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Life after Austerity: Did Ireland Succeed & Greece Fail? A Modern Money Approach

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Life after Austerity:
Did Ireland Succeed & Greece Fail?
A Modern Money Approach

A Senior Project Submitted to
The Division of Social Studies
of
Bard College



By
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Annandale-On-Hudson, New York
May 2016

Dedications and Acknowledgements

I would like to dedicate this thesis to my friends and family. To my parents, for being the most perfect role models, for their courage and their help and for always being there and never giving up on me, even when I did. To my grandmother, for her motivation and love. To my friends, for being my family away from home. There is not enough space or words that can express how much you all mean to me-- thank you for being an extraordinary support system and for years of memories and laughter, I wish you all the best of luck for the future.

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Plagiarism Statement

I have written this project using my words and ideas, except otherwise indicated. I have subsequently attributed each word, idea, figure, and table which are not my own to their respective authors. I am aware that paraphrasing is plagiarism unless the source is duly acknowledged. I understand that the incorporation of material from other works without acknowledgment will be treated as plagiarism. I have read and understand the Bard statement on plagiarism and academic honesty as well as the relevant pages in the Student Handbook. ¹

Madhurima Das

May 4th 2016

¹ Giovannoni, O. (2015) Guide to the Senior Project in Economics, Bard College

Abstract

This project examines the imposition of austerity measures on two periphery countries in the Eurozone – Greece and Ireland – after the global financial crisis that erupted in 2007. Ireland was the first economy to both enter and exit the crisis. Greece is still reeling from it, 9 years later. This project offers a detailed analysis of the policy response and economic conditions in each country, and reveals that Ireland's success is illusory. Even though Ireland exited the crisis in 2013, their 'success' was in part due to the relatively small size of fiscal contraction, the rebuilding of private sector savings, and the return to a net-exporting position. By contrast, Greece's adjustment to austerity was much more severe, the private sector financial position never fully recovered, and the country remained in a net-importing position. Although Ireland faced difficulties adjusting with some recommendations by the IMF, the Greek crisis and rounds of austerity were far more severe and detrimental to their social welfare levels than Ireland.

This project focuses on the flawed monetary arrangement and institutional design of the Eurozone focusing specifically on the differences between core and periphery countries under a stateless currency regime that has divorced fiscal and monetary institutions. Using the sectoral balances and the Parenteau model, we study public, private and foreign debt as well as the policy space available to give an insight into the two economies.

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Chapter 1

Introduction: Austerity

A singular event in the initial years of the 21st century changed the lives of many people across the globe. It was the 2007 global financial crisis. This crisis, curiously enough, was wrought with what was described as the ‘financial equivalent of the weapons of mass destruction which devastated lives and lands during the World Wars’. The crisis emanated from the shores of the most influential economic epicenter, the United States, and rapidly spread to engulf the whole world, a stark reminder of how intertwined all economies are in this increasingly globalized world. The ostensible catalyst, the bursting of the US housing bubble, caused a serial and rapid destabilization of the global banking sector, leading to seizing up of credit activity, thus causing convulsions in the global financial value chain, and a sharp reset of all asset prices across the world. As a natural corollary, the crisis spread to the European Union (EU), significantly impacting the weaker and more vulnerable ‘periphery’ countries (Portugal, Ireland, Italy, Greece and Spain).

The events and the aftermath are still fresh in everyone’s mind and efforts to normalize the situation still continue eight years on. This project examines two economies -- Greece and Ireland. The story of these two economies and the journey to recover from what seems to be an almost hopeless situation is a fascinating one. Clearly both the economies could be accused of hubris or profligacy, but it is nevertheless important to analyze, why recovery and austerity measures seem to have benefitted the Irish economy, while not producing a similar positive impact on the Greek economy. This serves as the primary objective of this paper.

The Eurozone crisis has exposed existential flaws of the entire Eurozone regime. The buildup of grave macroeconomic imbalances that remained completely unchecked, imploded on the heels of the US crisis leading to the vulnerable banking and public finance problems across the periphery countries in Europe. Since interest rates were already alarmingly low, these countries could not rely on expansionary monetary policy. At the same time, the automatic fiscal stabilizers in response to the falling demand,

produced extremely high budget deficits and public debts. Some countries are still suffering the effects of cyclical economic downturns, thus making it the longest crisis period after World War II. The average public debt in the European periphery itself has not been this high since wartime.

This crisis exposed the structural vulnerabilities of the European Monetary Union (EMU) countries. The underlying causes of the European debt crisis are complicated and cannot be attributed simply to years of assumed fiscal profligacy. Some key impacting factors were the lack of common fiscal policy, large disparities in the economic development between the core and periphery countries, financial imbalances in some countries, and failure to agree on a prudent fiscal policy direction. For the first time since the creation of the common currency, there is an alarming looming threat to its existence. This project investigates the reasons why the EMU does not function without further fiscal integration.

The Troika, a tripartite committee formed by the European Commission (EC), the European Central Bank (ECB) and the International Monetary Fund (IMF) acted for the first time, with respect to Greece in 2010, by implementing a minor package to limit the Greek deficit. This initiated a perfect storm of pension reductions, wage cuts, higher taxes, layoffs, and privatizations. In the timespan between 2008-2013, over six million jobs were lost. The crisis caused detrimental effects to the periphery region of the European Union. Fiscal consolidation has seemingly lead to devastating problems specifically in Greece and Ireland.

This paper examines the austerity measures imposed on the Irish economy and evaluates if the widely-accepted claim that it has yielded positive results. In addition, it studies the wide-ranging explanations about the failure of the austerity measures in Greece and contrasts them with the Irish ‘success-story’. Furthermore, this project will assess, not only the size and type of austerity, but also the financial reforms, growth channels, composition of private sector debt, trade profiles, and some purely psychological aspects in assessing the economic challenges of these two periphery countries. This project hypothesizes that the Irish ‘success’ is illusory and that the effects of austerity are much more similar between the two economies. In evaluating the specific situation in the Greek and Irish economies, we test our hypothesis using the modern monetary approach; analyzing the three sector balances and the

Parenteau model, pioneered by the the Levy Economics Institute at Bard College. Our research reveals that austerity cannot be viewed as ‘successful’, but due to the birth defects of the Eurozone it is embedded and therefore inevitable in the Euro Area, thereby producing a vicious macroeconomic cycles

The structure of this project is as follows:

- Chapter 2 offers a literature review on the topic
- Chapter 3 discusses the birth and birth defects of the Eurozone
- Chapter 4 examines the Greek and Irish economies during the crisis period, identifying parallels and contrasts in their respective experience
- Chapter 5 employs the contributions of the Cambridge Keynesian and Modern Money School to deepen our analysis
- Chapter 6 presents the three sector balances and Parenteau diagram in order to illustrate the macroeconomic challenges facing Greece and Ireland in the face of austerity. We also discuss the briefly the situation in Germany
- Chapter 7 presents a detailed chapter displaying the effect of austerity on both economies
- Chapter 8 offers policy recommendations for the individual countries, as well as for the Euro area as a whole

Chapter 9 concludes.

Chapter 2

Literature Review: Delving Deeper into Austerity

It appears - because it has been the case for twenty years - that every problem is solvable...that no matter how badly the world economy slumps there is a pain-free way out of it. Once the realization dawns that there is not, and that the pain will be severe, the question is posed that has not really been posed for twenty years: who should feel it?

-Paul Mason (2009)

In this section, we will be using facets of literature to provide an insight into the current crisis as well as the answer to our research question. This includes an analysis of spending cuts, taxes, and austerity measures to set the groundwork for the main research question. We use a variety of diverse literature from a vast array of sources to establish a multifaceted literature review elaborating on the Greek and Irish circumstances, delving deeper into economist's opinion of what could be the root of the economic crisis. We look at the basic idea of austerity, its effects on specifically Greece and Ireland as well as its functionality in the past as well as the difference between an austerity package that is primarily based on taxes versus one that relies on spending cuts. Moreover, we analyze the Maastricht criteria and the European treaties to grasp the reason why the core countries are economically superior to the periphery countries.

The crisis revealed the fragility of global financial systems. Wyplosz (2010) states that the crisis can not be considered exogenous and did not completely spill over from the American economy. As we delve deeper into research, it is evident that there were problems within the European Union since its birth.

The adoption of the common currency led to the convergence of the interest rates in most periphery countries to the level of interest rates of the core countries, thus in combination with rising capital inflows owing to greater financial integration, there was an increase in growth as well as government revenue and spending. However, the real appreciation led to a loss of competitiveness in periphery countries, adversely affecting export performance and leading to imbalances in the current account. Moreover, core countries such as Germany managed to maintain their competitive edge through wage restraint allowing them to increase their exports to periphery countries as well as lending to non-

core countries. The mechanism and foundation fundamentally led to imbalances in the European Union. It is a highly unsustainable regime which became clear after the global financial crisis and the current sovereign debt crisis as analyzed and concluded by Lin and Trichel (2012). We will further elaborate on the fundamental problems of the European Union in Chapter 3.

Table 2.1.1: Warning Indicators Prior to 2007²

<i>Indicators</i>	<i>Greece</i>	<i>Ireland</i>	<i>Italy</i>	<i>Portugal</i>	<i>Spain</i>
<i>Indicators of macroeconomic imbalances:</i>					
<i>Budget deficit</i>	√			√	
<i>Government debt</i>	√		√		
<i>Current Account deficit</i>	√	√	√	√	√
<i>Loss of competitiveness</i>	√	√			√
<i>Indicators of financial imbalances:</i>					
<i>Bank Assets- Growth</i>	√	√			√
<i>Bank Loans- Growth</i>	√	√			√
<i>Private credit to GDP</i>		√			√
<i>Private credit to deposits</i>		√	√		√
<i>Real Estate bubble</i>	√	√		*	√

Anzoulatos (2012) digs into warning indicators prior to the crisis shown in Table 2.1.1. The indicators display the macroeconomic data reflecting the problematic predicament the periphery countries were already in, prior to 2007. This raises the question of whether the cause of the sovereign debt crisis was completely due to the global financial crisis, or whether the financial crisis was just another domino in the equation? It may seem that the countries in crisis are largely responsible for their fate. However, as we delve deeper, it appears that regardless of substantial current account deficits and fiscal profligacy-- the responsibility does not exclusively lie with the periphery countries.

² Source: Anzoulatos (2012)

Moreover, the banking and financial system's opaqueness as to the level of risk and inadequate risk- management systems evident by the lack of quantitative models are more reasons which fomented trouble for the periphery countries. Furthermore, the ineffective supervision leads to unchecked proliferation of excesses which, for so long, curiously escaped the attention of supervisors for decades. The poor performance of essential elements of the economic system such as credit rating agencies contributed further to misleading economic indicators. The agencies may have indirectly misled investors to finance countries with severe high debt and economic imbalances. The staggering differences between the core and periphery countries which would eventually lead to a need for different economic perspectives.

2.1 The Economics of Austerity

The main economic concept we investigate in this paper is austerity. Austerity is defined as a set of policies with the aim of reducing government budget deficits³. These are comprised of measures such as spending cuts, tax increases, or a mixture of both imposed on a country to show the fiscal discipline of the government by bridging the gap between revenues and expenditures. We explore different opinions about the success vs. failures of the implementation of austerity measures.

2.1.1 Arguments for and against Austerity

Arguments for Austerity

The key arguments that all economists on this side of the argument seem to use are:

a) No pain no gain

The periphery countries cannot always be dependent on their prudent northern neighbors for a bailout. It's a hard lesson, but it is a lesson that is needed. (Blyth 2013)

b) What does not kill you makes you stronger

Austerity may be painful but will teach the Eurozone nations the necessity of shock treatment to ensure they can hold their own in a very globalized economy. From Mexico in the 1980s to Baltic States now, there have been examples of how austerity can spark sustainable recovery. (Debating Europe, 2012).

There have been previous examples of European Union countries that succeeded in implementing austerity measures which lead to growth in the economy for example Germany 2004-2007.

c) The 'free rider' problem

In a currency union, states have to play by the rules. The various treaties and pacts are to promote stability between the diverse groups of nations with strict implementation to prevent any economy from slacking off. This raises the question, why should the hard-working taxpayers of Germany or the Netherlands have to fork out for a southern spending spree? (The Economist, 2015).

³ Definition from Merriam Webster

d) Austerity = Recovery

There can be no real recovery until the southern nations get their public finances in order. It is impossible to spend your way out of a recession and it's important to prevent any untenable strains on the rest of the European currency union.

e) Spending cuts and structural reform are actually beneficial in the long term

There are a few advantages of fiscal consolidation and austerity, it can drive down interest rates and improve trade balance by decreasing imports and increasing exports (only if the interest rates go down and the exchange rate depreciates). It can also increase competitiveness by a reduction of wages (for example in Germany). It is also possible to reduce crowding out by lowering the government expenditure into the private sector. However, this only works when a company is working at full capacity. If an economy is in a recession running below capacity, then there exists conditions of surplus labor and funds for investment.

According to Haltom and Lubik (2013), even if austerity is detrimental in the short run, it can provide long-term benefits. Giavazzi and Pagano (1990) discovered empirical evidence that suggested that past financial contractions were expansionary focusing on two isolated cases in Denmark and Ireland in the 1980s. Perotti (1995), Ardagna (1998 and 2009) found that some episodes of austerity and fiscal consolidation lead to an increase in economic growth through spending-based consolidations leading to economic growth while consolidation based on tax increases were associated more with recessions. Moreover, the IMF published a paper (Guajadro, 2011) stating that even though fiscal consolidation tends to be contractionary in the short run, in the long run, however, they agree that tax increases tend to be more harmful to economic growth than spending cuts. Austerity measures clearly have not worked in the case of Greece yet; this sparks a debate on how to measure fiscal contractions. Perotti (2012) argues that studies of fiscal consolidation can not possibly be measured on a yearly basis and that they span over multiple years. The yearly data may not capture the fiscal consolidations accurately. Using case studies of four specific consolidation episodes in Denmark, Ireland, Finland and Sweden, Perotti (2013) argues that

there are other factors such as exchange rate adjustments that promoted stabilization eventually leading to economy growth.

Arguments Against Austerity

This section focuses on the more popular literature that is against the use of austerity measures. Most economists agree that austerity is and has proven to be detrimental to most economies.

The main points that all economists on this side of the argument seem to use are:

a) Tax increases are harmful to the economy and debt

Gale (2014) states that high tax rates slows down the economy immediately and depress future growth, they do not often promote revenue growth as investment decreases and consumption decreases. It is also a tool politicians do not prefer as it leads to a lot of chaos between the people. For example, in Greece, an increase in taxation of electricity, lead to an angry mob of protests by the population who could not afford to even turn on the lights. Economic harm can easily be done by the increasing of taxes, however, government expenditure on unemployment insurance and poverty programs such as the job guarantee act may be a silver lining.

b) Spending cuts can improve an economies condition and the budget yet to date “austerity in Europe” has consisted mainly of tax increases

In Sub-chapter 2.1.4, we explore the relative effects of spending cuts vs. tax increases. Economists on this side of the argument such as Giavazzi and Pagano (1990) claim that spending cuts and structural reform is a better alternative to taxing yet, taxation is the more popular tool of austerity⁴. Giavazzi and Pagano (1990) claim that government spending cuts will possibly increase consumer confidence, because consumers will spend more money in anticipation of future lower taxes, however, this aim was rejected stating that spending cuts depress the economy rather than improve it Perotti (1997). Figure 2.1.3 shows

⁴ Note: We can see from Appendices 3A, 3B, 7A, 7B there was a mixture of both spending cuts and taxation. In fact, there was a higher implementation of spending cuts in Greece.

the Greek contributions to GDP and it's clear that household expenditure does not increase under any form of austerity. (Schwaderlapp, 2015)

c) Structural reforms can permanently improve economic performance

Structural reform of social transfer and poverty programs can substantially increase long-run growth. A program that helps those who are unemployed keep in touch with the skills necessary to be competitive. There is a vast array of reforms including the health care system, labor laws and programs, deregulation of administered private prices etc. (Flesher, 2014).

d) Austerity is causing social problems in most countries where tougher austerity policies are being implemented

Austerity is destroying the social fabric of most peripheral European nations. It's hardest on the poor who played no role in causing the crisis, while bankers and politicians do not face the same extent of the crisis. Austerity has caused income inequality to decrease in Greece, the poor are still poor, and the rich are even poorer.

e) All current economists and economic policies are aimed at reducing the public deficit-to-GDP ratio, arguments are using multipliers instead of facing the obvious- the structure of the European Monetary Union

This raises the question; why should the debt-to-GDP ratio be 60%? Is there a specific level of debt-to-GDP level a country should attain not to have any economic problems?

Many debates between economists are not based on the understanding of the absence of a sovereign currency, its consequences or sectoral balances but by the use of multipliers.

The main issue with the fiscal multipliers is the constant systematic overestimation of forecasts. The actual results of austerity have worsened the economic conditions of most European countries. The World Economic Outlook (WEO) found in October 2012 that the forecasts of economic growth have been systematically over stated by a large margin. The WEO confirms that this also applies to the forecasts of the members of Troika as well as the private forecaster, the Economist Intelligence Unit. The multiplier used in forecasts by the IMF were around 0.5.

The WEO now estimates the real multipliers to have been around 0.9 and 1.7. The gap between the forecast and reality is about 0.4 to 1.2. This shows that the negative effects have been at least three times as great as the forecast suggests. The WEO's estimate is consistent with economist Krugman's estimates which he calculated to be 1.25. He further notes that "1 euro of austerity yields around 0.4 euros of reduced deficit, even in the short run". Wolf (2015) states that the multiplier is actually 1.5: "Every percentage point of structural fiscal tightening is estimate to lower GDP by 1.5%...the 8% points of structural fiscal tightening in Greece lowered its GDP by 12%" (WEO, 2012).

2.1.2 The Rules of the Game: Austerity by Design

The Maastricht criteria signed on the 7th February 1992 was an amending treaty signed by 12 countries (Belgium, Denmark, France, Germany, Greece, Ireland, Italy, Luxembourg, the Netherlands, Portugal, Spain, and the United Kingdom).

The Criteria established are as follows: ⁵

1. An inflation rate of no more than 1.5 percentage points above the average of the three countries with the lowest inflation rates
2. No exchange rate realignment for at least two years
3. Nominal long-term interest rates not exceeding by more than 2 percentage points of those for the three countries with the lowest inflation rates
4. A government budget deficit not in excess of 3 percent of each country's GDP
5. A gross debt to GDP ratio that does not exceed 60 percent

There has been extensive debate about the purposes and main aims of the Maastricht criteria. Arguing on behalf of many diverse countries, there were difference of opinions and arguments between officials and academic experts. The primary aim is to only allow the countries which meet these criteria into the Eurozone. The first convergence criteria were carefully premeditated to ensure maximum monetary

⁵ Criteria collected from Panos Afxentiou, *Convergence, the Maastricht Criteria, and Their Benefits*, 2000.

stability by supporting the fixed exchange rate regime which is further protected by maintain inflation and controlling government budget deficits for all 12 countries.

Table 2.1.2 Countries Percentage of time fulfilling Maastricht Debt, Deficit and Inflation criterion⁶

<i>Country</i>	<i>Months of fulfilling inflation criteria</i>	<i>Months of fulfilling debt criteria</i>	<i>Months fulfilling deficit criteria</i>	<i>% fulfilled of inflation criteria</i>	<i>% fulfilled of debt criteria</i>	<i>% fulfilled of deficit criteria</i>
<i>Germany</i>	132	132	96	100	100	38.46
<i>Ireland</i>	72	108	12	54.54	90	92.31
<i>Greece</i>	71	0	156	53.78	0	0
<i>Spain</i>	75	36	36	56.81	50	76.92
<i>France</i>	132	48	84	100	36	46.15
<i>Italy</i>	112	0	96	84.8	0	38.46
<i>Portugal</i>	96	42	150	72.72	38.9	3.85

Table 2.1.2, above, shows the percentage of months select European Union countries have spent fulfilling the Maastricht inflation, debt and deficit criterion between 1995 to 2007. Evidently, the sole economy to fulfill all the debt and inflation criteria in that time range is Germany.⁷ The “core” countries including Germany and France have on average complied 70.1% (over 92 months on average) of the fulfillment of afore mentioned criteria whereas the periphery countries have an average of 47.5%. Clearly, Greece as well as Spain have a low average of maintaining their debt-to-GDP and inflation criteria. With the exception of Portugal, most other countries achieved high growth of GDP in the first years of the Eurozone⁸. It is important to explore and comprehend the criteria to examine the dilemma Greece and Ireland. Figure 2.1.1 and 2.1.2⁹ show the radial diagrams diagrammatically illustrating the Maastricht criteria shortly after their respective years of convergence following the formation of the European Union.

⁶ Calculated by author using data from Eurostat

⁷ However, Germany faced minimal levels of government deficits.

⁸ See Appendix 1A for Real GDP Growth Graph

⁹ Tables 2.1.3 and 2.1.4 show the numerical values shown in the radar diagrams

It's clear that both economies' indicators are dissimilar when compared to the criteria of the Maastricht Treaty, especially for Greece. For Ireland (Figure 2.1.1) we use the year 1999 and for Greece (Figure 2.1.2) we use the year 2001, which is when Greece joined the EMU. Furthermore, in chapter 4, we present the same diagram for post-crisis and current criteria.

Figure 2.1.1: Radial Graph of Maastricht criteria and Ireland's indicators in 1999¹⁰

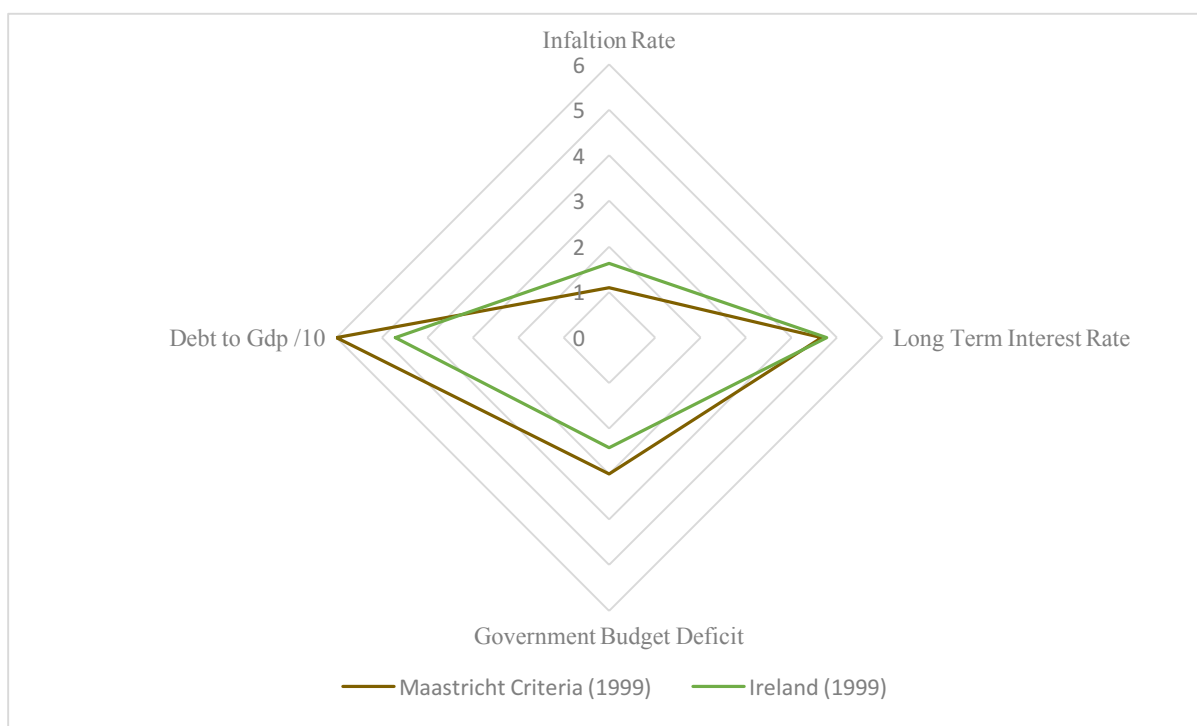


Table 2.1.3: Maastricht Criteria and Ireland's indicators in 1999

<i>Criteria</i>	<i>Maastricht Criteria (1999)</i>	<i>Ireland (1999)</i>
<i>Inflation Rate</i>	1.09	1.63
<i>Long Term Interest Rate</i>	4.65515	4.769166
<i>Government Budget Deficit</i>	-3	2.417720828
<i>Debt to Gdp /10</i>	6	4.7

¹⁰ A government budget deficit not in excess of 3 percent of each country's GDP

When Ireland officially entered the European Union, it's clearly visible in Figure 2.1.1 above, that the indicators were far off from the Maastricht criteria for that specific year. The Maastricht criteria, displayed in brown is on the outside of the green line which reflects the Irish data in 1999. Figure 2.1.2 below shows the Greek version after entering the European Union in 2001. However, unlike Ireland, Greece's radial line, shown in blue, does not completely fall inside or on top of the Maastricht criteria, shown in brown. They had a higher deficit level as well as a higher debt to GDP ratio than that allowed by the Maastricht Criteria¹¹, however, they had just gained entry into the Eurozone.

Figure 2.1.2: Radial Graph of Maastricht criteria and Greece's indicators in 2001

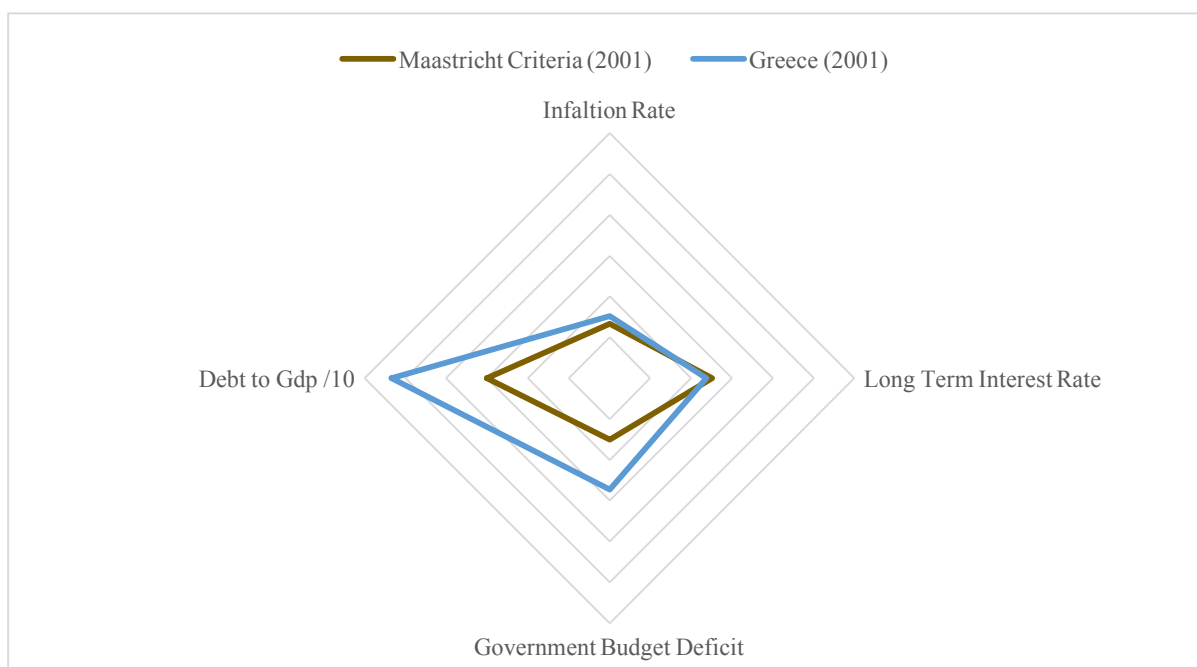


Table 2.1.4 Maastricht Criteria and Greece's indicators in 2001

Criteria	Maastricht Criteria (2001)	Greece (2001)
<i>Inflation Rate</i>	2.66	3.05
<i>Long Term Interest Rate</i>	5.0273	4.75
<i>Government Budget Deficit</i>	-3	-5.466055745
<i>Debt to Gdp /10</i>	6	10.68

¹¹ See page 11.

2.1.3 The Effects of Austerity on Greece and Ireland

“Greece has a role model, and that model is Ireland” — Jean-Claude Trichet (2010)

To explore the effects of austerity on Greece and Ireland, it's important first to explore the Greek and Irish timelines as well as the IMF packages implemented.

Greece

January 1st, 2001, Greece drops the drachma and enters the European Union. To meet the EU's standards, Greece makes deep cuts in public spending. However, Greece joined the EU on erroneous. They portrayed their economy to be much healthier than the reality. On November 15th, 2005, Greece admits it gave misleading information to gain admittance¹². In 2009, Greece's debt reached 129.7% of GDP leading to government spending cuts which incited unrest with angry mobs and strikes across the nation. The crisis forced the IMF to intervene. The first austerity package on the 9th of February lead to public worker strikes and soon led to the EU finance ministers announcing a €30 billion bailout package for Greece. Shortly after the Greek debt to GDP level spiked up to 148.3% in 2010, another round of austerity measures was imposed-- detrimental to the average Greek people. The next round of austerity was in 2011 of a €130 billion deal with the IMF. As the debt kept exploding and finally reached 175.1% in 2013, more and more austerity measures and bailout packages were issued leading to a snowball effect. For a further detailed timeline for Greece see Appendix 3A and for detailed IMF packages report see Appendix 7A.

¹² Note: After years (2002-2004) of refusals b Eurostat to validate data transmitted by the Greek government, on March 2014, Eurostat started an audit that noticed irregularities (the word falsification was never officially used) in the data submitted by the Greek government leading to criticism of the Greek nation around Europe.

The impact of the rescue package based on austerity measures lead to:

a) Electoral repercussions

Firstly, the crisis has completely altered the terms of the Greek political system from left-wing and right-wing political parties and from 'pro-austerity' and 'anti-austerity'. Most politicians neglected to listen to the value of good economics and instead switched to the 'benefits' of self serving politics.

b) More unemployment

In 2010, disposable income decreased by 12.4% compared to 2009. The top 20% earn as much as seven times as much as the bottom 20% (OECD, 2010). The OECD average of employment between the ages of 15 to 64 is 65% whereas Greece clocks in at 49%. Unemployment has continued to rise steadily throughout 2013, especially due to the increase in pink slips handed out as a coping mechanism to rising taxes and spending cuts. This had a cascading effect with increasing levels of youth unemployment as well as rising inequality.

c) Social unrest

Perhaps the most distressing effect of austerity measures is how it affected the average Greek citizen. There have been riots, strikes, negative propaganda against Germany as bankruptcy threatened the country. For a country that gets a large proportion of its income from tourism, the increase in social unrest impacted tourism. It became difficult for the average Greek citizen to look at the opportunity cost or analyzing the long-term benefits of spending cuts versus tax increases, they became upset with the debilitating impact of a massive increase in taxation and job losses leading to massive poverty. A fraction of the country is becoming homeless while the rest are finding a way of scrounging up change to maintain a shelter over their roof and basic dignity in life.

d) Rise in poverty, suicide, depression and homelessness

In 2011, alone, 372,000 people were at risk of social exclusion and poverty. According to the latest figures from the Bank of Greece, 45% of pensioners received monthly payments below the poverty line of just 665 euros. The population at risk of poverty is around 36%. Another cause for a fall in tourism

between 2011 and 2012 of -5.5% (UNWTO). Pension slashes are leading to even more people falling into poverty.

e) Deterioration in health and education

Healthcare is one the numerous public services that have been hit hardest by the crisis. An estimate of 800,000 Greek people is without medical access due to a lack of insurance or due to poverty. There have been clinics and social incentives to help people and efforts to ease the burden, however, they have been forced to close down due to budget cuts. HIV infections among drug users rose from 15 (in 6000) in 2009 to over 500 (in 6,000) in 2015. Regarding education, only 68% of adults are now even considering completing secondary education; there has been a decline in recent years.

Ireland

Ireland was the first Eurozone country to fall into recession in September 2008. During the international financial crisis, Ireland announced a bailout plan worth €400 billion to stabilize the countries leading banks. The Irish government used large quantities from the Troika bailout funds to aggressively intervene in propping up the precarious banking sector. In 2009, spending cuts were imposed leading to tens of thousands of protestors to rally nationwide. Shortly afterwards, the Irish government consistently took growing stakes in the Anglo Irish Bank. In 2010, Ireland accepted a €67.5 billion bailout package of which it injected €3.7 billion. Shortly after, the Irish voters approved a European treaty aiming to enforce stricter fiscal discipline. On December 13, 2013, Ireland successfully exited the bailout program first, however, the Irish economy had it easier than the Greek. For a further detailed timeline for Ireland see Appendix 3B and for detailed IMF packages report see Appendix 7B.

The impact of the rescue package based on austerity measures lead to:

a) Unemployment and falling demand

The first and the most visible effect of austerity on Ireland is unemployment. In 2011, the unemployment rate was 14.4%. Youth unemployment was dwindling between 30-32% leading to an increase in long-

term unemployment, and Ireland now stands third after Greece and Spain. A rise in unemployment caused an expected significant fall in aggregate demand.

b) The Celtic Tiger

The disreputable Irish “Celtic Tiger” was the era that ended with the collapse of a housing bubble and a banking crisis. The Irish government had implemented a wide range of policies to foster improvements in productivity and efficiency. There was a gradual improvement in the standard of education as policies were formed to provide more importance on education. By the 2000s, the Irish productivity was extremely close to US levels. Ireland has had previous experience with economic crisis and thus it may have been more prepared for the most recent crisis (Whelan, 2013)

c) Export sector and investments hit hard

Ireland is a small and highly open economy that has a high fraction of export-platform foreign direct investment operations. Thus, Ireland traditionally runs a large trade surplus. Ireland’s cost competitiveness was eroded in the later years, and their net exports have been declining even though they are net-exporters. During the collapse of the housing bubble, the roles played by investment and net exports were 25% and 10% respectively in 2007, yet by 2013 they were around 10% and 25% respectively.

d) Skill waste of a whole generation of young people

Skill loss is inevitable during unemployment. However, owing to the high level of youth unemployment in Ireland. It has become a significant problem regarding the future since the young of today may possess less employability than those in the core and even some other periphery countries.

e) Poor people, the vulnerable and dependents mostly paying for the price

30% of the Irish population is at risk of poverty or social exclusion, they are distanced from the labor market and are currently facing the consequences of having lost the skills during their period of unemployment.

To diagrammatically see the impacts of the rescue packages (during and after the crisis) on the GDP for both economies we would like to study the relative contributions to GDP.

Figure 2.1.3: Greece: Key Economic Variables and their contribution to GDP (Percentage) ¹³

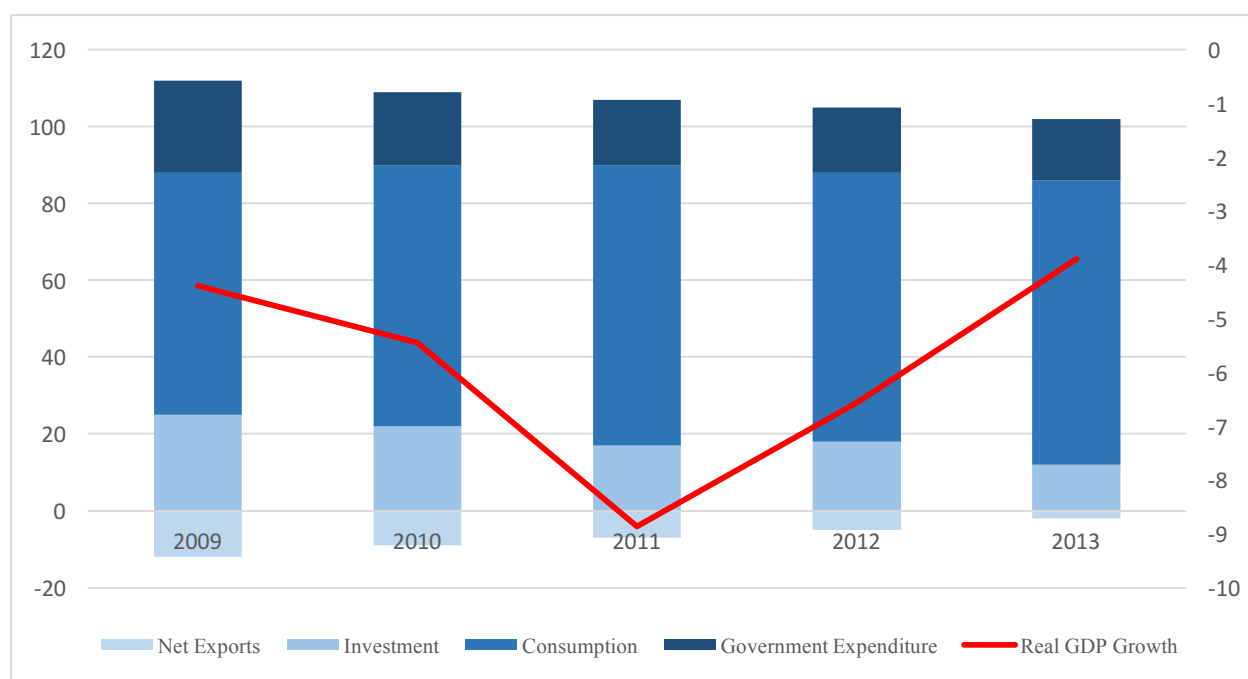


Figure 2.1.4: Ireland: Key Economic Variables and their contribution to GDP (Percentage) ¹⁴



¹³ Own Calculations. Data: Eurostat and World Bank

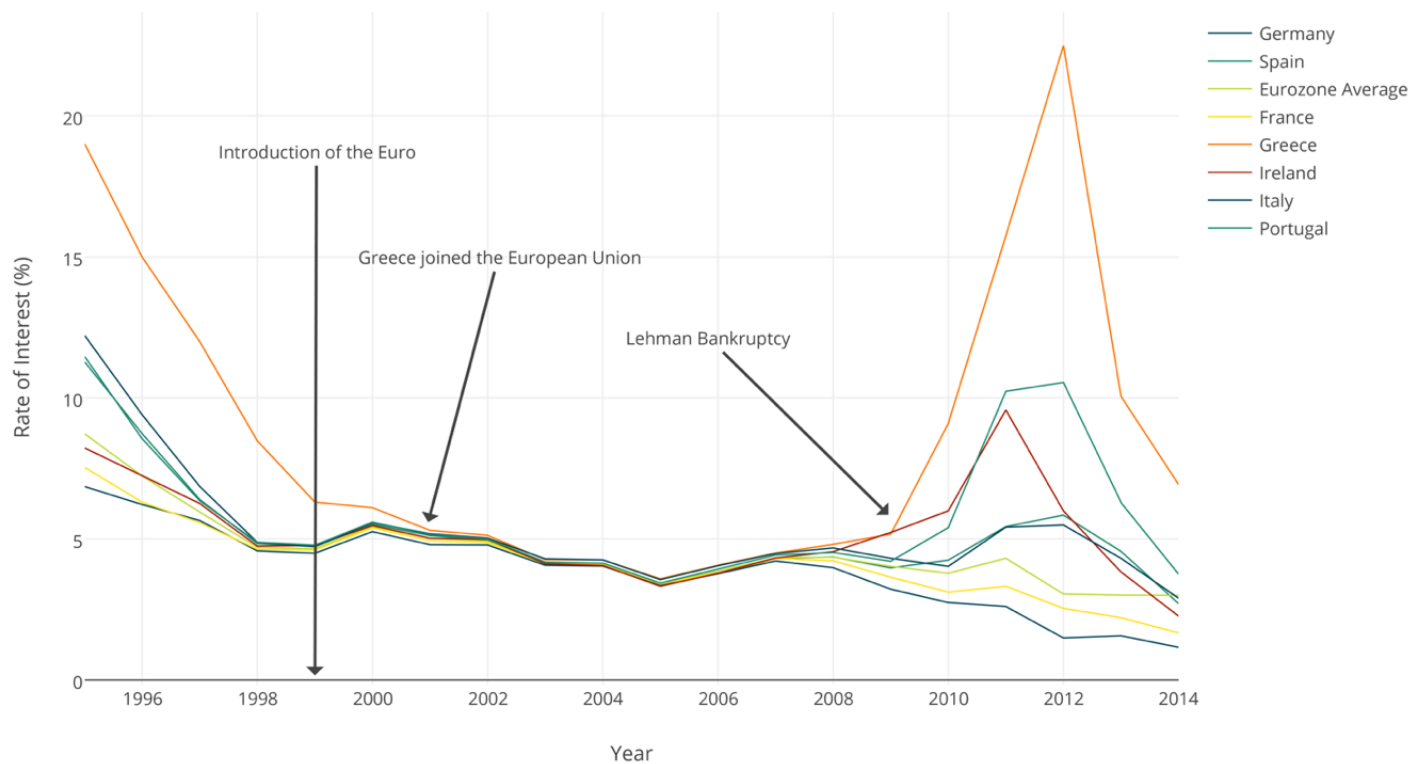
¹⁴ Own Calculations. Data: Eurostat and World Bank

Figure 2.1.3 shows Greece's breakdown of contribution to GDP, and as expected consumption has the largest contribution to GDP. However, it is interesting that even during and after the crisis, even though Real GDP growth had a downward trend, consumption consistently increased. However, in Ireland, Figure 2.1.4, consumption had a lower contribution to GDP and was consistently around 50%. Interestingly, the Real GDP growth lines for both the countries are practically inverse of each other. Greece has its lowest peak in the same year Ireland has its highest peak. In Ireland, the lack of expenditure by the households and the alarmingly low investments over the past few years show the effect of strict austerity measures specifically on Ireland, although the same could be said for Greece. The household sector undoubtedly faces the brunt of the crisis. The export sector is often an advantage for many countries but mostly to super exporting countries like Saudi Arabia, Germany, and China.

Another argument consistently used by those supporting austerity is that austerity measures is that it inspires confidence among investors- improving the economy due to the belief that the government will be able to live up to its' commitments (Graham 1998). However, this logic is flawed, any investor would fear a spiking and notorious debt load, especially if they fear the government may not be able to repay them back. Figure 2.1.3 shows clearly that investment has not increased to the extent that people expected it to. Figure 2.1.4 shows the consumption (which comprises on average of 60% of aggregate demand has the highest percentage, investment, however, is barely visible in 2011 and 2012 showing the 'negative effects' of austerity before Ireland exited the crisis in 2013. As visible, the Greek and Irish real GDP growth levels seem to be moving in an opposite direction. Ireland is achieving higher growth levels than Greece that shows deteriorating real GDP growth levels.

Moreover, when looking at the trends of the interest rates on 10-year government bonds in Figure. 2.1.5 below, you can see the major increase in the interest rates which lead to the Greek, Portuguese and Irish government bonds being potentially fatal to any investor. After Greece adopted the Euro in 2001, all the government bond yields converged. Moreover, after the crisis hit the Eurozone, it's clear that Greece faced the debilitating impact of the crisis followed by Portugal and Ireland.

Figure 2.1.5 Interest Rates on 10-Year Government Bonds (Percentage)¹⁵



¹⁵ Source: Liu (2013) Data: Eurostat

Note: Greece introduced the Euro in 2001 and converged perfectly with the rest until the Lehman bankruptcy.

2.1.4 The Effects of Spending Cuts vs. Tax Increases

One area where questions remain is the relative impact of tax changes versus spending changes. Traditional macro econometric forecasting models tend to find that spending changes, both expansions and contractions, pack a stronger punch than tax changes, particularly when the tax changes are expected to be temporary. But the needed head-to-head test of the two types of fiscal changes, where the same care is used to identify exogenous changes, has not yet been done.

-Christina Romer (2012)

Over the past several years there has been extensive research about the relative effects of tax changes versus changes in government spending. However, identifying the numerical effect of these changes is tricky. This is because changes in taxes and government spending respond endogenously to the business cycle, complicating efforts among researchers to identify the relative impact of tax versus spending changes (Jalil, 2012).

A few primary pieces of literature that we read which advocated that expansionary fiscal adjustments are not impossible was by Giavazzi and Pagano (1990), Guajardo et al. (2011) and Romer and Romer (2010) which implement the narrative approach to discuss the effects of changes in taxes and changes in the government spending on real output. They aim to find a feasible way to shape fiscal adjustments with as little cost as possible to any economy given debilitating monetary conditions. It's fair to assume that not all fiscal adjustments may lead to economic expansion, however, spending-based adjustments are often less recessionary than tax increases. (Guajardo et al. 2011)

Romer and Romer (2010) focus on tax changes, however, do not focus on which change has greater effects on output. Moreover, Guajardo et al. (2011) find that tax-based consolidations are associated with greater output effects than spending-based consolidations. They claim that tax increases are more amplified than spending increases since a tax increase is likely to raise prices and leading to an increase in interest rates by the central bank as they are inflation-averse. (Jalil 2012).

The main problem with this argument is that it does not offer a prescription of the type or the size of austerity measures that can bring succor to a suffering economy. President Obama's "balanced approach", supported by the IMF (Leigh 2013) proposed adopting a mix of spending cuts and tax increases, focusing more on structural reform. It's a known fact that different types of austerity measures produce different

results (Alesina and Ardagna 2009) hence the one size fits all is a mistaken notion where austerity measures are concerned. In fact, based on some of the periphery countries' pre-Maastricht records, it is easy to conclude that the sustainability in the long term would not be easy. This makes it clear that one set of criteria and one currency does not work perfectly for each country (Reinhart and Rogoff, 2008).

The general consensus is that fiscal adjustment packages that compromise mostly of reform and spending cuts are more likely to lead to a more lasting debt-to-GDP reduction than those austerity measures which are underpinned more by tax cuts. However, Jalil (2012) compared the output effects of fiscal consolidations in countries where monetary authorities are constrained in their ability to counteract shocks due to lack of an independent central bank. The extent to which government spending and tax cuts increase aggregate demand depend on the tax and spending multipliers. The tax multiplier is smaller than the spending multiplier since entire government spending directly goes into increasing aggregate demand. If the main aim is to shrink income, there is a need for a much larger tax increase since the multiplier is smaller, it is more recommendable to implement spending cuts as it has a higher multiplier. A much greater tax increase is needed to reduce income than a spending cut.

Christina Romer and David Romer (2010) of the IMF developed a new approach that guarantees the "exogeneity" of fiscal adjustments. They state that there is a different way to identify large exogenous fiscal adjustments to reduce the debt aggressively and it is unrelated. Their research found that fiscal adjustments based mostly on the spending side are less likely to be reversed and thus lead to long-lasting reductions in debt-to-GDP ratios (which is the primary aim.) However, Alesina, Ardagna and Biggs (2009) show that an estimated 80 percent of adjustments studied were failures. During a time of financial crisis, lawmakers and those in power are more often than not driven by opportunistic politics and capitalism than they are by good public policy and social welfare. Moreover, spending cuts are often the first salvo that causes lawmakers to lose their next election. However, Goldman Sachs Economics Outlook shows that spending cuts can be politically beneficial. Moreover, it also states that there is "no evidence that governments which quickly reduce budget deficits are systematically voted out of office" there may be a mildly negative chance of re-election.

Alesina and Ardagna (2012) analyzed some OECD countries that show the ten largest episodes of fiscal adjustments. Figure 2.1.5 below shows the improved economic condition by measuring the percentage change in deficit / GDP Ratio in different periods and with different durations.

Table 2.1.5 Percentage Change in Deficit/GDP Ratio for the 10 Largest Episodes of Fiscal Adjustments

<i>Country</i>	<i>Period</i>	<i>Years</i>	<i>Percentage Change in Deficit/ GDP Ratio</i>
<i>UK</i>	1994-2000	7	-11.1
<i>Sweden</i>	1993-1998	6	-14.1
<i>Norway</i>	1999-2000	1	-7.4
<i>Netherlands</i>	1993-1997	5	-8.6
<i>Japan</i>	1979-1987	9	-8.1
<i>Ireland</i>	1986-1989	4	-7.6
<i>Germany</i>	1984-1990	7	-10.7
<i>Denmark</i>	1983-1986	4	-15.1
<i>Canada</i>	1993-1997	5	-8.1
<i>Belgium</i>	1996-2000	5	-10.6

Kannan, Scott and Terrones (2012) state that the difference in outcomes is the result of the business cycle and government intervention such as monetary policy rather than the composition of fiscal adjustment packages. The standard explanation is that lower spending offsets the expectation of higher taxes in the future thus having a positive effect on households and investors. Alesina, Ardagna and Perotti (1998) have noted that fiscal adjustments are “multiyear rich policy packages”. Austerity measures are often implemented while lawmakers are implementing other growth-enhancing policy changes. Several policies have a moderately contractionary effect of fiscal adjustments and enhance their chances of success. For example, a liberalization of markets for labor, goods and services tend to have a more positive affect on economic growth. Germany’s fiscal adjustment of 2004 to 2007 provides a good

example since the economy implemented a tax reduction incentive as a part of a series of supply-side reforms between 1999 and 2005. The effects were visible towards the beginning of 2004. This, however, lead to a fragility in the labor market and thus there was a need of tight structural reform to tackle this market rigidity.

These reforms included “an increase in the statutory retirement age, the elimination of early retirement clauses, and tighter rules for calculating imputed pension contributions” (Breuer 2011). The above, along with large expenditure cuts in public administration fringe benefits and a reduction in subsidies lead to the slight improvement in Germany. This raises the question, once again, that is it possible to design a fiscal adjustment package that could both reduce the deficit and have a minimal impact on the economy. The peripheral countries on average in Europe have a stronger private sector than public sector, they also have a high income through tourism, thus cutting spending does not necessarily hurt the poor due to the wastefulness and inefficiency of the public sector (Alesina 2012). There is always a way to economize without hurting the bottom 20%, dependents who are most vulnerable. Alesina (2012) states that austerity based solely spending cuts are costly, especially as it has a higher multiplier than taxation. Greece was decimated with spending cuts which lead to a gradual deterioration of the economy.

Chapter 3

European Union Economics

3.1 Common Currency and its problem: Modern Money approach

My brother, if you mint coins, I want you to adopt the same divisions of value as in French money ... I've already done the same thing for my own Kingdom of Italy. The confederated Princes have done the same thing. That way there will be uniformity of currency throughout Europe, which will make trading much easier.

-Napoleon Bonaparte (1807)

For centuries, the idea of a common currency seemed like a good idea for those involved; it would lead to fewer transaction costs within the Eurozone for changing currencies, price transparency, improvement in inflation performances, eliminating exchange rate uncertainty, beneficial to the financial sector by lowering the transaction costs within the Eurozone, etc. The question on everyone's mind was whether a nation would increase its development when a country decides to abolish its national currency and instead adopt a currency of a much wider region? The answer was an unequivocal yes. The establishment of the Euro was the world's first regional common currency. Mundell's Theory of Optimum Currency Area argued that maximum economic efficiency is achieved if the region is sharing a single currency. Mundell (1961) listed advantages to this situation such as price comparability, cross-border investments, labor mobility, general trades, foreign direct investments and elimination of transaction costs. However, he also highlighted some significant disadvantages to the Euro, such as a limited loss of political and social autonomy. The European Union was originally established on the essential objectives of peace, safety, economic and social solidarity and security and to be a model of society. However, as time passed, the primary objectives seemed far from their existential worries.

One way to analyze the euro's future is to examine its past and go back to the origins of modern day money using Menger (1892) and Goodhart (1998). Menger's theory speaks of buyers and sellers agreeing on a common commodity as a medium of exchange: something small, valuable, non-perishable and divisible so that traders do not face any further costs while bartering. Menger's theory (1892) is a

market-led response to transaction costs, which the private sector uses as money as a solution. Goodhart (1998) provides economic analysis and assessment of the comparative advantages and disadvantages of the Euro in the context of the Optimal Currency Area (Mundell, 1961). He believes that the key issue with a single currency depends on the political relationship between the control over money and sovereign power, especially in a situation like Europe that is historically massively interconnected. Goodhart speaks of the Cartalists (which he refers to as the “C team”) argues that currencies become money simply due to the active involvement of the government. His example includes setting up a mint to produce coins and demand taxes are paid in the state money.

The key relationship in the C team model is the centrality of the link between political sovereignty and fiscal authority on the one hand and money creation, the mint and the central bank on the other. A key fact in the proposed Euro system is that the link is to be weakened to a degree rarely, if ever, known before. ... There is to be an unprecedented divorce between the main monetary and fiscal authorities ... the C team analysts worry whether the divorce may not have some unforeseen side effects. (Goodhart 1998:409)

The conclusion is that the euro needs a greater fiscal integration, not because some countries spoiled a ‘perfect plan’ with profligacy, but because the euro allows the disconnect and divorce of fiscal power and monetary power.

3.2 The Institutional Design of the EMU

The process of monetary union goes hand in hand, must go hand in hand, with political integration and ultimately political union. EMU [economic and monetary union] is, and always was meant to be, a stepping stone on the way to a united Europe.

-Wim Duisenber (1999)

The Eurozone is a flawed monetary arrangement: We examine the stark differences between core and periphery countries, subject to one monetary policy under a stateless currency regime that has divorced the fiscal and monetary institutions. From the beginning, the idea of the EMU rested on a gamble. Since 1992, when the European leaders decided to opt for the European Monetary Union they concluded that with ease, the southern European countries would adopt the “golden” German economic standards of lower inflation, wage growth, more saving and less spending. They also hoped Germany would become more like them: accepting more government and private spending, higher wages, and price inflation. However, this, of course, did not occur, and the actual implications of this gamble are becoming clear. (Weiss, 2000) The alarming fact is that the short-term symptoms of the crisis are not as detrimental as the long-term challenge which remains.

The European economies that converged have to pay attention to their domestic macroeconomic behavior to ensure are similar enough to each other's single monetary policies. For this to happen countries such as Germany and the deficit countries in the periphery must align their trends in inflation, public spending and private spending and competitiveness of their goods and services. The problem is the fundamental disequilibrium within the Eurozone which applies a single monetary policy and a single exchange rate to a diverse group of economies. Structural reform, austerity, taxation, micromanagement of national budgets or bailouts are insufficient to distract speculators and solve the problem. Instead, the burden must also be shifted from Europe's public sector to the private sector and from its deficit countries to its surplus countries- without this Europe will possibly face a long-term economic catastrophe. (Weiss, 2000)

The main problems with the institutional design of the European Union as well as the Euro are:

- **Interest rates that are not suitable for the entire Eurozone**

A common monetary policy entails a common interest rate for the entire area set by the ECB. This rate is completely inappropriate for regions which are growing at either end of the band of economic growth in the Eurozone. For example, in 2011, the ECB, while trying to control the fear of inflation in Germany, increased the interest rates, which were unsuitable for the periphery countries still trying to cope with Troika's austerity packages.

- **The Euro is not an optimal currency area**

For decades' people have been comparing the European Union to the US economy. There are several flaws with that statement. The American economy is an optimal currency area. If New Jersey were in a state of recession, workers could quickly move to New York without having to change countries without having to learn new languages, etc. There are more barriers to the movement of labor and capital within Europe than there are in the United States. A Greek unemployed worker, lacking basic skills due to loss of work after the crisis cannot easily relocate to for example Germany. The European Union is diverse enough that they should have different monetary policies. Bayoumi and Eichengreen (1994) suggest that if the proposed EMU were composed of only Germany, the Benelux Countries, France and Denmark, it would enable them to be an optimum currency area.

- **The limitations of fiscal policy given the common monetary policy**

With the common monetary policy, it's crucial to have similar levels of national debt to attract potential buyers of national debt. This will be further elaborated on in the next sub-chapter.

- **Lack of incentives**

Towards the beginning of the formation of the Eurozone, some economists argued that being a member of the Eurozone protects a country from a currency crisis. This offers less of an incentive for countries to use austerity measures. When Greece was facing an economic boom, they benefitted from low bond yields because their debt was secured by rest of Europe. This, however, lulled Greece into the perilous state of false reassurance (Woods, 2012).

- **Absolutely no scope for devaluation**

Many European countries have experienced rising labor costs, making exports uncompetitive. Most other nations would like to devalue their currency to restore competitiveness, yet the European common currency prevents them from devaluing this leads to record-breaking current account deficits, a fall in exports and low growth as we have seen the case in Ireland and Greece. Excluding Germany, just over half of all euro trade is with each other. Eurostat data has shown the stagnation the past few years. Thus, there needs to be an increase in global trading because most European countries cannot afford to buy any goods from each other.

- **No lender of the last resort**

The ECB is unwilling to buy government bonds in the case of liquidity shortages, making markets more nervous about holding debt from Eurozone economies. This is the problem in the case of Italy which has exacerbated over the past few years despite having a much lower budget deficit.

- **Divergence in the bank rates**

The recent credit crisis lead to rising bank rates in the peripheral Eurozone countries. Smaller firms faced higher costs than ever (even after the ECB cut the main base rate), suggesting that the ECB was unable to loosen the monetary policy when needed.

- **Substantial financial interconnection**

Cyprus owned Greek bonds, which caused issues for it, as a. The Financial Times' infographic showed the interconnection that allows anyone to see which country's banks are exposed to which other country's debt across the entire Eurozone. For example, restructuring for Italy could result in tremendous loss for the French economy.

It's important also to do a cost-benefit calculation and explore basic economic concepts regarding the effectiveness and feasibility of a sovereign monetary policy regarding EU's institutional design.

- **Effectiveness of monetary policy**

Can monetary policy systematically affect economic activity? The Keynesian economic theory states that monetary policy can affect both the level and the variability of economic activity (Poole, 1970). The new classical theory, however, insists that monetary policy has no systematic effects on the level of economic policy but it "can and has" affected variability (Martino, 1997). The different perspectives are due to the difference in the slope of the long run Phillips curve which traces the relationship between the unemployment rate and inflation. Keynesian theory has a negatively sloped Phillips relation while the new classical theory maintains a vertical relationship. In the Keynesian case, a negatively sloped Phillips curve allows governments to use monetary policy to reduce the unemployment rate at the cost of higher inflation. In the new classical theory, the vertical Phillips curve does not allow the monetary policy to reduce permanently unemployment. Instead, it only produces high levels of inflation. This difference between the two perspectives is crucial to the cost assessment of joining the EMU. There are significant and potentially problematic costs of giving up sovereign monetary policy in the Keynesian view. On the contrary, the new classical view suggests there to be a little benefit to having an independent sovereign monetary policy.

The Keynesian case can be illustrated by two Phillips curves, the lower one representing Germany and the upper one representing Greece. Before the EMU, the Greek economy maintains its inflation at PG1 and unemployment at UG2 whereas Germany has inflation of PD and unemployment of

UD. If after the EMU is formed, the Germans control the new ECB and maintain their existing policies, then the Greek economy would experience higher unemployment of UG_2 and lower inflation equal to Germany's rate of PD . In the new classical case, initially, Greece has an inflation of PG_1 and unemployment of UG . The only change after the formation of the EMU, in this case, is that the Greek inflation rate falls to the same level as the German rate.

These diagrammatic illustrations are crucial to understanding the fundamental significance of the competing views to show the monetary policy may not be effective at all, depending on which economic point of view you develop.

3.3 Limitations of Fiscal Policy and its implications on EU

Fiscal policies are known to have a significant impact on macroeconomic stability, inflation and economic growth. The key aspects are the composition of government expenditure and revenue, budget deficits, and government debt thus the need for fiscal discipline is a pivotal element of the macroeconomic stability. Moreover, in a monetary union, the need for fiscal discipline is even stronger. A country entering the EMU surrenders its monetary policy, and its debt becomes denominated regarding a currency over which it has no direct control. As the Eurozone faces a sustained debt crisis, the question arises whether a monetary union can be completely viable without a fiscal union resurfacing. The Eurozone came up with a few manageable solutions to the debt problems by engaging in a series of measures and reforms that could strengthen European integration such as:

- Expanding the size and powers of the EFSF (European Financial Stabilization Facility) created in the wake of the Greek crisis in 2010
- Establishing a permanent stabilization fund to replace the EFSF when it expired in 2013
- Include private sector in funding the bailouts
- Strengthening economic governance in the Eurozone

The creation of the EMU was criticized with the notion that countries could face asymmetrical recessions and shocks and would not be able to exercise discretionary monetary policy nor would they be able to devalue their currency. Government finances are under severe strain from the revenue and spending side. On the revenue side, there is pressure worldwide to reduce corporate tax rates and on the spending side; the aging of the population, rising health care costs and demand for public services are straining public finances. Lack of coordination between the national fiscal policies may create a serious threat to the single currency. The Eurozone should consider the adoption of a fiscal union which implies that the budget should be higher than what it is today. The main characteristic of a fiscal union is the capacity to spend subsequently to influence economic outcomes given that business cycles are not uniform in different economies.

Chapter 4

Greece and Ireland: Analysis and Comparison

The previous chapters, the literature review, and the European Union economics analysis, are vital to understanding this project. Subchapter 2.1.1 offered detailed literature review on the economics of austerity. Regardless of being poorly received throughout Europe, some countries manage to succeed and overcome its financial struggles. Moreover, to understand why Greece is a weaker economy than Ireland or to comprehend why the Irish have had an easier round of austerity measures than Greece, it's important to look at the history and the Maastricht Criteria (subchapter 2.1.2). It's vital to understand the dynamics within the EU as well as the major differences between the core and periphery countries. It's important to understand the fundamentals on which the entire Eurozone was built from inception. Through the literature review, we find which countries benefit the most from this union and which countries were and still would be better off if they were to switch back to their currencies, a topic which has sparked debates around the world.

In subchapter 2.1.3, we analyze the timeline for both countries as well as the impact of the rescue packages in both countries. This was perhaps held the most important information to be known as we can clearly see the glaring differences of the packages.

In subchapter 2.1.4, we explored the differences between spending cuts and tax increases. This is significant to understand the very different packages Greece and Ireland have received as well as their effects. It is not about the possibility but the outcome and cost of fiscal adjustments on different economies.

We further analyze and comprehend the relationship of the crisis to the EMU. Chapter 3 explored the problems with the common currency, the institutional design of the EMU and the limitations of fiscal policy and its implications for the European Union, specifically on Greece and Ireland. However, in this chapter we analyze the different economies, government and culture of Greece and Ireland.

4.1 Spider diagrams

Previously, in chapter 2, figures 2.1.1 and 2.1.2 are spider diagrams illustrating the comparison of Ireland versus the Maastricht Criteria in 1999 and Greece versus the Maastricht Criteria in 2001. Hence, earlier we examined the relative positioning of the 2 economies that are the subject of this thesis to the Maastricht criteria when they joined the Union.

We will now examine the situation with diagrams for their relative positioning just on the cusp of the beginning of the crisis years.

Figure 4.1.1 Maastricht Criteria Indicators for Ireland 2009¹⁶

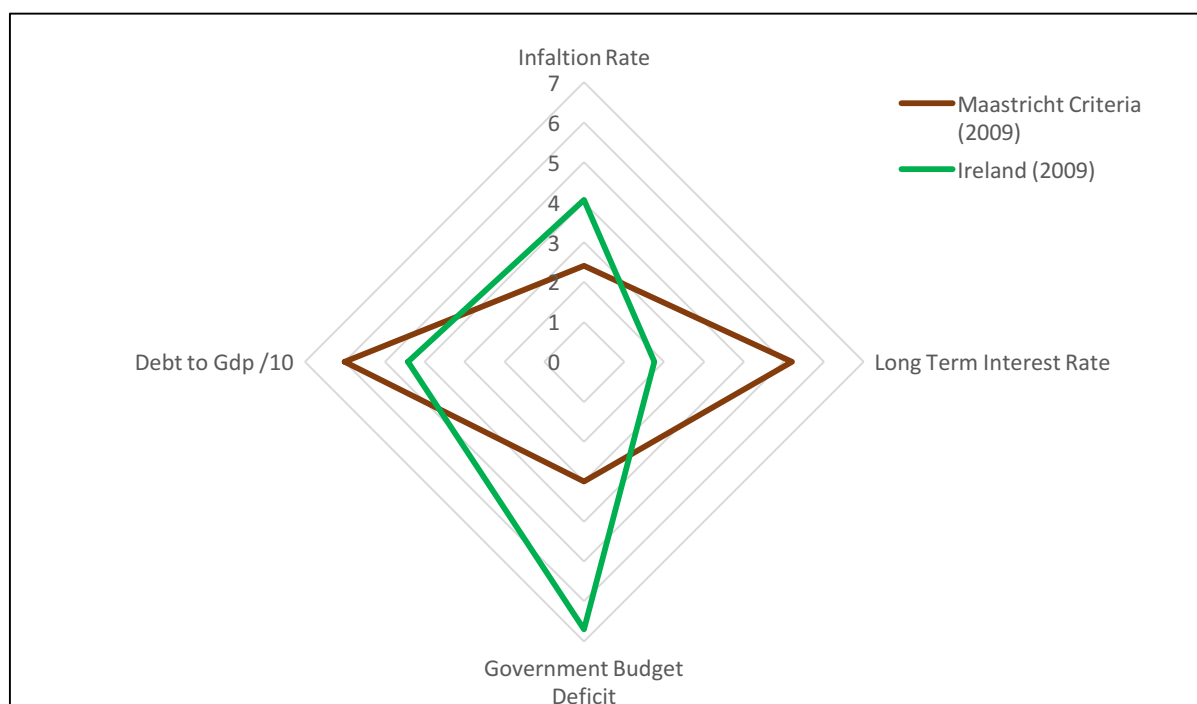


Table 4.1.1 Maastricht Criteria Indicators for Ireland in 2009

<i>Criteria</i>	<i>Maastricht Criteria (2009)</i>	<i>Ireland (2009)</i>
<i>Inflation Rate</i>	2.4	4.06
<i>Long Term Interest Rate</i>	5.2	1.75
<i>Government Budget Deficit</i>	3	-13.8
<i>Debt to Gdp /10</i>	6	6.1

¹⁶ Data: Eurostat

Figures 2.1.1 and 2.1.2, previously, showed the radial graphs of Maastricht Criteria vs Ireland and Greece when they joined the Eurozone. Figures 4.1.1 and 4.1.2, show the radial graphs for both countries in 2009 compared to the Maastricht criteria. This is to show the difference between each country, both pre and post crisis. Ireland, has a tremendous budget deficit which is skewing the radial graph down. It also shows a dramatic reduction of long term interest rate although the debt to GDP ratio is nearly identical to the Maastricht criteria. Moreover, the inflation rate is nearly double of what it should be, possibly due to wage pressures.

Figure 4.1.2 Maastricht Indicators for Greece in 2009¹⁷

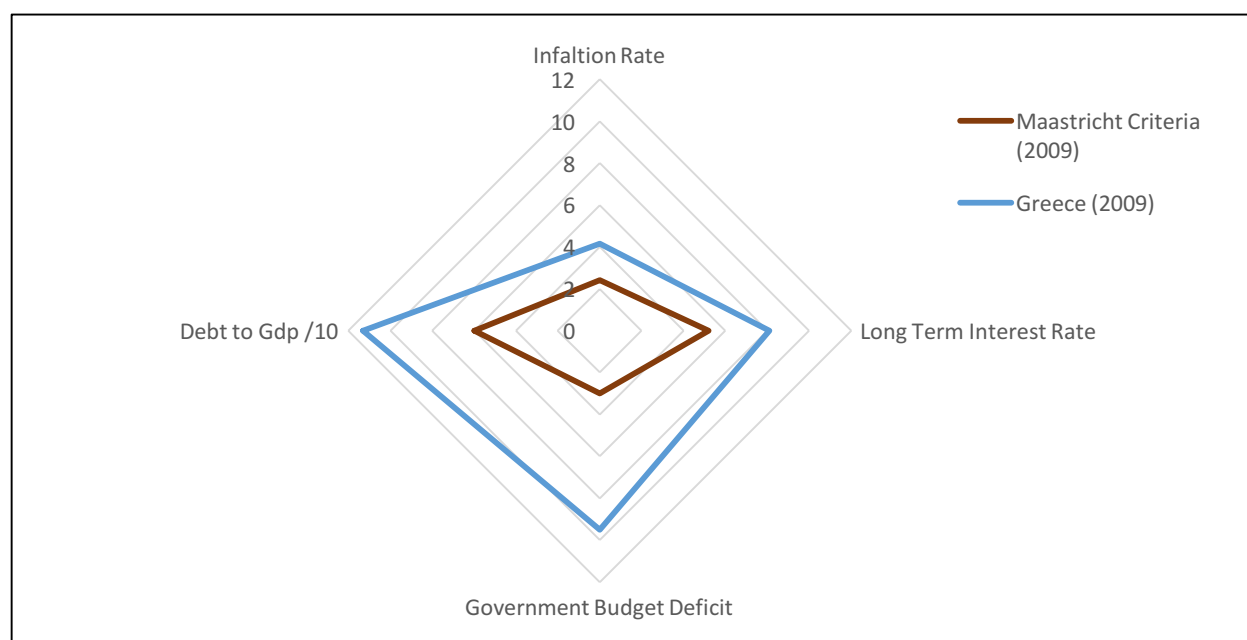


Table 4.1.2 Maastricht Indicators for Greece in 2009

<i>Criteria</i>	<i>Maastricht Criteria (2009)</i>	<i>Greece (2009)</i>
<i>Inflation Rate</i>	2.4	1.21
<i>Long Term Interest Rate</i>	5.2	8.1
<i>Government Budget Deficit</i>	3	-15.2
<i>Debt to Gdp /10</i>	6	12.67

¹⁷ Data: Eurostat

Figure 4.1.1 shows an even more altered pattern compared to Figure 4.1.2. Greece is clearly the worse scenario with a debt to GDP of over a double of the Maastricht criteria, a budget deficit five times more exacerbated, a higher long term rate of interest and a lower inflation rate than the criteria. The most alarming indicator is the debt to GDP. Although it was 126.7% in 2009, it kept climbing to a total of 178.6% by 2014.

We now cutover to 2013, post crisis years as it's important to understand the differences between those two economies and the region's strongest economy Germany in terms of progression.

Table 4.1.3 Maastricht Criteria Indicators for EU, Ireland, Greece and Germany in 2013¹⁸

<i>Criteria</i>	<i>Maastricht Criteria</i>	<i>Ireland</i>	<i>Greece</i>	<i>Germany</i>
<i>Inflation Rate</i>	2.7	0.2	-1.71	1.43
<i>Long Term Interest Rate</i>	2.96	3.828333	10.05417	1.57
<i>Government Budget Deficit</i>	-3	-5.658083927	-12.44587787	-0.110535234
<i>Debt to Gdp /10</i>	6	12	17.5	7.84

The table above shows the Maastricht criteria, Greece, Germany and Ireland in 2013. It's easy to see that the country that has the closest values to the Maastricht Criteria is Germany. With the exception of debt to GDP and inflation rate, Ireland also has the closest values to the Maastricht criteria. However, Greece clearly seems like an outlier. It has the highest debt to GDP, government budget deficit, deflation and highest long term interest rate in 2013.

¹⁸ Data: Eurostat

4.2 Why Greece and Ireland aren't a good comparison

Ireland and Greece are clearly two very different countries with very different economies. There is a large difference in the population levels, the tourism, work ethic, culture, exports, imports, previous familiarities with the crisis, banking sectors, monetary financing, and that subjective element called the 'innate perseverance and resilience of its citizenry how they reacted to adversity' etc. A comparison between both seem plausible; Ireland appears to be a good role model for Greece. However, there is a need of rigorous economic analysis to comprehend both the economies.

Ireland's austerity 'success' should not be seen as a role model for the Greek crisis. Throughout Europe, Ireland is held up as an example, not just Greece but for all of the European nations that are facing economic crisis. The Irish took the pain, engaged with the Troika and worked their way out of the crisis to become one of the fastest growing economies within the EU. Ireland became the first crisis-stricken country to exit the Eurozone bailout program three years after being saved from bankruptcy by the Troika with a €67.5 billion loan. The crisis was described as the country's worst economic period since the notorious potato famine. To be honest Ireland learned little from the speculative boom and bust, barely addressed its deficits in productive sectors, and in a way ignored or accepted stoically the profound social costs that it imposed on itself. Moreover, Ireland's finance minister stated that there must not be a repeat of debt-fuelled property spree that brought the Celtic Tiger boom to a disastrous end.

"We cannot go mad again," said Michael Noonan. The Irish success sends an important message around Europe that with determination, and support any country can emerge stronger than it was before the crisis. Ireland implemented all the spending cuts and structural reforms that were required under the IMF bailout terms. Ireland has raised a sufficient amount of debt to independently fund itself into 2015 with over €20 billion. Moreover, as Noonan said: "This is not the end of the road. This is a very significant milestone on the road". He stated that the austerity measures must continue to drive down the country's enormous amount of debt.

The European Commission stated in its final report on Ireland's progress under the rescue scheme that "with public debt level at 124% of the GDP in 2013, Ireland needs to continue with fiscal

consolidation, reduce private-sector debt overhang, and improve bank profitability to revive lending.”

However, Ireland had in actuality commenced its austerity programs in 2008 and accelerated it with four budgets in two years. When the Troika intervened in Ireland, they did not have to impose a proper program, hand down commands or enforce reforms. The Irish government itself was pushing its version of austerity measures for two years before the Troika. Moreover, the Troika intervened in Ireland directly to fund an already existing austerity program; they successfully became austerity’s lender of last resort (Woodruff, 2005).

In Ireland, over €30 billion in austerity measures were introduced, including mostly public spending cuts and some tax increases compromising of over 15% of GDP. However, as expected austerity led to the slow demise of the Irish socio-economic life, employment, resulted in poverty, liquidations, suicides. More than 32% of people lived in deprivation according to the Irish government, and one in ten people were at risk of food poverty. A falling unemployment rate led to an increase in emigration, one in seven young people have left the country.

Michael Taft of The Guardian states that Ireland, alone, is the beneficiary of:

...a fairly secret but very real policy of monetary financing. While potentially illegal and certainly opposed by ECB and EU policy, Ireland is actually paying off a substantial part of its debt to itself: Ireland’s Central Bank took over the debt of the infamous Anglo Irish Bank, whose speculative excesses cost the Irish economy nearly 20% of GDP when it became insolvent. (2015)

It is well known that the Irish economy had taken on debts by taking over the liabilities previously owed by privately-owned banks, a majority from the Irish Bank Resolution Corporation (IRBC). When the Anglo Irish Bank and Irish Nationwide Building Society got into financial difficulties a few decades ago, the Irish Central Bank (ICB) provided their joint successor, IRBC with the emergency lending assistance program (ELA), which acts as a lender of last resort facility at a national level. The cost of taking on these liabilities was around 22% of the Irish nominal GDP in 2011. Ireland’s debt-to-GDP ratio in 2011 was 107 percent, however, without this event, it would have been roughly 85 percent, in line with the Eurozone average. (Whelan, 2012). A significant amount of the funds provided by the

government to the IBRC was used to pay off bondholders. It is worth stressing, however, that the amount of IBRC bondholders remaining is small when compared with the total cost of bailing out these institutions (Whelan, 2012).

The ELA is a form of a loan from the ICB with a penalty interest rate. However, since the money is created outside the Eurozone system, the ECB monitors it extremely closely. Moreover, when the government commenced restructuring banking assets, it needed to provide the Anglo-Nationwide successor with assets that it could pledge as collateral for the ELA which came in the form of a promissory note. On the first week of February 2013, the Irish parliament voted to liquidate the IBRC and restructured the promissory note into a series of long-term bonds with maturities of between 25 to 40 years with lower interest rates. The main difference is that debt repayment is no longer front-loaded. Without the rescheduling of promissory notes, the Irish economy would have fallen into an uncertain debt trap. Moreover, the control on inflation would lead to the control of the debt. This is known as monetary financing (Münchau, 2013).

If Greece had a similar deal, the cost of their debt would plummet. Under the terms of the Irish bailout, the government was at liberty to implement whatever tax measures and spending cuts it deemed fit for deficit reduction. Greece had no such freedom or autonomy. If Greece were to be properly compared to Ireland, it's vital they too experience such fiscal autonomy and experience monetary financing for its mountain of debt.

In our example, we have two countries, Greece, and Ireland. One can raise money at an interest above 1.5% from borrowers; the other remains locked out of markets. One has escaped austerity; the other is still stuck with it. Ireland entered the crisis with a low debt level. Greece's debt was already at danger levels, way above the 60% debt-to-GDP ratio even before 2008. The Irish banks satiated itself with available international funds post-euro, the availability of cash allowed the Greek government to keep borrowing, regardless of their high debt.

However, Ireland's success also requires a discussion about the effectiveness of its response to financial crisis. The eight austerity budgets between 2008 and 2013 involved €18.5 billion in public

spending cuts and €12 billion in tax revenue measures. Key public services such as health, housing and security have diminished in quantity and quality. Public service employment have been reduced by 10%; health spending has been cut by approximately 27% since 2008 resulting in a massive failure of emergency services as well as general medical healthcare in Ireland. The Irish case actually points to the economic and human need for debt relief and alternative approaches to fiscal crisis.

If we take a look and compare the historical data since the 1970s for Ireland, Greece, and Germany--there is a stark difference. The table below shows the different GDP averages of the three economies between 1970-79 and 1980-89.

Table 4.2.1: GDP averages between 1970-89 for Germany, Ireland and Greece¹⁹

<i>Country/ Year</i>	<i>1970-89</i>	<i>1970-79</i>	<i>1980-89</i>
<i>Germany</i>	\$698,097	\$415,961	\$840,233
<i>Ireland</i>	\$15,693	\$8,349	\$23,036
<i>Greece</i>	\$30,939	\$20,862	\$41,017

Analyzing this, it's clear that Germany was and remains the strongest nation in the Union economically and there is hardly a comparison with the other two countries. However, as many critics have stated previously that Ireland has been a stronger economy historically though is not entirely accurate. In the 1970s, there were a series of major Irish bank strikes between 1966 to 1976 affecting the banking sector. Moreover, there was an oil crisis of 1973 and 1979. By the 1980's Ireland was referred to as the 'sick man of Europe' Furthermore, the 1980s to early 1990s was known as the era of political instability and corruption with power alternating between Fianna Fáil and Fine Gael until 1987 where Ireland faced the "Tallaght Strategy", with economic reform, tax cuts, welfare reform and a change in current spending policies. Throughout this period, they had continuous support from the European Union. As Greece entered the debt crisis, it did not have the same level of support, even if Greece has the biggest sovereign debt default in history.

¹⁹ Data from National Account Statistics, United Nations (1993)

Another aspect to look at is the difference in tourism and people. The table below records information of tourism in the European Union according to the tourism highlights by the UNWTO (2015) about international tourist arrivals in the European Union in 2014 as well as the international tourist receipts in the same year.

Table 4.2.2: Tourist Arrivals and Tourism Receipts in 2014 for the European Union²⁰

<i>Destination</i>	<i>International Tourist Arrivals 2014 (1000)</i>	<i>International Tourism Receipts 2014 (US \$million)</i>
<i>EUROPE UNION</i>	458,740	422,873
<i>Northern Europe</i>	62,911	74,133
<i>Ireland</i>	8260 ²¹	4,866
<i>United Kingdom</i>	32,613	45,262
<i>Western Europe</i>	164,936	153,632
<i>Austria</i>	25,291	20,559
<i>France</i>	87,300	55,402
<i>Germany</i>	33,005	43,326
<i>Southern/Mediterranean Europe</i>	163,092	159,254
<i>Greece</i>	22,033	17,793
<i>Italy</i>	48,576	45,545
<i>Spain</i>	64,995	65,187
<i>Portugal</i>	9,323	13,808

The area with most tourism are the Southern states of the European Union followed by Western European Union states and then Northern European states. However, we shall focus on a select few countries. Ireland accounts of 13.1% of Northern European Union arrivals while the United Kingdom boasts of a mammoth 51.8%. In Western Europe, Austria has a share of 15.3%, Germany consists of 20% while France takes the lion's share of 52.9%. Lastly, in the Mediterranean/Southern Europe, Portugal and Greece have the small shares of 5.7% and 13.5% respectively, while Italy and Spain bag the honors with 29.8% and 39.9% respectively. This shows a stark difference between tourism in the countries. The most

²⁰ Data from UNWTO (2015), tourism highlights.

²¹ Note: Data for Ireland in 2014 is not available thus data is used from 2013

visited locations are the United Kingdom (mostly England), France, Germany, Spain and Italy. Greece, which depends majorly on tourism, has had a very low amount of international tourist arrivals compared to the other countries. France, for example, has numerous cultural attractions and thus has the highest international tourist arrivals. Although, approximately 33.6% of all tourists arriving in Europe go to the southern hemisphere, only a small proportion go to Greece compared to Spain and Italy. When comparing Greece to Ireland, out of all tourists visiting the European, only 1.8% go to Ireland and 4.8% go to Greece. Regarding tourism receipts in 2014, 1.15% goes to Ireland and 4.2% goes to Greece whereas other periphery nations such as Spain and Italy have a higher amount of international tourist receipts of 15% and 10.7% respectively. This information shows the background on the tourist industry in Europe. This indicates a need for an increase in tourism in the periphery countries that are struggling the most. In essence one can argue that Greece and Ireland are far smaller but at least in the case for Greece one can argue that they have a huge potential to mine their significant historical importance and natural beauty as well

Now let us turn our focus on another crucial economic pillar, imports and exports.

Appendices 5Ai, 5Aii, 6Ai, 6Aii contain the bubble diagrams illustrating the structure of Greek exports, Greek imports, Irish exports and Irish imports respectively. There is clearly a stark difference in the size and composition of trade profiles between both the countries. When compared to the core countries, such as Germany whose primary export is manufacturing and vehicle, it's clear that neither Greece nor Ireland can easily create such a strong trade profile and unmatched manufacturing progress. However, in subchapter 6.1 we discuss the reason the Irish export side is gaining strength. In terms of trade profile, due to rising the international price of oil, there has been an increase in Greek exports related to oil. However, non-oil related exports are still declining in Greece as they are not as price competitive for competing nations.

4.3 Analysis of Greek and Irish Packages

A crucial analysis is the comparison of the Greek and Irish austerity packages. Appendix 7A and 7B show a detailed account of the austerity packages for both Greece and Ireland respectively. An analysis of both of the packages showed sheds some light into the situation.

Greece

The toughest austerity measures comprised of:

- An increase in taxes
- Luxury levies
- Major cuts in public sector wages
- Cuts in defense spending
- Cuts in education spending
- Decrease in social security
- Government privatization
- Retiring Civil Servants
- Major cuts in healthcare

On the 9th of February in 2010, Greece started off with a minor, warning package to limit their uncontrollable deficit. It was expected to save €0.8 million, freeze government employee salaries as well as a 10% cut in bonuses and cuts in overtime workers, public employees, and work-related travels.

Shortly after, a package was put into motion to increase the government income after the emergence of the Greek/German 10-year debt yield spread leading to the introduction of the “Economy Protection Bill”. The Economy protection bill was expected to save approximately €4.8 billion by reducing public wages, a cut in salaries and bonuses as well as an increase in VAT and other taxes. On the 23rd of April, 2010, the Greek government requested the IMF to activate their bailout package. The third austerity package thus

came as a result of the “First Economic Adjustment Programme for Greece” which aimed at saving €38 billion. In May, they reached their first loan agreement; Greece was to receive €110 billion with an interest of 5% (comparatively high for a bailout package).

In response to this agreement, Greece rolled out a staggering final round of austerity measures as described in Appendix 7A, which leads to nationwide strikes and massive protests leading to arrests, injuries, and even deaths. This continued to leading to higher taxes. The taxes on electricity was seen as one of the most problematic taxes according to Greek National Polls (Washington Post, 2015). People refused to turn on lights or use electricity to prevent paying extra money for electricity tax when a significant proportion of the population were facing pink slips or massive cuts in their disposable incomes. Everyone was affected by the austerity measures, yet the bottom 75% of the citizenry faced most of the consequences (including civil servants and retirees). The second bailout package was to prevent sovereign default, which lead to a loan of €100 billion and 50% debt reduction through the private sector involvement (PSI). As time progressed, there were more pink slips being handed out, higher taxes and even more civil unrest.

Ireland

The toughest austerity measures comprised of:

- Increase in taxes
- Large benefit cuts to seniors
- Cuts in public sector wages
- Cuts in healthcare
- Cuts in social security

It is apparent that from the very beginning of the crisis, the Irish government failed to protect vulnerable people or ignore that section. Approximately €30 billion of austerity measures occurred since

the beginning of the crisis. As the first country to enter into recession, investors fled due to fear of its debt problems. In a belated attempt to convince investors to tackle its debts, in 2010 the Irish government described a plethora of new measures aimed to drive sales taxes up, lower the minimum wage and reduce government payrolls but as a result plunged the economy into a deeper economic crisis.

Ireland negotiated an estimated €80 billion bailout, €10 billion in spending cuts and €5 billion in taxes over four years to reduce a budget deficit that is ten times the Eurozone limit. This in a way backfired as it initially weakened the economy. Between 2008-2011, Ireland- suffering from a massive banking crisis, had already slashed roughly 9% of its GDP. By the end of December 2011, the authorities effectively kept the budget on track to meet its 2011 targets. Appendix 7B states Shinohara, the Deputy Managing Director of the IMF stating that “Irish authorities have maintained resolute implementation on their economic program...economy is showing signs of stabilization and financial market conditions have recently...however, (Ireland) faces a weakening in trading partner growth.”.

The fifth review under the extended agreement with Ireland by the IMF states the changes in Irish recovery. Irish authorities continue to advance their healthcare system, downsize their banking system and as well as accomplishing disposition of their foreign assets were accomplished. This was seen as a comprehensive strategy for insolvency reform. Despite weaker domestic demand, there was an increase in employment and growth. The twelfth and final review under the extended fund facility arrangement for Ireland was published on December 13th, 2013 and was due to expire on the 15th of December. Due to their strict and steadfast policy implementation, the EU-IMF supported program was successful. Ireland recovered from a notorious banking crisis and significantly improved its fiscal position. A range of economic indicators suggest a slow but steady recovery although there are significant challenges remaining.

Comparison

A preliminary analysis of the austerity packages bring light to the differences both economies faced. Greece was decimated by both spending cuts as well as tax increases. Furthermore, as discussed later in the project, these austerity measures destabilized the economic welfare for the Greek economy.

Even according to the Irish CB Economist, Greece –without a doubt– ran the toughest austerity measures in the Euro area. Hence, regardless of backlash faced by the Greek economy about their inadequacy of the Greek reforms, Greece did have, the most ambitious goals as far as austerity measure went but their hand was forced due to their being the more problematic situation. The Greek packages compromised higher taxes, more spending cuts and more forced unemployment than the Irish packages. Ireland was given an ultimatum and by appropriate policy implementation they succeeded as the first to enter and first to exit the crisis. However, Ireland entered the crisis with a large deficit due to the banking sector- compared to Greece, Ireland had much easier circumstances to manage entering the crisis in part to their starting austerity measures of their own volition in the immediate years before the crisis.

Chapter 5

The Cambridge Keynesian and Modern Money School Literature

The central idea of the Maastricht Treaty is that the EC countries should move towards an economic and monetary union, with a single currency managed by an independent central bank. But how is the rest of economic policy to be run? As the treaty proposes no new institutions other than a European bank, its sponsors must suppose that nothing more is needed. But this could only be correct if modern economics were self-adjusting systems that didn't need any management at all.

-Wynne Godley (1992)

This project uses key concepts from the Modern Monetary Theory (MMT). MMT is a relatively new approach that builds on the insights of John Maynard Keynes, Georg F. Knapp, Karl Marx, Abba Lerner, A. Mitchell Innes, Hyman Minsky, Wynne Godley, Randall Wray and many others. There is an importance in discussing this theory for the purposes of this project as it spans across a vast array of sub-disciplines of economics such as: history of thought, economic history, monetary theory, unemployment, poverty, finance, sectoral balances, economic cycles and government policies (Wray, 2012). MMT has made various contributions to our understanding of the relationship between the treasury, and central bank, the importance of understanding the government finance, taxation, the liabilities pyramid, and others. It places large importance on reducing unemployment and maintaining price stability and relatively little on targeting government debts or deficits.

After the global economic crisis, household activity retrenched, leading to a sharp increase in savings and a slow down in economic growth. The high propensity to save was due to a significant level of unemployment and lower incomes of those lucky enough to keep their jobs. This led to a rapid increase in budget deficits due to the automatic stabilizers. In Europe there was a push to reduce the government sector deficit toward more acceptable levels in lockstep with Maastricht criteria. This was accompanied by a reduction in private sector surpluses and an increase whenever possible in current account surpluses. Periphery countries such as Ireland and Greece remained net importers for some time, meaning that the reduction in the private sector balance had to be that much greater. Throughout this process this increase in taxes and reduction in spending to tackle rising deficits proved to be detrimental to economic growth.

Sectoral Balances

This project studies the problems of a common currency by analyzing the relationship between three sector balances elaborated in chapter 5. The crucial accounting principle that motivates this research is the following (Godley, 1999):

$$\text{Domestic Private Balance} + \text{Domestic Government Balance} + \text{Foreign Balance} = 0$$

This identity illustrates that when one sector runs a budget surplus than at least one other sector must run a deficit. Similarly, if a sector is running a budget deficit, at least one other sector must run a surplus. Moreover, the liabilities of one sector must also equal the financial assets of the remaining. One sector cannot issue debt if another sector is not willing to take up or accumulate these debt instruments. Furthermore, the three sector balances must always balance out to zero, meaning that a change in one of the balances is impossible without a corresponding balancing change elsewhere.

Another goal of national accounting is to see the relationship between different sectors. Wray (2012) uses the bathtub analogy to arrive at the National Income and Products Accounts accounting identity is as follows:

$$S \equiv (G - T)$$

S= Private sector savings

G=Government expenditure on goods and services

T= Taxes

Private sector savings, by definition, is true by identity and equal to the size of the fiscal deficit. After adding the firms to the household sector and the foreign sector, which Wray describes as ‘adding another faucet,’ the identity becomes:

$$S \equiv (G - T) + I + NX$$

I= Private domestic investment

NX=Net Exports

Through the sectoral balances the MMT can also illustrate the well known Keynesian “paradox of thrift” effect. Household income determines spending at the individual level but in the aggregate, total spending determines total income. If due to an economic crash (for example as in Greece), households spend less in order to save more, aggregate consumption would fall. Firms would reduce output, lay off workers and cut wages, leading to lower disposable income. Keynes’s theory states that trying to save more by reducing aggregate consumption will reduce incomes.

The first pillar of the modern money approach is the sectoral balances, the second pertains to the nature of the currency. The Eurozone is an example of a non-sovereign currency regime where member states of the Eurozone are users instead of issuers of the currency (the Euro). Historically, there have been very few examples where politically sovereign nations have shared a common currency.

The EMU countries abandoned their own currency in favor of using the Euro. Monetary policy including the overnight interbank interest rate is set by the ECB for the Eurozone as a whole. Domestic fiscal policy is still left in the hands of individual nation states but the policy space is drastically reduced by separating the individual fiscal authorities from the monetary authorities. Fiscal policy was limited by the design according to the Maastricht Criteria (Wray, 2012). This was a disciplinarian action to assure that member states were kept in line. However, it is important to note that some EU member’s budget deficits moved beyond the Maastricht limits due to external conditions.

What happens if a whole country – a potential ‘region’ in a fully integrated community – suffers a structural setback? So long as it is a sovereign state, it can devalue its currency. It can then trade successfully at full employment provided its people accept the necessary cut in their real incomes. With an economic and monetary union, this recourse is obviously barred, and its prospect is grave indeed unless federal budgeting arrangements are made which fulfil a redistributive role... If a country or region has no power to devalue, and if it is not the beneficiary of a system of fiscal equalization, then there is nothing to stop it suffering a process of cumulative and terminal decline leading, in the end, to emigration as the only alternative to poverty or starvation. (Wynne Godley 1992:176)

As Godley (1992) states above, a sovereign currency nation does not have the straightjacket of Eurozone nation states when a crisis hits. When the monetary union was formed, states abandoned their own monetary unit in favor of a common unit. However, this abandonment deprived them of control over their own money supply (Afxentiou, 2000). They yielded control to a central bank, ECB, whose concern was the common interest of the entire European Union rather than the economic struggles of an individual economy.

Unlike the American economy, where the states are required to submit their balanced budgets which at the end of the fiscal year may either be lower or higher than anticipated, the different states (48 states) are able to borrow, use bonds and tax revenues to service debt. The European Union, tried to reduce the possibility of debt problems among their nations by using guidelines stating that no national government should run a budget deficit greater than 3% of the GDP and no government debt higher than 60% of the GDP. The main difference is that in the US there is counter-fiscal policy for the country as a whole where the central bank will buy government debt as needed basis. No such mechanism exists in Europe. The MMT scholarship had accurately predicted that the structure of the European Union would automatically lead to financial crisis, this, of course became clear when Greece and Ireland faced the brunt of the global financial crisis.

As of today, the financial crunch still percolates throughout some of the periphery countries. After the GFC, these countries faced severe debt problems. The markets pushed their interest rates on debt higher than GDP growth rate (Wray, 2012) leading to intervention by the Troika causing a lot of complications between the periphery states and the core countries. Nations such as Germany, Finland, Netherlands and France often blamed the “profligate” neighbors that reportedly ran ‘irresponsible fiscal policy’ as well as having irresponsibly high debt levels (Wray, 2012). The problem, however, lies with the institutional design.

Figure 5.1.1 Government Debt as a percentage of GDP, 1995-2014²²

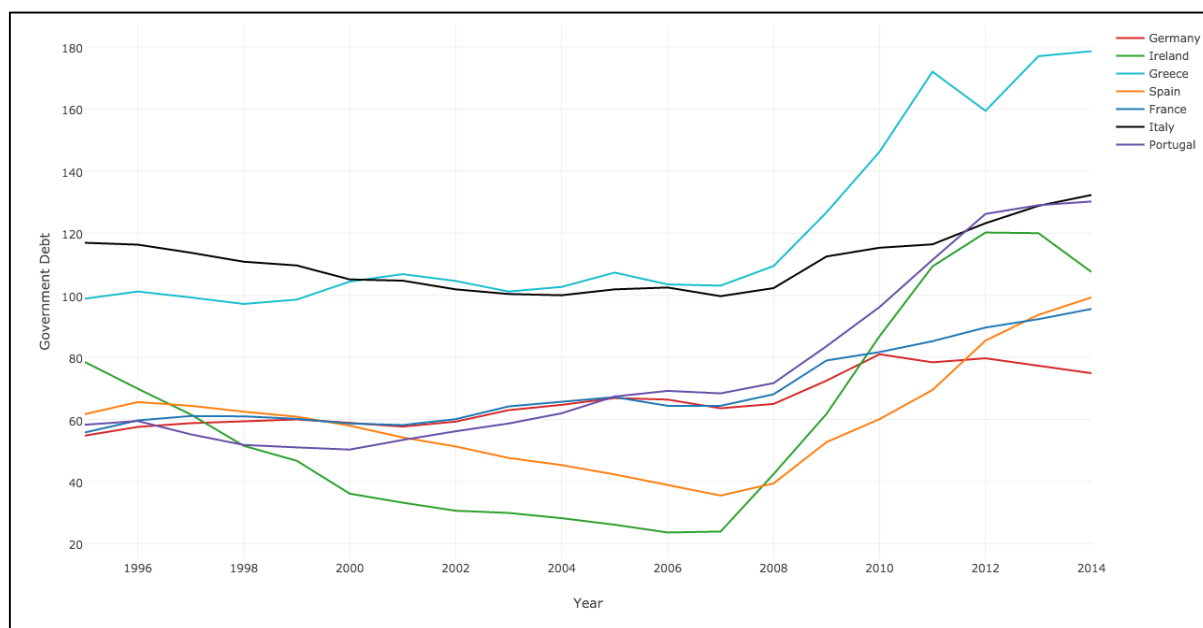
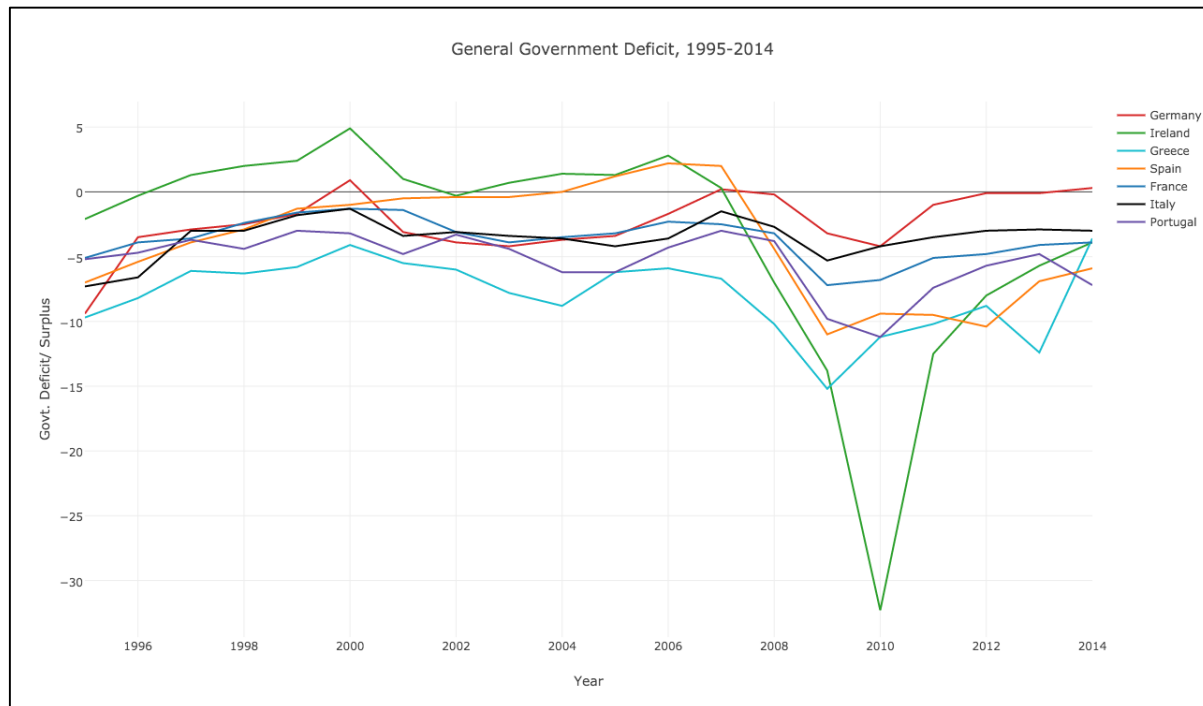


Figure 5.1.2 General Government Deficit, 1995-2014²³



²² Source: Wray (2012). Data: Eurostat

²³ Source: Wray (2012). Data: Eurostat

Figures 5.1.1 and 5.1.2 above show total government debt and deficit as a percentage of GDP respectively. This is done to give an idea of the massive differences between the core and periphery countries. Italy, Portugal and especially Greece had a historically higher debt to GDP than what was allowed by the Eurozone criteria. Greece, in particular, manipulated the budget numbers and entered under false pretenses. Figure 5.1.2 shows Ireland having the historically largest deficit²⁴ which will be examined through our sectoral balances framework. Table 2.1.2 (see chapter 2) showed that these countries had difficulty fulfilling their Maastricht criteria which raises a question: were some countries doomed from the beginning?

Since each nation has adopted the Euro, the exchange rates were fixed among countries within the monetary union. Greece, Spain, and Italy, for example, were less successful at controlling inflation, especially wage inflation compared to the core countries (Bruegel, 2011). As a result, they ran constant trade deficits, especially with Germany. Wray discusses the importance of grasping the concept of MMT to fully understand the situation in Europe.

Germany could (rightfully) point to “profligate” spending by the government and private sector of Greece, and Greece could (rightfully) blame Germany for its “mercantilist” trade policy that relied on trade surpluses. Germany was able to keep its budgets deficits low and its private sector savings high, by relying on its neighbors to keep the German economy growing through exports. But that meant, in turn, that its neighbors were building up debts- both public and private- and eventually markets reacted to that with credit downgrades. (Wray 2012: 183)

As Wray states above, there is no individual culprit. The European Union itself as an establishment was flawed from the very beginning. The stark difference between the core and periphery economies running under the same monetary policy and currency itself was the biggest problem. Further analysis of sectoral balances for Greece, Ireland and Germany is offered in the following chapter.

²⁴ Note: large deficit due to banking crisis, elaborated in the Irish sectoral balances

Chapter 6

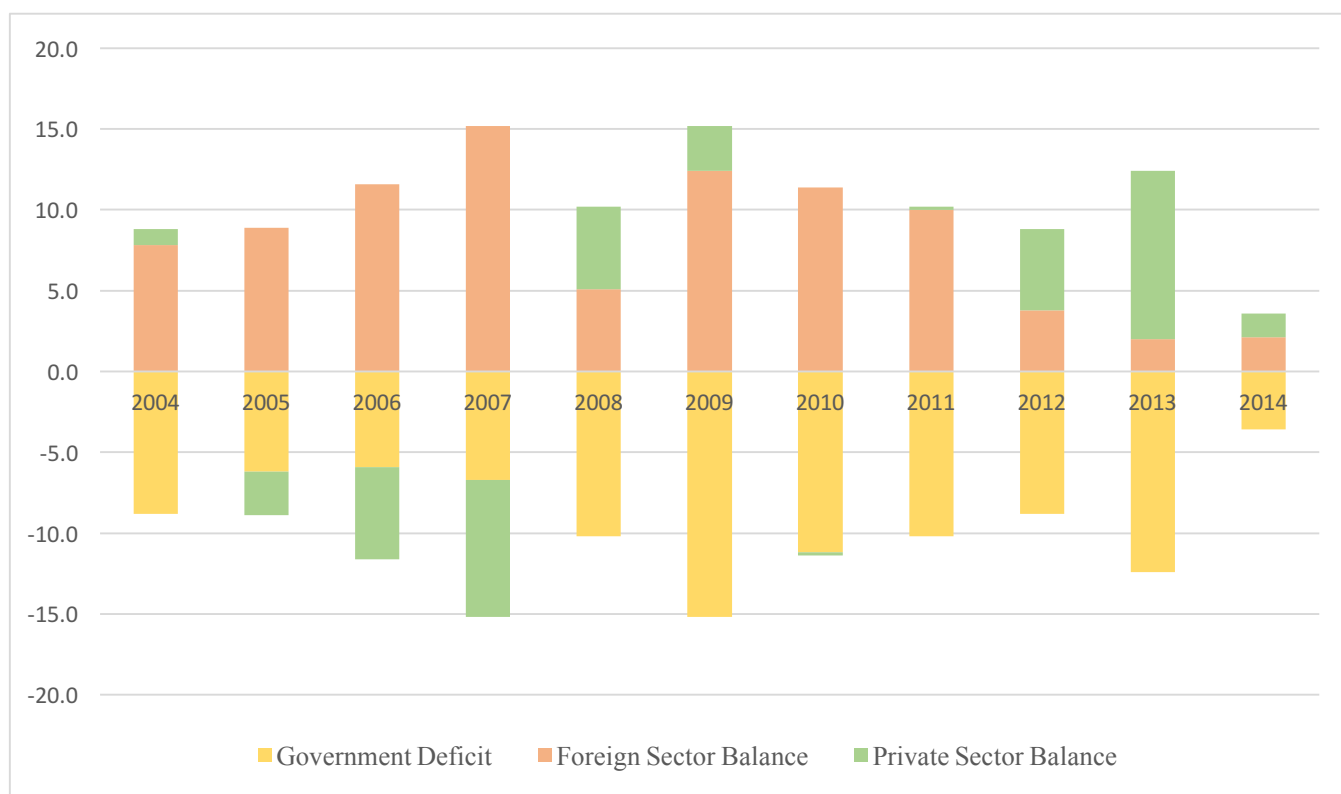
The Sectoral Balances

The sectoral balances approach is essential to understand the weaknesses and fragility of other financial systems. In this section, we calculate the sectoral balances for Greece and Ireland as well as represent them using the Parenteau model. It is impossible to fully study public debts and deficits in isolation from the private sector financial conditions. The sectoral balances allow us to explore this connection as we study the economic conditions. We stress the importance of the foreign position of each country in meeting deficit criteria.

6.1 The Three Sector Balances

6.1.1 Greece

Figure 6.1.1: Greece Sectoral Balances between 2004-2014²⁵



²⁵ Data: Eurostat

The sectoral balances for Greece perfectly illustrate the fact that Greece cannot meet its external debt commitments based solely on the imposition of austerity measures. As the IMF proposed to the government to cut down on their deficits, the Greek private sector (households and firms) had to pay the price. As seen, between 2004 to 2011, the foreign sector surplus shows the position of the Greek economy as a net importer. Having a consistently large foreign sector surplus and a lower private sector balance through the mentioned years (except 2008) illustrates the reality of the economy. They spend more on foreign goods (from countries such as Germany) compared to having a large production of the same products domestically. Although Greece is still facing the backlash from the crisis, from the beginning of 2012, the private sector balance has been increasing moderately. This is because of the paradox of thrift, people have increased savings and reduced consumption. For Greece to become a net exporter, there needs to be a large decrease in the foreign sector balance and less of dependence on foreign goods and services. However, as we compare the Greek sectoral balances to the German sectoral balances, it's evident that Greece to become less dependent on imports. If Greece were to comply and implement all suggested structural reforms (such as health, tax revenue collection and energy reform) as well as improve the liquidity and financial conditions of the banking sector (OECD, 2016), there would be an increase in confidence leading to faster economic recovery.

6.1.2 Ireland

Figure 6.1.2: Ireland Sectoral Balances between 1999 and 2014²⁶



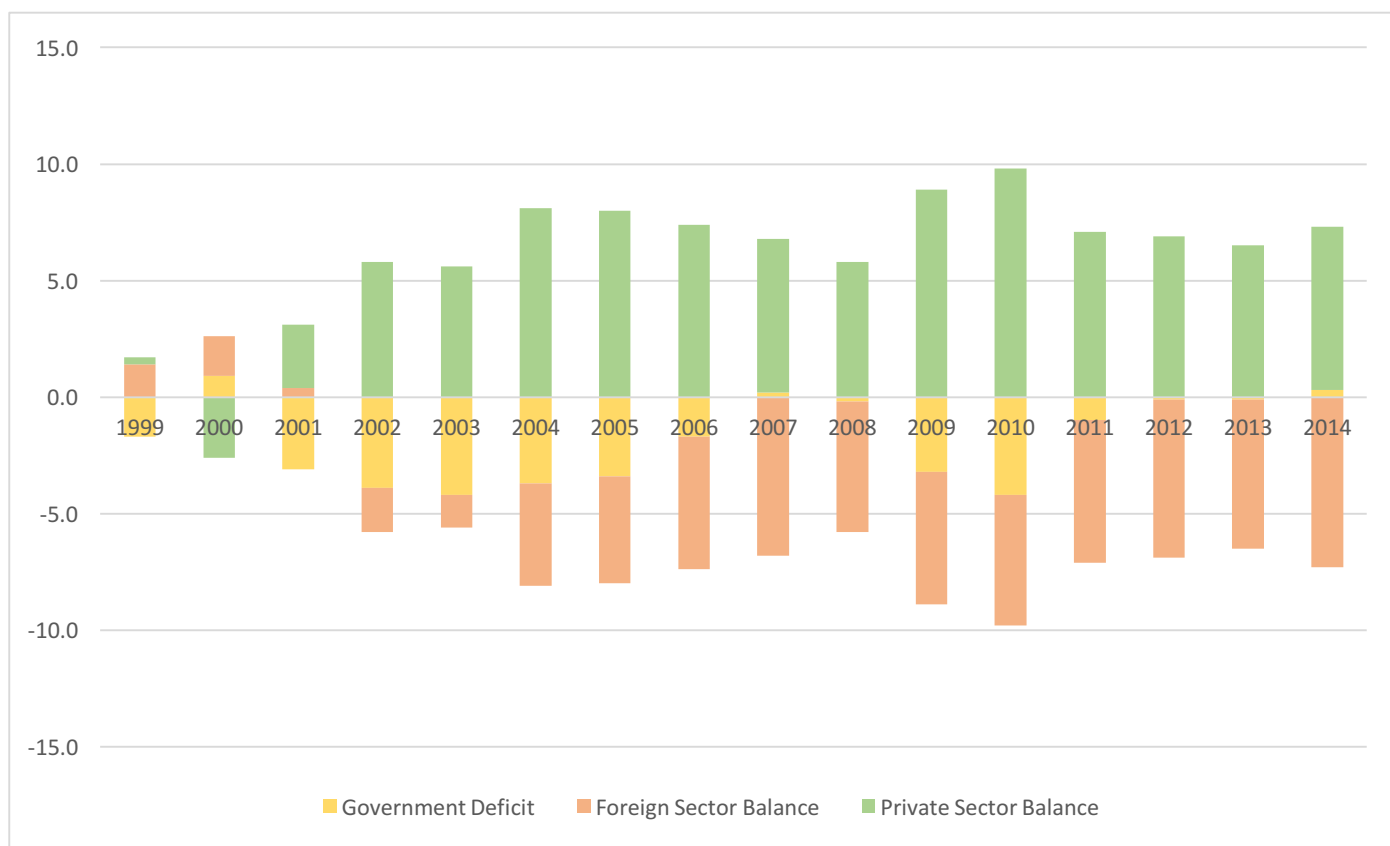
Firstly, the Irish sectoral balances contain an aberration. As mentioned earlier, in 2010 the government deficit quickly rose to -32.3% of GDP, drastically higher than the Maastricht Criteria. Many investors were skeptical as Ireland pledged to reduce its deficit drastically. The banking crisis in Ireland forced the government to require external assistance including approximately €35 billion, a large part of which was directed to the Irish banks to bulk up their balance sheet and mitigate any further problems with future loan losses as well as the cost of completely restructuring, preserving and shrinking their operations (World Economic Outlook, 2015). The main concern during the crisis years, especially in 2010

²⁶ Data: Eurostat

was whether revenue from the export side is strong enough to compensate the severe shortfall on the domestic side. Ireland, compared to Greece, has less of dependence on imports and is, therefore, less of a net importer. The foreign sector balance for Ireland seems to be smaller in size and has only faced notable surpluses between 2005 to 2012. Ireland clearly had an enormous deficit problem during crisis years, and although it has adjusted to its demand- it has a much smaller deficit of -3.9% which is heading towards the Maastricht Criteria limit. The Irish people have increasingly become more 'autonomous' and have bought domestic goods than foreign goods which can be seen as the foreign sector balance starts shrinking from 2007, and is now facing a foreign sector deficit, exploring benefits as a net exporter unlike Greece.

6.1.3 Germany

Figure 6.1.3 Germany Sectoral Balances Between 1999 and 2014²⁷



Germany's anemic pace of domestic demand growth and dependence on exports have hampered rebalancing at a time the many other euro-area countries have been under severe pressure to curb demand and compress imports in order to promote adjustment. The net result has been a deflationary bias for the euro area as well as for the world economy. (The U.S. Treasury 2013)

In response to the U.S Treasury's comments, 'The trade surpluses reflect the strong competitiveness of the German economy and the international demand for quality products from Germany' (Wall Street Journal, 2013). The German economy has consistently been running high current account surpluses for over ten years, especially after the introduction of the Euro in 1999. In 2013, the IMF advised 'stronger and more balanced growth in Germany...critical to a lasting recovery in the euro

²⁷ Data: Eurostat

area and global rebalancing.' Their notorious position as the European net-exporter is evidently discernible. The private sector balance consecutively runs surpluses. Current account surpluses in Germany are seen as a controversial feature of Germany's macroeconomic landscape since the reunification. It is evident from the sectoral balances that the private sector is strong. Perhaps this is why even through severe recession throughout the world, the German CA surplus just faced a small dent in the fourth quarter of 2008 to the first quarter of 2009.

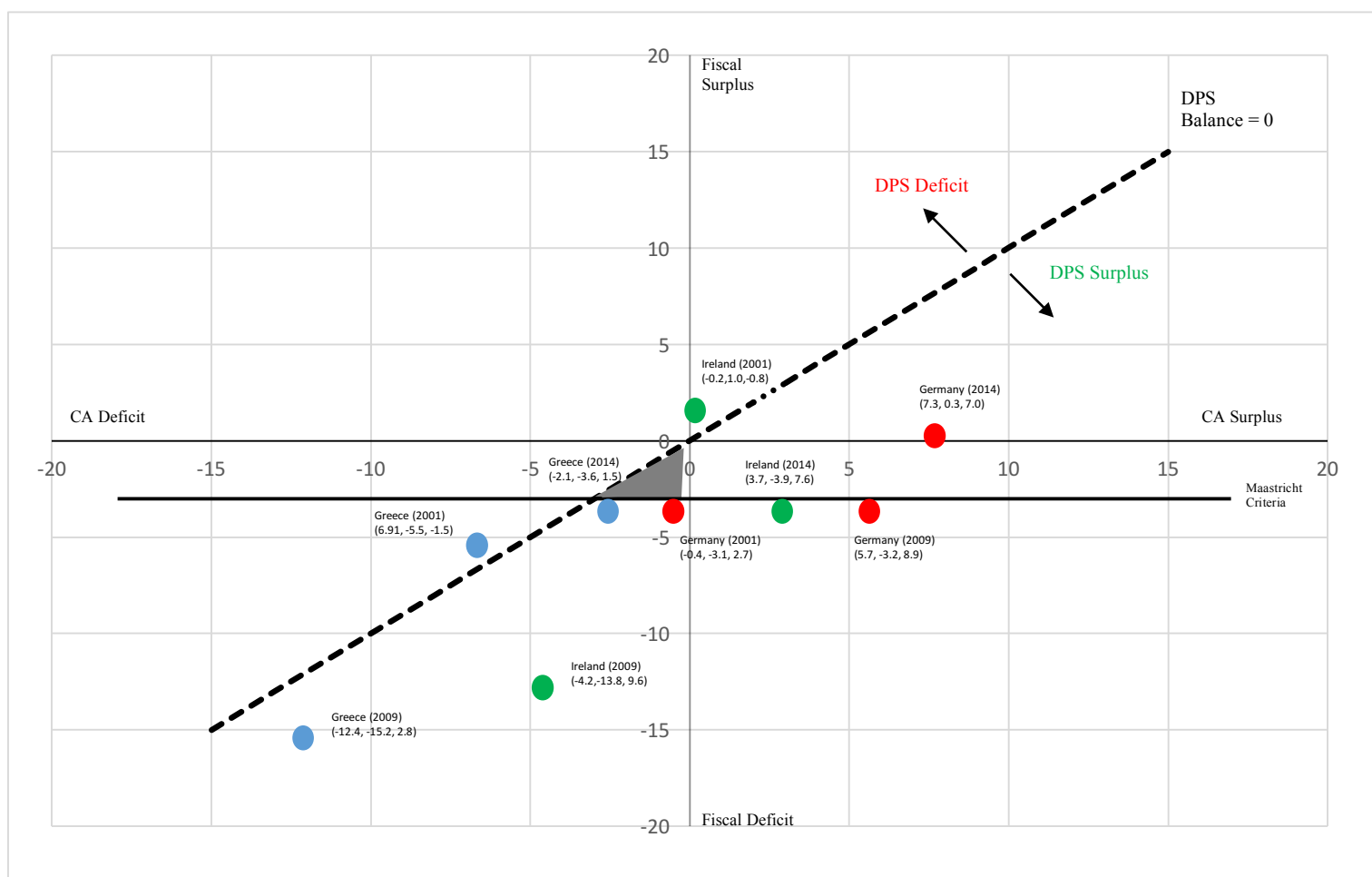
Moreover, capital flows to the Euro area fell abruptly, but the overall current account surplus quickly bounced back and reached its record peak of 7%. As a result, Germany became a major surplus country globally. Even though Germany has not had the need to implement such severe austerity measures, during the 'Hartz' reforms in 2003-2005, the German government implemented a 'far-reaching labor market deregulation...including a reduction in unemployment benefits and measures such as re-organization of labor placement and of job training schemes to improve job matching.' (Kollman, 2006) Germany itself, decided to impose certain structural changes and change in regular policies, however, Greece and Ireland did not have that freedom of choice. Greece was constantly told by the IMF to fix their budget, which led to a deeper crisis, which again led to the IMF implementing, even more, stricter cuts and taxes.

Greece's crisis involves long-term fiscal mismanagement with large systematic deficits, even during boom periods. The Irish crisis is a property bubble that burst, creating chaos for the banking system. Ireland had budget surpluses during the boom, largely based on revenues from the infamous property bubble. The next chapter further analyzes the Irish and Greek economies as we know it today, before providing policy implications.

6.2 The Parenteau Model

Economist Robert Parenteau develops the Parenteau Model to diagrammatically illustrate policy space countries have to achieve their fiscal objectives. Figure 6.2.1 below, represents the Parenteau curve for Greece, Ireland, and Germany in the years of 2001, 2009 and 2014. The Diagram includes a line indicating the Maastricht criteria. The Stability and Growth Pact was agreed to create a semblance of stability throughout the member states. However, ironically, it was the very source of the financial instability (Bibow, 2012). The Parenteau curve for Ireland, Greece, and Germany show that in 2001, Ireland and Greece were on the left of the 45-degree line which represented the range of all possible combinations where the domestic private sector is neither issuing financial liabilities nor accumulating assets. Ireland had a fiscal surplus as well as slight current account surplus whereas Greece, shortly after entering, had a current account and fiscal deficit. Germany, however, had a current account deficit of -3.1%, close to the Maastricht criteria and an acceptable fiscal surplus of 0.4%. As the crisis hit, Greece and Ireland were forced to implement austerity policies which have only caused their sectors to retrench, compress demand and cut wages. This causes a significant change in the position of Greece and Ireland on the diagram, especially Greece since its economy was hit the hardest. Greece now has both a current account deficit -12.4% as well as a fiscal deficit of -15.2%. Ireland has a smaller current account deficit of -4.2% and a fiscal deficit of -13.8% which increases tremendously over the third and fourth quarter heading into 2010 due to large bank bailout costs related to the Anglo Irish Bank and Irish Nationwide Building Society. Germany, however, had a current account surplus and a fiscal deficit of -3.2- again, close to the criteria limits. Evidently, Greece faced the brunt of the crisis in this particular scenario. Most recently, in 2014 Ireland's banking sector strengthened, leading to a positive current account balance as well as a fiscal deficit of -3.9, not far off from the Maastricht criteria. Germany had the economically strongest economy in 2014 and thus had both a current account surplus as well as a fiscal surplus.

Figure 6.2.1: The Parenteau Model for Greece, Ireland and Germany for 2001, 2009, 2014²⁸



The German economy raised a lot of concerns around the globe since other countries were going through deep recessions and crisis while Germany consecutively ran current account surpluses. As the net exporter, Germany would be expected to have a current account surplus and has since the introduction of the Euro. Moreover, specifically because of lower import spending, the German people would seem to be spending more of their disposable income on domestic goods rather than foreign goods. Furthermore, Ireland's location on the model also resembles the data points of an economy that is a net-exporter (except momentarily in 2009). Greece, however, is constantly a net-importer. However, accessing the cross-border financial account (the mirror image of the current account), depicts the savings and

²⁸ Data from Eurostat. Co-ordinates represent (Foreign Sector Balance, Government Deficit, Private Sector Balance)

investment decisions in Germany. (WEO, 2015). From this point of view, it indicates that the German economy has invested a relatively large percentage of its savings abroad. Moreover, because of the Euro, due to increased competitiveness of German products and its considerable global export outreach, Germany has an export sector which is the backbone of its 'robust economy'. Without strong export demand, the German economy would be much weaker and would be liable to have high unemployment rates. As a net importer, Greece will have current account deficits. Whereas Ireland benefits from a net exporter position. Export growth is beneficial to the current account as domestic demand and imports recover. Moreover, if compared to the German economy, their products are much less competitive and less likely to be purchased over a German good in foreign markets. The shaded triangle shows the little area where a country that is a net importer should reside in if they want to achieve savings for the private sector.

Chapter 7

Life After Austerity

This is taking place inside Europe. This is taking place inside a once great nation. The nation that invented democracy. We are on the edge of total social breakdown. And frankly, as far as the euro is concerned and the austerity measures are concerned, the medicine is killing the patient.

-Nigel Farage (2012)

This chapter focuses on analyzing both the economies after the financial crisis. Ireland has experienced a rebound while Greece is still trying to claw its way out of this crisis.

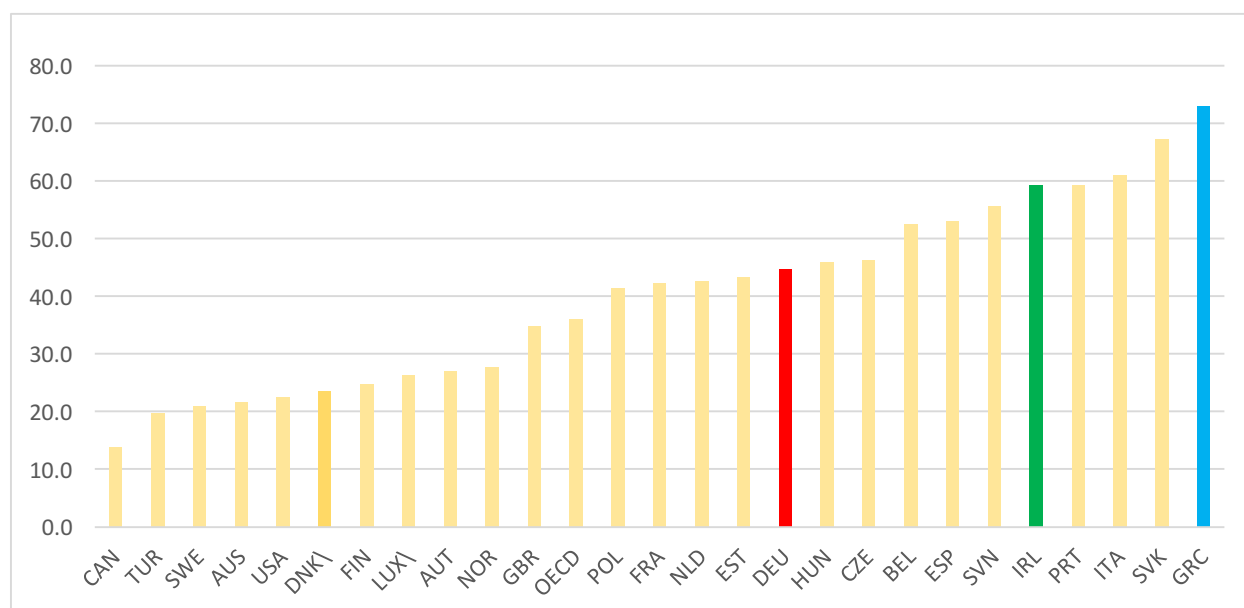
Figure 7.1.1: Economic Welfare Levels for Greece and Ireland compared to the OECD ²⁹



²⁹ Indicators are normalized to range between 0 and 10 (10 being best) according to the following formula (indicator value- minimum value)/ (maximum value- minimum value) * 10 Source: OECD, Better Life Index indicators 2015

Figure 7.1.1, above, is a radar diagram showing several indicators of economic welfare levels for Greece, Ireland, and the OECD. The green bar shows that Ireland has a higher value than the OECD average in many cases (for everything except income and wealth and jobs and earnings). Comparatively, well-being in Greece is significantly below the OECD average in several dimensions except education and skills as well as personal security. When we compare between Ireland and Greece, the blue line is almost always below the green line. The fact therefore is that Ireland is currently much more economically stable than Greece, whilst the latter has had damaging effects to social welfare and social psychology after undergoing multiple rounds tough of austerity measures. The Maastricht criteria constrains member states' fiscal policy by design. Ireland exited the crisis in 2013, however, their 'success' was in part due to the relatively small size of fiscal contraction, the rebuilding of private sector savings, and the return to a net-exporting position. Ireland was able to exit the crisis because there existed a smaller need for structural reform. Visibly, Greece's adjustment was much more severe and had more devastating effects on the economy. Moreover, the private sector financial position never fully recovered, and the country remained in a net-importing position little space to achieve its' fiscal objectives.

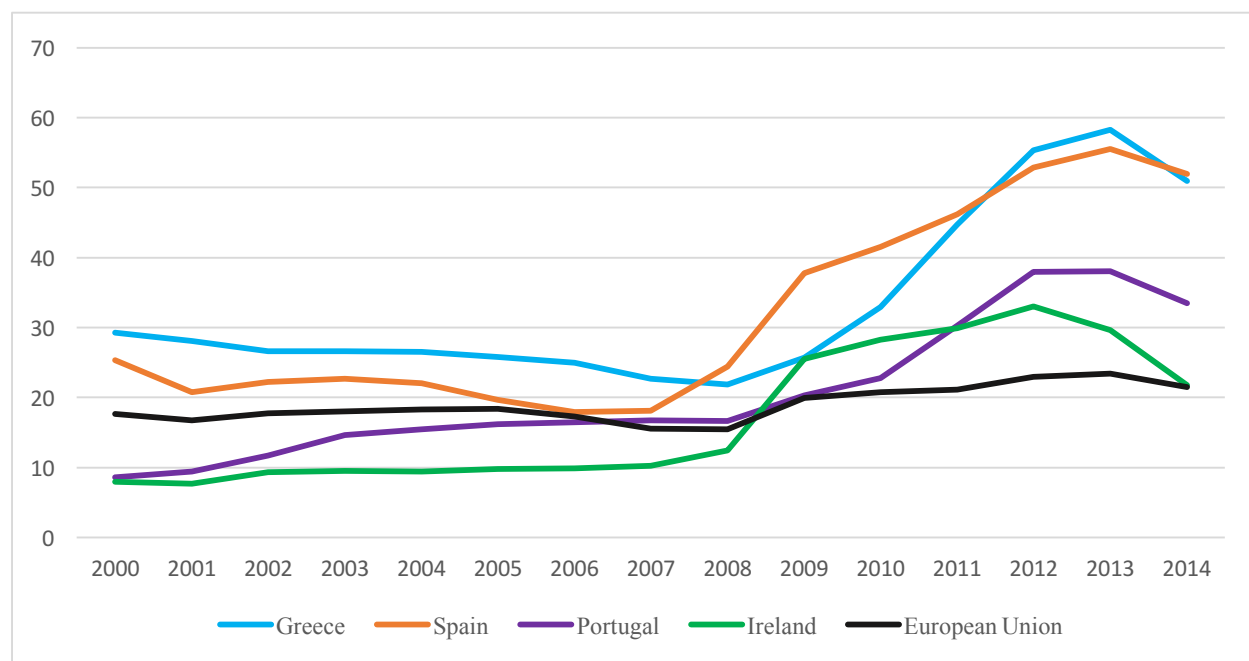
Figure 7.1.2: Long-term Unemployment for numerous OECD countries³⁰



³⁰ Data: OECD

Figure 7.1.2 above shows the OECD averages for the long-term unemployment. Again, Greece (blue) is at the top with 73%; Ireland is towards the higher side with 59.2% and to compare Germany is at 44.7%. A high rate of long-term unemployment can adversely affect families, people, and the economy. Depreciation of human capital increases as time passes. Potential wages the unemployed could have earned by finding a new job keeps decreasing their chances of getting a new job due to loss of skill and increasing employability. In the cases of countries that have had damaging effects of austerity measures such as Greece, Ireland, Spain and Portugal, the youth unemployment is steadily declining. Due to lack of mobility within the Eurozone, young people of these particular countries cannot automatically or easily find jobs. Figure 7.1.3, below, shows the slow increase in unemployment between 2000 to 2008 after which there is a constant increase in the periphery countries although the European Union average stays stagnant between 15-25% during the GFC.

Figure 7.1.3 Youth unemployment levels for Greece, Spain, Portugal and Ireland compared to the European Union levels³¹



³¹ Data: OECD

7.1 Celtic Tiger: Battered then Blooming

Examining the recent data, it is clear that Ireland has experienced an extraordinary economic recovery over the past two years. After being one of the most severely affected economies by the crisis with an output contraction of almost 7% between 2007 and 2010, Ireland enforced a wide-ranging and problematically ambitious series of reforms and cuts with the support of the Troika program of financial assistance. The successful implementation of these austerity measures by the Irish authorities laid the framework for a successful role model for the rest of the Eurozone crisis-stricken areas. Ireland has become the fastest growing economy in 2014, 2015 and 2016, a trend that is optimistic and forecasted to keep following the aforementioned pattern. The reforms recommended under the Troika intervention were primarily focused on the repair of the financial sector and restructuring fiscal sustainability and competitiveness. The recovery has supported the economic rebalancing process and sustained full-time job creations throughout a vast array of sectors and regions, leading to a slow yet stable decline of the unemployment rate and a reduction in long-term and youth unemployment. An amalgamation of output and corporate profits transmutes into stronger tax revenues through rippling corporate income tax receipts and overreaching the fiscal targets proposed. The recovery predominantly accelerated in 2015, with domestic demand overtaking net exports as the chief driver of growth. Although these extraordinary results are commendable, the main challenge for Ireland is to ensure durable, sustainable and balanced growth in its future years, matching its optimistic predictions. As some skeptic economists converse about the growth figures that overestimate the strength of the recovery, Ireland is facing a ‘booming’ economy.

However, as Yves Smith mentions ‘the word “boom” is usually synonymous with bubble’ (Smith, 2016), in this case, a corporate tax bubble. There is an increased necessity of fostering sustainable high growth as well as promoting durability and lack of volatility which is inherent to a small open economy through successively prudent macroeconomic policies. Ireland’s main concerns are enhancing its resilience by moving towards a balanced budget in structural terms to reduce the high public debt as well as strengthening their shaky banking sector. Moreover, there needs to be an increase in labor market participation as well as efforts to increase literacy, unemployment, and long-term unemployment. Finally,

they need to improve long-term economic growth prospects by fostering and providing assistance to Irish-owned businesses to provide more dynamic and productive results to increase foreign investments.

Economic Growth and Jobs

Appendix 2B shows the vigorously accelerating recovery that began in the last quarter of 2013, exceeding even the most optimistic expectations. Initially driven by exports, the recovery is now well anchored on domestic demand, spreading across sectors. The prompt recovery has led to vigorous job creation. As of 2014, private sector employees have benefited from an increase in wages throughout different professions. The previous public sector wage cuts ‘will be partially reversed in 2016’ (OECD Economic Surveys, 2015). Moreover, high economic growth pulled the unemployment rate below the EU average, after Ireland added more than 135,000 jobs in the third quarter.

The “Lansdowne Road” wage agreement with public sector unions added about €300 million to spending in 2016. An additional €470 million was allocated to education and social protection budgets for early education, new teaching posts, higher state pensions, and larger child benefits. Also announced was a 50 cent increase in the minimum hourly wage (an increase of about 6 percent). These measures aim to cement the recovery by supporting job growth and to ensure that the benefits of a growing economy are shared with the broader population after years of sacrifice. (IMF 2016)

The above quote by the IMF speaks of the importance of the economic recovery on the economy, specifically in the employment sector. An increase in employment and much awaited increase in wages support consumer confidence and in turn cause an increase in consumption, leading to an inflow of income into the economy through injections and growing production to match the increased demands. Households seemingly have been reducing their savings and increased their consumption, thus signaling confidence in the state of their personal well being and future security thus bolstering the economy without any significant credit expansions. Strong private sector reflects international and domestic confidence in the Irish nation. However, despite the strength and magnitude of the economic recovery and its results in job creation, labor market participation has remained relatively stagnant.

Figure 7.1.4 Real Household Disposable Income vs. real Household Consumption for Ireland³²

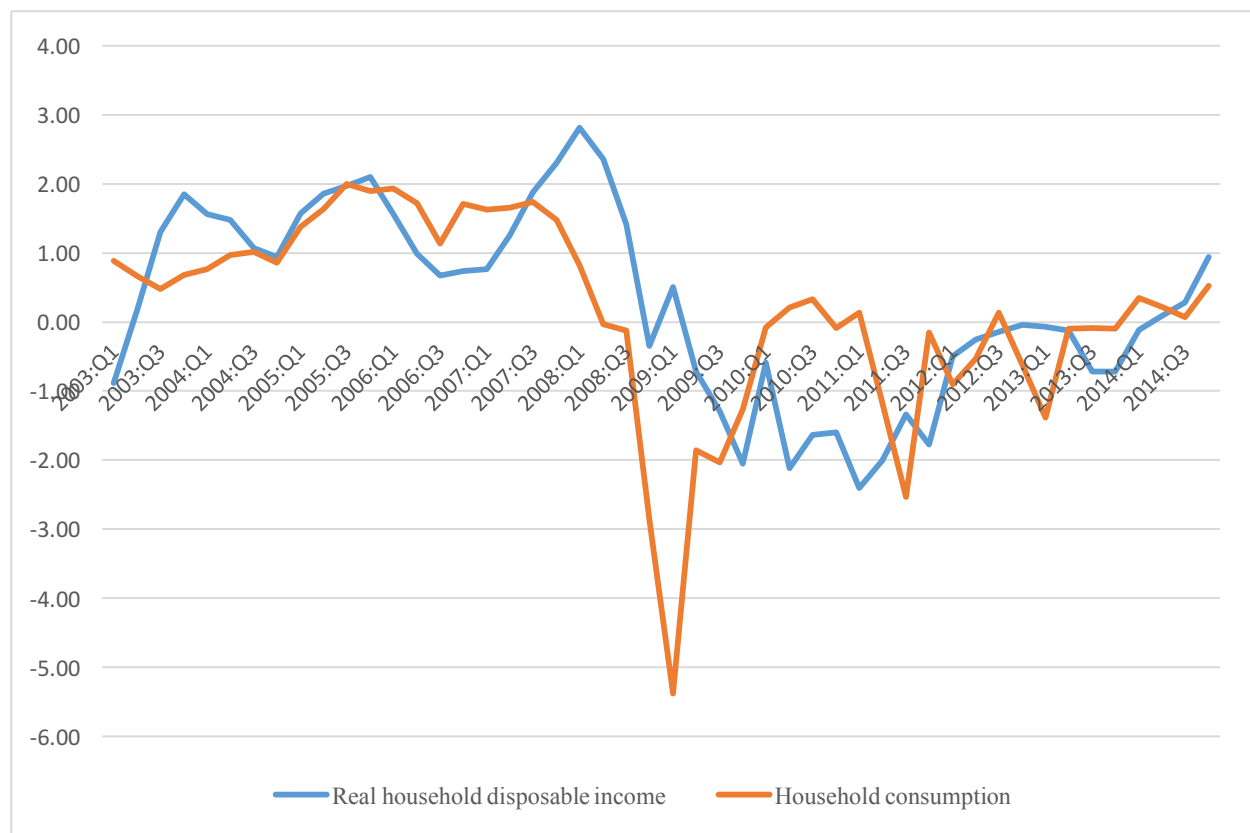


Figure 7.1.4 above shows the real disposable income for households (RDIH) in Ireland compared to the real household consumption (RHC). As economic growth is booming recently, both the RDIH and RHC have been slowly increasing showing an increase in consumer confidence. Moreover, it's evident during the crisis the detrimental effects of austerity on household consumption leading to mass significant hoarding of savings by household. Lastly, levels of RDIH and RHC were both mostly increasing before and after the crisis.

³² Data: OECD

Investment and trade

Investment is playing a central and vital role in the Irish recovery. Investment grew approximately 11.7% in the first three quarters of 2015. With a rapidly increasing real GDP growth rate, Ireland is becoming an increasingly attractive import destination with high net foreign direct interments. This influx of investment directly correlates to job creation and to the economic development.

Figure 7.1.5 Ireland Exports Competitiveness³³

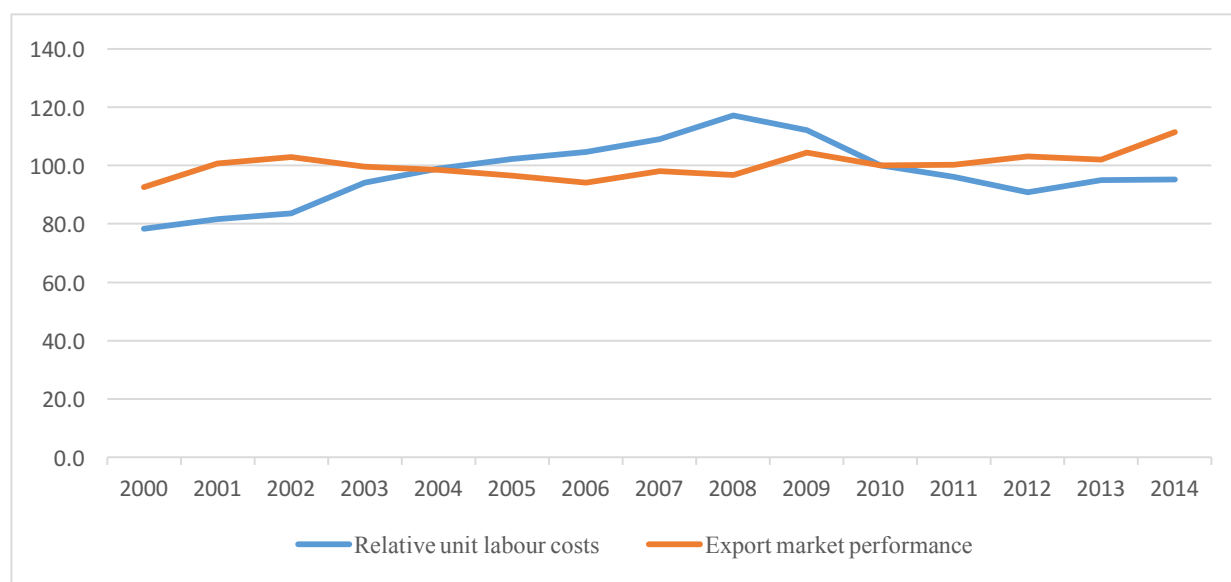


Figure 7.1.5, above, show an increase in competitiveness of Irish exports, as unit labor costs become more stagnant, there is a rapid increase of the export market performance. The strong export performance has been incredibly beneficial to the economy. As Appendix 6Ai shows Ireland's specialization in pharmaceuticals lead to an increase of demand for their exports throughout the globe. As Figure 6.1.2 show, Ireland has been facing a foreign sector deficit, thus the economy commences a possible era as a net exporter.

However, in the case of Irish exports, a large chunk of exports are services by companies with headquarters in Ireland such as Seagate Technology, Accenture, Covidien. These companies usually

³³ Data: OECD

devote massive amounts of their profits into research and development, which is an enormous advantage as Ireland leaves Eurozone behind as their exports boom.

Banking Sector

As confirmed by the positive outcome of the ECB's current account, the Irish domestic banks' performance is gradually improving, steering away from being its most problematic sector. Domestic banks commenced generating profits in 2014 for the first time since the beginning of the crisis.

'Achieving durable bank profitability while maintaining prudent lending practices remains a central challenge' (IMF, 2016). All the Irish banks (BOI, AIB, PTSB, Ulster Bank and Merrill Lynch) passed the asset quality review (AQR) and the baseline stress test (except for PTSB). The banks on a whole are stronger, indicating high profitability indicators for domestic banks continuing to widen profit margins. The local banks are taking advantage of the ECB's new targeted long-term refinancing operations, helping extend the average duration of their liabilities and lower average funding costs. The banks have obviously benefited from favorable market conditions and is predicted by the ECB to continue doing so and not be a significant threat to the economy.

Government and Public Finances

It's evident from the analysis of the sectoral balances for Ireland that current account surpluses have become established. This was due to regained competitiveness and a shift in resources towards the trade sectors and a significant contraction in domestic demand. As the foreign sector matures, households do not have the same spending capacity as before, thus the domestic economy outside the export sector has received the same benefits. Although exports are a tremendous benefit to the economy, the average Irish citizen is no longer able to spend the same amount of money to upkeep their past standards of living.

VAT, income taxes and corporate taxes throughout 2015 were increasing consistently with a robust labor market. On the expenditure side, there has been an increase in healthcare reform following detrimental effects on healthcare due to the strict austerity measures, thus current expenditures were

around 0.7% above the target through November 2015 (ECB, 2016). As a result of overspending, the deficit is likely to be higher than expected but still within the expected norms. Despite some of the expansionary measures (consisting of tax cuts and expenditure increases) in the budget for the year of 2015, Ireland has complied with its provisions of the SGP, albeit by a very narrow margin.

Ireland's fiscal position is expected to improve further if they manage current conditions shown in the sectoral balances. Gross general government debt is projected by the ECB to fall to 106% of the GDP in 2016 (down from 123.3% in 2013). This forecasted value, according to the ECB, is primarily reflecting the accounting treatment of the IRBC.

The overall health of the economy is improving, with high growth rates and less of reliance on imports, the worst is over. However, as mentioned earlier, the government should be cautious of the private sector fomenting trouble.

Compliance with Country Specific Recommendations

Appendix 8A shows that Ireland has overall made progress in addressing the 2015 country-specific recommendations including (but not limited to):

- A reduction of debt by the households
- A marked fall in gross government debt ratio
- Active deleveraging by companies
- Restructuring domestic banks to prevent financial sector vulnerabilities
- Control of vulnerabilities of the debt ratio (which is still high)
- A decrease in non-performing loans (although Ireland still has the highest ratio amongst the other Eurozone countries)
- A strengthening of the external account
- A fall in unemployment (although long term unemployment is still a concern)

In general, Ireland has made limited progress in addressing its country specific recommendations. Although it has made no progress in limiting discretionary powers to change expenditure ceilings, it has seen some progress in a variety of areas including; the cost-effectiveness of healthcare; broadening the tax base; increasing the work intensity of households; addressing the poverty risk of children; tapering benefits; improving access to childcare; finalizing durable restructuring solutions to its banking sectors and setting up credit registry, it continues to proceed down the right path though it has a long way to go in order to completely be at line with its 2020 national targets. Ireland may seem to be doing well, however, they have a lot of organization and restructuring to do in order to meet their targets.

7.2 Hellenic Republic: reeling yet recovering

The Greek economy is gradually recovering from a deep recession, this comes however, at an enormous social costs are alarmingly high. Analyzing the Parenteau model for the economy as well as the sectoral balances, Greece has not faced the same amount of success as Ireland. On the Parenteau model, Greece is not in the little area provided where a net-importer who wants to achieve positive savings for a private sector expansion. Greece has a net importer position as a small economy that majorly relies on tourism.

To recollect, after Greece adopted the euro in 2001, low-interest rates fuelled a rapid credit growth, high economic growth, and rising incomes, however, it also distorted Greece's fiscal position. Now under the aegis of the IMF programs, public debt has been restructured; there have been significant fiscal adjustments and structural reforms as well as an increase in taxes which seem to have bolstered strengthened the long-term prospects of the economy.

The GDP fell nearly 26% after the crisis, and though economy is now slowly growing, a full recovery will take time. The IMF predicts that 2016 and 2017 shall be positive years for Greek economic growth. There has, of course, been an increase in competitiveness but as the sectoral balances show us, the exports and investment sector remain exceedingly weak. The unemployment rate is high at 25.6%, although that is a marked decrease from the rates were seen in May 2013. The average citizens of Greece were most affected by this crisis, facing brutal tax increases in almost everything, lower demand for the average small business owner and a series of devastating reforms. Although tax and benefit reforms have materially improved the budget, public debt is still extremely high. The banking sector has recently been recapitalized but 'credit creation remains weak due to the high burden of non-performing loans on banks' balance sheets, and reduced demand for loans' (OECD, 2016). Greece has implemented significant labor market reforms to remedy further the health of the economy, including a reduction in monopoly and oligopoly power as well as a decrease in bureaucracy, corruption and weaknesses in public administration.

The social costs of the prolonged recession and additional economic austerity packages lead to unemployment, a decline in healthcare, civil unrest, a decrease in social security and mass poverty throughout Greece. The decline in household income and a lack of social safety and security led to a rapid increase in poverty. Anchored poverty i.e., measuring poverty about its pre-crisis income level almost tripled during the crisis years due to mass unemployment.

For Greece, stronger exports and investment are crucial for its recovery as well as an increased reform of health care, restoring sustainability and protection for the vulnerable to counteract all the detrimental effects austerity has had on the economy and its people.

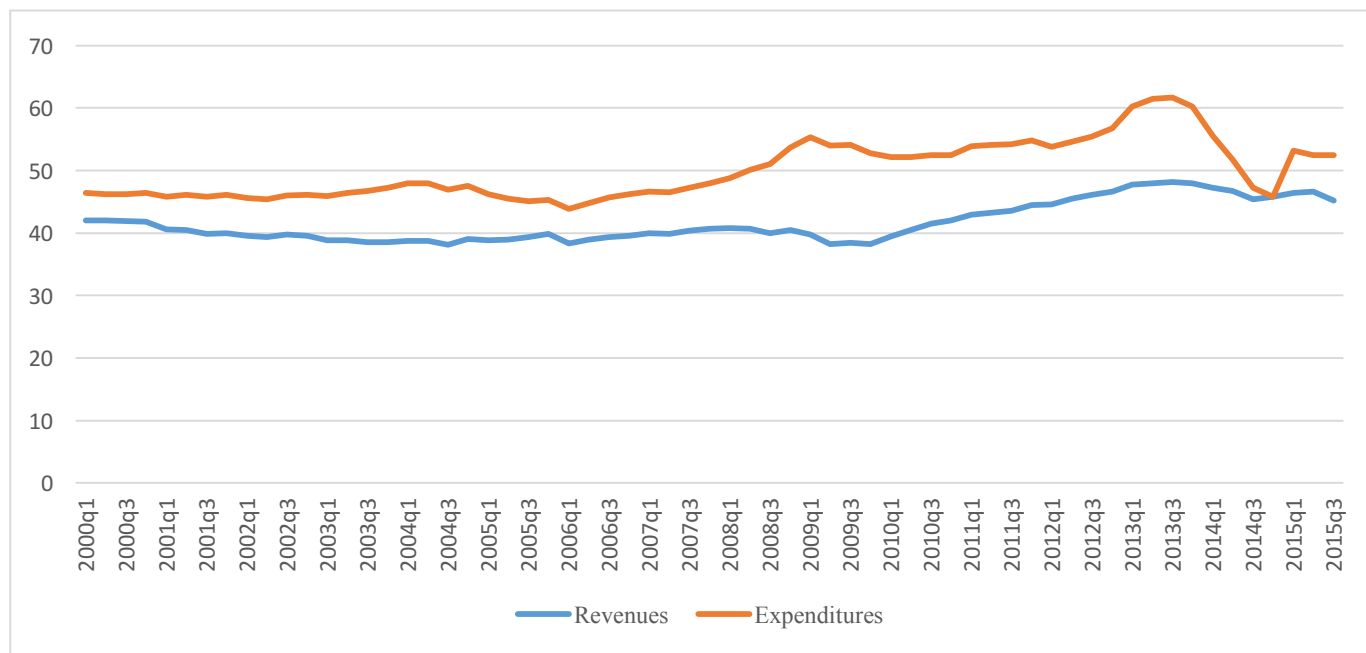
Economic Growth and Jobs

As mentioned previously, there is an increased need for structural reform to increase growth and raise export levels. Exports are a key to raising growth and incomes. Obviously, boosting economic growth is fundamental for reducing poverty and unemployment. Fully implementing all the key structural reforms, especially those concerning economic welfare, would boost output over the following decades. This would also lead to countless and needed jobs and pave the road for better social security. Appendix 2A shows Greece's predicted and actual GDP. Clearly, the predictions were incredibly optimistic as Greece is well below those projections. Stronger economic growth would make the debt burden more sustainable.

Pre-crisis Greece had one of the most restrictive employment protection legislations in the OECD (OECD Economic Surveys, 2016). This included long notice periods, large severance payments and a reduced job allocation and creation processes. The minimum wage in Greece increases with seniority (an incredibly unique case in the Eurozone) thus the minimum wage of workers without experience is relatively low compared to the rest of the Eurozone (however, Ireland, surprisingly, has a lower minimum wage than Greece). There is a need for extensive amendment of the minimum wage law for Greece. Appendix 9A shows the minimum wages for all OECD countries and their average. Figure 6.2.1, below shows Greek revenues and expenditures. It's visually apparent that the economy spends more than they

earn and is projected to continue doing so, this is another one of many suggestions for the Greek economy to correct.

Figure 7.2.1 Greek Revenues and Expenditures³⁴



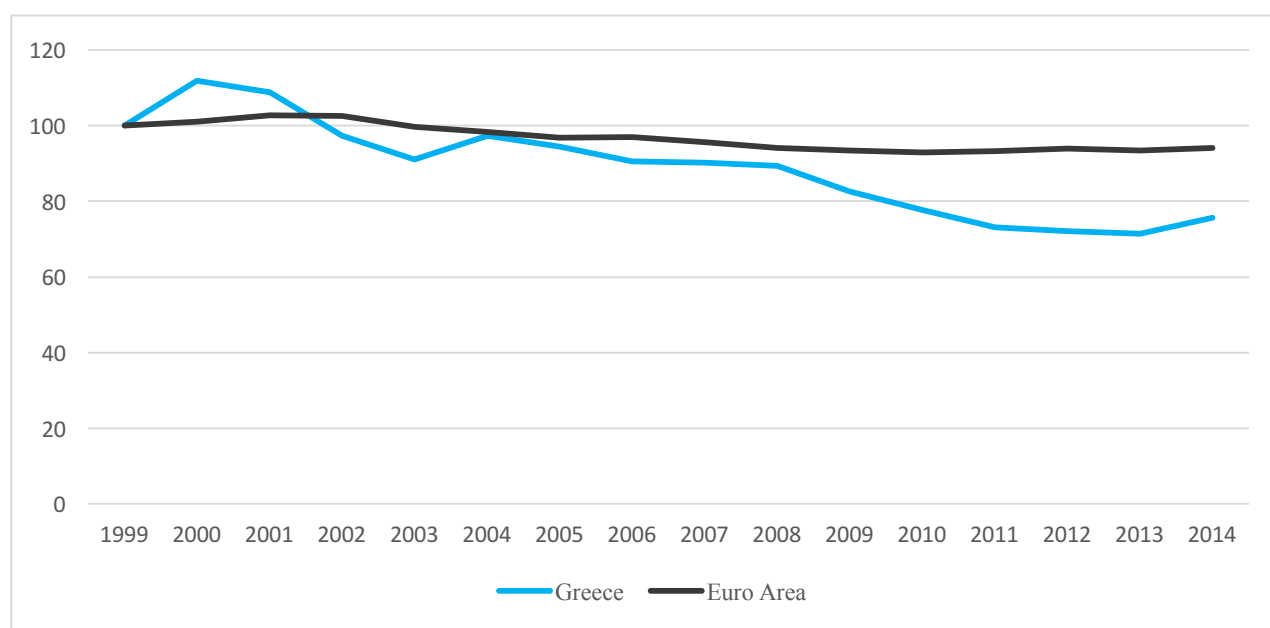
Investment and exports

After Greece had adopted the euro, low-interest rates fuelled rapid credit growth, high economic growth as well as rising incomes, however, it also distorted risk assessments and led to a severe deterioration of the fiscal positions, largely reflecting rising spending. (OECD, 2016). Investing in Greece according to most economists is an extremely high risk, relatively low reward situation. Although Greece would seem to be a magnificent opportunity, most investors (with reason) are afraid of investing in the ‘fragile economy’. The former Federal Reserve Chairman Alan Greenspan said Greece would leave the euro and the common currency would collapse. The German Institute for Economic Research’s president, Mark Fratzscher, characterized Greece as a political and economic catastrophe that would revert to the

³⁴ Data: OECD

drachma in desperation. (Winkler, 2015). However, Greece has undergone an economic metamorphosis in the year of 2014, resulting in a potential investment opportunity for investors with stomachs of steel. Since the election of the anti-austerity government (Syriza) the investing climate seems to have drastically improved regarding investment in Greece. For example, the Greek bonds “... beat every publicly-traded asset as its bonds increased in value from their lowest point in July to their highest today. Anyone sophisticated enough to buy those Greek bonds while simultaneously shorting, or borrowing the money to sell... made a big profit on that trade” (Winkler, 2015). Consistent with the IMF prediction of a gradual but increasing economic growth levels, there has been an influx of income through government bonds.

Figure 7.2.2 Greece Export Performance compared to the Eurozone Area³⁵



As figure 7.2.2, above, demonstrates that before entering the EU, Greece had a higher export performance than the Euro Area. After the crisis, the Greece export performance slowly went into decline. We conclude that analyzing previous sectoral balances and Parenteau model, it is evident that Greece is a net-importer. As suggested by Troika, product market reforms are necessary to reduce monopoly and

³⁵ Data: OECD

oligopoly power in key economic sectors and efforts to reduce the regulatory burden should gradually raise economic output. These reforms will further help in boosting exports which will be an indispensable engine for growth and job creation. (OECD, 2016) Greece has relatively low exports and has a persistent trade deficit. Due to lack of domestic demand and confidence, it's integral for the economy's welfare to boost economic growth in all industries with potential. For example, rising global risks such as sluggish growth in China would reduce exports as shipping accounts for 20% of Greek exports. Greece has suffered excessively from slow-moving global trade growth.

Public-private partnerships (PPP) would increase investment and operational efficiency if they brought private-sector expertise and capital to bear. PPP should not be used as a way to relax budget constraints. It is important that risk in these projects is correctly assessed and appropriately allocated between the public and private sectors, and that the explicit and implicit fiscal costs be transparently accounted for. (OECD Economic Surveys 2016)

As the quote above shows, there is a need for improvement in the business environment. Greece ranks among the worst countries to do business in (155 out of 189), thus additional reforms are needed in order to simplify the ways to do business, open up the economy more, removing frictional costs of business so as to attract a higher level of investment by undertaking projects such as PPP and following strategies laid out by the Troika.

Government, Taxes and Public Finance

A facet of Greece public life is that tax evasion is rampant, rife with corruption and a continually pervasive feature which induces significant leakages of probable revenues which are vital to sustain the government and the economy. There's increasing need to broaden the tax base, bring willful defaulters to justice and continuously strengthen tax administration by enforcing more autonomy in audits and tax collection.

Strengthening fiscal policy is critical for a sustained recovery. The reforms which were introduced for fiscal consolidation improved the overall fiscal balance of the government, leading to an overall general government balance of -3.6% of GDP and a small primary balance surplus of 0.2% of

GDP (OECD Economic Surveys 2016). Although the program initially put emphasis on the increase of taxes and broadening tax rates, the overall tax compliance was perceptibly low (a crucial problem for the Greek government). Moreover, due to bank recapitalization, the fiscal deficit further deteriorated.

Greek public debt to GDP ratio is amongst the highest worldwide. It's expected that the debt-to-GDP ratio would remain elevated for years, even if Greece somehow magically managed to meet the fiscal targets established. The Greek debt-to-GDP ratio has consistently been much higher than the Maastricht criteria; Ireland reached it's all time high 123.20% which was Greece's debt-to-GDP in 2001. Currently, Greek debt-to-GDP is at 179%, which is alarmingly high. As the patterns follow, the debt-to-GDP increases and the IMF enforces a new package with a new set of structural reforms which again lead to a cycle leading to increased government debt. A large debt overhang or weak implementation of reforms may harm growth by creating further uncertainty for the investors amidst elevated rates of interest.

Social costs, public expenditure and economic welfare

The social cost of the crisis have been severe; child poverty has exploded, and housing costs are becoming a haunting burden for the common man. Youth unemployment is very high, and most of unemployed are usually so for an extremely large period leading to loss of skills, lowering their chances to find work elsewhere creating unrest and distortion of the social fabric of the country. The pension system remains expensive, unfair and complex while the healthcare system is slowly deteriorating. As the Troika keep enforcing different packages on the economy and debt spirals out of control, social costs have never been higher. There have been a few policies to reduce poverty and inequality which requires urgent attention to revert the excessive social costs that the Greek economy has faced ensuring everyone pays their fair share of taxes by fighting tax evasion. The key issues that continue to plague the system are:

First, there have been moderate changes to pension reforms, even though it strengthened the long-term benefits and structure of the pension system, it's proven to be impractical in the short run. When

comparing the expenditure on pensions today, they are relatively high compared to other OECD countries which are putting pressure on the government.

Second, tax evasion is a huge structural issue which is leading to large gaps between VAT collections and an unfair advantage to those who are evading taxes leading to further taxation on those who are already struggling to pay taxes. Strengthening the tax administration further is a vital priority for the Greek government to ensure that they receive a fair amount of tax revenue to invest back into the economy and not continue to break the back of those who are already subjected to high levels of taxation.

Compliance with Second Set of Milestones

Appendix 10 A has the European Commission's report on Greece's compliance with the second set of milestones as of December 2015. While most measures have been delivered adequately, there have been issues with Greece's compliance with their health and (Government Pending Actions related) privatization, thus for the need for additional steps. It's evident that a significant part of the milestones concerns the financial sector mostly for bank recapitalization purposes. However, as Greece is still undergoing the macroeconomic adjustment program, the European Commission has not yet disclosed any national targets for 2020. Greece has been told to focus on these following four areas to gradually exit the crisis.³⁶

- Boosting investment- to support future growth opportunities
- Structural reforms- in product, service and labor markets to raise competitiveness and investment levels leading to greater social fairness
- Responsible fiscal policy- to strike a balance for short-term and long-term sustainability.

Moreover, due to high deficits, Greece would need to make further efforts to fix the balance sheets.

³⁶ European Commission Press Release (2015)

- Employment policy and social protection- to enable support and protect people throughout their lives.

7.3 Life After Austerity

The IMF states that Greece should be able to exit the crisis by the end of 2018. However, the indicators above are evidence that exiting the crisis solely based on numbers are not enough to make up for the damage multiple rounds of austerity have caused the economy. As Greece becomes closer to Maastricht criteria standards, we have to acknowledge that the Eurozone failed dismally in creating an optimal monetary union. Moreover, even though Ireland has exited the crisis, they had an easier crisis to exit. Additionally, Ireland has also faced a lot of negative effects through austerity, specifically a low literacy rate and a high level of emigration throughout its crisis period. This calls for a need for both the countries to pay more attention in their own economic welfare.

Furthermore, to prevent another crisis from destroying the entire European Union, there needs to be a change in policy. The EU needs a reunification of both monetary and fiscal policy as well as providing more policy space for their weaker member states to achieve their macroeconomic objectives without having a snowball effect through multiple rounds of austerity every time they sense instability. A union that consists of such diverse economies with dissimilar potential needs further integration and a need for a change in regime. The following chapter discusses possible policy recommendations for both the entire European Union as well as the two specific nations. These are logical and will potentially end up preventing further damage to the European member states now, and in the future without any political consequences such as a Greek exit leading to a domino effect leading to the potential end of the European Union.

Chapter 8

Policy Implication: Can Europe be saved?

This chapter tries to explore some alternative policy recommendations for both nations to eventually have a sustainable and efficient economy. This includes economists such as Dimitri Papadimitriou, Michalis Nikiforos, Gennaro Zezza, Yves Smith, Jörg Bibow and Warren Mosler.

Greece

Recent press and economic reports that emanate about the Greek economy continues to show that it limps with little to indicate that growth is poised to take off. Nor are there concerted efforts to create a more enabling climate for business and increasing the level of investment in the economy. The new round of austerity approved by the Greek parliament towards the last quarter of 2015 did not bring forth any new additional measures, however, once again reinforced the previous round of austerity measures and structural reforms as Appendix 10A states.

Ireland

On the other hand, from a recent analysis of the Irish economy the indicators reflect a journey towards normalization of economic conditions and leads one to believe that perhaps, Ireland is finally out of its financial crisis. Ireland also has to ensure it keeps all its finances stable to repay slowly back the loan, but as the first country to enter and exit the crisis, all signals shows that the Celtic Phoenix is for the time being stable. Although for the time being Ireland has strong economic growth and is projected to continue doing so, there are a few indicators that may disturb the status quo once again and Ireland needs to continuously make sure they are doing the right things for aspects within their control.

For example:

- a) Global crisis: Ireland's growth has become saddled on its export sector; thus global market volatility is potentially ruinous for the Irish economy. Moreover, due to high unemployment rates, high debt, and mortgage, the economy will stagnate if its trading partners show sign of weakness.

- b) Another property bubble: danger of rapid re-inflation which could trigger another spiral of higher prices and credit lending leading to another banking crisis
- c) Eurozone turmoil: Instability in the Eurozone (specifically Greece with its massive debt bailouts) would lead to turmoil in Ireland, this chapter focuses on policy suggestions to prevent more turmoil
- d) The exit of the UK from the Eurozone: with leading rumors and prospects of the United Kingdom leaving the European Union (the Brexit), it presents both “opportunities and challenges” according to the OECD. However, due to closeness as trading partners, the Brexit could be detrimental to Irish trade profiles even though it may lead to more investments.

Additionally, it is important to note that Ireland was never in as bad of a shape as Greece, the austerity measures imposed were never as strong as they were in Greece, Ireland had a massive government deficit of -32.3% due to the bailout (unlike Greece), Ireland did not have extreme government debt levels (unlike Greece), Ireland was an exporting economy (again, unlike Greece) —in other words, the severity of austerity was harsher in Greece than they ever were in Ireland.

Solutions

European Union as a whole

The Eurozone financial crisis is erroneously blamed on the fiscal profligacy of its weaker nations as well as a lack of compliance with the rules of the SGP. However, without the existence of a “treasury-central bank axis”, it’s nearly unmanageable to attempt to balance the budget categorically and establish low public debt levels (not to mention how highly fragile this ‘vision’ is for the private sector). “Debt—and in fact growing public debt— is a very natural concomitant phenomenon of economic growth. The euro regime is lacking a central fiscal institution with the power to spend, tax, and issue debt. This void is the key source of its vulnerability and ill-performance.” (Bibow, 2013)

Moreover, after any financial crisis, the private sector will seek to run a financial surplus as we have seen in the sectoral balances for Ireland and even Greece. Without recovery, the private sector will not reach a balanced fiscal position.

Previously, we have explored a vast array of strategies that could be implemented by both economies, but it's also crucial to investigate policy suggestions for the entire union. Moreover, it's important to focus on how to make the European Union robust and viable again. Jörg Bibow of the Levy Economics Institute of Bard College presents a proposal-- The Euro Treasury Plan. The Key facets that distinguishes this plan from the alternative policy proposals mentioned above is that firstly, it's a region-wide project, and most importantly it emphasizes steady (not counter-cyclical) public investment as a prerequisite for proper recovery and economic growth on an ongoing basis to prevent any immense damage from this recent crisis. The crisis has made clear that there is a need for the Eurozone to overcome its vulnerability as well as jointly anchor integration with an innocuous and sustainable approach. It's crucial that Europe has a common response to a common shock. (Bibow, 2013a)

As the euro currency union remains stuck in a crisis of its own making, Bibow proposed an area-wide boost to public investment that amounts to a joint recovery program much like suggested by Gewerkshafsbund (2012) and Varoufakis et al. (2013). The "Euro Treasury Plan" intertwines the expenditure and funding sides of a recovery program while also filling the void in the current euro regime. It heals its essential source of vulnerability: the decoupling of the central bank and treasury institutions (Bibow 2015).

At the heart of the Euro Treasury scheme proposed here is a simple and straightforward idea. The idea is to create a Euro Treasury as a vehicle to pool future Eurozone public investment spending and have it funded by proper Eurozone Treasury securities. Member state governments would agree on the initial volume of common area-wide public investment spending and the annual growth rate of public investment thereafter. Beyond that, the Euro Treasury operates on auto-pilot. (Bibow 2015:3)

As the quote states, the Euro Treasury scheme is a proposal beneficial to all of the European member states. Unlike the previous “euro bonds” proposal, the debt is not mutual; each state would alone be responsible for their respective national public debt levels. The Euro Treasury will not directly assume control of investment spending. Instead, it will provide investment grants according to each member state’s potential, in line with the GDP levels or “based on the ECB/s capital key (Bibow, 2015). The Euro Treasury looks to apply its power of taxation and revenue solely with the purpose to service the interest on the debt to keep the debt level stable at its target; it also maintains the debt levels for crisis countries by using special taxes designed to generate revenue to streamline debt servicing. All Eurozone countries still have to abide by all the rules in place by treaties and the current regime as well as further structural reforms, the Euro Treasury proposal is just applied to all current public expenditures. All the member states would see the interest burden on their national debt shrink with improving debt ratios and a much-needed increase of fiscal stability in the European Union. This alternative proposal allows the Eurozone to not only foster prosperity throughout the nations but also social welfare as it stabilizes economic activity and spending.

The Euro Treasury proposal would rectify the original defects with which the euro was born. It creates a central fiscal institution operating side by side with the ECB. This project will provide short-term as well as long-term recovery both directly and indirectly. Firstly, by increasing public investment expenditure it would provide immediate growth. Moreover, it also provides direct stimulus to lead to a balancing of current budgets while rebalancing the intra-area competitiveness leading to a more symmetric the European Union. Finally, as a recovery program and strategy, the Euro Treasury plan offers an option to secure an evolution from the current state of fragility, chaos and crisis to a more (much needed) less volatile, affluent and thriving trajectory.

Country-specific Policy Recommendations

Levy Economics Institute of Bard College published a strategic analysis which suggests all the following policy proposals for Greece to follow to prevent further damage to the global economy. The suggested policies by the Levy economists as well as Yves Smith and Warren Mosler are the following:

a) Introduction of a parallel financial system based on new government bonds (“Geuros” as referred to in the paper)

This policy proposes an option where Greece does not exit the European Union but adopts a national currency for all domestic transactions in order to relax austerity conditions (Lordon, 2013). Unless this exit (explained further in the last policy suggestion) is not perfectly planned, it could lead to the demise of the European Union as we know it. However, according to the terms of the European Union treaties (which have already mostly been violated several times by many economies and did not test the survival of the euro), this policy proposal is ‘strictly forbidden’. Unless, the countries bonds issued under this parallel system were only as a means of financing, with existing euro obligations to be paid off. (Papadimitriou et al., 2014). Richter, Abade and de Arce Borda (2013) stress that the introduction of a parallel currency would allow a return to the euro achievable within the time frame. A key assumption is that existing financial assets would not be redenominated into the new currency. Furthermore, the new currency would be managed by the Bank of Greece, which would be in charge of setting a credible target devaluation rate (suggested rate is about 50%) against the euro (Papadimitriou et al., 2014). Thomas Mayer of Deutsche Bank suggest an introduction of government IOUs as a “fiscal currency” also advocated by Bruno Th  ret and Wojtek Kalinowski, whom agree that a new currency maybe more readily acceptable. Parenteau (2013) suggests avoiding the term currency, instead creating “tax anticipation notes” as a credible way of financing the system. There has been an immense amount of critique and confusion about this proposal for example how the new currency should be backed, whether or not the new currency be freely convertible to the euro, the future of the euro after the implementation of the system, the amount of new currency created, whether or not foreign debt would be redenominated in the new currency etc. All these

questions are addressed (see Appendix 11A for detailed elaboration of the critiques mentioned in the Strategic Analysis of the Levy Institute, 2014). Since a vast majority of literature consists of a viable exit plan, this policy contemplates an alternative which does not lead to such a potentially problematic and drastic plan which, at the same time would stimulate net exports as well as investment within the economy.

b) Adoption of an employer of last resort program financed through the aforementioned parallel financial system

Without a structural change in fiscal policy, the Greek economy would continue to decline regarding employment and growth. Even if abandoning austerity measures may temporarily alleviate the economy but will lead to an even slower pace of recovery. Given the current rates of unemployment, even a slight increase in government expenditure is not enough to eventually lead towards full employment. The main idea behind the previous proposals is to simply allow Greece to restore its competitiveness and repair its economy. The impact of these would depend on the price elasticity of Greek trade (Papadimitriou et al. 2014). With that in mind, Papadimitriou, Nikiforos and Zezza conclude that price competitiveness of the Greek exports are very low, and thus policies aimed at export-led growth through an increase in export prices are highly unlikely to succeed.

c) Modern version of the Marshall Plan:

The first alternative policy scenario is an updated version of the Marshall Plan. The Marshall plan also referred to as the European Recovery Program (ERP) was an American initiative to aid Western Europe with a donation of approximately \$130 billion (in current USD) to help rebuild Western European nations following its notorious collapse after World War II effective on April 1948. This included a removal of trade barriers to support the war-devastated regions. This proposal would lead to a rapid increase in government consumption as well as investment. “The amount of this exogenous fiscal stimulus aid discussed in many Eurozone meetings- is assumed to be €30 billion, disbursed at a rate of about €2.5

billon each quarter.” This would lead to an exogenous inflow of finances into the capital account improving its external balance without putting pressure on the Greek government to repay an additional loan, assuming it keeps its commitments on previous loans. However, this program will come with vast repercussions if workers employed under this scheme are laid off towards the end of the program, which would lead to a negative impact, despite efforts of this program to increase public capital. However, many countries and governments would oppose to this plan in the interest of their taxpayers.

d) Temporary suspension of interest payments on public debt

The ‘Modern Marshall Plan’ debate has spurred reactions of many politicians against it. Thus, another alternative is a temporary suspension of interest payments on all public debt as well as suspension of any interest payments due and outstanding. Papadimitriou, Nikiforos, and Zezza (2013) consider whether sufficient funding for lowering unemployment and restoring growth can be obtained by changes in public debt management. Thus in this scenario, there is an assumption that all debt is frozen, all interest payments are suspended, and creditors are persuaded to roll over maturing debt for the period. The latest data available (2013) states that the general government debt is 183% of GDP. 80% of which is held by the foreign sector (by Eurozone institutions responsible for refinancing the country’s debt). The Bank of Greece holds approximately 5%. These figures, as well as the sectoral balances analysis for 2012, are what aided in the economists as mentioned earlier evaluation of prospective interest payments for debt management. This proposal leads to an availability of funds further than that would be available due to austerity measures such as tax increases (especially since tax evasion has become increasingly common). This would lead to a much-needed increase in investment within the economy and support for export creation as well as an increase in job creation (specifically for the Greek youth which is facing a large unemployment level of 48.9%). Although this would lead to a fall of income for bondholders, however, an increase in investment and consumption would offset the fall and ideally lead to a net positive effect. The main difference between this and the ‘Modern Marshall Plan’ is that in total, there would be a less amount of funding- perhaps not the most useful solution to this ongoing, extended crisis.

e) The Mosler Bond

The Mosler Plan is a proposal for the new Greek government bond issue to provide all required medium term Euro funding for Greece on very attractive terms (Mosler, 2016). This new bond issue would eliminate the risk of loss to the investors, thus stating that while in default, these transferable securities can be used at face value plus accrued interest, for debt payments, including taxes owed to the government (Mosler, 2011). With the elimination of risk and fear of loss, Greece may be able to fund independently all financial obligations with reduced interest costs. This would lead to a deficit reduction and a lack of dependence on the IMF and the European Union which have yet to display any promising results through their apparently incompetent proposals which only lead to further increases in government debt every time they were enforced. The lack of financial loss is an attractive foreign venture and thus, would lead to a much-needed increase in investment as well as financial independence after being slightly bullied by fellow nations to control their debt. If Greece has independence, it can restore some amount of national sovereignty and regain control of the process of fully comply with the general Maastricht criteria. With funding independence and lower interest rates, the Greek government would still have a tremendous amount of work and effort to restore Greece to success. The Mosler Bond has so far been well received by many peripheral country governments as it can promote a healthy and independent solution to what seems like an eternal crisis.

f) A credible exit strategy (as the complete last resort)

There are clearly vast options for these countries which do not resort to exiting the European Union. This is the least favorite of the options as a Greek exit would lead to tremendous chaos within the Euro, especially in the periphery countries. It is clear to a majority of economists that the Eurozone's main problems are to do with the euro. Although the euro has allowed for a 'stable' currency with lower interest rates, the nations have tried to address instability by focusing on tax evasion, overspending, and trying to weed out corruption. As we have analyzed earlier in chapter 3, the dynamics of the European Union itself is impacted by underlying structural problems and disparities between countries since before

the union was created. It is highly unlikely that polar opposite economies such as Germany and Greece (evident in all parameters) can get to any similarities in terms of performance outcomes. Even if we compare just the Greek export profile to the German export profile, there is a significant difference in magnitude, diversification, price elasticity and the products itself. Greece's main exports include mineral products whereas leading German exports include machinery and automobiles.

Austerity programs have clearly been an abject failure but so far are the only solutions being provided in the Euro. Given the assumption that Greece does not find alternative solutions to their problems, Yves Smith develops a credible exit strategy for Greece. However, economists such as Varoufakis did critique the idea without realizing that this is a policy suggestion as a last resort. A credible exit strategy would not be hard to implement and would consist of two essential principles (Smith 2011):

- 1) Upon leaving the Eurozone, the government would have to make payments exclusively in the new currency, meaning that the euro is now not a means of payment
- 2) The government would only accept payments in the new currency ensuring the value and short supply (for some time)

Essentially, the government spends and earns for self-provision, injecting a limited amount of the new currency into the economy. However, this would lead to a lot of chaos, for example, if the value of this new currency is significantly lower than the euro, everyone would desperately try to hold on to as many euros' cash available in anticipation of profitability. Smith (2011) states that all citizens of the country would have the liberty of choosing whether or not their bank accounts and disposable income are available in euros or the new currency. An important suggestion is that the new currency has a floating exchange rate, ensuring that import prices do not increase unless the government itself decides to devalue the currency. These are all, of course, speculative in nature, unless such a plan is implied, there cannot be a concrete idea or a clear path as to how the economies would survive. Moreover, even one country exiting the Eurozone could lead to a domino effect and result in collapse and chaos in the crisis-stricken European countries.

Chapter 9

Conclusion

‘When it comes to human dignity, we cannot make compromises’ – Angela Merkel (2011)

No economic event in recent history has occupied so much print and mind space as the global financial crisis. It has caused untold hardship and social dislocation. In particular, the study of the effect of the crisis on the two countries, Ireland and Greece, makes one reflect as to how poor governance, misuse of borrowed wealth, impractical short term fixes driven by mindless opportunism and politicians can cause hardships for thousands. Furthermore, the structural flaw in the entire European Union regime makes the member states prone to financial crisis.

After reviewing recent indicators, sectoral balances as well as the modern monetary theory into account, we can identify a likely projection of the trajectory for the key macroeconomic indicators for both economies to fall in line with European Union standards. Ireland is clearly making meaningful progress and attempting to perform to its maximum potential with its outstanding recent performance within the country and is improving its standing globally. The Irish government has put a respectable level of effort to ensure financial stability and prevent a banking crisis.

Ireland's seen as austerity's poster example, notwithstanding that the Irish success story is illusory. Moreover, it should not be taken as a proxy for a comparison to other countries because of inherent differences among countries, especially Greece.

Ireland has many reasons to be optimistic. The country has left the worst years of the infamous financial crisis. As indicators have suggested unemployment is dropping and the economy is growing faster than other EU states. According to Eurostat, Ireland is likely to see robust levels of economic growth, slowly achieving GDP levels similar to its pre-crisis levels. Even though Ireland is able to diminish the pain austerity measures have caused, they face an advantage of increasing exports and low corporate taxes making Ireland an attractive destination. If Ireland can maintain their budget position, and manage to avoid a potential private sector problems i.e. corporate tax bubble, brewing on their hands, the

economy maybe able to be restored to its ‘former glory’. The Irish have been able to apprehend a deficit stimulus sufficient to transfer them to a private surplus position as well as a foreign sector deficit position, leading to a favorable position as a net exporter in the pharmaceutical and technology industry. Pre-crisis, the Irish economy spent over a decade establishing an economy based on exports, pharmaceuticals, technology, agriculture leading to increasing foreign investment- an advantage Greece has yet to benefit from. This enables the Irish to have a more sustainable process of development eventually leading to compliance with the European Union criteria. Moreover, the Irish economy, unlike most other Southern European economies, does not have high levels of public debt. Ireland’s robust level of real growth as well as fiscal discipline has managed to reduce the government deficit notably.

Germany is often set as the foremost sample of what a ‘well developed’, ‘sustainable’ economy looks like with its miraculous long run private sector positive balance. However, this has been hampering other economies and putting other European states at a disadvantage, especially those that have been under severe pressure to curb demand as well as compress imports to promote their adjustments. Moreover, in the case of Germany, perpetual external surpluses are also the root behind the unresolved euro crisis. If the entire Eurozone is made to follow the German example, it would persistently lead to the depression of the domestic economies as well as provoke global tensions. Conclusively, the German mode is the wrong model for the Eurozone

Greece, however, is still unable to rebuild their private sector into a sustainable positive balance. By most counts, the trajectory for a somewhat healthy economy is expected after 2017. However, looking at current growth levels and welfare indicators, that seems unlikely. Greece, unlike Ireland is still facing a massive amount of poverty and unemployment, detrimental effects after continuous implementation of austerity measures by the IMF. In this project, we have argued that Greece can be on the road to recovery if and only if appropriate economic policy is implemented. This does not include continuous implementation of strict austerity measures which have in the past only lead to an explosion of debt. It needs to stimulate domestic and foreign investment efforts, for it to drive high real growth drive job creation and resultantly lower unemployment levels. It’s vital that they are serious about restructuring

their fiscal policy. When analyzing the sectoral balances, it is evident that countries that have their own currency can constantly print fiat currency thus fuelling deficit. The problem with the euro is clear. There are vast differences in economic performances between these states, making it impossible to implement a one-size fits all fiscal policy. The deficit limits restrict fiscal tools governments can use to combat recession and unemployment. Most importantly, the loss of economic sovereignty hinders Greece's ability to achieve its macro-economic objectives using interest rate policies.

The Maastricht Criteria constrains member states' fiscal policy by design. Even though Ireland exited the crisis in 2013, their 'success' was in part due to the relatively small size of fiscal contraction, the rebuilding of private sector savings, and the return to a net-exporting position. By contrast, Greece's adjustment (austerity) was much more severe, the private sector financial position never fully recovered, and the country remained in a net-importing position. Before the formation of the European Union, the world economy has never faced such a problem as the European Union was the first area with a common currency. It's facing a major crisis and even after efforts some countries are still mired in less than the satisfactory conditions they started with. It has been clear that harsh fiscal consolidation measures imposed on Greece are an ineffectual solution to its' major problems. Even with the Troika's imposed strategies aimed at a much needed increase in exports through internal devaluation lead to a fall in unit labor costs and a minimal growth of exports (primarily in oil-related goods). The main focus of Greece should be repairing the rapidly deteriorating living standards (specially to prevent a fall in tourism) and decline in domestic consumption. Moreover, even though many economists propose an increase in tourism maybe beneficial for Greece, tourism alone can not save the economy. Even though Greece receives increasing amount of tourists, the benefits for the domestic market is limited. The average tourist receipts have been decreasing over the past few years, especially due to the rising level of poverty and chaos. Moreover, an increase in tourism in Greece directly and indirectly leads to an increase in imports needed to accustom these tourists.

There has been a vast amount of alternative policy options explored above, all of which should be considered extensively to offer Greece a certain amount of freedom and to regain independence to fix

their own economy as their government sees fit with minimal supervision of other European institutions.

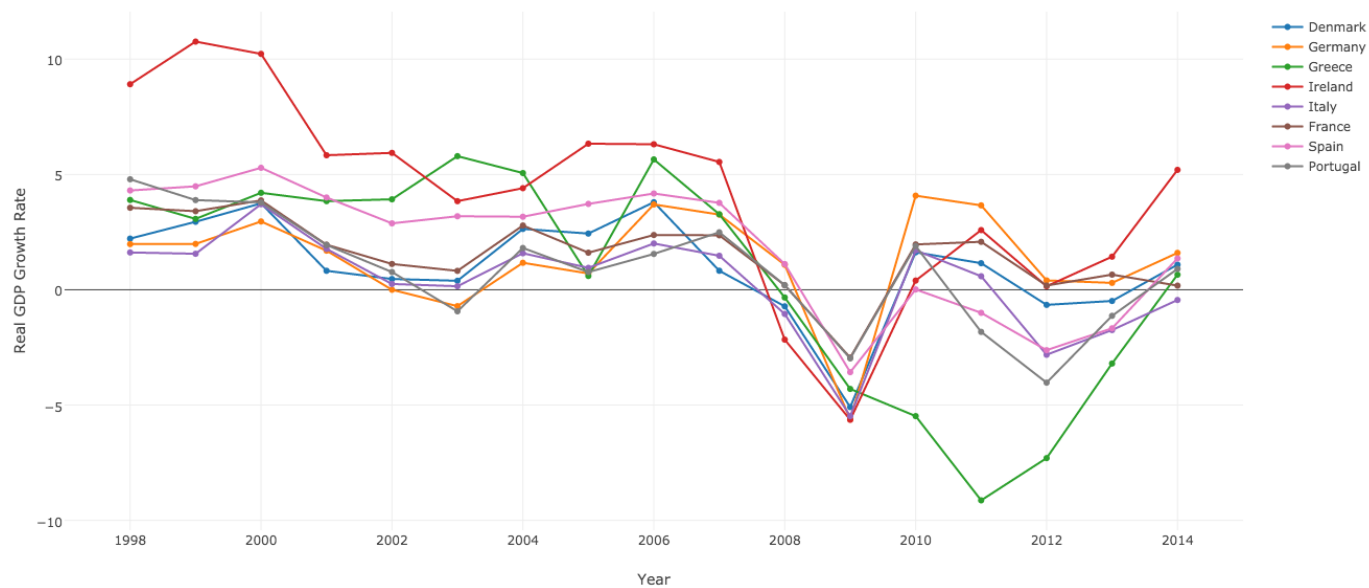
Although there is importance for Greece to build up their export sector, there needs to be focus increasing domestic demand, adjusting social welfare and reviving consumer confidence in Greece. There needs to be a kick start to the Greek economic growth engine. This entails programs and policies such as job guarantees, increase in infrastructure spending, increase in investment opportunities, removing frictional barriers to business etc. A public job guarantee program could be an option that could deliver a relatively quick reestablishment of living standards to the majority of the population. A well-organized approach, balanced with a healthy dose of realism and most importantly some luck would be needed for Greece to remerge as a strong economy.

As this project concludes, Ireland did succeed in mitigating the complications it faced due to austerity measures, however, undeniably, their crisis was very different. Ireland should not be seen as a role model for Greece, or in fact any other country. As we have previously discussed, Greece has had tougher and more enforced rounds of austerity than any other European nation. Additionally, they have also had more unfavorable effects to economic and social welfare than any other European nation. Greece, however, has impressive prospects and is currently increasing and the government debt to GDP is decreasing thus there is scope for Greece to exit this crisis, however, they need to be wary of corruption, welfare, unemployment and deflation.

The Maastricht criteria has evidently failed dismally in promoting stability and growth in the recent years. It has made it clear that the EMU needs reformation and the Maastricht regime is fundamentally incomplete. A monetary union without fiscal association defeats the purpose of the regime. In the end of this project we offer various proposals in order to establish an effort for a functional fiscal union designed to aid each country in crisis and ensure that each country deals with their crisis with their own merits, to promote more stability within European countries.

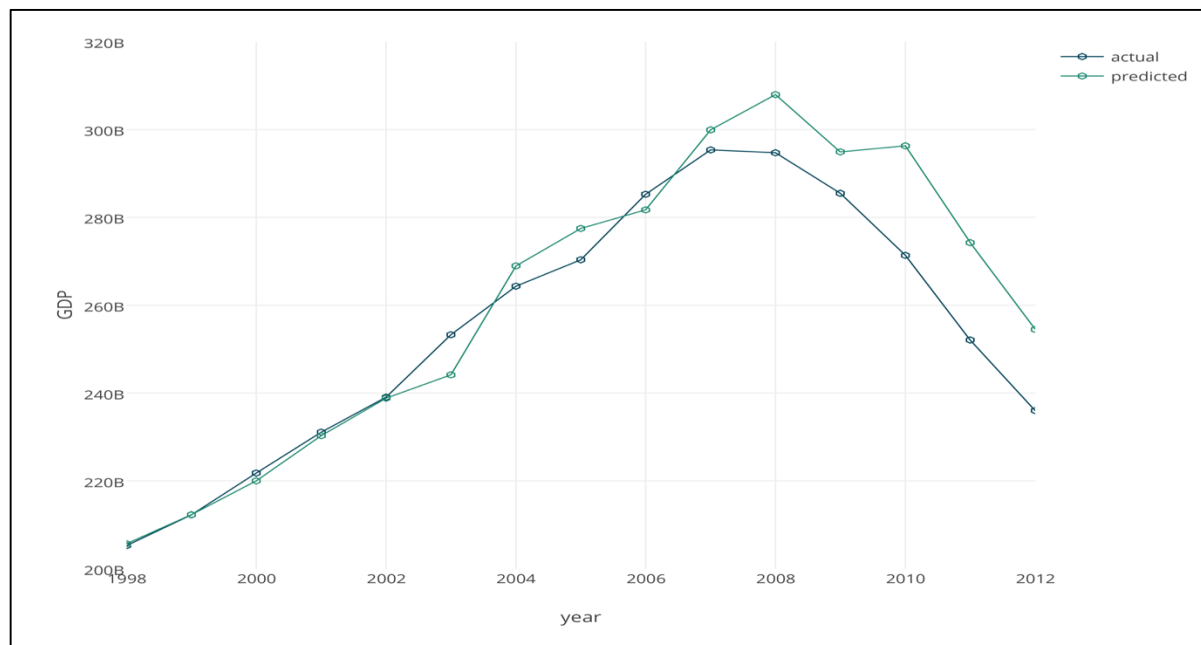
Appendices

1A Real GDP Growth for Denmark, Germany, Greece, Ireland, Italy, France, Spain and Portugal³⁷

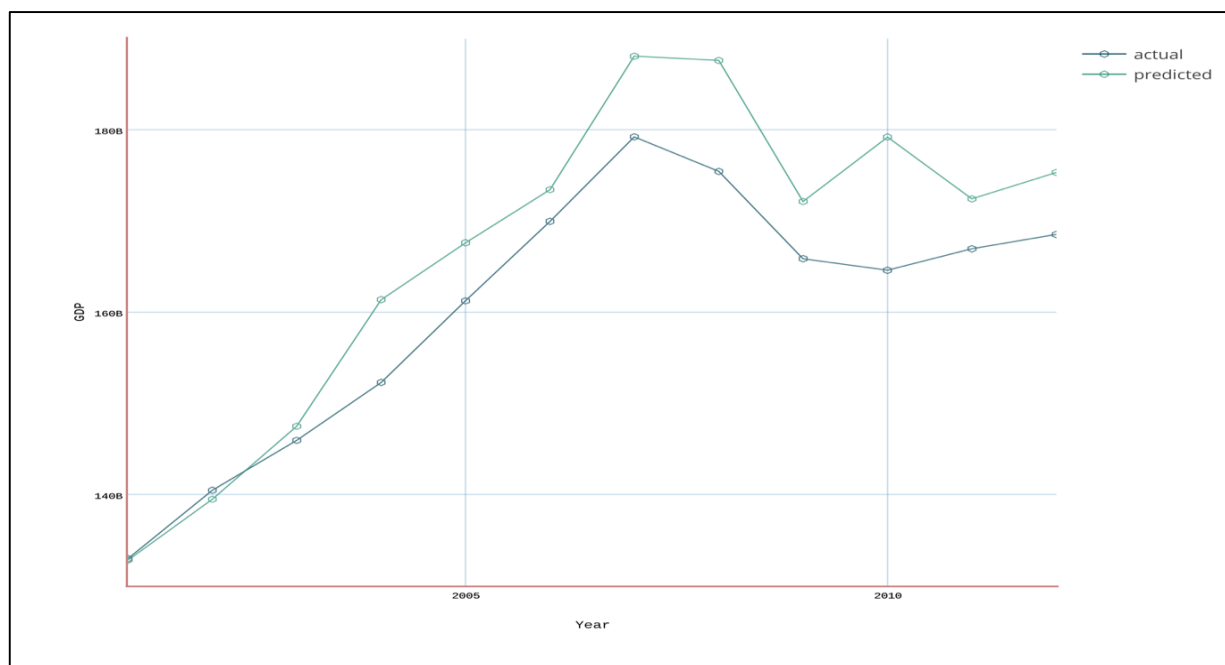


³⁷ Data: World Bank Database

2A Greece Actual Versus Predicted Output³⁸



2B Ireland Actual Versus Predicted Output³⁹



³⁸ Data: OECD Database

³⁹ OECD Database

3A Greek Crisis Timeline ⁴⁰

- January 1, 2001 - Greece drops its currency, the drachma, in order to join the European Union "Eurozone." Greece is the 12th country to adopt the euro. In order to meet the EU's standards, Greece makes deep cuts in public spending.
- 2004 - Greece spends approximately \$11 billion dollars (U.S.) on the Summer Olympics in Athens.
- November 15, 2004 – Greece admits that it gave misleading information to gain admittance to the Eurozone. One of the EU's requirements for Eurozone member countries is deficits below 3% of GDP. Greece has not met those criteria since 1999.
- October 4, 2009 - George Papandreou wins election as prime minister.
- November 2009 - Greece's national debt reaches €262 billion. Prime Minister Papandreou says that the 2009 budget deficit will be 12.7% of GDP, far above the EU limit of 3%.
- December 17, 2009 - Thousands of union workers go on strike to protest cuts in government spending.
- January 13, 2010 - The European Commission condemns Greece for giving false data on its finances and says the deficit and debt may be higher than the figures released in November 2009.
- February 2, 2010 - Prime Minister Papandreou makes a televised address, appealing to Greek citizens to support austerity measures.
- February 10, 2010 - Public workers in Greece strike in protest against new austerity measures.
- March 3, 2010 - Protests break out across the country. The government announces plans to lower the deficit by cutting public employees' salaries and raising taxes.
- April 11, 2010 - EU finance ministers announce a €30 billion bailout package for Greece.
- April 23, 2010 - Greece requests a €45 billion bailout from the EU and the International

⁴⁰ Timeline Source: European Debt Crisis Fast Facts, CNN.com, 2015

Monetary Fund.

- May 2, 2010 - The IMF, the European Central Bank and the European Commission announce a three-year aid package, worth €110 billion, designed to rescue Greece.
- May 11, 2011 - Clashes erupt between police and approximately 20,000 protesters in Athens.
- June 4, 2011 - Protests break out in Athens after Prime Minister Papandreou announces large cuts in public-sector employment.
- June 15, 2011 - Protesters hit the Greek Ministry of Finance with gasoline bombs.
- July 21, 2011 - European leaders agree to a second bailout package. European governments and the IMF will contribute a total of €109 billion. Private bond holders will be expected to contribute €37 billion.
- October 2, 2011 - The Greek cabinet announces that it adopted a draft budget for 2012, but will miss key deficit targets. According to the preliminary budget, Greece's budget deficit will be €18.69 billion, or 8.5% of GDP, in 2011. Greece originally agreed to a deficit of €17.1 billion, or 7.8% of GDP, with the International Monetary Fund, European Commission and the European Central Bank.
- October 19-20, 2011 - Tens of thousands of people protest against new austerity measures being considered by Greece's Parliament. At least one person is killed.
- October 27, 2011 - European Union leaders announce an agreement on debt crisis measures, including a deal with private sector investors to write down Greek bonds by 50%, which translates to €100 billion and will reduce the nation's debt load to 120% from 150%.
- November 6, 2011 - Papandreou announces that he will resign from office on the condition that the €130 billion deal is approved.
- November 11, 2011 - Lucas Papademos, a former professor, banker, and European Central Bank vice-president, is sworn-in as prime minister of Greece.
- February 12-13, 2012 - Lawmakers in Greece vote to approve another round of austerity measures, sought in return for a new Eurozone €130 billion (\$172.6 billion) bailout deal. As

lawmakers debate, police turn tear gas and stun grenades on protesters outside Parliament, and twenty-five protesters and 40 officers are injured.

- February 21, 2012 - Eurozone finance ministers approve a second bailout for Greece, including €130 billion (\$173 billion) in new financing.
- March 9, 2012 - Creditors agree to a plan to restructure Greek government bonds. The deal means Greece has cleared its final hurdle to qualify for the €130 billion bailout program from the European Union and International Monetary Fund.
- June 20, 2012 - New Democracy leader Antonis Samaras is sworn in as Greece's new prime minister.
- June 21, 2012 - Greece swears in a new cabinet, putting an elected government in charge of the country for the first time in 224 days.
- November 11, 2012 - The Greek parliament approves the nation's 2013 austerity budget that contains steep cuts required for Greece to receive the next installment of economic bailout funds. The final tally in the parliament was 167 votes in favor, 128 opposed, with four abstentions.
- September 12, 2013 - Unemployment in Greece reaches 27.9%. Additionally, 58% of people under 25 are unemployed as well.
- April 9, 2015 - Greece announces it has scheduled a 460 million euros (\$497 million) payment to the IMF, dismissing rumors the government might not have enough cash to pay on time.
- June 18, 2015 - European officials and the IMF fail to strike a deal on Greece's bailout program.
- June 30, 2015 - The midnight deadline passes for the Greek finance ministry to pay the 1.5 billion euros (\$1.7 billion) it owes the IMF. This means Greece has become the first developed economy to effectively default to the IMF.
- July 5, 2015 - Voters in cash-strapped Greece overwhelmingly reject austerity measures and Europe's bailout offer.
- August 20, 2015 - Greece receives the first chunk of its third bailout. The package, worth up to 86 billion euros (\$95 billion), will help the country avoid an outright financial collapse. All of the

countries that use the euro currency have agreed in principle to bail out Greece, but the IMF is only monitoring the situation so far. Today's date is the deadline to pay 3.2 billion euros (\$3.5 billion) to the ECB, in order to stay in the Eurozone. Greek Prime Minister Alexis Tsipras says in a televised address that he is resigning and calls for early elections.

3B Irish Crisis Timeline⁴¹

- September 2008 - Ireland is the first Eurozone country to fall into recession.
- September 30, 2008 – During the international financial crisis, Ireland announces a bailout plan worth €400 to stabilize the country's six main banks.
- December 18, 2008 - Chairman of Anglo Irish Bank Sean Fitzpatrick resigns, admitting that he hid €80 million in secret loans from shareholders.
- December 21, 2008 - The Irish government pumps €5.5 billion in three of the country's largest banks.
- January 15, 2009 - The Irish government is forced to nationalize Anglo Irish Bank to keep it from collapsing.
- February 4, 2009 - Prime Minister Brian Cowen announces €2 billion in public spending cuts.
- February 10, 2009 - Insurance company Irish Life & Permanent confirms that it made a loan to Anglo Irish of €7 billion in 2008.
- February 11, 2009 - Ireland announces that it will prop up Bank of Ireland and Allied Irish Bank with 7 billion. The government takes a 25% indirect stake in the banks.
- February 20, 2009 - A report is released showing that Anglo Irish Bank lent €451 million to 10 customers so they could buy shares in the bank. There are 15 customers who each owe the bank €500 million.
- February 21, 2009 - Tens of thousands of protesters rally in Dublin.
- May 29, 2009 - The government props up Anglo Irish bank with another €4 billion.
- February 19, 2010 - The government takes a 16% direct stake in Bank of Ireland, when the bank cannot make a payment.
- March 30, 2010 - Ireland props up Anglo Irish Bank with another €8.3 billion.
- March 31, 2010 - Anglo Irish Bank reports a loss of €12.7 billion, the largest corporate loss in

⁴¹ Timeline Source: European Debt Crisis Fast Facts, CNN.com, 2015

Irish history.

- May 13, 2010 - The Irish government takes a 18% stake in Anglo Irish bank.
- June 9, 2010 - The government's stake in Bank of Ireland rises to 36%.
- September 30, 2010 - The Central Bank of Ireland announces that the bailout of Anglo Irish bank could end up costing taxpayers €34 billion.
- September 30, 2010 - Ireland's deficit is revised to 32% of GDP, the largest deficit for a Eurozone member since 1999.
- September 30, 2010 - Ireland props up Irish Nationwide Bank with €2.7 billion.
- October 26, 2010 - The Irish government announces it must make budget cuts of €15 billion in order to reduce the budget deficit to 3% of GDP by 2014.
- November 21, 2010 - Prime Minister Cowen announces that Ireland has applied for aid from the EU and IMF.
- November 24, 2010 - Ireland outlines €15 billion in spending cuts and tax increases. It refuses to raise its low tax on corporations. This plan is intended to reduce the budget deficit to 9.1% of GDP in 2011.
- November 27, 2010 - Thousands rally in Dublin, protesting the bailout and budget cuts.
- November 28, 2010 - Ireland accepts a €67.5 billion bailout package.
- December 23, 2010 - The government injects another €3.7 billion into Anglo Irish bank, taking its stake to 93%.
- March 31, 2011 - An examination of the books of Irish banks shows a €24 billion shortfall. The Central Bank of Ireland says that it expects that the government will take control of the country's six largest banks.
- June 1, 2012 - Ireland's voters approve a European treaty that aims to enforce stricter fiscal discipline.
- July 5, 2012 - Ireland completes its first bond sale since its bailout in 2010. The Irish government raises €500 million, or \$626 million, by selling 3-month Treasury bills at a yield of 1.80%.

- December 13, 2013 - Ireland exits the bailout program established by the EU and IMF in 2010, the first Eurozone country to do so. Although Ireland is no longer reliant on the IMF and EU for funding, it will continue to pay off its emergency loans into the 2030s.

4A Basic Literature on Robert Parenteau Model⁴²

Assuming the economy as a whole is divided into three different sectors:

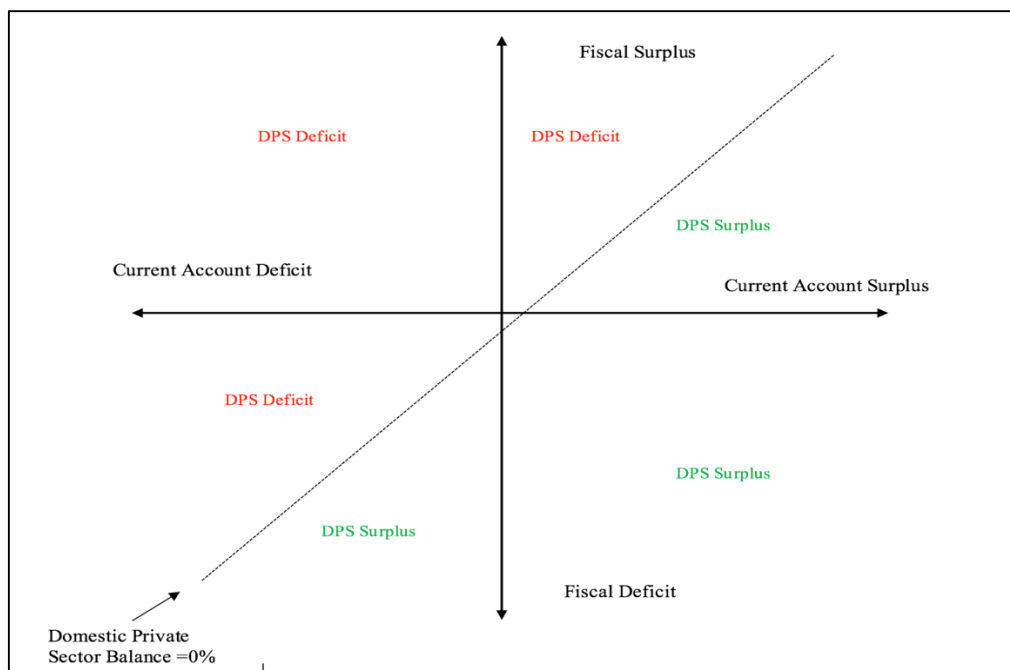
- The domestic private including households and firms
- The government
- The foreign sectors

Then the following identity must hold true:

$$\text{Domestic Private Sector Fiscal Balance} + \text{Fiscal Balance} + \text{Foreign Financial Balance} = 0$$

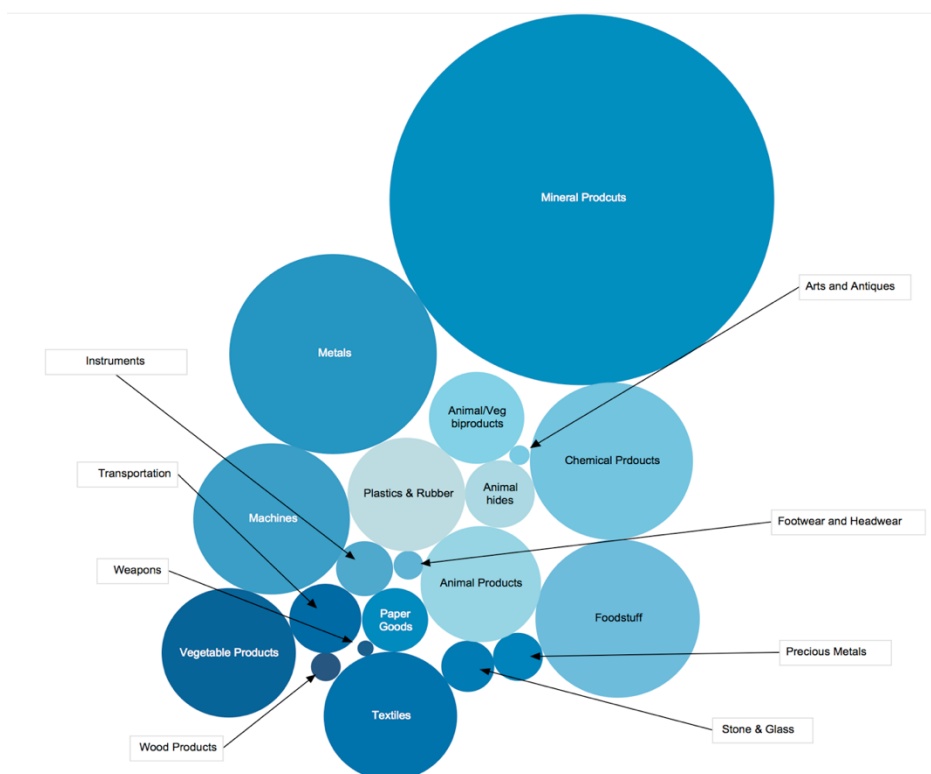
This can be easily displayed diagrammatically as the Parenteau model which includes the Maastricht Criteria.

$$\text{Domestic Private Sector Financial Balance} = \text{Current Account Balance} - \text{Fiscal Balance}$$

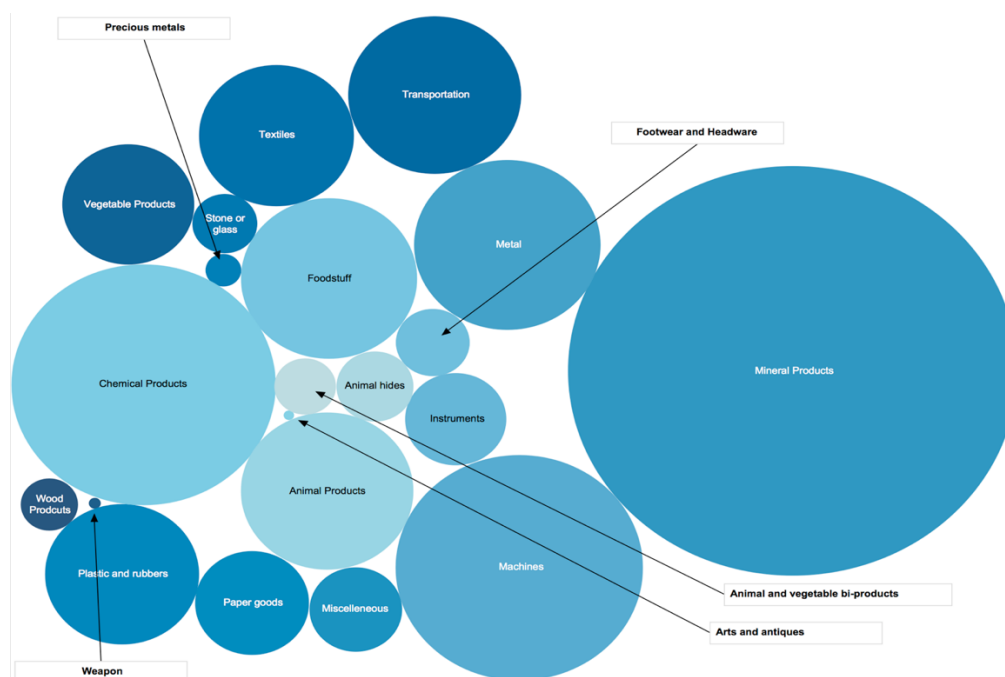


⁴² Parenteau (2010)

5Ai Greece Exports Bubble Diagram⁴³



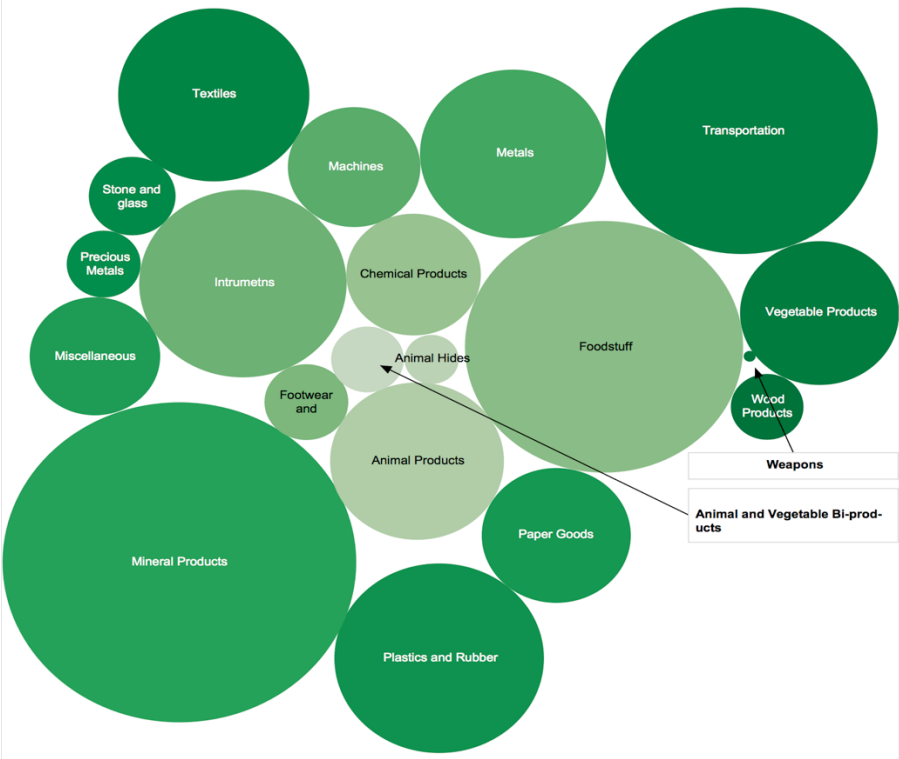
5Aii Greece Imports Bubble Diagram⁴⁴



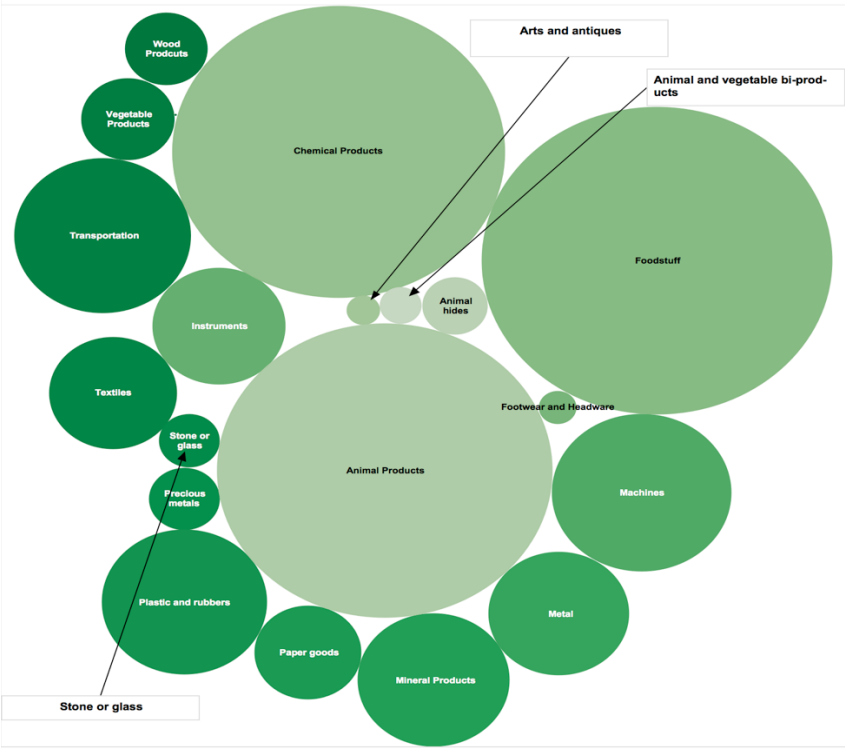
⁴³ Data (manual): The Observatory of Economic Complexity

⁴⁴ Data (manual): The Observatory of Economic Complexity

6Ai Ireland Exports Bubble Diagram⁴⁵



6Aii Ireland Imports Bubble Diagram⁴⁶



⁴⁵ Data (manual): The Observatory of Economic Complexity

⁴⁶ Data (manual): The Observatory of Economic Complexity

7A Greece Detailed Austerity Package⁴⁷

A summary of all Greek austerity packages to date.

1. 9th February 2010

The first austerity package was a minor package in order to limit the deficit. It all emerged with the Greek prime minister's promise to the World Economic Forum of Davos, Switzerland. The package was implemented on the 9th February 2010 and was expected to save €0.8 billion, including a freeze in all government employee salaries, a 10% cut in bonuses and cuts in overtime workers, public employees and work-related travels.

2. 5 March 2010

The second austerity package included further moves to increase government income. The package emerged after the rapidly rise of the Greek/German 10-year debt yield spread. The Greek parliament passed the "Economy Protection Bill", which was expected to save another €4.8 billion. The package was implemented on 5 March 2010 and it included 30% cuts in Christmas, Easter and leave of absence bonuses, a further 12% cut in public bonuses, a 7% cut in the salaries of public and private employees, a rise of VAT from 4.5% to 5%, from 9% to 10% and from 19% to 21%, a rise of tax on petrol to 15%, a rise in the (already existing) taxes on imported cars of up to 10% –30%, among others.

3. 23rd April 2010

The third austerity package came as a result of the First Economic Adjustment Programme for Greece announced by the Greek prime minister on 23rd April 2010. Changes aimed at saving €38 billion through 2012, representing the biggest government overhaul in a generation. Actions included sale of 4000 government-owned companies, limits on "13th and 14th month" salaries, a new rise of VAT from 5% to 5.5%, from 10% to 11% and from 21% to 23% and other cuts to public employee benefits, pension reform and tax increases.

It was met with a nation wide general strike and massive protests leading to three deaths, dozen injuries and 107 arrests

4. 29th June 2011

The fourth austerity package emerged from the deviation of the Greek economic program and was voted by parliament on 29th June 2011. It's known as the *Mesoprothesmo*, the mid-term plan. It includes rise

⁴⁷ Various references, collected and collated from Wikipedia

taxes for those with a yearly income of over €8,000, an extra tax for those with a yearly income of over €12,000 among others. On 11th August 2011 the government introduced more taxes, this time targeted at people owning immovable property. The new tax, which is to be paid through the owner's electricity bill.

5. 20th October 2011

The fifth austerity package was aimed to ensure the 6th bailout instalment for Greece. The new bill (frequently is called multi-bill) hit mostly the civil servants and the retirees. It was voted by the Greek parliament on 20th October 2011 amid protests. The bill included among other, major cuts of the wages of civil servants through to the definition of a single payroll and cuts for the pensions over €1000.

6. February 21st 2012

The sixth austerity package emerged from negotiations for austerity measures that would allow further loans and a second bailout package to prevent sovereign default. As a result, Greece was granted by the EU a €100 billion loan and 50% debt reduction through "private sector involvement" (PSI) for future reductions in government spending. The measures included among other 22% cut in minimum wage that goes to €586 from €750 per month.

7. 7th November 2013

A first part of the multi-bill was voted on 31st October and concerned the privatizations. The main part of the bill was voted on 7th November 2013 and includes labor market reforms and budgetary changes such as the total abolition of 13th and 14th month salaries among them.

8. 28th April 2013/ 17th July 2013

The eighth austerity package included two successive multi-bill with urgent measures so that Greece to receive the new instalment of the bailout package. Both was a requirement of the creditors in order to be given the next bailout instalments. It included layoff of another 15,000 public employees among them school guards and municipal policemen. The first multi-bill was voted by the parliament on 28th April 2013 and the second was voted by the parliament on 17th July 2013.

9. 9th May 2014

The ninth austerity package was imported by the government on April 2014 and was approved by parliament on 9th May 2014 with 150 votes for and 119 against. It included provisions about Greek economic policy during the four next years, under the title Medium-term Fiscal Strategy plan 2015-2018. The bill provided freeze of wages and pensions over a period of the next four years, until 2018. Also it

provided cuts public sector's expenses such as cuts for the expenses of the Ministry of Health among others.

10. 16th July 2015

The tenth austerity package emerged from the agreement of Greece with Eurozone for a new €86 billion bailout over three years. The deal requires the Greek parliament to approve the measures. The first set of new austerity package was voted by Greek parliament on 16 July 2015. It includes transfer of many products in the high rate VAT (23%) and rise of corporation tax from 26% to 29% for small companies among others. A second set of measures voted on 23 July 2015 that concerns the Code of Civil Procedure.

11. 14th August 2015

The eleventh austerity package included the bill that concerned the third bailout agreement between Greece and the 'quartet' of creditors (EU, ECB, ESM and IMF). It was approved on the 14th August 2015 with 222 votes for, 64 votes against. The new bill included provisions for the rise of various taxes and changes in the retirement system.

7B Ireland Detailed Austerity Package⁴⁸

A summary of all Irish extended fund facility arrangement by the IMF

1. December 16th, 2015

IMF Reaches Staff-level Agreement with Ireland on €22.5 Billion Extended Fund Facility Arrangement

The IMF's Executive Board approved December 16 a three-year lending arrangement for Ireland, totaling €22.5 billion. The loan is part of an international rescue package worth €85 billion that also involves the European Union, European bilateral lenders, and financing from Ireland's own cash reserves. Continued liquidity support for Ireland's banks from the European Central Bank is an essential component of the program.

2. May 16th, 2011

IMF Completes First and Second Reviews Under Extended Arrangement with Ireland and Approves €1.58 Billion Disbursement

The The Executive Board of the International Monetary Fund (IMF) today completed the first and second reviews of Ireland's performance under an economic program supported by a three-year, SDR 19.5 billion (about €21.8 billion; or US\$30.9 billion) arrangement under the Extended Fund Facility (EFF), or the equivalent of about 1,548 percent of Ireland's IMF quota. The completion of the reviews enables the immediate disbursement of an amount equivalent to SDR 1.41 billion (about €1.58 billion; or US\$2.24 billion), bringing total disbursements under the EFF to SDR 6.42 billion (about €7.20 billion; or US\$10.19 billion).

“Although the external environment continues to be challenging, the authorities are committed to sustained strong program implementation. Supporting these efforts with a more comprehensive European plan would help overcome market doubts, regain market access, reduce the threat of spillovers, and bring about a recovery of the Irish economy.”- Naoyuki Shinohara

⁴⁸ Excerpts from staff reports of the IMF

3. September 2nd, 2011

IMF Completes Third Review Under the Extended Arrangement with Ireland and Approves €1.48 Billion Disbursement

“The authorities are implementing major fiscal adjustment effectively by keeping the budget on track to meet the 2011 targets. Building a strong consensus on a medium-term fiscal plan in the coming months will reinforce confidence in achieving the substantial fiscal consolidation ahead, and reduce uncertainties around tax and spending policies for households and businesses. The recent establishment of a Fiscal Advisory Council will support sound fiscal policies on an ongoing basis. The Irish authorities have maintained resolute implementation of their economic program. The economy is showing signs of stabilization and financial market conditions have also recently improved. Ireland’s economy, however, faces a weakening in trading partner growth, which could dampen the pace of Ireland’s recovery in the near term. Continued timely implementation of the program remains essential to support the ongoing recovery, limit contagion risks, and rebuild market confidence.” - Mr. Naoyuki Shinohara

4. December 15th, 2011

IMF Completes Fourth Review Under the Extended Arrangement with Ireland and Approves €3.9 Billion Disbursement.

The authorities are also continuing to implement a sizeable fiscal adjustment, with the budget on track for the 2011 fiscal targets. The recently announced 2012 budget includes €3.8 billion (2.7 percent of GDP) in spending and revenue measures, to reach a deficit target of 8.6 percent of GDP, and the authorities’ Medium-Term Fiscal Framework sets out the path to bring the deficit below 3 percent of GDP in 2015. These actions are helping to restore confidence as part of the government’s strategy to put the economy on a path of sustainable growth, sound public finances, and job creation.

Led by strong export performance, Ireland’s real GDP growth turned positive in the first half of 2011, reaching an annual rate of 2¼ percent in the second quarter, with annual growth of 1.1 percent projected in 2011. Weakening activity in Ireland’s trading partners is projected slow Irish exports such that real GDP growth remains around 1 percent in 2012.

5. February 27th, 2012

IMF Completes Fifth Review Under the Extended Arrangement with Ireland and Approves €3.2 Billion Disbursement

The Irish authorities continue to advance wide-ranging reforms to restore the health of the financial system so it can support Ireland's recovery. Major progress in downsizing the banking system has been made, with the two largest banks disposing of almost €15 billion in mainly foreign assets in 2011 at better prices than anticipated. A comprehensive strategy for personal insolvency reform has been announced, including an out-of-court debt settlement mechanism that would cover mortgages and other secured debts. The substantial fiscal consolidation targeted for 2011 was achieved with a margin, with the general government deficit reduced to 10 percent of GDP, well within the program target of 10.6 percent. This result was attained despite weaker domestic demand, reflecting the authorities' strong revenue administration and firm expenditure control. Budget 2012 targets further fiscal consolidation to lower the deficit to 8.6 percent of GDP and sets out a clear path to reach the 3 percent of GDP deficit target by 2015.

Steps to support growth and job creation are being put in place. Reforms of sectoral wage agreements have been submitted to parliament to make wage-setting in occupations hard hit by recession more responsive to economic conditions. The authorities are also strengthening the effectiveness of activation and training policies to help job seekers get back to work. The government recently announced the disposal of €3 billion in state assets to enhance competitiveness while securing value for the state and reinvesting one-third of the proceeds.

6. June 13th, 2012

IMF Completes Sixth Review Under the Extended Arrangement with Ireland and Approves €1.4 Billion Disbursement

Ireland's policy implementation has continued to be steadfast and ownership of the program remains strong despite the considerable challenges the country is facing. However, as financial tensions in the euro area have resurfaced, Irish sovereign bond spreads have risen in recent months to exceed the level at the outset of the EU-IMF program. Slowing growth in trading partners is expected to dampen Ireland's export-led recovery, with real GDP projected to expand by ½ percent in 2012, down from 0.7 percent in 2011. At the same time, Ireland's progress in strengthening the financial system is reflected in the stability of overall level of deposits in the banking system.

After achieving the substantial fiscal consolidation targeted for 2011 with a margin, budget outturns for

the first five months of 2012 again were in line with expectations. At the end of May, the cumulative primary deficit was 1.3 percentage points of GDP narrower than in the same period last year, and just below the authorities' profile for the year. Income tax, VAT and corporation tax continued to over perform, and some 40 percent of the full-year tax revenue target has now been collected. The expenditure overrun seen in earlier months has also moderated, to less than 0.1 percent of GDP.

Financial sector and structural reforms are advancing as envisaged. The authorities remain committed to achieving the 2012 fiscal targets and are developing a package of specific measures to further underpin the 2013–15 consolidation. In the financial sector, the authorities are deepening reform efforts to improve the quality of bank assets and facilitate resolution of household debt distress, and are developing a framework to strengthen the credit union sector. Importantly, the authorities are reviewing and adapting their strategy for growth and job creation in view of the challenging external environment.

7. September 5th, 2012

IMF Completes Seventh Review Under the Extended Arrangement with Ireland and Approves €0.92 Billion Disbursement

The 2012 budget remains on track for the fiscal deficit target of 8.6 percent of GDP, despite a slowing in real GDP growth from 1.4 percent y/y in 2011 to a projected ½ percent in 2012 owing to weaker trading partner growth. In the year through July, the exchequer primary deficit was 0.7 percent of GDP below that in the corresponding period of 2011. Income tax, VAT, and corporation tax collections were ahead of expectations, yet this over performance was partly offset by higher health spending and unemployment benefits. The authorities have announced corrective measures for health spending.

Financial sector reforms have continued to advance, with the authorities submitting a restructuring plan for Permanent TSB to the European Commission, and they are preparing a roadmap to wean banks off the costly Eligible Liabilities Guarantee (ELG) scheme while preserving financial stability. The authorities introduced a personal insolvency bill to parliament at end June, and, at the Central Bank's request, banks are preparing to roll out a set of loan modification options to address rising mortgage arrears.

On June 29, Euro Area leaders stated that the Euro group will examine the situation of the Irish financial sector with the view of further improving the sustainability of the country's well-performing adjustment program. This positive signal helped the Irish government return to sovereign debt markets, by raising €4.2 billion of new funds in 5-year and 8-year bond financing in July, with the bulk of the issuance taken up by foreign investors. A further €1.0 billion in 15 to 35 year amortizing bonds was issued in August, tailored to meet domestic pension fund needs.

8. December 17th, 2012

IMF Completes Eighth Review Under the Extended Fund Facility with Ireland and Approves €0.89 billion Disbursement

Market conditions for Irish sovereign debt are much improved following the June 29, 2012 announcement that the Euro group is examining the situation of the Irish financial sector with a view to further improving the sustainability of Ireland's well-performing program, and also of Outright Monetary Transactions by the ECB. Together with Ireland's strong policy implementation, these developments have enabled Irish sovereign yields to decline notably in 2012 and allowed Ireland to access significant market funding in the second half of the year.

Looking ahead, however, a more gradual economic recovery is projected, with growth of 1.1 percent in 2013 and 2.2 percent in 2014, with public debt expected to peak at 122 percent of GDP in 2013. This baseline outlook is subject to significant risks from any further weakening of growth in Ireland's trading partners, while the gradual revival of domestic demand could be impeded by high private debts, drag from fiscal consolidation, and banks still limited ability to lend. If growth were to remain low in coming years, public debt could continue to rise, in part reflecting the potential for renewed bank capital needs to emerge.

9. March 22nd, 2013

IMF Completes Ninth Review Under the Extended Fund Facility with Ireland and Approves €0.97 Billion Disbursement

Ireland's strong policy implementation has continued and positive signs are emerging. Real GDP growth was 0.9 percent in 2012, and employment rose slightly over the year, although unemployment remains high at 14.2 percent. Further deepening its market access, Ireland issued €5 billion of 10 year bonds at 4.15 percent in March.

The 2012 fiscal deficit of 7¾ percent of GDP was well within the 8.6 percent target. In 2013, the fiscal deficit is projected at 6¾ percent of GDP, moving toward the target of below 3 percent by 2015. Public debt is expected to peak at 122½ percent of GDP this year and decline in later years provided growth picks up from the 1 percent rate projected in 2013.

Financial sector reforms have continued to advance, but banks remain weighed down by nonperforming loans at about 25 percent of total loans. The Irish authorities have therefore established targets for banks to durably resolve distressed mortgages, with banks required to propose sustainable solutions to 50 percent of distressed mortgage accounts by end-2013.

10. June 17th, 2013

IMF Completes Tenth Review Under the Extended Fund Facility Arrangement for Ireland and Approves €0.95 Billion Disbursement

The Irish economy grew modestly for a second year in 2012 and positive signs are emerging with employment rising just over 1 percent year-on-year in the first quarter of 2013, though the rate of unemployment remains high at 13.7 percent. Fiscal outturns in the first five months are in line with Budget 2013. Ireland targets a general government deficit of less than 3 percent of GDP by 2015 and with growth projected to accelerate from 2014, public debt is expected to peak at around 123 percent of GDP this year. In the banking sector, just over 25 percent of loans are nonperforming and losses persist, hindering new lending. Addressing these issues is the focus of the authorities' preparations for entry into European banking union ahead of the European stress test exercise next year.

11. September 26th, 2013

IMF Completes Eleventh Review Under the Extended Fund Facility Arrangement for Ireland and Approves €770 Million Disbursement

The Irish economy grew 0.4 percent in the second quarter but still contracted 1.2 percent year-on-year as exports dipped and domestic demand continued to decline at the pace seen in 2012. At the same time, employment grew 1.8 percent year-on-year and recent indicators suggest a growth pick up in the second half of 2013. The unemployment rate has eased from 15 percent in early 2012 to a still high 13.4 percent in August, yet 58 percent of the unemployed have been out of work for over a year.

Fiscal results for the first eight months are in line with Budget 2013, with the fiscal deficit expected to be about 6.8 percent of GDP (excluding one-off guarantee payments) in 2013 and public debt reaching 123 percent of GDP. Irish banks are gradually returning to profitability but carry nonperforming loans of 26½ percent of their loan portfolios and credit to the private sector declined by 4.5 percent year-on-year in July. In March the authorities set targets for banks to resolve mortgages in arrears and they are conducting diagnostics of Irish banks ahead of European stress tests in 2014.

12. December 13th, 2013

IMF Completes Twelfth and Final Review Under the Extended Fund Facility Arrangement for Ireland

This is the last review under the EFF arrangement, which will expire on December 15. Owing to steadfast policy implementation by the authorities, the EU-IMF supported program has been completed successfully. Ireland has pulled back from an exceptionally deep banking crisis, significantly improved its fiscal position, and regained its access to the international financial markets. Growth, though slower than initially projected, has exceeded the euro area average. Key policy actions have included necessary bank support, restructuring and downsizing, improvements in bank supervision and regulation, fiscal consolidation measures totaling some 8 percent of GDP and improvements in the institutional framework for fiscal policy. These and other efforts leave Ireland in a much strengthened position and a range of economic indicators suggest a recovery is emerging in the second half of 2013.

Yet important challenges remain. Public debt is projected to reach 124 percent of GDP this year, although this partly reflects Ireland's strong cash buffer. The fiscal deficit is expected at about 7 percent of GDP, within the target of 7.5 percent of GDP, yet still high. Banks remain weighed down by low-yielding indexed mortgages and by 26.6 percent of loans being nonperforming, including some 17.4 percent of the total values of mortgages in primary residences being in arrears for over 90 days. Unemployment, though significantly below its peak of 15.1 percent in early 2012, remains unacceptably high at 12.5 percent in November, with almost 60 percent of job seekers out of work for over a year.

8A Detailed Country Specific Recommendations Ireland⁴⁹

2015 Ireland Country-specific recommendations (CSRs)		
1	<p>Ensure a durable correction of the excessive deficit in 2015. Achieve a fiscal adjustment of 0.6 % of GDP towards the medium-term budgetary objective in 2016. Use windfall gains from better than-expected economic and financial conditions to accelerate the deficit reduction and debt reduction.</p> <p>Limit the existing discretionary powers to change expenditure ceilings beyond specific and predefined contingencies.</p> <p>Broaden the tax base and review tax expenditures, including on value-added taxes.</p>	<p>Ireland has made limited progress in addressing CSR 1 (this overall evaluation excludes an assessment of compliance with the Stability and Growth Pact).</p> <p>No progress in limiting discretionary powers to change expenditure ceilings. These have been revised up repeatedly on the back of better than expected growth, i.e. beyond specific and predefined contingencies. No changes have been made to the legal framework defining the conditions under which expenditure ceilings can be revised.</p> <p>Limited progress in broadening the tax base. Announced measures implementing internationally agreed efforts to reduce tax avoidance are likely to contribute to broadening the tax base. However, changes to the universal social charge, postponement of the revaluation of self-assessed property values used to calculate local property tax liabilities and introduction of further tax credits in the 2016 budget are likely to narrow the tax base. A report on tax expenditure was published recently but is limited in scope as it covers only a limited number of tax expenditures and does not cover VAT at all.</p>
2	<p>Take measures to increase the cost effectiveness of the healthcare system, including by reducing spending on patented medicines and gradually implementing adequate prescription practices. Roll out activity-based funding throughout the public hospital system.</p>	<p>Ireland has made some progress in increasing cost-effectiveness in the healthcare system, even though it remains an issue, with renewed expenditure overruns in 2015. Savings on pharmaceuticals have been generated by the increased recourse to generics and the use of internal reference prices and lists of interchangeable medicines. Prescription by international non-proprietary name is still not compulsory for medicines to be dispensed in Ireland. The planned mid-term review of the agreement on the supply and pricing of patented medicines with the Irish Pharmaceutical Healthcare Association</p>

⁴⁹ European Commission Staff Working Document, Country Report for Ireland 2016

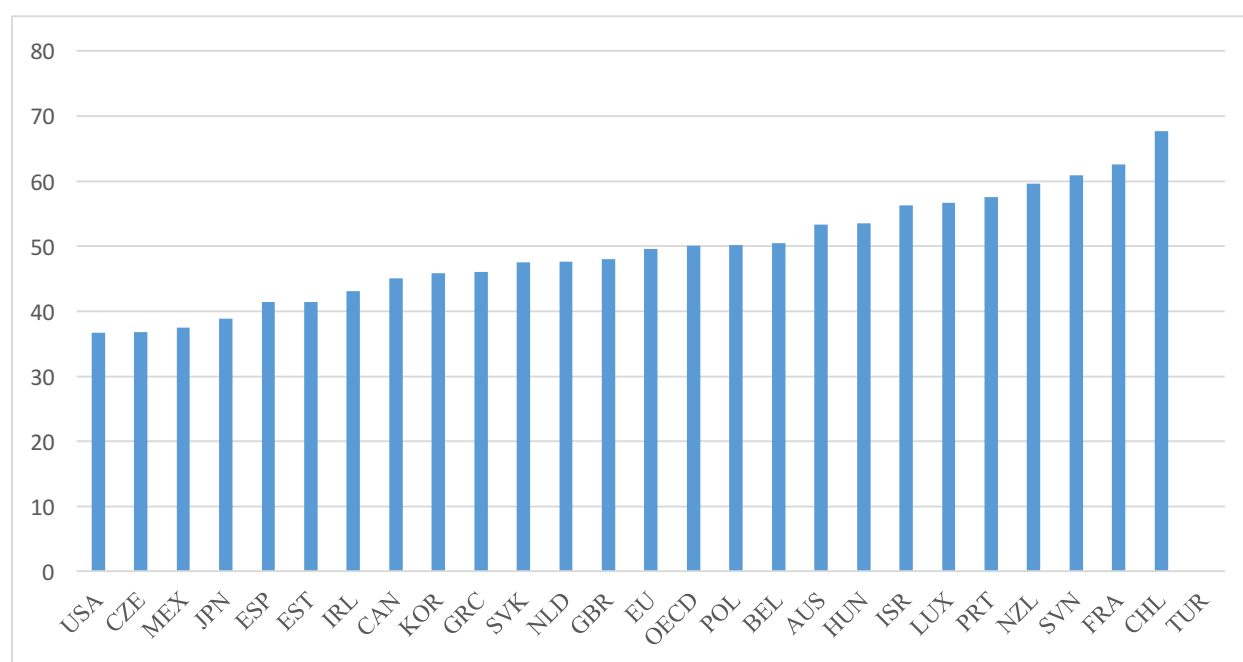
		(IPHA) was never concluded. Formal engagement with the IPHA for its replacement is only expected to start in early 2016. An Activity Based Funding Implementation Plan 2015-2017 was published in May 2015.
3	<p>Take steps to increase the work-intensity of households;</p> <p>and to address the poverty risk of children;</p> <p>by tapering the withdrawal of benefits and supplementary payments upon return to employment;</p> <p>and through better access to affordable full-time childcare.</p>	<p>Ireland has made some progress in addressing CSR 3. Some progress in increasing the work intensity of households. Reforms to the One Parent Family Payment (OFP) are continuing. The largest group of recipients of OFP, around 30 000, transitioned to a jobseeker's payment in July 2015. Some progress in addressing the poverty risk of children. The 2016 budget announced that Child Benefit would increase by a further EUR 5 to EUR 140 per month per child. A new Social Inclusion and Community Activation Programme was launched in April 2015. The programme aims to cater for individuals who are further from the labour market. Target groups include children and families from disadvantaged areas and lone parents. Some progress in tapering benefits. The 2016 budget announced reforms to the Family Income Supplement, which has increased the number of eligible families. The roll-out of the Housing Assistance Payment, which reduces the disincentive to return to work arising from housing subsidies for the unemployed, is continuing. Some progress in improving access to childcare. The Inter-Departmental Working Group on Investment in Childcare identified a number of policy options to strengthen childcare services. The 2016 budget announced plans for the development of a single Affordable Childcare Programme providing a new simplified childcare subsidy programme to be in place in 2017. The 2016 budget also announced new funding for childcare amounting to EUR 85 million and increasing the total funding for childcare by a third. EUR 47 million will be spent on a second year of free preschool education for children from 3 years of age until they start primary school.</p>

4	<p>Finalise durable restructuring solutions for a vast majority of mortgages in arrears by end-2015; and strengthen the monitoring arrangements by the Central Bank of Ireland.</p> <p>Ensure that restructuring solutions for loans to distressed SMEs and residual commercial real-estate loans are sustainable by further assessing banks' performance against own targets.</p> <p>Take the necessary steps to ensure that a central credit registry is operational by 2016.</p>	<p>Ireland has made some progress in addressing CSR 4. Some progress in finalising durable restructuring solutions. The Central Bank of Ireland has requested banks to provide plans on how they intend to conclude sustainable solutions with the vast majority of mortgage borrowers in arrears by the end of Q1-2016. As of the end of September 2015, 86 % of concluded restructuring solutions were meeting the terms of arrangements. However, meeting the terms of the arrangement is not necessarily an indicator of sustainability. Not all restructures are sustainable solutions since they include short-term solutions, such as interest only restructures. Substantial progress in strengthening monitoring arrangements. The five main mortgage holders' mortgage restructuring proposals are now monitored by the Central Bank of Ireland through a more granular framework that has replaced the mortgage arrears restructuring targets. The Central Bank of Ireland started publishing statistics on nonbank lenders' mortgage arrears portfolios in early 2015, as more non-banks hold mortgage loan arrears, especially long-term ones. Some progress in ensuring restructuring solutions for loans to SMEs. The Central Bank of Ireland continues with the monitoring of distressed SME and commercial real estate loan resolution against the set of key performance indicators. Still, their resolution continues to be a lengthy process. The National Asset Management Agency (NAMA) is ahead of schedule with the sale of its development property and commercial loan portfolio. NAMA is due to be wound down in 2018. Some progress in setting up a credit registry. A revised plan for the implementation of the central credit registry has been adopted while pushing back the timeline for effective implementation. Lenders may start submitting data on individuals from the end of September 2016, while the deadline for the submissions for all categories will only be at the end of 2017. Inquiries to the central</p>

		credit registry when granting new loans to individuals will become mandatory for lenders from 2018 onwards, while it will become obligatory for all categories of loan in mid-2018. The development of secondary legislation is still ongoing, with the intention to finalise the regulations by March 2016.
Europe 2020 (National targets and progress)		
Employment rate target: between 69 % and 71 %		The employment rate (Eurostat definition, age group 20-64) rose to 69.1 % in Q3-2015 compared with an average of 63.7 % in 2011- 2012.
R&D investment target: 2.0 % of GDP		Ireland has set a national R&D intensity target for 2020 of 2.0 % of GDP but has made no recent progress towards that target. Investment in R&D reflects the economic contraction. R&D intensity of 1.55 % in 2014 has decreased from 1.58 % in 2013. Public sector R&D intensity in 2014 was 0.41% and business R&D intensity 1.14 %. Business expenditure on R&D, which has been evolving in recent years more favourably than public expenditures, has been supported indirectly by an R&D tax credit scheme that has seen a large uptake.
Reduction of greenhouse gas (GHG) emissions in sectors that are not covered by the Emission Trading System by 20 % compared to 2005 levels.		Non-Emission Trading System greenhouse gas emissions decreased by 12 % between 2005 and 2013. National projections indicate that the country will miss its 2020 target by about 10.1 percentage points with existing measures and by about 5 percentage points with additional measures.
Renewable energy target: 16 % proportion of renewable energy in total gross energy consumption in 2020.		With a proportion of 8.6 % of renewable energy in 2014, Ireland is close to its 2013-2014 interim targets as set out in the Renewable Energy Directive. However, the existing policy, market and budget framework appears to be insufficient to enable the stepwise achievement of the 2020 objective.

<p>Energy efficiency target: 13.9 million tons of oil equivalent expressed in primary energy consumption (11.7 million tons of oil equivalent in final energy consumption).</p>	<p>In 2013, Ireland identified national indicative targets for energy efficiency (equivalent to 20 % energy savings in 2020). As regards primary energy consumption, Ireland has set more ambitious indicative targets in the 2014 National Energy Efficiency Action Plans, as compared with the initial target. This represents a welcome improvement compared with the first set of notified targets. Both primary and final energy targets are deemed adequate when compared with GDP estimations for 2014-2020. As regards trends, primary energy consumption did not change in 2014 and remained at 13.4 million tons of oil equivalent.</p>
<p>Early school leaving target: 8 %</p>	<p>Ireland has achieved the target with an early school leaving rate of 6.9 % in 2014. There has been a consistent positive trend in recent years from 11.5 % in 2010, 10.8 % in 2011, 9.7 % in 2012 and 8.4 % in 2013.</p>
<p>Tertiary education attainment target: 60 %</p>	<p>Ireland is one of the leading Member States in terms of tertiary education attainment rates, with 52.2 % of the population aged 30 to 34 years with that level of education in 2014. This remains short of Ireland's own Europe 2020 national target of 60 % but 14 percentage points above the EU average</p>
<p>To reduce the number experiencing consistent poverty to 4 % by 2016 (interim target) and to 2 % or less by 2020, from the 2010 baseline rate of 6.2 %, which will lift at least 200 000 people out of the risk of poverty and exclusion between 2012 and 2020 (revised target).</p>	<p>The number of people at risk of poverty or social exclusion decreased from 1.36 million in 2013 to 1.27 million in 2014. This remains significantly above the pre-crisis level of 1.05 million in 2008. Achieving the national target remains ambitious.</p>

9A Minimum Wage in 2014 for OECD countries⁵⁰



10A Detailed Report on Greece's compliance with second set of milestones of December 2015⁵¹

#	Action	Status: Done Or Pending
1	After presenting to KYSOIP, the Authorities will propose to the institution for discussion a concept note or policy paper outlining options for the key decisions on the design of the independent revenue agency , in order to ensure faster drafting and adoption of the legislation in time for the first review.	DONE
2	The Authorities will take measures to secure revenue collection : (i) Adopt measures, including legislative if necessary, for cross-checking registrations of fuel storage tanks (fixed or mobile) to combat fuel smuggling; (ii) appoint a procurement committee to be able finalise the purchase of software for VAT network analysis to combat VAT carousel fraud.	DONE
3	Health : the Government will (i) issue the Ministerial Decision on the implementation of hospital clawback; (ii) issue a Ministerial Decision to revise downward the prices of diagnostics from private providers to align to spending to clawback ceiling.	DONE
4	Operationalize the HFSF selection panel for the appointments of all members and chairman including (i) reaching agreement on a binding Terms of Reference for the selection process; (ii) having the HFSF submit to the EWG a proposal on the remuneration of Selection Panel members which has been agreed with the	DONE

⁵⁰ Data: OECD Database

⁵¹ European Commission Report on Greece's Compliance with the second set of milestones of December 2015

	European institutions; (iii) agreeing a timetable for the next steps with the aim of completing appointments by end-December 2015.	
5	Household insolvency legislation: (i) Adopt secondary legislation on the financial assistance scheme for vulnerable households to facilitate the required payments required under the household insolvency law. (ii) The Bank of Greece will issue a decision on the procedure and criteria to be used for terminating the maximum of borrower repayment capacity, the amount that creditors would have perceived in case of emergency enforcement and the potential prejudice to creditors; (iii) provided a detailed implementation plan to establish a Credit and Wealth by end-June 2016 as an independent authority that will identify borrowers' payment capabilities for the facilitation of banking institutions.	DONE*
6	NPL Strategy: (i) adopt the relevant legislation enabling licensing and regulation for non-bank service providers and loan transfers, to be effective as of 1 January 2016. For loans secured by the primary residences as well as loans of SMEs and consumers, the implementation framework will be finalised in the context of the first review of the ESM programme; (ii) initiate preparatory work to update and amend the out-of-court debt resolution law; (iii) propose a coordination mechanism overseen by the Bank of Greece with a mandate to consider large debts to both private and public creditors and identify and execute specific NPL resolution action; (iv) submit a Presidential Decree to establish a debt information network and debt information centres; (v) Bank of Greece to appoint a single special liquidator and introduce a performance-based remuneration scheme for liquidators in consultation with HFSF; (vi) HFSF to nominate an executive board member and internal team dedicated to NPL resolution; (vii) set up a new project structure for implementing and monitoring the NPL strategy including the establishment of a special coordinating secretariat and project management office at the Bank of Greece to support the Government Council for Private Debt Management.	DONE (6v*)
7	The authorities will follow up as agreed with OECD and adopt or otherwise address 10 more recommendations of the OECD toolkit II on beverages and petroleum products in addition to those completed in the context of the first set of milestones.	DONE
8	The authorities shall issue in agreement with the institutions of a Ministerial Decision to (re-) convene the inter-ministerial committee for regulated professions .	DONE
9	On structural, funds , the authorities will (i) implement Law 4314/2014 on European Structural and Investment Funds, adopt all associated delegated acts and any other measure indispensable for the activation of the available funds and ensure the fulfilment of significantly-delayed ex-ante conditionalities (ii) For the 5 motorway concession projects and for the metro and waste water and solid waste projects, the authorities will: (a) draw an action plan with agreed timelines	DONE

	with concessionaires and/or contractors and including necessary actions to resolve bottlenecks; (b) agree with the institutions and set- up an inter-ministerial coordination committee to monitor the implementation of the action plan and to ensure the necessary decisions are taken timely.	
10	Spatial planning and forestry law: the Authorities will (i) present the institutions with proposals for potential improvements of the law 4269 on spatial planning; (ii) agree with the institutions the content of and submit the Presidential Decree on forestry definitions	DONE
11	Energy: the Authorities will take irreversible steps (including announcement of date for submission of binding offers) to privatize the electricity transmission company, ADMIE, unless an alternative scheme is provided, with equivalent results in terms of competition and prospects for investment, in line with the best European practices and agreed with the institutions to provide full ownership unbundling from PPC.	DONE
12	Privatisation: The Authorities will (i) endorse a plan for the new privatisation fund so that it can become operational as soon as possible in early 2016; (ii) complete the Government Pending Actions identified by the institutions for 2015Q4.	DONE (12ii*)
13	The authorities will (i) adopt a law to reform the unified wage grid, effective 1 st January 2016, setting the key parameters in a fiscally neutral manner and consistent with the agreed wage bill targets and with comprehensive application across the public sector, including decompressing the wage distribution across the wage spectrum in connection with the skill, performance, responsibility and position of staff; (ii) commit to continue the attrition rule in 2016 while the ration for the years 2017-2019 will be set in the MTFS 2016-2019	DONE

*(follow up needed)

11A Elaboration of Critiques⁵²

1. Should the new currency be freely convertible in euros?

Pros: a convertible currency would be more reliable, and therefore demand for the new currency should stabilize. Cons: convertibility may lead to capital flight, and to ineffectiveness of monetary policy conducted in the new currency.

2. How should the currency be backed?

By gold and/or international reserves: some authors have suggested this possibility, which, of course, goes along with full currency convertibility, which would enhance confidence in the new currency. On the other hand, this approach would limit the actions of the central bank, prevent the government from running expansionary policies, and, last but not least, be implausible given the size of the current net asset position of Greece.

By future euro revenues from tourism and external trade:

some authors propose convertibility into euros, or convertibility at a future date, based on the expected euro receipts from trade, especially from tourism. This option, again, would limit the fiscal space for government action.

By tax revenues: in this case, the government would issue the new currency (or “fiscal certificates”) in coordination with the central bank, making it clear that it would accept the currency at par for tax payments. When taxes become due, the government can satisfy its needs for liquidity by issuing new IOUs. This option is more likely to be effective if government IOUs are not convertible into euros (although euros should be convertible into the new currency IOUs, if needed).

As pure fiat money: no authors explicitly suggest this approach, which implies a strong trust in the ability of the new currency to act as a store of value (i.e., not depreciate). For practical purposes, if the government were willing to accept the currency for tax payments at par, this proposal would not be different from the previous one but would allow banks to make loans in the new currency, while in the previous regime the currency would be a liability of the government.

⁵² Source: Levy Economics Institute Strategy Analysis, February 2014

Note: See Schuester (2013) for a comparative survey of proposals relative to the EZ.

3. How much of the new currency should be created?

Only a few authors address this point directly, and the appropriate amount would depend on our point (2) above. If convertibility with the euro can be maintained, the maximum amount of the new currency should be determined from the target exchange rate, or as a ratio to the euro value of reserves. For “fiscal certificates,” a simple option would be to pay existing government obligations with residents in new currency bonds, and therefore, the amount of new currency bonds to be issued would be equal to the existing debt of the government to the private sector. A more expansionary policy would set the desired amount of the new currency in circulation as an instrument to achieve the desired level of employment, for a targeted inflation rate.

4. Which transactions should be denominated in the new currency?

Most of the proposals in the literature suggest that all transactions among residents would be immediately denominated in the new currency, including wages and prices for domestic goods. Foreign goods would need to be purchased in euros, and sold on domestic markets in either euros or the new currency. A few authors suggest that wages could be paid in both currencies, either adopting a fixed share or letting the agents contract individual outcomes.

5. Would financial assets held by domestic residents be converted into the new currency?

Authors have widely divergent opinions on this matter, ranging from no conversion, so that all bank deposits (but also household mortgages) would remain in euros; to full conversion; to a mixed solution. It should be clear that if debt obligations were to remain in euros when the debtor has no access to euro revenues, a devaluation of the new currency against the euro would lead to a default of the private sector. Switching all euro bank deposits to the new currency, when the latter is expected to devalue, would imply a loss of purchasing power for foreign goods but little effect on purchasing power for domestic goods, as long as prices were kept under control.

6. Would foreign debt be redenominated in the new currency?

It is in the power of a sovereign government to change the currency denomination of contracts signed under the law of the issuing country, even when they involve nonresidents. However, most of Greece’s foreign debt has been issued under British law, and an attempt at conversion would imply complex legal problems. It would require an international agreement in order to avoid a complete default on existing foreign debt.

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