Global Financial Crises: The Impact on Albanian Economic Growth

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Abstract

This study presents the main causes and characteristics of the 2008 world financial crises, focusing on its impact on Albania`s economic growth; by examining the channels through which the global crises affected it. The methodology used to measure the impact of the crises is regression analysis and Johansen co-integration test, for exports and remittances as two important influencing components of GDP. The data is taken by INSTAT and World Bank on a quarterly basis, for 2004-2013 interval. The analysis showed that the crisis had a negative impact to a range of indicators causing a decline in emigrants' remittances, exports, FDI, affecting so GDP and the entire economic growth of Albania.

Keywords: GDP, financial crisis, exports, FDI, Albania

Introduction

Some years ago, the world economy faced the most severe financial crisis since the Great Depression of the last century. It started to appear in the middle of 2007 in the United States, due to subprime mortgage crises, and for a short time spread all over the world. Although the impact of the crisis was not uniform across all countries, no region of the world was unaffected; all regions experienced a considerable reduction in GDP growth and many countries suffered recession.

There is no precise definition of "financial crisis" but a common view is that disruptions in financial markets rise to the level of a crisis when the flow of credit to households and businesses is constrained and the real economy of goods and services is adversely affected.[1] In the 19th and early 20th centuries, many financial crises were associated with banking panics, and many recessions coincided with these panics. Other situations that are often called financial crises include stock market crashes and the bursting of other financial bubbles, currency crises, and sovereign defaults. Financial crises directly result in a loss of paper wealth; they do not directly result in changes in the real economy unless a recession or depression follows.[2]

The financial crisis of 2008 is considered by many economists to be the worst financial crisis since the Great Depression of the 1930s[3]. Around the world stock markets have fallen, large financial institutions have collapsed or been bought out, and governments of all nations have had to come up with rescue packages to save their financial systems. US financial institutions had been lending on a massive scale to many home borrowers with low-document loans. The people who sold the loans got their commission, and the investment banks securitized the loans and on-sold these securities as quickly as

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[1] Jickling, Mark. "Averting Financial Crisis". CRT Report for US Congress. 21 March 2008.
[2] P. Kindleberge, Charles, & Aliber, Robert. "Manias, Panics, and Crashes: A History of Financial Crises", 5th Ed. New Jersey: John Wiley & Sons, Inc., Hoboken, 2005.
[3] Roubini, Rogoff and Behravesh. Reuters. 29 February, 2009.

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possible, also making a commission. When borrowers could not make the repayments, banks would sell the house and house prices would fell, as well as the prices of the securities, financial institutions which bought these securities were left with huge losses.

The impact of the crisis was unavoidably felt also in Albania mainly in the form of lower remittances and FDI, and a drop of exports which eventually led to moderation of growth rates and of fiscal revenues. Industry was the sector most hit by the crisis, especially construction. Both extracting and processing industries recorded double digit declines in their sales from the start of 2009.

Certainly, Albania was not in terms of year-end 1996 and early 1997 when the "crisis of usury" was converted in genuine economic crisis resulting with a decline of 7% of GDP, a 42% increased inflation[1] and with the deterioration of other macroeconomic indicators. But although the weak integration with U.S. and world economy in general, Albania is not immune from the effects of global crisis. Over 3 / 4 of the foreign trade is conducted with EU countries[2]. The variety of data showed that the crisis firstly begun to affect to a range of indicators causing a decline in remittances, saving deposit rates, export-import, the depreciation of ALL against Euro and U.S. dollar, the curbing bank lending, especially in foreign currency, the increase of unemployment, the blocking specific sectors, like construction.

The aim of this paper is to examine if the global financial crisis of 2008 had an impact on the Albania`s economic growth and the channels through which it affected. Among these channels, we consider international trade - **exports**, capital movements – **remittances**, external financing - **FDI**. For **the methodology** used in preparing the paper, there were used mainly the reports and data series published INSTAT, Bank of Albania and World Bank. To support this analysis and to verify the impact of the crises on Albania's economy, it was done the Regression analysis and Johansen co-integration test on quarterly data for 2004-2013 time interval.

2. Albania's Macroeconomic Performance prior 2008 Financial Crisis

From 1998 and in advance Albania has experienced an important transformation that has lifted it into the ranks of upper middle income countries and has made a sharp reduction in poverty. Growth averaged more than 6% per year between 1998 and 2010 – having so the best performance in Europe (Figure 2.1). This helped to reduce poverty by half, with the rate falling from 25% of the population in 2002 to 12% in 2008.

The GDP per capita increased to $3950 in 2010, a rate of growth faster than in any other country in Central or Southeast European (Figure 1). This is despite the slowdown experienced from the global economic crisis. However, Albania's income level remains low compared to other countries in the region.
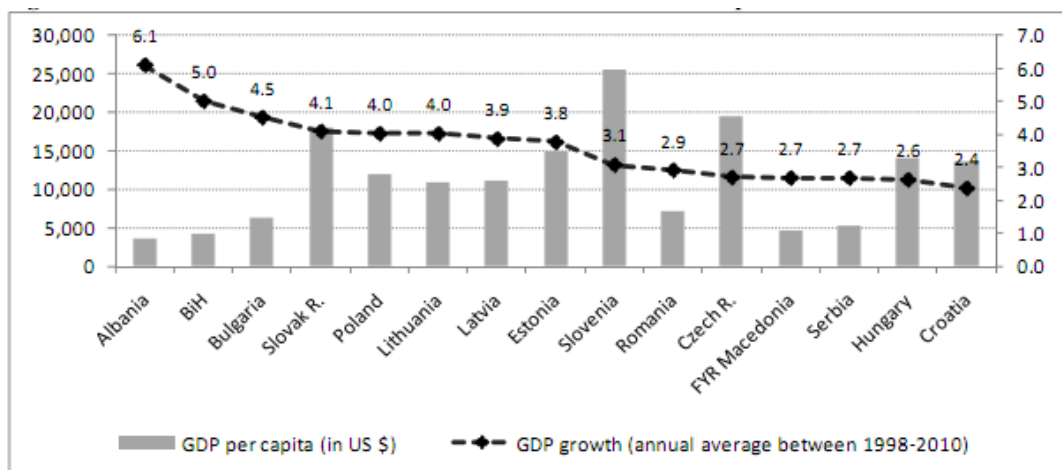

Figure 1: Economic Performance of Central and Southeast Europe's Countries; Source: (World Bank)

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[1] Time Series of Bank of Albania.

[2] Shqipëria në Shifra - Albania in Figures 2010. Tirana: INSTAT. November, 2010, 46.

This strong and successful economic growth has been a result of shifting labor and recourses from low to higher productivity sectors such as services and construction. It has also been supported by stable macroeconomic policies, structural reforms and other notable improvements in the business environment, energy, financial sector, tax administration and public financial management. These policies, combined with an acceleration of public investment in 2008 and 2009 of course served to soften the impact of the global financial crisis.

Services and construction until crisis begun represented more than 60% of GDP (Figure 2). The expansion of these sectors has been driven by an increase in the domestic demand sustained by increasing productivity, emigrants' remittances and other inflows[1]. Industrial sector shares around 39% of GDP, as a result of the growth of textile and shoe manufacturing and more recently due to the expansion of construction materials. The share of agriculture in GDP has been halved during the same period.
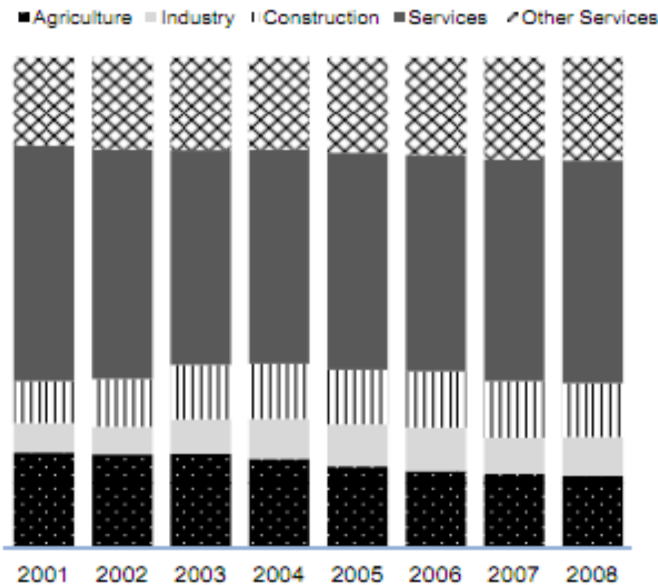

Figure 2: GDP Composition %; Source: (INSTAT)

In agriculture, 70% of production has been for subsistence[2] and value added per person has been less than one fifth of that in other sectors. Hence the shift to other sectors brought an increase in the share of higher productivity jobs. But again the agriculture sector remains dominant, accounting for 18% of GDP and about 40% of employment[3], which means there is still potential for increasing overall productivity.

The considerable growth was supported by a continuous increase in investment. Total gross investment has increased from 24.6% of GDP in 2000 to 29.5% in 2009, and private investment from 18% to 21.4% over the same period (Figure 3). The structure of investment has been directed towards the construction sector, with only about 10% of GDP going to investment for production purposes till 2006. Since then, non-construction investment has increased but the share of construction investment remains high.

[1]Albania - Sustaining Growth Beyond the Transition. A World Bank Country Economic Memorandum. 24 December, 2004. Report No. 29257-AL
[2] World Bank, 2007
[3] INSTAT

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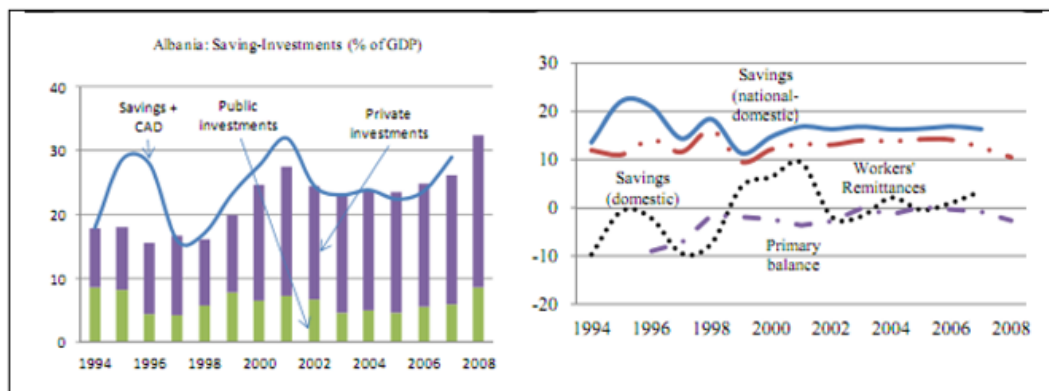and Business Studies

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Figure 3: Saving and Investments; Source:

Figure 4: Domestic vs. National Saving

(INSTAT, World Bank and IMF databases) (% of GDP); Source: (INSTAT, World Bank and IMF databases)

As a result of the sustained economic growth, poverty in Albania has fallen substantially. The absolute poverty rate[1] fell from 25.4% in 2002 to 18.5% in 2005 to 12.4% in 2008.

The impressive growth record of the past decade has been supported by both a strong and stable macroeconomic policies and a major progress in structural reforms. The most important reforms[2] that have been taken in recent years are the following:

Business climate: a one-stop-shop called the National Registration Center, a credit registry and introduction of a flat tax, together with administrative simplification of the tax regime.

Financial sector: strengthened financial supervision and changes to the legal and regulatory framework of the banking system to improve the execution of collateral and credit risk management.

Infrastructure: unbundling of the electricity network, privatization of the distribution system, and introduction of a best practice legal framework for telecommunications.

Public administration: introduction of electronic procurement in the public sector and introduction of a law on concessions.

These reforms have been combined with an improvement in overall governance. Albania is becoming every day more integrated into global economic systems, becoming so more dependent on international trade, technology and capital. This is very important for Albania to consider and adapt to.

Albanian economic performance during the world crisis shows that firstly Albania was not affected. Micro and macroeconomic indicators showed that it has escaped this economic "storm", showing so an economic stability. But in the next years data show a serious effect given that a good portion of the revenues come from remittances of migrants from neighbor countries, which are maximally affected by the crisis, it is right to say that the Albanian economy also has felt the effects of this economic crisis.

In the last quarter of 2008, the financial sector in Albania started to feel the impact of the global financial crisis. The main development was an increasing sensitivity of the public for their savings in the banking sector. People started to withdraw their deposits. At the beginning, there was no pressure on the exchange rate but it started to increase at the beginning of 2009, when it was noticed a contraction in the inflow of foreign currency, due to a decline in exports and remittances. The quality of the loan portfolio started to deteriorate, and the nonperforming loans reached 8% of the entire loan portfolio at the end of April 2009. Due to a decline in interest income margins and an increasing amount of provisions, some of the banks have started to accumulate negative financial results.

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[1] Fraction of the population whose real per capita monthly consumption is below Lek 4891 in 2002 prices.

[2] Albania The New Growth Agenda - A Country Economic Memorandum. World Bank. 2 November, 2010. Report No. 53599-AL

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On the other hand, almost all the banks have increasingly supported loans in domestic currency. The banking sector remained well capitalized and liquid. The capital adequacy ratio was 17.1% in March 2009, compared to the required minimum level of 12%. Liquid assets were 42% of total assets[1]. It means that the banking sector was able to cover for a worst scenario that combines no economic growth, a higher level of depreciation for the exchange rate, and a higher level of non-performing loans.

3. Transmission Channels

Investors' behavior under market imperfections and the presence of multiple equilibria can cause a shock to be transmitted from one economy to another. However, whether a shock is transmitted, and whether it has a large impact on another country will depend very much on how vulnerable the real sector and financial system are. An economy is more vulnerable if it has weak macroeconomic fundamentals or financial system. The degree of vulnerability also increases with the number and size of linkages with the real economy and financial system of other economies. Thus, the transmission channels can be real (economic) or financial.

One of the most commonly studied real channels of contagion involves **trade linkages**. If the export market of an economy experiences a shock such that its demand for imports declines, the exporting economy's trade account will be adversely affected. Trade linkages help explain cross-country correlations in exchange market pressure during crisis episodes, after controlling for other macroeconomic factors.[2] While trade linkages may help explain contagion between economies that are closely related, they leave some cases of contagion unanswered, such as the one between Russia and Brazil in late 1990s, as the two countries did not have substantial trade links. Sometimes **financial linkages** might be the more important channels. A financial crisis in one economy can lead to reductions in trade credit, foreign direct investments and other capital outflows. There are many ways that financial linkages help propagate spillovers or contagion, and the extent is partly determined by the degree of financial market integration between the economies concerned.

The general model of **Transmission Channel** is as follows:

$$\text{Crisis}_{it} = A\,(\text{Channel}_{0,i,t}) + B X_t$$

where **Crisis**$_{it}$, is a dummy variable equals to one during the crisis period in economy i and zero otherwise; X_t is a set of other possible explanatory variables and B is the corresponding coefficient matrix; **Channel**$_{0,i,t}$, is a variable (or a set of variables) which measures the intensity of the transmission channel in question between the identified "ground zero" economy and economy I, with its corresponding coefficient matrix being A. The significance of the transmission channels is thus indicated by the significance of the coefficient A.[3]

Escaith H. et al. (2010) maintain that international trade was both a casualty of the 2008–09 crisis and one of its main channels of transmission. A decrease in trade is expected when world output falls following a severe financial crisis. Karshenas (2009) noted that the impact of the global economic crisis on different LDCs has varied depending on the nature of their trade specialization. He stated that the global economic crisis has led to a sharp reduction in world trade and rapid de-cline in commodity prices and it is one of the main mechanisms through which LDCs have been affected. Escaith et al. (2010) suggest that the demand for consumer durable and investment goods was particularly affected by the sudden stop in bank credits. The 2008–09 crisis has highlighted new short-term and long-term dynamics in trade and GDP.[4] There were three channels through which the global financial crisis was transmitted to Albania.

3.1. Transmission Channel 1: International Trade - Exports

European countries went through a severe recession during the recent financial crisis, suffering a tightening in budget and rising in public debt[5]. The EU is Albania's most important export market so the recession in Europe had serious

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[1] Bank of Albania

[2] Glick R. and A.K. Rose, 1999. "Contagion and trade: Why are currency crises regional?" Journal of International Money and Finance, vol. 18(4), pp. 603-617.

[3] Cheung, Chi-sang Tam and Jessica Szeto, Contagion Of Financial Crises: A literature Review Of Theoretical And Empirical Frameworks, Research Note 02/2009

[4] Escaith, H. et al., "Global Value Chains and the Crisis: Reshaping International Trade Elasticity?" in Cattaneo, O. et al. (eds.), Global Value Chains in a Postcrisis World: A Development Perspective. Washington: The World Bank, 2010, 73–124.

[5] Turan, G. & Bala A., 2014. "European Crisis and the Effect on Albanian Economy", Academic Journal of Interdisciplinary Studies. Vol 3, No 3, pp. 230-237. Doi:10.5901/ajis.2014.v3n3p230

implications for Albanian exporters. The main trade partners remain Italy and Greece, whose exports are approximately 63% and 7% respectively.
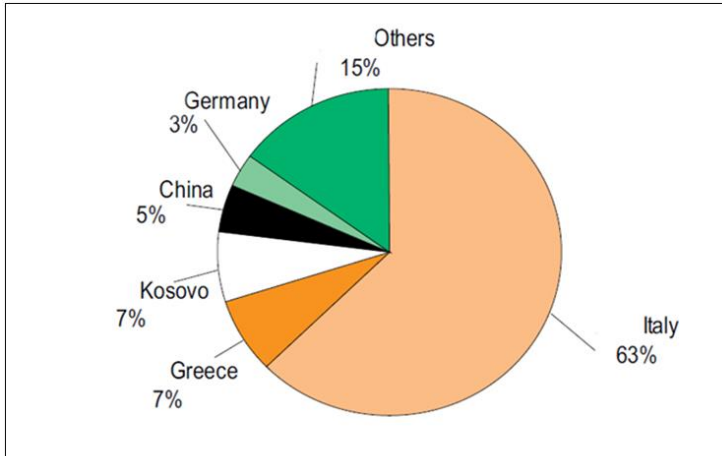

Figure 5: Structure of exports by main partners, 2009; Source: (INSTAT)[3]

By looking the data during 2005-2015 period (Figure 5), up to 2008 exports in Albania have shown a continuous increase. But it can be notated clearly that in 2009 the total amount of exports had a serious decrease because of the effect of world financial crises.
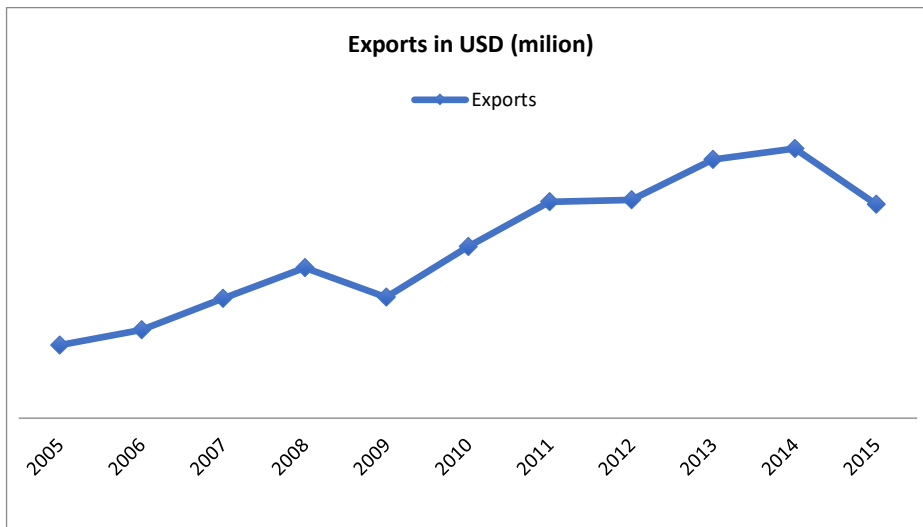

Figure 6: Exports in million USD in 2005-2015 period; Source: (World Bank)

3.2. Transmission Channel 2: Remittances

The money that migrants send from countries where they work, to their families, at home are otherwise known as remittances. This migration promotion is explained by "push-and-pull" model[1]. According to this model, economic conditions, demographic pressures, unemployment in sending countries ('Push Factors'), interact with higher wages, labor force requirements, family reunification ('Pull Factors') in host countries (Smith 1997).

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[1] Hagel, John. & S. Brown, John. "From Push to Pull-Emerging Models for Mobilizing Resources"
Working Paper, October 2005

Table 1: Push and Pull Factors

Conditions	Push Factors	Pull factors
Economic and **demographic**	Poverty, unemployment, low salaries; High birth rate; lack in health and education	Higher salaries, level of living, personal development; Professional development.
Political	Conflict, insecurity, violence; Unfunctional government, corruption;	Safety, Protection; Political liberties.
Social and Cultural	Discrimination on ethnic, gender, religion etc.	Family reunification patriotic Diaspora, Freedom from discrimination.

Economic and demographic factors associated with poverty, unemployment, low wages, high fertility, deficiencies in health and education have led to increasing rates of immigration in our country. The volume of remittances depends on the number of immigrants from the country of migration, on revenues that are provided there, the level of connection with their families, from facilities in sending money, political stability etc.
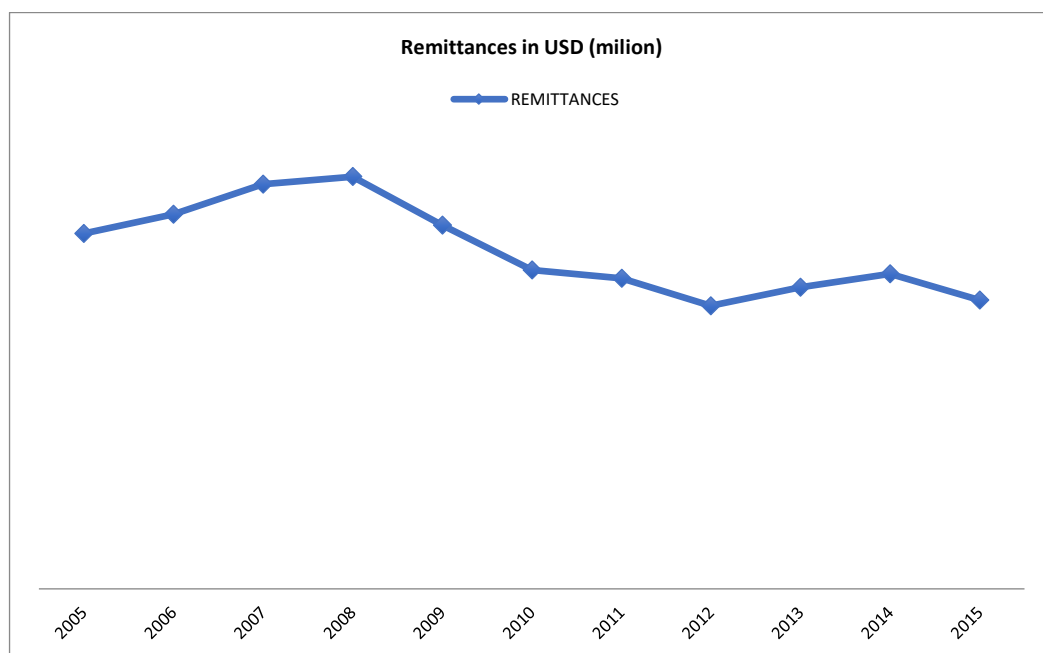

Figure 7: Remittances in 2005-2015; Source: (INSTAT)

During years 2005-2015 in Albania have entered totally 13.522 billion USD, or 1.230 billion of USD average per year (Figure 7). The remittances level has reached its maximum in 2008 with 1.495 billion USD. The volume started to fall in 2009, until 2013. This trend is explained by the global financial crisis effect. The sectors affected the most by remittances are construction, services and food, which are also the key contributors to Albania's GDP. The sharp contraction in construction has party been a result of declining inflows from workers abroad.

3.3. Transmission Channel 3: Foreign Direct Investment

Another transmission channel through which the global crisis has affected Albania is Foreign Direct Investment (FDI). This can be seen clearly in the above figure (Figure 8). The global slowdown and tighter financing conditions have led governments alike to review investment plans, bringing FDI down worldwide. The FDI in Albania reached its maximum in 2009, after that there has been a considerable reduction of investments because of the world crisis.
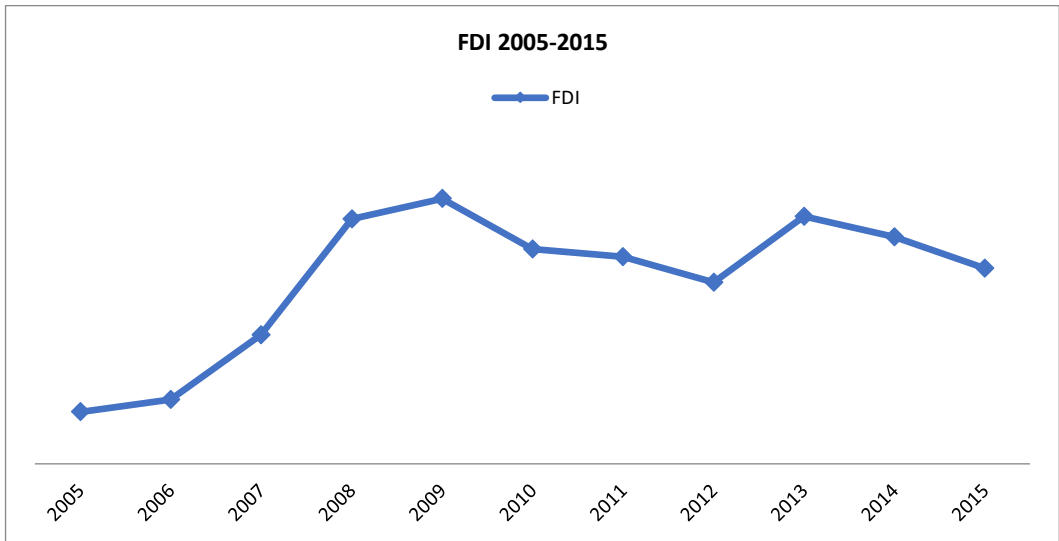
Figure 8: FDI inflows for years 2005-2015; Source: (INSTAT)

4. Regression Analysis; Johansen co-integrtion test, VECM and Granger Casuality test

We are going to use Regression Analysis and Johansen co-integrtion test in order to asertain the relationship between the dependent variable Gross Domestic Product (GDP) as the main macroeconomic indicator, and the indipendent one, exports. This analysis will examine if there exsist a strong or weak relationship between GDP and Export and to make some coclusions by interpreting the regression equation and other data. This study employs quarterly data from 2004 to 2013, so for a 10 year period. The data for this research are obtained from Central Bank of Albania and INSTAT. The regression model in this study is:

GDP= α+ β$_1$EXP + β$_2$RMT + e

Where:

α: is the intercept

β$_1$, β$_2$, β$_3$: is the estimated regression coefficients

e: is the error term

GDP: Gross Domestic Product is the dependent variable

EXP: Exports is the independent variable

RMT: Remittances

The hypothesis for this equation is represented by the following:

H0: Exports and remittances have a significant impact on Gross Domestic Product in the long run

H1: H0 is not true

GDP Histogram

Figure 9: GDP Histogram

For GDP the skewness is -0.7059 which is near to 0 and kurtosis is 2.1323 which is near to 3, meaning that the GDP has a normal distribution.

EXPORTS Histogram

Figure 10: Exports Histogram

For Exports the skewness is 0.0845 which is near to 0 and kurtosis is 1.7196 which is near to 3, meaning that the Exports have a normal distribution.

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REMITTANCE Histogram
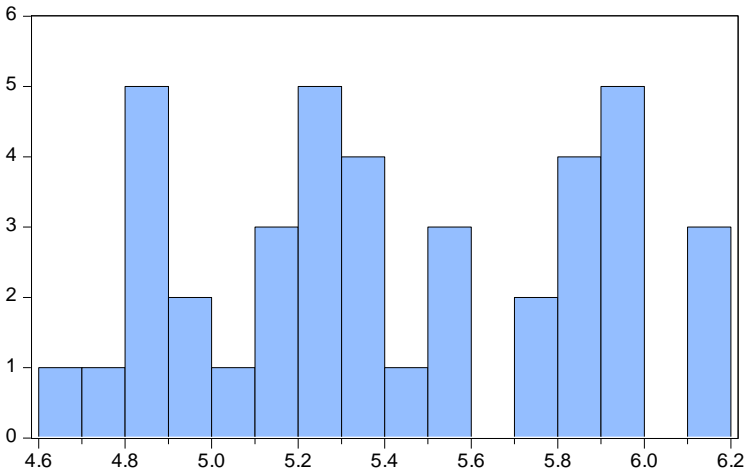
Series: LOGREMITTANCE	
Sample 2004Q1 2013Q4	
Observations 40	
Mean	5.230297
Median	5.251780
Maximum	5.690359
Minimum	4.744932
Std. Dev.	0.235940
Skewness	-0.229502
Kurtosis	2.055090
Jarque-Bera	1.839233
Probability	0.398672

Figure 11: Remittance Histogram
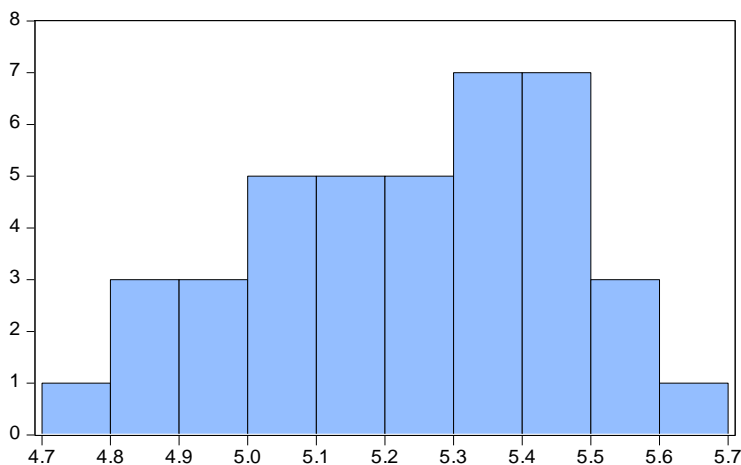
For Remittance the skewness is -0.2295 which is near to 0 and kurtosis is 2.0550 which is near to 3, meaning that the Remittance has a normal distribution.

Table 2. Group Statistics

	LOGGDP	LOGEXPORTS	LOGREMITTANCE
Mean	7.900794	5.423270	5.230297
Median	7.979480	5.337527	5.251780
Maximum	8.160186	6.126869	5.690359
Minimum	7.511525	4.691348	4.744932
Std. Dev.	0.205370	0.438210	0.235940
Skewness	-0.705900	0.084587	-0.229502
Kurtosis	2.132347	1.719612	2.055090
Jarque-Bera	4.576665	2.780021	1.839233
Probability	0.101435	0.249073	0.398672
Sum	316.0317	216.9308	209.2119
SumSq. Dev.	1.644902	7.489095	2.171034
Observations	40	40	40

Table 3. Estimation Equation Output

DependentVariable: LOGGDP				
Method: LeastSquares				
Date: 03/22/17 Time: 19:01				
Sample: 2004Q1 2013Q4				
Includedobservations: 40				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
LOGEXPORTS	0.699631	0.051945	13.46877	0.0000
LOGREMITTANCE	0.784273	0.053979	14.52927	0.0000
R-squared	0.168647	Meandependent var		7.900794

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Adjusted R-squared	0.146769	S.D. dependent var	0.205370
S.E. of regression	0.189702	Akaikeinfocriterion	-0.438022
Sumsquaredresid	1.367494	Schwarzcriterion	-0.353578
Log likelihood	10.76045	Hannan-Quinn criter.	-0.407490
Durbin-Watson stat	1.417262		

Table 4. Augmented Dickey-Fuller Unit Root Test on GDP, RMT and Export

Variables	1% Level	5% Level	10% Level	Probability
GDP	-3.615588	-2.941145	-2.609066	0.0000
REM	-3.626784	-2.945842	-2.611531	0.0000
EXP	-3.615588	-2.941145	-2.609066	0.0000

Table 5. Johansen Co-integration Test – GDP and Exports

Date: 03/22/17   Time: 23:47
Sample (adjusted): 2005Q3 2013Q4
Includedobservations: 34 afteradjustments
Trend assumption: Linear deterministic trend
Series: **LOGEXPORTS LOGGDP**
Lags interval (in firstdifferences): 1 to 5

UnrestrictedCointegrationRank Test (Trace)

Hypothesized No. of CE(s)	Eigenvalue	Trace Statistic	0.05 CriticalValue	Prob.**
None	0.157856	6.400182	15.49471	0.6482
At most 1	0.016302	0.558841	3.841466	0.4547

 Trace test indicatesnocointegration at the 0.05 level
 * denotesrejection of the hypothesis at the 0.05 level
 **MacKinnon-Haug-Michelis (1999) p-values

UnrestrictedCointegrationRank Test (MaximumEigenvalue)

Hypothesized No. of CE(s)	Eigenvalue	Max-Eigen Statistic	0.05 CriticalValue	Prob.**
None	0.157856	5.841341	14.26460	0.6337
At most 1	0.016302	0.558841	3.841466	0.4547

 Max-eigenvalue test indicatesnocointegration at the 0.05 level
 * denotesrejection of the hypothesis at the 0.05 level
 **MacKinnon-Haug-Michelis (1999) p-values

UnrestrictedCointegratingCoefficients (normalized by b'*S11*b=I):

LOGEXPORTS	LOGGDP
0.382874	-7.563803
5.633955	-9.215651

UnrestrictedAdjustmentCoefficients (alpha):

D(LOGEXPORTS)	0.029162	-0.008724
D(LOGGDP)	0.024229	0.000944

1 CointegratingEquation(s):		Log likelihood	88.61300

Normalizedcointegratingcoefficients (standard error in parentheses)
LOGEXPORTS	LOGGDP
1.000000	-19.75534
	(8.90225)

Adjustmentcoefficients (standard error in parentheses)	
D(LOGEXPORTS)	0.011165
	(0.00783)
D(LOGGDP)	0.009277
	(0.00461)

In **Table 5**, Trace test indicates no co-integrating equation at the 0.05 level where the Trace statistic is close to 5% critical value (Johansen, 1988), Max-Eigen value test also indicates that there is no co-integration at 0.05 level because Max-Eigen statistic is near to 5% critical value. In other words GDP and exports are not co-integrated to each other in the long run.

Table 6. Johansen Cointegration Test – GDP and Remittance

Date: 03/22/17   Time: 23:46
Sample (adjusted): 2005Q3 2013Q4
Includedobservations: 34 afteradjustments
Trend assumption: Linear deterministic trend
Series: **LOGGDP LOGREMITTANCE**
Lags interval (in firstdifferences): 1 to 5

UnrestrictedCointegrationRank Test (Trace)

Hypothesized No. of CE(s)	Eigenvalue	Trace Statistic	0.05 CriticalValue	Prob.**
None *	0.436224	22.87434	15.49471	0.0032
At most 1	0.094869	3.388977	3.841466	0.0656

 Trace test indicates 1 cointegratingeqn(s) at the 0.05 level
 * denotesrejection of the hypothesis at the 0.05 level
 **MacKinnon-Haug-Michelis (1999) p-values

UnrestrictedCointegrationRank Test (MaximumEigenvalue)

Hypothesized No. of CE(s)	Eigenvalue	Max-Eigen Statistic	0.05 CriticalValue	Prob.**
None *	0.436224	19.48536	14.26460	0.0068
At most 1	0.094869	3.388977	3.841466	0.0656

 Max-eigenvalue test indicates 1 cointegratingeqn(s) at the 0.05 level
 * denotesrejection of the hypothesis at the 0.05 level
 **MacKinnon-Haug-Michelis (1999) p-values

UnrestrictedCointegratingCoefficients (normalized by b'*S11*b=I):

LOGGDP	LOGREMITTANCE
-9.472212	-2.682587
-0.103667	-9.586329

UnrestrictedAdjustmentCoefficients (alpha):		
D(LOGGDP)	0.022173	-0.016610
D(LOGREMITTANCE)	0.055808	0.019995

1 CointegratingEquation(s):	Log likelihood	83.26534

Normalizedcointegratingcoefficients (standard error in parentheses)

LOGGDP	LOGREMITTANCE
1.000000	0.283206
	(0.24453)

Adjustmentcoefficients (standard error in parentheses)

D(LOGGDP)	-0.210024
	(0.12021)
D(LOGREMITTANCE)	-0.528625
	(0.18331)

In **Table 6**, Trace test indicates 1 co-integrating equation at the 0.05 level where the Trace statistic is greater than 5% critical value. Max-Eigen value test also indicates that there is 1 co-integration at 0.05 level because Max-Eigen statistic is greater than 5% critical value. In other words GDP and remittances are co-integrated to each other in the long run but we need to make some other tests to see if they are also co-integrated in the short run.

Vector Error Correction Model (VECM)

After having co-integrated equation between GDP and remittances, the short term dynamics must be searched by Error correction Model. At the end we make Granger causality test to see if the variables move in the same direction or not (Engle and Granger, 1987).

Table 7. Vector Error Correction Model (VECM)

DependentVariable: LOGGDP
Method: LeastSquares
Date: 03/22/17   Time: 21:02
Sample: 2004Q1 2013Q4
Includedobservations: 40

Variable	Coefficient	Std. Error	t-Statistic	Prob.
LOGREMITTANCE	0.171266	0.079634	2.150653	0.0381
C	6.683129	0.431945	15.47218	0.0000
@TREND	0.016507	0.001607	10.27088	0.0000

R-squared	0.753994	Meandependent var	7.900794
Adjusted R-squared	0.740696	S.D. dependent var	0.205370
S.E. of regression	0.104578	Akaikeinfocriterion	-1.605720
Sumsquaredresid	0.404656	Schwarzcriterion	-1.479054
Log likelihood	35.11440	Hannan-Quinn criter.	-1.559922

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| F-statistic | 56.70136 | Durbin-Watson stat | 0.757772 |
| Prob(F-statistic) | 0.000000 | | |

Since the P values above are lower than 0.05, it means that the VECM model is significant.

Table 8. Granger causality test

VAR GrangerCausality/BlockExogeneityWaldTests
Date: 03/22/17   Time: 21:37
Sample: 2004Q1 2013Q4
Includedobservations: 38

Dependentvariable: LOGGDP

Excluded	Chi-sq	df	Prob.
LOGREMITTANCE	6.352739	2	0.0417
All	6.352739	2	0.0417

Dependentvariable: LOGREMITTANCE

Excluded	Chi-sq	df	Prob.
LOGGDP	13.08724	2	0.0014
All	13.08724	2	0.0014

PairwiseGrangerCausalityTests
Date: 03/22/17   Time: 21:39
Sample: 2004Q1 2013Q4
Lags: 5

NullHypothesis:	Obs	F-Statistic	Prob.
LOGREMITTANCE does not GrangerCause LOGGDP	35	0.33120	0.8891
LOGGDP does not GrangerCause LOGREMITTANCE		4.72858	0.0038

Table 8 presents the results of Granger causality test. Because the P values are smaller than 0. 05, the results of co-integration have been confirmed by Granger causality test. In the table it can be seen that there is a one way causality from GDP to remittances.

"LOGREMITTANCE does not GrangerCause LOGGDP" is accepted and "LOGGDP does not GrangerCause LOGREMITTANCE" is rejected. Therefore, the pair wise Granger causality test confirms the result of the Johansen co-integration test results of co-integration between variables in Albania in the short run.

5. Conclusions

The entire world economy has been affected deeply by global financial crises, which was a result of unbalanced financial activity. The world economists failed to predict the risk coming from crediting. As result, most of developed countries' economies experienced recession. Less affected by the crises were developing countries and countries whose financial systems are not much integrated in the global market.

Albania was one of the countries which despite the global tendency, continued to have positive growth, being the country with the highest economic growth rate in the Europe during the crises period. The economic growth rate of Albania for 2008 was 7,5% and for 2009, 3.3%[1]. At the beginning of the global crisis, the Albanian financial system was largely unaffected for many reasons. Firstly, Albanian economy is not integrated into the global financial market. Secondly, banks in Albania are well capitalized and have very little, if any, exposure to complex financial instruments, which were the genesis of the global crises. Thirdly, the response of the government throughout the fiscal and monetary policy played an important role in coping successfully with the crises.

But after 2009, the impact of global and EU countries crisis started to appear in large doses. The fact that most of Albanian emigrants work in European countries and since export is conducted mostly with EU countries, Albania`s economy suffered a negative external shock transmitted mainly through exports, remittances and in foreign capital flows, causing a decrease in economic growth. As stated from the results of the equations, in the long run GDP was strongly co-integrated with REM variable, which caused a tightening in the budget and rise in the public debt. It was also proved that GDP and REM are co-integrated also in the short run and they move in the same direction.

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