The Impact of Greek Crisis on the Western Balkan Countries

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Abstract

Greece is experiencing one of the deepest economic and financial crises in history and its tremendous impact is not affecting only the Eurozone countries but also the economies of all South and Eastern European countries. The crisis is especially visible in countries influenced by the movements and deviations of Greek economy like the main regional trade partners or the ones that have a relatively high percentage of foreign direct investments. Among these countries the most affected are Albania, Macedonia, Montenegro, Bosnia and Herzegovina, Bulgaria and Croatia. The main aim of this research paper is to investigate and identify the impact and spillover effect of Greek crisis on the main Western Balkan countries. The chances of a rapid improvement of Greek economy seem to be diminishing and the tremendous impact on these countries are resulting in currency devaluation, increase of unemployment rate, decrease of real GDP and decrease of remittances. The purpose of this study is to analyze the effects of the crisis based on the main macroeconomic variables such as real GDP, inflation and unemployment rate. By using E-views program, a regression model will be built to help understand which of these macroeconomic variables was mostly affected and what will be the short term and long term effect of the crisis on the whole region.

Keywords: Greek crisis, Western Balkan countries, Spillover effect.

Introduction

The Greek financial crisis issue is still the main concern for Western Balkan countries and not only. It was a difficult period for all these countries, because before threatened by this debt crisis, they were affected by the global financial crisis. For sure, the effects of both crises were tremendous and very difficult to be recovered. The economies of Balkan countries such as Albania, Serbia, Montenegro, FYROM, Croatia, and Bosnia and Herzegovina have experienced a continuous growth until the Greek crisis occurred at the end of 2009. In 2009, all these Western Balkan countries, excluding Albania, passed through a recession period (see fig.1). The influence of Greek crisis on the Balkan countries was considerably high due to the fact of trade relation and financial integration between these countries and Greece. A moderate percentage of foreign banks is owned by Greek banks in Balkan countries and concretely 18% of banking system in Albania is Greek banks owned. For sure, banking sector was one of the main sectors affected by the crisis.

This study will identify the Greek crisis and its effects on the economies of Western Balkan countries. The first section mentions some studies related to the influence of Greek crisis. The countries which are considered in their studies are Albania, FYROM, Montenegro, Bulgaria, Croatia, Serbia and Bosnia and Herzegovina. Generally from the analysis of their study, the authors have concluded that Albania is the country more affected by the spillovers of the Greek crisis compared to other countries. This has happened due to the fact that there is a relatively high percentage of Albanian migrants in Greece and Greece is the most important country for the Albanian remittances. While, the effects on FYR Macedonia and Bulgaria are more limited because the trade linkages of these two countries with Greece are weaker.

The following section explains the data used for this study. The three factors considered as the most important factors of the crisis are real GDP growth, unemployment rate and remittances. The crisis has decelerated the economy by decreasing the real GDP growth, increasing unemployment rate and decreasing remittances. Then, the study comes with the effects of the Greek crisis on the Balkan countries economies. For sure, the effects of this crisis influenced negatively their economies, especially the countries which were more tied up with Greece. Finally, it comes with some conclusions.

Literature Review

The economy of Western Balkan countries has shown a good performance before affected by the Greek crisis. The crisis has encouraged the deceleration of their economy by decreasing the Balkan countries GDP, increasing unemployment rate, decreasing remittances etc. According to (Backé & Gardó, 2012), the Greek crisis effects on South-Eastern Europe countries have been limited. From the analysis of the study, it seems that Albania is the country more affected by the spillovers of the Greek crisis compared to other SEE countries. This has happened due to the fact that there is a relatively high percentage of Albanian migrants in Greece and Greece is the most important country for the Albanian remittances. While the effects on FYR Macedonia and Bulgaria are more limited because the trade linkages of these two countries with Greece are weaker. The authors determined that the Greek crisis affected more the banking and financial sector rather than real economy, especially the countries with a strong presence of Greek crisis such as Albania, Serbia, FYROM etc.

In her study, (Panagiotou, 2012) strengthens more the fact that Western Balkan countries are experiencing a difficult period because of the economic Greek crisis. The effects of the crisis were characterized by the decrease of GDP, decrease of remittances, increase of unemployment etc. The Western Balkan countries GDP-s in 2009 were decelerated to negative values such as Serbia -3.1%, Croatia -7.4%, Montenegro -5.7%, Bosnia and Herzegovina -0.9% and FYROM -0.9%. Also Albania has shown a decrease in GDP growth from 7.5% in 2008 to 3.4% in 2009. Unemployment rate was another indicator of the Greek crisis which for sure increased almost in all Western Balkan countries. The highest unemployment rate was signed in FYROM with 32.2% and the lowest value was in Croatia 9.1%. The unemployment rate increased even more in 2010 because the crisis widened and its effects were more evident during this year. The transfer of migrants' money to their home country is one of the most important positive influences on the economy. The decline of remittances was another impact of the crisis. The main origin of Albania remittances is Greece, FYROM, UK, Italy and Germany. The remittances are decreased from 1,495 million dollar in 2008 to 1,317 million dollar in 2009. The same effect is seen also in the other Western countries, where the lowest value of remittances is pointed in Montenegro 302 million dollar.

The impact of Greek financial crisis on the Western Balkan countries is further discussed by (Sadiku, Sadiku, & Berisha, 2014). The main objective of their paper was to identify the spillover effect of Greek crisis on these countries by using a binary logit model. From the analysis of the model, it was found that the variables such as the ratio of current account deficit and domestic bank loans give a sense of a strong impact in predicting the incidence of a financial crisis in the Western Balkan countries. The probability that banking and financial sector will be more affected by the Greek crisis is higher compared to that of real economy. In this case, the countries such as Albania, Serbia and FYROM are more affected by the crisis because they have the strongest presence of Greek banks. The authors concluded that their logit model performed well in the prediction of financial crisis occurrence in the Western Balkan countries. However, they mentioned that it would be better if the model contains more variables such as exports, portfolio investment variables etc in order to give more concrete results.

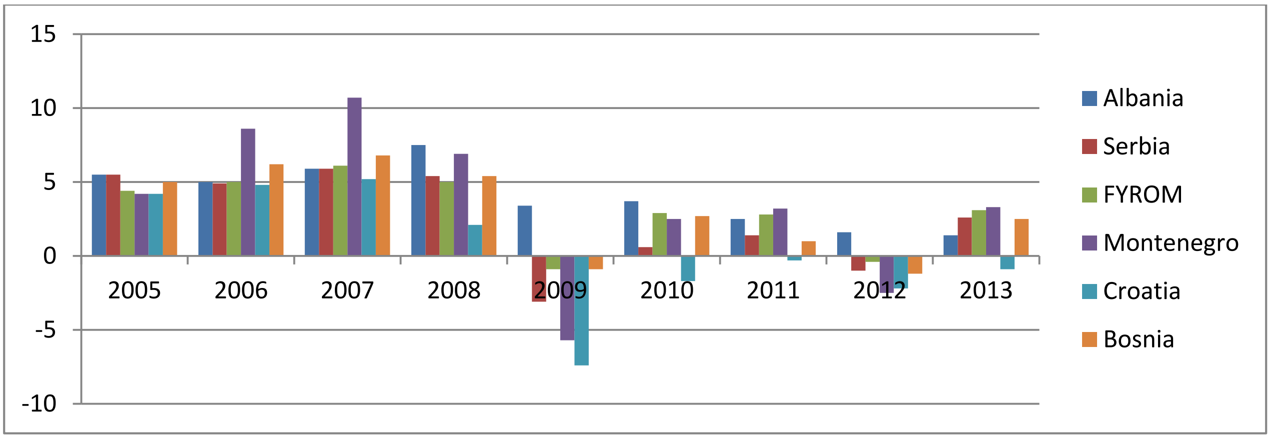
In the analysis done by (Daborowski & Szpala, 2010), it was found that Croatia was the only country which has experienced the major depreciation of the national currency and it can be compared to the devaluation of euro against dollar. This effect has happened because Croatia has the best-developed financial sector and it is stronger linked with European market. Even there is a slight growth in the GDP of these countries, the authors determined that the Greek debt crisis may put at risk this low growth. This impact may be seen in the countries which have stronger linkages with Greece like Albania, FYROM and Montenegro. The least affected by the debt crisis in Greece is Bosnia and Herzegovina and Croatia because they have weaker trade links with Greece. This crisis will reduce the Greek investments in other countries and the demand for goods and services from Western Balkan countries. The decrease of loan levels given by Greek banks will be one of the negative impacts of debt crisis. Also, the decrease of remittances is another negative consequence which for sure affects more Albania because more than 600,000 people work in Greece.

Data Description

The data are derived from World Bank and cover the period from 2005 to 2013. In this study, the countries considered are Albania, Serbia, FYROM, Montenegro, Croatia and Bosnia and Herzegovina. Kosovo is excluded from the analysis because there was not enough information and the needed data. While the data for the regression analysis for Albanian case are taken from 1999 to 2014. The three variables considered as most affected by the Greek crisis are real GDP growth, unemployment rate and remittances expressed in percentage of GDP. Generally, the consequences of this crisis are the decrease of real GDP growth, the decrease of remittances and the increase of unemployment rate.

In the figure 1, it is shown the real GDP growth for all the mentioned Western Balkan countries. In 2005 the lowest level of real GDP growth is signed in Montenegro and Croatia where the value is 4.2% for each country. While, Albania and Serbia pointed the highest value of GDP growth which is 5.5%. The debt crisis effect is seen at the end of year 2009 when all countries GDP, excluding Albania, have reached negative scales. The deepest impact is shown in the case of Croatia, where the value of GDP growth is -7.4%. This happened because Croatia has a strong economic and trade linkage with Greece and it has a considerable strong financial sector. After year 2009, the values of GDP growth have been increased in positive scales until year 2012 where their values reach again negative values. In 2013, generally they show a positive performance of their economy, except Croatia which signed negative value of -0.9%.

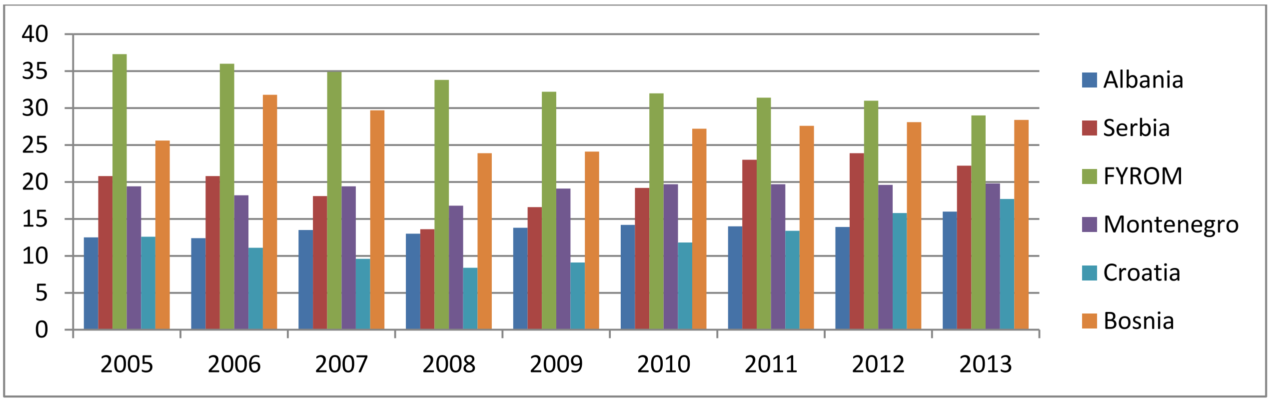
Figure 1: Real GDP growth (in %)



***Source**: World Bank, data processed by the authors.*

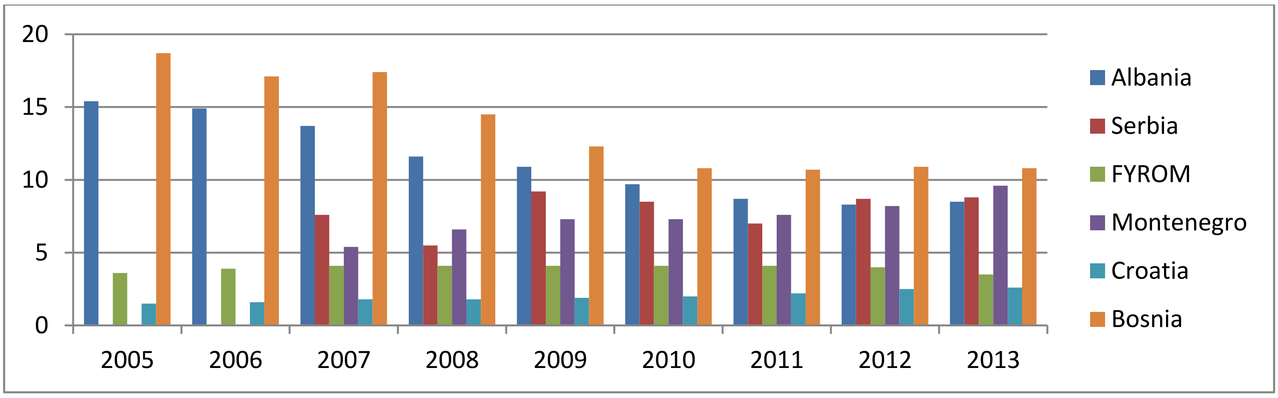
Another indicator of the debt crisis is also unemployment rate. As it is seen from the graph, FYROM has the highest unemployment rate during all the period from 2005 to 2013. Whereas, Croatia generally shows the lowest unemployment rate. The Greek crisis has increased the unemployment rate for all countries, except FYROM where the value of unemployment rate has decreased from 33.8% in 2008 to 32.2% in 2009. The high percentage of unemployment in FYROM and Bosnia and Herzegovina in 2013, 29% and 28.4% respectively, is very problematic for their economy. However, all these countries should work more in order to decrease this rate and to stimulate their economies. The following indicator is remittances expressed in percentage of GDP. There is an excess of data for Montenegro and Serbia for year 2005 and 2006. The highest remittances from 2005 to 2013 are signed in Bosnia and Herzegovina. The highest value is seen in 2005 and after this year there is a decreasing trend of this variable. Croatia has the lowest values of remittances and this may be because of less migrants moving to other foreign countries. Albania has been the second country among the countries with highest value of remittances. It has passed through a decreasing trend from 2005 to 2013 and the cause of this may be the return of the migrants in their home country by investing their savings.

Figure 2: Unemployment rate (in %)



Source: *World Bank, data processed by the authors.*

Figure 3: Remittances (in % of GDP)



Source: *World Bank, data processed by the authors.*

The Effect of Greek Crisis on Balkan Countries Economies

The debt Greek crisis turbulence has affected all the Balkan countries which were strongly tied up with Greece. Greece has been and still is the main trade partner and the main country for foreign investments for almost all the Balkan countries. Thus, these countries' economies will be influenced by this crisis by slowing down their economic development. The effects of this crisis were also seen by the figures above. In figure 1, according to the data given by World Bank, the real GDP has experienced a sharp decline during 2009. Except Albania, all other Balkan countries (Serbia, FYROM, Montenegro, Croatia and Bosnia and Herzegovina) have shown a negative real GDP growth. For sure, this decline has a negative effect of the FDI by decreasing them.

Remittances are considered as the main factor influenced by the crisis. Migrant remittances have always been the most important indicator of a well-developed economy. From figure 3 it is seen that remittances generally are decreased from 2005 to 2013. This is related also with the unemployment level which has been a very problematic issue for the Balkan Countries. According to (Koleka, 2015), many of the migrants have confirmed that they have not been paid even they have worked for a long time. Due to this fact, almost 16,000 Albanians have moved for asylum in Germany.

The other effect is related to the currency devaluation. According to (Golemis & Papadopoulou, 2009), the currency devaluation will increase the difficulty of households and businesses to serve their loans taken in Euros or another currency (with the argument of taking advantage of lower interest rates) and increase default. In this case, the level of non-performing loans may be increase by affecting negatively the economic performance. The following effect of the crisis is the decline of exports. The EU countries demand will decrease by leading in a decrease of goods and services exported by Balkan countries.

The main sector influenced by the Greek crisis seems to be banking sector. Referring to the report of (Correspondent, 2015), the banking system in the Balkan countries is unprotected at all from the crisis. Albania and Bulgaria's banking system, which are owned by Greek banks by 18% and 23% respectively, possess a very serious threat of the Greek financial crisis. According to the head of the Financial Stability Department at the Bank of Albania, Klodian Shehu, the debt crisis can not affect the Albanian sector because they do not borrow from Greek banks and they are not funding the Greek debt. He confirms that crisis will discourage the Albanian economy, especially the investment and trade sector.

Regression Analysis

This section will introduce the relationship and the effect of remittances and unemployment on the real GDP for Albania case. Remittances and unemployment rate have been two of the main factors of the Greek crisis which directly affect the performance of the economy. So, in this case the dependent variable is real GDP and the independent variables are remittance and unemployment rate. Through the E-Views program, it will be identified the effect of each factor on the real GDP growth. The regression equation is as below:

$GDP = \beta_0 + \beta_1 * Unemp + \beta_2 * Rem$

For each variable, it will be tested if they are stationary at level or not. If the variables are stationary at level, the regression of the variables will be analyzed. Otherwise, if the variables are stationary at 1st difference the Johansen Co-integration test will be analyzed. In this case, the 10% significance level will be considered.

Table 1: Stationary test of GDP variable

Null Hypothesis: GDP has a unit root
Exogenous: None
Lag Length: 0 (Automatic - based on SIC, maxlag=3)

		t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic		-2.835968	0.0079
Test critical values:	1% level	-2.728252	
	5% level	-1.966270	
	10% level	-1.605026	

The first variable which will be tested is the dependent variable, GDP. The ADF P-value is 0.007 which is lower than 10% significance level (0.007 < 0.1). At the same time, the t-statistic is lower than any critical value. Thus, the GDP variable is stationary at level.

Table 2: Stationary test of REM variable

Null Hypothesis: REM has a unit root
Exogenous: None
Lag Length: 1 (Automatic - based on SIC, maxlag=3)

		t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic		-3.423538	0.0023
Test critical values:	1% level	-2.740613	
	5% level	-1.968430	
	10% level	-1.604392	

The second variable considered is remittance. It is known that remittances play a crucial role in the economy of each country. The P-value is lower than 10% significance level (0.002 < 0.1). Also, the t-statistic is lower than any critical value which means that Rem variable is stationary at level.

Table 3: Stationary test of Unemp variable

Null Hypothesis: UNEMP has a unit root
Exogenous: None
Lag Length: 0 (Automatic - based on SIC, maxlag=3)

		t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic		-2.721449	0.0101
Test critical values:	1% level	-2.728252	
	5% level	-1.966270	
	10% level	-1.605026	

The ADF P-value of Unemp variable is 0.01 which is lower than 0.1. The t-statistic value is lower than 5% and 10% significance level. Thus, in this case the variable is stationary at level. Since all the variables are stationary at level, the regression will be used. The table above gives the results of the regression analysis.

Table 4: Regression analysis

Dependent Variable: GDP
Method: Least Squares
Date: 11/05/15 Time: 10:57
Sample: 1999 2014
Included observations: 16

Variable	Coefficient	Std. Error	t-Statistic	Prob.
REM	0.390519	0.198074	1.971583	0.0703
UNEMP	1.284807	0.648420	1.981442	0.0691
C	0.180347	2.589648	0.069642	0.9455

R-squared	0.415952	Mean dependent var	5.137500
Adjusted R-squared	0.326098	S.D. dependent var	3.021672
S.E. of regression	2.480536	Akaike info criterion	4.822187
Sum squared resid	79.98976	Schwarz criterion	4.967047
Log likelihood	-35.57750	Hannan-Quinn criter.	4.829605
F-statistic	4.629222	Durbin-Watson stat	1.349908
Prob(F-statistic)	0.030333		

The regression line in this case will be: GDP = 0.18 + 1.28*Unemp + 0.39*Rem.

In order for a variable to be significant, the P-value of the variable should be between + and – 0.1 interval. Thus, -0.1 < P-value < 0.1 shows the significance of the variable. From the table it is seen that both variables are significant. GDP tends to change by 1.28 percent for a one percent change in Unemp variable. From the other side, GDP tends to change by 0.39 for a one percent change in Rem variable. The R^2 in the table is 0.41 which means that 41 percent of the variation in the GDP growth is explained by the variation of the two independent variables unemployment rate and remittances.

Conclusions

Greek debt crisis has been widespread all over the world, especially it has affected the Western Balkan countries. The countries considered in this study are Albania, FYROM, Montenegro, Croatia, Bosnia and Herzegovina and Serbia. It was concluded that Albania was the country more influenced by the Greek crisis because of stronger trade relations with Greece. Also, a moderate number of Albanians are migrants in Greece which means that for sure this crisis will affect them by decreasing their remittances. At the beginning of the Greek crisis in 2009, there was a slowdown in the Western Balkan countries economies. All these countries real GDP were signed in negative scales, excluding Albania. The other effect of the crisis is related to the currency devaluation. This devaluation will affect a lot the loan borrowers who will be unable to pay back the loan. Thus, in this case the level of non-performing loans will be increased. The other effect of the Greek debt crisis is the decline of exports. So, the EU countries demand will decrease by leading in a decrease of goods and services exported by Balkan countries. It has been concluded that banking sector is the one more influenced by the crisis. Albanian banking sector is very threatened by the Greek crisis because 18% of it is owned by Greek banks. However, the government is taking actions to not influence and to avoid the decline of the economy. From the analysis, it was found that both unemployment rate and remittances are significant in this case. GDP tends to change by 1.28 percent for a one percent change in Unemp variable and it changes by 0.39 for a one percent change in Rem variable. The R^2 is 0.41 which is considerably high value.

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