

# FOREIGN CAPITAL, LABOR MARKETS AND EFFICIENCY EFFECTS. A CASE STUDY OF A SMALL OPEN ECONOMY

**Mico APOSTOLOV**

*Goce Delcev University of Stip, Stip, Macedonia*

*mico.apostolov@ugd.edu.mk*

## **Abstract**

In Southeast Europe, as in most developing regions, governments offer significant incentives to attract inward investment in expectation to narrow performance gaps between foreign and domestic firms. Hence, this is usually motivated by the prospect of spillover benefits to augment the primary benefits of the national income from new investment. This paper focuses on foreign direct investments and therefore foreign capital movements, labor markets and potential efficiency effects, through a case study of Macedonia. Using macroeconomic and firm-level data, we identify whether foreign ownership can bring about higher efficiency effects. By reviewing possible impact of foreign direct investments induced efficiency effects, we develop comprehensive evaluation on probable positive outcomes on enterprise restructuring due to change of ownership and corporate governance, shifts in labor market and impact on gross domestic product. Further, results give indication that there are good grounds for further development of foreign direct investment policies to facilitate positive and upward climb of this developing economy.

**Keywords:** Foreign capital, Labor markets, Efficiency effects, Southeast Europe, Macedonia.

## **1. INTRODUCTION**

The research is to be focused on examining effects of foreign direct investments in Southeast Europe economies and in particular a case study of the Republic of Macedonia.

The IMF, the World Bank (Enterprise Surveys) and other have conducted surveys on many countries using macro and firm-level data of a representative sample of economy's private sectors. What we are closely examining are the effects of how foreign direct investments (FDIs) contribute to the development of domestic firms and the overall economy. FDI is usually defined as dominant or controlling ownership of a company in one country, by an entity based in another country.

Using data of South-East Europe i.e. case study of Macedonia, will be examined the interrelationships between foreign direct investments and set of variables that influence the FDI patterns. Further, we are interested in the way FDIs shape the economy.

The academic significance of the topic is in determining the factors that influence foreign direct investments, as well as, the way FDI spillovers contribute towards overall development of Southeast Europe transition economies.

## 2. THEORETICAL AND LITERATURE FRAMEWORK

The question of foreign direct investments' spillovers is much researched and there is significant body of literature that covers many aspects related to the ways domestic economy reacts to exogenous inputs. Present literature on productivity spillovers can be separated into two general categories: inter-industry, subject to research is inter-industry dynamics i.e. horizontal spillovers; and intra-industry, mainly focused on vertical spillovers.

TABLE 1. DETERMINANTS OF FDI (FOREIGN DIRECT INVESTMENT)

Firms factors		Host country factors	
Determinants	Drivers	Determinants	Drivers
Ownership (O)	Competitive advantages	Economic Context	Market size, access, structure and growth; cost of raw material and quantity and quality of skilled labor; cost of other inputs (transport, telecommunication, energy); the existing macro-innovatory, entrepreneurial and managerial
Location (L)	Market seeking; Resource seeking; Efficiency seeking; Asset seeking.	Institutional and Structural context	Political and macroeconomic stability; corruption; democracy; trade openness; privatization; propriety rights
Internalization (I)	Costs of exchanged technology, information, managerial skills and market techniques		
Linkages	Learning process		

Source: Calvet 1981; Dunning 2000; Blonigen 2005

The literature gives negative, horizontal outcomes usually conditioned on several intra-industry factors in different parts of the world (Blomström and Sjöholm 1999, Konings 2001; Gorodnichenko 2007).

Nevertheless, there are positive, vertical outcomes noticed in many studies which deal more specifically and consider factors in depth, such as region of origin and export orientation (Monastiriotis and Alegria 2011), distinctiveness of beneficiary economy and related FDIs (Acemoglu, Griffith et al. 2010), firm and sector characteristics (Halpern and Muraközy 2007; Keller and Yeaple 2009).

Respected international companies are investing great deal in their research and indeed they are at the edge of applied science. Thus, it is expected that most of research and development originates from firms operating in more than one country giving higher rates of innovation overall (Criscuolo, Haskel et al. 2010). Therefore it is anticipated that such companies hold intangible, value-added knowledge assets, which in turn contribute to their market superiority and expansion.

Spillovers can occur in couple of ways. First, domestic companies can improve by applying processes purchased from foreign co-operant or acquiring such knowledge by reverse-engineering. Second, employing management and workers that have already been part of international companies and hold assets crucial to firm's technology processes. And, thirdly, direct competition will eventually force domestic firms to adapt to the business environment and employ all necessary practices in order to stay afloat (Glass and Saggi 2002).

### 3. EFFICIENCY EFFECTS FROM FOREIGN DIRECT INVESTMENTS

#### 3.1. *Inter-industry effects*

Indeed, it can be said that generally there are two important classifications of spillovers. The effects of FDIs could range from indirect to direct, explained through the basic logic that the entry of any company with increased productivity and efficiency positively influences domestic firms and their competitiveness. However, the companies that will not be able to meet those strengths within any particular sector subdued to foreign entry will eventually be pushed out of the market. Overall, these alterations are known as horizontal spillovers (Kathuria 2000).

In the literature it is noted that foreign direct investments can cause spillovers with negative upshots on domestic companies' productivity (study on Venezuela) (Aitken and Harrison 1999) , which is in consistency with a study on Indian FDIs' impact (Kathuria 2000).

In this context it can be said that the foreign companies operating on domestic market have keen interest in preventing technology leaks to their competitors. Thus, usually they prevent their assets through patents or higher wages for crucial players, especially managers. Horizontal or inter-industry spillovers are quite likely that will not occur due to the fact that foreign and domestic companies function

on different markets, especially if it is known that domestic firms lack the ability to exit out of their primary business environment. Therefore, it is noted that generally the foreign companies function as enclaves where their know-how has nothing to do with the local companies (Kokko 1994).

Nonetheless, it must be affirmed that FDIs can have negative consequence on domestic companies in two basic modes: 1) they can appropriate their market or 2) attract the finest human capital thus starve the local economy of good quality resources. As a result of such developments the domestic companies might suffer drawback on economies of scale and higher costs (Aitken and Harrison 1999).

However, on short run spillovers can be negative and it is mainly due to the competition effect on domestic markets. Foreign direct investments have cost and technological advantage over domestic firms which can be used to distort domestic market, forcing domestic firms to reduced productivity (Aitken and Harrison 1999). Indeed, more negative effects can be caused on domestic labor market, as FDIs get the best human capital depriving the domestic firms of quality labor. Negative vertical spillovers are also potential when acquired competitive domestic firms breaking their already established supply chains and pushing their suppliers out of productivity.

### **3.2. *Intra-industry effects***

Vertical spillovers affect on upstream and downstream domestic firms. Certainly, local companies can benefit quite a lot if they keep direct contact with the FDIs i.e. at early stage as suppliers and later as part of the extended supply chain of the foreign entry. Increase of overall business process standards impacts on increased performance of domestic firms, and usually these alterations are known as vertical spillovers. The vertical spillovers are frequently found to be positive and quite considerable (Smarzynska Javorcik 2004; Barrios, Görg et al. 2011).

Further, more recent research on developed countries provide evidence on positive productivity spillovers, like the study on UK manufacturing plants (Haskel, Pereira et al. 2007) or US manufacturing plants (Keller and Yeaple 2009).

In general terms the spillover has characteristics of transfer of *modus operandi*, from foreign direct investments to domestic companies through varieties of networks due to mutual contacts. Hence, main transfers occur in corporate governance and managerial practices, design and enforcement of marketing mix, production methods, and general knowledge related to business issues (Apostolov 2013). Local companies use new techniques to improve their processes that result because of interaction with foreign managers, as well as, former employees of foreign direct investments. Usually, in earlier stages they learn to imitate or adopt the techniques in order to positively impact the quality of

their products and services. Further, owing the cooperation with FDIs there is a substantial benefit of novel professional services or widening the supplier chain networks. The levels of standards are higher as the FDIs function on international markets, and they must use the same corporate policy elsewhere, which influences the local economy positively. Local companies absorb such practices to improve time efficiency or quality.

TABLE 2. SPILLOVER EFFECTS - CHANNELS AND DETERMINANTS SPILLOVER EFFECTS - CHANNELS AND DETERMINANTS

Spillover Channels: Drivers	Source of productivity gain
Imitation	<ul style="list-style-type: none"> <li>• Adoption of new technology</li> <li>• Adoption of new production methods</li> <li>• Adoption of new management practices</li> </ul>
Competition	<ul style="list-style-type: none"> <li>• Reduction in X-inefficiency</li> </ul>
Human capital	<ul style="list-style-type: none"> <li>• Increase productivity of new complementary labor               <ul style="list-style-type: none"> <li>• Tacit knowledge</li> </ul> </li> </ul>
Market access or exports	<ul style="list-style-type: none"> <li>• Scale economies</li> <li>• Exposure to technology frontier</li> </ul>
Allocative efficiency	<ul style="list-style-type: none"> <li>• Removing of barrier and monopolistic distortion</li> </ul>
Linkages (forward and backward)	<ul style="list-style-type: none"> <li>• Knowledge for local suppliers and distributors</li> <li>• Development of local industry</li> </ul>
Determinants of Spillovers	
Supply	Value of underlying technology Intellectual property protection Cost of absorption Organizational and managerial skills Commercial benefits
Demand	Absorption Skills capacity Trade regime Protectionism

Sources: Lall 1992; Blomström, Globerman et al. 2001

Additionally, it is more probable that vertical or intra-industry spillovers are to boost the domestic companies through technology leakages as they have strong incentive to localize favorable supplier base or consumers i.e. backward/foreword spillovers. When cooperating with suppliers, FDIs are interested in quality intermediate products and the technology is to be transferred to more domestic companies in order to escape single supplier's bargaining power (Blalock and Gertler 2008). On the other hand, it is in best interest of the company to increase demand providing support to domestic consumers and thus transfer of process skills. Then again, the effect can be absent in a direct form. If such case does appear, vertical spillovers are to be found indirectly in 1) increased domestic productivity and product quality; 2) economies of scale of domestic companies that are achieved by supplying FDIs and new entries of domestic companies to the same market on behalf of increased demand; 3) better availability of technological goods increases productivity of domestic firms or

downstream technology diffusion via trade; 4) mechanisms as a rule linked to horizontal spillovers, such as imitation or employment turnover may crop up in vertical as well.

Nonetheless, foreign direct investments and presence of foreign capital can be positive even in nonexistence of spillovers. Especially when taken under consideration the cases of economies in transition, the foreign direct investments have crucial role in overall enterprise restructuring (Blanchard 1998; Apostolov 2011).

#### 4. STATE OF AFFAIRS

Foreign direct investment, net outflows (% of GDP) in Macedonia was 0.39 as of 2013. Its highest value over the past 8 years was 1.93 in 2012, while its lowest value was 0.05 in 2006.

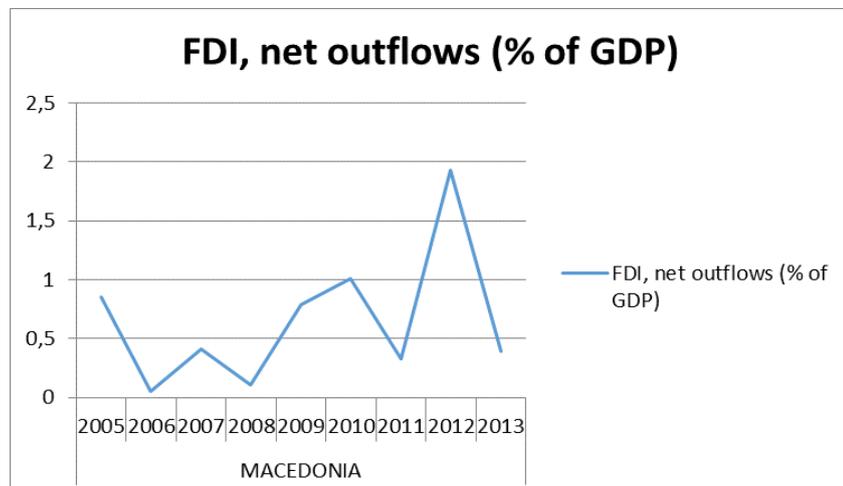


FIGURE 1 – FOREIGN DIRECT INVESTMENT, NET OUTFLOWS (% OF GDP)

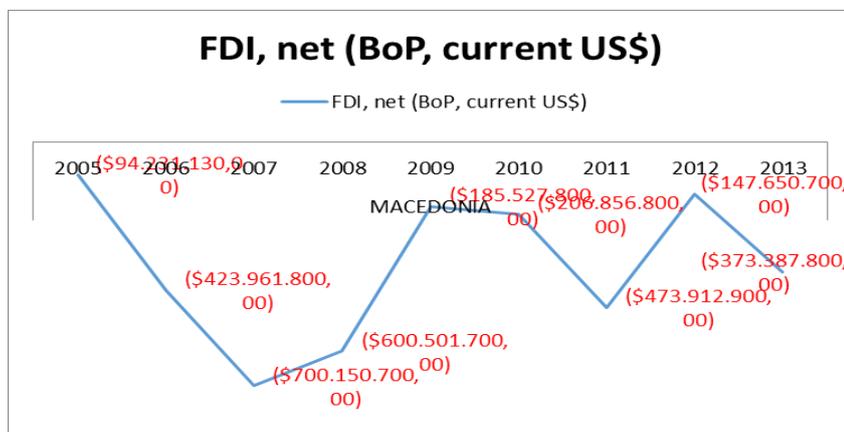


FIGURE 2 – FOREIGN DIRECT INVESTMENT, NET (BOP, CURRENT US\$)

The latest value for Foreign direct investment, net (BoP, current US\$) in Macedonia was (\$373,387,800.00) as of 2013. Over the past 8 years, the value for this indicator has fluctuated between (\$94,231,130.00) in 2005 and (\$700,150,700.00) in 2007.

The latest value for Foreign direct investment, net inflows (BoP, current US\$) in Macedonia was \$413,462,600 as of 2013. Over the past 19 years, the value for this indicator has fluctuated between \$733,466,900 in 2007 and \$9,490,000 in 1995.

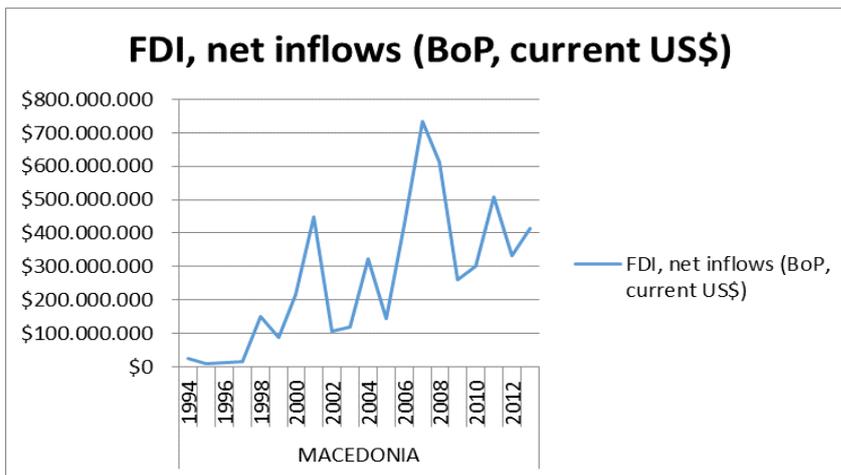


FIGURE 3 – FOREIGN DIRECT INVESTMENT, NET INFLOWS (BoP, CURRENT US\$)

Foreign direct investment, net inflows (% of GDP) in Macedonia was 4.06 as of 2013. Its highest value over the past 19 years was 13.01 in 2001, while its lowest value was 0.21 in 1995.

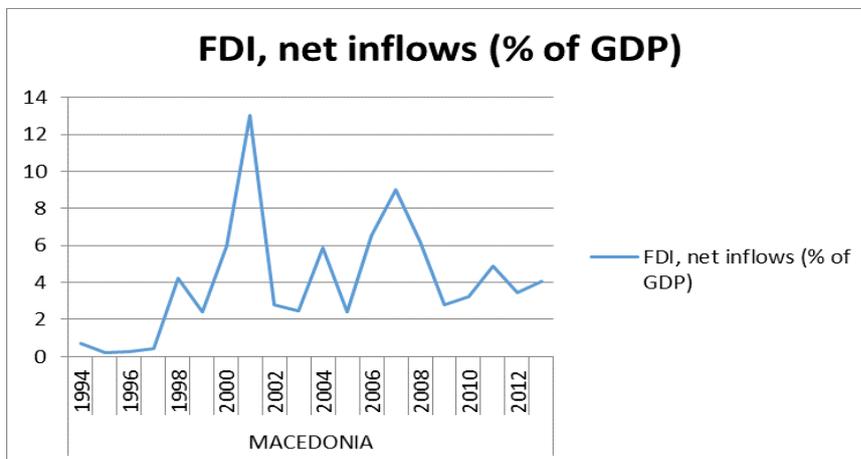


FIGURE 4 – FOREIGN DIRECT INVESTMENT, NET INFLOWS (% OF GDP)

N.B. Sources for the figures: International Monetary Fund, International Financial Statistics and Balance of Payments databases, World Bank, International Debt Statistics, and World Bank and OECD GDP estimates.

## 5. FOREIGN CAPITAL AND DOMESTIC OWNERSHIP

According to the data from World Bank Microdata Library - Enterprise Surveys (2002, 2005, 2009, 2013) there has been significant increase in foreign capital represented through ownership stakes (10% or more foreign ownership). So, in 2002 there was 15.8% for foreign and 11.7% for domestic ownership, where as in 2013 jump in foreign to almost half of the economy at 43% and 35.1% for domestic ownership. At the same time there is raise in foreign direct investment from 2.8% (2002) to 3.3% (2013) (except for the effect of the global financial and European debt crisis).

Figure 5 descriptively shows the movements of foreign capital, domestic ownership and foreign direct investments for the specific years analyzed. It can be said that foreign capital influx and domestic enterprise creation (expressed through movements in domestic ownership) are in line with the movements of foreign direct investment.

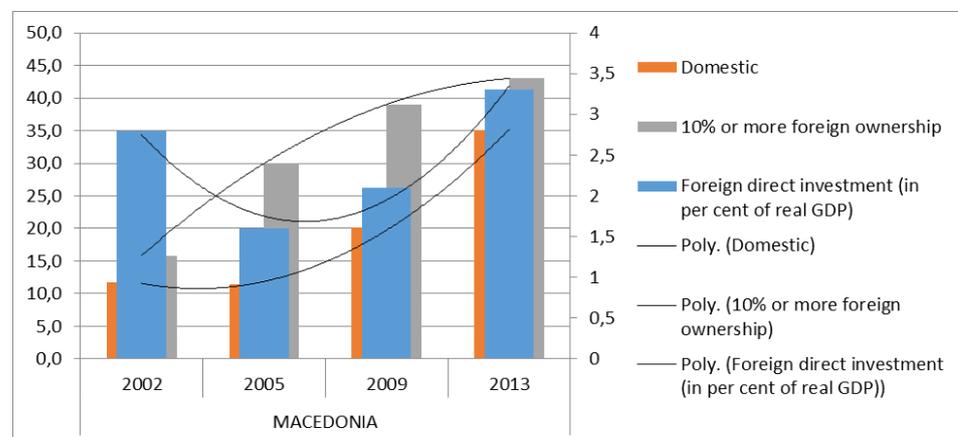


FIGURE 5 – FOREIGN CAPITAL, DOMESTIC OWNERSHIP AND FOREIGN DIRECT INVESTMENTS  
Source: World Bank Microdata Library - Enterprise Surveys

## 6. LABOR MARKET MOVEMENTS AND FOREIGN DIRECT INVESTMENT

The data used to determine job market movements was taken from World Bank Microdata Library - Enterprise Surveys and International Monetary Fund - World Economic Outlook Database (2002, 2005, 2009, and 2013). There is significant difference and oscillation on the job market measured through unemployment rate, which shows that in 2002 it was 31.9 % (almost third of labor force unemployed). The peak was in 2005 with 37.2% which by any economic theory is very much unsustainable situation, dropping to 32.2 % in 2009 and further lowering to 29% in 2013. Compared to foreign direct investments and influx of foreign capital (measured by 10% or more foreign ownership) it can be claimed that lowest

pint was in 2005 (1.6% FDI in percent of real GDP) which is in line with highest point of unemployment the same year. Contrary, highest points of FDI and foreign ownership dominance (3.3% and 43% respectively) lowered unemployment rate for almost 10 percentage points, which by any standard is quite a lot.

These movements are presented in Figure 6 where it can be detected inverse proportionality between FDI and unemployment rate.

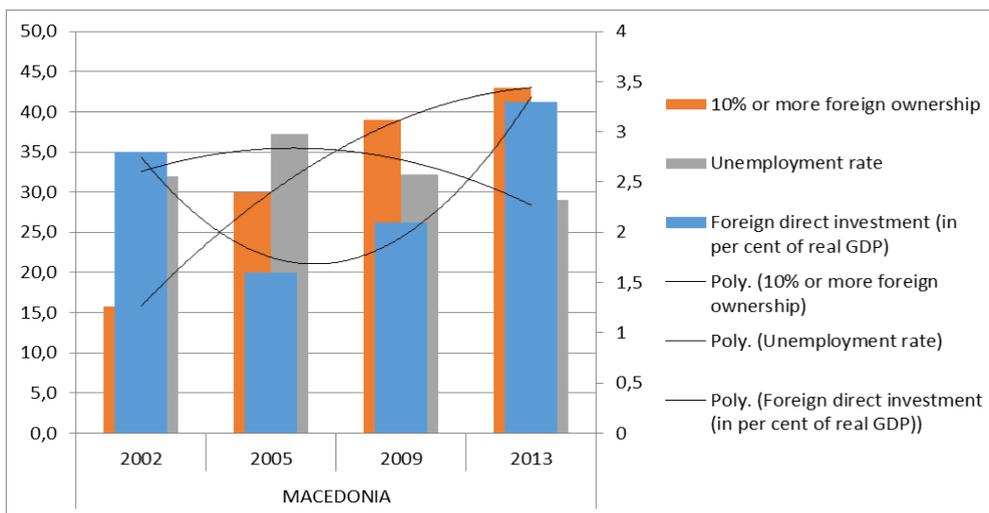


FIGURE 6 – LABOR MARKET MOVEMENTS AND FOREIGN DIRECT INVESTMENT  
Source: World Bank Microdata Library and International Monetary Fund

## 7. GROSS DOMESTIC PRODUCT AND FOREIGN DIRECT INVESTMENT

The movements of gross domestic product for the time period analyzed (2002-2013) show positive and upward climb (except for the time of global financial and European debt crisis). In 2002 the growth of real GDP was 0.9%, while in 2008 climbed to its highest peak at 5.9%. The lowest point for the period in question was in 2009 at -0.9% and 2012 at -0.4% which correlates to international financial movements and especially European debt crisis.

As far as foreign direct investments are concerned, in 2002 they were at 2.8% of real GDP with a peak of 8.6 % in 2008. The lowest inflow of foreign direct investments was in 2009 at 2.1% and 2012 at 0.9 % of real GDP. Since then there is positive inclination related to increase of foreign direct investments and it noteworthy to claim that increased FDI impact on increased foreign ownership.

Figure 7 shows that gross domestic product and foreign direct investments are closely tied ('power' lines match exactly). Indeed, it is evidence that the influence of foreign direct investments is considerable and

contributes greatly anchoring the main indicator of the domestic economy.

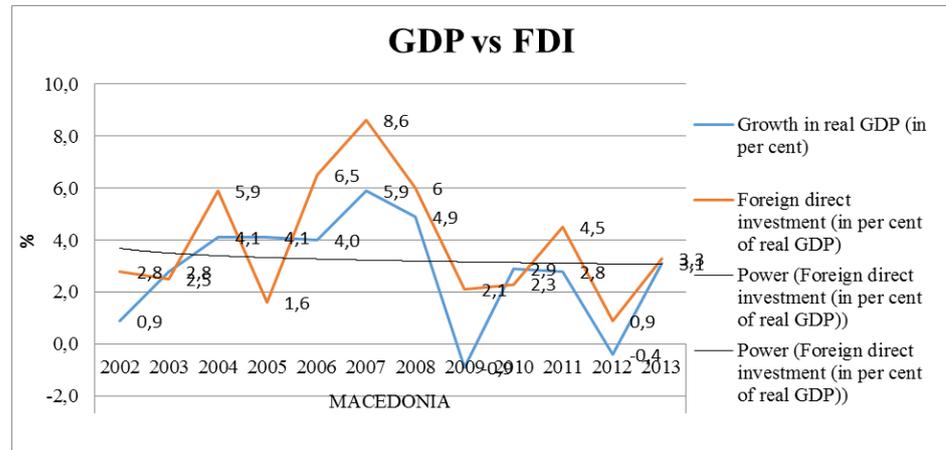


FIGURE 7 - GROSS DOMESTIC PRODUCT AND FOREIGN DIRECT INVESTMENTS  
Source: International Monetary Fund

## 8. DISCUSSION

### *Possible paths*

Some limitations and future research paths can be applied to this study. This research relies on broad indicators that helped assess foreign capital movements such as FDI influx and foreign ownership percentage, as well as, general movement of gross domestic product. Applying different measures, more complex and detailed indicators in future analysis can help uncover important inferences.

Another limitation of this study is that it was limited to Southeast European countries, more specifically a case study of Macedonia. Major constraint is data availability especially data specifically intended to analyze FDI phenomena, however major economic and business indicators are available on large and respected data bases which are employed in this study.

As specified by already established literature it is evident that economies, and especially transition economies, in the first wave of significant influx of foreign ownership can increase overall employment. Furthermore, it is apparent that foreign ownership advances throughout time because of imposed policies, as well as, overall progress of the economy's gross domestic product owing to increased incursion of foreign direct investments.

In future projects researchers might wish to use the same (or modified) methodology as applied in this research, and employ it to other countries and test whether GDP and job creation is constraint to foreign direct investments, in both developed and developing countries. Another possible path of research

could be the analyses on the impact of foreign direct investments by type of investment and sector, which might lead to valuable implications regarding the industry in which foreign capital has a greater influence in developing the overall economy.

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