WHAT HAPPENED WITH THE ATTRACTIVENESS OF THE ROMANIAN COUNTIES FOR FDI DURING THE PERIOD 2001 – 2012?

Vasile Alecsandru STRAT
PhD, University Lecturer,
Department of Statistics and Econometrics,
Bucharest University of Economic Studies, Romania

E-mail: vasilestrat@csie.ase.ro; strat_vasile@yahoo.com

Abstract

The FDI have become a very important aspect in the nowadays economical and geopolitical circumstances and, therefore, the study of this phenomenon is regarded with an increased attention by scholars, by government and business representatives.

Following this direction, the study of disparities registered between different regions or between different countries when dealing with the attractiveness of these entities in the eyes of foreign investors became a topic of an increasing importance.

In the present study, using yearly data regarding the stocks of FDI at the level of the Romanian counties, for the period 2001 – 2012, I try to evaluate the evolution of the attractiveness of these entities for foreign investors using the Gini coefficient. The study reveals that the attractiveness of the Romanian counties was significantly influenced by the main events which happened during this period.

Keywords: *FDI; county level; human capital; development region; Gini coefficient; king and viceroy effect*

1. Introduction

The foreign direct investments are regarded by the governments of many developing countries as one of the most important tools that can be used for their economical development.

The former communist countries from the eastern part of Europe are no exception and, starting from the beginning of the `90, their governments have been preoccupied with forging strategies that would enable them to attract foreign direct investments. These foreign direct investments were regarded as an important source of capital, an important source of management skills, an important source for new and better paid jobs, an important source for new technologies and also an important source for new and more completive products for both the internal market and for boosting up the export capacity of the country.

Although the competition between national governments for bringing foreign direct investments inside their countries is significantly more visible, there is also an important competition inside every state between the regional or even local authorities to attract these

investments into their units. Another important aspect, mentioned by the literature on this matter, is the presence of important discrepancies between the attractiveness (in the eyes of the foreign investors) of these local entities in almost every state.

Of main importance regarding this subject is also the regional policy of the EU, developed with the sole purpose of reducing the development (economic point of view) disparities among the European regions. Therefore, it is obvious that reducing the disparities between regions (and other economical entities) should be regarded with an increased attention due to the fact that it is the main tool that can be used for ensuring similar and adequate standard of living for all the inhabitants.

Romania is no exception in this regard and the presence of disparities among counties needs to be analyzed and these discrepancies need to be diminished in order to ensure a sustainable development of the national economy. Also, forging policies for diminishing these discrepancies needs to be an important priority because the enhancement of this phenomenon can create significant macroeconomic and social disequilibria with significant negative impacts in several fields.

The structure of the paper contains four main sections, as follows: literature review and theoretical background, methodology and data related issues, empirical results and conclusion.

2. Literature Review and General Framework

The subject of foreign direct investments has been one of the central topics in a large variety of scientific studies in the last 30 years. Due to its importance for the economical environment of a country or region this topic has started impressive debates and controversies among scholars, government representatives, company representatives and also NGO's representatives.

As many scholars have shown, the foreign direct investments have been regarded as the "holy grail" by the governments of the great majority of the developing countries. Starting from the '80, the phenomenon of foreign direct investments has increased its intensity due to globalization and also to the fact that governments and foreign investors have shifted their approach towards a more collaborative side. Murtha and Lenway have shown, in a research paper published in 1994, that governments lowered taxation levels and have also designed new policies and regulations in this field with the sole purpose of attracting as much foreign direct investment as possible.

Following this direction, I need to state that foreign direct investments have been regarded as a major source for fuelling the economic growth by the governments of all the ex communist countries from Europe, during the last 24 years. The foreign direct investments were regarded as a source of capital and also of other benefits which could have been easier obtained through such a method. Therefore I can state that these foreign investments were considered responsible for bringing: new and superior management skills and also new and improved technologies, in the host countries. They were also regarded as an important factor in providing new and better paid jobs, new and more competitive products and services.

Bearing in mind these benefits (and many others) brought in a country by foreign direct investments, many scholars have focused their research on studying the problematic aspect of the main determinants responsible for attracting a foreign investor in a specific

location. Scholars have conducted studies, following this research direction, both at national and at regional level.

As I have stated earlier, the literature provides evidence supporting the hypothesis that foreign direct investments are an important tool which can catalyze the development at regional level and, by consequence some of the main determinants should be looked for at regional level (Porter (2003)).

One of the main determinants of the foreign direct investments identified by a large number of studies is represented by the market size. Remarkable in this regard are the studies conducted by Crozet, Mayer and Mucchielli (2004), Przybylska and Malina (2000) and Ghemawat and Kennedy (1999), Cleeve (2008) and Schneider and Frey (1985).

The infrastructure was also identified as an important determinant of the foreign direct investments by many scholars, both at national and at regional level. Such studies are those published by Wei et al in 1998, by Mariotti and Pischitello in 1995, and by Broadman and Sun in 1997. Dunning, in a study published in 1998, argues that infrastructure represents a significant advantage of a location, when talking about foreign direct investments, because it is responsible for improving the potential to exploit the available resources. Noteworthy regarding the infrastructure, is the fact that studies conducted in this field asses the importance of the communication infrastructure (Asiedu (2002) and Khadaroo and Seetanah (2009)) and also of the transport infrastructure (Khadaroo and Seetanah (2009)).

Another important determinant identified by the academicians, who have studied aspects connected with the localization process of foreign direct investments, is represented by the characteristics of the labor market. Crozet, Mayer et al, in a study released in 2004, and Lansbury et al. in a study published in 1996, stress the importance of the availability and the price of the labor force in attracting foreign investors in a location. Wheeler and Moody provide evidences, in a study published in 1992, that between the inflows of foreign direct investments and the average wage there is a positive relation. In their studies, Vijayakumar et al. (2010) and Schneider and Frey (1985) support (through their findings) the idea that foreign direct investments are attracted into locations where the labor costs are low.

Research and development level and the human capital are other important determinants which have a significant importance in attracting foreign direct investments in a host country or region. Cantwell and Iammarino, in a study published in 2001, argue that the research and development level of an economy represent an important factor considered by foreign investors who intend to locate a future investment. Evidences in the same direction are provided by Cantwell and Piscitello (2005) and also by Chung and Alcácer, (2002). Dunning, in a study released in 2001, argues that the human capital positively influences the inflows of foreign direct investments. In the same direction point the findings reported by Cleeve (2008) and Al-Sadig (2009) which show that the secondary school enrolment has a positive impact on the inflows of foreign direct investments.

The literature also indicates: trade openness, government regulations, corruption, political stability and macroeconomic stability as key drivers of the foreign direct investments attraction. Al-Sadig (2009), Cleeve (2008) and Asiedu in 2002, all support the hypothesis that between trade openness and the inflow of foreign direct investments exists a positive correlation. Vijayakumar et al reach the same conclusion in a study published in 2010. Important for the literature concerning the interdependencies between the government

regulations and the inward foreign direct investments is the study published by Morrissey and Udomkerdmongkol (2012) who repots a positive link between these two aspects. Schneider and Frey (1985) show that incoming foreign direct investments are encouraged by political stability. Their results are further confirmed by Asiedu in his study published in 2006. Noteworthy regarding our topic is that Al-Sadig (2009) and Asiedu (2006) provide evidences, in their studies, supporting the idea that increasing corruption level is regarded by the foreign investors as a significant disadvantage of a potential location. These findings are reinforced by the results obtained by Cleeve in his study, released in 2008, and by Wei in 2000. Scholars used unemployment level or the inflation rate as a proxy for the macroeconomic stability and proved that foreign investors incline to locate their future investments in countries with a higher stability level.

However, I need to clearly state the fact that, even though the determinants described above were all identified and studied in a large variety of studies, some of them manifest their influence mainly at country level and less at regional level. Nevertheless these phenomena should be studied by the Romanian policy makers when trying to identify the determinants of the foreign direct investments, at regional level.

Also, when talking about foreign direct investments at regional level, of significant importance is the study of the disparities registered between different regions and their underlying causes. The registered disparities concern different domains like: labor market (Taylor and Bradley (1997)), tourism (Xue (2005), Soukiazis and Proença (2008)), infrastructure (Démurger (2001)) and other important socio-economic aspects (Singh, Kogan, et al (2008)).

At national level, even though the literature is not very vast, the disparities among regions are the main topic of the studies published by Boldea, Parean et al in 2012 and by Goschin, Constantin et al in 2008. Also noteworthy in the context of our study is the research paper published by Danciu and Strat (2012) where, based on micro economic level data, the authors analyze the potential of the Romanian regions in attracting foreign direct investments in the manufacturing sector.

2. Methodology, Research Goal and Data Issues

Three important aspects of the research are discussed along this section. First of all, the main objective of the research is presented and described. In the second part of the section the focus is on the employed methodology and on aspects related to the administrative divisions of Romania. Finally the third part of the section deals with issues related to the data used in this study.

2.1. Research Goal

The main goal of the present research is to analyze the evolution of the localization process of foreign direct investments at the level of the Romanian counties, during the period 2001 – 2012. Therefore, I will try to emphasize any changes in the trend of the localization process and I will also try to connect these turning points with the most important events which took place in Romania in that particular period (events that might have had an impact on the attractiveness of the Romanian counties in the eyes of foreign investors). Following this approach, the analysis will be conducted with respect to the three important milestones that have occurred during this period, namely: the year 2004 when Romania became a

member of NATO, the year 2007 when Romania became a member of the European Union and the year 2009 when the economical crisis brought its effects in Romania.

2.2. Administrative divisions of Romania

Romania is organized, from an administrative perspective, into 41 counties and a capital city named Bucharest. These counties serve as NUTS III units. The capital city is also divided into six administrative entities named Sectors.

After the end of the communist era, which took place in 1990, Romania decided to redesign its administrative and spatial organization from a highly centralized model to a new framework based on a regional perspective. An important milestone during this transformation process was the year 1998 when eight development regions were created. This eight development regions, serve as NUTS II units and their names are: North - East development region, South - East development region, South development region, South - West development region, West development region, North-West development region, Centre development region and Bucharest - Ilfov development region. Important to mention is the fact that, after the crucial moment which took place in 1998, no other significant events were registered in this regard. Moreover, I need to mention that these development regions are not fully functional administrative regions even though Romania became a member of the European Union since the 1st of January 2007.

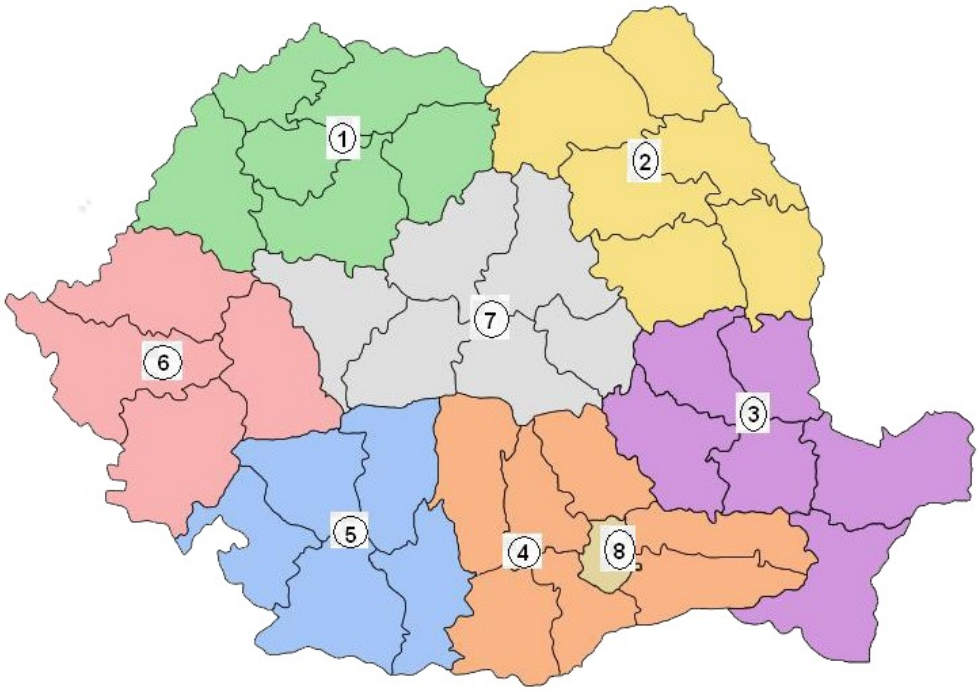

Figure 1. The administrative organization of Romania

2.3. Data Issues

The analysis presented in this paper is conducted on the series of stocks of foreign direct investments registered at the county level for the period 2001 – 2012. The national value of the stock used is calculated by summing up the individual values, for each year. The data were gathered from the database of the Romanian National Trade Register Office (the database is available online on the website of the institution). Due to comparability reasons

and also in order to improve the relevance of our results all the values (for all the counties) were expressed as percentages from the stock registered at national level.

3. Empirical Results

The evolution of the stocks of foreign direct investments at the level of the Romanian counties might be regarded as an important indicator of their economical development and, therefore, studying this aspect should be considered as being very important by the policymakers.

First of all, when talking about the inward foreign direct investments, it is important to mention that the stocks of foreign direct investments for Romania (calculated as a sum of the stocks registered at county level) have increased from 9119942.4 Euro to a value of 32939762.5 Euro over the period 2001 – 2012. The entire evolution of the growth rhythms is displayed in the chart from Fig. 2. Until 2003 the stocks have slightly decreased and afterwards the trend was constantly positive. For the period between 2004 and 2007 the growth rate was decreasing constantly from 25.7% to little over 15.5%. Therefore, when shifting our perspective from absolute values to percentages, I can assert that, even though the period between the NATO accession and the European Union accession has been a favorable period, Romania's attractiveness for foreign investors has diminished. Going further, I notice that the growth rhythm has increased in 2008 (the last year before the economical crisis started to affect the Romanian economy) at a value over 22%. In 2011 and 2012 the growth rhythm has been significantly lower, with values under 10%, but the positive trend has reappeared.

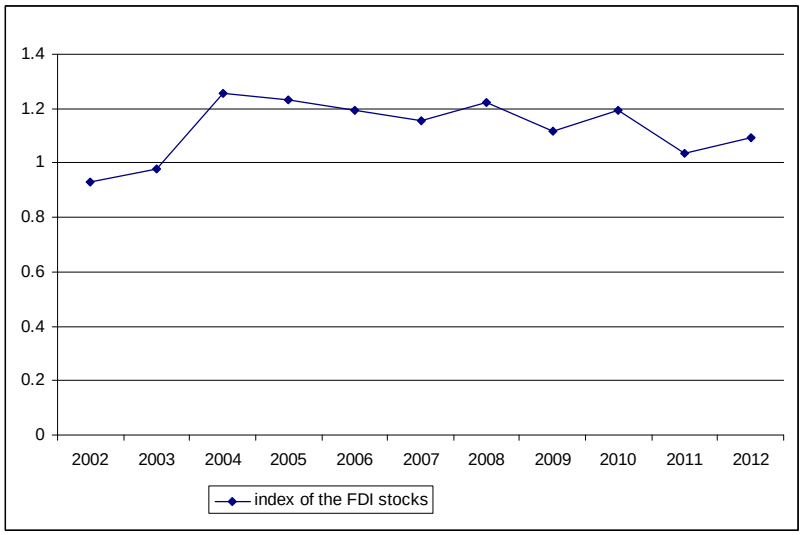

Figure 2. The dynamic of the FDI stocks (index with a moving base) for Romania
Source: Author's work

Taking the analysis further I will continue to asses the evolution of the stocks of foreign direct investments at the county level. In order to facilitate the comparison I have expressed the stock of foreign direct investment for each county as a percentage from the stock of FDI registered at national level.

Before moving on with the analysis I will present the evolution for the development region Bucharest Ilfov, due to its essential particularities. First of all, it is very important to mention that this region has received over 50% of the total foreign direct investments located in Romania. The percentage has increased from little over 50% in 2001 to over 59% in 2012. The entire evolution is displayed in the chart listed in the figure number 3.

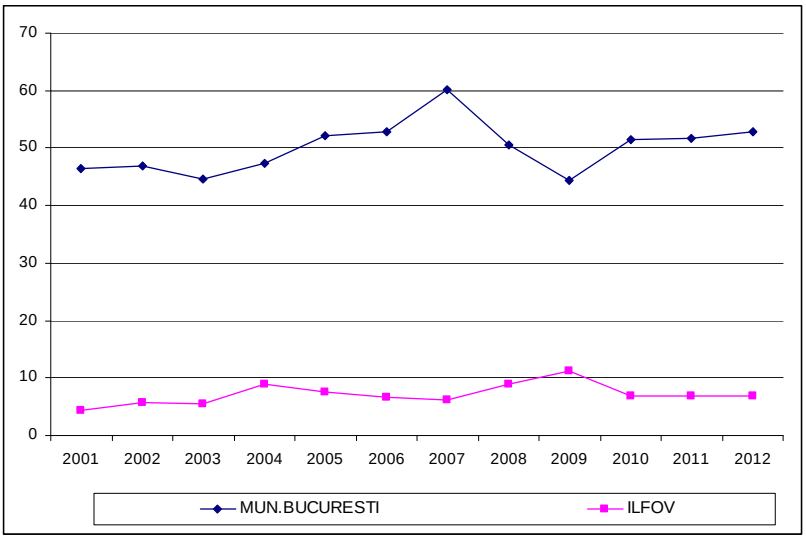

Figure 3. The dynamic of the FDI stocks (% from national value) for Bucharest and Ilfov
Source: Author's work

In the evolution of the stocks of foreign direct investments for Bucharest, an important milestone represents the first year (2007) after Romania was accepted as a member of the European Union. In 2007 the stocks attracted in Bucharest represented over 60% from the national level stocks. The lowest level for Bucharest was registered in 2009 when the stocks for Ilfov reached their highest value (over 11%). After 2009, the stocks for Ilfov constantly represented around 6.8% from the national stock and those for Bucharest increased easily from 51% to 52%.

The particularities presented by Bucharest might be described as "king effect", an effect which was observed and described by Jefferson (1939), by Laherrere and Sornette (1998) and by Roy Cerqueti and Marcel Ausloos (2014). Thus, Bucharest, even though is ranked first (it has the highest attractiveness) it attracts a percentage much, much larger, having in this way the behavior of an outlier.

Therefore, due to the fact that Bucharest represents an outlier among the Romanian counties due to its attractiveness for foreign investors, I have decided to continue the analysis without the entire Bucharest-Ilfov development region, namely Bucharest and the county Ilfov.

After dropping the Bucharest-Ilfov development region from our analysis, the percentages reported for each county were calculated based on the national stock's value calculated by summing up the stocks for all the 40 Romanian counties (except Ilfov and the capital city Bucharest).

In the table number 1 I have displayed the evolution of the stocks of foreign direct investments (presented as percentages from the national value) for the best performing five counties for each year covering the period 2001 – 2012.

Table 1. The best performing five counties
(Stocks of FDI expressed as % from national value)

	2001		**2002**		**2003**		**2004**
Galati	13.87	Galati	12.37	Galati	12.75	Arges	15.04
Timis	11.47	Constanta	10.34	Arges	11.90	Galati	11.73
Prahova	9.02	Timis	10.09	Constanta	9.63	Constanta	8.64
Arges	8.32	Prahova	8.17	Timis	9.41	Timis	7.92
Cluj	5.13	Arges	6.93	Prahova	7.40	Cluj	6.73
	2005		**2006**		**2007**		**2008**
Arges	14.13	Arges	12.83	Arges	12.89	Arges	10.23
Galati	10.68	Timis	10.01	Timis	9.47	Mures	8.65
Timis	10.12	Galati	9.28	Galati	8.66	Timis	8.48
Constanta	8.90	Constanta	7.47	Constanta	6.65	Bacau	7.25
Cluj	6.10	Cluj	5.68	Cluj	5.60	Galati	6.96
	2009		**2010**		**2011**		**2012**
Timis	8.81	Timis	8.74	Timis	9.14	Timis	9.18
Mures	7.04	Bihor	7.87	Bihor	7.65	Bihor	7.66
Cluj	6.71	Mures	7.06	Mures	6.93	Mures	6.66
Brasov	6.24	Brasov	5.87	Constanta	6.00	Brasov	6.37
Arges	6.09	Constanta	5.84	Brasov	5.75	Constanta	5.77

Source: Author's work

During the analyzed period the top five modified significantly. Galati County who was leading the hierarchy in the first three years became less attractive with time and finally exited the top five after 2008. Another notable evolution was registered by Arges County who lead the hierarchy between the years 2004 and 2008, due to the investment made by Renault in the Dacia factory from Mioveni. Starting from 2009, Arges County's attractiveness declined, and then it finally left top five in 2010. The best performing county for the last four years is the Timis County which was present in the top for the entire analyzed period. Another important aspect that emerges is the fact that most of the counties present in the top five are located in Transylvania. The only counties outside Transylvania are Galati, Prahova, Arges and Constanta, all of them the being located in the south and south east of the country (an exception is Bacau who appears in the top in 2008).

Notable is the fact that the leading five counties decrease their importance (as percentage of the stocks in the national stock) at national level for the analyzed period suggesting that other parts of the country have become more attractive for the foreign investors. The negative trend starts in 2003 and it ends in 2008 (at the debut of the economical crisis) when the trend becomes positive. Another noteworthy aspect is the fact that the leading five counties account for over 35% of the FDI stocks in the present, after their importance reached in 2003 values over 50%.

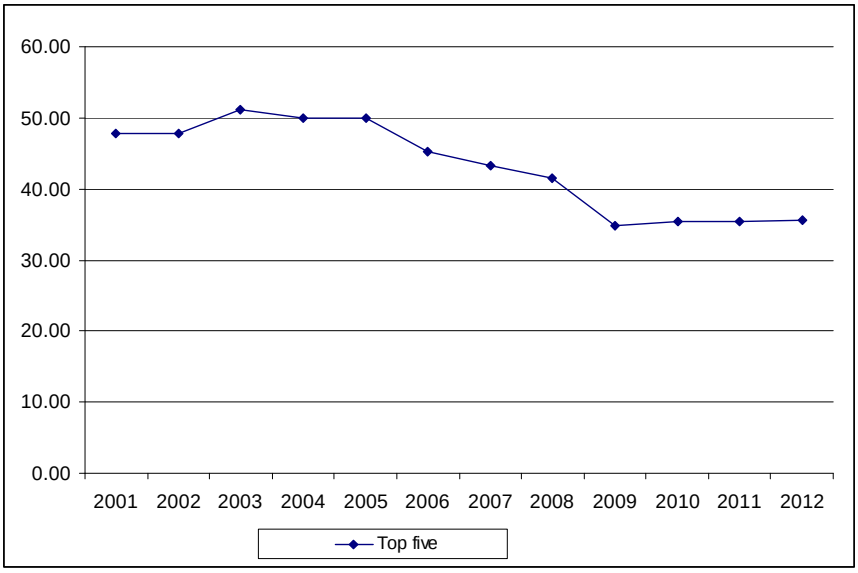

Figure 4. The importance of the leading five counties (Stocks expressed as % from the national value)

Source: Author's work

The following table displays the evolution of the stocks of foreign direct investments (presented as percentages from the national value) for the least attractive five counties, for each year covering the period 2001 – 2012.

Table 2. The least attractive five counties (Stocks of FDI expressed as % from national value)

	2001		**2002**		**2003**		**2004**
Salaj	0.32	Tulcea	0.35	Tulcea	0.25	Salaj	0.29
Bacau	0.23	Salaj	0.29	Giurgiu	0.24	Giurgiu	0.21
Giurgiu	0.12	Giurgiu	0.20	Ialomita	0.21	Ialomita	0.20
Botosani	0.10	Botosani	0.14	Botosani	0.12	Botosani	0.10
Gorj	0.05	Gorj	0.04	Gorj	0.04	Gorj	0.04
	2005		**2006**		**2007**		**2008**
Salaj	0.26	Bistrita-Nasaud	0.37	Bistrita-Nasaud	0.39	Bistrita-Nasaud	0.37
Botosani	0.22	Vrancea	0.30	Vrancea	0.32	Vaslui	0.36
Giurgiu	0.22	Botosani	0.25	Botosani	0.26	Ialomita	0.33
Ialomita	0.20	Ialomita	0.24	Ialomita	0.22	Gorj	0.21
Gorj	0.03	Gorj	0.02	Gorj	0.02	Botosani	0.21
	2009		**2010**		**2011**		**2012**
Valcea	0.48	Valcea	0.37	Valcea	0.36	Ialomita	0.32
Teleorman	0.44	Ialomita	0.33	Ialomita	0.32	Botosani	0.26
Tulcea	0.38	Vaslui	0.27	Vaslui	0.26	Vaslui	0.25
Vaslui	0.32	Botosani	0.25	Botosani	0.24	Gorj	0.14
Botosani	0.22	Gorj	0.15	Gorj	0.14	Vrancea	0.11

Source: Author's work

As it is visible from the data presented in the table, Gorj County is the least attractive county for foreign investors in nine of the analyzed years. This position is occupied by Botosani in two years and by Vrancea in 2012. Noteworthy is the fact that in 2001 Bacau was among the least performing five counties and in 2008 it entered top five, best

performing counties on the fourth position (it was present among the best performing counties for only one year).

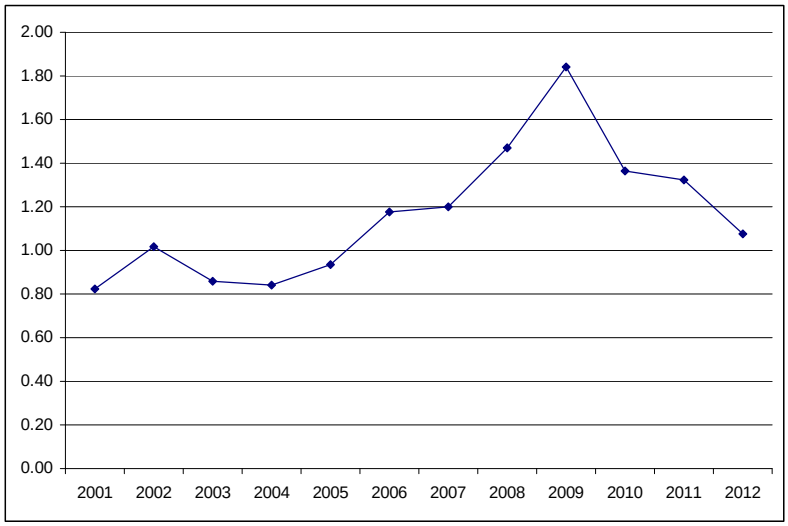

Figure 5. The importance of the last five counties
(Stocks expressed as % from the national value)
Source: Author's work

Important to mention is the fact that these five least attractive counties are responsible constantly, for under 2% of the entire stock of FDI attracted at national level (except Bucharest-Ilfov development region). Their importance increases until 2009 (almost 1.85%) and afterwards decreases sharply to 1.08%. Therefore, it is obvious that since the economic crisis has appeared their attractiveness has decreased significantly. Summarizing these results, I can state that, starting with 2009, the remaining 30 counties account for around 64% from the entire national stock of foreign direct investment (except Bucharest-Ilfov development region).

Before going further, I consider necessary to mention that for the first years of the analyzed period, when analyzing the behavior of the best five performing counties we might identify a "king plus viceroy effect" which was also mentioned by Roy Cerqueti and Marcel Ausloos (2014). This effect is similar with the "king effect" mentioned earlier in this paper, but it involves the presence of more outliers. The "king plus viceroy effect" fades away with the passage of time. Due to the fact that the "king effect" that we encounter in the case of Bucharest is obvious and constant, we will present a graphical description of the "king and viceroy effect" indentified for the best performing counties in Appendix A.

An even better description of how the attractiveness of the Romanian counties modified in the eyes of foreign investors is visible when analyzing the evolution of the Gini coefficient. The values of the coefficient range from 0 to 1, and higher values, close to 1 show an important concentration of the analyzed phenomenon, indicating that it is possible to talk about some important concentration poles regarding this phenomenon.

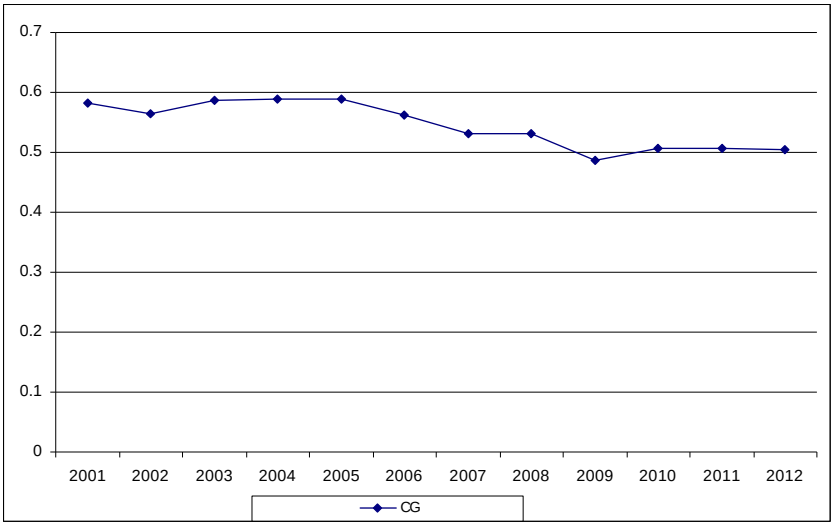

Figure 6. The evolution of the Gini coefficient
Source: Author's work

As it is visible from the chart displayed in figure number 6 the concentration level has decreased from values little under 0.6, during the period 2003 – 2005, to values around 0.5, during the last three years. The lowest concentration level is registered in 2009, which is the year when the global crisis affected the Romanian economy. In the last analyzed three years, the concentration level is somehow constant suggesting that after the year 2009 no significant events were registered regarding the evolution of the attractiveness of the Romanian counties in the eyes of foreign investors.

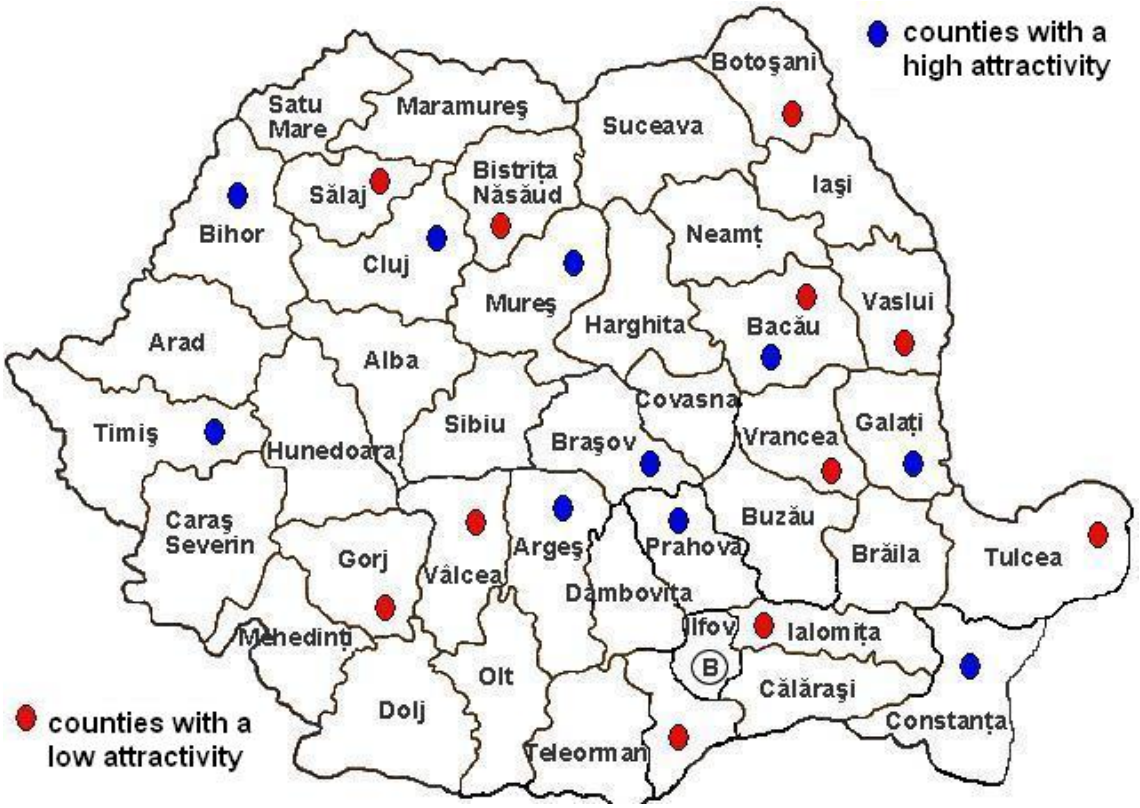

Figure 7. The most attractive and the least attractive counties

Summarizing the entire analysis, I can assert that the analyzed period might be divided into three main parts: 2001 – 2003 (2004), 2004 – 2009 and 2010 – 2012. In the first period, the coefficient was somehow stable with high values, around 0.58, suggesting that there are some poles that attract the majority of the inward foreign direct investments. This aspect is clearly visible when analyzing the figures displayed in Table 1 and Table 2. In the second period, two main events occurred, namely: Romania became a member of NATO and Romania became a member of the European Union. The value of the coefficient decreased constantly during this period showing that the importance of the concentration poles was decreasing. Therefore I can assert that these two events increased the investors' confidence in the potential of the Romanian counties' economy. Finally, the third period (after the economical crisis brought its effects in Romania) is characterized by a stability of the coefficient around the value 0.5 (the coefficient increases from 0.48 in 2009). Therefore, noteworthy for this period is the fact that the economical crisis had a significant impact on the process registered during the previous period and diminished significantly its intensity.

Using the territorial display of the information, presented in Figure 7, it becomes easily observable that the most attractive counties and the least attractive counties tend to agglomerate. Therefore, it becomes obvious that the policymakers need to construct a new regional policy which should be designed with the clear purpose to increase the attractiveness of the poorer counties (and provide therefore better opportunities for them). Following this direction, I can suggest that the administrative policy, based on counties (very small entities in the present European context), needs significant improvement due to the fact that it facilitates the increasing of the disparities in this field.

4. Conclusions

Summarizing the study, I can say that the present paper should be included among scientific works who analyze the discrepancies registered at regional level regarding the attractiveness of the Romanian counties in the eyes of the foreign investors.

An important aspect described in the present study (an aspect which confirms other analysis conducted earlier) shows clearly that, in Romania, significant discrepancies are registered between counties when talking about the stocks of received foreign direct investment. Noteworthy is the fact that, the five leading counties are responsible for over 35% ("king and viceroy effect") of the received foreign direct investments while the least attractive five counties are only responsible for under 1.8% of the national stock (national stock except the stock of FDI attracted by Bucharest-Ilfov development region). Also, following the same logic, I need to mention the fact that Bucharest ("king effect") - Ilfov development region has attracted almost 60% of the total stock of foreign direct investment during the analyzed period, showing that the remaining seven development regions have a very low attractiveness level. Therefore, a significant disequilibrium in the spatial structure of the Romanian economy might be suggested.

The most important piece of information brought by this study is represented by the description of the evolution of the spatial concentration of the stocks of foreign direct investment described with the help of the Gini coefficient. Thereby, during the analyzed period, I can identify three tendencies regarding the evolution of the FDI stocks, at county level. Until 2004 the coefficient was stable around high values, about 0.58, suggesting that

some counties were receiving the majority of the foreign direct investment, being therefore important development poles. Following this stage, the period between 2004 and 2009 (Romania became NATO member in 2004 and EU member in 2007) was characterized by a decreasing trend suggesting that the importance of the concentration poles was decreasing and that the investor' confidence in the potential of the other counties was increasing. Finally, after 2009 the impact of the global crisis was significant, leading to an increase of the concentration, suggesting that the importance of the concentration poles increased again.

This phenomenon, which appeared in this field in Romania after the year 2009, might be compared with the one identified by researchers at global level, namely that the developed entities become more attractive for foreign investors and the poorer ones loose their attractiveness slowing in this way the convergence process (sometimes the discrepancies increase).

Concluding, I might state that the difference between the leading counties and the others is too important to be recovered in a medium term time period. Following the same logic I might say the same thing about Bucharest and the rest of the country. In these conditions I suggest that constructing a new, viable and functional regional policy might be an appropriate solution to tackle this problem.

Knowing the magnitude of the phenomenon, it becomes obvious that the counties are too small (economies) and their power to implement policies which will boost up their attractiveness in the eyes of the foreign investors is limited. Therefore constructing functional regional administrative units with a greater strength might be the solution.

As a final remark I can state that constructing viable regional development units should be the first priority for the Romanian government in order to increase the competitiveness of the Romanian economy in the European context. By doing so, the central authorities will also give the possibility to the regional/local authorities to construct integrated policies at the regional level, in order to ensure a sustainable development (economical and also social) for the entire community.

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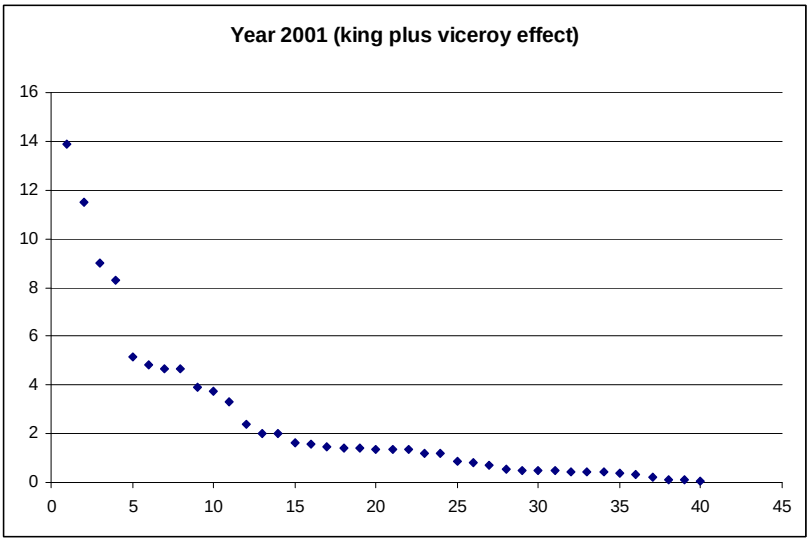
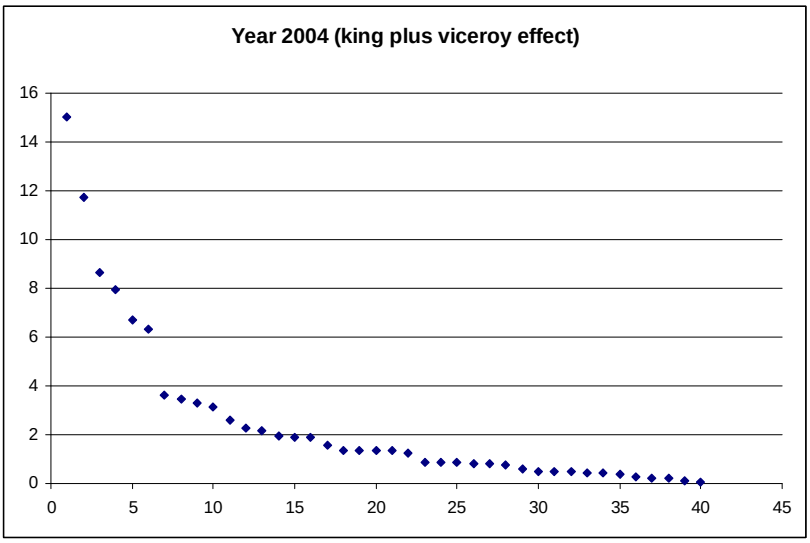
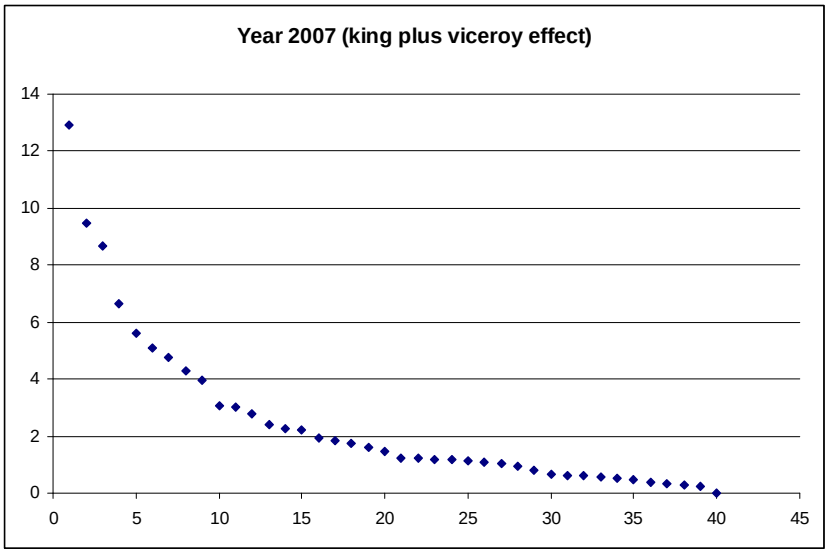
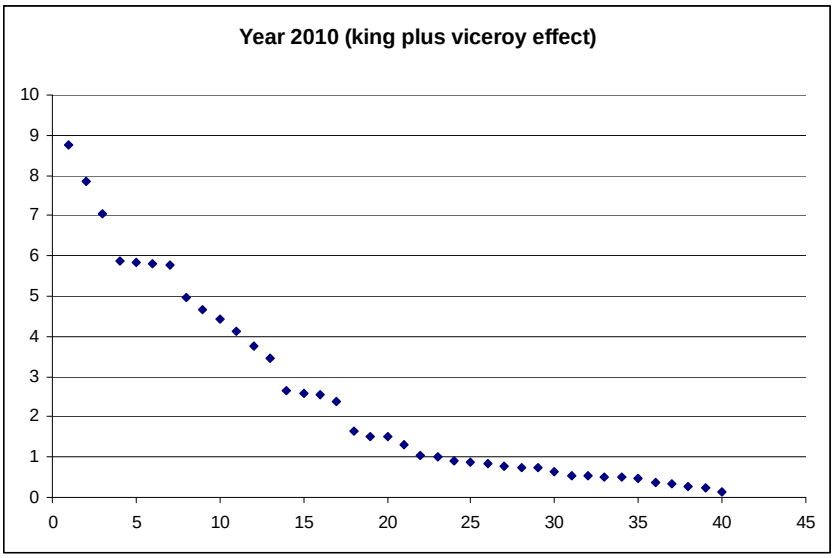
Appendix A

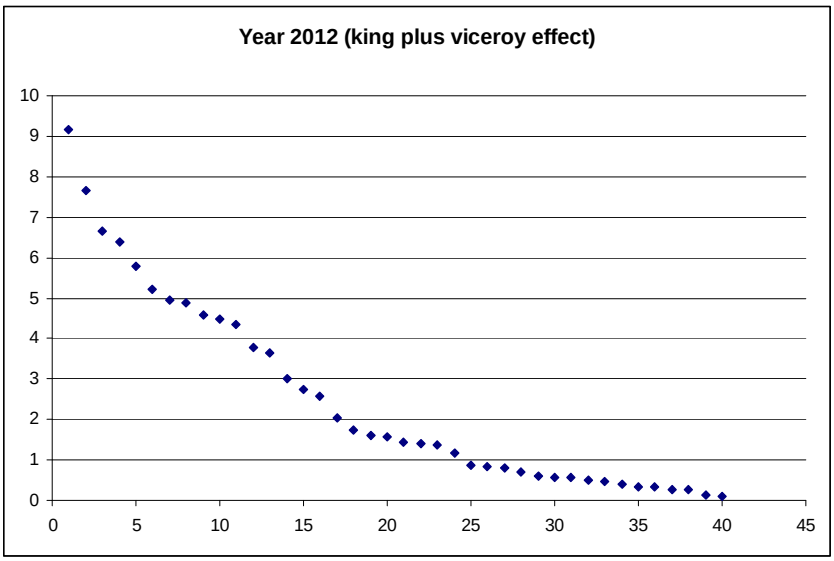
This Appendix contains figures which display the evolution of the "king plus viceroy effect" regarding the stocks of FDI received by the Romanian counties











Source: Author's work