FOREIGN DIRECT INVESTMENT FLOWS – GROWTH STIMULANT IN ROMANIA

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Abstract. *The foreign direct investment flows (FDI) expansion over the last 20 years has not been a spontaneous one, but it was stimulated over time by important reforms, such as the opening of the world's economies to attract capital flows, changes in economic policies, but also the implementation of the companies' privatization process. Also, the agreement to provide national treatment to foreign direct investment, approved by member countries of World Trade Organization, has helped this expansion process.*
The economic benefits of foreign direct investment flows are quite common and knew: technological innovation, competitiveness increase, efficiency improvement and intangible resource transfer as new forms of organization, administration and marketing.

Keywords: *FDI inflows and outflows, economic growth, GDP per capita, investment incentives, foreign investors.*

1. Introduction

In the following lines of our paper we will present the FDI flows situation in Romania related to the FDI stock based on the same econometrical model made in the case of China, not in the idea of comparing the two emerging economies, but to highlight two different economies model.

According to a 2011 UNCTAD report, the transition economies of South – Eastern Europe have reached in 2010 the value of $70 billion concerning the FDI flows, after a decline of over 40% comparing with the last year. FDI flows have continued to decline by over 31% mainly due to very poor investment from the European Union, the main investor in this geographical area[1]. In terms of the countries which are in this geographical

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[1] *Global Investment Trends Monitor*, No. 5, 17 January 2011, page 5.

area, UNCTAD makes statistics on the Black Sea Economic Cooperation Organization, internationally known as BSEC (Black Sea Economic Cooperation), International Organization on which Romania takes part (see Table 1).

Table 1.
FDI flows, FDI stock and GDP[2] – values from 1990 to 2010 in Romania

Year	FDI flows	FDI stock	GDP	Year	FDI flows	FDI stock	GDP
1990	0,01	0,01	38.510,55	**2001**	1.157,93	8.339,19	40.585,89
1991	40,00	44,00	29.054,33	**2002**	1.140,65	7.846,37	45.988,51
1992	77,00	122,00	19.715,60	**2003**	2.196,30	12.202,47	59.466,02
1993	94,00	215,00	26.546,04	**2004**	6.435,59	20.486,00	75.794,73
1994	341,00	402,00	30.283,94	**2005**	6.482,86	25.816,44	99.172,61
1995	419,00	821,00	35.726,50	**2006**	11.366,87	45.452,07	122.695,85
1996	263,00	1.097,20	35.563,02	**2007**	9.921,47	62.961,25	170.616,96
1997	1.215,00	2.416,64	35.533,25	**2008**	**13.909,99**	**67.911,09**	**204.338,61**
1998	2.031,00	4.527,25	42.115,35	**2009**	4.846,89	72.006,97	161.109,00
1999	1.027,03	5.673,98	35.995,56	**2010**	3.573,30	70.011,67	159.337,64[3]
2000	1.056,75	6.953,00	37.305,10	**2011**	–	–	–

Measure: US Dollars at current prices and current exchange rates in millions.

Source: The data has been extracted from UNCTAD statistics (http://unctadstat.unctad.-org/ReportFolders/reportFolders.aspx)

This International Organization was born in 1992 and was composed of eleven countries: Albania, Armenia, Azerbaijan, Bulgaria, Georgia, Greece, Moldova, Romania, Russia, Turkey and Ukraine. Currently meets twelve countries, Serbia adhering to it in 2004. Its main objective is to foster cooperation between countries and also to develop economic relations.

[2] According to UNCTAD statistics, the GDP is nominal and real, total and per capita in annual values.

[3] The values for 2010 are estimated.

Romania, country which held the presidency of this organization, believes that relations with neighbouring countries based on mutual trust, dialogue and cooperation between states are the main features of such an organization. Black Sea region has a huge human and economic potential that can be used effectively also to help countries overcome the negative effects of international economic context.

For a better illustration of this organization objective, we summarize the main objectives through the activities promoted by this organization, namely:

- to act in a spirit of friendship and good neighbourliness and mutual respect and enhance dialogue, trust and cooperation between Member States;
- to develop and diversify bilateral and multilateral cooperation based on principles and norms of international law;
- to take action to improve the business environment and to promote individual initiative and collective enterprises and companies directly involved in economic cooperation;
- to develop economic cooperation in a way that does not violate inter-national obligations of Member States, including those arising from their membership to other organizations or institutions;
- to be aware of the specific economic conditions and of the Member States interests;
- to further encourage participation in the BSEC economic cooperation and other interested states, international economic and financial institutions and enterprises and companies[4].

2. FDI and Stock Flows Analysis in Romania

The analysis that we performed on FDI flows, stock of FDI and economic growth of China in the article *China's Geostrategic Position – FDI Flows and Stock Analysis* [2] will be done on the case of Romania too, of course comparison between the two economies not being able to make but the idea was to illustrate the differences in autocorrelation between the

[4] The principles are extracted from Black Sea Economic Cooperation Charter; Charter came into force on May 1, 1999.

explained variables. Thus based on Table 1, we conducted an econometric analysis of the variables presented.

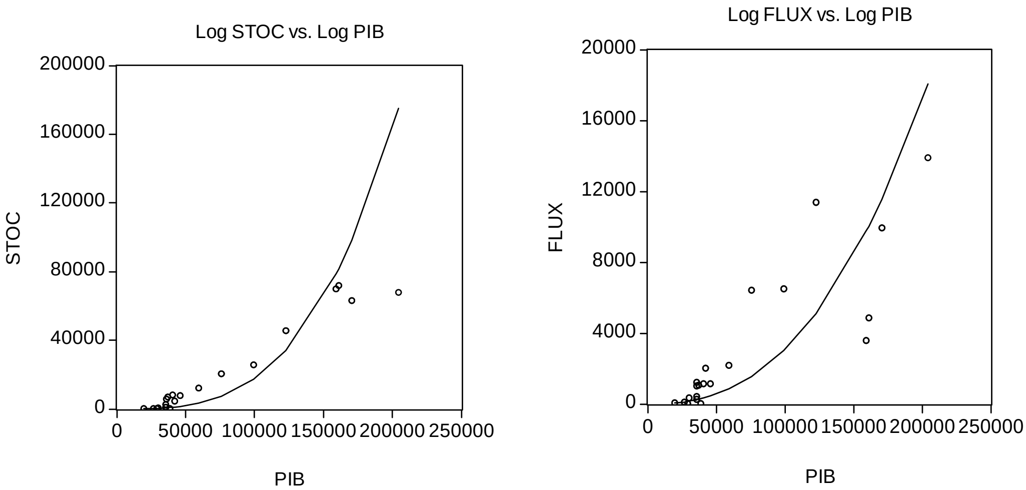

Figure 1. Economic growth correlated with FDI and stock flows in Romania from 1990 to 2010.

Source: Table 1 – FDI flows, FDI stock and GDP – values from 1990 to 2010 in Romania (Flux = Flows, Stoc = Stock, PIB = GDP).

Looking at Table 1 and Figure 1 (the data were logarithmic for better analysis), we can see that at the beginning of the period, until about 2000, in Romania, between FDI flows and GDP is a very close correlation, the same being true also for the stock of foreign direct investments. This means that any new investor in Romania have a contribution to economic growth.

While, due to economic activities diversification, technological progress, to all the economic facilities, all created by the Romanian Government, and also to the economic globalization in one word, in Romania, investment flows have entered in an upward trend (see Table 1), their contribution to GDP growth being really a significant one. It is well highlighted the upward trend in FDI inflows during 2000-2004, the year of 2003 being a border year, FDI flows actually exploding from $ 2.196 million in 2003 to $ 6.436 million in 2004, the same thing happening with the FDI stock, which grew at 68% over the previous year.

It was only the first step towards an increase in these flows. In 2005, flows remained stable, and then the same as the 2004 explosion occurs. In 2006, FDI flows reached a maximum for this period, registering a growth of 75% and higher than in reference year, 2004, of 77%. In Figure 2 we showed these peaks particularly important for investments and the stock of FDI flows, representative of the first half of 2000 years.

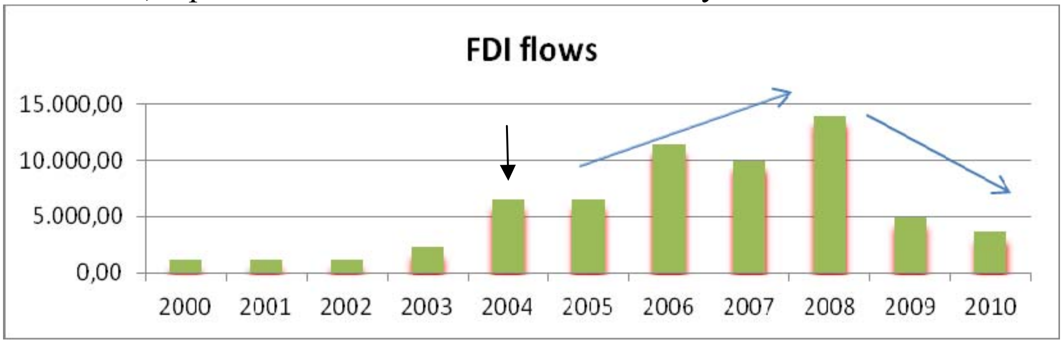

Figure 2. FDI flows between 2000 and 2010.

Source: Table 1 – FDI flows, FDI stock and GDP – values from 1990 to 2010 in Romania.

2007 brings a reduction of the capital flows to about 13%, decline that was recovered sharply in 2008, when flows have increased over the previous year by 40% and 22% from base year to date, and namely 2006.

From Figure 2 and Table 1 we can and we must analyze the FDI flows and stock situation or of all macroeconomic indicators in two periods, namely from 2000 to 2004 and from 2004 to 2008. The most representative period is as we see from the statistics 2004-2008, representing the expansion of FDI flows in Romania. The factors which determined this important expansion for our country are many and will be mentioned them below.

If the Romanian Government until 2004 adopted only protectionist measures, quite protectionist, in 2004, the new government introduced new regulations for growth. The government change from 2004 brought also a change of mentality, because it brought a perspective of opening the Romanian market to the foreign investors. The idea that ruled that period of time was that foreign direct investment flows are particularly important for an economy as they bring an essential contribution to economic growth by creating jobs, by optimizing resource allocation, allowing the transfer of technology from developed country to our own and finally by stimulating the international trade. With this new concept there has been adopted incentives for economic growth, leading to a heating of the economy, increasing the resentment of entry if the economic crisis, appeared to us in Romania, until the end of 2008.

2004-2008 comes with economic liberalization and with a friendly fiscality for the entrepreneurs, including foreign ones. The most important desire for the political environment was to stimulate the investments, being a considerable source of economic growth. The government tried to create a deregulated business environment, coordinated by a beneficial tax measures and incentive for all investors, a favourable economic environment through the promotion of favourable conditions for foreign investors, such as fair treatment, fair and non-discriminatory protection from illegal expropriation, appeal directly to international arbitration and transform Romania in a fiscally attractive country[5]. These measures were based on international experience has shown that improving the investment climate was the main condition for attracting foreign investors in a global economy where competition to attract foreign direct investment is fierce.

For the economic development and the modernization of a country, foreign direct investments have an important role because it helps countries in transition or in developing to integrate globally, but to move to a competitive market economy. FDI flows lead to a technology diversification worldwide, making it easily accessible. Thus, for a national economy, especially for those in developing or in transition, foreign investment helps its modernization by implementing advanced technology, new quality standards, new knowledge etc…., which determines the economy to move to a higher level of growth.

The international context shows us that these foreign direct investment flows or foreign capital flows, undoubtedly represents the foundation of the economy progress or the base of economic growth. Clear examples are China, South Korea, Singapore and Malaysia. China's example we analyzed it briefly, and we could see through an econometric analysis that we performed that indeed these flows determines growth and there are the foundation of economic growth to some extent, because while diversifying technology, knowledge and know-how developed this Asian economy in an extraordinary proportion.

We know that in also in the geographical area of former Soviet states, their transition to a market economy has developed, especially due to the development of these flows of capital investments in the area. We give examples of countries in transition that have succeeded in attracting foreign direct investments, which led to the development and modernization of their countries. Thus, countries like Poland, Czech Republic and Hungary started to use new technologies, technologies that have helped to

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[5] Chamber of Tax Consultants, Tax Consultant Magazine, Editorial no. 13, *Foreign direct investment – key to sustainable economic growth in Romania*

more quickly and efficiently manage the affairs of the local environment. These examples points out that foreign investment led recovery differences between Western Europe and them, reducing substantially this “disability”.

Romania, since 2004, wanted to reduce the gap between itself and the developed countries of Europe, in one way also to prepare for EU accession in 2007, through investment incentives in innovative sectors in conjunction with measures of fiscal relaxation. In addition, Romania started projects through which it tried to convince the foreign investors to develop a profitable business in Romania, and not in their country of residence.

As shown by UNCTAD (Table 1) and the National Bank of Romania, from 2005 to 2008, Romania had a lot to gain from the introduction of flat tax, flat tax that was seen as a measure of stimulus for the foreign direct investments. In Figure 3 and Table 1 we can see that from 1990 to 2004, the growth of foreign direct investment flows was an insignificant in volume, during which the tax system was progressive.

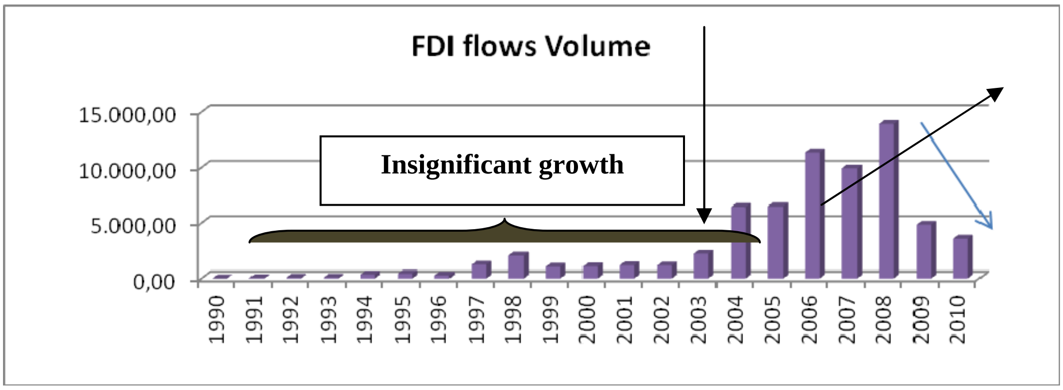

Figure 3. FDI Volume from 1990 to 2010.

Source: Table 1 – FDI flows, FDI stock and GDP – values from 1990 to 2010 in Romania.

Since 2005, the tax system was changed; it has become a unique one, allowing the volume of foreign direct investments to grow and to go on an upward trend, recording important figures for our economy. This governmental measure has led to a very beneficial situation, such as major investors made their appearance in Romania, investors such as Nokia, Ford, Erste Group, these adopted measures, in the first place, apart from a positive effect, increased the confidence in the national economy.

There are many local voices that believe that this flat rate is not beneficial, and on the contrary it would be better that Romania returns to the progressive tax rate, without taking into account the evolution of the key macroeconomic indicators during the 2000-2004 period and then 2004 to 2008. Although, perhaps it has not generated exclusively positive effects in terms of foreign direct investment flows, but from the rate introduction, the effects were beneficial for our country. Flat protesters should take into account several elements, namely: flat rate resulted in better compliance with law and terms of payment of taxes on income, solutions on tax avoidance payment effective disappeared. In addition, fiscal regulations were removed from the approximately 150,000 jobs and that facilitated the tax administration system, which however was quite cumbersome.

We can say that those who really enjoyed the flat tax were the investors, because this measure has attracted and still attracts many investors, especially foreigners. This, when it is combined with incentives to stimulate the foreign investments, in the future, will attract citizens of other European countries to establish tax residency in Romania and pay taxes on their global income in Romania to benefit from a favorable tax regime. Romania's goal is to keep the attracted investors as much as possible, so in other words, FDI stock to be a rising or steady one, but not decreasing. In these conditions, if it returns to the progressive tax rate, the investors that are already in the country might look burdened, reason that could determine their departure from the country. A flat rate helps the country to combat also the underground economy, a primary goal for each state, while the progressive rate may provide loopholes and there can be found solutions to avoid paying the taxes.

According to Central Bank statistics, the end of 2005-2008, the period of maximum expansion of these flows, the balance of tangible and intangible assets of foreign investors accounted 45% of total FDI, which stresses the durability of these foreign direct investments. This is evidenced also by the evolution of FDI stock during the second half of 2000 years.

Another important indicator of the FDI contribution to national GDP is the contribution they have to the trade balance. During 2005-2008 the FDI contribution to exports was 73% and to imports 62.6%, according to Central Bank statistics for this period.

Globally, in terms of FDI, we are witnesses of the development of a new type of investments or investment flows, based on technology and innovation. Thus, future share of foreign direct investments and their size will be dictated by how investors will create and implement new technologies, patented technological solutions, proprietary products, new brands, however being an intrinsic force of the new foreign investments in Romania.

Table 3.
Econometric model – case of Romania

Dependent Variable: PIB
Method: Least Squares
Sample: 1990 2010
Included observations: 21

Variable	Coefficient	Std. Error	*t*-Statistic	Prob.
Flows	3.206178	0.693035	4.626288	0.0002
Stock	1.718046	0.107859	15.92864	0.0000
C	27391.31	2220.835	12.33379	0.0000

R-squared	**0.982976**	Mean dependent var	71688.34
Adjusted R-squared	**0.981084**	S.D. dependent var	56930.06
S.E. of regression	7829.874	Akaike info criterion	20.90084
Sum squared resid	1.10E+09	Schwarz criterion	21.05006
Log likelihood	–216.4589	*F*-statistic	519.6567
Durbin-Watson stat	**2.263620**	Prob (*F*-statistic)	0.000000

Source: Table 1 – FDI flows, FDI stock and GDP – values from 1990 to 2010 in Romania.

Regression slope values are 3.20 and 1.71, statistically greater than one, the econometric data is correct; the values are correct, positive, which highlights significant parameters. As an explanation, if the trend of FDI flows is increasing, it will lead to an increase of the stock of foreign investments on the Romanian territory. So, over the period analyzed, always an increase in capital flows undoubtedly caused an increase in stock investments.

In addition, if we analyze the equation in Table 3 we see that *R*-squared has a value of 0.982976, which means a dependence of 98.29% (almost perfect) between the amount of investment flows, stock and Romania's economic growth. This dependence is also one of economic logic, because always capital investments contribute to economic growth of a state, the dependence being direct proportional.

Comparing with China case study when the Durbin-Watson statistic value was very low, namely 0.202703, which would translate that investment capital flows affect growth moderate, in Romania’s case study things change, the difference is indeed observed and significant, namely Durbin-Watson statistic is 2.263620, which shows that in our economy these variables are extremely correlated, FDI flows are directly correlated to the economic growth, having a significant influence on GDP value. The Durbin-Watson statistic value is closer to 1.5, respectively 2, the correlation and dependence between the analyzed variables is higher.

3. Conclusions

The most representative period for our country is 2004 to 2008. Already since 2004 the share of investment flows is an important, effectively tripling their value from the previous year. This cycle of four years of expansion of FDI flows has led to a growth illustrated in the gross domestic product value, one of the main economic indicators. Peak was in 2006 and 2008 when flows reached impressive values in Eastern Europe and South – Eastern Europe, the most important figures being in Russia, Turkey, Romania and Ukraine.

Peak in terms of attractiveness of FDI was registered in 2006 and 2008 when flows reached the spectacular value. Now, in regard to Romania, we can say that through the Romanian Center for Foreign Trade and Investment Promotion, our country is trying to promote opportunities for attracting foreign investors, but also to answer the question "Why to invest in Romania?"

As a conclusion we can say that Romania is one of the countries with great potential to attract foreign investors. We are witnessing a political experience that stimulates the growth of foreign direct investment flows, especially after 2004, being encouraged by beneficial government measures. According to our econometric analysis we identify that for our country, the investments, inflows and outflows, or stock of FDI, are extremely important to stimulate national economic growth. In other words, every investment that we managed to attract contributes to a certain extent of the economic growth.

REFERENCES

[1] Chamber of Tax Consultants, Tax Consultant Magazine, Editorial no. 13, *Foreign direct investment – key to sustainable economic growth in Romania*.

[2] Joia R., Huidumac C. E., Tănase, I. (2011), „*China's Geostrategic Position – FDI Flows and Stock Analysis*", published in Hyperion International Journal of Econophysics and New Economy, Vol. **4,** Issue 1, pp. 129-140.

[3] UNCTAD (2007), *World Investment Report: Transnational Corporations, Extractive Industries and Development,* United Nations publication, New York and Geneva.

[4] UNCTAD (2008), *World Investment Report: Transnational Corporations and the Infrastructure Challenge,* United Nations publication, New York and Geneva.

[5] UNCTAD (2009), *World Investment Report: Transnational Corporations, Agricultural Production and Development,* United Nations publication, New York and Geneva.

[6] UNCTAD (2011), *World Investment Report: Non-Equity Modes of International Production and Development,* United Nations publication, New York and Geneva.