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## **EUROPEAN POLICY REACTIONS TO THE FINANCIAL CRISIS**

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## **1. Introduction**

This paper examines the policy response to the financial crisis in the euro area. It focuses on those institutional aspects that also were in the centre of Liana Basile's work. The paper mainly deals with the content of the documents of the monetary authorities in order to reconstruct how they have faced the challenges set by the crisis.

These documents distinguish two periods of the crisis, one before and the other after the failure of the Lehman Brothers. During the first period, the effects of the crisis were mainly counter-acted through monetary interventions. During the second, which has produced more intense effects, the fiscal authorities have been bound to support the interventions of the monetary ones.

The size of the crisis in the euro area has been less dramatic than in USA for different reasons, going from the lower involvement in risky investments, to the more appropriate incentive systems and compensation policies, to the more effective regulation and oversight. Future work on these topics, comparing the influence of these elements in different countries and assessing their contribution to the emergence of these events, may be profitable for the analysis of the vulnerability of the financial systems and the adequacy of their regulation and oversight.

The paper argues that the analysis of the documents of the monetary authorities underlines that the effects of the crisis in the euro area have been counter-acted with punctuality and effectiveness. The financial system has worked smoothly, at least until the failure of the Lehman Brothers, allowing the banks and the private sector to raise funds at normal conditions. There has been no failure of large financial institutions. The operational framework of monetary policy has proved "efficient", in the sense that it has always been able to stir the overnight market rates towards the policy rate decided by the authorities.

In spite of these positive results, the perspectives of the crisis are uncertain and the analysis of the documents suggests that we are now entering a third phase of the crisis, which may turn out riskier than the previous two. The impairment of the credit system, which has manifested itself in the euro area after the failure of the Lehman

Brothers, is rationing the private sector and raising significantly the cost of credit for those capable to receive it. These obstacles are seriously challenging the private sector of the economy, which has already been put under stress by the world recession and the contraction of international trade. The monetary authorities now fear ‘the risk of an adverse feed-back loop that would spark a more traditional credit-cycle downturn – involving a further round of market credit losses on higher-quality assets for a banking system whose shock-absorption capacity has already been somewhat impaired’.

In this new phase of the crisis a major role has to be played by national governments and fiscal policy, which must prove capable of supporting effective demand and the economies in an orderly and coordinated way. Unfortunately, the working of fiscal policy in the euro area has proved to be inadequate and to lack efficient forms of coordination. They urgently need reforms, which can effectively constrain national governments on the common stance that fiscal policy must have at the euro area level. These reforms may be difficult to implement in a climate of re-emerging nationalism, even though the severity of the downturn may make it inevitable to deal with them.

The paper is so organised. Section 2 describes the institutional organisation, the features of the economy and the growth potentials of the euro area. Section 3 describes the organisation of monetary policy. Section 4 presents the policy responses to the crisis. Section 5 draws some conclusions and implications.

## **2. The European Union and the European Monetary Union**

### *2.1. Participation*

The European Union (EU) and the European Monetary Union (EMU) are “under-construction” systems. The number of countries belonging to them has been increasing and the laws and institutions regulating them are in constant evolution reacting to the fundamental values and the contingent needs of the Members States.

The EU is composed of 27 countries. Belgium, France, Germany, Italy, Luxembourg and Nederland are founding members: they participated in 1957 to the foundation of

the European Common Market. Other 9 countries (Austria, Denmark, Finland, Greece, Ireland, Portugal, Spain, Sweden and the United Kingdom) joined the EU before the EMU started to operate in 1999. Twelve countries (Bulgaria, Cyprus, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Malta, Poland, Rumania, Slovakia, Slovenia) joined in 2004 and 2007. Croatia, Macedonian Republic and Turkey are candidates to enter the EU in the future.

**Table 1 - Members of the European Union**

Founding Members	Belgium, France, Germany, Italy, Luxembourg and Nederland
Other entries before 1999	Austria, Denmark, Finland, Greece, Ireland, Portugal, Spain, Sweden, United Kingdom
Entries in 2004	Cyprus, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Malta, Poland, Slovakia, Slovenia
Entries in 2007	Bulgaria, Rumania

The EMU is composed of 16 countries. When it started to operate in 1999 it had 11 Member States (Austria, Belgium, Finland, France, Germany, Ireland, Italy, Luxembourg, Nederland, Portugal, Spain). Greece was admitted in 2001, Slovenia in 2007, Cyprus and Malta in 2008, Slovakia in 2009.

**Table 2 – Participation in the European Monetary Union**

Member States since 1999	Austria, Belgium, Finland, France, Germany, Ireland, Italy, Luxembourg, Nederland, Portugal, Spain
Member State since 2001	Greece
Member State since 2007	Slovenia
Member States since 2008	Cyprus, Malta
Member States since 2009	Slovakia

Among the non-euro countries, Denmark and the United Kingdom have a special status based on an “opt-out clause”, whereby they have no commitment to adopting the euro. The remaining countries (Bulgaria, Czech Republic, Estonia, Latvia, Lithuania, Hungary, Poland, Romania and Sweden) are “Member States with a derogation”, in the sense that they are committed to adopting the euro, but the timing and the convergence path to this adoption will be evaluated on a country-by-country basis.

## 2.2. Economy

Table 3 compares the economic size of the euro area with that of other countries. It shows that in 2008 the euro area produced 15.7% of the world GDP, USA 20.7%, China 11.4%, Japan 6.4% and India 4.8%.

**Table 3 – Output, population and foreign activities**

	<b>Euro area</b>	<b>USA</b>	<b>Japan</b>	<b>China</b>	<b>India</b>
<b>GDP</b> as a % of world GDP (a)	15.7	20.7	6.4	11,4	4,8
<b>Per capita GDP</b> in thousands of US dollars per year (a)	31.1	46.9	34.1	6.0	2.8
<b>Population</b> in millions (b)	329	304	128	1336	1186
<b>Population</b> as a % of world population (b)	4.9	4.5	1.9	19.8	17.6
<b>External trade</b> as a % of world trade (c)	28.7	8.1	4.9	9.3	1.2
<b>External trade</b> % of world trade over % of world population	5.9	1.8	2,6	0,5	0,1
(a) Source: IMF database (2008).					
(b) Source: OECD database (2008); the Euro area percentage is the ratio between the Euro area population (Eurostat database) and the world population (OECD database).					
(c) Source: IMF database (2008)					

A major strength of its economy is the ability to compete in the international markets for goods and services. The ratio between the share of world trade and that of population, an index of the ability of the economy to capture international trade, shows that the euro area overtakes by 5.9 times the average world ratio, followed at some distance by Japan (2.6) and USA (1.8). Moreover, the balance between export and import of the euro area has been on average 1.1% of the GDP from 1998 to 2007.

**Table 4 – Export and Import of goods and services**

<b>Exports minus Imports</b> as a % of GDP	1998-2007	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
<i>Euro area</i>	1,1	1.5	0.7	-0.1	0.9	2.0	1.7	1.7	1.0	0.7	1.2
<i>USA</i>	-4,3	-1.9	-2.9	-3.9	-3.6	-4.1	-4.5	-5.2	-5.8	-5.7	-5.1
<i>Japan</i>	1,5	1.9	1.6	1.4	0.6	1.3	1.7	2.0	1.5	1.5	1.9
Source: ECB database.											

During the decade starting with its birth in 1999 the euro area has grown at an average annual real rate of 2.1%. It grew at 2.2% during the previous decade. According to the

literature the growth pace has proved stable, but could have been higher. The official documents of the European Central Bank (see ECB, 2008a, p. 66) talk of a “weak” performance due to the slow growth of productivity.

**Table 5 – Output, employment and productivity growth**

<b>Output</b> - growth rate of GDP in % (a)	<b>1989-1998</b>	<b>1999-2008</b>
<i>Euro area</i>	2.2	2.1
<i>USA</i>	3.0	2.5
<i>Japan</i>	2.0	1.3
<i>China</i>	9.6	9.7
<i>India</i>	5.6	7.1
<b>Productivity</b> - growth rate in % (b)	<b>1989-1998</b>	<b>1999-2007</b>
<i>Euro area</i>	1.7	0.8
<i>USA</i>	1.5	1.6
<i>Japan</i>	1.3	1.9
<b>Employment</b> – growth rate in % (c)	<b>1991-1998</b>	<b>1999-2007</b>
<i>Euro area</i>	0.0	1.4
<i>USA</i>	1.6	1.2
<i>Japan</i>	0.3	- 0.2
(a) Source: IMF database and ECB database. (b) Source: ECB database. (d) Source: IMF database.		

From 1999 to 2007 the average annual rate of growth of productivity in the euro area was 0.8%, which is lower than 1.7%, the average annual rate of the decade 1989-1998. Employment instead grew from 1999 to 2007 at an average annual rate of 1.4%, which is higher than 0.0%, the average annual rate for the period 1991-1998. The opposite tendencies in the trends of productivity and employment nearly compensate each other, generating a similar average rate of growth of GDP for the two decades.

### 2.3. Growth potentials

For much literature and for the official documents of the ECB (2008a, pp. 66-68) the causes of the slow growth of productivity during the second decade are to be found in the rigidities of the labour markets and in the failure to reform them. These rigidities, however, have not had a negative influence on the international competitiveness of the area. The same official documents of the ECB acknowledge that the reduction in the share of the world trade, occurred during the second decade, is ‘a mechanical

adjustment to the emergence of the new lower-income competitors' (ECB, 2008a, p. 92). According to this document, the reduction reflects to some extent 'the export specialisation of the euro area', where countries with an overweight in labour-intensive sectors have lost positions in favour of emerging economies with a relative comparative advantage, whereas Member States specialised in the higher-price and higher-quality segments of mature industries and products have even gained market shares. Germany is a relevant case: it increased its quota of the world merchandise exports from 8.8% in 2000 to 9.5% in 2007 (Source: ICE, 2008, p. 208).

The literature on the slow growth of the euro area however suggests another interpretation that underlines the negative effects on growth of the existing forms of coordination between monetary and fiscal policies.<sup>1</sup> According to Blanchard and Giavazzi (2004, p. 1) the inadequacy of the institutional organisation of policy coordination in the EMU is responsible for the slow growth of the economy in recent years because it constrains that kind of government expenditure (infrastructure, research and development, high education, etc.) which enhances the growth potentials of the economy. For von Hagen and Mundschenk (2003, p. 279) and Wyplosz (1999 and 2002), instead, the existing institutional organisation of the area leads to inefficient policy outcomes on account of the non-cooperative attitude that they induce in the monetary and fiscal authorities. The non-cooperative behaviours hinder the implementation of a common stance of fiscal policy and the shared identification of a policy mix among monetary and fiscal authorities. As a result, monetary and fiscal policies work as strategic substitute rather than complement.<sup>2</sup> The Stability and Growth Pact (SGP), a set of rules introduced to avoid uncoordinated national discretion on fiscal policy, has generated a tendency to conduct this kind of policy in a rigid way that overlooks the anti-cyclical and structural needs of the Member States. Several countries infringed the rules of the SGP, leading the authorities to reform them in 2005. The literature and the ECB (2008a, p. 26) consider this reform unsatisfactory because it has weakened the enforcement of the rules, increased the ambiguity of their interpretation and favoured a return to national discretion.

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<sup>1</sup> For a review of the positions held on this point, see Panico and Vázquez Suarez, 2008.

<sup>2</sup> According to Wyplosz (1999; 2002), expansionary fiscal policies induce less accommodating monetary policies, whereas central bank's tolerance towards inflation weakens the national governments' commitment to expanding through deficit.

According to Panico and Vázquez Suarez (2008), the inadequate forms of policy coordination in the EMU have also produced a tendency to conduct fiscal policy in a restrictive way, failing to take advantage of the persistent trade surpluses of the area. This constraint on effective demand has negatively affected investors' confidence, their expenditure and, consequently, productivity and growth.

This second interpretation reminds us that the EU and the EMU are “under-construction systems”, whose institutional organisations can be reformed to achieve more satisfactory results for their citizens. At present, the EU Treaties, while recognising the need to have always a unified and coordinated approach, foresee three different modes for policy-making (see ECB, 2008a, p. 22). In the field of monetary policy there has already been a full transfer of competence to the Community, giving way to the single monetary policy and to the single currency. For fiscal policy the Treaties prescribe a rule-based approach, which relies on “hard” laws and procedures in order to coordinate national policies and their relation with monetary policy. For other “structural” policies the Treaties foresee a “soft” form of coordination based on peer pressure, support among the Member States and dialogue at the Community level. The existing arrangements, however, betray what the Treaties prescribe, since fiscal policy too, especially after the 2005 reform, appears to rely on a “soft” form of coordination. This contradiction, it is argued below, beside affecting the growth potentials of the area, may become a weakness of these economies in the future evolution of the crisis.

### **3. The organisation of monetary policy**

#### *3.1. Institutional framework.*

The birth of the EMU was preceded by the foundation of the European System of Central Banks (ESCB), of the Eurosystem and of the European Central Bank. The ESCB is composed of the ECB and of the 27 National Central Banks (NCBs) of the Member States of the EU. Since only 16 of the 27 Member States joined the EMU, the need was felt to attribute formal power on policy decisions to the Eurosystem, which is composed of the ECB and of the NCBs of the euro countries.



The governing bodies of the Eurosystem are the “Executive Board” of the ECB, made up by the President, the Vice-President and four members nominated by the euro countries, and the “Governing Council”, composed of the ECB’s Executive Board and of the heads of the euro area NCBs, who contribute to decision-making as recognised experts on monetary policies, rather than as representatives of national interests.

The Eurosystem is responsible for the issue of money<sup>3</sup>, the management of liquidity, the control of interest rates and the exchange policy. The NCBs are instead responsible for prudential regulation in a coordinated framework, within which the Eurosystem plays a significant role.

Decisions over the stance of monetary policy are taken by the Governing Council and are implemented by the Executive Board, which operates through the NCBs. Short-term money market interest rates play a crucial role in the transmission mechanism of monetary policy. The Governing Council decides the level of key interest rates that best serves the fulfilment of the price stability objective. The Executive Board attempts to implement the key rates through the available set of instruments and procedures. The separation between “decisions” and “implementation” reduces the risk that agents mistakenly interpret as Governing Council’s decisions the volatility of the interest rates that is due to market disturbances.

### *3.2. Operational framework.*

The Eurosystem’s operational framework is based on three main sets of instruments and procedures: (1) minimum reserve requirements; (2) open market operations; (3) standing facilities.

The Eurosystem requires nearly 6000 credit institutions (named “monetary financial institutions”) to hold with NCBs deposit accounts with a positive balance equal to 2%

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<sup>3</sup> The official documents of the ECB point out (see ECB, 2008a, p. 123) that during a crisis the NCBs may provide – temporarily and against adequate collateral – emergency liquidity assistance (ELA) to illiquid but solvent credit institutions. The possible provision of ELA can be undertaken only in exceptional circumstances at the discretion of the competent NCB, subject to the conditions set out in the Maastricht Treaty relating to the prohibition of monetary financing. NCBs may consider such assistance justified particularly on the grounds of preventing or mitigating potential systemic effects as a result of contagion through other financial institutions or market infrastructures. In 1999, the Eurosystem agreed on specific procedures for information-sharing when ELA is granted by a NCB.

of a pre-defined set of their liabilities. The aim of the reserve requirements is to create a demand for monetary base from credit institutions in order to stabilise the short-term interest rates. Compliance is determined on the basis of the *average* of the daily balances over a reserve maintenance period of around one month.

Open market operations are divided in 4 categories: main refinancing operations, longer-term refinancing operations, fine-tuning operations and structural operations.

The main refinancing operations play a pivotal role in steering the money market interest rates, managing the liquidity situation of the area, and signalling the stance of monetary policy. They are regularly executed by the NCBs on a weekly basis, through auctions where one-week maturity swaps are issued. Since June 2000 they have been conducted as variable rate tenders with a minimum bid rate set by the Governing Council, a multiple rate procedure and undisclosed allotment volumes. Monetary financial institutions, without knowing the total value of the assets issued by the Executive Board, can place up to 10 bids at rates not lower than the minimum one by taking into account the management of their portfolio and the minimum reserve requirements. They also can, at the end of each working day, use the “overnight” facilities to borrow and lend funds. The Executive Board of the ECB decides the amount of liquidity to supply in each auction, revealing it after the NCBs have completed the collection of the bids of credit institutions. This decision is influenced by the evaluation of the overall liquidity conditions prevailing in the area.

The longer-term refinancing operations are conducted on a monthly basis with three-month maturity swaps. They follow the procedures of the main refinancing operations, but with pre-announced allotment volumes and without a minimum bid rate to avoid blurring the signals arising from the main refinancing operations.

The frequency and maturity of the fine-tuning operations are not standardised. They can absorb or provide liquidity, according to the needs of the markets, and can take various forms, including foreign exchange swaps.

Finally, structural operations are similar to the fine-tuning operations, but aim at adjusting the amount of liquidity in the market through the use of longer-term assets.

Since June 2003 the Eurosystem has not used them.

Standing facilities are activated on the initiative of the counterparties. They are overnight operations divided in marginal lending and deposit facilities. The Eurosystem sets the interest rates on them. The rate on deposit facilities is usually 100 basis points lower than the minimum bid rate on the main financing operations and the rate of marginal lending is 100 points higher than the minimum bid rate of the main financing operations. The rates on deposit facilities and marginal lending form a corridor around the minimum bid rate within which the EONIA rate, an index of the overnight rate that prevails in the inter-bank market, tends to fluctuate. The inter-bank overnight rate thus tends to offer more favourable conditions than the rates on standing facilities. As a consequence, these facilities are mainly used to comply with the minimum reserve requirements and only in exceptional circumstances tend to provide and absorb liquidity for other reasons (see ECB, 2004, pp. 84-85).

### *3.3. Financial stability and oversight.*

The NCBs and other national authorities are responsible for financial stability and oversight. Nonetheless the need of cooperation in this field among all the authorities within the EMU and the EU is widely recognised. The Maastricht Treaty foresees that the Eurosystem has to contribute to the smooth working of the policies concerning financial stability and oversight. It states that the Eurosystem must be consulted and can provide advice on any legislation regarding these matters. What's more, it states that, in case the institutional mechanisms for cooperation fail to achieve a smooth and effective interaction among the authorities, it is possible to transfer specific supervisory tasks to the Eurosystem through a simplified procedure that does not require amending the Treaty.

Following these provisions, the Eurosystem, with the assistance of the Banking Supervision Committee (BSC)<sup>4</sup>, actively participates in the maintenance of financial stability:

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<sup>4</sup> The BSC was set up by the Governing Council in 1998. It is composed of the representatives of the ECB, the NCBs and the national supervisory authorities of the euro area, and of the representatives of the other NCBs and national supervisory authorities of the EU.

- it constantly monitors the stability conditions of financial institutions, markets and infrastructures;
- it contributes to the definition of the national and European policies regarding the monitoring of the stability conditions, financial regulation and supervision, and the management of the crisis;
- it participates in the management of financial crisis;
- it oversees the smooth operation of market infrastructures.

By monitoring and assessing their operation the Eurosystem attempts to identify at an early stage any source of instability for financial institutions, markets and infrastructures. Since December 2004 the Eurosystem presents its analyses in the semi-annual *Financial Stability Review*. This report benefits from inputs from the BSC, which further investigates the state of the banking sector publishing, since 2003, an annual report on *EU Banking Sector Stability*. Moreover, within the EU, the Eurosystem cooperates with the Committee of European Banking Supervisors (CEBS) and with the Economic and Financial Committee, which provides the EU Council of Economics and Finance Ministers (ECOFIN) with information and analyses on financial stability and examines problems related to these topics in the *Financial Stability Table* (FST). Finally, the Eurosystem cooperates on these topics with various international authorities, like the Financial Stability Forum (FSF), the Basel Committee on Banking Supervision (BCBS) and the Bank for International Settlements, the International Monetary Fund and the Committee on the Global Financial System.

The Eurosystem has been actively participating in the development of the EU and national regulatory and supervisory frameworks. It contributed in 1999 to the Financial Services Action Plan (FSAP) of the European Commission and to the subsequent formulation and implementation of the EU financial services policy strategy. It produced advice and clarification on the main instruments available to promote the overall safety and soundness of financial institutions, that is prudential requirements relating to capital buffers, best risk management practices and public disclosure. On these matters it clarified in 2002 and in 2006 the content of the Financial Conglomerates Directive and of the Capital Requirements Directive of the

European Commission. The Eurosystem is also having an active role in the functioning of the Lamfalussy framework, which pursues supervisory convergence and cooperation and enhances the role of colleges of supervisors of cross-border financial groups.

As to the management of financial crisis, the Eurosystem intervenes directly to deal with liquidity problems, participates in the treatment of solvency problems by providing the national authorities with analyses and information, and oversees the smooth working of financial infrastructures. Moreover it has enhanced, through the signing of Memoranda of Understanding, cooperation among different authorities and the use of quantitative approaches in the form of crisis simulation exercises. In recent years its efforts have been devoted to developing advanced quantitative approaches, such as stress tests, to identify the risks and their potential macroeconomic impact.

Finally the Eurosystem is playing an increasingly relevant role in the oversight of public and private financial infrastructures, like the TARGET system, EURO1, STEP1 and STEP2.

#### *3.4. Policy results.*

During the first decade of operation of the EMU the average rate of inflation has been 2.1% per year, a level close to the target set by the authorities, who declare to pursue a rate not greater than 2%, but actually aim at a rate equal or just below 2% (see ECB, 2008a, pp. 11 and 35).

During the same period output has grown in real terms at an average annual rate of 2.1%. According to the ECB (2004, p. 64), the medium term growth capacity of the euro area is between 2 and 2.5% per year, so that the growth pace of the area has lain at the lower hedge of the interval identified by the authorities. This low hedge position and the persistence of a positive trade surplus have induced some analysts to claim that the euro area could have grown at a higher rate. The growth performance of the area during this decade may be considered weak, but, in any case, it cannot be considered unstable. According to the ECB (2008a, p. 76), the dispersion of the growth rates of real GDP, measured by the standard deviation in unweighted terms, has been fluctuating around 2 percentage points.

During this first decade and, as it will be argued in the next section, during the present crisis too, financial institutions have proved solid and resilient and the working of market infrastructures smooth.

The operative framework of monetary policy has been capable to implement the policy stance decided by the Governing Council. The gap between the minimum bid rate and the EONIA rate has been kept very narrow, making it possible to consider the monetary policy framework “efficient” (see EBC, 2004, pp. 72 and 76).

The rate of variation of M3 has systematically overtaken the medium term “reference value” set by the authorities at 4.5% per year (see ECB, 2008a, pp. 38-39 and ECB, 2004, pp. 64-65). None the less, the inflation target has been under control. The data on the annual variation of M3 suggest that the overall stance of monetary policy in the euro area has been accommodating, rather than restrictive. Nonetheless, some literature considers the policy restrictive, arguing that the reaction to raise the interest rate when inflation soars is faster than that to lower it in the opposite case.

**Table 6 – Annual rate of variation of M3**

Average 1989-1998	Average 1999-2008	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
6.3	7.3	5.6	4.9	5.4	7.3	8.1	5.8	7.4	8.4	11.3	9.6

The monetary policy of the Eurosystem is also considered less active than that of the Federal Reserve because during the decade the interval of variation of the short-term money interest rates has been smaller than in the USA. From 1999 to 2008 the reference short-term money rate of interest of the euro area has moved from a minimum value of 2% to a maximum value of 4.75%. In March 2009 it went for the first time below 2%, reaching 1.5% first and then going down up to 1%. In USA it has followed a similar cyclical trend but has fluctuated between 0.20% and 6.5%. The reduced interval of variation may be seen as a sign that the euro area’s authorities are concerned with providing a newly created central banks’ system with a prudent and anti-inflationary reputation.

Finally the international role of the euro has become more relevant, not only for the greater integration of its trade, but also for the increased use of the euro as a reserve currency, which has passed from 13.9% of the total foreign exchange holdings in 1999 to 16.1% in 2008.<sup>5</sup> The reputation acquired by the Eurosystem through its prudent policy may have contributed to strengthening the value of the euro and may have induced the world's central banks to choose it as a reserve currency to a greater extent. The ECB (2008a, p. 96) claims that 'from a policy perspective, the Eurosystem has adopted a neutral stance on the international use of its currency', clarifying, however, that neutrality 'does not imply a lack of interest by the Eurosystem'. The ambiguity contained in these statements does not clear the doubts over the claim that policy-making in the euro area may also be affected by an undisclosed international objective.

#### **4. Monetary policy during the recent crisis**

##### *4.1. Evolution of the crisis.*

The official documents of the ECB identify two periods in the evolution of the crisis. The first goes from August 2007 to the bankruptcy of Lehman Brothers in September 2008, during which the effects of the crisis in the euro area were mainly counter-acted by monetary policy's measures. The second starts with the failure of Lehman Brothers. This event dramatically turned for the worse the evolution of the crisis by challenging the 'widely held view that any large bank that was thought to be too large or too interconnected to fail would be supported by the public authorities' (ECB, 2008b, p. 12) and fuelling 'concerns about the scale and location of counterparty losses' (ECB, 2008b, p. 12). During this period the negative effects of the crisis have been contrasted by the simultaneous actions of the monetary and fiscal authorities.

##### *4.2. From August 2007 to the failure of Lehman Brothers.*

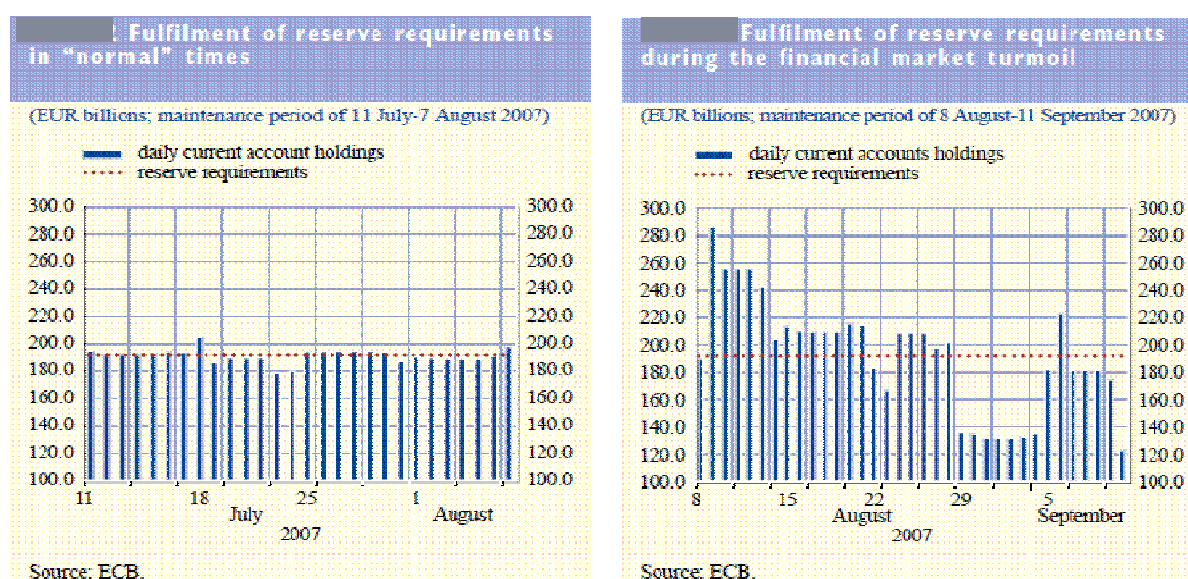
At the beginning of the first period the Eurosystem had to face a deterioration of the liquidity conditions of the monetary financial institutions and a change in the pattern

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<sup>5</sup> These data are published by the IMF, which clarifies that the quota of euro reserve currency is calculated on the basis of what central banks report. There is a quota of reserves, equal to 36.8% in 2008 and to 22.6% in 1999, whose composition is not specified by the central banks. The IMF names them "unallocated reserves".

of their reserve holdings. Before the crisis, reserve holdings had shown a homogeneous pattern with more or less constant daily balances. This pattern changed after the burst of the crisis because the monetary financial institutions adopted a cautious behaviour, which led to an increase in the holding of reserves in the initial part of the maintenance period (see Figure 1, which is taken from ECB, 2008c, p. 95). This change brought about volatility in the EONIA rate.

Figure 1



Coming from abroad, the financial turmoil caused some stress in the activities of two German banks, IKB and Sachsen LB, and of a French bank, BNP Paribas, which required emergency rescue by other banks (see ECB, 2007, p. 14). There was a rise in the inter-bank interest rates on maturity beyond one week, testified by the greater differential between the EURIBOR, an index of inter-bank three-month lending, and the EONIA rate. Yet, no euro area large banking group was at risk of failure.

Table 7 – Inter-bank interest rates differentials

2007	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Euribor minus Eonia	0.19	0.25	0.20	0.16	0.28	0.19	0.16	0.49	0.71	0.75	0.62	0.97
2008	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Euribor minus Eonia	0.46	0.33	0.51	0.79	0.85	0.93	0.77	0.67	0.75	1.29	1.09	0.80
2009	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug				
Euribor minus Eonia	0.65	0.68	0.58	0.58	0.50	0.53	0.61	0.51				

Source: ECB database



To deal with these problems the Eurosystem adopted a strategy based on two points. On the one side, it gave a clear sign of availability to fully meet the liquidity needs of the monetary financial institutions. On the other, it tried to acquire information on the demand for liquid means in order to avoid unnecessary increases in the money supply. The Eurosystem implemented this strategy through the following actions:

- it increased the supply of liquid means;
- it changed the allotment distribution over the maintenance period;
- it changed the composition of the sources of liquidity absorbing and providing
- it adjusted some allotment procedures.

To meet the needs of monetary financial institutions the Eurosystem increased the supply of liquidity, changed the time distribution of liquidity supply, taking into account the increase in reserve holdings in the initial part of the maintenance period, and made a more intense use of longer-term refinancing operations than in normal times. On some occasions, the main refinancing operations allotted higher amounts than originally planned (see ECB, 2008c, p. 96). This accommodating behaviour is reflected in the rise of the rate of variation of M3 in 2007 and 2008.

**Table 8 – Liquidity operations of the Eurosystem in billions of euro (May 2007 - Feb 2008)**

	2007 May	2007 Jun	2007 Jul	2007 Aug	2007 Sep	2007 Oct	2007 Nov	2007 Dec	2008 Jan	2008 Feb
<b><u>Liquidity-providing</u></b>										
<i>Total amount of open market operations</i>	431.6	434.9	445.4	451.7	440.4	456.6	445.2	451.6	564.5	442.3
<i>Main ref. operations</i>	281.6	284.9	295.4	301.7	268.7	194.3	180.2	173.0	255.7	173.8
<i>Long-term ref. operations</i>	150.0	150.0	150.0	150.0	171.7	262.3	265.0	278.6	268.8	268.5
<i>Other operations</i>	0.0	0.0	0.1	0.0	10.7	0.0	0.0	0.0	0.0	0.0
<i>Marginal lending facility</i>	0.3	0.3	0.2	0.1	0.2	0.3	0.1	0.3	0.3	0.2
<b>Liquidity-providing: Total amount</b>	431.9	435.2	445.6	451.8	440.6	456.9	445.3	451.9	564.8	442.5
<b><u>Liquidity-absorbing</u></b>										
<i>Other operations</i>	0.1	0.2	0.0	0.0	1.7	0.9	5.1	2.2	68.4	0.6
<i>Deposit facility</i>	0.5	0.2	0.3	0.4	0.4	1.6	0.6	0.4	1.1	0.4
<b>Liquidity-absorbing: Total amount</b>	0.1	0.2	0.0	0.0	1.7	0.9	5.1	2.2	68.4	0.6
Source: ECB database.										

To avoid unnecessary increases in the money supply the Eurosystem compensated the increase in the issues of some assets with the reduction of others. The value of swaps of the main refinancing operations issued in the first part of the maintenance period was higher than that issued in the second part. Moreover, it compensated the larger supply of liquid means through longer-term refinancing operations by reducing the supply of liquidity through main refinancing operations. Finally, it enhanced the use of fine-tuning operations to absorb the liquidity in excess.

**Table 9 – Composition of the liquidity operations of the Eurosystem (2001-2007)**

	2001	2002	2003	2004	2005	2006	2007
<b>Liquidity-providing</b> in %	100	100	100	100	100	100	100
<i>Main refinancing operations</i>	62.7	77.8	83.8	78.0	77.0	72.3	38.3
<i>Long-term refinancing operations</i>	30.7	20.8	16.0	22.0	23.0	27.7	61.7
<i>Other operations</i>	6.3	0.9	0.0	0.0	0.0	0.0	0.0
<i>Marginal lending facility</i>	0.3	0.5	0.2	0.0	0.0	0.0	0.1
<b>Liquidity-absorbing</b> in %	100	100	100	100	100	100	100
<i>Other operations</i>	0.0	0.0	0.0	83.3	75.0	0.0	84,6
<i>Deposit facility</i>	100	100	100	16.7	25.0	100	15.4
Source: ECB database (2008)							

During the first months of the crisis the Eurosystem introduced on three occasions some changes in the procedures used in normal times. On the 9<sup>th</sup> of August 2007, a few hours after the burst of the crisis, it carried out a fine-tuning operation using a special procedure with a fixed rate tender and full allotment. During the penultimate main refinancing operation of 2007, it lengthened the maturity of the assets to two weeks and announced that it would satisfy all bids at rates equal or greater than a pre-defined one. Finally, during the maintenance period 12 September – 9 October 2007 the Eurosystem conducted a supplementary longer-term refinancing operation with a variable rate tender and no pre-determined allotment.

The crisis emphasised the high degree of international integration reached by financial markets. As a result of the widespread use of innovative instruments these markets have become increasingly intertwined and many euro area credit institutions had large investment positions denominated in US dollars. For these reasons the Eurosystem

participated in some cooperative actions of the central banks. In December 2007 it issued on two occasions assets denominated in dollars with a one-month maturity. These operations were repeated in January and March 2008, marking the first multilateral central bank cooperation in a field that is crucial for the implementation of monetary policy (see ECB, 2008b, p. 12; 2008c, p. 100).

The strategy applied during the first part of the crisis was successful: the EONIA rate was kept in line with the policy rate determined by the Governing Council, the euro area large financial institutions avoided bankruptcies, and financial markets allowed the private sector to get funds at normal conditions.

According to the Eurosystem, these positive results were achieved because, before the crisis, financial firms had enjoyed high profits and had reached a high level of capitalisation. The robust conditions of the firms, the opportunity offered by the smooth working of the markets to recover funds during the central part of 2008, and the fact that the losses of the first period of crisis were spread homogeneously among a high number of large corporate banking groups allowed these institutions to show solidity and resilience.

#### *4.3. The crisis after the failure of Lehman Brothers.*

In September 2008, with failure of Lehman Brothers, the crisis took a turn for the worse. This event gave way to deep concern about the creditworthiness of financial institutions and the adequacy of their capital buffer. As a consequence, liquidity became very scarce, inter-bank lending ceased almost completely, inter-bank interest rates rose, and financial institutions became increasingly dependent on central bank's open market operations and overnight borrowing.

The perceived deterioration of counterparty risk also led to a sharp decline in the stock prices of financial firms. The market evaluation of euro area large corporate banking groups lost 200 billion euros between mid-September and late November 2008. Between August 2007 and November 2008 the loss amounted to 450 billion euros, which is more than 50% of its initial value (ECB, 2008b, pp. 13-14).

What's more, towards the end of September 2008, two large banks in Benelux and France, specialised in cross-border operations, came under stress owing to a widespread perception of weak asset quality and capital shortage. At the same time a major German commercial-property lender ran into problems for the operation of an Irish subsidiary and some other Irish banks faced a difficult situation. Government interventions were necessary to rescue these institutions, showing that, unlike what had happened in the previous phase of the crisis, emergency lending from other banks and central bank's liquidity operations were insufficient.

In the face of the new situation the monetary strategy of the Eurosystem did not change. It was still based on signalling availability to fully meet the needs of financial institutions while trying to avoid the emergence of liquidity in excess in the markets.

The Eurosystem issued again higher amounts of liquid means than in normal time and adapted the allotment distribution to the new patterns of reserve holdings during the maintenance period.

**Table 10 – Liquidity operations of the Eurosystem in billions of euro (May 2008 - Feb 2009)**

	2008 May	2008 Jun	2008 Jul	2008 Aug	2008 Sep	2008 Oct	2008 Nov	2008 Dec	2009 Jan	2009 Feb
<b><u>Liquidity-providing</u></b>										
<i>Total amount of open market operations</i>	469.4	460.7	460.8	465.6	463.5	514.3	758.3	794.5	832.8	776.3
<i>Main ref. operations</i>	174.4	172.8	185.4	166.3	163.5	174.1	301.6	337.3	219.2	224.9
<i>Long-term ref. operations</i>	295.0	287.9	275.4	299.3	300.0	334.3	452.5	457.2	613.6	551.4
<i>Other operations</i>	0.0	0.0	0.0	0.0	0.0	5.9	4.2	0.0	0.0	0.0
<i>Marginal lending facility</i>	0.1	0.3	0.1	0.1	0.1	7.5	12.7	2.7	2.9	2.1
<b>Liquidity-providing: Total amount</b>	469.5	461	460.9	465.7	463.6	521.8	771	797.2	835.7	778.4
<b><u>Liquidity-absorbing</u></b>										
<i>Other operations</i>	0.8	0.5	0.5	0.6	0.7	45.5	2.3	4.9	3.3	6.1
<i>Deposit facility</i>	0.3	0.2	0.4	0.3	0.6	19.9	213.7	200.9	238.5	175.4
<b>Liquidity-absorbing: Total amount</b>	1.1	0.7	0.9	0.9	1.3	65.4	216.0	205.8	241.8	181.5
Source: ECB database.										

Moreover, it kept the same composition of open market operations as that of the first period of the crisis.

**Table 11 – Composition of the liquidity operations of the Eurosystem (May 2008 - Feb 2009)**

	2008 May	2008 Jun	2008 Jul	2008 Aug	2008 Sep	2008 Oct	2008 Nov	2008 Dec	2009 Jan	2009 Feb
<b>Liquidity-providing</b> in %	100	100	100	100	100	100	100	100	100	100
<i>Main ref. operations</i>	37.1	37.5	40.2	35.7	35.3	33.4	39.1	42.3	26.2	28.9
<i>Long-term ref. operations</i>	62.8	62.5	59.8	64.3	64.7	64.1	58.7	57.4	73.4	70.8
<i>Other operations</i>	0.0	0.0	0.0	0.0	0.0	1.1	0.5	0.0	0.0	0.0
<i>Marginal lending facility</i>	0.0	0.1	0.0	0.0	0.0	1.4	1.6	0.3	0.3	0.3
<b>Liquidity-absorb.</b> in %	100	100	100	100	100	100	100	100	100	100
<i>Other operations</i>	72.7	71.4	55.6	66.7	53.8	69.6	1.1	2.4	1.4	3.4
<i>Deposit facility</i>	27.3	28.6	44.4	33.3	46.2	30.4	98.9	97.6	98.6	96.6
Source: ECB database (2008)										

Some changes were also introduced in the procedures. On the 8<sup>th</sup> of October 2008 the Eurosystem decided to conduct the main refinancing operations with a fixed rate tender procedure and full allotment and to reduce the corridor between interest rates on standing facilities to 100 basis points. On the 15<sup>th</sup> of October the Eurosystem further extended the list of assets eligible as collateral in credit operations and announced its intention to further enhance the provision of longer-term liquidity by fully meeting the demand of the monetary financial institutions for assets with three- and six-month maturity (see ECB, 2008b, pp. 13-14).

Finally, the Eurosystem continued to participate in central banks' cooperative actions in fields that are relevant for the implementation of monetary policy. On the 8<sup>th</sup> of October it participated with the central banks of USA, UK, Canada, Switzerland and Sweden in a coordinated cut in the interest rate, which reduced it by 50 basis points.

The decision to counter-act the negative effects of the crisis by lowering the policy rate led to further cuts. On the 6<sup>th</sup> of November the Eurosystem reduced the interest rate by other 50 basis points, leading it to 3.25%, and in the following months it implemented this measure other times, reducing this rate until 1.50% in March 2009.

The problems emerged during the second phases of the crisis have required that the monetary strategy of the Eurosystem be supported by fiscal policy actions. At the meeting of the Eurogroup of the 12<sup>th</sup> October 2008 the euro countries agreed that the national governments had to intervene with extraordinary measures to restore the smooth functioning of financial markets. The proposal was endorsed by the European Council, which met in Paris on the 15<sup>th</sup> and 16<sup>th</sup> of October. Since then, national governments have announced their specific plans to strengthen the deposit guarantee schemes, favour the exchange of banks's risky assets with safer ones, offer governments' guarantees for the issue of banks' debt, and directly inject new capital in banks' balance sheets. The ECB (2008b, pp. 13-14) estimates that the plans so far announced by national governments pledge around 2 trillion euros for these objectives. The US government has committed itself to make available to the banks up to 2.5 trillion dollars for guarantees of newly issued debt, purchases of troubled assets and capital injections. The UK government has committed itself to make available 300 billion pounds for guarantees of unsecured bank funding and recapitalisation.

According to the ECB (2008b, pp. 13-14) the combined actions of the monetary and fiscal authorities have significantly contributed to easing the tensions of the euro area financial system.

#### *4.4. Financial stability oversight*

In the euro area too the shortcomings of the regulation of the financial system are seen as a major cause of the crisis. This idea is enhancing reflection on new regulatory measures.

The financial turmoil has shown that the financial systems are highly integrated and intertwined, clarifying that it is necessary have a global approach to these problems. In this approach the Financial Stability Forum (FSF) and to the Basel Committee on Banking Supervision (BCBS) play a leading role. The Eurosystem cooperates with them and works at the EU level under the lead of the ECOFIN Council and the European Commission.

The revised regulatory framework emerging in Europe still attributes to the NCBs the responsibility for prudential regulation within a cooperative and coordinated framework. Moreover, following the lines set by the Lamfalussy procedures, an effort is made to improve cooperation among the authorities and to harmonise rules, institutions and structures of the national financial systems.

In October 2007, soon after the burst of the crisis, the ECOFIN Council set up a “road map”, i.e. a work programme, which aims at improving the effectiveness of the diverse forms of financial regulation. The work programme was updated in the subsequent meetings and has stimulated analyses and revisions in several fields of regulation, like transparency, evaluations, prudential standards and supervision, the role of credit agencies, and so on.

In April 2008 the Financial Stability Forum published the “Report on Enhancing Market and Institutional Resilience”. This document was endorsed by the G7 financial ministers and central bank governors and has become the international benchmark for the policy responses of the regulatory and supervisory authorities.

Following the lines of the report, the EU and the national legislations on financial regulation are changing in fields like:

- capital requirements,
- risk management,
- supervision,
- compensation policies,
- deposit-guarantee schemes.

In July 2008 the Basel Committee on Banking Supervision (BSCB) and the International Organisation of Securities Commissions (IOSCO) proposed a revision of the Basel II capital requirements, which the ECB (2008b, p. 130) considers a core element of the regulatory response. In September the Basel Committee on Banking Supervision published a document on risk management and supervision, which examines the measures to be taken to achieve greater international convergence and to enhance ‘the oversight of firm-wide risks and the management of securitisations and

other off-balance-sheet exposures, as well as of concentration, reputation and liquidity risks' (ECB, 2008b, p. 131). In the same month and on the same fields the Committee of European Banking Supervisors (CEBS) published its recommendations for policy responses at EU level, underlining the need to enhance cooperation among the authorities and the use of supervisory colleges for cross-border activities.

The European Commission has moved from its experience of the crisis and from the lines set in the documents mentioned above to propose a revision of the Capital Requirement Directive, which is due to come out within the first half of 2009. The Directive also foresees a reinforcement of the powers of supervisors and a clear allocation of responsibilities during a crisis. Moreover it prescribes 'an obligation on the consolidating banking supervisor to alert interested central banks and communicate to them all necessary information whenever an emergency situation arises that has the potential to jeopardise financial stability in any of the Member States in which the banking group concerned is present through subsidiaries or systemically relevant branches' (ECB, 2008b, p. 133).

The European authorities also consider revisions of compensation policies 'a necessary precondition for increasing the long-term stability of the financial system' (ECB, 2008b, p. 131). The European Council and the ECOFIN have endorsed that care must be taken to ensure a system of remunerations and incentives that avoids excessive risk-taking and concentration on short-term objectives. Following these lines, the ECB and the BSC have published a report that analyses the shortcomings of the incentive structure through which the "originate-to-distribute model" has been working in recent years, producing lax lending standards and inadequate diligence and monitoring being applied by most operators of financial markets.

Finally, in October 2008 the ECOFIN Council resolved to revise the rules concerning the deposit-guarantee schemes in order to increase the minimum level of coverage. On the basis of this resolution the European Commission is proposing a revision of the EU rules on this matter, to which the national governments will have to comply.

#### *4.5. Perspectives on the crisis*



The official documents of the ECB (2008b, p. 16) point out that, in spite of the success achieved in keeping the tensions under control, the outlook on the stability of the financial system remains uncertain. The main source of preoccupation regards the effects of financial crisis on the other sectors of the economy. The persistence of tensions keeps it difficult for the banks to raise funds through the inter-bank markets and through the issue of other forms of debt. The cost of credit remains high, in spite of the reduction of the policy rate, and the funding of the other sectors of the economy constrained. The impairment of these functions of the credit system contributes to the slow-down of economic activity.

The world's recession has affected the euro economies, which enjoy a prominent position in the international markets of goods and services. The rate of growth of GDP has turned negative in many countries and those enjoying a higher quota of world trade, e.g. Germany, feel these negative effects with more intensity.

**Table 12 - Growth rates of GDP in %**

	<b>2007</b>	<b>2008</b>	<b>2009</b> <b>(f)</b>	<b>08</b> <b>Q1</b>	<b>08</b> <b>Q2</b>	<b>08</b> <b>Q3</b>	<b>08</b> <b>Q4</b>	<b>09</b> <b>Q1</b>	<b>09</b> <b>Q2</b>
<b>Euro area</b>	2.7	0.7	-4.0	2.1	1.5	0.5	-1.7	-4.9	-4.7
<b>Belgium</b>	2.6	1.0	-3.5	1.9	1.9	1.1	-1.0	-3.1	-3.8
<b>Germany</b>	2.5	1.3	-5.4	2.7	2.0	0.8	-1.8	-6.7	-5.9
<b>Ireland</b>	6.0	-3.0	-9.0	-1.2	-0.6	0.3	-8.0	-8.4	...
<b>Greece</b>	4.0	2.9	-0.9	3.2	3.4	2.7	2.4	0.3	-0.2
<b>Spain</b>	3.6	0.9	-2.3	2.6	1.8	0.9	-1.2	-3.2	-4.2
<b>France</b>	2.3	0.4	-3.0	2.0	1.1	0.1	-1.6	-3.4	-2.6
<b>Italy</b>	1.5	-1.0	-4.4	0.4	-0.4	-1.3	-3.0	-6.0	-6.0
<b>Cyprus</b>	4.4	3.6	0.3	4.1	4.1	3.3	2.5	0.8	-0.7
<b>Luxembourg</b>	5.2	-0.9	-3.0	0.9	2.4	-0.7	-5.0	-5.4	...
<b>Malta</b>	4.2	2.5	-0.9	3.1	2.5	2.1	-0.3	-2.4	...
<b>Netherlands</b>	3.6	2.0	-3.5	3.7	3.4	1.8	-0.8	-4.2	-4.9
<b>Austria</b>	3.5	2.0	-4.0	2.4	2.1	1.6	0.2	-3.5	-4.4
<b>Portugal</b>	1.9	0.0	-3.7	0.9	0.6	0.3	-2.0	-3.7	...
<b>Slovenia</b>	6.8	3.5	-3.4	5.9	5.0	3.7	-0.9	-9.0	...
<b>Slovakia</b>	10.4	6.4	-2.6	9.1	8.1	7.3	2.4	-5.7	-5.4
<b>Finland</b>	4.2	1.0	-4.7	2.6	1.9	0.5	-2.6	-6.0	...
Source: Statistics Pocket Book, Jan., Apr., Jul., and Sep. 2009, section 11.2 (f) Eurostat forecast									

The rationing and the high cost of credit are further weakening the solidity of firms and their ability to reimburse the outstanding debts, raising new problems and risks

for a financial sector, whose capacity to absorb shocks has already been strained by the crisis. The documents of the ECB (2008b, pp. 15-16) give a clear warning on ‘the risk of an adverse feed-back loop which would spark a more traditional credit-cycle downturn – involving a further round of market and credit losses on higher-quality assets for a banking system whose shock-absorption capacity has already been somewhat impaired’. They consequently underline the necessity of government intervention to support effective demand.

The prominent role now attributed to fiscal policy in the future evolution of the crisis does not reduce the attention that has to be paid to the risks coming from inside the financial sectors. Beside the questions related to the improvement of financial stability oversight, recalled in the previous Section, two elements are considered:

- the financial and economic conditions prevailing in some eastern European Member States of the EU;
- the financial sustainability of the fiscal policy of some Member States of the EMU.

The negative effects of the turmoil on the financial and economic conditions of some eastern European countries and the involvement of some euro area large banks in those areas are a first source of preoccupation. The ECB (2008b, pp. 25-27) has devoted some attention to these problems, clarifying the extent of the involvement of the euro area large banking groups in different countries. Its analyses point out that there are marked differences in the levels of risk undertaken by these banking groups and in the economic conditions of eastern European countries. Although they were able to raise high profits until the first half of 2008, the most exposed financial institutions are now facing increasing earning risks. Yet, the ECB (2008b, p. 25) concludes, since their involvement appears in many cases limited with respect to their overall activities, ‘adverse developments in new EU Member States are unlikely to cause systemic stress in the euro area banking sector’.

A second source of preoccupations is the trend of the interest rates on the government bond of the euro area economies. After the failure of the Lehman Brothers there has been an increase in the differentials among these rates, which signals that financial

operators do not attribute the same degree of confidence to the governing institutions of the Member States of the EMU. From February 2008 to February 2009 the interest rates on 10-year government bonds of some central European countries (Germany, Nederland and France) have shown a tendency to reduction. The opposite occurs for the rates on 10-year government bonds of Ireland and of some southern European countries (Greece, Italy, Portugal and Spain).

**Table 13 – Interest rates on 10-year Government bonds**

	<b>Germ.</b>	<b>Belg.</b>	<b>Irel.</b>	<b>Greece</b>	<b>Spain</b>	<b>France</b>	<b>Italy</b>	<b>NLD</b>	<b>Port.</b>
<b>Feb 08</b>	3.95	4.23	4.21	4.36	4.15	4.08	4.35	4.05	4.27
<b>Mar 08</b>	3.80	4.23	4.17	4.42	4.12	4.02	4.38	3.97	4.36
<b>Apr 08</b>	4.04	4.37	4.44	4.54	4.32	4.27	4.53	4.21	4.27
<b>May 08</b>	4.20	4.51	4.58	4.74	4.43	4.41	4.70	4.35	4.63
<b>June 08</b>	4.52	4.84	4.91	5.17	4.79	4.73	5.11	4.73	4.96
<b>July 08</b>	4.49	4.85	4.92	5.15	4.80	4.69	5.10	4.69	4.95
<b>Aug 08</b>	4.20	4.58	4.59	4.87	4.56	4.40	4.81	4.40	4.69
<b>Sept 08</b>	4.09	4.56	4.56	4.88	4.57	4.36	4.80	4.35	4.66
<b>Oct 08</b>	3.88	4.46	4.55	4.93	4.47	4.18	4.78	4.23	4.56
<b>Nov 08</b>	3.56	4.26	4.56	5.09	4.15	3.98	4.74	3.96	4.35
<b>Dec 08</b>	3.05	3.87	4.57	5.08	3.86	3.54	4.57	3.65	4.01
<b>Jan 09</b>	3.07	4.13	5.20	5.60	4.15	3.60	4.62	3.76	4.32
<b>Feb 09</b>	3.13	4.24	5.65	5.70	4.23	3.68	4.54	3.80	4.52
<b>Mar 09</b>	3.02	4.03	5.76	5.87	4.06	3.65	4.46	3.66	4.68
<b>Apr 09</b>	3.13	3.93	5.34	5.50	4.01	3.66	4.36	3.77	4.53
<b>May 09</b>	3.37	4.03	5.27	5.22	4.06	3.80	4.42	3.85	4.29
<b>June 09</b>	3.47	4.12	5.73	5.33	4.25	3.90	4.61	3.96	4.50
<b>July 09</b>	3.34	3.92	5.45	4.89	4.01	3.73	4.37	3.76	4.25
<b>Aug 09</b>	3.31	3.77	4.92	4.52	3.79	3.59	4.12	3.61	3.95
Source: ECB database: Secondary market yields of government bonds with maturities close to 10 years									

From March 2009 we can observe different movements in the interest rates on 10-year government bonds and a tendency towards less worrying positions.

**Table 14 – Interest rate differentials with German 10-year government bonds**

	<b>Belgium</b>	<b>Ireland</b>	<b>Greece</b>	<b>Spain</b>	<b>France</b>	<b>Italy</b>	<b>NDL</b>	<b>Port.</b>
<b>Feb 08</b>	0.28	0.26	0.41	0.20	0.13	0.40	0.10	0.32
<b>Mar 08</b>	0.43	0.37	0.62	0.32	0.22	0.58	0.17	0.56
<b>Apr 08</b>	0.33	0.40	0.50	0.28	0.23	0.49	0.17	0.48
<b>May 08</b>	0.31	0.38	0.54	0.23	0.21	0.50	0.15	0.43
<b>June 08</b>	0.32	0.39	0.65	0.27	0.21	0.59	0.21	0.44
<b>July 08</b>	0.36	0.43	0.66	0.31	0.20	0.61	0.20	0.46
<b>Aug 08</b>	0.38	0.39	0.67	0.36	0.20	0.61	0.20	0.49
<b>Sep 08</b>	0.47	0.47	0.79	0.48	0.27	0.71	0.26	0.57
<b>Oct 08</b>	0.58	0.67	1.05	0.59	0.30	0.90	0.35	0.68
<b>Nov 08</b>	0.70	1.00	1.53	0.59	0.42	1.18	0.40	0.79
<b>Dec 08</b>	0.82	1,52	2.03	0.81	0.49	1.42	0.60	0.96
<b>Jan 09</b>	1.06	2.13	2.53	1.08	0.53	1.55	0.69	1.25
<b>Feb 09</b>	1.11	2.52	2.57	1.10	0.55	1.41	0.67	1.39
<b>Mar 09</b>	1.01	2.74	2.85	1.04	0.63	1.44	0.64	1.66
<b>Apr 09</b>	0.80	2.21	2.37	0.88	0.53	1.23	0.64	1.40
<b>May 09</b>	0.66	1.90	1.85	0.69	0.43	1.05	0.48	0.92
<b>June 09</b>	0.65	2.26	1.86	0.78	0.43	1.14	0.49	1.03
<b>July 09</b>	0.58	2.11	1.55	0.67	0.39	1.03	0.42	0.91
<b>Aug 09</b>	0.46	1.61	1.21	0.48	0.28	0.81	0.30	0.64
Source: ECB database; Secondary market yields of government bonds with maturities of close to 10 years								

With the slow-down of the euro economies in the second part of 2008, government deficits have increased in many countries in an uncoordinated and disorderly way. This tendency is reducing the confidence of the markets in the ability of the governing institutions of some countries to keep fiscal policy and the growth of government debt under control. The downgrading of the government debt of some Member States, however, endangers the future stability of whole area, because its economies are highly integrated and intertwined.

**Table 15 - General government balance as percentage of GDP**

	<b>2007</b>	<b>2008</b> Estimates	<b>2009</b> Forecasts	<b>2010</b> Unchanged policies
<b>Euro area</b>	-0.6	-1.9	-5.3	-6.5
<b>Belgium</b>	-0.2	-1.2	-4.5	-6.1
<b>Germany</b>	-0.2	-0.1	-3.9	-5.9
<b>Ireland</b>	0.2	-7.1	-12.0	-15.6
<b>Greece</b>	-3.6	-5.0	-5.1	-5.7
<b>Spain</b>	2.2	-3.8	-8.6	-9.8
<b>France</b>	-2.7	-3.4	-6.6	-7.0
<b>Italy</b>	-1.5	-2.7	-4.5	-4.8
<b>Cyprus</b>	3.4	0.9	-1.9	-2.6
<b>Luxembourg</b>	3.6	2.6	-1.5	-2.8
<b>Malta</b>	-2.2	-4.7	-3.6	-3.2
<b>Netherland</b>	0.3	1.0	-3.4	-6.1
<b>Austria</b>	-0.5	-0.4	-4.2	-5.3
<b>Portugal</b>	-2.6	-2.6	-6.5	-6.7
<b>Slovenia</b>	0.5	-0.9	-5.5	-6.5
<b>Slovakia</b>	-1.9	-2.2	-4.7	-5.4
<b>Finland</b>	5.2	4.2	-0.8	-2.9

Source: European Commission, Economic Forecast, Spring 2009

The reduced confidence in the financial sustainability of the policies of some Member States must thus be seen as another sign of the inadequacy of the current arrangements of policy coordination of the euro area and of the need to reform them.

## **5. Concluding remarks**

The management of the crisis during the different phases of its evolution testifies to the professional ability of the monetary authorities of the euro area. They have been able, with the support of the fiscal authorities in the second phase, to keep the tensions under control. As the documents of the ECB point out, we are now probably entering a third phase where the negative effects of the crisis on the level of activity may spark a more traditional credit-cycle downturn. During this phase the major role has to be played by fiscal policy, which must prove effective in supporting the different sectors of the economy. Unfortunately, up to now the institutional arrangements of fiscal and monetary policy coordination of the euro area have not proved effective and,

according to the literature, need to be reformed.<sup>6</sup> The lack of satisfactory arrangements for policy coordination is the major source of preoccupation for the future evolution of the crisis in the euro area.

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<sup>6</sup> See Panico and Vazquez Suarez (2008).