Implications of the Sovereign Debt Crisis on Financial Stability in the Eurozone

Wissenschaftliche Arbeit
zur Erlangung des Grades eines
Bachelor of Science

im Fachbereich Wirtschaftswissenschaften
der Universität Konstanz

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[redacted]

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Bearbeitungszeit: 28.02.2013 – 28.03.2013

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Konstanz, den 27.03.2013

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LIST OF ABBREVIATIONS

ECB	European Central Bank
EFSF	European Financial Stability Facility
ESM	European Stability Mechanism
EU	European Union
GDP	Gross Domestic Product
HICP	Harmonized Index of Consumer Prices
IMF	International Monetary Fund
LTRO	Longer-Term Refinancing Operation
OMT	Outright Monetary Transactions
RQMV	Reverse Qualified Majority Vote
SGP	Stability and Growth Pact
SMP	Securities Markets Programme
TSCG	Treaty on Stability, Coordination and Governance
UK	United Kingdom

Chapter 1

INTRODUCTION

Negative GDP growth of as much as 4,4%[1] combined with additional government spending[2] on economic stimulus and bailout programs caused public debt levels to skyrocket in the course of the financial crisis[3]. This is now especially a burden on those nations who failed to repay government debt, reduce excessive spending, balance their budget and push forward structural reforms during the economic upturn of the mid noughties. In the past years very diverse suggestions on how to deal with the sovereign debt crisis have been published. Those are ranging from a much stronger integration through partly commonly issued and guaranteed Eurobonds (Delpla and von Weizsäcker, 2011) up to various recommendations about a breaking up or restructuring of the Eurozone (Henkel, 2011).

As this is the first time ever for a currency union of that extent to be struggling, there is no historical data to rely on that would help in making more accurate assumptions or decisions. Additionally, national governments are ruling out certain approaches ex ante or demand adjustments as a precondition. Germany for example, with its dominant position in the Eurozone, strongly opposes to underwrite any debt of others through a jointly issued bond solution[4], vowing for a fiscal union instead. This is in line with the proposal of Marzinotto, Sapir and Wolff (2011), arguing that a fiscal union could not only solve the fiscal problems but also improve banking supervision as well as work on structural aspects by assisting member states.

Yet, no matter how plausible a plan seems in theory, unexpected changes in governments due to national elections can modify the

1 World Bank: (2013), "GDP growth (annual %)"
2 Eurostat: "Total general government expenditure"
3 Eurostat: "General government gross debt – annual data"
4 Reuters: (2011c), "Germany against euro bonds"

entire situation again (e.g. France 2012, Italy 2011 and 2013). While reforms are being put into place, trying to solve the problems that arise, they might bring along some unwanted side-effects. Reducing the budget deficit by reducing the expenditures might ultimately lead to lower growth. Moreover, despite austerity measures debt levels are scheduled to rise more for the coming years[5]. And even though yields on government bonds of troubled nations are well below their recent highs, the spreads between Eurozone countries are still considerably larger than before the sovereign debt crisis (see Figure 1.1).

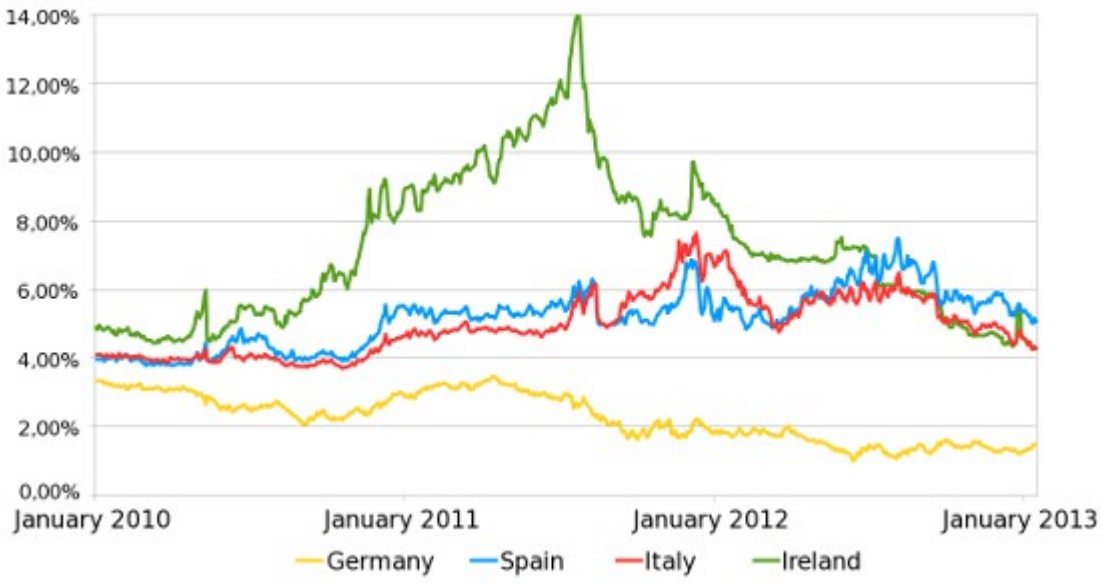

Figure 1.1: 10-year Government Bond Yields (01/2010 – 01/2013)

Source: Data from Eurostat

This brings up the highly controversial question about how far the Eurozone really is in solving this crisis. What proposals were made or have been agreed on in order to find a solution and did those past and recent decisions actually contribute to more stability in the monetary union? Furthermore, finding out what role government indebtedness plays and why countries within the Eurozone see their yields go higher than those of nations with their own monetary policy, despite a better budgetary situation, would also be interesting.

5 OECD: (2012), "OECD Economic Outlook, Volume 2012 Issue 2"

1.1 Purpose

The purpose of this thesis is to examine the effects of fiscal, political and monetary policies on the financial stability of nations within the Eurozone. As a lot of focus has been put on government bond yields and budget deficits in recent years I additionally analyze the importance of such, especially with respect to debt sustainability.

1.2 Approach

To determine the consequences of major events and announcements I investigate the fluctuations in government bond yields throughout the crisis. Moreover, a solvency equation is introduced to evaluate and compare selected countries regarding debt sustainability. The data used for the calculations consists of interest rates on government debt, inflation rates, real growth rates as well as the debt-to-GDP ratios from 2010 to early 2013.

1.3 Scope and Limitations

There are various forms of stability, such as social or economical. In this thesis, however, I focus on financial stability. Furthermore, due to the extent of this work I solely analyze the government bond markets and do not go into detail about volatility in equity markets, what would be an additional way to measure stability. The use of daily government bond yields is due to the fact that barely any detailed intra-day data was available for most events taken into account.

1.4 Structure

This thesis consists of four chapters. Chapter 2 presents major reforms throughout the European sovereign debt crisis and highlights their effect on government bond yields to assess changes in financial stability. The third chapter introduces a solvency condition and calculations are made to compare selected countries regarding their debt sustainability. The final chapter, Chapter 4, concludes.

Chapter 2

EUROPEAN SOVEREIGN DEBT CRISIS

When in early 2010 the fist signs of a crisis in Greece surfaced leaders tried to prevent a widespread contagion in Europe by approving a €110 billion three-year loan package[6]. It was financed jointly by the European Union (EU) and the International Monetary Fund (IMF), designed to stabilize the Greek economy and provide immediate financial support. Within weeks it turned out that this was not sufficient and further steps were inevitable to avoid countries from defaulting on their debt.

In the following sub-chapters I introduce those steps along with other major events that affected the Eurozone's stability. Also, I provide empirical data, in the form of yields on government bonds for selected countries, namely Italy and Spain, to highlight the immediate but also longer-term effects and consequences.

2.1 Financial Stability

With the sovereign debt crisis the Eurozone entered a difficult financial period of volatile markets. A term which was widely used in that context was 'financial stability'. There are numerous different, yet closely related definitions of financial stability. What they mostly have in common is that the existence of financial stability is crucial for the financial system itself but also for the entire economy[7].

2.1.1 Definition

The European Central Bank (ECB) defines financial stability as the capability of the financial system to withstand shocks and imbalances[8]. According to the ECB's definition the financial system

6 IMF: (2010), "IMF Approves €30 Bln Loan for Greece on Fast Track"
7 ECB: (2013a), "Financial stability"
8 ECB: (2012a), "Financial Stability Review, June"

consists of the financial markets, financial intermediaries and the financial infrastructure. Another, however similar definition of a stable financial system, comprises of the nonexistence of excessive volatility, stress or crises (Gadanecz and Kaushik, 2009).

2.1.2 Measuring Financial Stability

Not only is it difficult to define financial stability but it is also hard to measure it. Gadanecz and Kaushik (2009) present a list of commonly used variables when trying to assess financial stability through quantitative measures. Even though that approach allows for a more detailed evaluation of the situation, looking at markets' reaction gives an instant overview on how market participants perceive a certain announcement. One way to do so is to observe the moves in interest rates on government debt around major events and announcements.

2.2 Events and Reforms

Before taking a closer look at the effects, I first present some notable changes and announcements throughout the recent years. I distinguish between fiscal, political and monetary events, such as reforms, elections and ECB interventions.

2.2.1 Fiscal and Macroeconomical

The Six-Pack refers to a series of reforms and adjustments to enhance the Stability and Growth Pact (SGP) and to reduce macroeconomic imbalances. Those adjustments, some of them entirely new measures, were designed to create economic stability, regain the trust of financial markets and prevent future crises. To achieve these goals countries are now required to reduce any excess debt, above 60% of GDP, by 1/20th annually (Sachverständigenratsgutachten, 2012). Moreover, the Six-Pack changes the sanctioning mechanisms by introducing the Reverse Qualified Majority Vote (RQMV). Regarding macroeconomic imbalances a Scoreboard[9] is introduced which

9 European Union: (2011), "EU Economic Governance 'Six-Pack' enters into force"

comprises of different economic variables and which functions as an early warning system.

Based on an initiative of Germany and France, the Euro Plus Pact aims to improve competitiveness and increase growth. As a first step wages are monitored and productivity trends are analyzed in order to determine possible shortcomings of the individual nations. It further puts the focus on the restructuring of labor markets through tax reforms and on the continuous education of the workforce to raise labor participation[10].

Under the Fiscal Compact, which is the fiscal part of the “Treaty on Stability, Coordination and Governance" (TSCG), the member states commit to keep the structural deficit below 0.5% of GDP. This threshold is only relaxed to 1% for countries with a debt-to-GDP ratio significantly lower than 60%. It therefore functions as a "debt-break" and violations can result, also following the principle of a RQMV, in a fine of up to 0.1% of GDP. Furthermore, contries are required to sign these budget rules into national law, preferably on a constitutional level[11].

2.2.2 Political

One of the first major reactions of politicians to the European sovereign debt crisis was agreeing to a three-year bailout loan for Greece in early May 2010[12]. As the crisis widened and spread to other countries, mainly Ireland, Portugal and later Spain and Italy, further bailout packages were provided through the European Financial Stability Facility (EFSF)[13]. Those were subject to austerity measures, such as reducing expenditures and increasing taxation[14]. With the ongoing austerity politicians faced more and more pressure and

10 European Commission: (2011), "Background on the Euro Plus Pact"
11 European Commission: (2012), "A short guide to the new EU fiscal governance"
12 IMF: (2010), "IMF Approves €30 Bln Loan for Greece on Fast Track"
13 EFSF: (2013), "Lending Operations"
14 Department of Finance, Ireland: (2010), "The National Recovery Plan 2011-2014"

discontent from their citizens what, amongst others, lead in Italy in 2011 to the resignation of Silvio Berlusconi and the appointment of his successor Mario Monti[15]. Besides that, in 2012 the French president Nicolas Sarkozy was voted out and replaced by Francois Hollande and in late February 2013 Italian elections lead to unclear results.

2.2.3 Monetary

Throughout the European sovereign debt crisis, the ECB adjusted the key interest rates several times in order to manage the liquidity in the Eurozone[16]. Changes to those rates do not only serve as a strong signal for the current ECB monetary policy but they are also important as they are used to influence the general interest rate level[17]. Yet, as the interest rates were already on their lowest levels ever in 2009 the ECB was forced to use less conventional measures to provide sufficient liquidity.

On 10 May 2010 the decision to start the Securities Markets Programme (SMP) was the first response of the ECB to the deepening of the crisis, at that point mainly in Greece. It was established as a temporary mechanism to ensure liquidity in troubled bond markets. Already within the first days of its announcement the SMP was used to purchase €16.3 billion[18] in securities of Eurozone nations. In mid August 2011, after a phase of none to only little intervention, the ECB started purchasing massive amounts of up to €22 billion[19] per week to stop the sudden surge in government bond yields (see Figure 2.1).

Later that year, in December 2011 and February 2012, two Longer-Term Refinancing Operations (LTROs) were carried out as a non-standard monetary policy measure. With a maturity of three years

15 Reuters: (2011b), "Italy anxiously awaits reaction to new premier"
16 ECB: (2013b), "Key ECB interest rates"
17 ECB: (2011b), "Guideline of the ECB"
18 ECB: (2010), "Consolidated financial statement of the Eurosystem, 14 May 2010"
19 ECB: (2011a), "Consolidated financial statement of the Eurosystem, 12 August 2011"

and a volume of roughly €490 billion the first LTRO led to an increase in liquidity of close to €194 billion[20]. Those special three-year LTROs were conducted to expand lending activities to Eurozone households and corporations, totaling at a combined volume of about €1.02 trillion[21].

On 26 July 2012 Mario Draghi the President of the ECB stated during a speech at a conference in London that within its mandate the ECB would be ready to do whatever it takes to preserve the Euro[22]. This indirect announcement of further monetary intervention came at a time when yields on government bonds for Italy but especially Spain started to reach new highs (see Figure 2.1). It can be viewed as one of the most pivotal moments in recent years for the Eurozone as it reversed the trend of rising borrowing costs in a, at least up until early 2013, seemingly sustainable way.

Shortly after this effective announcement by Draghi the ECB came forward with a permanent and in its volume unlimited bond purchasing mechanism, the Outright Monetary Transactions (OMT). It replaces the SMP which will cease to exist once all current securities in its portfolio reach maturity. One of the key factors of the new program is that the ECB intends to fully sterilize any liquidity created by the OMT and therefore not extend its balance sheet. Also, it comes with the precondition that the ECB can only intervene in government bond markets of nations currently in an EFSF/ESM macroeconomic adjustment or precautionary program[23].

2.3 Implications on Government Bond Yields

The first signs of pressure on Italian and Spanish yields occurred during the time of the first bailout loan to Greece and the

20 ECB: (2012c), "Monthly Bulletin, January 2012"
21 ECB: (2012b), "Longer Term Refinancing Op.-Allotment"
22 ECB: (2012e), "Verbatim of the remarks made by Mario Draghi"
23 ECB: (2012d), "Technical features of Outright Monetary Transactions"

announcement of the SMP. For the following months both countries were able to take up debt at about 4%, yet, with increasing fear of contagion, bond yields started to soar in late 2010 (see Figure 2.1). A highly likely reason for this fear of contagion was the result of Ireland and Portugal requesting EFSF funding[24].

While the first raise in key interest rates by the ECB on 13 April 2011 barely had any effect on Italian and Spanish yields, the second increase to 1.5% caused yields to spike heavily. For Italy and Spain to return to a more sustainable level of 5% the ECB started to intervene, as previously described, using the SMP. In the following months bond yields started to soar even higher than before presumably on fears that Italy would not be able to repay its huge amounts of outstanding debt. Political uncertainty and with it the yields reached a peak when Berlusconi resigned in November 2012[25]. Within a short period of time the ECB lowered the key interest rates to previous levels in order to soothe the markets[26]. Meanwhile, the newly appointed Italian Prime Minister Mario Monti managed to pass emergency austerity measures and reforms in the parliament[27].

Nevertheless, yields were still at 7% what caused the ECB to provide banks with large amounts of liquidity through a three-year LTRO before the end of 2012. This apparently also helped in regaining some confidence and in the weeks after the first LTRO Spanish and particularly Italian yields started to fall to levels last seen in late 2010. For Italy it is however likely that in addition to the LTRO and the lowering of key interest rates by the ECB, especially the change in Italian politics contributed to the drop of roughly 200 basis points. That trend continued for more than two months and was only reversed when the Greek Minister of Finance, Evangelos Venizelos,

24 EFSF: (2013), "Lending Operations"
25 Reuters: (2011a), "Berlusconi resigns amid jeering, celebrations"
26 ECB: (2013b), "Key ECB interest rates"
27 Bloomberg: (2012), "Monti’s Austerity Budget Cuts Win Broad Support in Italian Confidence Vote"

announced a debt restructuring on 09 March 2012[28]. With investors actually losing money and in that case not being unconditionally protected by another bailout loan from EU and IMF, they seemingly revised their positions, given the higher probability of default. This additional risk for bondholders was also reflected by evermore falling bond prices what ultimately caused Spanish yields to peak at record highs of 7.49% in July 2012 (see Figure 2.1).

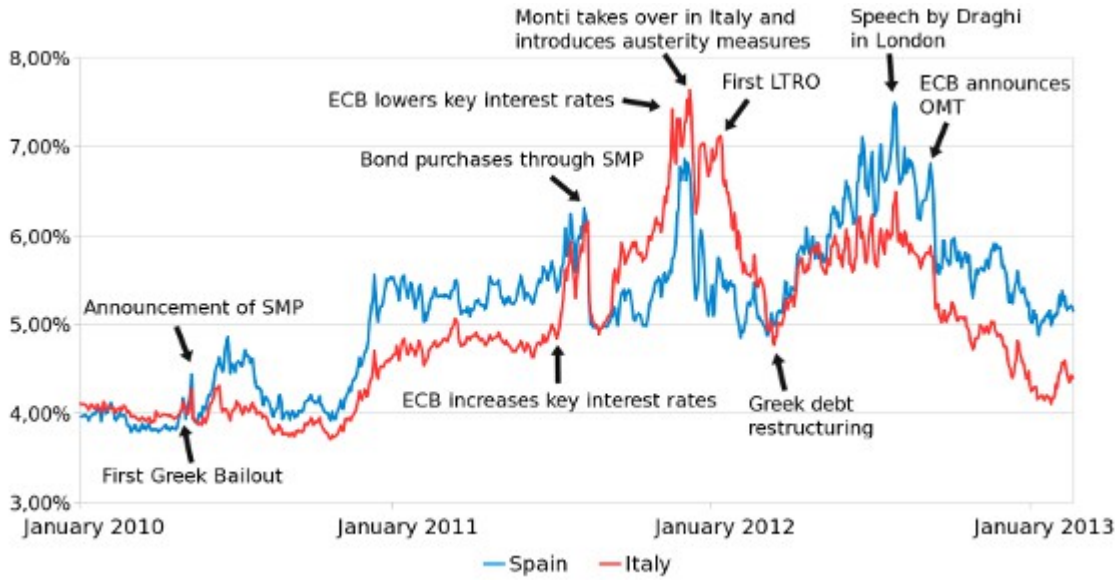

Figure 2.1: 10-year Government Bond Yields (01/2010 – 02/2013)

Source: Data from Eurostat

That was the point when the President of the ECB, Mario Draghi, stepped in. His speech did not only affect the government bond prices but also had a large effect on equity and foreign exchange markets. One explanation for that is that the ECB lowered the fear of a Eurozone breakup by giving up its somewhat reluctant position and stepping in as a 'lender of last resort'. The intervention and support by the ECB was especially crucial because Spain and even more Italy are too big to be covered under any of the existing financial assistance programs. Giovannini and Gros (2012) estimate the financial needs of Spain and Italy, for the scenario that those two

28 Hellenic Republic, Ministry of Finance: (2012), "Press release PSI"

countries lose market access, to be close to €1.8 trillion until 2016. In mid 2013 the EFSF and European Stability Mechanism (ESM) together will reach their lending ceiling of €700 billion, of which a maximum of €500 billion are lending volume provided through the ESM[29]. Furthermore, countries in need stop contributing to the EFSF and ESM what reduces the available capacity and makes it impossible for the current mechanisms to stem even half of the required amount. Support to Italy and Spain would also, by far, exceed the currently already agreed assistance, of €245 billion to Greece and another combined €145.5 billion to Ireland and Portugal by a multiple (Giovannini and Gros, 2012).

When on 06 September 2012 the framework of the OMT was announced yields fell significantly and kept falling ever since, with Italy, for the first time, reaching pre-crisis yields again in January 2013 (see Figure 2.1). Alongside the ESM and the other reforms mentioned this apparently helped in reducing uncertainty what caused the pressure on the Eurozone to steadily decline. Furthermore, additional liquidity provided by the ECB, no matter if it was through lower interest rates, LTROs or other interventions such as first the SMP and then OMTs, suppressed or lowered government bond yields. This, however, does not fix the underlying structural problems. It should therefore only serve the purpose of buying time for politicians to make the necessary adjustments and to mitigate situations that threaten the stability of the entire system.

29 European Union: (2012), "Statement of the Eurogroup"

Chapter 3

DEBT AND DEBT SUSTAINABILITY

In the third chapter I argue that even though the level of government bond yields is extremely important for a nations finances, there are other factors that influence the debt burden a country faces. Some of those factors are introduced and used to determine how well selected countries are performing. I also highlight, using Spain and the United Kingdom (UK) as examples, the difference of being in a monetary union compared to having an own monetary policy and therefore control over the national currency.

3.1 Government Finances

While after the financial crisis governments increased expenditures to kick-start their economies[30], in the European sovereign debt crisis especially troubled nations were pushed to agree to severe austerity measures in order to receive bailout loans[31]. Additionally, recent reforms like the Fiscal Compact now force nations to further reduce spending in order to comply with the new rules. The massive increase in debt and later on a weak or even negative GDP growth, arguably also due to austerity, put government finances under a lot of pressure.

3.1.1 Government Debt

In the EU government debt, or more commonly public or national debt, is measured following the definition in the Maastricht Treaty. It interprets government debt as general government consolidated gross debt of the whole government sector, comprising central government, state government, local government and social security funds[32]. Dividing the government debt of a country by the respective

30 Eurostat: (2013), "Total general government expenditure"
31 Department of Finance, Ireland: (2010), "The National Recovery Plan 2011-2014"
32 European Union: (2009), "COUNCIL REGULATION (EC) No 479/2009"

GDP gives the debt-to-GDP ratio which allows to compare the indebtedness of different countries in relation to their economic output.

3.1.2 Primary Balance

The primary balance refers, unlike the budget balance, to a term which excludes interest rate payments on government debt. A country achieves a primary surplus/deficit if government income through, for example, taxes is higher/lower than government spending. It is therefore also called primary net lending/borrowing of the general government and functions as an indicator of the current fiscal effort of a country[33]. It is, aside from some cases which will be mentioned in the following sub-chapters, necessary and desirable for a country to reach a primary surplus in order to reduce the debt-to-GDP ratio. It is also important to note that the primary balance can, depending on the total amount of debt a country owes and the interest it has to pay on it, significantly differ from the ordinary budget balance.

3.2 Factors of Solvency

At first, it is necessary to distinguish between solvency, debt sustainability and liquidity. A country is considered solvent when its future primary surpluses are large enough to cover all outstanding debt plus interest payments (Wyplosz, 2005). Its total debt is, according to the IMF definition, sustainable if it satisfies the solvency condition (see Chapter 3.2.1) given the refinancing costs it faces[34]. Additionally, the IMF states that this is under the assumption that no major corrections occur which could result in political or social unwillingness to repay the debt. Refinancing costs, in the form of bond yields, generally reflect the market participants' expectation about a countries ability to pay them back. Lastly, illiquidity can arise, no matter if the solvency condition is fulfilled or not, by simply not

33 IMF: (1995), "Guidelines for Fiscal Adjustment"
34 IMF: (2002), “Assessing Sustainability”

having enough money to repay creditors when their bonds reach maturity (IMF, 2002).

3.2.1 Solvency Condition

The condition I use to determine a countries solvency is,

$$B = (y - (r + \pi))D$$

wherein 'B' gives the primary balance needed to stabilize the debt-to-GDP ratio, 'y' denotes the average yield on 10-year government bonds, 'r' represents the expected real growth rate, 'π' the average Harmonized Index of Consumer Prices (HICP) and 'D' the debt-to-GDP ratio. Each average is calculated over the previous 12 months.

As seen in the formula the primary balance needed to stabilize the debt-to-GDP ratio is the difference between refinancing costs (y) and nominal growth (r + π), multiplied with the debt ratio (D). So, if the actual primary balance is equal to, or larger than, 'B', a country fulfills the condition and is therefore considered solvent.

3.2.2 Required Primary Balance to Stabilize the Debt Level

When applying the given solvency condition to a number of selected European countries, very diverse results can be found. Figure 3.1 displays that Germany and the UK are in a relatively comfortable position. They could actually even have a slightly negative primary balance and still keep their current debt ratios. With the relatively low average yields they pay (1.50% for Germany and 1.91% for the UK in 2012) even a marginal real growth rate would be enough to sustain the debt levels. Furthermore, the UK benefits from a relatively high inflation rate of in average 3.53% over the past 3 years.

For Italy and Ireland, despite quite high requirements, at least the trend seems to go in the right direction. Both are still paying interest

rates of more than 5% but with slightly elevated inflation levels and improvements in GDP-growth they were able to reduce their required primary balances. Lastly, Spain and much more Greece are far from comfortable levels, even drifting away more each year. After positive growth in 2011 Spain slipped back into recession, making it almost impossible to stop the increase in debt relatively to GDP. Greece on the other hand has been in an extreme recession ever since the financial crisis, having to pay higher yields in average every year.

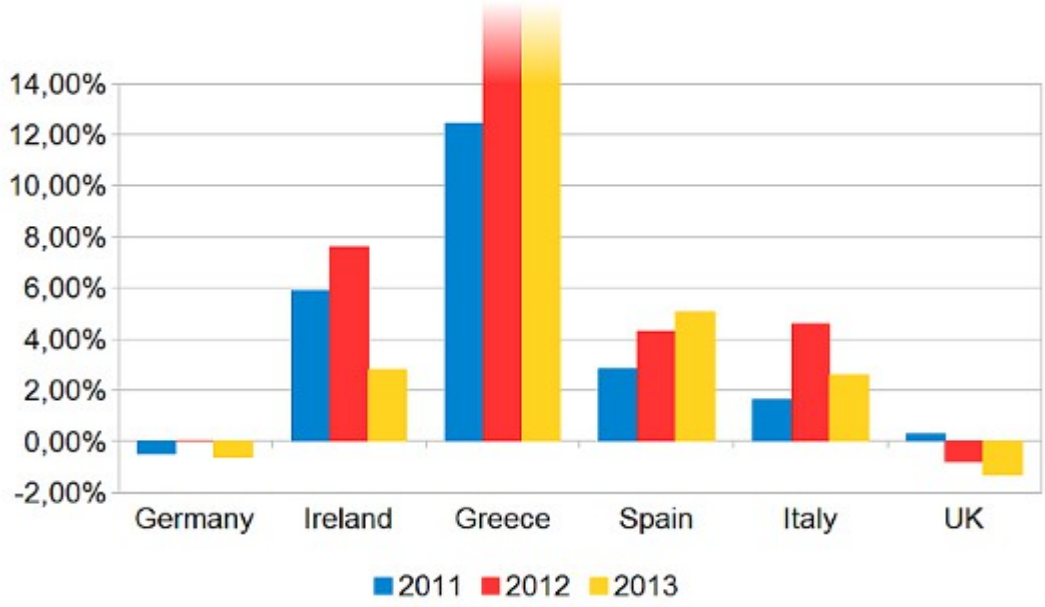

Figure 3.1: Required Primary Balance to stabilize Debt ratio[35]

Source: Data from Eurostat

3.2.3 Results and Analysis

The previously calculated values for Figure 3.1 help to understand how high the requirements are for each individual country. Now, in Figure 3.2 I present the actual primary balance minus the required primary balance. This is to get an idea of how well each of the chosen countries is performing. A value larger than zero results in a reduction of the debt-to-GDP ratio while a value smaller than zero leads to an increase in debt relatively to GDP. The latter would be the case if a

35 For visibility reasons the graph does not display the Greek primary balance requirements for 2011 and 2012 which are 21.11% and 27.47%.

country's primary balance was not sufficient to meet the requirements. As a matter of fact this is the case for all countries, except Germany and in 2013 Italy, for the values used in the calculation.

Taking a closer look at the results illustrated in Figure 3.2 one can spot a number of differences compared to Figure 3.1. Most notably, despite the low requirements, the UK clearly fails to stabilize the debt-to-GDP ratio in all three years observed. This is because the UK had high primary deficits in recent years of well above 5% and is expected to have a primary balance of -4.69% in 2013. Germany had equally low requirements and did not only meet but even slightly exceed them by turning a primary deficit of -2.02% in 2010 into an expected primary surplus of 1.33% in 2013. This was also reflected in the debt ratio which peaked in 2010 at a level of 82.5% and since then stabilized at around 81% of GDP.

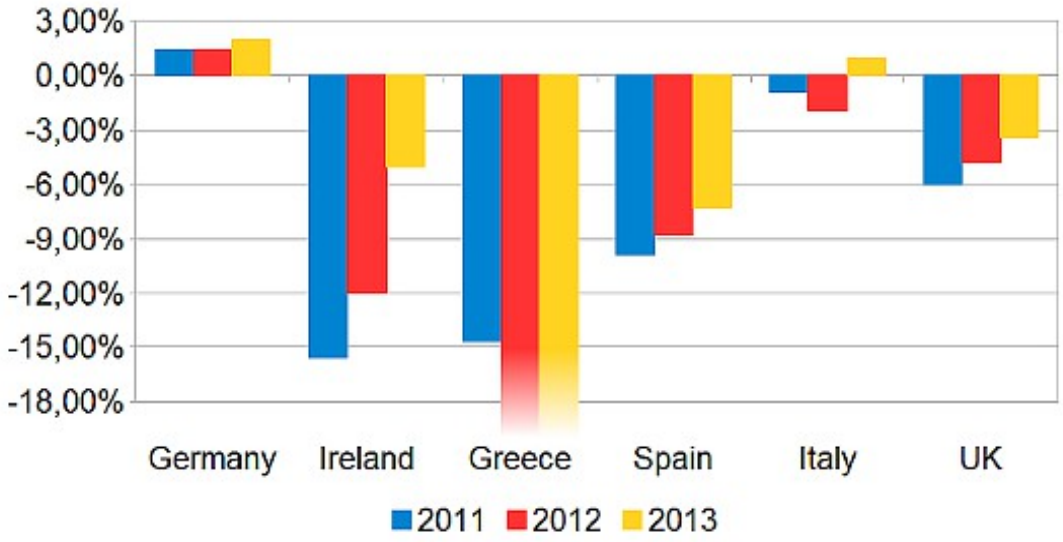

Figure 3.2: Difference between actual and required Primary Balance[36]

Source: Data from Eurostat and IMF

36 For visibility reasons the graph does not display the values for Greece in 2011 and 2012 which are -22.77% and -27.47%.

Among the observed countries Italy has by far the largest primary surplus what clearly helped making up for higher interest rates and a negative real GDP growth of 2.2% in 2012. Greece, despite the expectation of a balanced primary budget in 2013, is due to still very weak economic performance and extremely high interest rates on debt far from fulfilling the solvency condition. Similar problems can be seen in other Eurozone countries such as Spain. Ireland on the other hand is, mainly because of stronger growth, rapidly improving. Yet, data reveals that although their growth and primary balance exceed the British numbers the Irish government has to pay more than three times as much on newly issued debt than the UK.

De Grauwe and Ji (2012) show, by performing a chow test for structural breaks, that since the financial crisis countries in a monetary union see their yields increase significantly when reaching higher debt-to-GDP ratios. They could, however, not observe similar results for stand-alone countries with an own monetary policy. These higher yields lead to a larger primary balance needed to stabilize the debt ratio what is consistent with the results shown in Figure 3.1. For 2012, Spain paid in average 5.85% on their 10 year bonds compared to 1.91% for the UK, despite a much better primary balance and lower debt-to-GDP ratio. Both countries saw their debt ratio increase over the last years but in contrary to rising Spanish yields, the UK was even able to take up new debt for lower rates. De Grauwe (2011) argues that this is because in a stand-alone country the government is able to force its central bank to buy up debt with newly created liquidity in difficult times and therefore avoid a default. The result of that is a weaker currency, stronger growth and higher inflation what makes it easier for a country to sustain its debt.

Countries should, nevertheless, be certain about the persistence of that situation and not rely too much on those good conditions when assessing their budgets. While nations with higher rates have a

potential upside when things get better and confidence returns, countries now considered to be somewhat of a safe heaven are already borrowing at extremely low rates and would probably see those go up with narrowing spreads. It is also important to understand that according to the previously introduced solvency condition, a higher debt-to-GDP ratio makes a country more vulnerable to future changes in growth, inflation and interest rates on debt.

As average values were used for the calculations, it is not necessarily the case that slightly beating the requirements leads to an immediate decrease in the debt-to-GDP ratio. Nonetheless, the results help to compare countries and determine possible trends.

Chapter 4

CONCLUSION

Following the purpose of this thesis I introduced major events and reforms and illustrated the corresponding moves in government bond yields as an indicator of financial stability. The decision to look at Italian and Spanish bond yields, instead of Greek, Irish or Portuguese, had several reasons. First of all, the impact of a bailout or even a default of these two much larger economies would be way more severe, what makes it vital for the Eurozone to stabilize them. Also, Ireland, for example, was primarily in trouble due to its relatively large banking sector and not so much because of a weak economic performance or a lack of governance. Once provided with liquidity through loans, Ireland managed to avoid a second recession in 2012 and shortly after, it returned to funding through financial markets.

When analyzing the government bond yields a pattern can be found which divides the crisis into two major parts. After an early period of only reacting to threatening conditions in financial markets and coming up with emergency solutions, the leaders and decision-makers finally started to work on the solid framework which is necessary to regain stability and trust. One clear indicator for such a framework is that the preliminary solutions such as the SMP and EFSF have been replaced by similar, yet permanent, mechanisms.

The data also indicated that not all decisions enhanced financial stability. Raising the key interest rates while the fear of contagion among countries was high and the crisis was still deepening was certainly not beneficial.

Regarding debt sustainability the analysis showed that it is crucial for a country to be considered politically and economically stable, solvent and liquid. This was done comparing a stand-alone country, the UK,

with similar large and indebted economies in the monetary union. Not having control over the monetary policy turned out to be a major factor in difficult financial times and one of the main reasons for higher yields.

Ultimately the results in both, Chapter 2 and Chapter 3, point towards declining pressure on the Eurozone members. While still being a bit higher than before the sovereign debt crisis, the government bond yields returned to long term sustainable levels what also helps fulfilling the solvency condition. Furthermore, all troubled Eurozone countries analyzed showed noticeable improvements in their respective primary balances. And with the latest ratified reforms gradually beginning to start the budgetary situation should further strengthen.

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APPENDIX

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