

The Effects of Foreign Debt and Fiscal Balance on Economic Performances during the Eurozone Crisis

Bachelor Thesis

Can the Amount of Foreign Debt Incurred by Governments be Considered as a More Relevant Variable than their Fiscal Balance in Determining Member States' Economic Performances during the Eurozone Crisis?

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Executive Summary

In this project, the research question ‘Can the amount of foreign debt incurred by governments be considered as a more relevant variable than their fiscal balance in determining member states’ economic performances during the Eurozone Crisis?’ will be addressed. For this, three hypotheses have been formulated in order to test the influence of changes in fiscal balances and foreign debt levels on economic performances during the Eurozone Crisis. The context of the study is provided by the extensive implementation of austerity measures in EU member states since the onset of the crisis. The resulting academic debate, which is made up of supporters and critics of austerity as a response to the financial crisis, focuses on the respective effects of expansionary and contractionary fiscal measures to induce an improvement in economic performances. One train of thought which departs from this line of reasoning holds that the policy debate gives the role of fiscal balances too much focus and neglects other variables which might have a larger impact on economic performances. The neglected variable is foreign debt where the claim is that the amount of foreign debt a country holds is more important than its fiscal balance in determining its economic prospects. The research picks up on this claim and aims to examine whether foreign debt can be seen as a more relevant indicator which has not been given enough attention in the overall policy debate.

The paper is set up as follows. The first section will give an insight into the relevant events during the Eurozone Crisis, as well as the academic literature regarding the traditional austerity debate. The next part will then present the main theories that have been applied whilst also introducing the three hypotheses to be tested based on the given theoretical framework. The examination of the relevance of foreign debt and fiscal balance is supplemented by a brief evaluation of the effects of austerity measures in general. The third pillar of the paper introduces the methodology which is built around linear regression and the use of Spearman’s rank correlation coefficient. The main results of the fourth section, the empirical analysis, show that there is a positive relationship between economic performance on the one hand and austerity measures and fiscal balance on the other. One can also see a negative relationship between economic performance and foreign debt. After conducting a deeper analysis, one can conclude that foreign debt does not seem to have a lesser impact on economic performance than fiscal balance. This point strengthens the argument that too much focus has been laid on total public debt and austerity during the Eurozone Crisis and that a broader approach, which looks at the role of foreign debt, is needed. This aspect is picked up in the final chapter, where a presentation of the overall findings and analysis of the study, as well as its limitations, is supplemented by an analysis of the relevance of the results when looking at the makeup of the Macroeconomic Imbalance Procedure in the European Union.

1. Introduction

The effects and implications of the financial crisis in the European Union, which have included significant changes to European and national policies, political turmoil and vast social upheaval, have inspired a wide array of academic attention. This, in turn, has spawned a number of debates and passionate discussions in multiple fields including political science, sociology and economics. One of the most contentious issues to be discussed has been the adequacy of the overall policy response to the economic crisis. The chosen route since 2009 has predominantly involved austerity measures with the focus on cuts in spending and a restructuring of the tax system. This development has paved the way for an intense and contested debate on whether these measures have been successful so far and whether they include the most effective mechanisms to overcome the Eurozone Crisis. This paper aims at tackling this debate from an economic point of view and will consider the austerity debate intensively throughout.

This paper aims at contributing to the discussion of how fitting and appropriate the approach adopted by most European Union member states has been throughout the crisis. However, as opposed to most academic work dedicated to this subject, it will not be confined to merely looking towards whether austerity measures are sensible or not in the context of the Eurozone Crisis. Rather, the content of this paper will take the austerity debate as a whole and generally argue whether the entire makeup of the discussion involves the relevant points. In order to fully grasp this approach, one must bear in mind that the current austerity debate is predominantly focused on the importance of government balances and public debt. On the one hand, it can be argued that a deficit could be detrimental for an economy looking towards recovering from a recession, whilst it is also possible to hold that higher debt levels should be maintained to stimulate the economy. Whilst this issue will be contributed to in part in the subsequent sections, the main theme to be examined in this paper is whether the indicators surrounding public debt and government balances should even be considered as the most relevant aspects in deciding on a European economic policy approach. As will be discussed below, one can also follow the train of thought that the amount of foreign debt incurred by a country is much more indicative of its economic performance and future prospects than the formerly mentioned indicators. This view does not belong to the traditional austerity debate, and does not necessarily contribute to either side in the academic discussion, as it does not make a case for or against austerity. However, it calls into question whether the approach adopted in finding a solution and a fitting policy mix even touches on the most relevant points.

In general, this study will include the use of economic theory in order to shape hypotheses and explain how expectations regarding outcomes are formed. This will especially be found in the sections detailing the austerity debate, as the two dominant points of view make use of completely contrasting and irreconcilable theoretical frameworks. However, the theory will also be used to show how policymakers' actions are justified in that they prioritise government debt, whilst also thematising the alternative scenario of foreign debt playing a dominant role. A further pillar in the paper will be the empirical analysis where an array of indicators will be consulted. The aim here is to assess the economic performances of the 27 EU member states that were present when the crisis hit. The performance will then be measured against countries' progress regarding foreign debt, fiscal balances and their use of austerity measures. Overall, these indicators will then be compared to the hypotheses and theoretical expectations in order to show which theories match up better to reality.

In short, the paper is organised as follows. This section will commence with a background of the relevant events and literature, whilst also specifying the research questions that will be focused on. The second part will then provide a more comprehensive theoretical framework in order to lay down the hypotheses that will be applied, whilst also introducing the key concepts and causal relationships that are present throughout the rest of the paper and especially in the pillars dealing with the empirical analysis. The subsequent part will present the methodology applied to answer the research question with specific attention being paid to the operationalisation and conceptualisation of the aforementioned concepts. The final sections will then include the empirical analysis, as well as the conclusions that can be drawn in the context of the entire research paper.

The next section will give a brief introduction into the context of the paper by highlighting the key events underlying the research. For this, a description of the Eurozone Crisis and its effects will be presented.

1.1 Background – The Eurocrisis and Policy Responses

In 2007, the world bore witness to the worst economic crisis since the Great Depression in the 1930s. With the fall of the Lehman Brothers in 2008, fears began to spread that the Eurozone would soon be affected, too. The ongoing Eurozone Crisis, which began in 2009, has entailed economic turmoil throughout the European Union (EU) with problems such as increased unemployment, slow economic growth and rising public debt levels. In response to the aforementioned problems, policy makers throughout the 27 EU member states have attempted to find a sensible response. Since 2010, most EU governments have focused on balancing the budget through austerity measures. Here, one has been able to see a number of decisions being made ranging from raising taxes and cutting social welfare programmes to freezing or even decreasing public sector wage rates.

The decision of policy makers to follow austerity measures has sparked a fierce debate in the field of economics involving scholars, politicians, numerous other interest groups, as well as the mainstream media. Two main camps have emerged, namely those that support austerity and those that vehemently deny that the measures taken are in fact the appropriate ones. This debate has promoted a high amount of academic attention resulting in numerous papers and research being conducted. The fact that the policy question of how best to deal with the economic crisis that has engulfed the EU for half a decade has attracted so much attention displays the fact that the issue has wide-reaching consequences for all actors involved, be it politicians, businesses or European citizens. The implementation of regulations based on austerity obviously impacts all of these groups, whilst an alternative strategy of increased government expenditure and a fiscal loosening would do the same. Since these measures would predictably have completely different outcomes whilst still having a profound effect on the aforementioned actors, it becomes clear why the given debate is so hotly contested.

In general, the question of whether austerity measures are the best course of action and can ultimately lead to a better economic performance in Europe is carried out in two realms. On the one hand, economic theory is applied to explain why austerity can be viewed as a sensible option or not. Furthermore, a host of studies and research efforts have been conducted to add weight to one view or the other. When assessing the relevant academic literature, it becomes clear that this intense debate has fostered differing opinions and interpretations in both fields, so that a constant clash is

evident in the assessment and interpretation of empirical data, as well as in the application of economic theory. This has made for a multi-faceted and extensive clash of opinions which ultimately has wide-reaching implications for all EU citizens. However, in light of this debate and the polarisation of opinions and academic contributions, one can also detect alternative approaches that question the dichotomy of austerity measures being positive or negative. Here, the query can be raised whether the correct variables are being assessed. Amongst these ideas, it is possible to find work that suggests that perhaps indicators such as the amount of foreign debt a country has incurred or else their current account balance are actually more telling indicators than government budgets and fiscal balances.

In order to gain a deeper insight into the aforementioned debate, the second section will provide an overview of the relevant academic literature, whilst also highlighting which areas have enjoyed the most attention and in which aspects further research has been lacking. In order to be able to put the subsequent analysis into context, the following will provide a brief overview of the most relevant issues and events that have taken place since the onset of the financial crisis.

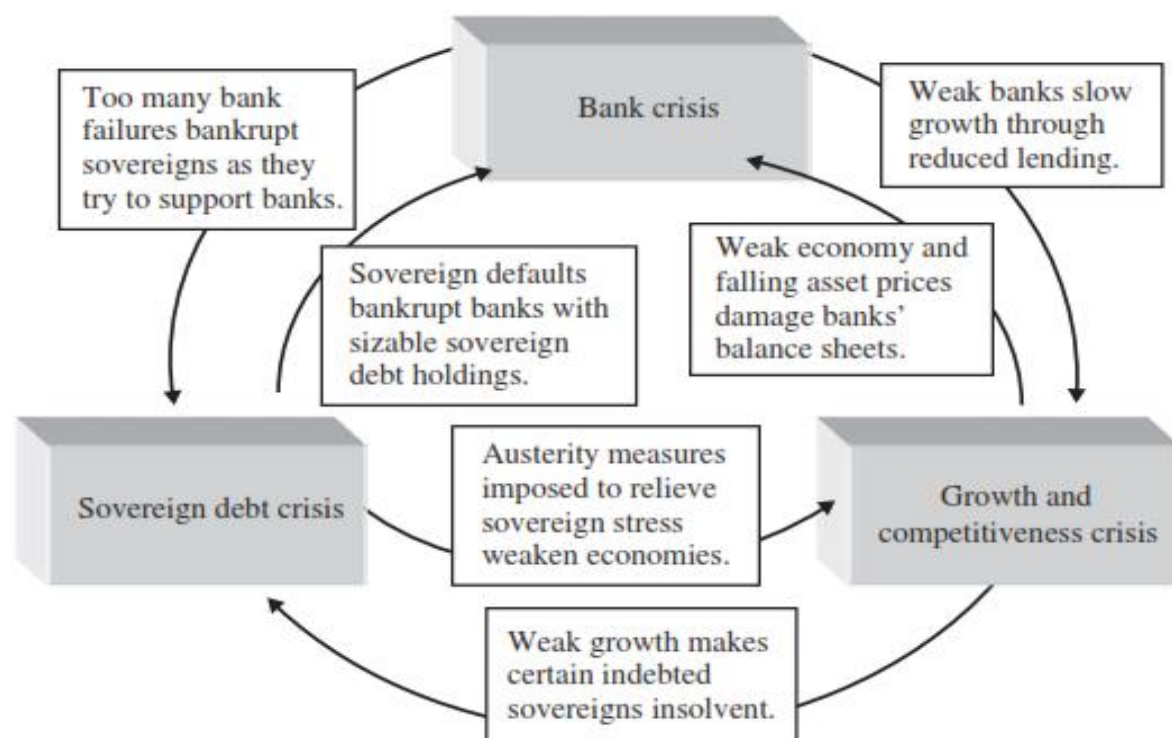
1.1.1 Relevant Events during the Eurozone Crisis

Whilst it is tempting to begin the discussion of the financial crisis in the timeframe between the fall of the Lehman Brothers in 2008 and the posting of Greece's annual budget deficit on November 5, 2009, it first makes sense to first of all look at the institutional foundation of the European Union in order to better evaluate the events of the last five years. In February 1992, the Maastricht Treaty was signed and, with it, the European Union formed (Cini & Borragan, 2013). The member states at the time gave their full commitment to economic convergence in order to complete a common currency area as soon as possible. The most relevant provisions included were the fiscal rules, which included that deficits should not exceed 3% of Gross Domestic Product and that total debt should not be higher than 60%. In 1997, these goals were solidified with the adoption of the Stability and Growth Pact, which introduced concrete surveillance and sanctioning procedures (Commission, 2014). On top of that, the treaties did not include a provision for the event that a member state should leave the EU.

The Economic and Monetary Union (EMU) can be seen as the formalisation of the economic integration in the EU. It encompasses efforts to streamline and coordinate the economic policies of the member states. The ultimate goal is to adopt the common currency. Whilst all members of the EU belong to the EMU, not all have adopted the euro as a currency. One can thus see a split between countries that belong to the Eurozone and those that maintain their own currency. In 1999, the Eurozone was created with 11 member states joining (Commission, 2014). These included Austria, Belgium, Finland, France, Germany, Ireland, Italy, Luxembourg, the Netherlands and Spain. This saw the aforementioned countries replace their respective national currencies with the euro for financial transactions. The full adoption took place three years later. Greece followed suit in 2001 by becoming the twelfth member of the currency area. By 2014, the Eurozone had expanded to 18 countries. In general, it has been argued that the crisis partly has its roots in the institutional makeup of the EU. Here, scholars have maintained that insufficient economic integration, a lack of European fiscal instruments to combat deteriorating conditions, as well as a lack of an exit mechanism for countries nearing default have all played their part. However, it can also be said that the rising credit bubble, a drop in competitiveness, as well as an inability of sovereign states to service their debt also contributed to this. The complexity of the crisis is captured by Shambaugh (2012), who states that the ongoing turmoil can be viewed as three crises at once. Here, the author claims that the EU is

engulfed in a banking crisis, a sovereign debt crisis, as well as a growth and competitiveness crisis which are all intertwined. Figure 1 shows the relevant processes below. The struggling banking sector leads to less credit being available which reduces lending and, in turn, impacts negatively on growth. A weaker macroeconomic performance furthermore hits the banking sector through falling asset prices. In relation to the sovereign debt crisis, the situation where banks need bailouts increases government debt considerably. If a sovereign defaults on part or all of its debt, it can be said that this also hits banks hard. The debt problem and growth crisis are linked in that austerity measures can lower economic performance whilst weak growth also increases debt.

Figure 1: The Three Crises in the Eurozone



Source: Shambaugh (2012)

Many took notice of the deteriorating economic situation in the EU when it was shown in 2009 that Greece had underreported its total government debt in previous years (Bruegel, 2014). A deficit of approximately 7% to 8% was instead nearer to 12.7% (Bruegel, 2014). Fears of contagion rose, especially with Greece's debt reaching approximately 120% of GDP. With interest rates rising and credit ratings being downgraded for a spate of countries worldwide, many sovereign states had difficulties servicing their debt. Amid ever increasing fears of contagion and with it being reported that France held 10% of Greece's debt, a bailout package was agreed on in 2010 (Bruegel, 2014). Here, the EU and the IMF pledged €110bn and, after two years of fiscal austerity being completed in the country, transferred a further €130bn in 2012 (European Parliament, 2014). Further bailouts were negotiated for Spain, Ireland, Cyprus, Hungary, Latvia, Romania and Portugal. Policy responses first of all saw stimulus packages and bailouts being facilitated which drove up debt levels. On a national level, many member states pledged to slash their public debt by implementing austerity measures (European Parliament, 2014). These typically included raising taxes and cutting government expenditures, whilst also incorporating more extreme measures such as internal

devaluation in Latvia (Medaiskyte & Klyviene, 2012; Weisbrot & Ray, 2010, 2011). On a European level, the European Financial Stability Facility (EFSF) was established in 2010 which created a legal instrument to provide funds for highly indebted countries (Bruegel, 2014). On top of that, the European Financial Stability Mechanism (EFSM) created an emergency funding scheme. It can also be said that the European Central Bank engaged in open market operations to bring stability to the Eurozone (Bruegel, 2014). Further commitments and funding initiatives include the European Stability Mechanism (ESM) and the European Fiscal Compact, which follows on from the Stability and Growth Pact (Commission, 2014).

After initially focusing on fiscal discipline and public debt, the European Union also tended to the dangers of excessive foreign debt and macroeconomic imbalances. The Macroeconomic Imbalances Procedure (MIP) was introduced in December 2011 in order to prevent and correct risky macroeconomic developments. Here, issues such as excessive foreign debt and current account deficits are scrutinised. The MIP is based on two pieces of legislation, namely Regulation 1176/2011 and Regulation 1174/2011, which belong to the 'Sixpack', which can be seen as a set of legislative measures to follow the initial Stability and Growth Pact. In general, the MIP begins with an 'Alert Mechanism Report' which assesses the member states' performances regarding foreign debt according to a scoreboard containing eleven macroeconomic indicators. After deriving the results from the scoreboard, the Commission assesses which countries' performance merits further analysis and, if necessary, conducts so-called 'In-depth reviews'. Overall, the MIP gives the Commission the opportunity to recommend preventive or corrective measures, depending on the severity of the given case. Country-specific recommendations are then issued which, in turn, means that the member states in question need to respond by submitting a corrective action plan with clear deadlines and targets. If deemed appropriate, the implementation of the action plan will be monitored by the Commission. In the case of non-compliance, the Commission can enforce varying kinds of sanctions and measures. According to Gros and Giovannini (2014), the MIP can be seen as an attempt to implement an early warning system in order to prevent future crises. The first Alert Mechanism Report was issued in February 2012 and set out a plan to conduct in-depth reviews of twelve EU member states. Of the twelve cases, no country was deemed to have an excessive imbalance. Since then Slovenia and Spain in 2013 and Croatia, Italy and Slovenia in 2014 were deemed to have an excessive imbalance. However, for each member state, the Commission ruled that the national action plans and commitment shown were sufficient to combat the given imbalances which meant that these countries avoided going through the Excessive Imbalance Procedure (EIP). A further reason why EIP has never been applied is that the most imbalanced and vulnerable 'Programme countries', such as Cyprus, Greece, Ireland and Portugal, are already subject to stringent surveillance procedures and conditions due to their receipt of financial assistance in the form of bailout packages. These countries are therefore not covered by the EIP.

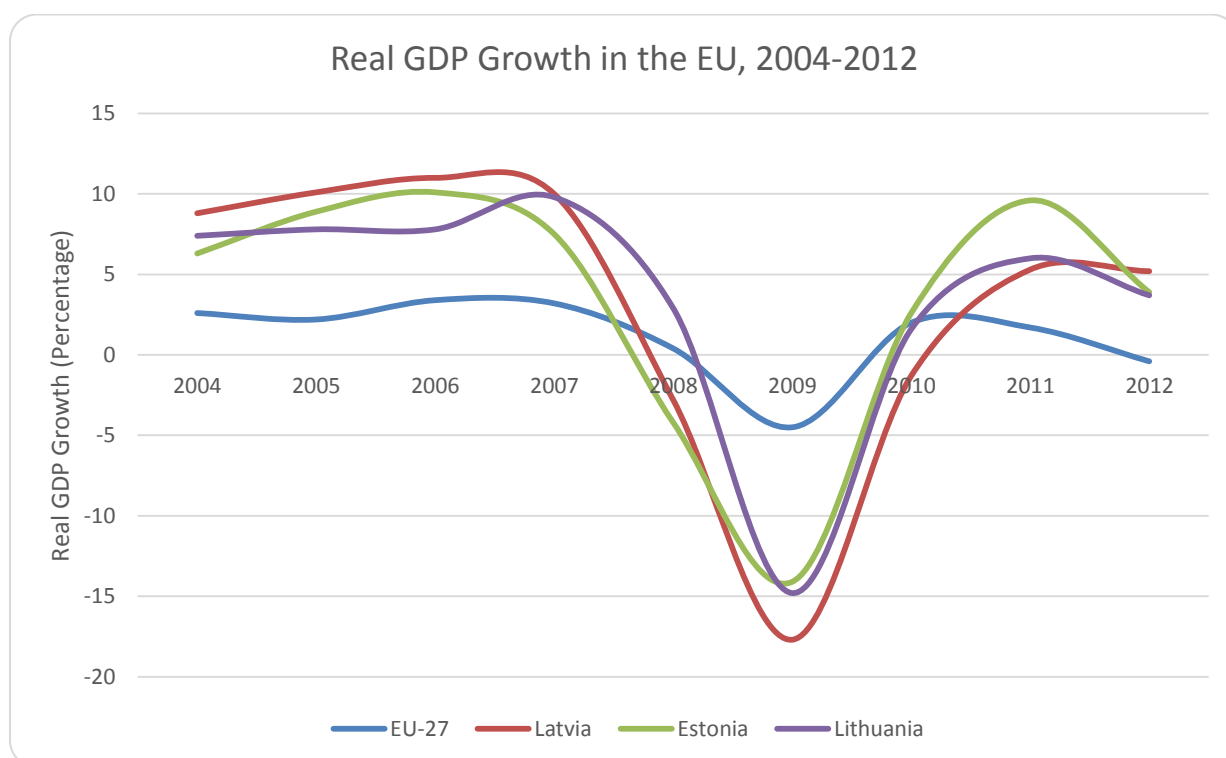
When looking at the measures designed by the EU to combat the financial crisis, it can be said that fiscal balance, as well as foreign debt was addressed which, in turn, can at first be seen as a contradiction of the premise of the research paper. This is due to the fact that the assumption is made that fiscal deficits enjoyed a high amount of attention in European policymaking vis-à-vis foreign debt. However, this issue can be clarified when considering that the extent and effects of the austerity measures have been stronger and more influential than the Macroeconomic Imbalance Procedure. On top of that, the MIP was first used in 2012, whereas austerity measures were implemented in 2010. Since the data of the study also only extends to 2012, any conclusion regarding

the effects of the MIP escapes the scope of the study, although it is still possible to relate the results of the research paper to the overall goals and makeup of the procedure. This point will be discussed briefly in the concluding part. The following section will provide a deeper analysis into the mechanisms involved during the Eurozone Crisis by looking at an array of economic indicators.

1.1.2 Analysing Economic Conditions during the Eurozone Crisis

Prior to the economic turmoil, many EU countries had enjoyed a period of growth and economic development, as can be seen in Figure 2, which shows the real GDP growth in the EU from 2004 to 2012. Here, one can see the positive growth in the European Union as a whole and the booms evident in the Baltic States from 2004 to 2007 which fluctuated in the range from 5% to 11%. However, it can be said that an increased willingness by banks to give out cheap loans, as well as a stock market bubble promoting increasingly risky investments led to a crash, as can be seen by the steep decline in 2009 (Eurostat, 2014). When assessing Figure 2, one can see that the EU's GDP contracted by 4.3%. This included extreme cases such as Latvia, which saw its economic activity drop by an unprecedented 17.7% in the same year. Whilst this was the steepest decline experienced by a member state, further cases such as Estonia (14.3%) and Lithuania (14.8%) can be seen as comparable, with other countries such as Finland (8.5%), Slovenia (8%) and Ireland (7%) also experiencing considerable setbacks (Eurostat, 2014).

Figure 2: Real GDP Growth in the European Union (EU-27 and Extreme Cases), 2004-2012

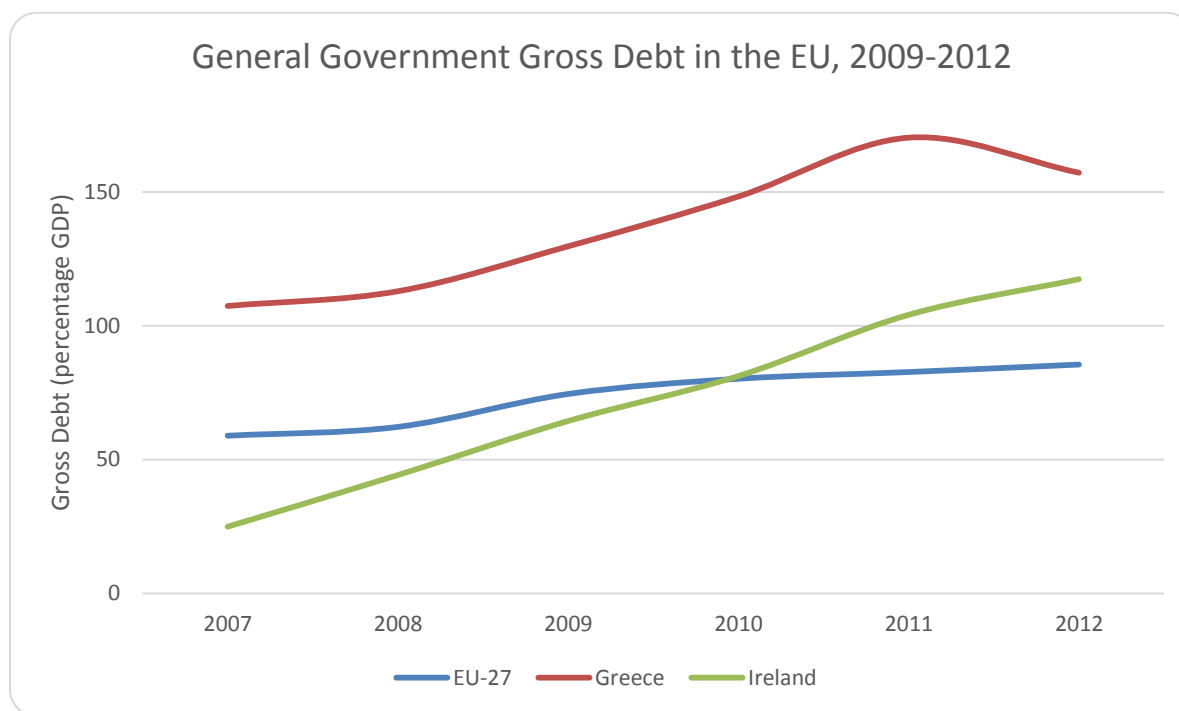


Source: Eurostat (2014)

The amount of debt accrued by member states was cause for great concern. With multiple banks being bailed out, fears spread that EU member states would default and possibly have to exit the Eurozone. Figure 3 sets out the debt levels in the European Union, whilst also highlighting some extreme cases that caused most concern among policy makers. When looking at Figure 3, one can see that general government gross debt began to rise rapidly from 2009. An increase from 62.2% of

GDP in 2008 to 80.2% in 2010 led to fears by policymakers regarding unsustainable debt levels (Eurostat, 2014). One extreme case is Ireland, whose debt almost trebled from 2008 to 2013. The most prominent case was, of course, Greece, which saw its debt reach a high of 170.3% in 2011. As alluded to in the previous section, one response was to carry out austerity measures which at least meant that the growth in debt stagnated after 2010.

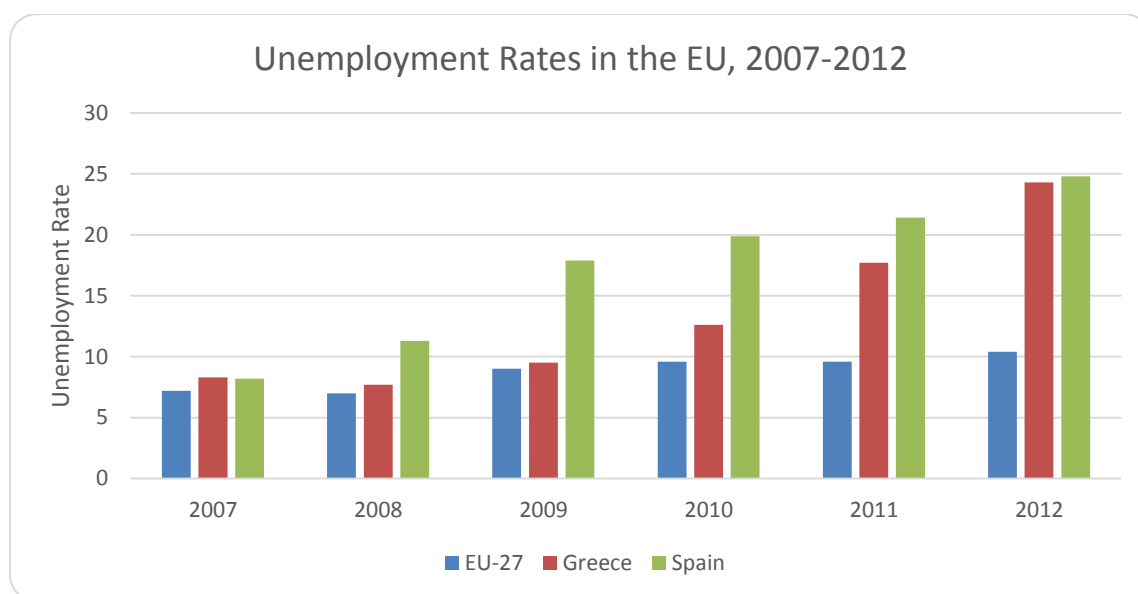
Figure 3: General Government Gross Debt in the EU (EU-27 and Extreme Cases), 2009-2012
(Percentage of GDP)



Source: Eurostat (2014)

Declining economic activity, decreases in investment, as well as cuts to government expenditures, had a wide range of negative effects throughout the 27 member states at the time. This meant that citizens were faced with a higher likelihood of unemployment and declining wage levels. In turn, this also negatively impacted demand and consumption. Figure 4 highlights unemployment rates which were one of the main concerns for European policy makers. The youth unemployment rate grew by approximately 4.3% in the EU from 2008 to 2009. One of the most noteworthy cases in this regard is Spain which currently has a youth unemployment rate of approximately 55.5% (Eurostat, 2014). In particular, Greece and Spain show extraordinary rises in unemployment, with the values for both countries more than trebling from 2007 to 2012 (Eurostat, 2014). In the case of Greece, the country saw its unemployment rate reach 24.3% in 2012 whilst Spain has a similar value at 24.8%.

Figure 4: Unemployment Rates in the EU, Greece and Spain, 2007-2012
(Percentage of the entire workforce)



Source: Eurostat (2014)

1.1.3 National Austerity Measures

The preceding sections have first of all shown the most relevant events in the context of the Eurozone Crisis, whilst also giving an insight into the economic conditions prevailing throughout this period. It has also been shown that most European policies aimed at fiscal discipline. This point was not only prevalent on the European level, as most member states embarked on stringent national austerity regimes of their own. In some cases, such as Greece and Ireland, these policy choices were part of the conditionality that came with their respective bailout packages. However, countries that did not receive assistance from the 'Troika', such as Germany and the United Kingdom, also introduced measures such as spending cuts and public sector wage decreases in order to reduce public debt levels. The following will give an overview of the national measures that were pushed through in this context which, in turn, will underline the claim that austerity measures and fiscal balances received a high amount of attention and focus during the drawing up and implementation of policies and solutions to combat the Eurozone Crisis.

The most prominent case is most definitely Greece which, in 2010, pledged to cut its budget deficit from 12.7% to 2.8% by 2012 under the Stability and Growth Pact (Voss, 2011). In light of these obligations, the Greek government first froze public sector wages under €2,000 and implemented two austerity packages in February and March. Despite reporting that the country had reduced its debt by 39.2% in the first four months of the year, the Greek government asked for further international assistance and introduced a third austerity package in May 2010 (Ray, 2012). At approximately the same time, Italy agreed to a fiscal austerity package worth €25 billion in order to reduce its budget deficit from 5.3% to 2.7% by 2012 (Voss, 2011). Similar measures were undertaken in Spain, which implemented a set of policies designed to save €15 billion. Even Germany, which was seen as a country with more favourable economic prospects, announced austerity measures worth up to €80 billion over three years. In general, it can be said that the preceding policy mixes all differed, but are mainly composed of a mix of tax restructurings, spending cuts and public sector

wage reductions. An example of a country that introduced a mixture of these measures is Spain which, in January 2010, pledged to reduce public spending by 4% GDP, whilst also reducing public sector wages by 4% (Voss, 2011). Other ways to reduce fiscal deficits that have been applied include increasing the retirement age. This was done in Ireland in 2009, where the retirement age was increased from 65 to 66 years in order to save €4 billion. Similarly, France announced that it would raise its public pension scheme retirement age from 60 to 62 years by 2018 (Voss, 2011). A completely different direction was taken in Latvia, where an internal devaluation was implemented. The policy entailed pushing down wages and prices in order to increase competitiveness (Weisbrot & Ray, 2010). Returning to Greece's austerity measures, June 2011 saw the national Parliament agree to the fourth austerity package (Ray, 2012). The amount of such measures steadily increased with Italy following suit and implementing two austerity policy mixes in July and September 2011, with the second one aiming at raising €124 billion. A further deficit reduction policy that gained attention was pushed through in France, where €12 billion were to be saved by raising taxes on the wealthy and closing tax loopholes. A final extreme case to be considered involves Cyprus which, in March 2013, asked for an international bailout. This was granted in exchange for closing one of the country's largest banks, as well as issuing a bank deposit levy on all uninsured deposits and a 40% levy on uninsured deposits exceeding 100,000€ in the Bank of Cyprus (Commission, 2014a).

This section has shown the EU member states' commitment to reduce their respective government deficits, whilst also giving an insight into the mechanisms and measures that were used to attain this goal. The following will show how this approach has been received from an academic point of view, with diverging opinions evident in the analysis of the merits and drawbacks of applying austerity measures during the Eurozone Crisis.

1.2 Literature Review

The subsequent sections examine the importance and influence of foreign debt vis-à-vis general government debt when assessing member states' economic performances during the Eurozone Crisis. Whilst this point will be dealt with below, it must also be held that the traditional austerity debate will also occupy a sizeable section of the content. This cannot be avoided as it provides the basis of the main research area present in this paper, whilst it is also not sensible to omit it or else pay a small amount of attention to the issue when discussing recent economic policies in Europe. This part will therefore, give an overview of the literature regarding the traditional austerity debate and further fields which have enjoyed attention, whilst also outlining the gaps and points where academic activity has been less evident.

1.2.1 The Traditional Austerity Debate

In general, it can be said that there are two dominant positions when it comes to austerity measures. When considering the work of Alesina and Ardagna (1998), one is able to detect the main theoretical considerations and justifications for employing austerity measures in times of crisis. According to their results, fiscal contractions can have expansionary effects and ultimately promote growth whilst balancing government budgets. This clashes with the work of scholars that generally base their assumptions on the work of Keynes (1936) which holds that expansionary fiscal policy, for instance through the application of lower taxes or higher government spending, is the right course of action during financial crises. The following will present the main arguments of both sides whilst also dealing with the relevant studies and literature that have been released to contribute to the debate.

The essence of the conflict can be found in the question of whether fiscal adjustment can have expansionary effects. From a theoretical viewpoint, most scholars adopting a Keynesian approach hold that contractionary measures lead to higher unemployment, lower wages and a decrease in demand and consumption which, in turn, contribute to increasing levels of public debt, slower economic growth and poor performances in social indicators. In order to contribute to this view, Blyth (2013) assesses austerity measures in the European Union and highlights their detrimental effects on growth. However, studies by scholars such as Perotti (2011), Alesina, Favera and Giavazzi (2012), as well as Giavazzi and Pagano (1990) underline that lower spending in fact contributes to more consumption and also a lower debt level. On top of that, it is expected that lower debt ratios decrease the cost of borrowing and ultimately drive up investment (Perotti, 2011). In this model, the idea of increased business confidence is highlighted which heightens investment and spurs economic growth (Semmler & Semmler, 2013). The point of confidence is also brought up by critics of expansionary fiscal policies, as it is assumed that a larger deficit deters investment. De Rugy (2013) expands on this point by also highlighting that a higher amount of confidence furthermore leads to a relaxation of monetary policies and a more open approach of central banks. This would also potentially have expansionary effects. Alesina, Perotti, Giavazzi and Kollintzas (1995) also claim that there is a low probability that expansionary fiscal policy induces economic expansion. Krugman (2010, 2012, 2013) can be seen as an outspoken opponent in this regard as he claims that the relationship between economic growth and confidence is much more complicated than portrayed by the aforementioned authors. He focuses instead on the fact that rising unemployment levels in the face of austerity measures can offset any growth accrued through increased confidence (Krugman, 2010; 2012).

Both views are backed up by a wealth of studies and empirical evidence involving assessments of previous economic crises and policy responses. A relevant point remains the criticism of the work of Alesina and Ardagna (1998) which looks at 51 previous instances of fiscal adjustments and concludes that consolidation can have expansionary effects. The point being made by critics is that the given austerity measures that have been assessed are not comparable and relevant as they did not occur during financial crises (Jayadev & Konczal, 2010). It has also been alleged that this can be seen during the Eurocrisis as austerity measures have not displayed the expected effects. However, this has also been countered by Alesina, Favero and Giavazzi (2012) through the statement that the composition of the austerity measures employed relies too much on taxes and has therefore not been implemented effectively. A further point which can be raised is that the preceding authors also highlight the importance of fiscal policy, as well as monetary policy in restructuring and for a country to ultimately achieve expansionary fiscal consolidation. The main idea is highlighted by Mody (2013) who considers the fact that the EU member states cannot individually make use of monetary policy. This means that countries are unable to adjust when demand drops whilst it is also impossible to increase exports by lowering the exchange rate. Nechio (2010) adopts a similar train of thought when comparing the Greek sovereign debt crisis with the financial crisis of Argentina from 1998 to 2002. Here, the author also claims that a loss of independence in monetary policy can seriously hamper a country's efforts in fighting a recession. Regarding the composition of austerity measures, Alesina and Ardagna (2010) focus on this point and underline that spending cuts are more effective than tax increases in avoiding recessions and slashing deficits. This is affirmed by the work of Giavazzi and Pagano (1990) and Alesina et al. (1995).

The case for expansionary consolidation is based on two perceived effects of fiscal adjustments, namely the *credibility effect* on interest rates and the *positive wealth expectations effect* which together, in turn, increase demand and competitiveness whilst also exerting downward pressure on interest rates which fosters investment. However, the issue of expectations is furthermore dealt with by Bertola and Drazen (1991) who develop a model to test the relationship between consumption and expectations of future fiscal policies. Whilst the authors highlight that there have been many cases where fiscal contractions lead to a rise in consumption, they urge caution as it is difficult to form a causal relationship between economic variables. On the flipside, there are also a number of scholars that have rejected this view by stating that increased likelihood of unemployment and poverty leads to a drop in consumption (Blyth, 2013; Kuehn, 2012). Research in this regard has often led to scholars examining the effects of measures on consumption.

In a study released by Alesina et al. (1995), it is claimed that, according to the results derived from their data set, there is little evidence to suggest that fiscal expansions can actually facilitate further economic growth. This is founded on the belief that the multiplier effect of fiscal policy is close to zero or negative (Kitromilides, 2011). This has been disputed by a number of scholars including Briotti (2005) and Eggertsson (2006). The latter even claims that multipliers might even be much higher and have a far larger effect than was originally conceived by Keynes (1936). This has been underlined by Semmler and Semmler (2013) who note that the multiplier effect of contractionary fiscal policy might be even more severe during financial crises. Arestis and Pelagidis (2010) contribute to this view by stating that fiscal policy can be used as an effective tool in policymaking. In general, the aforementioned studies have made use of economic theory whilst also examining the perceived effect of fiscal policies on economic growth.

Another widespread argument for austerity concerns the *crowding out effect*. This describes the situation where fiscal stimulus leads to higher interest rates and a drop in private investment (Mankiw, 2012). It is argued that public spending should be cut to avoid this effect, especially when assuming that private investment is more effective than public spending (Kitromilides, 2011). This falls in line with the preceding research of Barro (1989), which is based on the Ricardian equivalence theory. Here, the author states that deficit spending by countries will not have an expansionary effect on aggregate demand as it reduces private-sector demand at the same time (Barro, 1989).

A further point which has gained widespread academic attention is the effect of austerity measures on social indicators. Whilst authors such as Alesina and Ardagna (2010) claim that fiscal tightening only has short run effects and does not in fact facilitate long run recessions, the work of Haffert and Mehrtens (2013) underlines the belief that austerity measures prolong crises and that even a positive balance does not lead to future expansion. The question of whether restructuring has negative effects in the short term or for a longer period is relevant for the question of whether it is feasible to decrease welfare spending for the duration of the austerity period. Many authors who assume that restructuring will last for a longer period of time have underlined the social risks associated with austerity measures. Accordingly, Peet (2011) shows the positive relationship between austerity measures and increased inequality. Further relevant points are made by de Grauwe and Ji (2013) who claim that austerity measures can increase the risk of unemployment and poverty. Ortiz and Cummins (2013b) develop this line of argument by claiming that austerity measures predominantly impact on the most vulnerable groups in society. On top of that, Callan et al. (2011) study the distributional effects of austerity measures in six EU countries and reach similar conclusions. This furthermore supports the claims of Crotty (2012) who shows that austerity measures lead to an

unequal distribution of the burden of a financial crisis. Offe (2013) supports the aforementioned views by underlining the fact that austerity can lead to political and social exclusion, especially for lower-income households. McKee et al. (2012) take a different approach which highlights the inherent health issues and risks that are accompanied by the negative social effects of austerity measures. Regarding the effects of austerity on social indicators, it can be said that extensive work has been done to show that a reduction in government spending increases social risks. The most relevant conflict in this regard concerns the question of whether austerity measures have short or long-term contractionary effects, if any at all.

The influential paper by Reinhart and Rogoff (2010) stated that a debt ratio of over 90% of a country's gross domestic product (GDP) would entail negative economic growth. Whilst this idea enjoyed a high amount of attention and influence, it was found to be incorrect after multiple errors were found in the methodology (Herndon, Ash & Pollin, 2013). Instead, it was stated that positive growth is still possible even at higher levels of debt than those mentioned in Reinhart and Rogoff's paper.

Overall, it can be said that the austerity debate is handled extensively when surveying the relevant literature. This mirrors the contentiousness and relevance of the debate, which is underlined by the fact that more and more work is conducted on the issue as time passes. Indeed, many sources of this paper have been released in the last two years. Whilst the traditional debate enjoys the most attention, the subsequent section of the paper lays the basis for the impending research by dealing with the importance or relevance of foreign debt.

1.2.2 The Role of Foreign Debt

A further interesting point is made by Gros (2013), who studies the economic situation in Belgium. Here, the author is able to report that whilst Belgium succumbed to high public debt levels, the country was not as badly affected by the crisis as the debt ratio might imply and points towards the current account of Belgium and its favourable trade balance. The author claims that current accounts and trade balances are much more relevant indicators and determinants of the economic fortunes of a country than the fiscal situation. The aforementioned conclusions open the door to further research on the topic of the importance of the fiscal situation in countries vis-à-vis the impact of the current accounts. Interestingly, Giavazzi and Spaventa (2011) also claim that when analysing policymaking in the European Union, it can be said that the current account has not been considered as a variable that merits significant attention.

Overall, it can be said that whilst there is a significant amount of literature available that explains the link between foreign debt and economic performance through studies provided by scholars such as Pattillo, Poirson and Ricci (2011), Mencinger (2003), Kasidi and Said (2013) and Checherita-Westphal and Rother (2012), it has rarely been applied in a way to appraise the current austerity debate.

Whilst the preceding section has shown that extensive research has been conducted, it is still possible to detect gaps and opportunities for further study. One point which makes studying austerity measures during the Eurozone crisis difficult is the limited amount of empirical data that is available. The current literature on the effects of austerity measures on social indicators is therefore most likely sufficient for the time being. However, there are still issues that can be studied in a European context. One such area encompasses the aforementioned question of how important current accounts and trade balances are vis-à-vis fiscal policy. Furthermore, it can be said that the

composition of austerity measures in EU member states can enjoy further scrutiny, as one could then attempt to detect differences in the composition of austerity measures and their respective effects on economic performance. Finally, a further approach that can be taken is the comparison of the theoretical causal relationships that are predicted by the two opposing camps. This could be done by working out predicted short run effects of austerity measures and matching them with actual outcomes on a wide variety of economic indicators.

In general, this study will consult the gap in the literature regarding foreign debt and attempt to form an evaluation of the current austerity debate by looking into whether a significant factor, i.e. foreign debt, has not gained enough attention in European economic policymaking in the last 5 years.

1.3 Problem Statement

As alluded to above, the research question of this work will be based around the austerity debate. In order to conduct sensible and constructive research, the exact field needs to be narrowed. Thus, the main research area has been narrowed down to the importance of foreign debt as an indicator of economic wellbeing and future prospects during the Eurozone Crisis.

This topic has been dealt with by Gros (2013) whose research follows the train of thought that the distribution of domestic and foreign debt can determine how a country fares during a financial crisis. Here, it is said that domestic debt can lead to higher interest rates and risk premia that ultimately entails more redistribution within a country. However, debt that is held by foreign entities leads to governments transferring money abroad which decreases the welfare of the domestic population. In a previous critique of policymakers' tendency to focus on total debt, Gros (2011) claims that risk premia of government debt rely more heavily on foreign debt than on domestic debt and that higher premia make debt service less manageable. Brancaccio (2012) builds on this observation by pointing out that the Eurozone Crisis can be seen as a result of current account imbalances across the EU. The importance of foreign debt for economic performances is furthermore underlined by Karagöl (2002), Claessens & Divan (1990), as well as Frimpong and Oteng-Abayie (2006). Whilst Gros (2011, 2013) sets out the overall premise that foreign debt might be more important than fiscal balance, the link to how foreign debt can affect economic performance is not explicitly studied in his work, as the focus is more on the connection between sovereign spread and current account balances. Whilst these factors can be related to economic performance, the aforementioned authors help to make this connection clearer, which will be highlighted in the second chapter.

The problem that inspires this research is thus as follows. On the one hand, focus is laid on the question of whether austerity can lower public debt and, in turn, contribute to a better economic performance. This point provides a platform for an extensive and contentious debate between scholars either in favour or against the preceding assessment. However, the aforementioned authors suggest that total public debt might not even be the main problem and that specific attention should be put on foreign debt instead. If true, this could indicate that the debate as such does not take into account a crucial variable and needs to be refocused.

Therefore, the leading research question to be used involves comparing the importance of foreign debt with government debt levels in determining the economic performance of a member state in the context of the Eurozone Crisis. The main research question is therefore combined into the following: 'Can the amount of foreign debt incurred by governments be considered as a more

relevant variable than their fiscal balance in determining member states' economic performances during the Eurozone Crisis?' This question can be dealt with empirically, as one can seek to correlate indicators of foreign debt levels and fiscal balances with ones regarding economic performances. Sub-questions will include the following: 'What is the link between the foreign debt attributed to a government and its economic performance in the Eurozone crisis?' This question can be answered by making use of theory as well as empirical evidence, as one can first of all construct an expected scenario by applying theory and then test the hypothesis with the given empirical data. By answering this question, one can gain an insight into the potential influence of foreign debt on economic performances during the financial crisis. This would effectively provide a basis to answer the main research question.

Regarding the use of theories and empirical evidence, a similar approach will be adopted for the second sub-question. The question reads as: 'How have changing fiscal balances through austerity measures affected economic performances in the Eurozone Crisis?' However, the scope of this question will be broader and incorporate more effort than the aforementioned one. On the one hand, the goal is to contribute to the main question and prepare a comparison of government and foreign debt's effects on economic performances. However, this question also touches on the traditional austerity debate and will thus also lead to a framing of the findings in this context. Whilst it might not be too valuable when assessing the debate as a whole vis-à-vis the proposed alternative approach, the empirical evidence will still be assessed in order to give an indication as to whether it contributes to the viewpoint favouring austerity measures or not. This might somewhat go beyond the scope of the paper, but it also highlights the magnitude of the discussion and acknowledges that the traditional debate is relevant and merits attention at all turns. The main issue here is that the time span of 2008 to 2012 will probably not offer too much data to make a significant statement. However, this may still be attempted and could give a useful indication of what the early signs and short-term effects of austerity measures are indicating and how well it fits into the theoretical framework of one school of thought compared with the conflicting one.

2. Theoretical Framework

In order to adhere to a certain structure whilst addressing the expected and measured relationships, the subsequent section will be set out in three sections and split up according to the given sub-questions. This entails that each sub-question will be judged on which causal relationships and hypotheses are touched upon.

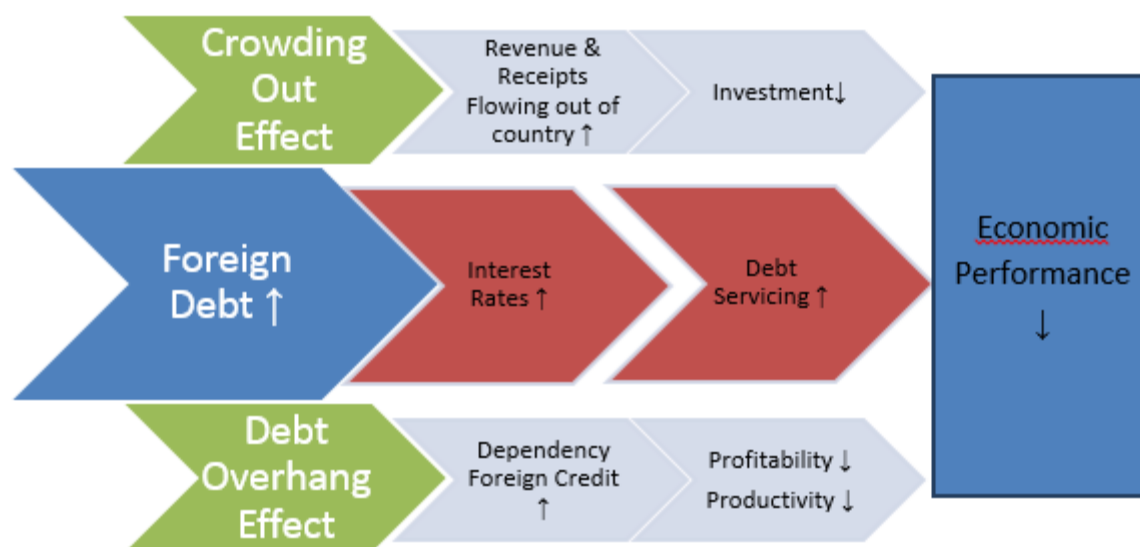
2.1 What is the Link between the Foreign Debt Attributed to a Government and its Economic Performance in the Eurozone crisis?

The given sub-question looks at the connection between the amount of foreign debt a government has accrued and its economic performance. Here, one can generally look at two possible outcomes when measuring, namely that there is no or else a negligible relationship, which can be explained by fiscal balance instead, or else that it does have a significant influence. The idea that foreign debt plays a dominant role in economic performance is supported by Gros (2013). Here, the author makes a case against the importance of fiscal balance and domestic debt, as this can be serviced through changes in taxation. He elaborates that whilst most countries that are not in a currency area can simply print money to pay their debts at the expense of extreme inflation, most countries in the EU do not have this option. However, the fact that each country in the EU has sovereign power over its taxation system offers a buffer in this regard. On the other hand, Gros (2013) states that the constraint on monetary policy brings about a more difficult problem connected to foreign debt. Overall, it is expected that higher foreign debt ultimately increases sovereign spread which, in turn, makes debt more difficult to service (Gros, 2011). As mentioned, Gros (2011, 2013) does not specifically carry out an analysis on economic performance and its connection to foreign debt, as the focus is laid on sovereign spreads and current account balances. However, the notion that foreign debt can have a larger role to play than fiscal balance is introduced which highlights the main point in this analysis. This premise will shortly be expanded on by incorporating the work of Karagöl (2002) and other scholars to make the connection between foreign debt and economic performance clearer. However, this does not entail that Gros' (2011, 2013) theoretical underpinnings are completely neglected, as the widening of sovereign spread can also plausibly have an impact on economic performance. According to Remolona, Scatigna and Wu (2007), widening spreads mirror increasing expected losses through default, as well as higher risk premia. In turn, it can be said that this negatively impacts market confidence which can increase long-term interest rates and debt service costs (Dötz & Fischer, 2010). These factors put financial pressure on the member state and reflect concerns regarding its solvency (Dötz & Fischer, 2010). These factors can therefore have a negative impact on economic performances. Further evidence can be found when assessing the work of Karagöl (2002), whose study finds an inverted causal relationship between Turkey's GNP level and the amount of foreign debt it has. Authors that have studied this link generally look at two effects that can have a damaging impact on economic performance, namely the *crowding out effect* and the *debt overhang effect* that have been applied by Krugman (1988) and Sachs (1986). According to Frimpong and Oteng-Abayie (2006), the *crowding out effect* looks at the negative impact of external debt on investment and growth. Increased debt servicing, which entails a higher proportion of fiscal revenue and export receipts being transferred to foreign creditors, decreases public investment (Frimpong & Oteng-Abayie, 2006). It is furthermore assumed that government investment complements private investment, which means that if less domestic public investment takes place, then this has a negative effect on private investment. Thus, the *crowding out effect* entails that

higher debt servicing lowers investment and ultimately economic activity and growth. Conversely, the authors assume that a lower level of debt servicing would lead to higher investment. The *debt overhang effect*, introduced by Krugman (1988), follows the reasoning that current debt effectively acts as a tax on future output (Karagöl, 2002). This also has to do with the effects of a higher amount of debt servicing. In a nutshell, it can be said that if there is the expectation that future debt will exceed a state's repayment ability, then the debt service will be an increasing function of the country's output (Claessens & Divan, 1990). This means that it can be expected that a larger portion of the returns on investment will be transferred to foreign entities to repay loans. This reduces profitability which reduces growth and makes a country more dependent on foreign credit (Karagöl, 2002). If investors assume that taxes will rise as a result of a higher debt level, then this also creates an incentive to invest in other countries. These factors can also lead to a poorer credit rating which constrains the access to foreign capital, whilst also pushing down demand and productivity which entails a poorer trade performance (Karagöl, 2002). A further point to be made is that if domestic producers assume that an increase in productivity will primarily benefit foreign creditors, then they also do not have an incentive to increase their competitiveness and efficiency (Shabbir, 2008). When looking at empirical work, one can draw on the conclusions of Shabbir (2008), as well as Kasidi and Said (2013) which offer evidence of the prevalence of the two effects.

When looking at the observations of Gros (2013) and the presence of the *debt overhang effect* and the *crowding out effect*, then it is possible to state that the first hypothesis in this paper is that, all other variables held constant, *countries with less external debt experienced a better economic performance during the Eurozone Crisis when compared to countries with higher foreign debt levels*. Here, one must remark that external and foreign debt will be used interchangeably throughout the paper. Figure 5 displays a simplified chart of the expected causal chain that will be tested. First of all, increased foreign debt necessitates the *debt overhang effect* and the *crowding out effect* to decrease investment which, in turn, lowers economic activity and growth. A further point that belongs to this hypothesis is that interest rate spreads rise due to a higher amount of risk and lower credibility. This makes debt more difficult to service and ultimately also impacts on economic performance.

Figure 5: Expected Relationships Resulting from Increased Foreign Debt



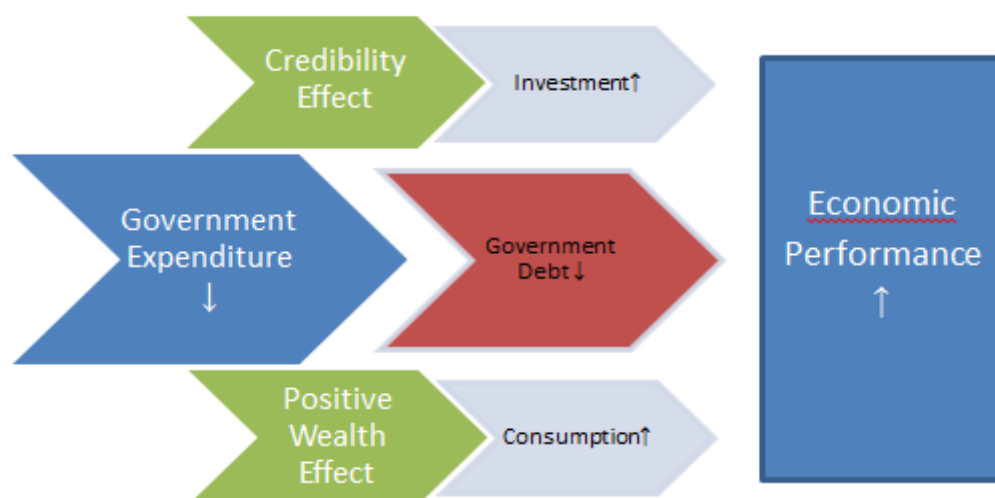
2.2 'How Have Changing Fiscal Balances through Austerity Measures Affected Economic Performances in the Eurozone Crisis?'

The second sub-question can be seen as broader and more complex than the preceding one and thus holds more relationships to be assessed. On the one hand, the first relationship takes into consideration fiscal balances and their effect on economic performances. Overall, it is expected that a higher level of public debt deters investment (Kitromilides, 2011) and slows economic growth since increased insecurity also lowers consumption and economic activity. The hypothesis in this regard is that *a lower fiscal deficit leads to an improvement in economic performance*. This hypothesis takes a rather simplified look into whether the variable foreign debt impacts on economic performance. The next relationship to be assessed takes a deeper look into the mechanics of the austerity debate by including more variables and ultimately assessing a more complex outlay of the hypothesis.

The second relationship to be tested concerns the connection between the use of austerity measures and economic performance. As stated above, two main ideas crystallise from this debate. On the one hand, it is expected that austerity measures lower public debt, restore investor confidence and ultimately lead to improvements in economic performance. The other side argues the opposite, with the respective causal chains detailed below.

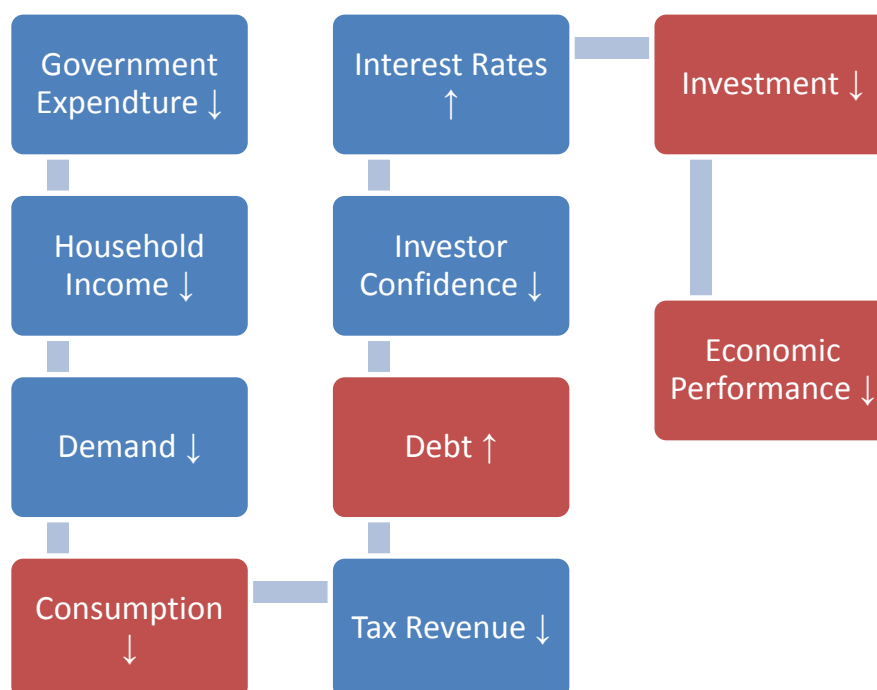
Figure 6 shows the causal links that arise when assessing the work of scholars such as Perotti (2011), Alesina, Favara and Giavazzi (2012), Giavazzi and Pagano (1990, 1996) as well as Alesina and Ardagna (2010). The following part will therefore summarise the main points that have been mentioned in the literature review in order to display the relationships that are to be tested. First of all, it is expected that a decrease in government spending will generally decrease debt. After this, two effects, namely the *positive wealth expectation* and the *credibility effect* increase consumption and lower interest rates respectively. The increase in consumption fosters economic activity and increases growth. The lower interest rates reduce the cost of borrowing and increase investment which, in turn, also contributes to economic growth. A further relevant point to be made is that lower debt levels heighten investor confidence and also contribute to higher investment. One would therefore assume that the incidences of lower debt, higher growth through a rise in consumption and investment, coupled with falling interest rates and higher confidence ultimately improves a member state's economic performance.

Figure 6: The Causal Expectations of Expansionary Consolidations



The flipside of the argument obviously follows a different set of assumptions and approaches and therefore gives rise to a contrasting causal chain. Scholars that follow a more Keynesian approach, including Blyth (2013), Nechio (2010), de Grauwe and Ji and Peet (2011) offer evidence that support the view seen in Figure 7. The IMF study conducted by Guajardo et al. offers a good overview of the arguments against expansionary fiscal consolidation. The reasoning starts with the notion that lowering government spending decreases household income which, in turn, decreases demand. This then translates into a decrease in consumption and ultimately a lowering of economic activity and growth. These factors lead to a decline in tax revenues for governments which increase debt and lowers investor confidence. The next steps are higher interest rates and a decline in investment which also decrease economic activity and growth.

Figure 7: A Critique of Expansionary Consolidations



Since the first approach has dominated economic policymaking in the last 5 years, the hypothesis to be tested in this regard is that the *economic performances of member states imposing tougher austerity measures have improved more vis-à-vis countries that have implemented more lenient policies*. In this regard, it is important to bear in mind that *tougher austerity measures* refers to stronger expenditure cuts or tax increases.

2.3 Answering the Main Question

After introducing the relationships and hypotheses to be assessed, it makes sense to provide a road map as to how the questions will be dealt with, and also show how dealing with the sub-questions ultimately contributes to finding an answer to the main question which is ‘can the amount of foreign debt incurred by governments be considered as a more relevant variable than their fiscal balance in determining member states’ economic performances during the Eurozone Crisis?’

In general, it can be said that the first two hypotheses that look at the respective impact of foreign debt and fiscal balances on economic performances are key to answering the main research

question. With the given analyses, it will be possible to conduct a comparison and see which independent variable has a more profound effect on the dependent variable economic performance. The third hypothesis can be seen as an extension of the second one and goes beyond the scope of the general aim of assessing the applicability of the current austerity debate to European policymaking. Here, a more complex causal chain will be looked at and used as a basis for further analysis. As alluded to above, this serves the goal of contributing to the traditional austerity debate in order to see whether the quantitative data which has been analysed supports the predictions evident in Figure 2 or Figure 3. This can be seen as a supplement to the analysis of the general austerity debate and ultimately mirrors the notion that the traditional austerity debate, even when questioned, first of all overlaps with a lot of the work which is being done in the context of this paper, whilst it also retains relevance as it highlights one of the most interesting and contentious debates in the field of economic theory and policymaking in recent times.

3. Methodology

The research paper follows a longitudinal design, which entails observing data at multiple points in time (Babbie, 2013). The quantitative data will be found by making use of databases that provide information and measurements on the economic indicators that are needed to complete this research (Eurostat, 2014). As one can see in preceding sections, the paper applies economic theory and academic material in order to construct hypotheses and relationships between variables. This is done in order to lend direction to the subsequent empirical analysis and ultimately contribute to the perceived strength or weakness of a given relationship between economic variables. After setting out these hypotheses, they are tested by looking at the correlation between the relevant economic indicators. In general, it can be argued that concepts and constructs in social science research cannot be given clear and unambiguous meanings (Babbie, 2013). This entails that through the processes of conceptualisation and operationalisation, the concepts are given a meaning or definition by the researcher, which can be justified, but cannot be seen as completely objective. It is thus sensible, in this regard, to choose and analyse a number of economic indicators for each measured concept in order to lend weight to the ultimate outcome and conclusion of the study. This will be done in the next section, where the aforementioned concepts will be given nominal definitions and assigned economic indicators that will be used to highlight the former's behaviour and overall makeup. Consequently, the indicators will give a view into whether a certain economic variable is influencing a second one, and to what extent this highlights a causal relationship. The concept of causality in this regard would entail that there is co-variation between the variables, whilst the correlation cannot be explained by a third variable (De Vaus, 2001). On top of that, there must also be enough evidence to show that the correct time order is present with the changes in the independent variables occurring before corresponding changes in the dependent variable (Gerring, 2001). The next part will then detail the measurement process and how the relationships will be tested. For this, multivariate regression will be used to measure the correlation between the variables. Finally, the limits and potential pitfalls of this study will be discussed in part 3.3, whilst possible solutions and ways to heighten validity and reliability will also be presented.

3.1 Conceptualisation and Operationalisation

The following will provide an insight into the way each concept has been dealt with, whilst also showing how it will be measured in order to test the three given hypotheses. According to Babbie (2013), the process of conceptualisation implies coming to an agreement on what abstract terms mean. For the purposes of this research, it can be said that the ideas employed, such as foreign debt or austerity measures, will need to be given clear nominal definitions in order to completely specify what is being dealt with. The step of operationalising a concept and thus providing it with an operational definition is the final step before actually commencing with measuring a given concept (Babbie, 2013). With the definitions provided for in this chapter, it will be possible to continue and give the variables an operational definition. This entails the process whereby the variables are assigned indicators that highlight the presence or absence of the studied concept (Babbie, 2013). The indicators in use are measured at the interval level, which means that the variables all have attributes that can be rank ordered whilst also having equal distances between values (Babbie, 2013). Overall, it can be said that three main independent variables have been selected, namely austerity measures, foreign debt and fiscal balance, whilst their impact will be measured vis-à-vis the dependent variable economic performance. The economic indicators will then ideally give an

overview of how the different variables interact with each other. Therefore, the following section will first of all introduce the main variable, whilst also offering insights into some supporting concepts that are applied throughout the paper.

The main dependent variable to be measured is economic performance. This is the focus of the study as it represents an outcome which may be influenced by one variable or another. This can simply be seen as *the state of a country's economy according to a number of indicators over a period of time*. One of the main measures of economic performance is undoubtedly a given country's growth in gross domestic product (GDP) over a given period of time. For each year and country, the real GDP growth rate will be considered, which can be seen as a way to measure economic activity, with the total value of all goods and services produced in a given year compared to the volume of the previous one (Baldwin & Wyplosz, 2004). In general, it can be said that for the last quarter of a century, this indicator has dominated policymaking and strongly influenced decisions made by leading figures (Stiglitz et al., 2009). According to Stiglitz et al. (2009), one may argue that the focus on GDP growth has perhaps been somewhat unwise as it fails to give a holistic and wide-reaching reflection of how well an economy is doing. Whilst the authors state that this is true when looking at economic activity, which focuses on productivity, the same can especially be said about economic welfare which focuses more on household and individual consumption (Stiglitz et al., 2009). In order to hone in on citizens' welfare and the effects of changes to the given independent variables, economic performance will also incorporate the actual individual consumption (AIC) from 2008 to 2012. AIC can be seen as the sum of the total value of final consumption expenditure of households and non-profit institutions, as well as the amount that the government spends on individual consumption goods and services (OECD, 2013). This is a measure which focuses on what is actually consumed, rather than what is purchased in a given time frame. The merit of including this feature is the fact that consumption gives a good indication of welfare and economic wellbeing. At this point, one may argue that since consumption is actually a part of GDP (Mankiw, 2012), it is questionable whether it should be included in the analysis. However, it can also be said that GDP growth is a rather broad and complex concept, which makes making assumptions and analyses on the basis of it quite difficult. It therefore makes sense to include consumption since it reflects a narrower and clearer field. For the same reason, private investment will be dealt with by looking at gross fixed capital formation (GFCF) as a percentage of GDP. This indicator shows the net amount of liabilities which have been taken on by non-financial entities and organisations, as well as private households (Eurostat, 2014a). Ideally, and in the context of this research, the indicator mirrors how much private investment has been induced in a given time frame. Given this objective, it makes sense to discuss the limits of the indicator. First of all, it can be said that GFCF does not translate into total investment, as it only looks at investments that are made to acquire fixed capital. This means that numerous financial assets, stocks and costs are neglected, as well as land purchases. On top of that, the indicator also excludes the decay of fixed capital. Despite these weaknesses, it can still be said that the indicator remains adequate for this analysis, since it can still provide an insight into the willingness of private parties to invest. A large feature in economic analyses also involves the state of the labour market. The following will therefore also consider unemployment rates, which is the rate of unemployed people in relation to the total workforce (Mankiw, 2012). Finally, national income will be assessed which looks at the amount of income received in return for the provision of a productive activity (Eurostat, 2014b). Here, net national income has been chosen as an indicator since it accounts for the consumption of fixed capital. At this point, one must bear in mind that the time

series chosen for the dependent variable does not incorporate a time lag and therefore spans from 2008 to 2012.

One of the main ideas discussed in this paper is *austerity measures*. According to Evans (2012), the term *austerity* comes from the Greek words 'harsh' and 'severe'. A parallel can be found to the reality and implications of austerity measures as these are often associated with economic downturns, social unrest and generally unpopular responses of citizens. In practice, austerity measures entail reduced government spending and a period of tighter fiscal policy and a lower level of investment in financial markets. This paper focuses on government policy and measures that are adopted to improve economic performance and lower government debt levels. Therefore, the definition used by Mody (2013) can be seen as quite fitting as the author sets out that *austerity measures can be seen as a fiscal tool to reduce public debt levels*. At this point, a distinction must be made between measures that are used to prevent the economy from overheating and ones that are implemented in order to slash the budget deficit (Romer & Romer, 2007). This paper will focus on measures designed to lower budget deficits. The following sections will apply this conceptualisation and narrow it down to government actions which have been applied within the European Union to reduce government deficits and cut spending. The independent variable 'austerity measures' will be assigned three indicators. On the one hand, government expenditures as a percentage of GDP from 2006 to 2010 will be assessed. This indicator will give an insight into how government expenditures have changed throughout the Eurozone Crisis. One other fiscal action that countries have employed is to raise taxes to increase government revenue. This facet will be covered by looking at current taxes on income, wealth, etc. as a percentage of GDP. Here, the taxes levied by the general government and the rest of the world are focused on by looking at all kinds of payments that are made in this regard (Eurostat, 2014c). Finally, general government fixed investment as a percentage of GDP incorporates the funds used by all sectors of government. Throughout the paper, the idea of a *traditional austerity debate* is used. This alludes to the dominant debate amongst policy makers as well as the way the bulk of academic literature can be organised. The assumption here is that most literature on austerity can be categorised into views that support the trajectory of economic policies in the Eurozone and those that criticise it heavily. Since this paper questions the makeup of this debate and explores the idea of laying the focus elsewhere, the term *traditional austerity debate* will be utilised to allude to the conflict between Keynesians and others. However, this does not mean that the results of this research will not contribute to one view or the other, but that a different overall approach will be taken.

A further pillar in the paper includes *foreign debt* which looks at indicators of a country's performance regarding international trade and foreign investment. If a country has more money leaving the country than the amount that is flowing in from external partners and resources, then it can be said that it has foreign debt. The independent variable is thus conceptualised as being *the amount of debt that is held by foreign entities and parties*. Throughout the paper, foreign debt will be used interchangeably with the term 'external debt'. In order to utilise this variable in the empirical analysis, balance of payment statistics will be assessed. These include the current account balance as a percentage of GDP, as well as the capital account balance and the financial account balance. The current account balance is the difference between a state's savings and expenditure. It can be seen as the sum of the balance of trade, net income from abroad, as well as net current transfers (Eurostat, 2014a). A deficit would mean that a country is a net borrower from the rest of the world, whilst a surplus means that a country is a net lender. The financial account indicates whether a

country has more money flowing out of it in terms of investment, or else whether it enjoys a high amount of foreign investment (Eurostat, 2014a). Finally, the capital account looks at transactions including net financial transfers, the acquisition of non-financial assets, as well as dealings that are connected to tangible and intangible assets (Eurostat 2014a). An indicator with close ties to these concepts is the net lending or borrowing of the total economy which mirrors the net resources that are produced by the economy and consumed by the rest of the world minus what is received from the rest of the world (Eurostat, 2014a). It is obvious in this regard that a net borrower receives more and a net lender distributes more. The indicator is calculated by using percentage of GDP. Net international investment position in percentage of GDP shows the net financial position of a country vis-à-vis the rest of the world (Eurostat, 2014a). Finally, direct investment flows as a percentage of GDP shows net amount of direct investment a country attracts from foreign entities (Eurostat, 2014a). It is the case that several of the aforementioned indicators show overlap with each other. Whilst this supports the idea that the number of indicators should be reduced, especially since the other independent variables hold less indicators, it can be said that the concept of foreign debt is less straight forward and more complex than its counterparts. It is therefore sensible to include a wide array of potentially overlapping indicators. This point must be included when discussing the results of the analysis, especially when examining how well the given indicators account for the variation in the dependent variable. Furthermore, it can be added that the data that has been collected for these indicators includes the year from 2006 to 2010.

The idea of a *fiscal balance* encompasses *the amount of money a government spends and receives through taxes and other transfers*. If government spending exceeds tax revenue, a deficit will occur, whilst the exact opposite will be evident if revenue is higher than government expenditure. The government balance as a percentage of GDP will be used as an indicator for fiscal balance. A deficit has a negative value whilst a surplus will be indicated by a positive value. In addition, gross government debt as a percentage of GDP will be assessed in order to gain an insight into the total amount of debt that has been accrued. Whilst the government balance can be seen as a flow variable, the latter is a stock variable. In general, this analysis looks at causal mechanisms and generally benefits from time lags and the use of flow variables to look at how changes in one aspect induce effects pertaining to a second variable. Both variables will be given a time lag, since the amount of debt, as well as the changes in debt in a given time frame; can have delayed effects on economic performance. This is evident when looking at the aforementioned literature which incorporates both instances and concludes that both have a profound effect on investment which, in turn, can have a delayed effect on economic performance. On the one hand, private parties may look at the total amount of debt in order to evaluate whether this can be serviced in the future, whilst also looking at the balance in order to gain an insight into whether the debt burden may grow or shrink with time. This paper therefore incorporates both indicators and introduces a time lag of two years.

When looking at the kinds of indicators assigned to the variables, it can be said that a vast majority are flow variables which describe developments in a given period of time rather than in one instant, such as GDP growth, consumption and government deficit/surplus. However, a small number of stock variables, such as total government debt and net international investment position, have also been selected for the study. The fact that both kinds of variables are being used reflects the processes that have been detailed in the theoretical framework. For instance, developments such as the rise in debt or decline in consumption can impact on the relationships between the independent

variables and economic performance. This is the reason for including flows, since developments over time in one area are assumed to have an impact on the dependent variable. However, it is also evident that stocks can also have a significant influence on economic performances. One example for this is the role of total government debt, which can affect investor confidence since if total debt is high, this will also translate itself into higher debt servicing in the future. Policy makers and private parties will definitely look at the evolution of debt when evaluating a given economy, whilst it is likely that the stock of debt will also play a role in decisions and policy making. This corresponds to the theoretical framework where stocks and flows both come into play which, in turn, is a strong argument in favour of using both kinds of variables.

3.2 The Measurement Process

In this section, the given relationships will be examined in order to evaluate the three hypotheses. In addition, one will also be able to see the overall strategy that will be applied during the empirical analysis to answer the main research question.

3.2.1 Statistical Regression and Spearman's Rank Correlation Coefficient

The following will define the method which will be applied to measure the aforementioned concepts and indicators. Overall, there are three concepts which take on an explanatory role. This means that the indicators selected together make up each respective variable. The dependent variable, in this case economic performance, holds six indicators. To evaluate how the three independent variables and eleven indicators possibly impact the on the indicators that have been assigned to economic performance, two statistical tests have been selected and will be used throughout the empirical analysis.

First of all, the work of Pescatori et al. (2011) has been consulted in order to get a firm grasp on how one might be able to conduct effective measurements. The authors apply linear regression in order to get a preliminary understanding of how the different concepts and variables interact with each other (Pescatori et al., 2011). According to De Veaux et al. (2011), linear regression can be used to better understand the relationship between two given variables. Overall, the technique simplifies relationships by expressing them as linear models. The regression will be facilitated by using SPSS software and adding the given data. By consulting public databases, it will be possible to obtain data for the 27 countries in the five calendar years from 2008 to 2012 (Eurostat, 2014). This will then provide an indication as to how the variables and indicators interact with each other. By analysing the given data, it will be possible to calculate the correlation coefficient between variables. If an interesting relationship can be found between the variables, then further analysis will be required.

However, one difficulty remains regarding the assumptions that need to be satisfied when applying linear regression, namely that the relationship between the two variables under analysis should be sufficiently linear. At this point, it is not possible to predict whether each relationship will display this characteristic. In these cases, rather than neglecting the given data, a second measure of statistical correlation will be assessed, namely Spearman's rank correlation coefficient. Here, the assumptions are less strict and easier to fulfill than those inherent in linear regression. According to Te Grotenhuis and van der Weegen (2009, p.89), 'Spearman's rank correlation is calculated using the rank scores of two ordinal variables'. Whilst this point conflicts with the fact that this study uses interval variables, the authors continue by stating that the coefficient can also be used to describe bivariate non-linear relationships between interval variables (Te Grotenhuis & van der Weegen, 2009). Overall, the

technique involved looks at groups of bivariate relationships and sees which groups show the most significant findings. This means that the squared correlation coefficient, or variance, is neglected due to the fact that the three independent variables have different numbers of indicators assigned to them. It would therefore not be beneficial to see which model explains the most variation in the dependent variable. The next part will provide a more detailed description of the exact steps and procedures to be employed during the empirical analysis.

3.2.2 Applying the Statistical Tests

In general, the hypotheses will be tested by looking at the how the three independent variables interact with the dependent variable. For this, correlation coefficients will be analysed to determine the covariation between different economic indicators. Pearson's correlation coefficient will be used when applying linear regression, whilst Spearman's rank correlation coefficient is to be applied when the given relationship is not linear.

Multiple linear regression implies a number of independent and dependent variables and their respective relationships being analysed (Kulcsar, 2009). The goal of this technique is to display the relation between different variables (Wooldridge, 2012). Wooldridge (2012) discusses the implications and difficulties of using a static regression model when assessing observational time series data. The main problem in this regard is that it is often not plausible to assume that a change in one variable will have a measurable effect on the dependent variable in the same year. The following analysis will therefore introduce time lags, where the independent variables will precede the dependent variable by two years.

Before commencing with linear regression, it is important to first control whether the conditions are satisfied. Linearity can be checked by looking at a scatterplot with the two variables on the axes. If the plot follows a general linear pattern, then this condition is satisfied (De Veaux, 2011). Homoscedasticity implies that variables have the same variance when it comes to errors. To check for this, one can make a scatterplot of the residuals between two variables in order to see whether a distinct pattern can be found. If no pattern can be seen, then the regression model can be applied further. When engaging in a regression analysis, it makes sense to look at the variation in the residuals. In the event that these conditions are not sufficiently met, Spearman's coefficient will be used. The only conditions to be checked are whether the given relationships are monotonic and whether the variables are at the interval, ratio or rank level. The latter condition will be satisfied in any case since the economic data is reported at the interval level.

Each hypothesis sets out an expectation of how one set of indicators will influence a second set. In general, these will be tested by looking at how strong and in what direction the independent variable affects the dependent variable. A first step to establishing how the relationship is set up includes calculating the correlation between the given economic indicators. Table 1 shows the different meanings of the values that can be computed when looking at correlation coefficients. The coefficient ranges from -1 and 1 and shows either a negligible, weak, moderate, strong or very strong positive or negative relationship between variables (Te Grotenhuis & van der Weegen, 2009).

Table 1: Interpretation of Correlation Coefficients

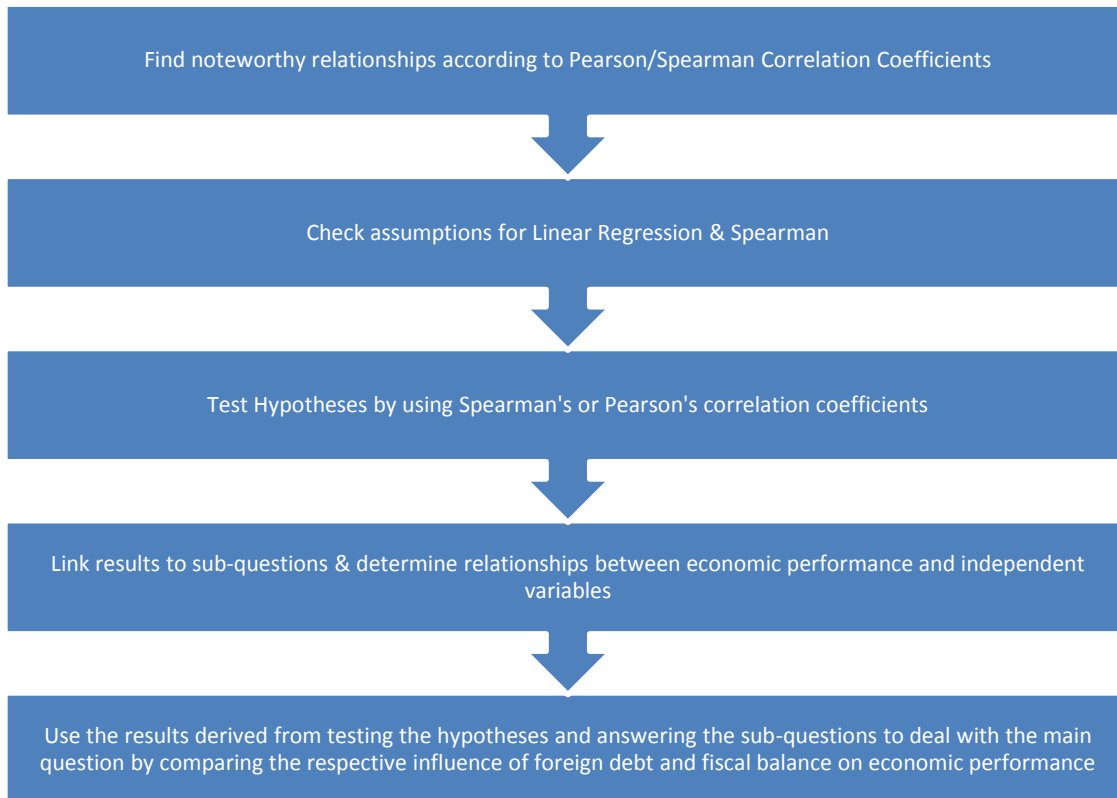
Coefficient	Interpretation
+ .70 or higher	Very strong positive relationship
+ .40 to +.69	Strong positive relationship
+ .30 to +.39	Moderate positive relationship
+ .20 to +.29	Weak positive relationship
+ .01 to +.19	No or negligible relationship
- .01 to -.19	No or negligible relationship
- .20 to -.29	Weak negative relationship
- .30 to -.39	Moderate negative relationship
- .40 to -.69	Strong negative relationship
- .70 or lower	Very strong negative relationship

Source: De Veaux (2011)

In order to assess the credibility and relevance of the given correlation coefficient, each value will be tested for its statistical significance. A standard procedure is to evaluate results as significant if they have a level of 5% or less and highly significant if they have a value of 1% or less (de Veaux et al., 2011). Any correlations that have a significance level above 5% will be excluded from the analysis.

The first step of the analysis will therefore be the assessment of correlation coefficients of both statistical tests and levels of significance. After a brief report of these values, the analysis will continue by selecting the most interesting and noteworthy cases and testing whether they fulfill the necessary criteria and assumptions in the context of statistical regression. The most noteworthy cases will be statistically significant instances of moderate or strong correlation that are relevant in light of the given hypotheses and theories. In case the selected relationships are not suitable for regression, Spearman's rank correlation will be used. Those relationships which merit further analysis will be checked for their robustness and relevance. The analysis will continue by summarising the results by looking at what the respective behaviour of each indicator implies about the given variable and relationship with other variables. This point in the research process presents a good opportunity to put the preliminary results into the context of the given theories and overall methods of the paper. Here, it must be remarked that amid the statistical analysis and careful reporting of the given quantitative data and coefficients, a rather more qualitative discussion will take place to reason in how far the results imply a given relationship or not between the variables. After the three hypotheses have been dealt with, the main research question will be tackled, which will take on a comparative character as the respective impacts of fiscal balance and external debt on economic performance will be considered. When considering Figure 8, one can see that the preceding section has set out a general strategy to conduct the empirical analysis.

Figure 8: Processes in the Empirical Analysis



The first hypothesis looks at the relationship between foreign debt and economic performance. Here, each indicator of economic performance, namely GDP growth, actual individual consumption, net national income, gross fixed capital formation and unemployment, will be assessed individually as the dependent variable and measured against the six independent variables belonging to foreign debt. The next hypothesis concerns fiscal balance and economic performance. Whilst the same procedure will be adopted to test the correlations, the theoretical assumptions include identifying whether a lower deficit induces investment, heightens consumption and ultimately improves economic growth. Finally, an appraisal of the austerity measures will follow the aforementioned structure whilst also incorporating the theoretical basis that has been dealt with. This entails an analysis which aims at determining whether less government spending lowers debt. In turn, this would heighten consumption, lower interest rates, increase investment and also contribute to higher GDP growth rates.

At this point, it makes sense to bear in mind that the sub-questions and hypotheses have been constructed to form a basis with which to answer the overall research question. This will be answered first by looking at how much external debt and fiscal balance respectively explain the variance in economic performances. Furthermore, it will be discussed whether the theoretical framework can be applied to explain the given empirical results. Finally, these considerations will then be combined to offer an indication as to which variable has a more profound influence on economic performance.

3.3 Limitations of the Study

This section highlights the limitations and threats to validity and reliability which may occur when looking at the relevance and applicability of the subsequent analyses and results. This study primarily follows an empirical research design as it includes a research question, a method and empirical evidence. Empirical questions are tackled where relationships between variables are assessed and theoretical expectations are appraised. One can talk of a correlated or observational study which merely observes the size and direction of a relationship amongst variables (De Vaus, 2001).

In social science research, it is difficult as a rule to construct and prove causal relationships, since the concepts involved are measured in a way that is subjectively set out by the researcher in advance. An example for this is the conceptualisation and operationalisation of economic performance, which has been given a number of indicators to measure its presence. Whilst the selection and definition has been argued by using literature and widely accepted theoretical underpinnings, it is not a universal approach which means that the definition might differ in other research projects. The concept of causality offers the most difficult obstacle to this research. Causality involves a change in one causal factor having an effect on a second factor (De Vaus, 2001). The impact of the change in the independent variable would therefore change outcomes and the behaviour of the dependent variable. The limited number of cases involved may also be problematic. The number of observations, approximately 135, necessitates caution when making inferences. According to Kahneman (2011), one of the most prominent errors in social science research is the selection of too few observations and cases during the analysis. The fact that smaller sample sizes can result in a higher risk of measurement errors must be factored in when forming conclusions. A related point can be found when considering that the given period of analysis, which spans from 2008 to 2012, only incorporates five calendar years. It can therefore be assumed that some effects of policies or variables might take longer to observe and cannot, therefore, be included in the given assessment. Nevertheless, one can still expect to achieve credible results due to the extreme and extraordinary nature of the Eurozone Crisis. In contrast to regular policies being implemented and moderate recessions coming to pass, the EU was engulfed in a crisis of unprecedented proportions which, in turn, will also be evident when analysing the given indicators.

A further issue involves the concept of validity. According to Babbie (2013), a valid measure would adequately reflect the concept that it is attempting to measure. Difficulties involving validity are broad and encompass a host of different problems. In this regard, issues of content validity pose the question of whether all relevant aspects of a concept have been incorporated (Carmines & Zeller, 1979). This necessitates a comprehensive conceptualisation. The difficulty here is the subjective nature of conceptualisation and operationalisation, as well as a lack of criteria which can be used to assess this.

In the context of this study, each variable has been given a number of indicators, in order to catch as many facets of the concept as possible. Construct validity, which looks at the whether the given variables relate to each other in the expected manner (Carmines & Zeller, 1979), is a further issue that needs to be addressed. The criteria to circumvent this danger are that a credible theoretical framework has been consulted, whilst the test that is to be performed in light of the measurement must be seen as valid and reliable. These criteria are fulfilled in this paper. Issues that cannot be completely resolved include the potential presence of confounding variables. The scope of this research means that it is not possible to see exactly whether there might be an intervening variable

in the measured relationships. Connected to causality is also the problem of an ambiguous temporal precedence, which is common in longitudinal designs. This may mean that it is unclear whether a change in one variable precedes a development in a second one. However, these prevailing issues do not entail that the research is invalid. The consideration to be taken out of this section is that conclusions and statements must be made with caution and that when reporting the results of this study, it is paramount to include and consider the limitations at the same time. Tentative conclusions and an appraisal of the given hypotheses can be reported, rather than constructing an elaborate and robust theory. The final issue to be addressed relates to reliability. Reliability is the property of a measurement whereby the measure would produce consistent and stable results over a number of attempts. This delves into the idea that a measure might not be a reliable process to gain information on observed relationships (Zeller, 2000). In order to combat threats of reliability, the paper works with clear definitions of concepts, whilst also applying multiple indicators for each variable in order to avoid measurement error.

In conclusion, it can be said that due to the scope of the study, as well as the limited number of cases and measurement techniques, any results and interpretations must be reported with caution and in full knowledge of the given limitations. However, the preceding analysis has also shown that the most prominent research errors and threats concerning validity and reliability have been considered and dealt with as far as the given resources of the project permit. The next section will therefore continue with the empirical analysis where the preceding measurement process and methodological approach will be implemented.

4. Empirical Analysis

As set out in the third section of this research paper, the given research design will be used to explore the relationships between variables. First of all, the selected correlation coefficients between economic indicators will be reported, whilst an assessment of their respective statistical significance will also take place. At this point, it should be noted that the choice of coefficient for each relationship is dependent on the assumptions that need to be fulfilled for statistical regression and the use of Spearman's rank correlations coefficient. The second part will relate the findings to the two sub-questions and three hypotheses. Finally, the third section will deal with the main research question.

4.1 The Three Hypotheses: Empirical Evidence

4.1.1 Economic Performance and Foreign Debt

As evident in Table 2, the indicators belonging to foreign debt have varying perceived effects on each dimension of economic performance. This is true when only looking at one indicator of the dependent variable, whilst it also holds true across a number of indicators for economic performance. This mirrors the fact that causal explanations are difficult to make, whilst each given relationship holds more complexity than can be shown by the given correlation coefficients. The chosen statistical technique is Spearman's rank, due to the fact that many of the relevant relationships do not satisfy the linearity condition required for multiple linear regression. More specifically, it can be said that the perceived respective relationships between GDP growth and current account and net lending/borrowing are monotonic, but not linear. The same holds for AIC's correlation with financial account, capital formation's correlations with current account and net lending/borrowing and unemployment's perceived co-variation with financial, capital and current account, as well as net lending/borrowing and net international investment position. Since these relationships do in fact show monotonic relationships, they can be assessed by using Spearman's rank correlation. One link which is to be neglected is the relationship between GDP growth and financial account balance since it is impossible to be seen as monotonic.

Table 2: Spearman's Rank Correlation Coefficients for Economic Performance and Foreign Debt

	Real GDP Growth (N=133)	Actual Individual Consumption (N=133)	Gross Fixed Capital Formation (N=135)	Unemployment Rate (N=135)	Net National Income (N=134)
Current Account Balance	0.205*	0.674**	-0.218*	-0.354**	0.207*
Financial Account Balance	-0.205*	-0.615**	0.225	0.367**	-0.165
Capital Account Balance	0.055	-0.678**	0.122	0.49**	-0.142
Net Lending/Borrowing	0.269**	-0.575**	-0.224*	-0.298*	0.268**
Net International Investment Position	0.09	0.746**	-0.192*	-0.672**	0.307**
Direct Investment Flows	-0.13	0.602**	-0.147	-0.289**	0.102

*significant at the 0.05 level (2-tailed) **significant at the 0.01 level (2-tailed)

When considering the relationships between real GDP growth and the given indicators for foreign debt, a small difference in the values that are given by Spearman's correlation and Pearson's coefficient is evident. Whilst in the three statistically significant relationships, the Spearman value indicates weak positive relationships, the Pearson coefficient indicates moderate relationships between GDP growth and current account balance (Pearson's $r=0.311^{**}$) and net lending/borrowing ($r=0.348^{**}$). This should however not pose a substantial problem since the coefficients point in the same direction whilst also only showing a rather small difference in values. Overall, the fact that the correlations are quite low in both cases, with the assumptions for regression being violated against, too, it can be assumed that it will probably be sensible to focus on the remaining indicators for economic performance and their respective relationships with the foreign debt indicators.

Continuing with AIC, it can be seen that all six relationships are statistically highly significant. The high correlation with current account balance (Spearman's $r=0.674$) indicates a strong positive relationship between the two indicators. This would imply that a current account deficit could precede a drop in consumption, whilst a large surplus would obviously be connected to higher consumption. Conversely, the opposite is true when looking at financial ($r=-0.615$) and capital account ($r=-0.678$) balances. This aspect makes sense in that current account and financial/capital accounts sit on opposite sides when calculating the balance of payment levels. The coefficient between net lending/borrowing is -0.575 which implies that a country which borrows more money would actually see rises in consumption.

Next, net international investment position (NIIP) has a correlation coefficient of 0.746 which is indicative of a very strong positive relationship. Taken individually, this would imply that a country with more financial assets than liabilities vis-à-vis the rest of the world will also see a higher level of consumption than if the liabilities outweighed the assets. Finally, a strong correlation between direct investment flows and AIC ($r=0.602$) indicates that countries attracting a higher amount of foreign investment also see a higher level of consumption in their area.

Further interesting observations can be found when surveying the values connected to unemployment rate. Here, one can see a moderate negative relationship with current account balance ($r=-0.354$), which indicates that a surplus in this regard could lead to less unemployment, with the opposite true when considering financial and capital accounts. This would imply that a better trade balance would contribute to less unemployment. To a certain extent, this is also reflected when seeing the weak to moderate negative relationship with the indicator net lending/borrowing ($r=-0.298$), as this would mean a higher amount of borrowing from foreign sources would coincide with a rise in unemployment. The strongest link can be seen when looking at NIIP which shows a strong negative relationship with unemployment rate ($r=-0.672$). This also shows that if more financial assets are flowing into the country than out of it, there is an indication that unemployment rates will be low, too.

Finally, net national income and gross fixed capital formation mainly show weak or negligible relationships.

4.1.2 Economic Performance and Fiscal Balance

When assessing the indicators relevant to economic performance and fiscal balance, it can be said that the interactions merit the use of statistical regression and the Pearson correlation coefficient. All relationships are sufficiently linear with the residuals showing no strong particular patterns.

Table 3: Pearson Coefficients: Economic Performance and Fiscal Balance

	Real GDP Growth (N=135)	Actual Individual Consumption (N=133)	Gross Fixed Capital Formation (N=135)	Unemployment Rate (N=135)	Net National Income (N=134)
Government Surplus/Deficit	-0.127	0.203**	0.361	-0.464**	0.041
Gross Government Debt	-0.033	0.31**	-0.422	0.092	0.187*

*significant at 0.05 level **significant at 0.01 level

In Table 3, it can be said that the most significant finding is the apparent moderately strong negative relationship between unemployment and government surplus/deficit. This would entail that a higher deficit is connected to a higher unemployment rate. Government surplus/deficit also shows a moderately strong positive relationship with capital formation (0.361) which, in turn, would indicate that a higher surplus also induces capital formation. The strongest point to be made regarding gross government debt is that it has a negative moderate correlation with capital formation (-0.422) which shows that a lower debt level is associated with more investment. Gross government debt is furthermore only moderately related to actual individual consumption (0.31), which would however show that a higher debt level is related to more consumption. In order to control for the time frame that has been selected for foreign debt, the research has been expanded to incorporate a time lag of one year, as well as an analysis without a time lag. This has been done since debt can be seen as a stock variable which, in turn, might have more direct effects on economic performances. However, when looking at the data that incorporates a time lag of one year, there are not many significant changes or variations that can be reported. On the one hand, the connection between government surplus/deficit is lowered slightly, whilst the coefficients for the same indicator with capital formation (0.415) and unemployment rate (-0.522) only increase marginally. Similar small changes can be found when looking at gross government debt and cannot be seen as significant aberrations.

4.1.3 Economic Performance and Austerity Measures

The final overarching relationship to be dealt with considers economic performance and austerity measures. When looking at the data more closely in order to assess the adequacy of the linear regression model in detailing the findings belonging to the third hypothesis, it can be stated that the conditions connected to linear regression are satisfied when looking at the correlations between AIC and government expenditure, taxes and government fixed investment. The same also applies between government expenditure and capital formation. With the assumptions satisfied for linear regression, the Pearson correlation coefficient has been selected for this analysis, as can be seen in Table 4.

Table 4: Pearson Correlation Coefficients: Economic Performance and Austerity Measures

	Real GDP Growth (N=135)	Actual Individual Consumption (N=133)	Private Credit Flow (N=135)	Gross Fixed Capital Formation (N=135)	Unemployment Rate (N=135)	Net National Income (N=134)
Government Expenditure	0.101	0.478**	0.034	-0.465**	-0.076	0.239**
Current Taxes on Income, Wealth etc.	-0.032	0.692**	0.101	-0.321**	-0.355**	0.129
General Government Fixed Investment	-0.085	-0.648**	-0.101	0.304**	0.269**	-0.163*

*significant at the 0.05 level **significant at the 0.01 level

When looking at the given values, it becomes clear that real GDP growth can be neglected with no significant values being reported. However, the opposite can be said when looking at AIC as all three indicators show statistically significant correlations with AIC, an indication that higher government expenditure contributes to AIC ($r=0.478$). Current taxes shows an even stronger correlation at 0.692, whilst a strong negative relationship can be held when considering general government expenditure. One noteworthy finding is that expenditure and government fixed investment give contradictory stories, as these results support different sides in the austerity debate. On the one hand, the positive link between increased expenditure and higher consumption would support criticisms of austerity measures, whilst the negative relationship between AIC and fixed investment does the opposite. With small potential relationships apparent when looking at unemployment rate and net national income, one can derive noteworthy results when looking at capital formation. Here, it is suggested that a higher government expenditure is associated with a drop in capital formation ($r=-0.465$), whilst higher taxes also has a similar negative effect. Higher government investment is however associated with more capital formation ($r=0.304$). The three aforementioned correlations all enjoy a high statistical significance.

4.1.4 Preliminary Findings

In summary, it can be said that, considering the outcome indicators belonging to economic performance, real GDP growth fails to offer many insights that can provide further analysis. Whilst weak to moderate relationships are evident when looking at foreign debt, the other variables show negligible results. Whilst this can perhaps be interpreted as a statement in itself, one can also draw on the aforementioned claims that GDP growth is a difficult concept to use effectively, due to its complex and multifaceted nature. The two variables that were chosen to help specify two components of GDP, namely consumption and investment, have however shown significant results and can be used in the next stage of the analysis. The same can be said when looking at unemployment rate, whilst net national income does not show noteworthy correlations with the given independent variables. This section will therefore highlight the main relationships and considerations that have been worked out whilst also putting these into the context of the given hypotheses. In turn, this process will offer tentative answers as to whether the hypotheses can be

rejected or not, whilst then highlighting which correlations will be tested against the assumptions inherent in regression analysis.

Beginning with the first hypothesis, which states that *countries with lower external debt experienced a better economic performance during the Eurozone Crisis when compared to countries with higher foreign debt levels*, it is possible to see weak to moderately strong relationships between GDP growth and current account balance, as well as net lending/borrowing. Stronger relationships are inherent when looking at consumption, which also point towards the fact that a better trade balance and less foreign debt contribute to higher consumption. However, a moderately strong negative correlation is also apparent when looking at current account and net lending/borrowing's respective effects on capital formation. This would imply that less foreign debt is actually connected to less investment. Finally, the connections between unemployment and net international investment position, current account balance and net lending/borrowing with unemployment rate would imply that less external debt can contribute to less unemployment. Overall, it can be said that the preliminary analysis points towards the fact that the hypothesis should not be rejected, with only one main factor, namely the connection between current account, net lending/borrowing and capital formation, not falling in line.

Looking at the second hypothesis, which holds that *a lower fiscal deficit leads to an improvement in economic performance*, one can again cite the small amount of conclusions that can be garnered from GDP growth and net national income. However, there is also evidence that a deficit can exacerbate unemployment and hinder private investment, whilst a high debt level is also connected to less capital formation. These two findings could actually be used to show the aforementioned credibility effect, whereby higher investor confidence induces private investment in the event of debt reduction. A further finding is the moderate positive correlation between the two indicators for fiscal balance and actual individual consumption.

The final hypothesis claims that tougher austerity measures lead to better economic performances. Concerning government expenditure, the Pearson coefficients indicate that more spending might coincide with less private investment which, in turn, can be regarded as a 'crowding out' effect. However, less expenditure may also lower consumption which, in turn, can be detrimental to growth levels. As highlighted above, this point is contradicted when looking at fixed government investment. Finally, the tax rate data shows a positive relationship with consumption which might be indicative of the 'positive wealth expectation'.

4.2 Evaluating the Hypotheses and Sub-questions

This section will place the aforementioned findings into the context of the overall purpose of the research paper by once again assessing the given sub-questions and hypotheses. By using the empirical data to answer the sub-questions and deal with the hypotheses, a basis will be laid to answer the main research question of whether *the amount of foreign debt held by governments can be considered as a more relevant variable than their fiscal balance in determining member states' economic performances during the Eurozone Crisis*. Therefore, the following is split up into three main sub-parts with two sections being devoted to the sub-questions and a further one to the main research question. Here, the first sub-question will be answered by assessing the first hypothesis, whilst the second one will look at the remaining two hypotheses. Finally, the preliminary findings will be summarised which will lay down the foundations to answering the main research question.

4.2.1 Subquestion 1

The first sub-question, which considers the relationship between foreign debt and economic performance, is supplemented by the hypothesis that countries with a lower level of foreign debt will also enjoy a stronger economic performance vis-à-vis countries that have accrued a larger amount of debt. The evidence used to deal with this statement can be found in section 4.1.1, and especially Table 2, where the correlation coefficients between the indicators of the two variables were assessed.

Regarding growth rates, it has been difficult to find strong evidence which can be used to support or weaken the hypothesis. Here, only weak relationships are evident. However, it can be said that when looking at actual individual consumption, there is strong evidence that less foreign debt heightens consumption. This can be seen when looking at the strong positive relationship with the current account balance and the net international investment position. The strong negative relationships with capital and financial account balances also underline this statement. The strong positive relationship with direct investment flows also falls in line with the aforementioned direction. However, one point that does not correspond to this statement is the negative relationship with net lending/borrowing. Instead, a strong negative relationship exists with consumption which would suggest that a higher amount of borrowing induces consumption. This is surprising, especially when considering that current account balance has a positive relationship with AIC. When looking at the other indicators for economic performance, each one has a positive or negative relationship with current account balance and net lending/borrowing, but never a positive and a negative one with the two indicators. However, since the evidence is so strong when looking at the other five indicators for foreign debt, it can be said that the correlations with AIC indicate that a higher amount of foreign debt can adversely affect consumption and therefore also economic performance. This generally shows the same direction as GDP growth, although the latter can only be used tentatively to support this interpretation.

Continuing with gross fixed capital formation, it can be said that the relationships only show weak correlations which point towards the notion that a higher amount of foreign debt might induce capital formation. The evidence is approximately as strong as the evidence that is offered when looking at GDP growth rate and is therefore difficult to use and interpret. A stronger statement is shown when looking at unemployment rate's relationship with foreign debt. Here, evidence is offered that supports the notion that a higher amount of foreign debt can increase unemployment. A moderate negative relationship with current account balance supports this, as well as the positive ones with financial and capital accounts. The weak to moderate correlations with net lending/borrowing shows this, too.

Overall, these findings would point towards the fact that a trade surplus and a lower amount of borrowing can help improve prospects on the labour market. The strongest piece of evidence for the preceding findings can be found when looking at net international investment position which shows a strong negative relationship with unemployment rate. Finally, it can be said that when assessing net national income, there is a weak negative relationship with indicators of foreign debt. However, the low values render this finding difficult to use in rejecting or accepting the hypothesis.

At this point, it can be said that with the preceding evidence, it is not possible to reject the hypothesis that countries with a lower level of foreign debt also showed better economic performances during the Eurozone Crisis. The data shows evidence that lower debt is connected to

higher consumption and less unemployment, whilst there is no strong evidence that can be used when looking at GDP growth, fixed capital formation or net national income. GDP and NNI would even tentatively point towards the given conclusion, although it is difficult to use these points as the evidence cannot be seen as strong. Capital formation, on the other hand, actually offers weak evidence which contradicts that foreign debt leads to a worse economic performance. However, in total, it can be said that this evidence is insufficient to reject the hypothesis. When looking at the theoretical framework that underlies the hypothesis, it can be said that it is not possible to find evidence for the 'crowding out' effect. However, the 'debt overhang' effect, which shows that economic performances are adversely affected by a reliance on foreign credit fits into the findings which have been presented. On top of that, the main mechanism, which is that a higher amount of foreign debt heightens interest rates and increases debt servicing which, in turn, adversely affects economic performances, is also supported. Here, one must however state that the exact mechanisms in these relationships have not been examined extensively and that the preceding claims are supported by the overall results of the analysis, rather than through a precise assessment of the given variables.

The first sub-question can therefore be answered by stating that there seems to be a negative relationship between foreign debt and economic performance. In the context of the paper, this translates into the statement that, all other factors held constant, countries with a higher amount of foreign debt have also shown weaker economic performances, whilst countries with less foreign debt have experienced the opposite during the Eurozone Crisis. The degree and relative strength of this relationship will be discussed later and in the context of the main research question which will offer a comparison of the effects of foreign debt vis-à-vis those attributed to fiscal balance.

4.2.2 Subquestion 2

The second sub-question addresses the links between fiscal balances and economic performances during the Eurozone Crisis, whilst also paying attention to the direct effects of austerity measures. Thus, two hypotheses have been formulated. Firstly, it is expected that countries with a lower fiscal deficit will show better economic performances during the Eurozone Crisis. The second expectation involves the notion that tougher austerity measures improve economic performances.

Beginning with the relationship between economic performance and fiscal balance, it can once again be stated that no strong evidence can be found when looking at real GDP growth, which does not show statistically significant values. Weak to moderate relationships are evident when looking at actual individual consumption, where the data suggests that a higher surplus heightens consumption. One of the most significant findings is the notion that a higher government deficit can be connected to a higher unemployment rate. This would therefore support the hypothesis that negative fiscal balances adversely affect economic performances. Whilst the data related to net national income is difficult to use on account of the low correlation coefficients, the evidence gathered when looking at gross fixed capital formation shows two interesting moderately strong relationships. Here, it can be said that a government surplus rather induces capital formation, whilst a higher debt level discourages it. This point can be seen as evidence of the *credibility effect*, which holds that a lower level of debt increases investor confidence and, consequently, private investment. If it is assumed that a lower debt level and the belief that a state can manage its debt is connected to heightened investment, then this is also in line with the finding that a government surplus is connected to less unemployment. All in all, the evidence points towards the fact that the hypothesis cannot be rejected. Whilst it is difficult to derive conclusions from the outcome indicators of GDP, NNI and AIC,

the connections shown when looking at unemployment rate and fixed capital formation offer enough evidence to tentatively show that fiscal balances are positively related to economic performances in the context of the Eurozone Crisis.

Continuing with the third hypothesis, which states that more severe austerity measures lead to better economic performances, one can again remark that real GDP growth and net national income do not give any useable insights. However, this stands in contrast to the results garnered from looking at the relationship between AIC and austerity measures. Here, one can see a moderate positive relationship between expenditure and consumption. This would therefore rather fit into the expectations of the opponents of austerity measures. However, one can also see a strong relationship between taxes and AIC which offers evidence to support the positive wealth expectation. The expectation is that individuals expect their lifetime disposable income to be higher despite the rise in taxes which subsequently increases demand, consumption and, ultimately, economic performance. Evidence for the *crowding out effect* can be seen when considering that higher government expenditure lowers gross fixed capital formation which can be seen as an instance where public investment lowers private investment. However, this is not in line with the findings related to capital formation and fixed investment which shows a positive relationship. Conversely, higher taxes are also moderately connected to less capital formation. The final piece of evidence that can be used is the negative moderate relationship between taxes and unemployment, which implies that a higher tax rate is connected to less unemployment.

In general, whilst one does have a less clear-cut picture than in the other hypotheses, it can be said that there is evidence to support the view that austerity leads to better economic performances. This is highlighted when looking at capital formation and consumption in particular. However, it can be said that a rather mixed picture is given since opponents of austerity measures will also detect empirical evidence which supports their view.

Since both hypotheses have not been rejected, one can state that the second sub-question can be answered with the statement that there seems to be a positive correlation when looking at the relationship of fiscal balance and austerity measures with economic performances.

4.3 The Influence of Fiscal Balance and Foreign Debt: A Comparison

With all three hypotheses having been dealt with and both sub-questions already answered, this section puts the findings into the context of the main research question and the general purpose of the paper, whilst also providing an answer to the question of whether foreign debt can be seen as more influential than fiscal balance in determining economic performance during the Eurozone Crisis.

4.3.1 Framing the Findings of the Empirical Analysis

When looking at the preceding findings, one can say that all three hypotheses have not been rejected and that evidence has been proffered that supports the reasoning that foreign debt has a negative relationship with economic performance, whilst fiscal balance and austerity measures have a positive one. This translates into the conclusion that during the Eurozone Crisis, countries with a higher level of foreign debt experienced more severe economic downturns, whilst countries with better fiscal balances and enforcing tougher austerity measures also showed better economic performances. The main research question, which looks at whether foreign debt is a more relevant indicator of a member state's economic performance than fiscal balance, necessitates a comparison of the effects

and relative influence of foreign debt and fiscal balance. At this point, it makes sense to recall the context and overall purpose of the main research question.

As discussed in the introductory section of the research paper, the main focus of the paper can be found when looking at policy responses to the Eurozone Crisis. More specifically, the research has centred on austerity measures and the corresponding academic debate that is being waged. Overall, policymakers have focused on fiscal balances and government debt when drafting possible solutions. As highlighted in the preceding analysis, this tendency is supported by a wide range of scholars and grounded in theories that show that austerity measures have expansionary effects, whilst high debt levels are detrimental to economic performances. This idea is also mainly supported in this analysis, since the second and third hypotheses have not been rejected. However, the primary purpose of this paper has not been to assess whether fiscal balances and austerity measures lead to better economic performances, but rather whether the focus on these two factors is credible or not. In this regard, the main point of this paper is to work out the role of foreign debt vis-à-vis fiscal balances and to understand whether this aspect is given enough consideration by policymakers in the European Union.

The fact that the first hypothesis has not been rejected shows that foreign debt does have a negative relationship with economic performance. The strength and relevance of this relationship can be determined by comparing these findings with those associated with the second and third hypotheses. As mentioned, certain limitations when looking at the short time frame, the difficulty connected to making causal inferences and the relatively low number of cases should promote caution throughout. In addition, it can be said that this paper is not using a straight-forward method when comparing the two effects, as it is difficult to make a sweeping comparison with the given data and its limitations. Therefore, whilst it will be problematic to denote one variable as more influential than the other, it will nevertheless be possible to show whether foreign debt has a significant role and should enjoy a higher degree of attention in European policy. This point reflects the overall objective of the study, namely to show whether foreign debt needs to be incorporated in a stronger way regarding policy responses to the Eurozone Crisis.

4.3.2 Comparing the Effects of Foreign Debt and Fiscal Balance

In general, it can be said that when looking at the given relationships and indicators, real GDP growth and net national income do not offer many useful insights for this comparison. However, the opposite is true when looking at AIC's relationships. Here, a strong negative relationship with foreign debt is suggested, as well as a weak to moderate relationship when looking at fiscal balance. This would give a first indication of how foreign debt might play a more prominent role when looking at consumption. When assessing capital formation, one can say that foreign debt shows a weak relationship whilst fiscal balance a moderately strong one. Looking at unemployment rates, it can be said that overall, both have moderately strong connections, with one indicator for foreign debt, net international investment position, showing a strong negative relationship with unemployment. These results show that foreign debt cannot be judged as having less of an effect than fiscal balance, with the general tendency being that it has a stronger influence, according to the selected indicators.

Regarding the overall conclusions that can be gathered by examining the austerity measures and whether the results support the arguments of the sceptics or the proponents of austerity measures in the EU, one must first of all consult the two proposed causal chains. It is furthermore prudent to consider the limitations inherent in this particular analysis. In general, the effects of the austerity

policies that have been pushed through might not be fully measurable if only a time lag of two years is evident, whilst the study will also be more credible once more time has passed and a longer time frame than 2008 to 2012 can be analysed.

The main findings have been that a drop in government expenditure lessens consumption, whilst rising taxation has the opposite effect. Regarding taxes, this finding is consistent with the pro argument of *positive wealth expectation*. However, the drop in consumption would also hinder economic growth through lower domestic demand, which would support the position of the sceptics. The fact that capital formation is negatively linked with government expenditure can also be seen as evidence of the effectiveness of austerity measures, of which the same can be said of the negative relationship between taxes and unemployment rate. One can tentatively conclude that the two main features that are highlighted by the supporters of austerity measures, namely the *positive wealth expectation* and *crowding out effect* can be seen. However, it can also be stated that the drop in consumption and demand does not correspond to this. In the end, one has a mixed set of findings with many weak and negligible correlations being reported. This fulfills the overall expectation that the effects of austerity measures are difficult to capture under the given circumstances. Whilst one can say that both sides score points against each other when looking at the theories, the same can be said when looking at the given empirical evidence. Luckily, the research paper is not fully focused on this approach, with the overall austerity debate and its merits being considered, as opposed to its individual components. In order to evaluate this, one must consider the results that have been gained from the main research question.

In summary, it can be said that the empirical analysis has not been able to reject the three given hypotheses which indicates a positive relationship between economic performance and fiscal balance, as well as austerity measures. Moreover, there is evidence which supports a negative relationship between foreign debt and economic performance. When looking at the two most prominent positions in the traditional austerity debate, one can find evidence to support both sides, particularly in view of the apparent presence of the *crowding out effect* and the *positive wealth expectation*. Regarding the main research question, which looks at the respective influence of foreign debt and fiscal balance, it can be said that both have a similar effect according to the given indicators, with a slight advantage given to foreign debt. This finding at least partly confirms the previously discussed expectations of Gros (2011, 2013) and suggests that the austerity route taken by EU member states has been too one-sided and does not give a sufficient amount of attention to the role of foreign debt.

5. Conclusion

The following will round off the research paper in two sections where, first of all, the relevance of the study and its applicability to European Union policies will be discussed, whilst the second sub-part will again briefly summarise the findings and point out the limitations and room for future research in this field.

5.1 The Relevance of the Study and the Role of the Macroeconomic Imbalance Procedure in European Policymaking

Throughout the research paper, the focus has been on national policies and their respective effects. However, it can also be said that a European policy response, namely the Macroeconomic Imbalance Procedure (MIP) which was set up to counter concerns regarding foreign debt, has also been evident. Whilst the time frame that has been chosen for this study largely precedes the measures that are being employed in the framework of the MIP, one is still able to utilise the findings of this study by giving an insight into how far the procedure addresses the apparent importance of foreign debt.

First of all, it can be said that the aims of the Commission, which include putting in place an early warning system for future crises, as well as correcting and preventing harmful macroeconomic imbalances, generally correspond to the notion that foreign indebtedness should be kept in check. For this, similar indicators to the ones used in this study such as the current account balance and net international investment position are assessed. The first point to be made is therefore that from a theoretical point of view, the issue of foreign debt is addressed with an attempt to smooth over macroeconomic imbalances.

However, regarding the implementation of the plan, it is more difficult to come to a conclusion. First of all, the programme has only been in place for approximately two years which, in turn, leaves little room for analysis and evaluation. Looking at the preliminary and forecasted data for 2013 and 2014 respectively, one can see slight overall improvements across the EU regarding the current account balance and the net international investment position. However, this finding is not applicable to the analysis since, with such a short time frame and dearth of cases, it is impossible to make reliable and valid causal judgements. On top of that, it is impossible to see how well the MIP can handle extreme cases, as the most vulnerable countries are not covered by the Excessive Deficit Procedure. One can therefore only draw on the three Alert Mechanism Reports that have been released so far and see in how far they have had an impact. As mentioned previously, there have been five detected instances of excessive macroeconomic imbalance. However, these have not resulted in Excessive Deficit Procedures as the Commission has been satisfied with each concerned member state's efforts to curb their respective imbalances.

The main mechanism for enforcing change has therefore been the country-specific recommendations (CSRs) that have been issued each year since 2012. The implementation of these mostly preventive measures is the responsibility of each individual member state which mirrors a system based on peer pressure, rather than the threat of strict sanctions in cases of non-compliance. The approach also does not show a one-size-fits-all approach since each country is given different recommendations. Looking at the European Parliament report on the implementation of the 2013 CSRs, it can be said that approximately 44.4% of the proposed measures have not been implemented decisively, with 45.8% of the areas seeing a moderate amount of progress and only close to 9.8% of the measures

being implemented in a satisfactory manner (European Parliament, 2014a). It has been suggested that the overall trend is that the countries with the most need to issue reforms are also the ones with the most violations (Marini, 2014).

One example for this is Bulgaria, which is in a precarious situation according to the utilised scoreboard. The member state has partially responded to one recommendation, whilst largely showing little to no progress when assessing the six remaining ones (European Parliament, 2014a). These findings can be put into the context of the research paper when considering that, in comparison with the applied austerity measures; the first efforts to correct and prevent macroeconomic imbalances have been rather tentative. Under the overall goal of bringing order to public finances, measures such as internal devaluation and strong budget cuts have been followed. The strength of the MIP has also been put into question with the claim that member states actually might rather be responding to market pressure rather than pressure from the Commission (Marini, 2014).

Overall, these claims are difficult to verify, especially when considering the limited time frame from 2012 to 2014. In summary, it can be said that the approach taken under the MIP, as well as its general goals, shows a commitment to combat excessive debt, which is in line with the idea that this issue has, thus far, not enjoyed enough focus in light of the Eurozone Crisis. However, it can be said that, among other factors, the limited implementation of the country-specific recommendations raises questions over its effectiveness. On top of that, one can also argue that the mechanism has not dealt with an extreme case yet, as Programme Countries are excluded from the procedure. This has left the Excessive Imbalance Procedure untested as yet which makes it more difficult to properly examine the capacities of the mechanism.

Comparing this effort with the austerity measures is therefore difficult, since the number of cases and years in which one can analyse these are more substantial. One point that can be raised however is that, at first glance, the measures adopted under austerity seem to be more extreme than those focusing on foreign indebtedness. This conclusion must of course be made tentatively, as it is unclear in what direction the MIP will go. This issue could be explored further in future research when more data is available. One can generally argue that the content of the MIP is largely in line with the claim that foreign debt should receive more focus during European policymaking, but that questions remain regarding the implementation of the mechanism with more observations needed before making a definite evaluation of the effectiveness of this aspect.

5.2 The Results of the Study and their Applicability

Future research can build on this paper by focusing on the effects of austerity measures and incorporating a longer time frame and perhaps differing time lags, as this would enhance the credibility and precision of the given approach. A further point to be considered is the fact that this paper focuses on the 27 member states that were part of the EU in 2008 as a group. Due to the extraordinary circumstances evident throughout the financial crisis, the results of this paper can be expanded on by looking at individual cases and groups of member states. Here, three outliers in regard to real GDP growth can be looked at more closely, namely the three Baltic states Estonia, Latvia and Lithuania in 2009, which experienced by far the steepest economic decline of all other cases. Furthermore, it can be said that countries which received bailouts, such as Ireland, Spain and

Greece, do not necessarily mirror the precise dynamics and economic conditions at play when looking at the indicators, since these were vastly influenced through loans. As previously mentioned, this research has applied a strategy that looks at the EU member states as a group which, in turn, leaves little room for deeper analysis and individual investigation. The upside of this point is that general patterns have been discerned which, in the future, can be examined on a narrower basis with individual cases.

The overall goal of this paper is to explore whether a reframing of the policy response to the Eurozone Crisis would be appropriate. The main problem that has been highlighted is that the traditional austerity debate and agenda of policymakers has been dominated by the question of whether government debt and economic performances can be improved by imposing contractionary or expansionary fiscal measures. By applying a theoretical framework that focuses on the effects of foreign debt, this paper has first of all set out to determine how foreign debt might actually have a more influential, or at least an equal role to play, than government debt levels and fiscal balances. This was highlighted in the second section, which focused on the adverse effects of increased debt servicing on the domestic economy, along with its corresponding *debt overhang* and *crowding out effects*. The main idea was to find evidence for this theoretical process in economic data on EU member states since the onset of the financial crisis. This has then been contrasted to the given evidence that shows the influence of fiscal balance on economic performance. This approach can be seen as an appraisal of the given theories, as well as a tentative evaluation of the direction that European policymakers have taken in response to the crisis.

As alluded to above, the given limitations of the study urge caution, in which case it makes sense to focus on foreign debt and ascertain whether it has a considerable effect on economic performance vis-à-vis fiscal balance, as opposed to determining which factor definitely has a stronger influence. According to the given data, it cannot be shown that fiscal balances have a more profound effect on economic performances during the Eurozone Crisis than the level of foreign debt. This finding ultimately shows that the policy debate is perhaps too slanted towards the idea of government debt and its negative consequences on economic performance. Whilst it would be unreasonable to completely disregard this factor in favour of foreign debt, the results suggest that a reframing of the debate might be necessary which would incorporate a wider range of indicators and an overall broader approach when tackling the problem. At this point, one must stress that this recommended approach is perhaps evident within the Macroeconomic Imbalance Procedure, although, as mentioned, there is currently insufficient data to pursue this claim. The findings are also consistent when ascertaining that both sides of the traditional austerity debate make sensible and credible claims. Whilst the contractionary approach can be seen as having merits with regard to attracting private investment, the expansionary school of thought shows the drawbacks of excessive austerity on economic growth and welfare. By reconciling these views somewhat and incorporating the factor of foreign debt in a stronger and more coherent way, one might be able to find a more holistic and effective strategy to combat the Eurozone Crisis. This point is clear in that the approach would incorporate a wider range of indicators and considerations, whilst also including foreign debt, a relevant factor that has perhaps been neglected in past policy debates.

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