# THE EFFECT OF FDI ON THE GDP OF MACEDONIA

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#### ABSTRACT

Foreign direct investment (FDI) is one of the most important international factors in relation with money movements. For this reason it has a major effect on the country's financial development and employment increase. Various studies in the world and mainly on European developing countries show that FDI plays an important role in creating new employment positions in host countries. A lot of research has been going on regarding FDI on a world scale which issue is already documented, however further information is needed in order to have a better understanding about FDI in the Balkan Region and particularly in Macedonia. In the last two decades, Macedonia has been one of the main receivers of FDI, compared to other countries from Central and Eastern Europe. The main purpose of this study is to analyze the effect of FDI on the level of GDP in Macedonia. To conduct the study, data are gathered from World Bank, International Monetary Fund, and State Statistical Office of Macedonia, for the country over a period of seventeen years from 1998-2014.

Keywords: FDI, GDP, Macedonia, growth, development

#### 1. Introduction

Foreign direct investment has been and is one of the main topics of interest for many years now. It is one of the most crucial and sensitive areas which plays an important role in the development and financial stability of a developing country. Numerous academics and researchers state that FDI is not just the idea of the money transfer but it has other significant and positive effects on a country's financial stability and development effort. In addition FDI can be an important starting point in boosting the country's economy by including valuable technology and know-how in the local companies. It is also driven by the ongoing liberalization of foreign direct investment and trade policies. In this context, globalization recommends an unprecedented opportunity for developing countries to achieve faster economic growth through trade and investment. It is important to point out that every country has its own thoughts and definitions about FDI. However, the general picture that people have in their mind when FDI comes up, is improving the economy of a state which has a direct impact on the increase of employment in that particular country (Hill and Athukorala, 1998).

Macedonia by being a small economy has a significant need for FDI, and for this reason has started to make important decisions in bringing foreign investors. The

legislation applies equally on domestic and foreign investors, which provides additional motivation in investment attraction. In order to protect the foreign investors, Macedonia has concluded several bilateral investment agreements and implements additional conventions that force label standards for FDI safety. Although many law enforcement measures have been undertaken, Macedonia's desire to enter both NATO and the EU remains unchanged because of the long time issue with Greece about its legitimate name (UNCTAD, 2012). This is the main national economic and political concern that holds the country far from the upper stated structures. Moreover, the economic crises have been additional element in slowing down the foreign investments in past few years. Between 2011 and 2012 the country faced a significant decrease of FDI from \$ 410 million up to \$ 61 million in the first three quarters of 2012. The largest part of this amount came from the outflow of the foreign-owned firm profits. Although the economic crises played a major role in FDI investment restrictions, corruption and EU integration were the main factors in decreasing Macedonia's FDI attraction (National Bank of Macedonia, 2013).

Most of the studies written on this subject have as their main objective to examine the impact and benefits of FDI on GDP. However, the observed results are not enough to make a desirable conclusion, due to technological and globalization changes in recent years which have brought inconsistency and additional debates on this topic.

### 2. Literature Review

Theories written about FDI and its determinants have started way back in history however; most empirical studies date back in 1980's and particularly in the last fifteen years. Furthermore, following the integration and globalization trends the number of variables which have direct influence on FDI have shown an improvement and the center of attention has switch to the influence of FDI in the development of the host countries. The aim of this study does not intent to present a broad and comprehensive summary of the literature review, but to examine the most significant studies in relation with the aim of this research.

Since its beginnings in 1960's the FDI role in the emerging economies has had both positive and negative thoughts about the affection on the country's economy as a whole (Fredkinsson and Zimny, 2004). Some see the FDI as the best possible way in order to maximize the economic growth of the country but on the other hand others pay more attention on the risks related and the negative effects it may bring to the economy of a certain country. At the beginning FDI used to be seen as unsupportive and offering inappropriate knowledge to developing world. However, few decades later, drastically different thoughts have come forward. Recently, FDI is seen as valuable tool and almost every country try to provide an ideal environment for investment.

Various studies show that different authors have come up with different conclusions concerning the meaning of foreign direct investment. FDI is the process where the people of a certain country obtain ownership of the company assets in order to control the manufacturing, distribution and other actions of their firm situated in another country. Foreign Direct Investment is the investment created to acquire long-term interest in companies operating outside investors' economy (Blaine, 2009). FDI my many authors is defined differently, however the common world of every definition is control. Control is the keyword which differentiates the FDI from the other ways of investment such as

portfolio investment where control is not the main concern. In the World Investment Report of UNCTAD (2011) is defined that in order to distinguish FDI from other investment manners the enterprise must have high level of control and long-term interest from the activity in the host country (UNCTAD, 2012).

Horizontal and vertical are two key techniques which help in making the foreign direct investment. The horizontal FDI can be found when an enterprise applies the existing operation to another country to expand its activity. The actions undertaken in the host country consist of the same level and significance as those in the home country. On the other hand, the vertical FDI can be seen when the foreign direct investment shifts the firm up and down in the value chain. Although, the foreign direct investment is divided horizontally and vertically, current literature frequently separates the FDI into two basic forms of entry: the Greenfield investment and Mergers and Acquisitions (M&A). The set up of the new production line in the host country is called green field investment, whereas buying the shares of an existing foreign company is a cross border acquisition (Bjorvatn, Kind & Nordås, 2002).

In public we can find debates which distinguish the Greenfield investment, offering additional capital and creates new job positions, and M&A that are intended to involve only changes in the ownership of the existing corporate unit (OECD, 2008). If a multinational enterprise (MNE) chooses to make an investment in a foreign country it takes under consideration two essential decisions: first, whether to purchase an existing foreign company (initiate an acquisition) or start up new foreign production line from nothing (establish a Greenfield facility); and secondly, whether to do it on your own (create a self-owned subsidiary or make a partnership with existing domestic firm (make a joint-venture) (Dikova & Witteloostuijn, 2005).

According to the results of regression, GDP is always connected with FDI which means that the level of development and size of the market undoubtedly related to foreign investors (Bevan and Estrin, 2000).

## 3. Economic Background And Macroeconomic Development In Macedonia

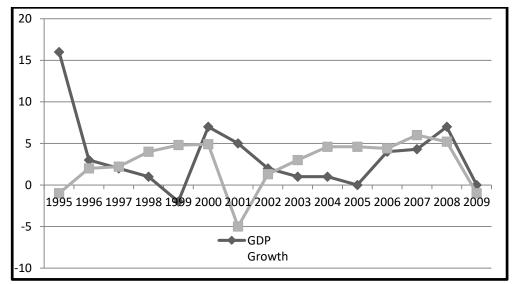
During the 90s the economic situation was very unstable however, since 2001 crucial structural changes were undertaken for the country benefits. Even though positive changes were made, the economic legacy is still evident. Comparing with the other European countries, Macedonia is one of the countries with lowest income and the unemployment rate remains very high (over 30%).

Moreover, comparing the GDP per capita with the rest South-East European countries is below the average, and can only be compared with countries like Bosnia and Herzegovina and Albania. If Macedonia will enter the European Union it would be the poorest member state with the lowest GDP per capita (\$4,838 in 2013), which is way lower than current poorest states Bulgaria (\$7,498 in 2013) and Romania (\$9,499 in 2013) (World Bank, 2013).

After breaking apart from Yugoslavia, in the following years Macedonia suffered from productivity losses (Figure 1.). Later on, in the period from 1996-2008 the country had some growth which stabilized the economical situation. When the global crises

occurred in 2008 and the worlds' most powerful economies declined it was time for the Macedonia economy to face the same destiny.

Figure 1: Real GDP growth and inflation in Macedonia, 1995–2009 (Annual change in percentage)



#### Source: UNCTAD, 2012

In comparison with the rest of the Balkan economies, the financial system in Macedonia resisted to the economic crisis due to its ideal management of liquidity risks and positive orientation regarding the traditional banking activities. According to a study undertaken by the "German Chamber of Industry and Commerce" in Macedonia (2010), half of the respondents stated that they faced decrease in their annual income for 2009. On the other hand, more than 40 percent believed that the turnovers will increase in 2010. The situation did not last more than six months and by the second half of 2009 the confidence of the people improved regarding the existing situation. The recovery of the Macedonian economy was highly depended on its main trading partners which were Germany and Greece, and the quantity of the external financing. The major concern remained the account deficit which by the year 2008 was 12.8 percent of the domestic GDP, up from 7.6 percent in 2007. In 2010 the rebound in exports and low imports showed significant improvement in the external balances of the country (IMF, 2010).

The gross domestic product of the Republic of Macedonia throughout the history has shown slight increase year after year reaching 4.5 billion EUR in 2005. Right after gaining independence, the economic stability of the country had to overcome the regional instability which had to do with the civil war in Bosnia and trade embargo imposed by Greece. As a result, in the period from 1991-1995 the GDP in Macedonia decreased by more than 30%, giving a tough start to the country. The late 90's worsen the economic stability due to the UN sanctions imposed on Serbia and Montenegro, which at that period used to be the country's major trading partner. However, the situation was stabilized through the financial support from the International Monetary Fund and the World Bank

stabilization program in 1994. In 2005, the GDP reached the predicted growth rate of 4.1% in 2003, attaining over 4.4 billion Euros. In the period from 2002 up to 2005 the government managed to boost the economic stability by increasing the GDP per-capita, keeping inflation at low level and sustain steady exchange rates.

The external debt remained constant at about 40% of GDP due to united public finances which had direct impact on decreasing the government debt to GDP ratio. Even though, there was increase in the number of small enterprises which operated in the domestic economy, the official employment had a declining trajectory. Foreign Direct Investments in the period after 2000 were steady, being around 2% of the gross domestic product. The larger share of GDP in the country during that period was kept by imports and exports of goods and services, showing better figures than EU 25. For instance exports in 2005 in Macedonia totaled 36% of GDP while in EU 25 they were almost 9% of GDP, whereas imports amounted 58% in Macedonia and 10% in EU 25. This situation was created as a result of free trade agreement with the European Union and liberalization of the largest number of domestic products. Although, some positive economic changes occurred in the domestic economy, still the country had to fulfill some difficult tasks such as decreasing poverty and unemployment in the following years (European Comission, 2006).

Comparing with the rest of South East European countries, Macedonia since 2009 has had a steady and constant growth. The minor GDP growth was calculated in 2008 being 0.4%, however in the coming years it showed a significant increase reaching 3.4% and 2.3% in 2010-2011 respectively. Among the six countries which represent the SSE region, the highest GDP growth for 2014 was in Macedonia. It was estimated to be above 3%, with growth mainly based on manufacturing, construction and FDI exports which took place in Macedonia during 2014. In addition, services also had their contribution on the GDP growth mainly the retail trade and real estate.

Although the economy showed steady growth, other economic activities such as CPI had a slight fall. Moreover, inflation was another component which was passing through a difficult period as a cutback in food and oil prices. In the following years public investment is expected to be one of the most important growth components, because the government has planned to construct two additional highways which will be in benefit of the region. The manufacturing sector is also expected to maintain its position by being one of the most important growth factors followed by private consumption increase and unemployment decline. In recent year, Macedonia has introduced a technique of measuring poverty called Survey of Income and Living Conditions (SILC), which was firstly used by the EU countries. According to SILC, the number of Macedonia population at risk of poverty had a minor decrease from 27% in 2010 to 26.2% in 2012. The poverty tendency is not expected to suffer drastic change, being estimated to remain steady in the region of 30% in the years to follow. However, the construction sector is projected to be the main contributor to increase employment, mainly for the low income families, followed by manufacturing sector and FDI exports that can be converted into job creation and help in poverty decrease (World Bank, 2015).

### 3.1. General FDI Trends in Macedonia

Until 1998 the foreign direct investments in the Republic of Macedonia used to be very low. Later on, up to 2007 things changed dramatically due to privatizations of the state-owned companies, and mergers and acquisitions by the foreign firms generally in the banking and telecommunication sector. The largest transaction by that time happened in 2001 with the sale of the national telecommunication operator to Magyar Telecom which at the same time is the associate partner of Deutsche Telekom. The next big thing occurred several years later in 2007 when the domestic inflows by foreign investors reach the peak of \$700 million. However, the next couple of years FDI faced a decrease mostly due to economic crisis that occurred in 2008 onwards. Up to 2008 almost 40 percent of the total FDI in the country was coming mainly from Greenfield projects (UNCTAD, 2008).

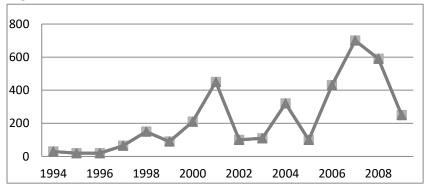


Figure 2. FDI inflows to Macedonia, 1994–2009 (Millions of dollars)

In comparison with the rest developing countries of the world, the Republic of Macedonia has attracted a considerable amount of foreign investments compared to its economy development.

Investor	Home Country	Target Company	Amount of Investment (\$ million)
Magyar Telekom Deutsche Telekom)	Hungary (Germany)	Makedonski Telekom	346.5
EVN	Austria	ESM Distribution	270.2
National Bank	Greece	Stopanska Banka	46.4
Balkan Brew Holding	Greece	Skopje Brewery	34.0

Table 1: Top foreign investment projects in Macedonia, 2001–2008

Source: UNCTAD, FDI/TNC database, 2012

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Hellenic Petroleum	Greece	<b>OKTA Refinery</b>	32.0
Société Générale	France	Ohridska Banka	30.4
Titan, Holderbank	Greece-Switzerland	Usje Cement Factory	30.0
Balkan Steel	Liechtenstein	Ladna Valalnica	21.0
QBE Insurance	United Kingdom	ADOR Makedonija	14.8
Duferco	Switzerland	Makstil	11.5
East West Trade	Austria	Centro	11.0
Milestone	Iceland	KIB Kumanovo	6.4
KuppBall Transthandel	Germany	FZC Kumanovo	3.4
SCMM	France	Feni Kavadarci	2.3

Source: UNCTAD, based on United States Department of State (2008).

Considering the FDI inflows terms, Macedonia has been a step behind all its comparator countries except Moldova. The FDI stock in 2009 was \$4510 which places the country only ahead of Albania and Moldova, however after 2001 is obvious that has attracted more FDI. In comparison with different regions in global terms it illustrates totally different picture. According on UNCTAD's performance and potential indices, the Republic of Macedonia has performed better than its potential. In 2008 in terms of FDI performance, Macedonia was ranked 44<sup>th</sup> out of 141 economies involved, and only 100<sup>th</sup> considering the FDI potential. This concludes that so far the main cause for having limited FDI has been the weak FDI potential of the country. In reality considering the FDI potential it is ranked lower than any of its competitors from SEE and CIS; however in term of FDI performance it is ranked higher than countries such as Greece and Ukraine (World Development Indicators, 2010).

### 4. Research Methodology

#### 4.1. Data

The main purpose of this study is to analyze the impact of FDI on the level of GDP in Macedonia. To conduct the study, data are gathered for the country over a period of seventeen years from 1998-2014. For completing the empirical investigation used are two variables which will be of a huge importance for the findings. The variables used in the study are: the foreign direct investment (FDI) and gross domestic product (GDP). The

data for both FDI and GDP are taken from the World Bank. The data collected will be analyzed on yearly basis.

## 4.2. Methodology

It will be used the multiple regression method with support of microsoft excel to make the empirically analyze the correlation between fdi and gdp. This study requires one regression equation: 1. The fdi impact on macedonian gdp.

# **REGRESSION QUESTION**

(1)

 $\log (GDP_i) = \alpha_2 + \beta_2 \log (FDI_i) + v_i$ 

Where,

(GDP<sub>i</sub>) = Gross Domestic Product of Macedonia

 $\alpha_2$  = the intercept for equation

(FDI<sub>i</sub>) = Foreign Direct Investment in Macedonia

 $\beta_2$  = Slope coefficient of Foreign Direct Investment

 $\mathbf{v}_i = \text{Error term for equation}$ 

## Note: The significance level will be taken as 5% in this study.

## 4.3. HYPOTHESIS

A null and alternative hypothesis will be taken for the above mentioned regression equation, once the significance of the equation has been checked.

Null Hypothesis H<sub>0</sub>:b<sub>2</sub>=0 (Direct Investment does not have statistically significant impact on Gross Domestic Product in Macedonia)

Alternative Hypothesis  $H_a:b_2\neq 0$  (Foreign Direct Investment has statisticaly significant impact on Gross Domestic Product in Macedonia)

## 4.4. Findings

# 4.4.1. DESCRIPTIVE STATISTICS

The table bellow illustrates the descriptive statistics and the summary of the variables used in the regression analysis.

# **Table 2: Descriptive Statistics**

	FDI Macedonia	GDP Macedonia
Mean	312.194.360	7.169.414.902
Std. Deviation	190.222.180	2.887.923.851
Std. Error	46.135.655	700.424.416
Variance	3,61845E+16	8,3401E+18
Kurtosis	-0,171362279	-1,743074676

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Skewness	0,725416427	0,001055885
Range	645060722,6	7752718421
Minimum	88406156,42	3571043203
Maximum	733466879	11323761624
Sum	5307304126	1,2188E+11
Count	17	17

Source: Authors

### **Kurtosis:**

Kurtosis is a statistical measure mainly used to illustrate the peak of distribution and how high the distribution is around the mean. In our case, the kurtosis values for FDI and GDP in Macedonia is negative, indicating that the variables distribution is concentrated towards the mean.

### **Skewness:**

Skewness is the measure of symmetry in a distribution when analyzing a data set. If the data points are skewed to the left of the mean it is negative and to the right it is positive skewness. Variables of FDI and GDP in Macedonia have positive skewness, meaning that the data points of these variables are greater that the mean.

# 4.4.2. Regression Equations

Equation Output

	Unstandardized Coefficients			
MODEL	В	Std. Error	<b>T-Statistics</b>	Sig.
Intercept	5077120621	1275586299	3,980	.000
Log FDI	0.670	3,517	1,905	.000

GDP (Dependent Variable)

R Square	0,194	F – Statistics	3,630
Adj. R Square	0,141	Sig.	.000

The adjusted R-Square for the equation resulted to be 14%, illustrating that in this model only 14% of the analyzed data is explained from regression equation. As a result we accept the null hypothesis (FDI does not have significant impact on the GDP in Macedonia) and reject the alternative hypothesis.

### 4.4.3. Results Interpretation

From the results that are found it is clearly noticeable that the regression equation have fallen under the significance level of 5 percent which makes it statistically significant. After completion of the statistical models, it can be confirmed that Foreign Direct Investment inflows in Macedonia have impact on the Gross Domestic Product.

#### 5. Conclusion

This research tried to find out if there is an impact of the Foreign Direct Investment on the Gross Domestic Product Macedonia. The data used for the regression analysis were taken from very serious sources such as World Bank for a period of seventeen years. After analyzing the multiple regression analysis it was found out that there is a positive impact of the FDI on the GDP of Macedonia.

FDI inflows averaged 4.2 percent of GDP per year between 2006 and 2014. While they are below the SEE-6 (South East Europe: Albania, Bosnia and Herzegovina, Kosovo, Macedonia, Montenegro, and Serbia) average of 7.6 percent of GDP, Macedonia's FDI is composed mainly of green-field investments in the tradable sector, with large impacts on exports. Still, backward linkages between foreign firms and domestic firms are limited and FDI-related net exports were only about 2 percent of GDP in 2014.

Macedonia's real per capita growth is among the strongest in the SEE-6 region. Growth performance over the past decade enabled Macedonia to reduce its income gap with the new EU member states from 30.7 percent in 2006 to 36.6 percent in 2014. Macedonia's relatively strong growth performance is the result of growing FDI-financed exports and a pickup in domestic demand, particularly public investments. Between 2002 and 2008, Macedonia grew at an average of 4.3 percent annually in real terms, which was 0.7 percentage points below the regional average.

Nevertheless, since 2009, Macedonia's average growth has been 1.8 percent, exceeding the regional average of 1.3 percent. Growth continued to be strong in the first quarter of 2015, driven by construction, trade, and services. Growth in 2015 is expected to moderate relative to 2014 (3.8 percent) but remain robust at 3.2 percent. (WB, 2015)

Nevertheless, faster growth is required for FYR Macedonia to close its income gap with the new EU member states within the next two decades.

#### References

Dikova, D., &Witteloostuijn, A. V. (2005). Acquisition Versus Greenfield Foreign Entry: Diversification Mode Choice in Central and Eastern Europe. Imprint, 22(1). doi:1874/147734

European Comission, 2006. Progress Report on Macedonia, pp. 47-53.

- Fredriksson, Torbjörn and Zbigniew Zimny, 2004. Foreign Direct Investment and Transnational Corporations, in UNCTAD, Beyond Conventional Wisdom in Development Policy. An Intellectual History of UNCTAD 1964-2004, New York and Geneva: United Nations, pp. 127-140
- Hal Hill and Prema-chandra Athukorala, 1998. "Foreign Investment in East Asia: A Survey," Asian-Pacific Economic Literature, Asia Pacific School of Economics

and Government, The Australian National University, vol.12(2), p.23-50, November.

- Harrison G. Blaine, 2009. Foreign Direct Investments, Nova Sciences Publishers, pp.85-121.
- International Monetary Fund, 2010. Selected Issues for Former Yugoslav Republic of Macedonia, pp.15-27.
- Kjetil Bjorvatn & Hans Jarle Kind & Hildegunn Kyvik Nordås, 2002. "The Role of FDI in Economic Development," Nordic Journal of Political Economy, Nordic Journal of Political Economy, vol. 28, pages 109-126.
- National Bank of the Republic of Macedonia, 2013. Annual Report, Skopje.
- OECD (2008), OECD Benchmark Definition of Foreign Direct Investment, Fourth edition, OECD Publishing.
- UNCTAD, 2008, 2012. Investment Policy Review, the Former Yugoslav Republic of Macedonia. UN New York and Geneva.

WB, International Finance Corporation, 2013. Macedonia, FYR Country Profile pp.5-15.

World Bank Group - FYR Macedonia Partnership Country Program Snapshot April 2015.