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Analysis on the Southern Europe Sovereign Debts Crisis.

- From causes to solutions: the Eurobond proposal.-

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INTRODUCTION

With its approval, on February 2nd 1992, the Maastricht Treaty designed not only the political, legal or social asset of the future European Union but declared the economic foundations for a single Monetary system. During that period the European leaders set the core reforms and the corporate governance system of the future Eurozone.

Twenty years later the pillars that were used to raise the Euro Area do not seem so solid and indestructible. The 2008 financial downfall led to an economic recession that reached the center of the European monetary system, showing structural problems and anomalies.

The wanting to delve into the recondite causes of the crisis motivated this analysis. In particular, the elaborate will focus on the Southern European countries. These States different nations share many similar cultural and sociological aspects. It does not seem a case that the crisis is concentrated mostly in this geographical area. In this case, the common cultural roots correspond to similar economic deficiencies.

The first chapter is dedicated to the structural inefficiencies that affected the process of European integration, analyzing the macroeconomic limits of Southern Europe, the Government Bond Market anomalies and the Spanish real estate bubble.

Afterwards, a precious element that helps the comprehension of the actual situation is the study of the policies adopted since the crisis exploded. Where the European corporate governance system is going through? The answer to this focal question will be furnished in the second part of the elaborate. The second chapter will provide a short description of the most relevant events occurred during the sovereign debt crisis, reporting the European responds to the crisis and illustrating the adjustments made by the European Central Bank to alleviate the crisis.

Then, crises do not last forever. Situations need to be addressed in accordance with a common vision of the future. The essential need that South Europe faces is to ensure the long term reliability of the Monetary Union. Since the beginning of the crisis, this not simple task has aroused plenty of different proposals, aimed by the objective of restoring the definitive political and economic order.

The sense of this thesis is to examine one of the most discussed long term solutions: the Eurobonds.

The final chapter will furnish the definition of Eurobond and illustrate the academic discussion about this proposal, comprehending the description of the political scenario.

CHAPTER 1 – ROOTS OF THE SOVREIGN DEBT CRISIS IN SOUTH EUROPE

The first chapter investigates the commixture of national and supranational responsibilities that worsened the crisis

1. LACK OF FISCAL DISCIPLINE

Since the beginning of the European economic integration, the need of an efficient fiscal policy coordination was clear. The respond that European institutions have given to this necessity showed some critical points of structural inadequacy. The stabilizing function, owned by the European institutions, was founded on selected tools like the Convergence Criteria or the Stability and Growth Pact. Those instruments were designed to protect members from economic shocks or financial instability.

The events occurred since the end of 2007, revealed the weaknesses of macroeconomic adjustment mechanisms and evidenced the European difficulties to address negative fiscal situations among Member States.

1.1 THE MAASTRICHT TREATY

The convergence criteria are the three most important macroeconomic requirements considered during the admission process to the European Monetary Union. Those rules, expressed by the Maastricht Treaty, had been used as a starting point to the creation of a solid European currency.

The criteria[1]are:

- **INFLATION RATE POLICY**

  Containment of the Inflation rate to favor the price stability.

  "The criterion on price stability referred to in the first indent of Article 140(1) of the Treaty on the Functioning of the European Union shall mean that a Member State has a price performance that is sustainable and an average rate of inflation, observed over a period of one year before the examination, that ***does not exceed by more than 1 ½ percentage points*** *that of, at most, the three best performing Member States in terms of price stability. Inflation shall be measured by means of the consumer price index on a comparable basis taking into account differences in national definitions."*

  Maastricht Treaty, -Art. 1; Protocol (No 13) on the convergence criteria referred to in Art. 140(1)

- **FISCAL POLICY**

  Limitation of the excessive deficit. Top value of the budget deficit to GDP ratio cannot be higher than **3%**, and the public debt cannot exceed **60%** of GDP.

  "the sustainability of the government financial position; this will be apparent from having achieved a

government budgetary position without a deficit that is excessive as determined in accordance with Article 126(6)".

Maastricht Treaty, The second indent of Art. 140(1)

- **LONG TERM INTEREST RATE POLICY**

  Control of the latest 12-month period interest rate among States.

  "The criterion on the convergence of interest rates referred to in the fourth indent of Article 140(1) of the said Treaty shall mean that, observed over a ***period of one year*** *before the examination, a Member State has had an average nominal long-term interest rate that does not exceed by more than* ***two percentage points*** *that of, at most, the* ***three best performing*** *Member States in terms of price stability. Interest rates shall be measured on the basis of long-term government bonds or comparable securities, taking into account differences in national definitions."*

Maastricht Treaty, Art. 4 of the Protocol (No 13) on the convergence criteria referred to in Art. 140(1)

- **EXCHANGE RATE POLICY**

  Keeping the exchange rate stability against the Euro.

  "the observance of the normal fluctuation margins provided for by the exchange-rate mechanism of the European Monetary System, for at least two years, without ***devaluing*** *against the euro".*

Maastricht Treaty, The third indent of Art. 140(1)

When the southern European countries approached the process of currency conversion into Euro, their public debt-to-GDP ratio and deficit-to-GDP ratio did not respect the requests.

Italy, Portugal and Spain adopted the European currency on January 1st 1999, but not all 3 nations successfully cut their deficit-to-GDP rate under the 3%. In 1998, Italy registered -2.7%, Spain touched the -3.0%, and Portugal did not respect the parameter because of a -3.9%. However, the Eurozone still accepted the Lusitanian country, because the convergence criteria were not so rigorous. Indeed, even if the deficit could not have been under the 3% it was considered sufficient if:

✓ either the ratio has declined substantially and continuously and reached a level that comes close to the reference value; or, alternatively,

✓ the excess over the reference value is only exceptional and temporary, and the ratio remains close to the reference value;

1.2 STABILITY AND GROWTH PACT

The Pact is a rule-based framework created to ensure the financial stability of the EMU members.

It was introduced by the Council Regulations N. 1466/97 and 1467/97[2]**,** and it was based on the

requirements set out in the Treaty of the Functioning of the European Union. It was designed to support and supplement the Maastricht Treaty rules at monitoring the fiscal conditions within the States.
The European institutions, especially the Council, received a role of surveillance on fiscal coordination policies and deficit control, attempting to diminish the impact of shocks or negative economic situations.
The Pact worked in accordance with two fundamental proposals: to prevent and to dissuade. The two "arms"[3] were introduced to achieve these objectives.

- **THE PREVENTIVE ARM** (entered into force 1 July 1998)
  Member States presented to the Commission annual stability programs or convergence programs, in order to reach the medium term objectives and keep a fiscal sound position. The commission evaluates the proposals and gives its opinion. Afterwards, if the commission has any doubt on the attainment of budgetary balance or fears an excessive deficit, proposes to the Council to address an Early warning against a State. Moreover, the Commission can decide the "Policy Advice": assigns direct policy recommendations to the national governments, leading their fiscal decisions.

- **THE DISSUASIVE ARM** (entered into force 1 January 1999)
  It is based on the EDP (excessive deficit procedure). This mechanism operates if the deficit exceeds the 3% of the GDP (limit fixed with the Maastricht Treaty). In that case, the Council addresses recommendations to Member States, including policies to reduce the excessive deficits and dictates a deadline to implement the necessary corrective reforms. The possibility of sanctions motivated the State Governments to follow the European indications, in case of non-respect of the supranational advises.
  The first version of the Stability and Growth Pact was not successful, because of the structural ineffectiveness at helping Member States to reach sound budgetary positions. Therefore, the European Council reformed it in 2005.
  Even Lucas Papademos (vice president of the ECB between 2002 and 2010) admitted those difficulties in a speech delivered at the Conference "The ECB and Its Watchers VII" [4]on June 2005. He acknowledged the incapacity of maintaining the budgetary stability throughout the first period of implementation:
  "*the Stability and Growth Pact did not succeed in preventing the occurrence of excessive deficits in several euro area countries"*
  The 2005 revision the SGP [5] set the new methodology for the implementation of MTOs (midterm objectives) by Member States, considering the difference of economic and fiscal circumstances in each country.
  The necessity to provide some distance of safety to the Maastricht deficit rules and to sustain the containment of debt inspired this change. Moreover, the European governance extended procedural deadlines, introducing new budgetary parameters that should have helped Member States affected by slow growth or negative cyclical adjustments. As an addition, the European Union decided to introduce long

term budgetary projections.

Unfortunately, as Schuknecht, Moutot, Rother and Stark (2011)[6] underline in a recent ECB paper:

"The implementation of the revised Pact was lenient. Significant extensions were immediately observed for deadlines under the excessive deficit procedure, and limited adjustment efforts were required."

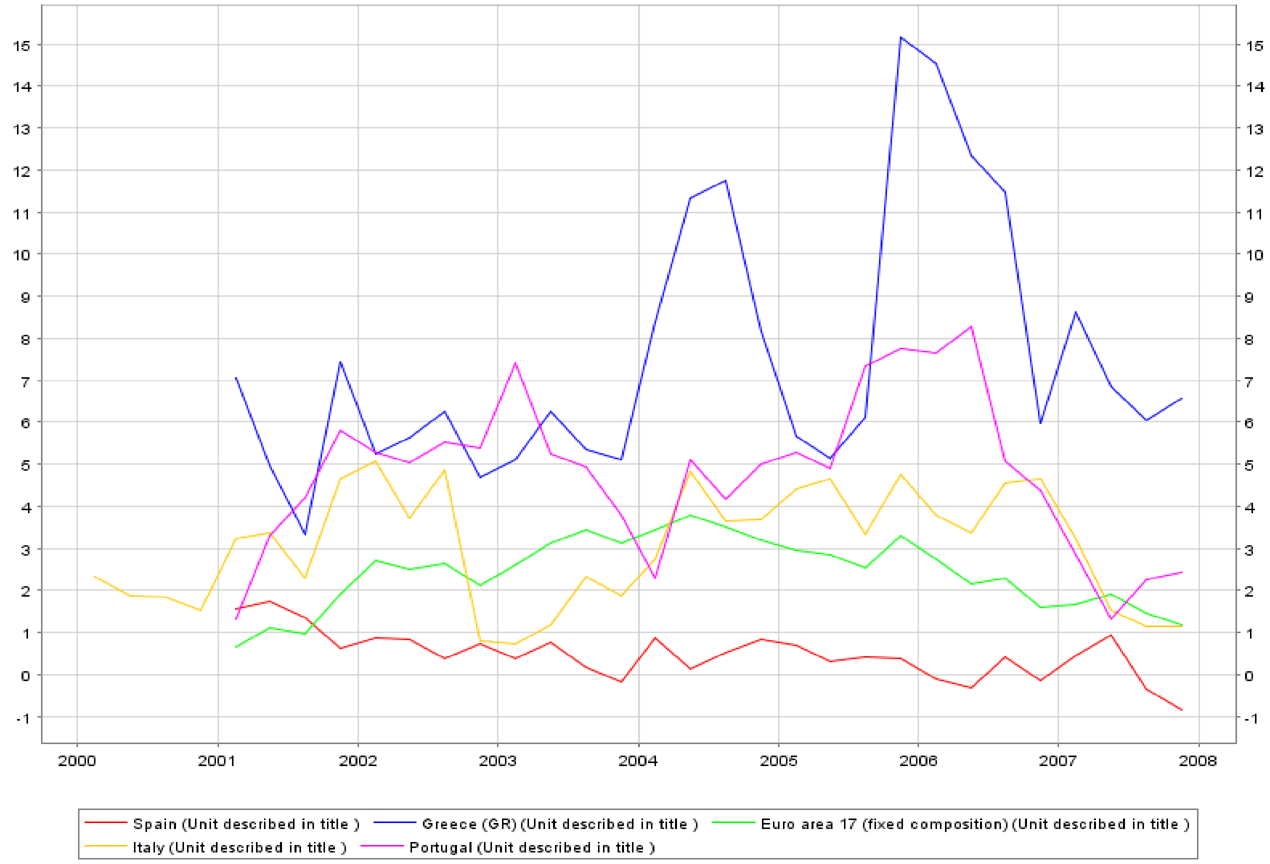
This statement clearly reassumes the lack of independence and efficiency that characterized the European institutions. The Member States have always been reluctant to put their operate under the total control of supranational institutions, and left for themselves a wide decisional power. This decision revealed unsustainable in the long term, and the Monetary union, based on the Maastricht Treaty should have been completed with a Political union.

1.3 SOUTHERN EUROPEAN COUNTRIES DATA

Throughout the years, breaking this set of economic rules became possible and the European governance, without the Member States wanting, remained sterile. Governments continued spending too much.

The economic performance of Southern European countries reflected the dysfunction of the supranational supervision. Their national deficits[7] or debts[8] well reassumed the consequences.

Figure 1: Debt in terms of annual Growth rates



Source (all series) : The ECB collects the annual data on individual countries directly from the national central banks (NCBs). This collection takes place in spring and autumn each year. The main data sources for NCBs are the ESA 95-based national accounts, which are compiled in most countries by NSIs, supplemented by NCB or finance ministry data on debt at nominal value. The ECB receives the quarterly non-financial accounts data from the individual countries via Eurostat. Quarterly financial accounts for general government and quarterterly Maastricht debt are received directly from the countries.

Greece left Dracma on January 1st 2001 with a negative annual deficit of -3.7% during 2000. Moreover, the debt burden increased from the 99.4% in 1996 to the 103.4% during 2000. The complexity of achieving a regular and stable debt reduction has been evident since those years. As a matter of fact, the 107.4% debt-to-GDP ratio, was the highest result among EU, before the financial crisis. The Greek deficit-to-GDP touched the biggest proportions (-7.5%) during 2004 (see Figure 2). Government diminished the structural imbalance just to a modest -6.5% in 2007.

Portugal arrived to the historic currency reform with a relatively low amount of public debt (51.8% in 1998) but, after the admission into the Eurozone, the annual deficit-to-GDP rate grew for five consecutive years: from -5.3% in 2001 to -4.1% in 2005 (see Figure 1). Debt burden grew from 50.4% in 2000 to 69.3% in 2006, settling to 68.3% at the end of 2007.

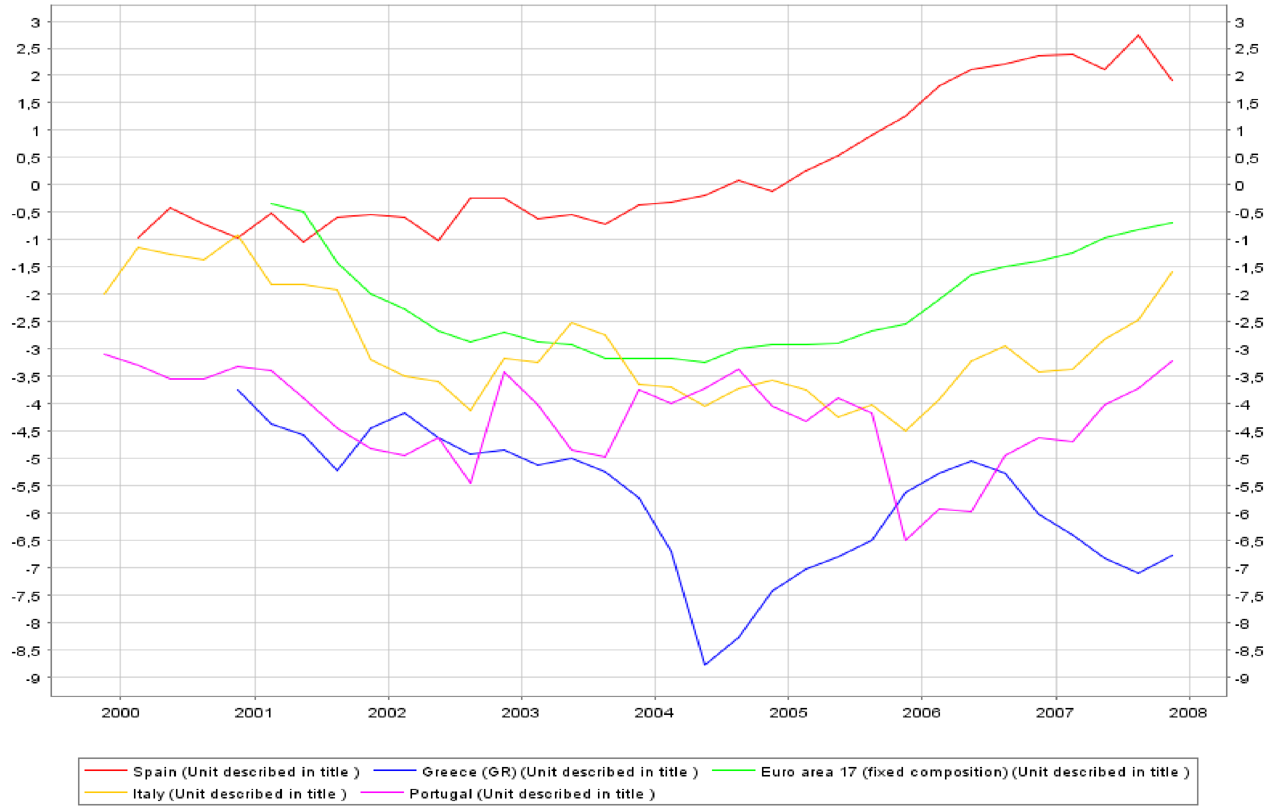
Italian debt decreased from 120.9% of GDP in 1995 to the 114.2% in 1998, pushed toward budgetary consolidation by a debt stability program. The domestic policies worked. Indeed, the constant and steady debt decrease continued till 2004 (103.4%). Since then, the tendency stopped and a new condition of instability led to the pre- crisis level of 103.1% in 2007. This change of direction is evident if we use the deficit prospective: government accumulated excessive fiscal imbalances from 2001 to 2006. Registering the highest parameter of -4.4% during 2005.

The Spanish situation was the much closer to the Maastricht among South Europe. The public debt in 1998 amounted to 64.1% and Spain fulfilled the European standard in 2000, reaching the 59.4%. Moreover, as a signal of the inequality between the Spanish and the other cases, the debt decreased to the 36.3% in 2007. The government had even budget surplus in the period between 2005 (1.3%) and 2007 (1.9%).

Although the Eurozone was based on the No-Bail-out principle, the majority of countries did not respect the Maastricht criteria, with the only exception of Ireland, Luxemburg, Finland, France and Portugal. Their fiscal values satisfied the debt-to-GDP ratio of 60%.

Euro has always represented a relevant political ambition and its ideological strength is high. Anyway, since the beginning of single currency experience, it was deducible that respecting the rules of the European Monetary Union would have been difficult for Greece, Portugal and Italy. These countries had a lack of fiscal discipline. Furthermore, manifested the intrinsic attitude towards chronic macroeconomic imbalances. The frequent imbalances inflicted them the higher risks of default in case of European economic crisis. The today situation it is the natural repercussion of old diseases and reflects national and European structural criticalities.

Figure 2: Annual Surplus/Deficit



Source (all series) : The ECB collects the annual data on individual countries directly from the national central banks (NCBs). This collection takes place in spring and autumn each year. The main data sources for NCBs are the ESA 95-based national accounts, which are compiled in most countries by NSIs, supplemented by NCB or finance ministry data on debt at nominal value. The ECB receives the quarterly non-financial accounts data from the individual countries via Eurostat. Quarterly financial accounts for general government and quarterterly Maastricht debt are received directly from the countries.

2. STRUCTURAL DEFICIENCIES

The numbers showed in the prior paragraph have multiple causes. As Szczygielski (2011)[9] underlines, the causes of the crisis are contained in a series of structural deficiencies.

In the following section are expressed some of the national and supranational economic weaknesses that cost a fiscal sound position to Southern European States.

2.1 LACK OF SUSTAINABLE GROWTH

Before the debt crisis exploded, Italy and Portugal have had the most evident inability to generate a constant growth rate[10]. In 2001, according to the Eurostat data, their real GDP-growth rate registered 2% in Portugal and 1.9% in Italy. This levels had not been overcome by the Lusitanian economy till 2007 (2.4%) and by the Italian GDP till 2006 (2.2%, best datum in the last 10 years). The lowest point has been touched during 2003, when Portugal experienced recession (-0.9%) and Italy had no growth.

Spain and Greece manifested more positive data. Their growths seemed stable and lasting. Since 2001 they have been constantly above the EU average. Greece fluctuated between the 3.5% in 2001 and the 3% at the end of 2007. The 5.9% during 2003 symbolized the peak of the Greek rise.

Spain has shown an impressive economic prosperity. The Iberian country registered 5% growth during 2000 and maintained a more sustained pace than the Eurozone, until 2007. Along with the economic growth, the GDP per capita raised[11]. The minimum difference between the Spanish citizens and the Eurozone average was diminished and the closest gap was reached in the course of two consecutive years: 2006 and 2007. The purchase power of the Iberian population achieved 105, and stabilized the difference with the EMU at 4 points (109).

The overall economic situation between 2002 and 2007 seemed steady and performances seemed durable. Reality instead, has demonstrate that pre-crisis fundamentals were not sustainable enough, especially without the markets trust.

2.2 LACK OF COMPETITIVENESS.

The previously analyzed countries presented a problem of competitiveness. Their economies did not adapt as fast as they should to some world-changing driving forces. Globalization first. Markets have faced the fall of price competitiveness and an increase in market share, but governments were not well-timed introducing crucial reforms. In the sequent segment we will try to analyze the burden of ancient structural macroeconomic shortages that limited their capacity to compete. The following data explain partly, but significantly, the complexity of macroeconomic deficiencies that current administrations have to face.

Cost of Labor

During the last decades Southern European workers could have defined themselves as citizens of wealthy and advanced nations. With the modern economic growth their salaries were increased as their future revenues expectations. Anyway, sometimes the expectations have gone further than the real productivity, and the labor force in these countries could have become too expensive. Nowadays, the marginal productivity of labor and its cost are key-factors to attract external investments.

For example, in Italy, the single currency did not allow anymore the governments to mask low marginal productivity with favorable exchange rates, obtained with the devaluation of Lira. Then, being competitive has become harder, even in the European market.

As Felipe and Kumar (2011)[12] point out, the OECD estimates about Unit Labor Costs in the Eurozone describe that:

"Unit labor costs have increased in all countries without exception, in some cases by a factor of 15 (e.g., Greece). The ratio of the 2007 value to the one for 1980 for Portugal is 9.5 (corresponding to an average annual growth rate of 8.45%); for Spain and Italy, 4.7 and 4.5 (or an average annual growth rate of 5.31% and 5.07%, respectively) …. The lowest increases were registered by Germany and the Netherlands, where the ratios are 1.6 and 1.7, respectively (average annual growth rate of 1.21% and 1.55%, respectively)."

In comparison with 1980, 2007 levels of nominal labor compensation were consistently increased:

"Italy (5.2 times or an average annual growth rate of 6.33%), and Spain (5.4 times, or an average annual growth rate of 6.43%); the lowest is for Germany (2 times, which translates into an average annual growth

rate of 2.66%)"

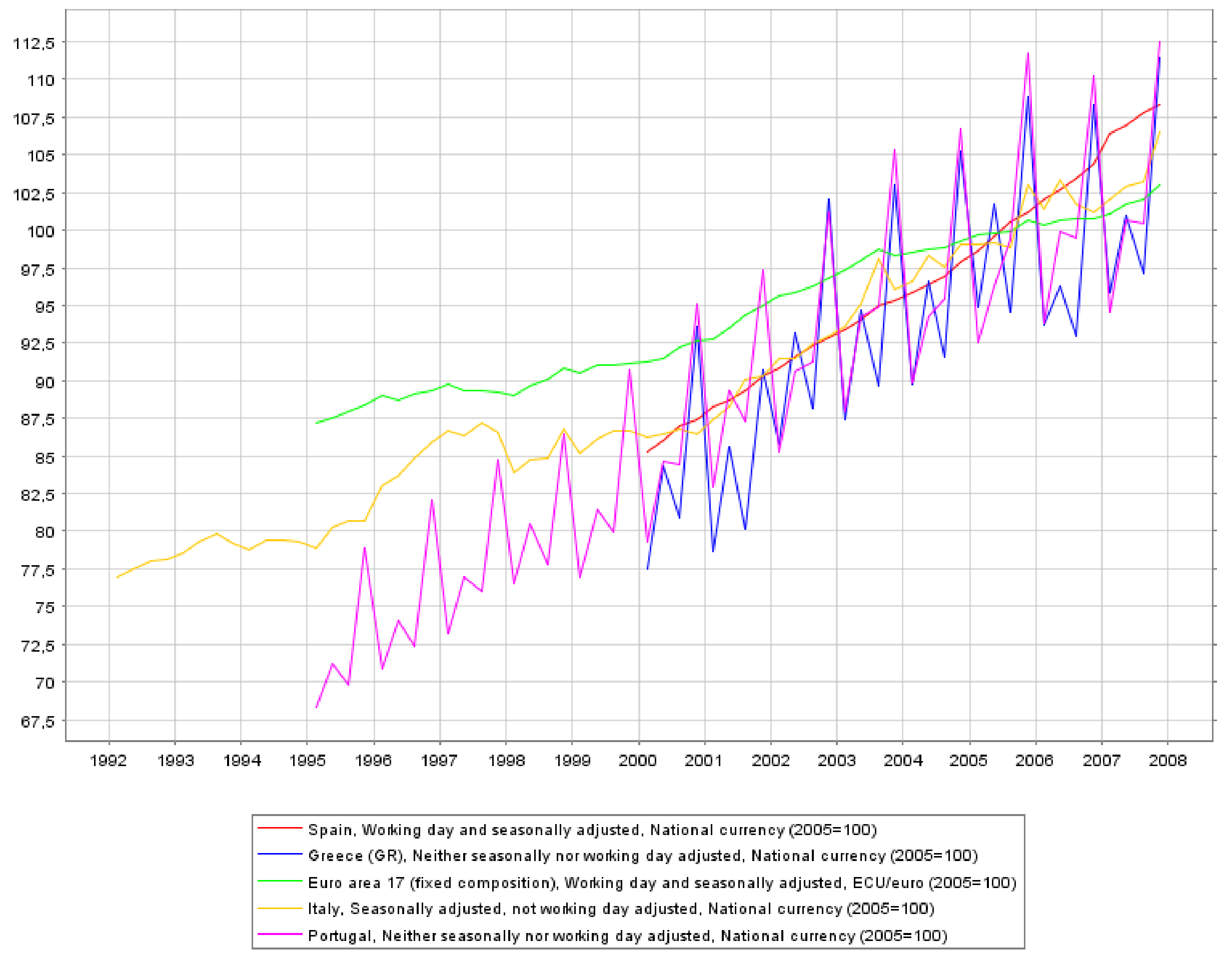
"Since 1995 (data available for all countries), the highest increases took place in Greece (ratio of the 2007 to the 1995 value is 2.2 and the average annual growth rate over the same period is 6.7%) . . . . Portugal (ratio is 1.66 or the average annual growth rate is 4.31%)"

The core principle is that the nominal wages grew faster than the labor productivity.

Labor cost rose systematically (see Figure 3) in Italy, Greece, Spain and Portugal but marginal productivity of labor remained low and workers did not generated consistent profits for investors.

However, if we only consider the growth of labor productivity, Portugal and Greece had a wide increase between 1995 – 2007.

F**igure 3: Unit Labor Cost**



Source (all series) : European Commission (Eurostat) and European Central Bank calculations based on Eurostat data

Balance of Payment crisis

Exports were not favored by the introduction of a common European currency. That's a logical conclusion if we consider the economic performances of the southern European realities. Current account balance is a prominent sign of economic fragility or lack of competitiveness. Whereas northern European industrial powers (like Germany) took advantaged from the absence of an exchange rate within the Monetary Union and could export their technological advanced products with a more sustained rhythm, the southern

citizens kept a steady negative balance of payments.
Analyzing the World Bank[13] data on Average Account Balance in terms of GDP percentage, we can recognize the balance of payments crisis. Exists an average imbalance for Italy, Spain, Portugal and Greece between 1999 and 2007.
Italy had the relatively best performances. The imbalance was first generated in 2001(-0.5%) and got worse during the following years. The progress was not uniform, but brought to the -2.9% of 2007.
The other three States included in this analysis showed more worrying structural tendencies.
Greece abandoned the surplus with the entrance into the Euro Area. The passage was traumatic for Greek exports, indeed from 1999 to 2000, the data passed from a +5.5% to a -7.9%. From that point the Greek economy could not improve the export numbers. The negative parameter of early 2000's, evolved in two digit deficits from 2006 (-11.3%). The Hellenic economy approached the global crisis with a -15%.
Portugal historically registered trade imbalances, indeed, the negative situation remained almost steady throughout a decade. From –8.5% in 1999 the data showed small changes until 2007 (-10.1%).
Spain got worse too, after the Eurozone introduction. The deficits kept growing (with the 2002 exception) and the -2.9% in 1999 grew more than three times, generating a -10% imbalance before the global crisis outbreak.
If is evident that Portugal, Spain or Greece did not gain competitiveness with the introduction of Euro, at the same time, is clear who improved exports and could reinforced its economy: Germany. The central European country inverted the imbalance of 1999 and 2000 (-1.3% and -1.7%) and escalated its exports, reaching a peak of +7.5% during 2007. The German case was not the only example of balance inversion, but helps understanding the mechanisms triggered off by the single currency.

Unemployment

A macroeconomic thermometer for the lack of competiveness that afflict a country during the medium period is the measurement of unemployment. The results of excessive labor market costs can be found in the analysis of this parameter.
In Southern Europe ,the lack of occupation was structurally high among some social categories (as young people who wants to enter into the Spanish job market) or across geographical areas less developed (as the south of Italy). All Southern Member States needed to actuate pro-market reforms. Their job markets responded to old requirements, extracted from old dynamics. One of the reasons why necessary reforms were not implemented in the Member States deals with the Policy making process. In Mediterranean countries, the strength and influence of selected lobby groups is far more resilient than others context. Settled professional categories tried to safeguard their advantageous position with every mean.
National governments implemented within their job markets the ancient demand of security and long term occupation. Nevertheless, when the world economic organization moved forward, the structural rigidity of labor did not allow administrations to respond with flexibility for the employees.

This statement can find a scientific parameter in the unemployment rates calculated by age. In this Countries (with the exception of Portugal) the under 25 data testified the struggle of young people at getting their first job.

Eurostat data[14] show how Italy, Spain and Greece mostly could not break the 20% unemployment barrier during the 1999-2007 period. Only Spain sustained a decisive negative trend, culminated in 2006 (17,9%), close to the Eurozone average of 17%. But the long term maintenance of the pre-crisis level (18,2%) was immediately questioned during the first year of economic depression. The 24,6% of 2008 forecasted the free fall that the under 25 employment rate would have experienced.

Greece and Italy had less effective policies for reducing the number of youth unemployed. The Hellenic State brought the negative result of 1999 (31.5%) to a slow and tiring decrement of 8.6 percentage point during 2007 and kept this trend even at the end of the first year of recession (22.1% in 2008). Nevertheless the progresses stopped and the number of under 25 unemployed grew fast, reaching the worrying nowadays levels: far over the 40%.

Italy had numbers similar to Spain. Close to the 30% threshold during 1999 (28%). The negative impact of this data fell sharply but not constantly, reaching the 20.3% before the crisis started to deteriorate the economic situation.

Portugal, who registered a satisfactory 10.8% before the introduction of Euro, was one of the European leading Member States in terms of youth occupation. However, soon Lusitanian population testified the increase of under 25 unemployment. During 2004 Portugal manifested a 18,9%, and surpassed the Eurozone averaged. This process continued till 2007, when the State touched the 20.4%.

The difficulties at entering into the job market dragged the total amount of unemployment to a raise and were the cost of job markets backwardness. There was necessity of modern pro-market reform that diminished the weight of market rigidity.

According to Eurostat[15], in terms of total unemployment, Greece and Spain have constantly shown the most relevant inefficiencies. Greek government had to face with a two digit unemployment rate throughout the 1999-2002 term. The best performance was registered in 2008 (7.7%), when the repercussion of the crisis still had to come.

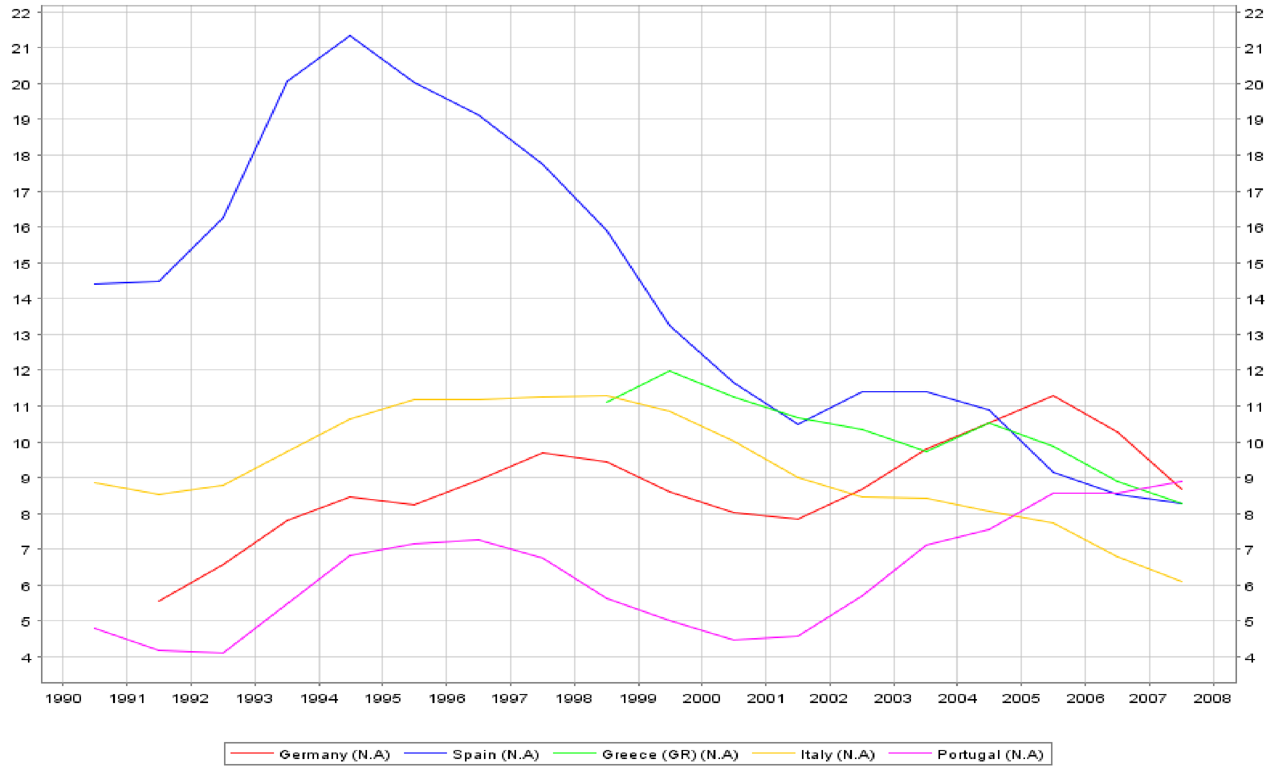
This parameter is an historical Achilles heel for Spain (see Figure 4). Indeed the double digit threshold was broken only in 2004. At that point the data were on the same line of Eurozone, reflecting also the important steps made in the under 25 job market. The reduction brought to the 2007 optimum (8.3%).

In Portugal the trend was opposite. Unemployment kept growing and surpassed the European average in 2006. Despite the negative progress, the data were contained at the end of 2007 to a 8.5%.

Italy, instead, has solidly shown a diminish of unemployment that reached the significant barrier of 6.1% in 2007. However, it is necessary to consider the differences that locally affect the Country and describe a large spread between geographical regions. The south of Italy reveals structural deficiencies, shaped throughout the decades by the absence of industries, infrastructures or legality[16].

Most of the previously exposed numbers were under the Eurozone averages data. This consideration explains how these countries were under the European standards in critical economic fields, and expresses efficiently how big their exposition could have been in case of a general recession situation. These States were the closest to the edge of the chasm.

Figure 4: Total Unemployment rate.



Source (all series) : Statistical Office of the European Commission (Eurostat)

2.3 LACK OF FISCAL TRASPARENCY

All four countries spend more than 20% of GDP in social programs every years (mostly for pensions and health care). Hence, social expenditure programs that characterize European welfare could not be met without a stable and widespread tax contribution from the population. Instead, often in South Europe tax collection systems have been ineffective. Tax evasion has cultural proportion in Mediterranean countries and unofficial economies are a social illness that State administration should cure.

Shadow Economies

Although they have a lot of merits, it is hard to tem an Italian or Greek as a tax payer. Anyway, this problem is more diffused than what the majority of people think. Indeed, according to a research, realized by Schneider(2011)[17]:

"The shadow economy reached its all-time high of €2.2 trillion in 2007"

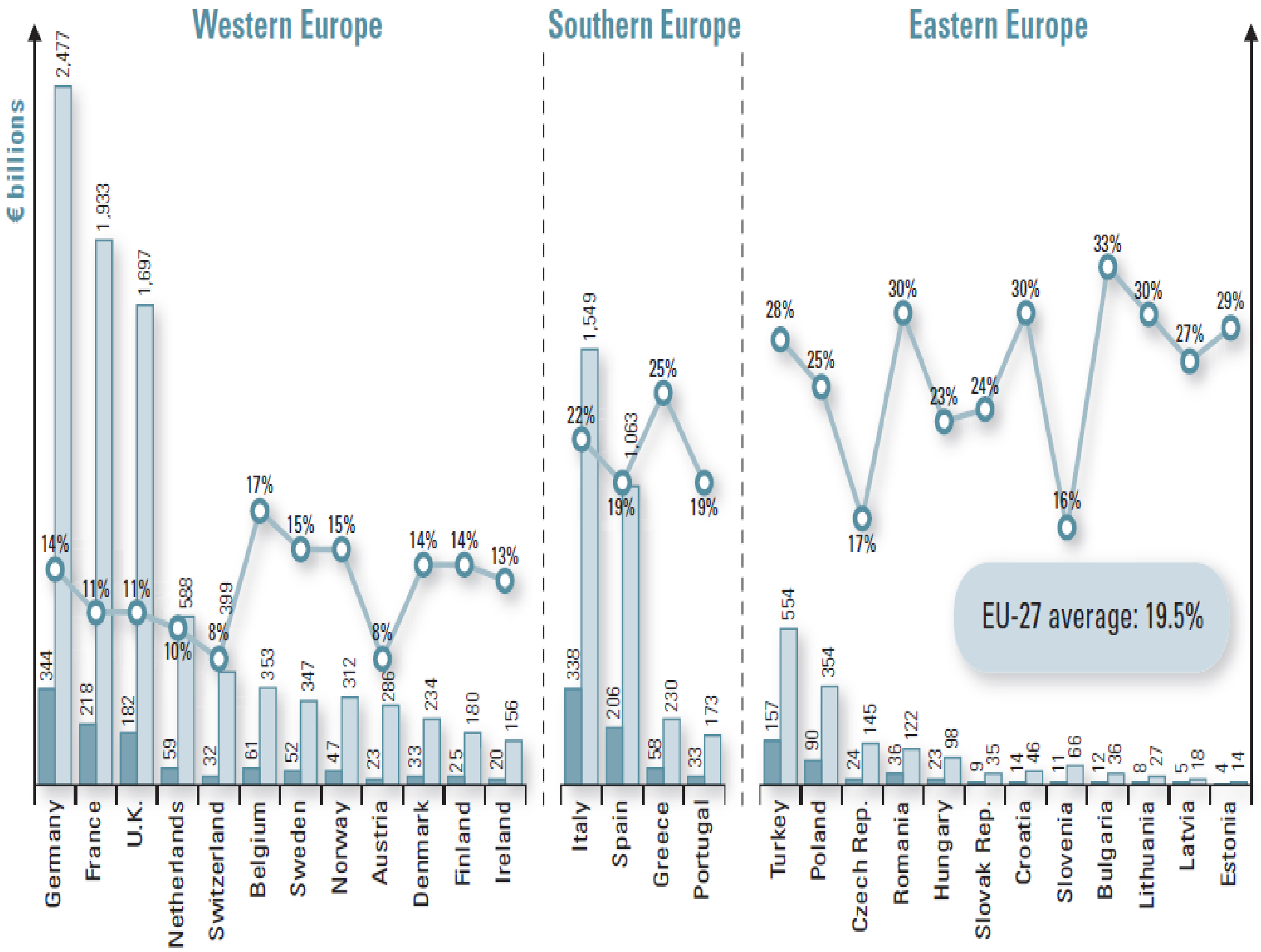
Within the Euro Area exist various environments and the weight of shadow economies on the GDP is diversified. The Figure 5 shows how the Southern Europe is between the Occidentalized West with a much solidity democratic culture and the post-communist East, where institutions and legality need to developed. While Spain and Portugal are on the edge of EU average, with a “grey” portion of 19% on the total GDP, the numbers are significant especially in Greek and Italian case. In particular, Italy has a gigantic amount of 338 billion euros for shadow economy (22% of the GDP), a number that represents almost the double of the Portuguese GDP. It is easy to understand why, recently, Italian governors declared war against tax evasion[18]. The reduction of this parameter can be fundamental to ensure the survival of the Italian solvency. Furthermore, a more accurate and effective tax taking before the crisis could have given highest resources to the State.

Afterwards the Greek case describes even better the massive cultural proportions of this phenomenon. Despite the 25% of shadow economy, which is the second highest among the Euro Area. As Szczygielski (2011)[19] points out, the gravity of social illness is represented by the creative accounting that the Greek institutions have shown in the course of 2001[20].

In fact, while Greece was subjected to the process of admission into the Eurozone, Goldman Sachs (one of the biggest investment banks of the world) borrowed billions to the Hellenic State, in order to help Athens to meet the Convergence rule on deficit and be part of the Euro Area. This flow of money from the private American investing institution to the public Greek finances remained hidden from the public. Masked as a currency trade rather than a loan. That year, Greece reduced the deficit on its balance sheet.

In this way, Government continued the public expense of money above its means and could match the European parameters without any cut. It is evident that the Greek economy was not ready for the passage from Dracma to Euro. But no one at the Joseph Bech building (the Eurostat headquarter) was informed about the real financial situation. A similar situation happened between the Italy and JP Morgan, back to 1996. The Mediterranean State swapped with the bank currency at a favorable exchange rate. The intervention gave more money to the government and made the State budget sustainable. On the other side, Italy ensured that future payments to the American institution would have not been booked as liabilities. In conclusion, these Countries combined excessive deficits and public spending with an irresponsible and risky management of public finances. The public or bureaucratic executives, unfortunately, represented the maximum expression of common national sins.

Figure 5: Shadow economies in relation to the GDP



GDP*Notes: Data for EU-27 (no shadow economy data on Cyprus, Luxembourg or Malta), plus Norway, Switzerland and EU candidate countries in 2010. The size of the shadow economy is calculated using the MIMIC and currency demand method.Sources: Dr. Friedrich Schneider, Johannes Kepler University of Linz, Austria; A.T. Kearney analysisShadow economyOfficial*

The dark blue columns indicate the levels of shadow economy. The light blue columns indicate the levels of GDP. The line graph reports the shadow economy as percentage of GDP.

2.4 MONETARY INFLEXIBILITY

A last factor of problematic can be found at the European level. This is probably the principal reason why the Eurozone troubled (more than the other international competitors) to respond the crisis.

The European Central Bank, has only partially the typical powers of a central bank. This economic institution, was established with the Treaty of Amsterdam with precise task and objectives[21]:

"The primary objective of the ESCB shall be to maintain ***price stability****. . . . without prejudice to the objective of price stability, the ESCB shall support the general economic policies in the Community with a view to*

contributing to the achievement of the objectives of the Community as laid down in Article 2." **(Treaty article 105.1)**

*The objectives of the Union are a high level of employment and sustainable and **non-inflationary** growth*.

(Article 2 of the Treaty on European Union)

The key Tasks are **(Article 105.2)**:

- ❖ Definition and implementation of monetary policy for the euro area;
- ❖ Conduct of foreign exchange operations;
- ❖ Holding and management of the official foreign reserves of the euro area countries;
- ❖ Promotion of the smooth operation of payment systems;

Plus, the ECB is the only bank that can permit the issuance of euro banknotes.

Since 1 June 1998, the core proposal of ensuring price stability within the Eurozone built the ECB independence. Thus, the monetary policies are directed to keep the year-on-year increase Harmonised Index of Consumer Prices (HICP) below but close the 2%, to avoid deflation and to set interest rates among Eurozone. Back to the 90s inflation was the strongest destabilizing macroeconomic force. Nevertheless, the power of the ECB (as the European integration) have never been modified or enlarged. Hence the bond market agitations underlined the lack of competences. According to Cheun, von Köppen-Mertes, and Weller (2009)[22], in the Euro Area, the Statue did not allowed the central bank to purchase public sector securities on the primary market or lend directly to public institutions. Moreover, the ECB could not treat public sector issuers more favorably than private ones, except in cases as levels of credit objectives or liquidity risk. Other central banks received more freedom to operate and a larger range of powers. The FED, could utilize open market operations, but the legislation that rules the American central bank (FRA) considers only few agencies as eligible for this type interventions (ex. Treasury). The Bank of England had even less legal restrictions and no statutory requirements regarding its eligible collateral.

Eurozone Member States could not count on the help of the central bank in case the markets lost their confidence and stopped buying their treasury bonds.

While the ECB exercised monetary policies only, fiscal policies have been left to the competence of national governments and a coordination between the economic governance tools has been impossible.

Furthermore, before 2010 the ECB could not stabilize the single financial imbalances, or monitor the banking sector. Leaving the European economic integration in a “grey” area of incompletion.

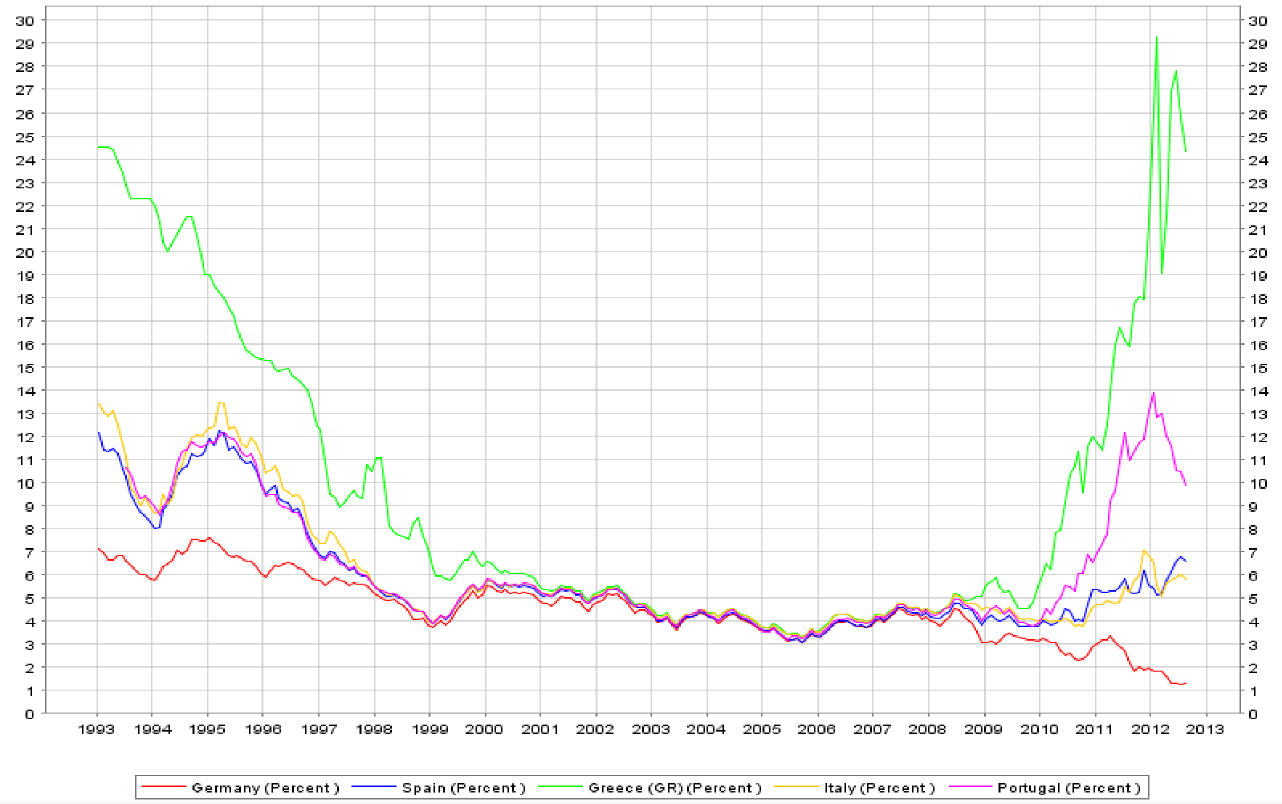
3. THE GOVERNMENT BONDS MARKETS

All the countries experienced some good economic fundamentals in the period between the beginning of

the Eurozone and the outbreak of the financial crisis. The introduction of the common European currency brought lower cost of borrowing for Member States with structural economic shortages that should have brought their cost of borrowing money to a much higher level.
Often the markets requirements had no responds.

Before the worldwide financial crisis, the yields of southern European government bonds were unnaturally low. Despite the inflexibility of ECB monetary policies and the impossibility of intervention on the bond market, the Figure 6 describes how during 90's the cost of borrowing for southern European countries fell sharply and stabilized at a sustainable level. These countries benefited of the single currency with favorable low interest rates on their 10 years government bond. As reported in the prior paragraphs, their economic fundamentals or their reliability were not comparable to the German ones.

Figure 6: 10 year Government Bond yields



Source : European Central Bank (ECB)

Anyway, we assisted to a convergence among interest rates, generated by the common participation to the Eurozone. Markets trusted the Maastricht convergence criteria and the European rigor in the application of legal requirements during the Euro introduction process.
According to the ECB data, Italy, Portugal, Greece and Spain all since October 2000 beneficed of interest rates on government bonds lower than 6%. The common process continued its decrease and by August 2002, all four countries broke the 5% threshold. Keeping their rhythm bond yields diminished under 4% on December 2004. Spain (3,09%), Greece (3,3%) and Italy (3,29%) reached lowest rates during September

2005. Three months before Portugal had touched the most favorable bond yield at 3,19%. At These levels, interest rates on BTPs or Obligaciones del Estado were close to the German Bunds like never before. Government bonds yields did not reflected the possibility of defaults.

Despite the favorable conditions, the flow of money generated by the decrease of interest rates was not used for the reduction of structural deficiencies (ex. excessive public debt). Indeed, Schuknecht, Moutot, Rother and Stark (2011)[23]claim that:

"The lower interest rates achieved thanks to EMU were used for increases in primary spending and tax cuts"

The increase of bond yields means the need to spend more public money to pay higher interest rate and to guarantee the solvency of the State.

Rating Agencies

Credit rating agencies are a key-factor in the determination of market behavior.

This agencies (Standard & Poor's, Fitch**,** Moody's are the most influent) analyze the situation of companies, banks or States bonds and express a ratings. Investors take their decisions looking also at the rating agencies reports. The judgments made by these organizations can determine the credibility of an institution. For example, the downgrade of a sovereign debt means an increase of the risk that the investors is taking. As a consequence, the investor will accept to buy the same bond only with an higher bond yield, as a "reward" for accepting a much higher degree of investment risk. In a 2012 research, Gaertner and Griesbach**[24]** quantified the cost of a downgrade in 0,3% on average borrowing cost when the State remains between AAA and A. Instead, the borrowing should be 3,12% more expensive than before when the downgrade occurs into the segment B or below. Indeed Gaertner declared:

"Once a country is being pushed into the 'B' segment, it is drifting further and further towards insolvency and it cannot really rescue itself, it needs outside help"

In the period 1999 – 2007 upgrades of sovereign debt exceeded downgrades (see table 1) and critical macroeconomic indicators were considered differently than nowadays. Since November 24th 1999, Standard & Poor's attributed A to Greek sovereign debt and from November 2005 to January 2009 the positive rate, which meant a "*strong capacity to meet financial commitments, but somewhat susceptible to adverse economic conditions and changes in circumstances"* **[25]**, remained.

Between May 1998 to October 2006 the high Italian public debt received an even higher rating (AA). S&P recognized a "*Very strong capacity to meet financial commitments"*. Afterwards, Italy saw its rate weakened to A+ during 2006.

Portugal maintained its AA since January 21st 2009, after more than 15 years of excellent parameters.

Two days earlier Spain, who had the best rating amount South Europe, lost its AAA and its*"Extremely strong capacity to meet financial commitments"*.

Gaertner synthesized the difference in the approach used by rating agencies:

"For a lot of euro zone countries ... they were treated in a way that differs from how they were treated

before the financial crisis"

Table 1

Sovereign Rating And Country T&C Assessment Histories As Of May 31, 2010		
Date	**Local currency rating LT/Outlook/ST**	**Foreign currency rating LT/Outlook/ST**
Greece (Hellenic Republic)		
Dec.16, 2009	BBB+/Watch Neg/A-2	BBB+/Watch Neg/A-2
Dec.7, 2009	A-/Watch Neg/A-2	A-/Watch Neg/A-2
Jan.14, 2009	A-/Stable/A-2	A-/Stable/A-2
Jan.9, 2009	A/Watch Neg/A-1	A/Watch Neg/A-1
Nov.1, 2005	A/Stable/A-1	A/Stable/A-1
Nov.17, 2004	A/Stable/A-1	A/Stable/A-1
Sept.13, 2004	A+/Negative/A-1	A+/Negative/A-1
Jun.10, 2003	A+/Stable/A-1	A+/Stable/A-1
Mar.13,2001	A/Positive/A-1	A/Positive/A-1
Nov.24, 1999	A-/Positive/A-1	A-/Positive/A-1
Italy (Republic of)		
May 20, 2011	A+/Negative/A-1+	A+/Negative/A-1+
Oct.19, 2006	A+/Stable/A-1+	A+/Stable/A-1+
Nov.1, 2005	AA-/Negative/A-1+	AA-/Negative/A-1+
Aug.8, 2005	AA-/Negative/A-1+	AA-/Negative/A-1+
July7, 2004	AA-/Stable/A-1+	AA-/Stable/A-1+
Jan.15, 2003	AA/Negative/A-1+	AA/Negative/A-1+
May 6, 1998	AA/Stable/A-1+	AA/Stable/A-1+
Portugal (Republic of)		
Jan.21, 2009	A+/Stable/A-1	A+/Stable/A-1
Jan.13, 2009	AA-/Watch Neg/A-1+	AA-/Watch Neg/A-1+
Nov.1, 2005	AA-/Stable/A-1+	AA-/Stable/A-1+
Jun.27, 2005	AA-/Stable/A-1+	AA-/Stable/A-1+
Oct.29, 2004	AA/Negative/A-1+	AA/Negative/A-1+
Dec.15, 1998	AA/Stable/A-1+	AA/Stable/A-1+
May 6, 1998	AA-/Positive/A-1+	AA-/Positive/A-1+
Spain (Kingdom of)		
Jan.19, 2009	AA+/Stable/A-1+	AA+/Stable/A-1+

Jan.12, 2009	AAA/Watch Neg/A-1+	AAA/Watch Neg/A-1+
Nov.1, 2005	AAA/Stable/A-1+	AAA/Stable/A-1+
Dec.13, 2004	AAA/Stable/A-1+	AAA/Stable/A-1+
July30, 2003	AA+/Positive/A-1+	AA+/Positive/A-1+
Mar.31,1999	AA+/Stable/A-1+	AA+/Stable/A-1+
May 6, 1998	AA/Positive/A-1+	AA/Positive/A-1+

Source: Standard & Poor's (http://www.standardandpoors.com/ratingsdirect)

4. SPANISH REAL ESTATE MARKET BUBBLE

In Spain the dynamics that caused the debt crisis were different than Italy, Greece or Portugal. Before 2007, the Iberian State had a contained public debt, lower structural deficits and its growth seemed sustainable. Thus, the crisis did not burst from public debt imbalances. On the contrary, the private sector collected an unsustainable high debt and forced the State to a massive intervention. Government had to bailout banks and became debtor to the foreign investors. Another driving force that weakened government position was the ongoing recession: the economic negative situation eroded tax revenues for the State and enlarged net debt.

The real estate market bubble start to form back to 1995. The housing prices between 1995 and 2007 averaged every year an increase of 10%**.** Banks facilitated the accumulation of private debt distributing the cheap credit available on financial markets. Stein (2007)**[26]** reveals how the capital gain in private housing sector, higher than interest rates, fueled this mechanism. Spanish banks borrowed money abroad benefiting of lower interest rates. At the same time, prices and the debt ratio in the real estate market kept rising. This amount of debt was owned, directly, by Spanish banks and, indirectly, by foreign investors. The solvency of debt seemed as guaranteed form a constant and unstopped capital gain in the housing market (not from the margin productivity of capital). The system functioned until 2007, when capital gains became lower than interest rates. The growth of housing prices declined and the increasing interest rate surpassed the amount of capital gain. The net worth of the real estate sector vanished and the market collapsed. The loans that the private sector received from the banks were not repaid and the credit institutions risked to failure. The banks found themselves without the liquidity necessary to repay international investors. Then, the State intervened purchasing the bank debt and substituting it with government debt.

Moreover, the economic downturn imposed interventions to stimulate the aggregate demand with the use of fiscal stimulus. Government kept increasing its expenditure. The logical consequence to this necessary policies was the increase of the sovereign debt.

CHAPTER 2 – SOLUTIONS ADOPTED AT EUROPEAN LEVEL

The following chapter focuses on policies adopted to contrast the negative trend generate by the outbreak of the financial slump and to contain the weight of some macroeconomic deficiencies, that the 2008 crisis highlighted.

1.CHANGES IN THE ECONOMIC SCENARIOS

In the following paragraph will be rapidly reassumed the most significant events in the South Europe debt crisis.

1.1 2008

The 2008 financial downfall has soon been defined as the worst recession since the Great Depression. As usually happened before, the European countries reacted deciding to give a new boost to the economy. On November 26th 2008, Europe launched the Recovery Plan[27], trying to remedy to the fragility of financial markets, the low level of confidence that slowed down consumption and the fall of exports. A mixture of short-term and long-term policies based the new Plan. The intention was to combine fiscal stimulus, incrementing purchasing power and investments in key sectors (like clean technologies, education and infrastructures). The total 200 billion funds required for this massive intervention were collected at national (170 billion) and supranational level (30 billion, from EIB and EU), with the precise purpose:

"to boost falling demand, prevent knock-on effects on investments and employment, and protect growth and jobs"[28].

Crisis debilitated the financial situations of south-European economies, and the real burden of their structural inefficiencies started to put pressure on their short-time policies, reducing their space of movement. The new public expenditure encouraged with the Recovery Plan had to cohabit with the already high State contribution for the welfare state programs.

As Eurostat reported, Greece was aggravating the 2007 deficit (-6.5%) to 9.8% and enlarging its debt to 113% of GDP. Spain and Portugal passed from a -1.9% financial imbalance in 2007 to respectively -4.5% and -3.7% at the end of 2008. As a consequence, the Portuguese touched 71.6% of GDP. Instead, the Spanish debit remained low (40.2% in 2008). Italy suffered the lowest deficit among South Europe and achieved -2.7%.

1.2 2009

The suspect that the recession was not over started to scatter during 2009. Months after the subprime slump and the failure of Lehman Brothers, worrying signs of recession continued and started moving the concern from the private sector to public finances.

In Athens, the new socialist government elected on October 4th and guided by George Papandreou[29] had to face the rising concern about the public debt, diffused at the end of summer. Troubles started in December with the first significant downgrade under in years under the "A" threshold[30]. According to the Standard & Poor's definition of "BBB", Greece was judged having:

"Adequate capacity to meet financial commitments, but more subject to adverse economic conditions"

Austerity began in the end of December when the Greek Prime Minister announced cuts for the first time.

The fiscal situation revealed as unsustainable: deficit broke out at 15.6% and the debt almost touched the 130% (129.4%).The Greek sovereign debt crisis officially began.
The other States perceived the same slump. Spain collapse from 40.2% of debt to 53.9% (11.2% of deficit), Italy broke the 115% threshold and saw its debt arriving at 116% of GDP, suffering of a -5.4% deficit. Portugal also could not contain the fiscal imbalance (-7.4%) and incremented its debt to the 83.1%.

1.3 2010

The first signals of supranational political mobilization were sent during 2010. The real economy difficulties widespread concern among citizens, the social tensions grew. Austerity measure became a common intervention across European nations. The survival of Euro or the possibility of bailout mechanisms started being discussed. International criticism invested also the Portuguese, and Spanish situations.
Investors turn their back against Athens. After decades of favorable interest rates, foreign investors did not believe in Greek capability to refund debts. Market seemed to open their eyes on the real economic situation for the first time. The macroeconomic data convinced operators that the Southern European State would have been insolvent. Yields on government bonds increased (see Figure 6), and long term interest rate quickly surpassed the 6% during January 2010 (6.02%) and arrived on the edge of 8% at the end of May (7.97%).
The concrete risk of Greek default put the Eurozone leaders under pressure. Markets suffered massive losses and the Hellenic plans of deficit reduction were put under the international observation. The "Troika" was born. This Russian word, which means "triumvirate", became a popular acronym coined to identify the three institutions (International Monetary Fund, European Central Bank and European Commission) that assumed the task to monitor and eventually help countries with fiscal imbalances.
At the same time Greek population did not accept the possibility of austerity reforms: protests and demonstrations started to crowd the streets of the Capital.

Greece First Bailout

Despite German malcontent, Athens received the first bailout on May 2nd 2010[31]. Was constituted a loan from EU and IMF to the Hellenic State that was 110 billion euros worth. The national government paid a high price. Papandreou committed his country to 30 billion euros of budget cuts. The bailout conduct to the approval of an Austerity Plan on May 10th 2010 by the Greek Parliament[32]. Decisions were drastic and involved the most relevant expenditure sectors. Retirement age was elevated, wages and pensions were cut and taxes were increased or introduced. The value added tax was raised from 21% to 23%, and specific taxes on fuel, alcohol, cigarettes or luxury were imposed.
Europe responded to the Greek effort on May 9th 2010, with the approval of the European Financial Stability Facility (EFSF)[33]. This bailout fund was the first stability intervention that modified the EU asset since the beginning of the debt crisis and came after months of negotiations. Member States decided to form a safety net of 750 billion euros worth, in order to ensure stability within the Eurozone. The deal

planned a multilateral collaboration from governments (440 billion euros), IMF (250 billion) and EC (60 billion).
The structure, constituted under the law of Luxemburg, was formed with a strong independence feature. European Commission should have integrated the decision making. Moreover, the European Investment Bank (EIB) should have given contribution for treasury management and administrative coordination. The EFSF should have given immediate relief to struggling economies.
Furthermore, on May 11th, the Council of European Union approved another impermanent solution: the European Financial Stability Mechanism.
In the meantime, the Spanish socialist government approved the first austerity plan[34] by the end of June. The State recuperated 15 billion euros cutting wages and reforming labor, but the price that the Spanish institutions paid was the increase of political instability and generation of dissatisfaction among citizens.
These provisional remedies seemed to not satisfy the markets and the clime of distrust about the Greek future continued. Therefore, investors soon required two digit interest rates on Greek government bonds by July 2010 (10.34%)and by the end of the year, government bonds suffered a 12% interest rate, deficit was diminished, but still elevated to the 10.3% and debt arrived to 145% of GDP. Spain followed the trend of low deficit reduction to the -4.6%, but saw its public debt overcoming the Maastricht threshold of 60% (61.2%) and started losing the markets trust (bond interest rate was at 5.38% in December). Italy seemed to keep a sizeable reputation and conceding a relatively low 4.18% for bond yields, despite the consistent deficit (-4.6%) and an outstanding debt (118.6% of GDP). Portugal suffered of the instability on the bonds market and its rate were subjected to an accelerate raising trend. The long period interest touched the 6.53% in the end of the year. The Lusitanian country was the only southern European State with an increased deficit (-7.8%). The Portuguese debt exploded to the 93.3%.

1.4 2011

During this year the recession assumed the largest proportions. The sovereign debt instability infected the third largest economy of the Eurozone (Italy) and provoked massive political and social changes.

Portugal Bailout

The first one to collapse was the Portuguese situation: on April 7th, Lisbon, facing the 7.8% interest rate, officially requested a bailout[35]. On May, was approved a 7and half-year loan and Portugal received 78 billion euros[36], divided in multiple tranches. The aid included 12 billion for the recapitalization of the national bank and it was bonded to a macro-economic review program. The prime minister Fernando Teixeira dos Santos accepted to adopt an austerity plan and promote unpopular cuts[37]. Lisbon accorded to block public sector salaries, increase or implement new taxes (like on cars or tobacco), privatize national companies, decrease or freeze pensions and other welfare state programs. The resources were emanated by EFSF, EFSM and IMF. Afterwards, the Portuguese bonds rates increased roughly from the 7.8% in March to the 13.08% in December. Moreover, rating agencies downgraded the Lusitanian capacity of solvency. In

June, Moody's prospect a high possibility of default and diminished to Ba2 the classification of long term government bonds[38]. At the end of 2011, despite a limited deficit decrease (-5.1%), the total amount of Portuguese debt became bigger than the total GDP (107.8%).

Greece Second Bailout

In Athens, things went worse. The Greek government seemed to have no future, constricted between the impossibility of guaranteeing solvency and the impossibility of abandoning the Euro Area. In May long term interest were on the edge of 16% (15.94%) and Standard & Poor's attributed to the Hellenic economy the lowest rate possible: CCC[39]. Greece was judged "*Currently vulnerable and dependent on favorable business, financial and economic conditions to meet financial commitments".* The downgrade followed insistent news on the possibility of another bailout. The package seemed forecasted by the decision taken on July 11th 2011, when the Eurogroup approved the European Stability Mechanism Treaty. It was arranged that the new lending facility would have substituted the EFSF in 2013, gathering its resources with ulterior capitals.

European leaders decided the second loan on July 21st but the approval did not occur until March 2012. The definitive worth of the package was set at 130 billion euros[40]. The aids were articulated in subsequent installments and based on a multilateral contribution (IMF participated with 28 billion). The bailout responded to the necessity of ensuring Greek solvency until 2020. Moreover, it was decided that the EFSF would have distributed a first tranche of loans for a total value of 39.4 billion.

As for the previous package, the transfers of money would have been subjected to the implementation of strong structural transformations, in order to reduce the public debt. Taxes were increased and spending cut another time.

The result of this recessive spiral was that Greece lost definitively markets trust and by the end of the year Greek bonds fell to the catastrophic rate of 21.12%. Deficit kept decreasing slowly (-9.1%) and debt reached the incredible amount of 165.3% of GDP.

During summer 2011, worries about Italian and Spanish contagion started to diffuse. Vítor Constâncio (Vice-President of the ECB) clearly reassumed the mechanism provoked by the events of early 2011.

In a speech delivered at the Bocconi University/Intesa Sanpaolo conference on "Bank Competitiveness in the Post-crisis World"[41], he affirmed that:

"The downgrade of Portugal and, above all, the continuing fears of a Greek default apparently triggered a sell-off in Spanish and Italian government bonds. There had not been adverse data releases concerning the Spanish and Italian economies or budgetary situations around that time. By 18 July Italian government bond yields had increased by almost 100 basis points, while Spanish ones had increased by more than 80 basis points"

The doubts around Italian and Spanish capacity of solving public debt increased. The uncertainty caused the approval of austerity reforms. In September, the Italian senate approved 59.8 billion savings[42], obtained with the usual combination of more taxes and less spending. The value added tax was increased of a percentage point (from 20% to 21%), retirement age was raised for selected categories, public sector wages were frozen and a new tax on energy was introduced. Despite this effort, the weight of bond yields (7.06% in November) cost the political leadership to Silvio Berlusconi as he was constricted to resign on November 12^{th}[43].

At the end of the year the Italian deficit was contained to -3.9% and the public debt grew over the 120% (120.1%). Spain could calm down the market nervousness only with the help of future elections and the announce [44] that Zapatero would not have stand for the re-election. However, the bond yields arriver to 5.53% in December -8.5% pushed the debt to the 68.5% of GDP.

The economic instability brought harsh austerity measures, then those policies conducted firstly to the lack of consensus and secondly to political changes. By the end of 2011, in three of the four analyzed countries, the Prime ministers resigned. After those decisions South Europe chose between two directions: elections (as in Spain and Portugal) or the formation of technocratic governments (as in Italy and Greece).

2. EUROPEAN UNION INITIATIVES

This paragraph will analyze the most relevant supranational policies adopted to slow down effects of massive recession mechanism, caused by excessive interest rates on government bonds.

2.1 INSTRUMENTS FOR CRISIS MANAGEMENT (New Europe financial facilities)

Europe first goal was to reduce the cost of borrowing for countries with uncertain fiscal situations. The objective was to establish a consistent framework of institutional tools that could safeguard government finances.

This proposal generated the two mechanism (EFSF and EFSM) and the approval of a new Stability Market Program for the ECB. The 27 economic and finance Ministers of all Member States took these decisions on May 8^{th} and 9^{th} 2010, during the Economic and Financial Affairs Council (Ecofin).

The lending facilities represented the first move to repair to sovereign debt excessive imbalances.

2.1.1 EFSF

The European Financial Stability Facility (EFSF) was a new liability tool, created (on June 7^{th}2010) to guarantee financial assistance for countries that struggled at keeping sound and sustainable fiscal conditions. The purpose was creating an emergency measure capable to give what Member States and their economies needed more: liquidity and assistance. Because of the low level of confidence, markets did not supply anymore funds to States in critical situations. Thus, became necessary to create a supervision mechanism and an institution with specific goals[45]:

"EFSF's mandate is to safeguard financial stability in Europe by providing financial assistance to euro area Member States"

The EFSF is a company based on a debt issuance program. It is possible to consider the first message gave from EU to the markets in the tentative to recreate the necessary trust and to avoid the risk of short-term financial difficulties.

The lending facility is a legally institution[46], separated from the EU, who only coordinates market interventions with the Commission, but borrows financial resources in its own right. The EFSF is authorized to use issue bonds and other debt instruments to ensure stability and promote specific activities[47]:

- Provide loans to countries in financial difficulties.

- Intervene in the debt primary markets.

  Primary market interventions were created to purchases maximum the 50% of the government bonds issued during a public auction. The purpose is to ensure trust between States and borrowers and avoid risk of insufficient demand. This function can be absolved only if the State national is subjected to an adjustment program or a precautionary program. The goal is to make possible the acceptance of a country that is returning on the market. The EFSF can hold bonds or resell them, alternatively to the State or to private investors.

- Intervene in the debt secondary markets.

  In this case, intervention is allowed only in selected eventualities. For example, if the ECB recognizes exceptional financial market circumstances that put financial stability in jeopardy or if the member State requires assistance to the Eurogroup. Ensuring liquidity and incentives to investors, this kind of operations are provided to facilitate the functioning of markets and to guarantee an adequate level in government bonds prices.

- Act on the basis of a precautionary program.

  This procedure transfers credit from the facility to member States. The amount of credit depends on GDP of the country and oscillates between the 2% and the 10% of the Gross Domestic Product. The program is 1 year- long with the possibility of renovations. The process is targeted to avoid problems at obtaining financial resources on the capital market and to build up market trust. The credit is provided with three different modalities, depending on the fiscal solidity of the beneficiary State. The concession of credit generates enhanced surveillance on the behavior of the country.

- Finance recapitalizations of financial institutions through loans to governments.

  The recapitalization is favored by sustainable borrowing costs and is finalized to inhibit the "contagion of financial stress". Loans are guaranteed to Member State that need to do distributed the funds to financial institutions.

  Eurozone Member States own the EFSF. As Table 2 reports, the shareholders contributed in different measure to creation of the facility. Each shareholder is represented with a member in the Board of Directors. The single contribution to the fund is directly proportionated to the political and economic relevance of participant States.

Indeed, Germany, France, Italy and Spain guarantee the 77.1% of contribution, for the total amount of more than 600 billion euros. The overall "fire power" of the EFSF is close to €780 billion euros, with a lending capacity of €440 billion.

The shareholders are guarantors for the correct functioning of EFSF. The structure is designed to ensure payments even in case of borrowers default, thanking to a credit enhanced system.

These characteristics assured the solidity of the lending authority and helped this institution to obtain reliable (not excellent) evaluations from the principle ratings agencies[48], both in short and long term (AA+ from Standard& Poor's, AAA from Fitch and Aaa from Moody's).

Table 2: EFSF Shareholders

Member States	Credit rating (S&P/Moodys/Fitch)	New EFSF maximum guarantee Commitments (€m)	New EFSF contribution key (%)	New EFSF maximum guarantee commitments (PT, GR, IE stepped out)	New EFSF contribution key in % (PT, GR, IE stepped out)
Austria	(AA+/Aaa/AAA)	21,639.19	2.78	21,639.19	2.99
Belgium	(AA/Aa3/AA)	27,031.99	3.47	27,031.99	3.72
Cyprus	(BB/Ba3/BB+)	1,525.68	0.20	1,525.68	0.21
Estonia	(AA-/A1/A+)	1,994.86	0.26	1,994.86	0.27
Finland	(AAA/Aaa/AAA)	13,974.03	1.79	13,974.03	1.92
France	(AA+/Aaa/AAA)	158,487.53	20.31	158,487.53	21.83
Germany	(AAA/Aaa/AAA	211,045.90	27.06	211,045.90	29.07
Greece	(CCC/C/CCC)	21,897.74	2.81	0.00	0.00
Ireland	(BBB+/Ba1/BBB+)	12,378.15	1.59	0.00	0.00
Italy	(BBB+/Baa2/A-)	139,267.81	17.86	139,267.81	19.18
Luxembourg	(AAA/Aaa/AAA)	1,946.94	0.25	1,946.94	0.27
Malta	(A-/A3/A+)	704.33	0.09	704.33	0.10
Netherlands	(AAA/Aaa/AAA)	44,446.32	5.70	44,446.32	6.12
Portugal	(BB/Ba3/BB+)	19,507.26	2.50	0.00	0.00
Slovakia	(A/A2/A+)	7,727.57	0.99	7,727.57	1.06
Slovenia	(A+/Baa2/A)	3,664.30	0.47	3,664.30	0.51
Spain	(BBB+/Baa3/BBB)	92,543.56	11.87	92,543.56	12.75
Total		**779,783.14**	**100**	**726,000.01**	**100**

Source:EFSF

The European Investment Bank supported the facility for treasury management and administrative organization. The authority destined loans to requiring Member State since February 1st 2011, when 3.6 billion euros, were transferred to Ireland, with the objective of facing fiscal instability. Nowadays, the Board of directors and the CEO (Klaus Regling) have already decided and implemented procedures, concentrated in Ireland, Portugal and Greece (see Table 3). In exchange for austerity policies, these countries already received 103.3 billion euros (respectively, 12 to Ireland, 73.9 to Greece and 17.4 to Portugal) and still 85 billion are pending (5.7 to Ireland, 70.7 to Greece and 8.6 to Portugal).

Furthermore, during June 2012, Luis de Guindos (Finance Minister of Spain) requested 100 billion euros were to recapitalize national banks[49], who suffered of the real estate market blast. The EFSF already stipulated loans for 440 billion euros (17 to Ireland, 26 to Portugal, 144.6 to Greece and 100 to the Spanish banks). The bailout facility still has a residual capacity of 292 billion.

Table 3: Loans lent to Southern European Countries

Beneficiary country	Date of disbursement	Amount disbursed	Maturity
Portugal	22/06/2011	€3.7 billion	05/07/2021
	29/06/2011	€2.2 billion	05/12/2016
	20/12/2011	€1 billion	23/08/2012
	12/01/2012	€1.7 billion	04/02/2015
	19/01/2012	€1 billion	19/07/2012
	30/05/2012	€5.2 billion	30/05/2032
	17/07/2012	€2.6 billion	17/07/2038
Current average maturity 12.51 years			
Greece			
- PSI operation	various dates	€29.7 billion	24/02/2042
- Accrued interest	various dates	€4.8 billion	28/08/2037
- 2nd progr. - Tranche 1	19/03/2012	€5.9 billion	19/03/2032
- 2nd progr. - Tranche 2	10/04/2012	€3.3 billion	10/04/2027
- 2nd progr. - Tranche 3 (Bank recapitalisation)	19/04/2012	€25 billion	19/04/2032
- 2nd progr. - Tranche 4	10/05/2012	€4.2 billion	10/05/2027
- 2nd progr. - Tranche 5	28/06/2012	€1 billion	28/06/2027
Current average maturity 12.5 years			

Source: EFSF

2.1.2 EFSM

The creation of the European Financial Stability Mechanism (EFSM) is based on the Council Regulation (EU) N°407/2010 of May 11th 2010[50]**.** It was the special proposed vehicle implemented for fiscal protection. The Mechanism facilitates the access to credit for States with financial problems.

The fund incorporated 60 billion euros and was collocated under the administration of European Commission. The resources are borrowed directly by the European Union and the EC is authorized to allocate loans on the financial markets. The European budget ensures their solvency.

The role of EFSM is similar to the previously instituted Balance of Payment Assistance (a loan lending program available for Member States external to the Eurozone and with macro-economic deficiencies). The lending process[51]starts when a Member State expresses an official request. Afterwards, the Council judge whether conceding financial help or not. In case of positive answer, the characteristics of the intervention are set. Although, the cost of borrowing is none and the State is not obligated to pay interests back to the EU, the concession of loans and the opening of credit lines are subjected to the adoption selected policies negotiated with the Commission (adjustment programs).

The bond offering Began on January 5th 2011 with billion distributed to the Irish State.

The Stability Mechanism was activated for two Member States: Ireland and Portugal (see Table4). The Irish government received 22.5 billion euros. Portuguese public finances benefited of a bigger amount: 26 billion. The Lusitanian economy received 8 different loans. The first intervention is dated May 24th 2011, the last one is in April 2012. The Portuguese government has been required to cut the structural deficit, secure the financial sector (capitalizing and deleveraging) and implement long term reforms to facilitate sustainable growth, competitiveness and employment[52].

The rating agencies positively judge European Union credit capability (AAA for Fitch, Aaa for Moody's and AAA for Standard & Poor's) and the EFSM will continue to operate as long as exceptional events and circumstances still exist.

Table 4:Overview on EFSM funding and loan disbursements

Amount	Maturity	Raised on	Loan beneficiary	Disbursement on
€ 5.0 bn	5 yr	5 Jan. 2011	Ireland	12 Jan. 2011
€ 3.4 bn	7 yr	17 March 2011	Ireland	24 March 2011
€ 4.75 bn	10 yr	24 May 2011	€ 3 bn for Ireland, € 1.75 bn for Portugal	31 May 2011
€ 4.75 bn	5 yr	25 May 2011	Portugal	1 June 2011
€ 5.0 bn	10yr	14 Sept. 2011	Portugal	21 Sept. 2011
€ 4.0 bn	15yr	22 Sept. 2011	€ 2 bn for Ireland; € 2 bn for Portugal	29 Sept. 2011
€ 1.1 bn	7yr	29 Sept. 2011	€ 0.5 bn for Ireland; € 0.6 bn for Portugal	6 Oct. 2011
€ 3.0 bn	30 yr	9 Jan. 2012	€ 1.5 bn for Ireland; € 1.5 bn for Portugal	16 Jan. 2012
€ 3.0 bn	20 yr	27 Feb. 2012	Ireland	5 March 2012
€ 1.8 bn	26 yr	17 April 2012	Portugal	24 April 2012
€ 2.7 bn	10 yr	26 April 2012	Portugal	4 May 2012
€ 2.3 bn	15 yr	26 June 2012	Ireland	3 July 2012

Source: European Commission(Status: 3 July 2012)

The lending institutions represented an enormous effort for European Union, but still denoted the incapability of resolving the core difficulties of fiscal situations. As Sibert (2010) noticed[53], the measures risked to be just a palliative, not a definitive solutions. And stubbornly did not (or could not) touch unsustainable the fiscal policies that the national governments implemented. The difficulty to achieve decisional compromises underlined the lack of a political efficient integration and the nonexistence of legal solid basis for this kind of intervention at European level. The incongruity was shown by the Maastricht, so-called, “no bailout” rule[54]:

ARTICLE 104 of the Maastricht Treaty (actually ART.125 TFUE)

“The Community shall not be liable for or assume the commitments of central governments, regional, local or other public authorities, other bodies governed by public law, or public undertakings of any Member State, without prejudice to mutual financial guarantees for the joint execution of a specific project. A Member State shall not be liable for or assume the commitments of central governments, regional, local or other public authorities, other bodies governed by public law or public undertakings of another Member State, without prejudice without prejudice to mutual financial guarantees for the joint execution of a specific project”

Formally the legal justification of the lending facilities in based on the second point of the **Article 103 A of the Maastricht Treaty, actually the Art. 122 TFUE**:

“Where a Member State is in difficulties or is seriously threatened with severe difficulties caused by exceptional occurrences beyond its control, the Council may, acting unanimously on a proposal from the Commission, grant, under certain conditions, Community financial assistance to the Member State concerned. Where the severe difficulties are caused by natural disasters, the Council shall act by qualified majority. The President of the Council shall inform the European Parliament of the decision taken.”

It is evident that an excessive fiscal imbalance or the unstopped increase of the public debt should have been under government control, and that natural disasters has nothing to do with human indiscipline.

2.2 LONG-TERM REFORMS

Along with short term signs, the survivor of the Euro Area and the credibility of the European Union depended on implementation of drastic and structural reforms. The European institutions recognized the necessity of reinforcing the economic surveillance on Member States and started to build a comprehensive governmental framework, in order to provide financial stability, coordinate fiscal policies and generate sustainable economic growth.

2.2.1 ESM

The formation process for the European Stability Mechanism (ESM) was long and bumpy.

The first official act was made on November 28th 2010[55], when the Eurogroup agreed to the Commission proposal of a new Treaty. To set up the legal foundation it created a new European Treaty.

Thus, the “Treaty Establishing the European Stability Mechanism” was signed by the European Leaders on July 11th 2011 and modified on February 2nd 2012, according to the decisions taken by the European Council on July 21st 2011 (second Greek Bailout) and on December 9th 2011 (fiscal compact settlement)[56].

The Treaty established that the ESM could have used the same instrument of the EFSF[57]:

“*precautionary **financial assistance** in the form of a precautionary conditioned credit line or in the form of an enhanced conditions credit line” (Article 14)* *“specific purpose of **re-capitalizing the financial institutions** of that ESM Member” (Article 15)*

*“financial assistance in the form of a **loan** to an ESM Member” (Article 16)*

*“purchase of bonds of an ESM Member on the **primary market**” (Article 17)*

*“operations on the **secondary market** in relation to the bonds of an ESM Member” (Article 18)*

To be definitively implemented the Treaty needed the ratifications of adopting Member States.

The ESM is a public financial framework based in Luxemburg and subjected to the international law. This lending facility was concept as a permanent crisis resolution mechanism. It is projected to guarantee a long-term safety-net within the European Union, adducing a total capital of 700 billion euros(€80 billion in paid-in shares, €620 billion in callable shares) and a lending capacity of 500 billion[58]. The ESM should have replaced the EFSF and the EFSM in 2013, keeping the same tasks**.** Moreover, the Treaty prescripts a close cooperation with the IMF, that will furnish technical and financial cooperation. Nowadays, it seems that the Mechanism will function from October 2012 and the interruption of funding will be prevented with transitions between the previous bailout facilities and the ESM. The 17 Members of Eurozone will fund the institution on stable basis, furthermore, the other European Union Member may be part of single actions. The Biggest contributors will be Germany (190 billion euros), France (142 billion), Italy(125 billion), and Spain (83 billion)[59]

The fundamental assignment was to furnish liquidity to States that could not afford the bonds market requests and to reduce the investors skepticisms about the Euro subsistence. The loans ensured by the Mechanism are not constricted by pre-defined margin and can be extend to 30 years[60]**.**

The conditions required to participant States are going to be strict and subjected to the ratification of the Fiscal Compact, the ESM Treaty and the adoption of budgetary sound policies. The Board of Governors, formed by the Ministers of Finance, will embody the decision-making role. The Board will decide only with the qualified majority of 85% votes (significantly high threshold)[61].

2.2.2 The TSCG

Signed on March 2nd 2012, the “Treaty on Stability, Coordination And Governance in the Economic And Monetary Union”(TSCG) responds to three key European necessities: ensure economic stability, bring a fiscal policy coordination and implement a more efficient governance.

The TSCG was signed by 25 of the 27 European Union Members (UK and Czech Republic did not sign)

The fiscal part of the Treaty is commonly recognized as the “Fiscal Compact”.

As Herman Van Rompuy (European Council President) affirmed during the signing ceremony of the TSCG, the fiscal compact was supposed to[62]:

“bring a strong fiscal rule into your national legislation, preferably at a constitutional level. It will have binding effects and a permanent character. The transposition of this rule takes place under the control of the European Court of Justice . . . This stronger self-constraint by each and everyone of you as regards debts and deficits is important in itself. It helps prevent a repetition of the sovereign debt crisis. It will thus also

reinforce trust among Member States, which is politically important as well."

The most relevant rule implemented by this part of the TSCG regards the obligation to converge toward the Medium Terms Objective (MTO) settled in the revised the Growth and Stability Pact (GSP): the convergence process must limit the structural deficit at 0.5% of nominal GDP for Member States with debt ratio over the 60% of GDP. Country with a debt significantly below the 1& of GDP must contain their deficit under the 1%. Furthermore, at the Article 4 the TSCG reports that in State were the public debt exceed the 60% of GDP the imbalance should be reduced "*at an average rate of one twentieth per year as a benchmark*"[63].

The Treaty provides automatic mechanism in case of excessive imbalance and the exceptional eventuality of escape clauses, in case of extraordinary circumstances. The adoption of this measure at the national maximum legislative level (constitutional or equivalent), would generate the legal strength of the budgetary rule.

Moreover, the surveillance system has been reinforced. The European Court of Justice was allowed to impose economic sanctions (0.1% of GDP) to the signing Member State that does not implement the proper law reforms. Plus, at the national level, the creation of independent institutions should reinforce the control on MTOs attainment.

Another core proposal was to ensure the coordination of economic policies among Member States. In order to do so, the Treaty introduced the ex- ante common agreement on Debt Issuance Plans and supported the creation of economic Partnership Programs.

Furthermore, the Euro Area economic governance was reinforced, setting the obligation of gathering Euro summit meetings at least two times per year[64]**.**

2.2.3 The Six-Pack

Is a complex of measure adopted on December 13th 2011. It is formed by five Regulations and one Directive. The mission of this pack diffusing a more efficient macroeconomic surveillance in the Euro Area. The pack modified for the third time the Growth and Stability Pact, ensuring a stronger power for the preventive and the corrective arm, setting automatic consequences for 3% deficit imbalances and the possibility of sanctions. Moreover, the measure give a quantitative definition to the possibility of "significant deviation" from the MTOs and introduced the Excessive Deficit Procedure (EDP) even, if the debt ratio is diminishing with an unsatisfactory rhythm. The Six-Pact made easier to impose financial sanctions, reducing the majorities to approve most of them[65].

3.THE ROLE OF EBC

Not only the political institution, but also the European Central Bank contributed at finding remedies that could solve the prolonged sufferance of Southern European finances. The biggest innovation was the establishment of purchasing mechanism on the government bonds market: the SMP.

The Security Market Program (SMP) is a monetary policy tool, legally based on the "Decision of the European Central Bank of 14 May 2010 on establishing a securities markets program". The decision became necessary after the turbulence on the Government bonds market and was presented as an extraordinary measure. The aim that inspired the decision was similar to the EFSF or EFSM ones. It supposed to prevent liquidity and facilitate the access to the credit market for countries that were suffering of high interest rates in the long period. Furthermore, the economy were suffering of a credit crunch and banks diminished their lending capability.

ECB announced the adoption of the program on May 10th 2010[66] and, according to the Article 1 of the ECB Decision[67], began to intervene:

- ✓ *On the secondary market, eligible marketable debt instruments issued by the central governments or public entities of the Member States whose currency is the euro;*
- ✓ *on the primary and secondary markets, eligible marketable debt instruments issued by private entities incorporated in the euro area.*

The European Central Bank openly started to purchase national debt bonds of European States with secondary market operations. The purpose was to address the necessary monetary policy transmission and not to help governments to enlarge their debt. Moreover, requiring States had to ensure the implementation of deficit reducing programs, respecting eventual commitments negotiated with the European political authorities.

The procedure provided that the decision making on scopes attained to the Government Council.

On May 10th the ECB purchased 16.5 billion[68] of Eurozone government bonds and started implementing "sterilization operations" to prevent the inflationary risks of that the extra liquidity could have generated. Nowadays, the ECB holds large share of southern European government bonds but could not avoid the risk of an increase in bond yields.

The ideological significance of this decision is bigger than the economic influence. The ECB has always been an independent institution, who focused on price stability and inflation containment. Adducing the exceptional circumstances as motivation to this historical change of direction, the ECB seemed to not consider the possibility that the contained power and the limited competences of the central bank were not sufficient in the long term.

However, the SMP was not the only measure introduced. As Ahearn, Jackson, Mix and Nelson (2012)[69] report, ECB reactivated the swap line with the Federal Reserve and established currency agreements with national banks Canada, England, Japan and Switzerland.

Hence, on December 2011 the credit institution made the most drastic incursion on the markets. The ECB provided three-year loans to over 500 European banks, destining a total amount of 489 billion euros. Finally trying to increase liquidity and give boost to the credit[70]. Furthermore, on September 2012, the new ECB president, Mario Draghi, announced the program of unlimited bond- purchase. The objectives that the political leaders accorder to the ECB are two: assume the control of interest rates in the Eurozone and stem the speculation against the common currency[71].

CHAPTER 3 – THE EUROBOND PROPOSAL

The aim of the final chapter is to analyze a long term solution proposed to solve the Southern European sovereign debt crisis. The Eurobond solution can be the answer to some of the most significant political and economic demands: How to diminish interest rates on government bonds? How to reform the European Monetary Union governance? How to discourage Member States to adopt irresponsible fiscal policies?

1. DEFINITION

The introduction of international bond is one of the long term structural reforms proposed to respond to the Southern European sovereign debt crisis. The word "Eurobond" reports the idea of a government bond issued by all the Euro Area Member States. The first proposal of a common "Union Bond" was made in the early 1990s by the French economist and politician, Jacques Delors[68].

Normally, the formation of a common bond market is the logical consequence of the common currency introduction. The lack of this process in the Eurozone, generated a macroeconomic dysfunction, breaking the relationship between a unitary monetary union and a single debt market. Furthermore, the Euro has not the strength of other reserve currency (like the dollar) and has a secondary role on the international markets. Thus, one of the most frequent motivations to establish the Eurobond reform is the possibility to render the Euro as the world leading currency.

The resolution of the Southern European sovereign debt crisis, is hindered by the excessive interest rates on public debts, that swallow an always more relevant part of States resources and constrain governments to implement painful cuts, instead of establish the structural reforms.

The distinguishing feature of E-Bonds is that the bonds issuance would be guaranteed by all the countries involved, ensuring a higher liability. The common bonds cannot respond to different debts with a heterogeneous degree of risk. The Eurobond construction is based on the idea of enforcing the solvency capacity of the Euro Area Member States and furnishing affordable interest rate for the national debts. In order to do so, the level of debt issued by the States and the level of risk assumed by the investors must be the same for each country. This prospective is opposite to the actual European contest. How to cover this distance between theory and reality is the basic question that separates the different academic visions of the Eurobond proposal.

The key variable that can enable the introduction of the Eurobonds is the reduction of the moral hazard, according to the OECD definition: "*behavior when agents do not bear the full cost of their actions and are thus more likely to take such actions*"[73]. Hence, this permanent solution can also induce a smart reform for the public debt management, establishing new political and economic mechanisms that can conduct to the structural containment of excessive deficit and debt. As Jones (2010)[74] points out, the Eurobond prospective should make convenient to reinforce the fiscal discipline, rewarding the financial sustainability with lower borrowing cost and increased liquidity. Trying to avoid the risk of default, the fiscal transparency should be based on mechanisms similar to those of the stock exchange market: keep the quantitative of borrowing proportioned to the income. This equilibrium would be guaranteed by a limited access to the benefits that the common bond market could generate.

Despite the economic significance, this proposal can represent an upgrade for the European integration, completing the basis set with the Treaties of Maastricht and Amsterdam and designing a new contest of solidarity and cooperation.

2. ACADEMIC DEBATE

This paragraph reports the evolution of the academic and public debate (started in 2009) around the proposal of common European bonds. Since then, according with De La Dehesa (2011)[75] the following propositions were the most relevant.

2.1 The Gross - Micossi proposal

The first proposal of a jointly guaranteed common European bond was diffused on March 3rd 2009, by Daniel Gros and Stefano Micossi. The two economist structured their analyses on the consequences of the 2008 financial crisis, focusing on the financial market instability and on the necessity of strengthening the banking sector**.**

The risk of an insufficient level of liquidity in the European financial and banking system is a structural problem that the credit crunch underlined. It was evident the unattractiveness of the European government bonds for international investors. In fact, especially during periods of crisis, the EMU seemed incomplete and inefficient: without a central bank that could operate in the bond market and acquire State obligations, no one government had the real control of liquidity. The researchers individuated in the *"EU government backed Bonds"* the solution for the endemic volatility of the financial markets. The bonds could provide a net inflow of capitals to the Eurozone[76]**.**

Gros and Micossi forecasted the introduction of the EFSF (that they defined a "fund", instead of facility) as a temporary crisis management tool. This future institution, inspired by the American Troubled Assets Relief Program (TARP), would have had a consistent issuing capacity (500-700 billion euros) and the task of issuing bonds on the financial markets, in order to provide stability and ensure the liability of European Member States.

The fund could have restored the safeness of the European government bond market and attracted investments, stabilizing both the public and the private sector. The possibility of distributing losses in the countries were those shrinkages were caused, would have satisfied the necessity of correspondence between the merits of responsible governments and the benefits brought by the EFSF. Moreover, the new institution, facing interest rates lower than the Member States bonds, would have gained new resources that could have been used to reinforce the functioning of assistance mechanisms (like the balance of payment assistance)[77].

In the long term, the two economist provided the possibility of replacing the temporary fund with a consolidated EU authority: the European Investment Bank.

It is interesting to notice how forecasted the introduction of lending facilities to help Member States with difficulties and how they anticipated the debate on the Eurobond solution.

2.2 The De Grauwe - Moesen proposal

The analysis starts from the assumption that it is unusual that bonds based on a the same currency can report a consistent differentials. The pursuit of safeness that guided the investors on the government bond markets, transformed the role of bond yields, that became the empirical measure of the default risk or liquidity risk[78]. Furthermore, the interest rates erode the corrective fiscal reforms and generates a vicious circle that limit the effectiveness of the political governance.

De Grauwe and Moesen suggest two type of solutions: to extend the ECB range of interventions to the long term assets or to issue the *"Euro denominated bonds"* jointly guaranteed by all the Euro Area Members. The researchers proposed to use the European Investment Bank (EIB) as an alternative issuing institution. The core question is how to convince countries that already have a safe position (like Germany) to join this mechanism and help States with past faults. Therefore, is it fundamental to constrain the financial equilibrium and avoid the risk of "free-riding". This moral hazard can be avoided with the stimulus generated by a four points system[79]:

- The shares in the EIB would set the participation of every government to the common bond issuance.
- The interest rates sustained by each country would be based on the weighted average of national bond yields and EIB involvement.
- Every country would obtain the shares of profit, in accordance with the same parameters.
- The interest rates paid by every government would correspond to those registered on the national bond market at the moment of Eurobond issue.

The shares of the EIB involvement detained by every State should determinate the level of implication for each country. This principle could restore the equity and permit each country to pay different rates. The researchers, based the common liability on the proportional division of responsibilities and gains. Permitting, for example, to the Germans to achieve a higher decisional power and a lower interest rate than Greece.

2.3 The Tremonti – Junker proposal

A turning point in the public debate on the Eurobond eventuality was reached on December 5th 2010, when an editorial wrote by Giulio Tremonti (Italy's minister of economy and finance) and (prime minister and treasury minister of Luxembourg) was published on the Financial Times, adducing that the Eurobond adoption could have saved the Euro Area. The document was published prior to the December 2010 European Council and was a clear message to the other leaders[80].

The necessity to give a strong sign of unity and solidity to the financial markets would have motivated the reform, in order to re-acquire their trust.

Tremonti and Junker proposition is to establish a new European Facility, called European Debt Agency (EDA), that should replace the EFSF. According to the two political leaders, launching the E-Bonds could be affordable if the Agency had issued bonds to cover the 40% of States GDP. This division between a minority part of the debt financed on a common European bond market and the 60% of majority could accomplish two results. On one side, it would be easy for the Member States to finance the Eurobonds. On the other side, the introduction of a new market would produce a significant yield differential, making more difficult for financial undisciplined countries to continue borrowing without a severe fiscal regulation. In order to dire the critical circumstances of sovereign debt crisis, in its first phase the EDA should finance the 50% of Member States issuances and create a more liquid environment. In cases of extremely difficulty and impossibility of market contribution, the proportion of debt financed by the EDA could reach the 100%. Furthermore, the Facility should have guaranteed the convertibility between the national bonds and the new common obligations[81].

Tremonti and Junker affirmed that the E-Bonds should have driven new stability forces among the markets, inducing private investors to assume a higher degree of risk and responsibility for their actions. Moreover, States could have sustained much easily their debt burden, facing less pressure and obtaining space of movement to restructure their macroeconomic framework. The two ministers concluded forecasting that the new liquidity supply could have conducted the Eurobond market to become the biggest among the "Old Country" and to reach a level comparable to the US Treasury debt market. This introduction could have benefited investors at the worldwide stage[82].

This proposal seems adapt to solve the sovereign debt crisis, but insufficiently balanced in the long term. There is a lack of impulses towards a wise political leadership.

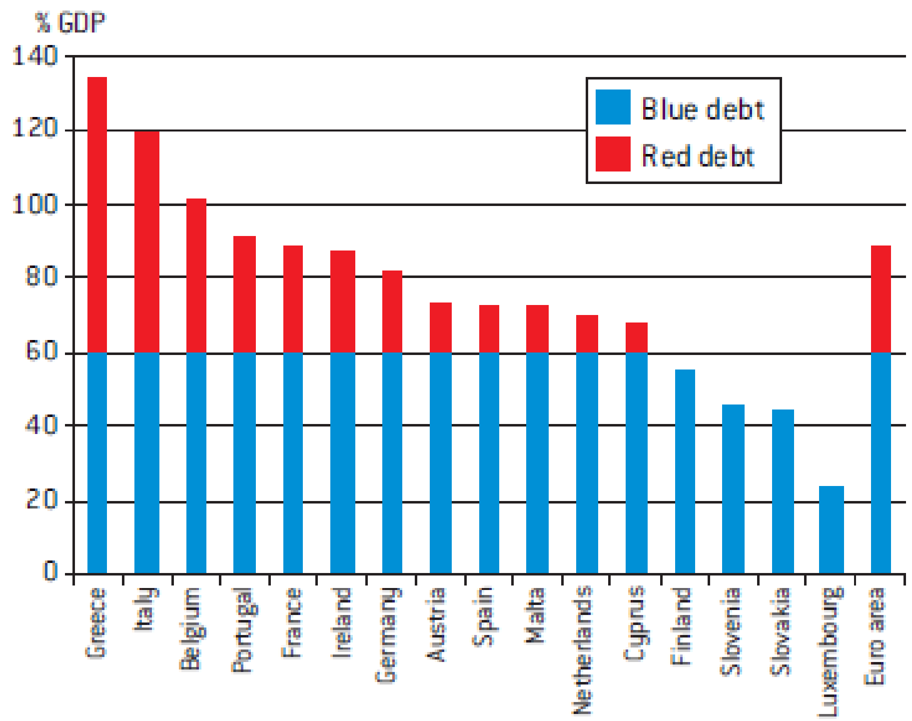
2.4 The Blue Bonds

The idea of Blue Bond was launched by Delpla and von Weizsäcker (2010). The denomination "Blue" holds the foundations of this idea: separating the excessive public debt from the affordable one, and creating an incentive to maintain a sound budgetary position in the long-term.

If we can recognized a "merit" to the sovereign debt crisis, this is set in the capacity to reveal the deception behind bond yields. From the introduction of Euro, indeed, long time interest rates did not correspond to the reality. States with an excessive debt burden were equalized to countries with a responsible governance. The introduction of Blue Bonds could have made this difference clear and uniform.

The publication proposed to differentiate the blue debt (covered with the issuance of common European bonds) to the red debt (financed by national treasuries with the State obligations). The mechanism would allow Member States to issue a part of their public debt in form of common European government Bonds (the Blue ones). Any amount of excessive debt would be issued in form of national government Bonds (the Red ones). The Maastricht convergence criteria inspired the key-threshold that should divide the sustainable borrowing to the higher interest rates. As Figure 7 shows, the researchers set the limit at the 60% of GDP[83]. The proposal is to utilize every government fund to repay first the blue obligations, assigned of a senior status. The blue debt should receive triple A ratings. This measure would give more confidence to investors and would increase the demand, lowering the bond yields. Hence the higher interest rate of red debt would respond to a higher risk, classified with the junior status. There would be an increase in the marginal cost of borrowing that should represent an incentive to keep financial sound discipline. The importance of Blue debt liability is reassumed by the fact that each Member State should furnish multiple guarantees not only its portion of debt, but for all the Blue Bonds issued every year. The national Parliaments would detain the decisive power to definitely guarantee the bonds allocation. Furthermore, an independent authority (the Independent Stability Council, ISC) should manage the allocation of European Bonds, in order to safeguard the transparency and the efficiency of the system. The ISC should be formed by members with an high degree of technical competence and independence. Moreover, it should be necessary to create an agency (the Blue Debt agency), where tax revenues would be transferred directly. As Delpla and von Weizsacker affirmed *"In a nutshell: cheaper borrowing requires more integration whereas more expensive borrowing requires measures to avoid systemic consequences"*[84].

Figure 7: Split of debt levels according with the 2011 data



Source: DG ECFIN, Bruegel.

The article 125 TFUE (the no bailout rule) would be applied only to the red bonds. The junior tranche should not be destined of EBC refinancing operations and should not be acquired by the banking system.
Despite the fact that no foreign country or lending facility could can ensure the solvency of the red debt, the possibility of default on national bonds would be less baleful and would give more opportunities for a fast recovery to the economic framework.
Furthermore, the perspective of eliminating the red zone gives a stimulus toward the fiscal budgetary equilibrium. However, even a reduction of the junior status area could facilitate borrowing and could reduce bond benchmarks. As a consequence, lower interests could bring an economic gain throughout the reduction of the net value of debt stock.
The final effect could be the transformation of Euro into the second reserve currency of the world. I f we consider the 60% of GDP for Euro Area Members the total amount of the market would reach between 5000 and 6000 billion euros, a size comparable with the US Treasury bond market (7250 billion)**.**
Delpla and von Weizsacker estimated that:
"with Blue Bonds, euro area countries might save up to 0.30 percent each year on the stock of debt" [85].
An interest rate significantly lower than the German bonds benchmark.
This massive quantitative of liquidity means solvability and should constitute a fix income for public investors or private sovereign wealth funds. Indeed, the liquidity gain for investors could be particularly high, especially in times of economic crisis.
The access to the Blue Bonds market as the principal collocation market for national debt should be considered a reward reserved to deserving countries. Lower yields should constitute a obvious incentive for States toward the financial discipline. Every participating country should present low debt levels or credible government commitments toward a strict financial regulation. The equality of the system is based on this core concept. In order to enforce the fairness, Delpla and von Weizsacker proposed to differentiate the Blue Bond borrowing quotas by country, reserving the higher percentages of GDP borrowing to budgetary balances States[86].
In case of tough crisis, the red zone debt could reach the "black debt area", facing unsustainable bonds benchmark. The proposal provide the stipulation of agreements to render void the special collaterals offered for the black quantitative, automatically converting that proportion into red debt.
This last proposal, seems the best articulated, designing a complete framework that leave no space to the moral hazard of unsustainable fiscal policies.

2.5 The Commission Green Paper: The Stability Bonds

On November 23rd 2011, the European Commission launched the "Green Paper on the feasibility of introducing Stability Bonds"[87]**.** The report expresses a positive judgment on the issuance of Stability Bonds and sustains that this reform could enhance the Euro Area, ensuring the financial stability, avoiding the risk of shocks, facilitating the transmission of ECB policies among the common currency area, augmenting the efficiency of the single market and strengthening the role of the Euro as a reserve currency. At the same time, the Green Paper acknowledges the necessity of introducing strict preconditions to the Stability Bonds. It should be essential to limit the risk of free riding: the obligations should be the reason why safeguarding the budgetary situation and the future competitiveness. The rating agencies should give a positive judgment, the best possible (AAA) to the bonds, facilitating the process of acceptance for investors and political leaders.

The Green paper designed three possible scenarios, according to three different approaches to the issuance of the Stability Bonds[88]:

I. *The full substitution of Stability Bond issuance for national issuance, with joint and several guarantees.*
This approach would require the higher degree of integration.
The delocalization of issuing institutions would require the creation of a European Debt Agency with the task of distributing the proceeds in accordance with the single financial needs and collecting payment from the Member States. This resolution would create an easy transfer of benefits within the nations and the direct refinancing could furnish a massive amount of liquidity. However, this internal flow of money could not be immune for the risk of the moral hazard. Then, it would be essential to declare the percentage of national debt covered by the issuance of common bonds, with the objective of leaving less freedom to the national governance.

II. *The partial substitution of Stability Bond issuance for national issuance, with joint and several guarantee.*
The Stability bonds would cover only a portion of the national debt, implementing the structure of the "blue bonds".
The creation of two issuing institutions and markets (one for the Stability bonds and one for the national government bonds), would demand a double level of liability: joint and several guarantee for the supranational obligations, and a national certification for the State bonds. The partial reform would give more flexibility to the national policies and would request a lower degree of stability.

III. *The partial substitution of Stability Bond issuance for national issuance, with several but not joint guarantees.*
The Stability Bonds liability would be ensured by pro rata guarantees. This scenario seems the less challenging for the European countries, the obligations and the benefits would be limited. The quality of credit could be determinate by the weighted average of the credit rating of the Member States. Thus, it would be useful to enhance the credit with liquidity tools.

3. POLITICAL DEBATE

The proposals illustrated in the precedent paragraph turned on the political debate on the Eurobond project. The joint guarantee bond needs of the political approval to be actuate.

After the launch of the Green Paper, this idea gathered a relevant political support. Even José Manuel

Barroso (the President of the European Commission) publicly showed its support to the Stability Bonds. Indeed, in a speech delivered at the "Presentation of the 2012 Annual Growth Survey and economic governance proposals" in late 2011, he declared[89]:

"Stability Bonds will not solve our immediate problems and cannot replace the reforms that are needed in countries currently under pressure. But it is also important to show to public opinion and the international investors that we are serious about stronger governance in the euro area, both in discipline and in convergence. And Stability Bonds are exactly an example of that -an example of reinforced governance, of a strong will to live together in the euro area, and a good example of discipline and convergence."

Nevertheless, the main antagonist of the Eurobonds in the political scenario seems to be also the more influent European leader: Angela Merkel.

Chancellor Merkel has manifested in several occasions her opposition to this type of reform[90]. The contrariness is fund on the prospective of "sharing" the cost of debt with the other countries and on the fear of the moral hazard. Miss Merkel is convinced that the lower interest rates would remove the incentives toward budgetary discipline. The possibility that southern European States could borrow money beyond their means causes the German irritation. Germany will not concede easily the joint and several bonds, without the reinforcement of fiscal controls.

Furthermore, this position is mostly justified by the raising costs that Germany would have to face for borrowing. According to the ECB data, actually the bond yields amount at the 1.34%. German population would difficultly express a positive judgment on paying higher interest rates to "save" other less rigorous States. However, Germany seems the biggest "beneficiary" of the Southern European debt crisis. Before the financial crisis began, at December 2007, Germany paid on its government bonds an interest of 4.21%, today, at August 2012, the interest rates diminished of - 2.37%. Therefore, it is evident that the low borrowing requests that Germany is facing on the government bond market are not solely generated by the German economic strength. Interest rates are partially motivated by the weaknesses of the Southern European countries, whose stability is questioned by investors.

On the other side, the French President, Francois Holland guided the "pro-Eurobond front". Since its election, in Spring 2012, Hollande designed the introduction of the Eurobonds as a core aspect of his political project for restoring growth[91].

An important moment in the Eurobond discussion was reached in May 2012[92], during an informal summit that gathered the European leaders. Hollande, with the endorsement of the southern European Prime Ministers, proposed this solution, supporting the idea of the Stability Bonds, but the agreement was not reached. The political decision was postponed and the leaders preferred to concentrate on other themes. The temporary impracticability is perfectly synthesized by the phrases that Hollande declared after the summit[93]:

"For now, Germany's line of thinking is that euro bonds, if I give the most optimistic version, could only be

an end point, whereas for us they are a starting point. It's true that there is there a difference . . . I respect Mrs Merkel's point of view when she says euro bonds are not an instrument of growth in themselves. So the discussions will continue."

CONCLUSION

If every crisis reserves the opportunity to find solutions. The European sovereign debt crisis needs to be interpreted as a chance to reform. Unfortunately, the fundamental reforms need to base on a common vision of the future.

The crisis is a mixture of responsibilities at different levels that summarizes a long process of structural deficiencies accumulation. The spirit of reconstruction should embrace each decisional level involved in the management of the crisis.

At the national level, in the southern European countries, decision makers face the challenge of establishing unpopular but unpostponable reforms that can furnish a new lymph to the economic performances. In the South of Europe the productivity of labor or the structuration of the labor market remained unchanged for too long. Lobbies and partial interest had excessive power and conditioned the politicians. With the introduction of some credible basis is possible to reach an endurable and prolonged growth focused on a restored competitiveness. New pillars, as the investments in technological progress and infrastructures or the flexsecurity of laborers, can help the national economies to recover. Furthermore, especially at the political level, the decision making should be more competent and should put more attention on the repercussions that the actual policies have in the middle and long period. Only molting this kind of policies the public debt will be truly sustainable.

At the European level, the crisis represents a turning point toward the future. The need of coordination between the fiscal and the monetary policy was clear since the signature of the Maastricht Treaty, back to the 1992, but the integration did not find its natural continuation an remained culpably inadequate. However, despite the theoretical unsustainability of the European system of corporate governance, nothing has been done to upgrade this organization and render it complete, until the first difficulties came. The European leaders privileged the short term benefits to the long term effectiveness of the European institutions.

Member States should decide how they want to design the European construction for the future generations. Europeans need to determine what is the type of "sharing" that they want to implement. If, in the long term, their objective is to create to United States of Europe and lose growing parts of their sovereignty or if they want to stop this process, that seems irreversible, to safeguard their national interests and preserve their flexibility. This assumption is an essential basement for the future and is the key requirement to apply any kind of durable solution, Eurobonds first.

The nowadays situation is in between the two scenarios. Interventions like the EFSF, the EFSM, the ESM or the TSGC seem to be incomplete measures that express the wanting to avoid more drastic changes. The markets rejected in part this reforms and kept pressing the government bond yields of the more suffering economies, the Southern Europeans. The introduction of the blue bond proposal could be a partial solution to the structural difficulties that the national economies are facing, but needs to be coordinated with other measures.

Moreover, as the 1907 financial crisis led to the launch of the most relevant central bank of the world (the Federal Reserve System) this sovereign debt crisis can produce a better economic governance and give to the ECB the role that deserves in the worldwide scenario.

I would like to conclude, quoting John Fitzgerald Kennedy, whose words contain the spirit that aimed this analysis:

“The Chinese use two brush strokes to write the word 'crisis'. One brush stroke stands for danger; the other for opportunity. In a crisis, be aware of the danger-but recognize the opportunity.”

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