# THE EVOLUTION AND IMPACT OF FOREIGN DIRECT INVESTMENTS IN ROMANIA

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#### Abstract

This study approaches the topic of foreign direct investments in Romania and their role in the sustainable development of the economy. The aim of the paper was to emphasise the role of foreign direct investments on the sustainable development of Romania's economy and their impact on economic growth and business environment development. The research was based on statistical indicators related to foreign direct investments, published by the National Bank of Romania. The indicators for which we performed a dynamic analysis of the data series were: the FDI per economic activities and the FDI per development regions. The data covered the interval between 2003 and 2014. The results indicated an upward trend in the case of foreign direct investments in Romania. Foreign direct investments had a direct and highly significant correlation with the gross domestic product.

Key words: foreign direct investment, Romania

### INTRODUCTION

Investments are a need in the establishment of a competitive economy, in narrowing gaps between the level of the economy in Romania and the one in the developed countries.

Investments represent the economic factor in the form of material, financial and labour resources, whose purpose is to replace obsolete means of production, improve already existing means of production or create new means of production, in order to obtain economic effects in time and whose total is higher than the initial expenditures. [5]

The investments that are obtained must be channelled towards those economic sectors which contribute to sustainable economic growth – agriculture, tourism, the processing industry – and not towards speculative sectors, such as the real estate or retail sectors.[4][2]

According to the UNCTAD definition, the foreign direct investment (FDI) represents a long-term relationship which reflects the investor's lasting interest and his actual possibility to control the entity located in the foreign country where the investment is made. The foreign direct investment is the long-term

investment relationship between a resident and a non-resident entity; it usually involves a significant degree of influence exerted by the investor on the management of the direct investment enterprise in which he has invested. Direct investments include the paid-up capital and the reserves related to a non-resident investor holding at least 10 % of the subscribed share capital of an enterprise, the loans between the investor and the enterprise he invested in, as well as the profit he reinvested. [8]

Foreign direct investments trigger positive effects both at macroeconomic and at microeconomic level, indicated by economic growth, the creation of new jobs, of new production facilities and also by the increase in contributions to the state budget, as a result of taxes paid by the new tax-payers.

Foreign direct investments also have a positive effect on national manufacturers who will invest in their turn, as they want to streamline their activity, as well as to have the possibility to become suppliers of the foreign business partner. [7]

Increased attention paid to the domain of foreign direct investment is justified by the fact that they are a booster for economic growth and they do not generate external debt, as they are complementary to domestic investment. [4]

Foreign direct investments are considered a unique solution with high opportunity for success in narrowing competitiveness gaps which separate the economies of developed countries from the economies of emerging countries. [3]

Foreign direct investments are generally attracted by countries with political and economic stability. Practice has shown that developed countries, in capacity as main receivers of FDI, obtain significantly higher benefits than emerging countries. Their main positive impacts are: economic growth, stimulating domestic investments, supporting reorganisation and privatisation, supporting the increase in state budget revenues. Nevertheless, it is also possible they will have a negative impact, both at macroeconomic and at sectorial level. These negative effects are generally visible on a short term, their occurrence being closely related to implementing and streamlining the investment. [1]

In terms of sustainable development, foreign direct investments trigger the improvement in life quality for those who take the new jobs. As a result of the increase in the supply of goods and services, there is a decrease in prices. But foreign direct investments can also trigger negative effects in the context in which foreign companies have monopoly.

The aim of the paper was to emphasise the role of foreign direct investments on the sustainable development of Romania's economy and their impact on economic growth and business environment development.

### MATERIALS AND METHODS

The research was performed based on the statistical data obtained from the Tempo-on line database and the Reports of the National Bank of Romania on foreign direct investments. We considered an interval of 12 years, respectively 2003-2014. The analysis methods employed in data processing were: the comparison method, the indices method,

the correlation method and the regression method.

Using the comparison method, events are compared in time and space.

Considering that the indices present the evolution of a phenomenon schematically, but also emphasise the annual growth rhythms [6], in the case of foreign direct investments we used the FDI per economic activities and the FDI per development regions.

The correlations and regressions were calculated using the statistical tool in Excel, useful in analysing, simulating and interpreting the results.

#### **RESULTS AND DISCUSSIONS**

Foreign direct investments are an important element in the economic development of any country and in its operation, considering the market economy principles. Foreign direct investments have been a very important solution to sustainable economic growth in Romania, taking into account the fact that the economy can be modernised by importing advanced technologies, highly effective machinery and equipment, as well as by implementing new quality standards.

If we analyse the dynamics of the foreign direct investment balance in Romania, we notice an upward trend. Thus, the FDI balance increased by 523% in 2014, as compared to 2003 (fig.1). The increase may be explained by the fact that foreign investors saw the possibility to obtain relatively high profits form the Romanian economy, in the form of greenfield investments, merger-buyouts or purchases.

We notice that, starting with 2008, when the economic-financial crisis also affected Romania's economy, the foreign direct investment balance cumulated very slow growth rhythms.

The situation may be explained by the significant decrease in or even discontinuance of investments out of the net profits obtained by foreign investors, taking into account that there were investors who suffered great losses.

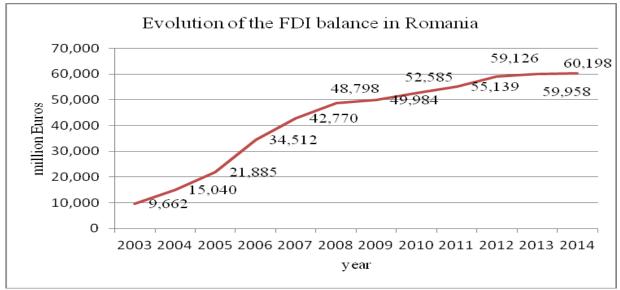


Fig.1 Evolution of the FDI balance in Romania in the interval 2003-2014 Source: NBR Reports- foreign direct investment in Romania 2004-2015

At the end of 2014, the foreign direct investment balance amounted to EUR 60,198 billion, namely 23.4% higher than in 2008 and only 0.4% higher than in 2012.

In terms of the foreign investors' interest in economic sectors, we may notice that industry fills the first position, with a ratio of 51% in 2003 and 48.7% in 2014.

We may notice that, during the analysed

interval, foreign investors were also interested in financial brokerage and insurance, which include the banking activity, non-banking and financial institutions and insurance ones, the highest ratio in this sector being 23% in 2007. (fig.2)

Another activity that attracted important FDI is commerce.

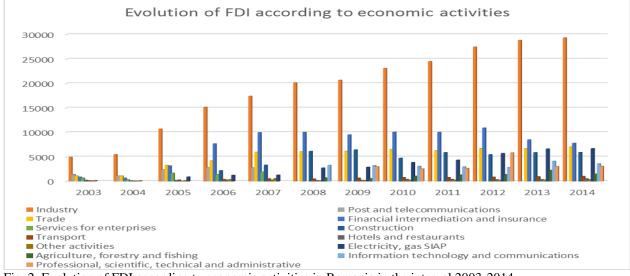


Fig. 2. Evolution of FDI according to economic activities in Romania in the interval 2003-2014 Source: NBR Reports- foreign direct investment in Romania 2004-2015

We noticed a low ratio, compared to the potential, in the case of domains such as transport, hotels and restaurants, with ratios of approximately 2%.

Since 2008, foreign investments have been attracted in domains such as agriculture,

forestry and fisheries, as well as the information technology and communications. But, the ratios in agriculture, forestry and fisheries are not significant, ranging from 1.1% to 3.8%. The need to increase investments in agriculture is given by the

advanced wear and tear of the assets, which triggered negative effects on labour productivity and production costs.

In the domain of information technology and communications, the ratio of foreign direct investments range from 4.8% to 6.7%.

In terms of regions, foreign direct investments are mainly oriented to the Bucharest-Ilfov region, with a ratio exceeding 50%. During the analysed interval, FDI recorded an increase of 581% in 2014 as compared to 2003.

The next regions that benefited from FDI during the analysed interval are: the Centre region, where the FDI increased in 2014 as compared to 2003 by 823%, the South-Muntenia region, and the South-East region,

but the ratio of foreign direct investments in this region out of the total FDI does not exceed 10%.

The North-East region is the least attractive to foreign investors and this is where the lowest ratio is recorded for FDI out of the total foreign direct investment, of approximately 2%.(fig3) Nevertheless, we notice that the volume of foreign direct investments increased by 669% in 2014 as compared to 2003. This region is avoided by foreign investors due to the faulty transport infrastructure, as well as long distance from the western part of Europe. But foreign investors should consider the labour cost in this region, which is very low.

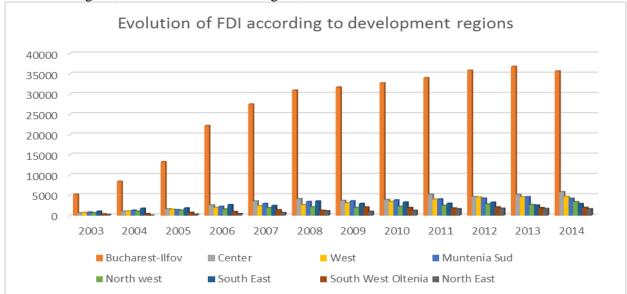


Fig. 3. Evolution of FDI according to development regions in the interval 2003-2014 Source: NBR Reports- foreign direct investment in Romania 2004-2015

We must mention that, in the territorial dispersion analysis of FDI, we must also consider the fact that the statistical research located the FDI in the territory according to the headquarters of the direct investment companies, which does not always correspond to the place where the economic activity is performed. (the NBR report)

To analyse the impact of foreign direct

investments on economic growth in Romania in the interval 2003-2014, we used the econometric modelling method, by means of the Excel software, the Data Analysis module. In order to emphasise the influence of the foreign direct investment balance on economic growth (GDP) in the interval 2003-2014, we used the econometric modelling method (Table 1).

Table 1. Economic indicators used in the econometric study (Billion EUR)

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	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
FDI balance	9.6	15	21.9	34.5	47.7	48.7	49.9	52.5	55.1	59.1	59.6	60.1
GDP	52.6	60.8	79.5	97.7	123.7	139.7	118.2	124.4	131.3	132.	140.6	202

Source: NBR Reports- foreign direct investment in Romania 2004-2015

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Thus, we will analyse the relationship between the foreign direct investment balance, which is the independent variable, and the gross domestic product, considered the dependent variable. Y= a+bx+c, where: Y= Dependent variable, the GDP;

X= Independent variable, the foreign direct investment balance;

a= free term;

b= independent variable parameter;

c= equation error term

Table 2. Regression function results

Regression Statistics								
Multiple R	0.856694							
R Square	0.73392461							
Adjusted R								
Square	0.70436068							
Standard								
Error	19.9076481							
Observations	11							

#### **ANOVA**

					Significance
	df	SS	MS	F	F
Regression	1	9838.506	9838.506	24.825	0.000757
Residual	9	3566.83	396.3145		
Total	10	13405.34			

		Standard			Lower	Upper	Lower	Upper
	Coefficients	Error	t Stat	P-value	95%	95%	95.0%	95.0%
Intercept	30.7504037	19.4097	1.58428	0.147591	-13.15739	74.6582	-13.1574	74.6582
9.6	2.02572198	0.40657	4.982469	0.000757	1.105997	2.94545	1.105997	2.94545

Source: own calculations

Based on the data in Table 2, the regression function is the following for the foreign direct investment balance:

## $Y = 30.750403 + 2.025721 \times$

The value of the correlation coefficient between the foreign direct investment balance and the gross domestic product is 0.856694, and, as it is close to the value of 1, it indicates that there is a close correlation between the two variables, therefore the increase in the foreign direct investment balance triggers the increase in GDP. Foreign direct investment caused a direct and highly significant correlation on the gross domestic product.

The determination coefficient R<sup>2</sup> recorded the value of 0.73392, which indicates that 73.3% of the gross domestic product variation was caused by the variation of the foreign direct investment balance.

As the Fisher test value was 24.825 and the probability was 0.000757, we accept that,

overall, the simple linear regression model is valid.

As there is a direct and very close connection between the two indicators, we can estimate that an increase by EUR 1 billion in the foreign direct investment balance will trigger an increase in the gross domestic product of EUR 2.0257 billion.

The results obtained using the econometric model emphasise the contribution made by the foreign direct investments to the sustainable development of Romania's economy.

## **CONCLUSIONS**

The foreign direct investment balance in Romania took a positive trend in in the interval 2003-2014, as a result of the fact that investors saw the possibility to make a profit from greenfield investments, merger-buyouts or purchases.

In terms of the foreign investors' interest in

economic sectors, we may notice that industry fills the first position, but important FDI ratios are also found in the domains of financial brokerage and insurance, as well as commerce.

The agricultural sector, a very important sector in Romania's economy, recorded low ratio values in terms of the amount of foreign direct investments. The need to increase investments in agriculture is given by the advanced wear and tear of the assets, which triggered negative effects on labour productivity and production costs.

In terms of regions, foreign direct investments are mainly oriented to the Bucharest-Ilfov region, with a ratio exceeding 50%, whereas the North-East region is the least attractive to foreign investors and it records the lowest ratio of FDI out of the foreign direct investment, of approximately 2%

The impact of foreign direct investments on the gross domestic product emphasised a positive relationship between these two macroeconomic indicators, which had a positive impact on economic growth. Based on the research results, we noticed that the connection between the amount of foreign direct investments and the gross domestic product was of high intensity, the correlation coefficient value being 0.856694, and the determination was 73.3%. Therefore, this positive impact triggered streamlining the use of resources in the economy.

It is necessary to perform activities to attract a number of foreign investors as large as possible, who will contribute to the development of investment activities that will lead to an increase in the number of jobs, population incomes, to a decrease in poverty, as well as to recording superior macroeconomic results.

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