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REGIONAL DISPARITIES IN ROMANIA – AN ANALYSIS ON THE FOREIGN DIRECT INVESTMENTS EFFICIENCY

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Abstract

By this study, we intend to analyze the evolution of the Romanian regions during transition under the influence of the foreign direct investment (FDI) inflows, using the efficiency calculations of the macroeconomic indicators. The methodology developed by Romanu & Vasilescu (1993) was chosen because it reflects, in a direct way, the contribution of the investments on the evolution of the macroeconomic indicators and in which way the FDI influenced their evolution. The ratio between the variation of the indicators of effort and effects shows us the efficiency and the progress of an effect indicator for every additional value of effort. We consider as effort indicator the FDI level and effect indicators the gross domestic product (GDP), gross value added (GVA) and fixed gross capital formation (FGCF).

If we have in view these premises, the evolution of the Romanian economic development regions is characterized by huge disparities. The most obvious is between Bucharest and the rest of the regions. In the same time, FDI had strong positive influences on the macroeconomic indicators and the activity was efficient only after 2000.

Keywords: Investments, Efficiency, Regions, Romania.

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Overview

The study uses data provided by the national institutions specialized in foreign direct investments (FDI) monitoring in Romania like the National Office of The Trade Register (NOTR), National Institute for Statistics (NIS), Romanian Agency for Foreign Investment (RAFI) and the National Bank of Romania (NBR). According to NOTR definition, the foreign capital invested in Romania is equal to capital subscription to matriculations, plus subscriptions through capital increase mentions, minus share capital transferred by non – resident shareholders /associations to resident shareholders/associations, minus share capital subscribed to firms erased from the trade register.

The methodology used in this study is based on the papers elaborated by Romanu & Vasilescu in 90s. They are an extended research of the papers published by Camasoiu in 70s, with direct applicability in Romanian economy, at macroeconomic level. The papers had in view an analysis of the efficiency of the investment flows using the evolution of the main macroeconomic indicators under their influence. We chose as indicators which reflect in the best way the evolution of the Romanian economy the following: gross domestic product (GDP), gross value added (GVA) and fixed gross capital formation (FGCF). GDP is defined as the sum of value added at every stage of production of all final goods and services produced within a country in a given period of time. GVA is defined as GDP minus taxes and subsidies on products. FGCF is defined as the total value of additions to fixed assets by resident producer enterprises, less disposals of fixed assets during the quarter or year, plus additions to the value of non-produced assets.

Because the capital plays a very important role, conducts our life in a totally different way than twenty years ago, at the beginning of the transition period and will have a deeper influence, in the next decades, we consider that FDI is an important indicator of the state of the economy. The investment activity has a central position in economy because it is an instrument for achieving economic growth. Among different forms of investments, foreign capital and FDI seem to be the most dynamic and advantageous for the countries from Central, Southern and Eastern Europe, for the sides implies in this process, investors and receivers.

In the last fifteen years, in Romania have developed different concepts concerning investment policy, regional development and the role of FDI in the future economic stability, in pre-accession period and after the accession into European Union structures. Unfortunately, the policies suffered of the lack of poise and the decision-makers showed a totally lack of consistency with grave negative effects on the next decision steps.

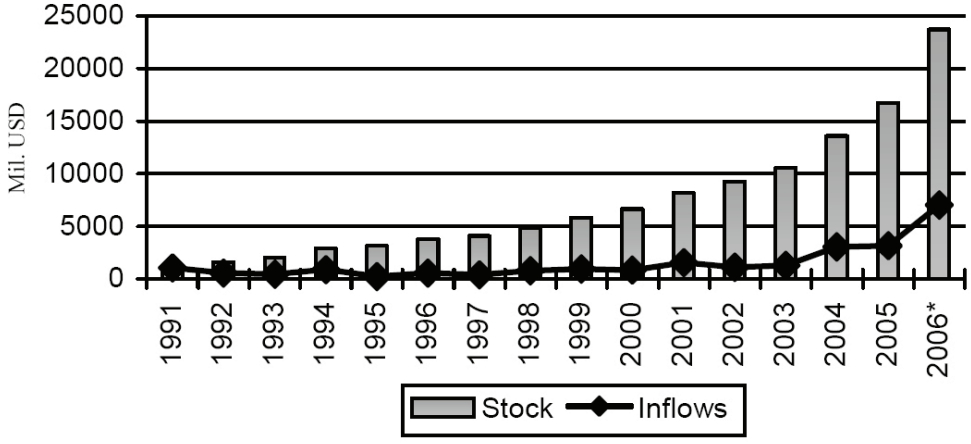
The evolution of the foreign direct investments

In many years during transition, Romania did not have a good image on the international market and in the eyes of the investors. It played an unsignificant role in the region and the capacity of absorption of the FDI was weak (about 6% from regional FDI inflows till 2005). For the foreign investors, the general climate of the economy was not the best in attracting strategic investments and that was the main barrier against economic development.

After the last EU enlargement in 2004, the major foreign investors in Central and Eastern European Countries (CEEC) have changed their policy and started to invest in South Eastern European Countries (SEEC) more than before. In 2005, according to RAFI data, about 12 Billion $ were invested in SEEC (it is an absolute record for this region). Among the countries in the region, Romania was the main destination with more than 51% from total (6.1 Billion $, green field and privatization).

Watching the evolution of the FDI in Romanian economy (Figure 1), we can say that it was characterized by constant and little incomes for almost entire period and, in the same time, the lack of privatization in "key moments". Exceptions from this „rule" were the last three years when a new trend was established due to the policy of the Romanian Government, the policy of the foreign investors after the last EU enlargement in 2004 and the forecasts of the Romanian economy evolution after the accession into EU in 2007. At the end of 2005, the FDI total stock in Romania was 16,731.7 Mil $ (four times less than Poland which is the main FDI destination in region).

Figure 1 - The evolution of the FDI stocks and inflows in Romania (1991-2006)



Source: NOTR Database. Note: 2006 = Forecast RAFI.*

The general investment climate in the last years, better than in 90s, made possible an improvement of the collaboration between Romanian administration and investors. In the same time, the perception of the Romanian business environment among foreign investors has become positive and, as a result, the ratting, which was given to Romania by international

financial agencies, was upper. That was an asset and encouraged the investors. Even for 2006/2007 the previsions were favorable and the Romanian authorities expected FDI inflows at an upper level than in 2005 (the total inflows from green field and privatization made in 2006 can increase the annual stock up to 10 Bil $).

From the table 1, we can distinguish three forms of attitude of the foreign investors during transition (Voicilas, 2006):

- A defensive attitude, which characterizes the majority of the period, with little FDI, less than 6% from total (period 1992-2000);
- A prudent attitude, which characterizes a few years of the period, with a FDI policy in expectation and investments between 6-10% from total (1991, 2001-2003);
- An offensive attitude, which characterizes the last years, with intensive investments, more than 15% from total (2004-2005).

Table 1 – FDI indicators in Romania (1991-2005)

Indicator	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Inflows in total stock (%)	6.32	3.43	2.50	5.27	1.42	3.43	2.15	4.52	5.64	5.02	9.21	6.45	7.70	18.12	18.82
Average stock (Mil. $)	1058.3	815.8	683.1	732.8	633.8	623.7	586.0	607.2	644.7	664.1	743.8	771.7	811.5	970.1	1115.4
Average stock per capita (Thou. $)	48.8	75.3	94.5	135.2	146.2	172.6	186.9	221.8	265.4	304.1	375.2	424.9	484.4	626.0	771.7
Average inflows per capita (Thou. $)	48.8	26.4	19.3	40.7	11.0	26.5	14.3	34.8	43.6	38.7	71.1	49.7	59.4	139.9	145.3

Note: We considered the population constant at the level of the year 2002 (21,680,974 inhabitants).
Source: Voicilas, D.M., 2005. Special study, Foreign direct investment in South-East Europe – overview on Romania and Bulgaria. In: Chojna, J. (Supervisor), Foreign Investments in Poland – Annual Report. ISSN 1231-1111, Foreign Trade Research Institute, Warsaw, Poland, 208-229; Calculations based on NOTR Database; NIS Database.

"The concave evolution" of the average FDI in total stock, in the whole period, is an evidence of the attitude of the foreign investors and their response to the political and economical climate in Romania (Voicilas, 2006). The concavity is a result of the withdrawal of the foreign investors from the Romanian market, for a period of time, due to the lack of political stability and reforms in economy during 90s. The changes in the last years have attracted the investors again.

The last two indicators from the table 1 show us that Romania recovered a part of "the time lost" in 90s and it is closer to the values recorded in other countries in Central and Eastern Europe (CEE) or even some countries from South and Eastern Europe (SEE), like Croatia and Bulgaria.

In these conditions, Romania becomes a principal receiver of FDI in SEE. It is still behind countries from CEE, like Poland, Hungary and Czech Republic (taking into account indicators like FDI stock, FDI inflows, average stock/capita or average inflows/capita), but the tendencies are encouraging. With about 1/3 from the total investments made in these countries (analyzed separately) in the last fifteen years, the gap between Romania and the main CEEC is still big.

The regional analysis of the foreign direct investments

A regional analysis in Romania shows major differences at all levels and in many fields. Among the eight Romanian economic development regions, there are a few which have closer indicators with the level of other countries in EU (especially among New Member States – NMS), but still many other far from the requirements of an EU member.

The territorial repartition of the FDI for all activity sectors of the economy puts into evidence some of the trends manifested by the investors in 90s. As result, there are emerging centers of concentration for the foreign investors in those geographical areas and historical provinces with a rich economic and infrastructure potential or with historical traditions in certain activity branches.

Table 2 - FDI in Romania by economic development regions (1991-2005)

Development regions	Investors		Capital		Rural population	Regional population
	No.	%	Mil. $	%	%	%
Northeast	4749	4.0	523.7	3.1	59.5	17.1
Southeast	6496	5.5	1483.6	8.9	44.8	13.2
South	4781	4.0	1663.3	9.9	59.5	15.6
Southwest	2975	2.5	270.8	1.6	55.8	10.8
West	12858	10.8	1075.7	6.4	38.4	8.9
Northwest	11622	9.8	912.2	5.5	49.9	12.6
Center	11132	9.3	811.5	4.9	41.5	11.6
Bucharest	64507	54.1	9990.9	59.7	11.3	10.2
Total	119120	100.0	16731.7	100.0	46.7	-

Source: NOTR Database; NIS Database.

When we analyze the distribution of the foreign investors taking into consideration the number of the commercial companies (Table 2), we can see that about half (54.1%) have been founded in Bucharest, which anyhow has the supremacy regarding the value of the invested capital, with almost 60%. The second group of regions, on the subsequent place is: the West Region, Northwest Region and Center Region (between 9-11%). The fewest commercial companies were founded in Southwest Region (only 2.5%). If we have in view the value of the investments, after Bucharest is following the South Region and Southeast Region. These three regions gather almost 80% of the total FDI in Romania. On the last place is the Southwest Region.

Following these two criteria, we can conclude that the Bucharest Region is

concentrating the greatest part of the foreign investments in Romania, the rest (about 40%) being shared by the other seven regions of economic development, existing a great economic imbalance manifested in all domains of activity. The least attractive region for the foreign investors is Southwest, which is on the last position in function of both criteria. It is in fact one of the poorest regions in Romania, together with the Northeast Region, with a rural majority and a strong agrarian character (almost 60% from the population is rural). Both regions have 28% from the Romanian population but they cumulate only 4.7% from the total FDI. An exception is the South Region, which has a rural character, over 15% from the Romanian population but high level of investments.

Generally, the foreign investors avoided the poorest regions in Romania, the rural environment, preferring the towns or the adjacent areas. The regional distribution of the FDI in Romania is characterized by great inequalities, the one between the Bucharest Region and the other regions being most obvious and the second between rural and urban area.

The regional analysis of the efficiency

In this chapter we will show in which way the FDI evolution influenced the main macroeconomic indicators in the Romanian economy and regions. We take into consideration the evolution of the following indicators: GDP, GVA and FGCF. The calculation of the efficiency of the FDI is based on the following indicators: FDI fertility, FDI efficiency coefficient, Capital efficiency. Each calculation will be done at national and regional level.

FDI Fertility

The indicator shows the efficiency of the FDI utilization reflected by the ratio of the GDP and FDI variations. In the table 3, we present the results of the calculation based on the following formula (Romanu&Vasilescu, 1993):

$$Ef(a/b) = \Delta GDP/\Delta FDI; \quad (1)$$

Where a=initial moment; b=the moment for comparison.

Table 3 – FDI fertility ($)

Ef	2005/1991	2005/2004	2004/2003	2003/2002	2002/2001	2001/2000	2000/1999	1993/1992	1992/1991
National level									
Value	9.021	6.476	4.668	5.952	4.800	3.717	1.671	0.585	0.344
Regional level									
Value	Northeast								
	5.012	2.352	2.012	2.566	1.798	1.988	1.001	0.022	0.022
	Southeast								
	9.011	8.229	5.044	6.322	3.265	3.285	1.889	0.836	0.092
	South								
	9.584	9.566	7.281	6.873	4.232	2.899	2.285	0.877	0.595
	Southwest								
	4.363	4.025	2.233	2.749	3.162	1.012	1.027	0.066	0.033
	West								
	5.892	6.787	4.399	5.244	5.963	3.239	1.869	1.002	0.059
	Northwest								
	7.255	5.365	4.211	7.241	4.466	4.819	1.242	0.514	0.099
	Center								
	6.886	6.232	4.178	5.978	4.246	2.633	1.533	0.161	0.853
	Bucharest								
	24.168	9.256	7.989	10.641	11.269	9.865	2.525	1.201	1.003

Source: Own calculation based on NIS and NOTR Data.

At national level, the FDI fertility increased in the last years. The level of FDI and GDP increased in the same time but not in the same proportion. It is evident the connection between FDI and the growth of the GDP especially after 2000 when the FDI contribution is bigger than in previous period. At the beginning of 90s the impact of FDI on GDP was small and the activities were not efficient because the values were little. The ratio shows that for one unit of FDI there was obtained less than one unit of GDP.

At regional level, the general tendency was that the values increased from year to year. With little exceptions, the regional values followed the national average. Generally, the biggest values were in Bucharest Region for the entire period, which express the highest fertility in Romania. Higher values compared with the national average were met in South, Southeast and West regions. In the same time, the smallest values were met in Southwest and Northeast regions, which had inefficient activity at the beginning of 90s, small GDP contribution at the national level and small FDI values, as well.

FDI Efficiency Coefficient

The indicator is a ratio between the variation of the GVA and FDI and shows the progress of the GVA for every additional FDI unit. We use the following formula (Romanu&Vasilescu, 1993):

$$Ee(a/b) = \Delta GVA/\Delta FDI; \quad (2)$$

Where a=initial moment; b=the moment for comparison.

Table 4 - FDI efficiency coefficient ($)

Ee	National level	Regional level							
		Northeast	Southeast	South	Southwest	West	Northwest	Center	Bucharest
2005/1991	19.187	10.261	22.233	25.652	11.285	19.412	18.471	15.639	30.542
2005/2004	14.932	11.263	16.852	19.463	9.052	15.396	14.245	12.865	20.326
2004/2003	10.700	8.523	12.042	11.715	9.429	11.003	10.058	10.002	12.826
2003/2002	5.979	5.229	6.115	6.525	4.998	5.224	6.004	5.551	8.188
2002/2001	4.361	3.022	3.986	4.661	3.262	4.007	5.080	4.981	5.887
2001/2000	2.139	1.006	2.120	1.925	1.000	1.869	1.522	1.687	5.983
2000/1999	1.955	0.996	1.886	2.382	1.056	1.535	1.642	2.121	4.023
1993/1992	0.396	0.066	0.285	0.589	0.011	0.125	0.187	0.050	1.852
1992/1991	0.239	0.003	0.011	0.120	0.001	0.052	0.012	0.060	1.655

Source: Own calculation based on NIS and NOTR Data.

The efficiency increased from year to year (as we see in table 4). The biggest values were after 2000 (a very efficient activity) and the smallest at the beginning of 90s (when was an inefficient activity). Generally, Bucharest Region was on the first place with a strong influence on national GVA and values above the national average. Good influence had also South and Southeast regions. Inefficiency and bad influence on national average had Northeast and Southwest regions.

Capital Efficiency

The indicator expresses the modification of the fixed gross capital formation under the influence of the FDI. The formula used is (Romanu&Vasilescu, 1993):

$$Ec(a/b) = \Delta FGCF/\Delta FDI; \quad (3)$$

Where a=initial moment; b=the moment for comparison.

Table 5 - Capital efficiency ($)

Ec	National level	Regional level							
		Northeast	Southeast	South	Southwest	West	Northwest	Center	Bucharest
2005/1991	6.304	5.021	7.014	7.526	4.122	5.898	5.042	6.822	8.985
2005/2004	4.397	3.228	4.868	4.152	4.001	4.286	4.821	3.996	5.822
2004/2003	3.798	3.006	3.966	4.581	3.020	4.011	3.928	3.183	4.686
2003/2002	2.393	2.323	2.588	2.983	1.866	1.986	2.055	2.171	3.176
2002/2001	1.489	1.007	1.854	1.798	1.151	1.352	1.384	1.279	2.084
2001/2000	0.812	0.574	0.985	0.876	0.289	0.677	0.718	0.499	1.875
2000/1999	0.527	0.158	0.528	0.579	0.227	0.379	0.293	0.455	1.599
1993/1992	1.041	0.582	0.957	1.766	0.421	0.900	0.875	1.003	1.827
1992/1991	0.751	0.400	1.074	1.005	0.436	0.541	0.763	0.498	1.290

Source: Own calculation based on NIS and NOTR Data.

The activity was efficient and the FDI influence on the FGCF was positive after 2002 when were recorded values bigger then one (the results of the calculation are presenting in table 5). Till that time, the FDI influence on the FGCF was small. Bucharest Region had a decisive contribution in all years and the activity was efficient. For the rest of the Romanian regions, important contributions had South and Southeast regions with an efficient activity in many years (even before 2001) and weak contributions had Northeast and Southwest regions, generally with values bellow the national average.

Conclusions

From the analysis of the FDI and efficiency in the Romanian economy and regions, certain conclusions can be drawn that come to consolidate their increasing role for economic growth, modernization and consolidation of the market.

In Romania, FDI evolution after 1990 had the general trend like in all transition countries; however, its particularity was that the frequency of changes and sometimes the lack of coherence and consistency of authorities strongly influenced the attracted foreign capital. At present, Romania is behind its main competitors in CEE (countries like Poland, Hungary or Czech Republic), but ahead of many other countries especially from SEE. In 90s, the investment policy and the negative image of the Romania on the international financial markets determined little inflows of FDI, which had negative effects on the macroeconomic indicators and the evolution of the regions. Due to these reasons, the performances of the economy were weak. Generally, the evolution of the economy was like a concave curve and the level of the macroeconomic indicators recorded before 1990 were reached just in 2004-2005.

The Romanian regions are characterized by huge disparities. The most obvious is between Bucharest and the rest of the regions. The repartition of the FDI between regions is unbalanced and we can identify less developed regions like Northeast and Southwest or richer and more attractive regions like South and Southeast. Important FDI were done in Bucharest and surroundings (about 60% from total FDI in Romania) and the economic development regions from South of Romania. The East and West regions did not have the same attractively for investors. Considering that 10% from the Romanian population has benefited of 60% from the total FDI in Romania, we can imagine that the effects on the economy and regions are different. The disparities appear in all sectors of activity. Agriculture and rural area have an important role, because the less developed regions are mostly rural, with a large number of agricultural workers, unemployed workers (or hide unemployment), little performances and efficiency. All these will have a direct influence on the evolution of the regions inside EU market.

The FDI impact is different in Romanian regions. Analyzing the influence of the FDI on the macroeconomic indicators and the efficiency of the FDI, we can conclude that an efficient activity and strong positive influences on the economy was only after 2000. Before this year, the influences were small. The main contribution had Bucharest that registered values above the national average. After 2000, important contributions

and efficient activity had other two regions, South and Southeast but, in the same time, weak performances had regions like Northeast and Southwest. Between them, there is a group of three regions (West, Northwest and Center) that had efficient activity in many years but the values were under the national average.

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