THE DIFFERENCES BETWEEN ROMANIAN REGIONS CONSIDERIND THE POTENTIAL TO ATTRACT FOREIGN DIRECT INVESTMENTS

Aniela Raluca Danciu[1], Răzvan Şerbu[2] , Elisabeta Molnar[3]
[1]Academy of Economic Studies, anielaco@hotmail.com, [2] "Lucian Blaga" University Sibiu, razvanserbu@gmail.com,,[3]Academy of Economic Studies, elis@remtours.ro

Abstract:
With the implementation of global and regional strategies by MNCs, the choice of location is becoming increasingly important, hence requiring a better understanding of the internationalization process and of the factors influencing the spatial distribution of FDI.
The main objective of the study is the analysis of the regional disparities in Romania based on the essentials indicators which influence the foreign direct investment at regional level.

1.INTRODUCTION

Foreign direct investment by multinational corporations (MNCs) plays an important role in the transformation of former centrally planned economies into vibrant market systems, since it provides an inflow of capital, management skills, and jobs, alongside increasing exports and transfer of technology. It is also perceived as one of the conditions paving the way for improving the competitiveness of the economy and enhancing the provision of goods and services for the domestic market. With the implementation of global and regional strategies by MNCs, the choice of location is becoming increasingly important, hence requiring a better understanding of the internationalization process and of the factors influencing the spatial distribution of FDI.

There have been numerous empirical studies that have focused on the location choices of MNCs and FDI flows in developed countries (Shaver, 1998; Head *et al.,* 1995; Friedman *et al.,* 1992; Culem, 1988; Nachum and Wymbs, 2005). Since early-2000s these studies have also started to concentrate on the transition economies within the CEE region (Campos and Kinoshita, 2003; Deichmann, 2001; Resmini, 2003, 2007; Boudier-Bensebaa, 2005; Cieślik and Ryan, 2005). According to Slay (2003, p.1) "… relative to the rest of the world, this region has been an excellent bet". Despite the growing interest in the subject we shall propose to ranking the Romanian counties and the regions considering the most important determinants of the spatial distribution of FDI

2.LITERATURE FRAMEWORK:FDI REGIONAL DATERMINANTS

Studies on the locational choices of FDI can be classified into two types in literature. First type explains the locational choices with some traditional locational factors like market potential, labour costs, economic growth, government policies. Second type highlights a range of environmental variables that act as a function of political, economic, legal and infrastructural factors of a host country. In this study, population growth, urban density, GDP growth, change in the number of telephone, port facility, coastal region, previous foreign investment, bank credit, ublic investment for each provinces. So far, several locational variables have been identified in literature as important determinants of FDI.
Market Size
According to Chakrabarti (2003), an expansion in the market size of a location leads to an increase in the amount of direct investment in that location through an increased demand. Foreign investors are likely to be attracted by large markets allowing them to internalize profits from sales within the host countries. According to Woodward (1992), Japanese–

affiliated manufacturing investments in the USA during the 1980s to conclude that investors prefer states with strong markets and low unionization rates. The effect of specific market and regional growth characteristics are also taken into consideration in the spatial analysis of FDI in the United States, by Bagchi-sen and Wheeler's study. In this paper population is a measure of the market size and it indicates the economics dynamics of a location and states market growth potential (Bagchi-sen and Wheeler,1989). The other important determinant of FDI which defines local market size is GDP.

Agglomeration

The other important determinant of FDI is existence of agglomeration economies. Agglomeration economies are important to attract foreign direct investment. Agglomeration economies refer to the positive externalities and economies of scale associated with spatial concentration activities and co-location of related production facilities (Chadwick, 1989; Krugman,1991; Smith and Florida, 1994). There is systematic evidence suggesting that multinationals are attracted to clusters of economic activities in their own and in closely related industries and activities (Glickman and Woodward, 1988; Wheeler and Mody, 1992; Head and Ries, 1996; Devereux and Griffith, 1998; Guimaraes et. al., 2000; Driffield and Munday, 2000) The total number of industrial enterprises in a county, is expected to significantly attract FDI since the existence of industrial clusters signals a set of favourable condition for foreign investors such as the presence of local suppliers, specialized labour and infrastructure (He, 2002).According to Coughlin, Terza and Arromdee (1991), the density of manufacturing activity was the important one of factors in location decisions of foreign firm in the US during 1981-1983. Head, Ries and Swenson (1995), examined the location choice of 751 Japanese FDI and observed strong agglomeration effects at the industry level. In this study, the total number of industrial enterprises in a province, is expected to significantly attract FDI since the existence of industrial cluster signal a set of favourable conditions for investors such as the presence of local suppliers, specialized labour and developed infrastructure (He, 2002).

The other variable related to agglomeration economies is population density. Population density represents urbanization economies. Both number of foreign –funded enterprises and population density are expected to have a positive effect on FDI. Economists and geographers have pointed out that the role of agglomeration economies in industrial activities is very significant. The locational attractiveness to foreign investments is likely to improve through agglomeration effects related to the infrastructure quality, the availability of specialized service suppliers and of skilled labour, location-related reputation effects and the development of industrial clusters (Porter, 1990; Wheeler and Mody, 1992; Dunning 1998).

Infrastructure

The other important determinant of FDI is infrastructure. There are a positive relationship between infrastructure and inward FDI. Empirical studies support for the importance of infrastructure in FDI location decisions is provided by Wei and et al. (1998), Mariotti and Pischitello (1995), Broadman and Sun (1997) and He (2002). A location with good infrastructure is more attractive than the others (Wei and others,1999; He,2002).

Knowledge

Cantwell (1989) states that knowledge-seeking investments vary across locations because they depend on location specific factors, such as the number of scientists and educated people in the area, previously established innovations, R&D intensity, the education system, and good linkages between educational institutions and firms. As a result, firms may supplement their existing technologies by expanding internationally to access new knowledge. This expansion may suggest two types of knowledge-seeking behavior between firms originating from leading versus lagging technical centers (Cantwell and

Janne, 1999). Firms from lagging technical locations need to catch up and locate their research centers abroad in order to improve their existing technology. However, while firms from leading locations do not need to catch up, they may also locate their research centers abroad to source more diverse knowledge, since "… the acquisition of new skills, and the generation of new technological capacity, partially embodied in new plant and equipment, must be a goal of every firm" (Cantwell, 1989, p.8). Due to the fact that knowledge is partially tacit and its transfer needs frequent interactions, knowledge-seeking investment requires physical proximity (Kogut and Zander, 1992). Moreover, efforts to search for knowledge-seeking investment are not carried out in isolation, but are strongly supported by various external organizations such as, for example, public research centers, universities or industry associations (Cantwell and Piscitello, 2005). The educational level of a country's citizens, alongside the existence of universities, research centers, science bases and other institutions that create knowledge in a region, has become increasingly important for the internationalization process, not only at the national level but also at the regional level (Cantwell and Iammarino, 2001, 2005; Acs *et al.,* 2002; Chung and Alcácer, 2002). Kuemmerle (1999) shows empirically that firms in technology-intensive industries by establishing R&D facilities abroad can expand their technological capabilities. Florida (1997) finds that accessing new indigenous technology is more important than customizing existing technology for new markets.

Bartlett and Ghoshal (1999) show that as firms establish their facilities abroad and allocate heterogenous products to them, R&D sites in close proximity to factories are needed. This is due to the fact that these sites support the transfer of knowledge, which is an attractive factor for the location of multinational companies (Cantwell and Piscitello, 2002). In addition, specific regions within nations might be particularly attractive locations for knowledge-seeking investment (Jensen, 2004).

Information Cost
To minimizing information costs, foreign investors are expected to tend to coastal areas (Dunning 1998). Coastal cities is geographically closer to the major sources of FDI and more open to international markets (Wei and the others,1999). The coastal region is geographically closer to major sources of FDI and more open to international markets . Public information is readily available along the cost (Wei et al.,1999) Chien (1996) finds evidence for preference of coastal areas multinational firms.

Labour Cost
Glickman and Woodward (1988) found that there was a negative relation between the interstate distribution of the value of foreign manufacturing investment and the index of state labor costs. Ondrich and Wasylenko (1993) found no evidence that wages affected the foreign new plant location.

3. VARIABLES SELECTION

In this paper we four criteria are used for classifying the Romanian counties and regions considering the potential to attract the foreign direct investments. These four criteria are: the market size, the agglomeration economies, infrastructure and knowledge.

For measure the market size we selected two indicators: **population** and **Gross Domestic Product**. Population .indicates the economics dynamics of a location and states market growth potential (Bagchi-sen and Wheeler,1989).

In this study, the indicators related to agglomeration economies are: **the total number of industrial enterprises and the population density.**

Three variables are used related to infrastructure for FDI in this study: **hard surface public roads, railway lines, telephone line (***per1000 population***).**

The number of scientists and R&D expenditures are considered. for knowledge criteria.

4.ADMINISTRATIVE DIVISIONS IN ROMANIA

After 1990, Romania shifted its spatial policy from a central-based policy to a regional-based policy, in compliance with EU-standards. According to four criteria (number of inhabitants, surface, cultural identity and functional-spatial relations;) Romania was divided 1998 into eight Development Regions. The eight regions serve as NUTS-II units and as a framework for development policies while the counties serve as NUTS-III units. The NUTS-II units are: **North-East development region (**Bacau County, Botosani County, Iasi County,Neamt County, Suceava County,Vaslui County), **South-East development region (**Braila County, Buzau County, Constanta County, Galati County, Tulcea County, Vrancea County**)**, **South development region** (Arges County, Calarasi County, Dambovita County,Giurgiu County, Ialomita County, Prahova County, Teleorman County), **South-West development region** (Dolj County, Gorj County, Mehedinti County, Olt County, Valcea County)**, West development region** (Arad County, Caras Severin County, Hunedoara County, Timis County)**, North-West development region** (Bihor County, Bistrita County, Cluj County, Maramures County, Satu Mare County, Salaj County)**, Center development region** (Alba County, Brasov County,Covasna County, Harghita County, Mures County, Sibiu County)**, Bucharest-Ilfov development region** (Ilfov County, Bucharest).

5. COUNTIES AND REGIONS CLASSIFICATION USING THE RELATIVE DISTANCES METHOD

The method of the relative distances is an efficient method for observing the relative distance of each county compared to the top county within a given country. Compared to the highest value, the other counties position themselves at a certain distance given by the relative coordination measures. Then, we compute a synthetic indicator as a geometric average of the relative coordination measures for each county. After the computing synthetic indicator for each county, we assign the final ranking. We assign the ranking one to the county with the highest value of the synthetic indicator.

Table 1: Regions classification using the relative distances method

Region	Market size		agglomeration		infrastructure		knowledge		All criteria	
	Synthetic Indicator	Rank	Synthetic Indicator	Rank	Synthetic Indicator	Rank	Synthetic Indicator	Rank	Synthetic Indicator	Rank
North East Region	0.6928	2	0.0845	6	0.4766	4	0.1503	3	0.2719	3
North West Region	0.6226	4	0.1201	2	0.5113	2	0.1625	2	0.2801	2
South West Region	0.4674	8	0.0578	8	0.3910	8	0.0717	7	0.1841	8
Center Region	0.5916	6	0.1107	3	0.4521	6	0.0808	6	0.2235	5
South East Region	0.5919	5	0.0814	7	0.4680	5	0.0693	8	0.2129	7
South Muntenia Region	0.6892	3	0.0845	5	0.4337	7	0.1608	4	0.2654	4
Bucharest	0.7774	1	1	1	1	1	1	1	0.9450	1
West Region	0.4820	7	0.1044	4	0.4902	3	0.0917	5	0.2190	6

After classifying of the regions, using the four criteria, we can observe that the Bucharest has ranking one and it would be attract higher number of foreign investors. The second region is North West region, following by North East and North West Region. The last places are occupied by the South West Region and South East Region.

Considering the infrastructure, the regions which would be attract higher number of foreign investors are Bucharest, North West and West Region.

Considering the knowledge, the regions which would be attract higher number of foreign investors are Bucharest, North West and North East Region.

Considering the market size the regions which would be attract higher number of foreign investors are Bucharest, North East Region, South Region. and North West Region.

Considering theagglomeration, the regions which would be attract higher number of foreign investors are Bucharest, North West, Center and West Region.

Table 2: Counties classification using the relative distances method

Rank	Counties	Potential to attract FDI
1	Bucharest	Very high
2	Iasi	
3	Cluj	
4	Arges	
5	Timis	
6	Prahova	
7	Brasov	
8	Constanta	
9	Dolj	High
10	Galati	
11	Bihor	
12	Suceava	
13	Hunedoara	
14	Mures	
15	Bacau	High medium
16	Arad	
17	Sibiu	
18	Dambovita	
19	Valcea	
20	Alba	
21	Neamt	
22	Bistria Nasaud	
23	Gorj	
24	Maramures	Low medium
25	Vaslui	
26	Calarasi	
27	Caras Severin	
28	Satu Mare	
29	Botosani	
30	Braila	
31	Buzau	Low
32	Vrancea	
33	Olt	
34	Teleorman	
35	Harghita	
36	Covasna	
37	Ialomita	
38	Giurgiu	Very low
39	Mehedinti	
40	Tulcea	

We found that those investors, for whom agglomeration, knowledge and market factors are the main motives for investing in Romania, tended to choose the Bucharest Ilfov region despite the fact that other regions were also considered. However, investors for whom low input costs, availability of labour and resources and geographical factors are significant motives for setting up a business activity in Romania, favour other regions than the Bucharest Ilfov area. These findings confirm that Romanian regions do indeed differ substantially in attracting foreign capital.

After classifying of the counties, using the four criteria, we can observe that the Bucharest has the ranking one, followed by Iasi (rank 2), Cluj (rank 3), Arges (rank 4) Timis (rank 5), Prahova (rank 6), Brasov (rank 7)and Constanta (rank 8).These regions are considered the regions with the highest potential to attract foreign direct investment.

On the other side are the Following counties : Giurgiu, Mehedinti, Tulcea which have the lowest potential to attract foreign direct investments.

Inside the regions, there are big disparities determined by heterogeneous development areas, due to small, mono-industrial towns, strongly affected by the restructuring, reduced economical diversification of some big cities and due to the incapacity of some urban centers of becoming development vectors for adjacent areas. The under-developed regions are those dependant on agriculture, with great rural population where trans-border transport, is little developed, comparing to those in the opposed corner, whose dependence on the primary sector is reduced.

CONCLUSION

Such an approach in location analysis can aid formulation of specific growth strategies by policy makers as they plan to attract FDI to particular locations. According to this paper, policy makers in Romania should improve the business services and create investment opportunities for foreign investors especially in counties that have the market size and growth potential. These lead to make counties more attractive. To attract some investments particular locations in Romania, infrastructure has been only given the priority as general tendency, especially communication infrastructure. It is clear that this tendency is not sufficient solely to attract FDI to particular   locations.

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