Why the Saddest Tragedy is Greek

A Comparative Study of the Financial Crisis and its Origins in Greece, Spain and Portugal

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Abstract

This thesis explores the financial crisis in Greece, Spain and Portugal in the period of 2007-2012, with the goal of uncovering which explanatory variables that are crucial for determining the level of severity of crisis in these cases. The purpose is to test the perception of these countries as the most severe cases of the European financial crisis, and provide in-depth within case insights that could help explaining this expected outcome. Furthermore, the case selection is also based on the expectation that Greece has experienced the significantly most severe level of crisis, despite sharing a wide range of similarities with Greece and Portugal. This is mainly based on markedly larger support packages issued to Greece by the euro zone after the occurrence of the crisis. I therefore apply a comparative-historical case study with a most similar systems design (MSSD), to identify the explanatory variable(s) that could explain this expected different outcome. The definition of the dependent variable *severity of crisis* is based on Reinhart and Rogoff's (2009) classification of four main subtypes of crises, *banking*, *currency*, *debt*, and *inflation crises*, and the frequency and depth of the occurrences of these. The set of explanatory variables is based on Greece, Spain and Portugal's challenges in the aftermath of the fall of their respective authoritarian regimes around 1975, and the development of their political system and economy up to 2012. The data sources applied are an extensive selection of qualitatively analyzed descriptive statistics, which included the values of the EU average as a reference point, and secondary literature.

The results of the analysis showed that Greece stood out as the most severe case of crisis. Portugal experienced a substantially more severe crisis than the EU average, while Spain experienced a level of severity closer to the EU average but still noticeably more severe. The variable where Greece showed the clearest deviation from Portugal and Spain, was their lower level of *central bank independence*. The Greek government's actively inflating monetary policies throughout the 1980s had a deteriorating effect on the level of sovereign debt, a trend that was reversed at an earlier stage in Spain and Portugal. The findings of this thesis could contribute to future research, by providing a set of explanatory variables that could be expanded further. Also, my measure of *severity of crisis* could serve as a useful foundation for developing a measure of this phenomenon suitable for quantitative analysis.

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Abbreviations

BCDI – Banking, Currency, Debt and Inflation (financial crisis index)
CBI – Central Bank Independence
EFSF – European Financial Stability Facility
EMU – European Monetary Union
EU – European Union (includes its predecessor European Economic Community before 1993)
GDP – Gross Domestic Product
GSP – Greece, Spain and Portugal
IMF – International Monetary Fund
MSSD – Most Similar Systems Design
PASOK – Greek Socialist Party

Chapter 1: Introduction

"The worst to bear are self-inflicted wounds".
Sophocles (497-405 B.C.), "Oedipus the King" (in Sophocles 2008, p. 85)

1.1 The Issue – The European Crisis and its Greatest Victims

Europe has experienced a financial crisis of historic proportions during the last few years. The collapse of the American real estate market in 2007 and 2008 marked the beginning of a still ongoing period of economic stagnation, which also influenced their close trade partners on the European continent. Major banks and firms have been declared bankrupt, or have struggled tremendously for their existence because of liquidity problems. Unemployment rates have risen dramatically. National governments have executed harsh budget cuts, to meet the increasing challenges with servicing public loans and keeping budget deficits down. In addition to the materialization of these issues on a domestic level, the crisis has in many ways become a joint "European problem", because of the increased level of economic cooperation through the expanding scope of the European Union (EU) (Guillén 2012, p. 45-6).

As the European financial crisis has evolved, Southern Europe has stood out as an area that has been struck particularly hard by the crisis. This is especially the case for Greece, Spain, and Portugal, the countries that form the basis for this thesis (Verney 2009, p. 2). Through the first 75 years of the twentieth century they were characterized by strict authoritarian rule (shortly disrupted in the case of Greece), low levels of industrialization and high levels of poverty. The fall of the authoritarian regimes in all three cases in 1974-1975, among other things "fueled" by the international oil crisis in 1973, marked the beginning of a transition to democracy and an open market economy. This culminated in their accession to the EU in the 1980s, Greece in 1981 and Spain and Portugal in 1986 (Huntington 1991, p. 51, 88). After their respective admission to the EU all three countries experienced *convergence*, with higher rates of economic growth than the modernized "European core". This substantial increase in growth appeared almost immediately after admission in Spain and Portugal, while Greece experienced the same somewhat later, starting in the early 1990s (Pagoulatos 2004, p. 45-6). Furthermore, they all successfully initiated the necessary monetary adjustment programs to qualify for admission to the European Monetary Union (EMU) with participation in the euro

zone, Spain and Portugal in 1999 and Greece in 2001 (Verney 2009, p. 1-2).

Despite these countries' tendencies towards catching up with the "European core" during the last few decades, past problems with political and economic instability seem to have reappeared to the surface after the occurrence of the financial crisis in 2007. This is evident through the general perception of Greece, Spain and Portugal as some of the most severe cases of the crisis. The main motivation of this thesis is rooted in this perception. As the European (and global) financial crisis appears to be caused by factors determined on an international level, why do some countries experience more severe strikes of crises than others? Recognizing that the experience of an international financial crisis is different from country to country implies recognition of the significance of studying specific cases struck by crises, in order to explain its causes. The quote above from the play "Oedipus the King", by the ancient Greek tragedian Sophocles, illustrates this point. While the "tragedy" of the financial crisis in Greece, Spain and Portugal could have been triggered by the extensive breakdown of banks worldwide, the specific features of these cases could nonetheless be crucial for explaining the potentially more severe "wounds" that the crisis has left here, compared to other EU countries.

1.2 Research Question and Clarifications

My twofold research question is as follows:

> *What factors are crucial for explaining the severity of the financial crisis in Greece, Spain, and Portugal, and their apparently more severe strike of crisis than the EU average? What explain potential differences in the character and severity of crisis between these cases?*

Through these questions I will investigate explanatory factors relevant for developing a causal explanation that could determine different levels of *severity of a financial crisis*, my dependent variable. The main purpose of the study is in other words not to explore the distinction between countries "in crisis" and "not in crisis", but rather detecting variation between *cases of crisis*. These cases are primarily Greece, Spain and Portugal, which will be investigated through a comparative-historical case study of the period 1975-2012. The main rationale behind choosing this approach, which I will elaborate in chapter 3, is to be able to execute an in depth study of the phenomenon of financial crises and the interaction between a broad set of explanatory variables, and their affect over time, in a few cases (Mahoney and

Rueschemeyer 2003, p. 12).

As indicated in the research question, a secondary objective of the thesis is to confirm (or disconfirm) the perception of Greece, Spain and Portugal as some of the most severe cases of the European financial crisis. Therefore, when available, the values of the EU average will be included along with the three cases in the descriptive statistics presented, which constitute an important part of the *qualitatively analyzed* empirical evidence of this thesis. This provides a comparative reference point that could help determining the general trends of the EU countries, and whether they resemble or differ from the three main cases on the dependent and explanatory variables.

The inquiry of the research question will be developed on the basis of the tradition of *comparative politics*, more specifically its subfield of *political economy*. This entails investigating explanatory factors rooted in public institutions and actors' *direct* and *indirect* role in economic activities. A central idea of such an approach is the role of the *state* as the provider of the conditions for the functioning of any variety of capitalism. Even in a liberal market economy, which pursues minimal state intervention in the market, the framework in which economic transactions are conducted is still ultimately set by the state, through the for example enforcement of property rights, contractual laws. Furthermore, in addition to providing the premises for economic activities, states also serve an important role as economic actors themselves, if to somewhat different extents. This is both indirectly through for example subsidies and regulation of key sectors, or more directly through partially or completely state owned enterprises and welfare state expenditures (Schmidt 2009, p. 516-7).

By applying such an approach, one could develop a profound set of explanatory variables concerning political and economic performance, based on a wide range of phenomena directly or indirectly influenced by state activity. If properly done, this could contribute to a solid framework for determining different levels of *severity of financial crises*. In addition, considering the increasing impact of globalization on national economies, it is necessary to include explanatory variables that consider how international actors influence the state's economic role. The commitments through EU membership are especially important here in the cases of Greece, Spain and Portugal, as EU constitutes the major trade partner for these countries (Tovias 2002, p. 162).

1.3 Why Greece, Spain and Portugal?

Since this is a *case-centered* thesis, I find it necessary to account for the case selection already here, to establish a clear foundation for the understanding of the theoretical review in chapter 2. This selection is based on the strategy of Most Similar Systems Design (MSSD). The key principle of this design is to select generally *similar cases*, but which have experienced *different outcomes* on the dependent variable. Through this strategy, the idea is to locate one (or a few) explanatory variable that differ between the cases, and therefore could be seen as crucial for explaining the different outcomes (Gerring 2008, p. 668). *Different outcomes* will in this case refer to different levels of *severity of crisis*. I will provide a more detailed description of MSSD and my adaption of the design in section 3.2.

The primary rationale behind the selection of Greece, Spain and Portugal, is their position as *Southern European* countries presumed to have been struck particularly hard by the ongoing financial crisis, compared to the rest of Europe, especially within the EU (Verney 2009, p. 3). With this as a fundament, the selection is based on three main similarities between these cases, assumed to be relevant for establishing an explanation of the dependent variable *severity of crisis*. The similarities concern some key aspects of their modern political and economic history, which could be utilized as a starting point for a *comparative-historical case analysis* of the origins of their severe experiences of financial crisis.

The first reason for choosing these three cases is rooted in their experience of *transition to democracy* at approximately the same time, after the fall of their respective authoritarian regimes in the time frame of 1974-1975. In the Portuguese case this fall came through the revolution initiated by a military coup in 1974, ending the regime carrying the heritage of the dictator António Salazar. Spain's transition is normally stipulated to begin after the death of the dictator Francisco Franco in 1975, when negotiations between parties from the old regime and the central oppositional interests groups began. Greece had experienced a less institutionalized authoritarian rule, through the military junta that took power by coup of the semi-democratic parliamentary regime in 1967. The power of the junta gradually eroded in the aftermath of the international oil crisis in 1973, and they were ultimately replaced by civilian rule in 1974 (Roccas and Padou-Schioppa 2001, p. 54). By starting their democratization processes at approximately the same time, these three cases share a common foundation for political development, and would be expected to have shared several challenges in their establishment of democratic procedures and institutions. This includes the

increased pressure on government expenditures on redistribution of wealth and welfare services (Thomadakis 2006, p. 31).

The second justification of the case selection is based on their common features of *economic development*. All three countries experienced late industrialization and were dominated by agricultural production up to the mid-1900s. After their opening of the economy during the 1950s, all three countries experienced strong convergence with rapid growth of the industrial sector. This escalated in the 1960s, with substantially higher rates of economic growth than the advanced economies of Europe at the same time. However, this "boom" reversed into a "bust" after the international oil crisis struck in 1973, which also is said to have been a contributing factor to the fall of the Southern European dictatorships in the subsequent years. The economic downswing in the 1970s, with stagnation of growth and the emergence of "stagflation", consisting of high rates of both inflation and unemployment, was shared by all three cases (Gibson 2001, p. 3-4). These common grounds for economic development after democratization represent a strong foundation for a comparison of underlying causes of the severity of the ongoing financial crisis.

The third reason for the selection of the cases of Greece, Spain and Portugal, is their approximate simultaneous admission to the EU. Greece became members in 1981, while Portugal and Spain got their membership in 1986. This has entailed a comprehensive process of political and economic reform, both during the application process and after admission, to adapt to the increased requirements for bureaucratic efficiency to implement EU regulations, as well as facilitation for participation in the internal market (Tovias 2002, p. 170-1). These reforms included the monetary adjustment programs to prepare for admission to the EMU and the subsequent transition to euro, which was conducted in 1999 for Portugal and Spain, and 2001 in the case of Greece (Verney 2009, p. 2).

Considering these common traits of their political and economic path after the fall of their authoritarian regimes in the mid-1970s, on what basis do I expect to find deviation on the dependent variable, in form of identifying different levels of *severity of crisis*? This expectation is rooted in (1) the widespread perception of Greece as the country that has been struck the hardest by crisis within the EU, and (2) the magnitude of economic support that this has entailed. First, the political discourse of the European arena the last few years has to a great extent painted a picture of Greece as the EU member with the most complex economic challenges after the strike of the global financial crisis in 2007/2008. While the cases of

Portugal and Spain also have been perceived as serious, the general perception in Europe appears to be that Greece poses the largest economic threat to the EU, and especially the euro area (Featherstone 2011, p. 194).

The second reason, reinforcing the first argument, is the magnitude of financial support Greece has received from the euro area. This has been initiated through the adjustment programs financed by the intergovernmental body of the European Financial Stability Facility (EFSF), established by the euro area after the occurrence of the European financial crisis, in collaboration with the International Monetary Fund (IMF). The two adjustment programs, for the period 2010-2012 and 2012-2014, provided Greece with disbursements to a total of 210 billion euro (European Commission 2014b). In comparison, Portugal has received disbursements of 78 billion euro between 2011 and 2014, while Spain has chosen to use approximately 40 billion euro of their approved amount of 100 billion euro, earmarked for the strengthening of their banking system between 2012 and 2014 (European Commission 2014d, 2014a). As Spain has a considerably larger economy and a population of approximately 45 million, compared to Greece's 11 million and Portugal's 10 million, the significantly larger financial support to Greece points towards a conception of a particularly severe crisis situation (European Union 2014). This poses a strong incentive for assuming that Greece has experienced a harder strike of financial crisis than Spain and Portugal, which constitutes my primary expectation. Secondarily, by the same line of argument one would expect that Portugal has experienced a somewhat more severe strike of crisis than Spain, considering the larger amount of the actual disbursements received by the former.

The scope of time selected for this thesis, 1975-2012, is based on the above-mentioned commonalities of modern political and economic history. 1975 is the year when all three cases had started their democratic transition after the fall of their respective dictatorships. It also marks the (late) beginning of a period of economic stagnation, which characterized their period of democratization. Finally, it is the year when Greece applied for EU membership, followed by Portugal and Spain in 1977, which started the process of adaption for achieving the requirements for admission (Tovias 2002, p. 168). In light of the "initiation" of these three main challenges, 1975 constitutes a sensible year to begin an inquiry of the origins the financial crisis in Greece, Spain and Portugal. 2012 is selected as the last year of the scope due to the expectation of being the last year with a sufficient amount of available data. The period of interest concerning the outcome, the European financial crisis, is here set to 2007-2012.

1.4 Relevance of Research Question and Scientific Contribution

Why should the issue I address in my research question be studied? King, Keohane and Verba (1994) present two main criteria for research projects in social sciences that could be useful in making such a justification. The first of these is:

> "A research project should pose a question that is 'important' in the real world" (King et al. 1994, p. 15)

The above quoted criterion may seem obvious, but the importance of it is not to be underestimated. To study political issues in a relevant matter one has to pursue an area of research that deals with phenomena that affect a considerable amount of people's lives. Only if the research deals with issues that could help to contribute to identifying and further understanding negative and positive aspects of society, could this requirement of relevancy be considered fulfilled (King et al. 1994, p. 15). I would argue that my research project strongly complies with this criterion. Through dealing with the ongoing financial crisis, it addresses a matter that is central for the understanding of the current situation of both European society as a whole and the specific societies of my selected cases. To widen the knowledge of what caused this critical economic situation, could therefore contribute to an understanding that could help reducing the possibility of such a damaging crisis on a societal and individual level in the future. The contribution to society based on a single study will of course always be of a strictly limited character, but it should nevertheless be emphasized as an important ideal. Suggestions of *policy implications* of the study will therefore be provided as part of the conclusion, to highlight how political and economic actors could utilize the knowledge developed through this thesis in practice.

However, as King et al. (1994, p. 16) points out, the degree of relevancy does not just depend on the relevancy of the research question. It also depends on the execution of the research project. Descriptions of otherwise relevant issues would have limited value without handling the phenomena systematically and making valid causal or descriptive inferences (King et al. 1994, p. 16). It is here that the second criterion for social science research comes into place:

> "A research project should make a specific contribution to an identifiable scholarly literature by increasing our collective ability to construct verified scientific explanations of some aspect of the world" (King et al. 1994, p. 15).

This requirement of scientific contribution is crucial to consider during the process of

justifying a research project. The idea is that a social scientific study should locate deficiencies and/or contradictions within an existing theoretical framework, and then develop the specific research design based on these findings. This is meant to reduce the risk of "duplicating" studies, and thus secure that the study contributes with new perspectives to the existing theoretical work. The new findings drawn from such a study could again be utilized in further research of the phenomenon (King et al. 1994, p. 16-7).

Scientific contribution in social sciences is often linked to the distinction between *inductive* and *deductive* studies. *Inductive studies* are developed with the purpose of expanding on existing theory, and generating new hypotheses about social phenomena. Such strategies of *theory building* are usually associated with *qualitative approaches*, which allow detailed descriptions of an issue in one or a few cases. This could be favorable for studies of phenomena where existing research is scarce, or to fill significant gaps in the literature (Moses and Knutsen 2012, p. 22-3). *Deductive studies* on the other hand, base their inquiry on existing theory in order to test the validity of its causal inferences. This *theory-testing* approach is usually associated with quantitative studies operating with a larger number of cases (large-N). The objective here is to test existing hypotheses, based on principles for determining probability and generalizability to the whole population of relevant cases, in order to strengthen or weaken these hypotheses (Gerring 2007, p. 41). However, while the strategies of *induction* and *deduction* usually are associated with different research techniques, they are not mutually exclusive categories. They are rather methodological archetypes that in practice often are combined to different extents in specific empirical studies, in order to maximize the strength of the argument proposed by the study. This could for example be done through strategies of *triangulation*, utilizing different methods and sources of evidence (Yin 2009, p. 115).

I argue that this thesis has both inductive and deductive elements in terms of scientific contribution. The primary contribution is *inductive*, through the objective of developing an explanation of what factors that determine the level of *severity of crisis* in *specific cases* struck by a comprehensive international financial crisis, from a political economy point of view. Existing studies most often focus on explanatory factors of financial crises in a relatively narrow sense, often directly related to the financial system, and tend to follow two main strategies. In the first tradition, researchers (*eg.* Sachs et al. 1996; Furman and Stiglitz 1998) illuminate different financial weaknesses as an explanation of specific incidents of crises, such as *banking* or *currency crises*, for one or a relatively small group of cases.

Researchers of the second tradition (*eg.* Reinhart and Rogoff 2009; Kindleberger and Aliber 2011) apply analyses across a large number of cases, to make inferences of general trends of the causal path of financial crises.

By studying explanatory factors of the strike of financial crises *within* a few cases, my objective is to expand the knowledge about country-level variation in *severity* of international financial crises. Instead of the traditional narrow focus on weaknesses in the financial system, the approach will explore the causes of crises through a broader assessment of the cases' political economies. This *theory-building* strategy will be applied by selecting cases that are considered as *outliers*, in the case of Greece, Spain and Portugal, through being perceived as particularly severe cases of the European financial crisis (George and Bennett 2005, p. 20). However, the case selection also includes significant elements of *deduction*, through testing the validity of the perception of these as *outliers*. As noted, this will be done by including calculations of the EU average on the descriptive statistics provided as part of the empirical evidence, to provide a comparative reference point that could give an indication of how the main cases deviate from the rest of the EU countries.

1.5 Structure of thesis

In Chapter 2 the theoretical framework for the thesis will be presented. It starts off with defining the central concept of *financial crises.* After this, I will define the theoretical concept of determining *severity of crisis*, to be able to develop a precise measure for my dependent variable. The definition will be based on Reinhart and Rogoff's (2009) categorization of four main varieties of crises. The rest of the chapter will present the theoretical framework for the development of my set of explanatory variables, with definitions of my explanatory variables at the end of the chapter. They will circle around political and economic challenges particular for the Southern European region, and challenges related to EU membership.

In Chapter 3 I present my methodological framework and the data that the thesis will be based on. I discuss methodological advantages and disadvantages of my choice of a *comparative-historical case study*. Then I discuss the grounds and justification of my case selection, and my choice of the MSSD approach. After this, the chapter continues with operationalizing my dependent variable and explanatory variables. This chapter closes with a presentation of my sources of data and issues related to the reliability of these.

In Chapter 4 I present the empirical results of the selection of descriptive statistics, designed

to measure the dependent variable and several of the explanatory variables.

In chapter 5 I present the empirical evidence of my *qualitatively* measured variables, along with the analysis of my empirical findings as a whole, on the basis of my theoretical and methodological framework.

In Chapter 6 I answer my research question, by concluding on my main findings of the analysis. I also discuss implications of these findings, both *theoretically*, with suggestions to further research, and in terms of impact on future *policy*.

Chapter 2: Theory and Definitions

This chapter explores relevant literature in order to establish a theoretical basis for the study of my research question, and provide definitions of key concepts. First, it discusses the challenges related to defining the complex concept of *financial crises*, ultimately leading to the definition applied in this thesis. The rest of the chapter will be devoted to the theoretical concepts crucial for developing a definition of the dependent variable *severity of crises*, and the explanatory variables designed to explain variation on the dependent variable. The framework for the definition of *severity of crisis* is built around Reinhart and Rogoff 's (2009) categorization of different of four main varieties of crises, where the number of occurrences of each type determines the overall severity. The explanation of the determinant of *severity of crisis* in Greece, Spain and Portugal (GSP), is built around key issues concerning the economic and political challenges shared by these cases, expected to affect their economic performance. The chapter will end with defining the explanatory variables applied in this thesis, based on these issues.

2.1 What is a Financial Crisis?

While the theoretical field of explaining the causes of financial crises is an extensive one, less space in the literature has been devoted to the development of a clear-cut definition of the actual phenomenon. There could be several reasons for this. One explanation lies in the variety of events associated with the term, and the disagreement among scholars related to which events to include as part of the phenomenon. Mishkin (1992, p. 116) highlights the distinction between the *monetarist* and the more *eclectic* view of identifying financial crises. *Monetarists*, like Friedman and Schwartz (1963, in Mishkin 1992, p. 116), only recognize incidents involving a collapse of the banking system as a “financial crisis”. In contrast the

more *eclectic* definition, pursued by *Keynesians* such as Minsky and Kindleberger (1972, 1978, in Mishkin 1992, p. 116) among others, include measures such as decline in asset prices, failures of firms, deflation or disinflation, and disruptions in foreign exchange markets as part of their definition of crisis. Based on such a broad definition, Reinhart and Rogoff (2009) handle the issue of defining financial crises by developing characteristics of different types of crises. In this way one could identify processes that, to a certain extent, are less complex and more easily measured than the general phenomenon. They also include defaults on public debt as an important version of such subtypes. I will revisit these specific definitions in section 2.2.

Another challenge related to defining the concept of financial crises is identifying the thresholds between "normal" fluctuations in the economy and a crisis situation. There will always be both theoretical disagreement and variation in empirical evidence considering what level of inflation that is damaging enough to label it as an "inflation crisis", how large the annual depreciation of a national currency has to be before calling it a "currency crash", or what level of public debt that indicates a major increase in the risk of defaulting (Reinhart and Rogoff 2009, p. 4-6). I will treat the issue of measuring crises in depth in chapter 3.

Eichengreen and Portes (1987, p. 1) highlight the paradox of the general lack of a precise definition of the main concept as a problematic feature of the existing literature on financial crises. To take this into account they have developed the following definition, which I will use in this thesis:

> "A financial crisis is a disturbance to financial markets, associated typically with falling asset prices and insolvency among debtors and intermediaries, which ramifies through the financial system, disrupting the market's capacity to allocate capital within the economy" (Eichengreen and Portes 1987, p. 1-2).

There will always be a trade-off between accuracy and comprehensiveness in defining such a complex phenomenon. However, this definition provides what I would call a satisfactory combination of these two. It highlights its main feature of *disruption of the market*, along with some key processes of economic slowdown that are possible to measure in an operationalized form. However, the definition does not exclude other processes relevant to provide a holistic understanding of financial crises as a phenomenon. The definition could therefore form a useful basis for the development of my dependent variable, *severity of financial crisis*.

2.2 Varieties of Crises – In search for a Definition of Severity

Let us now move to the theoretical material relevant for identifying variation in the level of *severity crisis* between different cases struck by an international financial crisis. The following four subsections will address the main varieties of crises emphasized by Reinhart and Rogoff (2009), banking crises, currency crises, debt crises (foreign and domestic), and inflation crises, along with some highly emphasized explanatory factors of these. These types form the basis of development of their BCDI index, designed to measure severity of financial crises, based on the number of different types crisis occurring in a given year (Reinhart and Rogoff 2009, p. 249). Due to some limitations in Reinhart and Rogoff's (2010) data set, further explained in section 3.3, the BCDI index will not be applied as an empirical measure of the dependent variable. However, the definitions behind the index, consisting of the mentioned varieties of crises, will be utilized as a foundation for the operational definition of *severity of crisis*. A thorough review of the literature defining the different types of crises, as well as some key explanatory factors emphasized in the literature treating the types, is therefore in order.

Before moving to Reinhart and Rogoff's (2009) classification of types of financial crises it is important to note their distinction between *advanced economies* and *emerging markets*. It serves as a background for the analysis rather than a rationale for applying different explanatory variables, but should nevertheless be mentioned. The purpose of the distinction is to highlight the different challenges met by newly industrialized countries (NIC) and advanced industrial countries experiencing financial crises. The idea is that the typical institutional weaknesses of *emerging markets* possibly contribute to lower thresholds for the occurrence of crises, and heavier dependence on foreign loans, than *advanced economies* (Qian 2012, p. 2). The classification is based on the World Bank's division of low-, middle- and high income countries, where (most) middle-income countries are considered as *emerging markets* and high-income countries *advanced economies* (Reinhart and Rogoff 2009, p. 394).

Both Greece, Spain, and Portugal are classified by the World Bank (2013) as "high income OECD-countries", thereby fulfilling the criteria of being *advanced economies*. However, they are all characterized by Reinhart and Rogoff (2009, p. 284-7) as countries that have "graduated" from an emerging market status to becoming advanced economies after 1979. Therefore, considering that the "graduation" has come *during* the period of interest in this thesis (1975-2012), I find it useful to also consider challenges associated with emerging

markets in the treatment of these cases.

2.2.1 Banking Crises

As an institution in the center of all economic activity, the banking system plays a crucial role in all financial crises. Banks' presence is central as a causal factor leading up to crisis, as part of the actual outcome, and as an important feature of the aftermath of crises and the following process of recovery. Reinhart and Rogoff (2009, p. 144) highlight what they consider an embedded vulnerability of banks both in emerging markets and advanced economies. This is connected to the way banks conduct their business. By borrowing money from their depositors, and then issuing loans with a long-term repayment perspective, banks take a considerable risk related to the possibility of the withdrawal of these deposits on short-term notice. It is this risk that becomes clear during *bank runs*, or *banking panics*, which ultimately could lead to a banking crisis.

A *run* occurs when a considerable share of a bank's depositors loses confidence in the safety of their deposits at approximately the same time. This could trigger a *panic* among the depositors where they rapidly withdraw their money, running down the reserves of the bank and thereby hurting its liquidity. In this way a *run* constitutes a self-fulfilling process, in which the expectations of reduced safety of the deposits of a bank are met, because of the massive withdrawal from its depositors. In cases where this happens to a single bank, "runs" could be solved by the issuing of loans from a pool of other banks to increase their liquidity in the short run, with relatively low risk for each of the lending banks. The real problem occurs when this happens to many banks at the same time, and the "bank run" develops into a systemic banking crisis (Reinhart and Rogoff 2009, p. 144-5). This makes the process of restoring liquidity much harder, and increases the possibility of extensive prevalence of bankruptcies, mergers and public takeover in the banking system (Reinhart and Rogoff 2009, p. 10). Reinhart and Rogoff (2009, p. 145) also emphasize the role of systemic banking crises as an amplification mechanism for a deeper recession. They occur as a result of the negative spiral of defaults on loans, and ensure a major slowdown of spending and production in the economy. In addition banking crises often trigger other types of crises such as currency crashes and defaults on public debts, which could increase the severity of the crisis (Reinhart and Rogoff 2009, p. 145-6).

Where in the picture does the state appear in the case of banking crises? A major focus of the literature treating this question emphasizes the fragility of banking systems as a crucial factor

for determining the occurrence and severity of banking crises. These weaknesses are especially apparent in the case of emerging markets, and could derive from the process of financial liberalization in such countries. When an initial opening of the economy occurs, after typically experiencing an isolative and high state influenced economic policy of an authoritarian regime, banks tend to assume a more active and aggressive role in the economic system. The weak position of many existing banks after the initial opening allows innovative newcomers to utilize from this liberalization, most often accompanied by a low regulating capacity of financial authorities (Furman and Stiglitz 1998, p. 16-7). To attract capital these banks tend to increase interest rates accompanied by expanding their range of lending, which contribute to a potential lending "boom". The expansion of credit in itself indicates an increased risk taken by the banks. In addition "childhood diseases" of the emerging system and lack of sufficient information makes it difficult to precisely determine the repaying capacity of borrowers. These weaknesses reveal themselves with full strength first when economic stagnation occurs, which makes systemic banking crisis a plausible scenario in the case of a *bank run* (Sachs et al. 1996, p. 25-6).

The negative effect of weak banking systems on banking crises in emerging markets is also reinforced by the typical high dependency of foreign investment in these economies. The vulnerability for economic fluctuations on a global level is therefore high in the first place, because the national capital flow in a considerable degree is dependent of the strength and capacity of foreign investors. In addition, banks that borrow money in foreign currency and lend in domestic currency constitute a considerable vulnerability. This is linked to the possible decrease of banks' profitability, should an unexpected depreciation of domestic currency occur. When systemic weaknesses in the banking sector are added to this scheme, the incentives for foreign depositors to withdraw their deposits from banks in such emerging markets during global economic downswings are strengthened even more, because of the associated higher risk of losing capital. Such occurrences of bank runs, consisting mainly of the withdrawal of foreign capital, could increase the damage of a banking crisis and result in a severe recession (Demirgüç-Kunt and Detragiache 1997, p. 8-11).

2.2.2 Currency Crises

Currency crises, also referred to as *currency crashes*, involve massive depreciation of the exchange rate of a country's currency. This has of course clear links to the occurrence of inflation crises and hyperinflation, which I will discuss further in subsection 2.2.4 (Reinhart

and Rogoff 2009, p. 5-6). Kaminsky and Reinhart (1999, p. 475) emphasize that there also is a relation between *banking crises* and *currency crises*. One possible link is the possibility of one type of crisis triggering the other. Another one is to focus on their shared foundations of causal factors. These could include fragile financial institutions in the aftermath of liberalization, and dependency on foreign capital that makes an economy vulnerable to fluctuations in the global market (Kaminsky and Reinhart 1999, p. 491).

Sachs et al. (1996) develop the concept of "weak fundamentals" to determine the probability of the occurrence of a currency crises in emerging markets. "Weak fundamentals" consist of an excessively appreciated real exchange rate combined with a weak banking system (Sachs et al. 1996, p. 6). An excessive appreciation entails that the central bank enforces an artificially high value of the national currency, based on a temporary increase in capital flow that is unlikely to persist over time. This lack of sustainability becomes clear in the event of a reversal of such a capital flow, and could contribute to a more fierce depreciation than in the case of currencies based on a more "realistic" valuation (Athukorala and Warr 2002, p. 39). The other part of weak fundamentals is a weak banking system. These weaknesses could, as discussed in the case of banking crises, origin from the liberalization of the financial market, with banks assuming a more aggressive issuing of credit combined with low levels of state re gulation (Sachs et al. 1996, p. 26). Together these two "ingredients" create vulnerability towards the occurrence of a currency crisis. Sachs et al. (1996, p. 6) highlight that countries could adjust for weak fundamentals by having high net reserves relative to their short-term foreign debt obligations. A government could stabilize the situation by running down on these in order to avoid a severe currency crash. This is however a privilege not shared by every emerging market.

Another aspect of currency crises in emerging markets is the possibility of a *contagion*. A withdrawal of foreign investment in a single country, accompanied by an attack on the national currency, could influence investors in other emerging markets, and thereby trigger similar panics in a number of such countries. An example of this is the Mexican Peso crisis in 1994-95, which triggered the so-called "Tequila effect", a wave of crises caused by withdrawal of foreign bank deposits in other emerging markets in Latin America and Asia (Sachs et al. 1996, p. 1-2). According to Sachs et al. (1996) the affected countries that were struck the least by the "Tequila effect", Indonesia and Malaysia, had introduced regulation of the banking system to exercise a certain control of the credit flow, and thereby avoided a lending boom prior to the crisis. In contrast the most severe cases of Argentina, Mexico and

the Philippines, experienced strong lending booms and had far less regulation of the banking system when the crisis struck (Sachs et al. 1996, p. 25-7).

2.2.3 Debt Crises

Sovereign lending, which involve the borrowing of national governments, is a concept with deep historical roots which goes back to at least medieval Europe, if not even further. The concept of *defaults* on sovereign debt is a "tradition" that goes back almost as long, and is a well-known source of financial crises (Reinhart and Rogoff 2009, p. 69). External defaults occur when a government defaults on a loan issued mostly by foreign creditors under another country's jurisdiction, most often denominated in a foreign currency. Domestic defaults occur when a government loan is issued within a country's own jurisdiction, most often in the local currency (Reinhart and Rogoff 2009, p. 10-3).

As in the case of banking crises a short-term default on *external public debt* does not necessarily imply a weak repaying ability of a country in the long run. In cases of short term defaults on foreign debt where the long term credit ratings is expected to be good, a solution could be a short term loan from a third party. This could be one or several other countries, or an international lending institution, such as the World Bank or the IMF. The situations where these "bail-out"-solutions seem reasonable for a pool of foreign creditors is often referred to simply as *illiquidity*. In contrast of this one finds the concept of *insolvency*, where a country not is expected to be able to repay its debts even in the long run. This situation often occurs if a country borrows money from a large number of foreign creditors over a longer period of time. In the beginning of the period the collective interest of these lenders, which individually are lending a relatively small amount, may be to support the country with short-term problem of servicing their debt. However, at a certain point when the country continues to extend their foreign debt the equilibrium may change and the will of foreign creditors to roll over debt may disappear, because of the reduced expectations of getting repaid. This shift could contribute to a situation of insolvency, which increases the risk of a severe case of sovereign debt crisis (Reinhart and Rogoff 2009, p. 59-61).

What then is a healthy level of public foreign debt for a country? Reinhart and Rogoff (2009) establish the concept of debt intolerance as a central feature of answering this question. The basic idea is that emerging markets often will have problems with handling debt to foreign creditors at a considerably lower ratio of gross domestic product (GDP) than advanced economies (Reinhart and Rogoff 2009, p. 21). One important reason for this could be rooted

in the complications that arise when a debtor is a state instead of a private actor. The rules of the game are somewhat changed in this scenario, because a country seldom is declared bankrupt, and at least not with the same legal consequences as in the case of a private firm. In other words the creditors not only depend on the *ability* of the borrower to repay, but also the *willingness* to repay (Reinhart and Rogoff 2009, p. 51-2).

The last point raises the question of what factors that determine the will of repayment. Eaton and Gerzovitz (1981, in Reinhart and Rogoff 2009, p. 55) apply an approach based on reputation. The argument is that government incentives for honoring their debt to foreign creditors are entrenched in the benefits of continued access to foreign capital, in form of the opportunity for both further credit and trade. These benefits rely on the evaluation of their creditworthiness, which has a clear link to their reputation of repayment. This approach is therefore based on market behavior rather than the role of institutions. Bulow and Rogoff (1989a, in Reinhart and Rogoff 2009, p. 56) challenge this view, and instead establish an institutional approach that focus on the enforcement of the legal rights of creditors in the lenders' countries. An important element here is the creditors' possibility of seizing the borrowing government's assets abroad. Also a default from a government in one country may impair the will of lending from creditors in other countries, because of the risk that the first creditor will enforce its prior claim when the time for repayment arrives (Reinhart and Rogoff 2009, p. 56-7).

Reinhart and Rogoff (2009, p. 57) emphasize the complexity of the rationale behind honoring foreign public debt, and argue that none of the above-mentioned approaches constitute a quite accurate explanation. They also highlight the importance of foreign direct investment for emerging markets as a disciplinary factor for avoiding defaults on foreign debts (Reinhart and Rogoff 2009, p. 58) However, they point out the considerable problem that lies in the fact that emerging markets tend to have more fragile financial and political structures than advanced economies. Factors such as underdeveloped financial institutions, corruption and political instability tend to impede stable economic governance on a domestic level, which again could reduce a government's capability and will of honoring foreign debts. This could lead to a country becoming debt intolerant, which would start a negative spiral with increasingly reduced options for foreign trade and borrowing (Reinhart and Rogoff 2009, p. 30-1). In addition, the occurrence of debt intolerance tends to be more frequent in countries with a history of high inflation and repeated defaults. Debt intolerance therefore could be seen as a central concept to have in mind when considering debt crises (Reinhart and Rogoff 2009, p.

21).

2.2.4 Inflation Crises and the General Impact of Inflation

Inflation serves a central role in financial crises, both as a direct indicator of crisis, as part of an overall financial situation pre-crisis, and as a contributing factor to the character of the aftermath of crises. The term refers to the persistent increase in the general price level, which decreases the real value of money. This is not necessarily a direct "evil". An *anticipated* increase of the inflation rate would not contribute to reduce purchasing power, because the level of salaries would increase along with the price level. An *unanticipated* increase of inflation rate is considered by *Keynesians* as a sensible strategy for reversing recessions, because this could result in a reduction in real prices, and thereby stimulate to an increase in spending (Abel et al. 2008, p. 462-4). However, Abel et al. (2008) highlight some important costs of inflation. Anticipated inflation could induce so-called "shoe leather costs", through people and firms pursuing to reduce their cash holdings because of the eroding value of the currency. Unanticipated inflation would increase the risk of *reducing* as well as *gaining* wealth, through transferring profits from one group to another. In addition, a strategy of disinflation, reducing inflation by reducing the monetary base, usually implies higher unemployment and the risk for economic recession because of stagnation in spending. Reducing moderate or high inflation is therefore a challenging exercise for governments, which may give incentives to avoid, or depart from, dis-inflating policies, despite of the negative effects on the stability and effectiveness of the financial system this creates (Abel et al. 2008, p. 463-6). As the preceding review has shown, such sustained high levels of inflation also tend to increase the probability of other types of crises.

The opportunity of *seigniorage* practices is also viewed as a potential pitfall related to inflation. Here the idea is that a government has the short-term possibility of increasing revenue simply through printing more money. This could be tempting for governments if the social costs of attracting other forms of revenue, such as taxation, are considered as high (Dornbusch and Fischer 1993, p. 3). Barro and Gordon (1983, p. 603) stress the element of surprise as crucial factor in order to achieve *seigniorage* as an effect of increasing inflation, to ensure that the increase is not anticipated and adapted for by the market. Without this anticipation an increase in inflation could decrease the real value of both government budget deficits and public debt denominated in national currency. Also, extensive government spending could reinforce the benefit of this strategy, because of the higher probability of

increased social costs of other forms of taxation in the short run (Barro and Gordon 1983p. 602-603).

An "institutionalized" high level of inflation, with the embedded vulnerability of the financial system associated with this, also increases the possibility of experiencing *hyperinflation.* The term refers to the occurrence of extremely high inflation that persists over a sustained period of time (Abel et al. 2008, p. 465). Reinhart and Rogoff (2009, p. 5) defines the threshold of the occurrence of hyperinflation to be inflation rates of 40 percent per month. Hyperinflation damages a country's currency severely, through reducing its value to a level where it is practically ineffective, and ensuring an extreme rise in prices. This again has consequences for the economy as whole, because the disruptive effects on the market efficiency associated with moderate or high inflation are amplified during occurrences of hyperinflation. It causes panics among workers on spending their money before prices rises further, which again has disrupting effects on production. It also typically creates reduced tax collecting ability for the government, because the expectations of further decrease of the value of money gives an incentives for taxpayers to withhold their payments as long as possible (Abel et al. 2008, p. 465). Hyperinflation is therefore considered as a clear case of *inflation crisis.* However, Reinhart and Rogoff (2009) argue that inflation crises occur on considerably lower levels of inflation. To take this into account they therefore apply an inflation rate threshold for the occurrence of inflation crises on 20 percent per annum. The per annum measure also secure an increased possibility for measuring the duration of the inflation crisis (Reinhart and Rogoff 2009, p. 4-5).

In order to determine a government's vulnerability towards inflation crises, it is necessary to briefly review the concept of *central bank independence* (CBI). An independent central bank is often viewed as the key to achieve price stability and low inflation. This is due to the embedded bias towards higher inflation that governments that control monetary policy tend to have. Such an "inflation bias" could be rooted in the short-term benefits of increasing inflation, such as the above-mentioned concept of *seignorage*, which could be beneficial for an incumbent wanting to stay in power. To avoid this "inflation bias" it is seen as beneficial to delegate monetary policy to an independent authority, preferably the central bank. This does not mean that the government becomes insignificant in monetary issues. It rather means a shift in the center of agenda setting, from a political to a non-political institution (Keefer and Stasavage 2003, p. 407-8).

Rogoff (1985, p. 1177) emphasize the advantages of appointing a "conservative central banker", a central bank governor with preferences towards a lower level of inflation than the public opinion. This could stimulate to a favorable policy outcome of the "game" of checks and balances that the conduction of monetary policy in a CBI system typically consists of. Keefer and Stasavage (2003, p. 409) stresses this preferable role of the "conservative central banker" as an agenda setter, through choosing an inflation rate that the political veto players could accept or refuse. By setting a more conservative starting point for conducting monetary policy, there is an increased probability for a lower final inflation rate than in the case of government conducted monetary policy. CBI could in this way be a tool for keeping a stable level of inflation and avoiding unexpected inflation rises and inflation crises (Keefer and Stasavage 2003, p. 420-1).

But to what extent is the introduction of CBI in the state structure, the prominent cause of price stability and low inflation? This has been a subject for theoretical disagreement. Hayo and Hefeker (2002) argue that there has been an overestimation of the significance of CBI as an indicator of low inflation. They instead highlight two main factors as crucial for determining price stability. The first of these is the national inflation culture, which refers to the traditional emphasis of fighting inflation as a target for the government. If low inflation never has been a significant objective for the government, and/or important interest groups that influences monetary policy such as banks, an introduction of CBI is less likely to produce a low inflation outcome by the logic of this argument (Hayo and Hefeker 2002, p. 663-5). The second primary factor concerns a state's institutional preconditions for achieving price stability. The expressed goal of attaining stable low inflation is not enough in itself. The outcome of monetary policy also depends on how the political system and the legal system facilitate this goal. Institutional difficulties typically associated with emerging markets could therefore be an obstacle for achieving price stability through CBI (Hayo and Hefeker 2002, p. 666-9).

2.3 The Southern European Economies

The following two sections (2.3 and 2.4) review theoretically emphasized features of Southern European economies and politics, primarily in the meaning of the selected cases of Greece, Spain and Portugal (GSP). The purpose is to develop a theoretical foundation for the explanatory variables applied for explaining the *severity of financial crisis* in these cases, as a framework of how they differ from the rest of the EU countries, and the assumed more severe strike of crisis this has led to. This section provides a theoretical discussion on the

commonalities of modern economic development in of Southern Europe.

2.3.1 Modernization and Economic Development

Although the selected time period of this case study is set to 1975-2012, a brief review of the modernization process, starting somewhat before, is critical for understanding of their economic position at the beginning of this period. All three countries were up to the entry to the second half of the twentieth century characterized as economies dominated by rural sectors with low degrees of industrialization. In Spain and Portugal a highly emphasized reason has been to the strict isolative economic policy enforced by authoritarian regime, led by respectively Francisco Franco and António Salazar, up to the 1950s. Greece's semi-parliamentary system in the same period provided the same high state intervention in the economy and an even lower degree of industrialization than the two others. However after the opening of their respective economies in the 1950s, all three countries experienced strong convergence, especially in the 1960s, which implies significantly stronger economic growth than the general level in advanced economies (Roccas and Padou-Schioppa 2001, p. 46-8). Roccas and Padou-Schioppia (2001, p. 52-3) emphasize the strong state in the economy as central for this convergence, along with very low labor costs at the start of this period, which grew at approximately the same rate as the growth of productivity.

The "boom" of the 1960's in Southern Europe came to an end with the occurrence of the international oil crisis in 1973. The reverse of growth in the aftermath of this crisis has been said to have crucial impact of the fall the authoritarian regimes of all three cases of GSP in the period of 1974-1975 (Thomadakis 2006, p. 312). From the start of the period of interest of this thesis, 1975, GSP was characterized by severe stagnation in industrial productivity and growth, as well as the occurrence of "stagflation" with the combination of persistent high inflation *and* unemployment (Gibson 2001, p. 4). Public sector remained large, especially in Greece and Portugal, and the service sector grew rapidly due to extensions of civil service to keep up employment. This trend was also apparent in the case of Spain, although they to a greater extent directed their increases in government expenditures towards social protection Nevertheless, the occurrence of service sector dominance *before* the experience of fully dominating industrial sector is a major feature of the Southern European economies, which defers from the general European trend (Roccas and Padou-Schioppa 2001, p. 55-7). This dominance, along with high state control and economic stagnation characterized the Southern European economies on the verge of democratization around 1975.

2.3.2 Economic Challenges of Democratic Transition

The process of democratization implies several challenges for incumbents in terms of stabilizing the economy and developing a sustainable economic system. Transitional governments face a dilemma between policies with long-term or short-term gains. The sensible solution in a long-term perspective could be to pursue austerity during the first years of democratization. By applying restrictive measures with focus on stabilization, price stability and limiting public costs, one could build a foundation for developing a stable economic system that could secure steady economic growth in the future. However, as democratic principles of popular influence on decision-making processes gets increasing attention, popular demands for increased redistribution of wealth tend to intensify. In their struggle for legitimizing their democratic rule as a real change from past authoritarian regimes, transitional regimes therefore have a strong incentive to increase public expenditures in order to meet some of these demands. This could result in the pursuit of reforms that are financially unsustainable in the long run, which could contribute to economic destabilization in period where stabilization is needed (Haggard and Kaufman 1995, p. 158-9).

An example of such destabilizing practices from the cases of GSP is the sharp increases in the wage level in the late 1970s, especially in the public sector. This was a consequence of the strong pressures for higher wages from the increasingly influential labor unions, towards the newly democratized governments. Along with for example increased welfare state expenditures, this contributed to *seigniorage* practices (as explained in subsection 2.2.4), financing public spending by expanding the monetary base, in a period characterized by economic stagnation after the strike of the international oil crisis (Barry 2003, p. 904)

The renewed focus on redistribution after democratization caused substantial increases in public spending. The "sensible solution" for financing public expenditures is usually considered to be taxation, making citizens contribute with their "share" to measures that are meant to benefit the population on a societal and/or individual level. However, due to several aspects of the political climate in the mid-1970s increased taxation was a difficult source of revenue to apply in GSP. This had to do with legitimizing the transitional regimes, the struggle to gain power among new democratic parties, as well as the existence of a recession that increased the demand for state *expenditures*, instead of increased state *revenues* through unpopular taxes. The governmental reluctance towards increasing taxes along with rising public expenditures in the late 1970s to early 1980s therefore contributed to increasing public

deficits (Thomadakis 2006, p. 316-7).

The generally low level of taxation in GSP has been accompanied by a dependence on various *indirect taxation* measures on goods and services. However, while they in the Greek case stood for 60 percent of the tax revenue in 2004, they are generally seen as highly ineffective, consisting of a large number of different taxes, usually with low yields. The high percentage of total tax revenue that these form of taxes constitute, despite the relatively low levels of actual contributions, reflect a major inefficiency problem with the tax system (Kaplanoglou and Newbery 2004, p. 226). In addition to this widespread application of largely ineffective consumption taxes, tax evasion is widespread problem in GSP. Systematic underreporting of income by businesses and sole proprietorships is contributing to a substantial loss of potential public revenues. Also, the presence of an informal economy, consisting of unregistered businesses providing informal work, as well as unreported self-employed, constitute a major challenge against a well-functioning tax system (Dell'Anno et al. 2007, p. 67; Bronchi and Gomes-Santos 2002, p. 6).

2.3.3 Foreign Trade and Internal Market Participation

With the admission to the EU, in 1981 for Greece and 1986 for Spain and Portugal, came increased possibilities for foreign trade, especially after the opening of the European internal market in 1993. But the increase in possibilities for *competing* naturally also implies increased *competition* from other EU countries. An important theoretical aspect considering implications of increased competition through the internal market of the EU is the difference between *inter-industry trade* and *intra-industry trade.* The idea of the traditional type of *inter-industry trade* is that countries with advantages in a main branch of industry, usually a labor-intensive or agricultural sectors, export goods from this industry, while importing from branches where they have less *comparative advantage*. This was a favorable approach in times where the industrialization process were incomplete in many countries, as a way of utilizing sectorial gaps in their own and other countries' markets in their strategies for imports and exports (Smith and Wanke 1993, p. 541).

However, as more European economies reached an advanced level of industrialization, and as there was established closer economic co-operation through the EU, *intra-industry trade* has taken over as the dominant trade strategy. In contrast to *inter-industry trade*, this strategy utilizes *comparative advantages* of production on a far more specific level, through small advantages in technology, and other conditions that makes production of a certain good

beneficial. This is seen as a more effective form of trade, reducing the element of exploitation from countries dominated by "strong" high technology sectors, towards countries dominated by "weaker" and more labor-intensive sectors. However, there are still imbalances in economic development within the EU, especially through their extension of the membership base the last few decades. For countries that lack behind on the development of technology, and still are dependent on certain main branches of labor-intensive industries, this entails substantial challenges of competing in the internal market with countries with more advanced economies (Smith and Wanke 1993, p. 541-2). This could be a potential challenge for the cases of GSP.

2.4 Political Development and the Welfare State

2.4.1 Political Institutions – Development and Challenges

The establishment of effective institutions is one of the major obstacles for a country in transition from authoritarian rule. The political environment that characterizes a country that has experienced the demise of an authoritarian regime is typically a chaotic affair. Usually a wide variety of interest groups struggle for influence in the new regime, based on different perceptions of what is the most fair and convenient path towards a democratic system. The legacy of the old regime is also most often present, through the existing constitutional arrangements and bureaucratic apparatus, which to a certain extent is a "necessary evil" to utilize in order to develop the extensive degree of political reform required for consolidating the new democratic regime (Magone 2003, p. 63-4). In addition, as highlighted above, the promise of democracy usually comes hand in hand with stronger popular pressure towards redistribution of wealth. This requires a substantial increase and re-organization of the handling of state funds, in order to develop a functioning welfare system (Haggard and Kaufman 1995, p. 152). These institutional challenges became apparent in GSP after the fall of their respective authoritarian regimes in 1974/75, and will be the center of attention for this subsection.

One of the major institutional challenges during a democratic transition is to establish functioning political institutions rooted in democratic principles. The insecurities considering which actors that should be involved, and how to develop suitable arrangements embedded in the character of the specific societies, makes this a difficult exercise. First of all, the development of a stable and efficient legislative assembly is critical. This proved to be challenging in all three Southern European cases treated here. Neither of these countries were

able to establish fully professionalized parliaments with the necessary foundation of routines to achieve an effective legislative rule (Magone 2003, p. 82).

In Portugal the party system has been characterized by a high degree of polarization and fragmentation. This despite that the supposedly proportional electoral system produced an effective threshold of parliamentary representation of about 6,5 percent between 1975 and 2002 (Magalhães 2003, p. 185-6). The main consequence of this has been a high degree of instability, with no legislature finishing its full term before 1987 (Magone 2003, p. 82). In Spain, the strength of the executive branch manifested itself also in legislative matters. As a result of this executive dominance, legislative bills proposed by the cabinet often have had broad official support by opposition parties, despite that the discussions in legislative committees typically are characterized by a high degree of disagreement (Magone 2003, p. 86). These weaknesses of parliamentary practices are possibly even stronger in the case of Greece. The Greek members of parliament are merely semi-professionalized, entitled to have a "normal job" on the side. It is considered more of a "talking parliament", which is evident through the fact that only 8 out of 2.744 approved legislative bills originated from the parliament between 1974 and 1999 (Magone 2003, p. 91).

As a consequence of the weaknesses characterizing the legislatures of GSP, parliamentarism in these countries has developed in an imbalanced form, towards dominance of the executive branch. In all three cases this has meant dominance of the prime minister as the leader of government, despite both Greece and Portugal having a *de jure* semi-presidential system where a president is appointed as well. However, the *de facto* political influence of these presidents is low, and the presidency remains more of a ceremonial character (Pasquino 1995, p. 266-7). In Greece and Spain government dominance was institutionalized from the very beginning of the democratization process starting in 1975. The emergence of an effective two-party system developed a "natural habitat" for strong governments in Greece, with two parties, New Democracy (ND) and the Socialist Party (PASOK), alternating as the incumbent majority government (Magone 2003, p. 79). In Spain the pursuit of government stability resulted in the restricted possibility for the parliament to carry out votes of no confidence towards the cabinet, which had an important impact on this outcome. The conditions included the requirement of an official alternative prime minister candidate. These obstacles of dismissing a government in office, have produced an influential character of the prime minister and the cabinet, even in cases where the incumbents lack a qualified majority in parliament (Magone 2003, p. 72).

The tendency of governmental dominance in Portugal, on the other hand, developed later in the democratization process than in the other two cases. Here it came as a result of the high degree of political instability both in legislative and executive branch, which characterized the first decade after the fall of the military regime in 1974. The appointment of Social Democrat Anibal Cavaco Silva as prime minister in 1985 changed this tendency. Reform of public administration and the system of decision-making provided more political stability, as well as stronger governmental influence. This was enforced by the series of one party majority governments following the absolute majority victory of the Social Democratic Party (PSD) in 1987 (Magone 2003, p. 70-1).

2.4.2 The Role of State Bureaucracy

In addition to establishing stable institutions for political decision-making, another major issue for new democracies is the development of the state bureaucracy. The effect of political decisions depends on the ability of public administration to transform adopted policy into efficient practical solutions. This entails substantial challenges for the actors involved in establishing the new rule in a transitional regime. One question concerns the extent which reliance of the existing state apparatus is necessary. Here there is a trade-off between potential stability and the objective of distancing the new regime from the old. By relying on existing bureaucratic personnel to one degree or another, they could contribute with experience and knowledge and possibly avoid a chaotic environment in civil service that could complicate the consolidation of democracy. On the other hand, the continuing existence of the bureaucratic elite of the old regime could be a major obstacle for substantial reform of public administration (Sotiropoulos 2006, p. 203-4).

In Spain the character of the transition to democracy, with the negotiated settlement between Francoist elites and central interest groups of the opposition, made the reliance on existing civil service a preferable solution. This included the integration of approximately 30.000 public officials from the Francoist regime into the “new” public administration. As a consequence of this, the transition to democracy in Spain was not initially accompanied by particularly extensive structural changes of public administration (Sotiropoulos 2006, p. 213-4). This absence of structural reform was also mainly the case in Greece. However, through being in power for the relatively brief period of 1967-74, the previous military regime lacked to complete the institutionalization of a strong bureaucratic elite. This made the distancing from the old regime, by replacing public officials in certain sectors, a more natural path than

in Spain (Sotiropoulos 2006, p. 204). Portugal experienced the most radical transformation of public administration in the subsequent years of the fall of authoritarian rule in 1974, with a comprehensive process of dismissal of civil servants associated with the former military regime. This could be explained by the stronger revolutionary character of the Portuguese transition, compared to the more consensual transitions of Spain and Greece. However, despite the considerable change in personnel, the instability characterizing political institutions during the late 1970s prevented substantial bureaucratic reform before the 1980s (Sotiropoulos 2006, p. 212-3). Despite the differences in the initial handling of the existing public administration, this lack of bureaucratic reform in the period of transition and consolidation of democracy was evident in all three cases (Sotiropoulos 2006, p. 204).

Another challenge related to the bureaucracy of GSP is the tendency towards clientelism and politicization of public administration. All three countries have a long tradition for patron-client relations, consisting of networks for exchange of positions, services and resources based on some form of affiliation. These relations are reaching from a local level and "up the ladder" to state officials and managements of public corporations. Traditionally the networks were based on quite personal relationships between the different levels of patron and client. However, after the fall of authoritarian rule clientelism have taken a more politicized form, mainly following the lines of the party system. The remaining strength of such party patronage networks has had a significant impact on the character of public administration after democratization in these countries (Sotiropoulos 2004, p. 407-8).

Party patronage has been especially evident in Greece, were the governing party to a great extent have been able to dictate the composition of public administration. Consequently a shift in governmental power typically has been followed by extensive hiring of civil servants affiliated with the new incumbent party (Magone 2003, p. 108-9). At the "top", this has meant widespread replacement of leading positions in ministries and central administrative agencies, as well as in public corporations. At the "bottom", rather than dismissing and replacing existing staff, a common procedure for the new governing party has been to establish temporary positions that later have been incorporated as permanent (Sotiropoulos 2004, p. 410-2). The result of this has been a sustained increase in state bureaucracy, hand in hand with a persistent low level of bureaucratic efficiency. Further, the division of the Greek civil service into over 890 corps with low degree coordination between them, has resulted in a fragmented system that reinforces this problem of inefficiency (Magone 2003, p. 109). In addition, Legg and Roberts (1997, p. 168) argue that bureaucratic inefficiency to a great

extent is deliberate: “Ties to influential politicians, then, are more valued than departmental loyalty. The hallmark of the individual bureaucrat is to avoid responsibility”. This system of promotion in public administration through virtually intentional inaction also entails a lack of continuity in bureaucratic leadership. Along with the mentioned high turnover of political appointees, civil servants that have “climbed that ladder” of the Greek bureaucracy typically have reached an age where the ultimate goal is to achieve full pension, directly followed by retirement (Legg and Roberts 1997, p. 169). These patterns of party patronage has also been evident in Portugal and Spain, if to a somewhat less extent (Magone 2003, p. 105-6)

2.4.3 The Mediterranean Welfare State Model

The challenge of placing the Southern European welfare regimes within a certain “world of welfare capitalism” has been a frequently debated issue among scholars handling welfare state concerns. Although not explicitly treated, these countries are normally considered as part of the *corporatist* model within Esping-Andersen’s (1990) classical typology of welfare states (Arts and Gelissen 2002, p. 142). This archetype of welfare states, also labeled “Bismarckian”, with close links to the German model, is rooted in the traditional organization of the state in continental Europe, with a segmented system of welfare provision. This system usually provides relatively generous benefits for active parts of the workforce, while groups like unemployed and short-term employees gets considerably less support. In contrast the *social democratic* welfare states pursue a more extensive set of benefits and services, based on principles of universal welfare rights. The last archetype, *liberal* welfare states, provide a relatively limited set of welfare benefits, mostly consisting of means-tested cash benefits, to provide a minimum standard for the low-income strata (Esping-Andersen 1990, p. 26-8).

However, a common critique of the Esping-Andersen typology is the “bad fit” of Southern European welfare states in the *corporatist* model. This has resulted in the occurrence of a sub-category in the literature consisting of Southern European welfare states, often called the *Mediterranean* welfare state model (Arts and Gelissen 2002, p. 142). One of the most emphasized common feature of these *Mediterranean* welfare states are their rudimentary character compared to the rest of Western Europe. This could be coherent with the fact that these welfare states are established rather recently. While welfare rights were established as constitutional rights in GSP after their respective transitions in 1974/75, the states’ weak foundation for redistribution has made the development of an effective system for the implementation of welfare benefits a considerable challenge. This is despite the mentioned

considerable increase in state expenditures on re-distributional matters. The result has to a great extent been a rather fragmented process of development of social assistance programs, often with contradictory and unenforceable rules and very low actual payments. The systems have also been developed with considerable embedded imbalances. This is especially the case with the heavy emphasis on old age pensions in the public sector, at the expense of other kinds of benefits and services. However, there has been considerable progress in all three countries on the establishment of an universal health care system (Ferrera 2005, p. 4-6).

The particularly segmented character of the Southern European labor markets, combined with high dependence of participation in the workforce to attain social services, has been emphasized as another important characteristic of the *Mediterranean* welfare state. While active participants of the labor market enjoy relatively generous welfare benefits, the support of unemployed and part-time workers are at a much lower level (Garcia and Karakatsanis 2006, p. 93). Permanent employees in core sectors, mostly public sector large/medium firms, are especially strongly protected (Ferrera 2005, p. 5). In addition, since labor unions consist of full time employees, they have been a strong political force against changing the system, which complicates a potential process of improving conditions for unemployed and partly employed. These circumstances have also contributed to the strong consolidation of this "dualization" of the labor market (Garcia and Karakatsanis 2006, p. 94-5).

Several cleavages serve as major obstacles for participation in the official wage economies of the Southern European economies. One of these is based on age. Young people have substantial difficulties with entering the labor market, and thereby getting considerable welfare benefits (Garcia and Karakatsanis 2006, p. 94). One of the reasons for this could be low levels of education compared to the European average, despite considerable improvements in the education system. For example, in Portugal almost half of the population between 18 and 24 were neither in school or receiving vocational training in 2005 (Capucha et al. 2005, p. 226). Also the population of rural areas has experienced difficulties reaching full proletarianization along with the transition to a modernized economy. While growth in urban areas has been immense at the cost of rural areas, elements from the "traditional family farming era" are still evident despite the shift to an urban environment, due to the challenges of attaining full time employment. Therefore family businesses are still a common phenomenon, and often with different forms for informal activity (Mingione 1995, p. 128-9) .

Another line of argument defending the inclusion of a *Mediterranean* welfare state archetype

is the focus on the strong role of the family as an alternative to the state for distributing welfare. The argument is that the traditional family situation, with the extended family often living under the same roof, has led to an embedded attitude towards taking care of disadvantaged family members, such as elders. This task has been especially evident among women, who traditionally have been the leader of the household, with a strong identifying attribute linked to supporting their family. Women's traditional strong sense of responsibility towards family care is evident also in the modern Southern Europe, through persisting high levels of female unemployment. In addition the segmented character of the developing welfare systems has contributed to reinforcing, rather than a dissolving, the high dependence on the family as a provider of welfare. This could be linked to the low levels of support for outsiders of the workforce, combined with high thresholds for entering the labor market for young first time applicants and long-term unemployed (Garcia and Karakatsanis 2006, p. 103-5).

2.5 Defining the Explanatory Variables

The following section presents the explanatory variables that are applied in this thesis. They are selected and defined based on the theoretical framework provided earlier in this chapter. The variables are divided into three main variable groups. The first one concerns the *condition of the financial system*, and is based on a few key explanatory elements directly related to the types of crises presented in section 2.2, which pose the basis for the definition of the dependent variable. Most of the explanatory variables are however situated in the two other variable groups, based on the theoretical review of section 2.3 and 2.4, respectively called *features of economy* and *political challenges*.

For each explanatory variable there will also be presented a hypothesis of the expected effect they will have on the dependent variable severity of crisis, and whether there is a general expectation of deviation between the cases on this effect. Because of the qualitative and mainly inductive character of the research project, they are not formulated as clear-cut hypotheses determining expected statistical co-variation. Instead they represent general expectations of the causal relationships, rooted in the theoretical framework presented in this chapter.

2.5.1 Condition of Financial System

Bank regulation

As pointed out in section 2.2, *banking regulation* is emphasized in the literature as a crucial factor for determining the risk of experiencing a severe strike of crisis, both in form of a systemic *banking crises* and *currency crises*. Especially in newly liberalized emerging markets, the increased influence of private actors often results in decreased capabilities among the existing regulating institutions, which often results in a massive increase in the credit flow and risks taken by banks (Furman and Stiglitz 1998, p. 17). Measures of public institutions' regulating and supervising capabilities could therefore be a significant explanatory factor of the vulnerability towards a crisis. Moreover, the persistence of low regulating capacity could be a possible determining factor of a severe strike of crisis. Having in mind that GSP had the status as newly liberalized economies at the beginning of the period of interest (1975-2012), I present the following hypothesis concerning the explanatory variable *bank regulation*:

H1: The lower level of bank regulation in GSP has increased their vulnerability towards banking and currency crises, compared to the EU average.

Central bank independence

The independent central bank is often considered as an ideal provider of price stability and low inflation, as well as ensuring credibility of monetary policy, distant from the "desire" of political incumbents to benefit of increased inflation on short term (Crowe and Meade 2008, p. 763). A low degree of *central bank independence* (CBI) could in this way be considered as an institutional weakness that could contribute to an unfavorably high level of inflation, and an increased possibility of inflation crises as well as currency crises. This is also the case if a country has *de jure* but not *de facto* CBI. In addition, *seigniorage*, the active use of surprise inflation to decrease the value of governmental debt and deficits, could be a possible source of both debt and deficits crises. Such a short term strategy could be especially "tempting" for governments with problems of legitimizing their tax regime (Dornbusch and Fischer 1993, p. 5). *Central bank independence* is therefore applied as an explanatory variable. Based on the point made in subsection 2.3.2, about newly democratized governments' incentives towards inflating in order to finance increased expenditures on re-distributional measures, I apply the following hypothesis.

H2: The lower level of de facto CBI in GSP has increased the vulnerability towards inflation, currency and debt crises, compared to the EU average.

2.5.2 Features of Economy

Sectorial composition and productivity

Based on the theoretical notion of the late industrialization in GSP as an impeding factor on economic performance, *sectorial composition and productivity* is included as an explanatory variable of *severity of crisis*. According to the literature emphasized in section 2.3, the sudden opening of the traditionally isolative economies in the 1950s and 60s, followed by the fall of these regimes in the 1970s, has resulted in a distinctive form of capitalism in Southern Europe, with deviations in sectorial development compared to other European countries. The remaining influence of the state and the public sector in shaping patterns of production is often associated with a lower level of dominance from the industrial sector during the period of strongest convergence. This has resulted in service sector dominance at an earlier stage than common in the rest of Europe, taking over at an earlier stage for agriculture than common in other European countries (Sapelli 1995, p. 103). This "incomplete" character of industrialization is assumed to cohere with lower levels of productivity, which is why the indicators *sectorial composition* and *productivity* is included in the same variable. As mentioned in subsection 2.3.1, Spain directed their increases in public spending after democratization to a larger extent towards social security measures instead of public service sector expansion than Greece and Portugal. Having this in mind, I provide the following hypothesis:

H3: The higher degree of public service sector dominance and lower productivity, strongly in Greece and Portugal and moderately in Spain, have had a negative effect on economic performance, thereby increasing their general vulnerability towards financial crises, compared to the EU average.

Taxation

The explanatory variable *taxation* is included to account for the emphasis in the literature on the difficulties that Southern European governments have had in establishing and legitimizing an effective tax system. This has especially been related to taxation on income, resulting in a stronger use of indirect taxation on goods and services, especially in Greece (Kaplanoglou and Newbery 2004, p. 227). In addition, the lacking ability of attracting tax revenue could have been decisive for the development of a great extent of government influence on monetary policy, with the active use of increased inflation emphasized in the case of the explanatory variable *central bank independence*. In this way the underdevelopment of the tax

system could be seen as a source of the inflationary practices that have increased the vulnerability different types of financial crises, directly in the case of inflation and currency crises, and indirectly in the case of debt and deficits crises. Based on this I apply the following hypothesis:

H4: The lacking ability of establishing and legitimizing an effective tax system, strongly in Greece and moderately in Spain and Portugal, has caused challenges of financing public expenditures which have contributed to increased vulnerability towards debt, inflation and currency crises, compared to the EU average.

Patterns of foreign trade

The variable *patterns of foreign trade* is included to detect the trends for GSP in terms of their ability to compete in the international market, primarily within the EU. It is applied to account for the effect of the development of foreign trade for these countries after their admission to the EU and entry into the internal market. Two different aspects are emphasized in the treatment of this variable. The first of these is the tendencies considering the trade balance, identifying the comparative strength between the countries' imports and exports. An increase towards a *trade surplus,* where the value of exports exceeds the value of imports, would indicate that a country is able to utilize the benefits of the economic opening of borders. In contrast, an increase of the *trade deficit* would imply a heavier reliance on imports, indicating a limited ability to compete within the internal market. The second aspect involves identifying whether a country utilizes comparative advantages in larger branches of industries (inter-industry trade), or rather utilizes more specific technological advantages (intra-industry trade). This is to investigate whether GSP have been able to sufficiently develop their technological capacity, in order to be able to compete on the same premises as other EU countries (Smith and Wanke 1993, p. 541-2). Considering the weaknesses of the Southern European economies emphasized in section 2.3, I apply the following hypothesis:

H5: Higher trade deficit, combined with the remaining dominance on inter-industry trade strategies in labor-intensive sectors, have prevented GSP from competing effectively within the EU's internal market, thereby damaging their economic performance and increasing their general vulnerability towards financial crises, compared to the EU average.

2.5.3 Political Challenges

Governmental dominance and bureaucratic efficiency

Governmental dominance is mentioned in section 2.4 as a central feature of the Southern European democracies. The dominance of the executives over the legislature could reflect a stronger opportunity for expansive economic policy-making of the incumbents, especially one-party-governments with majority in parliament, compared to systems that are more balanced between executive and legislative powers. This could lead to implementation of policies that are financially beneficial in the short run instead of the long run. I combine this with the indicator *bureaucratic efficency,* to investigate whether party patronage, through the changing/adding of civil servants after a change in government, has contributed to inefficient and too large bureaucratic apparatus (Sotiropoulos 2004, p. 408). As highlighted in subsection 2.4.1 and 2.4.2 these tendencies seem to have been strongest in Greece. I therefore apply the following hypothesis concerning the variable *governmental dominance and bureaucratic efficiency:*

H6: High executive dominance combined with a large, ineffective and politicized bureaucracy, strongly in Greece and moderately in Spain and Portugal, has increased their vulnerability towards financial crises, compared to the EU average.

Public social expenditure

Public social expenditure is applied as an explanatory variable based on the assumption that GSP provided a relatively low level of redistribution, despite of it being a major share of the increasing public expenditure after democratization. In addition I apply an indicator of *public pension expenditure*, to account for the theoretical emphasis on public pensions as the social benefits with the highest level of payments, especially in the case of Greece. These indicators are supposed to account for respectively the underdevelopments and the imbalances in the Southern European welfare systems (Ferrera 2005, p. 4). They could together provide an understanding of the level of modernization and their political challenges related to social inequality. The systemic weaknesses and challenges linked to welfare could thereby contribute as part of an explanation of the general vulnerability towards experiencing severe financial crises. I apply the following hypothesis:

H7: Low levels of social expenditure in GSP, combined with imbalances in the welfare system with higher public pensions in Greece, could indicate weaknesses in their social protection that increase their vulnerability towards financial crises, compared to the EU average.

Segmentation of labor market

The explanatory variable *segmentation of labor market* applies the employment rates from

three key groups, based on the cleavages influencing the composition of the workforce of GSP emphasized in subsection 2.4.3. These are the employment rates for men, women and young people. As the theoretical discussion has shown, the former has tended to dominate the workforce, while the latter two have had substantial challenges with entering the labor market (Garcia and Karakatsanis 2006, p. 94). This segmentation, keeping a considerable amount of people out of the labor market, could be viewed as an obstacle against establishing an effective labor market that could strengthen utilization of the available manpower, thereby preventing a strengthening of the conditions for production. In addition this segmentation could be a contributing factor to the remaining impact of the *informal economy,* as a deteriorating factor on the performance of the official economy (Mingione 1995, p. 140). An argument against applying these employment rates as explanatory variables is that they could be interpreted as *consequences* of the outcome rather than *causes*. However, I argue that the pattern of employment rates could be viewed as representing *feedback effects.* This implies that a persisting pattern of labor market segmentation could indicate substantial systemic problems, which could have negative impact on a country's economic performance. Through this view a decrease in the employment rates for women and youths could represent the reinforcement of these patterns, rather than just being a consequence of an economic recession. I therefore apply the following hypothesis:

H8: The segmented character of the labor markets in GSP, with high barriers for the entry of women and young people, has had a negative impact on their economic performance, increasing their general vulnerability towards financial crises compared to the EU average.

2.5.4 Summary of Explanatory Variables

Table 2.1: Explanatory variables of dependent variable *severity of financial crisis*

Explanatory variables	Greece (expected value)	Portugal (expected value)	Spain (expected value)
Condition of Financial system:			
Bank regulation	Low	Low	Low
Central bank independence	Low	Low	Low
Features of economy:			
Sectorial composition and productivity	High public service sector dominance, low productivity	High public service sector dominance, low productivity	Moderate public service sector dominance and moderate productivity
Taxation	Low revenues, consumption tax dominance	Moderate revenues and consumption tax dominance	Moderate revenues and consumption tax dominance
Patterns of foreign trade	Trade deficit and inter-industry dominance	Trade deficit and inter-industry dominance	Trade deficit and inter-industry dominance
Political challenges			
Governmental dominance/bureaucratic effeciency	Executive dominance, highly clientelist bureaucracy	Executive dominance, moderately clientelist bureaucracy	Executive dominance, moderately clientelist bureaucracy
Public social expenditure	Low (high on pensions)	Low	Low
Segmentation of labor market	High barriers for entry of youth and women	High barriers for entry of youth and women	High barriers for entry of youth and women

Table 2.1 summarizes the selected explanatory variables and the hypothesized variation on these. Common for all explanatory variables are that GSP are expected to have a worse score than the EU average, making them more vulnerable for experiencing a severe financial crisis. The most important features here is that Greece is expected to have a worse score than Spain and Portugal on the explanatory variables *governmental dominance and bureaucratic efficiency* and *taxation*. They are also expected to have *higher pensions expenditures*, which could be negative in form of culminating in high levels of public debt/deficits, as well as illustrating the imbalances in their social protection system. Also, Greece and Portugal are expected to more dominated by the public service sector and have lower productivity than Spain. Table 2.1 reveal that there are expected to be more than one variable with different values between the cases. This is a deviation from the ideal type of MSSD, where only one different explanatory variable are supposed to account for the differences on the dependent variable (Gerring 2008, p. 668). I will provide a justification of this and elaborate on my adaption of the design in section 3.2.

Chapter 3: Methods and Data

In this chapter, I present my research design, consisting of the strategies applied for selecting and interpreting the empirical evidence applied to answer the research question. I will also discuss crucial methodological issues, such as the reasoning behind selecting a qualitative approach opposed to a quantitative one, and potential pitfalls and weaknesses related to this choice of methods. Furthermore, I provide a justification of the case selection for this thesis, as well as operationalizing the selected dependent variable and explanatory variables. Finally, I will account for what kind of data and data sources that will be applied.

3.1 Comparative-Historical Case study with Descriptive Statistics

The method applied in this thesis is a *comparative-historical case study* of three cases, Greece, Spain and Portugal (GSP), in the period 1975-2012. The strategy for the selection of cases is a *most similar systems design* (MSSD), also called the *method of difference*, a tool developed for comparisons of similar cases with different outcomes on the dependent variable. In addition, the EU average will be used as a comparative reference point during the same period on the indicators when possible. This is to provide a "European context" that could help detecting potential deviations between the situation of the selected cases and the one among the EU area in general, relevant for the part of the research question concerning the standing of GSP opposed the rest of the EU. The empirical evidence will consist of a combination of *descriptive statistics* and analysis of *secondary literature*, in order to cover a wide variety of relevant data.

Gerring (2007, p. 19) defines a case as "a spatially delimited phenomenon (a unit) observed at a single point in time or over some period of time". While a large number of studies observe *cases* based on this definition of geographical and temporal delimitation of the units of analysis, a study of a *case* does not automatically imply a *case study* approach. In order to meet the criteria of being a *case study*, opposed to a *quantitative cross-case study* (large-N study), the main "competitor" of studies of *cases* in social sciences, one have to consider the number of observations tied to each unit of analysis. A typical *large-N study*, mostly in some form of regression analysis, utilizes a larger sample of cases to detect variation across these on a *delimited* number of observations. The objective is most often to provide a standardized framework for conducting causal inferences across cases, from the causal factors represented by the explanatory variables (X) to the outcome in form of the dependent variable (Y). Another central objective is to pursue results that can be generalized from a *sample* of cases to

the total amount of relevant cases, the *population*, on the basis of calculations of probability (Gerring 2007, p. 20-1).

In contrast, a *case study* applies a larger scope of observations for an individual case. Instead of primarily highlighting standardized measurements that secure direct comparability of the results *across* cases, the focus is rather on acquiring *in depth* information about each case. The logic behind comparison in *multiple case studies* is therefore rooted in utilizing detailed knowledge of variation *within* a case, in order to provide a nuanced picture of the similarities and differences among the cases (Gerring 2007, p. 21-2). A consequence of this focus on many observations on each case is that a multiple case study normally will have to be limited to a relatively small number of cases. Gerring (2007, p. 22) estimates that a sample bigger than a dozen cases usually will be disadvantageous for conducting an efficient comparative case study. In this way there is a trade-off between the representativeness of the population of cases, and the depth of the explanations of a phenomenon. The selection of cases is therefore most often not done with the main objective of generalization, and observing the frequency of specific a causal relationship. They are rather chosen on the basis of uncovering when specific outcomes occur or not occur, and the mechanisms that determine these outcomes (George and Bennett 2005, p. 31-2).

3.1.1 Why Qualitative Case Analysis of a "Matter of Numbers"?

Let us now focus on why I find the qualitative *case study approach* to be appropriate for an inquiry of explanatory factors that could determine different levels of *severity of crisis* in GSP. One important argument is the complexity of the phenomenon studied here. The concept of financial crises, earlier defined a disruption of a market's ability to attract capital within the economy, is highly comprehensive both in the way it is unfolded, the possible underlying causes, and period of time in which these causal processes develop. Studies that pursue to provide a holistic explanation of such a phenomenon in three cases would therefore benefit from a research design that accounts for this comprehensiveness, by acquiring a broad variety of sophisticated information about these cases. This is the fundamental argument for my choice of the *case study* approach.

The comprehensiveness of the phenomena investigated is also taken into consideration through the specific type of *case study* analysis applied. Through covering multiple cases over a longer period of time, the analytical technique applied is defined as *comparative-historical analysis* (Gerring 2007, p. 27). Mahoney and Rueschmeyer (2003) highlight three crucial

features in their definition of *comparative-historical analysis*. The first of these is the treatment of causal relationships of substantive importance. This demand of major societal impact complies largely with an inquiry of financial crises, considering the comprehensive influence they have on society both on a macro and micro level. Second, there has to be taken into consideration that causal processes develop over a longer stretch of time. The use of historical analysis, following the development of possible explanatory factors over a longer period of time, is therefore a crucial feature of this analytical approach. This is an uncontroversial feature to apply for the concept of financial crises, since vulnerabilities of economic systems develop over time, and often are fully revealed first during economic stagnation. The last feature emphasized is the systematic comparison of cases, aiming for the development of sophisticated theories about these phenomena. This is done by a thorough inquiry of a few cases, often of a similar or contrasting character (Mahoney and Rueschemeyer 2003, p. 11-3). The strategy for case selection here will be treated in section 3.2.

As comparative-historical case studies involve causal processes, it is necessary to discuss the use of *causation* in qualitative studies. *Causation* involves the study of the potential underlying *causes* (explanatory variables) of a specific *outcome* (dependent variable). In respect to the strategies for studying this relationship, case studies differ from large-N statistical studies in the prioritized focus on identifying *causal mechanisms* instead of *causal effects*. The latter, a crucial component of causal statistical studies, consists of estimations of how a change of the values of an explanatory variable (X) affects the values of the dependent variable (Y), and the estimated certainty of these predictions (George and Bennett 2005, p. 138). While such procedures provide an effective technical framework for unfolding co-variation between variables, a common critique of the quantitative focus on *causal effects* is that they ascertain correlation between X and Y, without establishing an explanation of *why* this correlation exists (Gerring 2007, p. 44).

This is where *causal mechanisms* come into the picture in case study approaches. The idea is that an in depth study of phenomena that are expected to be correlated with each other, could provide a more solid explanatory framework of the logic behind this correlation. In addition to revealing the existence of a correlation, based on theoretical assumptions, one could develop a theoretical framework of what intermediate factors *between* the variables that is decisive for the occurrence of an outcome. In order to identify these mechanisms, case study researchers sacrifice the statistical certainty of finding significant correlation between X and Y. In this

way it is a trade-off between *internal* and *external validity*. The former, dealing with the objective of obtaining valid causal inferences, is often more emphasized, and easier to achieve through detailed studies of on or a few cases. The latter, concerning the suitability for making valid generalization to a population, is more challenging with few cases, and most often regarded as secondary priority by case study researchers (Gerring 2007, p. 43-5). Through the choice of the case study method, I lose the opportunity of determining statistically significant *causal effects* of my dependent variable. An important objective of this study will therefore be to instead identify *causal mechanisms*, to establish a theoretically plausible explanation of how the explanatory variables, and the relation between these, affect the level of *severity of crisis*.

Another argument for applying a case study approach instead of a quantitative one is the complexity of the dependent variable *severity of crisis*. Since financial crises consist of phenomena that to a certain extent is possible to measure by numbers, a regression-based quantitative strategy could appear as favorable, to detect statistical co-variation. However, a major argument against this is the wide variety of events that could be included as part of the phenomenon of financial crises. Naturally, as emphasized in chapter 2, these challenges of theoretically defining financial crises and their severity, materialize themselves also in the case of applying a distinct quantitative measure to such a definition. As noted by Reinhart and Rogoff (2009, p. 249), their BCDI index, highlighted as the foundation for the definition of *severity of crisis* in section 2.2, only measure severity on the basis of the occurrences of incidents of the four varieties of crises in a given year. The level of severity *within* a type of crisis is thereby not accounted for. Therefore, as I elaborate in my operationalization of the dependent variable in section 3.3, these types of crises are measured by a set of descriptive statistics. This is in order to go a step further than the dichotomy of "occurrence" or "non-occurrence" of the varieties of crises, and also be able to spot different degrees of crisis among the cases that have experienced each type.

The objective of applying a broader set of measurements of the dependent variable is to increase the *conceptual validity*. This implies pursuing to the greatest extent possible that the measurements applied represent the theoretical concept it is supposed to measure. Case studies are perceived as more favorable for obtaining high levels of conceptual validity, through being able to provide a broader context for assessment of the materialization of concept in different empirical cases. In contrast, quantitative large-N studies often face the problem of *conceptual stretching*, in form of labeling relatively dissimilar cases as part of the

same concept (George and Bennett 2005, p. 19-20). The character of the explanatory variables are also generally of a complexity that favors the pursuit of conceptual validity through applying a less standardized measurement. While many of the variables are related to indicators measured by descriptive statistics, several are partly or completely measured by qualitative measures. A broader context-based definition of the explanatory variables could in this way provide more suitable information for a precise assessment of the concept.

3.2 Case Selection Approach

3.2.1 MSSD – "Relaxing" Mill's Method of Difference

The origins of the fundamental principles of comparison in social sciences is often credited John Stuart Mill (1843, in George and Bennett 2005, p. 153), and his development of the approaches of the *method of difference* and *method of agreement*. The latter, treating cases generally perceived as different in terms of plausible explanatory factors but experiencing the same outcome, is not relevant for this thesis (George and Bennett 2005, p. 155). However, the main principles for the *method of difference*, or most similar systems design (MSSD), constitute the framework for my selection of cases. The basis for this method of case selection is to study cases that are generally similar, but with different outcomes on the dependent variable. By eliminating all theoretically relevant explanatory variables that are *similar* between the cases, the idea is that the case study inquiry should lead to the determination of one explanatory variable that constitute the real cause of the *different* outcomes on the dependent variable (Gerring 2008, p. 668).

A common critique of the archetype of Mill's *method of difference* is the strict emphasis on eliminating all possible causal factors that lack variation between the cases. By holding the similarities constant, the objective is to achieve a high degree of explanatory power of the causal relationship of cases differing on the outcome. However this criterion is often viewed as too stringent for studies based on a few cases. By fully applying it, the researcher runs the risk of excluding possibly relevant explanatory variables for an outcome in one case, on the basis of its possible unimportance in another case. This could be perceived as a counterproductive strategy, considering the central objective of detecting *within case variation* in case study approaches (Mahoney 2003, p. 342).

The conditions for applying a functional MSSD in its archetype form are also of a quite demanding character. First of all, the variables in question, both explanatory and dependent,

has to be of a distinct dichotomous character. In qualitative case study approaches this division of features, into one of two mutually exclusive categories, most often is considered a disadvantage. As we have seen, an important objective is to avoid putting cases into categories they do not really fit, thereby reducing the *conceptual validity*. In addition, such a rigid categorization of variables also prohibits the possibility of studying *interaction effects*, in the meaning of how explanatory variables in combination with each other could have a specific effect on the final outcome (Gerring 2008, p. 669).

Based on the emphasized weaknesses of the rigid archetype of Mill's *method of difference* I relax the criteria of my MSSD, with the purpose of taking the complexity of the phenomena of financial crises and its possible causes into account. This is done following the principles of a practical adaption of the MSSD approach presented by Moses and Knutsen (2012), commonly applied in regional studies. Here the idea is to pursue the design as an exploratory experiment, instead of the more controlled experimental strategy of the archetype MSSD. The main principle of studying similar cases with expectations of different outcomes is kept, since this provides a useful framework for a structured comparison of the causal relationship of interest. However, the approach does not imply systematic elimination of explanatory variables that are expected to be similar across the sample of cases. Instead I will provide a set of explanatory variables theoretically expected to have had an impact of the level of *severity of crises* in the selected cases, to *explore* whether these are similar or different among the cases of GSP (Moses and Knutsen 2012, p. 101). Instead of a fully dichotomous character, these variables will be less rigid in their operationalization. The focus will instead be on detecting meaningful variation between the different cases based on within case insights, both on the explanatory variables and the dependent variable. In addition, I will account for potential *interaction effects* between the explanatory variables, to explore how they in combination could have contributed to the outcome.

The grounds for the selection of Greece, Spain and Portugal are accounted for in section 1.3. To summarize, these are based on three main similarities. First, they have a similar modern political history, experiencing the fall of their respective authoritarian regimes at approximately the same time in the mid-1970s. Second, all three cases a relatively late industrialization compared to the rest of Western Europe, with the opening of their economies in the 1950s, followed by strong convergence in the 1960s. This growth trend was reversed in all three cases in the 1970s, in the aftermath of the occurrence of the international oil crisis in 1973. Third, all three cases have faced similar challenges related to EU membership, by being

admitted at approximately the same time, Greece in 1981 and Spain and Portugal in 1986. The justification of the expected deviation on the dependent variable, through higher *severity of crisis* in Greece compared to Spain and Portugal, is based on two main arguments. These are (1) the general notion of Greece as the most severe case of the European financial crisis, and (2) the fact that they have received considerably higher financial support from the euro area after the occurrence of crisis than the other cases. The explanatory variables of this thesis are selected on the basis of these main arguments for the case selection.

3.2.3 Population and Prospects for Generalization

Since generalization most often does not constitute the main purpose of *case studies*, there are difficulties related to defining cases as "insiders" or "outsiders" of the study of a phenomenon. A strategy for coping with this challenge is to provide both a *narrow* and a *broad* definition of the *population*. In this way one could locate which cases that the study *must* be relevant for, and the cases that it *could* be relevant for (Gerring 2007, p. 83). The *narrow* population applied here is "Southern European countries with EU membership that have experienced severe strikes of financial crises in the period of 2007 and 2012". By this definition, Ireland is excluded, despite the perception of this country as another severe case of financial crisis, which also have received financial support from the euro area (European Commission 2014c). However, they do not share the same number of similarities in political and economic features as the Southern European countries selected to consider them in this MSSD setup.

Two cases which are included in the *narrow* population of relevant cases, but not in the final sample is Cyprus and Italy. Cyprus is also a Southern European EU member that has been perceived as experiencing a severe strike of crisis, and has received some financial support from the EU (European Commission 2014c). However, by not joining the EU before 2004, they lack an important reference point that is central for the selection criteria of the MSSD applied here. Italy is a country that often is included in comparative studies of political and economic phenomena in Southern Europe along with GSP, and the excluded case I consider closest to the MSSD setup. However, although experiencing democratization somewhat later than most Western European countries, the transition still appeared three decades before GSP. Also industrialization developed at a significantly earlier stage, and they experienced their rapid growth period in the 1950s, *after* the fall of their dictatorships in contrast to GSP. They also have a considerable longer history of EU membership, being one of the founding

members in 1957. These differences in timing of political and economic development culminate in the exclusion of Italy from the comparison (Roccas and Padou-Schioppa 2001, 31-33).

Considering the more *broad* prospects of generalization the inclusion of the EU average on the indicators measured by descriptive statistics provides a reference point for the general European conditions, and how they resemble/differ from GSP. This could reveal some general trends of causal mechanisms that could determine the level of *severity of crisis* in European countries, as well as other advanced economies, based on theoretical assumptions on causal relationships. But since such a case study cannot provide systematic evidence in terms of determining large-N cross-case causal effects, the prospect for statistical generalization is limited (Gerring 2007, p. 43). However, the in depth description of the causal relationship provided by a case study, gives better possibilities for generalization to cases belonging to the *narrow* version of the population, in this case Cyprus and Italy.

3.3 Operationalizing the Dependent Variable – Severity of Crisis

Section 2.2 provided a thorough review of the varieties of crises that pose the foundation of Reinhart and Rogoff's (2009) BCDI index, designed to measure *severity of crises*. In this section I operationalize these definitions in order to able to measure the dependent variable empirically. Because of the lack of a full data set of the composite index covering the cases of GSP (there only exist an overview of occurrences of different types of crises), there will be applied a set of descriptive statistics to measure the different types of crises. This also gives the opportunity to apply an additional aspect that could supplement the limitations of the BCDI index. As noted in section 3.1 the index applies a set of dummy variables, only measuring occurrence or non-occurrence of each type of crisis, the *severity* of the financial crisis is measured by the number of crisis types that occurs in a given years. Reinhart and Rogoff (2009, p. 249) recognizes this as an incomplete measure of *severity of crises*. By applying descriptive statistics on the types of crises that are possible to measure by a quantitative threshold, one opens the possibility of detecting occurrences of crises, and in addition detecting different levels of severity between cases on *each type* of crisis. This is possible through a *qualitative* analysis of these statistics, in contrast to a regression analysis where the dependent variable has to be composed into one measure.

Since *banking crises* are complex phenomena, challenging to assign a clear cut operational quantitative threshold, Reinhart and Rogoff's (2010) data determining the occurrences of this

phenomenon will be applied here. There is only assigned one occurrence per year. The level of *severity* of banking crises is thereby measured through the frequency of years characterized by banking crisis for the available period of 2007-2010. The lack of data on occurrences of banking crises from 2011-2012 is a weakness with the application of this measurement. However, as banking crises often are regarded as triggering mechanisms of financial crises, occurring at the beginning of a potentially deeper recession, the probability for occurrence is highest in the period that is covered here (Reinhart and Rogoff 2009, p. 271).

When it comes to *currency crises*, Reinhart and Rogoff (2009, p. 6) apply a clear quantitative threshold. This is a yearly depreciation of currency of 15 percent or more, which provides the opportunity of locating significant differences in levels of currency crises beyond this threshold. The variation of the value of currency is measured in *real effective exchange rates.* As for *nominal effective exchange rates*, the national currency is set against the US dollar (USD), to a weighted average of changes in its competitor's exchange rates, also against the USD. In addition, the exchange rates are adjusted for variation in relative prices (consumer prices), to take into account that local inflation could erode the potential gains of depreciations of nominal exchange rates (OECD 2013g).

Considering *debt crises*, Reinhart and Rogoff (2009, p. 10) focuses on *defaults* on sovereign debt. However, due to the complex dynamics of sovereign lending concerning the relationship between the *willingness* and *ability* to repay, a lot of defaults end up being partial, with repayment of a substantial share of the loaned amount (Reinhart and Rogoff 2009, p. 61). Therefore, to take into account that an "unhealthy" level of government debt equivalent of a crisis could exist without the occurrence of a full default, I apply the indicator *gross government debt as a percentage of GDP* (debt-to-GDP ratio). Reinhart and Rogoff (2009, p. 22) argue that a continuous debt-to-GDP ratio on over 100 percent easily could be characterized as unsustainable over time. I therefore apply this as a threshold for a critical level of debt. Considerable transgression of this threshold could thereby be seen as an indication of debt crisis. In addition a steep increase of the debt-to-GDP ratio will also be assessed as a critical debt situation.

I also apply the indicator *net lending/borrowing as a percentage of GDP* (government revenue minus expenditure) as part of my measurement of *debt crises* (Eurostat 2014c). This is a measure of *government budget deficits*, which is strongly related to government debt. In general budget deficits should over some time represent the accumulated level of government

debt. However, large deviations between the level of debt and the level of deficits could be indication of a more severe debt situation than shown by the debt-to-GDP ratio which would appear over time (Marcet and Scott 2009, p. 474). Therefore a sudden increase in government budget deficits not corresponding with the debt-to-GDP ratio will be assessed as an indication of a possible debt crisis. A weakness for both the measures of debt is the use the ratio of GDP in order to determine the relative levels of debt with respect to the size of the country/economy. The problem with this measure is that the level of GDP does not remain constant. Therefore changes in *GDP* will bring changes in the *ratio to GDP* even if the size of debt remain constant, which is an important aspect to take into consideration when assessing the empirical results.

The last type of crisis from Reinhart and Rogoff's (2009, p. 5) categorization, *inflation crisis*, operates with a clear quantitative threshold for its occurrence, set to an increase of 20 percent per year or more. The inflation indicator applied here reflects the percentage change per year, and as the case with *currency crises* it is measured by the consumer price index (World Bank 2014c).

3.4 Operationalizing the Explanatory Variables

In this section I present my operationalization of the explanatory variables applied in this thesis. This is done with the objective of pursuing the highest possible level of *conceptual validity*, with measures that are both as precise and as close to the original concept as possible. The character of the operationalization therefore vary, dependent on whether they are measured quantitatively, qualitatively or with a combination of the two. However, a weakness of several variables measured partially or completely by quantitative indicators, is the use GDP ratio as measure of relative sizes. As noted for measures of debt on the dependent variable, variation in GDP will cause variation in the GDP ratio without any real change on the indicator of interest.

3.4.1 Condition of financial system

My operationalization of the explanatory variable *bank regulation* will be based on the data collected by Barth, Caprio and Levine (2013). They present a comprehensive selection of indices measuring different aspects that influence public authorities to regulate and supervise bank activity. Among these I have selected to focus on the ones considering *capital regulations* and *the scope of bank activities*, which are emphasized as particularly central for

the regulating capacity. *Capital regulations* are measured by the requirements considering the ratio between a bank's capital and its assets. *The scope of banking* activity is measured by a composite index of three individual indices, considering restrictions of (1) securities activities, (2) insurance activities and (3) real estate activities (Barth et al. 2013, p. 11-4). A problem with the data set of Barth et al. (2013) is that it only covers a sample of years in the period of 1999-2011, which implies a lack of data in a period that could be of interest, due to the newly liberalized character of the economies of GSP in 1975. Nevertheless, as trends of low *bank regulation* are difficult to reverse, the data from the period provided here could still present a useful indication of whether the hypothesized lower level of *bank regulation* correspond with the empirical evidence (Sachs et al. 1996, p. 26)

The operationalized version of the variable *central bank independence* will be based on qualitative perceptions of *de facto* CBI and central bank transparency. This is partly due to lack of consistent quantitative data on the relevant cases. In addition, *de facto* CBI is a challenging phenomenon to measure, which could favor a less standardized qualitative assessment (Eijffinger and Geraats 2006, p. 1).

3.4.2 Features of Economy

For the operationalization of the variable *sectorial composition and productivity* I use three different quantitative indicators. The first of these is the sectorial distribution of *value added as a percentage of GDP*, divided into agricultural, industrial and the service sector. This indicator measures the net output of goods and services, excluding goods that are produced for further production. In this way it could be a sensible measure of the real strength of an economic sector, by providing information of proportion of production of consumable goods and services for each sector (World Bank 2014b). Furthermore, I apply a measure for *state control*, in form of an index measuring the prevalence of public corporations combined with public involvement in business operations, through different varieties of regulations and price controls (OECD 2013d). I also apply the indicator *GDP per hours worked*, to account for possible variation of labor productivity (OECD 2014c).

The operationalization of the *taxation* variable will consist of two types of quantitative indicators. The first of these is *total tax revenue as a percentage of GDP*. As for the other measures based on the percentage of GDP, a weakness of this measure is that an increase or decrease of GDP would result in a change of the share of GDP despite the value of tax revenue being the same. However, it could still be a useful measure for determining the

relative magnitude of tax revenue of the cases of GSP, compared to each other and the EU average. The second indicator of *taxation* applied here is the composition of these tax revenues, divided into to the main categories of taxes on income, taxes on goods and services, and taxes on property. High reliance on indirect taxes is an indication of a regressive tax system, opposed to the heavier dependence on income taxes in progressive tax systems typical for many EU countries (Thomadakis 2006, p. 332-3).

Two quantitative indicators will be applied in the operationalization of the explanatory variable *patterns of foreign trade*. The first consider the trade balance, in form of the *current account balance as a percentage of GDP*. The *current account balance* includes all economic transactions between entities of residents and non-residents of a country. In addition, offsets to current economic values that does *not* involve a *quid pro quo* exchange are included (OECD 2014a). The second applied indicator is measuring *comparative advantage in key economic sectors* within the OECD, with the purpose of detecting *inter-industry trade* or *intra-industry trade* trends. The selected sectors are agricultural products, textiles (including leather and footwear), machinery and equipment, and electrical and optical equipment (OECD 2013e). A high degree of comparative advantage of the first two are considered to indicate *inter-industry trade*, due to the characterization of these as labor-intensive and low technology sectors. In contrast, high values on the last two are considered to indicate *intra-industry trade*, through being less labor intensive and more directed towards development of new technology (Smith and Wanke 1993, p. 541).

3.4.3 Political Challenges

For the explanatory variable *governmental dominance and bureaucratic efficiency* I will apply the a measure taken from OECD's (2011) "Government at a Glance" survey, measuring turnover of civil servants with a change in government, as an indication of the incumbent party(s) control over state bureaucracy. In addition, due to the general lack of statistical data effectively measuring these issues on the cases of GSP, there will by supplied a qualitative assessment of secondary literature treating the relationship between government and bureaucracy in GSP.

For the operationalization of the variable *public social expenditure* I apply two different indicators. The first of these is the total *public social expenditure as a percentage of GDP*. "Public social expenditure" does here mean programs directed towards redistribution of resources where the relevant financial flows are controlled by general government (OECD

2013h). The other applied indicator measures *public pension expenditure as a percentage of GDP*, to take into account the expected imbalances towards higher expenditure on public pensions compared to other benefits, especially in Greece. A weakness of the latter is that there only is available data for the period of 2005-2009, which implies that much of the period of interest (1975-2012) is excluded. However while this limits the possibility of studying the trends over time, the sample of years provided could still give an indication of the general level, and differences between the three cases and compared to the EU average.

For the operationalization of the explanatory variable *segmentation of labor market* I use the *employment rate* for three different groups. These are for youth (age 15-24), women of working age (15-64) and men of working age (15-64). The term *employment rate* refers to the percentage of the total population of each group that is employed in a given year. Those who are considered "not employed" are either unemployed or inactive (students, disabled, homemakers, etc.) (OECD 2013a).

3.5 Data

The data of this thesis could be divided into two main categories. The first one, constituting the majority of the data provided, is the collection of *descriptive statistics,* which are applied on many of the indicators considering economic conditions, which often is best represented by quantitative measurements. Some political indicators are also measured by descriptive statistics. The statistics are generally collected from Eurostat, OECD and the World Bank. These are all major statistical actors that provide a wide variety of reliable data on central economic and political phenomena on all three cases of GSP, as well as for the rest of Europe. In addition I will provide a second category of empirical evidence from secondary literature, on the variables partly or completely measured qualitatively. The latter kind of data lacks some of the precision of the former, but could in return provide more nuanced descriptions of complex phenomena where a suitable quantitative measure is challenging to achieve, thereby increasing the *conceptual validity*.

Despite the generally high reliability of the statistical material applied, there are some challenges related to the comparability of data collected in different countries. The statistical data is generally collected on a national level, which entails the opportunity of variation of different concepts are defined and operationalized, as well as some variation in how the data is collected. This is evident concerning the measurement of the economic activity of governments, which regards several of the indicators of both the dependent variable and the

explanatory variables. Such activity is generally based on the principles of the Systems of National Accounts (SNA), which is a "[…] internationally agreed standard set of recommendations on how to compile measures of economic activity" (United Nations 2014). A potential weakness of measuring governments' economic activity could be the country-to-country deviations from the SNA standard concerning what economic activities that is considered governmental. In some countries the expenses of corporations that are to a certain extent publicly financed are considered as part of the government's expenditures. Others have a more narrow definition, which for example excludes public corporations that charge market prices for their goods or services. However, OECD has taken this into account by establishing a rule of a minimum of 50 percent ownership for a corporation to be considered "public". The standardized character of this measure therefore provides a high level of comparability, and the level of ambiguity is considered as low (OECD 2013c).

Chapter 4: Empirical Results

In this chapter I present the results of my selection of descriptive statistics, with the purpose of determining and explaining the severity of the financial crisis in Greece, Spain and Portugal (GSP). I highlight the crucial statistical findings that will form the *quantitative* basis for my following qualitative analysis of my research question. My *qualitative* case data based on secondary literature, will be presented along with the analysis in chapter 5.

The chapter is divided into two main sections. The first section addresses the findings related to my dependent variable – *severity of crisis.* Here the goal is to determine level of crisis in GSP, as well as the EU average, along the lines of the categorization of the different types of crises emphasized in chapter 2. In the second section the focus is on the explanatory variables that are completely or partially measured quantitatively. The results are presented in graphs and tables, mainly the former. They consist of the values of each of three main cases as well as an estimate of the average of the members of the EU [1]. The time period of the data is

[1] The estimate of the EU average is based on the actual number of members of each individual year of the selected time period of the thesis (1975-2012). This leads to six different "EU" constellations: EU9 (1975-1980: Belgium, Denmark, France, Germany, Ireland, Italy, Luxembourg, Netherlands, The United Kingdom), EU10 (1981-1985, includes Greece), EU12 (1986-1994, include Portugal and Spain), EU15 (1995-2003, include Austria, Finland and Sweden), EU25 (2004-2006, include Cyprus, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Malta, Poland, Slovakia, Slovenia) and EU27 (2007-2012, include Bulgaria and Romania). In some statistics the average is labeled "EU/OECD", which marks when data is missing on the non-OECD members of the EU. In these cases Bulgaria, Cyprus, Latvia, Lithuania, Malta and Romania are excluded from the calculation of the EU average. Any deviation from the above-mentioned constellations will explicitly be accounted for in relation with the figure/table.

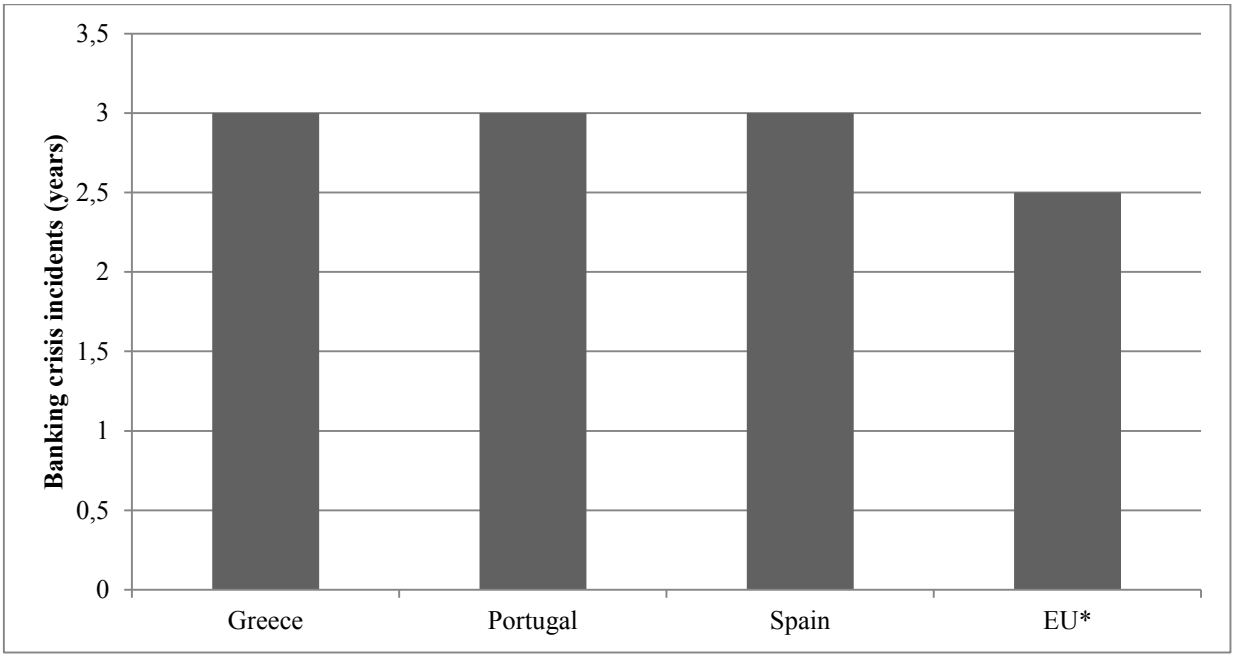
pursued to be 1975-2012 when accessible, or where necessary the years with available data within this period. Each graph/table is accounted for by a following comment of the main features of the results.

4.1 The Dependent Variable – Severity of Crisis

As mentioned in the theoretical review of the phenomenon of financial crises in chapter 2, my definition of the dependent variable *severity of crisis* is based on the four subtypes of crises applied in Reinhart and Rogoff's (2009) construction of the BCDI index: *Banking crises, currency crises, debt crises* (external/domestic), and *inflation crises*. The idea is that frequency of the occurrence of different types of crises in these cases, as well as how hard each kind have struck, could constitute a reliable indication of the severity of the financial crisis as a whole (Reinhart and Rogoff 2009, p. 249).

The time period of interest here is 2007-2012, or the years within this period that provide available data. 2007 is a natural starting point, because this year marked the start of the collapse of American mortgage market, which initiated the banking crisis that spread worldwide, including Europe. 2012 is the last year which I expect to find a sufficient amount of data. However, when values of the rest of the period of the case study are partly or completely available, I also provide data from these years. This is to possibly locate the point in time when the recession began, as well as uncover past trends and occurrences of crises or near-crisis episodes.

Figure 4.1: Years of experiencing banking crisis (2007-2010)

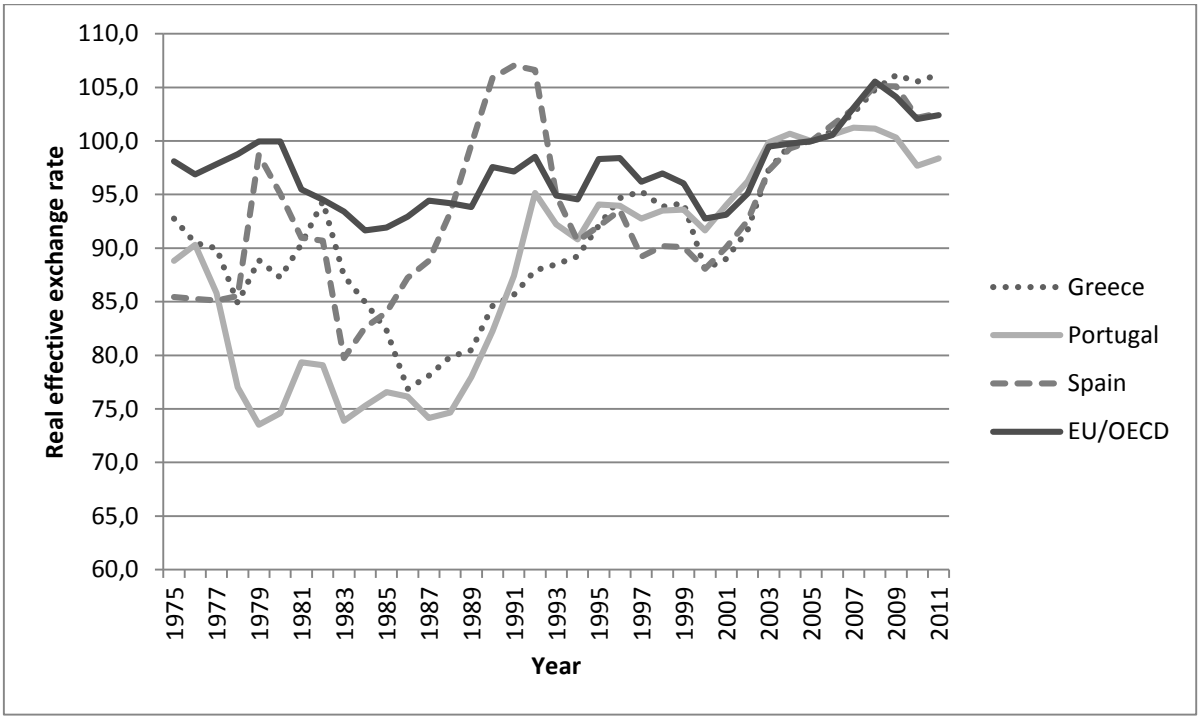


Source: Reinhart and Rogoff (2010). *Notes:* The figure displays the number of years, in which the cases has been categorized as "in banking crisis" in the period of 2007-2010. * Due to shortages in Reinhart and Rogoff's (2010) data, only the countries that where members of the EU15 are included in the calculation of the EU average. In addition Luxembourg is missing from the data set, and is therefore excluded, making the total basis for the EU average 14 countries.

Let us begin with detecting banking crises. Figure 4.1 shows the years of the ongoing crisis that according to Reinhart and Rogoff's (2010) data have been characterized as "being in a banking crisis". All of the three cases of GSP have experienced banking crisis in three years of the period from 2007-2010. The average of the 14 EU countries with available data is 2,5 years "in banking crisis". It is worthwhile to mention that out of this sample only Finland and Sweden are characterized with zero occurrences of banking crisis. Most of the countries have experienced 3 years "in banking crisis", like GSP, except Ireland (4) and Italy (1, possibly due to an error in the data set[2]). Therefore, the occurrence of banking crises during this period could be highlighted as a quite strong common feature of this financial crisis experienced by European countries.

[2] Italy is marked by "0" incidents during the period 2007-2010 in the main table by Reinhart and Rogoff , while the summary table of crisis episodes puts the country as "in banking crisis" in 2008. In the calculation of the EU average in figure 4.1 Italy is therefore put down as experiencing "1" episode during the period. However, since the summary table only display the year when a banking crisis started, there is a possibility that Italy could have experienced more than one year "in banking crisis" during this period, if the values in the main table is incorrect.

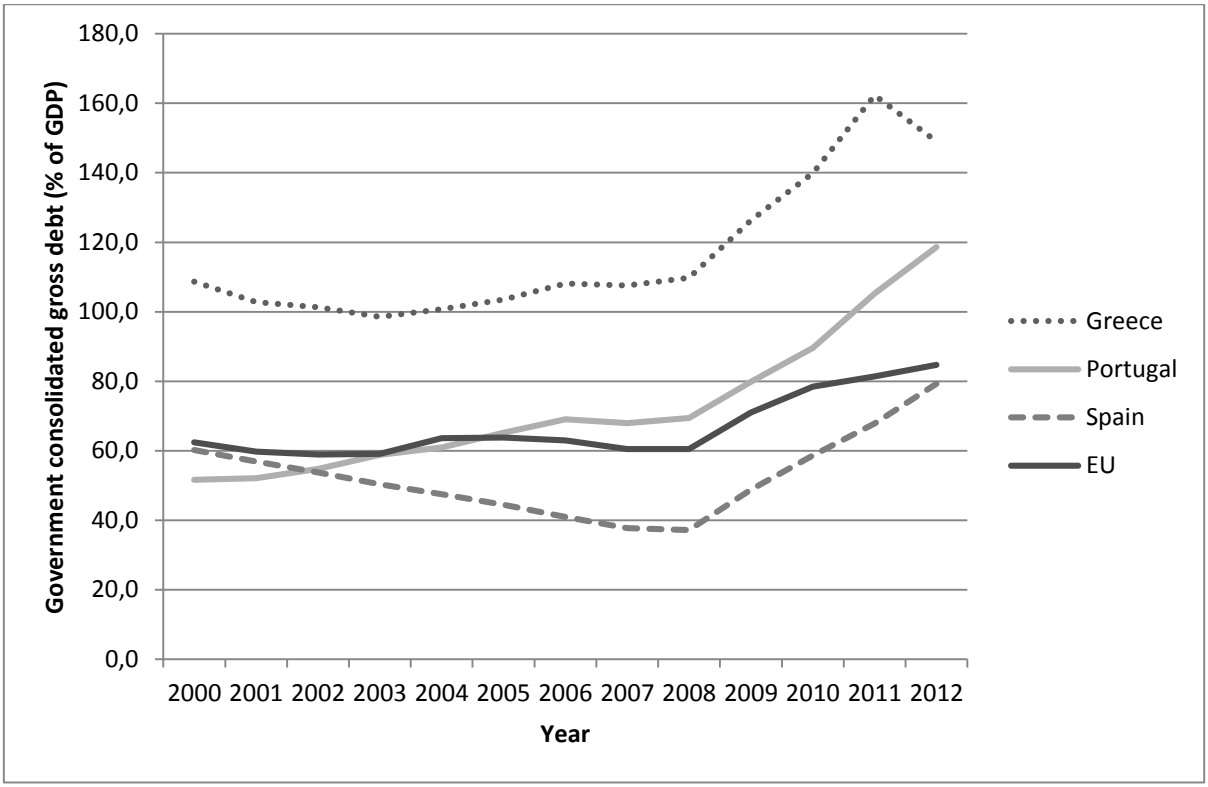
Figure 4.2: Real effective exchange rates (1975-2011)



Source: OECD (2013b). *Notes: Nominal* effective exchange rates are changes in a country's exchange rate against US dollar (USD), to a weighted average of changes in its competitors' exchange rates against the USD. *Real* effective exchange rates, which is applied here, in addition takes differences in inflation into account, by adjusting for variations in relative prices, using consumer prices (OECD 2013g).

To trace possible currency crises, one has to consider the trends in change of exchange rates. Reinhart and Rogoff (2009) defines a currency crash to occur when a national currency is depreciated 15 percent annually or more. According to figure 4.2 there are no such occurrences for the selected cases for the period of 1975-2011. However all three cases of GSP have experienced major fluctuations. Spain has been closest to reaching the crisis threshold, with a change of -13.7 percent from 1982-1983. This happened subsequently to the largest exchange rate "boom" identified here, with a positive change of 13.3 percent from 1978-1979. The worst Portuguese depreciation was -11.4 percent from 1977-1978. Figure 4.2 also shows that Portugal had a long stretch with considerably lower real effective exchange rates than the other cases, between the late 1970s and late 1980s, before reaching a more steady higher level from the beginning of the 1990s. Greece experienced their worst fall in exchange rates from 1982-1983, with a change of -8.0 percent. The EU/OECD countries as a whole have had a less fluctuant path, with the strongest average depreciation being -4.7 percent from 1980-1981. The most important finding is nevertheless that none of the cases experienced any significant depreciation during the period of interest here (2007-2011). Accordingly this evidence suggests that none of the cases have been close to experiencing a currency crisis during the ongoing recession.

Figure 4.3: Government debt (2000-2012)

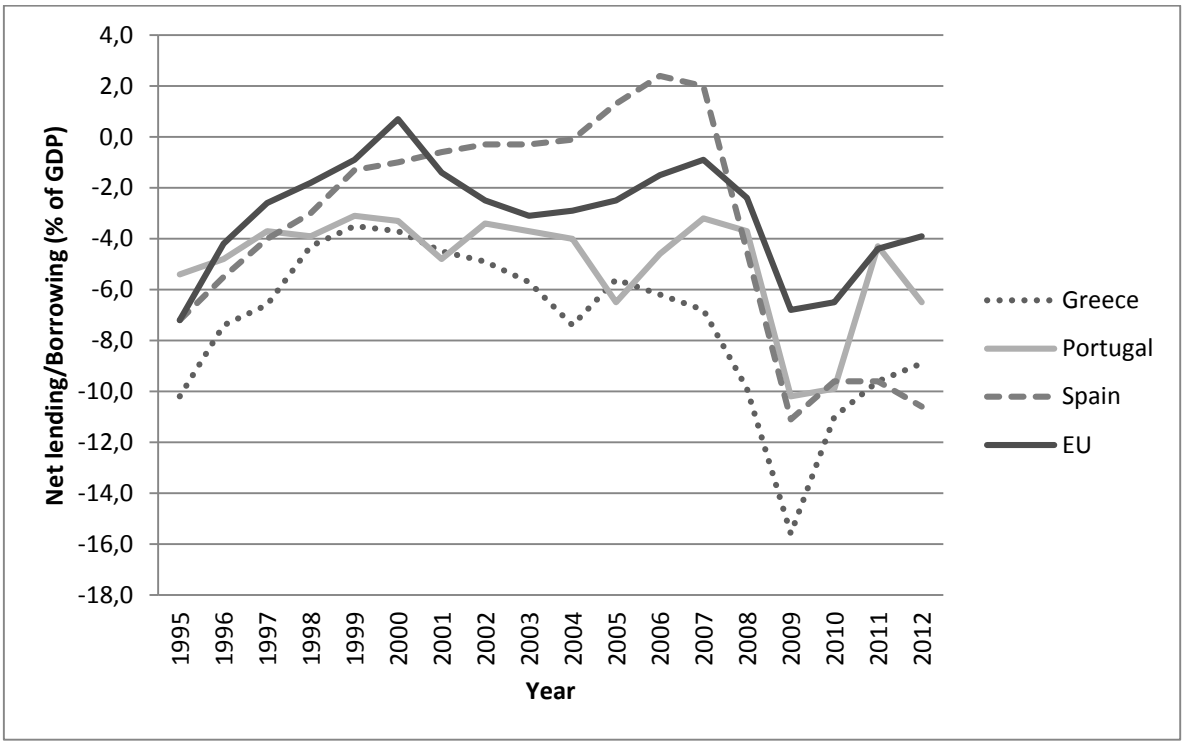


Source: Eurostat (2014e). *Notes:* Eurostat applies quarterly data, which here has been converted into yearly data by calculating an average for each year. *Government debt* is defined as "the total gross debt at nominal value outstanding at the end of each quarter between and within the sectors of general government" (Eurostat 2014f).

Figure 4.3 displays the development of the level of government debt as a percentage of GDP between 2000 and 2012, with the purpose of uncovering cases of debt crises. The clearest tendency from this graph is Greece's consistently higher level of government debt, compared to the three other cases. It has steadily been around 100 percent of GDP, before increasing from 109.8 percent in 2008 to 162.3 percent in 2011, followed by a reduce to 149.0 percent in 2012. The consistency of this markedly higher debt level shown by the data in figure 4.3 could in itself be an indication of a crisis-like situation. But as debt crises is a phenomenon defined by events, high levels of governmental debt has to be followed by an identification of a default on repayment commitments, partly or completely (Reinhart and Rogoff 2009, p. 11). According to the data of Reinhart and Rogoff (2010), dating occurrences of different types of crises, Greece has not been categorized as experiencing defaults on external public debt during the period of 2007-2010, similar to the other EU countries. However, it is worth noting that 2010 has been categorized as a "near default" incident. When it comes to the other cases, Portugal has experienced the most severe increase in government debt during the financial crisis period, going from 67.9 to 118.6 percent of GDP from 2007-2012. They are neither characterized as experiencing defaults on external debt by Reinhart and Rogoff (2010). This is

also the case for Spain, which actually has held a consistently lower debt level than the EU average, but have experienced a considerable increase from 37.2 to 79,3 percent of GDP from 2008-2012.

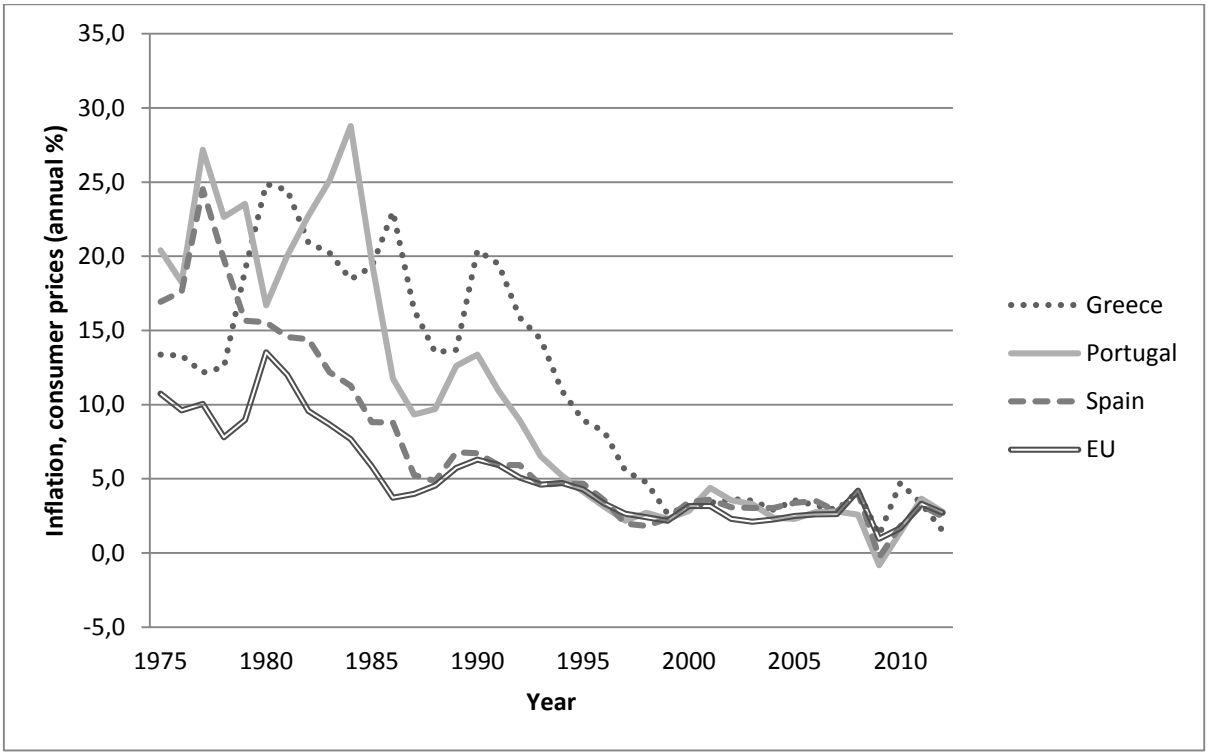
Figure 4.4: Government budget surplus/deficits (1995-2012)



Source: Eurostat (2014d). *Notes:* Net lending (+)/borrowing (-) is *government revenue* minus *government expenditure.*

The second indicator related to debt crises applied in this thesis concerns *government deficits*. Figure 4.4 displays the level of government surplus/deficits from 1995-2012. A central point to highlight from this graph is that Greece almost consistently has had the highest level of deficits throughout the period. It is also possible to locate a clear tendency of increase of this deficit during the period of the European financial crisis, with a negative change of 8.8 percent, from -6.8 percent of GDP at the start of the crisis in 2007, to the low point of -15.6 percent in 2009, the highest level of deficits for the whole sample. The negative tendency is also visible in the cases of Portugal and Spain, which respectively experienced a change of -7.0 and -13.1 percent from 2007-2009, reaching the low point of -10.2 and -11,1 percent of GDP. The EU average experienced a more moderate increase of deficits, with a change of -5.9 in the same period, reaching -6.8 percent of GDP in 2009.

Figure 4.5: Inflation (1975-2012)



Source: World Bank (2014c). *Notes:* "Inflation as measured by the consumer price index reflects the annual percentage change in the cost to the average consumer of acquiring a basket of goods and services that may be fixed or changed at specified intervals, such as yearly. The Laspeyres formula is generally used" (World Bank 2014c).

The fourth type of crisis emphasized by Reinhart and Rogoff (2009) is inflation crises. Figure 4.5 presents the level of inflation in consumer prices from 1975-2012. The graph reveals that all three cases of GSP have experienced inflation crises during this period, in accordance with the threshold of 20 percent annually set by Reinhart and Rogoff (2009, p. 5). Portugal has had the most frequent occurrences, experiencing such levels for almost the whole period of 1975-1984, with the exception of 1976 (18.2 percent) and 1980 (16.7 percent) which had values slightly under the minimum threshold. Their highest inflation level was in 1984, with 28.8 percent. Also Greece had several occurrences around the same period, experiencing inflation over 20 percent from 1980 up to and including 1983. Spain has had one occurrence that could be characterized as "inflation crisis incidents", in 1977. The average inflation level of the EU was never close to a crisis level during the period of 1975-2012. Even more important is the finding that GSP showed the same non-crisis tendency from 2007-2012, the period of particular interest here. During the 1990s all of the three cases reduced their inflation, ultimately reaching a level close to the EU average.

4.1.1 Summary of Findings on Dependent Variable

Based on the findings presented in this section, incidents of two of the four different types of crises, applied for measuring the dependent variable *severity of financial crisis*, could be identified among Greece, Spain and Portugal during the period from 2007-2012: *Banking crisis* and *debt crisis*. According to Reinhart and Rogoff's (2010) data, GSP have all experienced banking crises in three years of the period 2007-2010, opposed to 2.5 years for the EU average. Furthermore, a substantially higher level of gross government debt as a percentage of GDP than for the other two cases and the EU average was revealed in the case of Greece. This could be perceived as an unsustainable magnitude of debt equivalent of a debt crisis, despite Reinhart and Rogoff (2010) only categorizing it as "near default" in their data set of defaults on external debt between 2007-2010. Portugal also reached a significantly higher level of gross government debt than the EU average during the period of 2007-2012. The second indicator of debt crises, *governmental deficits*, reinforces this picture of Greece as having the most severe debt challenges, and Portugal as a more severe case than the EU average. In addition, Spain saw the highest increase of deficits and reached a considerably higher level of deficits during the period of crisis than the EU average, in contrast to the similar level of gross government debt.

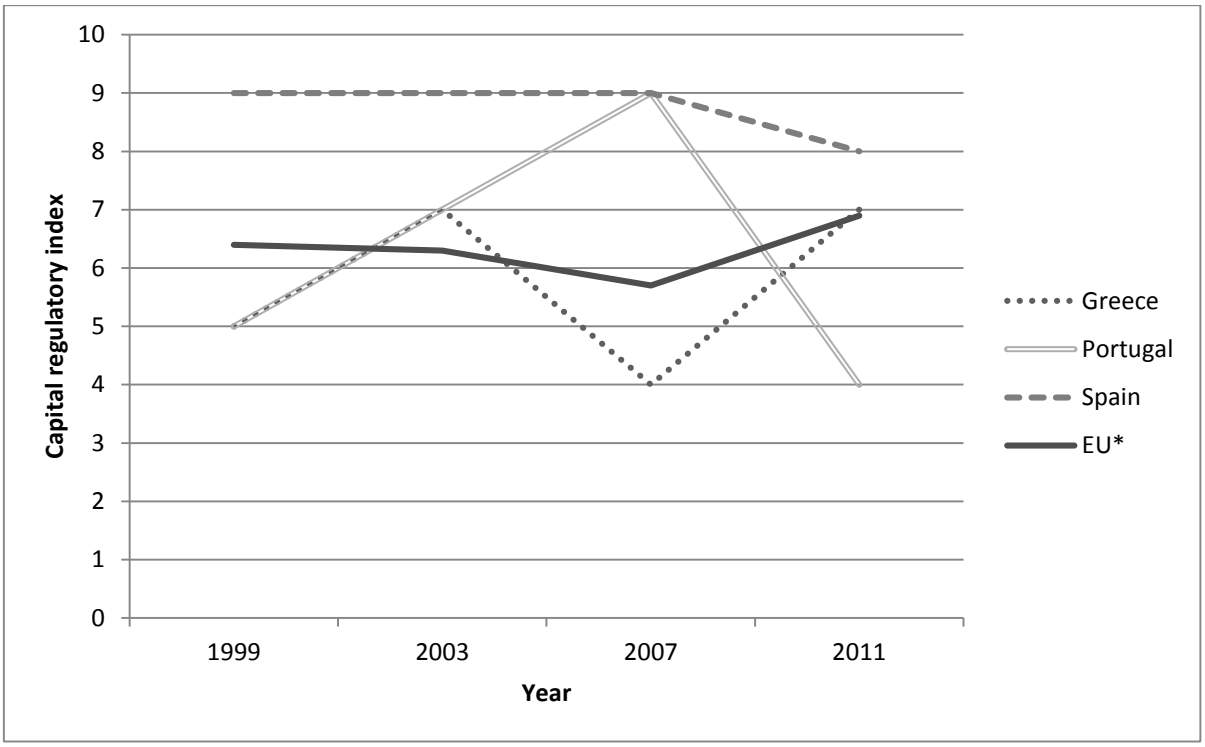
In the case of potential currency crises, none of the countries have experienced depreciations close to a level which could indicate a crash of national currency during the period of 2007-2011. Also, while all three cases of GSP have experienced inflation exceeding Reinhart and Rogoff's (2009) threshold for inflation crisis of 20 percent per annum after 1975, they have not been close to seeing such levels in the period of 2007-2012.

4.2 Explanatory Variables

This section presents the results of the explanatory variables that are partly or completely measured by descriptive statistics. They are divided into three main categories: (1) *condition of financial system,* (2) *features of economy,* and (3) *political challenges*.

4.2.1 Conditions of Financial System

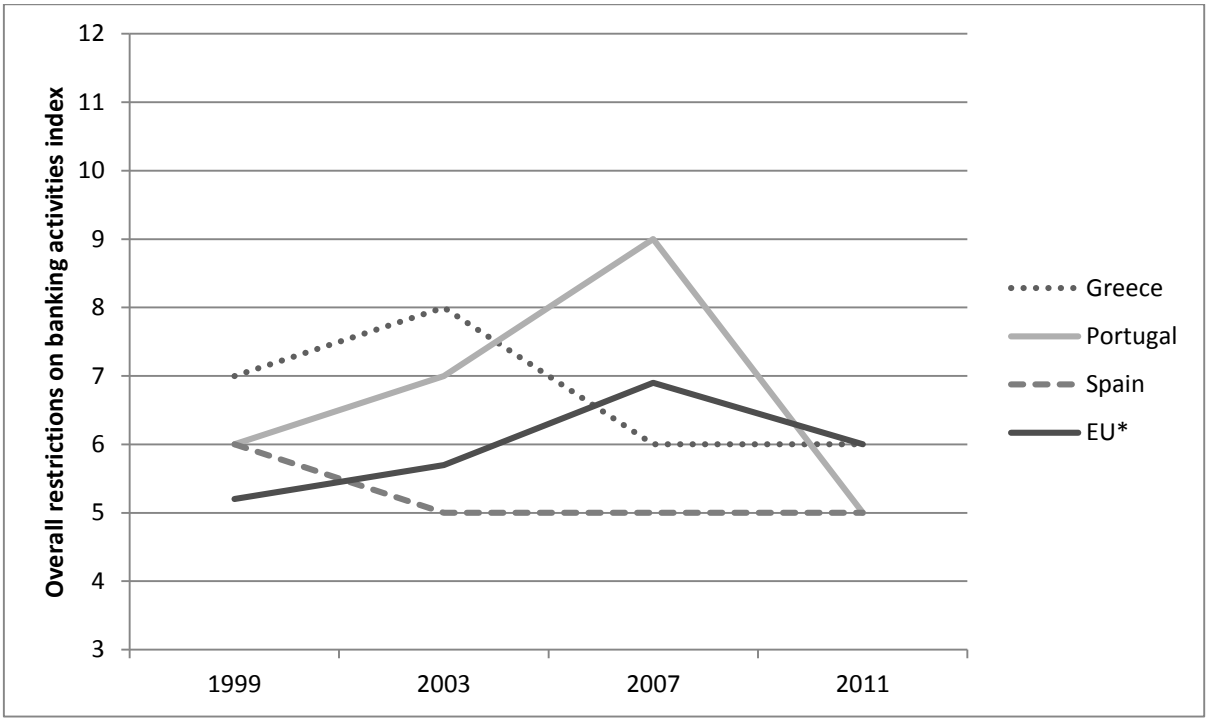
Figure 4.6: Restrictiveness of capital regulation by bank regulatory institutions (1999-2011)



Source: Barth et al. (2013), based on data from World Bank (2012). *Notes:* The index measures the level of restrictiveness of state regulation on capital requirements for banks, on a scale from 0-10, where high values indicates high restrictiveness (Barth et al. 2013, p. 14). * Sweden is missing from the calculation of the EU average for 2011, due to lack of data on this indicator.

The restrictiveness of the requirements for capital stock among banks from regulating authorities is the first of two measures for the variable *bank regulation* applied here. Figure 4.6 present the values of GSP and the EU average on Barth et al.'s (2013) capital regulatory index, on four points in time from 1999-2011. The line of Spain show a consistent high capital regulatory levels, with values between 8.0 and 9.0 throughout the period, on a scale where 10.0 represents the highest restrictiveness. Portugal shows the largest variation in regulative levels, from 9.0 in 2007 to 4.0 in 2011. Greece has experienced some variation above and below the capital regulatory level of the relatively stable EU, ranging from 7.0 in 2003 and 2011 and 4.0 in 2007. Spain and Portugal have experienced a reduction in regulatory level during the crisis period from 2007-2011, while Greece and the EU average experienced an increase.

Figure 4.7: Restrictions on banking activity by regulatory institutions (1999-2011)



Source: Barth et al. (2013)., based on data from World Bank (2012). *Notes:* The index measures the overall level of restrictions by the state regulatory and supervising authorities on the range of activities of banks. It is a composite index of three original indexes, measuring restrictions on (1) securities activities, (2) insurance activities and (3) real estate activities. The index is on a scale from 3-12, high values indicate high level indicates high levels of restrictions (Barth et al. 2013, p. 11, 52). *Germany and Sweden are missing from the calculation of the EU average for 2011, due to lack of data on this indicator.

The second measure of the variable *bank regulation* refers to the restrictions associated with different activities performed by banks. Figure 4.7 displays the results of Barth et al.'s (2013) overall restrictions index, composed by three original indexes considering the regulation of securities activities, insurance activities and real estate activities. Again, according to this data Portugal have experienced the largest variation, from the highest sample value of 9.0 in 2007, to sharing the lowest value of the sample with Spain in 2011 with 5.0. The latter have had the consistent lowest level banking restrictions from 2003-2011. Greece has experienced values on the restrictions index between 8.0 in 2003 and 6.0 in 2007 and 2011. Both Portugal and the EU average encountered reductions in restrictions of banking activities during the crisis period of 2007-2011, while Greece and Spain remained at the same level.

4.2.2 Features of economy

Table 4.1: Distribution of economic sectors, value added as a percentage of GDP (1973-2012)

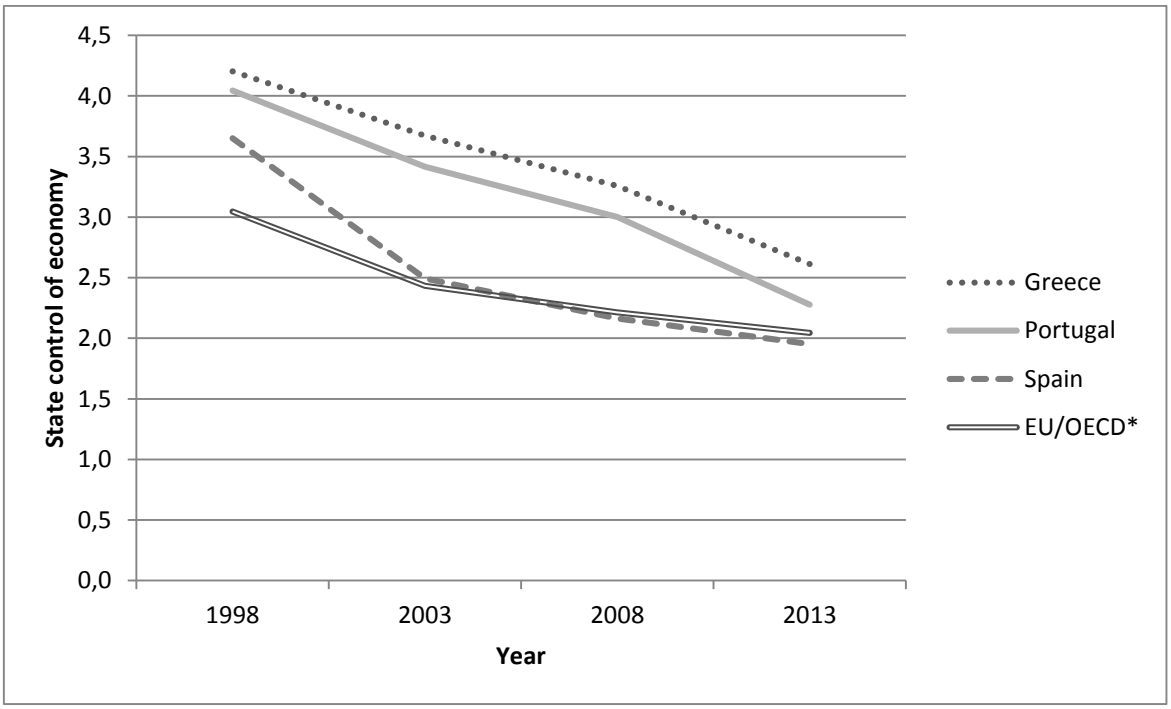
	*1973**	*1985*	*1990*	2005	2006	2007	2008	2009	2010	2011	2012
Greece											
Industry	29,3	26,2	24,1	19,7	21,8	20,5	19,2	17,3	17,0	15,8	16,4
Agri-culture	18,0	15,5	13.8	4,9	3,7	3,5	3,1	3,1	3,2	3,4	3,4
Services	52,6	58,3	62,1	75,4	74,5	76,0	77,7	79,6	79,8	80,8	80,2
Portugal											
Industry	39,5	39,6	34,8	25,5	25,3	25,3	24,6	23,3	23,9	24,1	23,6
Agri-culture	14,7	8,0	5,8	2,7	2,7	2,4	2,4	2,3	2,3	2,2	2,3
Services	45,8	52,5	59,4	71,8	71,9	72,3	73,0	74,4	73,8	73,8	74,1
Spain											
Industry	37,4	37,3	34,5	31,8	32,0	31,2	30,5	28,5	27,2	26,6	25,9
Agri-culture	10,1	5,9	4,5	3,1	2,7	2,7	2,5	2,4	2,6	2,5	2,5
Services	52,6	56,8	61,0	65,1	65,4	66,1	67,0	69,2	70,2	70,9	71,6
EU*											
Industry	-	-	-	26,4	26,7	26,6	26,2	24,6	25,0	24,8	24,4
Agri-culture	-	-	-	1,8	1,7	1,7	1,6	1,5	1,6	1,5	1,5
Services	-	-	-	71,8	71,6	71,7	72,2	73,9	73,4	73,7	74,1

Source: World Bank (2014b, 2014a, 2014d), for 2005-2012. OECD (undated, in Roccas and Padou-Schioppa 2001, p. 47) for 1973, 1985, 1990. *Notes: Value added (% of GDP)* defined as "(…) the net output of a sector after adding up all outputs and subtracting intermediate inputs". The *industrial sector* here includes "(…) mining, manufacturing (also reported as a separate subgroup), construction, electricity, water, and gas" (World Bank 2014b). The *agricultural sector* includes "(…) forestry, hunting, and fishing, as well as cultivation of crops and livestock production" (World Bank 2014a). The *service sector* includes "(…) wholesale and retail trade (including hotels and restaurants), transport, and government, financial, professional, and personal services such as education, health care, and real estate services. Also included are imputed bank service charges, import duties, and any statistical discrepancies noted by national compilers as well as discrepancies arising from rescaling" (World Bank 2014d). *1973 applied as the closest available year to 1975. **EU data is lacking on the years 1973, 1985 and 1990.

The explanatory variable *sectorial composition and productivity* is accounted for in table 4.1. Here the distribution of the three main economic sectors are presented in form of value added, *i.e.* the total production of finished consumable goods and services, as a percentage of GDP. From this table one could identify Greece as the country with the consistently highest level of value added by the service sector after 2005, with a relatively steady increase from 75.4 percent of GDP in 2005 to 80.2 percent in 2012. Although slightly reduced during this period (from 4.9-3.4 percent of GDP), Greece has also had the highest share of production in agriculture, as well as the lowest industrial production varying from 21.8 percent of GDP in 2006 to 15.8 percent in 2011. Portugal has had a virtually identical trend of sectorial shares of

production as the EU average between 2005 and 2011, with a slight increase in the share of the service sector. This culminated in a share of 74.1 percent of GDP in the service sector, 23.6 percent in industry and 2.3 percent in agriculture in 2012, compared to respectively 74.1, 24.4 and 1.5 percent in case of the EU average the same year. Spain had a markedly higher share of production in the industrial sector than Portugal/EU in 2005, with a correspondingly lower share in the service sector. However, by 2012 their shares of production consisted of 71.6, 25.9 and 2.5 percent of GDP in respectively services, industry and agriculture, considerably closing in on this gap. Looking at the trends for the sample of years *before* 2005, Greece had a markedly larger output in the agricultural sector than the two other countries, especially at the beginning of the period with 18.0 percent of GDP in 1973. Both Portugal and Spain had a significantly bigger industrial sector in 1973, with respectively 39.5 and 37.4 percent of GDP. In all three cases the service sector was the largest one also in the sampled years before 2005.

Figure 4.8: State control of economy (1998-2013)

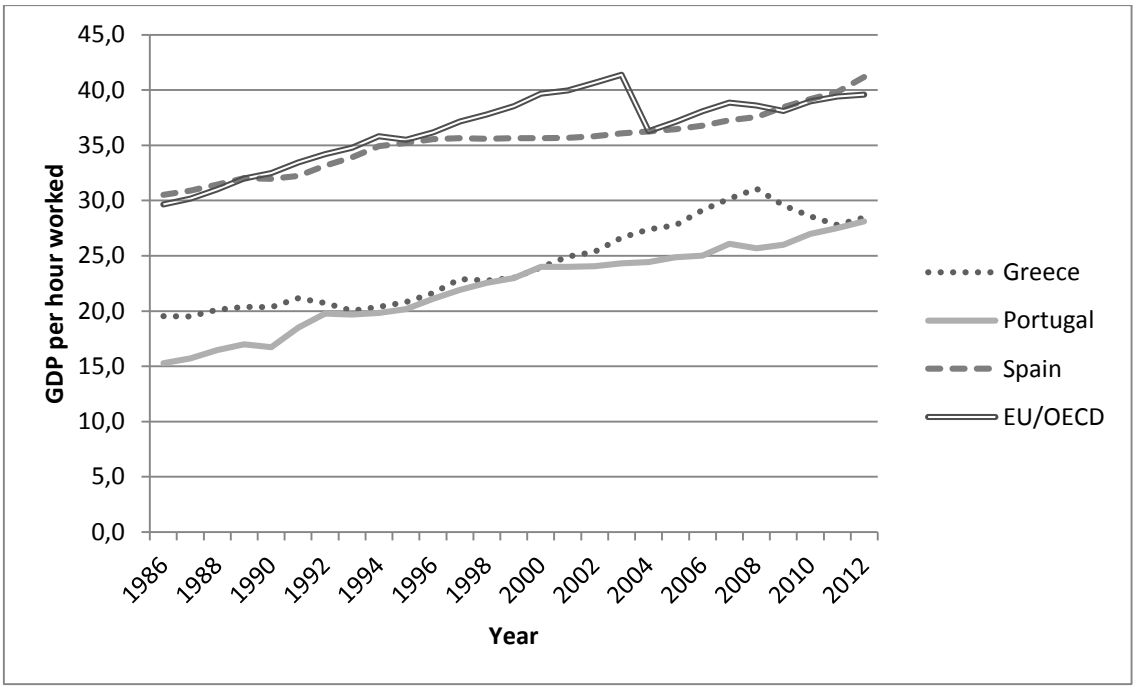


Source: OECD (2013d). *Notes:* The indicator *state control of economy* is based on survey data, considering magnitude of public ownership and state involvement in business operations. Indexed on a scale from 0-6, where high scores indicate high state control (OECD 2013d). 2013 is included instead of 2012, due to lack of data on the latter year *Luxembourg and Poland are missing from the calculation of the EU/OECD average, due to lack of data.

Figure 4.8 examines the OECD (2013d) estimate of the level of state control of the economy, which also is applied as an indicator of the explanatory variable *sectorial composition and productivity*. The graph shows a general trend of reduction of state control for GSP and the

EU average during the period 1998-2013. Greece have had the consistently highest level of state control according to this data, despite the decrease from 4.2 in 1998 to 2.6 in 2013 on an scale from 1-6. Portugal has had a similar level, from 4.0 to 2.3 in the same period. In Spain, the level of state control has decreased from 3.7 in 1998 to 2.0 in 2013. After starting the period with a slightly higher level than the EU average, they have had a virtually identical level between 2003 and 2013.

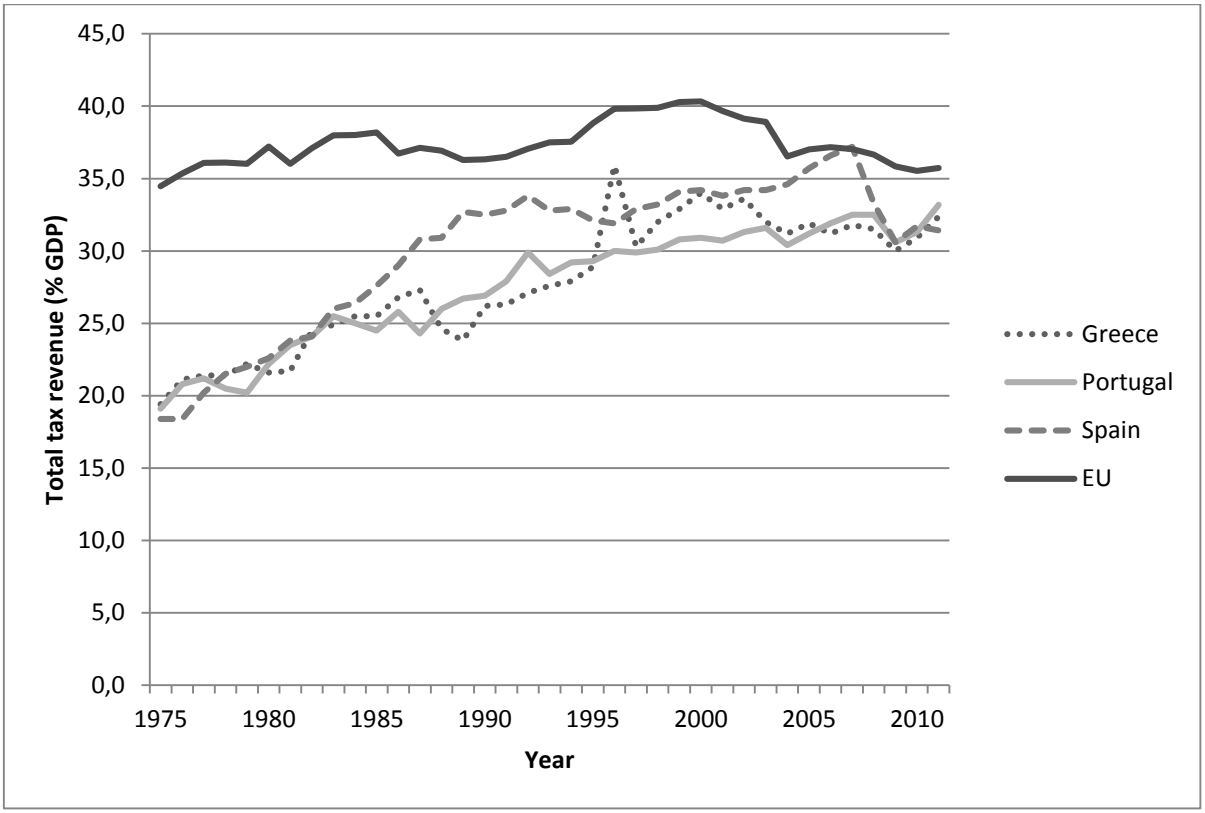
Figure 4.9: Labor productivity (1986-2012)



Source: OECD (2014c). *Notes:* The indicator *GDP per hour worked* is here measured in USD, constant prices, 2005 purchasing power parities (PPP).

Another indicator applied for the explanatory variable *sectorial composition and productivity,* is labor productivity, which is displayed in figure 4.9 as GDP per hour worked. The main findings here are the consistently similar levels of Portugal and Greece on the one hand, and Spain and the EU average on the other. The Portuguese level of labor productivity has increased from 15.3 in GDP per hour (in USD, constant prices, 2005 PPP) to 28.1 in 2012. Similarly, Greece has experienced an increase from 19.5 to 28.5 in GDP per hour during the same period. In contrast, Spain have experienced a trend from 30.5 to 41.2 in GDP per hour during the period 1986-2012, quite similar to the one of the EU/OECD average, from 29.6 to 39.6 during the same period. Hence, like the trend of the EU countries, Spain has had a considerably higher level of labor productivity than Portugal and Greece during the period displayed in figure 4.9.

Figure 4.10: Total tax revenue (1975-2011)



Source: OECD (2013b), for Greece, Portugal and Spain 1975-2010, and EU averages 1975-2003. European Commission (2013) for Greece, Portugal and Spain 2011, and EU averages 2004-2011, due to lack of OECD data on several EU25/27 countries. *Notes:* OECD (2013i) defines *total tax revenue* as "(…) the revenues collected from taxes on income and profits, social security contributions, taxes levied on goods and services, payroll taxes, taxes on the ownership and transfer of property, and other taxes". European Commission (2013, p. 266) defines *total tax revenue* as "taxes on production and imports (…), current taxes on income and wealth (…), capital taxes (…), actual compulsory social contributions". These definitions cover to a large extent the same transfers. In addition, overlapping data shows consistent close similarities that justifies the use of both data sources as a measure of the same indicator.

Considering the explanatory variable *taxation*, an important aspect is the government's total tax revenue, which findings are provided in figure 4.10. During the period 1975-2011 the EU average was consistently higher than the cases of GSP, except for Spain exceeding them with tax revenues on 37.2 against 37.0 percent of GDP in 2007. At the end of the period covered here, 2011, the EU average had reached 35.7 percent of GDP, experiencing a moderate decrease from the highest level of 40.3 in 1999. The three cases of GSP started the period at a considerably lower level than the 34.5 percent of GDP of the EU average in 1975, but then experienced substantial and relatively steady growth throughout the period, closing in this "gap". Tax revenues in Spain changed from 18.4 percent of GDP in 1975 to 31.4 in 2011. In Portugal, they increased from 19.1 to 33.2 percent of GDP during the same period. Similarly, Greece went from 19.4 to 32.4 percent of GDP.

Table 4.2: Tax composition (percentage of tax revenues excluding social security, 1980-2002)

	1980	1985	1990	1995	1998	2000-2002
Greece						
Taxes on income	28,9	27,2	28,5	32,9	33.5*	37.6
Goods and services	61,4	66,3	63.8	61,0	60,0*	54,4
Taxes on Property	6,9	4,2	6,6	4,9	5,6*	8,0
Portugal						
Taxes on income	27,9	34,7	35,3	35,9	38,7	39,4
Goods and Services	63,7	57,8	60,7	61,6	55,4	55.7
Taxes on property	2.0	2,6	3,7	3,4	3,9	4,9
Spain						
Taxes on income	50,6	44,6	47,4	45,8	43,5	44,2
Goods and Services	40,3	48,9	43,9	44,8	45,4	45,6
Taxes on property	8,9	5,9	8,5	8,6	9,3	10,2
EU15						
Taxes on income	47,6	47,8	47,8	43,4	48,7	50,2
Goods and Services	43,7	44,3	43,9	39,8	41,8	42,9
Taxes on property	5,9	5,5	5,9	6,1	6,5	7,0

Source: OECD (2000, 2004, in Thomadakis 2006, p. 332). *Notes:* *Greece data from 1997.

Building on the findings on *tax revenues*, the composition of these is another relevant aspect of the explanatory variable *taxation*. Table 4.2 presents data of the *composition of tax revenues*, excluding social security contributions, in a sample of years between 1980 and 2002. Here, an important tendency to address is the similar patterns of the tax composition of Greece and Portugal, which is differing significantly from the EU average. Throughout the period the largest proportion of tax revenues for these countries has come from taxes on goods and services, also called indirect taxes. The gap between taxes on goods and services opposed to taxes on income has albeit become smaller. In Greece it has gone from respectively 61.4 against 28.9 percent in 1980, to 54.4 against 37.6 percent in 2000-2002. Similarly, Portugal has moved from 63.7 against 27.9 percent in 1980, to 55.7 against 37.6 percent in 2000-2002. Greece has had a slightly higher proportion of property tax revenue than Portugal throughout the period. In Spain, the proportion of tax revenue from taxes on income relative to from taxes on goods and services has been approximately the same, with the exception of 1980, where

the former accounted for 50.6 percent opposed to 40.3 percent for the latter. In 2000-2002, Spain the proportion of tax revenue had developed to consist of 44.2 percent on taxes on income and 45.6 percent on goods and services. This slightly differs from the EU average, which were 50.2 on income and 42.9 on goods and services. However, the gap is considerably lower than for Greece and Portugal, and the deviation from the EU average is also smaller for the rest of the period. Spain's proportion of revenue from property taxes has generally been a little higher than for the EU average, ending the displayed period with respectively 10.2 opposed to 7.0 percent in 2000-2002.

Figure 4.11: Trade balance (1996-2012)

Source: OECD (2014b). *Notes:* "The current account includes all the transactions (other than those in financial items) that involve economic values and occur between resident and non-resident entities. Also covered are offsets to current economic values provided or acquired without a quid pro quo. This indicator is measured in million US dollars and percentage of GDP" (OECD 2014a).

As part of the explanatory variable *patterns of foreign trade* figure 4.11 display the balance of trade, in form of the *current account balance as a percentage of GDP*, in the period of 1996-2012. The clearest tendency here is that the EU average has consistently been closest to having a *trade surplus* throughout the period, meaning that the majority of total value of international transactions has been sales from residents to non-residents instead of the other (*trade deficit*). It as varied between 2.0 and -2,4 percent of GDP. Between GSP, Spain have had the consistently lowest trade deficits, while there has been some variation in having the highest trade deficits between Greece and Portugal. All three cases experienced a considerable

increase in trade deficits during the early to mid-2000s, continuing as the financial crisis hit in 2007. Greece had the steepest decline, moving from -5.7 to -15.0 percent of GDP between 2004 and 2008. Spain went from -3.3 to -10.0 percent of GDP between 2002 and 2007, while Portugal's trade deficits increased from -6.4 to -12.6 between 2003 and 2008. However, after reaching their low point during the crisis all three cases of GSP reduced their trade deficits significantly, reaching respectively -2.7, -1.1 and -2.0 percent of GDP in 2012.

Table 4.3: Real comparative advantage based on gross exports, key sectors for manufacturing goods (1995-2009)

	1995	2000	2005	2008	2009
Greece					
Agricultural products (food, beverages and tobacco)	2,7	2,5	2,3	2,0	1,7
Textile products (including leather and footwear)	2,4	2,2	1,5	1,2	1,2
Machinery and equipment	0,3	0,4	0,5	0,3	0,3
Electrical/optical equipment	0,2	0,2	0,2	0,3	0,3
Portugal					
Agricultural products	0,8	1,0	1,1	1,2	1,1
Textiles, footwear	4,3	3,4	2,7	2,3	2,2
Machinery and equipment	0,4	0,5	0,6	0,5	0,5
Electrical/optical equipment	0,7	0,6	0,7	0,7	0,7
Spain					
Agricultural products	1,0	1,2	1,2	1,4	1,4
Textiles, footwear	0,9	0,8	0,9	1,0	1,1
Machinery and equipment	0,6	0,8	0,6	0,6	0,6
Electrical/ optical equipment	0,4	0,4	0,4	0,4	0,4
EU*					
Agricultural products	1,5	1,4	1,4	1,3	1,3
Textiles, footwear	1,1	0,9	1,0	0,8	0,8
Machinery/equipment	0,9	1,0	0,8	0,9	0,9
Electrical/optical equipment	0,6	0,7	0,8	0,8	0,7

Source: OECD (2013e). *Notes:* Real comparative advantage is measured in share of manufacturing total of the OECD countries in each sector. *Cyprus is missing from the calculation of the EU average due to lack of data.

A final quantitative indicator relevant for the explanatory variable *patterns of foreign trade* is the degree of advantage a domestic market in producing goods for exports within different sectors, also called comparative advantage. Table 4.3 presents real comparative advantage based on gross exports for four key sectors for manufacturing production. A central finding here is that Greece has had a higher level of comparative advantage on both agricultural and textile products than the EU average in all the years between 1995 and 2009 sampled in table 4.3. The gap has however been reduced, going from 2.7 against 1.5 percent in 1995 to 1.7 against 1.3 percent in 2009 on agricultural products, and from 2.4 against 1.1 in 1995 to 1.2 against 0.8 percent in 2009 in the case of textile products. Both on machinery and equipment

and electrical/optical equipment Greece has had a consistently lower share than the EU average. Portugal has had a share of agricultural productions slightly under the EU average. However, they markedly higher share than the EU average in textile products in 1995, although reduced from 4.3 percent in 1995 to 2.2 percent in 2009. Machineries and equipment production shares where slightly under the EU average, while electrical/optical equipment where on approximately the same level throughout the period. Spain's share of agricultural and textile products has been at approximately the same level as the EU average, with respectively 1.4 and 1.1 percent in 2009. Considering both machineries/equipment and electrical/optical equipment Spain has been slightly under the level of the EU average.

4.2.3 Political Challenges

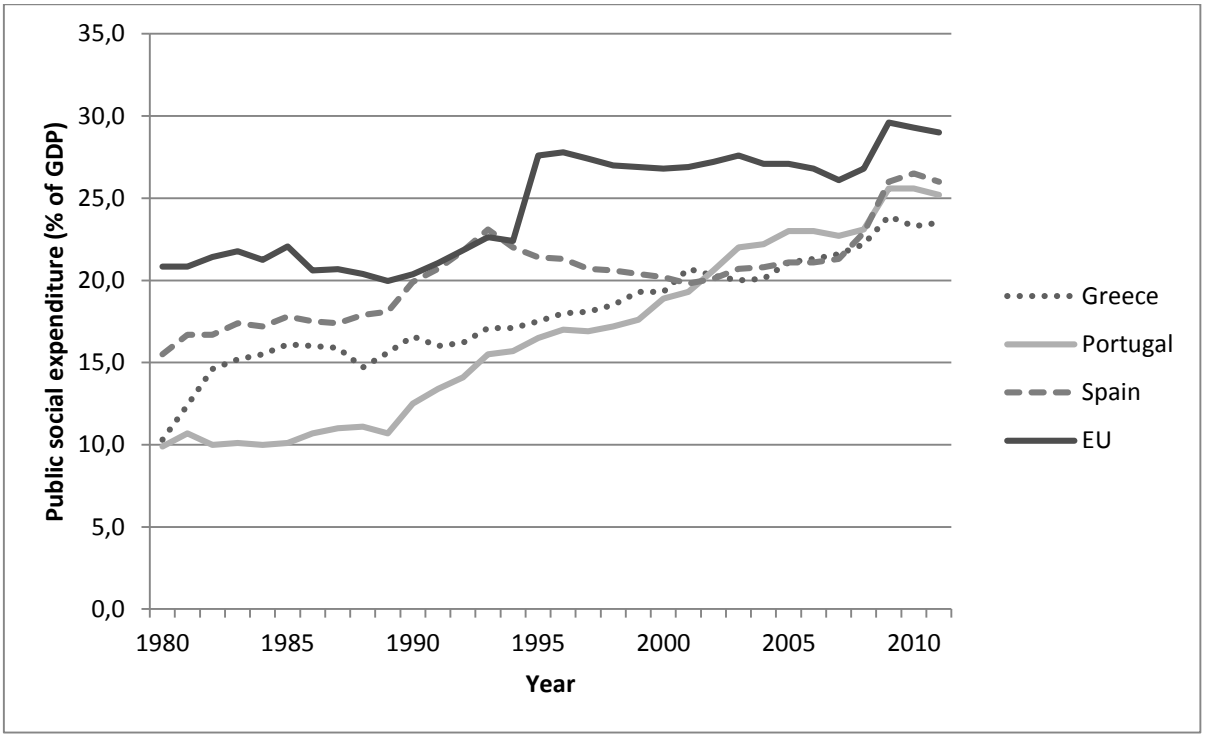
Table 4.4: Turnover of civil servants with a change in government (2010)

	Advisors to the ministry's leadership	**(Highest) Level 1**	**Level 2**	**Level 3**	**Level 4**	**Level 5**	**(Lowest) Level 6**
Greece	●	⭘	⭘	❍	❍	❍	❍
Portugal	●	⭘	⭘	❍	❍	n.a.	n.a.
Spain	n.a.	⭘	⊙	❍	❍	❍	n.a.
EU/OECD*							
Austria	⭘	❍	❍	❍	❍	❍	❍
Belgium	●	⊙	❍	❍	❍	❍	❍
Czech Republic	n.a.	●	●	⭘	❍	❍	n.a.
Denmark	❍	❍	❍	❍	❍	❍	❍
Estonia	●	❍	❍	❍	❍	❍	❍
Finland	●	⊙	❍	❍	❍	❍	❍
France	⭘	⊙	⊙	❍	❍	❍	❍
Germany	n.a.	⭘	⭘	❍	❍	❍	❍
Hungary	⭘	●	●	⭘	⊙	⊙	n.a.
Ireland	●	❍	❍	❍	❍	❍	❍
Italy	●	⭘	⊙	❍	❍	❍	❍
Netherlands	❍	⊙	❍	❍	❍	❍	❍
Poland	●	⊙	❍	❍	❍	❍	❍
Slovak Republic	⭘	●	⭘	⊙	⊙	❍	❍
Slovenia	⭘	⊙	❍	❍	❍	❍	❍
Sweden	●	❍	❍	❍	❍	❍	❍
United Kingdom	●	❍	❍	❍	❍	❍	❍
Sign explanations:	● yes, all	⭘ yes, many	⊙ yes, few	❍ none			

Source: OECD (2011). *Notes:* *Luxembourg is missing due to lack of data.

As part of the measuring of the *governmental dominance and bureaucratic efficiency*, table 4.4 depicts the tendencies of turnover of civil servants following a change in government as of 2010, based on survey data from OECD (2011). The turnover rate is divided into 7 different categories, from "advisors to the ministry's leadership" at the top, to the lowest level called "level 6" of civil service. Focusing first on the former, data on this level is missing in Spain, while the values of Greece and Portugal reveal that a change in government results in a full turnover of the advisory apparatus close to the ministries' leadership. Considering the values of the EU/OECD countries this is a quite common tendency. Eight other countries in the sample experience the same total turnover, as well as four with "many" changes of civil servants. Only Denmark and Netherlands, of the countries with available values, have "none" of these turnovers after a change in government. Moving to the next level, representing the highest level of the civil service system ("level 1"), all three countries if GSP experience "many" changes after a shift in executive power. Only Germany and Italy share this level of turnover here, while Czech Republic, Hungary and Slovak republic experience a full turnover. Six countries in the EU/OECD sample have "few" turnovers, whereas six countries have "none". On "level 2" of civil service Greece and Portugal experience "many" turnovers, while Spain have a "few". Among EU/OECD Germany and Slovak republic shares the former value, while France and Italy shares the latter. Only Czech Republic and Hungary experience a full turnover at "level 2". At the four lowest levels GSP have experienced no turnover where data is available. Among the other countries there are only a total of six occurrences of "many" or "few" changes of civil servants at these levels.

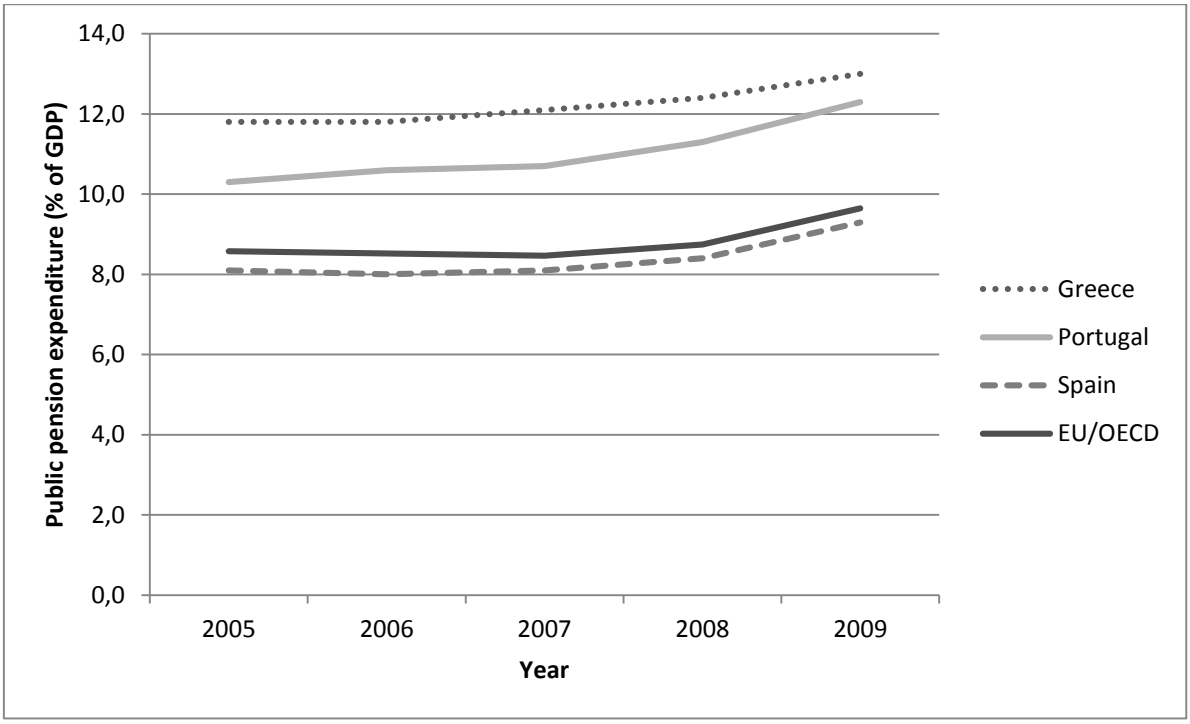
Figure 4.12: Public social expenditure (1980-2011)



Source: OECD (2013b), for Greece, Spain and Portugal 1980-2011, and EU average 1980-1994. Eurostat (2014c), for EU average 1995-2011. In the definition of *public social expenditure,* OECD (2013h) include programs that involve "(…) either redistribution of resources across households or compulsory participation. Social benefits are classified as public when general government (…) controls the relevant financial flows".

Moving to *public social expenditure*, the findings of this variable is presented in figure 4.12. Between 1980 up to and including 2010, Portugal had the lowest level of public social expenditure as a percentage of GDP, although experiencing a steady increase throughout this period, from 9.9 to 19.3 percent of GDP. At the final year of 2011 Portugal had reached 25.2 percent of GDP. Greece experienced a similar steady increase, going from 10.3 to 23.5 percent between 1980 and 2011. Spain's path from was slightly more fluctuant, but in general they had an increase from 16.7 to 26.0 percent of GDP from 1980 to 2011. The EU average for public social expenditure was consistently at a higher level than GSP throughout the period treated in figure 4.12, except for the singular case of Spain slightly exceeding them in 1993. In 2011, at the end of the period displayed here, the EU average had reached 29.0 percent of GDP.

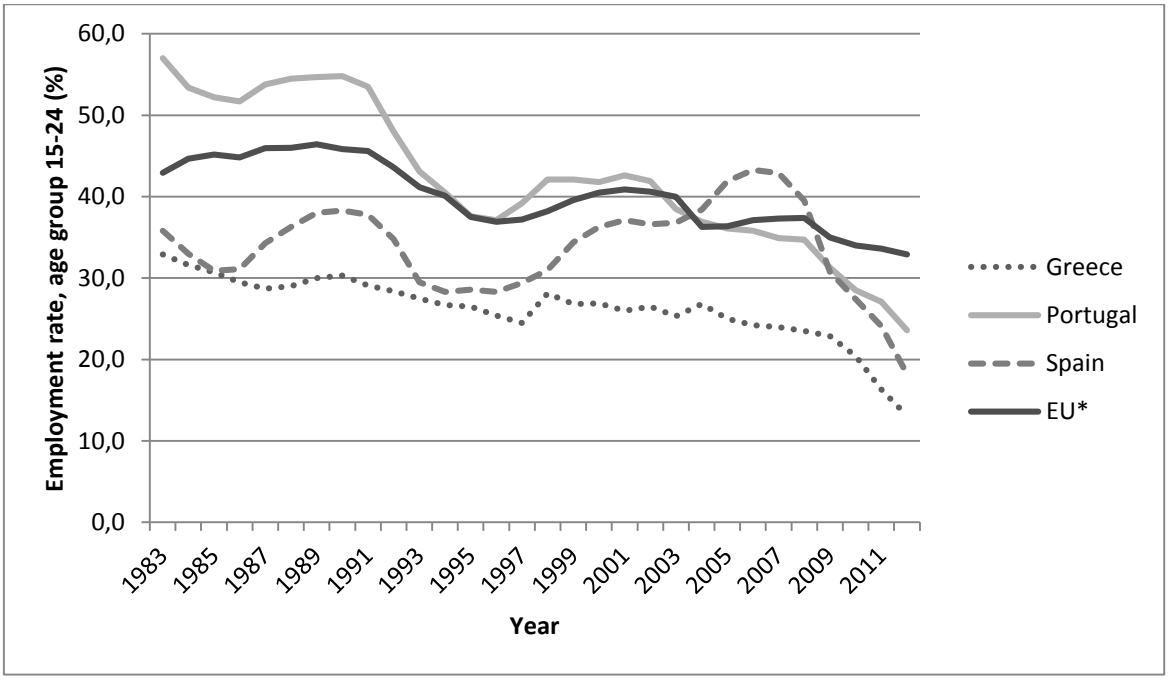
Figure 4.13: Public pensions expenditure (2005-2009)



Source: OECD (2013b). *Notes:* "Old-age pension benefits are treated as public when relevant financial flows are controlled by general government (…). Pension benefits provided by governments to their own employees and paid directly out of the government's current budget are also considered to be public (OECD 2013f).

Also part of the variable *public social expenditure* is public expenditure on pensions, displayed in figure 4.13 as a percentage of GDP in the period 2005-2009. An overall tendency is that the level of public pensions has been quite steady, with a slight increase at the end of the period. Greece has the consistently highest level of public pensions expenditure, reaching 13.0 percent of GDP in 2009. Portugal has a slightly lower level than Greece, with 12.3 percent the same year. Spain has a level of public pensions expenditure slightly under the EU average, with 9.3 percent of GDP, compared to 9.6 percent for the latter.

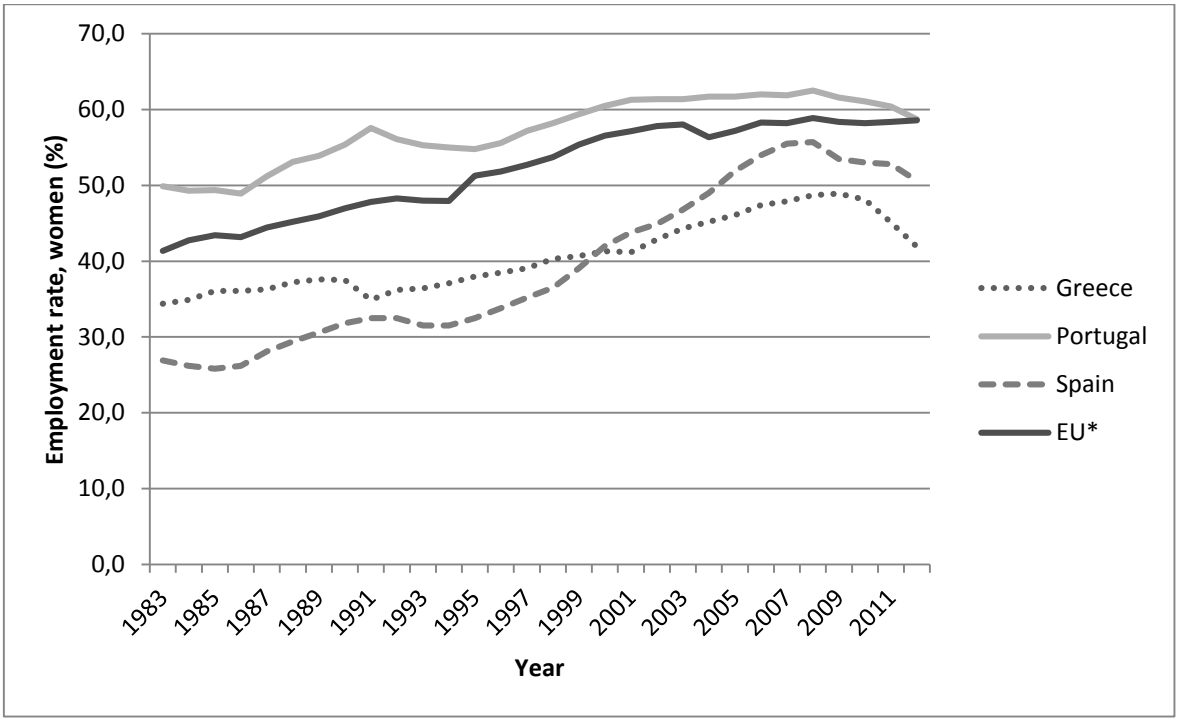
Figure 4.14: Youth employment (1983-2012)



Source: OECD (2013b) for Greece Spain and Portugal 1983-2012, EU average 1983-1994. Eurostat (2014a) for EU averages 1995-2012, and Greece, Spain and Portugal 2012. *Notes:* *Great Britain is missing from the calculation of the EU average for 1983, due to lack of data from this year.

Let us now move to the *segmentation of labor market* variable. Figure 4.14 presents one aspect of this, the employment rate of young people, here represented by the age group 15-24. This figure reveal that Greece has had the lowest level of youth employment throughout the period covered her, 1983-2012. It has also been decreasing relatively steady, from 32.9 percent in 1983 to 24.0 percent in 2007, before decreasing more steeply during the financial crisis and reaching 13.1 percent in 2012. Although starting off at the approximate same level as Greece in 1983, the development of youth employment rates in Spain has been of a more fluctuant character. The age group 15-24 experienced their highest employment rate in 2006 with 43.3 percent. However since then there has been a steep fall downwards, which led to the lowest level of the whole period for Spain in 2012, with 18.2 percent. The line of Portugal reveals the highest youth employment of the sample in 1983, also higher than the EU average, with 57.0 percent. However, after the tendency has been negative, despite some periods of increase, with a decrease that eventually has brought them below the EU average, and reaching the lowest Portuguese level of the whole period in 2012 with 23.6 percent.

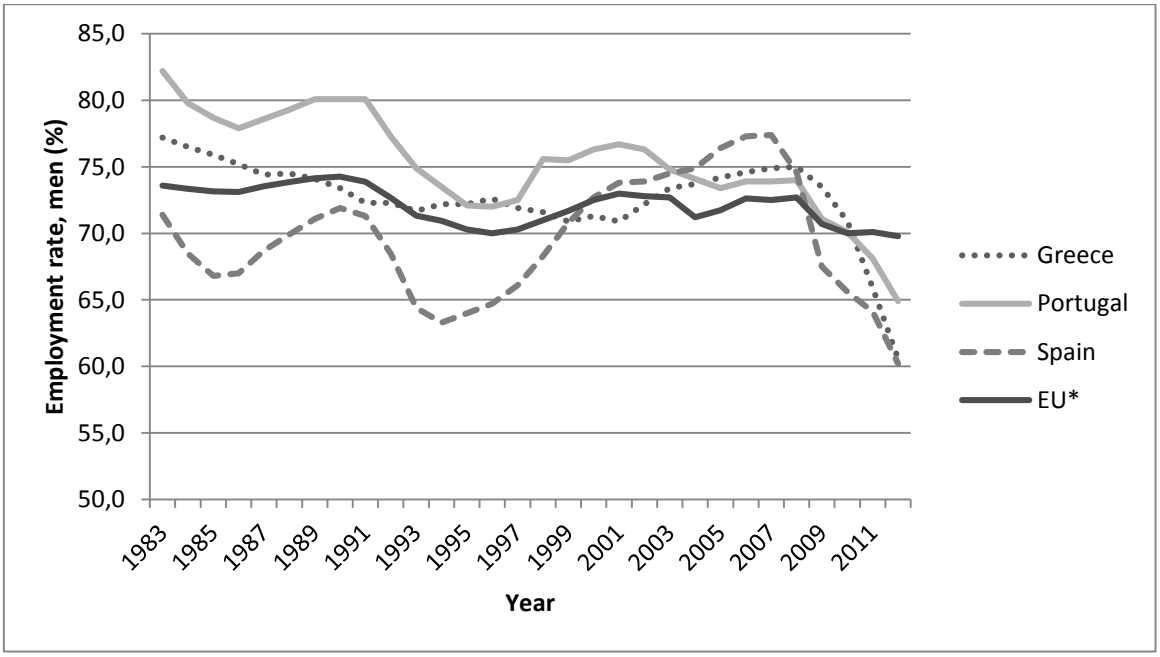
Figure 4.15: Employment rate, women age 15-64 (1983-2012)



Source: OECD (2013b), for Greece, Spain and Portugal 1983-2011, and EU averages 1983-2003. Eurostat (2014b), for EU averages 2004-2012., and Greece, Spain, and Portugal 2012. *Notes:* *Great Britain is missing from the calculation of the EU average for 1983, due to lack of data from this year.

Also part of the variable *segmentation of labor market* is the employment rate of women of working age (15-64), displayed in figure 4.15. Most evident is the high level of women's employment in Portugal, remaining higher than the EU average throughout the whole period of 1983-2012, with 49.9 percent at the beginning and 58.6 at end of the period. Spain has had the largest increase in women's employment, from 25.8 in 1985 to 55.7 in 2008. Greece had a more moderate increase, from 34.4 percent in 1983 to 48.9 percent in 2009. All three cases of GSP experienced a slight decrease in women's employment during the crisis years of 2007-2012, a tendency not shared by the EU average.

Figure 4.16: Employment rate, men age 15-64 (1983-2012)



Source: OECD (2013b) for Greece, Spain and Portugal 1983-2011, and EU averages 1983-1994. Eurostat (2014b) for EU averages 1995-2012., and Greece, Spain, and Portugal 2012. *Notes:* *Great Britain is missing from the calculation of the EU average for 1983, due to lack of data from this year.

The variable *segmentation of labor market* also includes employment among men, which is presented in figure 4.16. An important general tendency is that the employment rates are considerably higher for men than for women, when this figure is compared with figure 4.15. Shifting the focus towards the isolated tendencies of figure 4.16, Portugal has the highest employment rate at the starting point of 1983 also here, with 82.2 percent. Although experiencing a decrease for most of the period, Portugal remain on a higher rate than the EU average up and including 2010, before decreasing to their lowest point in 2012 with 64.9 percent. Greece has a quite similar path with the EU average, until experiencing a sharp decrease between 2008 and 2012, from 75.0 to 60.6 percent. Spain has experienced the largest fluctuations in men's employment, reaching the highest point with 77.3 percent in 2006, followed by a steep decrease to 60.2 percent in 2012. The EU average has the most steady employment rate for men, although experiencing a moderate decrease between 2008 and 2012, from 72.7 to 69.8 percent.

4.2.4 Summary of Findings on Explanatory Variables

Table 4.5: Key findings on quantitative indicators of explanatory variables

Indicator	*Trend for Greece, Spain and Portugal*	*Standing out*
Capital regulation of banks	Spain with consistently higher restrictiveness than EU average. No clear trend in Greece and Portugal, varying above and below EU average.	Spain (more restrictive)
Restrictions on banking activities	Portugal with largest variation in restrictiveness. Greece varying above and below EU average. Spain mostly less restrictive than EU average.	No clear tendency.
Value added per sector (% of GDP)	Greece with consistently larger service sector and smaller industrial sector than EU average. Portugal close to EU average. Spain with markedly smaller service sector and larger industrial sector than EU average in 2005, but more close to EU average in 2009. All three countries with service sector as the biggest also in the sampled years between 1973 and 1990.	Greece (most dominated by service sector)
State control of economy	Greece consistently with most state control, markedly higher than EU average along with Portugal. Spain close to EU average.	Greece and Portugal (most state control)
Labor productivity (GDP per hour worked)	Greece and Portugal with consistently lower labor productivity than the EU average. Spain with productivity similar to EU average.	Greece and Portugal (lowest productivity)
Total tax revenue (% of GDP)	All three countries with a relatively steady growth at about the same level, almost consistently lower than the EU average.	No clear tendency.
Composition of tax revenue	Spain relatively close to the EU average, with approximately the same proportion of tax revenue from taxes on income as on goods and services. Greece and Portugal with a considerably larger proportion from taxes on goods and services than on income, despite a reduction of the gap from 1980-2002.	Greece and Portugal (higher proportion of tax revenue from goods/services)
Current account balance (% of GDP)	GSP with consistently higher trade deficits than EU average. Spain with lowest deficits. Greece with highest deficits and steepest increase of deficits after the strike of crisis in 2007.	Greece (Highest deficits during crisis)
Real comparative advantage, key sectors of manufacturing goods	Greece with higher comparative advantage on agricultural and textile products, and lower on machinery and electrical/optical equipment, than EU average. Portugal with markedly higher comparative advantage on textiles. Spain at with similar levels to EU average in all four sectors.	Greece (least similar to EU average)
Turnover of civil servants with change in government	Similar turnover for GSP as other EU countries on "advisors to ministry's leadership" level. Higher turnover than most EU countries at first and second highest level of civil service. Mostly no turnover at the four lowest levels.	No clear tendency.
Public social expenditure (% of GDP)	All three countries mostly below EU average 1980-2011. Greece and Portugal following similar trend. Spain closer to EU average before 1995, but similar trend to the others after this.	No clear tendency.
Public pension expenditure (% of GDP)	Greece with highest expenditure, Portugal with similar levels. Spain slightly under EU average.	Greece and Portugal (highest expenditure)
Employment rate, age group 15-24	Greece with consistently lowest youth employment 1983-2012. Portugal slightly higher youth employment than EU average before crisis, Spain mostly slightly lower, before crisis. Both experiencing decreased employment during crisis (2007-2012), moving closer to Greek level.	Greece (lowest youth employment)
Employment rate, women	Portugal with consistently higher/similar employment rate as EU average. Greece and Spain consistently under EU average.	Greece and Spain (lowest women's employment)
Employment rate, men	Portugal mostly slightly higher employment than EU average. Greece similar trends to the EU. Spain mostly slightly under. All moved under EU average after occurrence of the crisis.	No clear tendency.

Table 4.5 summarizes the central findings of the quantitative indicators of the explanatory variables presented in this section. The main trend for GSP in comparison to the level of the EU average is included for each indicator, as well as a "pinpoint" of the case(s) standing out from the general trend of the EU average and the other cases. According to table 4.5, the two indicators of *banking regulation*, related to the variable group *conditions of financial system*, show a lot of variation of regulatory level and thereby few clear tendencies. One exception is that Spain has had the most restrictive level of capital regulation compared to both the other cases and the EU average.

Several trends should be emphasized concerning the variable group *features of economy*. Greece has a markedly more dominant service sector in form of value added as a percentage of GDP, compared to the other cases and the EU average. Furthermore, Greece and Portugal stand out with the highest state control of the economy, as well as having the lowest degree of labor productivity. While there were no clear tendencies considering total tax revenues, the data on the composition of these revenues shows that Greece and Portugal have been more dependent on taxes on goods and services opposed to taxes on income. In contrast, Spain has had approximately equal proportions of these two forms of taxes, a trend relatively similar to the EU average. Considering the trade balance, Greece stands out with both the highest current account deficit and the steepest increase in these after the occurrence of the financial crisis in 2007. In terms of trends of comparative advantage in key manufacturing sectors, Greece deviates the most from the EU average, having markedly higher comparative advantage on agricultural and textile products, combined with a markedly lower level on machines and electrical/optical equipment.

Considering the variable group *political challenges*, the turnover of civil servants following a change in government showed no clear tendencies among GSP, other than having higher turnover than most EU countries on the higher levels of the civil service system. When it comes to public expenditure, Greece and Portugal stand out with the highest level of expenditure on public pensions, while no clear tendencies were found considering general public social expenditure. Considering the indicators measuring the variable *segmentation of labor market*, Greece stands out with lowest degree of youth employment, as well as having the lowest level of women's employment along with Spain. No clear deviation from the EU average was found concerning men's employment rate.

Chapter 5: Analysis - Towards an Explanation of severity of crisis?

In this chapter I discuss my results of the descriptive statistics presented in chapter 4, as well as presenting and analyzing the empirical evidence on the explanatory variables completely or partially based on qualitative measures. The empirical findings will be discussed against the theoretical review and hypotheses presented in chapter 2, to uncover the degree of which my empirical evidence consist or deviate from the perspectives supplied by relevant literature. The purpose of the chapter is to answer the research question of this thesis, considering how to explain the severity of crisis in Greece, Spain and Portugal (GSP), as well as potential differences in severity compared to the each other and the EU average. The analysis will first discuss the findings on the dependent variable *severity of crisis*. Then the results on the explanatory variables will be discussed, divided into the main variable groups of (1) *Condition of Financial System*, (2) *Features of domestic economy and politics*, and (3) *Impact of EU membership*.

5.1 The Dependent Variable – Determining Severity of Crisis

The results on the dependent variable *severity of crisis* revealed two different types of crises that could be identified to a greater or lesser extent in GSP between 2007 and 2012. One of these, *banking crisis*, was clearly identified in all of the three cases, while the indication of debt crisis was strongest in the case of Greece. Portugal had a considerably more severe level of debt than the EU average, while this tendency was more moderate in the case of Spain. However, according to the findings here none of the cases experienced either of the two other types of crises, currency crises and inflation crises, during this period.

Let us begin with the implications considering the findings identifying crisis episodes, starting with the occurrence of *banking crises*. While all cases of GSP has been characterized by banking crises in three years of the period 2007-2010, this is not in significant contrast to the experience of the EU countries included in Reinhart and Rogoff's (2010) data, which in average experienced 2.5 years of banking crisis in the same period. With the exception of Finland and Sweden, all of the 14 countries included in the sample of the EU average were struck by banking crises and most of them for three years, as for the cases of GSP. The occurrence of banking crises in GSP could therefore be seen as part of a European trend, and in this way support the notion of the ongoing financial crisis as a primarily global phenomenon, with its severity largely determined by the magnitude of crash of the economy on an international level (Guillén 2012, p. 41). However, as pointed out by Reinhart and

Rogoff's (2009, p. 145), banking crises could also be seen as amplifying mechanism for deeper recession. In this way, different levels of vulnerability towards financial crises could be revealed in the *aftermath* of a strike of banking crisis, through the occurrence of other types of crises induced by the initial bank run.

One weakness of this measure of banking crises is that it is defined by events rather than by quantitative thresholds, which implies a dummy variable design, with the possible values of either "crisis" or "no crisis" (Reinhart and Rogoff 2009, p. 8). It is therefore not possible to spot variation in severity between the determined incidents of crisis. However, the resembling amount of years of experiencing banking crises between GSP and the EU average nevertheless gives a solid indication of a similar strike of banking crisis. Therefore the banking crises in GSP will be viewed as being similarly severe as the EU average. However, the mentioned possibility of banking crises being triggers for deeper recession will be taken into account in the discussion of the other types of crises.

The other type of crisis identified among the cases of GSP is *debt crisis*, if to a somewhat less clear extent than the case of the incidents of banking crises. Reinhart and Rogoff (2009, p. 10) defines debt crises primarily by events rather than quantitative thresholds, through the identification of defaults on external debt. According to Reinhart and Rogoff's (2010) data, only Greece was characterized as a case of "near default", while the other available EU countries did not experience a default on external government debt. However, as mentioned in connection with the operationalization of the dependent variable in section 3.3, debt-to-GDP ratio is still a useful tool in determining how severe the government debt situation is, as well as identifying significant gaps of this ratio between different cases. For example, a proportion of government debt exceeding 100 percent of GDP could easily be viewed as challenging even for advanced economies. Also, defaults on external debt often occurs on considerably lower debt-to-GDP ratios in emerging markets (Reinhart and Rogoff 2009, p. 22).

The clearest finding considering *gross government debt as a percentage of GDP* is the consistently high level in Greece. While the EU average had a debt level on around 60 percent of GDP in the period before the financial crisis, as displayed in figure 4.3 (2000-2006), the Greek level was steadily around 100 percent of GDP in the same period. After the occurrence of the financial crisis Greece saw an increase of this ratio, reaching 162.3 percent of GDP in 2011. In contrast the EU average experienced a more moderate increase during the crisis, reaching 84.8 percent in 2012, which gives a perspective of the how severe the situation is in

Greece. Based on these substantial differences in the debt-to-GDP ratio, and the increase experienced during the recession period of 2007-2012, a categorization of Greece as a case of debt crisis seems in order.

One reason why a complete default has not taken place in Greece according to Reinhart and Rogoff's (2010), could be the two extensive adjustment programs initiated by the euro zone after 2010, to improve financial stability for member countries that were struck the hardest by the crisis. Through the intergovernmental body of EFSF, in collaboration with the IMF, Greece received disbursements at the value of 80 billion euro between 2010 and 2012, followed by 130 billion euros between 2012 and 2014 (European Commission 2014b). The cash flow this has provided has undoubtedly played a major role in the perception of the Greek debt situation as not a complete default. Despite the objective of these programs to restore fiscal sustainability, the issuance of further loans contributing to the maintenance of the high level debts could be seen as a paradox. Anyhow, the "eagerness" of the euro zone to stabilize the Greek economy gives a solid indication on the perceived severity of the debt situation in Greece. Also Portugal and Spain have received financial support from the EU. Portugal received an adjustment program consisting of disbursements to the total of 78 billion euros between 2011 and 2014. Out of the EMU approved amount of 100 billion euros to the reinforcement of the banking sector, Spain has chosen to use approximately 40 billion euros of this between 2012 and 2014 (European Commission 2014d, 2014a).

The findings on *governmental deficits*, the second applied indicator of *debt crisis,* showed that all three cases of GSP had a higher level of net borrowing as a percentage of GDP than the EU average during the crisis period of 2007-2012. Greece experienced the most severe level of deficits with -15.6 percent of GDP in 2009. They also saw a worse increase of deficits than the EU average between 2007 and 2009. In the case of Greece, the level of government deficits correlate with the tendency unfolded in the case of gross government debt, revealing a considerably worse situation than the other cases and the EU average. Also Portugal has reached a more severe level of deficits than the EU average during the crisis, consistent with the tendency uncovered considering gross government debt. However, Spain experienced a considerably higher level of deficits than the EU average, as well as the worst increase in deficits of the sample during the crisis with -13.1 percent, in contrast to the slightly lower compared to the EU average in the case of government debt. The case of Spain in this way shows some interesting short term variation between deficits and debts, which could indicate a more severe debt situation than revealed by the magnitude of gross government debt

(Marcet and Scott 2009, p. 474).

Due to the consistent higher level of two indicators *gross government debt* and *government deficits* (net borrowing) as a percentage of GDP, combined with their status of "near default" on external debt in 2010 I identify Greece as a clear case of debt crisis, and the most severe of the three emphasized cases and the EU average. While more moderate in the case of Portugal, I argue that the steep increase, and the significantly higher level than the EU average, on both these indicators after the outburst of the financial crisis in 2007, indicates a situation of substantial debt crisis also here. In Spain the occurrence of a debt crisis is less evident, with a debt-to-GDP ratio coherent with the level of the EU average. However, their deficits-to-GDP ratio was significantly higher, and with the steepest increase of the sample during the period of crisis (2007-2012). Due to these clear fiscal unbalances, I identify Spain as a "close to debt crisis" case.

As the results of figure 4.2 and 4.5 showed, there were not found occurrences of currency crises or inflation crises in either of the cases of GSP in the period of 2007-2012. However, as pointed out in chapter 4, it is worth noticing that all three cases saw levels of inflation equivalent of an inflation crisis in the late 1970s or early 1980s. They also saw considerable depreciations of national currency during the same period, if not quite reaching the 15 percent per annum level set as a threshold for experiencing currency crises. These past tendencies to inflate and reduce value of currency should be taken into consideration in the forthcoming discussion of potential vulnerabilities of financial institutions as an explanatory factor of the *severity of financial crises*.

Based on the discussion of this section I would classify Greece as experiencing the highest *severity of crisis*, considering their significantly more severe strike of debt crisis. Portugal is classified as the second most severe strike of financial crisis, also experiencing a debt level equivalent of a crisis situation. Spain is classified as the third most severe strike of crisis, with a "near debt crisis" situation moderately differing from the situation for the EU average. All three cases, as well as the EU average, experienced banking crises episodes of similar severity. However, these banking crises could be viewed as triggers for the occurrence of other types of crises. Thus, the occurrence of a continent-wide banking crisis could be viewed as an amplifying mechanism for debt crises on a domestic level, where different levels of vulnerability caused occurrence or non-occurrence of debt crises, as well as variation in severity among those struck by debt crises.

5.2 Condition of Financial System

5.2.1 Bank Regulation

Now moving to the analysis of the results on the explanatory variables, let us begin with *bank regulation*. This is highly emphasized as a crucial determining factor of the vulnerability towards both banking crises and currency crises in the literature on financial crises. Especially for emerging markets experiencing an opening of the economy, the potential low capacity of regulatory authorities could create an environment for increased risk-taking in the banking sector (Furman and Stiglitz 1998, p. 17). However, the results from Barth et al.'s (2013) data, as displayed in figure 4.6 and 4.7, reveals no consistent deviance from the EU average in the direction of a less strict level of regulation and supervision of banks in the selection of years between 1999 and 2011. In fact, if anything Spain has had a consistently higher level of regulation considering capital requirements than the EU average. However, this Spanish tendency is accompanied by a slightly lower level of restrictions on banking activities than the EU average throughout most of the period. It is therefore not possible to spot a consistent trend in the overall level of bank regulation in the case of Spain. Furthermore, the review of Greece and Portugal shows variation above and below the regulatory level of the EU average both considering regulation of capital requirements and banking activities, leaving no clear tendency of the overall regulatory level in one direction or the other.

A weakness considering the variable bank regulation is the apparent lack of available data on the early period of the timeframe of this thesis, 1975-1998. Any incapacity of regulatory authorities during the economic and political opening of the regimes of GSP in the late 1970s and early 1980s is thereby not accounted for here. Therefore the theoretical point of the embedded weaknesses typical of a newly liberalized economy lacks complete empirical illumination. Anyhow, the data of the available time series do not detect any clear differences in GSP compared to the EU average that could justify *bank regulation* as an *immediate* explanatory factor for the more severe strike of financial crisis in these cases. This also complies with the findings of the similar patterns of severity of banking crises in GSP compared to the EU average, suggesting that the banking crises part of the recession in Europe to a considerable degree are determined by features of the global economy rather than on variance on a domestic level. Following this line of argument the available data impairs the claim raised in *HI,* suggesting that weaker bank regulation has made GSP more vulnerable to banking crises.

5.2.2 Central Bank Independence

Considering the lack of sufficient quantitative data measuring *central bank independence* (CBI) in GSP, in combination with the ambiguities and complexity related to this concept, this variable is treated qualitatively by reviewing the historical path of monetary policy after 1975. Beginning with Greece, the government's influence on monetary issues has been of a quite overt character. This was especially evident between 1975 and 1982, when the Treasury had direct official impact on the execution of monetary policy through the Currency Committee. The Committee, consisting of five ministers from the government and the Governor of the national central bank (Bank of Greece), made the central decisions on a broad set of fiscal issues, including the main features of monetary policy such as monetary targets. Despite the abolition of this committee after 1982, and the introduction of *de jure* CBI, the Greek government continued to exert the main influence over monetary issues (Garganas and Tavlas 2001, p. 48).

The most important incentive for maintaining strong governmental influence on the Bank of Greece was to fulfill the critical demand for public revenue. Especially after the inauguration of the PASOK government in 1981, with promises of extensive redistribution of wealth, the possibility of monetary creation by inflationary shocks became a convenient strategy with short-term benefits. *Seigniorage* in this way became a major source of Greek government revenues, as solution for financing the increasing level government budget deficits (Lazaretou 2005, p. 356). According to Gros and Vandille (1995, p. 186) the practice of *seigniorage* constituted revenues of over two percent of GDP throughout the 1980s and early 1990s.

The main problem with the introduction of unanticipated inflation as a long-term strategy is that these inflation shocks after a while are anticipated and accounted for by private actors. The effect of these increases in inflation therefore diminished relatively quickly, and led to a persistent high level of inflation, without the intentional increase in revenues (Alogoskoufis 1995, p. 179). As displayed in figure 4.5, this level remained in the area of 20 percent for the bulk of the decade following EU entry in 1981. After 1991, Greece experienced a massive decrease in inflation, from 19.5 to 2.6 percent in 1999, which largely could be explained by the effort to fulfill the criteria for admission to the EMU. A major contributing factor was the "Hard-Drachma Policy" introduced by the Bank of Greece in the mid-1990s. Through this policy, which also increased the *de facto* CBI, the Greek exchange rate was pegged against the European Currency Unit (ECU), the unit for the national currencies that were to join the

Eurozone in 1999 (Garganas and Tavlas 2001, p. 66).

Also Portugal and Spain had significant government influence on central banks in the period after the fall of their authoritarian regimes in the mid-1970s. As with Greece the monetization of deficits became an applied strategy to adjust for the increasing expenditures on redistribution. However, in contrast to Greece they managed to reverse this strategy at an earlier stage, during the early to mid-1980s, and initiating a persisting reduction of inflation around their admission to the EU in 1986 (Alogoskoufis 1995, p. 181). In Portugal, the central bank (Bank of Portugal) reported directly to the Treasury until the separation in 1989. As displayed in figure 4.5, Portuguese inflation reached 28.8 percent in 1984, the highest level of the whole sample of GSP and the EU average. However, in contrast to Greece they experienced a substantial decrease of inflation during the period immediately prior and following EU entry, reaching 9.3 percent in 1987. In addition, the government ran a primary balance surplus (before interest payments) from 1984 and throughout most of the 1980s and early 1990s, and their overall government budget deficits were considerably more moderate than in Greece. As a consequence of this, when Portugal initiated their monetary adjustment program in 1990, with the ultimate objective of EMU admission, the Portuguese government's dependence on central bank control to attract revenues from monetary creation were relatively low compared to Greece, which made CBI a more likely scenario (Detragiache and Hamann 1999, p. 363-65).

Spain experienced a similar path as Portugal, with respect to the development of monetary policy. Stabilization programs that included the reduction of such practices, replaced the financing of increasing deficits with monetization in first half of the 1980s. Also, reforms of the Bank of Spain during the second half of the 1980s gradually reduced governmental influence on monetary policy, and the possibility of *seigniorage* practices (Juselius and Toro 2005, p. 519-20). Furthermore, despite the 1980s being characterized as an "inflationary decade", the level of inflation in Spain remained at a less dramatic level than both Greece and Portugal, considerably closer to the general level in Europe (Thomadakis 2006, p. 324). This is also apparent through the inflation trends displayed in figure 4.5. From EU entry in 1986 to 1988, Spanish inflation went from 8.8 to 4.8 percent, compared to 3.7 to 4.6 for the EU average. In this way they approached similar levels of the rest of the EU in terms of inflation, before initiating the monetary programs designed to secure EMU admission in 1989 (Juselius and Toro 2005, p. 510). At this point Spain had also diminished their dependence on *seigniorage*, reducing the government's incentives for maintaining strong influence over the

Bank of Spain (Gros and Vandille 1995, p. 188).

Considering the review above, what impact could the variable *central bank independence* have as part of an explanation of the dependent variable *severity of crisis*? The most important finding in this respect is how governmental influence on monetary policy has led to active inflationary practices. As we have seen, the "temptation" of increasing the money supply, as a strategy for the creation of revenues to compensate for increased social expenditures, has been a major force for governmentally dominated central banks. The result of this has been debt issuing and the systematic running of increases in government budget deficits along with continuous money creation. After these *seigniorage* strategies has been anticipated by the market, the inflation shocks have had diminishing effects in terms of creating revenues, causing an increase in the need of extending government debts to finance deficits. In this way, *seigniorage* practices by government-influenced central banks have had an impact on the increase of deficits and debt, with the ultimate possibility of contributing to a debt crisis. As shown above, this causal path has been most evident in the case of Greece. Through the first official, then unofficial, governmental control of the Bank of Greece, Greek monetary policy has been characterized by systematic monetization of deficits and persistent high levels of inflation from the late 1970s and throughout the 1980s. Thus, the imbalances of Greek governments' fiscal policies this has created could be highlighted as a significant source of the consistently higher level of both *gross government debt* and *net borrowing* as a percentage of GDP than Portugal, Spain, and the EU average.

Furthermore, the damages of these inflationary exercises over a longer period, could explain why these tendencies for government debt and deficits have persisted even after the Bank of Greece became a more independent body, and managed to substantially reduce inflation in the 1990s prior to their admission to the EMU. While both Portugal and Spain were characterized by governmental central bank control and *seigniorage* practices in the late 1970s and early 1980s, they managed to reduce these policies and thereby decrease inflation at an earlier stage than in the case of Greece. This could account for the less severe level of debt crises, while their "past inflationary sins" due to lack of *de facto* CBI pose as an explanation of the more severe strike of debt crisis than the EU average, significantly in Portugal and moderately in Spain. Therefore the empirical evidence here generally supports the claim of *H2,* assuming that GSP would be more vulnerable to debt crises due to lower degree of CBI. However, the deviation shown by Greece towards lower CBI than the two other cases was not anticipated in the theoretical review in chapter 2.

5.3 Features of domestic economy

5.3.1 Sectorial Composition and Productivity

As part of the set of explanatory variables highlighting key features of the Southern European economy, *sectorial composition and productivity* is theoretically emphasized as a factor determining the economic development in these countries, and thereby the vulnerability towards financial crises. In terms of the sectorial composition through *value added*, Greece stood out with the persistently largest share of agriculture between 1973-1990, moving from 18.0 to 13.8 percent of GDP. In contrast Portugal and Spain saw a more substantial decrease in the share of output of the agricultural sector in the same period, respectively from 14.7 to 5.8 and 10.1 to 4.5 percent of GDP. In the period of 2005-2012 Greece continued to stand out with the largest output in services as well as agriculture, and the smallest in industry throughout the period of 2005-2012, as displayed in tabl 4.1. The distribution was respectively 80.2, 3.4 and 16.4 percent of GDP in 2012. In comparison the EU average had a distribution of respectively 74.1, 1.5 and 24.4 percent of GDP. Spain's composition developed from larger industrial and smaller service sector in 2005 to being at the approximate level as the EU average in 2012, while Portugal followed a similar trend to the EU average throughout the period.

How could this variation in sectorial composition contribute to an explanation of the *severity of crisis* in GSP? Here the domination of the service sector in Greece could reflect two important theoretically emphasized points of their economic development, partially transferable Portugal. One of these is the remaining influence of the state in the economy after transition to democracy in the mid-1970s. In Greece, the public sector even increased, through job creation in civil services that was applied as a strategy to avoid increases in unemployment during the economic downswings in the late 1970s (Thomadakis 2006, p. 316). This could correspond with Greece's higher level of *state control of the economy* than the EU average, as shown in figure 4.8, a feature shared by Portugal. Spain, on the other hand had a similar trend as the EU average. However, all of the cases had a declining level of state control between 1998 and 2013, meaning that the strength of this feature has been reduced. A weakness with this measure is the lack of data on the period before 1998. Nevertheless, the tendency of Greece and Portugal being the most state influenced economies, consists with the theorized trend of Spain directing more public expenditure towards social protection instead of expansion of the public service sector (Roccas and Padou-Schioppa 2001, p. 55)

The second point considering the variable *sectorial composition and productivity* is Greece and Portugal's markedly lower level of labor productivity than Spain, which also here has the approximate same level as the EU throughout the period of 1986-2012. According to figure 4.9, Greece and Portugal's *GDP per hours worked* respectively moved from 19.5 to 28.5 and 15.3 to 28.1 during this period. In contrast, Spain followed a similar trend as the EU average, moving from 30.5 to 41.2. This tendency is crucial for determining why the higher service sector dominance (especially in Greece) and higher state control have had a negative impact on economic performance under the circumstances emphasized here. The strategy of keeping unemployment down by increasing public employment in the late 1970s and early 1980s, especially in the service sector, could here be seen as having a negative impact on productivity, hurting the competitiveness of the economy (Roccas and Padou-Schioppa 2001, p. 56-7). In this way, the interaction effects shown by the combination of a dominant public service sector and low productivity could be seen as damaging for the ability of Greece and Portugal to function effectively at the same level as other European economies. This could again increase the vulnerability towards financial crises, which generally consists with *H3*. However, an exception is that Portugal has had a sectorial composition closer to the EU average than expected during the period of 2005-2009 than hypothesized. Also, Spain shows a path of *sectorial composition and productivity* more similar to the EU average than expected.

5.3.2 Taxation

The explanatory variable *taxation* has been emphasized as a crucial component of the challenges related to attracting public revenues in the aftermath of transition to democracy in GSP in the late 1970s to early 1980. Two indicators have been applied to measure this variable. The first of these is *total tax revenue as a percentage of GDP*, displayed in figure 4.10. The findings showed that all three cases of GSP had reached a similar level to the EU average's 35.7 percent of GDP in 2011, with respectively 32.4, 31.4 and 33.2 percent of GDP the same year. However, one has to take into consideration that these cases have been established as more severe cases of crisis than the EU average. It is therefore a plausible assumption that the reductions in the gap to the EU average the last few years to a greater extent could be explained by a decrease in GDP, rather than a substantial increase in real tax revenues.

In addition, the first decade of the period reveal a larger gap to the EU average. While the tax revenues of the EU average went from 34.5 to 38.2 percent of GDP between 1975 and 1985,

the level in GSP went from approximately 20 to 25 percent of GDP. This substantially lower level conforms with the theoretical emphasis on the challenges related to legitimizing a tax system during and right after a democratization process. Both the pressures for increased redistribution and the economic stagnation characterizing this period complicated the process of establishing an effective tax system, which could cover the increases in public expenditures (Thomadakis 2006, p. 316). Connecting this finding with the low CBI and high inflation in GSP during the period of 1975-1985 discussed in subsection 5.2.2, the picture of their vulnerabilities towards debt crises becomes even clearer. Their inabilities to collect a sufficient amount of tax revenues, coupled with governments' active use of money creation as an alternative source of revenue, could form a relationship of *interaction effects.* Together they constitute the challenge that was not overcome during the first decade after democratization, and the short-term solution that had long-term damaging impact by substantially increasing debt and deficits in the long run, especially in Greece.

Also part of the explanatory variable *taxation* is the indicator *composition of tax revenue*, displayed in table 4.2. The main finding here is that Greece and Portugal to a larger degree than Spain rely on consumption taxes instead of income taxes. The share of total tax revenues between these where respectively 61.4 percent and 28.9 in Greece and and 63.7 and 27.9 in Portugal in 1980, while Spain in contrast had 40.3 percent in consumption taxes and 50.6 percent in income taxes and. This tendency persisted until the end of the period with available data (2002), although both Greece and Portugal saw a reduction in the gap between the share of consumption taxes and income taxes. Spain's composition was relatively similar to the EU average.

As emphasized in the theoretical review in subsection 2.3.2, the reliance on indirect taxation on consumption, at the expense of income taxes could, be an indication of an imbalanced and ineffective tax system, which result in low real tax revenues (Kaplanoglou and Newbery 2004, p. 226). However, the larger proportion of income taxes in Spain has not materialized itself in form of substantially higher level of total tax revenue compared to Greece and Portugal in figure 4.10, as would have been expected. Therefore I argue that the empirical evidence on the variable *taxation* only partially confirm *H4*. GSP have had a lower level of tax revenues than the EU average, especially in the first decade after 1975, but the share of direct and indirect taxation does not seem to have influenced the level of tax revenues between these cases. Furthermore, the evidence does not indicate that the Greece has had substantially larger problems than Spain and Portugal with enforcing *taxation*, despite the

expectation of this in *H4*. However, as the discussion of CBI in subsection 5.2.2 has shown, Greece has to a significantly larger extent than Spain and Portugal applied alternative revenue measures to taxation, through money creation and *seigniorage* practices, which has led them towards being a more severe case of debt crisis.

5.3.3 Patterns of Foreign Trade

Considering the explanatory variable *patterns of foreign trade*, GSP have shown empirical deviation from the EU average. The results on the indicator *current account as a percentage of GDP*, displayed in figure 4.11, showed that all three cases had consistently higher trade deficits throughout the period of 1996-2012, compared to the EU average. Among the three, Spain have had the lowest trade deficits, reaching their highest deficits with -10.0 percent of GDP in 2007. Greece and Portugal have generally had somewhat higher trade deficits, respectively reaching their highest levels with -15.0 and -12.6 percent of GDP in 2008. This tendency towards higher imports than exports could indicate a lack of ability to utilize the increased opportunities to compete internationally through their accession to the internal market of the EU. Instead, other countries seem to have utilized their increased access to the markets of GSP, as the majority of the values of foreign transactions tend to end up in "foreign hands". A weakness is the lack of data from the period before 1996. This means that one misses the opportunity of identifying the trends *before* the opening of the internal market of the EU in 1993, which could have revealed if the trend *after* the opening has been towards higher imports or exports.

Considering the second indicator of *patterns of foreign trade*, the picture of GSP's inability to compete on equal basis as other EU countries is partly reinforced. Table 4.3 displayed the *real comparative advantage based on gross exports* in key sectors of manufacturing categorized as either typical for *inter-industry trade* or *intra-industry trade.* The empirical results showed that Greece had a higher comparative advantage in agricultural products than the EU average (food, beverages, tobacco), while Portugal had higher comparative advantage in textile products, both characterized as traditional *inter-industry sectors*. Spain, on the other hand, was revealed to have similar patterns of comparative advantage as the EU average. They have been less dominated by agricultural and textiles production. The Spanish comparative advantage on the two sectors considered as more *intra-industry,* machinery and technical and optical equipment, is slightly lower than the EU average. It is approximately the same as Portugal in these sectors, and a little higher than Greece. The technological gap of Spain, and

to a certain extent Portugal, compared to the EU average is therefore smaller than expected, considering Smith and Wanke's (1993) emphasis on convergence countries' challenges of competing with advanced economies in the internal market of the EU.

In this way the empirical evidence on the variable *patterns of foreign trade* only partially consists with *H5*, suggesting deviation from the EU average on all three cases of GSP. Both Greece and Portugal had a markedly higher trade deficit than the EU average, and a higher comparative advantage in a low technology and labor intensive sector, respectively agriculture and textiles. On the other hand, the evidence on Spain did not show much deviation from the EU average in terms of patterns of comparative advantage. This consists with the general lower level of *severity of crisis* revealed in Spain, particularly compared to Greece. The variable could therefore constitute an unpredicted deviating explanatory variable in my exploratory MSSD setup. The combination of higher trade deficits and lower competitiveness on the internal market to especially Spain, but also Portugal, could have contributed to a higher vulnerability towards financial crisis.

5.4 Political challenges

5.4.1 Governmental Dominance and Bureaucratic Efficiency

Moving to the last group of explanatory variables that considers political challenges, let us first discuss *governmental dominance and bureaucratic efficiency*. This variable was measured by the turnover of civil servants following a change in government around 2010. Table 4.4 showed that Greece and Portugal experienced changes of all or many civil servants on the three highest levels of bureaucracy. The tendency is more difficult to spot in the case of Spain, because of the lack of data on the highest level. However, as there are many changes in positions on the second highest level, and also a few changes at the third level, a legitimate assumption would be that highest level experienced either change of all or many positions with a change of government. The fact that most of the countries sampled experienced their highest turnover on the highest level strengthens this assumption. Based on these arguments I place Spain as having approximately the same tendency as Greece and Portugal, but slightly weaker because of the lower turnover on the third level.

A high turnover on the highest level, advisors to the ministry's leadership, is shared by most of the sampled EU countries in table 4.4, and is not a controversial feature. However the persisting high turnover on the second and third highest level is significantly less common

between the other sampled cases. This tendency of stronger governmental influence on the composition of the higher levels of civil service could indicate a more dominant role of the government in these cases. A significant weakness here is the lack of time series data, which could have revealed if the tendency persisted over time. However the picture is reinforced when coupling the findings in table 4.4 with the evidence on CBI discussed in subsection 5.2.2. The strong influence on monetary policy throughout the 1980s and its influence on the persisting high inflation, especially in Greece, is a clear indication that the government have strong mandate in conducting policy, and thereby strong governmental dominance. This is in accordance with Magone's (2003) emphasis on how fragmentation in the legislative bodies and mechanisms in favor of the executive branch has led to a imbalanced form of parliamentarism, with the government as the main player in policy-making. The possibilities this created for the incumbents included increasing public indebtedness, thereby increasing the vulnerability towards *debt crises*.

When it comes to *bureaucratic efficiency*, no clear tendency could be read out of table 4.4. As for most of the other sampled EU countries, the findings here showed no turnover (or not available data) of civil servants on the three lowest levels of bureaucracy (4-6). Based on the theoretical review on the clientelistic patterns in subsection 2.4.2 this is not surprising in itself. According to Sotiropoulos (2004), the typical procedure after a change in government in the lower branches of public administration has been to create temporary positions for sympathizers of the new governing party, which later has been made permanent. This strategy has contributed to a consistently growing and inefficient bureaucratic corps after democratization in the mid-1970s, especially in Greece but also in Portugal and Spain. The tendency was to some degree reversed in the 1990s, where reforms of retrenchment of the public sector and privatizations were carried out, but is still clearly evident (Sotiropoulos 2004, p. 417-8). It has been a challenge to find data that could confirm these patterns. Statistics on employment in public administration in GSP are inconclusive, and limitations of reliability of the data are often specified. In this way my findings on turnover of civil servants does not confirm the patterns of bureaucratic efficiency and its effect on the *severity of financial crises* as indicated in *H6*, but does not disconfirm them either. Paired with the positive evidence on *governmental dominance*, I argue that *H6* is partially confirmed, but that more research is needed on this point.

5.4.2 Public Social Expenditure

The variable *public social expenditure* was measured as percentage of GDP, as displayed in figure 4.12. The main findings here were that all three countries of GSP had a significantly lower level of *public social expenditure* through the bulk of the period of 1980-2011, but with a persisting trend of increase in expenditures. Before 1995 Spain had a converging trend towards the EU average, but experienced a "dip" after this and has been following a similar trend to Greece and Portugal since. During the last years of the period GSP experienced some convergence towards catching up with the trend of the EU average, but their level were still lower at the end in 2011. Moreover, the apparent tendency of closing in on the gap to other European countries could in reality be a result of a decreasing level of GDP, rather than an actual increase in social expenditure. Taking this into account I would argue that the theoretical emphasis on the rudimentary character of the *Mediterranean* welfare state model is also reflected in the findings on *public social expenditure* here.

In addition to the main measure, I also applied the indicator *public pensions expenditure as a percentage of GDP,* to account for the theorized imbalances in the *Mediterranean* welfare states. The findings of figure 4.13 showed a persisting higher level of public pensions expenditure for Greece and Portugal, compared to Spain and the EU average. All four cases shared the trend of slight increasing levels, but no convergence between the former and the latter is evident. A weakness here is the relatively short scope of time, from 2005-2009, but the differences in levels are still quite clear. The results for Greece and Portugal is in line with Ferrera (2005) and Garcia and Karakatsanis' (2006) emphasis on the "dualization" of social protection in Southern Europe, where active participants of the labor market, especially in the public sector, receives welfare benefits that are significantly more generous than for the unemployed population.

The dualistic feature of welfare benefits was according to *H7* expected to be strongest in Greece, which it is. However, the score of Portugal show a similarly strong pattern, which was not accounted for in *H7*. As expected, Spain did not share this high level of *public pensions expenditure*. I would therefore argue that *H7* is confirmed by the empirical evidence, but with a stronger imbalance in Portugal's welfare system that expected. The lower level of social spending therefore appears to have caused a somewhat more severe financial crisis in Spain than for the EU average. The pattern has been reinforced by further imbalances of social protection created by the public pensions system in Greece and Portugal, causing a

more severe debt crisis situation for these cases, especially the former, driven by increased welfare costs on a limited part of the population combined with low capacities of taxation.

5.4.3 Segmentation of Labor Market

The last explanatory variable applied in the causal explanation of *severity of crisis* in this thesis is *segmentation of labor market*. This is measured by the employment rate of youth (15-24), women and men (15-64), as shown in respectively figure 4.14, 4.15 and 4.16. The strongest tendency here is that Portugal had a significantly higher employment rate for all three groups throughout the period of 1983-2012. They also slightly exceeded the EU average level for the majority of the period. After the financial crisis hit in 2007 Portugal experienced significant reduction of the employment rates for youth and men, but remained at a higher level than Greece and Spain, reaching respectively 23.6 and 64,9 percent in 2012. The decrease of women's employment was minimal, ending at a similar level as the EU average with 58.6 percent in 2012. The results for Portugal therefore constitute a significant deviation from *H8*, suggesting that high barriers for youth and women have had a negative impact on economic performance. Therefore, the theorized Southern European pattern of the segmented character of the labor market does not seem to apply for Portugal, and cannot be weighted as a eligible explanatory factor of their higher *severity of crisis* than the EU average.

However, turning to the employment rates of Greece and Spain, the segmentation of the labor market appears to be a considerably clearer feature. For the majority of the period of 1983-2012 youth and women's employment rates were at a lower level than the EU average, while men's employment followed a similar trajectory to the EU average. The only exception is Spain's youth employment between 2004 and 2008. After the European financial crisis hit in 2007, both cases experienced considerable employment rate declines. These were especially dramatic for youth and men, with Spain reaching respectively 18.2 and 60.2 percent in 2012, and Greece 13.1 and 60.6 percent the same year. The decline for women's employment was less steep, reaching respectively 50.6 and 41.9 percent for Spain and Greece in 2012.

The significant differences in the levels of employment between men, women, and youth in Greece and Spain consist with the segmented character of the labor market emphasized by Garcia and Karatsanis (2006), and could be used as a confirmation of its causal relationship on the dependent variable *severity of crisis*. However, its casual importance could be questioned, based on the assumption that a strike of a crisis, with the consequence of decreasing employment rates, should reinforce the “dualized” pattern. This is not the case in

neither Greece nor Spain, where the decline for men was similarly steep as for youth, and stronger than for women. Then again it is important to take into account that lower employment rates reduces the possibility of steep declines, especially when they are as low as the youth employment in Greece, being at 24.2 percent in 2006 the year before the strike of crisis. I would therefore argue that the findings on Greece and Spain partially consist with *H8*, without being fully confirmed because of the lack of the reinforcement of the employment patterns after the strike of crisis. This would have been a clear indication of its influence on the *severity of crisis*.

5.5 Summary of analysis

Table 5.1: Key elements of the analysis and compliance with hypotheses

	Greece	**Portugal**	**Spain**
Severity of crisis 2007-2012 (dependent variable):	Banking crisis and severe debt crisis.	Banking crisis and substantial debt crisis.	Banking crisis and "close to" debt crisis.
Hypotheses/Explanatory variables:			
H1, bank regulation: Low (compared to EU average) in GSP.	No clear tendency (weakened)	No clear tendency (weakened)	No clear tendency (weakened)
H2, central bank independence: Low de facto CBI in GSP.	Low CBI with inflating policies throughout 1980s (strengthened)	Low CBI with inflating policies, reversed before Greece (partly strengthened)	Low CBI with inflating policies, reversed before Greece (partly strengthened)
H3, sectorial composition and productivity: Strong public service sector dominance and low productivity in Greece, moderate in Spain and Portugal.	Strong service sector dominance, high state control, low productivity (strengthened)	Moderate service sector dominance, high state control, low productivity (partly strengthened)	Normal service sector dominance, low state control, high productivity (weakened)
H4, *taxation*: Highly ineffective tax system in Greece, moderately in Spain and Portugal.	Low tax revenues, consumption tax dominance (strengthened)	Low tax revenues, consumption tax dominance (strengthened)	Low tax revenues, less consumption tax dominance (partly strengthened)
H5, *patterns of foreign trade*: High trade deficit and inter-industry trade dominance in GSP.	High trade deficits, inter-industry dominance (strengthened)	High trade deficits, inter-industry dominance (strengthened)	Moderate trade deficits, less inter-industry dominance (partly weakened)
H6, governmental dominance and bureaucratic efficiency: High executive dominance and inefficient bureaucracy in Greece, moderate in Spain and Portugal.	Strong government dominance, no clear trend on bureaucracy (partly strengthened)	Strong government dominance, no clear trend on bureaucracy (partly strengthened)	Relatively strong government dominance, no clear trend on bureaucracy (partly strengthened)
H7, public social expenditure: Low in GSP, combined with high public pensions in Greece.	Low with high public pensions (strengthened)	Low with high public pensions (partly strengthened)	Low with low public pensions (strengthened)
H8, segmentation of labor market: High barriers for the entry of women and young people to the labor market in GSP.	Segmented, but pattern not reinforced by crisis (partly strengthened)	Not segmented, similar trend to EU average (weakened)	Segmented, but pattern not reinforced by crisis (partly strengthened)

Table 5.1 sums up the main points of the analysis, considering the findings on the dependent variable *severity of crisis* and the explanatory variables, in light of the hypotheses formulated in section 2.5. In line with the expectations that I based my choice of a MSSD approach on, the analysis showed that Greece was the most severe case of financial crisis. In addition to experiencing a *banking crisis* over three years, along with most of Europe, Greece suffered from the most severe case of *debt crisis*, reaching a debt-to-GDP ratio of 162.3 at the worst in 2011 as shown in figure 4.3. Table 5.1 also reveals that Greece scored similar to or worse than Spain and Portugal on all the explanatory variables applied in this thesis. The analysis has shown that the increasing need for public expenditures to finance increased government spending after democratization started in 1974 not was reflected in substantial increases in taxation. Greek governments instead pursued alternative strategies, including actively increasing inflation to attract revenues throughout the 1980s, which had a strong damaging effect on their level of debt. Despite this *public social expenditure* remained on a markedly lower level than the EU average, except for specific groups such as pensions for public employees. The Greek economy has been characterized by low competitiveness and productivity, and a segmented labor market with high barriers for entry of youth and women.

According to the analysis, as shown in table 5.1, Portugal experienced the second most severe case of financial crisis, also in line with the expectations accounted for in section 1.3. Similar to Greece, they have had low levels of taxation, productivity, and competitiveness in trade, and *public social expenditure* have been on a low level with imbalances in form of higher expenditure on public pensions. However, Portugal managed to achieve *CBI* and reverse inflation at an earlier point than Greece, which could contribute to explaining why the level of *debt crisis* is significantly lower, yet still substantial. It is also worth mentioning that the analysis of Portugal showed a clear deviation from *H7*, considering *segmentation of the labor market.* The findings showed that Portugal had a similar trend of employment rates as the EU average, even exceeding this level in some periods, suggesting that this variable is not applicable for an explanation of the *severity of crisis* in this case.

Table 5.1 also reveals that the analysis has put Spain as the least severe case of crisis. In addition to the occurrence of a banking crisis, Spain has only experienced a debt situation *close* to a crisis level. Compared to Greece and Portugal, they deviate significantly less from the EU average, with a similar debt-to-GDP ratio, but with a higher level of deficits as a percentage of GDP. This is also reflected in the findings on the explanatory variables. Both in terms of *sectorial composition and productivity* and *patterns of foreign trade* Spain's path is

closer to the EU average than to Greece and Portugal. This could suggest that the findings on Spain deviates from the applied MSSD setup that form the basis of this thesis, and that they are less similar to Greece and Portugal than assumed. However, in terms of *CBI, taxation*, and *public social expenditure* the findings of Spain supports fully or partly the hypothesized causal impact. Also, in contrast to Portugal, Spain has a significant *segmentation to the labor market* similar to the trend in Greece. This suggests that the MSSD approach could be legitimized here as a tool in regional studies, as pointed out by Moses and Knutsen (2012), if not in its archetype stringent form, where the cases should be similar on all but one explanatory variable in addition to deviation on the dependent variable.

Chapter 6: Conclusions

6.1 A Tragedy Unfolding as Expected?

The objective of this thesis has been to answer the following research question:

> *What factors are crucial for explaining the severity of the financial crisis in Greece, Spain, and Portugal, and their apparently more severe strike of crisis than the EU average? What explain potential differences in the character and severity of crisis between these cases?*

The research question was developed on the basis of two main assumptions. The first of these was the notion of Greece, Spain, and Portugal as similar cases with particularly severe individual experiences of the European financial crisis, in the aftermath of the collapse of the American real estate market in 2007/2008. By conducting a *within case* analysis of these three cases, with values of the EU average on the variables measured by descriptive statistics, I wanted to test this assumption and identify causal factors that could contribute to explaining this outcome. The second assumption was that Greece stands out as the most severe case of crisis among the three. This was mainly based on the substantially larger financial support granted by the euro zone to Greece, compared to Spain and Portugal. On the basis of this I applied a MSSD approach, to single out the deviating explanatory variable(s) that could help explain Greece's higher *severity of crisis,* despite the similarities of modern political and economic history they share with Spain and Portugal. In order to define the dependent variable *severity of crisis*, I used Reinhart and Rogoff 's (Reinhart and Rogoff 2009) classification of four main types of crises, banking, currency, debt, and inflation. The level of

severity was measured by the frequency of each type of crisis, as well as accounting for the variation of levels within these types where possible. The set of explanatory variables was developed on the basis of theoretically emphasized elements of economic and political development in Greece, Spain and Portugal, following the fall of their respective authoritarian regimes around 1975.

The qualitative analysis of the selection of descriptive statistics and secondary literature applied in this thesis showed a general support of the assumption that Greece, Spain and Portugal experienced particularly severe cases of financial crises, compared to the EU average. Occurrences of *banking crises* were identified in all three cases, as well as for most of the other sampled EU countries. In accordance with Reinhart and Rogoff's (2009, p. 145) emphasis of the sequencing of a typical financial crisis, this widespread occurrence of *banking crises* as a common feature of the European financial crisis, serving as an amplifying mechanism for deeper recession in specific cases. This variation was identified in the case of *debt crisis.* Here Greece stood out as the clearly most severe case of *debt crisis*, with Portugal also experiencing a steep increase in the debt-to-GDP and deficit-to-GDP ratio far more dramatic than the EU average. Spain was the case showing the least deviation from the EU average with a similar debt-to-GDP situation, but with a more severe deficit-to-GDP ratio placing them as a "near debt crisis" case. Moreover, while Spain was closest to the EU average on most of the explanatory variables, there were only two variables (*bank regulation* and *sectorial composition and productivity*) where they did not show some degree of a worse situation than the EU average. My conclusion on the first part of the research question is therefore that the all three cases experienced a more severe strike of financial crisis than the EU average, as expected. Furthermore, I consider the explanatory power of the set of explanatory variables, derived from their similar modern political and economic history, to be generally strong. An exception is the explanatory variable *bank regulation*, where the hypothesized causal relationship was weakened in all three cases.

When it comes to the second part of the research question, considering potential differences in *severity of crisis* between the three cases, the analysis also consisted with the underlying assumption. Greece stood out as the clearly most severe case of financial crisis, experiencing a substantially more severe *debt crisis* than Portugal and Spain, consistent with the expectation that formed basis of the choice of MSSD. In addition, Portugal experienced a more severe crisis than Spain, in accordance with my secondary assumption expressed in section 1.3.

I would argue that the crucial explanatory variable differing Greece from Spain and Portugal is *central bank independence* (CBI). The analysis showed that Greece applied the most extensive practice of government controlled monetary creation after the fall of their authoritarian regime in 1974, causing a level of inflation on over 20 percent throughout most of the 1980s. This contributed to an increasing level of debt, which caused greater vulnerability towards *debt crisis*. These deliberate inflating policies were also practiced in Spain and Portugal, but they started reversing the trend at an earlier stage, around their admission to the EU in 1986. Among the other central explanatory variables contributing to the severe financial crisis in Greece were the low levels of *taxation,* their unfavorable *sectorial composition and productivity* and *patterns of foreign trade*, as well as a highly *segmented labor market* with high barriers for participation of youth and women. Portugal was characterized by similar weaknesses, except for having a considerably less *segmented labor market*. Spain on the other hand, had a *segmentation of the labor market* similar to Greece, but with more moderate negative tendencies on the other variables. As argued in section 5.5, the fact that Spain shows at least some deviation from the EU average on most of explanatory variables could justify my less stringent MSSD adaption, treating it mainly as a tool for a regional study rather than a controlled experiment.

6.2 Theoretical Implications

This study has supplemented the existing literature on financial crises, by conducting an in-depth inquiry of the assumed most severe cases of the European financial crisis. This has given the opportunity to explore several explanatory factors linked to the development of the political economies of these specific cases, in order to develop a framework for explaining the level of *severity of crisis* in these cases. As a highly complex phenomenon, more research is needed to build on this knowledge and clarify the picture further, and explore nuances and other possible explanatory variables not explored in this thesis. A suggestion for further research building on these findings is to further explore the effect of the shadow economies of these countries on financial crises, which have developed as a consequence of the segmented character of the labor market and welfare services. Furthermore, more knowledge on the effect of the inefficiencies and trends of the bureaucratic system is needed, as they constitute an extensive and problematized sector in these countries, especially in Greece. In addition, I hope that my work on developing a measure for *severity of financial crises* could be developed further. For example could a more precise and standardized index open for the possibility of applying this dependent variable in quantitative analyzes.

6.3 Policy Implications

The complexity of the phenomenon of financial crises and the factors influencing this outcome makes the task of providing specific advises for actions of political authorities an almost impossible task. However, the thesis highlights some crucial challenges for governments of new democracies that are important to be aware of to prevent increasing ta country's vulnerability towards financial crises. These are related to preventing that increased pressures on public expenditures leads to alternative risky revenue sources with considerable long-term disadvantages. The importance of developing state institutions and the scope of public spending over time cannot be underestimated here. Furthermore, initially unpopular measures of establishing a functioning system of taxation could secure a solid revenue platform for financial stability in the long run. These are extremely challenging processes to implement in typically fragile transitional regimes, but they could nevertheless serve as important ideals to work towards.

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