
Patterns of Foreign Direct Investment in Transylvania

(CENTER, WEST AND NORTH WEST ROMANIAN NUTS 2 REGIONS)

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ABSTRACT

Foreign direct investment (FDI) has gained significant importance over the past decade as a tool for accelerating growth and development of transition economies. It is widely believed that the advantages that FDI brings to the standard of living and prospects for economic growth of the host nation largely outweigh its disadvantages. Despite the growing interest in the subject, to our knowledge, there is still no satisfactory empirical work which can explain the determinants of the spatial distribution of FDI flows into the separate regions of Romania, one of the largest new EU-member states. Thus, this research attempts to fill this gap by using a primary data from a questionnaire that covers the entire transition period. The main goal of this study is to identify the main determinants of the direct foreign investments in Central, West and North West Romanian regions. Basically, the study is constructed so, that it will provide a list of the main strengths and weaknesses of Center, West and North West regions, that would influence a foreign investor to choose the proper location for a future investment when developing his strategy.

Keywords: regional disparities; economic development; foreign direct investment; agglomeration; market size.

INTRODUCTION

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 in 1998 into eight Development Regions.

In this paper we shall analyze only three regions: **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).

Romania's administrative division

Figure 1



Evolution of the regional FDI

Ranking the regions based on their ability to attract foreign investors, Danciu et al (2011) confirmed the strong domination of the Bucharest-Ilfov region, placed on the first position, followed at a long distance by the West, Center and North- West regions. The heterogeneous development areas, the economic decline recorded by small and medium size towns, and the severe negative impact of economic restructuring upon mono-industrial areas determines even bigger disparities inside the regions.

Given the significance of investment flows for the regional development, identifying the forces that attract foreign direct investment is a matter of high interest for the policy makers. Certain regional factors may determine which regions receive higher levels of investment, while other regions in the same country receive lower investments. Therefore we address two interrelated research questions: “what are the underlying factors that

drive the regional FDI behavior in Romania?”, and “how significant are the individual characteristics of the regions for the FDI activity?” Considering the importance of investments for the economic development, such questions are essential in shaping the economic policies of the regions, both in periods of economic growth and during recessions.

Literature review: FDI regional determinants

The literature on FDI determinants has been motivated by theories of international business and by international trade. The so-called OLI paradigm proposed by Dunning (1977, 1981, and 2001) states that three conditions must be satisfied for FDI to occur: Ownership advantages, Location-specific advantages and Internalization.

In this study, we focus on the location-specific advantages. Krugman (1996, 1998) demonstrates that the location of economic activity is determined by two groups of factors.

First group includes traditional advantages of particular locations such as agglomeration, market size infrastructure and knowledge. Thus, although all the above forces play some role in the choice of location, empirical studies suggest that their importance may vary depending on region, country or industry. For example, Levinson (1996) and Coughlin and Segev (2000), analyzing the establishment of new plants in US, show that agglomeration is the main factor that could explain the attractiveness of the South-East region for new plants. In respect of transition economies, Campos and Kinoshita (2003) and Pusterla and Resmini (2005) find that agglomerations are one of the principal determinants of the spatial distribution of FDI. Chen (2009) investigates the role of agglomeration in determining FDI location in China. The results suggest that urbanization economics and foreign specific agglomeration have positive impact on local FDI.

Crozet, Mayer and Mucchielli (2004) , Przybylska and Malina (2000) and Ghemawat and Kennedy (1999) find that market-size positively influences FDI flows to Poland. 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. According to Woodward (1992), Japanese-affiliated manufacturing investments in the USA during the 1980s prefer states with strong markets.

When referring to the knowledge-based view of the firm, 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. 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; Chung and Alcácer, 2002).

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).

Based on the above empirical literature which states that market size, agglomeration and knowledge positively encourage the inflow of FDI, we establish our first four hypotheses as follows:

Hypothesis 1: *Agglomeration factors* are a significant reason for FDI localization: hence the stronger agglomeration factors are represented in a given region, more FDI will engage in that region.

Hypothesis 2: *Market size factors* are a significant motive for FDI localization: hence the stronger market size factors are represented in a given region, more FDI will engage in that region.

Hypothesis 3: *Knowledge factors* are a central reason for FDI localization: hence the stronger knowledge factors are represented in a given region, more FDI will engage in that region.

Hypothesis 4: *Infrastructure factors* are a valuable motive for FDI localization: hence the better infrastructure factors are represented in a given region, more FDI will engage in that region.

Second group consist of market forces including all kinds of input costs. Crozet, Mayer and Mucchielli (2004) and Lansbury *et al.*, (1996a) demonstrate that labor costs have a significant influence on the pattern of inward investment. 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. For this reason, it is possible to hypothesize a positive relationship between resource-seeking investment and the regional location of FDI.

Following on from this, our final two hypotheses state:

Hypothesis 5: *Labor factors* are a significant motive for FDI localization: hence the stronger labor factors are represented in a given region, more FDI will engage in that region.

Hypothesis 6: *Cost factors* are a valuable motive for FDI localization: hence the stronger efficiency-seeking factors are represented in a given region, more FDI will engage in that region.

EXPERIMENTAL SECTION

Data collection

Data used in this study were collected in a more complex statistical survey, conducted at the level of all Romanian development regions (except Bucharest-Ilfov region). The entire data collection process was conducted following the methodology described further.

In order to identify and quantify the importance of the main determinants of foreign direct investments in Romania we started by collecting some administrative data from the authorities. We received a database consisting on all foreign direct investments in Romania that met our five previously imposed criteria:

- firms that have more than 100 employees;
- firms that were created between 1990 and 2009;
- firms that were still present on the market at the 1st of January 2009;
- more than 50% of the initial capital was foreign;
- firms that were active in the manufacturing sector;

Because of the small volume of the target population, of only 670 firms (407 firms from the three development regions used in this study) we decided to perform an exhaustive survey instead of a sample survey. Thus, our research involved an eight question questionnaire and it was conducted over the telephone among the top and middle managers of the target companies. Less than half, only 235, of the companies provided us viable responses. When referring to the regions included in this present research only 140 managers agreed to answer to our questionnaire.

In this context our research became a sample survey and analyzing the selection mechanism became a very important issue in order to address the statistical representativeness of the obtained results. It is obvious that we could not assume that the action of responding/not responding could be considered a mechanism that generates randomization without performing further analysis.

The first shortcoming that we encountered was the result of different response rates among our three regions, ranging from a low 29.7% in the West region to 42.6% in the North-West region (the response rate for the Center region was 33.1%). Also noteworthy is the aggregate response rate of only 34.4%.

As mentioned before analyzing the selection mechanism became mandatory in order to ensure a greater reliability of the obtained results. Therefore, we used two methodologies in our attempt of obtaining some form of evidence that the selection mechanism was somehow similar to randomization. The basic idea behind both methods was to show that the distributions of some existing control variables were not significantly different

in the respondents and non-respondents samples. Using the administrative information, mentioned at the beginning of this section, we constructed four control variables, as follows:

- dichotomous variable - *technology level of activity* (High Tech/Low Tech);
- dichotomous variable – *EU membership of the investor* (EU member/ Non EU member);
- ordinal three classes variable - *number of employees in 2009* (low number, medium number, large number);
- ordinal three classes variable – *2009 income* (low income, medium income, high income)

$$X_{1i} = \begin{cases} 0, & \text{Low tech (LT) firms} \\ 1, & \text{High tech (HT) firms} \end{cases} \quad (1)$$

$$X_{2i} = \begin{cases} 0, & \text{NON EU member (NON EU) investor} \\ 1, & \text{EU member (EU) investor} \end{cases} \quad (2)$$

$$X_{3i} = \begin{cases} 1, & \text{low number of employees in 2009} \\ 2, & \text{medium number of employees in 2009} \\ 3, & \text{high number of employees in 2009} \end{cases} \quad (3)$$

$$X_{4i} = \begin{cases} 1, & \text{low income in 2009} \\ 2, & \text{medium income in 2009} \\ 3, & \text{high income in 2009} \end{cases} \quad (4)$$

The first method involved hypothesis testing. We used the non-parametric Mann-Whitney test and the Chi-Square test to assess the significance of the existing differences, concerning the four control variables, in the two samples (respondents versus non-respondents). The analysis was performed using the SPSS software package and the results obtained (Figure 1) could not provide enough statistical evidence to deny the null hypothesis (there is no statistically significant difference between the two samples). Thus, we can conclude, based on the previously presented results that our respondents sample was obtained through a selection mechanism that is quite similar to a random one.

Respondents versus Non-respondents

Figure 1

	UEvsNUE	HTvsLT	A2009	CA2009
Mann-Whitney U	18641.000	17718.500	18120.500	18067.000
Wilcoxon W	28511.000	27588.500	27990.500	27937.000
Z	-.084	-1.141	-.576	-.970
Asymp. Sig. (2-tailed)	.933	.254	.564	.332

The second method that we propose uses some techniques developed by Rosenbaum and Rubin (1983) propensity scores and also a matching mechanism that is specific to the one used in the matched sampling technique. Basically we constructed for each unit of the population a score (with values between 0 and 1) in order to quantify the probability of being in the sample, conditioned by our four covariates X_i , described earlier. The methodology involved the following steps:

- For each firm the propensity score was calculated.

$$e(z_i) = \Pr(S_i = 1 | x_{1,i}, x_{2,i}, x_{3,i}, x_{4,i}) \quad (5)$$

$$\hat{e}(z_i) = \frac{1}{1 + e^{-(\alpha + \beta * x_{ij})}} \quad (6)$$

$$\hat{e}(z_i) = \frac{1}{1 + e^{-(\alpha + \beta_1 * X_{1i} + \beta_2 * X_{2i} + \beta_3 * X_{3i} + \beta_4 * X_{4i})}} \quad (7)$$

- Each non-respondent was matched with at least one respondent based on their propensity scores. We used as criterion an exact matching algorithm.

$$Match(z_i, z_j) = \begin{cases} 1, & \text{if } \hat{e}(z_i) = \hat{e}(z_j) \text{ where } z_i(s) = 0 \text{ and } z_j(s) = 1 \\ 0 & \text{if } \hat{e}(z_i) \neq \hat{e}(z_j) \text{ where } z_i(s) = 0 \text{ and } z_j(s) = 1 \end{cases} \quad (8)$$

- For each of the non-respondents we calculated the number of possible matches. The value of the variable k was initialized with zero for each non – respondent.

$$NoMatch(z_i) = \begin{cases} k + 0, & \text{if } Match(z_i, z_j) = 0, \forall i, j \\ k + 1 & \text{if } Match(z_i, z_j) = 1, \forall i, j \end{cases} \quad (9)$$

Using this procedure we have identified 10 propensity scores that could not be matched (number of matches for each of those individuals was zero), meaning that almost 2.5% of target population's units were not represented in the sample of respondents. Thus, it is obvious that the probability of not being able to construct a matched sample (containing only respondents) for any random sample of non-respondents is not null. Therefore the reliability of our sample needs to be regarded with great caution when talking about statistical representativeness and the results obtained should be regarded more as a hypothesis for future research than as a final and clear result. Even though post-weighting is a procedure usually used when employing propensity scores based methods because our procedure revealed units (non-respondents) that could not have been matched based on their propensity scores we have decided not to apply weights to our sample.

Profile of the investor for Center, West and North West Regions

In this section, we will construct the general framework by describing the obtained results at regional level. The questionnaire consists of eight questions: seven simple questions and a complex one with 18 sub-questions clustered in four groups.

The main part of our analysis will focus on the sixth question (the complex question): "Which were the reasons that made you decide invest in this region?" The four main classes mentioned before are as follows: (1) Infrastructure, (2) Labor force, (3) Agglomeration factors and (4) Cost factors. The answer to all eighteen questions, included in the four clusters, is a scale with five values: 1—This factor was not taken in consideration, 2 – Very little importance, 3 – Little importance, 4 – Important, 5 – Very Important. Further in our analysis we have modified the scale for each question by building a dichotomous variable because the low volume of our sample and also in order to respect our proposed approach based on strengths and weaknesses.

The first class of factors "Infrastructure" includes five topics as follows: (1) transportation costs, (2) quality of the roads, (3) the existences of the airports nearby, (4) the existence of viable land for the investment and (5) favorable conditions for distribution of the products. Transportation costs were considered as being important and very important by about 39% of all investors. Also the existence of viable land for the investment was considered by 53.5% of the interviewed managers as being a crucial reason in the location choosing strategy. Concerning for the authorities might be the fact that almost 70% of the respondents do not consider the existence of airports nearby as being a factor that might require attention when locating an investment. However the existence of favorable conditions for distribution is considered as being important or very important by almost half of the investors.

Level of importance for each Infrastructure related factor*Table 1*

Infrastructure					
Region	F1	F2	F3	F4	F5
Center	32.00%	14.00%	20.40%	50.00%	40.80%
West	41.80%	21.00%	41.90%	62.80%	54.70%
North-West	43.40%	6.50%	28.10%	47.70%	52.10%
General	39.00%	13.80%	30.10%	53.50%	49.20%

Companies who assign the transportation costs a greater importance are more inclined to choose North-West or West. This fact shows that those firms are interested in the European Highway system and therefore they locate in Romania near the Hungarian border. The quality of the Romanian roads is a problem for the large majority of the investors. Also respondents located in the West consider the existence of an airport as a significant factor in the decision making process. Favorable conditions for distribution are of significant higher importance for investors who decided to locate their facilities in the West and North-West.

The second class of factors “Labor force” includes 4 topics as follows: (1) the existence of available labor force, (2) the low cost of the labor force, (3) the existence of qualified labor force, (4) the high level of education of the population.

Level of importance for each Labor related factor*Table 2*

Labor force				
Region	F1	F2	F3	F4
Center	84.00%	82.00%	78.00%	45.80%
West	83.80%	76.80%	86.10%	44.20%
North-West	95.70%	82.60%	60.80%	15.90%
General	87.80%	80.46%	74.96%	35.30%

Important to emphasize is that the first three topics were considered a major factor in the process of strategic planning (important or extremely important) by almost 90% of the companies from our sample. The most important is the existence of available work force, followed by low cost of this workforce and by the existence of qualified workforce. The high level of education is not as important due to the fact that most of the companies bring their specialists requiring local work force for the lower levels of the company. However in the regions West and Center the importance of this factor is significantly higher probably because of the main urban areas (Cluj, Arad, Timisoara). Also noteworthy is the fact that investors who located their

investments in the West region considered the existence of qualified labor force an important characteristic in a significant higher percentage than the rest. Concluding this class of factors we can assert that aspects concerning the existence of labor force at reasonable costs are one of the main advantages of our country.

The third class of factors “Agglomeration” was divided into three main topics: (1) The existence of suppliers in the region, (2) The existence of other companies with the same activity field in the region and (3) The existence of other foreign companies in the region. The importance of these three factors in the opinion of our respondents, at regional levels, will be displayed in Table 3.

Level of importance for each Agglomeration related factor level

Table 3

Agglomeration			
Region	F1	F2	F3
Center	35.30%	28.00%	40.00%
West	32.60%	25.60%	21.00%
North-West	39.10%	41.30%	26.10%
General	35.60%	31.60%	29.03%

As we can see from the figures these factors are considered as being important by appreciatively about a third of the responding managers. The existence of other foreign companies in the region is regarded with significant greater attention by companies who chose the Center region. The existence of other companies with related fields of activity is regarded as being important by a significant larger percentage of the investors who decided to invest in North-West.

The fourth class, called “Cost factors” was divided into three main topics: (1) tax incentives for investors, (2) low rent levels or low land acquisition price, (3) availability of cheap raw materials in the area.

Level of importance for each Cost related factor

Table 4

Cost factors			
Region	F1	F2	F3
Center	31.90%	52.10%	22.00%
West	16.30%	44.20%	25.60%
North-West	21.70%	52.20%	21.70%
General	23.30%	49.50%	23.10%

The low level of rents or the low land acquisition price and the general operating costs are considered as important determinants of the

future investment by almost 50 % of the respondents. Tax incentives and the availability of raw materials are considered as being an important determinant for the made investment by about a quarter of the respondents. A significantly larger percent of the respondents from the Center region considered the tax incentives offered by authorities as being important when deciding to locate their investment. This factor was of importance for a significantly lower percentage of respondents from the West region.

Model specification

In order to assess the importance of each factor (item) in the location choosing process we have used a methodology based on a logistic econometric modeling process. We have decided to express the binary answer (YES/NO) to the question, “*Since Bucharest-Ilfov region is the most attractive in terms of location of FDI, have you taken into account the region to locate your investment, at the beginning of your decision process?*”, as a function of individual items or items’ combinations.

Noteworthy is the fact that we have divided all the 18 items into five main classes: infrastructure factors, labor related factors, agglomeration factors, cost related factors and other factors. Thus, we have decided to include each of the factor classes in our model with an individual item or with an aggregate construct. Therefore the structural form of our model is listed below:

$$\text{Choice (1/0)} = \beta_0 + \beta_1 \text{FACTinfr} + \beta_2 \text{FACTlab} + \beta_3 \text{FACTagl} + \beta_4 \text{FACTr\&d} + \beta_5 \text{FACTcost} + \beta_6 \text{FACTmark} + \beta_7 \text{DUM} + e \quad (10)$$

$$\hat{ch}(z_i) = \frac{1}{1 + e^{-(\alpha + \beta * x_{ij})}} \quad (11)$$

$$\hat{ch}(z_i) = \frac{1}{1 + e^{-(\beta_0 + \beta_1 * X_{1i} + \beta_2 * X_{2i} + \beta_3 * X_{3i} + \beta_4 * X_{4i} + \beta_5 * X_{5i} + \beta_6 * X_{6i} + \beta_7 * X_{7i})}} \quad (12)$$

Using a multi-step method implying correlation analysis, factor analysis and several logistic regressions we have chosen the best construction for the involved independent variables. Each time Factor Analysis was performed using a PC Extraction method and a Varimax rotation method. Factor scores were created using the Regression Method (1) available in SPSS (the results were a little better with this refined method than with the simple weighted sum method (2)).

$$(1) F = Z * R^{-1} * S \quad (13)$$

Z – Matrix of standardized observed variable scores

R – Correlation matrix for the observed variables

S – Factor structure matrix

$$(2) F = Z * S \quad (14)$$

Because some of the independent variables were the initial items measured on a five point scale and some of them were constructed using combinations of the initial items (Factor scores) we have decided to standardize all of them before estimating the model.

The independent variables used in the model are as follows:

- FACTinfr

From the first class of items we have decided to use the answer to the question “Have you taken in consideration, when locating your investment, the existence of favorable conditions for distribution of your products?” The choosing of this factor was influenced, beside the results of the statistical analysis mentioned above, by its connection with market seeking behavior which is an important characteristic of foreign companies deciding to invest in Romania.

- FACTlab

The second class of factors was included in the model using the estimated score for the first Factor resulted from the Factor Analysis conducted on the class of Labor related items. The new construct is highly correlated with the last two items and it might be regarded as a measure for *the existence of qualified and highly educated workforce*. The values of this independent variable (the score) are standardized.

Labor items Factor Analysis

Table 5

Component matrix (Factor loadings)	0.298	-0.102	0.825	0.839
Component score Coefficient Matrix	0.112	-0.188	0.556	0.583

- FACTagl

From the third class of items, after the same process involving correlation analysis, factor analysis and logistic regression analysis we have decided to use the answer to the question “Have you taken in consideration, when locating your investment, the existence of other foreign companies in the region?” The values of the independent variable included in the model resulted also through standardization.

- FACTr&d

The fourth independent variable of the model is the item inquiring about the importance of the existence of research centers and universities in

the neighbor area of the investment. The values of the independent variable included in the model resulted also through standardization.

- FACTcost

The fourth class of factors was included in the model using the estimated score for the Factor resulted from the Factor Analysis conducted on the class of Cost related items. The new construct similarly correlated with all three initial items and it might be regarded as a general measure for cost related factors. The values of this independent variable are standardized.

Cost items Factor Analysis

Table 6

Component matrix (Factor loadings)	0.667	0.770	0.678
Component score Coefficient Matrix	0.445	0.514	0.453

- FACTmark

The sixth independent variable of the model is the item inquiring about the importance of the existence of a potential market in the region (based on the field's literature market seeking firms are one of the most important types of companies that decide to invest in foreign countries). The values of the independent variable included in the model resulted also through standardization.

- DUM

This variable reflects the technology level of the investment, with values of 0 for Low Tech investments and 1 for High Tech activities.

RESULTS AND DISCUSSION

The logistic model was estimated using SPSS at the level of the entire sample and also at the level of each region.

After running the four logistic regressions the estimated values of the parameters are as follows:

Models parameter estimation

Table 7

Variable	General		Center		West		North-West	
	β_i	Sig	β_i	Sig	β_i	Sig	β_i	Sig
FACTinfr	0.394	0.115	0.213	0.598	0.563	0.341	1.325	0.047
FACTlab	-0.356	0.134	0.176	0.680	-1.014	0.072	-0.476	0.344
FACTagl	-0.249	0.322	0.006	0.988	-0.460	0.499	-0.874	0.163
FACTr&d	0.518	0.040	0.602	0.124	0.007	0.991	0.754	0.271
FACTcost	-0.391	0.174	-0.472	0.371	0.160	0.791	-1.572	0.048
FACTmark	0.393	0.134	0.200	0.693	0.771	0.159	0.270	0.640
DUM	-1.262	0.073	-1.661	0.096	-20.041	0.999	-1.313	0.377
Const	-1.388	0.000	-0.966	0.023	-1.432	0.007	-2.498	0.001

Therefore, analyzing comparatively these four models we will be able to assess the importance of each factor at the level of different regions.

In the general regression model, we found that those investors, for whom infrastructure, knowledge and market factors are the main motives for investing in Romania, considered Bucharest-Ilfov region at the beginning of the location process. However, investors for whom low input costs, availability of labor force and resources are significant factors for setting up a business activity in Romania, tend not to take Bucharest-Ilfov area in consideration. These findings confirm that Romanian regions do indeed differ substantially in attracting foreign capital and that regional characteristics matter in the selection of primary location choice in Romania.

When looking at the second model the findings for the comparison of the choice of location between Bucharest-Ilfov versus **Center region** indicate that only two variables have significant parameters. The parameter of FACTr&d is positively significant at a 15% level. This suggests that foreign knowledge-seeking investors located in the Center region took Bucharest-Ilfov area in consideration at the beginning of their investment. The second one is the industry dummy, called DUM, which is negatively significant (the parameter) at a 10% level. This might indicate that investors from high-tech industries located in the Center region came here without looking at Bucharest Ilfov region.

The findings for the comparison of the choice between Bucharest-Ilfov region versus the **North-West** region shows that only two of the variables' parameters used in the model turned out to be negative and statistically significant: FACTagl and FACTcost. This suggests that firms who regard costs and labor related factors as being important are more likely to go into the North-West area without considering Bucharest-Ilfov region. We also note that the parameter of the FACTinfr is statistically significant and has a positive sign. This shows that investors for whom infrastructure is the important motive for establishing their business in the North West region looked at the Bucharest-Ilfov area when deciding the location of their future investment.

The findings for the comparison of the choice between the Bucharest-Ilfov region and the **West** region show that only two of the variables used have statistically significant parameters. Because of the negative parameter of the labor factor the probability of the inflow of FDI into the West area is higher than to the Bucharest region. Firms looking for new market opportunities, located in the West region took Bucharest-Ilfov region in consideration in their strategies before coming to Romania.

Also noteworthy is the fact that for each of the three regions different factors considered in the location decision process by foreign investors required a comparison between that specific region and Bucharest-Ilfov region.

CONCLUSION

As expected the results indicate that there are substantial differences in the attractiveness of Romanian regions, when the initial inflows of FDI are evaluated.

It is shown that if input costs and the availability of labor and resources are seen by investors as important factors for investing in Romania, then all three regions are more favorable for the inflow of foreign capital than the Bucharest-Ilfov area.

Companies that regard the existence of cheap and available raw materials, the existence of other companies working in related fields of activity and the existence of tax incentives as being possible determinants for their future investment are more inclined to invest in the North-West region (without even considering the Bucharest-Ilfov region). Firms who decide for an investment in the West region are more inclined to consider in the environmental scan stage Bucharest-Ilfov region as an option if they are more interested in finding new markets and on the contrary are not interested in the Bucharest-Ilfov region if they go for labor related aspects.

Further study should analyze if Center, North-West and West regions, are preferable location (in comparison to the Bucharest area) for the inflow of FDI when geographical factors are important motives for investors. Access to west borders (European Highway system), makes this area very attractive for foreign capital (Nandakumar and Wagué, 2001) because geographical proximity imply lower communication costs and fewer difficulties in managing business activities (Woodward, 1992; Louri et al., 2000).

Furthermore, the Bucharest region is more likely to be considered as a preferable destination by a foreign firm if market factors, infrastructure factors and knowledge factors are viewed as important motives for locating the future investment. This finding is hardly surprising, because the Bucharest metropolitan area is the largest market within the country.

Economic development of the region's main cities together with future improvement in road infrastructure, as well as proximity to the country western border favor Transylvania (Center, West and North West Regions) on the map of foreign investment localization.

Author Contributions

Despite the growing interest in the subject of FDI location, to our knowledge, there is still no satisfactory empirical work which can explain the determinants of the spatial distribution of FDI flows into the separate regions of Romania, one of the largest new EU-member states. Thus, this research

attempts to fill this gap by using a primary data from a questionnaire that covers the entire transition period. The main authors contribution is to identify the main determinants of the direct foreign investments in Central, West and North West Romanian regions and to provide a list of the main strengths and weaknesses of Center, West and North West regions, that would influence a foreign investor to choose the proper location for a future investment when developing his strategy.

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