



BANK OF GREECE  
EUROSYSTEM

# Special Conference Paper

The crisis in the euro area, May 23-24, 2013

The European crisis and  
the role of the financial system

Vítor Constâncio

JULY 2013

15

BANK OF GREECE  
Economic Research Department – Special Studies Division  
21, E. Venizelos Avenue  
GR-102 50 Athens  
Tel:+30210-320 3610  
Fax:+30210-320 2432

[www.bankofgreece.gr](http://www.bankofgreece.gr)

*Printed in Athens, Greece  
at the Bank of Greece Printing Works.  
All rights reserved. Reproduction for educational  
and non-commercial purposes is permitted  
provided that the source is acknowledged.*

ISSN 1792-6564

## **Editorial**

On 23-24 May 2013, the Bank of Greece organised a conference on “The Crisis in the Euro Area”, in Athens.

The papers and commentaries presented at the conference addressed many important issues related to the functioning of the euro area. Our hope is that these contributions will help improve understanding of the nature of Europe’s monetary union, the underpinnings of its crisis, and the changes that are needed so that crises will be prevented in the future.

The papers examined two main sets of issues. One group of papers, adopting a union-wide perspective, assessed the aspects of the euro area’s institutional architecture that, with the benefit of hindsight, may have contributed to the crisis, and the policy responses to the crisis at the union level. A second group of papers focused on developments in three crisis countries -- Greece, Ireland, and Portugal.

The papers presented at the conference, with their discussions, will be published in the *Journal of Macroeconomics*.

Here we present the paper by Vítor Constâncio, Vice President of the European Central Bank.

# **THE EUROPEAN CRISIS AND THE ROLE OF THE FINANCIAL SYSTEM**

Vítor Constâncio  
European Central Bank

## **ABSTRACT**

The paper aims to provide a deep rationale for banking union in the Euro Area. It shows that the banking sectors of core and peripheral countries were responsible for financing the credit boom that created the imbalances and vulnerabilities that later were at the centre of the crisis. The increase of debt ratios in the periphery until 2007 was more significant for the private sector than for the public sector. The crisis has been as much a banking crisis as a sovereign debt crisis and to avoid similar future risks a European Supervisor and a Resolution Authority are essential.

*Keywords:* European crisis, banking union, fiscal and macroeconomic imbalances

*JEL Classification:* H63, E52, F36, G01

*Acknowledgements:* The views expressed in this paper are those of the author and do not necessarily reflect the views of the European Central Bank.

## **Correspondence:**

Vítor Constâncio  
European Central Bank  
Kaiserstrasse 29  
60311 Frankfurt am Main  
Germany

## 1. Introduction

There are, of course, several narratives and interpretations about the way the crisis unfolded in the euro area. For some, it is mostly a story of unsound fiscal policies and excessive sovereign debt; for others, it is principally a story of competitiveness losses engineered by uncontrolled unit labour costs; and for others still, it is essentially a traditional balance of payments crisis in a “fully fixed” exchange rate regime. In more recent years, the narrative of seeing it as a banking crisis has gained attention, combining it with the sovereign debt crisis to create a story of “two debt overhangs”.

Naturally, there is a grain of truth in all these narratives, as is to be expected given the complexity and interplay of factors within a major international crisis.

However, more than trying to discuss a cogent overall interpretation of the euro area crisis, I would like to explore two perspectives:

- first, what were the root causes and key initial drivers of the crisis?
- second, what role did the international financial crisis, originating in the US, play in triggering the European crisis?

The first question is important to identify the possible shortcomings in the design of monetary union that need to be corrected to avoid future crises. It is my contention that the initial driver of the crisis was located in the financial sector, particularly banks which intermediated large capital flows towards the periphery, creating imbalances that became unsustainable when a sudden stop occurred following the international crisis and the abrupt revision of price of risk that it entailed.

The second question is useful to consider whether the construction of monetary union would have been sufficient to ensure a gradual correction of vulnerabilities and avoid a crisis, if a major international shock had not occurred. One can speculate that, left alone, the euro area may have been able to gradually overcome its own vulnerabilities through a process of inter-regional rebalancing. But we can never be certain about that. Fortunately, this question is less consequential than the first one.

## 2. The root causes of the crisis

### 2.1 The prevailing crisis narrative

Beginning with the first perspective, the oldest narrative of the crisis, progressively corrected by academics but still popular with some segments of public opinion, goes more or less like this: There was essentially nothing wrong with the initial design of EMU, and the crisis resulted mostly from the fact that several peripheral countries did not respect that design – in particular the fiscal rules of the Stability and Growth Pact – which generated the sovereign debt crisis. This is the “it was mostly fiscal” narrative, which can be easily connected to two of the others: fiscal indiscipline led to economic overheating, wage and price increases implied loss of competitiveness, and this then led to the balance of payment crises.

Although this is an internally coherent narrative, it is not correct, especially as a main driver of the crisis.

First, there is no strong correlation between whether a Member State respected or not the Stability and Growth Pact before the crisis, and the yields being demanded by financial markets today. For instance, Germany and France did not respect the Pact in 2003-4; Spain and Ireland respected it more or less fully until 2007.

Second, there was no uniform increase in overall government debt during the first years of the common currency in the countries that are now under sovereign stress.

**Table 1. Growth of public and private debt ratios to GDP.**

	Public Sector Debt Ratio (% of GDP)			Private Sector Debt Ratio (Variation in %)
	1999	2007	$\Delta$ 99-07 ln %	$\Delta$ 99-07 ln %
Euro Area	71.7	66.4	-7.4%	26.8%
Greece	94.9	107.2	13%	217.5%
Italy	113.0	103.3	-8.6%	71.2%
Spain	62.4	36.3	-41.8%	75.2%
Portugal	51.4	68.4	33.0%	48.9%
Ireland	47.0	25.0	-46.8%	101.0%

In fact, in a number of those it declined, and in some of them it declined substantially. For instance, from 1999-2007, public debt in Spain declined from 62.4% of GDP to 36.3% of GDP. In Ireland, over the same period, public debt fell from 47.0 % of GDP to 25.0% of GDP. While at relatively high levels, public debt also went down in Italy (from 113.0% of GDP to 103.3% of GDP) and increased only slightly in Greece. However, in the latter two cases, debt levels were still indeed far above the 60% stipulated in the Stability and Growth Pact.

## **2.2 Bringing the banking sector back in**

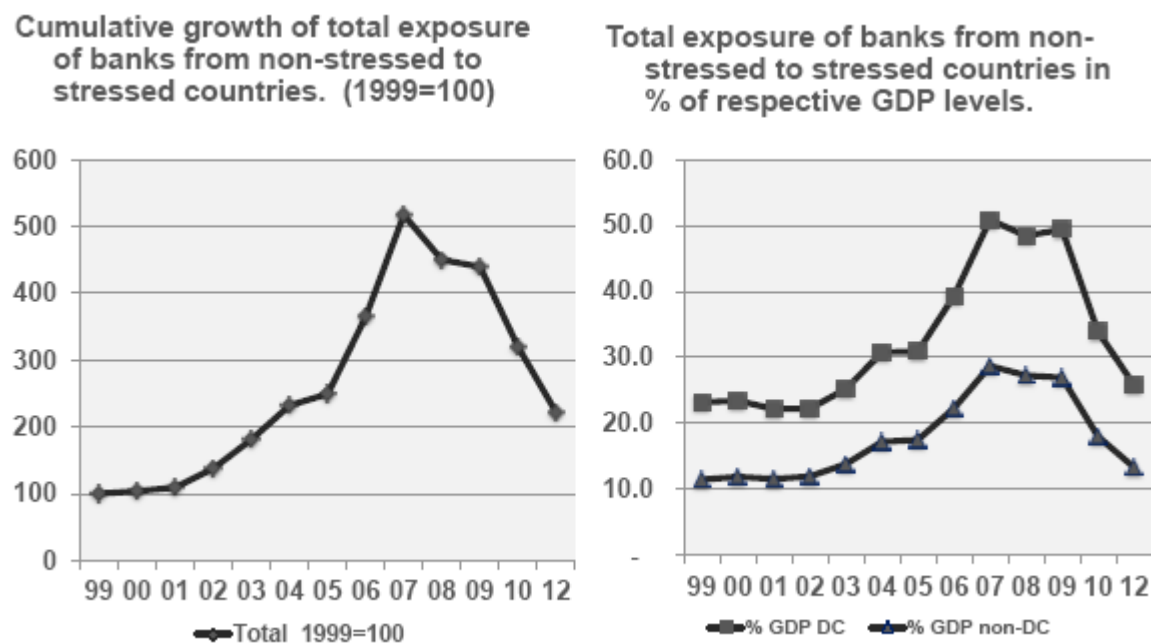
I submit that, to have a more accurate narrative for the causes of the crisis, we have to look beyond fiscal policies alone: imbalances originated mostly from rising private sector expenditures, which were in turn financed by the banking sectors of the lending and borrowing countries.

As the above table shows, contrary to public debt levels, the overall level of private debt increased in the first seven years of the EMU by 27%. The increase was especially pronounced in Greece (217%), Ireland (101%), Spain (75.2%), and Portugal (49%), all of which are countries that have been under severe pressure during the recent crisis <sup>[1]</sup>. The steep rise in public debt, on the other hand, began only after the financial crisis. Over the course of four years, public debt levels increased by a magnitude of five in Ireland and by a magnitude of three in Spain.

Seen from this perspective, the rapid increase in public debt levels followed from collapsing tax revenues and from social expenditures, which increased during the recession after the automatic stabilisers were triggered. Dangerous feedback effects between local banking systems and sovereigns which emerged after the start of the financial crisis also served to weaken the fiscal accounts.

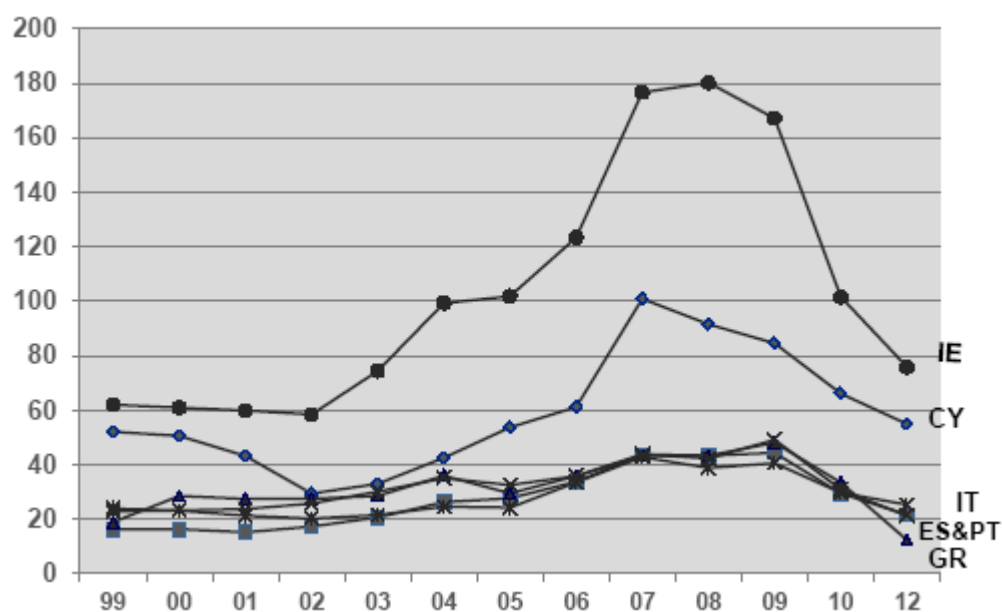
Where did the financing come from for the explosion of private debt? A particular aspect of the process of financial integration in Europe after the introduction of the euro was a major increase in cross-border bank activity. Exposures of banks from non-stressed countries to stressed countries more than quintupled between the introduction of the euro and the beginning of the financial crisis.

**Figure 1. Exposure of banks from non-stressed to stressed countries.**



While this explosion of financial inflows was unevenly distributed among periphery countries, it affected all of them, and containing its effects proved extremely challenging.

**Figure 2. Total exposure of banks from non-stressed to stressed countries in % of their GDP.**

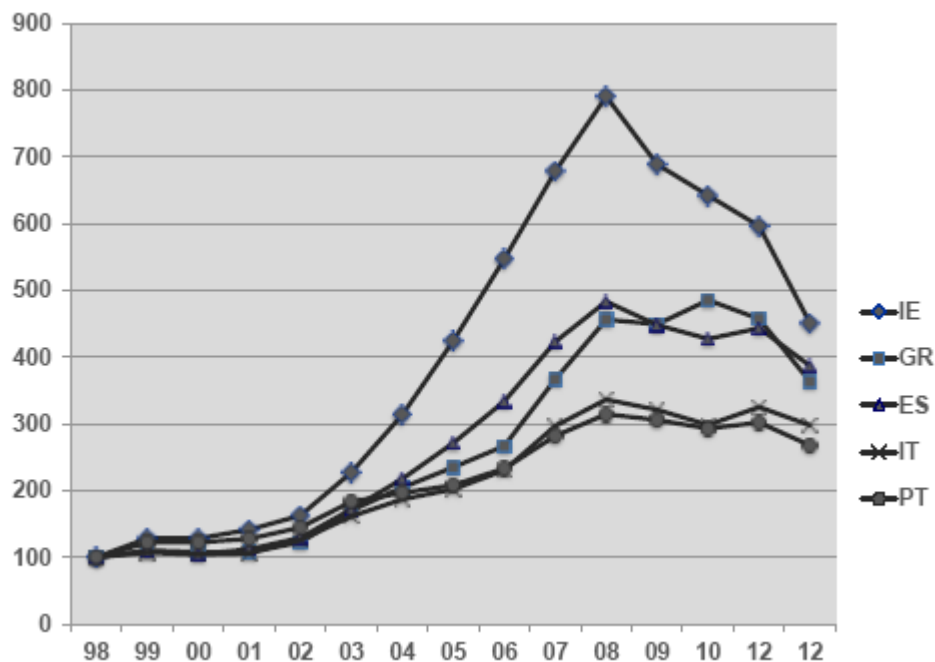




I have first-hand experience of the difficulties that periphery countries faced. The European rules on free movement of capital, the objective to create a level-playing field for different banking sectors, and the belief in the efficiency of supposed self-equilibrating financial markets, all conspired to make it very difficult to implement any sort of containment policy. Moreover, no one ever predicted that a sudden stop, characteristic of emerging economies, could occur in the euro area.

As a result, the inflow of relatively cheap financing turned into a huge credit boom in the countries now under stress. As we know, credit was not perfectly optimised by rational private agents. On the demand side, in an environment of low interest rates, consumers and firms, anticipating future growth, frontloaded consumption and investment like good intertemporal optimizers. On the supply side, European banks and financial markets did not perform according to theory in managing credit risk. It was this that then led to overheating, wage and price pressures, losses of competitiveness and high current account deficits.

**Figure 3. Cumulative growth of bank credit to the private sector in stressed countries.**



## **2.3 The responsibility of fiscal policies**

What role could fiscal policies have played in offsetting these developments? In some cases, inappropriate fiscal policies certainly made a contribution to the imbalances. But as I showed elsewhere, <sup>[2]</sup> it would be asking too much of fiscal policy to think that it could have significantly offset this explosion of private expenditure. This is because budget multipliers of very open economies in periods of normal economic activity are generally quite small. With low fiscal multipliers, too large policy-induced changes in expenditure or revenues would be needed to dampen the cycle. The required budget surplus to offset the private imbalances in the euro area would have been totally unrealistic and unfeasible.

For instance, in Portugal the credit boom that began 1995, as entry into the euro seemed more and more assured, implied that the private sector balance fell from +5% of GDP in 1995 to -5.2% in the year 2000. That is a 10 p.p. variation in 5 years. As the public deficit improved on by 1.7 p.p. – from -4.5% to -2.8% of GDP – the implied external deficit increased from -0.5% to -8% of GDP. To have avoided this scenario, the public balance would have had to be strongly in surplus – and no one at the time recommended this or thought that it was possible. Certainly, if fiscal policy had been more counter-cyclical, the private sector induced macro imbalances would have been mitigated. But they would not have been eliminated altogether.

## **3. The role of the international crisis**

Let me now turn to the second perspective I discussed above: the role of the international crisis in triggering the euro area crisis.

### **3.1. Contagion from the US to European banks...**

Historical experience shows that credit booms tend to end in tears, but the sudden stop that occurred in the European periphery cannot be explained without introducing the trigger effect of the international financial crisis. Euro area countries were immediately affected by the global financial crisis through at least two channels.

- First, a number of euro area banks had substantial balance sheet exposures to the US housing market.
- Second, when the general global re-pricing of risk triggered by the US sub-prime crisis materialised, it had serious adverse consequences for local financial stability in those countries.

Facing losses on several of their assets, banks were forced to rebalance their portfolios in order to meet regulatory capital standards. They rapidly increased their holdings of “safe” government debt, as a rule denominated in domestic currency. This development was especially obvious after the collapse of Lehman Brothers which triggered an unprecedented flight-to-safety. At the same time, in many euro area jurisdictions public finances were strained to the limit by the recession-induced collapse in tax revenues and by the necessity to recapitalise failing banks. Overall, this meant that banks were becoming more exposed to their sovereigns at precisely the moment when sovereign creditworthiness was declining – creating the conditions for the infamous “bank-sovereign loop”.

### **3.2...and from banks to real economy**

The full effects of these developments emerged in 2010 when sovereign debt tensions appeared in countries with large recent increases in public debt and budget deficits, and/or poor long-term growth prospects due to neglected structural reforms. In this way, the general banking crisis developed into fiscal crises in specific European countries, causing severe recessions in those under stress and at some points endangering the stability of the euro area. The way in which this phase of the crisis developed took some observers by surprise, in particular the contagion effects, self-fulfilling cycles and possibility of multiple equilibria. Contagion has been demonstrated to exist in the euro area from sovereigns to sovereigns and from sovereigns to banks, in both directions. Two recent ECB working papers <sup>[3]</sup> show that contagion also exists among banks themselves and from them to the real economy. In this case, the study demonstrates that the post-2009 recovery in bank lending in the syndicated loans market has been hampered by the fact that a number of banks active in this market have large balance sheet exposures to sovereign debt issued in the past by countries now under stress. Since the beginning of

the sovereign debt crisis, these “affected” banks’ supply of syndicated credit has been almost 20% lower overall than it would have been if tensions in government bond markets had not been present.

All these points illustrate well the decisive role played by the banking sector in the inception and development of the euro area crisis. This is crucial not just for our understanding of how the euro area sovereign debt crisis came to be, but also for how we ensure that we avoid its repetition. The financial and macroeconomic imbalances built up by the activities of European banks until 2007, together with the international financial crisis, were the prime movers of crisis in Europe. Without this, the sovereign debt crisis would not have been nearly so severe.

## **4. Addressing financial imbalances**

All this raises the question, however, as to why financial imbalances were not given more attention prior to the crisis.

### **4.1 The limitations of the intellectual climate**

Part of the reason is that the approach taken towards financial integration and banking activity reflected two features of the dominant economic thinking at the time.

First, that the private sector was essentially stable and self-correcting, composed of fully rational agents always optimizing inter-temporally with knowledge of the future probability distributions to infinity of economic returns and variables. In such a world, no defaults were admitted or dangerous bubbles possible. Only the public sector could create instability – hence, the Stability and Growth Pact was supposed to be sufficient to ensure stability.

Second, that finance did not matter for real economy fluctuations. After the Real Business Cycle school, the rational expectations hypothesis and the intertemporal optimization paradigm, money and finance were considered no longer relevant. While money crept back in the new consensual macro model through the introduction of wage and price rigidities, allowing for short-term real economy effects of monetary policy, finance continued to be invisible with the Efficient Market Hypothesis ensuring a reliable

plumbing of the real economy. Banks and capital markets were not considered endogenous sources of instability that could have real economy effects. They were absent from macroeconomic models.

## **4.2 The limitations of financial governance**

This thinking fed into the attitudes of national authorities for whom capital flows were considered to result from optimizing self-equilibrating markets, as I illustrated above. But even if national supervisors had taken different view, the framework for financial governance in Europe simply did not equip them to address financial imbalances stemming from cross-border banking activity. Aside from a single currency with a single central bank and a fiscal brake (the SGP), monetary union initial institutional architecture was minimalist: governance of economic and financial policies remained firmly a national competence as countries were supposed to ensure the "shock-absorber" function on their own. There was no framework to deal with the build-up of systemic risks. National supervisors lacked the instruments to contain private capital flows, meaning only macro-prudential measures made possible by a consensus at the European level could have dealt with systemic events. In other words, there was a mismatch between the depth of integration in Europe and the scope of governance, which – as the Dirk Schoenmaker's "financial trilemma" predicts <sup>[4]</sup> – laid the ground for financial instability.

## **4.3 The case for Banking Union**

This background makes clear the case for reform, both in economic theory and models and the EMU institutional architecture. From an institutional perspective, the most important consequence has been the launching of the Banking Union project. Our experience of the role of banks in the crisis fully justifies the intention to introduce a true European perspective in supervision and resolution of banks – thereby mitigating national bias, and hopefully better separating banks from their sovereigns.

The first component of Banking Union, the Single Supervisory Mechanism (SSM), is about to be approved and the ECB is actively preparing to implement it. The SSM, besides all the necessary microprudential supervision competences, will also have

adequate macroprudential policy instruments. The participant countries in the SSM can feel reassured that systemic risk at the European level will be better addressed in the future.

The SSM is a key component of the Banking Union, but it is only one component. In particular, a European framework for the resolution of banks – with a Single Resolution Mechanism centred on a single Resolution Authority and Fund – needs to follow. For SSM supervision to be credible there has to be assurance that banks of any size and complexity can be safely wound down. Hence, a Resolution Authority that is only a coordinating mechanism for existing national authorities is not sufficient. If implemented properly, this vision for Banking Union consisting of genuine supervision and resolution at the European level will be the most far-reaching change introduced since the inception of the euro. The fact that Member States are working towards it reveals their willingness to continue to deepen European integration and to put in place a framework that will allow the euro area to function to its potential.

Other reforms have meanwhile been implemented to complete the initial minimalist design of monetary union. The acknowledgement that the private sector played a key role in generating imbalances provided the rationale for the creation of a formal Macroeconomic Imbalances Procedure. This procedure monitors and promotes timely policy measures to avoid the building up of macroeconomic instability in Member States. The fiscal framework has also been strengthened by several new pieces of legislation including the reinforced Stability and Growth Pact and the so-called Fiscal Compact.

In the monetary policy domain, the adequate liquidity provided by the ECB to the banking sector and the creation of Outright Monetary Transactions (OMT) have crucially reduced the tail risks threatening the euro area, and allowed time for reforms to be effectively implemented.

## **5. Addressing fiscal and macroeconomic imbalances**

Even though the prime driver of the crisis was primarily located in the banking sector, the fiscal and macroeconomic imbalances that emerged as a result are real and

have to be addressed. While the new governance framework I just described can help, a vital contribution has to occur at the level of individual member states. A determined effort to correct the economic and financial imbalances is necessary accompanied by structural reforms that will enhance growth prospects. Fortunately, such an effort has already been made by several countries and the adjustment achieved is in many ways quite significant.

**Table 2. Rebalancing in the euro area.**  
**Adjustment in the periphery: public finance**

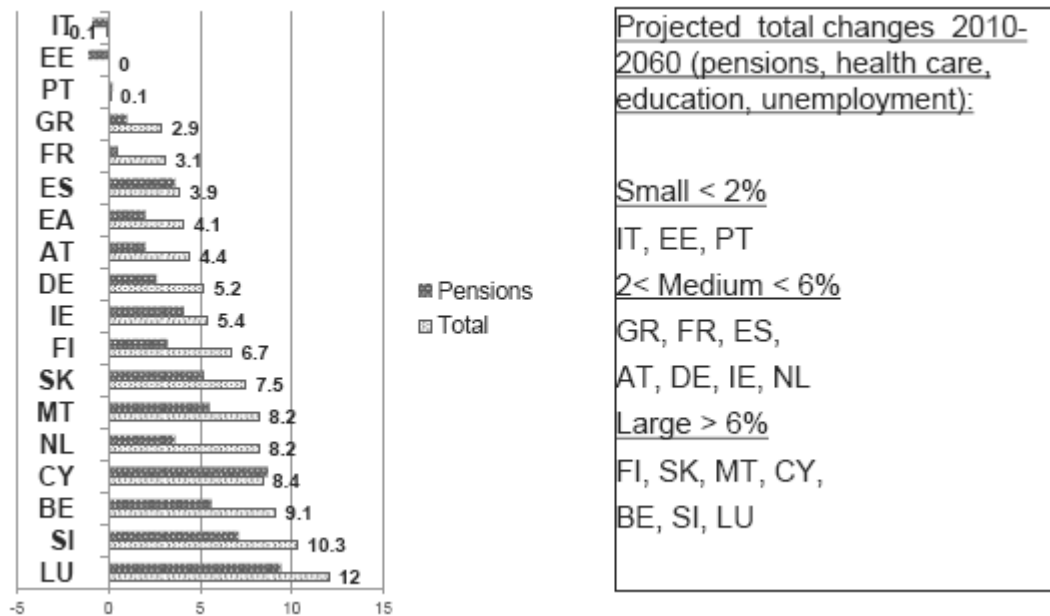
	<b>Total government nominal budget balance 2012 (as a % of GDP)</b>	<b>Primary government nominal balance 2012 (as a % of GDP)</b>	<b>Change in nominal primary balance 2009-2012 (%)</b>	<b>Change in structural primary balance 2009-2012 (%)</b>
<b>Greece</b>	<b>-10.0</b>	<b>-5.0</b>	<b>5.5</b>	<b>10.6</b>
<b>Spain</b>	<b>-10.6</b>	<b>-7.7</b>	<b>1.7</b>	<b>2.0</b>
<b>Ireland</b>	<b>-7.6</b>	<b>-3.9</b>	<b>7.9</b>	<b>6.6</b>
<b>Portugal</b>	<b>-6.4</b>	<b>-2.0</b>	<b>5.3</b>	<b>5.7</b>
<b>Italy</b>	<b>-3.0</b>	<b>2.6</b>	<b>3.3</b>	<b>3.1</b>
<b>Euro area</b>	<b>-3.7</b>	<b>-0.6</b>	<b>2.9</b>	<b>2.2</b>

*Source:* European Economic Forecast, Spring 2013, European Commission.

## **5.1 Fiscal imbalances**

Since the outbreak of the sovereign debt crisis, most countries, notably those in the distressed countries, have undertaken substantial fiscal adjustment efforts. Based on the European Commission's Spring 2013 Economic Forecast, Greece improved its structural primary balance by more than 10.6 percentage points between 2009 and 2012. Ireland (6.6), Portugal (5.7) and Italy (3.1) have also undertaken substantial adjustment efforts, which are well above the euro area average of 2.2 percentage points. Spain is close to the average. However, further efforts are needed in most countries to bring public debt ratios to a more sustainable level, also in view of the long-term challenges, including ageing.

**Figure 4. Projected 2010 to 2060 changes in age-related expenditure (as a % of GDP)**

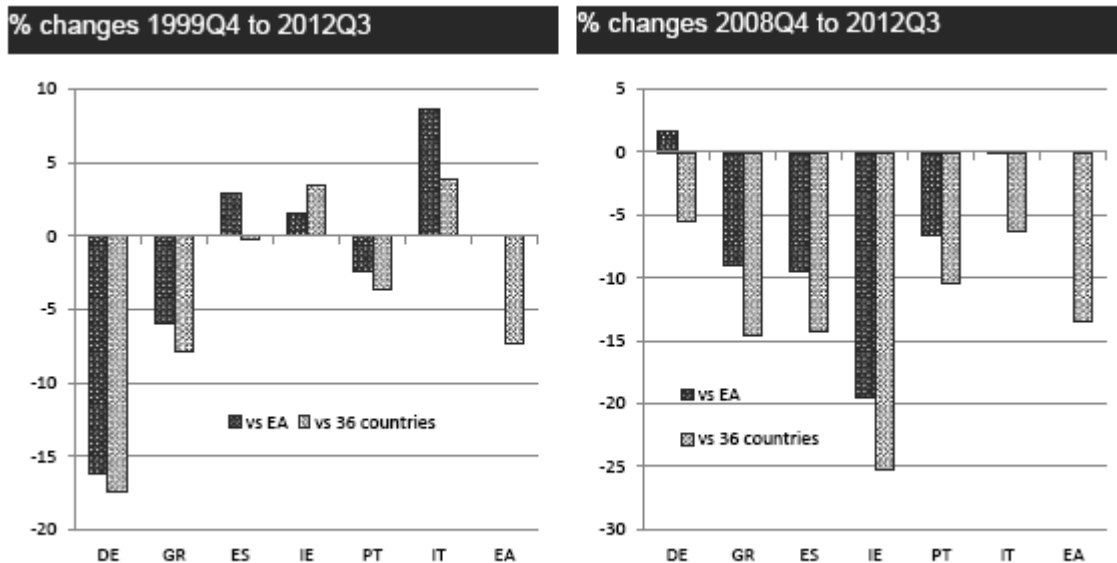


*Source:* Fiscal Sustainability Report 2010, European Commission.

High and rising age-related long-term budgetary costs (which include pensions, health and long-term care costs, changes in unemployment benefits and education expenditures) put a burden on public finances in the long-term. Under the no-policy-change assumption, i.e. assuming that no further pension reforms will be undertaken, the Commission's Ageing Report <sup>[5]</sup> projects total age-related public expenditures to increase on average by 3.6% of GDP in the euro area between 2010 and 2060, of which 1.4% of GDP is related to pension expenditures. However, it is precisely in the domain of reforms to contain the long-term burden of ageing populations on public expenditures that the countries under stress have already made adjustments. Italy and Portugal, for instance, have negligible projected increases in age-related expenditure. Other countries under stress like Greece, Spain and Ireland are already in a group of countries classified as being of medium risk while in 7 euro area countries, namely Finland, Slovakia, Malta, Cyprus, Belgium, Slovenia and Luxembourg, expenditure is projected to increase by more than 6%.



**Figure 5. Rebalancing in the euro area.**  
**ULC-deflated real effective exchange rates across countries.**

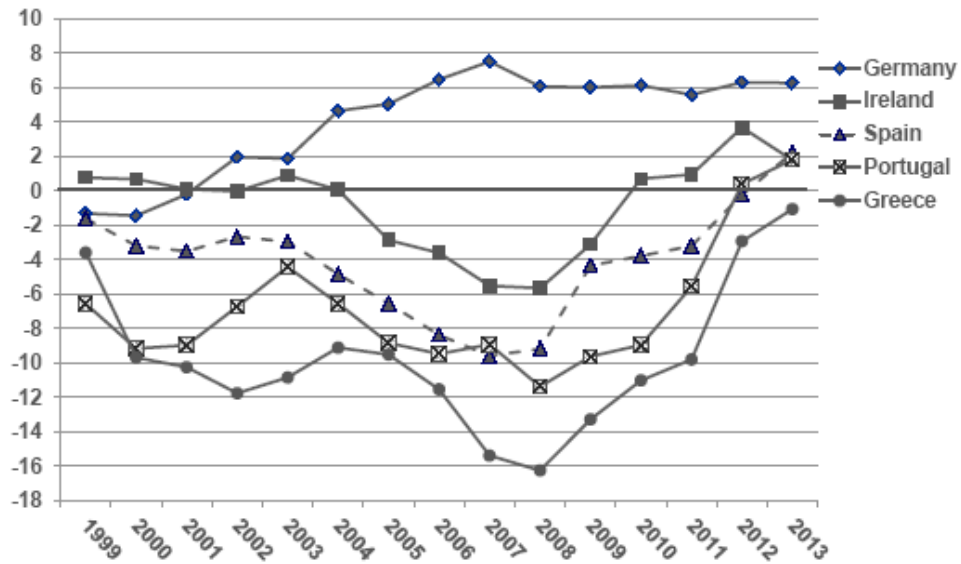


*Source:* ECB harmonised competitiveness indicators.  
 Increases (decreases) in the real effective exchange rate signal a worsening (improvement) in competitiveness.

## 5.2 Macroeconomic Imbalances

Turning to the adjustment in competitiveness, as measured by the real exchange rate in relative unit labour costs terms, progress has been significant with improvements since 2008 that have more than offset the losses accumulated since 1999. Countries have improved their competitiveness position both compared to the rest of the world and within the euro area. According to the harmonised competitiveness indicators based on unit labour costs, Ireland (-19% since 1999) has seen the strongest adjustment, while Italy (-0.2%) has shown the most limited adjustment among the distressed countries. Greece (-9%), Spain (-9.5%) and Portugal (-6.6%) register significant improvements.

**Figure 6. Rebalancing in the euro area.**  
**Evolution of external borrowing (-) lending (+) since 1999.**  
**(in % of GDP)**



Source: European Commission (February 2013)

As a consequence, the total external borrowing requirements of stressed countries has undergone a remarkable evolution from significant deficits (except for Italy) in 2008-09, to close to balance or even in surplus in the case of Ireland by the end of 2012.

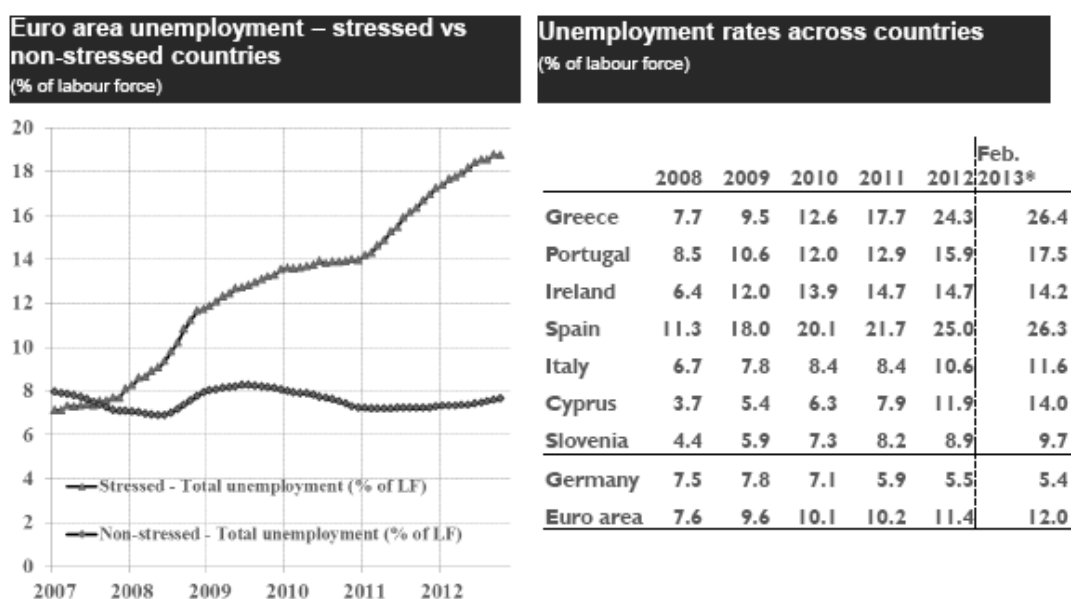
**Table 3. Rebalancing in the euro area**  
**External borrowing/lending requirements in selected euro area countries.**

Country	External borrowing (-) /lending (+) in 2012 (% of GDP)	Change from 2009 to 2012 (% of GDP)	Exports of goods and services (vol) - cumulative growth 2009-2012 (in %)	External borrowing (-) /lending (+) in 2013 (% of GDP) (forecast)
Italy	-0.6	1.4	20.6	1.1
Spain	-1.5	2.8	23.5	2.2
Greece	-5.5	7.7	3.0	-1.1
Ireland	2.1	5.2	15.0	1.8
Portugal	-1.2	8.4	22.0	1.8
Slovenia	2.0	2.4	18.2	4.8
Euro area	1.5	1.4	21.4	2.6

Source: European Economic Forecast, Spring 2013, European Commission.

The recent European Commission's Spring Forecast foresees that for this year, with the exception of Greece with a deficit of just -1.1% of GDP, all other countries under stress will be in current account surplus. It is important to underline that this achievement is not only the consequence of recession and lower imports, but is also the result of a quite dynamic performance in exports of goods and services, close to or above the euro area average, again with Greece being the exception. However, the significant adjustment made by the stressed countries has been achieved at high cost in terms of growth and particularly in some cases in terms of unemployment.

**Figure 7. Rebalancing costs in the euro area.**  
Unemployment rates across countries.



### 5.3 The way ahead

Notwithstanding this, now is not the time to change course in a way that could unravel what has been achieved. The extension of the compliance period that has been recently given by the Commission to various countries means that the pace of the adjustment can become more gradual, in full respect of the structural approach under which effective action under the Stability and Growth Pact preventive arm is measured.

The final goal of continuing to reassure markets about future debt sustainability cannot be abandoned. It is encouraging that the market reaction to recent developments, including our own OMT, has substantially reduced yields and spreads, particularly for Greece that also benefited from a rating upgrade.

Nevertheless, it is also clear that the rebalancing process would benefit from a more favorable European economic environment with higher growth. Here, four elements could help. First, a more coordinated approach to macroeconomic policy at the euro area level to achieve higher demand growth. Second, structural reforms also in surplus countries to increase growth and facilitate a more encompassing rebalancing process. Third, to support national structural reforms in stressed countries, the introduction of contractual programmes with means to support their implementation, which is expected to be part of a forthcoming Commission proposal. Fourth, I hope that there will be a future decision to implement at the euro area level what is referred in the President Van Rompuy's Report "Towards a genuine Economic and Monetary Union" <sup>[6]</sup> as *"....the establishment of a fiscal capacity to facilitate adjustment to economic shocks. This could take the form of an insurance-type mechanism between euro area countries to buffer large country-specific economic shocks. Such a function would ensure a form of fiscal solidarity exercised over economic cycles, improving the resilience of the euro area as a whole and reducing the financial and output costs associated with macroeconomic adjustments"*.

## **6 Implications for economic research**

Let me now briefly recall the research progress that we have made in the ECB in terms of understanding the role of the financial sector in the macroeconomy. As I noted above, one reason why the importance and risks of financial developments were not identified earlier is that, before the crisis, financial sectors were basically absent or immaterial in the standard macroeconomic models that central banks tended to use.

It is important that the economics profession manages to change this as soon as possible. In this context, more than two years ago the ECB and the other central banks of

the European Union have started a major research initiative in this regard, the Macroprudential Research Network (MaRs) <sup>[7]</sup>. A sub-team of MaRs has made key steps in integrating realistic characterizations of widespread financial instability into models of the aggregate economy, in analysing the transmission channels between financial instability and macroeconomic variables, in explaining the recent crisis, and in assessing policies addressing systemic risk. <sup>[8]</sup>

Some of these new models do a fine job in explaining how financial imbalances contributed to macro imbalances in periphery countries. For example, these models predict that if there are large international capital flows into a low-growth country, then excessive investment is allocated to low-productivity projects (such as housing). With such a supply-driven credit boom, interest rates go down, incentives in the banking sector deteriorate, and financial fragility arises endogenously. Such countries end up running large current account deficits and their banking sectors become overleveraged, which sooner or later precipitates a financial crisis.

Despite what we have learned thanks to our internal research endeavours, we also need the wider economic profession, in particular academia, to engage more forcefully in this research agenda. We highly value our interaction with academia and the benefits from combining policy experience with analytical rigour. Despite a few valuable efforts <sup>[9]</sup>, we feel that much more needs to be done, so that the young PhD's we hire from universities are well equipped with analytical tools that reflect both standard macroeconomic relationships *and* how they are altered by the activities of financial intermediaries – and, of course, their potential for instability.

## **7 Conclusions**

In my remarks I have recalled that ill developments and practices in major financial centres at the start of the millennium and the ensuing financial crisis were a deep underlying source of the crisis that we face in Europe still today. This is not to deny that other factors also played a role. Such factors include: the failure of regulators to arrest the increase in leverage in the financial system; unclear bank resolution regimes which promoted moral hazard in the banking sector; and the failure in a number of euro area

jurisdictions to apply appropriate anti-cyclical fiscal policies and to undertake structural reforms aimed at improving competitiveness. Nevertheless, even considering this background, I hope I have been clear about what I consider the prime drivers of the European crisis, namely the role of the financial sector and of the international financial crisis. Without the strain on public finances generated by the recession that ensued and by balance sheet losses of European banks, euro area governments would not have been so vulnerable to stress in sovereign bond markets. In other words, without the banks' behaviour and the global financial crisis, the sovereign debt crisis at least would not have been so severe.

Given the root causes I have outlined, the need for a deep financial and regulatory reform was naturally a key lesson from the crisis. In what concerns Europe, the banking union is therefore a central pillar of the strategy to make our Economic and Monetary Union more effective and robust.

To stabilise EMU over the long-term, however, requires a more fundamental review of the institutional architecture. The minimalist approach pursued at Maastricht was found to be inadequate in the context of highly integrated financial markets. In recognition of this, the Presidents of the European Council, Commission, Eurogroup and ECB have been asked lay out a roadmap to complete EMU over the next decade.

Having been thoroughly stress-tested over the last three years, everyone now have a much clearer idea of what rules and institutions are essential for monetary union to function effectively. In the view of the Four Presidents, a stable EMU needs to be built on four pillars: financial union, fiscal union, economic union and political union.

The most important concept underlying this vision is that, to maximise its benefits, the single currency needs strong common institutions. Strong institutions to supervise and stabilise the single financial market. Strong institutions to guide fiscal policies. Strong institutions to coordinate economic policy, guarantee competitiveness and encourage sustainable growth. And strong institutions to engage citizens more closely in the European project.

This vision will take time to implement but it should strengthen our resolve to adopt all the short term measures indispensable to finally overcome the euro area crisis.

## End notes

<sup>[1]</sup>Constâncio, V., (2012). Towards a European Banking Union. Speech at Duisenberg School of Finance, Amsterdam.

<sup>[2]</sup>Constâncio, V. (2005) “European monetary integration and the Portuguese case” in the Third ECB Central Banking Conference, published by Carsten Detken, Vítor Gaspar, Gilles Noblet (editors) « *The new EU Member States: convergence and stability*», ECB 2005, available in <http://www.ecb.int/pub/pdf/other/neweumemberstatesen2005en.pdf>

<sup>[3]</sup>See A. Alter and A. Beyer, “The dynamics of spillover effects during the European sovereign crisis”, CFS Working Papers, No. 2012/13, 2012; Popov, A., and N. van Horen, 2013. The impact of sovereign debt exposure on bank lending: Evidence from the European debt crisis. ECB mimeo.

<sup>[4]</sup>Schoenmaker, D (2011) “The financial trilemma” in Economic Letters, 111, p. 57-9

<sup>[5]</sup>EU Commission “The 2012 Ageing Report”, European Economy 2

<sup>[6]</sup>See “Towards a genuine Economic and Monetary Union ” a Report by the President of the European Council in close collaboration with the Presidents of the European Commission, the Eurogroup and the ECB, available in <http://www.european-council.europa.eu/the-president/eurozone-governance?lang=en>

<sup>[7]</sup>For details, see European Central Bank (2012), Report on the first two years of the macro-prudential research network, Frankfurt, October.

<sup>[8]</sup>Aoki, K., and K. Nikolov, 2012, Bubbles, banks, and financial stability, ECB Working Paper 1495; Boissay, F., Collard, F., and F. Smets, 2013, Booms and systemic banking crises, ECB mimeo; Clerc, L., Derviz, A., Mendicino, C., Moyen, S., Nikolov, K., Stracca, L., Suarez, J., and A. Vardoulakis, 2013, Macroeconomic model with three layers of default, ECB mimeo; Goodhart, C., Kashyap, A., Tsomocos, D., and A. Vardoulakis, 2012, Financial regulation in general equilibrium, NBER Working Paper 17909.

<sup>[9]</sup>See, e.g., Brunnermeier, M., and Y. Sannikov, 2010, A macroeconomic model with a financial sector, Princeton University working paper; and He, Z., and A. Krishnamurthy, 2010, A model of capital crises, Northwestern University working paper.

## **Special Conference Papers**

### **The Crisis in the Euro Area, May 23-24, 2013**

14. Provopoulos George, “The Greek Economy and Banking System: Recent Developments and the Way Forward”, July 2013.
15. Constâncio Vítor, “The European Crisis and the Role of the Financial System”, July 2013.
16. Honkapohja Seppo, “The Euro Area Crisis: a View from the North”, including discussion by Dimitris Malliaropulos, July 2013.
17. Goodhart C.A.E., “Lessons for Monetary Policy from the Euro-Area Crisis”, including discussion by Gikas A. Hardouvelis, July 2013.
18. Bordo Michael and Harold James “The European Crisis in The Context of the History of Previous Financial Crises”, including discussion by Nicos Christodoulakis, July 2013.
19. Whelan Karl, “Ireland’s Economic Crisis: The Good, the Bad and the Ugly”, including discussion by Thomas Moutos, July 2013.
20. Gibson D. Heather, Hall G. Stephen, and Tavlas S. George, “Fundamentally Wrong: Market Pricing of Sovereigns and the Greek Financial Crisis”, including discussion by Elias Tzavalis and Thanasis Kazanas, July 2013.
21. De Grauwe Paul and Ji Yuemei, “How Much Fiscal Discipline in a Monetary Union?”, including discussion by George Hondroyiannis, July 2013.
22. Polito Vito and Wickens Michael, “How the Euro Crisis Evolved and How to Avoid Another: EMU, Fiscal Policy and Credit Ratings”, including discussion by Dimitrios Sideris, July 2013.
23. Azariadis Costas, “Credit Policy in Times of Financial Distress”, including discussion by Harris Dellas, July 2013.
24. Carneiro Anabela, Portugal Pedro and Varejão José, “Catastrophic Job Destruction during the Portuguese Economic Crisis”, including discussion by Daphne Nicolitsas, July 2013.
25. Eichengreen Barry, Jung Naeun, Moch Stephen and Mody Ashoka, “The Eurozone Crisis: Phoenix Miracle or Lost Decade?”, including discussion by Apostolis Philippopoulos, July 2013.
26. Reichlin Lucrezia, “Monetary Policy and Banks in the Euro Area: the Tale of Two Crises”, including discussion by Mike G. Tsonias, July 2013
27. Geanakoplos John, “Leverage, Default, and Forgiveness: Lessons from the American and European Crises”, including discussion by Nikos Vettas, July 2013.
28. Gibson D. Heather, Palivos Theodore, and Tavlas S. George., “The Crisis in the Euro Area: an Analytic Overview”, July 2013.