. Especially since the start of the financial crisis in 2007, many EU member countries broke the provisions of the SGP and exceeded both the 3% and the 60%-of-GDP limits. Currently, the EU Commission has opened deficit procedures against 23 of 27 EU member countries (*European Commission, 2012*).

The main reason for the failure of SGP was that the threat of sanctions was not credible. Individual EU member countries did not have an incentive to impose sanctions

⁶ A qualified majority is reached if 55 percent of the member states agree, which represent at least 65 percent of the EU population. Exceptions from the 3 % rule are only granted in the case of a severe recession, which is defined as a decline in economic activity of at least 0.75% of GDP.

against other countries, because they feared becoming subject to such sanctions themselves, once they had allowed the sanction mechanism to start. Moreover, the sanctions were in any event rather weak, because deficit countries were only obliged to make an interest-free deposit which could be transformed into a financial penalty, but only at the end of a long and protracted decision making process (*German Council of Economic Experts*, 2010).

In addition to the lack of fiscal discipline, European governments - as in many other developed countries - struggled with the fiscal consequences of the subprime crisis. After the failure of Lehman Brothers in September 2008, fiscal authorities in many countries set up rescue packages for failing commercial banks, which amounted to a total of 1100 billion Euros (*German Council of Economic Experts*, 2010; *European Commission*, 2010b). Rescue measures comprised public bank guarantees, capital injections into undercapitalized banks, bad bank schemes and even bank nationalizations (*Bordo*, 2008; *Levine*, 2010; *European Central Bank*, 2010a). Such measures became particularly necessary in Ireland, where the banking system was very heavily hit by the subprime crisis, and more recently in Spain and Cyprus, where failing banks also had to be bailed-out. Bank bail-outs apart, the main reason for increasing budget deficits, however, was high government spending on social security payments which, together with decreasing tax revenues, as a consequence of the economic bust in Europe, led to a significant increase in total European government debt as a percentage of GDP, especially after 2007/2008 (Fig. 2).

While increases in debt ratios were a common phenomenon in almost all European countries, Greece was the first to be threatened by a debt crisis. Its public debt ratio had increased to 140% of GDP in 2010.⁷ Other countries, such as Portugal and Ireland, were also in danger of a debt crisis and received financial assistance from Eurozone member countries, the European Union, and from the IMF as well. However, these countries, did not yet incur a similar crisis, so that we need an analytical framework to explain under what conditions a high government debt level may indeed cause a fully-fledged debt crisis.

2.2. Analytical framework

Romer (2012) investigates the unexpected occurrence of a sovereign debt crisis and explains why investors may become unwilling to buy government debt obligations at any interest rate. He considers a one-period model of an economy with a government that wishes to roll-over a quantity D of its debt for one period. At the end of the period, the government receives tax payments T which are used to pay the principal and the interest on its debt, with $R > 1$ being the interest factor. Tax receipts are assumed to be random and uniformly distributed within the interval $[T^{Min}; T^{Max}]$. If T falls short of RD , the government defaults on its debt, and defaults are assumed to be all or nothing.

Government debt is held by investors who are assumed to be risk-neutral, and there is an exogenous risk-free opportunity interest factor $\bar{R} > 1$. Thus, at the capital market equilibrium, the following no-arbitrage condition must prevail

⁷ Another country with similar problems is Hungary, although it is not a member of the Eurozone.

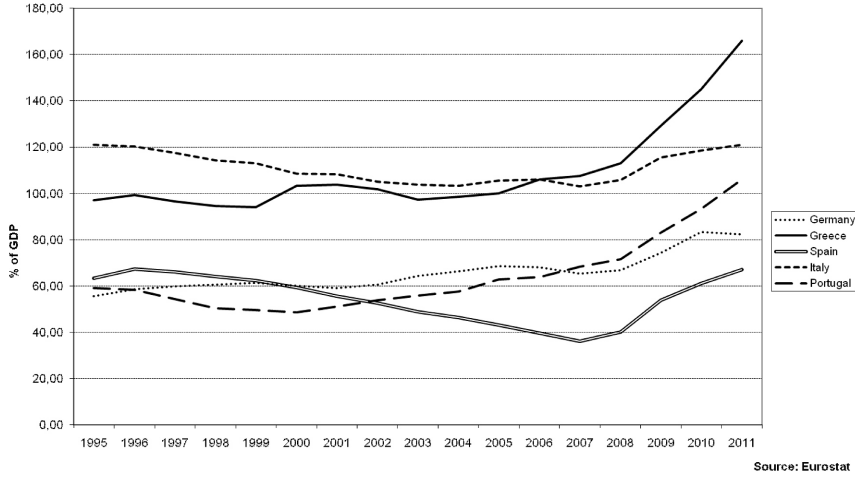


Figure 2. National debt as percentage of GDP of selected countries since 1995.

$$(1 - \pi^e) \cdot R = \bar{R}$$

or

$$\pi^e = \frac{R - \bar{R}}{R}, \quad (1)$$

where π^e is the exogenous probability of government default expected by investors. Figure 3 shows the locus of points satisfying (1) in (R, π) space. For $\pi = 0$, R equals \bar{R} . If R rises, π^e also increases; we have $\pi^e \rightarrow 1$ for $R \rightarrow \infty$.

Since the government defaults if T is less than RD , the fundamentally justified probability of default π^{fw} is equal to the probability that T is smaller than RD . Since tax revenues are assumed to be uniformly distributed between T^{Min} and T^{Max} , this condition is fulfilled if

$$\pi^{fw} = \Pr(T < RD)$$

or

$$\pi^{fw} = \frac{1}{T^{Max} - T^{Min}}(RD - T^{Min}). \quad (2)$$

The set of points satisfying (2) is also plotted in Figure 3 as a z-shaped line. The fundamentally warranted probability of default is 0 for $R < \frac{T^{Min}}{D}$ and 1 for $R > \frac{T^{Max}}{D}$. For $R \in \left[\frac{T^{Min}}{D}; \frac{T^{Max}}{D}\right]$, the probability π^e rises with R .

At equilibrium, conditions (1) and (2) must hold simultaneously. These conditions are fulfilled at points A and B of Figure 3 where the two curves $\pi^e = 1 - \frac{\bar{R}}{R}$ and $\pi^{fw} = P(T < RD)$ intersect. There is also a third equilibrium C with $\pi = 1$ and $R \rightarrow \infty$.

- At point A , $\pi^{fw} = 0$ and tax revenues always cover RD . Hence, $\pi^e = 0$ also holds and investors purchase government debt for $R \simeq \bar{R}$.
- At point C , $\pi^{fw} = 1$ and tax revenues do not cover principal and interest payments on the outstanding debt. Thus $\pi^e = 1$ and investors will not buy government debt.

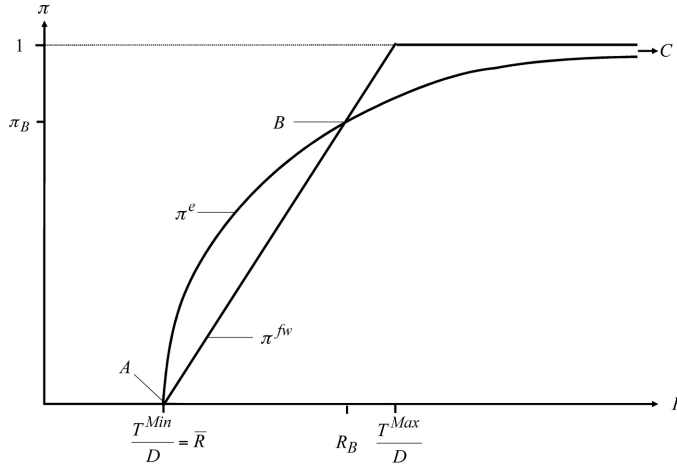


Figure 3. A model for a government debt crisis.

- While A and C are stable equilibrium points, point B is an unstable equilibrium. If $\pi^e > \pi_B$, investors demand a higher R and this leads to an increase in π^{fw} . In response, investors expect a higher probability of default π^e and the process continues until point C is reached. If $\pi^e < \pi_B$, the opposite procedure applies until point A .

This model enables the separation of fundamental from speculative origins of a debt crisis. Assume the economy is initially at the fundamental equilibrium A . If the risk-free interest rate \bar{R} increases, the curve $\pi^e = 1 - \frac{\bar{R}}{R}$ moves to the right. This results in an upwards shift of the stable equilibrium A , which first only marginally increases the interest factor R and the default probability π . The superior equilibrium A collapses, however, if π^e shifts too far to the right. In this case, the economy moves to the inferior equilibrium C ($R = \infty, \pi = 1$).

A fundamental debt crisis also occurs if D increases. This leads to a shift of π^{fw} to the left, because in the (π/R) -space, the probability $P(T < RD)$ increases in D for given values of R . This initially results in smooth changes in equilibrium points, but may also result in a drastic change to the inferior equilibrium. The same applies if $E[T]$ falls. Therefore, the density function for taxes shifts to the left and $P(T < RD)$ again increases for given values of R .

Now assume that the economy is initially at the unstable equilibrium B . A multiplicity of equilibria then implies that there may be self-fulfilling expectations of a sovereign debt crisis. Assume that π^e increases, because a rating agency downgrades the government's debt, and investors start to believe that the probability of default has increased. If π^e increases above π_B (in Fig. 3), a speculative debt crisis occurs and investors demand a higher interest factor R which in turn increases π^{fw} . The process continues until C is reached and a default occurs.

2.3. Debt crisis in Europe

The *Romer-model* provides a useful framework for discussing alternative causes of the European debt crisis. As depicted in Fig. 2 above, national debt as a proportion of GDP increased steadily since the mid-2000s in many southern European countries, such as Greece, Italy, and Portugal. This applies also to Spain where, however, the public debt ratio fell until 2007, but began to rise afterwards. For these economies, increasing interest payments on the outstanding debt resulted in increasing structural budget deficits. In terms of Figure 3, this means a shift of the π^{fw} -locus to the left, because the probability of tax revenues lower than RD increases.

Consequently, equilibrium point A moves to the right and the fundamentally justified probability π increases (as well as the interest factor R). In addition, the unstable equilibrium point B moves to the left and the distance between the two equilibria declines. This implies that the danger of a country suffering from a speculative debt crisis increases in its fundamentals. With a large D , a comparatively small increase in π^e (following a downgrading of the country by a rating agency) will trigger a speculative debt crisis.

A large stock of outstanding government debt also increases the probability that a speculative debt crisis could be transmitted to the home country from abroad. Such contagion can be caused for example, by similarities between two countries. If one country experiences a crisis, market participants might expect a similar crisis to occur in the other country, whenever both countries are regarded as being subject to similar economic conditions. In the case of the *Romer-model*, contagion would occur if market participants increase π^e due to the fact that another similar country has already experienced a sovereign debt crisis. There is indeed some evidence indicating that this happened during the recent European debt crisis (*Mink and De Haan, 2012; Arezki, Candelon and Sy, 2011; Missio and Watzka, 2011; Afonso, Furceri and Gomes, 2012*).⁸

3. SHORT-TERM POLICY RESPONSES: CRISIS RESOLUTION

Reactions to the sovereign debt crisis by European authorities can be divided into short-term emergency measures and long-term structural reform packages. Short-term policy measures are intended to remove upward pressures on interest rates for European government bonds and to prevent contagion, the transmission of the crisis from one country to another. They can be divided further into monetary and fiscal policy measures. Long-term measures are intended to reduce public budget deficits permanently

⁸ *Constâncio* (2011) quotes evidence of the existence of such a sovereign-to-sovereign contagion. He refers to Moody's, which cited, among other features, developments in Greece when downgrading Portugal in July 2011. The contagion hypothesis, however, has been challenged by *Cochrane* (2010): "We're told that a Greek default will lead to 'contagion'. The only thing an investor learns about Portuguese, Spanish, and Italian finances from a Greek default is whether the EU will or won't bail them out, too. Any 'contagion' here is entirely self-inflicted. If everyone knew there wouldn't be bail-outs, there would be no contagion". The alternative explanation for why debt crises occur at the same time in different countries is a "wake-up call", i.e., market participants become generally more risk-sensitive, once they observe a crisis unfolding in one country.

and to ensure financial discipline within the Eurozone in the medium-term to long-run. The present and the following sections concentrate on short-term policy responses, and the long-term measures are discussed in Section 5.

3.1. *Monetary policy responses*

3.1.1. *Reactions to the subprime crisis*

Before the start of the financial turmoil, the Eurosystem conducted monetary policy primarily by granting short-term loans to banks and to other financial institutions. The Eurosystem's most important policy instrument entailed "main refinancing operations" (MRO), loans with a duration of one week granted to financial institutions inside the Eurozone, but only against collateral. In addition, the Eurosystem conducted mainly "long-term refinancing operations" (LRO) with a duration of three months. Although the Eurosystem accepted sovereign debt as collateral in these operations, it never bought these bonds in open market operations on secondary markets (*Scheller, 2006; European Central Bank, 2011*).

With its monetary policy operations, the Eurosystem tried to control short-term interest rates on European interbank markets, especially the unsecured overnight interest rate (EONIA) which serves as the policy rate within the Euro area.⁹ For this purpose, the Eurosystem supplied liquidity to interbank markets according to the "benchmark allotment", i.e., the sum of currency needed by non-banks ("autonomous factors") and the liquidity needed by banks to comply with minimum reserve requirements.

In September 2008, initial signals emerged indicating a collapse of European interbank markets. Normally, interbank markets function perfectly and allow commercial banks to reallocate liquidity within the banking sector without having to resort to the central bank. With the start of the financial turmoil, however, market participants perceived increasing liquidity risks and counterparty risks, and thus hesitated lending to each other (*Eisenschmidt & Taping, 2009; Heider, Hoerova & Holthausen, 2009*). Interbank market failure became obvious from several indicators:

- Firstly, the difference between interest rates on unsecured and secured interbank markets began to rise. While this difference is negligible during normal times, the interest rate spread rose to unprecedented heights after the collapse of Lehman Brothers.
- Secondly, commercial banks started to use the Eurosystems deposit facility excessively. This facility allows banks to deposit excess liquidity with the central bank instead of lending it on the interbank market. As the interest rate received from this facility is always lower than interbank market interest rates, banks do not use this facility during normal times. In the crisis, however, balances on the deposit facility rose significantly, because banks stopped trusting each other.

The Eurosystem reacted to these developments by initiating and starting a policy of 'quantitative' and 'qualitative easing' (*European Central Bank, 2010a*). For this purpose, it changed its monetary policy framework and introduced special monetary policy

⁹ EONIA is an acronym for European Over Night Index Average and is computed as a weighted average of all overnight unsecured lending transactions in the Euro area interbank market.

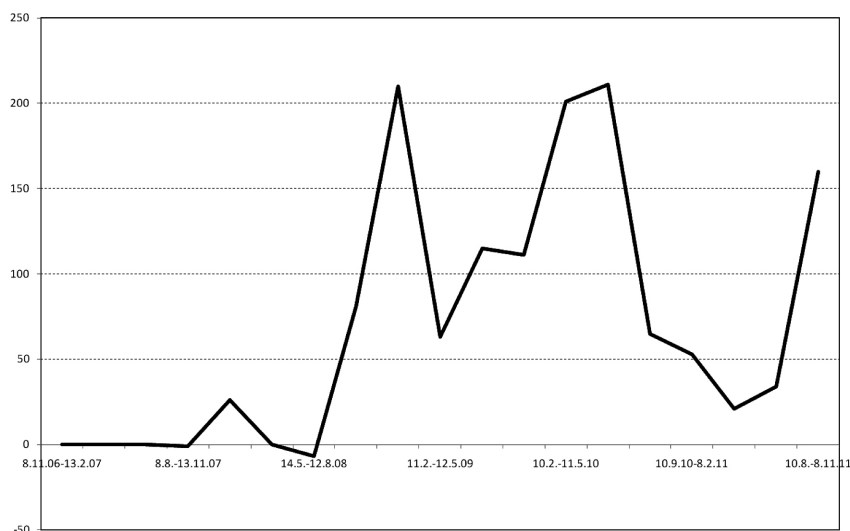


Figure 4. Excess liquidity in Eurozone countries: 2007–2011 (in billion Euros).

instruments originally intended to be temporary. Under ‘quantitative easing’, the Eurosystem expanded the size of its balance sheet and began to supply base money above the ‘benchmark allotment’ and to create excess liquidity in the economy. Therefore, the ECB began to provide liquidity to financial institutions through fixed-rate tenders with full allotments of bids given by financial institutions (instead of through variable-rate tenders, as before). It also started outright purchases of covered bonds in secondary markets (*European Central Bank*, 2009a, 2010a).

Quantitative easing was accompanied by ‘qualitative easing’, under which the Eurosystem changed the composition of its assets towards more risky assets and/or to assets with a longer maturity than before the start of the crisis. For this purpose, the ECB expanded the list of assets eligible as collateral and reduced the minimum requirements for collateral used by financial institutions when they borrow from the Eurosystem. In addition, the Eurosystem increased the frequency and maturity of long-term operations with its counterparties.

An indicator of quantitative easing is given in Fig. 4 which presents, for the Euroarea, the average excess liquidity during minimum reserve periods starting in November 2006. It depicts an increase in the supply of excess liquidity after the Lehman crisis in September 2008. The extent of quantitative easing can also be seen in Fig. 5, which presents the size of the Eurosystem’s consolidated balance sheet, which increased significantly after the Lehman crisis (*European Central Bank*, 2009b). The figure also indicates qualitative easing by the Eurosystem. It shows the decreasing significance of Eurosystem’s marginal refinancing operations, compared with an increasing amount of liquidity provided through long-term refinancing operations. In addition, there is an increasing proportion of long-term operations with a duration of more than three months,

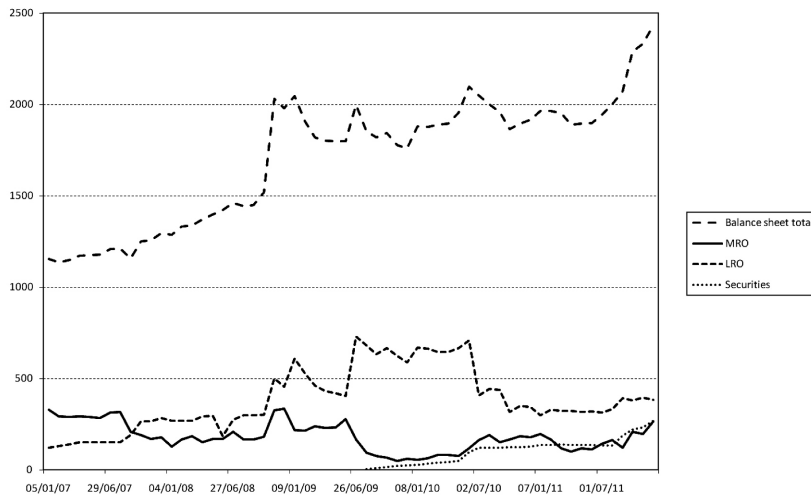


Figure 5. Size and asset composition of the Eurosystem's consolidated balance sheet (2007–2011, in billion Euros).

although this cannot be seen from the figure yet.

3.1.2. Reactions to the sovereign debt crisis

Although financial markets started to calm down in late 2009, the symptoms of financial crisis reappeared in summer 2010, in reaction to the sovereign debt crisis. While, during the first phase of the financial crisis, banks held private toxic assets mistrust resulted this time from the possibility that banks might hold toxic public assets, i.e., Greek (and later Italian or Spanish) sovereign debt. These obligations had become toxic, because a default had become a realistic possibility, i.e., that some European governments would not be able to pay interest on their debt outstanding or even not to repay the principal.

The Eurosystem began to react to these new developments in May 2010 when it decided on its 'Securities Markets Programme' and began to buy public and private debt instruments on open markets. It first bought Greek sovereign debt obligations and since August 2011, Italian and Spanish government bonds as well.¹⁰ In addition, in December 2011, the ECB announced that it intended to conduct two three-year-tenders, i.e., loans to commercial banks with a duration of 36 months (*European Central Bank*, 2010b, 2011). Although the 'Securities Markets Programme' did not formally violate the no-bail-out clause of the Maastricht Treaty, it removed pressure from governments to place government bonds on primary markets. The ECB announced its intention to apply this instrument only temporarily and to sterilize the liquidity created by issuing time deposits.

The ECB has always stressed that the only purpose of its interventions in secondary

¹⁰ The total volume of debt instruments bought under the securities markets programme amounted to 282 billion Euros in August 2012.

securities markets was to react to imperfections in interbank markets, but not to provide financial assistance to highly indebted governments. The non-standard measures that commenced after the emergence of the sovereign debt crisis were solely to support financial institutions with a liquidity problem, which had lost access to interbank markets due to the declining quality of their collateral assets. The objective was hence to prevent a credit crunch and a transmission of the debt crisis into the real sector through the banking system (*European Central Bank*, 2010b). They were not, however, intended to solve the debt crisis. This was regarded as the sole responsibility of fiscal policy and of structural reforms within the individual member states.

3.2. *Fiscal policy responses*

3.2.1. *Available options*

To tackle the debt crisis and relieve upward pressure from interest rates on European government bonds, the following four policy options were discussed among the various fiscal authorities:

- Firstly, bilateral financial assistance given to individual crisis countries. Such financial assistance can come either from the EU Commission, i.e., by member countries of the European Union, from members of the Eurozone, or from the IMF. Bilateral financial assistance may be made conditional on the introduction of structural reform packages in the receiving countries.
- Secondly, a default by a debtor country (i.e., a suspension of interest payments and/or of reimbursement of the outstanding stock of debt) combined with mandatory debt restructuring and replacement of existing government debt obligations with new obligations under different terms. The alternative to a default was a voluntary debt restructuring and negotiating a “haircut” on outstanding debt between European governments and European banking associations.
- Thirdly, establishment of a European debt agency which grants loans to national governments, also against a promise to commence an adjustment programme. The loans granted by the agency are refinanced by issuing debt obligations.
- Finally, the issuance of “Eurobonds” which are debt obligations nominated in Euro and guaranteed jointly by the 17 Eurozone member states. Proceeds from Eurobonds issuance are to be forwarded to individual governments which use the money to redeem some of their national debt. Since credit ratings of Eurobonds are expected to be higher than those of GIPS sovereign bonds (but lower than, e.g., ratings of French or German sovereign bonds), they would allow crisis countries to refinance their debt on more favorable terms.

There are important differences between the issue of Eurobonds and the establishment of a debt agency. Eurobonds (i.) do not enable making loans conditional on the enforcement of macro- and microeconomic adjustment programmes; (ii.) they also do not allow an up-front fixing of the volume of loans granted and to making financial assistance conditional on a unanimous decision by Eurozone member countries; finally (iii.) Eurobonds are guaranteed jointly by all national governments, but a fund’s obligations are guaranteed only according to a pre-fixed quota. In addition, Eurobond

issues involve a cross-subsidy from “Northern” to “Southern” Euroarea member states and may be thus interpreted as an abolition of the no-bail-out clause of the Maastricht Treaty.

On these grounds, Eurobonds were heavily opposed by, for example, the German government, which, instead, partly favored a default and a restructuring of Greek government bonds, i.e., a replacement of existing government debt obligations with ones under different terms (as had already been done in other countries, such as Argentina). Such a mandatory default, however, was opposed by the ECB and also ultimately rejected for the following reasons (*Frankfurter Allgemeine Zeitung*, 2011a):¹¹

- Since a large proportion of Greece government bonds is held by financial institutions within the euro zone (*International Monetary Fund*, 2011), a default would most likely transmit the debt crisis into the banking sector, thus repeating the first part of the financial crisis. Such a contagion was expected, because a Greek debt default would reduce bank solvency. Moreover, a debt restructuring could increase counterparty risks and reduce the readiness of banks to lend on interbank markets and thus create a liquidity crisis inside European interbank markets. Both effects would have negative consequences for bank lending and thus for the real economy.
- Since the debt crisis was regarded partially as having speculative origins and resulting from market participant expectations, contagion from one country to another was expected. A default by the Greek government was feared as leading to a default of other Southern European governments, such as Spain and Italy, because market participants perceive similarities between all three countries and their public finances. Hence, a Greek default was regarded as a signal that Italy and Spain would shortly be in similar situations. This had to be prevented at any price, because a bail-out of Spain or Italy was regarded as beyond the fiscal capacities of Eurozone member countries as a whole.

3.2.2. *Options realized*

Since neither the issuance of Eurobonds nor a default was regarded as being reasonable options, European governments opted for the other two alternatives. Since February 2010, the Greek government received bilateral financial assistance amounting currently to 110 billion Euros over three years from the European Union, the Eurozone countries and the IMF. A second relief package over 150 billion Euros was granted in spring 2012. In turn, the Greek government introduced several austerity programmes to bring the country’s fundamentals back in line, so as to restore stability.¹² Important measures within the programme entail wage cuts for civil servants and pensions cuts, as well as sales tax increases; the abolition of tax exemptions and increases in retirement ages; public spending cuts and privatizations of public corporations; and finally, layoffs of public servants. In addition, efforts were made to improve tax collection, and the

¹¹ Since the ECB had bought sovereign bonds under its securities purchase program, it feared downwritings that could have required a recapitalization through the national fiscal authorities and would thus endanger its independence.

¹² Austerity programs were also started in Ireland, Portugal, and Italy.

government started to update its debt management strategy.

In addition to bilateral programmes, the “European Financial Stability Mechanism” (EFSM) was founded in June 2010, with a total volume of 750 billion Euros. The EFSM was originally intended to exist for only three years and consists out of three pillars:

- The first pillar comprises direct loans from the European Commission to single EU member states. The maximum volume of loans granted was limited to 60 billion Euros. These loans are guaranteed by all 27 members of the European Union.
- The second pillar entails loans from the IMF up to 250 bn. Euro.
- The final pillar is the “European Financial Stability Fund” (EFSF), a special purpose vehicle founded by Eurozone member states and headquartered in Luxembourg. The EFSF is not funded, but authorized to raise up to 440 billion Euros from financial markets by issuing bonds and other debt instruments. Loans are guaranteed by national governments according to a quota (their shares in the capital paid in to the ECB). EFSF can only act after a support request is made by a Euroarea member state. In addition, a country-specific austerity programme must have been negotiated with the European Commission and the IMF and accepted by all Eurozone finance ministers, as well as a memorandum of understanding signed.

By August 2012, two Eurozone member countries will have received financial assistance from EFSF (Table 1). The first was Ireland on 28th November 2010, which will receive up to 17.7 billion Euros in 2011 and 2012. The second was Portugal on 7th April 2011 which will receive 26 billion Euros over three years. Both countries will also receive funds from the IMF and from the European Union. Greece will be the third country, which, in 2010, already received the above mentioned 110 billion Euros bailout under a bilateral commitment by the Eurozone member countries and the IMF.¹³ In February 2012, the European ministers of finance decided on a second rescue package for Greece, which will replace the first bilateral one and provided financial assistance up to 130 billion Euros until 2014 (*Mussler*, 2012). The second rescue package will be financed by the EFSF (later ESM) and the IMF. In addition, the Greek government negotiated a haircut with private debtors, worth an additional 107 billion Euros.¹⁴ In total, the new programme will reduce Greek total public debt by 107 billion Euros (from 350 in 2012). Both financial assistance packages were only granted in return for promises by the Greek government to undertake structural reforms.

In December 2011, the European Council decided to transform the temporary European Financial Stability Facility and the European Financial Stabilization Mechanism into a permanent rescue funding programme, called the “European Stability Mechanism” (ESM). ESM will become effective after Parliaments in at least 12 member states have approved the new mechanism (*Bundesministerium der Finanzen*, 2011). The ESM is also constructed as a special purpose vehicle and located in Luxembourg. It differs

¹³ However, Slovakia opted out, and Estonia was excluded, because it was not a member of the Eurozone in 2010.

¹⁴ The quota for the haircut was 53.3 percent and for this purpose, debtors had to swap existing Greek debt obligations for new ones. Central Banks, however, were partially exempted from the haircut.

Table 1. EFSM funding and loan disbursements (July 3, 2012)

Amount	Maturity	Raised on	Loan beneficiary	Disbursed on
€ 5.0 bn	5 yr	5 Jan 2011	Ireland	12 Jan 2011
€ 3.4 bn	7 yr	17 March 2011	Ireland	24 March 2011
€ 4.75 bn	10 yr	24 May 2011	Ireland, Portugal	31 May 2011
€ 4.75 bn	5 yr	25 May 2011	Portugal	01 June 2011
€ 5.0 bn	10 yr	14 Sept 2011	Portugal	21 Sept 2011
€ 4.0 bn	15 yr	22 Sept 2011	Ireland, Portugal	29 Sept 2011
€ 1.1 bn	7 yr	29 Sept. 2011	Ireland, Portugal	06 Oct 2011
€ 3.0 bn	30 yr	9 Jan 2012	Ireland, Portugal	16 Jan 2012
€ 3.0 bn	20 yr	27 Feb 2012	Ireland	5 March 2012
€ 1.8 bn	26 yr	17 April 2012	Portugal	24 April 2012
€ 2.7 bn	10 yr	20 April 2012	Portugal	4 May 2012
€ 2.3 bn	15 yr	26 June 2012	Ireland	3 July 2012

Source: <http://ec.europa.eu>

from the preceding programmes in two important aspects:

- ESM will be funded with paid-in capital of 80 billion Euros. Contributions come from all Euroarea members, and capital payments must be made by 2014. In addition to paid-in capital, Euroarea member countries have to give capital guarantees up to a total of 620 billion Euros. Since such guarantees by single Eurozone member countries to ESM may default, the total financial lending capacity of EMS is only 500 billion Euros. The EFSF will continue to exist until this full lending capacity is reached and all capital contributions are made (*Frankfurter Allgemeine Zeitung*, 2012a).
- In addition to granting loans to Eurozone member states, the ESM may also buy government bonds of these states on the primary and secondary markets. The purpose of interventions in primary markets is to ensure that the governments concerned remain in the sovereign debt market or to reintroduce them to the primary markets if they had to leave them. The purpose of interventions in secondary markets is to prevent contagion in sovereign debt markets.

In addition to the introduction of ESM, after January 2013, the European Council also decided to introduce ‘collective action clauses’ (CAC) into all newly issued sovereign debt contracts for obligations with a maturity of more than one year. Such collective action clauses allow for a private haircut, if a majority of creditors agrees. This makes it more difficult for individual creditors to block a private sector solution and a voluntary debt restructuring. In addition, in February 2012, Greece passed a law introducing CACs retroactively.¹⁵

¹⁵ The ECB and other central banks were exempted from such a clause in the Greek case. See *Frankfurter Allgemeine Zeitung* (2012b).

4. OBSTACLES TO RESOLUTION FINDING

As reported in the preceding section, the European monetary and fiscal policy authorities did not have a coherent rescue strategy, but rather adopted a piecemeal approach to resolution measures. Finding a solution was fraught with many obstacles, due to policy trade-offs and conflicts of interest, which resulted primarily from the fact that (i.) different countries are affected differently by a debt crisis and that (ii.) decision-making powers over monetary and fiscal policy are split between different institutions within the European Union.

4.1. *Eurozone member countries versus non-member countries*

Shortly after the emergence of the debt crisis in Greece, fears of contagion became widespread in other countries, first in Portugal and later in Spain and Italy, where the emergence of a speculative debt crisis was feared. These fears were accommodated by the fact (i.) that GIPS country sovereign debt obligations are held predominantly by non-domestic investors, and (ii.) that investors inside the European Monetary Union have easy access to “safe havens” within the currency union, without being subject to significant transaction costs or to any exchange rate risk. “Safe havens” took the form of sovereign debt obligations from countries which are still rated “triple A”, such as (currently) Germany, the Netherlands, and Finland.¹⁶ In consequence, short-term interest rates on government bonds and treasury bills in these countries began to fall and sometimes even became negative (as in the case of German Bunds in early 2012).

GIPS countries are exposed to the danger of a speculative debt crisis, because they no longer have access to an autonomous monetary policy (*German Council of Economic Experts*, 2011; *De Grauwe*, 2011). Instead, as members of a currency union, they are subject to a heteronomous monetary policy, set by the European Central Bank. Governments can no longer take refuge as easily with their central bank if they suffer from liquidity problem, because decisions on monetary policy are made in Frankfurt and not Athens, Rome, Lisbon, or Madrid. By adopting the Euro, GIPS countries have to contend with increases in the risk of default on payments, and since this is also known by market participants, they are in far greater danger of a speculative debt crisis. In this respect, GIPS countries are in a situation comparable with some emerging markets (such as Hungary at present) where governments have raised debt in foreign currency, because they were unable to raise sufficient credit on domestic capital markets in local currency.¹⁷

This situation contrasts with non-member countries of the Eurozone, where investors do not have easy access to “safe havens”, because they are subject to a significant exchange rate risk. Since non-Eurozone countries are not members of a monetary union, they may still conduct an autonomous monetary policy, and their central banks could intervene at any time in the market for government bonds. Therefore, the governments of non-Eurozone countries do not face a liquidity problem ipso facto, because they can

¹⁶ Sweden, Denmark, and the UK are also rated “triple A”, but are located outside the Eurozone.

¹⁷ This is also discussed in the literature about the ‘original sin’. See *Jeanne and Zettelmayer* (2002).

raise the money needed for debt repayments, to an unlimited extent from their central bank.¹⁸ Since this is common knowledge, it is less probable that market participants will increase their expected probability of default and thus cause a speculative debt crisis. This might be one of the main reasons why countries like the UK (or Japan and the US) are not faced with the threat of a debt crisis, although the level of their government debt is almost as high as in GIPS countries (*Yoshino and Vollmer, 2012*). Furthermore, this explains why these countries do not have a significant interest in bailing out Eurozone members which have a debt problem.¹⁹

Because non-members are less in danger of a speculative debt crisis, they are less interested in crisis resolution as well as in crisis prevention. This might be a major reason why only a limited proportion of funds transferred to the EFSM come from the European Union and also explains why some non-Eurozone countries are not very eager to join the ‘fiscal compact’ as a potential device to prevent the reemergence of a sovereign debt crisis in the future.

4.2. *Central bank credibility versus financial stability*

The second conflict of interest is between monetary and fiscal policy within the Eurozone and concerns a trade-off between the independence of the central bank and the stability of the European markets for sovereign bonds. According to its statutes, the ECB is not allowed to buy government bonds in primary markets, because this would undermine the no-bail-out clause of the ‘Treaty on the Functioning of the European Union’. As mentioned above, the Eurosystem did not buy sovereign bonds on secondary markets before the crisis (but only accepted them as collateral), although that would have been reconcilable with the rules of the ‘Treaty’. Rather, it did not buy them because of the associated moral hazard for the fiscal policy authorities.

The decision in May 2010, to start the ‘Securities Markets Programme’ and conduct interventions in the markets for public and private debt securities, was justified on the grounds of addressing the “malfunctioning of the securities markets” and restoring “an appropriate monetary policy transmission mechanism” (*European Central Bank, 2010b*). The ECB hence reacted to the malfunctioning of European interbank markets, in which banks refused to accept specific government bonds as collateral, because of counterparty risks. Accordingly, the ECB opened an open market window to allow banks, which hold these government bonds, to refinance their liquidity needs through the central bank.

At the same time, the ECB ensured that the scope of interventions would be determined by the Governing Council and announced that it would not change its policy stance. The Governing Council also stressed that it had “taken note of the statement of

¹⁸ This is not to say that their central banks will automatically provide liquidity to the government. However, it is more probable for the Bank of England, for instance, than for the Bank of Greece to do so, in order to prevent a debt crisis and a market melt-down.

¹⁹ In this respect, Greece is in a similar situation to Hungary, which also incurred a debt crisis without being member of the Eurozone. Hungary, however had issued government debt obligations nominated in foreign currency and also had no chance of monetizing this debt through measures undertaken by the Hungarian National Bank.

the Euroarea governments that they will take all measures needed to meet [their] fiscal targets this year and the years ahead in line with excessive deficit procedures” (*European Central Bank*, 2010b). Finally, the ECB announced its intention to sterilize the liquidity created additionally, by combining open market operations with contractionary fine tuning operations to ensure medium-term price stability.

Since the start of the securities markets programme, the Eurosystem has purchased sovereign debt obligations (issued by GIPS countries) to an amount of 280 billion Euros (or 10% of the size of its consolidated balance sheet or 300% of the Eurosystem’s capital and reserves). Although this was not the officially stated purpose, the securities programme probably had an influence on the funding conditions for new bond issues of GIPS countries, because they might have temporarily reduced yields on secondary markets, especially shortly before the issuing dates of new sovereign bonds. The programme most likely contributed to easing the refinancing conditions for GIPS countries, but also undermined the no-bail-out clause in Article 125 of the ‘Treaty on the Functioning of the European Union’.²⁰

The price paid for the interventions in public and private securities markets is a potential threat to the ECB’s independence.²¹ Central bank independence is at stake for the following two reasons:

- A disorderly debt default by the Greece government could entail a write-down on the ECB’s government debt holdings and hence a reduction in the ECB’s paid-in capital. This could eventually necessitate a recapitalization of ECB by the governments of participating Eurozone countries. However, this danger is less acute in the case of a debt restructuring, if the haircut is applied only to private government debt holders.
- More importantly, the Eurosystem could be forced to continue its interventions in secondary securities markets, even if price stability in the medium-term is in danger, if upwards pressure on interest rate spreads persist. In that case, market participants could start believing that the Eurosystem is following a second mandate, besides price stability, which could affect its credibility, thus raising inflationary expectations.

For these reasons, the Eurosystem’s capacity to act as a stabilizer on markets for sovereign bonds is rather limited, and European fiscal authorities are forced to create additional instruments, such as EFSF or ESM, to stabilize the interest rates on government debt obligations.

²⁰ It is not easy to prove this assertion, but the securities programme was heavily criticized on similar grounds by a former member of the ECB’s Governing Council. See *Weber* (2010).

²¹ This concern was shared, for example, by the former German President, Christian Wulff, who pointed out at the Lindau-meeting with Nobel laureates: “I say this circumspectly: I regard the huge buy-up of government bonds of individual states by the European Central Bank as politically and legally questionable. Article 123 of the Treaty on the Functioning of the European Union prohibits the ECB from directly purchasing debt instruments, in order to safeguard its independence. This prohibition only makes sense if those responsible do not get around it by making substantial purchases on the secondary market.” (*Wulff*, 2011).

4.3. *Financial stabilization vs. fiscal discipline*

A third source of a conflict of interest results from the trade-off between stabilizing of financial markets and maintaining fiscal discipline. A public bail-out may prevent a speculative debt crisis in the short-run, but also destroys incentives for fiscal authorities to reduce budget-deficits, thereby eroding fiscal fundamentals and creating the basis for a future speculative debt crisis.

The intuition behind this trade-off can be clarified by the model presented in Section 3 above, if one considers a country with an already relatively large debt burden D . Due to these poor fundamentals, point A is located far to the right in Figure 3 and the country has a large interest factor R and a high probability of default π . Thus, even a comparatively small downgrading of the country by rating agencies could trigger a speculative debt crisis. The country's position would clearly improve, if some part of total debt were waived or repayments guaranteed by some foreign country. With a reduction in D , the stable equilibrium point A will be associated with a smaller probability of default, so that only a larger downgrading would trigger a speculative debt crisis.

The flipside of this scenario, however, is that such a public bail-out creates incentives for the receiving country to further lose fiscal discipline and accumulate even higher budget deficits. This would raise the probability of a speculative debt crisis in the future. To prevent this, donating countries need to make financial assistance conditional on the fulfillment of certain reform programmes, which aim at improving the competitiveness of the receiving country and hence create a tax base which enables the payment of interest and principal on outstanding debt. Since these adjustment programmes are painful, internal opposition against them in receiving countries is substantial.

4.4. *Budgetary prerogatives within countries: Governments versus legislative*

A final element of conflict prevails within single countries and concerns the allocation of budgetary rights between government and parliament. Normally, decisions on fiscal matters rest solely with the parliament which determines the annual budget. During the crisis, however, governments had to agree to financial guarantees without obtaining prior agreement on all relevant matters from parliament. In the case of Germany, for instance, the Deutsche Bundestag passed a law that allowed the Federal Government to participate in the EFSF, and parliament did not insist on approving each individual payment or guarantee given to debtor countries. The law even allowed the Federal government to take further financial decisions without the consent of parliament. This procedure was, however, declared by the German Supreme Court as contravening the constitution. According to the court's verdict, the Deutscher Bundestag not only has the right, but also the obligation to approve any decision made by the federal government, which has implications for the German budget and involves tax payer money (BVG Aktenzeichen: 2 BvR 987/10). This implies that the German Bundestag (or one of its subcommittees) has to decide case by case on all matters concerning the EFSF, such as on granting additional credit, or initiating additional country programs. Since these matters are similar in other European countries, decision making on changes in the

guarantee programs is very time consuming.²² The usual procedure during the crisis was that decisions were first made by the European council and then had to be approved by national parliaments. Only then could follow-up decisions be made by the European council.

Conflicts of interests between government and parliament also occur within recipient countries - and they are often more serious than within donating countries. Because of conditionality, receiving countries have to fulfill onerous austerity programmes and to impose spending cuts and tax increases. Politicians thus suffer from a credibility problem, because programmes agreed upon by the incumbent government may be overruled by successor governments. For this reason, donating countries also demand written agreements from opposition parties in parliament, guaranteeing that country programmes will be executed even if a new government has come into force after a general election. While this may help alleviate payments by donating countries, it does not ensure the implementation of reform programmes, if new parties are elected, which did not previously sign the concordat for the country programme.

5. CRISIS PREVENTION; RE-ESTABLISHING FISCAL DISCIPLINE

In order to regain market participant trust in national government ability to meet financial obligations, policy makers must reduce future public budget deficits by either cutting public spending and/or by increasing taxes (or other public revenues). Since any transitory effort to regain budget control would not be credible, some European countries started to make fiscal policy subject to a rule by introducing a 'balanced-budget amendment' or 'debt brake' into their constitutions. The country to do this was Germany, which already in 2009 imposed an upper limit on the maximum annual public deficit (as a percentage of GDP) of 0.35 per cent in the case of the federal government and 0 per cent in case of the regional governments (or "Bundesländer"). These debt-brakes will become effective in 2016 for the federal government and in 2020 for the regional governments. A similar provision was introduced in 2011 into the Austrian constitution, which defined a maximum annual deficit of 0.35 per cent. Finally, in its constitution Slovakia fixed a maximum total debt level in percentage of GDP which will gradually be lowered to 50 per cent, and politicians in countries like Spain and Portugal also plan such debt-brackets for inclusion in their constitutions.

To tackle the debt-problem on a broader basis (and to calm down financial markets), the European Council decided in December 2011 to introduce a 'fiscal compact', to be

²² In the case of Slovakia, for instance, the conflict between the government and parliament over the EFSF escalated and resulted in the resignation of the government.

signed no later than March 2012 (*European Council*, 2012).²³ The fiscal compact co-exists with the provisions of the ‘stability and growth pact’ and aims at further strengthening fiscal discipline by specifying a balanced budget rule, imposing more automatic sanctions, and introducing stricter surveillance of the member countries. The fiscal rule requires that a country’s annual structural government deficit not exceed 0.5% of nominal GDP.

The rule has to be incorporated into each country’s national legal system, preferably at the constitutional level. This is to be done until one year after the treaty has come into force. If a member state fails to impose the fiscal rule on time, the EU Court of Justice will decide on the matter. The Court’s decision will be binding, and if not implemented, can be followed up with a penalty of up to 0.1 percent of GDP. This amount will be payable to the European Stability Mechanism if the country’s currency is the Euro, otherwise to the general budget of the EU.²⁴

While the fiscal compact follows the same philosophy as the SGP, there are two important differences: (i.) The ceiling for the annual structural budget deficit has been reduced from 3 percent to 0.5 per cent, which reflects the fact that the ratio of total government debt to GDP has to be reduced in almost all countries; (ii.) the balanced budget rule will be introduced into national legislation and preferably become part of national constitutions, which makes it more difficult to breach.²⁵

The inauguration of the fiscal compact will be accompanied by the forestalling of the permanent European Stability Mechanism ESM, which will supersede the transitory European Financial Stability Mechanism EFSF. The ESM will have the right to buy sovereign debt obligations and thus relieve the ECB from this task. The ESM also grants loans to single countries, if they implement the appropriate reform programmes. Because all participating countries should have transformed the balanced budget rule into national law by March 1st, 2013, granting assistance in the framework of new programmes under the European Stability Mechanism will from then on be conditional on the ratification and implementation of this Treaty by the Contracting Party concerned. Thus, there is a nexus between the implementation of the fiscal compact and the provision of financial assistance under ESM (*European Council*, 2012).

Hence, the European Council did keep to the original idea of the SGP, namely preventing an excessively large budget deficit *ex ante*, but it did that at the expense of

²³ “Treaty on Stability, Coordination and Governance in the Economic and Monetary Union”. The UK and (later) the Czech Republic did not participate. The fiscal compact could not be integrated into existing EU treaties because of the veto by the British government. Hence, a new treaty had to be signed among the remaining 25 countries. This treaty will come into force once ratified by at least 12 Euroarea member states. The aim is to incorporate it into EU law within five years of its introduction.

²⁴ The fiscal compact also sharpens the provisions of SGP, because it requires that an “excessive deficit procedure” automatically be triggered by the European Commission, if a country deviates from the 3 percent rule. Euro area member states commit to supporting the Commission’s proposals, except when a qualified majority of them are against the decision.

²⁵ In addition, deficit procedures under the SGP will be established automatically, unless this is rejected by the qualified majority of member countries. This makes it more likely that such a deficit procedures will indeed be opened.

the no-bail-out clause, which is almost overruled by the permanent stability mechanism ESM. It remains to be seen whether the provisions of the fiscal compact are sufficiently credible to foster fiscal discipline within Europe.²⁶ Strengthening the no-bail-out clause might have been an alternative option, but that would have required designing 'bankruptcy procedures' for sovereign states that are still absent and difficult to create (Schwarcz, 2000; Rogoff and Zettelmayer, 2002).²⁷

6. CONCLUSIONS

The objective of the paper was to describe policy reactions to the solvency crisis and to identify possible conflicts of interest which made it difficult for European policy makers to find a quick solution to the debt crisis. We first argued that membership of a monetary union fundamentally changes the conditions under which fiscal policy can be pursued. A member of a monetary union has to exercise far more fiscal discipline than a stand-alone country, because it cannot easily take refuge in an autonomous monetary policy and is, at the same time, much more subject to pressures towards market discipline from debt holders. We secondly showed that the specific construction of the European Union creates several conflicts of interest between member and non-member countries of the Eurozone, and between low-indebted and highly-indebted countries inside the Eurozone. These conflicts are difficult to resolve. In addition, conflicts of interest occurred between monetary policy and fiscal policy authorities, as well as within countries, between the executive and the legislative powers.

Doubts are well justified as to whether the recent attempts by the European Council to prevent the reoccurrence of a sovereign debt crisis are sufficient. The provisions of the fiscal compact and their implementation into national law can be broken, and the threat of excluding a country from financial assistance by the EMS is not credible. The chances of making such a rule credible were sacrificed, when the no-bail-out clause and the SGP were suspended. If the future capacity of a national government is again tested by the market, the political pressures on authorities to grant financial assistance and to bail-out the respective country will be immense.

An alternative to the introduction of 'debt brakes' into national constitutions would have been to transfer the rights to make fiscal decisions from the national level to that of the European Parliament. Such a transfer of budgetary rights to a supranational level, however, requires a fundamental change in the constitutions of many countries or even a replacement of existing constitutions with new ones. This would be very difficult to achieve. What is therefore needed are alternative rules which make a government default a real option and a possibility which is anticipated by both investors in sovereign debt obligations and by governments and their electorate. Such a rule would prevent

²⁶ Some doubts are founded. In September 2011, the Portuguese head of government referred to a debt brake in the constitution as „a golden rule which hurts nobody”. See *Frankfurter Allgemeine Zeitung* (2011b).

²⁷ In a private bankruptcy procedure, the company is put under receivership, which is not possible in case of a sovereign default. Otherwise, one would have to substitute a democratically elected government with an assigned liquidator.

moral hazard on the part of fiscal authorities and ultimately entail something like ‘bankruptcy procedures’ for sovereign states, which are still lacking in Europe.

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REFERENCES

- Acharya, V. V., Philippon, T., Richardson, M., Roubini, N. (2009), “A Bird-Eye View. The Financial Crisis of 2007–2009: Causes and Remedies”, in: Acharya, A. A., Richardson, M., eds., *Restoring Financial Stability. How to Repair a Failed System*, New York, 1–56.
- Afonso, A., Furceri, D., Gomes, P. (2012), “Sovereign Credit Ratings and Financial Market Linkages: Application to European Data”, *Journal of International Money and Finance*, Vol. 31, 606–638.
- Arezki, R., Candelon, B., Sy, A. (2011), “Sovereign Rating News and Financial Market Spillovers: Evidence from the European Debt Crisis”, Working Paper No. 11/68, Washington: International Monetary Fund.
- Bordo, M. D. (2008), *A Historical Perspective on the Crisis of 2007–2008*, NBER Working Paper No. 114569.
- Bundesministerium der Finanzen (2011), “Fragen und Antworten zum Europäischen Stabilitätsmechanismus (ESM)”, Berlin.
- Cochrane, J. (2010), “Greek Myths and the Euro Tragedy”. *The Wall Street Journal*, May 18, 2010.
- Constâncio, V. (2011), “Contagion and the European Debt Crisis”. Keynote lecture by Vítor Constâncio, Vice-President of the ECB at the Bocconi University/Intesa Sanpaolo Conference on “Bank Competitiveness in the Post-crisis World” Milan, 10 October 2011, <http://www.ecb.int/press/key/date/2011/html/sp111010.en.html>
- De Grauwe, P. (2011), The European Central Bank as a Lender of Last Resort, VoxEU, 18 August 2011.
- Dewatripont, M., J.-Ch. Rochet, Tirole, J. (2010), *Balancing the Banks, Global Lessons from the Financial Crisis*, Princeton, Oxford: Princeton University Press.
- Eisenschmidt, J., Tapking, J. (2009), *Liquidity Risk Premia in Unsecured Interbank Money Markets*, Working Paper, European Central Bank, Frankfurt a.M.
- European Central Bank (2009a), “The Implimentation of Monetary Policy since August (2007)”, *Monthly Bulletin*, July, 75–89.
- European Central Bank (2009b), “Recent Developments in the Balance Sheets of the Eurosystem, the Federal Reserve System, and the Bank of Japan.” *Monthly Bulletin*, October, 81–94.
- European Central Bank (2010a), “The ECB’s Response to the Financial Crisis”, *Monthly Bulletin*, October, 59–74.
- European Central Bank (2010b), “ECB Decides on Measures to Address Severe Tensions in Financial Markets”, Press Release 10 May 2010, Frankfurt/Main.
- European Central Bank (2011), *ECB Announces Measures to Support Bank Lending and Money Market Activity*, Press Release, December 8, 2011, Frankfurt/Main.
- European Commission (2010a), *Report on Greek Government Deficit and Debt Statistics*, COM (2010) 1 final, Brussels, January.
- European Commission (2010b). *Facts and Figures on State Aid in the Member States: Report from the Commission/State Aid Scoreboard—Autumn 2010 update*.
- European Commission (2012), *Excessive Deficit Procedures*. http://ec.europa.eu/economy_finance/economic_governance

- European Council (2012), *Treaty on Stability, Coordination and Governance in the Economic and Monetary Union*, Brussels.
- Frankfurter Allgemeine Zeitung (2011a), "Warum sich die EZB gegen eine Umschuldung wehrt" (Why does the ECB oppose a debt restructuring?), May 18, 2011.
- Frankfurter Allgemeine Zeitung (2011b), "Eine Schuldenbremse für Portugal" ("A tax brake for Portugal"), September 15, 2011.
- Frankfurter Allgemeine Zeitung (2012a), "Euro-Staaten rechnen sich ihre Brandmauer hoch" (Euro countries brighten their firewall), No. 78, March 31, 2012.
- Frankfurter Allgemeine Zeitung (2012b), "EZB entzieht sich der Umschuldung" ("ECB prevents debt restructuring"), February 16, 2012.
- Gerring, J. (2004), "What is a Case Study and What is it Good For?" *American Political Science Review*, 98(2), 341–354.
- German Council of Economic Experts (2010), *Chances for a Stable Upturn*, Annual Report 2010/11, Wiesbaden.
- German Council of Economic Experts (2011), *Assume Responsibility for Europe*, Annual Report 2011/12, Wiesbaden.
- Gibson, H. D., Hall, S. G., Tavlás, G. S. (2012), "The Greek Financial Crisis: Growing Imbalances and Sovereign Spreads", *Journal of International Money and Finance*, Vol. 31(3), 498–516.
- Heider, F., Hoerova, M., Holthausen, C. (2009), *Liquidity Hoarding and Interbank Market Spreads: The Role of Counterparty Risk*, Working Paper, European Central Bank, Frankfurt/Main.
- International Monetary Fund—IMF (2011), *World Economic and Financial Surveys, Fiscal Monitor: Addressing Fiscal Challenges to Reduce Economic Risks*, Washington: International Monetary Fund, September.
- Jeanne, O., Zettelmayer, J. (2002), *Original Sin, Balance Sheet Crises, and the Roles of International Lending*, IMF Working Paper WP/02/234, Washington: International Monetary Fund.
- Levine, R. (2010), *The Governance of Financial Regulation: Reform Lessons from the Recent Crisis*. BIS Working Paper No. 329, Basel.
- Mink, M., De Haan, J. (2012), *Contagion During the Greek Sovereign Debt Crisis*, De Nederlandsche Bank, Working Paper No. 334, Amsterdam.
- Missio, S., Watzka, S. (2011), Financial Contagion and the European Debt Crisis, *Working Paper* No. 3554, Munich: Cesifo.
- Mussler, W. (2012), Die Griechenland-Hilfe im Überblick, *Frankfurter Allgemeine Zeitung*, Februar 21, 2012.
- Nakaso, H. (2001), *The Financial Crisis in Japan During the 1990s: How the Bank of Japan Responded and the Lessons Learnt*, BIS Papers No. 6, Basel.
- Rogoff, K., Zettelmayer, J. (2002), Bankruptcy Procedures for Sovereigns: A History of Ideas 1976–2001, *IMF Working Paper* 02/133, Washington: International Monetary Fund.
- Romer, D. (2012), *Advanced Macroeconomics*, 4. ed., New York.
- Schwarcz, S. L. (2000), Sovereign Debt Restructuring: A Bankruptcy Reorganization Approach, in: *Cornell Law Review*, Vol. 85, 955–1034.
- Scheller, H. P. (2006), *The European Central Bank—History, Role and Functions*, 2nd ed., Frankfurt/Main: European Central Bank.
- Sinn, H.-W. (2011), Germany's Capital Exports under the Euro, *VoxEU.org*, 2 August.
- Weber, A. (2010), "Kaufprogramm birgt erhebliche Risiken", Interview mit Bundesbankpräsident Axel Weber, *Börsen-Zeitung*, Frankfurt, 11. 5. 2010, 1.
- Wulff, C. (2011), "Opening Speech at the 4th Lindau Nobel Laureate Meeting in Economic Sciences", Berlin, <http://www.bundespraesident.de>.
- Yin, R. K. (2003), *Case Study Research. Design and Methods*, 3. ed. London, New Delhi: Sage.
- Yoshino, N. & Vollmer, U. (2012), *The Sovereign Debt Crisis: Why Greece, but not Japan?*, mimeo, Keio University Tokyo.