UNIVERSITY OF ECONOMICS PRAGUE

DIPLOMA THESIS

University of Economics, Prague International Business – Central European Business Realities



The European debt crisis and its consequences in Slovakia and in the Czech Republic

Author: Bc. Gábor Csanda

Thesis instructor: doc. Ing. Josef Taušer, Ph.D

Scholar year: 2011/2012

Declaration:	
I hereby declare that I am the sole author of the thesis debt crisis and its consequences in Slovakia and in the Czech Re out all quotations. The used literature and sources are stated references.	epublic ". I duly marked
In Prague on May 18 th , 2012	Bc. Gábor Csanda

Acknowledgement

I hereby wish to express my appreciation and gratitude to the supervisor of my thesis, doc. Ing. Josef Taušer, Ph.D. for the great support, helpful professional advices, and assistance with the processing of my Master Thesis.

CONTENT

LI	ST OF FIGU	JRES AND TABLES	3
IN	TRODUCTI	ION	4
1.	TOWARD	S A UNITED EUROPE	6
	1.1. The	development of monetary integration in EU	6
	1.1.1.	The Werner Report	6
	1.1.2.	The European Monetary System	8
	1.1.3.	The Delors Report	13
	1.2. The	European Monetary Union	15
	1.2.1.	The Maastricht Treaty	15
	1.2.2.	The Eurosystem	18
	1.2.3.	First years of the monetary union	20
2.	THE EURO	OPEAN DEBT CRISIS	23
	2.1. From	m financial crisis to sovereign debt crisis	23
	2.2. Gre	ece – the real beginning of the euro crisis	27
	2.3. The	rescue plan	32
	2.4. Con	ntagion across Europe	35
	2.5. The	fundamental issues – origins of the crisis	45
	2.5.1.	A closer look at the 'PIIGS'	50
3.	IMPLICAT	TIONS FOR THE CZECH REPUBLIC AND SLOVAKIA	57
	3.1. Eco	onomic implications	57
	3.1.1.	Economic growth	57
	3.1.2.	Public finances	58
	3.1.3.	Government bond yields	60
	3.1.4.	Unemployment	61
	3.2. Poli	itical implications	62
	3.2.1.	Greek bailout	63

3.2.2. European Stability Mechanism	63
3.3. Summary	64
CONCLUSION	65
BIBLIOGRAPHY	67
ANNEX	73

LIST OF FIGURES AND TABLES

Table 1-1: The ECU basket	9
Table 2-1: Dec 7 vs. Dec 8, 2009 10Y bond yields and spreads	28
Table 2-2: Government balances in the Euro zone	46
Figure 1-1: The impossible trinity	10
Figure 1-2: Timeline of European monetary integration	16
Figure 2-1: Euro zone bond spreads (basis point)	25
Figure 2-2: Greek 10-year bond yields (January '07 – December '09)	29
Figure 2-3: Greek 10-year bond yields (September '09 – May '10)	31
Figure 2-4: Complexity of debt 'network' as of December 31, 2009	35
Figure 2-5: Irish 10-year bond yields (March '10 - December '10)	37
Figure 2-6: Portuguese 10-year bond yields (January '10 - May '11)	39
Figure 2-7: Italian 10-year bond yields (October '10 - December '10)	42
Figure 2-8: Government bond yields of Italy, Spain, France and Germany	47
Figure 2-9: Total debt as a % of GDP	48
Figure 2-10: Trade deficits	49
Figure 2-11: Labor costs	49
Figure 2-12: Government debt as % of GDP	51
Figure 2-13: Real GDP growth	52
Figure 2-14: Government bond yields (pre - euro vs. post - crisis)	54
Figure 2-15: Government balance as % of GDP	55
Figure 3-1: GDP growth	58
Figure 3-2: Budget deficit	59
Figure 3-3: Public debt	60
Figure 3-4: Bond yields	61
Figure 3-5: Unemployment rate	62

INTRODUCTION

People in Central Europe always looked up to the Western European nations and wanted to become a bit like them. When the European single currency was introduced and it substituted the national currencies, it was seen as something fascinating. At the time of joining the European Union the general feeling was great, since we got 'accepted' to the club of developed countries. Moreover, all new members committed themselves to adopt the Euro as soon as they fulfill the criteria. However, the aspirations of the new member countries differed significantly – some wanting to join as soon as possible while others delaying it until later. These two viewpoints are clearly visible in the case of Slovakia and the Czech Republic. When the financial crisis of '07 hit the European Union, those within the Euro area were enjoying a more stable environment, but when this crisis started to turn into a Euro crisis, the situation turned around. Being outside was safer, and now, more than two years after the start of the Euro crisis, it is still safer to be on the outside. The dream of many generations to create a united Europe has turned into a mess and the European integration process a prime example of what should be avoided – in some of its aspects. The crisis caused a lot of problems and it seems that the national differences are becoming larger despite the effort of integration and therefore its future is uncertain at the moment.

The primary objective of this master thesis is to answer the following questions: (1) What are the historical perspectives of the single currency? (2) How did the integration process toward the monetary union happen? (3) How did the Euro crisis start and why now? (4) What were its causes and consequences in Europe? (5) What are its implications for the Czech Republic and Slovakia? The questions are answered in the three chapters of this paper.

The first chapter examines the integration process which had the ultimate goal of a single currency area. It follows a chronological order while mostly focusing on the institutional framework which was created during this process. It studies the development from its very beginning, when the first initiatives were born, all the way through to the early years of the monetary union. It explains what led to a particular initiative, its reasons of failure or success and also the follow up. The second part of this chapter deals in detail with the European Monetary Union and studies the legal and institutional framework behind. Lastly, the first years of its functioning – the years between the launch and adoption of Euro – are analyzed.

The second chapter is mostly following a chronological order as well, but in cases it focuses on one particular issue while going into much detail. At first, it shortly identifies the fundamental issues and development of the US subprime mortgage crisis which later turned into the global financial crisis. Then its consequences in Europe are studied and how it evolved into the Euro crisis. The development of the crisis is followed by the order of events, which in addition are explained in a broader sense. At first the focus is on Greece itself, as it was the origin of the debt crisis. Then the framework of the rescue plan is studied in detail with implications on the general EU legal and institutional framework. This is followed by the detailed analysis of the process of how the Greek crisis turned into a European affecting numerous countries. Lastly, the reasons of the turmoil are studied and analyzed, at first from the framework point of view — meaning the issues which are built in the Euro itself — and how it affected particular countries, and then with the main focus on the peripheral countries which are the most vulnerable to the situation at the moment.

The third, and final, chapter investigates the impact of the European happenings on the economies of the Czech Republic and Slovakia, which took a significantly different stance in the depth of monetary integration and as well the handling of the crisis. It explains the drivers behind the differences of the consequences between the two countries.

Due to the recentness of the topic, the majority of literature sources used was articles from journals and economic papers, such as the Wall Street Journal, New York Times and The Economist. The first chapter follows the structure of the book "The European Union: Economics and Policies" written by Ali M. El-Agraa and "The Economics of European Integration" written by Richard Baldwin and Charles Wyplosz. A few books were already available on the topic of the financial crisis and/or debt crisis, but unfortunately, mostly written by US authors and therefore with the main focus on the US perspective of the situation. Even though, some were used in the writing of this paper, like "Bust: Greece, the Euro and the Sovereign Debt Crisis" by Matthew Lynn and "Endgame: The End of the Debt Supercycle and how it changes everything" from John Mauldin and Jonathan Tepper.

Furthermore, the secondary data was accessed and collected from various sources, including amongst others the European Statistical Office, International Monetary Fund, Thomson Reuters, Bloomberg. The second and third chapters are mostly based on studying the available data from a qualitative point of view.

1. TOWARDS A UNITED EUROPE

The European continent is rich in history and that unfortunately means a great number of wars as well. The first half of the 20th century with World War I and II took its toll on the nations of Europe. As a consequence, the political leaders renewed some earlier thoughts on a united Europe in a hope of avoiding wars on the "old continent" in the future. This initial purpose of war prevention ended in an integration process that was not experienced before. From independent states to a monetary union (as is the case for 17 countries) it was a long and rough way. In this case like in any other when something unseen happens, the outcomes are unclear. We, as the nations of Europe, are now facing an uneasy situation. The recent happenings question if the progress made was enough or even in the right direction.

1.1. The development of monetary integration in EU

The current monetary integration within the European Union (EU) is the final stage of a long planned initiative which dates back more than four decades. In this subchapter the most important milestones on the road towards a common European currency are analyzed.¹

1.1.1. The Werner Report

The first initiative dates back to the late 1960s when the Bretton Woods exchange rate regime started to fall apart. The system which worked well until that point was under pressure due to the costs of the Vietnam War and the US was unable to manage the system any longer – the problem was that countries attempted to stabilize themselves with regard to the US, but they were not able to serve as an anchor of the system anymore. The countries of the European Community (EC) wanted to create a system on the same principles, but which would ensure stability in the region. During the Hague summit in 1969 the original six member states² agreed that the EC should continuously change over to an economic and monetary union (EMU)³. A committee led by Pierre Werner was set up to analyze the circumstances and issues. The findings were presented in the final report in 1970 and according to them the "EC would:

¹ El-Agraa, A., (2011)

² The original six member states are Belgium, France, Italy, Luxemburg, Netherlands, West Germany

³ El-Agraa, A., (2011)

- 1) Constitute a zone where persons, goods, services and capital would move freely but without distorting competition, or creating structural regional imbalances.
- 2) Form a single monetary entity within the international monetary system, characterized by the total and irreversible convertibility of currencies; the elimination of fluctuation margins of exchange rates between [members]; the irrevocable fixing of their parity relationships. These steps would be essential for the creation of a single currency, and they would involve a Community level organization of central banks.
- 3) Hold the powers and responsibilities in the economic and monetary field that would enable its institutions to ensure the administration of the economic union. To this end. The necessary policy decisions would be taken at EC level and the necessary powers would be attributed to community institutions."⁴

According to the Council a full EMU could have been achieved before the end of the decade, hence by 1980. The implementation was divided into three stages: (1) starting 1971 and completed within three years – EC instruments made more operational; (2) the first stage should not be taken separately, but accompanied by full economic and monetary integration; (3) consultations within member states strengthened, budgetary policies aligned with EC objectives, harmonized taxes to some extent, coordination of credit and monetary policies, further integration of financial markets.

The initiative failed, but it is important to notice that the first stage was accomplished in a shorter time frame than it was set, and improvement was achieved to some level in the second stage as well. There were several problems during the implementation process, such as the first oil shock, enlargement problems and the Nixon shock. Initially the member states agreed that they would keep all bilateral exchange rates within a 2.25% band. As a result, the currencies would fluctuate closely together in a 'snake' shape around dollar. The Smithsonian Agreement limited every currency's fluctuation from the dollar by 2.25% as well. The Italian lira, British pound and French franc were unable to maintain their parity and moreover, the Smithsonian Agreement also collapsed by 1973.⁵

⁴ El-Agraa, A., (2011), "The European Union: Economics and Policies", p. 163-164

⁵ El-Agraa, A., (2011)

1.1.2. The European Monetary System

In 1978 it was decided that the European Monetary System (EMS) should be created⁶. This was considered by some as another run at an EMU in Europe. However, it was designed to create monetary stability in the area as big exchange rate movements were viewed as a threat to the Common Market. The initial idea comes from the German Chancellor, Helmut Schmidt, and French President at the time, Valéry Giscard d'Estaing. However, some differences had to be overcome which was presented by the different positions of the countries; Germany with the strong currency, UK opposing a fixed exchange rate regime, and not to mention the smaller countries which were to be included as well. The final agreement was 'fair' to all countries, and without putting any currency in the midst. It also deals with the creation of a currency zone in the EC where the exchange rates should be managed with discipline. The discipline is the Exchange Rate Mechanism (ERM) which is based on four principles: (1) "a grid of agree upon bilateral exchange rates, (2) mutual support, (3) a commitment to joint decision of realignments, and (4) the European Currency Unit (ECU)."⁷

All currencies participating in the ERM were fixed to each other, they were allowed to fluctuate within a +/- 2.25% band around the central rate⁸. There were three important specifics of the system; (1) for the first time this was an only European system, (2) there was no currency in the center, and (3) keeping the bands was the responsibility of both countries.

The biggest problem with the system set up after Bretton Woods was that in case a currency depreciated against another one, only that country's central bank was obliged to intervene which had the weaker currency, leaving them alone in the problem. However, in the case of the ERM, the agreement stated that both central banks should intervene up to the point when the exchange rate was within the 2.25% limits again. Furthermore, it was up to the central bank's decision on what currency were the interventions carried out. In case that a central bank had to strengthen its currency against another one and ran out of foreign exchange reserves, the other central bank was obliged to give a loan to that particular central bank in order to restore the exchange rate to 'normal'. These interventions had to be carried on until the point that the exchange rate of a currency against any other currency was within the given band. Therefore, the

 ⁶ Baldwin, A. & Wyplosz, C., (2006)
 ⁷ Baldwin, A. & Wyplosz, C., (2006), "The Economics of European Integration", p. 333

⁸ Italy and Ireland were given a band of +/- 6% due to higher inflation

⁹ El-Agraa, A., (2011)

system provided an automatic mutual support. On the other hand, the interventions could have been executed in theory forever if the markets were not persuaded. In that case, the exchange rates had to be realigned. The creators of EMS decided that all members had to agree on exchange rate realignment. The reason for this was that they wanted to avoid practices, such as repetitive devaluations, which would provide a country with unfair trade advantages. This basically meant, that to some extent, each country gave up the control of their exchange rate and that realignments included negotiations with other central banks, this way prolonging the process¹⁰.

The most important addition of EMS was the introduction of ECU. The ECU represented a basket of currencies of all EMS countries and not just those in the ERM. When the basket was created, each currency was given a weight which was supposed to represent the country's importance and size in trade within Europe. The weights were adjusted every five years; at the time of creation 1 ECU was equal to 1 USD.11

Table 1-1: The ECU basket

	Amount in 1 ECU	Weight (%)
Belgian franc	3.43100	8.71
Danish krone	0.19760	2.71
Deutschmark	0.62420	32.68
Dutch guilder	0.21980	10.21
French franc	1.33200	20.79
Greek drachma	1.44000	0.49
Italian lira	151.80000	7.21
Irish punt	0.00855	1.08
Portuguese punt	1.39300	0.71
Spanish peseta	6.88500	4.24
UK pound sterling	0.08784	11.17

Source: Baldwin, A. & Wyplosz, C. 12

Originally, the ECU served as the official unit of account for the European Community. However, it was not a monetary union and therefore it was designed to make it clear that it's not a currency; physically no ECU existed and central banks could

¹⁰ El-Agraa, A., (2011)

¹¹ Baldwin, A. & Wyplosz, C., (2006) 12 Baldwin, A. & Wyplosz, C., (2006), "The Economics of European Integration", p. 335

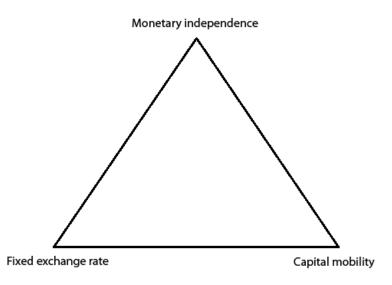
not make transactions in it. Even though, private markets used the ECU and issued debt in it, but according to the law these were currency baskets.

The years of EMS can be divided into four periods which are all closely connected to crises in the ERM. The crises occurred as a result of the impossible trinity principle.¹³

The principle states that the characteristics cannot be achieved at one time and therefore a country/system can choose only two. The principles are the following: (1) fixed exchange rate, (2) monetary policy independence, and (3) full capital mobility. The options under the theory according to Joshi are:

- Stability of exchange rate can be combined with integration of capital markets as long as a fixed exchange rate regime is adopted and therefore losing monetary policy independence;
- A combination of capital market integration and monetary policy independence can be achieved without exchange rate stability, as domestic interest rates can be set but therefore exchange rate by markets has to be respected;
- Lastly, the combination of monetary policy independence and exchange rate stability is possible if there is no capital market integration; in case of capital controls the exchange rate and interest rate relationship is not kept.¹⁴

Figure 1-1: The impossible trinity



Source: author

¹⁴ Joshi, V., (2003)

¹³ Baldwin, A. & Wyplosz, C., (2006)

EMS in the years 1979-1985¹⁵

As earlier stated, the EMS was created to prevent big exchange rate fluctuations within Europe. After the oil shock of 1973 inflation rates across the countries were significantly different and the second oil shock did not help the situation either. As a result of the system of adjustable fixed exchange rates there were two strategies two follow by ERM countries. First, to focus monetary policies on exchange pegs, but comparable inflation rates were a prerequisite and high inflation countries would be worse off in terms of competitiveness in comparison with low inflation countries. Secondly, to omit the differing inflation rates and realign exchange rates as often as needed in order to prevent trade imbalances and problems in competitiveness. As inflation is a result of money growth, the same policies regarding money growth should have been adopted across the countries. However, the countries could not decide on an inflation target as low inflation would have an impact on high inflation countries in form of high unemployment, and high inflation would just go against the policies adopted in low inflation countries like Germany. As a result, the second option was chosen and this is the reason for the numerous realignments needed in the early years.

EMS in the years 1985-1992¹⁶

As it turned out, the second option was not ideal and caused problems in a lot of countries, especially in those with high inflation. One of the reasons for this was that their real exchange rates appreciated and that resulted in trade deficits. Finally, nominal depreciation was needed by these countries, but clearly, low inflation countries did not agree to deep depreciations in the ERM and therefore basically high inflation countries had a permanent trade deficit while those with low inflation trade surpluses. Another issue was with the predictability of the system. It could be easily foreseen when realignments were going to happen and also which currency would be depreciated. Speculators were aware of this and 'betted' against high inflation currencies and therefore most of the realignments had to be done due to speculative pressure. As a result of such speculative attacks France had to devalue the franc three times in 1983. Afterwards, the Finance Minister convinced the President that the country should follow a monetary strategy of disinflation instead of repetitive devaluations. The countries with high inflation followed the example of France in order to achieve low inflation rates

¹⁵ El-Agraa, A., (2011)

¹⁶ Baldwin, A. & Wyplosz, C., (2006)

similar to Germany. Consequently, in the years from 1987 to 1992 there were realignments needed. Exercising a monetary policy which practically followed the German was as if the countries gave up independent monetary policy. On the other hand, Germany was free to decide and this had two major outcomes; the other countries wanted to transform to a monetary union, and the 'blow up' of the EMS.

The EMS crisis of 1992 - 1993¹⁷

As mentioned, there was no need for realignments for a relatively long time. However, this did not mean that there were no problems. On one hand countries like France and Denmark experienced their inflation rates converging to those in Germany, but this was not the case of some others, like Italy or Spain. And as a result these countries' competitiveness was diminished.

Moreover, it was this time when the Berlin Wall collapsed and Germany was reunited. In order to prevent East-Germans massively moving to the western part, where wages were much higher, the government decided to bring the wages on to the same level in the whole country. However, this did not reflect the productivity in the eastern part and that resulted in a dramatic increase of inflation and consequently a tighter monetary policy by a sharp increase of interest rates.

There were two possibilities how would the other ERM members react. First, that they let their currencies depreciate against the Deutschmark, but is was considered humiliating. The other option was to follow the German Central Bank in tightening the monetary policy. It was a matter of coincidence what happened afterwards.

The monetary integration plans were developing in the meantime and the Maastricht Treaty was signed in late 1991. The following year it was up to the member countries to ratify it. First country which attended do so was Denmark, but their constitution sets that an international treaty can be ratified only by referendum. The referendum did not pass, moreover, one provision of the treaty stated that it is valid only if ratified by all members. The exchange markets lost their faith in the monetary union project and speculative attacks were aimed at Italy and later UK as well, as these currencies were considered to be the most overvalued. At first central banks with strong currencies intervened, but by September 1992 the attacks were enormous and the German Central Bank stopped the support, as believed unlimited interventions are not

-

¹⁷ Baldwin, A. & Wyplosz, C., (2006)

rational. As a result, UK¹⁸ and Italy left the ERM. Markets interpreted it as the ERM is weaker than thought and speculative attacks were aimed afterwards at Ireland, Portugal and Spain and had to be devalued twice. Then attacks went on against Belgium, France, and Denmark in spite of the fact their currencies were not overvalued as inflation rates really converged to German levels. Speculations continued and exchange reserves were diminishing. To uphold the system of ERM, the bands were widened to +/- 15%. However, by this time the idea of monetary integration was considered to be a misstep. Moreover, UK and Italy were angered by Germany not keeping the mutual support principle.

In 1993 the existing members agreed to loosen the system. The exchange rates could now fluctuate in a band of +/- 30%.

EMS - second version

At the time of euro adoption, in 1999, the EMS II came into effect as a replacement for EMS¹⁹. There were a few core differences:

- the currency parities are based on the euro as the center currency, unlike EMS I where the system was symmetric;
- the band of fluctuation is not explicitly set, the standard was the +/- 15% of the later EMS I, but narrower ones could be set too;
- the mutual support principle of 'unlimited' automatic interventions is still valid, but the European Central Bank has the option to restrain this responsibility.

1.1.3. The Delors Report

In 1988 in Hannover at an EC summit it was decided that the adoption of the Single European Act, and therefore the aim to create a Single European Market, meant that member countries as if proved their goal of a continuous creation of an economic and monetary union. Political leaders agreed to further discuss how to achieve this union at the summit the year after and appointed Jacques Delors, the Commission President at the time, to lead the committee combined of experts and central bank governors to identify the specific steps needed to accomplish the union²⁰.

¹⁸ UK joined the ERM just one year earlier ¹⁹ Baldwin, A. & Wyplosz, C., (2006)

²⁰ El-Agraa, A., (2011)

As stated in the report, the committee thought that the establishment of the union should be considered as one process, divided into several stages. Therefore if a member state decides to enter the first stage it means it is committed to the whole process. It also emphasized that the creation of an economic and monetary union requires common monetary policy, compliance in economic policies and also other areas, mostly in the fiscal field. These would necessitate adjustments in national legislations and as well in the Treaty of Rome. ²¹

In the first stage the emphasis would be on a better convergence in economic performance with the help of strengthened cooperation in economic and monetary policy. The measures would be dealing with the accomplishment of the Single European Market, decline in differences with the help of budget consolidation in the countries, elimination of barriers of financial integration and an intensified cooperation in the field of monetary policies. The realignment of exchange rates was possible, but other adjustment methods were preferred. The report also stated that from that time on the committee would be defining the direction of exchange rate and monetary policy.

The second stage was considered as a transition to the final one and therefore serving as a learning period in common decision making. In this step the basic organizations and structure of the union would be created. The EC would:

- 1) "Establish a medium-term framework for key economic objectives aimed at achieving stable growth, with a follow-up procedure for monitoring performances and intervening when significant deviations occurred;
- 2) Set precise, although not yet binding, rules relating to the size of annual budget deficits and their financing;
- 3) Assume a more active role as a single entity in the discussions of questions arising in the economic and exchange rate field."²²

Furthermore, in this stage the European System of Central Banks (ESCB) would be created. At first, the cooperation in the field of monetary policies should be managed by the Committee of Central Bank Governors. Then in the final stage the monetary policy would be common while exchange rate realignments would not be possible. According to the report the "second stage would require a number of actions:

• National monetary policy would be executed in accordance with the general monetary orientation set up for the EC as a whole.

-

²¹ El-Agraa, A., (2011)

²² El-Agraa, A., (2011), "The European Union: Economics and Policies", p. 167

- A certain amount of foreign exchange reserves would be pooled and used to conduct interventions in accordance with the guidelines established by ESCB.
- The ESCB would have to regulate the monetary and banking system to achieve a minimum harmonization of provisions (such as reserve requirement or payment arrangements) necessary for the future conduct of a common monetary policy."²³

The last stage would be initiated with the fixation of member countries' exchange rates and later with their replacement by the common EC currency. This stage would require that in the economic field (1) the regional and structural policies will be strengthened, (2) budgetary and macroeconomic rules become obligatory and (3) cooperation in the field of international policy more compliant. Furthermore, the ESCB would become fully responsible for (1) the application of monetary policy, (2) exchange rate management including interventions, (3) foreign exchange reserves and (4) arrangement of all steps needed to shift to the common currency²⁴.

1.2. The European Monetary Union

As discussed so far, the attempts at monetary integration have a long history in Europe (summarized in Graph 1 below). However, the first milestone in this process was the Treaty of Maastricht, also known as the Treaty on European Union.

1.2.1. The Maastricht Treaty²⁵

In 1991, in the Dutch Maastricht the Treaty on European Union was signed by the member countries and later on the ratification process was concluded despite the initial problems. The treaty itself affected many aspects of the integration initiative. First off, the official name became the European Union by replacing the European Community. This 'cosmetic' change was supposed to show that the treaty contained political thoughts as well and not just economic. The European Parliament's power was increased and the voting system was modified to 'unanimity' for decisions of the Council. While these initiatives were not worked out fully, the monetary part was complete and it was agreed that by the beginning of 1999 the common currency would be adopted. It was outlined what will be the responsibility of the European Central Bank

El-Agraa, A., (2011), "The European Union: Economics and Policies", p. 168
 Baldwin, A. & Wyplosz, C., (2006)

(ECB), how would the union work and under what circumstances could it be launched, commonly known as the Maastricht, or convergence criteria.

1970 1979 1989 •Werner Report Delors Report Maastrich Treaty European Monetary System launched signed <u>小</u> 1998 1999 1994 1997 Creation of European Monetary union Stability and Growth • European Monetary Central Bank (replaces EMI) virtual launch of euro Exchange rates fixed 2008 2007 2001 2002 •Slovenia adopts the Cyprus and Malta Greece joins the •Euro coins and notes adopts the euro introduced in 12 monetary union 2009 2011 Slovakia adopts the •Estonia adopts the

Figure 1-2: Timeline of European monetary integration

Source: European Commission²⁶

The Maastricht criteria

At the time of Treaty preparation the macroeconomic conditions of the member countries differed significantly. As a result, Germany, which was always concerned with keeping inflation low, demanded that joining the future monetary union would not be taken as granted, but rather a country should qualify by fulfilling some criteria. Furthermore, these criteria were not only valid for the creating countries but also for the potential future applicants²⁷:

²⁷ Baldwin, A. & Wyplosz, C., (2006)

²⁶ Retrieved on April 30th, 2012 from

http://ec.europa.eu/economy_finance/emu10/timeline_en.pdf

- 1) Inflation it was agreed upon, that the inflation rate of a country should not be more than 1.5% over the average of those with the lowest inflation rates in the EU;
- 2) Long term nominal interest rate this criterion was set to rule out the possibility of manipulating with inflation rates, like 'freezing' prices the year before acceptance and then loosening price stability in the future. According to the Fischer theory *nominal interest rate* = expected inflation + real interest rate, and since real interest rates are basically consistent and rigid worldwide, it is expected inflation that mostly effects the nominal interest rates. As it was agreed upon, the long-term nominal interest rate of a country should not be more than 2 percentage points above the average of the three countries with the lowest inflation rates;
- 3) ERM membership according to this rule, a country has to participate for at least two years in ERM, and therefore fluctuate in a set band versus the other currencies in the monetary union, but most importantly without the need to devalue its currency
- 4) Budget deficit in this case the power of Germany in the decision making process dominates, as it was them who suggested the 3% of GDP as highest budget deficit acceptable. The idea behind the actual number comes from the structure of the German budget, as according to them a deficit on the level of public investments, such as infrastructure and telecommunications, is tolerable on the level of 3% because it enhances growth and therefore generates the money needed to repay the initial investment;
- 5) Public debt this criterion was accepted to prevent manipulations with budget deficits, as expenses can be accounted for in the next year or earnings accounted for in the previous to achieve better looking results. The limit for public debt was set to 60% of GDP based on the fact that at the time of writing the Treaty the average public debt to GDP ratio of the countries was around this number. However, there was a large number of countries whose public debt was much higher, but as Belgium argued (whose debt was 120% of GDP at the time), that the country is in the midst of European integration since the very beginning, is committed to strict financial discipline in the future and cannot be excluded as a result of 'past sins'. As a result of

Belgium's complaints, the criterion was reformulated to public debt to GDP ratio below 60% or 'moving that way'.²⁸

It is important to notice it was the first time, that as a result of the Maastricht Treaty, it was mentioned that some countries could be left out of this integration process. Originally the purpose of this was to preserve price stability. Finally, there were other reasons for it. Firstly, the Margaret Thatcher led Britain was strongly against a monetary union and resisted the negotiation process. However, this did not stop the other countries discussing it and finally UK realized they were being left out of this major process. This led to Thatcher being substituted by John Major, who was only able to acquire an opt-out clause by that time, what granted UK the right not to join the monetary union. Later on Denmark was granted a comparable opt-out clause after the ratification did not pass in the referendum for the first time. Then when Sweden joined the EU in 1995 it stated they do not want to join the monetary union and demanded an opt-out clause as well. However, this was refused, but according to the agreement reached Sweden would not enter ERM and is as a result disqualified. Practically this means that Sweden is considered as Denmark, both having the option to decide on euro adoption when recognized as appropriate.

1.2.2. The Eurosystem²⁹

"With a single currency there can be only one interest rate, one exchange rate vis-à-vis the rest of the world, and therefore one monetary policy." Generally this also means that there is one central bank, but this was not the case of the European Monetary Union (EMU). Each member of the euro zone further on operates their own central bank and in addition to this there is the European Central Bank (ECB) based in Frankfurt, Germany. There are two reasons for this system: (1) the creators of EMU did not want to unite the central banks into one as this could have met with a lot of reluctance and also the distress of likely lay down of employees; (2) the system itself was influenced by countries where are simultaneously regional central banks and a federal central bank working, like in the USA or Germany.

In the EMU there are two different systems of central banks coexisting at the same time. First, the European System of Central Banks (ESCB) which groups the ECB and all the central banks of the countries which are in the EU; and second, the

²⁸ Baldwin, A. & Wyplosz, C., (2006)

²⁹ El-Agraa, A., (2011)

³⁰ Baldwin, A. & Wyplosz, C., (2006). "The Economics of European Integration", p. 384

Eurosystem, what was a newly created term which refers to the ECB and those national central banks which are part of the euro zone. The latter system is the one responsible for monetary policy in the euro zone, it also executes operations on the foreign exchange market, is in charge of the foreign reserves of the euro area states and supervises the financial system and institutions.

The ECB is managed by the Executive Board (includes six board members), who are chosen by the leaders of the euro area countries after discussions with the European Parliament and the Governing Council of ESCB. It is the Governing Council which decides on monetary policy issues by a majority voting system. Even though that the Governing Council makes the decisions, the ECB's President runs the meetings of the Council. The ECB is then responsible to execute the decisions and orders the national central banks to perform the agreed monetary policy. It is important to notice that the members of the Executive Board are not representatives of any country.

Objectives of the Eurosystem³¹

In the Treaty of Maastricht it is clearly set that the main objective of the Eurosystem is to ensure price stability, however, the formulation is rather unclear: "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." The Treaty does not include a clear description of price stability, but "the Governing Council agreed that in the pursuit of price stability it will aim to maintain inflation rates close to 2 per cent over the medium term." Inflation is measured by the year-on-year increase in the Harmonized Index of Consumer Prices, but their understanding of 'medium term' is not defined. Besides price stability the Treaty also indentifies secondary objectives like "economic and social progress, and a high level of employment" but these are taken as inferior goals.

Instruments and strategy of the Eurosystem³⁵

The Eurosystem executes monetary policy with short term interest rates as the majority of central banks. It is due to the fact that central bank is the only entity to

³² Article 105 of the Maastricht Treaty

³¹ Baldwin, A. & Wyplosz, C., (2006)

³³ Monthly Bulletin, ECB, May 2003, p. 8

³⁴ Article 2 of the Maastricht Treaty

³⁵ Baldwin, A. & Wyplosz, C., (2006)

supply cash and has therefore a monopoly and thus manages the short term rates. On the other hand, the central bank does not have a monopolistic position with financial instruments for longer periods and therefore it is hard to manage long term rates.

The strategy taken by the Eurosystem is based on three components: (1) price stability as defined by the system, (2) economic and (3) monetary conditions. Economic include the assessment of current and likely future conditions in terms of exchange rate, employment, foreign affairs, prices and growth. The monetary assesses credit conditions and the monetary aggregates. So when the monetary policy is being decided, the Council first looks at the economic analysis, while the monetary analysis serves as a proof for the forecasts presented.

1.2.3. First years of the monetary union

Inflation and economic growth³⁶

When the EMU was created, the global economy was not in a good condition and therefore the union experiences a number of problems. In 2000 oil prices tripled, while stock markets were falling as a result of the burst of the so called dotcom bubble. Soon after, the US entered recession while Europe was slowing down. A year later the 9/11 attacks marked the global economy with having a bad performance once again. This all impacted negatively the euro area, most visibly by the above target inflation rates. It was this time when the strategy was revised from a below 2 per cent target to a close to 2 per cent inflation target, because the Eurosystem was unable to fulfill their own goals from 2000 till mid-2004. The issues arose as a result of adverse shocks, namely the oil shock which in general put central bankers in an uneasy situation. The choice was either trying to avoid rising inflation or to enhance growth at the price of higher inflation. As mentioned in section 1.2.2. the main objective was and still is to ensure price stability, growth comes only as a secondary goal. This strategy resulted in about 2 per cent inflation but a fairly low growth on average in the euro area. There was lot of judgment for this, including from member states, but it has to be underlined that the growth range was quite big. There were countries with high growth, but the big economies like Germany, France and Italy performed poorly thus resulting in the relatively slow average growth. The ECB reasoned that monetary policy has little effect

-

³⁶ Baldwin, A. & Wyplosz, C., (2006)

on growth in the long run, and as proved by history, this was the case as there were other factors involved.

Exchange rate development³⁷

Another issue was the exchange rate evolution. From the time of the launch of euro in 1999 the US dollar started to appreciate against all major currencies, but most notably the euro. This was seen as the weakness of the euro and that the ECB could not accomplish its goal of a strong currency. Then, from 2002 onwards the US dollar started to depreciate, and the ECB was criticized for overvaluing the euro and thus hurting exports and prolonging the economic slowdown.

However, the ECB clearly stated since the beginning that it is not liable for the exchange rate and thus would not intervene. Theory of exchange rate regimes proposes that economies which are big and closed, just like the EMU, are not concerned with exchange rate stabilizations as freely floating rate would suit them the best. The ECB was of the same opinion, but the 'timing' of depreciation and then appreciation was the worst possible. The euro depreciated at the time of the oil shock, so the rise in oil prices was more dramatic. Then it appreciated when the developed world was hit by the burst of the dotcom bubble and it needed a boost, but the rising euro made domestic producers less competitive on worldwide markets. It is not sure if anything could have done to lessen the effects, but collaboration from the side of US would be needed, and that was quite unlikely as the exchange rate movements were in their favor.

Asymmetries across member states³⁸

In case of a single currency, there is also a 'single' monetary policy as there is just one central bank. Therefore, the Eurosystem cannot adjust the policy based on the economic needs of a particular member state, but should take the euro area as one and deal with it accordingly. These represent the costs which member countries have to take in order to be in a monetary union.

The economic situation varied significantly across euro zone members. Inflation rates were converging in the after - Maastricht period, but as a result of the oil shock, there were signs of divergence into the future. GDP growth was also converging and stayed that way too. However, it is more problematic if inflation is year-by-year lower/higher in a country than the rest of the union. If it is constantly higher, the

³⁷ Baldwin, A. & Wyplosz, C., (2006) ³⁸ Ibid.

country loose on competitiveness and then that would have to be compensated by years of lower than average inflation. In the first years of the EMU there were several examples of lasting inflation differences; like Spain, Netherlands, Ireland and Portugal which experienced an above average inflation, while countries like Germany, France and Finland below average. The reasons for these differences can be explained by³⁹:

- The Balassa Samuelson effect, which predicts that a country's real
 exchange rate appreciates when it is converging. In a monetary union this
 would have an effect of above average inflation, what does not necessarily
 mean loss in competitiveness, but may be a result of increased productivity.
 This may be valid for Portugal, Spain and Ireland.
- Not ideal conversion rate when the conversion rates were fixed in 1998 it was not sure if they are relevant, like Germany's currency was overvalued and that is the reason for the below average inflation in the first years.
- Wage and price pressure increases in minimum wages, electricity or transport prices might be reflected in an increase in production costs and finally the overall price level. Such was the case in Greece, Portugal, Spain and Netherlands.
- Policy mistakes too much public spending or wage and price increases in the price increases are likely to be reflected in a higher inflation.
- Asymmetric shocks countries are affected differently by events such as the oil shocks and this is reflected in all the economic variables.

.

³⁹ Baldwin, A. & Wyplosz, C., (2006)

2. THE EUROPEAN DEBT CRISIS

Towards the end of the first decade after the Euro launch the project was considered to be rather successful. The Euro was strong and its importance in the World economy was increasing from 'day to day'. The member countries from an economic point of view were doing well and more countries were joining the club, as Slovakia was to become the 16th member in the beginning of 2009. Unfortunately, by late 2008 the subprime mortgage crisis in the US turned into a financial crisis, and not only affecting its source of origin, but also Europe and the rest of the world – especially developed countries as categorized by OECD. As it turned out during the following years, this led to unexpected consequences in the European economy in general, but most severely in the peripheral countries of the Euro zone and therefore having major impact on the whole zone itself. The public debt, especially in PIIGS countries⁴⁰, was at levels which put much pressure on the economies and some were unable to finance this burden. This led to the creation of funds, mechanism and maybe even a further integration – or disintegration – of the concerned countries.

This means that as of May, 2012 we do not see the European Union and the Euro as it was seen before the financial crisis, but more importantly, financial markets are still distressed, the bond markets under severe pressure and the austerity measures do not seem to have the desired effect, but rather worsen the situation as production slows down and unemployment is as its highest both in the EU and Euro zone since the launch of Euro in 1999.⁴¹ The following chapter deals with the debt crisis in Europe, how it evolved and where it stands at the time of writing.

2.1. From financial crisis to sovereign debt crisis

The origins of the US subprime mortgage crisis of 2007 – 2009 date back to the early 2000's. ⁴² It all started with an expansionary monetary policy as a reaction to hurtful events on the economy, such as the dotcom bubble, 9/11 attacks, and Iraq to prevent recession. It is important to notice that the expansionary monetary policy was also applied elsewhere around the globe, including the European Central Bank as a reaction to the stagnation of Italian and German economies, terrorist attacks in Madrid and London, etc. However, this expansionary policy caused a boom in the housing

⁴⁰ PIIGS countries include Portugal, Italy, Ireland, Greece and Spain

⁴¹ European Commission, (2012)

⁴² Csanda, G., (2010)

market, most noticeably in the US and Spain. Housing seemed affordable for almost everyone as mortgage rates were low. Furthermore, by future house owners it was considered to be a safe investment as housing prices were continuously on the rise. For the same exact reason banks and mortgage companies were willing to give mortgages to even riskier clients without a permanent and/or stable income to increase their earnings as there was 'only a minimum risk' connected and they were 'secured' by the permanently rising house prices.

However, the most important is how the crisis was 'distributed' globally. There was a financial instrument created which was derived from the mortgages via securitization. The process of securitization by IMF is defined as "certain types of assets are pooled so that they can be repackaged into interest-bearing securities",43, and in this case the assets were the mortgages. Securitization was practiced for quite some time before the subprime crisis, but there were other underlying problems involved. In some cases these securities were backed by subprime mortgages which were risky, and moreover this was connected with insufficient regulation and poor rating methods by the rating agencies. 44 Finally, these securities are then marketed on the financial markets and sold to banks, hedge funds, pension funds all over the world. All in all, this meant that when the subprime problem got visible, there was a sellout of these securities as it was not sure which of them are backed by subprime mortgages.

In 2007 it was still unsure if the subprime mortgages would be reflected in the economy. Then, in the UK a typical 'run on the bank' happened with Northern Rock, the fifth biggest mortgage bank in the UK at the time with about 1.5 million clients. It is important to notice that this bank was considered to have only a small amount of the concerned securities and there was only an insignificant amount of clients with lower income levels. The reason for Northern Rock's problems was lack of liquidity. Interbank lending decreased as banks feared that others might have a large proportion of the risky securities and at the same time the 'run on the bank' occurred. 45

In the following year liquidity problems affected Bearn Sterns, the US based investment bank, which resulted in the drop of share prices by 47 per cent on March 14th. Out of fear of a domino effect in the banking system of the US the New York Federal Reserve approved a bailout plan by JP Morgan Chase and then on March 16th

⁴³ Jobst, A., (2008): "What is Securitization?" in Finance and Development, September 2008, Volume 45, Number 3, p.48

⁴⁴ International Monetary Fund, (2008)

⁴⁵ Klasekova, M., (2007)

approved that the major investment bank would buy Bear Stearns at a discount price of \$2 (compared to the \$30 on March 14th, however, the final price was increased to \$10 per share). According to Mody, A. and Sandri, D. this marks the first phase of the crisis as represented in Graph 2.

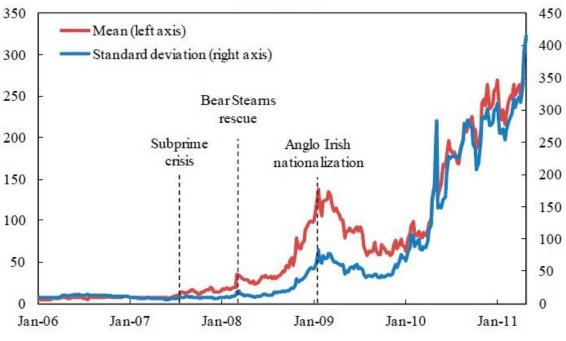


Figure 2-1: Euro zone bond spreads (basis point)

Source: Mody, A. & Sandri, D.⁴⁷

According to them the situation in the Euro zone can be divided into three stages based on government bond spreads of countries in the Euro area:⁴⁸

- 1) From the beginning of the subprime crisis till the Bear Stearns bailout; during which time there was only a minor increase in spreads which was mostly connected with the situation of global banks, but across the members the correlation remained high;
- 2) From the Bear Stearns case till the Anglo Irish nationalization in Ireland; when the spreads were increasing and correlation across countries decreasing as a result of the situation of the financial system in each country and fears of involvement of public finances in stabilizing the situation;
- 3) After the nationalization of Anglo Irish, there was a lower pressure on spreads for a while until the crisis in Europe evolved fully, this time the

⁴⁶ Boyd, R., (2008)

⁴⁷ Retrieved on May 6th, 2012 from http://www.imf.org/external/pubs/ft/wp/2011/wp11269.pdf

pressure was not only the result of the situation in the financial sectors, but also the differences across the countries, which caused the significant increase in spreads and huge differences across member states.

The spread in this case means the difference between a country's 10-year bond yield and the German 10-year bond yield, which serves as a benchmark in Europe, as it is an equivalent of a risk free rate in European debt markets. Thus, the bigger the spread, the riskier is the debt of a country. Spread vs. bund is referred to as the German bond, as spread vs. T-bonds as the difference between the yields of one country's yield and the yield on US bonds. Further on, 1 basis point depicts 1/100th of a percent.⁴⁹

The second stage can be furthermore characterized by numerous shocks on the financial markets. In September, 2008 the largest intervention was done in the US. The two state sponsored corporations which backed approximately half of the \$12 trillion mortgage market, Federal National Mortgage Association⁵⁰ and Federal Home Loan Mortgage Corporation⁵¹, were put in federal conservatorship by the Federal Housing Finance Agency. Not long after a major investment bank, the Lehman Brothers collapsed. Markets considered this to be impossible, as Lehman Brothers was seen as a typical 'too big to fail' case. They proved to be wrong, as the Fed did not provide a bail out. Days later the Fed most probably regretted the decision, as the panic on the markets spread and the pace of events speeded up. Investment bank Merrill Lynch was bought by Bank of America for \$50 billion and this way bankruptcy prevented. The Federal Reserve of New York decided to lend up to \$85 billion to American International Group⁵², the largest US insurer after their credit was downgraded by all major rating agencies. Later on, Washington Mutual, one of the largest US savings banks was put into Federal Deposit Insurance Corporation's receivership and then sold to JPMorgan Chase, while the original holding company bankrupted. Another of the biggest savings banks, Wachovia was overtaken by Wells Fargo to prevent its collapse. Towards the end of 2008 Citigroup was rescued by a bailout from the Treasury.⁵³ In January, 2009 Bank of America was bailed out and Anglo Irish, Ireland's third biggest lender was nationalized. This was a result of the real estate crash in the country as Anglo Irish was considered to be the most exposed. As mentioned, this marks the end of the second phase of the crisis.

⁴⁹ Lynn, M., (2011)

⁵⁰ Federal National Mortgage Association commonly known as Fannie Mae

⁵¹ Federal Home Loan Mortgage Corporation commonly known as Freddie Mac

⁵² American International Group commonly known as AIG

⁵³ Joint Statement by Treasury, Fed, FDIC, (2008)

The final stage is when the crisis fully shows its impact on the particular economics of the EU. Outlooks into the future worsened and therefore the continuous shocks on the financial markets affected more those countries which had lower growth prospects and higher public debt ratios prior to the crisis.⁵⁴ This is the reason for the increasing spreads and difference in spreads across the Euro area. Later in 2009 the first signs of the Euro crisis were visible in the form of Greek fiscal issues.

2.2. Greece – the real beginning of the euro crisis

It is rather hard to define when the problems started in Greece as most of the issues are complex and a result from lack of reform, but the downgrading of Greek debt in January, 2009 by Standard & Poor's to A- can be considered as the first warning.⁵⁵ The government realizing the underlying fiscal problems increased taxes on cigarettes and alcohol in February. Later in the year, Prime Minister Kostas Karamanlis decided to call for early elections, as he felt there was a need for a comfortable majority in the parliament to implement the austerity measures initiated by the government and to pass the structural reforms required by the seriousness of the situation. However, in the elections in October the opposition's PASOK party came out as winner with a 43 per cent vote and its leader, George Papandreou was appointed as the new Prime Minister (PM). It is interesting to notice, that the reason why he turned out to be the winner is the sentiment of the Greeks towards the planned austerity measures of the former PM and the his rhetoric in the campaign suggesting that it's was not the time for cutbacks in spending, but rather a stimulus package should help to lead out the country from the problems. Just a couple days later the new PM publicly admitted that the country is not on track and therefore that year's budget is likely to have a 12% deficit, exceeding more than twice the previous estimates. This was followed by the downgrade of Greek debt to A- by one of the major rating agencies, Fitch. In November it was reported, that the Euro zone is out of the worst recession since WWII as the area's economy grew by 0.3% in the third quarter of '09. However, this did not mean any good news for Greece. In early December, the worries over the sustainability of Greek debt grew and S&P issued a negative outlook stating "our view that the fiscal outlined by the new government are unlikely to secure a sustained reduction in fiscal deficits and the public debt burden". 56 This resulted in the Greek 10-year bond's spread over the German one

⁵⁴ Mody, A. & Sandri, D., (2011)

³³ Lynn, M., (2011)

⁵⁶ Mrsnik, M., (2009), Standard & Poor's credit report, December 7, 2009

reached 171 basis points on December 7th. The next day, Fitch downgraded Greek debt once again, to BBB- and as a result the spread increased to 221 basis points as can be seen in Table 2-1 below.

Table 2-1: Dec 7 vs. Dec 8, 2009 10Y bond yields and spreads

BONDS	- TE	N YEA	AR GO	V'T SPR	EADS	3		BOND:	S - TE	N YEA	AR GO	V'T SPR	EADS	3	
		Spread	Spread			Spread	Spread			Spread	Spread			Spread	Spread
	Bid	VS	VS		Bid	VS	VS		Bid	VS	VS		Bid	VS	VS
Dec 7	Yield	Bund	T-Bonds		Yield	Bund	T-Bonds	Dec 8	Yield	Bund	T-Bonds		Yield	Bund	T-Bonds
Australia	5.52	+2.27	+2.08	Netherlands	3.42	+0.24	+0.05	Australia	5.55	+2.39	+2.16	Netherlands	3.41	+0.25	+0.02
Austria	3.51	+0.33	+0.14	New Zealand	6.03	+2.79	+2.60	Austria	3.51	+0.35	+0.12	New Zealand	5.97	+2.82	+2.58
Belgium	3.57	+0.39	+0.20	Norway	3.98	+0.75	+0.56	Belgium	3.56	+0.40	+0.17	Norway	3.95	+0.80	+0.56
Canada	3.30	+0.05	-0.14	Portugal	3.76	+0.53	+0.34	Canada	3.29	+0.14	-0.10	Portugal	3.79	+0.64	+0.40
Denmark	3.57	+0.37	+0.18	Spain	3.73	+0.57	+0.37	Denmark	3.52	+0.37	+0.13	Spain	3.75	+0.60	+0.36
Finland	3.43	+0.23	+0.04	Sweden	3.23	+0.05	-0.14	Finland	3.41	+0.26	+0.02	Sweden	3.19	+0.04	-0.20
France	3.44	+0.26	+0.07	Switzerland	1.90	-1.30	-1.49	France	3.42	+0.27	+0.03	Switzerland	1.92	-1.23	-1.47
Germany	3.19	-	-0.19	UK	3.69	+0.43	+0.24	Germany	3.15	200000	-0.24	UK	3.69	+0.54	+0.30
Greece	5.14	+1.71	+1.52	US	3.44	+0.19		Greece	5.36	+2.21	+1.97	US	3.39	+0.24	(2)
Ireland	4.81	+1.62	+1.42					Ireland	4.86	+1.71	+1.47				
Italy	3.94	+0.79	+0.60	Yields: annualised basis. Source: ThomsonReu-				Italy	3.97	+0.81	+0.58	Yields: annualised basis. Source: ThomsonReu-			
Japan	1.29	-1.90	-2.10	ters Selection made by ThomsonReuters.			Japan	1.27	-1.89	-2.12	ters Selection made by ThomsonReuters.				

Source: Thomson Reuters⁵⁷

The shocks were followed by statements from Mr. Papandreou reassuring investors that they are willing to do anything to get the finances back on track. Other EU officials and politicians expressed their concerns and as the German Chancellor Angela Merkel said at the EU summit in Bonn trying to calm the markets: "If something happens in one country, then all other countries are affected as well. As we have a common currency, we also have a common responsibility." Unfortunately, there was no general consensus on the attitude of EU towards the issue, which became clear when Fredrik Reinfeldt, the Prime Minister of Sweden told: "What we now are seeing in Greece is of course problematic, but it is basically a domestic problem that has to be addressed by domestic decisions". By the end of the summit it was clear that EU leaders were not committed to support Greece by any other means than words and requests of getting the deficit under control. PM Papandreou said that a new plan will be ready by the upcoming year on how to stabilize the economy and said: "We will live up to our obligations. There is no possibility of a default for Greece". 60

⁵⁷ Retrieved on May 5th, 2012 from

 $http://markets.ft.com/RESEARCH/markets/DataArchiveFetchReport?Category=BR\&Type=SPR\&Date=12/07/2009\ and$

http://markets.ft.com/RESEARCH/markets/DataArchiveFetchReport?Category=BR&Type=SPR&Date=12/08/2009

⁵⁸ Merkel, A., (2009) in "Merkel says EU has 'common responsibility' for Greece" in Bloomberg News, December 10, 2009

⁵⁹ Reinfeldt, F., (2009) in "Merkel says EU has 'common responsibility' for Greece" in Bloomberg News, December 10, 2009

⁶⁰ Papandreou, G., (2009) in "Greek Prime Minister George Papandreou: 'We Will Not Default on Our Debt" in The Daily Telegraph, December 11, 2009

On December 14th cuts in public spending were introduced and promises made that the deficit would be brought below 3% of GDP by 2013. But the markets and analysts did not believe in them and therefore the rating was cut by S&P on December 16th to BBB- what caused the spread to increase to 250 basis points. In the meanwhile politicians across Europe were repeatedly saying that it is the problem of Greece and the only solution to it is to introduce widespread cuts. Moody's just before Christmas as well downgraded Greek bonds to A2. This led to the Greek Parliament's approval of budget for the following year with the aim to reduce deficit from 12.7% in 2009 to below 9.4% in 2010.⁶¹ Picture 1 illustrates the development of the Greek 10-year bond yields and that towards the end of 2009 there was a significant increase due to the downgrade of Greek debt by the major rating agencies and the indecisiveness of European political leaders.⁶² The time towards the end of the year can be characterized by continuous downgrades of the Greek debt and introduction of new measures to tackle the issue and calm down markets.

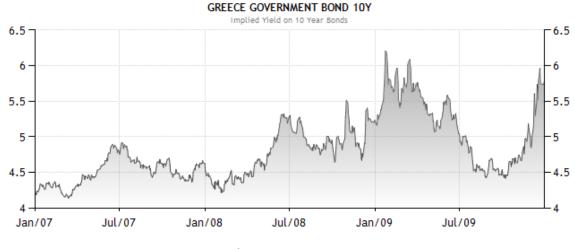


Figure 2-2: Greek 10-year bond yields (January '07 – December '09)

Source: Trading Economics⁶³

By February, 2010 Greece was constantly introducing new attempts at bringing down the deficit, by cutting wages, increasing taxes, increasing retirement age and others. However, it was not only the markets which had to be persuaded, but also the general public. In late February, unions organized massive protests across the country against the austerity program of the government. While European leaders cannot come

⁶¹ Associated Press, (2009)

⁶² Lynn, M., (2011)

⁶³ Retrieved on May 1st, 2012 from http://www.tradingeconomics.com/greece/government-bond-yield

to a decision how should be the problem managed, the media in the Netherlands and Germany brings up the option of a bailout which gains opposition of the public in those countries. The Greek financial sector was suffering from the situation as well, since the major banks get downgraded as they were holding most of the Greek bonds and the economic outlook was not positive either.⁶⁴

In the beginning of March an additional plan was introduced by the government to get finances back on track. It meant an additional € 4.8 billion in cuts and tax increases which included increased VAT, increased taxes on tobacco, alcohol and fuels, etc; this represented a 2% of the Greek GDP. Both the European Commission and major rating agencies approved the new measures saying that by these means the budget could be kept.⁶⁵ At the same time, PM Papandreou notes that if Greece would need financial support, he prefers to deal with this within Europe. In a case – which was highly likely at the time – that European countries would not provide any financial support, Greece would ask the International Monetary Fund (IMF) for aid to calm down markets. Just a week later the main resister of a bailout, Germany changes its mind and says they're open to a joint action of the Euro zone and the IMF.⁶⁶ This was agreed upon by all members of the Euro area. However, it was stressed that this did not mean an automatic rescue package for Greece, but rather served as a guide on what should be done if the problems intensify. Politicians thought that the 'insurance' of IMF and Euro zone having the back of Greece would be sufficient.

It is important to notice that a possible reason for the German turnaround might be in the Maastricht Treaty, as it is stated "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". ⁶⁷ By the involvement of IMF, this initial rule could be by-passed. Other reasons include, that it could be considered shameful that a Euro zone country has to ask for financial aid from the IMF, which is funded by developed nations to help – usually – the least developed countries in trouble. Furthermore, the sign to the outer world that the Euro zone is not willing and/or able to cope with the issues of its own is not a good one. ⁶⁸ Not to mention the fact that European Union and the Euro zone was built on the idea of solidarity within its members. From German point of view, the

⁶⁴ Mollenkamp, C. & Paris, C., (2010)

⁶⁵ Paris, C. & Granitsas, A., (2010)

⁶⁶ Walker, M. & Forelle, C., (2010)

⁶⁷ Artice 104b of the Maastrich Treaty

⁶⁸ Lynn, M., (2011)

participation of IMF was also good, as generally the institutions requires drastic measures to be taken and therefore it would not seen as Germany is the one who demands it.

In April the bond yields soared mostly based on rumors and concerns that the country can cope with it without outside help. First, Fitch downgraded Greek debt to BBB-, only one above the rate for 'junk bonds'. In response, Euro zone leaders agreed on the possible bail conditions for Greece. Loans from all Euro zone members (based roughly on the size of their economies) totaling to 30 billion Euros over the following three years at a rate of 5% and an additional 15 billion Euros from the IMF could be provided for Greece as a matter of last resort. The interest rate of 5% was hard to agree on and was a compromise between the countries, as differences in viewpoints between leaders still persisted, Germany insisting close-to-market rates (around 7% at the time) and others led by France arguing for lower rates as market rates would not ease the situation. This agreement was, however, not a bailout, but rather a 'safety net' which can be activated if needed and had to be still approved by all involved nations. ⁶⁹

Later that month the European Statistical Office reported that the Greek deficit for 2009 was 13.6% of GDP, and not 12.7% as claimed by the government. As a reaction Moody's also decreases the rating. PM Papandreou April 27th, considering there is no other option left, asks for the IMF – Euro zone joint help as agreed on the previous month.

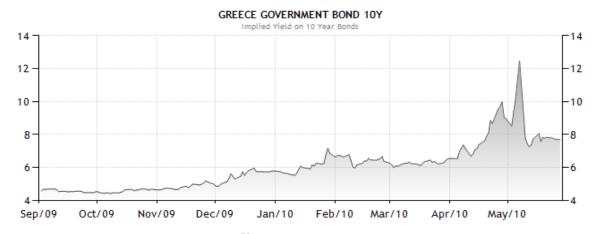


Figure 2-3: Greek 10-year bond yields (September '09 – May '10)

Source: Trading Economics⁷⁰

⁶⁹ Forelle, C. & Walker, M., (2010)

⁷⁰ Retrieved on May 3rd, 2012 from http://www.tradingeconomics.com/greece/government-bond-yield

The response to the request was not as the Greeks expected. Germany and the IMF conditioned the help with further austerity measures, as those so far were not enough and did not prove their commitment to bring down the deficit to the Maastricht levels. In Germany this had much to do with the opposition within the country and that regional elections were due. As a response, S&P's downgraded the Greek bonds to BB+, considered as 'junk status'.⁷¹

May 2nd, in a hope of putting an end to the Greek drama, the IMF and Euro zone countries agreed to provide a bailout to Greece in the form of a loan amounting to € 110 billion over the following three years to prevent a default or restructuring of Greek debt - it had to be bigger and therefore more reassuring. The deal meant further cuts in public spending and most importantly, structural reforms of the economy, which were put off too long and were in fact the primary reason for the problems of Greece. The agreement was still subject to the approval of German Parliament, which is required by German constitution.⁷² On one side Greece finally got the outside help needed to 'survive', but on the other it did not bring much peace to the financial markets. Firstly, the bailout was long expected by analysts and investors, and secondly, there was a reasonable fear of contagion to other highly indebted countries like Spain, Italy and Portugal. The deal did not address this issue at all, and was ruled out by officials that it can be used as precedent if other countries experience likely problems in the future.⁷³

By this time, however, other countries were already experiencing problems as did Greece earlier on. Credit downgrades happened in many European countries, but those mostly affected by the Greek events were Spain and Portugal.

2.3. The rescue plan

Not even a week after the Greek bailout, May 7th, the German Parliament had to approve the package. In the meantime, the market development did not look good. Greek bond yields were on the rise once again, and that not being enough, the EURIBOR, the European Interbank Offered Rate was as well. Despite some earlier opposition, the German Parliament approved by vast majority the agreement as the Finance Minister Wolfgang Schäuble called it a requirement for the future of Europe. 74

⁷¹ Lynn, M., (2011) ⁷² Ibid.

⁷³ Bilefsky, D. & Thomas, L., (2010)

⁷⁴ Lynn, M., (2011)

The happenings on the markets were stressing many leaders, including Bundesbank⁷⁵ officials, José Manuel Barroso – the President of the European Commission, and as well Timothy Geithner – the US Treasury Secretary. Barroso and Merkel agreed that on the scheduled EU summit for that days evening a more throughout proposition had to be made because the previous week's Greek bail is not sufficient enough to bring relief to the markets anymore. Geithner in a call to the German Finance Minister requests the European leaders to do anything to support the euro.⁷⁶

At first, the politicians represented significantly different views on what should be done. According to Nicolas Sarkozy, the French President, a European bond should be introduced, which is the liability of all the Euro zone countries – and this would mean that there is one bond yield and therefore no punishment in form of higher yields for those which are in a worse condition. The first estimates of the amount of the fund were between \in 30 billion and \in 70 billion. Nonetheless, everyone agreed that the final decision has to be big, so it would 'send a signal', and has to be done by Sunday, May 9^{th} night before the markets open in Sydney and Tokyo. It was decided that the Finance Ministers would meet on Sunday to come up with the appropriate solution.

On Sunday, the European Commission issued the first draft of the agreement, which included: (1) no involvement of IMF in the future, (2) no time restraint on the bail, (3) agreement is not needed from all member states, (4) all members would back the loans and finally, (5) the introduction of a European bond. In the meantime, the Bundesbank was asked by the German Government to determine the liquidity requirement of the 'problematic' countries in the southern region of the euro zone. The estimated figure of maturing debt is around 500 billion Euros over only the following two years.

While the leaders were gathering in Brussels, the German Finance Minister experienced health issues on the way from the airport, medical attention had to be called and he was transferred to the hospital. This is fairly important as in the beginning of the negotiations Germany was only represented by State Secretary Jörg Asmussen as a substitution for the Finance Minister. In the afternoon, Thomas de Maziére, the German Interior Minister is informed of the hospitalization of the Finance Minister and asked to represent the German point of view in the negotiations. When he arrives to Brussels it is already late evening and therefore not a lot of time before the markets open in Sydney.

76 Der Spiegel, (2010)

⁷⁵ Bundesbank is the German central bank

At first, he insists on dismissing the proposed idea of a European bond, partially because of the German constitution and secondly because of the 'moral hazard' connected with it.⁷⁷

The negotiations continued till early morning as lot of the issues could not be agreed on initially. Finally, after lot of compromises from all sides, the final agreement is made before 2 a.m., when the markets open in Tokyo (the market opening in Sydney was missed). The main points of the agreement are the following ⁷⁸:

- 440 billion Euros of loans to troubled economies backed by the other Euro zone members:
- 250 billion Euros supported by the IMF;
- 60 billion Euros provided by the European Commission
- European Central Bank would start to buy up bonds of the troubled economies on the secondary markets.

The total amount of 750 billion Euros proved to be impressive enough for the markets at first. However, when further analysis were made, it did not seem that good anymore. Firstly, the money would be raised by a fund, which not yet existed. Secondly, the loans were backed by all members meaning that the ones in troubles also participate as long as they do not need a bailout – mostly concerning Portugal, Ireland and Spain. Thirdly, it still created a 'moral hazard' issue, as countries could rely now on being bailed out by the fellow members and did not need to make an effort on fiscal consolidation. Others argued that this way, the monetary union becomes a transfer union and structural issues are not solved (as debt cannot be a solution to too much debt).79

The actual framework how the fund would operate was decided later, in early June. A new European Financial Stability Facility (EFSF) would be created which would issue debt and provide loans to the countries in problems. The issued debt would be guaranteed by the member states. It was insisted by Germany, that the loans would be provided only in exchange of strict austerity measures by the countries in concern. The European Investment Bank would provide assistance and support the EFSF, but without the involvement of lending.⁸⁰

⁷⁷ Lynn, M., (2011)
⁷⁸ Ewing, J. & Thomas, L., (2010)

⁸⁰ Castle, C., (2010)

2.4. Contagion across Europe

As already mentioned, markets lacked the decisiveness of Euro zone leaders on the problems of Greece, but most importantly actions which would assure investors of the support of the other members. There was basically too much playing around according to the markets and that resulted in a contagion across Europe. The reason was not necessarily a financial situation as bad as in Greece, but the vulnerability of the countries in times of a worldwide economic slowdown.

Furthermore, as a result of the common currency, the financial markets became more interconnected within the region. The exposure to foreign countries became bigger, and that was the main reason why the EU so heavily resisting the idea of a Greek default on debt.

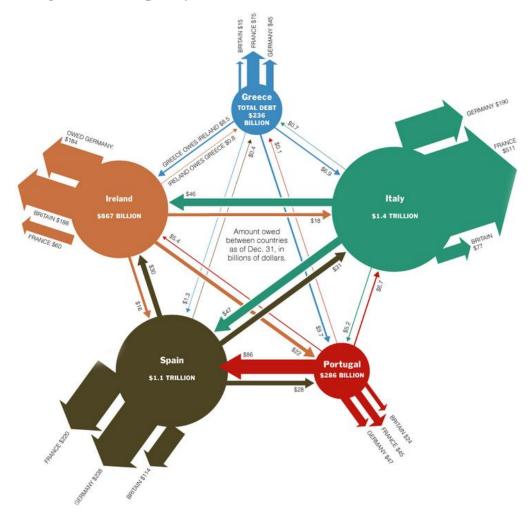


Figure 2-4: Complexity of debt 'network' as of December 31, 2009

Source: New York Times, Bank for International Settlements⁸¹

⁸¹ Retrieved on May 8th from http://www.nytimes.com/interactive/2010/05/02/weekinreview/02marsh.html

On one side were the financially troubled economies which could be affected by the loss of market confidence, and on the other, a potential default of a country would immediately launch a domino effect across the continent affecting also relatively stable economies like France and even Germany. As is it illustrated in Picture 4, the case of Greece was not of such importance due to its size, what is relatively small to other Euro countries, but the contagion. A possible Greek default would increase the burden on Portugal, and if Portugal defaults Spain is affected highly due its high exposure.

The pressure on the other highly indebted countries in the times of the Greek turmoil was huge. After the Greek rescue plan Spain decided to 'forego' the problems and cut deficit by austerity measures in the form of 5% reduction of public wages for that year, freeze for the following and tax increases for high income people; while Portugal initiated increase of taxes and wage decreases for public workers and politicians. In Spain, the confidence in the country was also influenced by the problematic banking sector, which was extremely exposed to mortgages in the real estate market which was collapsing as a result of the housing bubble. 82 The regional banks – cajas, were a prime example of overexposure. The government supported the cajas to merge so their balance sheets become better. In late May, the government took over CajaSur, one of the regional banks from the southern region of the country which was run by the Catholic Church and in 2009 incurred losses in the amount of 170 million Euros. This acquisition was the first of many to come in the rescue plan of the banking system, which was predicted by S&P to cost overall 35 billion Euros.⁸³ Then, Fitch downgraded the Spanish rating to AA+ explained by "the process of adjustment to a lower level of private sector and external indebtedness will materially reduce the rate of growth of the Spanish economy over the medium term".84

In mid June, the Greek rating was cut to junk status by Moody's as well, reasoned by the uncertainties connected with the impact of austerity measures on the economic performance of the country. In July, first Moody's decreased the Portuguese rating to A1 and then Ireland's to Aa2. Later that month, the EU decided to make the results of stress tests on major banks public in order to reassure the markets. The results were good, according to analysts too good as only 7 out of the 91 examined banks did not pass. The overly good results were considered to be partially a result of the EFSF set

⁸² Henson, C. & Hannon, P., (2010)

⁸³ Lynn, M., (2011)

⁸⁴ Coulton, B., (2010) in "Spain Loses AAA Rating at Fitch as Europe Battles Debt Crisis" in Bloomberg News, May 29, 2010

up in May but concerns about the credibility of the tests remained as not enough data was made public. The results were supposed to enhance interbank lending and therefore ease the financial system. ⁸⁵

In late August, the rating of Ireland was decreased by S&P to AA- saying that the costs connected with the rescue of the financial sector were significantly higher than earlier expected. A month later, Spain's rating is again reduced by Moody's to Aa1 due to low growth outlooks and its impact on the budget. In October, Irish rating decreased by Fitch from AA- to A+ as reacting to the increased costs of the banking sector rescue, later the month the government announced that budget expenses have to be decreased by 15 billion Euros over the following four years to bring down deficit below 3% of GDP by 2014.

In November, after a long resistance, the Irish government applied for a bailout from the EFSF. The EU insisted on the help for Ireland in order to prevent contagion to Portugal or Spain. The country suffered severely from the financial crisis, but not as a result of overspending, as was the case in Greece. It was due to the fact that the Irish banking sector suffered huge losses after the crisis, resulting from the real estate boom and following bubble burst. The government wanted to prevent losses of the banks and that resulted in an enormous budget deficit of 32% of GDP in 2010. The banking system was so weak that in the month earlier there was 25 billion Euros withdrawn from major Irish banks. Additionally, the rising bond yields were unsustainable and a bailout had to be asked from the fund.

IRELAND GOVERNMENT BOND 10Y Implied Yield on 10 Year Bond 10 10 Q. Q 8 8 7-6 Jul/10 Mar/10 Jun/10 Aug/10 Sep/10 Oct/10 Nov/10 Dec/10

Figure 2-5: Irish 10-year bond yields (March '10 - December '10)

Source: Trading Economics⁸⁶

⁸⁵ Ewing, J. & Saltmarsh, M., (2010)

The loan amounted to 85 billion Euros – jointly from EU and IMF – at 5.8% what was considerably lower than the market rates. Importantly, Ireland did not have to increase its corporate tax of 12.5% (one of the most important advantages of the country attracting foreign investors) what was at first a request from the EU in exchange for the help. Furthermore, austerity measures were already implemented, although some more were needed to be introduced in the form of tax increases and further cuts in spending. Another difference from Greece was the attitude of people towards the measures, as they did not protest on a regular basis as was the case of Greece or Spain when introducing austerity plans.⁸⁷

In December, a decision was made by EU leaders to establish a permanent fund which will substitute the existing temporary EFSF after 2013 in a hope to bring the unfolding debt crisis under control. The amounts in the fund were not specified at the time, but it would not fall short of the EFSF. Important addition is that all EU members are participating, unless they opt out, which was done by the UK. The possibility of loss sharing with private investors was raised and agreed on by France and Germany. The issues around a common European bond still exist, but as agreed, the framework of the fund should be made in a way that no referendum is needed in any of the member states. In the meantime the yields on Spanish bonds at an auction jumped significantly higher – 5.45% for 10-year and 5.95% for 15-year – than at the previous one – 4.62% and 4.54% respectively, and moreover, the country was not able to raise the wanted 3 billion Euros. 88

Early March, 2011 Moody's lowers Greece's rating to B1 what is followed by a preliminary decision to ease the conditions of the Greek bailout, to decrease the interest rate for the initial three years by 100 basis points and to extend their maturity to seven and a half years – eased conditions were offered to Ireland as well in return of an increase of corporate taxes (pushed by Germany and France), which was refused by the Irish⁸⁹. The EFSF's decision power is strengthened allowing it to buy up government bond not only on secondary, but as well primary markets. The conditions of the permanent fund called European Stability Mechanism (ESM) operating from 2013 are agreed on – bailout fund in the amount of 500 billion Euros of full lending capacity (the EFSF has a lending power of only 250 billion Euros in order keep its high rating). Later

⁸⁶ Retrieved on May 9th, 2012 from http://www.tradingeconomics.com/ireland/government-bond-yield

⁸⁷ Thomas, L., (2010)

⁸⁸ Castle, S. & Jolly, D., (2010)

⁸⁹ Minder, R., (2011)

the month the Portuguese government collapses over a failed attempt to pass further austerity measures, which is followed by rating decrease to A- by Fitch, and BBB- by Standard & Poor's a couple days later, which also lowers Greece's rating to BB-. In April, at first Fitch lowers Portugal's rating to BBB- which is then followed by a cut to Baa1 from Moody's. Consequently, Portugal applies for a bailout at the European Commission.⁹⁰

As a reaction to the concerns on the fiscal conditions of the country, the bond yields soared and the resigned Prime Minister José Sócrates said it was unsustainable anymore saying "I had always considered outside aid as a last recourse scenario, I say today to the Portuguese that it is in our national interest to take this step". 91

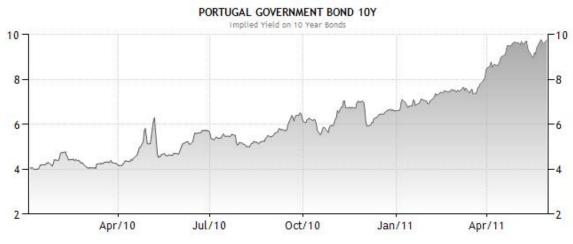


Figure 2-6: Portuguese 10-year bond yields (January '10 - May '11)

Source: Trading Economics⁹²

The loan over the following three years was agreed in the amount of 78 billion Euros, having the IMF, European Financial Stabilisation Mechanism and the EFSF share it equally. Portugal agreed to initiate privatization and a health care reform to bring budget under control. ⁹³

In the meanwhile Irish debt was downgraded to Baa3 by Moody's in mid – April just one grade above junk status and by EU officials the thought about need of a second Greek bailout were discussed broadly. In June, Greece is downgraded to CCC by Standard & Poor's (the lowest rating of all countries examined by S&P). Greek Prime

⁹⁰ WSJ, (2011)

⁹¹ Sócrates, J., (2011) in "Portugal Asks Europe for Bailout" in the New York Times, April 6, 2011

⁹² Retrieved on May 10th, 2012 from http://www.tradingeconomics.com/portugal/government-bond-vield

⁹³ Flanders, S., (2011)

Minister Papandreou announces that the country will need another bailout to prevent default but EU officials request further budget cuts and structural reforms in Greece in order to transfer the next payment of the bailout, which was passed by government and followed by numerous violent protests.⁹⁴ In July Moody's first lowered the rating of Portugal to junk, which was followed a couple days later by the downgrade of Ireland to junk as well. Italy in an attempt of staying out of the debt crisis passed budget cuts to even the budget by 2014.

In July, the Euro zone officials made a more comprehensive framework to tackle the crisis⁹⁵. Amongst others it included a (1) second Greek bailout in the amount of 109 billion Euros - (2) with the participation of private investors who would voluntarily incur losses of around 20% on Greek bonds (insisted upon by Germany); (3) expanding the repayment period for Greece (to anywhere between 15 and 30 years) and lowering the interest rates to 3.5%; (4) the decreased interest rate would apply to Ireland and Portugal as well; and lastly, (5) the EFSF would be allowed to buy bonds and provide credit to countries not at immediate risk and not bailed out like Spain and Italy. 96 Late July, the Spanish Prime Minister Jose Luis Rodriguez Zapatero announces November 20th as the date for early elections.

The first days of August brought turmoil to the bond market once again, as the Spanish bonds soared and reached a new maximum since the adoption of Euro at 6.46 per cent on the 10-year government bonds. As a reaction, ECB announced it would start buying sovereign bonds once again, however, by markets the small amount of Irish and Portuguese bonds bought was considered as a sign of weakness from the ECB's part. The next day, ECB – not publically – asked Italy to implement further austerity measures and aim to have a balanced budget by 2013 and not 2014. However, the yields on Italian bonds surpassed Spain's. The ECB reacted by buying bonds of the two countries on secondary markets, resulting in the drop of Spanish yields to 5.16 per cent and the Italian's to 5.23 per cent, a reduction of 88 and 80 basis points, respectively. 97 Mid – August the Italian government passed a proposal according to which the budget would be balanced in 2013 with the help of an austerity package in the amount of 45.5 billion Euros. Some countries - Belgium, France, Italy, and Spain - banned short-

⁹⁴ Smith, H., (2011) 95 Traynor, I., (2011)

⁹⁶ Flanders, S., (2011) ⁹⁷ Peston, R., (2011)

selling of shares as a reaction to many bank stocks reaching lowest prices since the collapse of Lehman Brothers.

In September, Greece is repeatedly warned that it is not meeting the budget and reform plan. One of the executive board members of the ECB, the German Jürgen Stark resigned unexpectedly. Officially due to personal reasons, but it is more likely that it was a result of disagreement with the ECB's bond buy ups, which questioned how much longer could that be carried out. ⁹⁸ In the meantime there were protests in Greece and Italy as new austerity measures are introduced. G7 leaders were pressing on European leaders to solve the situation for once and all, as concerns increased. Later that month Italy's rating was lowered to A by S&P.

In the beginning of October, the ECB announced to offer loans in the amount of 40 billion Euros to banks to recapitalize themselves. A couple days later the banking sector experiences a relief as the feared bankruptcy of the French – Belgian bank Dexia was foregone by a bailout-buyout combination. Moody's downgraded Italian bonds to A2 what was followed by Fitch's lowering the ratings of Spain to AA- and Italy to A+. Later the month Greece passed a crucial austerity measure which included pension decreases and a lay-off of thirty thousand state employees. In the final week of the month, at a EU crisis summit, the leaders agreed on the further steps toward the solution of the debt crisis. The 'haircut' on Greek bonds is agreed on with private investors at the rate of 50% (in comparison, around 20% was discussed in July) which would mean that the Greek debt burden by 2020 will be 'only' 120% of GDP. Furthermore, banks were to raise additional capital in the amount of 108 billion Euros in order to be able to absorb losses from problematic loans, such as the ones to Greece or Portugal. Additionally, there was an agreement to increase the lending power of the fund to about 1 trillion Euros, although details were not specified. How the such as the ones to Greece or Portugal.

For a moment it seemed that the solution is calming enough, but Greek PM Papandreou announced that a referendum would be held about the austerity measures. His announcement was a shock and brought further turmoil to the financial markets, stocks fell worldwide, and the yield on the 2-year Greek bonds skyrocketed to 84.7%. The EU stopped all payments of aid to Greece and gave an ultimatum to decide whether they wanted to remain in the Euro zone. Papandreou revoked the idea of referendum the

98

⁹⁸ Ewing, J. & Kulish, N., (2011)

⁹⁹ Peston, R., (2011)

¹⁰⁰ Erlanger, S. & Castle, S., (2011)

¹⁰¹ Gow, D., (2011)

¹⁰² Hewitt, G., (2011)

next day and resigned three days later, as according to him unity is required in the parliament to lead the country out of the crisis. Lucas Papademos, a former ECB vice-president was appointed as the new PM, leading a coalition of three parties and a technocrat and not a political figure, was expected to stabilize the political situation in the country. 104

In the meanwhile, the ECB's new president, Mario Draghi cut the key interest rate from 1.5% to 1.25% at his first meeting, in a hope to enhance lending in the Euro zone. Italian PM Silvio Berlusconi committed to resign from his office if a key austerity package would pass in the parliament, as he lost majority. The Italian bond yields soared to 7 per cent, the highest since the country's euro adoption, and which is considered to be unsustainable in the long-term.

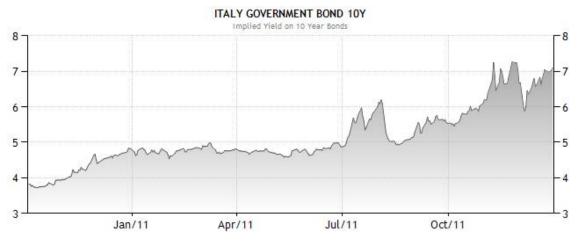


Figure 2-7: Italian 10-year bond yields (October '10 - December '10)

Source: Trading Economics¹⁰⁶

On November 12th, the package passed in the parliament and then PM Berlusconi resigned, all in a hope of returning the confidence of markets in Italy's ability to control its finances. Main political parties agreed that the best solution for the country would be a transitional government led by Mario Monti, a former European Commission member. Shortly after Greece, Italy was the second country where government's collapsed under market pressures and technocrats were assigned to lead the countries out of the crisis.¹⁰⁷

¹⁰³ Smith, H. & Kington, T., (2011)

Smith, H., (2011)

¹⁰⁵ Ewing, J., (2011)

Retrieved on May 10th from http://www.tradingeconomics.com/italy/government-bond-yield Donadio, R. & Povoledo, E., (2011)

In the beginning of December, the ECB President, Draghi initiated a fiscal compact. Just a week later the ECB decreased the interest rate once again, to 1%, moreover, started to offer unlimited cash for banks for a term of three years. On December 9th, the EU leaders wanted to make an agreement among all members about a new fiscal rule. However, the UK did not agree with one of the crucial parts and will be therefore left out, but the other 26 countries of EU were willing to join. The most important characteristics to the agreed 'fiscal compact' are:

- "a cap of 0.5% of GDP on countries' annual structural deficits,
- 'automatic consequences' for countries whose public deficit exceeds 3% of GDP,
- The tighter rules to be enshrined in countries' constitutions,
- European Stability Mechanism (ESM) to be accelerated and brought into force in July 2012,
- adequacy of 500 billion Euro limit for ESM to be reassessed,
- Euro zone and other EU countries to provide up to 200 billion Euros to the IMF to help debt-stricken euro zone members." ¹⁰⁸

The agreement would be in form of a treaty, but not an EU Treaty which takes a long time to implement, but by one between governments. Some analysts considered this as a move towards fiscal union, but nonetheless, it was a commitment of further integration within the EU.¹⁰⁹

The year of 2012 kicked off quite disappointingly, since Standard & Poor's downgraded nine Euro zone countries including France, the second biggest economy of the union. The rating agency reasoned the downgrade with their belief that the initiated policy changes in the zone did not deal with the systematic issues of the area and further arguing, that the crisis did not arise primarily as a result of overly borrowing, but more as a consequence of loss of competitiveness and trade deficit in the concerned peripheral countries, and only than due to the too much borrowing. From the affected countries Portugal and Cyprus were downgraded to junk, Italy cut to BBB+, Spain to A, and most importantly, France lost its AAA rating and was lowered to AA+ (the others include Austria, Malta, Slovakia and Slovenia).

1

Hewitt, G., (2011) in "Euro crisis: Eurozone deal reached without UK" in BBC News, December 9, 2011

¹⁰⁹ Donovan, J., (2011)

Standard & Poor's statement, 2012

¹¹¹ Peston, R., (2012)

Bigger problem was, that the EFSF's rating was deducted for the countries' which backed it – but were downgraded – and that resulted in the lowering of its rating to AA+ by S&P. Although, it was noted that the fund can hold the AAA rating by two options; first, to increase the guarantees and therefore having the same amount available, or second, to decrease the AAA guaranteed loans to around 260 billion Euros (note that Ireland and Portugal were already using about 40 billion and further 100 billion Euros to be used for the second Greek bailout). 112

In the meantime Greece was negotiating with private investors on the exact conditions of the haircut, but the negotiations got stuck over the voluntariness of it. The agreement was a precondition for Greece to receive the following payment of the bailout. In case that agreement would not have been reached Greece was most likely to be forced to depart from the Euro. 113

In the end of January, the agreed upon fiscal compact was signed by twenty five member states of the EU, as after the initial UK veto the Czech Republic based on constitutional reasons refused to do so. According to the treaty gives the right to the European Court of Justice to fine countries breaking the rules. The politicians also expressed their concerns on the EU economy, since unemployment was on the rise and growth prospects were not goof either. A goal was set to: (1) agree on a universal system of EU patents before July, (2) focus funds on small and medium sized enterprises, and (3) to enhance a single market of energy and services. The EC stated there is 82 billion Euros to fund project which would enhance job creation and growth. 114

In February, the Greek parliament passed the needed package, but the EU stated that further measures in the amount of 325 million Euros are needed to get the finances on track with the plan and receive the following payment. After the budget cuts were passed in the parliament, violent protests were again happening. 115

By late February, the first signs showed that the overall Euro zone economy is not doing well – a contracting services sector – and the EC updated its predictions for the year, according to which the euro zone GDP will shrink by 0.3%. In March the data suggested that unemployment of the zone hit record high at 10.7% in January, ranging

-

¹¹² Ibid.

¹¹³ Ibid.

¹¹⁴ Morris, C., (2012)

¹¹⁵ Lowen, M., (2012)

from 4% in Austria to 23.3% in Spain. On the other hand, according to OECD there are some signs of economic recovery.

In March, the second Greek bailout is approved after the restructuring of debt taking place. The debt swap included bonds worth 172 billion Euros and the investors having as much as 74% losses. The voluntary agreement meant that investors exchanged their Greek government bonds for new ones which have a lower yield and are worth less. This debt restructuring was a precondition to get the 130 billion Euros in the next bailout package. Following into spring the Italian and Spanish bond yields were slightly increasing, but high demand remains for them.

In early May election were taking place in both France and Greece. In France, the socialist Francois Hollande won in the second round of the presidential elections over the former Nicolas Sarkozy by a tight vote. After the elections concerns remain about the future cooperation between Germany's Angela Merkel and France on the issues of the debt crisis, as Hollande several times stressed that austerity measures are not going to help and he intends to have a pro-growth budget – meaning more public spending, which is directly opposing the ideas of Germany on how to solve the crisis. 117 The results of elections in Greece are even more worrisome, since parties rejecting the bailout conditions, communists and extremists came out much better than expected and gaining voter from the traditional parties. It is a prevailing sign of the social unrest which was caused by the severe austerity measures enforced by EU, EC and IMF. At the time of writing, the outcomes are still unclear, as neither party was able to form a majority government and even another round of elections is in the play. Nonetheless, the situation is not good and uncertainty is not helping to restore confidence. Among analysts the talks about the Greek exit from the Euro zone intensified seeing the developments and even German Finance Minister Schäuble told that the Euro zone would survive without problem a potential Greek exit.

2.5. The fundamental issues - origins of the crisis

At first glance it might seem that the reasons for the Greek problems are a combination of high public debt, continuous budget deficits and the economic slowdown. Then the question can be raised, how come countries like Japan and Belgium did not experience similar 'speculative attacks' of investors? While Greece had

¹¹⁷ Karpiš, J., (2012)

¹¹⁶ Flanders, S., (2012)

a 113% public debt to GDP ratio in 2009, Japan had 195% and Belgium 89.3%. The reason is quite simple; there are other factors beyond the debt-to-GDP ratio which caused the events. Ultimately, the actual problems of Greece are very similar to those of the other 'PIGS' countries – refers to the countries of Portugal, Italy, Greece and Spain; but during the crisis due to its problems Ireland was 'added' to the group, hence becoming 'PIIGS'.

As earlier mentioned, the Euro zone leaders agreed on the 'fiscal compact' to prevent crises to arise in the future by insisting on the fiscal responsibility and charging penalties on countries which do so. However, the Stability and Growth Pact agreed in 1997 was very much alike (3% deficit limit as in the Maastricht Treaty). By looking at Table 2-2 it is clear that there were quite a few offenders of this agreement, including Germany – the country that insisted on having the SGP in the first place.

Table 2-2: Government balances in the Euro zone

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Austria	-2,3	-1,7	0,0	-0,7	-1,5	-4,4	-1,7	-1,5	-0,9	-0,9	-4,1	-4,5	-3,7
Belgium	-0,6	0,0	0,4	-0,1	-0,1	-0,3	-2,7	0,1	-0,3	-1,0	-5,6	-3,8	-3,1
Cyprus	-4,3	-2,3	-2,2	-4,4	-6,6	-4,1	-2,4	-1,2	3,5	0,9	-6,1	-5,3	-1,8
Estonia	-3,5	-0,2	-0,1	0,3	1,7	1,6	1,6	2,5	2,4	-2,9	-2,0	0,2	-13,1
Finland	1,7	6,9	5,1	4,1	2,6	2,5	2,8	4,1	5,3	4,3	-2,5	-2,5	-9,1
France	-1,8	-1,5	-1,5	-3,1	-4,1	-3,6	-2,9	-2,3	-2,7	-3,3	-7,5	-7,1	-8,5
Germany	-1,6	1,1	-3,1	-3,8	-4,2	-3,8	-3,3	-1,6	0,2	-0,1	-3,2	-4,3	-5,2
Greece	×	-3,7	-4,5	-4,8	-5,6	-7,5	-5,2	-5,7	-6,5	-9,8	-15,6	-10,3	-3,9
Ireland	2,7	4,7	0,9	-0,4	0,4	1,4	1,7	2,9	0,1	-7,3	-14,0	-31,2	-3,5
Italy	-1,9	-0,8	-3,1	-3,1	-3,6	-3,5	-4,4	-3,4	-1,6	-2,7	-5,4	-4,6	-5,5
Luxembourg	3,4	6,0	6,1	2,1	0,5	-1,1	0,0	1,4	3,7	3,0	-0,8	-0,9	-2,7
Malta	-7,7	-5,8	-6,4	-5,8	-9,2	-4,7	-2,9	-2,8	-2,4	-4,6	-3,8	-3,7	-4,7
Netherlands	0,4	2,0	-0,2	-2,1	-3,1	-1,7	-0,3	0,5	0,2	0,5	-5,6	-5,1	-2,6
Portugal	-2,7	-2,9	-4,3	-2,9	-3,0	-3,4	-5,9	-4,1	-3,1	-3,6	-10,2	-9,8	-4,2
Slovakia	-7,4	-12,3	-6,5	-8,2	-2,8	-2,4	-2,8	-3,2	-1,8	-2,1	-8,0	-7,7	-6,4
Slovenia	-3	-3,7	-4,0	-2,4	-2,7	-2,3	-1,5	-1,4	0,0	-1,9	-6,1	-6,0	-4,8
Spain	-1,2	-0,9	-0,5	-0,2	-0,3	-0,1	1,3	2,4	1,9	-4,5	-11,2	-9,3	-0,5

Source: European Statistical Office

It is noticeable, that Germany broke the rule five times prior to 2008 when the financial crisis started, in the same period France did so three times, Italy six times, but Spain not even once. Despite this, the yields on government bonds did not seem to be based on these figures. As is clearly visible in Figure 2-8, the yields after the collapse of Lehman Brothers were developing in a substantially different way. Germany and France broke the 3% deficit several times and even though their yields were decreasing, while

Spain's increasing and therefore creating an ever more significant spread between the two. Based on this, it can be deducted that the markets do not consider the government budget balances as the primary criteria when assessing the state of the economy and riskiness of a country. The question remains if the 'fiscal compact' is going to help and prevent situations – like what we are experiencing now – from happening in the future. The core of the problems do not rely in the borrowing of governments, but as we shall see below, in something more complex. However, it is not suggested that the pact is 'useless', but that just by itself does not mean a lot and has to be supported by other actions and/or policies.

annual interest rate*

8%

7%

6%

5%

4%

3%

France

3%

Germany

1%

Jan 08

Jan 09

Jan 10

Jan 11

*10-year benchmark government bond yields

Source: Bloomberg

Figure 2-8: Government bond yields of Italy, Spain, France and Germany

Source: Bloomberg, BBC¹¹⁸

As suggested, the yields were diverging based on the debt burden in the private sector. In this case, in contrary with the public debt figures, the total debt of Spain and Italy increased dramatically over the decade since the adoption of the Euro. This was a result of the extremely low interest rates in the southern regions of Europe – unlike before the Euro area when interest rates were significantly higher and volatile. As a result of the common monetary policy, there was one interest rate set by the ECB. The availability of cheap loans and mortgages fueled the economies of these countries, meaning that growth was debt driven. This is extremely true in the case of Spain, where this phenomenon resulted in a boom on the real estate market. Therefore, the development in the total debt burden was significantly different compared to

 118 Retrieved on May $5^{\rm th}$ from http://www.bbc.co.uk/news/business-16301630

government debt, which is illustrated in Figure 2-9 below. Furthermore, the total debt is much more representative of the state of an economy, as it can be deducted if growth is debt fueled – what is not a sustainable strategy in the long-term. The debt ratios in Spain clearly suggest that the economy was booming as a result of this, since while the public debt to GDP ratio was stable over the decade, the overall debt rose to an enormous 355% of GDP, thus explaining the drivers of the increasing yields on the country's bonds.

Figure 2-9: Total debt as a % of GDP

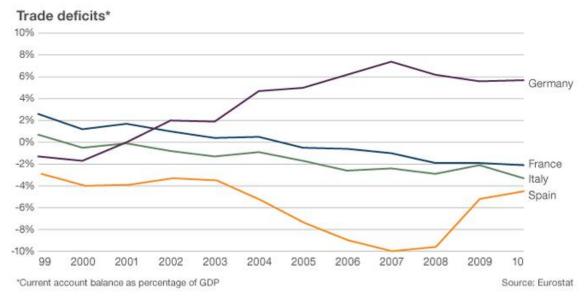
Spain 2010 355% Spain 2000 258% Italy 2010 129% 310% 181% Italy 2000 252% France 2010 321% France 2000 243% Government debt Germany 2010 241% ■ Private debt Germany 2000 226%

Total debt as a % of GDP

Source: Bank for International Settlements

Moreover, the increased availability of debt allowed these countries to consume more. By doing so, they started importing more and more goods, but the exports were not increasing that dramatically. This effect was even multiplied by the single market within the borders of EU. As Figure 2-10 suggests, the countries of Spain and Italy were having huge trade deficits, what was eventually true for France as well. On the other hand, countries like Germany, were exporting more – in this case the economy was driven by exports – to the world, and also to the southern countries of Europe, therefore having large trade surpluses. It is noticeable, that the development of trade balances of Spain and Germany were almost the exact opposites since the adoption of Euro in.

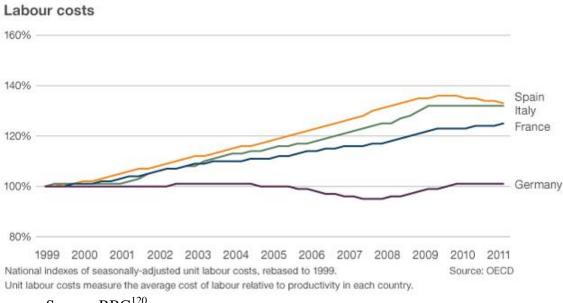
Figure 2-10: Trade deficits



Source: BBC¹¹⁹

On the other hand, the developments in trade deficits were not solely due to the described situation. It was a result of the framework under which the Euro was adopted and 'operating'. The monetary policy was more German like and nothing close to what the southern states were used to in the 1990's and the low interest rates resulted in relatively high inflation. The growing economies had another impact, the rising wages.

Figure 2-11: Labor costs



Source: BBC¹²⁰

 $^{^{119}}$ Retrieved on May 6^{th} from http://www.bbc.co.uk/news/business-16301630

¹²⁰ Retrieved on May 10th from http://www.bbc.co.uk/news/business-16301630

As it is illustrated in Figure 2-11, the labor costs were significantly departing from the original level in 1999; while in Germany they stayed the same and even dropped below the initial levels. Important to notice, that the drop in Germany was not a result in the drop of actual wages, but the increasing productivity of workers. This was not the case in the southern countries, where wages were rising and productivity was not getting any better, but even worse, whence the final effect. This affected the competitiveness of these labor markets in relation to others and resulted in the loss of competitiveness vs. Germany or other countries within the EU. This being the other and major reason for the widening trade deficits on the south, and increasing surplus in Germany, as it made – from an economical point of view – more sense to produce in Germany instead of any of the above mentioned countries.

When putting together these factors, it is inevitable that in the first decade of the Euro the economies were not converging in all aspects as expected and that there were major imbalances across nations.

2.5.1. A closer look at the 'PIIGS'

After examining the primary causes of the debt crisis in context of the Euro area, the focus will be on the troubled economies which are the epicenter of it all, but still significant differences persist.

Portugal

The country by becoming a member of EU hoped to catch up with the most developed members. However, even when adopting the Euro, the country was still considered poor in comparison to the others. Moreover, its economy was rather underdeveloped and did not develop a competitive advantage in any sector or aspect during the years. The major sources of revenue were tourism and exports of items like cork and paper. Its economy was growing at very moderate levels, giving an average of 1% over the decade after the Euro's launch. 121 Its only advantage in the beginning was the low wage level, but later on wages rose and also the EU was enlarged by ten countries in 2004, most of which having even lower wage levels and therefore attracting investors. The economy lacked structural reforms and the crisis hit at a time when the previous performance has not been good either. As a result of it's steadily climbing

¹²¹ Lynn, M., (2011)

public debt over the years it became the victim of the turmoil on the financial markets, nonetheless, for obvious reasons.

Government debt as % of GDP

Figure 2-12: Government debt as % of GDP

1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011

Ireland ——Greece

Spain

160,00% 140,00% 120,00% 100,00% 80,00% 60,00% 40,00% 20,00%

Italy —

Source: European Statistical Office

Portugal —

Italy

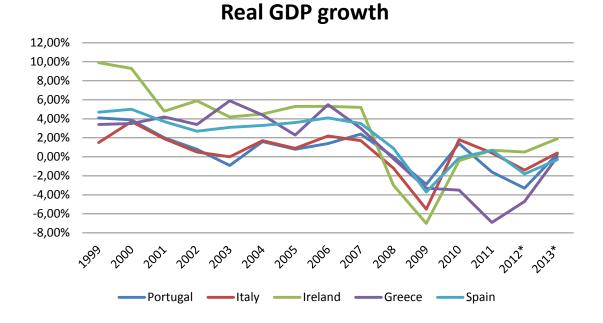
180,00%

0,00%

From all the concerned countries, Italy has the most stable economy. In its case the main problem is the enormously high public debt standing at 116% in 2009. However, this was not due to its overspending in the times of the Euro, but much older generations. Prior to the Euro the national currency – the lira – had to be devaluated several times and that way regaining the competitiveness of the economy. But under the single currency this was impossible, causing the bad economic performance over the decade, which expanded yearly only 0.6% on average over the first decade of the Euro, while going into recession several times.

While the financing of the country became extremely cheap – compared to preeuro times, the politicians did not have much to worry about as there was no push to decrease the debt burden. But as the problems with Greece started, so did the worries of Italy intensify. The yields started to crawl as the Greek situation was not getting anywhere (partially a fault of the EU) and the government was pushed to decrease spending and implement measures to prevent getting the country involved in the debt crisis. Furthermore, Italy being the third largest economy of the Euro area gave a good reason to be concerned. The long time Prime Minister had to leave office as he was unable to push through the needed reforms and a technocrat government was put to power with one goal, to prevent disaster. By this time the EFSF was functioning, but did not even nearly have the power to bailout Italy. Finally, the new PM Monti managed to implement some long needed reforms (the labor market was extremely rigid and Berlusconi did not have the political power to make any changes) and restore market confidence to some extent.

Figure 2-13: Real GDP growth



Source: European Statistical Office, *estimates

Ireland

'The Celtic Tiger', as Ireland was called in the late 1990's was a mostly agricultural country. After joining the EU it benefited from the Common Agricultural Policy and made structural reforms, amongst others decreasing the corporate tax level to 12.5%. This meant that major foreign corporation placed their European headquarters in the country because of the beneficial tax conditions. The country was prospering very well and the adoption of Euro was considered a good chance to boost growth further, partly due to the elimination of exchange risk.

The main effect of the Euro membership was the decrease of interest rates, just like in the case of Spain. And the same was true for inflation rates, which were higher on the periphery of Europe than at the center in Germany or the Netherlands. This had

the same effect on the demand for loans and mortgages as in Spain and caused a massive housing bubble. The continuously low interest rates did not help the situation (a country which implements its own monetary policy would have acted by increasing interest rates). As it is a wrongly commonly believed, housing prices always rise. This was the case in Ireland as well and that meant investments in real estate were very profitable at the beginning. Until the crisis hit, when the bubble popped and people became reluctant to buy. That ended in the falling of prices and bank's losses on mortgages after all. It was so serious, that the Irish government had to rescue the banking sector of the country in order to prevent disaster. As it is visible on Figures 2-12 and 2-15, this put much financial pressure on the country and caused the bailout of the country as a last resort due to the unsustainable bond yields. It is important to notice, that unlike the other 'PIIGS' countries, Ireland happened to be in the epicenter as a result of the housing bubble (low interest rates) and not other problems. The country was doing well and is recovering at a better pace as well (see Figure 2–13) and people took the tough austerity measures much easier than in the other countries.

Greece

The problems of Greece represent a long list and many books and articles were discussing it in detail. As it turned out later, the country never fulfilled the Maastricht criteria in the first place – and therefore was not eligible to join the Euro. This was disguised with various accounting techniques – with the help of Goldman Sachs – and found out years after joining the EMU at a revision of data by the European Statistical Office. Moreover, it continued to break the deficit rule every single year since the Euro was adopted. In the beginning, the single currency was very positive for the Greeks and the economy as well. But just like in all the other cases, the main issue arose as a result of the low interest rates unprecedented beforehand.

Unlike in other countries, in Greece the governments did not use the booming economy to consolidate public finances and bring down public debt from the already high levels (see Figure 2-12). Instead, it kept spending more than it was able to allow in the long term. Under normal circumstances this would mean a trend of increasing yields on financing, but as a result of the single currency this did not happen. As seen on Figure 2-14, convergence in interest rates happened in contrary to the other economical aspects. The reason for it was that investors considered the country, just like all peripheral countries, safe due to their Euro membership. Moreover, the ECB accepted

bonds of Greece and Germany basically in the same way as collateral. The markets (along with the rating agencies) did not consider the economic figures that important thinking the Euro area will have their back in the worst case – as it turned out they were right. Then the financial crisis hit and it changed everything. The rating agencies started to give more importance to the economic circumstances of the country and lowering radically the ratings in a short period of time therefore making harder to raise funds.

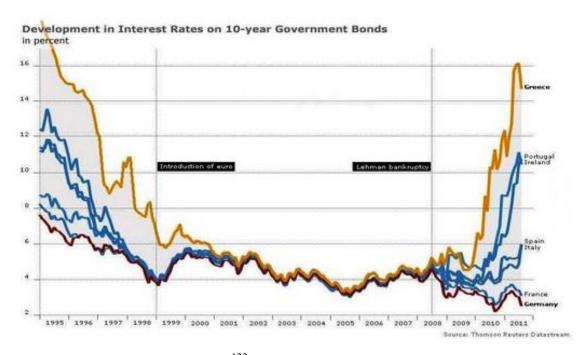


Figure 2-14: Government bond yields (pre - euro vs. post - crisis)

Source: Thomson Reauters¹²²

If this would not have been enough, than there are the other factors. The Greek economy was not competitive and lacked structural reforms. The R&D expenditures amounted to only 0.7% of GDP in 2000 compared to the EU average of 1.9%. It is highly dependent on tourism and most importantly the public sector. In Greece the public sector is the biggest employer without doubt. The retirement age was extremely low at 58 compared to EU average (people in dangerous professions could retire even earlier – 637 professions were considered as such, such as barbers, radio technicians, etc.). Other insanity of the system was that a civil servant's pension is continued to be paid out to their daughters even after they die, as long as they do not get married. Tax

Retrieved on May 3rd from http://www.upms.sk/sk/prednasky/prepis/3.-prednaska-o-pricinach-dlhovej-krizy-v-eurozone-juraj-karpis/

evasion was taking enormous measures in Greece and the black economy was predicted to be around 40% of GDP according to Transparency International. 123

The other factors included the huge trade deficits and soaring wage prices after EU adoption, which ultimately made the Greek economy fully uncompetitive and living beyond its means.

Government balance as % of GDP

Figure 2-15: Government balance as % of GDP

1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 3,00% -2,00% -12,00% -17,00% -22,00% -27,00% -32,00% -Portugal Italy Ireland Greece Spain

Source: European Statistical Office

Spain

The country was considered a prime example of how countries develop after joining the monetary union which provides the background of a stable monetary policy and the trust of markets. However, this development was not throughout and the economic growth was the result of cheap money. In fact, almost the banks paid the people to take loans – as in some cases, like in 2006 the interest rate was set at 2.75 per cent by the ECB, but the inflation rate in Spain was at 4%. This meant that the real interest rate charged for the loans was negative. Not surprisingly the private sector was taking on more and more debt which had the aftermath of a housing boom. As it turned out, the boom lasted too long and it turned into a housing bubble (the country has 1.7 houses per person – the most in the world). In the meantime the already mentioned

¹²³ Lynn, M., (2011)

continuous loosing of competitiveness was going on, while the available loans boosted domestic consumption which resulted in the widening trade deficit.

The government after realizing the seriousness of the situation in Greece was trying to introduce budget cuts and consolidate the finances, but this met with much reluctance from the population. Furthermore, Spain holds a significant amount of Portuguese debt and was therefore considered to be next in the line. But due to the size of its economy it was too big for the EFSF for a potential bailout. The rising yields made it harder to finance its obligations and finally the ECB's bond buy ups pushed down the yields to sustainable levels. Nonetheless, the country has to bring under control its finances, which will be extremely hard with the unemployment rate over 20% and the bailout of the banking system.

3. IMPLICATIONS FOR THE CZECH REPUBLIC AND SLOVAKIA

The main focus in this chapter is on the two countries, which once used to be one, but due to political reasons had different ideas about the depth of participation in the integration of Europe, but most significantly the single currency, the Euro. Both countries joined the EU in May, 2004 but unlike the Czech Republic, Slovakia adopted the Euro in the beginning of '09 – just when the crisis showed its first impacts in the region of Central Europe – becoming the sixteenth member state of the Euro area. Both economies are largely dependent on exports and therefore the economic situation of its trade partners, from which in both cases the most important is Germany and than trade between the two countries.

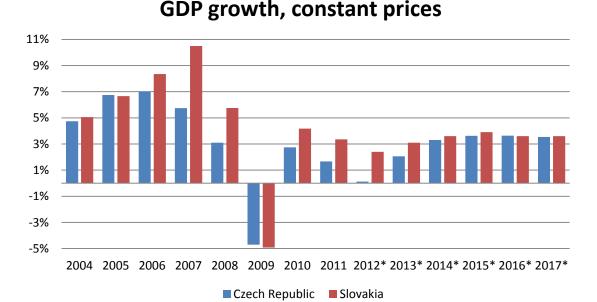
3.1. Economic implications

The macroeconomic indicators are the most important factors when studying the situation of a country. Therefore, at first, we look into the most commonly used indicators which reflect the consequences of the crisis well, and based on which the differences and similarities can be found out. Ultimately, these variables represent a reliable source of information about the conditions of a particular country and its competitiveness in relation to others.

3.1.1. Economic growth

The first impact of the crisis was visible on the output of the countries. As mentioned, the export driven economies were severely hit by the financial crisis – causing smaller demand in the developed countries which was a result of the credit crunch – what was reflected in the output growth in 2009 (as seen in Figure 3-1). Then the recovery seemed to come rapidly as well. However, the Euro crisis affected consumer confidence across Europe and therefore growth was dropping once again. The bottom is expected to be reached this year and the future from this point of view should be stable, as long as there will be no other turmoil in the European economy. It is noticeable, that the slowdown was reflected with a minor delay in comparison with the rest of the developed world. Furthermore, domestic consumption was at first stable, but later when the affect was reflected to the labor market as well, domestic demand started drastically dropping and eliminating the positive effect of consumption on the gross domestic product.

Figure 3-1: GDP growth



Source: IMF¹²⁴, *estimates

3.1.2. Public finances

The sudden drop of economic output deteriorated public finances which were in line with the Maastricht criteria beforehand – Slovakia had to fulfill them in order to join the Euro. As it can be seen on Figure 3-2, the budget in Slovakia was affected much more, partially due to the drop in taxes but also as a result of increased unemployment and therefore the total higher spending on social benefits.

Furthermore, in the first year of the crisis in the region the general idea on how to 'cure' the problem was based on Keynesian economic thought. According to which, if private investments fall, the state should substitute it, hence stimulating the economy into the future. This meant large expenses on financial stimulus with a questionable effect on economic output or employment figures. This thought was turned around 180° as the debt crisis erupted in the peripheral countries and the main strategy became cost cutting and financial consolidation in the western countries – once again, its impact in the short term is rather negative and there is a high possibility many countries will be reluctant to continue to do so, as the society is suspicious since two years after the debt crisis the end is still unforeseeable. Both Slovakia and the Czech Republic are following

Page | 58

 $^{^{\}rm 124}$ International Monetary Fund, World Economic Outlook Database, April 2012

suit, and moreover Slovakia is committed to bring the budget under control – but as it is visible, the IMF does not believe it would happen in the near future.

Additionally, the level of public debt is rising due to the continuous excess deficits and low economic growth. However, both countries can be considered to be on the 'safe side', as they are amongst those having the lowest public debt as a share of GDP in the EU. On the other hand, the level is rising and that is the reason why the governments try to cut expenditures and consolidate the finances. As seen in Figure 3-3 the level is higher in Slovakia, and by 2017 according to the IMF is expected to be just about 5% below the Maastricht given level of 60%.

2004 2005 2006 2007 2008 2009 2010 2011 2012* 2013* 2014* 2015* 2016* 2017*

0%
-1%
-2%
-3%
-4%
-5%
-6%
-7%

■ Czech Republic Slovakia

Government net budget as % of GDP

Figure 3-2: Budget deficit

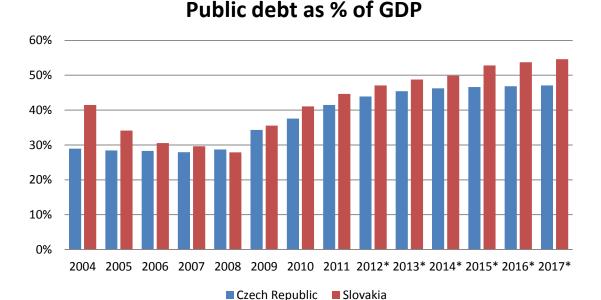
Source: IMF¹²⁵, 2010 Czech data and * are estimates

The high deficits had a negative effect on public debt, but the high economic growth prior to the financial crisis compensated this, and therefore the public debt levels were decreasing. But since the economy contracted in 2009 in both countries and grew only at a smaller pace, the debt levels started to rapidly increase. This is definitely not a positive development and should be kept in mind, as the financial markets are giving more attention to the state of finances in the particular economies since the debt crisis in Greece and the other countries.

-8% -9%

 $^{^{125}}$ International Monetary Fund, World Economic Outlook Database, April 2012

Figure 3-3: Public debt



Source: IMF¹²⁶, 2011 Czech data and * are estimates

3.1.3. Government bond yields

As it can be seen in Figure 3-4, there is a significant difference in the development of bond yields since the Euro crisis, more precisely from the time the EFSF was constructed. Prior to the Euro adoption in Slovakia, it was argued that staying out of the monetary union would mean higher financing costs of the country. As it turned out, the opposite is true – all due to the situation in the peripheral countries and the uncertainties connected with it.

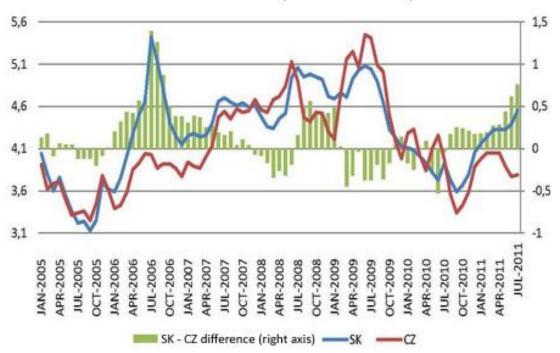
The difference in the yields has not been so high since a small period in 2006. The share of inner factors affecting this development cannot be estimated, but nonetheless, a future growth in the indebtedness of Slovakia could cause the yields to rise even more. It should be kept in mind by the leaders of the countries, especially in the case of Slovakia where a socialist government won the early elections in the spring of 2012 – although their rhetoric also underlined that they are committed to the consolidation of public finances.

_

 $^{^{\}rm 126}$ International Monetary Fund, World Economic Outlook Database, April 2012

Figure 3-4: Bond yields

Government 10-year bond yields



Source: INESS¹²⁷

3.1.4. Unemployment

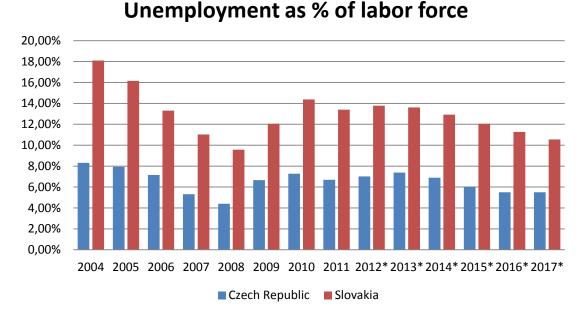
Due to the structure of the labor market, the unemployment rates in Slovakia were always significantly higher than in the Czech Republic. There was a positive trend of decreasing unemployment rates up to 2008, when the lowest rates were recorded in the studied time frame. However, after the economic output 'reacted' to the slowdown in Western European countries, so did the unemployment with a little delay.

The significant increase in the number of unemployed was also a result of those returning from Western European countries in a hope of finding a job back home – but as mentioned, the effects were felt later in these countries – thus putting even bigger pressure on the labor markets. Unemployment topped in 2010 with a slight positive development in the following year, but since a double dip recession is happening / expected to happen in many EU countries, the situation is not assumed to get better, but worse this year. Furthermore, the development towards the end of the decade – as can be seen in Figure 3-5 – will not mean a dramatic decrease in unemployment, but rather at a continuous slow pace. According to the IMF estimates, the unemployment rates by

Retrieved on May 5th from http://www.upms.sk/sk/prednasky/prepis/3.-prednaska-o-pricinach-dlhovej-krizy-v-eurozone-juraj-karpis/

2017 will be still higher in both countries than they were in the year prior to the financial crisis.

Figure 3-5: Unemployment rate



Source: IMF¹²⁸, 2011 Czech data and * are estimates

3.2. Political implications

Both Slovakia and the Czech Republic joined the European Union in the spring of 2004. It was a remarkable day in the history of both countries. As mentioned before, all the new member states of the EU committed to adopt the Euro as their official currencies as soon as they fulfill the criteria. Looking back into the future, it's not hard to realize that if a country does not want to join it can easily go around the rules by not participating in the Exchange Rate Mechanism. On the other side, it's much less likely that a country could join the Euro while not fulfilling the criteria, like Greece.

As it turned out, the Slovak government considered the Euro adoption a priority and as a result joined the Euro area in 2009, when the financial crisis started to show its impact in the Central European region. On the contrary, the Czech government officially does not have a target year when the Euro would be adopted. The reasons are not connected with the inability to fulfill the Maastricht criteria, but the views of its

-

¹²⁸ International Monetary Fund, World Economic Outlook Database, April 2012

political leaders. Consequently, in this subchapter the implications of Slovakia will be studied, as there is almost none in the Czech Republic.

3.2.1. Greek bailout

When in 2010 the EU leaders and IMF agreed on the first Greek bailout, it was still subject to approval in all the Euro area countries, so in Slovakia as well. It was just before the general elections, and therefore it was logical to leave it for the new government to decide about its approval. However, the governing socialist party agreed with the bailout from the beginning and without giving any critical remarks. The right wing opposition argued against the bailout, as according to them it represented a moral hazard.

The elections turned out to be favorable for the right wing parties, which by forming a four party coalition had the majority in the parliament. And they opposed the idea of the bailout further on – despite the general belief that it was a pre-election rhetoric which will not be kept anyway. The fact is that the general public agreed with it. In Slovakia, the wages, social benefits, retirement and basically any sort of income was at a much lower rate than in Greece. So the question was raised, why to help the richer.

On the other hand, the EFSF was approved in the summer arguing that it is a temporary mechanism. But it was stated, that if the EFSF would be substituted by something permanent, the conditions for default should be included so to prevent the above mentioned moral hazard.

3.2.2. European Stability Mechanism

The ESM was approved as last in Slovakia and that was all that anybody cared of in Europe. But it was not an easy agreement and approval in the parliament. The four governing parties had significantly different views on the ESM. One of them publicly opposed it and argued several times, that there is no reason for the ESM, the troubled economies should default on their debt and that meaning to find their way out of the problems. It was also added, that as a result of ESM, the Euro area will soon become a transfer union, what was not what the county signed up for when adopting the Euro.

The dispute was not getting anywhere and the time was pushing, so the Prime Minister connected the approval of ESM with a confidence vote for the government – in a hope of persuading the coalition member to vote for it. As it turned out, nobody changed their minds and the government fell because of the ESM. The papers were full

of Slovakia, saying it is the country which killed the ESM, but is the last one to have a pragmatic mind in the Euro area. Interestingly, the socialist opposition was in favor of the ESM, but did not want to vote so the government collapses. The PM later that week agreed with the opposition that they will support the ESM in the next voting if there will be early elections – all just to prevent international 'shame', as Slovakia was considered the black sheep by EU leaders. As said, finally the ESM passed and the country became the last to approve it at the cost of the government.

In the meantime, the Czech Republic was the only EU member besides UK not to participate in the ESM – arguing it is not constitutional. However, a more likely reason is the highly possible not approval of the agreement by the Czech President, who is known for his Euro skepticism.

3.3. Summary

As it was mentioned several times, the two countries have different views on the Euro issues and the common currency in general as well. There are various reasons for it, but its study is not in the scope of this paper.

The most important finding from the presented indicators is that there is no significant difference between the two countries – in terms of GDP growth, unemployment development and public finances – despite the fact that one of them has its own national currency while the other uses the Euro. The reasons can be numerous for this, but it is mainly a result of the openness of the economies. Both countries are heavily dependent on exports and therefore on the economic situation of their trade partners. As mentioned, the most important trade partner of both countries is Germany, where the economic situation is not the best either. The second most important country in terms of trade volume are the countries for each other. It would not be relevant to deduct further assumptions at the moments, since the Euro adoption in Slovakia took place only three years ago – exactly at the time when the financial and consequently the euro crisis was reflected in the economic conditions across Europe.

CONCLUSION

The 20th century in Europe symbolizes turbulent times. The political leaders of the war torn continent thought that by uniting the countries under some kind of framework would prevent future disturbances. After the idea was born and heard by many, the integration process in Western Europe started with the ultimate goal of the 'United States of Europe'. Currently, the integration process is at the monetary union level, but already at serious crossroads. Before the single currency was adopted, the countries set the rules under what circumstances could a country become a part of it. This set of rules was supposed to enhance convergence among the countries, so their economies would function well together and the common currency – and ultimately common monetary policy – will not be an obstacle. The rules of the game were made, but the game was not played in accordance with them – the creator of the rules, Germany, broke them several times and the punishments based in the Stability and Growth Pact were somehow every single time overcome. Hence, there was no motivation for the other countries to play along. And as we can see it now, the expected convergence did not happen. There was some visible among the countries prior to the launch of the single currency, but least, if any, afterwards. This is especially true for the peripheral countries.

In the first chapter the focus was on the monetary integration process itself, with the aim to identify the main aspects of it from the prospective of the current level of integration within Europe. The background of development of the single currency from an idea, through the process all the way to the final goal was analyzed. We identified the differences among the countries and their views of how the monetary integration should be done and the depth of their participation in it. We successfully fulfilled the objective of identifying the historical perspectives of the single currency and mapped out the integration process with the primary focus on the institutional framework.

The second chapter aimed to critically asses the reasons of the crisis, its triggers and consequences. We identified that the trigger of the euro crisis was the US subprime mortgage crisis, which severely affected the European economies. Analyzed its meaning in a broader sense and proceeded with the analysis onto Greece, the epicenter of the Euro crisis. Its historical origins were examined, with the main aim to identify the main aspects of it. Furthermore, we identified that one of the main reasons of the severity of the situation can be fined in the political leaders of the Euro area, which

were reluctant to deal with the situation in the beginning, insisting that it's a Greek issue, and not a European. The other perspective is also examined, as just like a coin, this has also two sides. Then the spread of the crisis across Europe is analyzed with the detailed background explaining the reasons for it. Finally, the fundamental issues are explained, which represent the deep rooted problem in the Euro and how it was missed or ignored in the first decade.

The last chapter aimed to identify the most visible consequences of the euro crisis in the Czech and Slovak economy. The reason for choosing these two countries originates in the different stand point of the two, mostly due to political issues. We successfully identified the issues, however, it can be concluded that both of the economies are heavily dependent on the economic well being of their partners and therefore their economic situation within the countries is not that much subject to the participation in the Euro or not. Although, this cannot be concluded with certainty, as the common currency in Slovakia was adopted just over three years ago and the positive effects of it could not be reflected since the adoption was 'matched' with the financial and then euro crisis.

What can be concluded is that the single currency, despite being an economic issue, was always highly effected by politics and remains so in the present as well. The political reasons were always prioritized, just as are now. It is a matter of time and willingness from the member countries if the grand project of the Euro will survive or disappear suddenly. At the moment the latter one seems more likely, because as said, it is a political issue and therefore highly dependent on the views of politicians. In my opinion the Euro's only chance to survive is to take the integration process to the next step, but for that it needs the support of politicians – who in the end need the support of the population, which at the moment is very unlikely to support any such thing.

BIBLIOGRAPHY

- 1. **El-Agraa, Ali M.** *The European Union, Economics and Policies.* Cambridge: Cambridge University Press, 2011. ISBN 9781107400115.
- 2. **Baldwin, Richard and Wyplosz, Charles.** *The Economics of European Integration.* New York: McGraw Hill Education, 2006. ISBN 9780077111199.
- 3. **Pentecost, Eric J. and Poeck, André van.** *Euroepan Monerary Integration.* Cheltenham: Edward Elgar Publishing, 2001. ISBN 1840645792.
- 4. **Overtveldt, Johan van.** *The end of the euro: the uneasy future of the European Union.* Chicago: Agathe Publishing, 2011. ISBN 9781932841619.
- 5. **Beblavý, Miroslav, Cobham, David and Ódor, Ľudovít.** *The Euro area and the financial crisis*. Cambridge: Cambridge University Press, 2011. ISBN 9781107014749.
- 6. **Lynn, Matthew.** *Bust: Greece, the euro, and the sovereing debt crisis.* Hoboken: John Wiley & Sons, 2011. ISBN 9780470976111.
- 7. **Mauldin, John and Tepper, Jonathan.** *Endgame: the end of the debt supercycle and how it changes everything.* Hoboken: John Wiley & Sons, 2011. ISBN 9781118004579.
- 8. **Buti, Marco et al.** *The Euro: the first decade.* Cambridge : Cambridge University Press, 2010. ISBN 9789279098420.
- 9. **European Commission.** [Online] [Cited: April 30, 2012.] http://ec.europa.eu/economy_finance/emu10/timeline_en.pdf.
- 10. **European Statistical Office** [Online] [Cited: May 7, 2012.] http://epp.eurostat.ec.europa.eu/statistics_explained/index.php/Unemployment_statistics
- 11. **Mody, Ashoka and Sandri, Damiano.** *The Eurozone Crisis: How Banks and Sovereigns Came to be Joined at the Hip.* [Online] [Cited: May 6, 2012.] http://www.imf.org/external/pubs/ft/wp/2011/wp11269.pdf.
- 12. **Kláseková, Mária.** Pod Northern Rock sa triasla zem. [Online] [Cited: May 5, 2012.] http://firmy.etrend.sk/firmy-a-trhy-financny-sektor/pod-northern-rock-sa-triasla-zem.html.
- 13. **Jobst, Andreas.** What is Securitization? *International Monerary Fund.* [Online] September 2008. [Cited: May 7, 2012.] http://www.imf.org/external/pubs/ft/fandd/2008/09/pdf/basics.pdf.

- 14. **Boyd, Roddy.** The last days of Bear Stearns. [Online] [Cited: May 7, 2012.] http://money.cnn.com/2008/03/28/magazines/fortune/boyd_bear.fortune/.
- 15. **Gow, David.** Eurozone crisis: banks agree 50% reduction on Greece's debt. *The Guardian.* [Online] [Cited: May 1, 2012.]
- http://www.guardian.co.uk/world/2011/oct/27/eurozone-crisis-banks-50-greece.
- 16. **BBC.** Leaders agree eurozone debt deal after late-night talk. *BBC News*. [Online] [Cited: April 25, 2012.] http://www.bbc.co.uk/news/world-europe-15472547.
- 17. **Smith, Helena.** Lucas Papademos sworn in as Greece's prime minister. *The Guardian*. [Online] [Cited: May 3, 2012.]
- http://www.guardian.co.uk/world/2011/nov/11/lucas-papademos-greece-prime-minister.
- 18. **Ewing, Jack.** European Central Bank, Under New Chief, Cuts Key Rate. *The New York Times*. [Online] [Cited: April 21, 2012.] http://www.nytimes.com/2011/11/04/business/global/european-central-bank-cuts-rates-hoping-to-avert-downturn.html.
- 19. **Allen, Katie, et al.** Eurozone debt crisis: Greek timeline. *The Guardian*. [Online] Katie Allen, Graeme Wearden, Alex Hawkes and Helena Smith. [Cited: April 11, 2012.] http://www.guardian.co.uk/business/2011/oct/31/eurozone-debt-crisis-greece-crisis-timeline.
- 20. **Donadio, Rachel and Povoledo, Elisabetta.** Berlusconi Steps Down, and Italy Pulses With Change. *The New York Times*. [Online] [Cited: April 29, 2012.] http://www.nytimes.com/2011/11/13/world/europe/silvio-berlusconi-resign-italy-austerity-measures.html?hp.
- 21. **BBC.** Euro crisis: Eurozone deal reached without UK. *BBC News*. [Online] [Cited: April 28, 2012.] http://www.bbc.co.uk/news/world-16104089.
- 22. **Bloomberg News.** European Crisis Timeline From Maastricht Treaty to Fiscal Union Agreement. *Bloomberg News*. [Online] [Cited: May 2, 2012.] http://www.bloomberg.com/news/2011-12-09/european-crisis-timeline-from-maastricht-treaty-to-fiscal-union-agreement.html.
- 23. **BBC.** Standard & Poor's downgrades EU bailout fund EFSF. *BBC News*. [Online] [Cited: May 6, 2012.] http://www.bbc.co.uk/news/business-16586807.
- 24. **BBC.** Greece MPs pass austerity plan amid violent protests. *BBC News*. [Online] [Cited: May 3, 2012.] http://www.bbc.co.uk/news/world-europe-17007761.
- 25. **BBC.** Eurozone unemployment continues to rise. *BBC News*. [Online] [Cited: April 25, 2012.] http://www.bbc.co.uk/news/business-17219160.

- 26. **BBC.** OECD: Eurozone shows 'tentative' signs of recovery. *BBC News*. [Online] [Cited: May 1, 2012.] http://www.bbc.co.uk/news/business-17340015.
- 27. **BBC.** Eurozone group backs second Greek bailout. *BBC News*. [Online] [Cited: May 7, 2012.] http://www.bbc.co.uk/news/business-17338100.
- 28. **Karpiš, Juraj.** Grexit je za dverami. *Hospodárske Noviny*. [Online] [Cited: May 12, 2012.] http://finweb.hnonline.sk/c1-55769570-grexit-je-za-dverami-span-class-koment-tyzdenny-komentar-span.
- 29. **BBC.** Timeline: The unfolding eurozone crisis. *BBC News*. [Online] [Cited: April 26, 2012.] http://www.bbc.co.uk/news/business-13856580.
- 30. **BBC.** What really caused the eurozone crisis? *BBC News*. [Online] [Cited: April 29, 2012.] http://www.bbc.co.uk/news/business-16301630.
- 31. **Duarte, Esteban and Ross-Thomas, Emma.** Spain Loses its AAA Credit Rating at Fitch Amid Debt Struggles. *Bloomberg News*. [Online] [Cited: May 2, 2012.] http://www.bloomberg.com/news/2010-05-28/spain-loses-aaa-rating-at-fitch-on-concern-debt-burden-to-hamper-growth.html.
- 32. **Monaghan, Angela.** Greek prime minister George Papandreou: 'we will not default on our debt'. *Daily Telegraph*. [Online] [Cited: May 1, 2012.] http://www.telegraph.co.uk/finance/newsbysector/banksandfinance/6790750/Greek-prime-minister-George-Papandreou-we-will-not-default-on-our-debt.html.
- 33. **Minder, Raphael.** Portugal Asks Europe for Bailout. *The New York Times*. [Online] [Cited: April 15, 2012.] http://www.nytimes.com/2011/04/07/business/global/07euro.html.
- 34. **Vits, Christian and Czuczka, Tony.** Merkel Says EU Has 'Common Responsibility' for Greece. *Bloomberg News*. [Online] [Cited: April 18, 2012.] http://www.bloomberg.com/apps/news?pid=newsarchive&sid=aHiUy1wGd.nI.
- 35. **Saltmarsh, Matthew and Ewing, Jack.** Doubts Persist as Most Europe Banks Pass Stress Tests. *The New York Times*. [Online] [Cited: April 5, 2012.] http://www.nytimes.com/2010/07/24/business/global/24stress.html.
- 36. **Henson, Carolyn and Hannon, Paul.** EU Pressured to Release Bank Stress-Test Results. *The Wall Street Journal*. [Online] [Cited: March 30, 2012.] http://online.wsj.com/article/SB10001424052748704198004575310880125807608.html
- 37. **Marsh, Bill.** Europe's Web of Debt. *The New York Times*. [Online] [Cited: April 12, 2012.]

http://www.nytimes.com/interactive/2010/05/02/weekinreview/02marsh.html?ref=week inreview.

- 38. **Schwartz, Nelson D.** In and Out of Each Other's European Wallets. *The New York Times*. [Online] [Cited: April 2, 2012.]
- http://www.nytimes.com/2010/05/02/weekinreview/02schwartz.html?_r=1.
- 39. **Castle, Stephen.** Euro-Zone Finance Ministers Strike Deal to Create a Safety Net. *The New York Times*. [Online] [Cited: April 29, 2012.] http://www.nytimes.com/2010/06/08/business/global/08eurogroup.html.
- 40. **Ewing, Jack and Thomas, Landon Jr.** A Trillion for Europe, With Doubts Attached. *The New York Times*. [Online] [Cited: April 4, 2012.] http://www.nytimes.com/2010/05/11/business/global/11assess.html.
- 41. **Thomas, Landon Jr.** After Months of Resisting, Ireland Applies for Bailout. *The New York Times*. [Online] [Cited: April 23, 2012.] http://www.nytimes.com/2010/11/22/business/global/22debt.html?pagewanted=1.
- 42. **Spiegel Staff.** How the Euro Rescue Package Came Together. *Der Spiegel*. [Online] [Cited: April 10, 2012.]

http://www.spiegel.de/international/europe/0,1518,695110,00.html.

- 43. **Forelle, Charles and Walker, Marcus.** Europe Bankrolls Greece. *The Wall Street Journal.* [Online] [Cited: April 19, 2012.]
- http://online.wsj.com/article/SB10001424052702304168004575177872689747694.html
- 44. **Bilefsky, Dan and Thomas, Landon Jr.** Greece Takes Its Bailout, but Doubts for the Region Persist. *The New York Times*. [Online] [Cited: March 31, 2012.] http://www.nytimes.com/2010/05/03/business/global/03drachma.html?pagewanted=1.
- 45. **Forelle, Charles and Walker, Marcus.** Europeans Agree on Bailout for Greece. *The Wall Street Journal*. [Online] [Cited: April 9, 2012.]
- http://online.wsj.com/article/SB10001424052748704094104575143191767370052.html
- 46. **Walker, Marcus and Forelle, Charles.** In Shift, Germany Says It Is Open to IMF Aid for Greece. *The Wall Street Journal*. [Online] [Cited: April 19, 2012.] http://online.wsj.com/article/SB10001424052748704207504575129022672073334.html
- 47. **Paris, Costas and Granitsas, Alkman.** Greece Outlines More Steps to Pare Deficit. *The Wall Street Journal*. [Online] [Cited: May 1, 2012.] http://online.wsj.com/article/SB10001424052748703862704575098901888341426.html

- 48. **Mollenkamp, Carrick and Paris, Costas.** Four Biggest Greek Banks Downgraded. *The Wall Street Journal*. [Online] [Cited: April 18, 2012.] http://online.wsj.com/article/SB10001424052748703503804575083831024586788.html
- 49. **Donadio, Rachel.** Greek Leader Offers Plan to Tackle Debt Crisis. *The New York Times*. [Online] [Cited: April 14, 2012.]

http://www.nytimes.com/2009/12/15/world/europe/15greece.html?_r=1.

- 50. **Smith, Helena.** Greece needs another €110bn bailout to avoid debt default, says Papandreou. *The Guardian*. [Online] [Cited: March 17, 2012.] http://www.guardian.co.uk/world/2011/jun/19/greece-papandreou-second-bailout-figure?intcmp=239.
- 51. Joint Statement by Treasury, Federal Reserve, and the FDIC on Citigroup. [Online] [Cited: March 17, 2012.]

http://www.federalreserve.gov/newsevents/press/bcreg/20081123a.htm.

- 52. **Duhigg, Charles.** Loan-Agency Woes Swell From a Trickle to a Torrent. *The New York Times.* [Online] [Cited: April 3, 2012.] http://www.nytimes.com/2008/07/11/business/11ripple.html?pagewanted=1&ei=5124&en=8ad220403fcfdf6e&ex=1373515200&partner=permalink&exprod=permalink.
- 53. **Csanda, Gábor.** The impact of the financial crisis on the Slovak economy. *Bachelor Thesis*. Banská Bystrica : EF UMB, 2010.
- 54. **Castle, Stephen and Jolly, David.** Europe Set to Extend Rescue Fund. *The New York Times*. [Online] [Cited: March 19, 2012.] http://www.nytimes.com/2010/12/17/business/global/17summit.html.
- 55. **The Wall Street Journal.** Europe's Debt Crisis. *The Wall Street Journal*. [Online] [Cited: March 5, 2012.]

http://online.wsj.com/public/resources/documents/info-EZdebt0210.html.

- 56. **BBC.** Eurozone agrees bail-out fund of 500bn euros. *BBC News*. [Online] [Cited: April 7, 2012.] http://www.bbc.co.uk/news/business-12460527.
- 57. **Minder, Raphael.** Portugal Asks Europe for Bailout. *The New York Times*. [Online] [Cited: April 12, 2012.]

http://www.nytimes.com/2011/04/07/business/global/07euro.html?_r=2.

- 58. **BBC.** Portugal's 78bn euro bail-out is formally approved. *BBC News*. [Online] [Cited: April 18, 2012.] http://www.bbc.co.uk/news/business-13408497.
- 59. **BBC.** Greece aid package boosts stock markets. *BBC News*. [Online] [Cited: March 9, 2012.] http://www.bbc.co.uk/news/business-14246787.

- 60. **Traynor, Ian.** Bailed out again. Eurozone throws Greece €109bn lifeline. *The Guardian*. [Online] [Cited: April 2, 2012.] http://www.guardian.co.uk/business/2011/jul/22/bailed-out-eurozone-greece.
- 61. **Alderman, Liz and Donadio, Rachel.** Debt Contagion Threatens Italy. *The New York Times*. [Online] [Cited: March 25, 2012.] http://www.nytimes.com/2011/07/12/business/global/italy-evolves-into-eus-next-weak-link.html.
- 62. **BBC.** ECB 'to act' over eurozone debt crisis. *BBC News*. [Online] [Cited: March 30, 2012.] http://www.bbc.co.uk/news/business-14439224.
- 63. **Ewing, Jack and Kulish, Nicholas.** A Setback for the Euro Zone. *The New York Times*. [Online] [Cited: March 7, 2012.]

http://www.nytimes.com/2011/09/10/business/global/a-top-ecb-official-to-resign.html.

- 64. **BBC.** Dexia bank gets massive bailout. *BBC News*. [Online] [Cited: April 27, 2012.] http://www.bbc.co.uk/news/business-15235915.
- 65. **Erlanger, Stephen and Castle, Stephen.** Europe Agrees to Basics of Plan to Resolve Euro Crisis. *The New York Times*. [Online] [Cited: April 20, 2012.] http://www.nytimes.com/2011/10/27/world/europe/german-vote-backs-bailout-fund-asrifts-remain-in-talks.html.
- 66. **The Economist.** Is this really the end? *The Economist*. [Online] [Cited: March 1, 2012.] http://www.economist.com/node/21540255.
- 67. **The Economist.** Beware of falling masonry. *The Economist.* [Online] [Cited: February 26, 2012.] http://www.economist.com/node/21540259.
- 68. **The Economist**. A very short history of the crisis. *The Economist*. [Online] [Cited: March 2, 2012.] http://www.economist.com/node/21536871.
- 69. **Angerer, Carlo, Böcking, David and El-Sharif, Yasmin.** Europe Fights the Growing Currency Crisis. *Der Spiegel.* [Online] [Cited: May 2, 2012.] http://www.spiegel.de/international/europe/debt-quicksand-europe-fights-the-growing-currency-crisis-a-774483-2.html.
- 70. **Karpiš, Juraj.** O príčinách dlhovej krízy v Eurozóne. *Univerzita pre Moderné Slovensko*. [Online] [Cited: March 29, 2012.] http://www.upms.sk/sk/prednasky/prepis/3.-prednaska-o-pricinach-dlhovej-krizy-veurozone-juraj-karpis/.

ANNEX

1: Country Ratings as of April 27, 2012

Sortable Table Key	Moody's	Fitch	S&P	
Highest grade credit	Aaa	AAA	AAA	
Very high grade credit	Aa1, Aa2, Aa3	AA+, AA, AA-	AA+, AA, AA-	
High grade credit	A1, A2, A3	A+, A, A-	A+, A, A-	
Good credit grade	Baa1, Baa2, Baa3, Baa4	888+, 888, 888-	BBB+, BBB, BBB-	
Speculative grade credit	Ba1, Ba2, Ba3	BB+, BB, BB-	BB+, BB, BB-	
Very speculative credit	B1, B2, B3	B+, B, B-	B+, B, B-	
Substantial risks - In default	Caa1, Caa2, Caa3, Ca	CCC, CC, C, RD, D	CCC+, CCC, CCC-, CC, C, D	

Country	Moody's	Fitch	S&P
Austria	Aaa	AAA	AA+
Belgium	Aa1	AA	AA
Bulgaria	Bea2	BBB-	BBB
Cyprus	Baa3	BBB-	BB+
Czech Republic	A1	:A+	AA-
Denmark	Ass	AAA	AAA
Estonia	A1	A+	AA-
Finland	Aaa	AAA	AAA
France	Aaa	AAA	AA+
Gemany	Aaa	AAA	AAA
Greece	Сө	RD	SD
Hungary	Bea3	BB+	BB+
lreland	Ba1	BBB+	BBB+
Italy	A3	A-	BBB+
Latvia	Baa3	BBB-	BB+
Lithuania	Bea1	BBB	BBB
Luxembourg	Aea	AAA	AAA
Malta	А3	A+	A-
Netherlands	Aaa	AAA	AAA
Poland	A2	A-	A-
Portugal	Ba3	BB+	BB
Romania	Baa3	BBB-	BB+
Slovakia	A2	A+	A
Slovenia	A2	A	A+
Spain	А3	A	BBB+
Sweden	Aaa	AAA	AAA
United Kingdom	Aaa	AAA	AAA

Sources: Moody's, Standard & Poor's, Fitch

Source: Wall Street Journal 129

 129 Retrieved on May $3^{rd},$ 2012 from http://online.wsj.com/article/SB10001424052970203914304576630742911364206.html?mod=WSJ_WSJ_EDisunion_LEFTopStories