

Masthead Logo

Via Sapientiae:

The Institutional Repository at DePaul University

College of Liberal Arts & Social Sciences Theses
and Dissertations

College of Liberal Arts and Social Sciences

8-2013

Introducing flexibility in the admission requirements for the membership of eurozone countries

Caheri Aguilar-Arriagada

DePaul University, CAHERI.AGUILAR@GMAIL.COM

Recommended Citation

Aguilar-Arriagada, Caheri, "Introducing flexibility in the admission requirements for the membership of eurozone countries" (2013). *College of Liberal Arts & Social Sciences Theses and Dissertations*. 150.
<https://via.library.depaul.edu/etd/150>

This Thesis is brought to you for free and open access by the College of Liberal Arts and Social Sciences at Via Sapientiae. It has been accepted for inclusion in College of Liberal Arts & Social Sciences Theses and Dissertations by an authorized administrator of Via Sapientiae. For more information, please contact wsulliv6@depaul.edu, c.mcclure@depaul.edu.

INTRODUCING FLEXIBILITY IN THE ADMISSION REQUIREMENTS FOR THE
MEMBERSHIP OF EUROZONE COUNTRIES

A Thesis

Presented in

Partial Fulfillment of the

Requirements for the Degree of

Master of Arts

August, 2013

BY

Caheri Aguilar-Arriagada

Department of International Studies

College of Liberal Arts and Social Sciences

DePaul University

Chicago, Illinois

To my family, especially to my father, José Luis Aguilar Carbajal, who has always encouraged me to challenge myself in every aspect of my life, and to Dr. Antonio Morales-Pita who guided and supported me throughout the whole process

ABSTRACT

In the last few years the main topics of discussion related to the European Economic and Monetary Union have focused on whether it will be able to survive the current crisis or whether or not the countries were ready to form a Monetary Union in the first place. There has also been mention of member countries having surpassed the public debt and budget deficit thresholds, 60 percent and 3 percent respectively, established by the Stability and Growth Pact. However, there has not been much focus on what the figures, established as limits in order to ensure fiscal stability, actually account for. In this paper the author analyzes the compliance of a group of member countries with the limits established in the Stability and Growth Pact on public debt and budget deficit. Based on statistical data available this author compares the economic performance of several member countries at different stages of the business cycle using 60 percent public debt and 3 percent budget deficit in relationship to GDP as the points of comparison. The establishment of a differentiated scale, which would respond to the stage of the business cycle a country might find itself in, is proposed. In the analysis one might observe that even among those countries considered to be very fiscally sound there have been those that at some point have, since their adoption of the euro, surpassed these limits. While the 3 and 60 percent look for fiscal stability they don't seem to account for economic slowdowns. The parameters should be reflective of a particular step in the business cycle, thus allowing for more flexibility in response actions.

CONTENTS

LIST OF ILLUSTRATIONS	v
INTRODUCTION	1
CHAPTER 1. THEORETICAL CONDITIONS STEMMING FROM THE CREATION OF A MONETARY UNION	4
Literature Review	4
Definition of Monetary Union	9
Implications of joining a Monetary Union	10
Use of Fiscal Policy	13
Role of Economic Parameters	15
Debt: Fiscal Adjustments and Imbalances	17
Relationship Between Growth and Social Justice	20
CHAPTER 2. THE CASE OF THE EUROPEAN UNION	23
Brief Historical and Political Background	23
Paul Krugman's Analysis of the Lack of Fulfillment of the Conditions for an Optimal Currency Area	25
The Division Between Northern and Southern Eurozone Countries	27
CHAPTER 3. THE REALITY OF THE FULFILLMENTS OF THE EU AS A RESULT OF THE AMERICAN SLOWDOWN	31
Analysis of the Impact on the Economic Parameters of the Eurozone Countries as a Result of the American Slowdown in 2008-2009	31
The Emergence of the Housing Industry Bubbles as a Result of Reckless Borrowing by Southern Countries	34
The Emergence of Bailouts in Flagrant Violation of the Principles of the Eurozone	34
The Political Gridlock Resulting From the Bailouts	35
The Role of the Eurobonds	36
The Role of the German Chancellor and Mr. Mario Draghi as New President of the ECB	38
CHAPTER 4. THE BUSINESS CYCLE AND THE EUROZONE	39
The Regularities of the Business Cycle	39
The Validity of the Requirements of the Eurozone Membership in the Context of the Different Phases of the Business Cycle	40
The Proposal of the Establishing a Differentiated Scale for the Parameters in Function of at Least Two of the Phases, Namely Recovery and Recession	42
CONCLUSION	48
BIBLIOGRAPHY	50

ILLUSTRATIONS

Figures

1. Budget balance (% of GDP) 2009	43
2. Budget balance (% of GDP) 2010	44
3. Budget balance (% of GDP) 2006	45
4. Public debt (% of GDP) 2009.....	46
5. Public debt (% of GDP) 2009 and 2010.....	46
6. Public debt (% of GDP) 2006.....	47

Tables

1. GDP growth 2002-2012	29
2. Budget deficit (% of GDP) 2002-2012.....	29
3. Public debt (% of GDP) 2002-2012	33

Introduction

The creations of the European Union and the European financial crisis have elicited an extensive literature in the main newspapers and journals specialized in economic and financial issues. However, most of these articles or papers seem to address the possible demise of the euro and the Eurozone or the underlying problems of the EU system that have made this crisis unavoidable. The parameters that have to be met in order to gain entry into the Eurozone, such as the 60 percent public debt and 3 percent budget deficit, are cited but mostly in relation to the membership criteria for EU members to gain entry into the Eurozone. The author has not found recent papers criticizing the adoption of these parameters.

Many economists seem to agree that the European Union was not ready to become a monetary union as it fails to meet some of the essential criteria for establishing an optimal currency area. As important as identifying these underlying systemic problems is, it is also important to consider factors that can be modified in the short-run that might lead to a better functioning of the Eurozone. This paper will focus on modifications to the public debt and budget deficit as percentages of the GDP as parameters required for membership in the Eurozone. The current values assigned as thresholds for these parameters do not take into consideration the effect of stages of growth and recession in the business cycle and implicitly assume that economies will fundamentally be in good standing without any crisis.

Consequently, the hypothesis of this paper is to prove that the current criteria for Eurozone membership are too strict because they do not take into consideration recessionary stages of the business cycle.

Chapter one starts by presenting a literature review of works related to the relevance and adequacy of the reference values established under the Maastricht Treaty. The second part of the

chapter addresses the theoretical aspects of creating a monetary union made up by several countries, and analyzes the financial and economic implications for its members. Due to the nature of a monetary union, fiscal policy becomes the only stabilizing policy tool available to member countries. This part of the chapter also looks at how fiscal policy is normally used by states and why it tends to come into conflict with the practice of balancing the budget. The last part of the chapter looks at the role of economic parameters in monitoring the economic behavior of a particular country.

Chapter two presents the case of the European Union as a current example of a monetary union. This chapter presents the development of the monetary union from the European Coal & Steel Community to the establishment of the European Union under the Maastricht Treaty. The second part of this chapter presents Paul Krugman's analysis of the Eurozone's lack of fulfillment of the conditions for an optimal currency union. The last part of the chapter analyzes the division of the Eurozone into Northern and Southern countries based on their economic positions and performances.

The third chapter analyzes: (a) the impact of an economic downturn, such as that triggered by the American slowdown in 2008-2009, on the budget deficit and public debt as percentages of GDP as leading parameters to determine the acceptance of a European country into the EU; (b) how the creation of the Eurozone artificially reduced the bond yields of the Southern governments and facilitated the emergence of housing bubbles; (c) the bailouts given to Greece and Portugal as a clear violation of the principles (stipulations) established by the Eurozone and the resulting political conflicts; and (d) the implications of the creation of Eurobonds on the political gridlock prevalent in the EU, as well as the roles of the German Chancellor and the ECB President as two key players in the Eurozone.

The fourth and final chapter looks at the different phases of the business cycle in contraposition to the requirements for Eurozone membership in the context of these different phases. The chapter ends with a detailed data analysis of the economic performance of several Eurozone member countries at different stages of the business cycle, setting the stage for the conclusion that the parameters established are not flexible enough to reflect the economic reality of a member country.

Chapter 1

Theoretical Conditions Stemming From the Creation of a Monetary Union

Literature Review

The material available in relation to the adequacy of the parameters established as part of the membership criteria is limited, even if the mention of the debt and deficit membership criteria has been extensive since the adoption of the euro. However, there have been some authors who have discussed important topics related to it, such as where do the debt and deficit reference values derive from. In his paper *European Union at the End of 1997: Who is within the public finance “sustainability” zone?* Luigi L. Pasinetti (1998) analyzes, based on the growth rate, public debt and total deficit, where the future Eurozone members fell in relation to the sustainability zone defined by their individual growth rate, debt and deficit circumstances. He refers to the public debt and budget deficit parameters when he explains how he arrived at the sustainability relation.

Pasinetti refers to the use of the 60 percent and 3 percent figures as something that emerged, not as a definite set of values that would guarantee the sustainability of the European Monetary Union and the euro but, as a combination of values that represented a particular point within the boundaries that defined a particular public finance sustainability zone.¹ At the beginning of the paper the author proceeds to provide the reader with an explanation of the rationale behind the figures. The 60 percent represented the average public debt/GDP ratio among the future members of the European Union at the time the Maastricht Treaty was being drawn. Based on the relationship that he establishes throughout the paper among the growth rate,

¹ Pasinetti, L. L. (1998, March). European Union at the End of 1997: Who is within the Public Finance “Sustainability” Zone? *Banca Nazionale del Lavoro Quarterly Review*. 51 (204), 19.

public debt and public deficit, he accepts 3 percent as a ratio that will maintain the public debt/GDP ratio either constant or decreasing based on what could have been the rate of growth at the time (based on the real rate of growth and inflation).²

The author provides an analysis of the role of the public debt and deficit figures in accordance to their implied role as written down in the Treaty of Maastricht (art. 104c) and the Annex Protocol. Pasinetti argues that one can infer that the purpose of these figures is to prevent the creation of “excessive government deficits”; he then proceeds to briefly explain what would be considered an “excessive” deficit in terms of the public debt/GDP ratio.³ Even as Pasinetti provides these important factors in relationship to the origin and the role of the figures, he does not compare the European countries’ performances at different points in time since the establishment of the Treaty. The paper provides a basis for beginning to understand why the parameters now in use were chosen in the first place. However, the data and graphs presented were analyzed before the euro was adopted. The real economic performance of the member economies versus the expected ideal compliance with the established parameters is what interests this author and what she addresses in this paper.

An author that more directly addresses the adequateness of the fiscal framework established by the EMU is Otmar Issing (2004) in *The Stability and Growth Pact: The appropriate fiscal framework for the EMU*. In this paper Issing argues that the EMU’s fiscal framework, including the limits on public debt and budget deficit “ensure sustainability.”⁴ He

² Pasinetti, 19.

³ Ibid., 18.

⁴ Issing, O. (2004). *The Stability and Growth Pact: The appropriate fiscal framework for EMU*. *International Economics and Economic Policy*, 1(1), 9-13.

provides three reasons as to why the reference values for deficit and debt in combination with an adequate monitoring system are appropriate for creating stable economic policies.

Firstly, Issing states that the establishment of clear parameters facilitates the monitoring process. According to Issing fiscal rules in the case of a monetary union must fulfill a series of conditions. Among these conditions he cites “the budgetary balances in the member countries and in the currency union as a whole should be able to behave in a cyclically appropriate way.”⁵ Secondly, he argues that in principle the public debt and budget deficit reference values established in the Maastricht Treaty Annex Protocol satisfy the conditions he describes and that even if the numerical values were different they would probably still face criticism. Thirdly, Issing argues that the 3 percent limit on budget deficit is often decontextualized and not considered in relation to the goal of wanting member countries to have a balanced budget or a budget surplus under “normal economic circumstances”.⁶ Issing parts from the assumption that member countries will achieve a balanced budget or a budget surplus to argue that additional flexibility is created in the possible scenario that the automatic stabilizers are activated. In that same section Issing states that,

For particular deep or rapid economic recession, the Pact foresees special provisions. These requirements and criteria and their application to all the euro area countries help to ensure that the aggregate fiscal balance of the euro area remains appropriate over the cycle, despite the national autonomy.⁷

The article refers to the established public debt and budget deficit values as the basis that would allow for flexibility in the application of fiscal policy. Issing also argues that the Stability and Growth Pact did take the possibility of recession into consideration by setting special provisions

⁵ Issing, 11.

⁶ Ibid.

⁷ Ibid.

to address the possible deviation from the 3 and 60 percentage values. However, in this particular work the author does not address what are the provisions that are in place in the case of a recession in the European Monetary Union.

From the article the reader can infer that for the author it is important that the fiscal balance follows the (business) cycle as he keeps making reference to it. Even though Issing analyses the rationale and the advantage of having the limits on budget deficit and public debt be 3 percent and the 60 percent respectively, he does it within the realm of what should happen in “principle”. He only dedicates a few lines to mention the effect of the fiscal framework in the actual practice of its implementation. Issing does not even consider the possibility that the fiscal difficulties of some member countries at the time the article was written could be related to the fiscal framework established in the Stability and Growth Pact. For him, the member country is responsible for any fiscal difficulties, as he implied that this would signal a failure to meet the preconditions of having a balanced budget during growth periods.⁸

Another author who also writes in favor of the fiscal framework established by the Treaty of Maastricht and the Stability and Growth Pact is Mauro Visaggio (2004) in his paper *Does Stability and Growth Pact Provide an Adequate and Consistent Fiscal Rule?* Visaggio examines the adequacy and the consistency of the fiscal rule with which members of the EMU have to comply. Just as Pasinetti analyzed the fiscal framework in terms of sustainability Visaggio examines the fiscal rules in terms of ensuring the sustainability of the public debt. However unlike Issing who supports the numerical reference values provided by the Annex Protocol of the

⁸ Issing, 11.

Maastricht Treaty, as a ceiling for debt and deficit, Visaggio is indifferent to the actual numerical values. He is concerned with these values only in terms of the possible burden on society.⁹

Willem H. Buiter and Clemens Grafe (2004) criticize the fiscal framework established by the Maastricht Treaty and the Stability and Growth Pact. In their article *Patching up the Pact* they argue that the existing criteria are not designed to address the economic reality of future member countries that are dissimilar in economic or financial position to the current members. Even though this article is primarily concerned with the fiscal criteria as they relate to EU candidates, it uses the public debt and budget deficit reference values as a starting point for the authors' argument. They criticize the lack of clarity concerning the reasoning behind the public debt and budget deficit values. Like Pasinetti they conclude that the 60 percent debt ceiling is most likely a reflection of the average public debt in the area at the time the Maastricht Treaty was being drafted. Unlike with the public debt ceiling the authors mention that they found no historical benchmark related to 3 percent being chosen as the budget deficit ceiling.¹⁰ This article does not delve deeper into why the established fiscal framework, and proposed debt and deficit ceilings, provide an inadequate framework for accession candidates and an adequate one for current members.

When examining the literature available on the topic of the numerical reference values, as well as member countries' compliance with them, it is noteworthy to observe that most of the material available predates the 2008 global financial crisis and the sovereign debt crisis the European Union is going through at the moment. Even though there are authors who have

⁹ Visaggio, M. (2004, June). Does Stability and Growth Pact Provide an Adequate and Consistent Fiscal Rule? *Macroeconomics, EconWPA*, 1-32. Retrieved from <http://EconPapers.repec.org/RePEc:wpa:wuwpma:0407008>

¹⁰ Buiter, W. H. & Grafe, C. (2004, March). Patching up the Pact: Some Suggestions for Enhancing Fiscal Sustainability and Macroeconomic Stability in an Enlarged European Union. *Economics of Transition*, 12 (1), 67-102.

criticized the chosen numerical reference values, especially as the reasoning behind their choice tends to be somewhat evasive, there are other authors that support their implementation as preventing Eurozone member countries from reaching excessive budget deficit and public debt values. This paper will attempt to contribute to fill in the gap as to what has happened in the last years in relation to maintaining the reference values in the face of, not only a temporary economic slowdown, but also in the face of a crisis.

Definition of Monetary Union

Before one can discuss the significance of the parameters or the factors that must be taken into consideration when establishing quantitative thresholds, whose fulfillment are supposed to ensure the stability of the member countries of a monetary union, one must first understand what a monetary union entails. Robert Mundell, a pioneer of the Theory of Optimal Currency Areas, defines a currency area as "a domain within which exchange rates are fixed".¹¹ In his influential paper *Theory of Optimum Currency Areas* Mundell (1961) describes two types of currency areas. The first type is a currency area comprised of different regions (countries) under a common currency. The second type consists of different countries, each with their national currency.¹² For the purpose of this paper our interest lies in the first type.

Some of the benefits that a group of countries would gain from joining a currency area would be: a decrease in transactions costs, elimination of currency exchange risks, and an

¹¹ Mundell, R., A. (1961). A Theory of Optimum Currency Areas. *The American Economic Review*, 51(4), 657.

¹² *Ibid.*, 658.

increase in transparency.¹³ In the case of a monetary union with a common currency each member country gives up its national currency on behalf of a new single (common) currency. Consequently, the adoption of this common currency also implies the creation of a single central bank.¹⁴ As Benjamin J. Cohen states “monetary union means complete abandonment of separate national currencies and full centralization of monetary authority in a single joint institution.”¹⁵ Just as Mundell did in the *Theory of Optimum Currency Areas* Cohen also makes reference to variations in the structure of currency areas, but as previously mentioned this author is interested in the case of a currency area with a common currency and an independent central bank in charge of monetary policy.

Implications of Joining a Monetary Union

Among the implications of joining a monetary union is the loss of a national currency and with that, the ability to use exchange rates as a mechanism to correct any external imbalances. In other words, a country loses its ability to use its currency to increase competitiveness.¹⁶ Devaluation and revaluation are no longer viable options for helping stabilize the economy. Since currency devaluation is not an option the country has to resort to implementing internal devaluation. An internal devaluation tends to be more painful for the population and the time it takes to achieve the goal of reducing labor costs is usually prolonged. Internal devaluation implies cutting wages, as the government tries to increase competitiveness by reducing labor

¹³ (2012, June 14). Revenge of the Optimum Currency Area [Web log post]. Retrieved from <http://krugman.blogs.nytimes.com/2012/06/24/revenge-of-the-optimum-currency-area/>

¹⁴ Mundell, 657.

¹⁵ Cohen, B. J. (2008, Feb. 10). Monetary Unions. In *EH.Net Encyclopedia*. Retrieved from <http://eh.net/encyclopedia/article/cohen.monetary.unions>

¹⁶ Mundell, 659.

costs, which as Paul Krugman points out encounters more resistance. A reduction in wages may be particularly problematic during economic slowdowns because there is no guarantee that prices will also fall. Thus, putting pressure on households.¹⁷ On the other hand, a currency devaluation effects “a de facto wage cut”.¹⁸ Compared to internal devaluations currency devaluations have demonstrated to be less painful and less politically problematic.

There is an agreement among economists that the greatest sacrifice a country makes when joining a currency area, and giving up its national currency, is the loss of flexibility.¹⁹ This loss might not be as noticeable or as appreciated when a country’s economy is doing well. It will be during economic slowdowns that the loss of flexibility will be especially felt, and when the implications of this loss will become more apparent. Paul Krugman refers to “a loss of a mechanism for adjustment.”²⁰ There are benefits to joining a currency area but there are also costs. Following this line of thought, Krugman argues that in the case of an exchange rate area “these costs arise because a country that joins an exchange rate area gives up its ability to use the exchange rate and monetary policy for the purpose of stabilizing output and employment.”²¹ The benefits that derive from joining a currency area are expected to outweigh the costs and policy limitations that membership might entail.

The obvious implication of joining a monetary union is, as stated above, the loss of a sovereign national currency and control over monetary policy. But what exactly does the loss of

¹⁷ Krugman, P. (2011, Jan. 12) Can the euro be saved? *The New York Times Magazine*. Retrieved from http://www.nytimes.com/2011/01/16/magazine/16Europe-t.html?pagewanted=all&_r=0

¹⁸ Ibid.

¹⁹ Friedman, M. (1968, March). The Role of Monetary Policy. *The American Economic Review*, LVIII (1).

²⁰ Krugman, Revenge of the Optimum Currency Area.

²¹ Krugman, P. & Obstfeld, M. (2003). Optimum Currency Areas and the European Experience. *International Economics: Theory and Policy* (7th ed.). Boston: Addison-Wesley, 577.

monetary policy entail? The monetary authority, in this case the central bank, controls the money supply. In the case of a currency union, with a single currency, there is a centralization of monetary authority under a single institution. This means that a country cannot influence the money supply available since it is no longer in control of the money supply for that country's particular currency. With regard to monetary policy the monetary authority's main mechanisms to maintain a stable economy are interest rates, open-market operations and the reserve ratio. The two main types of monetary policy are expansionary and contractionary policies. Contractionary monetary policy is usually implemented when the economy is either growing or expected to grow too fast with the implicit inflationary risk. There tends to be a reduction in the money supply due to an increase in interest rates, the reserve ratio and the sale of bonds by the central bank. An expansionary monetary policy (also known as quantitative easing – QE) is regularly implemented when the economy is in recession or is growing very slowly. Countries in a currency area can neither print money nor implement monetary policy to stabilize their economies.

Relinquishing control over monetary policy is not something trivial. Due to the monetary authority's role in stabilizing economic growth, it is worth analyzing what the implications of a “one-size-fits-all monetary policy” are.²² Milton Friedman (1968) argues the importance of monetary policy in *The Role of Monetary Policy*. Friedman lists three main capabilities of monetary policy:

1. Prevents money itself from being a major source of economic disturbance.
2. Provides a stable background for the economy.
3. Contributes to offsetting major disturbances in the economic system arising from other sources.²³

²² Krugman, Revenge of the Optimum Currency Area.

²³ Friedman, 12-14.

Joining a monetary union requires fiscal discipline by the countries that comprise it. Since these countries have to ensure the well being of their economy and their people they must follow policies that allow them some flexibility during economic slowdowns. One of Keynes central arguments was that there should be more fiscal discipline in good times, deficits should be avoided, in order to save up for when the economy is not doing as well. In the words of Henry Farrell and John Quiggin “John Maynard Keynes argued that surpluses should be accumulated during good years so that they could be spent to stimulate demand during a bad one”.²⁴

Use of Fiscal Policy

Fiscal policy refers to "the use of government spending and taxation to influence the economy".²⁵ In general, fiscal policy is divided in three categories

(1) Policies concerning government purchases of goods and services, (2) policies concerning taxes, and (3) policies concerning transfer payments (such as unemployment compensation, social security benefits, welfare payments, and veteran's benefits).²⁶

In a currency union, the only tool for economic stabilization for each individual country is fiscal policy.

The Theory of Optimum Currency Areas describes the optimal characteristics for sharing a common currency. Even if countries involved in a currency area share some characteristics they are still individual countries, with different strengths and weaknesses. Among their differences is the composition of their economy. One country may specialize in manufacturing

²⁴ Farrell, H. & Quiggin, J. (2011, May/June). How to Save the euro- and the EU: Reading Keynes in Brussels. *Foreign Affairs*, 90 (3), 100.

²⁵ Weil, D. N. (n.d.). Fiscal Policy. In *The Concise Encyclopedia of Economics*. Retrieved from <http://www.econlib.org/library/Enc1/FiscalPolicy.html>

²⁶ Case, K. L. & Fair, R. C. (2004). The government and fiscal policy. In *Principles of Macroeconomics* (7th ed.) (pp.161-181). New Jersey: Pearson Prentice Hall, 161.

while the other may depend more on tourism. When all sectors of the economy are doing well a one-size-fits-all monetary policy might not seem too problematic. It is when the different countries find themselves out of sync concerning the business cycle (be it due to a decrease in demand, etc.) that the strain of having a centralized monetary union might be felt. This is due to the fact that, while one country might be trying to stimulate demand the general monetary policy might be concerned with rising inflation in the currency area. As in the example just mentioned, it may occur that the monetary authority of the currency area conducts a monetary policy that might be counterproductive to a member country's economic objectives.

The government is in charge of fiscal policy. Even as government intervention continues to be a contentious subject in economics, its influence over the economy cannot be denied. John Maynard Keynes argued in favor of government intervention to correct economic instability. Members of a currency union must rely on fiscal policy to compensate for the lack of an independent monetary policy. Fiscal policy is primarily concerned with fighting unemployment and inflation. When do countries typically use it? Governments tend to use fiscal policy to “promote strong and sustainable growth and reduce poverty”.²⁷

Just as with monetary policy, fiscal policy can be expansionary or contractionary. Expansionary fiscal policy is usually used when the economy is in recession while contractionary fiscal policy tends to be implemented when the economy is growing too fast. Expansionary fiscal policy involves increasing government spending while reducing taxes. Since the main goal of applying expansionary fiscal policy is to stimulate the economy this generally tends to lead to an increase in aggregate demand and a decrease in unemployment. On

²⁷ Horton, M. & El-Ganainy, A. (2012, March 28). Fiscal policy: taking and giving away. *Finance & Development Magazine*. Retrieved from <http://www.imf.org/external/pubs/ft/fandd/basics/fiscpol.htm>

the other hand, contractionary fiscal policy tends to be used to prevent inflation and it involves a decrease in government spending and an increase in taxes.

Fiscal policy objectives tend to vary. Mark Horton and Asmaa El-Ganainy give an excellent example of factors that might be taken into consideration when deciding fiscal policy objectives,

In the short term, priorities may reflect the business cycle or response to a natural disaster or a spike in global food or fuel prices. In the longer term, the drivers can be development levels, demographics, or natural resource endowments.²⁸

If the economy is in recession, it calls for expansionary fiscal policy, whose implementation leads to an increase in the budgetary deficit. If the economy is experiencing an inflationary spiral contractionary fiscal policy should be implemented, leading to a possible increase in the budgetary surplus. In other words, balancing the budget is antagonistic with simultaneous consistent application of fiscal policy. The dilemma arises when the deficit in the budget leads to debts that require borrowing, especially if the borrowing is done from international organizations. Experience has shown that lenders often require the implementation of contractionary fiscal policy to balance the budget of the borrower to reduce the risk of not being paid back. Evidence shows that austerity measures embedded in contractionary fiscal policy lead to balancing the budget rather than to growth.

Role of Economic Parameters

What is the role of economic parameters? It allows one to monitor the economic behavior of a particular country. Due to the need to maintain a stable currency area it is necessary to be more aware of the economic behavior of those countries involved. Since monetary policy is

²⁸ Horton, M. & El-Ganainy, Fiscal policy: taking and giving away.

centralized, the behavior of the monetary authority does not need to be monitored as closely. But due to the fact that each country can pursue its own independent fiscal policy, it might be harder to be informed of the current condition of a country's economy.

Among the most relevant economic parameters would be the budget balance, public debt and GDP growth. The budget balance measures government expenditures and revenues in a given year. A budget deficit is not necessarily considered to be a sign of bad economic behavior. Rather, one has to look at how large the deficit is in relation to the GDP, as well as the endogenous or exogenous causes of the deficit. The result of the net accumulation of deficits is the public debt. The public debt/GDP indicator allows one to see how dependent on borrowing a country might be to sustain its economy and whether this level of borrowing is sustainable in the long run. All these parameters are interrelated.

As with a budget deficit, "the manner in which debt builds up can be important".²⁹ A high level of public debt can affect growth,

A higher level of public debt implies that a larger share of society's resources is permanently being spent servicing the debt. This means that a government intent on maintaining a given level of public services and transfers must raise taxes as debt increases. Taxes distort resource allocation, and can lead to lower levels of growth.³⁰

Carmen M. Reinhart and Kenneth S. Rogoff (2010) analyzed the effect of government debt on real GDP growth in their paper *Growth in a Time of Debt*. They used four ranges for debt levels: low debt, medium debt, high debt and very high debt.³¹ Based on their analysis they concluded that once government debt reached a certain threshold, different for developed and developing

²⁹ Reinhart, C. M. & Rogoff, K. S. (2010, May) Growth in a time of debt. *American Economic Review: Papers & Proceedings*, 573-578.

³⁰ Cecchetti, S. G, Mohanty, M.S. & Zampolli, F. (2010, May). The future of public debt: prospects and implications. *BIS Working Papers* No. 300, 12-13.

³¹ Reinhart & Rogoff, 7.

countries, the rate of growth decreased. In other words, there were “notably lower growth outcomes”.³²

Lastly, we have the GDP growth rate. The GDP growth rate is important because it gives one an overall picture of the condition of a country’s economy. If the economy is growing it is assumed that the country is doing well and, all things constant, it is expected to continue doing well. However, one has to be wary of relying solely on GDP growth as an indicator without looking at its structure. It is important to know the origin of that growth; whether it is related to external factors or if it is due to an increase in the price of a particular good, or whether it is due to the diversification of the economy.

Debt: Fiscal Adjustments and Imbalances

There are several factors that can lead to fiscal imbalances, some of which may be beyond a government’s control. A fiscal imbalance basically represents a gap between the ability to generate revenue and the expenditures a government must account for. Fiscal policy must also be used carefully because it is not uncommon to relate it to budget deficits, especially in what concerns government fiscal transfers. The implementation of expansionary fiscal policy during a recession will probably lead to an increase in the budget deficit, if the economy has not previously accumulated a surplus. Since the government is stimulating the economy it is probably investing more in programs that will encourage an increase in economic activity, and an increase in demand. It will also present a decrease in tax revenues since it does not want to strain the already weakened consumers and businesses. An increase in unemployment is usually accompanied by an expansion of unemployment benefits in order to lessen the burden of the

³² Ibid., 22.

people. This, of course, puts more pressure on government expenditures, which might have been unprepared to address the added burden.³³ A deficit will then lead to the need to borrow, either domestically or internationally, thereby fueling an increase in public debt. Depending on the borrowing terms, specifically on the bond yield, a country might find it very hard or costly to borrow. In a currency area if a country has a high level of public debt plus high borrowing costs it could later become a problem for the other member countries, as it may threaten the stability of the common currency.

One of the most important factors that may lead to fiscal imbalances, especially at this point in time, is the rapidly aging population. There are several costs related to an aging population that might not be accounted for in the budget projections. These are long-term costs but they are very important because they represent a future liability for the government.³⁴ Where do these costs come from? Age-related costs will be primarily reflected by pension and health care costs. Not only is this a liability because of the number of people who will represent an added cost to the government but also because of the continually rising health care costs and the increase in life expectancy.³⁵ The support ratio, the ratio of the working population (numerator) to the retired population (denominator), will necessarily be affected.³⁶ The ratio declines as a result of either a decrease in the working age population or an increase in the retired population. Even if the government cannot fully control the change in the ratio it can exert some influence in increasing the numerator by increasing employment and/or extending the retirement age of the

³³ Arestis, P. & Malcolm, S. (2010, April). The return of fiscal policy. *Journal of Post Keynesian Economics*, 32(3), 329.

³⁴ Cecchetti, S. G, Mohanty, M.S. & Zampolli, F. (2010, May). The future of public debt: prospects and implications. *BIS Working Papers* No. 300, 1.

³⁵ Cecchetti, Mohanty, & Zampolli, 6.

³⁶ Ibid.

labor force, and having a flexible immigration policy. Age-related costs are dangerous because since they are more long-term they act almost as hidden costs, leading to governments being unprepared to deal with them.³⁷

With regard to fiscal adjustments, in order to stabilize the economy the government might either tighten or loosen fiscal policy. Usually, in periods of recession governments promote fiscal stimulus.³⁸ However, when the country has a high level of debt, expansionary fiscal policy would find it harder to promote growth. In the paper *The future of public debt: prospects and implications* Cecchetti, Mohanty and Zampolli (2010) state that “the existence of a higher level of public debt is likely to reduce both the size and the effectiveness of any future fiscal response to an adverse shock.”³⁹ A high level of debt also becomes problematic because if it is deemed to be excessive, not only by the national government but also by the international community, the national government might find itself having to apply contractionary fiscal policy to try to reduce it. Cecchetti notes, “but fiscal restraint tends to deliver stable debt; rarely does it produce substantial reductions”.⁴⁰ As mentioned in the previous section, fiscal tightness and austerity do not foster growth, that is the basis for the automatic stabilizers, which are instrumental for balancing the budget without the implementation of contractionary fiscal policy, to kick in. In the case of a country having a high debt level the absence of an independent monetary policy will also be felt. An independent monetary policy would allow the currency to be devalued to try to increase competitiveness to promote growth and subsequently, try to reduce debt through a combination of fiscal and monetary policy.

³⁷ Cecchetti, Mohanty, & Zampolli, 1.

³⁸ Arestis & Malcolm, 331.

³⁹ Cecchetti, Mohanty, & Zampolli, 14.

⁴⁰ Ibid., 1.

The Relationship Between Growth and Social Justice

Growth does not necessarily lead to democracy and social justice. There has been a growing interest in the effect of factors such as inequality and corruption on growth. Some countries might register higher levels of growth while reducing income inequality. However, this is not always the case. Several parameters to be considered in relationship to growth are the gini coefficient, poverty rate, index of democracy, index of economic freedom, human development index, and corruption perception index. The calculation of the aforementioned indexes is one of the best ways to know how much growth has contributed to social justice. The gini coefficient measures “the extent to which the distribution of income ... among individuals or households within an economy deviates from a perfectly equal distribution.”⁴¹ Fuad Hasanov and Oded Izraeli analyzed economic data from 48 states in the U.S. to try to answer the question of whether inequality is good or bad for growth. Their findings were that growth tends to be negatively affected by low and high levels of inequality.⁴²

The OECD defines the poverty rate as “the ratio of the number of people who fall below the poverty line and the total population.”⁴³ A study conducted by several World Bank economists revealed that, “a 10 percent drop in poverty levels, other things being equal, can increase economic growth by one percent. In turn, a 10 percent increase in poverty levels lowers

⁴¹ OECD Glossary of Statistical Terms – Gini index definition. (2002, Aug. 9). *OECD.org*. Retrieved from <http://stats.oecd.org/glossary/detail.asp?ID=4842>

⁴² Hasanov, F. & Izraeli, O. (2012, Jan.-Feb.). How much inequality is necessary for growth? *Harvard Business Review the Magazine*. Retrieved from <http://www.hbr.org/2012/01/how-much-inequality-is-necessary-for-growth/ar/1>

⁴³ OECD. (2010). Poverty rates and gaps. In *OECD Factbook 2010: Economic, Environmental and Social Statistics*. Retrieved from <http://dx.doi.org/10.1787/factbook-2010-89-en>

the growth rate by one percent.”⁴⁴ The relationship between a high poverty level and growth creates a vicious cycle as the poor are unable to participate in economic activities related to growth. High poverty leads to low growth and low growth leads to high poverty.⁴⁵

The Index of Democracy, which is calculated by the Economist Intelligence Unit, evaluates the democratic standing of a country on the basis of five categories: 1) electoral process and pluralism, 2) civil liberties, 3) the functioning of government, 4) political participation, and 5) political culture.⁴⁶ Another parameter mentioned above was the index of economic freedom. The Wall Street Journal and the Heritage Foundation developed this index in order to monitor what they describe as “economic freedom” around the world. Economic freedom is defined as “the fundamental right of every human to control his or her own labor and property.”⁴⁷ This is measured based on components of four categories: 1) rule of law, 2) limited government, 3) regulatory efficiency, and 4) open markets.⁴⁸ The benefits associated with a higher level of economic freedom according to the sponsors of this index are a demonstrated positive relationship between economic freedom and positive social and economic values, “such as per capita income, economic growth rates, human development, democracy, the elimination of poverty, and environmental protection.”⁴⁹

Among the most reliable indicators of social and economic development is the Human

⁴⁴ Latin America Needs to Cut Poverty to Boost Growth. (2006, Feb. 14). *The World Bank*. Retrieved from <http://go.worldbank.org/D32PM6TTD0>

⁴⁵ Ibid.

⁴⁶ The Economist. *Democracy Index: Liberty and justice for some*. Retrieved from <http://www.economist.com/node/8908438>

⁴⁷ The Heritage Foundation. 2013 Index of Economic Freedom. Retrieved from <http://www.heritage.org/index/about>

⁴⁸ Ibid.

⁴⁹ The Heritage Foundation. 2013 Index of Economic Freedom.

Development Index (HDI), which is obtained through a combination of life expectancy, educational attainment and income indicators.⁵⁰ The last parameter to consider in relation to growth and social justice is the Corruption Perception Index, sponsored by Transparency International. The Corruption Perceptions Index “measures the perceived levels of public sector corruption” in various countries and territories.⁵¹ In the case of a currency union it is important to maintain a balance between growth and social justice. The existence of social justice in the region lowers the probability of conflicts arising in individual countries that might affect the stability of the monetary union as a whole.

⁵⁰ United Nations Development Program. *Human Development Reports*.
<http://www.hdr.undp.org/en/statistics/hdi/>

⁵¹ Transparency International. *Corruption Perceptions Index*. <http://www.cpi.transparency.org/cpi2012/>

Chapter 2

The Case of the European Union

Brief Historical and Political Background

The origins of the European Union can be traced back to the European Coal & Steel Community, which was established after the Second World War. One of the main reasons cited as a motivation for the creation of what would later become the European Union was Europe's recent history that included World War I and World War II. The economic and human devastation that resulted from the two wars became one of the incentives for European countries to form long lasting bonds among themselves, in order to prevent a repetition of these events. Developing tighter relationships would in turn increase the costs of going to war with each other, thus making it harder for a WWIII to occur. It was thus that the European Coal & Steel Community became the first formal organization of what would later become the European Union. The increase in economic integration in Europe was also accompanied by an enlargement of the organizations that were formed throughout the last half-century which came to be known as the bases of what today is known as the European Union. This integration process reached its peak with the establishment of the European Monetary Union, set in the Maastricht Treaty, with the euro becoming its most important accomplishment.

Europe's violent history was only part of the reason for the desire to create an organization that would unite Europe's nations. Another reason was political. After WWII the United States influence in the world arena had greatly increased. Having just emerged from a war and having to face not only large economic costs but also large infrastructure damage, accompanied by large human casualties, European countries saw their power and influence dwindling in the global sphere.

The Marshall Plan was an American aid program for Europe drawn up in 1947 and put into effect in 1948. This plan was designed to help Europe with the post-WWII reconstruction process. The United States wanted political stability, peace, and the return of a “normal economic health in the world.”¹ With the aid of the United States, Europe was able to develop once again. At this time, the U.S. dollar became the sole currency to be negotiated. This continued until 1971 when the U.S. experienced its first balance of trade deficit, which marked the end of the Bretton Woods system.

It was at this time that the idea of a union to counterbalance the United States’ influence emerged, as the U.S. was slowly losing its status as a hegemon. A united Europe could compete on a more leveled playing field with the U.S. through the development of a stronger voice in the international arena.² During the second-half of the 20th century a series of organizations were established with the goal of strengthening European unity. However, it was not until 1992, when the Treaty of Maastricht was signed, that a more solid foundation was established, giving birth to the European Union. This treaty also became the pillar of what is known as the Economic and Monetary Union (EMU).³ The Eurozone was then established, culminating with the launch of the euro in 1999.

¹ Marshall, G. C. (1947, June 5) *European Initiative Essential to Economic Recovery*. The Department of State Bulletin, XVI (415), 1159-1160. Retrieved from https://www.trumanlibrary.org/whistlestop/study_collections/marshall/large/documents/index.php?documentdate=1947-06-05&documentid=8-7&pagenumber=1

² Anderson, P. (2009). *The New Old World*. London: Verso.

³ Treaty of Maastricht on European Union. (2010). *Europa.eu*. Retrieved from http://europa.eu/legislation_summaries/institutional_affairs/treaties/treaties_maastricht_en.htm

Paul Krugman's Analysis of the Lack of Fulfillment of the Conditions for an Optimal Currency Area

Many economists were skeptical of the creation of a European Monetary Union because they considered its foundations to be unstable. Among these economists we have Paul Krugman. Krugman has repeatedly argued that Europe did not, and does not, have the institutions necessary to create a common currency area.⁴ Throughout his papers and lectures focusing on this topic he emphasizes the preconditions that should have been fulfilled in order for a monetary union to be established. Referring to Robert Mundell he mentions factor mobility, focusing on labor, as a necessary characteristic of a monetary union.

He focuses on labor because it is one of the main factors affected by an asymmetric shock. Labor mobility is important because during an economic downturn a particular area might be more affected than another leading to a rise in the unemployment rate due to a decrease in investment, etc. In the event that the unemployment rate rises it can be decreased through emigration, as the labor force decreases and comes more in line with the jobs available.⁵ This allows the unemployment rate to decrease. Krugman notes that there is limited labor mobility in the European Union. In his paper *Can the euro be saved?* he compares the United States to Europe. One of the factors of comparison is labor mobility in both currency areas. In his analysis of the differences between what could be referred to as the United States currency area and the Eurozone he notes that the relatively cultural homogeneity in the United States, beginning with the use of English, makes moving from one state to another and looking for a job much more possible. He states in fact that labor mobility is very common in the U.S. while in

⁴ Krugman, *Can the euro be saved?*

⁵ Krugman, *Revenge of the Optimum Currency Area.*

Europe it is not. One of the main barriers to labor mobility in Europe is language.⁶ However, there are also institutional differences, such as the existence of closed shopped jobs and different requirements to practice certain jobs (specially professional jobs) in every member country.⁷ The institutional differences are related to the fact that Europe's labor market is heavily regulated.

Krugman also cites fiscal integration as a key component in a currency union. Once again he makes reference to a European and a U.S. state and how the outcomes of an asymmetric shock would vary based on their different structures as currency unions. Unlike the European Union, that is only a monetary union, the United States is also a fiscal union. This changes a state's or member country's economic situation considerably. In the case of the U.S., if one of its states were to suffer a financial or economic crisis the federal government would be able to help through resource transfers.⁸ Financing of diverse programs, such as unemployment benefits, is still possible because it is the federal government not the state that pays for them. A member of the European Monetary Union does not have this leverage and this is partly why its economy might be much more affected by a crisis. In the case of an asymmetric shock a member state has to rely primarily on itself. This lack of fiscal union is particularly palpable right now, as default became a very real possibility for several of its member states. It has also become apparent that the existing institutions are not equipped to handle large crises. The possibility of creating a governing body that can help member countries in times of need has been a bureaucratic headache, as a consensus is hard to reach.

⁶ Krugman, Can the euro be saved?

⁷ Ibid.

⁸ Krugman, Revenge of the Optimum Currency Area.

The condition of free capital mobility might be considered to have been met. As capital is largely handled through technological means there are no barriers to its free movement across borders. An interesting relationship can be observed between labor rigidity and capital flow. It is plausible that labor rigidity facilitates capital flow, since labor limitations makes it more likely to have capital investments. Free movement of labor in the European Union would probably limit movement of capital as wage levels would not vary as much from country to country.

Lastly, Krugman, just as other economists have already done, agrees that while there has been an increase in trade it has not been as dramatic as it was first expected.⁹ The adoption of the euro, the most powerful symbol of the monetary union, did reduce transaction costs and risks but it did not lead to the expected intra-European trade increase.

The division Between Northern and Southern Eurozone Countries

Differences among the existing member countries have always existed. In fact, part of the European project consisted in providing funds to those member countries that were lagging behind. These economic differences became less pronounced by the development of the European Monetary Union and the adoption of the euro. Due to the euphoria caused by the apparent success of the euro the differences seemed to decrease as the Eurozone continued to grow and individual economies appeared to be performing well. However, the economic performance and the financial behavior of the member countries came under scrutiny after the 2008 financial crisis. It was at this point that an invisible line was drawn again which separated them into what came to be informally referred to as the Northern and Southern countries.

⁹ Krugman, Revenge of the Optimum Currency Area.

The Northern and Southern countries are not just referred to as such because of their geographical location. When talking about members of the Eurozone they imply common economic characteristics among members. The Northern countries are economically stronger and are considered, for the most part, to have sound fiscal policies in place. The Southern countries are economically weaker and are also considered to follow less sound fiscal policies. Even with the creation of the Stability and Growth Pact which established the conditions, that had to be met and maintained, in order to be accepted and maintain membership in the Eurozone, the economic convergence that its proponents expected did not take place. As the case of Greece, which manipulated its budget deficit figures in order to meet the membership requirements, illustrates. Countries like Germany, the Netherlands and Belgium belong in the first group, while countries like Greece, Portugal, Italy and even Spain are considered Southern countries.

During the first half of the 2000s all of the countries were performing very well in economic terms. Some countries, such as Ireland, experienced incredible rates of growth. Yet, it was not until the 2008 world economic crisis occurred that the stability of each member country was more clearly known. In terms of GDP growth the Northern countries experienced a very slight downturn or were still able to show some growth, even if small. Those countries that did experience a slowdown were able to recover in about a year. On the other hand, most of the Southern countries are still trying to overcome the aftereffects of the crisis and have shown either a small, zero or negative GDP growth. See Table 1.

Table 1. GDP growth 2002-2012

Country	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Austria	1.60	0.91	2.30	2.73	3.63	3.68	1.08	-3.50	2.21	2.69	0.66
Belgium	1.36	0.81	3.25	1.80	2.67	2.86	0.95	-2.75	2.42	1.81	-0.20
Finland	1.83	2.01	4.13	2.92	4.41	5.34	0.29	-8.54	3.32	2.74	-0.20
France	0.94	0.92	2.33	1.85	2.64	2.25	-0.19	-3.06	1.57	1.70	-0.01
Germany	0.03	-0.39	0.69	0.85	3.89	3.39	0.80	-5.08	4.03	3.10	0.87
Greece	3.44	5.94	4.37	2.28	5.51	3.54	-0.22	-3.14	-4.94	-7.10	-6.80
Ireland	5.66	3.88	4.40	5.89	5.42	5.43	-2.14	-5.47	-0.78	1.42	0.60
Italy	0.45	0.03	1.56	1.09	2.27	1.55	-1.16	-5.50	1.77	0.56	-2.38
Netherlands	0.08	0.32	2.03	2.17	3.46	3.91	1.77	-3.66	1.57	1.08	-0.90
Portugal	0.76	-0.91	1.56	0.78	1.45	2.37	-0.01	-2.91	1.94	-1.55	-3.20
Spain	2.71	3.09	3.26	3.59	4.08	3.48	0.89	-3.74	-0.37	0.40	-1.30

Source: Data from the Economist Intelligence Unit, GDP (% real change), (2013).

In terms of debt, the Northern countries have smaller public debts than the Southern countries. The higher debt of Northern countries, such as Germany, is largely due to their central role in helping maintain the Eurozone afloat. Most Southern countries present a higher level of debt than the 60 percent established in the Stability and Growth Pact. Another important indicator of the difference between these groups of countries is the budget deficit in relation to the GDP.

Table 2. Budget deficit (% of GDP) 2002-2012

Country	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Austria	-0.90	-1.70	-4.60	-1.80	-1.70	-1.00	-1.00	-4.10	-4.50	-2.50	-3.10
Belgium	-0.20	-0.10	-0.30	-2.70	0.30	-0.10	-1.00	-5.60	-3.90	-3.90	-2.80
Finland	4.17	2.50	2.27	2.69	4.08	5.34	4.30	-2.49	-2.55	-0.56	-1.40
France	-3.20	-4.10	-3.60	-2.90	-2.30	-2.80	-3.30	-7.60	-7.10	-5.20	-4.50
Germany	-3.85	-4.15	-3.76	-3.32	-1.64	0.24	-0.08	-3.08	-4.14	-0.78	0.10
Greece	-4.84	-5.71	-7.42	-5.64	-6.02	-6.76	-9.93	-15.61	-10.84	-9.50	-6.60
Ireland	-0.30	0.42	1.40	1.67	2.93	0.07	-7.35	-13.94	-30.86	-13.28	-8.20
Italy	-3.00	-3.47	-3.48	-4.18	-3.31	-1.49	-2.70	-5.38	-4.59	-3.95	-3.00
Netherlands	-2.11	-3.15	-1.77	-0.28	0.52	0.16	0.49	-5.58	-5.02	-4.42	-3.80
Portugal	-3.50	-3.80	-4.00	-6.50	-4.60	-3.30	-3.70	-10.20	-9.90	-4.40	-5.10
Spain	-0.20	-0.40	-0.10	1.30	2.30	1.90	-4.50	-11.20	-9.70	-9.50	-7.30

Source: Data from the Economist Intelligence Unit (2013).

Unlike their southern counterparts the majority of the Northern countries have maintained their budget deficit within the established parameter of three percent.

Another characteristic of those countries identified as Northern is that they tend to have a more diversified economy. Spain serves as an illustration of a less diversified economy. Even though tourism is very important to its economy during the housing boom it invested heavily in housing. Consequently, its economy was primarily driven by tourism and housing. When the bubble burst Spain started struggling for additional sources of revenue.

Chapter 3

The Reality of the Fulfillments of the EU as a Result of the American Slowdown

Analysis of the impact on the economic parameters of the Eurozone countries as a result of the American slowdown in 2008-2009

The collapse of Lehman Brothers not only impacted the U.S. economy but also marked the beginning of a crisis that would have overarching global effects. The impact of the slowdown of the American economy on Europe had several dimensions. Due to how closely interlinked financial markets are, and the decision of some European banks to buy U.S. mortgages, European banks were exposed to the slowdown and in some cases suffered heavy losses.¹ The burst of the property bubble not only affected the housing industry but also affected other sectors of the economy tied to this industry.² Unemployment rose and overall demand fell in the U.S. The fall in demand was an important factor as the U.S. is an important non-European market for Eurozone members.

In order to analyze the impact that the American slowdown had on the Eurozone economies this author will compare GDP growth, budget balance, and public debt before and during the 2008-2009 period. As shown in Table 1 (p. 29) Eurozone members' economies have, overall, showed positive growth rates since their adoption of the euro. There were only a few times in which several countries showed a slight contraction in their economies. In 2008 several European countries had a negative growth rate but no major contractions. The impact of the American slowdown can be fully appreciated when analyzing the growth rate for 2009. Lehman Brothers filed for bankruptcy towards the later part of 2008. In 2009 all Eurozone members had a negative growth rate, the majority showing a dramatic contraction in their economy from the

¹ Stiglitz, J. E. (2010). *Freefall*. New York: W. W. Norton & Company, 21.

² Ibid.

previous year. Countries like Finland went from having a 0.3 percent growth rate in 2008 to a -8.5 in 2009. The Netherlands went from having a 1.8 percent growth rate in 2008 to a -3.7 in 2009. As can be observed even countries known for their economic soundness and their fiscal discipline were affected.

Regarding the budgetary balance, during the first part of the decade the majority of the Eurozone members that had a budget deficit stayed either within the 3 percent budget deficit limit or relatively close to it as shown in Table 2 (p. 29). In 2008 some countries like Greece and Ireland did show a significant increase in their budget deficit, while Spain went from having a budget surplus to a deficit of 4.5 percent of GDP, but the majority maintained levels similar to those they had had in previous years. In 2009 one can observe significant increases in countries' budget deficits. Finland went from having a 4.3 budget surplus in 2008 to a 2.5 deficit as a percentage of GDP in 2009, while the Netherlands also went from a 0.5 percent surplus to a 5.6 percent deficit.

In 2008 some countries like Greece and Ireland did show a significant increase in their budget deficit, while Spain went from having a budget surplus to a deficit of 4.5 percent of GDP, but the majority maintained levels similar to those they had had in previous years. In 2009 one can observe significant increases in countries' budget deficits. Finland went from having a 4.3 budget surplus in 2008 to a 2.5 deficit as a percentage of GDP in 2009, while the Netherlands also went from a 0.5 percent surplus to a 5.6 percent deficit. The most dramatic changes can be observed in Greece, Ireland, Spain and Portugal where their deficits reached 15.6, 13.9, 11.2, and 10.2 percent respectively.

The majority of Eurozone member countries had decreasing public debts since their adoption of the euro up to 2007. In table 3 one can observe that Belgium's public debt had

decreased to 84 percent of GDP in 2007. In that same year Finland and Ireland had a public debt of 35.2 and 25.1 percent respectively. With a few exceptions, such as Finland and Austria, 2008 saw an increase in the public debt level of Eurozone members. Most increases in public debt ranged from 2 to 6 percent. However, there were countries like the Netherlands and Ireland that did have increases of over 10 percent of their GDP in their public debt.

Table 3. Public debt (% of GDP) 2002-2012

Country	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Austria	69.20	68.25	68.78	69.15	66.25	66.48	62.15	69.20	71.48	72.10	75.60
Belgium	103.40	98.40	94.00	92.00	88.00	84.00	89.20	95.70	95.50	97.80	99.30
Finland	41.49	44.54	44.41	41.73	39.66	35.18	33.97	43.55	48.67	49.16	53.40
France	59.00	63.14	65.14	66.74	63.91	64.19	68.26	79.18	82.39	86.05	89.90
Germany	60.75	64.44	66.23	68.55	68.02	65.21	66.79	74.48	82.48	80.54	81.50
Greece	101.66	97.45	98.86	101.23	107.47	107.23	112.90	129.69	148.33	170.55	166.80
Ireland	32.01	30.75	29.46	27.26	24.62	25.08	44.50	64.87	92.14	106.42	117.80
Italy	105.13	103.78	103.46	105.27	105.84	102.95	105.63	115.90	118.74	120.09	127.10
Netherlands	50.47	51.94	52.48	51.80	47.33	45.25	58.44	60.73	63.16	65.44	72.10
Portugal	56.60	59.20	61.90	67.70	69.30	68.30	71.70	83.20	93.50	108.10	119.80
Spain	52.60	48.80	46.30	43.20	39.70	36.30	40.20	53.90	61.50	69.30	82.00

Source: Data from the Economist Intelligence Unit (2013).

In 2009 one can observe significant increases in the public debt level from 2008. Finland went from a debt level of 34 to 43.6 percent, Austria from 62.2 to 69.2 percent, Greece went from 112.9 to 129.7 percent, Ireland from 44.5 to 64.9 percent.

How can this slowdown be attributed to the United States' economic situation in 2008-2009? When analyzing the parameters it can be observed that countries like Austria, Belgium, Finland, France, Germany and the Netherlands returned to positive growth levels in 2010. If the parameters show that all countries went into recession in 2009, including those that are considered to have more stable economies, but in 2010 some had recovered and were showing positive growth rates there had to be one factor that affected all of them. This factor was the American slowdown.

The Emergence of Housing Industry Bubbles as a Result of Reckless Borrowing by Southern Countries

In order to understand how Southern countries, directly or indirectly, became the engineers of their individual housing bubbles one must first understand why they were able to borrow up to this point. Economists agree that the reason is tied to the launch of the euro. The launch of the euro led to a decrease in bond yields, as member countries' government bonds were perceived to be of low risk similar to those of the strongest Eurozone economies. The fall in bond yields allowed these countries to borrow more than they would have done at the levels registered before joining the single market. This led to a flow of cheap money during the 2002-2008 period that in turn led to the fueling of the property bubbles in several member countries.³ Southern countries borrowed beyond their means as their membership in the Eurozone seemed to act as a safety net against any possible reversal in the borrowing terms.

Through this access to easy credit, governments and private corporations started investing heavily in the housing industry. The banks became involved as they provided loans to homebuyers and property developers as housing prices continued to rise. More people became involved in the property industry thus adding fuel to the bubble.⁴

The Emergence of the Bailouts in Flagrant Violation of the Principles of the Eurozone

There were three pillars established to ensure the successful functioning and survival of the European Monetary Union, that is to say,

³ Knight, L. (2012, May 18). Spanish economy: What is to blame for its problems? *BBC News*. Retrieved from <http://www.bbc.co.uk/news/business-17753891>

⁴ Harvey, D. (2010). *The Enigma of Capital and the Crises of Capitalism*. Oxford: Oxford University Press.

a rule against excessive deficits and public debt levels, a “no bail out” clause that would make member governments responsible for their own debts, and a prohibition against the monetization of government debt (unsterilized ECB purchase of members’ debt).⁵

In principle, the “no bailout” clause in combination with the other pillars made it clear that fiscal misbehavior would not be tolerated and that each member country would have to be responsible for the consequences of their economic and fiscal decisions. Moral hazard was the main concern underlying these pillars.

In 2010 Greece became the first Eurozone country to be given a bailout amid controversy as to the larger implications of this violation of one of the Eurozone principles. This principle was once again violated as Portugal was also bailed out just a few months after Greece. If the bailouts to Greece and Portugal were already controversial, the second Greek bailout really brought the “no bailout” issue to the forefront. The previous bailouts had been considered exceptions to the rule. A second bailout to a member country raised the question of whether it was worth risking more political and economic disagreement over a programme that may not produce the expected results.⁶

The Political Gridlock Resulting From the Bailouts

As a result of the bailouts the European political leaders got together to discuss the future of the Eurozone. The political gridlock developed because the European leaders reached a political impasse as to what the next step should be. Some called for further integration, hinting toward the possibility of the creation of a fiscal union that would complement the existing

⁵ Haley, J. A. (2012, March 28). Paradise Lost: The Maastricht Conditions and the Euro [Web log post]. Retrieved from <http://www.cigionline.org/blogs/new-age-of-uncertainty/paradise-lost-maastricht-conditions-and-euro>

⁶ Munchau, W. (2012, Feb. 12). Why Greece and Portugal ought to go bankrupt. *Financial Times*.

monetary union. Others called for the creation of an emergency fund. However, the points of contention are always in the details of these possible solutions. European leaders tend to disagree on the details. Questions such as: what would this action entail? who would provide the funding? how much would each member have to contribute and based on what criteria? what message would such a decision send to other member countries, the rest of their European counterparts, and the world? become problematic as each country looks after its own interests while simultaneously trying to address the larger issue affecting the union. In the case of the creation of an emergency fund countries with stronger economies worried that, since money was being put aside in case of an emergency, struggling countries would not be as incentivized to improve their fiscal behavior.

The bailouts also made political leaders more aware of how their citizens felt about these issues. The growing discontent of the German population with the bailouts provided to Greece has been an important factor in Chancellor Merkel's decision making. This illustrates the many dimensions that are involved in European policymaking.

The Role of the Eurobonds

The idea of a Eurobond emerged as the European community searched for solutions to the European sovereign debt crisis, as countries like Greece and Portugal with higher debt levels struggled to maintain their economies afloat. Central to the possible creation and use of the Eurobonds is the stability of the euro.⁷ The constant threat of a possible default by any of the

⁷ Eiffinger, S. (2011, April) Eurobonds – Concepts and implications. In European League for Economic Cooperation Cooperation, *Cahier Comte Boël no. 15: How to strengthen the European Monetary Union* (pp.7-16). Retrieved from <http://www.elec-lece.eu/documents/pub/B15.pdf>

economically weaker countries destabilizes the value of the euro as it brings up the question of how much longer will it exist. The delegitimization of the euro is a problem that affects all Eurozone members.

In theory the Eurobond would be a “ ‘pooled’ sovereign debt instrument of the Member States of the euro area”.⁸ It would allow struggling countries to borrow at lower interest rates than they are currently doing. They would provide these countries with much needed liquidity to stabilize their economy and try to get out of recession. Eurobonds would be backed by the stronger Eurozone economies, which would reduce their risk of default as financial assets in comparison to bonds by the individual struggling economies. Yields for Greek bonds are very high because they are perceived to be highly risky. Since Eurobonds would have a financially sound base they would protect the euro from larger market shocks.⁹

Even if the survival and stability of the euro are the main reason for the creation of the Eurobonds they are a source of political controversy. Why? Mainly, because Eurobonds are perceived as benefiting weaker economies, while incurring the costs on the stronger ones. It is true that Eurobond yields would be lower than the bond yields of countries like Greece, Portugal, Spain, or Ireland. However, for countries like Germany, Finland, Netherlands, and Austria, it would mean an increase in their current bond yields. Issing (2004) cited this as one of the reasons against a Eurobond as he said that countries with sound fiscal policies would have higher yields than they would have if they did not have a common Eurozone bond. The issue of moral hazard is also brought up as countries with stronger economies argue that Eurobonds would be counterproductive to fixing fiscal behavior in the economically struggling countries.

⁸ Ibid., 7.

⁹ Eiffinger, Eurobonds – Concepts and implications.

The Role of the German Chancellor and of Mr. Mario Draghi as New President of the ECB

The German Chancellor plays a very important role in the EU and the Eurozone. As the political leader of one of the strongest economies in Europe, and of one of the original founding members of the European Union, Chancellor Angela Merkel is at the center of the decision-making process in the EU. As a European leader she has to consider what is in the best interest of the EU. Her main goal is to ensure the stability of the system while making sure that it is also growing. However the German Chancellor is first and foremost responsible to her constituents, the German citizens.¹⁰

Mario Draghi is the successor of Jean-Claude Trichet as President of the European Central Bank. Just as the German Chancellor plays a very important role in helping maintain a stable European Union and Eurozone, the President of the European Central Bank is also entrusted with the mission of helping ensure the stability of the euro and in turn the Eurozone. Unlike his French counterpart, Draghi has shown the willingness to provide liquidity to the Eurozone banks in an effort to strengthen individual economies and thus the euro. The flexibility shown by Mario Draghi in addressing the European sovereign debt crisis is partly possible because contrary to Chancellor Merkel he does not experience a conflict of interests between opposing positions.

¹⁰ Morales-Pita, A. (2013, January). Analyzing the implications of the contradiction between the German Chancellor and the EU. *Proceedings of 6th International Business and Social Sciences Research Conference 3 – 4, Dubai, UAE, ISBN: 978-1-922069-18-4, 15 pages.*

Chapter 4

The business cycle and the Eurozone

The regularities of the business cycle

Central to this paper's argument is an understanding of the business cycle. Wesley Clair Mitchell, an American economist, provided the most cited definition of a business cycle. He wrote,

Business cycles are a type of fluctuation found in the aggregate economic activity of nations that organize their work mainly in business enterprises; a cycle consists of expansions occurring at about the same time in many economic activities, followed by similarly general recessions, contractions, and revivals which merge into the expansion phase of the next cycle.¹

Business cycles do not have a specific length rather they share specific characteristics in economic related behavior. Concerning the duration of a business cycle Mitchell and Burns write, "this sequence of changes is recurrent but not periodic; in duration business cycles vary from more than one year to ten or twelve years."² Mitchell divided the two periods of the business cycle into four stages. The expansion period consists of the recovery/revival and prosperity stages. While the contraction period includes the crisis and depression stages. When it is a mild depression it is referred to as a recession.³

During these stages several economic indicators move together. For example during a contraction one not only sees a decline in output (of goods and services), but one also observes an increase in unemployment. The opposite is true for an expansion period. A period of

¹ Burns, A. F., & Wesley, C. M. (1946). *Measuring Business Cycles*. New York: National Bureau of Economic Research, 2.

² *Ibid.*, 3.

³ Sherman, H. J. (1991). *The Business Cycle: Growth and Crisis Under Capitalism*. New Jersey: Princeton University Press, 11.

expansion is characterized by a rise in output, and an increase in employment.⁴ Since output is the main economic indicator used to determine in what stage of the cycle a country is in, it is only natural to use GDP growth as a reference point when trying to define stages. Recession is generally identified by economists as the succession of negative GDP growth during two consecutive quarters. It is important to remember that even as business cycles follow a certain pattern they are all still considered separate and unique entities. Howard J. Sherman (1991) in his book *The Business Cycle: Growth and Crisis under Capitalism* notes that, “the business cycle is found in all capitalist countries, but the forms of the cycle are much influenced by international events and national peculiarities.”⁵

The Validity of the Requirements of the Eurozone Membership Criteria in the Context of the Different Phases of the Business Cycle

Due to the nature of a monetary union the main goal of its proponents and of the participants is to ensure that the economies of all its members are as synchronized as possible. In the case of the Eurozone the Maastricht eligibility criteria serves this purpose. The criteria was established to make sure that the public finance position of the member countries are not so different that it would endanger the survival of the union. Through convergence they tried to synchronize, as much as possible, the business cycles of the participating economies. The eligibility criteria include the “sustainability” of the public finance position of the member country.⁶ The reference values that were provided to help ensure that sustainability can be found

⁴ Romer, C. D. (2008). Business Cycles. In *The Concise Encyclopedia of Economics*. Retrieved from <http://www.econlib.org/library/Enc/BusinessCycles.html>

⁵ Sherman, 31.

⁶ Pasinetti, 17-36.

in the Protocol on the excessive deficit procedure annexed to the Treaty of Maastricht and they are:

- 3 % for the ratio of the planned or actual government deficit to gross domestic product at market prices;
- 60 % for the ratio of government debt to gross domestic product at market prices.⁷

These particular figures were established to prevent countries from accumulating excessive deficits, which are regarded as destabilizing to an economy.

It is important to consider not only the figures provided as reference values but also to delve deeper into why these particular values were chosen. Luigi L. Pasinetti (1998) analyzes the possible reasoning behind the budgetary balance and public debt reference values in his article *European Union at the End of 1997: Who is within the Public Finance "Sustainability" Zone*. Pasinetti concludes that these figures are a reflection of the economic situation at the time of the conception of the Maastricht Treaty, when most countries belonging to the European Community had an average public debt of about 60 percent. Taking factors like the real rate of growth, the rate of inflation and the 60 percent public debt/GDP ratio into consideration implies that in order to maintain a non-increasing debt/GDP ratio the deficit/GDP ratio cannot be higher than 3 percent.⁸ Pasinetti notes that these values "represent a point on the boundary to the (sustainability) 'zone' in which the public debt to GDP ratio is either constant or decreasing."⁹

The established limits on public debt and budget deficit do not account for the different phases of the business cycle. A member country has to adhere to complying with these limits regardless of what phase of the cycle it finds itself in. The lack of flexibility in the reference

⁷ Treaty on European Union. (1992, July 29). *Official Journal C 191*. Retrieved from <http://eur-lex.europa.eu/en/treaties/dat/11992M/htm/11992M.html#0084000006>

⁸ Pasinetti, 19.

⁹ Ibid.

values assumes that the economies of all Eurozone member countries are always growing. However, this is not true. Why? The literature concerning the increase in trade in the Eurozone due to the creation of a single market and a single currency says that even though there has been an increase in intra-European trade not all countries are benefited equally. In order for a country to have a trade surplus there must be another country with a trade deficit, in order to balance out. The same logic applies to other economic indicators. If one country is doing well, there must be another country that is not doing as well. Of course, there are exceptions like in 2009 when all European countries showed contractions in their economies. Based on the understanding that countries will not always be constantly growing but that they will also go through periods of contraction, one cannot expect the parameters established by the Maastricht Treaty to accurately reflect the reality of the economic situation.

The Proposal of Establishing a Differentiated Scale for the Parameters in Function of at Least Two of the Phases, Namely Recovery and Recession

This paper's proposal is that a scale has to be created that accurately reflects the movement of the economic indicators according to the phase of the business cycle a country's economy is going through. It has been mentioned that there are four phases to the business cycle but for the purpose of this paper we will only consider two phases, recovery and recession. These two phases reflect the most dramatic changes in the business cycle. This author will focus her analysis on 10 of the 11 countries that first adopted the euro, in 1999, and Greece that joined in 2001, since they provide a larger data sample for investigation.

As previously mentioned 2009 was the only year since the adoption of the euro in which all Eurozone economies contracted. In 2009 only one country, Finland, stayed within the

established parameter of maintaining a 3 percent budget deficit/GDP ratio. Germany had a deficit of 3.1 percent, which still surpasses the established limit. The deficit of the rest of those referred to as Northern countries ranged from 4.1 to 7.6 percent: Austria had a deficit of 4.1 percent, Belgium’s deficit reached 5.6 percent, France’s was 7.6 percent, and the Netherlands had a deficit of 5.6 percent, as shown in figure 1.

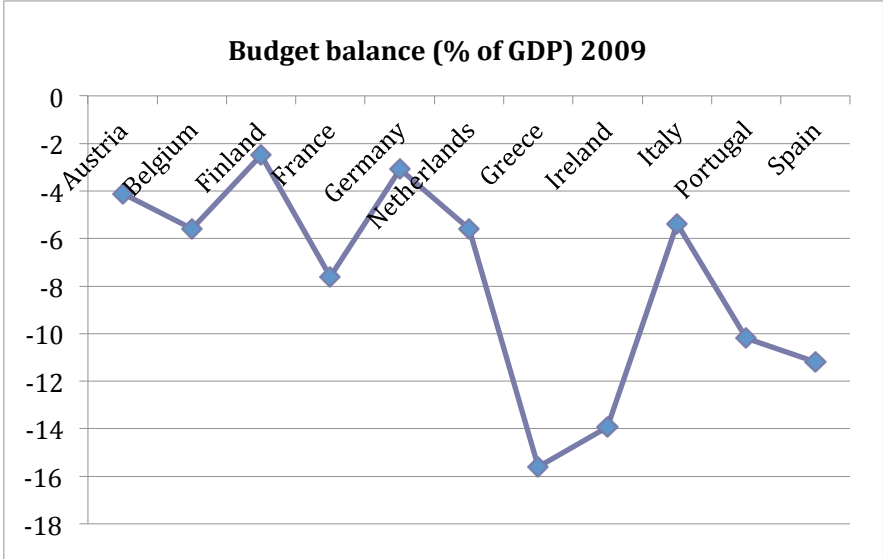


Figure 1. Budget balance (% of GDP) for the year 2009. Date from the Economist Intelligence Unit (2013).

In that same year, 2009, the group referred to as Southern countries presented much higher budget deficits, with the exception of Italy, which had a 5.4 percent deficit. Greece had a 15.6 percent budget deficit, the highest in the group, followed by Ireland with a 13.9 percent deficit. It is important to note that even some of the countries considered to be models of fiscal discipline failed to comply with the 3 percent deficit requirement.

In 2010 the Northern countries entered the recovery stage going from negative to positive growth rates. However, as shown in figure 2, with the exception of Finland, their budget deficits still exceeded 3 percent. Their budget deficits by country were: Austria 4.5 percent, Belgium 3.9

percent, France 7.1 percent, Germany 4.1 percent and the Netherlands 5 percent. From the Southern countries only Italy and Portugal showed an improvement in their GDP growth rate in this year. Italy had a 4.6 percent deficit and Portugal a 9.9 percent deficit

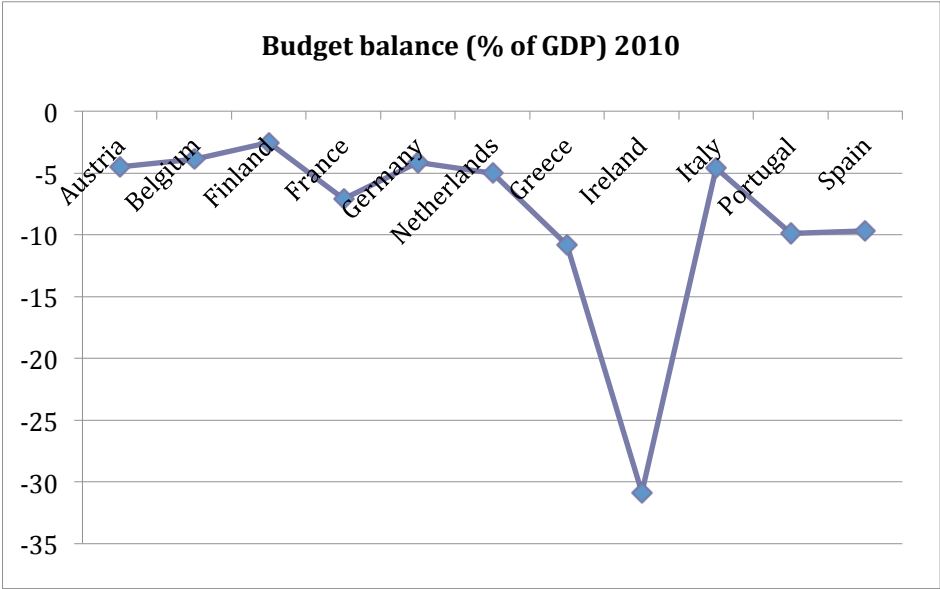


Figure 2. Budget balance (% of GDP) for the year 2010. Data from the Economist Intelligence Unit (2013).

Now, let us look at the year 2006, a year in which these same 11 countries had a GDP growth of at least 1 percent. In figure 3 one can observe that the majority of the countries had a deficit lower than 3 percent and that some even had budget surpluses. Among those countries that exceeded the 3 percent limit there were Greece with a 6 percent budget deficit, Italy with a deficit of 3.3 percent and Portugal with a 4.6 percent deficit.

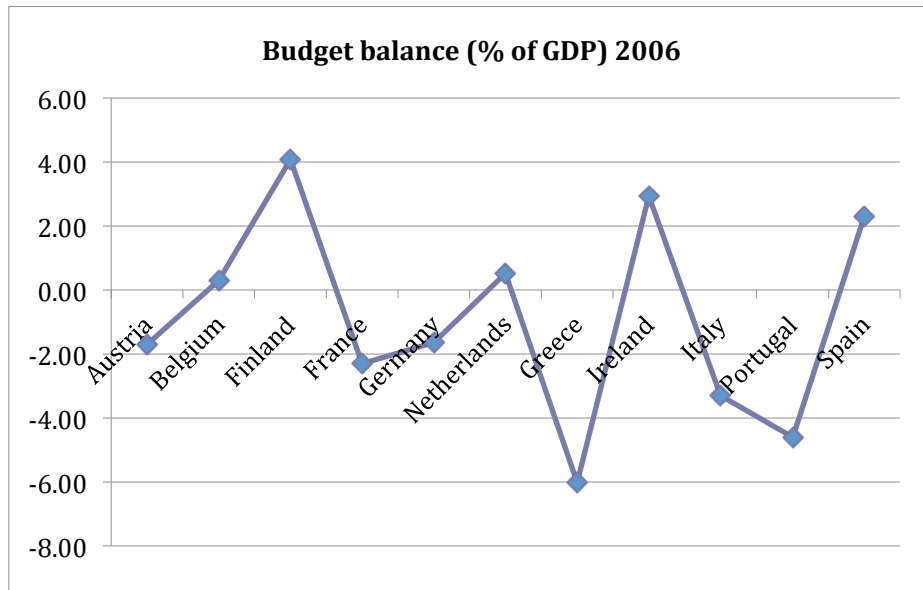


Figure 3. Budget balance (% of GDP) for the year 2006. Data from the Economist Intelligence Unit (2013)

In order to provide an accurate comparison concerning the debt level we will be analyzing the same years (2009, 2010, and 2006) as those analyzed for the budgetary balance. In 2009 the 11 member countries showed an increase in their public debt/GDP ratio compared to the previous year. Most importantly, as shown in figure 4, only two of these countries had a public debt level lower than 60 percent, Finland with a 43.6 percent and Spain with 53.9 percent public debt. Out of the remaining countries three exceeded the 90 percent threshold determined by Dr. Carmen Reinhart and Kenneth Rogoff as being the level after which the ratio of public debt/GDP starts affecting the level of growth in developed countries; these countries were Belgium at 95.7 percent, Greece at 129.7 percent and Italy at 115.9 percent.

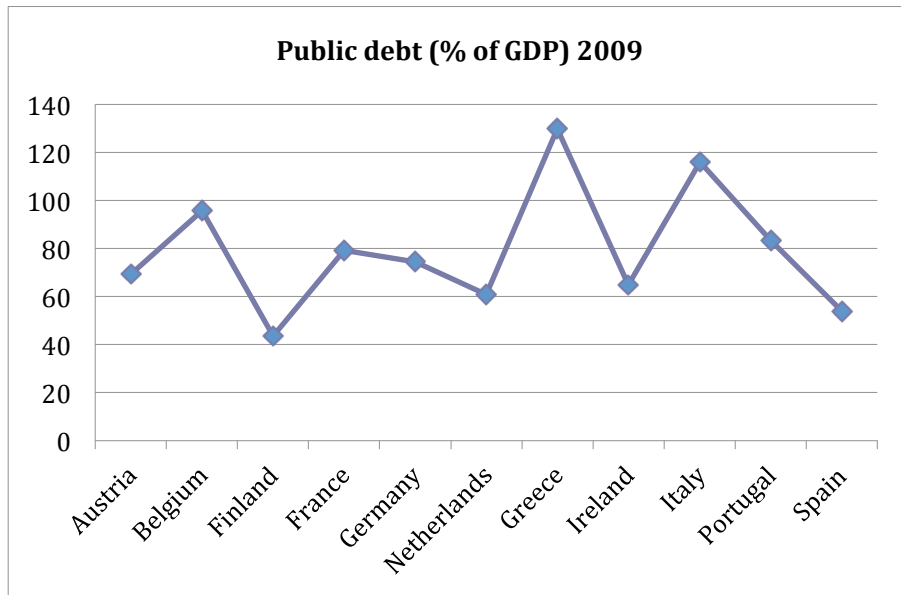


Figure 4. Public debt (% of GDP) for the year 2009. Data from the Economist Intelligence Unit (2013).

In 2010 all countries once again showed an increase in their public debt level. Even those countries that were in the recovery phase still showed an increase in their public debt, even if it was very small.

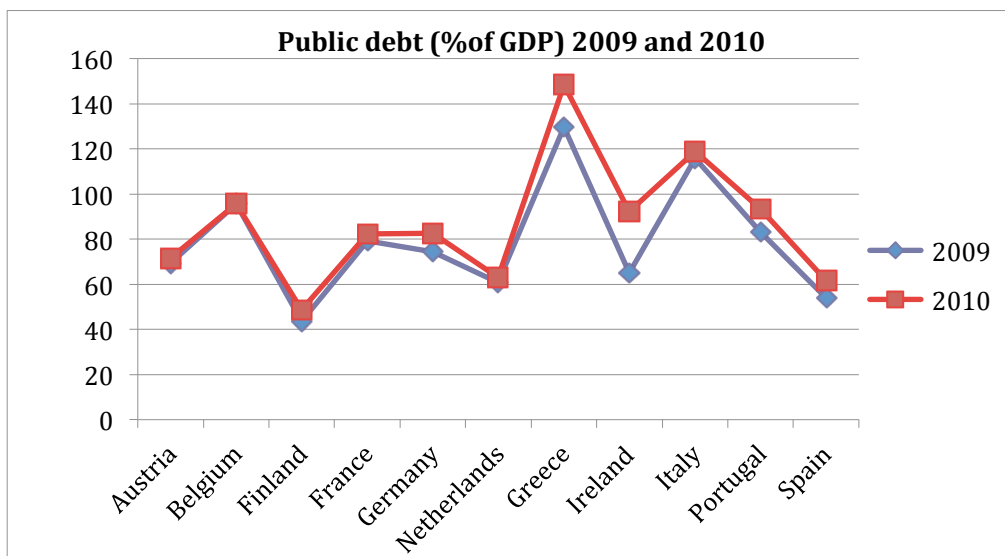


Figure 5. A comparison of public debt (% of GDP) during the years 2009 and 2010. Data from the Economist Intelligence Unit (2013).

Countries like Austria went from a 69.2 percent to a 71.5 percent public debt/GDP ratio. Finland, which was the only country with a budget deficit lower than 3 percent, went from a 43.6 to a 48.7 percent public debt.

When analyzing the public debt level of these countries in 2006 one can observe that while all the countries' economies were growing, and had been growing during the previous years there were some countries that still exceeded the established 60 percent public debt limit.

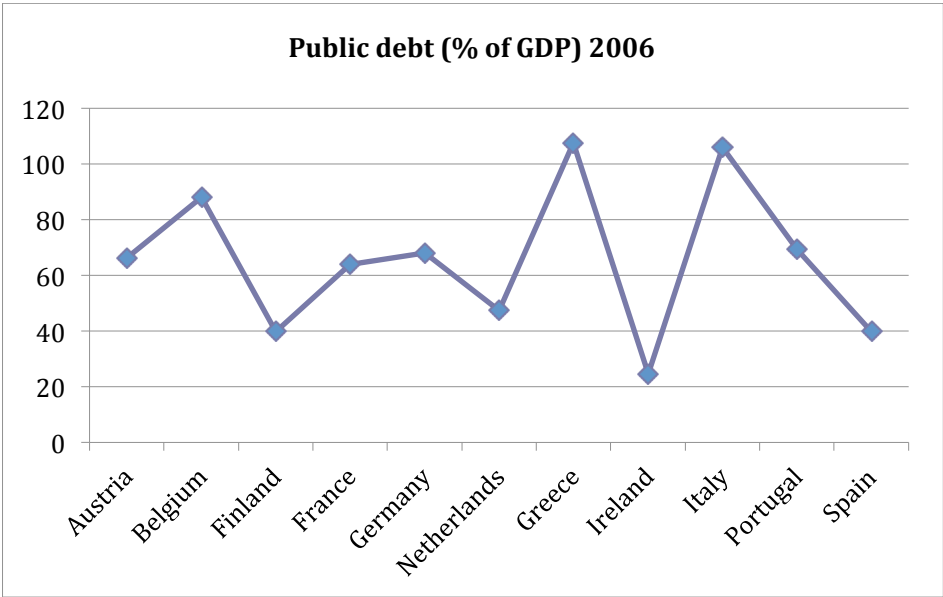


Figure 6. Public debt (% of GDP) for the year 2006. Data from the Economist Intelligence Unit (2013).

After having analyzed the economic behavior of these countries in relation to different stages of the business cycle and having used the established reference values as a starting point this author has concluded that these reference values do not accurately reflect the economic behavior, as they should in relation to the business cycle.

Conclusion

Because fiscal policy is the only stability mechanism available to the Eurozone members, it is of paramount importance to analyze the adequacy of the Maastricht Treaty thresholds established for the budget deficit and public debt as percentages of the GDP. Taking into consideration the stages of the business cycle, the author considers that the thresholds should be different for periods of recovery and recession.

Analyzing the data for the Eurozone members in the period 2002 – 2012, the author differentiated as (a) periods of growth or recovery the years 2002-2008 and 2010-2011 for the Northern countries and 2002-2007 for the Southern countries; and as b) periods of recession the year 2009 for the Northern countries and 2008-2012 for the Southern countries.

In relation to the budget deficit as a percentage of the GDP in the period of growth or recovery, most of the data showed that the majority of the Northern and Southern countries registered deficits $\leq 4\%$. As far as the data for recession years are concerned, they were taken basically from the Southern countries with the exception of the year 2009 in which the majority of the Northern countries experienced recession. The result was an average of $\leq 8\%$. Therefore, this author recommends adopting a 4% threshold during recovery periods and an 8% threshold in periods of recession. A similar procedure was followed with the determination of the public debt indicator, which was concentrated in the range $\leq 70\%$ in periods of growth and $\leq 120\%$ in periods of recession. Given the 90% threshold derived from Carmen Reinhart and Kenneth Rogoff's seminal work as a tipping point for a country to experience GDP rate decreases as a result of the public debt size, this author recommends adopting the 70% in periods of growth and 90% in periods of recession.

Unlike the 3% budgetary deficit/GDP ratio and the 60% public debt/GDP, the proposed differentiated scale would, on one hand, give the Eurozone members more flexibility in terms of fiscal policy; and, on the other hand, provide a more realistic way to accept new members of the monetary union.

Bibliography

- Anderson, Perry. (2009). *The New Old World*. London: Verso.
- Arestis, P. & Malcolm, S. (2010, April) The return of fiscal policy. *Journal of Post Keynesian Economics*, 32(3), 327-346.
- Buiter, W. H. & Grafe, C. (2004, March). Patching up the Pact. *Economics of Transition*, 12 (1), 67-102.
- Burns, A. F., & Wesley, C. M. (1946). *Measuring Business Cycles*. New York: National Bureau of Economic Research.
- Case, K. L. & Fair, R. C. (2004). The government and fiscal policy. In *Principles of Macroeconomics* (7th ed.) (pp.161-181). New Jersey: Pearson Prentice Hall.
- Cecchetti, S. G, Mohanty, M.S. & Zampolli, F. (2010, May). The future of public debt: prospects and implications. *BIS Working Papers* No. 300, 1-22.
- Cohen, B. J. (2008, Feb. 10). Monetary Unions. In *EH.Net Encyclopedia*. Retrieved from <http://eh.net/encyclopedia/article/cohen.monetary.unions>
- Eiffinger, S. (2011, April) Eurobonds – Concepts and implications. In European League for Economic Cooperation, *Cahier Comte Boël no. 15: How to strengthen the European Monetary Union* (pp.7-16). Retrieved from <http://www.elec-lece.eu/documents/pub/B15.pdf>
- Farrell, H. & Quiggin, J. (2011, May/June). How to Save the euro- and the EU: Reading Keynes in Brussels. *Foreign Affairs*, 90 (3), 96-103.
- Friedman, M. (1968, March). The Role of Monetary Policy. *The American Economic Review*, LVIII (1), 1-17.
- Haley, J. A. (2012, March 28). Paradise Lost: The Maastricht Conditions and the Euro [Web log post]. Retrieved from <http://www.cigionline.org/blogs/new-age-of-uncertainty/paradise-lost-maastricht-conditions-and-euro>
- Harvey, D. (2010). *The Enigma of Capital and the Crises of Capitalism*. Oxford: Oxford University Press.
- Hasanov, F. & Izraeli, O. (2012, Jan.-Feb.). How much inequality is necessary for growth? *Harvard Business Review the Magazine*. Retrieved from <http://www.hbr.org/2012/01/how-much-inequality-is-necessary-for-growth/ar/1>

- Horton, M. & El-Ganainy, A. (2012, March 28). Fiscal policy: taking and giving away. *Finance & Development Magazine*. Retrieved from <http://www.imf.org/external/pubs/ft/fandd/basics/fiscpol.htm>
- Human Development Report Office. (2013). United Nations Development Programme. *Human Development Reports*. Retrieved from <http://www.hdr.undp.org/en/statistics/hdi/>
- Issing, O. (2004). The Stability and Growth Pact: The appropriate fiscal framework for EMU. *International Economics and Economic Policy*, 1(1), 9-13.
- Keen, S. (2011). *Debunking Economics – Revised and Expanded Edition*. London: Zed books.
- Knight, L. (2012, May 18). Spanish economy: What is to blame for its problems? *BBC News*. Retrieved from <http://www.bbc.co.uk/news/business-17753891>
- Krugman, P. (2011, Jan. 12). Can the euro be saved? *The New York Times Magazine*. Retrieved from http://www.nytimes.com/2011/01/16/magazine/16Europe-t.html?pagewanted=all&_r=0
- . (2012, June 14). Revenge of the Optimum Currency Area [Web log post]. Retrieved from <http://krugman.blogs.nytimes.com/2012/06/24/revenge-of-the-optimum-currency-area/>
- Krugman, P. & Obstfeld, M. (2003). Optimum Currency Areas and the European Experience. *International Economics: Theory and Policy* (7th ed.) (pp.565-591). Boston: Addison-Wesley.
- Latin America Needs to Cut Poverty to Boost Growth. (2006, Feb. 14). *The World Bank*. Retrieved from <http://go.worldbank.org/D32PM6TTD0>
- Lucarelli, B. (2011-2012, Winter). *German neomercantilism and the European sovereign debt crisis*. *Journal of Post Keynesian Economics*, 34(2), 205-224
- Marshall, G. C. (1947, June 5) *European Initiative Essential to Economic Recovery*. The Department of State Bulletin, XVI (415), 1159-1160. Retrieved from https://www.trumanlibrary.org/whistlestop/study_collections/marshall/large/documents/index.php?documentdate=1947-06-05&documentid=8-7&pagenumber=1
- Morales-Pita, A. (2013, January). Analyzing the implications of the contradiction between the German Chancellor and the EU. *Proceedings of 6th International Business and Social Sciences Research Conference 3 – 4, Dubai, UAE, ISBN: 978-1-922069-18-4, 15 pages*.
- Munchau, W. (2012, Feb. 12). Why Greece and Portugal ought to go bankrupt. *Financial Times*.
- Mundell, R. A. (1961). A Theory of Optimum Currency Areas. *The American Economic Review*, 51(4), 657-665.

- OECD Glossary of Statistical Terms – Gini index definition. (2002, Aug. 9). *OECD.org*. Retrieved from <http://stats.oecd.org/glossary/detail.asp?ID=4842>
- OECD. (2010). Poverty rates and gaps. In *OECD Factbook 2010: Economic, Environmental and Social Statistics*. Retrieved from <http://dx.doi.org/10.1787/factbook-2010-89-en>
- Pasinetti, L. L. (1998, March). European Union at the End of 1997: Who is within the Public Finance “Sustainability” Zone? *Banca Nazionale del Lavoro Quarterly Review*. 51(204), 17-36.
- Reinhart, C. M. & Rogoff, K. S. (2010, May) Growth in a time of debt. *American Economic Review: Papers & Proceedings*, 573-578.
- Romer, C. D. (2008). Business Cycles. In *The Concise Encyclopedia of Economics*. Retrieved from <http://www.econlib.org/library/Enc/BusinessCycles.html>
- Sherman, H. J. (1991). *The Business Cycle: Growth and Crisis Under Capitalism*. New Jersey: Princeton University Press.
- Stiglitz, J. E. (2010). *Freefall*. New York: W. W. Norton & Company.
- The Economist. (2007, Aug. 22) Democracy Index: Liberty and justice for some. *Economist.com*. Retrieved from <http://www.economist.com/node/8908438>
- The Heritage Foundation. (2013) 2013 Index of Economic Freedom. *Heritage.org*. Retrieved from <http://www.heritage.org/index/about>
- Tett, G. (2011, August 4). Eurozone crisis resembles US turmoil in 2008. *Financial Times*. Retrieved from <http://www.ft.com>
- Transparency International. (2013). 2012 Corruption Perceptions Index – In Detail. *Transparency International*. Retrieve from http://cpi.transparency.org/cpi2012/in_detail/
- Treaty of Maastricht on European Union. (2010). *Europa.eu*. Retrieved from http://europa.eu/legislation_summaries/institutional_affairs/treaties/treaties_maastricht_en.htm
- Treaty on European Union. (1992, July 29). *Official Journal C 191*. Retrieved from <http://eur-lex.europa.eu/en/treaties/dat/11992M/htm/11992M.html#0084000006>
- Visaggio, M. (2004, June). Does Stability and Growth Pact Provide an Adequate and Consistent Fiscal Rule? *Macroeconomics, EconWPA*. Retrieved from <http://EconPapers.repec.org/RePEc:wpa:wuwpma:0407008>.

Weil, D. N. (n.d.). Fiscal Policy. In *The Concise Encyclopedia of Economics*. Retrieved from <http://www.econlib.org/library/Enc1/FiscalPolicy.html>