

## Debt crisis and fiscal consolidation in Spain\*\*

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### ABSTRACT

This paper analyses the start of the debt crisis in Europe and in Spain, which increased inflation, unemployment and public debt. Although Spanish banking system was considered one of the best, the growing debt brought Spain into one of the worst affected countries in financial crisis. Because of this, Spain was faced to the fiscal consolidation as the imperative for further development. The strength of the crisis in Spain can be seen from main economic indicators. Budget deficit in Spain was almost 12% just two years after it went into surplus for the first time in 30 year period. Public debt has started to rise from 2007 and in 2013 it overcomes 90% of GDP. The rate of unemployment also started to rise from 2007 and in 2013 it is higher than 25%. This paper analyses also Phillips curve in Spain using the actual data after the start of fiscal consolidation.

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## 1. INTRODUCTION

The global financial crisis started in different periods in different countries, but 2007/2008 can be considered as the start of this crisis at the global level. It resulted in the threat of total collapse of large financial institutions, the bailout of banks by national governments, and large falls in stock markets around the world. The crisis led to global recession that lasted on average for 5 years and in some countries it still has not ended. In European countries the crisis has been manifested as the debt crisis. The crisis made it difficult or even impossible for some European countries to repay or refinance their government debt without the assistance of third parties like the European Central Bank or International Monetary Fund. One of these countries is Spain, which had a comparatively low debt level prior to the crisis. The debt of Spain was largely avoided by the ballooning tax revenue from the housing bubble, but when the bubble burst, Spain spent large amounts of money on bank bailouts. This with the combination of economic downturn increased the country's deficit and debt levels and led to a substantial downgrading of its credit rating.

## **2. DEBT CRISIS**

### **2.1. The European debt crisis**

The European debt crisis is a crisis occurred at the end of the 2009 in Europe, specifically among some EU countries. It has deepened also on the rest of Europe in the 2010 and 2011. The debt crisis is a crisis on the demand side. Macroeconomic equilibrium may crash due to shocks on the supply side and the demand side shocks. These shocks affect negatively. The consequences of mentioned phenomenon are increasing inflation, increasing unemployment, public debt and deficit. The shocks on the demand side are changes in demand caused by changes in output and prices in the same direction. Adverse demand shocks lead to less demand (less C and I), which then lead to less production and to more unemployment. The crisis can be divided into two sectors of the financial crisis. Sovereign debt crisis relates to the budget deficits that occurred by insufficient tax revenue and excessive consumption in several European countries such as Greece, Portugal, Italy and Spain.

The financial crisis which started in the United States deepened on the states that have use the same problematic way of crediting as U.S., such as Iceland and Ireland. European banks hold assets in U.S. banks. Here we can see the link between Europe and US. After attempting to rescue banks affected by the above-mentioned problem, state budget deficits went very high. If we look in the long run, the debt crisis has affected the appearance of net capital inflows to developed countries, i.e. countries creditors and led to a reduction in indirect investment in the world economy. During the crisis, there was a significant increase in unemployment. Some sectors are affected more, some less. Industrial and construction sector suffered the biggest losses, which was not surprising since it is well known that exactly these sectors are the most vulnerable to changes in the economy. A lot of companies went bankrupt, and this trend is still on. In order to illustrate better trends in the economy caused by the mentioned crisis, we will use the example of Spain, which is classified in so-called "peripheral" European countries among with Greece, Portugal and Ireland.

### **2.2. The European debt crisis in Spain**

The current financial crisis in Spain had its starting point in 2008 in the world financial crisis and continued during the European debt crisis. The financial crisis in Spain as part of the global economic crisis began because of the large long-term debts. This led to the fall of the real estate market which followed the bankruptcy of large companies and financial institutions, and therefore unemployment has risen. Then Spain declared the recession. Even though the Spanish government tried to cover debts and exit the crisis without any European supports through for example an increase in the Value Added Tax from 19% to 21% or cutting the government expenditures, data shows that Spain's government debts

showed a significantly increasing trend over the period from 1980 to 2012. Spanish banking system was considered one of the best in all of the Western economies. Bank Santander is Spain's largest bank, which has helped the UK government with the problem of the banking sector and it was thought that the Bank could solve the liquidity problem arising during the crisis.

As the debt grew, when financial bubble burst, it brought Spain into one of the worst affected countries in financial crisis. Spain was slow to react to the action that caused the crisis, but with time increased efforts to introduce reforms and austerity measures. The government has taken measures to reduce the deficit in a way that reduced the salaries of civil servants by about 5 percent, eliminated certain benefits, etc. They also had a reform of the labor market. As Spain has one of the highest unemployment rates in Europe, these reforms are of great importance. Rising unemployment in the U.S. and Spain have had a significant share of the overall increase in global unemployment. One of the worrying facts is that almost 50 percent of young people are unemployed. Therefore, a reform of the labor market is mostly oriented on decreasing unemployment among young people. To summarize the accumulated imbalances in Spanish economy led to a deterioration of the labor market due to rigidity and inefficiency. Financial sector solvency deteriorates due to its exposure to the real estate sector. There is a lack of control in public accounts, as a consequence of inefficient expansive budgets. Because of the above mentioned situation there was a high need of austerity measures such as: increase taxes, reduce government expenditures, increase exports and there is a need of improving competitiveness.

### **3. FISCAL CONSOLIDATION**

Large number of countries face severe fiscal consolidation requirements. At a time when the recovery is still fragile and monetary policy already extended, difficult trade-offs arise between short-term growth and consolidation.<sup>1</sup> Fiscal consolidation adjustment is defined as a period in which the budget deficit as percentage of GDP declines. Talking about the types of fiscal adjustment, there are two types. It is possible to cut spending or raise taxes. Reducing expenditure refers to government spending and social security expenditures, salaries of public sector employees, reducing public investment and on the transfers. In this context, often is raised a question whether fiscal adjustment cause the recession. Just for this reason, opinions regarding undertaking programs of fiscal consolidation aimed at stabilizing the economy are much divided. The goals of fiscal consolidation are here for firming market economy, training government for returning external debts and for the recovery of the public finance.

For most countries, present consolidation plans envisage some mix of spending restraint and revenue-raising measures. According to some research, the likelihood of sustaining consolidation efforts until

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<sup>1</sup> OECD (2010): Fiscal consolidation: requirements, timing, instruments and institutional arrangements, OECD Economic Outlook, Vol. 2010/2

debt sustainability is reached is higher when governments tackle politically sensitive areas, such as social transfers.<sup>2</sup> Other empirical studies done on a large number of historical consolidation episodes indicate that there are a number of policy and other factors that are associated with fiscal consolidation efforts and influence their outcome like size of consolidation, reaching debt sustainability and monetary policy.<sup>3</sup>

The programs of fiscal consolidation may lead to a fall in GDP growth and unemployment rates. There may be a reduction in budgetary flexibility which can make difficult the use of the appropriate pro-cyclical fiscal policy. Eurozone countries, particularly peripheral members such as Spain are also in the process of fiscal adjustment. Reduce government spending, and increased rates of certain types of taxes, such as value added tax, which in Spain is 21 percent. In general, one has to be aware of the risks of using austerity measures, since the ones released in Spain can easily turn the plate and lead to even higher unemployment and a decrease in GDP. Furthermore, wages in Spain were cut in order to create jobs. Meanwhile, taxes were increased, as we saw previously, what lead to a higher inflation rate. This again had a negative effect on the wages. The only option to improve this situation is to create and establish demand for labor in the labor market. Fiscal reforms that need to be taken are attaining and/or maintaining public debt below 60 percent of GDP while attempting to achieve budget surplus, increase budget control, establish a cap to expenditure growth and maintaining an expenditure ceiling in public administration, increase taxes for households and budget cuts to public services. The toll of the crisis on public finances has contributed to larger needs for fiscal consolidation in most countries, but in many countries this only aggravated existing imbalances. Opinions about fiscal consolidation are various. Some economist are for and some against it. In the short run, fiscal consolidation programs that rely on spending reductions have expansionary “non-Keynesian” effects that may offset the contractionary Keynesian reduction in aggregate demand.<sup>4</sup> In some cases, “non-Keynesian” effects may be strong enough to make fiscal consolidation programs expansionary even in the short term is one of the ways of thinking.

#### **4. ANALYSIS OF MAIN ECONOMIC INDICATORS**

When the state with government revenues cannot finance public expenditures, it can sell its own assets or to finance debt by borrowing. Most often government borrows by issuing government securities in

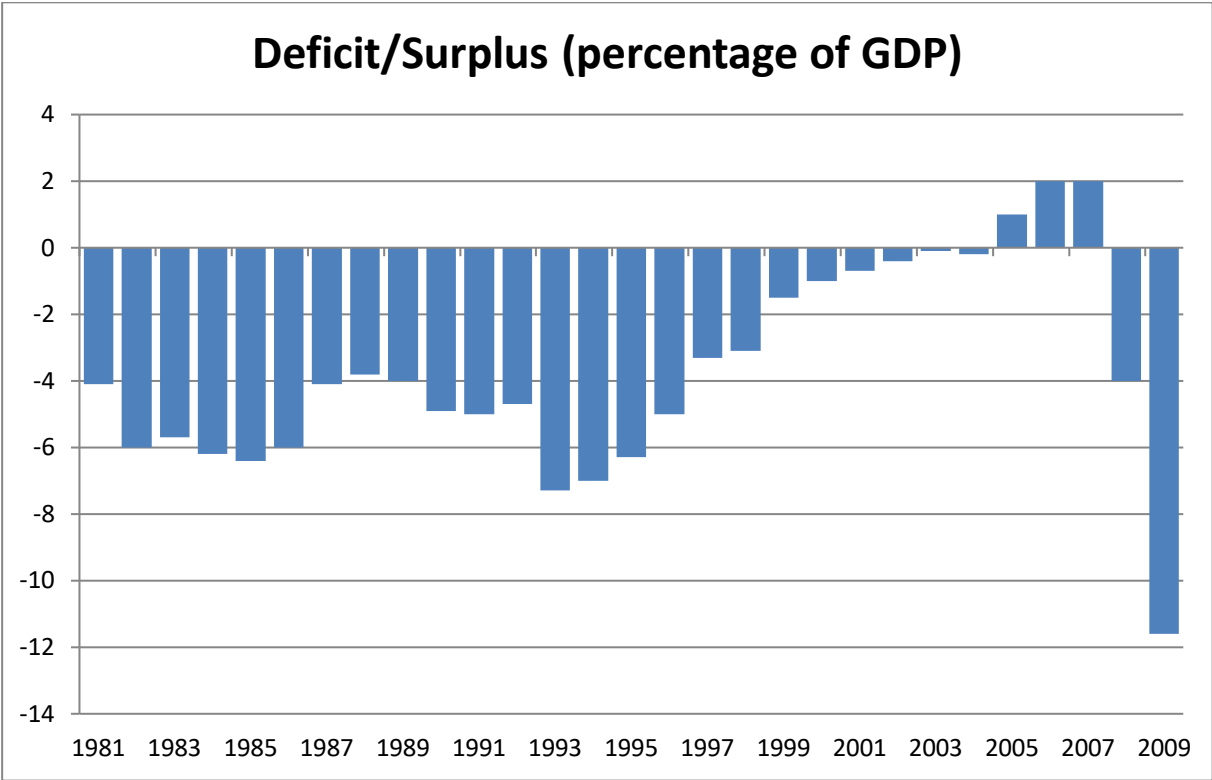
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<sup>2</sup> Guichard, S., Kennedy, M., Wurzel, E., André, C. (2007), What Promotes Fiscal Consolidation: OECD Country Experiences, OECD Economics Department Working Papers, No. 553

<sup>3</sup> Ahrend, R., Catte, P., Price, R. (2006), Interactions between monetary and fiscal policy: How monetary conditions affect fiscal consolidation, OECD Economics Department Working Papers, No. 521

<sup>4</sup> Brady, G.L. (2014) Austerity in the European Union: Keynesian stimulus versus fiscal consolidation, Symposium: "The Public Debt and Monetary Stability", Joint Economic Committee, Washington DC

the domestic or international financial markets to finance the deficit, i.e. the lack of income over expenditure. Here are presented changes in deficit and public debt of Eurozone member states. Those are one of the key economic indicators. Public debt and deficit are presented in relative to GDP. Fiscal restrictions are arising from the Maastricht convergence criteria, which represents some kind of rules for all members. They have been set because of the fear that an excessive deficit and public debt of member states could affect the increase of interest rates of other Eurozone members. The limits of public debt and deficits had been set. There are four criteria usually called Euro convergence criteria.<sup>5</sup> One is related with a reduction of excessive public debt (60 percent) and budget deficit (up 3 percent). Among public debt and deficit there are other economic indicators which we will analyze here in the case of Spanish economy. Those indicators are changes in real GDP per years and changes in rate of unemployment. Also there will be mentioned the Phillips curve as link between inflation and unemployment.



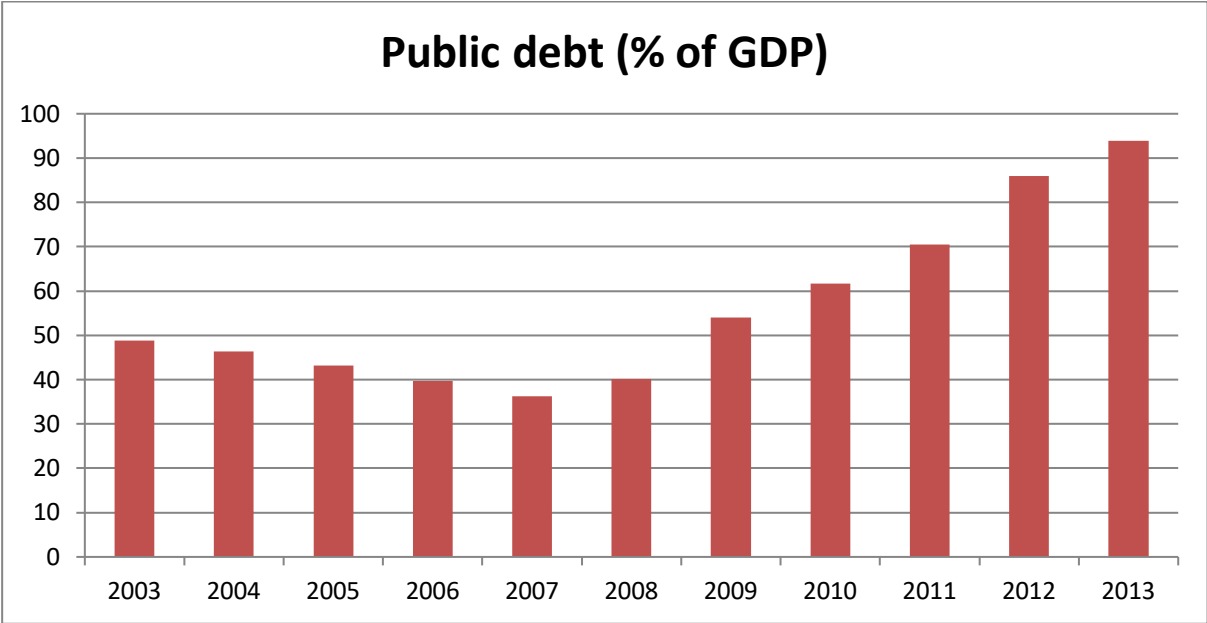
**Chart 1:** Budget deficit of Spain through years

Source: Eurostat

The budget deficit is a flow variable that shows the difference between revenues and expenditures, or the amount of net debt in a calendar year. Deficit is formed and measured by movements during the period. The economic and financial crisis has significantly affected on the public finance in Spain. The chart shows that in Spain in the 2007 has been present surplus of 1.9% of GDP, and 2009 we observe a

<sup>5</sup> Hubbard, G., Kane, T. (2013) Balance: The Economics of Great Powers From Ancient Rome to Modern America, Simon & Schuster, pp. 204

significant decline, a deficit of 11.4% of GDP. In 2009 Spain has entered The Excessive Deficit Procedure. A country enters in mentioned procedure based on decision of EU Council. A Council recommends to a Member State which are the steps they should do to reduce the deficit in a given time period. Spain has been given a deadline for the execution of corrections budget balance of 7 years, which indicates the intensity of the crisis that the country has been affected. Therefore, it is reasonable to expect that Spanish deficit cannot be corrected in a short period of time.



**Chart 2:** Public debt in Spain over the years

*Source: Eurostat*

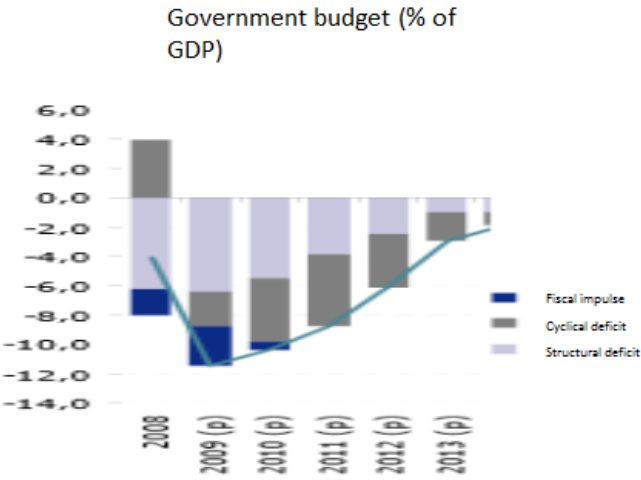
Spanish public debt in 2009 was approximately 54% of GDP. We can see a significant increase in public debt in the 2009 compared to 2007. There is an increase of 18%. Public debt in Spain reached record level of 93,9% in 2013. In 2011, public debt was 86%, while in 2013 it increased to 93.9% of GDP. Catalonia is the most indebted region with a debt of 22% of its regional GDP.

**5. STRUCTURAL AND CYCLICAL DEFICIT**

To be able to estimate whether the fiscal rules that have been set for the EU Member States are adequate, we must determinate whether the fiscal policies of EU member states are correctly oriented. In order to determine whether the fiscal policy of a country is properly focused on stabilization, the deficit must be distinguished between the structural and the cyclical. The structural deficit is the part of the national budget, which is the result of discretionary decisions of fiscal policy, while the cyclical deficit that part of the balance that is the result of an automatic action of the fiscal system, and automatic stabilizers.<sup>6</sup>

<sup>6</sup> Coricelli, F., Ercolani, V. (2002) Cyclical and Structural Deficits on the Road to Accession: Fiscal Rules for an Enlarged European Union, CEPR Discussion Paper No. 3672

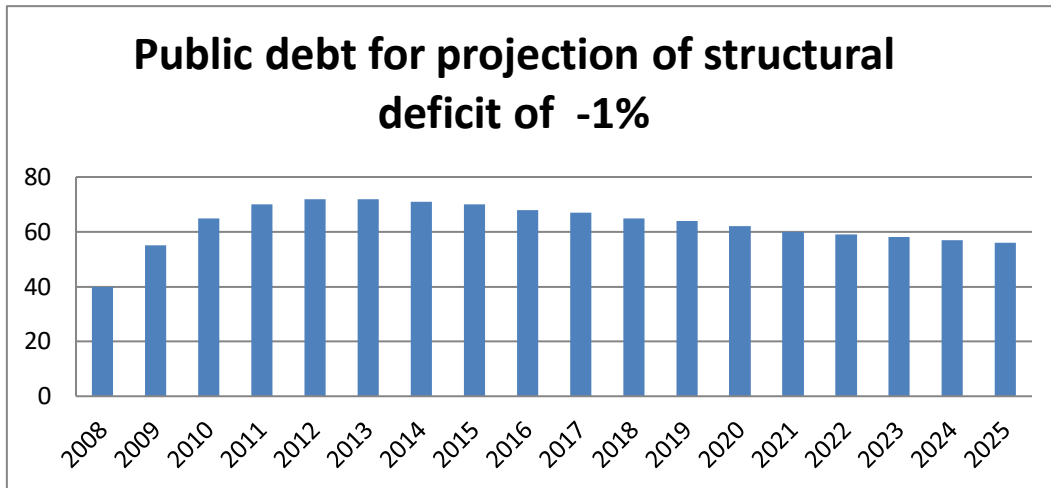
Difference between actual and structural deficits is noticeable in all EU member states, and that difference is equal to cyclical deficit. To it is actually proof that the automatic stabilizers operate in the right way given the limitations. Whether fiscal policy is expansionary or restrictive it is seen only by the impact of discretionary measures. From the above mentioned, it can be concluded that the assessment of the character of fiscal policy is determined on the basis of the structural deficit. This deficit is necessary to control and to reduce as much possible. It is generally considered that the deficit reference value of 3% of GDP refers to the cyclical deficit that occurs under the influence of automatic stabilizers. So the structural deficit is one that really needs to be balanced. Generally it can be said that discretionary fiscal policy measures are not really desirable and it is better if the fiscal policy is coordinated through the action of the automatic stabilizers.



**Chart 3:** Cyclical and Structural deficit over the years of crisis  
*Source: BBVA*

The deterioration of the fiscal balance was mainly due to discretionary fiscal policy. Closing 2009 with a deficit of around 11.5%, discretionary policies and structural adjustment have placed structural deficit at 10% (9 pp more than 2007). The fiscal contraction has led to an additional deficit accumulated between 2007 and 2009 of 4.2 % of GDP. In the last years we can see a decrease in structural deficit what we can consider as positive step towards economic recovery.

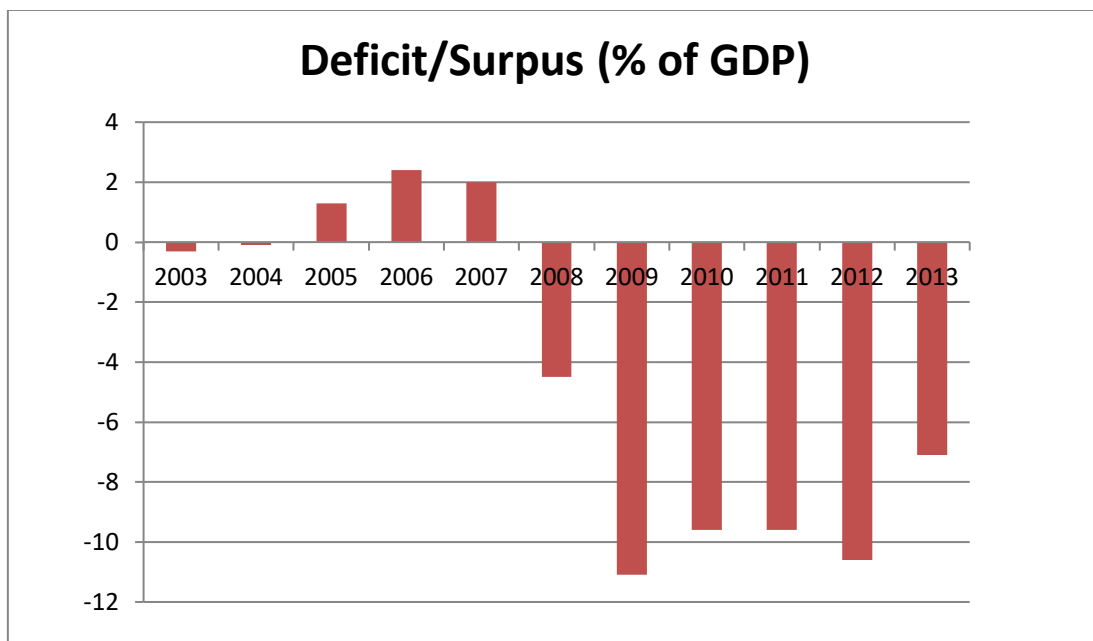
Here are some projections how to maintain public debt at recommended level, around 60% of GDP and lower if the budget balance would not significantly deviate from the level of -1%, through a certain number of years of fiscal consolidation.



**Chart 4:** Public debt for projection of structural deficit of (-)1%

*Source: Eurostat, BBVA*

Next chart shows the budget deficit or surplus as the percentage of gross domestic product from 2003 to 2013.



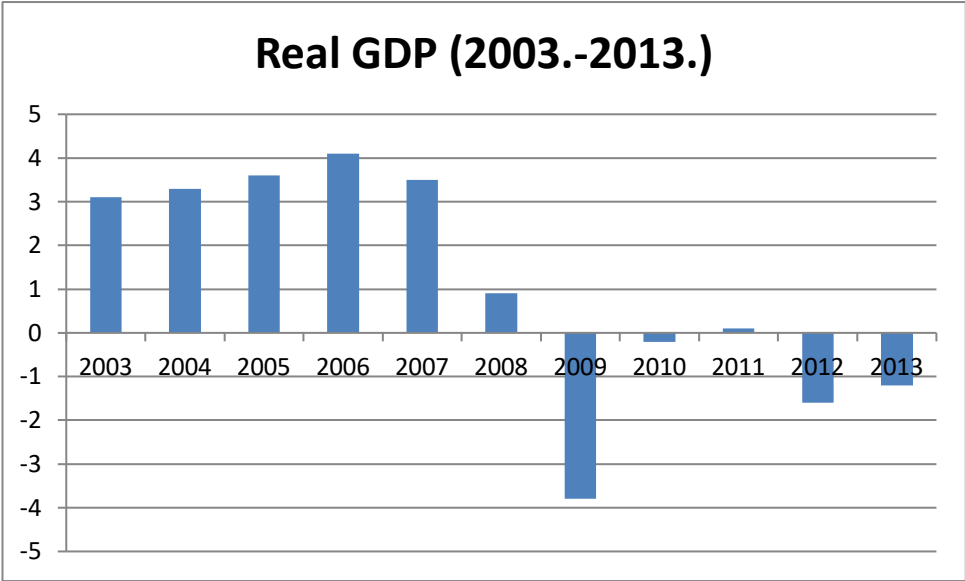
**Chart 5:** Budget deficit/surplus over the years

*Source: Eurostat*

In period from 1993 to 1997 we could observe a fiscal consolidation measures, as is the case in the present time. In 1993 the deficit was 7.4% of GDP, while in the 1997, after the implementation of fiscal consolidation, it is 3.4%, which represents an adjustment of 4 points of GDP. If we look at the deficit in 2009, as already stated it is 11.6%, and the adjustment should be 8.6 GDP points, to obtain the recommended level, the 3% of GDP. As we can see in above chart recommended level was not achieved



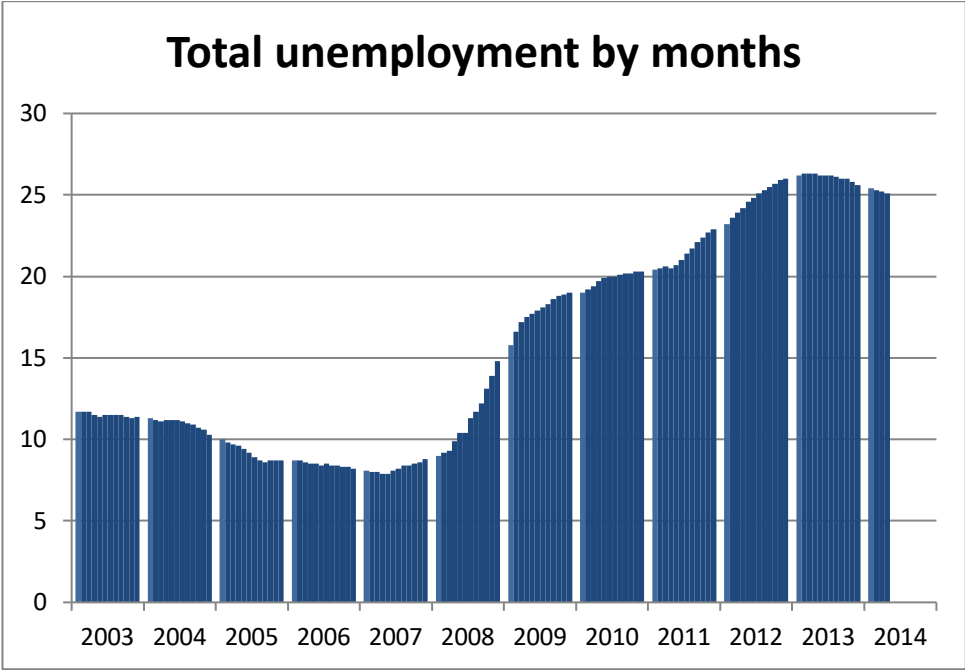
yet. The increase of the public deficit started in 2009., while it currently accounts for 7,1%. Despite, the trade deficit decreased, but still not enough in order to cover the public deficit.



**Chart 6:** The percentage change of GDP

*Source: Eurostat*

As we can notice, during the period of 2009 Spain suffered the highest losses. The figure shows the percentage change in GDP in the year of crisis.



**Chart 7:** Unemployment rate (by months, %)

*Source: Eurostat*

The financial crisis caused a slowdown of economic growth. This is particularly manifested in the reduction in aggregate demand and hence to that in reducing the rate of employment. In addition, an increase of various forms of insecure employment was caused by a decrease in economic activity. A significant reduction in the number of employees is the most visible in sectors that are based on production, construction and exports. Reduced demand for labor force is even more articulated for certain groups in the labor market such as young, old, unskilled workers, women and immigrants. For those groups it is considered that in times of economic crisis, it is even more difficult to find a job and more easy to remain without it. They become discouraged workers. In 2009 Spain had higher unemployment than France and Italy together. According to the CIA World Factbook data, Spain has a population of 46,754,784, making it the 27th country in the world by population, and the number of unemployed stood at 4.9 million. Since then the rate of unemployment has been increasing. In 2013 the rate of unemployment in Spain was 26,1%. The rate of unemployment of young people is around 50% which is very demotivating. One of the important reforms in Spain was labor market reform. One of the goals was an attempt to improve efficiency and reduce labor market duality by decreasing dismissal costs. The deregulation of contracts will increase internal flexibility and the collective bargaining reform. In the Spanish case (the opt-out clause) will enable greater speed of responsiveness to environmental changes and foster adaptability and competitiveness of Spanish firms.

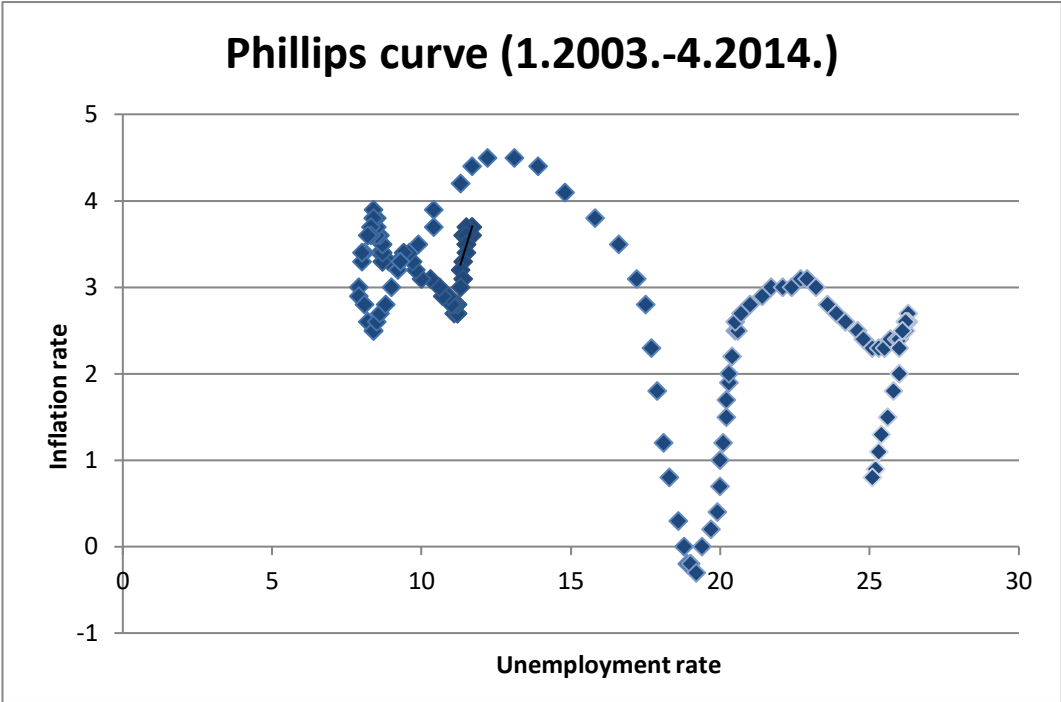
## **6. THE PHILLIPS CURVE**

The Phillips curve shows the short-run relationship between inflation and unemployment. It shows the short-run combinations of unemployment and inflation that arise as shifts in the aggregate demand curve move the economy along the short-run aggregate supply curve.<sup>7</sup> The correlation between inflation rate and unemployment rate is negative, which means that the increase in one leads to the decrease in the other and vice versa. As more people work, output increases, spending also increases, as well as demand. As the consequence, the price of goods and services increase. The greater the aggregate demand for goods and services, the greater is the economy's output, and the higher is the overall price level. A higher level of output results in a lower level of unemployment. If we observe the Phillips curve in case of Spain we can notice a constant increase of unemployment that is not always followed by low inflation. After 2009 the unemployment rate is increasing but the inflation also. In 2011 the rate of unemployment was 21,8% and inflation was higher than previous years (3,1%). Here we can see that the concept of stable Phillips curve broke. The same has happened in the in the early '70s. During the '70s and '80s, the economy experienced high inflation and high unemployment simultaneously. In other showed years Phillips curve is stable. The most recent data show that the high rate of unemployment of 26% is

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<sup>7</sup> Blanchard, O.; Johnson, D.R. (2012) *Macroeconomics*, 6th edition, Pearson  
Mankiw, G. (2012) *Macroeconomics*, 8th edition, Worth Publishers

followed by low inflation of 1,5%. If we observe the data by months, we can see that unemployment is increasing while inflation is decreasing where we can confirm verity of Phillips curve.



**Chart 8:** Phillips curve (by months)  
*Source: Eurostat*

**7. CONCLUSION**

The financial crisis has its origin in the USA, but it has soon expanded on the rest of the world. In Europe it occurred in the form of so-called debt crisis, the crisis on the demand side. Very steep decline in production, consumption and investment are just some of the consequences. The European debt crisis that has hit most countries in Europe had a particularly negative impact on the Spanish economy as we could see through the whole work.

Public debt has been experienced high jump if we observe the 2007 to 2009, when it was 54% of GDP. In later years we cannot notice decrease but on the contrary, there was an increase of public debt in Spain. Although Spain has taken measures of fiscal consolidation, public debt 2013 climbs to a record 93.9% of GDP. This information is some kind of alarm for the implementation of further reforms that would avoid the Greek, whose debt exceeded the above public debt of Spain. Many companies have declared bankruptcy or went bankrupt. Sectors particularly affected by the crisis are construction, finance and banking.

Unemployment increased to a record number of 26% and it is particularly affected the younger population, 50% of unemployment among young people. There have been taken many actions with the

purpose to decrease the current high unemployment rate, to stimulate GDP growth and stimulate deficit and public debt reduction. One of the recommendations of the European Commission and Germany as the leading force of the European Union is the implementation of fiscal consolidation, which can leave both positive and negative effects on the economy. Many scenarios show that the Spanish economy will recover successfully implementing the above fiscal adjustment. Spain has taken the proposed measures, but according to the latest estimations, it was found that the results still have not reached the desired goals, such as a deficit of 3% of GDP.

The conclusion is that Spain should continue with reforms. Further research should concentrate on the effects of reforms conducted in Spain and on their influence on economic indicators. An interesting analysis could be done comparing trends before the crisis, in the crisis and after the crisis.

## REFERENCES

- Ahrend, R., Catte, P., Price, R. (2006), Interactions between monetary and fiscal policy: How monetary conditions affect fiscal consolidation, Working paper No. 521, OECD Economics Department Working Papers
- Blanchard, O.; Johnson, D.R. (2012) Macroeconomics, 6th edition, Pearson
- Brady, G.L. (2014) Austerity in the European Union: Keynesian stimulus versus fiscal consolidation, Symposium: "The Public Debt and Monetary Stability", Joint Economic Committee, Washington DC
- Coricelli, F., Ercolani, V. (2002) Cyclical and Structural Deficits on the Road to Accession: Fiscal Rules for an Enlarged European Union, Working paper No. 3672, CEPR Discussion Paper
- Eurostat, available at: <http://epp.eurostat.ec.europa.eu/portal/page/portal/eurostat/home> (accessed 16 June 2014)
- Guichard, S., Kennedy, M., Wurzel, E., André, C. (2007), What Promotes Fiscal Consolidation: OECD Country Experiences, Working paper No. 553, OECD Economics Department Working Papers
- Hubbard, G., Kane, T. (2013) Balance: The Economics of Great Powers From Ancient Rome to Modern America, Simon & Schuster, pp. 204
- Mankiw, G. (2012) Macroeconomics, 8th edition, Worth Publishers
- OECD (2010): Fiscal consolidation: requirements, timing, instruments and institutional arrangements, OECD Economic Outlook, Vol. 2010/2