

Economic Stability in the Eurozone

*To What Extent Can the Public Deficit Requirements of the
“Fiscal Compact” Safeguard Economic Stability in the Eurozone?*

Bachelor-Thesis in European Studies

Presented to the Faculty of Management and Organisation

At

The Hague University of Applied Sciences

By

Stefan Mühlhoff

Student Nr.: 14055716

Class: ES3-3B

Supervisor: Enitsa Gabrovska

The Hague, 09th January, 2017

Executive Summary

The outbreak of the Eurozone economic crisis in 2008 caused one of the most difficult challenges in the history of the European Union. Output and employment decreased and faith in the European project diminished. Leading European policy makers identified fiscal irresponsibility by some member states as the crisis' principal cause. Therefore the governments of the Eurozone member states decided to strengthen the fiscal spending regulations of the Stability and Growth Pact (SGP) with stricter rules termed the "Fiscal Compact". The aim of this action was to prevent future crisis and thus to ensure the Eurozone's economic stability. This thesis is an assessment of the effectiveness of the "Fiscal Compact" rules as a safeguard of economic stability. The thesis uses a theory on economic instability of the American economist Hyman P. Minsky as the theoretical framework for assessment. All information has been collected through desk research. The thesis mainly focuses on qualitative information but does also use quantitative data to substantiate the theory. The central conclusion of the thesis is that the rules of the "Fiscal Compact" do have a positive impact on stability in the monetary union but are not sufficient and should be extended with further policies. This is because the analysis shows that excessive government deficits are not the sole threats for economic stability. Private investment behaviour also has to be considered. One policy recommended by this paper is the establishment of an early-warning system for destabilizing investment in the Eurozone. The second recommendation is the continuation of talks for the introduction of a European financial transaction tax.

Table of Contents

1. Introduction	1
2. Methodology.....	5
3. Minsky’s theory on economic instability	7
4. The main challenges to economic stability in the Eurozone	14
4.1 Theoretical Aspects	14
4.2 The Eurozone economic crisis	19
4.2.1 Greece.....	20
4.2.2 Ireland and Spain	23
4.3 Conclusions	26
5. The Stability and Growth Pact and the Fiscal Compact	28
5.1 The Stability and Growth Pact	28
5.2 The Fiscal Compact	29
5.3 The SGP, the “Fiscal Compact” and economic stability.....	30
6. Minsky and instability in the Eurozone.....	33
7. Conclusions	37
8. Recommendations for further policies	39
9. Reference List.....	42

1. Introduction

When the “Treaty on Stability, Coordination and Governance in the Economic and Monetary Union” (TSCG) was signed in March 2012, the German chancellor Angela Merkel called the Treaty a “milestone” (Deutsche Welle, March 2nd, 2012). Other European policy makers were similarly enthusiastic. The Treaty was created as a response to one of the most severe crisis in the history of the European Union, the Eurozone economic crisis. The crisis which unfolded after 2008 caused a drastic decrease of economic output and a massive increase of unemployment rates. In some countries such as Spain and Greece unemployment rates went up to over 20% (Deutsche Welle, June 18th, 2015). Almost all other Eurozone member countries were faced with soaring unemployment rates as well, even though not quite as dramatic. Irresponsible public spending and mismanagement mostly in the Southern member states were identified as the main causes for the economic difficulties in the Eurozone. The TSCG therefore sets out specific public deficit requirements which shall avoid excessive government spending and thus help to prevent future economic impasses. The deficit requirements are also referred to as the “Fiscal Compact” (“Treaty on Stability, Coordination and Governance in the Economic and Monetary Union”, March 2nd, 2012).

This kind of economic governance for the Eurozone is not new. Fiscal deficit requirements have always been an integral part of the European Monetary Union. The Stability and Growth Pact (SGP) entered into force in 1999 even before the Euro was introduced as official currency. However, the financial crisis was an indicator for European policy makers that the SGP requirements were not sufficient to safeguard stability in the Eurozone. The aim of the Fiscal Compact is to strengthen the deficit requirements of the SGP and to guarantee a stable functioning of the European monetary system (Buonanno & Nugent, 2013). As opposed to the SGP the requirements of the “Fiscal Compact” have to be transposed into national law.

Since long before its introduction, the Euro has been subject to a lively academic and public debate. This debate has intensified since the outbreak of the financial crisis. Many solutions and suggestions for how to solve the crisis have been put forward. Some scholars such as Feldstein (2012) or Mitchell (2015) argue that the Eurozone has a number of inherent deficits and should therefore be resolved. Leading European political figures like Herman van Rompuy (2012) on the other side advocate for closer economic and fiscal integration. In his report “Towards a Genuine Economic and Monetary Union” van Rompuy calls for more integrated budgetary and economic policies and stronger democratic accountability of Eurozone governance.

However, these two positions do certainly mark the two most extreme opposites in the debate. Both of these suggested ways forward do not seem to be feasible if one looks at the current political arrangements within the European Union. While there is no observable willingness among member states to abandon the Euro as a common currency, there is neither the will to give up further national sovereignty in order to get to closer economic integration. That means that the current arrangements are likely to stay in place for the foreseeable future. In consequence, the “Fiscal Compact” will be one of the most important arrangements that determine the future of the Eurozone as one of the central projects of European integration.

Since stability is a crucial element of any economy and one of the key determinants of economic prosperity and well-being, the question arises in how far the “Fiscal Compact” as a policy is sufficient to safeguard stability. This assessment is relevant because it can deliver a contribution to the question of how the Eurozone as a currency area can be sustained. It can further help to answer the question which feasible policy options are available to improve Eurozone governance. The European Union will only be successful in the long run if it can demonstrate its ability to guarantee a decent standard of living to all of its citizens. Therefore, the aim of this thesis is to evaluate in how far the “Fiscal Compact” can ensure economic stability in the Eurozone.

The central research question is:

“To what extent can the public deficit requirements of the “Fiscal Compact” safeguard economic stability in the Eurozone?”

The central thesis of this paper is that the “Fiscal Compact” has the potential to contribute to a more stable function of the Eurozone but should be extended with further policies. As a theoretical framework for assessment it uses a theory on economic instability of the American economist Hyman P. Minsky.

The paper is divided into three parts. At first, the paper outlines Hyman P. Minsky’s theory on economic instability. For doing so, the paper draws heavily on his book “Stabilizing an Unstable Economy” (2008) which is an analysis of economic instabilities in the post-World-War II US economy. Based on this analysis Minsky developed a theory on economic instabilities in capitalist economies. The theory serves as the theoretical framework for analysis.

The second part of the paper gives an outline of the main challenges to economic stability that specifically arise from the design of the Eurozone as a single currency area. Since Minsky’s theory is based on an analysis of the US economy, the unique construction of the Eurozone as a single currency area needs to be acknowledged. For doing so, the main challenges to economic stability in the Eurozone are introduced from a theoretical point of view. After that the paper takes a look at the Eurozone crisis in Greece, Ireland and Spain. Furthermore, it analyses the Stability and Growth Pact (SGP) and the Fiscal Compact as existing policies with the aim of safeguarding economic stability. Since the deficit requirements in the two treaties are similar, they are discussed both.

The third part of the paper combines the first two parts by examining in how far Minsky’s theory based on the US economy as outlined in part one can yield additional insights into economic instabilities in the Eurozone. Based on this, the paper examines the effectiveness of

the “Fiscal Compact”. It further analyses which propositions for additional policies can be made in order to improve the impact of the “Fiscal Compact”. This is done under consideration of the political realities in the European Union which means that they take into account the limited willingness of most states to give up sovereignty in favour of increased integration.

2. Methodology

In order to answer the questions of the paper, desk research has been used. Since the dissertation takes a theoretical approach to the topic desk research has been the most suitable and practical kind of research. All information necessary to answer the central question and sub-questions has been accessible through literature and online sources. The main part of the research is based on qualitative information but quantitative information that substantiates the theory has been used as well. Because the research aims to explore the underlying mechanisms of economic instability there is a stronger focus on qualitative information. During the research both primary and secondary sources have been used. The most important primary sources are the original texts of the TSCG and the SGP. The texts served as an important source of information about the nature and implementation requirements of the Fiscal Compact and the Stability and Growth Pact. Secondary literature has been used to explore existing theories and for an in-depth understanding of important theory.

The major source of information for the first part of the paper is the book “Stabilizing an Unstable Economy” (2008) by the American economist Hyman P. Minsky. The book was first published in 1986 and presents an analysis of phases of instability in the post-World-War II US economy. Based on his observations Minsky develops a theory on economic instability in capitalist economies. The central thesis of Minsky is that instability is an inherent part of capitalist economies and cannot be exclusively attributed to external shocks or bad policy decisions. Instead, he identifies the profit seeking behaviour of financial actors as the main cause for economic crisis. Phases of stability persuade financial actors that markets are stable. As a consequence, they are tempted to engage in activities that promise higher returns. Higher returns, however, are always connected with higher risks. In consequence, the perception of market stability creates instability so that phases of stability and of instability follow on each other.

Since the crisis in the Eurozone did originate after a phase of economic stability, Minsky's propositions seem to be true for the Eurozone as well. After the introduction of the Euro, the economy functioned well at low rates of inflation and moderate growth rates. After this phase of stability, the financial crisis broke out. Minsky argues that once the inherent instability of capitalist economies is recognized, it is nevertheless possible to design policies that are able to contain these instabilities.

Furthermore secondary literature has been used in order to gather information concerning key challenges to economic stability in the Eurozone. Important information sources were academic journals like the "Journal of International Money and Finance". Important books that have been used for the first part of the paper are "Crisis in the Eurozone" (2015) by Baimbridge and Whyman, and "The Incomplete Currency" (2016) by Marcelo Minenna. These helped to understand the causes of the Eurozone crisis and thus enhanced the understanding of the functioning of the currency area and the way in which the SGP and the Fiscal Compact are supposed to work.

For the assessment of the existing policies in the Eurozone, Minsky's theory of economic instability has been used as analytical framework. After introducing Minsky's theory the most important factors for economic instability in the Eurozone have been analysed. Building up on that analysis, it has been examined in how far the deficit requirements of the "Fiscal Compact" can counter economic instability by applying Minsky's theory to the Eurozone context.

3. Minsky's theory on economic instability

This chapter introduces Hyman P. Minsky's analysis of economic instability in capitalist economies as the theoretical framework for an assessment of the "Fiscal Compact". The whole chapter refers to Minsky's book "Stabilizing an Unstable Economy" (2008). The writing was first published in 1986 and contains Minsky's theory on instability in capitalist economies based on his analysis of the post World-War II US economy. Minsky's core proposition is that capitalist economies are endogenously unstable. Instability is a consequence of the profit seeking behaviour of market participants and of uncertainties related to investment. He argues that economic policies must be put in place in order to cushion instabilities. Minsky explicitly distances his theory from classical and neo-classical economic theories which state that markets are inherently self-stabilizing.

In order to understand economic instability and its causes it is useful to first look at its opposite, economic stability. In principle, economic stability refers to equality between supply and demand in a particular market. Whenever the supplied quantity of a good is equal to demand for that good, the needs of market participants can be satisfied. This is what Minsky calls market coherence. In classical economic theory markets generate coherence out of themselves. The mechanism that automatically generates coherence is the price. The price ensures that the amount of goods supplied and the amount of goods demanded are equal. If the demand of a good increases, so does its price. That motivates more suppliers to enter the market and to satisfy the increased demand. According to classical economic theory, this system guarantees coherence for any kind of market as long as the market is protected from outside interference. According to this school of thought economic instabilities are a consequence of outside influences on markets which prevent them from generating coherence out of their own actions.

This point of view is rejected by Minsky who argues that capitalist economies are more complex than the classical model states and that the normal functioning of a capitalist

economy leads to instability. This is because prices in a capitalist economy have a dual purpose. They do not only serve as an indicators for supply and demand but they are also needed to create profits for investors. In order to understand this, one needs to consider certain particularities of modern capitalist systems.

Capitalist economies produce sophisticated products, which means that they depend on large production capacities and complex production processes. The build-up of these production capacities necessitates investments. Investments are usually financed through credits. Credits must be paid back together with a certain interest rate. Investments therefore constitute costs of production that must be added to regular production costs like wages and raw materials. In order for businesses to service credits, prices must always be higher than regular production costs. Furthermore, investors do not only want to cover their expenses, they also want to gain surplus from their investments. Prices therefore serve several functions. That means that prices cannot fall below a certain level without causing difficulties for investors to service their credits. Even though it is true that prices determine supply and demand, as classical economic theories state, they serve as more than a mediator between the two.

Since there is no central planning authority in capitalist economies it is up to market participants to decide on investments. Investment decisions are always decisions about the future which means that they depend on investors' expectations about coming economic developments. These expectations are in turn influenced by experiences made in the present and the past. If current prices are high enough to cover all relevant costs and yield some additional profit, investors are rewarded for their past investment decisions. In that case they will consider to invest further.

If investment is profitable, more investment means more profit. If prices in the past and present have been favourable, investors have justified reasons to expect sufficiently high prices in the future as well. This creates a positive economic environment favourable for

investment and economic expansion. However, since no price guarantees exist in capitalist economies, investment decisions always contain a degree of uncertainty.

If prices need to ensure the generation of profits, the question is how profits are made. Profits are made only when demand for goods is high. High demand for products ensures that prices are sufficiently high to pay regular production costs, to pay off credits and to an additional surplus. If that is the case the overall economic climate is positive. Such an economic climate, creates incentives to expand economic activity in order to maximize profits. Expansion of economic activities requires investment. Investment in turn leads to an increased demand for goods in which money is actually invested. Soaring demand, as mentioned before, is a key determinant of profits. In that way an economic circle is created in which investment based on profit expectations causes profits to be actually materialised. The state of the economy depends on investors' expectations that future prices will be high enough to justify investment.

Nevertheless, there is no guarantee that this circle will run endlessly. There is always a possibility that current investments are made in assets that do not yield sufficient prices in the future. At some point demand for goods can be satiated so that prices fall. Since markets are interconnected, falling prices in one market also affect price development in other markets. Investors run into difficulties when prices fall to such an extent that they can no longer service their investment credits. Investments become unprofitable and they end up with a huge pile of debt.

Another factor that Minsky describes as influencing profits is external trade. This aspect is particularly important in the Eurozone context. If countries have a trade deficit, profits are lower because some of the domestically earned money has to be paid to foreigners to pay for imports. On the other hand, if a country has a surplus in foreign trade money will flow in from abroad so that profits increase.

In order to understand how this situation can lead to economic instability it is important to take a look at the role of the banking sector. Since most of the investment in an economy is channelled through banks, they play an important role in the emergence of economic instability. Banks are the institutions that decide which kinds of investments are actually made in an economy because they are the ones that supply the necessary credits. Minsky distinguishes between three financing modes in which banks operate.

The first financing mode is hedge finance in which banks give out credits to businesses which can pay their debts from the profits of running operations. Credits are taken up and paid back immediately without the involvement of any further financing operations. This kind of financing is not connected to high risks, which in turn means that profits for banks are modest.

The second financing mode is speculative finance in which banks give out credits to companies that do not have short-term profit expectations. Consequently, they have to take up new credits in order to service their previous credits. It is not before profits are finally made that creditors can repay their debts. An example that Minsky gives for business activity that often involves speculative finance is the construction sector. It usually takes a long time to build houses and a lot of capital is needed in the process to pay for the construction costs. However, no profits can be made before the whole house is finished and can be sold at a profitable price. All costs that incur during the construction period have to be financed by credits. Since large construction projects run over a long period of time it is difficult to predict the development of prices over the construction period. It can happen that house prices fall over time so that the profits expected at the beginning of the project cannot be realized. That means that financing of construction activities is connected to higher risks. At the same time higher risks mean higher potential profits for banks because interest rates for these credits are higher.

The third financing arrangement is Ponzi finance, which is similar to speculative finance, but even more connected to uncertainty. Since the differences between Ponzi and speculative finance are not relevant for this thesis they will not be explained in detail here.

Just like other economic actors banks are influenced in their decisions by experiences of the present and the recent past. If bankers have given out too many credits based on speculative or Ponzi finance in the past, and if these credits have not been paid back, they will shy away from risk and only give out credits based on hedge finance. Since this kind of finance is safer than the others, most credits will be paid back. If banks run their operations based on hedge finance over a certain period of time, they accumulate a decent profit.

The experience that most credits are paid back diminishes their awe to engage in riskier financing activities. In consequence, they start to give out credits based on speculative or Ponzi finance again. Since these financing forms promise higher returns, they are more interesting for banks as long as risks seem to be manageable. That means that there is a continuous financing cycle which starts with banks concentrating on hedge financing and then moving on to more speculative forms of finance as all credits based on hedge financing are paid back. This financing circle runs parallel to the developments in the economy as outlined before.

If banks move on to more speculative forms of finance, credit becomes available to more and more persons. The number of credits increases, which also means that investment increases. The increase in credit works as a driver of economic activity. Since an increase in credit means that there is more money in circulation demand for products increases. This in turn leads to higher profits and prices as has been explained above. However, prices do not rise indefinitely. At some point demand will be satiated so that prices and profits fall. At that point the huge amount of credit given out by banks turns from a driver of economic activity into a source of instability. The higher the number of credits given out on a speculative or even Ponzi basis, the more defaults on credits. More defaults in turn decrease the willingness of banks to give out

credits so that economic activity is further diminished. In such a situation a stop or at least a radical decrease in investment takes place. Economic instability is therefore a result of investment behaviour in times of a positive economic climate. A positive economic climate motivates riskier investment which at some point causes instability.

In summary, Minsky argues that free market mechanisms in a capitalist economy do not lead to coherence. They rather lead to economic instability. This is because economic activity is not only driven by current demand and supply but by market participant's expectations of future developments. If economic actors have a positive vision of the future they decide to invest in order to maximize their profits. An important role in the investment process is played by banks who give out the credits necessary for investment. If investment decisions are validated by the economic development, conditions are favourable for further investment. On the one hand investors are willing to invest, on the other hand banks are willing to give out credits. That leads to an increase in credit and in economic activity.

However, since capitalist markets do not have predetermined prices investment is always connected to uncertainty. At some point demand for any kind of product is satiated. Declining demand leads to decreasing prices and profits. If prices decrease to such an extent that they can no longer cover production costs, outstanding credits cannot be paid back. Investors then end up with a huge pile of debt and investment turns from a driver of economic activity into a source of instability.

According to Minsky, this kind of natural economic behaviour makes it necessary for legislators to create economic policies which can cushion the destabilizing effects of speculative investments. However, an important condition for the success of economic policies is that the destabilizing effects of investments are acknowledged. Economic policies based on the classical economic view that market mechanisms automatically lead to coherence cannot have a significant impact.

The question that arises from this chapter is in how far Minsky's theory is important in the Eurozone context. The Eurozone has recently been faced with economic instabilities, most significantly demonstrated in the Greek debt crisis and the financial crisis of several other Eurozone states like Spain, Ireland or Portugal. The "Fiscal Compact" is designed as a policy that has a stabilizing economic effect. If one follows Minsky's proposition, an important determinant of its impact is that the destabilizing effects of investment are taken into account. Yet it needs to be considered that Minsky's argumentation is based on his observations of the US economy. The Eurozone is different from the US economy in so far as it combines the economies of different sovereign countries in a single currency area. It is therefore necessary to look at some specific characters of the Eurozone before assessing the "Fiscal Compact" with Minsky's theory. This will be done in the following chapter.

4. The main challenges to economic stability in the Eurozone

To analyse the main challenges to economic stability in the Eurozone is a complex task. This chapter does therefore not aim to present a complete picture of the issue but rather to give an outline of the most important facets. The chapter will begin with a part in which the main aspects will be examined from a theoretical perspective. It will then continue with an illustration of how these aspects played a role in the Eurozone crisis.

4.1 Theoretical Aspects

The first aspect that will be examined here is how the single currency influences the policy options for the management of public debt in Eurozone member states. Public debt is an important factor of economic stability because it has an impact on economic activity. As Klein and Stellner (2014) have discovered, there is a positive correlation between public and corporate interest rates. Higher interest rates for private companies make it more difficult for them to obtain credit and thus have a negative effect on economic activity.

In general, public debt is created when a sovereign country has higher expenses than it has revenues. In consequence, the country has to borrow money from a private lender at a certain interest rate. The country has to pay back the amount borrowed plus an interest rate. The interest rate depends on the lender's perception of the likelihood that the country will be able to repay the debt. As Minenna (2016) points out, this perception depends to a large extent on the country's Debt/GDP-ratio. If a country has a high GDP in relation to its overall debt, investors have a higher confidence that the government is able to generate sufficient revenues that will allow it to service its debt. The interest rate the country has to pay on its credits is therefore lower at a lower Debt/GDP-ratio.

A second important factor that influences the interest rate the country has to pay is the rate of inflation (Minenna, 2016). If inflation increases, the lender will ask for a compensation of the money's devaluation and thus increase the interest rate.

Inflation does, however, also affect a country's Debt/GDP ratio (Minenna, 2016). GDP is measured in a country's national currency. Since GDP measures the amount of goods and services produced in a given country, if the prices for those goods and services increase due to inflation, so does, on paper, the GDP. The country's debt on the other hand is only partially affected by higher inflation. Since a country's debt is the accumulation of its borrowing over time, it consists of a huge number of separate credits that were made at different points in time at different rates of inflation, and therefore different interest rates.

As opposed to the GDP which rises with inflation, the credit contracts have been made in the past and are therefore not affected by current inflation. That means that a higher inflation does have a positive effect on the Debt/GDP ratio. While the GDP as the denominator rises as a whole with higher inflation, the debt as the numerator does not rise at an equal level. A consequence of that is that governments can devalue their debt by increasing the inflation rate. However, a necessary precondition for this is that governments have the capacity to influence inflation. A very important tool to control inflation is the monetary policy carried out by a central bank (Board of Governors of the Federal Reserve System, n. d.).

In the Eurozone, the political institution that is tasked with the control of inflation is the European Central Bank (ECB). Article 127 of the Treaty on the Functioning of the European Union (TFEU) defines price stability as the central goal of the ECB's policy (van Ooik & Vandamme, 2013). The ECB itself defines price stability as an annual inflation rate of below 2 % (European Central Bank, 2016). In consequence, the above mentioned way of managing public debt by increasing inflation is not a feasible policy option for members of the Eurozone.

If the Debt/GDP-ratio of a Eurozone member state worsens, that state consequently has to look for other options that can help to control its public deficit.

Two possible options are to either increase revenues by raising taxes or to cut public spending. These two options are, however, limited because tax revenues cannot be increased indefinitely and public spending cannot be cut without limits either. This is true for any kind of government. Nevertheless, it is especially true for the Eurozone. People can move and choose their work freely within the European Union and the same is true for capital. That means that excessive taxation in one Eurozone country can create incentives for people to move to other countries where their income is less affected by taxation (Stiglitz & Heymann, 2014). Since this option is especially feasible for highly educated people with higher employment opportunities, increasing taxation might weaken the country's economy and thus even worsen the situation. Capital owners can similarly transfer their money to bank accounts in other Eurozone countries without any risks related to fluctuations in exchange rates. The second option, public spending cuts, does not present a definite solution either. If the quality of a country's public services deteriorates due to a cut in government spending, this might equally motivate people to migrate to other member states with better public services.

According to Paul de Grauwe (2012), the fact that members of the Eurozone cannot control their monetary policy also makes governments more vulnerable to self-fulfilling prophecies. Countries with a sovereign monetary policy have the option to print new money via their central bank as the last resort to service their debt. Since this option is not feasible for Eurozone countries, it is difficult for governments to guarantee that they will be able to repay their debts. In consequence, the sole perception of difficulties by financial actors can be enough for them to lose trust. A lack of trust is reflected in higher interest which can then create the financial difficulties investors were fearing. From that analysis, de Grauwe concludes that "financial markets acquire great power in a monetary union" (p. 258, para. 2).

To sum up, Eurozone membership significantly constraints the way in which states can manage their debt and leaves them more vulnerable to financial actors. A devaluation of debts via inflation is impossible. Changes in fiscal policies do also have limitations. A consequence is that in the Eurozone, as Pisani-Ferry (2012) puts it “sovereign default is a risk to consider” (p. 5, para. 2). Keeping in mind the correlation between interest rates on public and private borrowing that has been mentioned above, it is obvious that a sovereign default would present a definite challenge to economic stability.

A second important way in which the Eurozone creates a challenge to economic stability is a missing adjustment mechanism for exchange rates (Arestis & Sawyer, 2013). A lack of such a mechanism can lead to permanent imbalances by which certain countries of the currency area consume more than they produce, while the opposite happens in other countries. Further explanation for this will be given in the following paragraphs.

Without a common currency, every Eurozone state would have its own national currency. In that case anyone wanting to buy goods from another state would have to exchange national currency into foreign currency. The same would be true for financial actors that want to invest their capital in another country. In that case a high demand for one country’s currency would drive up the price of the currency and make trade or investment less profitable. This does not happen if there is only one currency (Minenna, 2016).

As Minenna (2016) maintains, there are two ways in which missing exchange rate adjustments can become a problem. The first is a difference in inflation. If two countries experience different rates of inflation, that means that prices in one country increase faster than in the other. In a currency area, this can for example be caused by different levels of productivity. Different price levels make it profitable for merchants in the country with higher inflation to import goods from the country with lower inflation. Goods in the country with lower inflation are cheaper. Without a currency union, goods imported from another country must be paid in

foreign currency. Therefore, merchants must buy foreign currency in exchange for their domestic currency. In consequence, if there is an excessive demand for products from the country with lower inflation, the demand for that country's currency will increase. An increase in demand means an increase in price. If the price for a currency goes up, it becomes less attractive to trade in that currency. This mechanism allows for an adjustment of prices for imports and exports between countries with different currencies. Different levels of productivity can be levelled out in that way.

However, in order for that mechanism to function each country must have its own currency. This is not the case in the Eurozone. If there are price differences in Eurozone countries, it is not difficult for other Eurozone members to import goods from the country with lower prices. As a consequence, countries that can produce goods at lower prices can consistently export their products to other members of the Eurozone. If that is the case, some countries consistently produce more than they consume while other countries consistently consume more than they produce. In order to sustain that in the long run, countries with a higher consumption need to borrow money in order to pay for their imports. This is again facilitated by the fact of a single currency, which makes it easier to obtain credits from financial actors in other Eurozone countries, as Krugman (2011) observes. Krugman suggests further that countries that are faced with high import rates from within a monetary union have only few policy options to correct that imbalance. One possible way of doing that is to lower prices for domestic goods, which usually means to lower domestic wages. However, this is obviously not a popular option. Another possibility would be an increase in productivity which is not achievable within a short time.

The second reason why a missing adjustment mechanism can be problematic is a difference in interest rates (Minenna, 2016). If there are differences in interest rates in different countries, investors will seek to move their money to the country in which they can achieve higher returns. The problem following from that is quite similar to the one described above for the trade in goods. If interest rates in one Eurozone country are up, it is easy for financial actors

to transfer their money to that country. Since there is no currency exchange needed, the rapid shift of capital from one country to another does not cause a change in exchange rates. Instead, investors can continue to transfer their money as long as the difference in money demand remains. That means that the common currency potentially threatens economic stability by creating huge imbalances in financial flows (Minenna, 2016).

In summation, there are several ways in which the Eurozone as a common currency area creates challenges to economic stability. Firstly, it leaves countries with a limited number of policy options to manage their sovereign debt. In consequence, countries are more dependent on financial actors and the likelihood of sovereign default increases. High amounts of sovereign debt are also potentially harmful to economic activity because they make it more difficult for private actors to obtain credits at affordable prices. Secondly, the single currency facilitates the emergence of imbalances in trade and in investments. The single currency allows Eurozone members that produce goods at lower prices to export to other Eurozone states without price increases due to exchange rate adjustments. This phenomenon is fostered even further by the fact that importing member states can easily borrow money all over the Eurozone to pay for their imports. Similar things can happen when there are differences in interest rates between nations.

The second part of the chapter will look at how the financial crisis that broke out after 2008 demonstrated in reality what has been described above.

4.2 The Eurozone economic crisis

This part of the chapter will take a look at the Eurozone economic crisis which unfolded after 2008. It will demonstrate how the threats to economic stability that have been described before became observable in reality. Given the complexity and breadth of the issue the following part will focus on three countries: Greece, Spain and Ireland. The three countries are among the most affected by the financial crisis. Furthermore, they all had different economic

conditions before the crisis broke out. As Stiglitz and Heymann (2014) point out, the financial crisis in Greece was rather caused by government failure, while the crisis in Spain and Ireland was caused by the failure of private actors on financial markets.

4.2.1 Greece

For many scholars like, de Grauwe (2010), severe mismanagement and fiscal irresponsibility has made Greece the centre and principal cause of the Eurozone crisis. Greece has been faced with difficulties regarding its public finances since it entered into the Eurozone. The country's public deficit has steadily increased since it became a member of the common currency area in 2001 (Tsoukalis, 2013). At the beginning of the crisis in 2008 the Greek debt accumulated at 109.4 percent of the country's GDP, as compared to 68.5 percent for the Eurozone average (Eurostat, n. d. b). At the same time however, the country had to pay interest rates that were similar to other Eurozone member states with a considerably lower debt-GDP ratio (Higgins & Klitgaard, 2011). Before 2009, the credit risk of all Eurozone member countries was perceived as similar by financial actors.

According to Pisani-Ferry (2014), there are mainly three reasons for why interest rates for Eurozone countries were almost identical before 2009. The first is that financial markets change between phases of optimism and pessimism. In phases of optimism they tend to react in favour of higher returns and neglect risks, whereas in phases of pessimism the opposite happens. Therefore, the phase after the introduction of the Euro in 1999 can be seen as a phase of optimism in which risk was neglected in favour of returns. The outbreak of the financial crisis in the US can be regarded as a turning point after which financial markets changed from profit seeking to risk minimisation. The second reason is that risk assessments for sovereign countries is difficult and costly and was therefore neglected before 2009. The third reason Pisani-Ferry suggests is that investors speculated that countries in fiscal difficulties would be bailed out by other members of the currency area.

Taking into consideration that the debt-GDP ratio does normally play a crucial role in determining the interest rates a country has to pay, the change in interest rates after 2009 does not seem to be a surprise. It should rather be seen as a surprise that Greek interest rates were so low before 2009. For the reasons mentioned above investors trusted Greek sovereign bonds and charged low interest rates before the outbreak of the crisis. After the outbreak of the financial crisis an inverse development took place (Grauwe & Yuemei, 2013). As outlined in the previous section, membership in the Eurozone drastically limits the policy options available for states to deal with sovereign debt and thus increases the likelihood of sovereign default. What had been neglected before suddenly became apparent. The perception of increased risk led investors to ask for higher interest rates for Greek sovereign bonds.

The increase in interest rates confronted the Greek state with a serious problem to service its debt. As a consequence, the country had to ask for financial assistance from other Eurozone members and the International Monetary Fund (IMF) ("Greece accepts bailout package", May 2nd, 2010). Their financial assistance was connected to strict austerity requirements, which in turn had severe consequences on the real economy. Even though these measures prevented the Greek default it is not yet clear how a final solution for the debt problem will look like. Within the current arrangements Greece would have to continue repaying its debt from the crisis until 2054 (Schumacher & Di Weder Mauro, 2015) The limited policy options for Eurozone members to manage public debt turned out to be a problem in the case of Greece.

The fact that the Greek government was able to accumulate such a high public deficit does raise the question where the money they borrowed came from. In order to answer this it is useful to look at the second challenge to economic stability that has been outlined in the first part. As has been described, the single currency facilitates trade imbalances between members. According to Lane (2012) between 2003 and 2007 Greece had a trade deficit of 9.1 percent. A high share of their imports came from other Euro countries like Germany or the Netherlands. The structure of the Eurozone facilitated Greek imports. On the one side the country had to take up credit in order to pay for its imports. On the other side, as Varoufakis

(2013) points out, investors in Germany or the Netherlands were looking for places to invest the money which these countries generated from their exports. Therefore most of the credits which the Greek government took up in order to pay for the country's imports came from the exporting countries themselves. However, it is important to note that most of the money which the Greek government borrowed came from private investors that were seeking to invest their money with a certain profit. Even though the Greece debt-GDP ratio had been high from the very beginning, investors decided to neglect this fact and borrow their money to the Greek government. The missing exchange rate adjustment facilitated the imbalances in trade and finance and is therefore an important contributor to the crisis.

In summary one can state that the challenges to economic stability as outlined in the first part did indeed play a role in the Greek crisis. Limited policy options to manage public debt turned out to be a problem after the crisis broke out. A missing adjustment mechanism facilitated the accumulation of public deficits. Nevertheless, another important factor was the behaviour of market participants themselves. In order for Germany and other exporting countries to continue with their exports, it was necessary that importing countries like Greece had access to credit which allowed them to pay their imports. Access to credit only became possible because investors in the exporting countries made it available to the Greek government with the expectation of profit. The running of the system was facilitated by the single currency. The crisis was therefore caused by both the design of the Eurozone system and by the behaviour of the actors in the system. In the case of Greece it was mainly the government that borrowed extensively.

The next section will briefly outline the situation in Spain and Ireland which was different from the one in Greece.

4.2.2 Ireland and Spain

Even though Ireland and Spain were equally affected by the crisis as Greece, their governments did not continuously accumulate debts in the way the Greek government did. In fact, their debt-GDP ratios until 2009 were within the limits set by the Stability and Growth Pact (Eurostat, n. d. b). These ratios only began to deteriorate after 2009. The following paragraphs will describe the situation in Ireland and after that the situation in Spain will be explained.

Before 2009 Ireland had been in a phase of continuous economic growth which had begun in the 1990s. This time is also called the “Celtic Tiger” period (Kitromilides, 2012). During the 1990s economic growth in Ireland had been driven by investments of American IT-companies like Microsoft, Intel, Dell and others. This investment decreased in the beginning of the new century but the economic growth continued. After 2003, that means after Ireland joined the Eurozone, it was mainly led by the construction sector. As a consequence of the first phase of economic growth Ireland attracted a high number of immigrants mainly from Eastern Europe. The growth in population led to an increased demand in real estate. This in turn led to an increase in prices which created incentives for property development. Other factors that drove up prices for real estate were the generally higher income levels caused by the initial phase of economic growth and the fact that house prices were comparatively low during the 1990s (Lane, 2011).

The construction sector profited from credits that were easily obtainable from domestic banks. A considerable amount of the money which the banks were able to lend came from other Eurozone member states. As in the case of Greece, investors from export dominated countries borrowed their capital to Irish banks in order to profit from the Irish economic growth. According to Lane (2011), the amount of money Irish banks borrowed from abroad more than tripled between 2003 and 2008. As Kitromilides (2012) underlines, the fact that Irish banks had easy access to capital from other Eurozone countries led to a loosening of the banks’ lending criteria. Again, the single currency made it easy for investors to transfer their money to Ireland

without having to fear any changes in exchange rates. Competition between banks to give out credits led to ever looser lending criteria. As a consequence of this more credits were given out on an unsolid basis. According to White (2010) there was a 156 percent increase in investment in real estate between 2000 and 2008.

The economic activity in the construction sector also led to high tax revenues for the Irish state. However, as in the case of Greece, when the economic crisis broke out in 2009 investors lost trust in the Irish economy and began to withdraw their money from the country. Furthermore, house prices fell continuously during the crisis Lane (2011). Faced with a shortage of credit the economy slowed down and tax revenues decreased. The slowdown of the economy also increased unemployment, thus increasing government spending obligations for social security. As a consequence, the debt-GDP ratio increased to 120 percent in 2013 (Eurostat, n. d. b).

Even though the Irish situation is different from the case of Greece, there are certain similarities. In both cases the crisis was preceded by a period of excessive borrowing of foreign capital which was facilitated by the single currency. In the case of Greece, it was the government which took up the debt, in the case of Ireland it were private banks. However, in both cases money came from exporting countries like Germany, the Netherlands or Austria (Varoufakis, 2013) from where investors aimed to obtain profits.

The following paragraphs will now examine the situation in Spain. As in the case of Ireland, the Spanish debt-GDP ratio before the outbreak of the crisis in 2008 stood at 39.4 percent which is considerably lower than the Eurozone average (Eurostat, n. d. b). Similar to the Irish case, the Spanish economy grew continuously between the introduction of the Euro and the economic crisis in 2008 (Ferreiro & Serrano, 2012). Main drivers of the economic growth were the construction and the services sector.

Just like the Irish economy the Spanish economy had been growing before the introduction of the Euro. The phase of economic growth started in the second half of 1996 and continued just until the outbreak of the crisis in 2008 (Ferreiro & Serrano, 2012). However, as Neal and Garcia-Iglesias point out (2012), the continuation of economic growth after the introduction of the Euro had been mainly fuelled by foreign capital. Most of that foreign capital came from other Eurozone member countries (Etxezarreta, Navarro, Ribera & Soldevila, 2011). As in the case of Ireland, the construction sector was an important contributor to that growth. The most part of the activities in the construction sector were financed by credits. According to Ferreiro and Serrano (2012) the private Spanish debt in 2007 stood at a rate of 116 percent of the GDP.

The economic growth did at the same time lead to a higher inflation than in the rest of the Eurozone. That means that the prices for Spanish goods were increasing faster than in other countries, making Spanish exports less attractive. The negative effect of inflation on exports was amplified by the fact that the main drivers of economic growth were the construction and the services sector which do both not contribute to exports (Neal & Garcia-Iglesias, 2012). As a consequence, imports from other Eurozone countries were comparatively cheaper. Therefore Spain's imports continuously exceeded its exports. The imports were again financed by foreign credits from other Eurozone member countries.

As in the cases of Ireland and Greece, the absence of exchange rate adjustments made it possible to sustain these imbalances until the outbreak of the crisis. As Ferreiro and Serrano (2012) point out, the economic growth abruptly stopped after the beginning of the crisis. Since foreign capital did no longer flow in, the credit driven economy stopped to grow. The decrease in economic activities in turn led to a decreasing inflation. Despite a decrease in prices Spain was not able to mitigate its negative trade balance. A considerable part of the economic growth was due to real estate investment with no effect on external trade. The decreasing inflation did nevertheless also affect the real estate sector because real estate prices were falling as well (Varoufakis, 2015). With real estate prices falling investors were unable to repay their credits and economic activities decreased even further.

The decrease in inflation did not only affect the private activities but also had an impact on the Spanish sovereign debt. As described in the first part of the chapter, inflation can be an important factor for the sustainability of sovereign debt. Therefore, when the inflation in the Spanish economy turned into a deflation in 2014 and 2015 (Eurostat, n. d. a) it had negative effects on the Spanish debt-GDP ratio. While the country's debt-GDP ratio stood at 35.5 % in 2007 it was at more than 100 % in 2014 (Eurostat, n. d. b). Eurozone membership limits the country's policy options to deal with these effects. It cannot influence inflation rates via monetary policy while at the same time it is difficult to increase tax revenues due to the bad state of the economy (Baimbridge & Whyman, 2015).

The Spanish case is thus another demonstration of how the challenges for economic stability explained in the first part played a role during the Eurozone crisis. As in the cases of Greece and Ireland, the single currency allowed foreign financial actors to lend their money to Spain. As in the case of Ireland, it were mainly private actors that borrowed from other Eurozone states. Sovereign debt only became a problem after the outbreak of the crisis and as a consequence of the Eurozone architecture. It did not cause the crisis in the first place. However, as in the other two cases, this would not have been possible without foreign investors that were willing to lend their money.

4.3 Conclusions

The chapter aimed to outline general challenges to economic stability that are a consequence of the Eurozone architecture. The most important challenges are the elimination of sovereign monetary policies and of exchange rate adjustment mechanisms. Without sovereign monetary policies Eurozone member states can no longer control their debt-GDP ratios as an important way to manage public deficits. Other policy options to do that like tax increases or spending cuts are limited as well. This makes countries more dependent on risk perceptions of financial actors and increases the likelihood of sovereign default. Without an exchange rate adjustment

mechanism it is easier for both, capital and goods to continuously flow from exporting countries to importing nations.

The cases of Greece, Ireland and Spain demonstrated how these challenges to economic stability played an important role in the Eurozone crisis after 2008. All countries did continuously borrow money from other Eurozone members, especially Germany, the Netherlands, Finland and Austria (Varoufakis, 2013). In the case of Greece it was primarily the government that borrowed, in the cases of Ireland and Spain it were private actors. All three countries experienced difficulties in the management of their public debt as a consequence of restricted policy options. Nevertheless, it was also the behaviour of private investors who neglected the risks in favour of profits which was an important factor for the crisis.

The next chapter will examine how the Stability and Growth Pact and the Fiscal Compact aim to deal with economic instability in the Eurozone. The latter one can be regarded as a response to the financial crisis.

5. The Stability and Growth Pact and the Fiscal Compact

In this chapter the Stability and Growth Pact (SGP) and the Fiscal Compact as two of the main policies for economic stability in the Eurozone will be examined. The chapter will first look at the SGP and then continue with the Fiscal Compact. After that the chapter will look at how the two policies can help to manage the economic challenges as described in chapter one.

5.1 The Stability and Growth Pact

The main requirements of the SGP are laid out in Title VIII and Protocol No. 12 “Treaty on the Functioning of the European Union” (TFEU) and a number of EU regulations (Prammer & Reiss, Q1 2016). The SGP builds up on the Maastricht Criteria and aims to ensure that member states continue to meet the Criteria after their accession to the Eurozone (Buonanno & Nugent, 2013). The SGP consists of a preventive arm and a corrective arm. The preventive arm entered into force in 1999 and was reformed by a number of regulations in 2011 and 2013 (European Commission, 2016). It consists of medium term budgetary objectives (MTO) which are laid out individually for each member state and of a reporting mechanism to the Commission and the Council.

MTOs should be designed in a way that the annual budget deficit does not exceed 3% of the GDP, even in cases of economic downturns (Morris, Ongena, & Schuknecht, 2006). That means that under regular economic conditions budgets should be in surplus or at a deficit of 1% of the GDP. There are certain cases specified in which countries are allowed to deviate from the requirements but these exceptions will not be discussed here. Member states have to report their MTOs to the Commission and the Ecofin Council for assessment. If a country’s MTOs are judged insufficient by the Commission and the Council this puts public pressure on the state in question to change its fiscal policies. However, since all issued judgements must be approved by the Ecofin Council, member states have consistently used their power to influence the issuing of negative statements (Baerg & Hallerberg, 2016).

The corrective arm of the SGP entered into force in 2005 (European Commission, 2016). The main component of the corrective arm is the Excessive Deficit Procedure (EDP). An EDP can be opened if a country's annual deficit exceeds 3% of its GDP or if the country's debt-GDP ratio stands at more than 60% (European Commission, 2016). It is then up to the Ecofin Council to decide if an EDP is opened. In that case the Council gives recommendations to the deficit country which in turn has between three and six months to take action. If the deficit country does not take the necessary actions the Council may decide to implement sanctions.

The SGP rules have consistently been breached by several member countries. The fact that the Ecofin Council plays a central role in the enforcement process has repeatedly prevented the issue of negative statements or even EDPs to be opened against countries (Schuknecht, Moutot, Rother, & Stark, 2011). As a consequence, stricter deficit requirements were established in the follow-up of the Eurozone crisis.

5.2 The Fiscal Compact

The Fiscal Compact is part of the Treaty on Stability, Coordination and Governance (TSCG) which was signed by 25 EU member states in March 2012. The requirements of the Fiscal Compact can be seen as a stricter variant of the SGP. Buonanno and Nugent (2013) characterize the Fiscal Compact as "...the SGP with added bite" (p. 218, para. 2). As opposed to the SGP the Fiscal Compact is an intergovernmental treaty and not part of the *Acquis Communautaire*.

Similar to the SGP the Fiscal Compact requires signatory states to operate within the limits of medium-term objectives. Whereas the threshold for budget deficits within the SGP lies at 3 % of GDP, the Fiscal Compact sets out a limit of 0.5 % ("Treaty on Stability, Coordination and Governance in the Economic and Monetary Union", March 2nd, 2012). The rules can be enforced via the Court of Justice of the European Union (CJEU).

An important difference to the SGP is that the Fiscal Compact requires the signature countries to adopt the debt regulations as part of their national laws. Article 3 of the treaty specifies that the regulations shall be adopted “through provisions of binding force and permanent character, preferably constitutional” (“Treaty on Stability, Coordination and Governance in the Economic and Monetary Union”, March 2nd, 2012). The transposition of the debt requirements into national law is supposed to give them more binding force than the SGP-requirements.

The fact that the Fiscal Compact requirements have to be transposed into national law and that they are enforceable via the CJEU limits the power of the Ecofin Council to circumvent the application of the rules.

5.3 The SGP, the “Fiscal Compact” and economic stability

If one compares the “Fiscal Compact” and the SGP with Minsky’s criteria for economic policy as mentioned in the first chapter one finds that they do not fit together. As Minsky states, economic policy must acknowledge the destabilizing effects of investment in order to be effective. However, the “Fiscal Compact” and the SGP both concern government spending behaviour, not investment. Yet there are reasons for why the policies have been adopted. These will be outlined in the following paragraphs.

According to Morris, Onega and Schuknecht (2006) binding rules on fiscal spending are important to prevent short-sighted excessive government spending. Without rules, governments will increase public debt levels beyond sustainable levels. They present statistical evidence which shows that public deficits did indeed increase considerably since the 1970s, not only in the Eurozone but also in other industrialised countries. They point out different reasons for why this is the case.

Since governments have to rely on voters' support in order to ensure their re-election they are tempted to increase public spending or to cut taxes in an unsustainable way. The short term effects of such policies will serve the re-election purpose while the long-term effects will not be visible within the election period. Furthermore, government spending can be biased towards certain parts of society through extensive lobbying. While public spending normally benefits a specific societal group, public debt is a burden for the whole society. That means that excessive public spending can potentially favour certain groups within society in a disproportionate way. Adding to that, they suggest that financial markets might not always estimate sovereign default risks in a timely adequate way. That means that sovereign interest rates might be low when the perceived default risk is low but then increase suddenly when financial actors' perceptions change.

The question that arises from the previous paragraph is how this is important within the Eurozone context. With reconsideration of the challenges to economic stability outlined in chapter one, there are certain reasons for why common deficit rules can be advantageous in a monetary union. Since the Eurozone restricts member countries' policy options to manage their public debt it is useful to introduce common rules which aim to prevent the build-up of excessive debts in the first place. Therefore, if there are reasons for why governments have a tendency for excessive spending, it makes sense to design policies that aim to prevent governments from doing so. The second challenge to economic stability in the Eurozone outlined in chapter one does also play a role here. Since there is no currency-adjustment mechanism in the Eurozone financial flows can easily flow from one member country to another. This facilitates governments to indebt themselves in other states of the currency area.

If one applies that logic to the case of Greece one can come to the conclusion that a tighter application of the fiscal rules would indeed have been a way to prevent the Greek debt crisis. The pile-up of Greek government debt was certainly facilitated by a combination of its membership in the Eurozone and the neglect of the SGP requirements. From that perspective

it does also make sense that the Fiscal Compact was created as a stricter form of the SGP which proved insufficient during the crisis.

Nonetheless, if one looks at the cases of Spain and Ireland, it becomes obvious that they were severely affected by the crisis even without neglecting the SGP requirements. In their cases it were not the governments that made use of easy access to foreign credit but private actors. Problems with public debt did only come as a consequence of the crisis which had not been caused by government behaviour. However, the SGP rules are only designed to prevent excessive public debt. There is no such mechanism in place for private debt.

Another important aspect that one has to take into account is the behaviour of financial actors from Germany, the Netherlands and other northern European countries. As has been pointed out by Pisani-Ferry (2014) investors from these countries disregarded the risks of their investments before the crisis broke out in 2008 and concentrated on possible returns instead. This is also an aspect which is not covered by the SGP or the Fiscal Compact.

As a conclusion one can say that there are reasons for the existence of fiscal deficit requirements in the Eurozone, even though the policies do not comply with Minsky's requirements for economic policies. Membership in the Eurozone diminishes member states' policy options to manage public debt. Furthermore, it facilitates the creation of public debt by opening possibilities of governments to take up credit in other member states. The public deficit rules as laid out in the "Fiscal Compact" and the SGP are a possibility of preventing that. Nevertheless, as evidence from the Eurozone crisis shows, Spain and Ireland were affected by it even without excessive public spending prior to the crisis. In order to understand the underlying causes for that, the next chapter will come back to Hyman P. Minsky's theory on economic instability as outlined in the first part and apply it to the Eurozone context.

6. Minsky and instability in the Eurozone

This chapter will come back to Minsky's theory on economic instability as described in the first chapter. As the analysis of the Eurozone crisis showed, the crisis was partly caused by government behaviour and partly by the behaviour of private investors. Since the aspect of government behaviour has already been discussed in the last chapter, this chapter will only look at the behaviour of private investors. That means that it will focus on the cases of Spain and Ireland. One should again be reminded that there were other countries affected by economic instabilities like Portugal and, to some extent, Italy. However, due to the limited scope of this thesis, this chapter will only build up on the two cases already discussed in the previous one.

The first thing one can observe if one compares Minsky's theory with the cases of Spain and Ireland is that banks and investment activities played a major role in the occurrence of the crisis as well as in the preceding phase of economic growth. Another similarity is that investment in the construction sector played an important role in destabilizing both countries, a sector which Minsky associates with speculative finance. As Minsky points out, it is credit and investment which is an important driver of economic activity, but also a cause of instability. If one looks at the cases of Ireland and Spain, it were indeed credits that fuelled the construction industry and thus contributed to economic activity prior to the outbreak of the crisis.

In Ireland as well as in Spain economic growth was driven to a considerable extent by activities of the construction sector. This sector in turn was fuelled by credits from other Eurozone member states. The single currency made it easy for banks to engage in cross-border lending activities without any exchange-rate risks. In both cases the developments were purely driven by the behaviour of private investors in the market with no outside interferences from the national governments or any other public body. The question is which the driving mechanism behind the activities of market participants was.

In Minsky's theory the issuance of credit by bankers is dependent on profits. If economic actors earn profits that are high enough to pay back their credits, bankers gain confidence in the economy and are ready to give out riskier credits. One important aspect that determines profits is that the demand for goods is high. Another factor conducive to profits is a positive external trade balance. If one looks at the Eurozone, there were countries like Germany or the Netherlands that had a positive external trade balance which equally means that demand for their goods was high. One factor that characterizes the Eurozone, as outlined in the previous section, is the absence of a currency-adjustment mechanism. The absence of such a mechanism facilitated permanent trade imbalances between member countries. In consequence, export surpluses in the Netherlands and Germany were permanently positive and profits were permanent in these countries. One can therefore conclude that Minsky's theory of how profits are made can be applied to the Eurozone context.

This leads to another important aspect of Minsky's theory which needs to be considered here. That is how profits are linked to credit and investment. If profits for companies are high, credits given out by banks can be paid back. If credits are paid back the trust of bankers in the ability of the economy to repay credits increases. Consequently, their willingness to engage in riskier financing activities increases. If one applies that thinking to exporting countries like Germany or the Netherlands, one can conclude that German and Dutch bankers were convinced of the ability of the economy to repay credits. Profits in these countries were high due to external trade surpluses, and thus investors were most likely able to repay their credits. Following from that is that the willingness of bankers in these countries to give out riskier credits certainly increased. This is also in line with Pisany-Ferry's (2014) observation that there was a low risk-awareness among banks from these countries prior to the outbreak of the crisis.

As Minsky points out, riskier financing operations promise higher potential returns for banks. As mentioned, the absence of a currency-adjustment mechanism in the Eurozone facilitates cross-border investments. Therefore, bankers from Germany or the Netherlands that were

looking for investment opportunities with higher potential returns could easily expand their activities to other Eurozone countries.

Next to the willingness of bankers to give out credits there also needs to be a readiness from economic actors to invest. The willingness of investors to demand credits from banks depends on their expectations for future developments of the economy. The economy of Spain had grown prior to the introduction of the Eurozone. The same is true for the Irish economy which had experienced its “Celtic Tiger” period since the 1990s. One can therefore suggest that investors’ expectations in the two countries were positive and enthusiasm for investment was high. If one combines the willingness of Spanish and Irish market participants to invest with the readiness of German and Dutch banks to give out risky credits, one can conclude that this had to lead to an unstable economy just in the way Minsky’s theory suggests. And this is indeed what happened as one can see from the outbreak of the Eurozone crisis in 2009.

As Minsky explains, there are three main financing operations. The least risky but also least profitable one is hedge financing. In hedge financing businesses pay back their credits out of income they receive from running operations. A necessary precondition for this kind of finance is that business profits are sufficiently high and constant. The trade balance of Germany and the Netherlands was permanently positive and profits were therefore permanently available to service debts. According to Minsky, such a situation leads banks to also give out credits based on speculative finance or even Ponzi finance, which potentially yield higher profits. One can therefore reason that as German or Dutch banks were more and more willing to give credits based on speculative or Ponzi finance.

One of the economic sectors that is associated by Minsky with speculative finance is the construction sector. As Minsky points out, investments in the construction sector do often stretch over a long period of time. This makes it difficult to predict prices at the point at which the construction is finished. No profits can be made before the whole project is completed.

This aspect can help to explain why it took several years before the Eurozone crisis broke out. As Minsky states, crisis are created through investment behaviour in times of favourable economic development. Economic development prior to the Eurozone crisis has indeed been favourable, as the steady economic growth rates in Ireland and Spain prior to 2009 suggest. However, when real estate prices started to fall the credits that had been an important driver of that growth turned into a debt burden for investors. It was only after these events that the public debt of Ireland and Spain increased as a consequence of falling tax revenues and increases in public expenditure due to social security payments.

As a consequence of this analysis one can say that Minsky's central suggestion that economic instability is created by the internal mechanisms of capitalist economies can be regarded as true for the Eurozone. It was not some external factor that played the main role in the economic crisis in Spain and Ireland. Rather, the difficulties were created by investment which first worked as a driver of economic activity and then turned into an unsustainable debt burden. Even though there are some factors for instability that are specific to the Eurozone as a currency area, Minsky's theoretical framework can help to bring insights into economic instability of the currency area. In terms of policy that means that one can also apply Minsky's suggestion that economic policy must take inherent instability into account.

In the given case this means that the "Fiscal Compact" and the SGP which do only look at fiscal expenditures but not at destabilizing influences of investment cannot be regarded as sufficient. However, as has been outlined before, they cannot be regarded as completely unjustified either. One can therefore conclude that they should not be abolished but amended with additional policies which also take inherent instability into account. Before propositions for such policies are given in the last chapter of this thesis, the following chapter will give a brief summary and conclusion of the whole paper.

7. Conclusions

The conclusion that can be drawn from this paper is that the public deficit requirements as laid out in the “Fiscal Compact” and the SGP can be regarded as having a certain stabilizing effect on the Eurozone, but should be amended by further policies. If applied correctly they can help to prevent economic instability caused by excessive government spending as in the case of Greece.

The regulation of government spending as a Eurozone policy is useful because the architecture of the Eurozone as a single currency area has a particular impact on public deficits. Firstly, because the single currency diminishes policy options of governments to manage their debts. This is so because the single currency does not allow member state governments to influence their country’s debt-GDP ratio via monetary policy. The debt-GDP ratio is an important indicator of debt sustainability. Furthermore, there are limits for member states to increase their revenues that are caused by the membership in the European Union. Secondly, the single currency facilitates government borrowing in other member states and thus makes excessive government spending easier to finance. If public debt becomes too high this has an impact on the economy by making it more difficult for private companies to obtain credits. The fact that the rules of the SGP did not prevent the crisis from occurring justifies the creation of the “Fiscal Compact” which aims to make the deficit rules more binding for its signatory states.

However, as the analysis has shown, the “Fiscal Compact” and the SGP cannot be regarded as comprehensive. They do not take into account that economic instability cannot only be caused by government behaviour but also through the inherent mechanisms of capitalist economies. These inherent mechanisms were at work in the cases of Ireland and Spain, as an application of Hyman P. Minsky’s theory on economic instability has shown. In both countries no excessive public deficits existed prior to the outbreak of the crisis. Still, both countries were severely affected by the economic downturn. The underlying causes for this go beyond fiscal spending behaviour.

An analysis needs to go back to before the introduction of the Euro. In both countries the economic climate was positive before they entered the Eurozone. This led to an economic climate conducive to investment financed through credits from private sources. The introduction of the Euro opened new channels for credit so that economic growth after the establishment of the single currency was to a large extent driven by credits from other Eurozone countries. Credits came particularly from countries of the north of the currency area like the Netherlands, Austria or Germany. Banks in these countries had a diminished risk awareness because economies were running at profitable levels which allowed domestic businesses to pay back their credits. The decreased risk awareness led these banks to give out riskier credits in search of higher returns. This coincided with demand for credit in Spain and Ireland caused by positive future expectations of investors due to the upward developments in the two economies. Credits were mainly used to finance construction undertakings. Since construction undertakings run over a long period of time it took several years until it became obvious that the investment in real estate could not be justified by sufficiently high prices. As a consequence, it took several years before it became apparent that investors were not able to service their credits. Only after this mechanism took effect, the governments of Ireland and Spain were forced to accumulate high deficits as a consequence of diminished tax revenues and increased social security payments. Even with full application of the public deficit requirements of the “Fiscal Compact” and SGP this process could not have been prevented.

One thing that needs to be acknowledged is that the paper only looked at the examples of Greece, Ireland and Spain and partly on northern European countries like Germany, the Netherlands or Austria. Other Eurozone member countries that were also affected by the Eurozone countries have not been discussed. That does not mean that the conclusions drawn here are invalid, but one needs to be keep in mind that there might still be other causes for Eurozone instabilities which have not been mentioned in this paper. In order to be of practical use the conclusion of this paper should be used to propose further actions to be taken. This will be done in the following chapter, which will briefly introduce some possible additions to the existing policies.

8. Recommendations for further policies

As Hyman P. Minsky observes, recommendations for policies are more difficult to make than an analysis of the existing situation. Recommendations for policies that can strengthen the impact of the “Fiscal Compact” have to take into account several questions. The first one is the question of feasibility. In order to be feasible policies must recognize the limited will of European policy makers to give up further national sovereignty in favour of strengthened European integration. As Snell (2016) argues, deeper integration of economic policies inevitably leads to a conflict with national sovereignty. Policies must therefore balance between these two poles. At the same time policies must address the question of effectiveness. They must be powerful enough to have an actual effect on the Eurozone economy. Lastly, they must acknowledge the reality that instability is endogenous to capitalist economies as Minsky proposes.

As the analysis has shown transnational investments from countries in the north to southern member states of the currency union were central in the evolution of the crisis. The fact that investment turns to ever riskier ventures in times of economic stability which eventually leads to an economic crisis must be a key issue in the design of further policies. At the same time it is obvious that investment is not only a source of instability but also a driver of economic activity. One can therefore not recommend a policy that does not allow for investment at all. The aim of the policy should rather be to prevent an investment cycle that turns from hedge finance to speculative or Ponzi finance. While hedge finance is something that should be encouraged because it facilitates economic progress, speculative and Ponzi finance are not desirable. They might also lead to economic growth over a certain period of time as the Spanish and Irish construction sectors demonstrated. However, there is no benefit from economic growth in itself if the growth is not sustainable in the long run and when it leads to crisis that far outweigh the economic benefits of such finance.

One proposal that fits all the requirements is an early-warning system for speculative investment as proposed by Dreger and Kholodilin (2011). The two economists developed such a system for the German Federal Ministry of Finance. According to them it is possible to detect speculative investments by observing current price developments and comparing these developments with data of previous developments. If there are any peculiar price developments this is an indicator for unsustainable investment which needs to be looked at closer. Their proposal is based on the real estate market, which has been identified as a key sector for speculative investment. If the system detects speculation driven developments in the economy further measures could be implemented. Such a measure could for example be an increase in interest rates by the ECB.

To develop such a system for the Eurozone can be a feasible addition to the “Fiscal Compact”. It does not affect the sovereignty of member states but could still have an effect on economic stability. Furthermore, it would not threaten all forms of investment across-the-board which might have a negative influence on economic development. Rather, it would allow for steps to be taken in time when investment becomes too speculative and starts to threaten economic stability. The development of such a system could be made a task of the European Commission so that no gross institutional changes would be necessary. If a measure following the detection speculative developments in the economy would be an increase in the interest rates by the ECB, this would only include an action of an already existing institution as well.

There is of course some uncertainty connected to such a proposal because there is no definite evidence that such a system works. However, in light of what is at stake it seems to be reasonable to take the proposal into consideration.

There are certainly other ways of increasing economic stability in the Eurozone. One measure is the introduction of a financial transaction tax which has been discussed intensively after the crisis. As Cortez and Vogel (2011) indicate, such a tax, if implemented in the right way, could have a positive effect on short-term investments and speculation. The European Commission

presented a proposal for a European financial transaction tax in 2011. The proposed tax explicitly aimed to circumvent undesirable effects of investment (European Commission, n.d.). Nevertheless, political support for the proposal was weak. A number of member states opted out so that by mid-2016 only ten countries were left on the negotiating table (Brunsdon, June 5th, 2016). This demonstrates that even though additional policy options for the “Fiscal Compact” are available they are difficult to implement due to political objections of some member states. Nevertheless, a recommendation that can be given based on this report is that such a tax would be a good addition to the “Fiscal Compact” and that negotiations should be continued.

9. Reference List

- Arestis, P., & Sawyer, M. (2013). *Economic and Monetary Union Macroeconomic Policies: Current Practices and Alternatives*. Basingstoke, Hampshire: Palgrave Macmillan.
- Baerg, N. R., & Hallerberg, M. (2016). Explaining Instability in the Stability and Growth Pact: The Contribution of Member State Power and Euroskepticism to the Euro Crisis. *Comparative Political Studies*. (Vol. 49 (7)), 968-1009.
- Baimbridge, M., & Whyman, P. (2015). *Crisis in the Eurozone: Causes, Dilemmas and Solutions* (1. publ). Basingstoke: Palgrave Macmillan.
- Board of Governors of the Federal Reserve System (n. d.). *How does monetary policy influence inflation and employment?* Retrieved 17th October, 2016, from https://www.federalreserve.gov/faqs/money_12856.htm.
- Brunsdon, J. (June 5th, 2016). *EU financial transaction tax progress stalls*. Retrieved 4th January, 2017, from <https://www.ft.com/content/ab4ad04c-29ae-11e6-8ba3-cdd781d02d89>.
- Buonanno, L., & Nugent, N. (2013). *Policies and Policy Processes of the European Union*. Basingstoke, Hampshire: Palgrave Macmillan.
- Cortez, B., & Vogel, T. (2011). A Financial Transaction Tax for Europe? *EC Tax Review*. (20 (1)), 16–29.
- Deutsche Welle (March 2nd, 2012). Merkel hails "milestone" deal, warns crisis isn't over. *Deutsche Welle*. Retrieved 13th September, 2016, from <http://www.dw.com/en/merkel-hails-milestone-deal-warns-crisis-isnt-over/a-15782636>.
- Deutsche Welle (June 18th, 2015). The Eurozone Crisis by the Numbers. Retrieved 23rd November, 2016, from <http://www.dw.com/en/the-eurozone-crisis-by-the-numbers/a-18523237>.
- Dreger, C., & Kholodilin, K. A. (2011). Speculative bubble on housing markets: Elements of an early warning system. *DIW Economic Bulletin*, Vol. 1 Issue 4, 3-9.

- Etxezarreta, M., Navarro, F., Ribera, R., & Soldevila V. (2011). Boom and (deep) crisis in the Spanish economy: the role of the EU in its evolution. *Communication for 17th Workshop on Alternative Economic Policy in Europe*.
- European Central Bank (2016). *The definition of price stability*. Retrieved 15th October, 2016, from <https://www.ecb.europa.eu/mopo/strategy/pricestab/html/index.en.html>.
- European Commission (n.d.). *Taxation of the financial sector*. Retrieved 04th January, 2017, from https://ec.europa.eu/taxation_customs/taxation-financial-sector_en.
- European Commission (2016). *Economic and Financial Affairs: EU economic governance*. Retrieved 27th October, 2016, from European Commission: http://ec.europa.eu/economy_finance/economic_governance/sgp/index_en.htm.
- Eurostat (n. d.a). *Eurostat Inflation Rate*. Retrieved 18th October, 2016, from <http://ec.europa.eu/eurostat/tgm/table.do?tab=table&init=1&language=en&pcode=tec00118&plugin=1>.
- Eurostat (n. d.b). *General government gross debt - annual data*. Retrieved 15th October, 2016, from <http://ec.europa.eu/eurostat/tgm/table.do?tab=table&init=1&language=en&pcode=teina225&plugin=1>.
- Feldstein, M. (January 2012). The Failure of the Euro. *Foreign Affairs*. Retrieved 30th September, 2016, from <https://www.foreignaffairs.com/articles/europe/2011-12-13/failure-euro>.
- Ferreiro, J., & Serrano, F. (2012). The Economic Crisis in Spain: Contagion Effects and Distinct Factors. In P. Arestis & M. C. Sawyer (Eds.), *International papers in political economy. The Euro Crisis* (pp. 235–268). Basingstoke: Palgrave Macmillan.
- Grauwe, P. de (2010). Crisis in the Eurozone and how to deal with it. *CEPS Policy Brief*. (No. 204).
- Grauwe, P. de (2012). The Governance of a Fragile Eurozone. *Australian Economic Review*, 45 (3), 255–268.

- Grauwe, P. de, & Yuemei, J. (2013). Self-fulfilling crisis in the Eurozone: An empirical test. *Journal of International Money and Finance*, 34, 15–36.
- Greece accepts bailout package (May 2nd, 2010). *CNN Money*. Retrieved 30th October, 2016, from http://money.cnn.com/2010/05/02/news/international/greece_bailout/.
- Higgins, M., & Klitgaard, T. (2011). Saving Imbalances and the Euro Area Sovereign Debt Crisis. *Current Issues in Economics and Finance, Federal Reserve Bank of New York*. (Vol. 17, No. 5).
- Kitromilides, Y. (2012). The Irish Tragedy. In P. Arestis & M. C. Sawyer (Eds.), *International papers in political economy. The Euro Crisis* (pp.159–194). Basingstoke: Palgrave Macmillan.
- Klein, C., & Stellner, C. (2014). Does sovereign risk matter?: New evidence from eurozone corporate bond ratings and zero-volatility spreads. *Review of Financial Economics*, 23, 64–74.
- Krugman, P. (2011). Can Europe be Saved? *New York Times Magazine*, 12th January, from <http://www.nytimes.com/2011/01/16/magazine/16Europe-t.html>.
- Lane, P. R. (2012). The European Sovereign Debt Crisis. *Journal of Economic Perspectives, Volume 26, Number 3*, 49–68.
- Lane, P. R. (2011). The Irish Crisis. IIS Discussion Paper No. 356, IIS: TCD.
- Minenna, M. (2016). *The Incomplete Currency: The future of the euro and solutions for the Eurozone*. Chichester, West Sussex, United Kingdom: John Wiley & Sons.
- Minsky, H. P. (2008). *Stabilizing an unstable economy* ([New ed.]). New York, NY: McGraw-Hill Education; McGraw-Hill.
- Mitchell, W. (2015). *Eurozone Dystopia: Groupthink and Denial on a Grand Scale*. Northampton: Edward Elgar Publishing.
- Morris, R., Ongena, H., & Schuknecht, L. (2006). The Reform and Implementation of the Stability and Growth Pact. *European Central Bank Occasional Paper Series*. (No. 47).

- Neal, L. & Garcia-Iglesias, C. (2012). *The economy of Spain in the Eurozone before and after the crisis of 2008*, from https://mpra.ub.uni-muenchen.de/37008/1/MPRA_paper_37008.pdf.
- Pisani-Ferry, J. (2012). The Euro-Crisis and the new Impossible Trinity. *Bruegel Policy Contribution*. (Issue 2012/01).
- Pisani-Ferry, J. (2014). *The Euro Crisis and Its Aftermath* (1st Edition). Oxford: Oxford University Press.
- Prammer, D., & Reiss, L. (Q1 2016). The Stability and Growth Pact since 2011: More complex - but also stricter and less procyclical? *Monetary Policy & The Economy*, 33–53.
- Schuknecht, L., Moutot, P., Rother, P., & Stark, J. (2011). The Stability and Growth Pact: Crisis and reform. *European Central Bank Occasional Paper Series*. (129).
- Schumacher, J. & Di Weder Mauro, B. (2015). *Diagnosis Greek debt sustainability: Why is it so hard?* Conference Draft Paper, from Brookings Institution.
- Snell, J. (2016). The Trilemma of European Economic and Monetary Integration and Its Consequences. *European Law Journal*. (22 (2)), 157–179.
- Stiglitz, J., & Heymann, D. (Eds.) (2014). *Life after Debt: The Origins and Resolutions of Debt Crises*. Basingstoke, Hampshire: Palgrave Macmillan.
- Treaty on Stability, Coordination and Governance in the Economic and Monetary Union: TSCG. (March 2nd, 2012)
- Tsoukalis, L. (2013). International Bubbles, European Currency Union, and National Failures: The Case of Greece and the Euro Crisis. In A. Triandafyllidou, R. Gropas, & H. Kouki (Eds.), *Greek Crisis and European Modernity*. Basingstoke, Hampshire: Palgrave Macmillan.
- van Ooik, R., & Vandamme, T. (2013). *European Basic Treaties: Treaty on the Functioning of the European Union*. Deventer: Kluwer.
- van Rompuy, H. (5th December, 2012). Towards a Genuine Economic and Monetary Union.
- Varoufakis, Y. (2013). We Are All Greeks Now. In A. Triandafyllidou, R. Gropas, & H. Kouki (Eds.), *Greek Crisis and European Modernity* (pp. 44–58). Basingstoke, Hampshire: Palgrave Macmillan.

Varoufakis, Y. (2015). *The Global Minotaur: America, Europe and the Future of the Global Economy. Economic controversies*. London u.a.: Zed Books.

White, R. (2010). *Years of High Income Largely Wasted*. Dublin: Davy Stockbrokers