

# THE EUROPEAN CENTRAL BANK AND THE EUROZONE CRISIS MANAGEMENT

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## Abstract

*The Euro is the single currency shared by 17 of the European Union's Member States, which together make up the Euro area. Since its introduction, in January 2002, it became the second most traded currency in the world after the United States dollar. With the launch of the Euro, the monetary policy became the responsibility of the independent European Central Bank, which was created for that purpose, and of the national central banks of the Member States, having adopted the Euro. However, the accumulation of massive and unsustainable deficits and public debt levels in a number of peripheral economies threatened the Eurozone's viability by the end of its first decade, triggering a Eurozone sovereign debt crisis. The institutional mechanisms surrounding the Euro have also been an integral part of the crisis. On this line, the European Monetary Union is supported on one side by treaties and multilateral agreements including the Maastricht Treaty, the Stability and Growth Pact and the Lisbon Strategy and, on the other side, by the European Central Bank. The combination of these institutions has produced a mix of monetary, fiscal and labour market policies with powerful social implications. And, what started as a debt crisis in Greece in late 2009 has evolved into a broader economic and political crisis in the Eurozone and European Union.*

*In this framework, the purpose of my paper is to analyze the roots of the Eurozone crisis, as the biggest challenge since the Euro adoption and the European Central Bank's response to it. Therefore the objectives are: identification of the reasons that stand behind the crisis, then observing how the crisis has affected the functioning of the European Central Bank and the Euro, and how it was forced to respond and, finally, focusing on the future and the challenges that lie ahead.*

**Key words:** Euro zone, Euro, crisis, European Central Bank, challenges

## Introduction

Since 2010, the Eurozone debt crisis triggered a growing scepticism about the future of the European Union and of the Eurozone. Across Europe, a fundamental debate is taking place upon this subject and many citizens are concerned about where Europe is heading.

Though, the crisis highlighted the economic interdependence of the European Union, while also underscoring the lack of political integration, needed to provide a coordinated fiscal and monetary response. Since the eruption of the sovereign debt crisis in the Euro area in May 2010, the European Central Bank (or for that matter the Eurosystem) has been in the spotlight of crisis management and resolution.

Having these premises, **my study focuses on the Eurozone crisis, as the biggest challenge since the adoption of the Euro and tries to make an objective analysis of its causes.**

The importance of my study lies in the fact that, only by understanding the reasons that stand behind a crisis, that had and still has deep consequences on the European Union as a whole and on its composing member states, we can learn some lessons, in order to avoid such event happening in the future.

In this highlight, the objectives are: identification of the reasons that stand behind the crisis, then observing how the crisis has affected the functioning of the European Central Bank and the Euro, and how it was forced to respond and, finally, focusing on the future and the challenges that lie ahead.

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To answer at these objectives, I will start by understanding the roots of the Eurozone crisis, in order to find out in the end the challenges that lie ahead.

Therefore, I will divide my paper in three sections:

- The reasons that stand behind the crisis;
- How the crisis has affected the Euro and the functioning of the European Central Bank and how it was forced to respond;
- The future and the challenges that lie ahead;

The existent specialized literature has widely debated this subject, but this paper will try to make an objective and understandable analysis of a matter that preoccupies and affects many countries and, in the end, many people, and implies a coordinated answer at the European Union level.

## Paper content

### 1. The reasons that stand behind the crisis

The *Organization for Economic Cooperation and Development* (OECD)<sup>1</sup> announced the Eurozone debt crisis was the world's greatest economic threat in 2011, and things have only worsened in 2012. The crisis has festered since 2009, when the world first realized Greece could default on its debt. In three years, it's escalated into the potential for sovereign debt defaults from Portugal, Italy, Ireland and Spain.

The European Union, led by Germany and France, struggled to support these members with bailouts from the European Central Bank and the International Monetary Fund. These measures haven't been enough, allowing the crisis to threaten the existence of the Euro itself.

*How did such a great crisis evolved?*

The creation of the European Union and the founding of one of the most important central banks in the world – the European Central Bank – at the end of the 1990s was an historical accomplishment. Yes, there were sceptics that, right at the start, warned that the Economic and Monetary Union will not survive its first serious recession...but were they right? This is a question that preoccupied in the last years many sound voices.

The origins that stand behind this crisis are considered by the analysts to be multiple, as shown below.

Analysts note that the powerful original members of the European Economic Community, such as Germany, were eager to develop a large and competitive Eurozone, and so allowed less solvent European Union nations to adopt the Euro, even if they had failed to fulfil the criteria outlined by the Maastricht Treaty<sup>2</sup>. Today, all European Union member states - with the exception of the United Kingdom, Denmark, and Sweden - are required to join the Eurozone, only when they meet the criteria<sup>3</sup>. Entry to the Eurozone is controlled by the so-called Eurogroup, which comprises the seventeen Eurozone finance ministers; the group has been led by Luxembourg Prime Minister Jean-Claude Juncker since 2005.

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<sup>1</sup> The Organization for Economic Cooperation and Development, (OECD) is an association of 34 nations in Europe, North America, and the Pacific. Its goal is to promote the economic welfare of its members, and coordinate their efforts to aid developing countries outside of its membership. Although it was originally based in Europe, it is broadening its scope to become more global. It is working to add six of the fastest growing countries in the emerging markets as members.

<sup>2</sup> The **Euro convergence criteria** (also known as the **Maastricht criteria**) are the criteria which European Union member states are required to meet to enter the third stage of the Economic and Monetary Union (EMU) and adopt the Euro as their currency. The four main criteria, which actually comprise five criteria as the "fiscal criterion" consist of both a "debt criterion" and a "deficit criterion", are based on Article 140 (ex article 121.1) of the Treaty on the Functioning of the European Union.

<sup>3</sup> The Eurozone in crisis, Cristopher Alessi, 23 July 2012.

This is where things have gone wrong. Let us first recall that the convergence criteria relate to government finance, long term interest rates, inflation and real exchange rates. In the year before the introduction of the Euro it was realised that compliance with the government finance criteria after the introduction of the Euro did require additional measures and procedures, so the Stability and Growth Pact was introduced. However, it is now abundantly clear that this Pact was not complied with and that government finance criteria are still not respected by many Euro area countries. The other criteria were more or less ignored. The interest rate criterion is closely related to the government finance criterion. At the moment, a number of Euro area countries no longer fulfill this criterion, which specifies that long-term rates should not deviate by more than 200 basis points from the average long term rate of the three best performing countries in terms of inflation.<sup>4</sup>

Following Maastricht, leaders of European countries with weaker economies tended to defer tougher budgetary measures because of domestic challenges. The effects were not immediately felt: the periphery states thrived in the first years of the Euro, propelled by large infusions of liquidity and unprecedented access to credit from other Eurozone states. At the same time, the "productive capacity" of the periphery was limited by rigid labour markets and a reduction of economic competitiveness.

The underlying structural issues in the Eurozone periphery became increasingly visible following the global financial meltdown of 2007-2008. Liquidity quickly dried up and several states were left with unsustainable deficits and public debts greater than their Gross Domestic Product. By 2010, a sovereign debt crisis - most pronounced in Greece - was spreading throughout the periphery and imperilling the future of the Eurozone. Between spring 2010 and spring 2011, the European Union and the International Monetary Fund acted to bail out Greece, Ireland, and Portugal.<sup>5</sup>

So, the sovereign debt crisis<sup>6</sup> that broke out in Greece at the end of 2009 is fundamentally due to the precarious integration of the peripheral countries<sup>7</sup> in the Euro-zone. Its immediate cause, however, lie with the crisis of 2007-2009. Speculative mortgage lending by the United States financial institutions, and trading of resultant derivative securities by international banks created a vast bubble in 2001-2007, leading to crisis and recession. State provision of liquidity and capital in 2008-2009 rescued the banks, while state expenditure prevented a worsening of the recession. The result in the Eurozone was a sovereign debt crisis, exacerbated by the structural weaknesses of the monetary union.

In this context, the crisis of public debt, thus, represents Stage Two of an upheaval that started in 2007 and can be called a crisis of "financialization"<sup>8</sup>. Mature economies have become

<sup>4</sup> The European Central Bank in (the) crisis, Sylvester Eijffinger, Lex Hoogduin, CESifo DICE Report 1/2012.

<sup>5</sup> The Eurozone in crisis, Cristopher Alessi, 23 July 2012.

<sup>6</sup> The **European sovereign debt crisis** (often referred to as the **Eurozone crisis**) is an ongoing financial crisis that has made it difficult or impossible for some countries in the Euro area to repay or re-finance their government debt without the assistance of third parties.

<sup>7</sup> In World Systems Theory, the **periphery countries** (sometimes referred to as just **the periphery**) are those that are less developed than the semi-periphery and core countries. These countries usually receive a disproportionately small share of global wealth. They have weak state institutions and are dependent on – according to some, exploited by – more developed countries. These countries are usually behind because of obstacles such as lack of technology, unstable government, and poor education and health systems.

<sup>8</sup> *Barron's Finance & Investment Dictionary*: Concept associated with developments leading up to the 2008–2009 crisis and defined differently by various people, but referring generally to the dominance of financial services over industry as the primary creator of wealth. Whereas, traditionally, the capital markets made bank-based savings available to producers who created wealth, capital market systems became themselves the generator of profit making and wealth. Derivatives, such as futures contracts, swaps, and options, originally designed as tools for use in hedging and risk management, became widely traded financial assets.

The definition of financialization proposed by Gerald Epstein has been cited by many authors: "the increasing role of financial motives, financial markets, financial actors and financial institutions in the operation of the domestic and international economies".

“financialized” during the last three decades resulting in growing weight of finance relative to production. Large corporations have become to rely less on banks, while becoming more engaged in financial markets. Households have become heavily involved in the financial system through assets (pension and insurance) and liabilities (mortgage and unsecured debt). Banks have been transformed, seeking profits through fees, commissions and trading, rebalancing their activities toward household rather than corporations. Financial profit has emerged as a large part of total profit.

But financialization has unfolded in different ways across mature countries, including those in the European Union. Germany has avoided the explosion of household debt that recently took place in other mature countries and peripheral Eurozone countries. The performance of German economy has been mediocre for many years, while great pressure has been applied on German workers’ pay and conditions. The main source of growth for Germany has been its current account surplus inside the Eurozone, resulting from pressure on pay and conditions rather than on superior productivity growth. This surplus has been recycled through foreign direct investments and German bank lending to peripheral countries and beyond.

The implications for the Eurozone have been severe. Financialization in the periphery has proceeded within the framework of the monetary union and under the dominant shadow of Germany. Peripheral economies have acquired entrenched current account deficits. Growth has come from expansion of consumption financed by expending household debt or from investment bubbles characterised by real estate speculation. There has been a general rise of indebtedness, whether of households or corporations. Meanwhile, pressure has been applied to workers’ pay and conditions across the periphery, but not as persistently as in Germany. The integration of peripheral countries in the Eurozone, then, has been precarious, leaving them vulnerable to the crisis of 2007-2009 and eventually leading to the sovereign debt crisis<sup>9</sup>.

Finally, the financial crisis of 2007-2008 had a very strong impact on the banking sector in some countries. Governments offered support to their banks in order to avoid a collapse of the financial system, which weakened government budgets and increased government debt. This negative impact was reinforced by the deep recession of 2009, which caused a sharp decline in government revenues. In countries like Ireland, and to a lesser degree Spain, this became a threat to fiscal sustainability. The fiscal sustainability crisis in individual countries became a threat to financial stability in the Euro area, because of high financial integration in the Euro area and due to (the threat of) contagion. High financial integration was reflected in the fact that, in many cases, a high proportion of the government debt of Euro area countries is held outside the country concerned.

Doubts about the sustainability of debt of a certain country therefore have an immediate impact on the solvency of banks across the Euro area. The discussion about private sector involvement in the case of Greece and as an element in the functioning of the European Stability Mechanism (ESM) enormously reinforced the potential and actual spill-over effects between countries and between government instability and financial sector instability.<sup>10</sup>

Last, but not least, the institutional mechanisms surrounding the Euro has been an integral part of the crisis. To be more specific, European Monetary Union is supported by a host of treaties and multilateral agreements, including the *Maastricht Treaty*, the *Stability and Growth Pact* and the *Lisbon Strategy*. It is also supported by the European Central Bank, in charge of monetary policy across the Eurozone. The combination of these institutions has produced a mix of monetary, fiscal, and labour market policies with powerful social implications.

## **2. How the crisis has affected the Euro and the functioning of the European Central Bank and how it was forced to respond**

As we seen which were the main origins that stand behind this crisis, the next step is to find out how the crisis has affected the Euro and the functioning of the European Central Bank and how it was forced to respond.

<sup>9</sup> Crisis in the Eurozone, Costas Lapavistas et al., Verso, UK, 2012, pg. 1-2.

<sup>10</sup> The European Central Bank in (the) crisis, Sylvester Eijffinger, Lex Hoogduin, CESifo DICE Report 1/2012.

The crisis is so severe that there are neither soft options, nor easy compromises for peripheral countries. The choices are stark, similar to those of developing countries confronted with repeated crisis during the last three decades.

**The first alternative** is to adopt austerity by cutting wages, reducing public spending and raising taxes, in the hope of reducing public borrowing requirements. Austerity would probably have to be accompanied by bridging loans or guarantees by core countries to bring down commercial borrowing rates. It is likely that there would also be “structural reform”, including further labour market flexibility, tougher pension conditions, privatisation of remaining public enterprises, privatisation of education, and so on. The aim of such liberalisation would presumably be to raise the productivity of labour, thus improving competitiveness.

This is the preferred alternative of ruling elites across peripheral and core countries, since it shifts the burden of adjustment onto working people. But, there are several imponderables. First, it is the opposition of workers to austerity, leading to political unrest. Further, the Eurozone lacks established mechanisms both to provide bridging loans and to enforce austerity on peripheral members. There is also strong political opposition within core countries to rescuing others within the Eurozone. On the other hand, the option of forcing a peripheral country to seek recourse to the International Monetary Fund would be damaging to the Eurozone as a whole.

The second alternative is to reform the Eurozone. There is almost universal agreement that unitary monetary policy and fragmented fiscal policy have been a dysfunctional mix. The aim would be to produce smoother interaction of monetary and fiscal forces, while maintaining the underlying conservatism of the Eurozone.<sup>11</sup>

So, what about the Euro and the European Central Bank?

*“The European Central Bank’s actions since the onset of the financial crisis have been bold, and yet firmly anchored within the medium-term framework of our monetary policy strategy.”* (Trichet<sup>12</sup>, 2009).

Before the crisis, the European Central Bank’s success in achieving price stability was typically interpreted as testimony to the effectiveness of its underlying principles of central banking.

The main objective of setting up the European Central Bank was to maintain price stability in the Euro area as a whole. The European Central Bank has so far been very successful in achieving its main objective: since the introduction of the Euro inflation has on average been around 2%. That is lower than the average outcome for Germany in the era of the Bundesbank, and lower than in many other advanced countries around the world. The European Central Bank has also succeeded in becoming a very highly respected central bank in the international arena. Therefore, the Euro as such and the European Central Bank are not the problem.

As stated above, it is more a question of the sovereign debt crisis affecting the Euro and the European Central Bank through two channels.

The first channel is the creation of (potential) financial instability in the Euro area. This is an issue for the European Central Bank because one of its tasks is to contribute to the financial stability policies of the competent authorities without prejudice in terms of maintaining price stability.

The second channel is even more fundamental from the perspective of the Euro, because it affects the conditions for the existence of the Euro and the European Central Bank’s capacity to maintain price stability in the Euro area.

The so-called convergence criteria are fundamental to the existence of the Euro and the possibility of running a single monetary policy for the Euro area. These criteria should not only be fulfilled as a condition for introducing the Euro and for entering the Euro area at the moment of

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<sup>11</sup> Crisis in the Eurozone, Costas Lapavistas et al., Verso, UK, 2012, pg. 8-9.

<sup>12</sup> Jean-Claude Trichet is the former president of the European Central Bank. On 1 November 2003 he took Wim Duisenberg's place as president of the European Central Bank.

entry, but should be complied with on a sustainable basis. The latter means that compliance must be ensured after adopting the Euro.

Nevertheless, the European Central Bank was immediately thrown into the spotlight after the sovereign debt crisis hit in May 2010. There were three aspects to its responsibilities: future prevention, crisis resolution and crisis management. In future prevention and final crisis resolution, the European Central Bank can only offer its analysis and views. The responsibility is in the hands of the politicians.

These are not areas that put pressure on the (cohesion of) European Central Bank Governing Council's decision-making. All Council members have a similar interest, although they may somewhat disagree on the precise content of the measures to be taken. Initially, however, resolving the crisis is a matter for the governments of the Euro area. It is in the area of crisis management that the European Central Bank and the cohesion of its Governing Council were quickly put to test. During the Greek sovereign debt crisis market turbulence increased to high levels and interest differentials against Germany went up sharply<sup>13</sup>.

### **European Central Bank's main actions in the Eurozone crisis: The Securities Markets Programme**

In May 2010, the European Central Bank decided to start the Securities Markets Programme (SMP) in order to address tensions in certain market segments that hampered the monetary policy transmission mechanism. The latter refers to the process with which the European Central Bank aims to influence prices in the entire Euro area via its interest rates. Under the SMP, should this mechanism be disrupted by dysfunctional market segments and the European Central Bank's rate signal not be transmitted evenly to all parts of the Euro area, the European Central Bank could intervene by buying, on the secondary market (i.e. from banks and against market prices), the securities that it normally accepts as collateral. The last SMP purchases took place in February 2012 and the programme was terminated in September 2012<sup>14</sup>.

The European Central Bank Governing Council found itself in uncharted territory. For the first time it had to take a decision on whether and how to intervene in government debt markets. This was, of course, no ordinary monetary policy decision. It could even be debated whether the decision was indeed a monetary policy decision, or whether it was about supporting financial stability measures taken by governments.

There was also a substantive argument against the Securities Markets Programme (SMP). By buying government bonds, the European Central Bank would relieve market pressure on the governments concerned to consolidate and adjust. This is the argument of induced moral hazard and why the European Central Bank stressed the temporary nature of all of its so called unconventional measures and thus also of the SMP.

The SMP was meant to be temporary, but governments did not take sufficient measures to end the market turbulence or to make it possible for the European Central Bank to (gradually) exit the programme. There was a period beginning in spring last year when tensions in the markets became smaller. The size of the SMP more or less started to stabilise at around 70-75 billion Euro and started to look like it would die quietly, until the crisis flared up again when Spain, and later Italy, came under pressure. A very rapid increase in the size of the SMP to well above 200 billion Euro was the result. The SMP purchases only came down when the European Central Bank, under its new President Mario Draghi, announced two three year LTROs with full allotment<sup>15</sup>.

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<sup>13</sup> The European Central Bank in (the) crisis, Sylvester Eijffinger, Lex Hoogduin, CESifo DICE Report 1/2012.

<sup>14</sup> www.ecb.int.

<sup>15</sup> The European Central Bank in (the) crisis, Sylvester Eijffinger, Lex Hoogduin, CESifo DICE Report 1/2012.

### **Addicted banks**

In October 2008, following the collapse of Lehman Brothers, the financial turmoil turned into a global financial crisis. Growing uncertainty about the financial health of major banks worldwide led to a collapse in activity in a large number of financial markets. The virtual breakdown of the money market caused short-term interest rates to increase to abnormally high levels, both inside and outside the Euro area. During this period of great uncertainty, banks built up large liquidity reserves, while removing risks from their balance sheets and tightening loan conditions. The crisis also began to spread to the real economy, with a rapid and synchronised deterioration in economic conditions in most major economies and a free fall in global trade. The European Central Bank responded with several measures, the most important of which was a switch to a policy of full allotment and fixed rates. This meant that Euro area banks were able to get unlimited liquidity from the European Central Bank at the main refinancing rate provided they offered adequate collateral. The European Central Bank effectively took the place of the money market. Other measures (besides a substantial cut in interest rates) included widening the range of eligible collateral and lengthening the maturities of loans to banks<sup>16</sup>.

This is perhaps the most important policy measure that the European Central Bank had introduced before the sovereign debt crisis. As a by-product of full allotment, a number of banks addicted to the European Central Bank credit had emerged. The purpose of full allotment was to provide funding to banks that could no longer rely on the professional funding markets, and the interbank market in particular, which almost completely dried up as a consequence of high uncertainty after the collapse of Lehman Brothers.

### **Three year LTROs and collateral measures**

The European Central Bank then surprised everybody by announcing two long-term refinancing operations (LTROs) with a 3 year maturity and full allotment (against collateral). It also allowed seven national central banks to accept a wider range of collateral against European Central Bank refinancing operations.<sup>17</sup>

In December 2011, in response to severe market tensions that threatened the functioning of the money market and the flow of credit from banks to businesses and consumers, the European Central Bank decided to conduct two longer-term refinancing operations with a maturity of 36 months. The rate in these operations was fixed at the average rate of the main refinancing operations over the life of the respective operation. The first operation was allotted on 21 December 2011 and the second on 29 February 2012.

In addition, the European Central Bank decided to increase the availability of collateral by reducing the rating threshold for certain asset-backed securities and by allowing national central banks, as a temporary solution, to accept as collateral additional credit claims (bank loans) that satisfy specific criteria. The responsibility entailed in the acceptance of such credit claims will be borne by the national central bank authorising their use.

Thirdly, the European Central Bank decided to reduce the reserve ratio to 1% (from 2%) thus freeing up collateral and supporting money market activity.

In September 2012, to preserve the singleness of its monetary policy and to ensure the proper transmission of its policy stance to the real economy throughout the Euro area, the European Central Bank announced the possibility of Outright Monetary Transactions (OMTs). OMTs are interventions in secondary sovereign bond markets to address severe distortions in these markets which originate from, in particular, unfounded fears on the part of investors of the reversibility of the Euro. OMTs

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<sup>16</sup> [www.ecb.int](http://www.ecb.int).

<sup>17</sup> The European Central Bank in (the) crisis, Sylvester Eijffinger, Lex Hoogduin, CESifo DICE Report 1/2012.

provide, under appropriate conditions, a fully effective backstop to avoid self-fulfilling destructive scenarios with potentially severe challenges for price stability in the Euro area. In order to preserve the primacy of the European Central Bank's price stability mandate and to ensure that governments retain the right incentive to implement the required fiscal adjustments and structural reforms, a necessary condition for OMTs is strict and effective conditionality attached to an appropriate EFSF/ESM programme<sup>18</sup>.

### 3. The future and the challenges that lie ahead

One of the main challenges that lie ahead is reforming the European Union.

The challenge is probably due to the fact that not all countries of the Euro area currently fulfil the convergence criteria; and this will probably be the case for quite a number of years to come. Fiscal consolidation and restoring competitiveness in particular take time.

In the wake of the global financial and debt crisis, the European Union began to adopt measures for centralizing governance mechanisms and coordinating fiscal and economic policy. Most notably, in December 2011, European Union leaders agreed to the formation of a so-called fiscal union. Twenty-five European Union countries - all but the United Kingdom and Czech Republic - signed on to the German-engineered **fiscal pact**, which would allow the European Union to dictate the national budgetary policies of participating nations. European Union leaders also agreed to introduce the \$650 billion **European Stability Mechanism** - the permanent bailout fund meant to replace the EFSF - a year earlier than planned, in July 2012.

Germany has resisted calls to issue joint Eurobonds to combat rising borrowing costs throughout the single currency zone. However, Eurozone leaders announced plans in the summer of 2012 to push forward with further integration by creating a **single banking authority**, situated in the European Central Bank, as a first step towards developing a **Eurozone-wide banking union**. When in place, such an oversight mechanism could ultimately allow the Eurozone's rescue funds to, for example, directly aid Spanish banks, rather than channelling the loans through the already indebted Spanish government.<sup>19</sup>

### Conclusions

As a conclusion, the study focused on the Eurozone crisis, a long debated subject in the last years, from multiple points of view.

In the first part, there were analysed the main causes that are considered to stand behind the recent crisis.

Second part, tried to reveal how the crisis affected the functioning of the European Central Bank and the Euro, and, having this premises, how the European Central Bank was forced to response through its actions.

The last part was dedicated to some considerations about the future and the challenges that lie ahead in an uncertain economic context.

Passing through this topics, had a clear purpose: only by clearly understanding the reasons that stand behind a crisis, that had and still has deep consequences on the European Union as a whole and on its composing member states, we can learn some lessons, in order to avoid such event happening in the future.

As a suggestion for future researches, I believe that an interesting paper would consist into analysing the proposal for a banking union, as one the European leaders response to the crisis.

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<sup>18</sup> www.ecb.int.

<sup>19</sup> The Eurozone in crisis, Cristopher Alessi, 23 July 2012.



**References**

- The Eurozone in crisis, Cristopher Alessi, 23 July 2012.
- The European Central Bank in (the) crisis, Sylvester Eijffinger, Lex Hoogduin, CESifo DICE Report 1/2012.
- Crisis in the Eurozone, Costas Lapavitsas et al., Verso, UK, 2012, pg. 1-2.
- The European Central Bank and the Eurozone debt crisis, Daniela Gabor.
- Euro crash, the exit route from monetary failure in Europe, Brendan Brown, Palgrave Macmillan, Second edition, 2012.
- Money, debt and the New World Order, Philip Coggan, Penguin Books, 2012.