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The ECB, the ESM and Stability Bonds: a way out of the crisis

NOTE

Abstract

The Euro Area is on the brink of a melt down unless urgent action is taken. The paper looks at the constraints on the EFSF and for ECB interventions, which limit the capacity to bail out Member States. The issue of Eurobonds could solve some of these issues, although the Commission' Stability Bonds may take to long for their realisation. A transition proposal is made, that would give both the EFSF and the ECB a constructive role in overcoming the crisis.

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EXECUTIVE SUMMARY

The Euro Area is on the brink of a meltdown. Political mishandling of the European debt crisis has undermined investors' trust and confidence that holding their wealth in Southern European government bonds is safe. Not surprisingly they are selling their investments *en masse* and when bond prices collapse, yield spreads explode. This is not a conspiracy by markets against the euro, but the rational response to policies which seem to ignore the external effects of Member State's actions.

At the core of the crisis stands Europe's economic governance, or rather non-governance. Policy decisions are made by autonomous Member States, which seek to maximise the utility of what they take to be their national interest, given what others do. But as is well known from Game Theory, the strategic interactions of several autonomous decision makers can generate stable equilibria that are not Pareto-optimal. In other words, what Member State governments are doing may seem to be rational from a national perspective, but it damages the interests and welfare of all European citizens. In the European debt crisis, the welfare losses result from the fact that uncoordinated government declarations affect financial markets negatively.

These external effects must be re-internalised by institutions that take into account the general interest. At the moment, we have two institutions that are able to do so: the ECB and the EFSF; the latter is to be succeeded by the ESM in 2012. The job of the ECB is to provide liquidity to the banking system; the task of the EFSF is to provide liquidity to Member States, which have lost access to financial markets. The functions and interests of these two institutions are therefore different. The ECB is independent; the EFSF is funded or guaranteed by Member States. In their desire to minimise financial costs to tax payers, Member States are tempted to shift the liquidity provision function for sovereign bonds to the ECB. By doing this, they undermine the ECB's independence. Hence, the present discussions about the roles, relationships and challenges of the ECB, the EFSF and the ESM, reflect a power struggle between member states and the ECB that will determine the future fate of the European Monetary Union.

In this briefing paper, I will first summarise the institutional arrangements, give an explanation for the euro crisis, then assess the role of the EFSF and the ECB and conclude on the provision of liquidity by the EFSF through Eurobonds.

1. THE INSTITUTIONAL FRAMEWORK

In Spring 2010, concerns about the debt position of Greece, followed by Ireland, and later also by Portugal, led to the drying up of capital markets for sovereign borrowers. To prevent a major financial crisis, the European Union and its Member States have provided financial support to distressed Member States, who were facing problems in meeting their international and domestic payment obligations. They granted loans first to Greece, then to Ireland and Portugal, on the condition that these Members States implement closely monitored programmes of economic adjustment. The purpose of these financial bailouts was to restore market confidence in the sustainability of public debt in these countries by correcting their financial and fiscal imbalances and allow them to return to financial markets at reasonable prices. An important element in the crisis fighting mechanism was the provision of special financial facilities (European Commission, 2011: pp. 17-20). Four instruments must be distinguished in this context.

1.1. The European Financial Stability Mechanism (EFSM)

The legal basis for the EFSM is article 122 TFEU and the Council regulations no. 407/210 of 11 May 2010. The EFSM is a tool by which the Commission can borrow on financial markets on behalf of the Union under an implicit EU budget guaranty. The Commission then lends the proceeds to the beneficiary Member States with no servicing costs for the Union. The EU budget guaranty guarantees the payment of the bonds in case of default by the borrower. It has a budget of EUR 60 billion.

1.2. The European Financial Stability Facility (EFSF)

This is a new institution set up after the European Council meeting in May 2010. Its objective is to provide loans to the Euro Area Member States with difficulties in accessing the primary market, to recapitalise banks when needed and to intervene in the secondary markets.[1] The EFSF is a *société anonyme* incorporated in Luxembourg, which borrows in financial markets with the guarantees of the Member States of the Euro Area other than the countries that receive aid from the EFSF (stepped out guarantors). The EFSM was authorized to borrow up to EUR 440 billion in funds guaranteed by Euro Area Member States to which the EUR 60 billion of the EFSM should be added and additional funding to the International Monetary Fund of at least EUR 250 billion was secured as a safety umbrella for distressed Member States. This meant that the crisis mechanism created in May 2010, amounted to total funds of EUR 750 billion. In September 2010, the highest possible rating was assigned to the EFSF by all three rating agencies (Standard & Poor's, Moody's and Fitch), although this required credit enhancement of 120%, over-guaranty and additional cash reserves (ESFS, Newsletter 3, 2011). While support for Greece was provided from the EFSM, the first Euro Area Member State to use the newly established EFSF facility was Ireland in November 2010. The total Irish package of financial assistance amounted to EUR 85 billion. On 7 April 2011, Portugal also negotiated a rescue package, which was formally agreed in May 2011, amounting to EUR 78 billion, of which EUR 26 billion were financed under the EFSM, another third by the EFSF, and the final third by the IMF. All these rescue packages were conditional on fiscal consolidation strategies and adjustment programmes.

The EFSF has already had two lives. The original EFSF (EFSF-1) was decided in May 2010 and set up in June 2010. However, it quickly became apparent that in order to obtain a AAA rating

[1] http://www.efsf.europa.eu/attachments/efsf_guideline_on_interventions_in_the_secondary_market.pdf

for bonds issued to finance the EFSF, cash guarantees had to be given, which handicapped the fund's lending capacity.

In December 2010 it was agreed that the initial EFSF was to be amended in order to increase the guaranty commitments from the initial amount of EUR 440 billion to EUR 780 billion. This increased the lending capacity to EUR 440 billion. The new structure of the EFSF was signed by Member States in July 2011 and was ratified by Slovakia as the last of the 17 Member States on 13 October 2011. For the new version EFSF-2, credit enhancements were changed from the initial 120% over-guaranty plus cash reserves plus non specific cash buffer to a uniformed 165% over-guaranty (EFSF Newsletter 2, 2011). The new credit enhancement structure ensures the triple AAA rating, confirming the EFSF as a quality issuer on international debt markets. It makes the structure more efficient as the borrower countries no longer need to deduct the cash reserve and loan specific cash buffers from the amount of the loan, which was necessary under the previous structure.

Two new key elements have been introduced by the EFSF-2: first, a lower interest rate on EFSF loans as the new lending rate will comprise only EFSF funding cost plus operational cost; secondly, extended maturities from the current average of 7½ years to a minimum average of 15 years and up to 30 years. In addition to providing loans to Member States, the EFSF is now also authorized to intervene in primary and secondary markets although only on the basis of ECB analysis recognizing the existence of financial market circumstances and risks to financial stability. It may also finance the recapitalization of financial institutions through loans to governments including non programme countries (EFSF Newsletter 3, 2011).

1.3. The European Stability Mechanism (ESM)

In December 2010, the European Council agreed to the creation of a permanent crisis mechanism, the ESM. It will replace the EFSM as a permanent intergovernmental institution. Its objective is to provide loans to the Euro Area Member States and may exceptionally intervene in debt primary markets. Financial assistance to Euro Area countries will be under strict conditionality and includes private sector involvement in accordance with IMF practices, namely case by case analysis of debt sustainability, collective action clauses for all new Euro Area government bonds after June 2013, and preferred creditors status, junior only to IMF loans (EFSF Newsletter, January 2011).

The Treaty on the ESM was signed by the 17 euro Member States in July 2011. It should become effective in 2013[2] after ratification by national Parliaments. Its establishment is based on Article 136 TFEU. The ESM will be set up as an International Financial Institution (IFI) under international public law located in Luxembourg. The function of the ESM is to mobilize funding and provide financial assistance during critical times to Euro Area Member States, subject to strict policy conditionality and macroeconomic adjustment programmes. The highest decision body of the ESM will be the Board of Governors consisting of the Ministers of Finance in the Euro Area with the European Commissioner for economic and financial affairs and the President of the ECB as observers. The Board of Governors will take decisions by mutual agreement (unanimity) regarding the granting of financial assistance, the terms and conditions, and the lending capacity of the ESM. All other decisions will be taken by qualified majority.

The ESM will be one of the largest International Financial Institutions in the world. Its subscribed capital will be EUR 700 billion and its lending capacity will be ensured by

[2] This date was advanced by the December 2011 European Council to 2012

establishing the appropriate mix between paid in and callable capital. Its capital structure will comprise EUR 700 billion of authorized capital of which EUR 80 billion will be paid in capital (phased over 5 years in equal instalments) and EUR 620 billion of callable capital. The lending capacity will be formally reviewed on a regular basis. The ESM will lend at fixed or variable rates; pricing will take into account the debt sustainability of recipient countries while remaining above funding cost with an adequate market for risks in line with IMF pricing principles (European Commission 2011).

1.4. The ECB's unorthodox policies

Since the collapse of Lehman Brothers and the ensuing Global Financial Crisis, the ECB has used a number of unorthodox policy measures in order to ensure sufficient liquidity in the European banking system. These measures were necessary in order to preserve the ECB's technical capacity of maintaining price stability. The two main tools were the Covered Bond Purchase Programme (CBPP) and the Securities Markets Programme (SMP). The aim of the CBPP was to support a specific financial market segment that was important for the funding of banks particularly affected by the financial crisis. The purchases under the programme were EUR 60 billion and were terminated by 30 June 2010.

Following the May 2010 European Council meeting, the Governing Council of the ECB decided on 10 May 2010, on several measures to address severe tensions in financial markets. In particular, it decided to conduct interventions in the Euro Area public and private debt securities markets (Securities Markets Programme) to ensure depth and liquidity in those market segments that were dysfunctional. The objective was to restore the proper functioning of the monetary policy transmission mechanism, and thus to guarantee the effective conduct of monetary policy oriented towards price stability in the medium term. The impact of these interventions was sterilised through specific operations aimed at re-absorbing the injected liquidity and thereby ensuring that the monetary policy stance was not affected.

On 8 August 2011, the ECB signalled that it would expand its SMP to include the bonds of Spain and Italy. At that occasion, it also said that it "considers fundamental that governments stand ready to activate the European Financial Stability Facility (EFSF) in the secondary market, on the basis of an ECB analysis recognising the existence of exceptional financial market circumstances and risks to financial stability, once the EFSF is operational."[3] It emphasised that the SMP and EFSF mechanisms were designed to get the euro through the crisis so that fiscal reform could take place in a more orderly fashion.

To summarise, these four policy tools are all designed to deal with the severe liquidity crisis which has occurred as a consequence of the Global Financial Crisis. It is important to understand this crisis correctly, if one wishes to implement proper policies.

[3] http://www.ecb.int/press/pr/date/2011/html/pr110807.en.html

2. THE NATURE OF EUROPE'S DEBT CRISIS

There are two views to look at the European debt crisis. For the *fundamentalists*, the debt crisis is caused by lack of discipline in sticking to the principles of "a sound and competitive macroeconomic base and solid public finance" (Weidmann, 2011). European governments, particularly in the South, are said to have borrowed excessively in the past, and now they are no longer able to sustain such policies. Hence, the remedy is to implement "painful reforms" and consolidate budgets, which would rebuild trust and confidence in financial markets (Issing, 2009). If the Stability and Growth Pact did not prevent excessive borrowing, new and tighter rules need to be set up, which could go as far as kicking Member States out of the Euro Area.

For the *monetarists*, the European debt crisis is the consequence of a liquidity shock. A liquidity shock starts when there is a drop in the fundamental value of securities in the market. This event may lead to the net selling of these assets and therefore to a fall in bond prices and therefore an increase in bond yields as well as increases in volatility. When no one wants to buy these assets, liquidity dries up. As asset prices fall, banks' balance sheets deteriorate and reduce bank capital (Chacko et al. 2011). This could cause a bank run. But even if deposits are guaranteed by governments, banks must reduce their liabilities, lend less and the resultant credit crunch spills over into the real economy. Low demand and falling investment will then slow down growth or even cause a recession. A vicious downward spiral reduces government income and re-enforces the debt crisis. Thus, a small local liquidity shock can lead to a global systemic financial crisis when the need for liquidity spills over to banks, and this danger is the greater, the higher the degree of integration.

A liquidity crisis can be stopped by a lender of last resort that buys up the excess supply of illiquid papers, thereby preventing the crisis from turning into a default avalanche. This excess supply consists of "old" securities, which risk adverse investors dump in the secondary market, and of new securities issued in the primary market. For monetarists, the danger in a liquidity crisis comes from the *collapse of asset prices in the secondary market* because of the distortions it produces for banks' balance sheets. By contrast, the fundamentalist approach focuses essentially at *reducing the excess supply of new securities* by stopping highly indebted states from borrowing more. While monetarists would agree that balancing budgets is part of a medium term strategy to restore stability, they also argue that if the cause of the crisis is a liquidity shock, the focus on fiscal consolidation alone and deficit reduction is insufficient and needs to be complemented by a lender of last resort capable of stopping the vicious spiral with disastrous spillovers into the real economy.

What kind of crisis is Europe's debt crisis? Table 1 shows the relative importance of public debt in the Euro Area and beyond. For the Euro Area the total outstanding public euro debt is EUR 8.1 trillion. The USA and Japan carry a debt stock of over EUR 10 trillion, each. Public debt per person is lower in Europe than in the USA (with the exception of Ireland) and Japan. However, with respect to deficits, the situation is different. The Euro Area borrowed in 2011 EUR 437.7 billion, while the US deficit is more than twice as much and Japan's is only two thirds. Thus, the Euro Area's overall debt performance should be more sustainable then in the USA if one considers new borrowings and also more sustainable than in Japan if one looks at the debt - GDP ratio.

The relative weight of debtors is unequally distributed. With nearly EUR 2 trillion outstanding debt, Germany is Europe's biggest sovereign debtor with a share of 24.1%, followed by Italy (23.6%) and France (21.5%). Greece's public debt of EUR 340 billion represents only 4.5% of total debt in the Euro Area. With respect to new borrowing, France exceeds all others. The

annual deficit for 2011 is estimated to be EUR 126.8 billion, nearly as much as Germany and Italy combined. Greece is expected to borrow EUR 16.8 billion, which represents a share in new borrowing well below its share in the outstanding debt stock. This is also true for Italy, but not for Spain, Ireland or Portugal. It is also of interest that among the non-euro Member States, the UK borrows far more than any other euro member, including France.

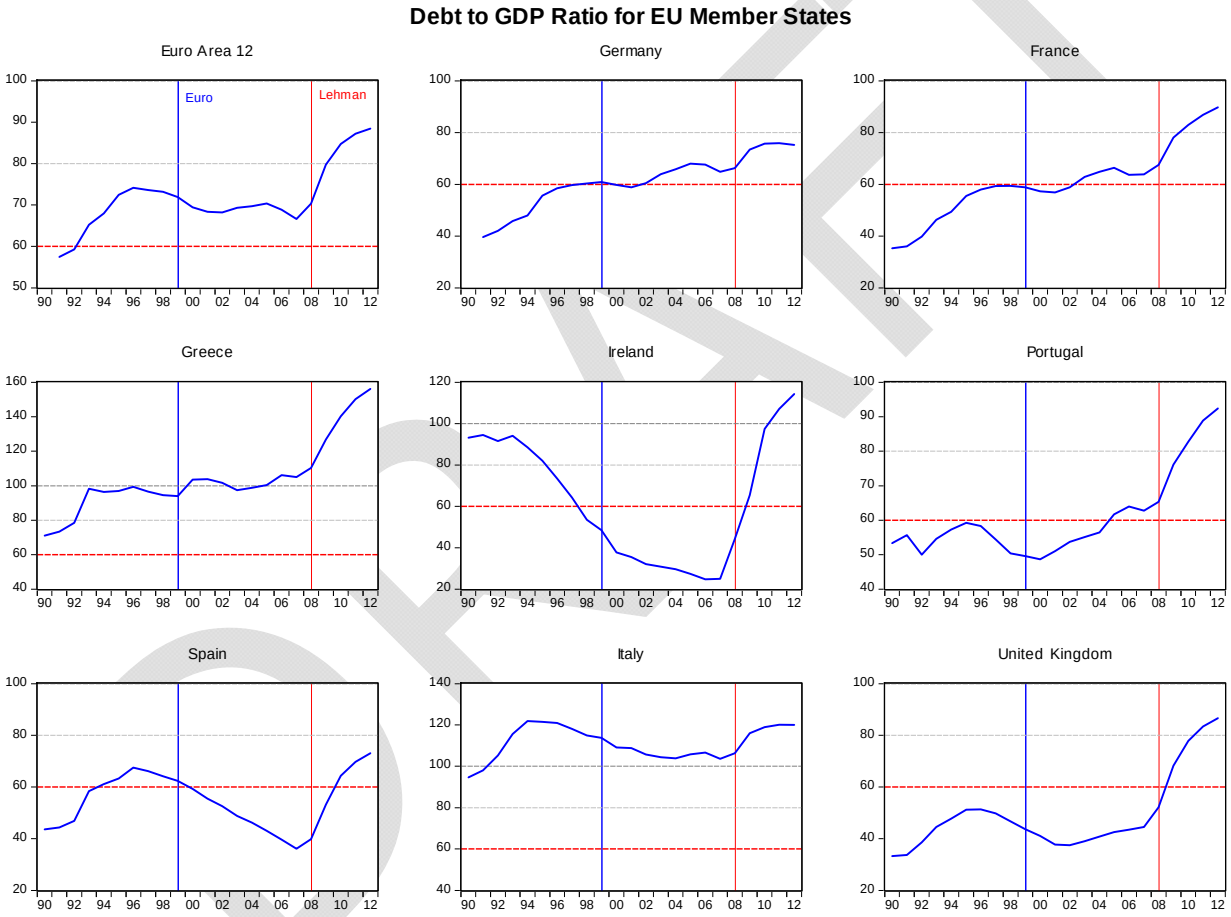
Table 1. Public debt and deficits of euro area Member States

	Debt						Deficit	
	debt in 2011	country share	debt per head	Debt-to-GDP	absolute change	relative change	deficit in 2011	country share
	€ bn	%	€ thousands	*level in 2007*	*2011-07*	*2011-07 in %*	€ bn	%
Euro area 17	**8107.1**	**100.0**	**24.5**	***66.6***	***21.9***	***32.9***	**-427.7**	**100.0**
Germany	1955.9	24.1	23.9	64.9	10.3	15.9	-69.6	16.3
Italy	1912.3	23.6	31.5	103.6	16.3	15.7	-68.4	16.0
France	1746.7	21.5	26.8	63.8	26	40.8	-126.8	29.6
Spain	745.4	9.2	15.9	36.1	36.9	102.2	-68.4	16.0
Netherlands	402.1	5.0	24.2	45.3	22	48.6	-23.5	5.5
Belgium	367.1	4.5	33.9	84.2	17.9	21.3	-16.8	3.9
Greece	340.2	4.2	29.9	105	51	48.6	-16.8	3.9
Austria	209.4	2.6	24.9	59.3	14	23.6	-10.5	2.4
Ireland	169.7	2.1	37.9	25	89.3	357.2	-16.3	3.8
Portugal	152.6	1.9	14.3	62.7	29.7	47.4	-8.4	2.0
Finland	96.2	1.2	17.9	35.2	17.8	50.6	-3.0	0.7
Slovakia	31.5	0.4	5.7	29.6	17.8	60.1	-3.7	0.9
Slovenia	16.6	0.2	8.2	23.4	24.2	103.4	-2.0	0.5
Cyprus	11.9	0.1	14.7	58.3	10.1	17.3	-1.0	0.2
Malta	4.5	0.1	0.0	61.7	9.2	14.9	-0.2	0.0
Estonia	1.4	0.0	1.1	3.7	8	216.2	-0.3	0.1
		relative to EA	**debt per head**	*relative to EA*	*relative to EA*	*relative to EA*		*relative to EA*
United Kingdom	1474.3	18.2	23.5	44.5	42.1	94.6	-152.5	35.6
Poland	200.8	2.5	5.3	45.0	14.6	32.4	-22.8	5.3
Sweden	151.2	1.9	16.3	40.0	-2.5	-6.3	-0.4	0.1
Denmark	115.4	1.4	20.9	27.3	21.9	80.2	-10.4	2.4
Hungary	75.0	0.9	7.5	66.1	15.5	23.4	-4.4	1.0
Czech Republic	66.0	0.8	6.2	29.0	16.2	55.9	-7.0	1.6
Romania	42.2	0.5	2.0	12.6	21.5	170.6	-6.1	1.4
Lithuania	12.0	0.1	3.7	16.9	31.4	185.8	-2.0	0.5
Latvia	9.7	0.1	4.4	9.0	47.6	528.9	-1.5	0.3
Bulgaria	7.6	0.1	1.0	17.2	3.6	20.9	-1.1	0.3
United States	10764.9	132.8	34.5	62.4	39.7	63.6	-970.7	227.0
Japan	10132.3	125.0	78.7	187.7	37.5	20.0	-291.7	68.2

Source: Ameco and ECB

Figure 1 shows that public debt in Europe exploded with the Global Financial Crisis after the Lehman bankruptcy in 2008. Prior to this event, the debt ratios were falling for Spain, Ireland and Italy, and stable in Greece; they did increase in Germany and France. For the Euro Area as a whole, the debt-GDP-ratio did come down, although only at a slow pace. It can be argued that the reductions were insufficient given the economic boom of the first euro-decade. Especially the property booms in Ireland and Spain, probably also in Greece due to the Olympic Games, generated unsustainable revenue, but France and Germany also did not use the favorable growth environment to reduce their debt. No doubt, the Stability and Growth Pact has failed to restrain member states.[4] In this respect, the fundamentalists are right to insist that Europe's fiscal policy framework needs to be tightened up.

Figure 1.

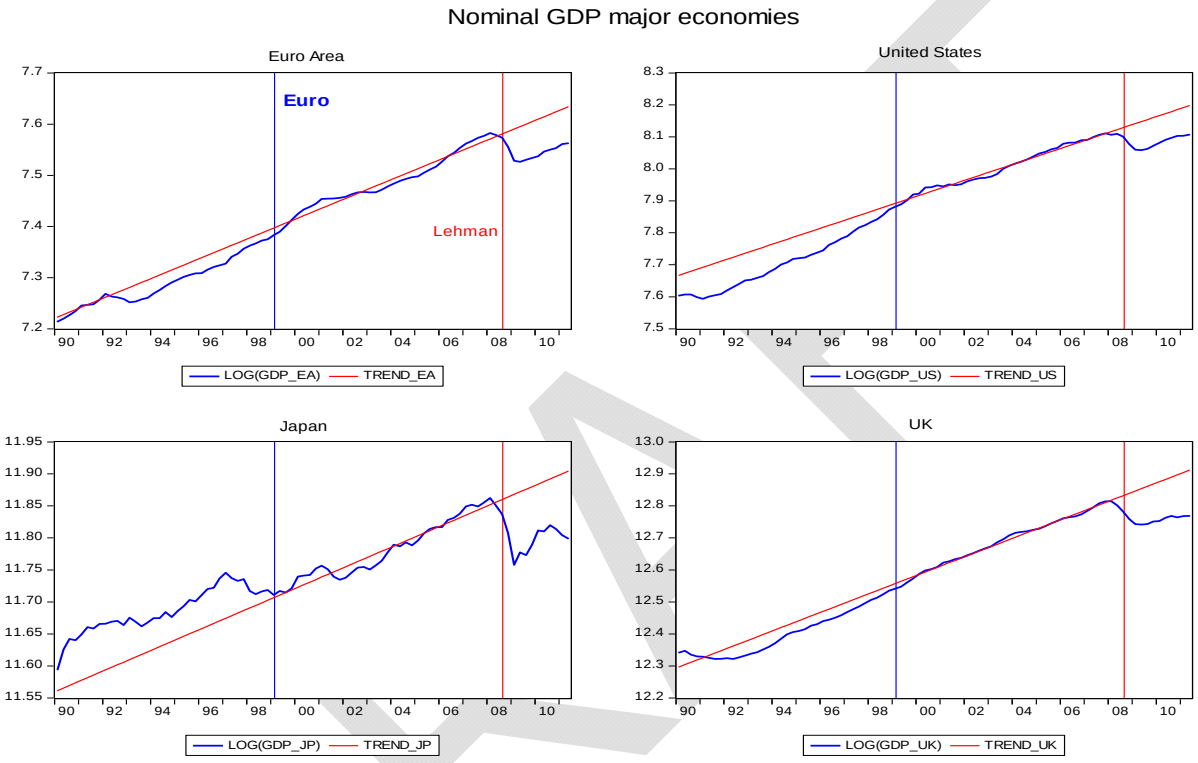


Source: AMECO

[4] I have argued elsewhere that this "lack of discipline" is unavoidable in a monetary union with many autonomous governments. See Collignon, 2003.

However, a major factor in the European debt crisis has been the dramatic recession and subsequent slow growth. With the important drop in global output (see Figure 2), which has affected all Euro Area Member States, public revenue has fallen in the same proportions as GDP,[5] while expenditure had continued to grow at previous rates. This negative growth has contributed to a deterioration of the primary deficit (the deficit net of debt service), but it has also accelerated the snowball effect, which occurs when interest rates exceed the growth rate.

Figure 2.



Source: EUROSTAT

Under these circumstances, a consolidation of budget deficits is necessary. However, the accelerated speed of deficit reduction is counterproductive. The harsh austerity programs have failed to reduce public debt ratios, because all drivers of growth have been blocked. Portugal's economy is contracting and Ireland only manages to grow because of booming exports to Germany's chemical industry. The most obvious failure of austerity is Greece, where GDP has fallen between 2009 and 2011 by 10%, the capital stock by 30.3% and the stock of capital equipment by even 50%. Domestic demand has shrunk by 17.5% and the only positive contribution to growth has come from a tiny increase in net exports (in essence because of a reduction in imports). Nominal wages have been cut and employment is down. Unemployment has risen by over 50%. Under these conditions, the debt ratio increases unabatedly and it seems absurd to suggest that Greece's austerity programs could stabilize its public finances. See Table 2.

[5] The income elasticity of government revenue relative to GDP is close to 1. See European Commission, 2011.

Table 2. Macroeconomic aggregates: Greece

Annual percentage change

	1992-06	*2007*	*2008*	*2009*	*2010*	*2011*	*2012*	*2009-11*
GDP	*3.0*	4.3	1.0	-2.0	-4.5	-3.5	1.1	**-10.0**
Private consumption	*3.1*	2.8	3.2	-2.2	-4.5	-6.4	-2.2	**-13.1**
Public consumption	*3.1*	8.2	1.5	10.3	-6.5	-2.6	0.1	**1.2**
Gross fixed capital formation	*4.3*	5.5	-7.5	-11.2	-16.5	-2.6	0.1	**-30.3**
- of which: equipment	*8.6*	22.3	6.6	-11.8	-23.5	-16.0	-1.9	**-51.3**
Exports	*6.3*	5.8	4.0	-20.1	3.8	10.7	6.9	**-5.6**
Imports	*5.8*	9.9	4.0	-18.6	-4.8	-8.4	-3.1	**-31.8**
Contribution to GDP growth								
- domestic demand	*3.4*	4.6	1.0	-1.8	-7.7	-8.0	-1.8	**-17.5**
- inventories	*-0.1*	1.6	0.5	-2.3	0.9	-0.5	0.3	**-1.9**
- net exports	*-0.4*	-2.0	-0.5	2.0	2.3	5.0	2.6	**9.3**
Wages (compensation per head)	*7.9*	6.1	7.0	3.6	-3.5	-1.0	0.1	**-0.9**
Unit labour cost	*6.0*	3.6	6.2	5.0	-1.1	-0.1	-0.9	**3.8**
Employment change	*1.2*	1.7	0.2	-0.7	-2.1	-2.6	0.1	**-5.4**
Unemployment rate	*9.9*	8.3	7.7	9.5	12.6	15.2	15.3	
Change in debt	**27.7**	**-1.1**	**5.3**	**16.5**	**13.4**	**10.0**	**5.8**	**39.9**

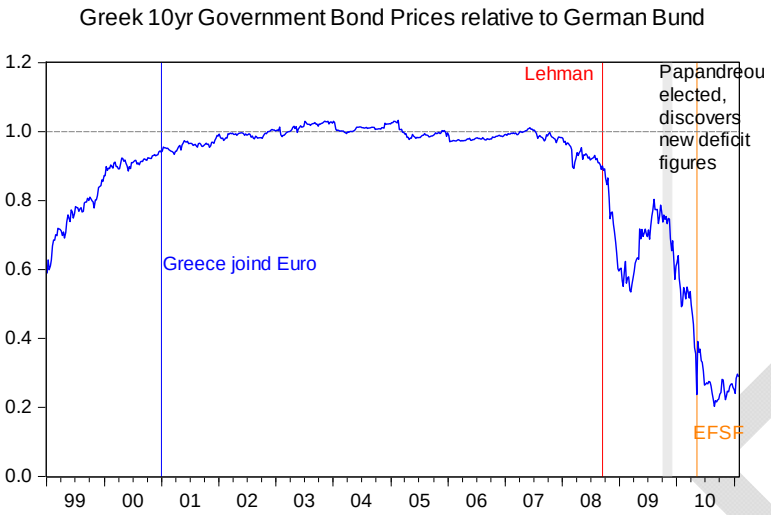
Source: European Commission, 2011

The effect of the Greek adjustment program reveals a deeper problem with Europe's fiscal rules. The Stability and Growth Pact stipulates specifically that the "corrective arm" of the Pact is suspended when a Member State's economy shrinks by more than 1.7%. However, it does not give criteria for suspending the suspension. Presumably the corrective procedures are put back into motion as soon as the critical GDP-shrinkage has stopped and growth returns. But this is too early, as it implies that budgets now have to be adjusted to the lower output level. This early adjustment will prevent growth and output from returning rapidly to its normal steady state. Furthermore, lower investment and employment will impair long run growth. Hence, if a large part of the deficit is caused by a revenue gap after a severe output shock, it might be more appropriate to smoothen the adjustment over time. A simple rule to achieve this would be to freeze nominal expenditure until the pre-shock output level has been reached again and let the deficit adjust endogenously during this period. Once the previous GDP level has been surpassed, the ordinary preventive and corrective mechanisms of the SGP should be fully implemented again.

Acknowledging the institutional failure of the Stability and Growth Pact does not prevent us from recognising that the European debt crisis shows all the signs of a liquidity shock that originated in Greece and has spilled over into other Member States. The Greek shock was a combination of the economic deterioration after Lehman and the loss of confidence after the newly elected Papandreou government revealed that its predecessor had reported wrong data about Greek debt and deficits. Investors were therefore no longer willing to hold Greek bonds and the bond price relative to Germany collapsed (see Figure 3). This set into motion the vicious downward spiral of declining asset prices, which led to the complete freezing of the Greek bond market and spilled over into other Southern Member States. Not surprisingly,

rating agencies have repeatedly downgraded euro Member States where the possibility of GDP contraction puts the sustainability of public debt in jeopardy.

Figure 3.



Source: BLOOMBERG

The correct response to this crisis would have been an immediate bailout of Greece at the beginning of the crisis and the injection of liquidity into a dysfunctional market in order to prevent the vicious spiral from developing. However, the conflict between fundamentalist and monetarist policy makers has prevented swift action. In fact, discordant political statements have deepened the crisis by creating a climate of uncertainty and increased volatility, which have accelerated the sell-off of southern European public bonds. Collignon, Esposito and Lierse (2011) have shown that political communication explains a significant contribution to the rising yield spreads between Greece and Germany. In the short run, every time the German Chancellor, Mrs. Merkel has made a declaration on Greece, uncertainty measured by the volatility of spreads has increased and this higher volatility has required higher returns on bonds from Greece. However, over the longer run, there was a direct effect whereby Merkel's statements seem to reduce the yield spread. Thus the picture is one of chaotic cacophony that irritates markets (and citizens), while in the end sound policies prevail. The price for this political inefficiency is high in terms of credit risk and credit cost (see Figure 3).[6]

[6] Our estimates suggest that Merkel's uncooperative attitude at least in the early period of the crisis, did cost Greece up to EUR 170 million. If her behaviour is a proxy for the cacophony of Europe's intergovernmental governance system, the cost for Europe's South (Greece, Italy, Spain, Portugal, Ireland) would be between EUR 1 and 1.6 billion every time Mrs Merkel talks about Greece. Given that our estimates record approximately 70 such declarations, the aggregate cost of Merkel's communication is close to EUR 100 billion. See Collignon, Esposito and Lierse (2011)

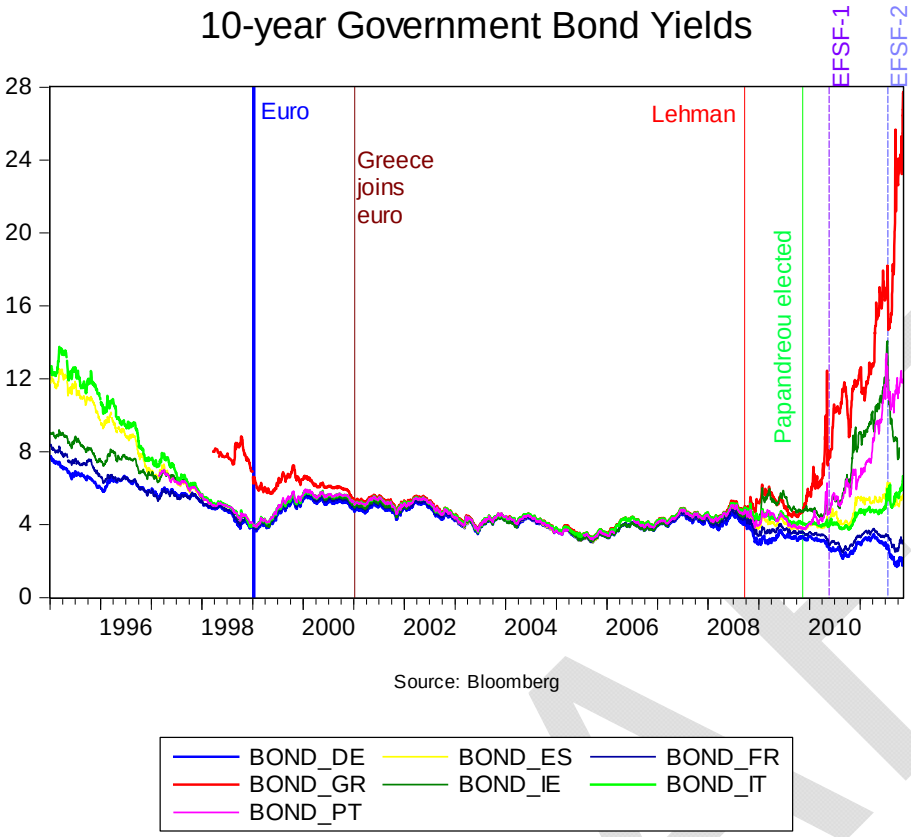
3. THE IMPACT OF THE EFSF

The May 2010 European Council saw the monetarists' arguments prevail. It was finally recognised that the European Treaty allowed liquidity bailouts, even if Art. 125 TFEU prohibited the assumption of debt.[7] The EFSF was set up to provide liquidity to Member States which had lost access to financial markets when issuing new debt. The European Central Bank followed up on 10 May by starting the Securities Markets Programme in order to stabilise the secondary market. However, it was too little, too late. When financial crisis contagion spilled over into large Member States, especially into Italy in 2011, but also into Spain and even into France, it became obvious that the original EFSF bailout fund was insufficient. In July 2011, the European Council meeting increased the fund's resources from the initial amount of EUR 440 billion to EUR 780 billion. Yet again, this was not enough. Given that Italy has to refinance approximately EUR 350 billion in 2012, there are large liquidity risks for lenders and the European Council agreed in October 2011 to leverage the EFSF up to EUR 1 trillion. By mid-November it seemed again that this has failed to quiet markets as is clear from the yield spreads on government bonds (Figure 4).[8]

[7] Art. 125.(1) TFEU says: „The Union shall not be liable for or assume the commitments of central governments, regional, local or other public authorities, other bodies governed by public law, or public undertakings of any Member State, without prejudice to mutual financial guarantees for the joint execution of a specific project." Hence, the prohibition concerns assuming liabilities by another state, which means one country's liability becomes another country's liability. By contrast, making loans increases liabilities for the borrower and generates assets for the lender. The argument that the EFSF breaks the Treaty provision of "no bailout" confuses assets and liabilities. The Maastricht Treaty prohibits, rightly or wrongly, a "'federalization" of member state debt of the kind that took place in the United States in 1792, when Alexander Hamilton "assumed" state debt by the federal government in order to stabilize financial markets, but it does not prevent governments from making loans to other governments.

[8] A similar picture is drawn by the prices for CDS. See Collignon, 2011

Figure 4.



One reason for this failure is the power struggle between member states and the ideological conflict between fundamentalists and monetarists. The fundamentalists in the strong economies of Europe's North (especially in Germany, the Netherlands and Finland) seek to minimize their contribution to the different bailout funds, as this exposes their taxpayers' funds to potential defaults. They therefore emphasize correcting economic fundamentals and resist intervention. From a national point of view, this is rational behavior. However, the aggregate effect is the under-provision of bailout funds that prevents stopping the vicious downward spiral in bond markets. This is a typical collective action problem, which occurs when many independent decision makers have incentives to behave uncooperatively. The literature in political economy has shown that delegation to a single decision maker is the most efficient way to cut short of such problems. Hence, the Euro Area would need to delegate decision making to a non-intergovernmental European government.

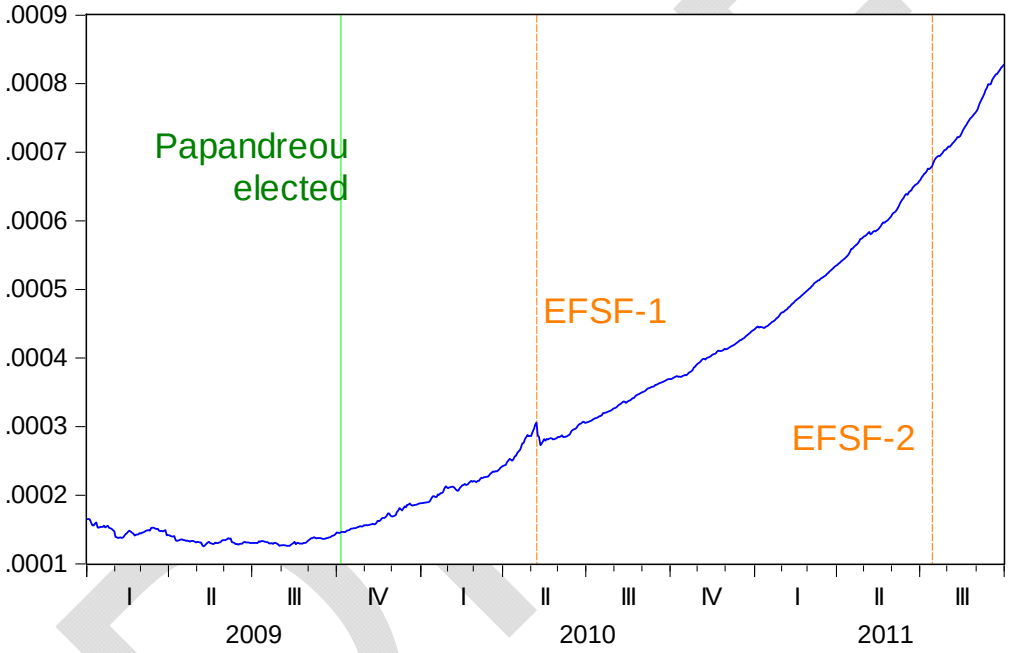
A correlate of the fundamentalist ideology is "Private Sector Involvement" (PSI). While member state governments first promised that Greece will not default, they have forced banks in October to write off "voluntarily" part of Greece's outstanding debt. This was a fantastic shot in the foot. Financial operators took this as a warning that similar conditions could be imposed on other sovereign debt in the future. They consequently unloaded their portfolio holdings, thereby further accelerating the collapse of bond prices and generating a genuine run out of European debt. PSI has also closed the door to leveraging the EFSF, for promises by member state governments are no longer credible and risk adverse investors shy away from holding European sovereign bond. By now, the flight out of the euro is so generalized, that the euro is

losing value in exchange markets, despite the structural weaknesses of the US economy and the problems in Japan. In other words, the euro's function as the alternative reserve asset in the global economy is vanishing rapidly, because member State governments impose dysfunctional policies.

The deteriorating trust in the euro can also be measured by the political noise generated by policy makers who cannot agree on what to do. Collignon (2011) gives measures of such noise by the conditional variance of the daily change of the euro's external value in a GARCH-M model.[9] Figure 5 reproduces the graph. It is remarkable to see how uncertainty and loss of trust by international investors has risen continuously and exponentially since the Papandreou government took over in Greece. Furthermore, the creation of the ESFS in May 2010 only had a very short term effect on reassuring markets. The transformation to the second generation of the EFSF in July 2011 had no effect on the growing uncertainty in the Euro Area.

Figure 5.

Political uncertainty reflected in the USD/euro rate



Source: Collignon, 2011

[9] A GARCH-M model estimates a time series' mean as a function of the conditional variance.

4. THE ROLE OF THE ECB

The two conflicting views between fundamentalists and monetarists resemble the debates in the 1980s between *economists* and *monetarists* regarding the preconditions of monetary union. At the time, economists, mainly in Germany, emphasized the need for economic convergence prior to starting monetary union, monetarists believed that money will endogenize the adjustment process. The conflict was finally overcome by the Delors Committee, which proposed the creation of an independent centralized monetary authority, the ECB, and the convergence in economic fundamentals by stipulating criteria, the later Maastricht criteria, which ensured fundamental convergence in economic performance.[10] The solution of Europe's debt crisis may require a similar compromise between long term fiscal consolidation and short term liquidity management. How could such a way out of the crisis look like? Restoring trust in the euro must, first of all, take the noise out of the policy debates. At the present moment, this noise is fuelled by the conflict of interest between Germany, France and the ECB about who should bail out liquidity-constrained sovereign debtors: Governments through the EFSF or the ECB?

Governments try to minimize their exposure to bailouts, although there are important conflicts between national strategies. Germany, as the main voice of fundamentalism, insists on the need for fiscal discipline in order to reduce the supply of new debt titles for which there is little appetite from financial investors. This seems to be in the German national interest as it would reduce the potential liabilities of the EFSF in case a bailout country defaulted. However, this view of national interest ignores the externalities of underprovided funds and the resultant rise in general uncertainty that will damage German interests in a much broader sense. Furthermore, Germany can only sustain this position because it has significant competitive advantages over all its neighbours which help keeping German deficits relatively low.[11] France, on the other side, has lost the advantage accumulated by decades of *competitive disinflation* policy. Over the last five years it has masked the important deterioration of its competitiveness[12] by excessive deficits – borrowing roughly as much as Germany and Italy together. As the Euro Area is now becoming increasingly more likely to enter a recession, this high borrowing is turning into a debt problem for France. French sovereign debt is on the brink of being downgraded from AAA, which undermines its capacity to bail out other Member States. Hence the French government would like to push the bailout away from the EFSF into the ECB.

The alternative to Member States providing liquidity through the EFSF, and later through the ESM, is to ask the ECB to be the *buyer of last resort* for government bonds. Monetarists argue that Europe is now in a systemic liquidity crisis which has spread to most Southern sovereigns. In this situation, contagion between sovereign bond markets can only be stopped if the central bank is willing to be the lender of last resort that guarantees that cash is available to pay out bondholders (de Grauwe, 2011). According to their view, only the ECB has the "firing power" to buy all bonds which the private sector does not wish to hold. The argument boils down to saying that the central bank could issue unlimited liabilities, i.e. money. This proposal has been fiercely resisted by fundamentalists, especially in the German government and in the

[10] See Collignon and Schwarzer, 2003, for details.
[11] The German budget law for 2012, which was voted by the Bundestag in November 2011, is proof, however, that German policy makers find it as difficult to consolidate in a boom as any other policy maker in Europe, including the least responsible ones.
[12] See CER, 2011 and Collignon 2012 forthcoming.

Bundesbank. Their fear is that monetizing public debt could undermine price stability and even lead to hyperinflation (Weidman, 2011).

However, the two positions focus on different aspects. The monetarist lender-of-last-resort camp only looks at the short run; the fundamentalists emphasize the long run. How to pass from here to there is rarely discussed.

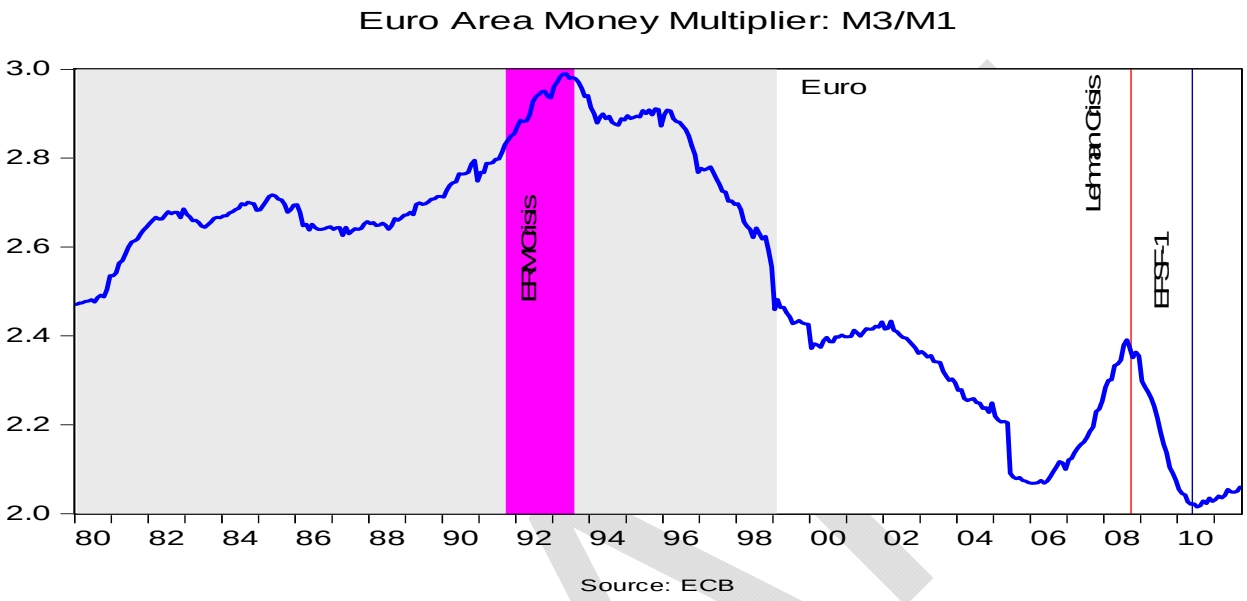
The ECB's mandate sets price stability as the primary objective of monetary policy, but it also explicitly mentions the need for maintaining financial stability. The central bank's independence is necessary in order to fulfill this mandate. The Bank must keep control over all instruments, which allow the proper conduct of monetary policy. The unorthodox methods are necessary to ensure that the orthodox transition mechanism, namely interest rates, can function correctly. However, if the ECB were to buy debt by Member States which would subsequently default, it could lose its capacity to act in accordance with its mandate. It would sit on a pile of liabilities (base money), which it could no longer recall. The ECB must therefore resist pressures by Member States and financial markets to become the unlimited buyer of last resort for sovereign debt. The fear by fundamentalists is not without grounds, as can be seen from the monetarist claim that in countries capable of issuing debt in their own currency, "central banks can always provide the liquidity to the sovereign to avoid default. This may lead to future inflation, but it shields the sovereign from a default forced by the market" (de Grauwe, 2011b: 32).

This debate resembles the classic conflict in monetary theory between horizontalists and verticalists (Moore, 1988). Horizontalists claim that money supply must be perfectly elastic (the supply curve of money is a horizontal line at any interest rate), while verticalists insist that the central bank needs to keep money supply tight and highly inelastic in order to prevent inflation (the supply curve of money is a vertical line at any amount of base money). The missing link between the two positions is the transmission from base money to broad money aggregates. Because central banks use the price for liquidity, i.e. short term interest rates as their main policy instrument, they must accommodate with perfect elasticity the demand for base money at that price. Otherwise, they could not sustain that interest rate. However, broad money (M3), which is relevant for determining the price level of goods and services and the rate of inflation, depends on bank deposits, which are liabilities for banks. Yet, these deposits are created by bank loans, so that loans make deposits and it is the demand for loans at a given equilibrium for liquidity preference and interest rates that makes the broad money supply vertical. Hence it is important that the ECB maintains financial stability in the banking system in order to preserve the interest rate as the policy instrument for controlling inflation. In the present crisis, this may require unorthodox methods of liquidity provision in the short term money market, but also stability in long term bond yields and their differentials between Member States.

The relationship between central bank money (M1) and broad money (M3) is reflected in the money multiplier. If the central bank could control broad money supply and inflation by variations of base money, the ratio of M3/M1, which is called the *money multiplier*, would have to be stable. However, if broad money is responding to interest rates and liquidity preference, the money multiplier would vary according to economic conditions. Figure 6 shows significant fluctuations in the size of the multiplier. A fall in the ratio indicates an increase in liquidity preference by the banking sector, a rise signals generous liquidity provision. From the time of the crisis of the Exchange Rate Mechanism (ERM) in 1993 until 2005, liquidity preference has tended to rise. From the mid-2000s until the Lehman crisis in 2008, banks were little concerned by liquidity constraints, despite the monetary tightening by the ECB. After the

Lehman crisis, liquidity became very tight, but interestingly, after the set up of the EFSF the situation has improved slightly. However, it is quite clear that the creation of central bank liquidity through sovereign bond purchases has not had any substantial inflationary effect.

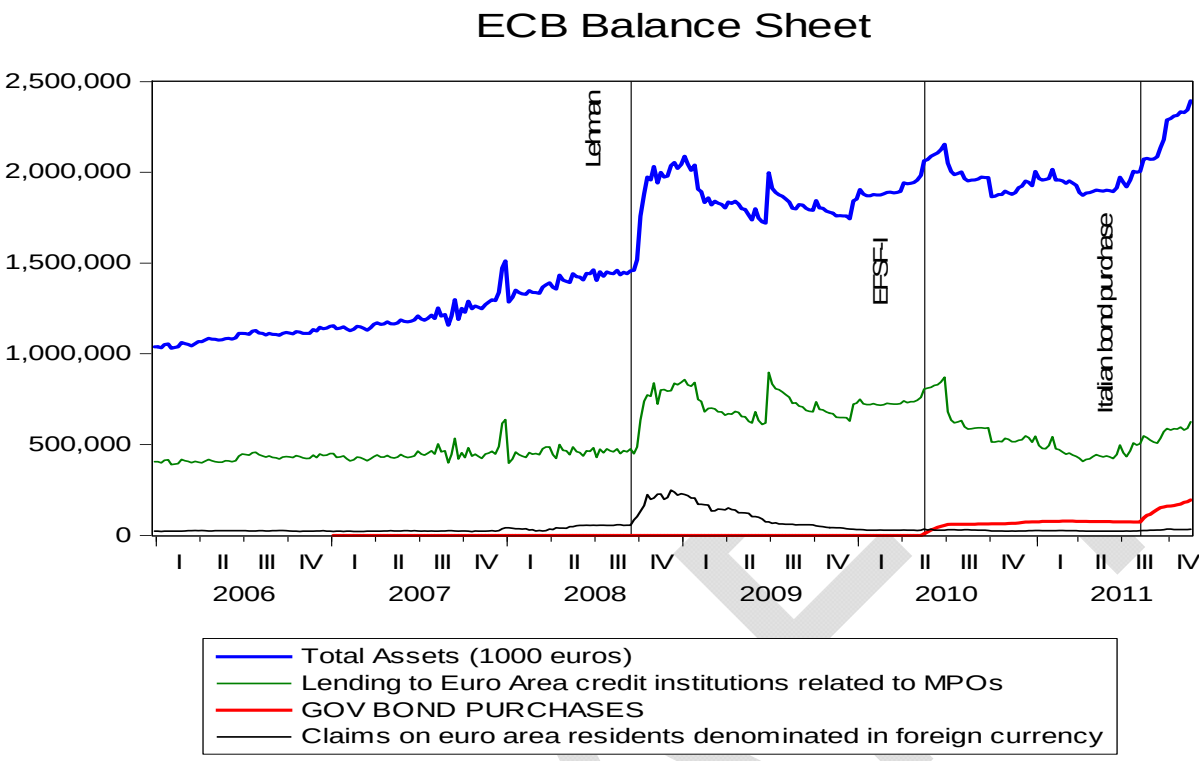
Figure 6.

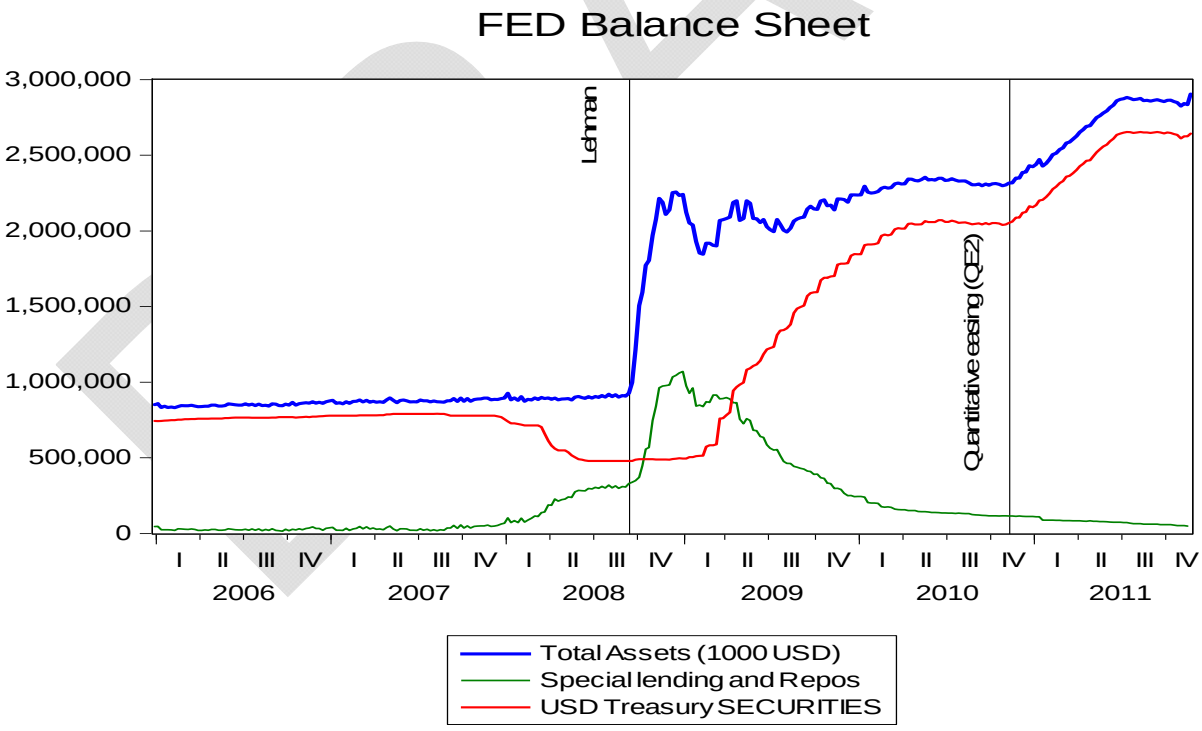


This raises the question, whether the ECB could intervene at a larger scale and buy sovereign debt of Southern European member states without the risk o igniting inflation. So far, the ECB has taken a restrained approach: it has bought only a modest amount of government securities and it insists that it is fulfilling its mandate of maintaining price stability over the medium run, because it keeps money supply under control by "sterilizing" its interventions. Dullien and Joebges (2011) found that the ECB purchases of government debt were sterilized at the rate of 50 percent. Sterilization means that, to the degree that the ECB buys government bonds, it will sell other assets, domestic and foreign, which will keep base money supply stable. Hence, as long as the ECB has sellable assets other than government bonds, the risk of excessive liquidity creation can be eliminated. Thus, open market operations in government securities are not automatically inflationary. Nevertheless, the capacity of the ECB to buy government bonds, i.e. its firing power, is not unlimited and the constraints on a non-inflationary bailout depend on the balance sheet of the central bank. In this respect the fundamentalists are right to emphasize that a central bank's reputation takes long to be built up, but trust is easily and quickly lost.

How large are the constraints on government bond purchases by the balance sheet of the ECB? Figure 7 shows the balance sheets of the ECB (Eurosystem) and the Federal Reserve System. The total assets of both central banks have greatly increased after the Lehman default. In the US, the Fed first reacted by using repos to provide liquidity to the banking system, but then replaced them by open market purchases of Treasury bonds. In Europe, government bond purchases only occurred after 10 May 2010, but with approximately € 200bn they remain rather insignificant relative to the total ECB balance sheet of nearly € 3 trillion.

Figure 7.





Source: Bloomberg

The weak impact of the SMP for the euro economy is also clear when we compare the volumes to GDP. Table 3 shows that before the Lehman crisis, total assets of the Eurosystem were nearly twice as high as in the USA; as a response to the crisis, the Fed balance sheet tripled, but only doubled in Europe. Public debt held by the Fed was 5.6 % of GDP before the crisis, but stands now at 17.7 %. By contrast, the ECB ratio of public debt to GDP is still only 2.5% . Given that total outstanding debt is 84% in the Euro Area and 92.8% in the USA, the monetized part of public debt is 2.9% in Europe and 19.1% in the USA. If the ECB would buy European bonds up to a share comparable to the Federal Reserve, it would generate nearly EUR 1500 billion, which is close to a third of total base money supply M1. This volume would leave a sufficient reserve for sterilisation and control of base money. The EUR 1500 billion are the reasonable "firing power" for ECB interventions in the secondary market for European government bonds.

Table 3. Central Bank Dimensions in % of GDP

Total assets (% GDP)

	ECB	***FED***
Before crisis (June 2007)	13.1	6.2
After crisis (November 2011)	26.1	19.4

Central Bank: gross public debt in balance sheet (% GDP)

	ECB*	***FED****
Before crisis (June 2007)	0.4	5.6
After crisis (November 2011)	2.5	17.7
Share of monetized debt to total	2.9	19.1
Memo:		
National gross public debt in 2010	84.1	92.8

* Public debt owned by Euro Area national central banks + SMP

** Federal Agencies debt is included

Source: Bloomberg

Nevertheless, there is an important difference between buying US Treasury bonds or Greek and Italian debt titles. The first are considered riskless, the later highly risky. Buying risky assets is contrary to conventional central bank practices. A central bank is the "bank of banks". It provides liquidity to the banking system against adequate collateral and sound counterparties. A long tradition in central banking, going back to 300 years experience in the Bank of England, emphasises that as the bank of banks, the central bank can only fulfil its function as the *lender of last resort*, if its assets are of top quality. Otherwise banks would switch their deposits to other more secure banks, such as foreign banks, where wealth can be held in strong currencies.[13] Because modern central banks' liabilities are legal tender, this switching process may become inelastic, but that does not change the fact that risk-averse investors would avoid holding deposits in a bank that is not trustworthy. In addition, the risk of holding assets, which may become worthless, reduces the ECB's capacity to reduce base

[13] This may be the reason why emerging market central banks often hold a large part of their assets in foreign currency. Clearly, this is not an acceptable perspective for the European Central Bank.

money through selling assets in the open market or even through issuing Sterilisation Bonds as Dullien and Joebges (2011) suggest.

From the beginning, the ECB has therefore insisted that it only lends to banks against "good" collateral, although, under pressure from markets and uncooperative Member State governments, it has now started to buy risky sovereign bonds. Nevertheless, its main instrument remains the *repurchase agreement*, also known as a *repo*, which is the sale of securities together with an agreement for the seller to buy back the securities at a later date. This policy tool allows control over monetary base. Contrary to the American Federal Reserve System, the ECB has not made frequent use of outright purchases and sales of securities through open market operations (OMO). One reason may be that the Fed can use the deep and liquid Treasury bond market for OMOs, while the ECB does not have an equivalent market for risk free Eurobonds. If one would like to use the ECB's "firing power" to intervene in the sovereign bond market, the Euro Area would need to have a "good quality" asset that represents the aggregate strength of the Euro Area. Hence, the ECB would need to be able to use Eurobonds.

5. STABILITY BONDS AS A WAY OUT OF THE LIQUIDITY CRISIS?

After lengthy debates about the risks and benefits of Eurobonds, the European Commission (2011b) has now produced a Green paper on the feasibility of introducing *Stability Bonds*. This closes a gap, for until now the modalities of creating Eurobonds were never clear. The Commission proposes three options for the issuance of joint Stability Bonds:

1. The *full substitution* by Stability Bond issuance of national issuance, with joint *and several guarantees*: this approach would replace the entire national issuance by Stability Bonds and as each Member States would be fully liable for the entire issuance.

2. The *partial substitution* by Stability Bond issuance of national issuance, with *joint and several guarantees*: this option would only cover parts of national financing needs. Member States would continue issuing their own bonds, although at an accordingly lower volume due to the parallel issuance of Stability Bonds. Hence, Member States would still need to tap financial markets on their own and would be subject to market and financing conditions that would vary across Member States and might reflect their different credit quality.

3. The *partial substitution* by Stability Bond issuance of national issuance, with *several but not joint guarantees*: This approach is the most limited one of the three options. It would be relatively rapidly deployable. Some additional safeguards, i.e. "credit enhancements" would be necessary, for example in the form of collateral provided by Member States. This approach would have certain similarities to bonds issued by the European Financial Stability Facility (EFSF). However, whereas the latter are meant to step in and help financing vulnerable Member States in the context of the sovereign debt crisis, Stability Bonds would be instruments available to all Euro Area Member States and also outside any crisis context. Their volume and potential effect on market efficiency and integration would be accordingly much larger.

The advantages of such bonds are described by the Commission as follows:

1. They could quickly alleviate the current sovereign debt crisis, as the high-yield Member States could benefit from the stronger creditworthiness of the low-yield Member States

2. They would make the euro-area financial system more resilient to future adverse shocks and so reinforce financial stability.

3. They would improve the effectiveness of euro-area monetary policy.

4. They would promote efficiency in the euro-area sovereign bond market and in the broader euro-area financial system.

5. They would facilitate portfolio investment in the euro and foster a more balanced global financial system

However, there are also a number of open questions. The joint issue of European bonds would require much stronger fiscal surveillance procedures and policy coordination than the present Stability and Growth Pact. This is in any case desirable, as the crisis has shown that the previous arrangements were insufficient. Also, especially option 1 and 2 are incompatible with the present Art. 125(1) TFEU and would require a Treaty change.[14] The Commission also

[14] See footnote 7.

emphasizes that “Stability Bonds should be designed and issued such that investors consider them a very safe asset. Stability Bonds would need to have high credit quality to be accepted by investors and by those euro-area Member States that already enjoy the highest credit rating”.[15]

No doubt, any of the three options would be a significant step forward in the governance of Europe’s fiscal policy. Stability Bonds could make a real difference in restoring trust and confidence in financial markets that the European Union has the political will to continue and survive (which is presently vanishing rapidly). The main problem with the proposed Stability Bonds is that it will take a long time until they could come into existence. Even if the opposition by the German Chancellor could be overcome, Treaty changes will take a long time. A quick and short term transition to one of the three described scenarios is needed.

[15] Information for this chapter taken from: http://europa.eu/rapid/pressReleasesAction.do?reference=MEMO/11/820

6. A TRANSITION SCHEME FOR STABILITY BONDS

The proposed options 1 and 2 are clearly the arrangement most compatible with an integrated financial market and a currency with the potential of being the second global reserve currency. In terms of the debt crisis, member states subject to high yields and high risk premia would benefit from the creditworthiness of low yield member states. Under option 2, the Commission refers to the Delpla and von Weizsäcker (2010) idea of blue and red bonds, reflecting a unionization of debt up to 60% of national GDP. This leaves still an important fraction of non-unionized debt outstanding which could perpetuate the European debt crisis. One could imagine alternatively a more functional distinction whereby all central government debt is unionized, while lower level public debt remains individually issued.

For practical purposes, option 3 is the most realistic in the short run. However, its capacity to mitigate the sovereign debt crisis in the Euro Area is limited, as the Commission (2011:18) recognizes: "In the absence of any credit enhancement, the credit quality of a Stability Bond underpinned by several but not joint guarantees would at best be the (weighted) average of the credit qualities of the euro-area Member States. It could even be determined by the credit quality of the lowest-rated Member State, unless they enjoy credible seniority over national issuance in the case of all Member States (see below). This could reduce the acceptance of the instrument among investors and among the higher-rated Member States and undermine the benefits of Stability Bonds, notably their resilience in times of financial stress." The enhancement essentially boils down to providing seniority to the debt servicing of Stability Bonds. However, while under normal conditions, the total cost of debt for a country should remain constant or fall, the marginal cost of the debt would rise. This makes it harder for Southern European member states to maintain the sustainability of their debt.

An additional enhancement for option 3 could overcome these difficulties and allow a rapid transition to full Stability Bonds. It consists in unionizing an important part of today's outstanding public debt and enhancing the quality of the Stability Bonds by issuing them as asset backed securities.[16]

In this context, the EFSF would act as the centralized debt management office which issues Stability Bonds as its liability against a portfolio of national bonds, which it buys in the secondary market. In my previous proposals, I suggested that the portfolio should aim at shares of national debt reflecting the shareholding in the ECB. However, in the present circumstances of crisis management this seems no longer necessary, although for distributional purposes it may be desirable in the longer run. It is, however, important that the quality of the assets underlying these Stability Bonds justifies AAA rating. This requires that the EFSF buys a large share of the outstanding German, French, Dutch bounds in addition of Greek, Portuguese, Irish and Italian Bonds. Table 1 has shown the proportions of outstanding European debt. If one would aim for swapping 60% of the national debt of Greece into Stability Bonds in such a way that Greek bonds represent the 2.8% in the ECB's share capital, the total volume of the Stability Bonds to be issued by the EFSF would be EUR 7177 billion, i.e. the degree of unionization would be 88.5% of the total outstanding debt in the Euro Area. For

[16] The idea builds on my earlier proposals of Union Bonds, which were inspired by the ECU as a precursor of the euro. See Collignon, 2011b and 2011c.

Italy, which has a higher share in the ECB capital, the unionization degree would fall to 78.2% for a total Stability Bond portfolio of EUR 6343 billion.[17]

This transitional arrangement of Stability Bonds issued by the EFSF would create very quickly a deep European bond market, without imposing additional costs to low yield member states. A further advantage would be that by combining high and low yielding assets in a tradable portfolio, Stability Bonds would be of investment quality without Member States having to commit to additional guarantees, which could impose potential burdens on tax payers in Northern Europe.

Finally, it would be possible for the ECB to buy these Stability Bonds outright from banks or to use them as collateral in monetary policy operations (repos and OMOs) without the EFSM needing a banking license. If the ECB bought these Stability funds to an amount of up to EUR 1500 billion, it would still leave approximately EUR 5000 billion in the hands of private investors, who would, however, regained trust and confidence in European bonds. The ECB has substantial, but not unlimited power to stabilize financial markets, although it needs a deep Eurobond market to intervene

7. CONCLUSION

The euro is under existential threat, but there are still a few options to save it. Unless member state governments quickly act and create Stability Bonds, which replace risky sovereign bonds, panic in financial markets will destroy the accomplishment of 50 years of European integration.

[17] These amounts are calculated like this: the unionization degree is x/d, where d is the amount of outstanding debt of the Euro Area. x is 60% of a member state's outstanding debt, divided by the ECB share capital.

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