THE ATTRACTIVENESS OF CEE COUNTRIES FOR FDI. A PUBLIC POLICY APPROACH USING THE TOPSIS METHOD*

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Abstract

This paper analyzes the location decision for foreign direct investments (FDI) in Central and Eastern European (CEE) countries based on the attractiveness of policies most influenced by public officials. Our assessment of the FDI inflows in a country is based on four pillars: infrastructure, quality of institutions, labor market and taxes. The attraction degree of the CEE countries in 2007 and 2010 is calculated using the Technique for Order Preference by Similarity to Ideal Solution (TOPSIS) method, a tool usually used for decision-making issues.

The empirical result indicates that Estonia is the most attractive country for investments (as regards the public policy approach). Globally, the paper establishes the state's role in attracting FDI and identifies whether there is room for further improvement on the public policy side.

Keywords: FDI, public policy, Central and Eastern European countries, TOPSIS.

1. Introduction

The positive and substantial economic impact of foreign direct investment (FDI) on the development of the investors' host and home country is widely discussed in the literature. However, half of Europe was deprived of the benefits of FDI until 1990, thus CEE countries entered this race for FDI with a serious handicap as compared to their Western neighbors. Practically, CEE countries started from scratch the construction of an attractive economy for investors, while their neighbors had already registered an experience of several years. Although the CEE countries had the opportunity to choose their development model based on the best practices in other countries, the implementation of the model and its adaptation to their own specificities remained exclusively within their remit. The process proved extremely slow, as engaging in attracting FDI is not similar to a sprint, but rather to a long term race; this is equivalent with the need to continuously restructure and upgrade location specific endowments. The resources the CEE countries are counting on for this race have at least one of three disadvantages: they are limited (for example, the natural resources endowments), or they prove to be insufficient for constructing a long term attractiveness (such as low wages) or become almost redundant in the context of technological advances (the proximity to large markets).

The EU accession of ten CEE countries in 2004 and for another two in 2007, most of them former communist states, meant a huge step forward for attracting foreign investments. The investors' enthusiasm was partially due to the visible measures and reforms applied during the pre-accession years for gaining more competitiveness. There are authors sustaining that the EU accession was a pre-requisite for starting FDI in CEE countries; EU announcement about accession prospects proved significant for increasing FDI inflows (Bevan and Estrin, 2004, p. 785).

Today, CEE countries still lack attractiveness for foreign investors and hardly succeeded to join the FDI winners group in Europe. UK, France, Germany and Spain remain the top investment destinations in terms of FDI projects according to the Ernst & Young's European attractiveness survey (2010, p. 20). The only transition economy in top ten is Poland, in the 8th place. Specialists draw attention to economic conditions, risk levels and government attractiveness policies as sources of the unequal distribution of foreign investments. One of the main differences between transition economies and economically advanced countries consists in the less developed market institutions (Vasyechko, 2012, p. 121).

If the economic conditions are also related to the international environment, the risk level can also be attributed to the investors' perception; the public policies are under the immediate control of the host government and therefore can be quickly employed as a mean for increasing FDI. The role of the state is best expressed through the concept North uses for defining institutions, which Dunning also employs. Therefore, it is for the state to establish the rules of the game, as well as their monitoring and enforcement (Dunning, 2004, p. 2). Based on this approach, the host government is the main actor for designing location attractiveness.

When referring to public policy, empirical studies mainly analyze four components: infrastructure, labor market, institutions or governance quality and fiscal policy or taxation level (Bellack, Damijan and Leibrech, 2007; Bellack, Leibrecht and Liebensteiner, 2010, Goodspeed, Martinez-Vasquez and Zhang, 2009). Vasyechko (2012) finds a strong influence of host government policies on foreign investors' strategies in reviewing the literature of FDI determinants in transition countries.

Goodspeed, Martinez-Vasquez and Zhang (2009, p. 14) point out that in order to be more effective in attracting FDI, government officials in developing countries should pay more attention to policy programs aimed at improving governance institutions and public infrastructure. The taxation is important for FDI choices, but only after more fundamental institutional governance issues are addressed and good levels of public infrastructure are made available.

The goal of this paper is to assess to what extent the government is able to influence its attractiveness for FDI. We take into account its impact on the design of public policies in four domains: infrastructure, institutions' quality, labor market and fiscal policy. Firstly, we develop a comprehensive literature review on the four determinants of FDI in the CEE countries. Secondly, we use the TOPSIS method to rank the most attractive countries for FDI, as regard their public policy strategies. The method allows us to follow an investor's rationale in the process of location decision-making. The results obtained are discussed in relation with the evolution of the public policy decisions in the evaluated countries.

The rest of the paper is organized as follows. In Section 2 we provide a detailed review of the literature. In Section 3 we present our data and methodology. Section 4 is dedicated for discussions of the results and Section 5 concludes.

2. Literature review

In CEE countries, FDI are especially driven by the difference in prices of production factors and the size of national market. Although studies indicate a shift towards created resources as major determinants for FDI, CEE countries are still seen as attractive because their cheaper factors of production and low wages.

Suder and Sohn (2010) are among the many authors that find the GDP level of CEE countries strongly influencing the attractiveness for foreign investors, as the host market size is positively and strongly correlated with the FDI inflows.

2.1. Infrastructure

The infrastructure represents the basic condition for firms to conduct their businesses in a foreign country. It is not only the transport infrastructure, but also the Information and Communications Technology (ICT) infrastructure, the new driver of change, and the energy infrastructure. A major part of the infrastructure endowment still remains under the influence of public institutions, firstly because it requires a huge financial effort for a company, and secondly because the CEE countries are only beginning to engage in public-private partnerships. The main problem of CEE countries

tries remains the infrastructure as in the last years, just some CEE countries saw the economic opportunity of infrastructure on the long and medium term, and decided to improve it (such as Hungary). There is room for further improvements, as a good telecommunication, electricity and transport infrastructure attracts higher value-added production.

There are different proxies used in the literature for measuring the impact of infrastructure on FDI. For Gramlich (1994), the relevant infrastructure includes transport, communication and electricity production facilities, as well as transmission facilities for electricity, gas and water. Bellack, Damijan and Leibrech (2007, p. 6) also utilize variables including telecommunication, electricity and transport production facilities in order to determine the impact of overall infrastructure. Although the study finds a strong link between infrastructure endowments and FDI, the results also indicate that information and telecommunication infrastructure, followed by the transport infrastructure, are of a special significance in attracting FDI, more important than electricity generation capacity (Bellack, Damijan and Leibrech, 2007, p. 13). In explaining FDI, Goodspeed, Martinez-Vasquez and Zhang (2009, p. 6) use a composite infrastructure index comprehending transport, telecommunication, energy and environment infrastructures and find a positive impact upon FDI. Of great significance is their observation indicating that FDI are more sensitive to host country infrastructure quality in developing host countries than in developed ones (Goodspeed, Martinez-Vasquez and Zhang, 2009, p. 11). In examining infrastructure impact on country attractiveness, Bellak, Leibrecht and Damijan (2007, p. 7) establish a composite indicator expressing infrastructure endowment based on the principal component analysis, which focuses on telecommunication, electricity and transport production facilities. The variables used to analyze the infrastructure endowment are per capita data on penetration with telephone mainlines, mobile phones, personal computers, broadband connections to the internet and the number of internet users (for measuring the telecommunications infrastructure); the density of railways, motorways, non-motorway-roads and waterways, as well as the number of major air- and seaports (for transport infrastructure) and the annual electricity generation capacity per capita in GWh (for measuring the electricity supply capacity). The authors find a positive impact of infrastructure endowment growth on inward FDI. These findings are consistent with those obtained by Leibrecht and Reidl (2010, pp. 10-15), who use the same variables expressing infrastructure endowment, but in an empirical model that encompass spatial interdependencies. A faster method for assessing infrastructure is used by Bellak, Leibrecht and Liebensteiner (2010, p. 44) with the same positive relation regarding FDI. Here, the infrastructure is represented by the sum of telephone mainlines, mobile phone subscribers and internet connections per 1000 inhabitants, referring overall to the information and communication infrastructure endowment. Botric and Skuflic (2006) investigate the determinants of FDI in South Eastern European countries. One of the variables used is the ICT, defined as the number of telephone lines per 100 inhabitants or the number of Internet connections. The countries on the top positions of FDI attractiveness are those with a better infrastructure for ICT. The sector not only has an increasing importance in the foreign investors' decision, but is also a resource for diversifying economies. It helps to reduce the dependence on the natural resource endowment and to reduce the disadvantages of a landlocked country. The ICT infrastructure endowment leads to an increase in FDI by about 0.73% (Bellak, Leibrecht and Steher, 2008, p. 12). Addison and Heshmati (2003, p. 23) investigate the determinants of FDI inflows to developing countries and establish that the spread of ICT increases FDI inflows to developing countries. In their study, the ICT variable is defined as the sum of total spending on information technology plus communications equipment and services as a percentage of the gross domestic product (Addison and Heshmati, 2003, p. 11).

2.2. Institutions

Wilhelms and Witter (1998) develop the theory of institutional fitness pointing to the fact that inward FDI are mostly depending on the institutional variables (such as the policies, laws and the ways of enforcing them) than on the intransigent fundamentals, where are included the size of the population or socio-cultural characteristics. Although less mentioned in the literature, the main contribution of the theory is that it strongly emphasizes that not the most powerful or big countries are successful in attracting FDI, but the most adaptable ones, suggesting the strong influence of institutions in the host countries for inward FDI (Wilhelms and Witter, 1998).

The discussion about the institutions' quality certainly implies the issue of governance. From a company's point of view, a high quality of institutional governance signifies that the government is committed to provide a stable business environment and to set up market friendly policies (Fabry and Zeghni, 2010, p. 84). For this reason, the institutional capacity to adapt at the global changes is considered an advantage and makes a country more attractive than other. For Dixit (2009), good economic governance is equivalent with property rights protection and contracts enforcement. Dunning (2004, p. 1) states that the quality of institutions is becoming increasingly important for attracting FDI. As regards the transition economies, Dunning (2004) emphasizes that the institution infrastructure must meet the needs of investors, which is theoretically in line with Wilhelms and Witter (1998).

For CEE countries, the actual institutional environment remains a barrier for attractiveness. The lack of the capacity to develop and make the institutional context more flexible is a weak point for these countries, as reliable institutions were always associated with growth and FDI attractiveness (Fabry and Zeghni, 2010). The core issue is that of stability and predictability, especially for a foreign investor. Improving the institutional framework by establishing a predictable framework for economic policies and enforcement is a method of increasing foreign investments (Daude and Stein, 2007, p. 337). Bellak, Leibrecht and Liebensteiner (2010, p. 49) find that all the countries in South Eastern Europe can improve their institutional environment in order to attract FDI. Therefore, it is an instrument to enhance one country's attractiveness for FDI, but rests at the will of the state.

In the literature, the impact of state regulations on FDI is mostly assessed for the developing or transition economies. Dunning (1998) reveals that the influence of the state is omnipresent, independently of the FDI type (resource, market, efficiency or strategic asset seeking) or the period of time. If in the beginning of foreign investment theories, state intervention was seen as a barrier to FDI due to the restriction imposed on investment flows, its role became over time of reducing the transaction costs and offering significant intervention for facilitating FDI, through investment incentives, institutional competence, macroeconomic policies, investment in education and research and development, availability of specialized clusters.

Secondly, the ease of doing business highly depends on institutions: it is the governments attribute to regulate the deployment of a business, starting with the period for setting up a business until the number of days necessary for its closure. The bureaucratic procedures are a core problem for foreign investors and for the business environment as a whole. But it is a problem that can be handled with and the decision to approach it stands only in the institutions' hands.

The risk of transition countries is induced by the level of uncertainty, so the complicated bureaucracy and lack of transparency in the legal system may also deter investment (Benacek *et al.*, 2000, p. 182). In 1997, amid the barriers to invest in the Czech Republic, the non-transparent legislation and a poorly performing judiciary system, the bureaucratic complications regarding ownership, the product innovation and taxation and over-regulation in Greenfield investment weight heavily on the investors' decision.

Goodspeed, Martinez-Vasquez and Zhang (2009, p. 12) indicate that, compared with the developed countries, FDI in developing countries are sensitive to the levels of corruption in the host country. In measuring corruption, the authors use the Corruption Perception Index from Transparency International (Goodspeed, Martinez-Vasquez and Zhang, 2009, p. 7).

2.3. The labor market

The level of wages is assessed in the literature as one of the most important factors affecting the decision to invest in a large number of sectors in transition economies. Dunning (1998) establishes that labor costs were a significant variable for market-seeking type FDI during the 1970s, and remains a significant variable during the 1990s along with the existence of skilled and professional workforce. For efficiency seeking investors, labor costs are included in the category of the main production related costs during the 1970.

The literature survey realized by Benacek *et al.* (2000) highlights this factor's importance for an investor until 2000. The studies in the following years revealed the same results, as in Botric and Skuflic (2006, p. 18), who investigated the relation between FDI and a series of variables in seven South East European countries between 1996 and 2002 and identifed a significant and negative relation between labor costs and FDI. Mainly in these countries, FDI is attracted by inexpensive labor, reflected in the low labor costs. Bellak, Leibrecht and Steher, (2008) search for the influence of labor

cost and labor productivity on FDI; their sample included USA, six old EU member states and four new EU member states in CEE between 1995 and 2004. Institutional barriers to FDI and high labor costs have a significant negative impact on inward FDI, leading to a decrease in FDI of about -0.40% and of -0.65% for labor costs. If for the labor costs the result is consistent with the literature (meaning that there is a significant negative impact of labor costs on inward FDI), the authors find a lack of significance for labor productivity (Bellak, Leibrecht and Steher, 2008, p. 12).

Still, the major problem that appears today for these countries is the loss of the competitive advantage represented by the low level of wages. Even if the wages in Bulgaria and Romania maintain their lowest level in the European Union, in this field they cannot compete with the huge advantage of the Asian countries. We witnessed Hungary and Poland losing this advantage. In 2011, an important foreign investor proved that countries such as Romania are in the same situation: the Finnish Nokia company closed its factory due to a strategy of cost reducing and relocated in Asia; Nokia took the same decision three years earlier, when it left the German market due to the same reasons.

Regarding labor skills, Nonnemberg and de Mendonça (2004, p. 9) found a statistical significant relation between the level of schooling and FDI in their panel data analysis for 38 developing countries and transition economies for the 1975-2000 period, indicating that policies aiming to increase the level of education may induce these investments. Bellak, Leibrecht and Steher (2008, p. 10) identify significant impact of labor costs for FDI attractiveness. At the same time, the human capital stock heavily influences FDI as large investments in education and training are raising the national supplies of skilled labor and increase the possibility to move up the value-added ladder. The labor market conditions expressed through wages and the labor productivity have been widely addressed in literature. In developing a comparative index of FDI attractiveness, Pantelidis and Nikolopoulos (2008) take into account the wage rate index, composed by the labor cost, labor productivity, labor force and skilled workforce. The conclusion is that the labor index is one of the most influential host country determinants for FDI in the EU member states for the 1976-2004 period.

2.4. Taxation

The usual behavior of companies is to search for attractive environments, seeking opportunities that enable them to obtain various types of competitive advantages (Morgan and Katsikeas, 1997). The role of taxation is therefore significantly important. Gordon and Hines (2002) argue that econometric studies of the past 15 years show that both the level and location of FDI are highly sensitive to the treatment of taxes. Madies and Dethier (2010) conclude that the result of most empirical studies is that FDI flows into developing countries are sensitive in varying degrees to the taxation of corporate income and fiscal incentives.

Goodspeed, Martinez-Vasquez and Zhang (2009, p.12) raise a fairly thorny issue when they set to identify the strategy that the political authority in a country must

establish for deciding which measures are the most effective in attracting FDI. They roughly deal with the taxation issue in the developing and developed countries. The results show that FDI stock is more sensitive to the host country taxation in developed countries and not in developing ones. This more pronounced taxation sensitivity in high-income countries is due to the supply of a better infrastructure, benefits owed to congestion, or the unique and attractive market opportunity. Tax incentives are not sufficient to overcome the structural inefficiencies encountered in infrastructure or bureaucracy. Bellack, Damijan and Leibrech (2007, p. 13) identify that the location decisions made by MNEs are influenced both by taxes and infrastructure. Moreover, taxrate elasticity of FDI is a decreasing function of infrastructure endowment. In most countries, the existent infrastructure can be taxed without a loss of FDI. While countries with an above average infrastructure endowment can finance their infrastructure by taxing corporations, countries with an inferior infrastructure endowment are forced to cut corporate income taxes for increasing attractiveness in order to receive FDI in the short run.

3. Methodology

We choose to establish the attractiveness of 10 European Union countries in CEE (Bulgaria, the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, Slovenia and Slovakia) based on the public policy approach in 2007 and 2010. In order to evaluate the ranking accuracy, the results will be compared with the Inward FDI Performance Index, developed by UNCTAD. A similar approach is carried out by two of the authors in Popovici and Călin (2012). In the present study, we focus on the effects of the crisis regarding the CEE attractiveness for FDI and we perform a much more comprehensive methodological approach for establishing the CEE attractiveness for foreign investments.

As identified in the literature, the main criteria for establishing the government capacity to attract investments can identified by establishing the degree of development in four areas: the quality of institutions, infrastructure, labor market and taxation.

The infrastructure measures the extent to which resources and systems are adequate to serve the basic needs of businesses. The quality of institutions designates the accuracy and efficiency of public administration. For the labor market, we measure the degree of flexibility and the degree of the labor force qualification, as given by the tertiary education enrolment rate. In constructing the taxation index, we used the corporate income rate, as described in the literature, the average gross monthly wages and the social security contributions for expressing the labor costs and the VAT. The social security contributions can be understood as the total additional costs a firm has to bear after the wage level is set. The VAT is a cost incurred by all the economic agents. It has the special feature of being enforced in the country where the product is consumed, not where it is produced. Therefore, VAT has not only a purely technical role for collecting budgetary revenue, but it is an important tool for economic and fiscal policy. Each of these four criteria is the expression of a series of variables (as

presented in Table 1, together with the data source and the initial scale index). We mainly used the data from the Global Competitiveness Report 2010-2011 for the 2010 analysis and the Global Competitiveness Report 2008-2009 for the 2007 countries appraisal. As compared to Popovici and Călin (2012), we broaden the construction of the four indexes by taking into account several proxies; for example, the infrastructure index is computed using not only the extension of telephone lines and the internet access, but we also add the quality of roads, the quality of railroad, ports and airports infrastructure and the quality of electricity supply. The same is valid for the rest of the three indexes.

The methodology is structured on two pillars: the construction of the global indexes for each of the four criteria chosen and the final classification of countries according to the public policy attractiveness, using the TOPSIS method.

As the data is differently expressed and quantified and represent the result of various methods of measurement, expressed in different scales, at this moment they do not allow an accurate comparison. Therefore, the first step is to establish a common basis for data evaluation and comparison. In this respect, for each of the variables mentioned in Table 1, we compute the ratio of the value recorded by each country in the value of the best performing country. Then, for each of the four criteria, a global index will be developed based on these ratios, as the weighted average of the chosen variables. In this index construction, we opted for equal weights.

In the second stage, the TOPSIS approach is used in order to determine the best country where one could make an investment, based on its public policy attractiveness index.

The construction of FDI attractiveness indexes is quite frequently used in the literature. A similar approach is used by Pantelidis and Nikolopoulos (2008) when investigating Greece's FDI attractiveness among other EU countries. Still, their analysis stops in 2004 and Bulgaria and Romania are not taken into account. A much more comprehensive study is developed by Groh and Wich (2009), that build a more extensive FDI attractiveness index, meant to rank 127 countries according to their appeal for foreign investments. While this time the econometric model is missing, the authors rely on the variable identified in the literature as strong FDI determinants. The authors also test the accuracy of their results by comparing them with the ranking offered by the Global Competitiveness Index developed by the World Economic Forum. The two rankings are largely similar.

The difficulty in constructing an attractiveness index lies in the relative weight given to the variables used in its construction, which frequently remain at the author's choice. The econometric approach is indicated for solving this problem, but it is not readily available for investors, thus losing the perspective of the actual choice an investor is confronted with. A multi-criteria decision-making method would be more appropriate for choosing investment location through the eyes of an investor. In this respect, we employ the TOPSIS method, currently used in multi-criteria decision-making processes, but scarcely used in the field of Economics. The advantages of this

Table 1: Variables and data

Variable	Definition and initial index scale	Impact on FDI attractiveness	Source
	Institution's quality		
Investment freedom	Evaluation of restrictions typically imposed on investment, regarding the national treatment of foreign investment, the foreign investment code, the restrictions on land ownership, the investment restrictions, the expropriation of investments without fair compensation, the foreign exchange and capital controls. Index ranging from 0 (no investment freedom) to 100 (total freedom).	Positive	Heritage Foundation, Index of Economic freedom
Business freedom	Quantitative measure of the ability to start, operate, and close a business that represents the overall burden of regulation as well as the efficiency of government in the regulatory process. Index ranging from 0 (no business freedom) to 100 (total freedom).	Positive	Heritage Foundation, Index of Economic freedom
Freedom from corruption		Positive	Heritage Foundation, Index of Economic freedom
Fixed telephone lines	Number of active telephone lines (that have registered an activity in the past three months). Measured as the number of active fixed telephone lines per 100 inhabitants.	Positive	The Global Competitiveness Report
Mobile telephone subscriptions	Number of mobile telephone subscriptions, Measured as the number of mobile cellular telephone subscriptions per 100 inhabitants.	Positive	The Global Competitiveness Report
Quality of roads	Satisfaction with the quality of road infrastructure. Values ranging from 1 (low quality) to 7 (high quality).	Positive	The Global Competitiveness Report
Quality of railroad infrastructure	Satisfaction with the quality of railroad infrastructure. Values ranging from 1 (low quality) to 7 (high quality).	Positive	The Global Competitiveness Report
Quality of airport infrastructure	Satisfaction with the quality of airport infrastructure. Values ranging from 1 (low quality) to 7 (high quality).	Positive	The Global Competitiveness Report
Quality of ports infrastructure	Satisfaction with the quality of ports infrastructure. Values ranging from 1 (low quality) to 7 (high quality).	Positive	The Global Competitiveness Report
Broadband Internet subscriptions	All subscriptions to high-speed access to the Internet at downstream speeds equal to, or greater than, 256 kb/s. Measured as the number of fixed broadband Internet subscriptions per 100 inhabitants.	Positive	The Global Competitiveness Report
Quality of electricity supply	Satisfaction with the quality of electricity supply (lack of interruptions and lack of voltage fluctuations). Values ranging from 1 (low quality) to 7 (high quality).	Positive	The Global Competitiveness Report
	Labor market		
Tertiary education enrolment rate	Gross tertiary education enrolment rate. Measured as the ratio of total tertiary enrolment, regardless of age, to the population of the age group that officially corresponds to the tertiary education level.	Positive	The Global Competitiveness Report
Labor freedom	Quantitative measure of the legal and regulatory framework of a country's labor market, regarding the ratio of minimum wage to the average value added per worker, the hindrance to hiring additional workers, the difficulty of firing redundant employees, the legally mandated notice period and the mandatory severance pay. Index ranging from 0 (no labor freedom) to 100 (total freedom).	Positive	Heritage Foundation, Index of Economic freedom

Variable	Definition and initial index scale	Impact on FDI attractiveness	Source
	Taxation and costs		
Corporate income tax	Direct tax that applies to profits generated from conducting a business. Measured as the statutory rate of the corporate income tax.	Negative	Annual report of the Romanian Fiscal Council
VAT	Consumption tax levied at each stage of production based on the value added to the product at that stage. Measured as the statutory rate of the VAT.	Negative	Annual report of the Romanian Fiscal Council
Social Security Contribution	Tax paid by employers (in this case) to social security funds, insurance companies and autonomous pension funds to provide social benefits for their employees. Social security contributions are expressed as percentage of total labor costs.	Negative	Eurostat database
Average gross monthly wages	Average gross monthly The average income of an individual before taking taxes or deductions into account, in a country. wages Wages are expressed in Euros.	Negative	The Vienna Institute for International Economic Studies, Country expertise

method are that the relative weights of criterion importance are incorporated and analyzed through the distance from the positive ideal solution and the negative ideal solution, giving the possibility to quickly identify the best alternative. TOPSIS is also performing well with only a few variables, as in our case (Olson, 2004).

The TOPSIS method is used as it allows making a ranking decision through encompassing three types of attributes or criteria: qualitative benefit attributes/criteria, quantitative benefit attributes and cost criteria. The method was first developed by Hwang and Yoon in 1981. In this method, two artificial alternatives are hypothesized: the ideal alternative, representing the option which has the best level for all attributes considered, and the negative ideal alternative, which has the worst attribute values. The base concept is that the selected best alternative has the shortest distance from the ideal solution and the farthest distance from the negative-ideal solution in a geometrical (Euclidean) sense. The TOPSIS solution comprehends both desiderates at the same time. The TOPSIS method is not widespread as regards the decision for FDI location, as only Karimi, Yusop and Sieng Hook (2009) used the method in analyzing the location decision for FDI in ASEAN Countries. We choose to apply the method for the CEE countries, thus bringing a considerable improvement to our previous analysis in Popovici and Călin (2012).

The TOPSIS method requires to first create a matrix of m alternatives (options) and n attributes/criteria. Each option will be scored with respect to each criterion. The following decision matrix is created:

$$P = \begin{bmatrix} C_1 & C_2 & C_3 & \dots & C_n \\ A_1 & X_{11} & X_{12} & X_{13} & \dots & X_{1n} \\ X_{21} & X_{22} & X_{23} & \dots & X_{2n} \\ X_{31} & X_{32} & X_{33} & \dots & X_{3n} \\ \vdots & \vdots & \ddots & \ddots & \vdots \\ X_{m1} & X_{m2} & X_{m3} & \dots & X_{mn} \end{bmatrix}$$

where A_i is the i^{th} alternative, C_j is the j^{th} criterion and x_{ij} is the performance measuring the i^{th} alternative in terms of the j^{th} criterion.

After creating the matrix, the next steps are as follows:

1st step: the calculation of the evaluation criteria weights, in order to find the relative normalized weight of each criterion. Calculation of the geometric mean of the ith row in the pair-wise comparison matrix:

$$GM_i = \sqrt[n]{\prod_{j=1}^n x_{ij}}$$
, i =1, 2, ... m

Geometric means of the rows in the comparison matrix are normalized:

$$W_i = GM_i / \sum_{i=1}^m GM_i$$
, i=1,2, ... m

where W_i is the weight of the C_i criterion, $\sum_{i=1}^m w_i \sum_{i=1}^m w_i = 1$ and $W = [w_1, w_2, ..., w_n]$ is the criteria weight vector.

- 2nd step: the construction of the normalized decision matrix. This step transforms various attribute dimensions into non-dimensional attributes, which allows comparisons across criteria. The scores are normalized as follows:

$$R_{ij} = \frac{x_{ij}}{\sum_{i=1}^{m} x_{ij}^2} R_{ij} = \frac{x_{ij}}{\sum_{i=1}^{m} x_{ij}^2}$$
, i =1, 2, ... m; j = 1,2, ... n

 -3^{rd} step: the construction of the weighted normalized decision matrix. An element v_{ij} of the new matrix is calculated as:

$$v_{ij} = w_j \times r_{ij}$$
 $v_{ij} = w_j \times r_{ij}$, i =1,2, ... m; j = 1,2, ... n; where V = $[v_{ij}]$.

4th step: the identification of the positive ideal solution and the negative ideal solution. The ideal positive solution is represented by:

$$\dot{A} = \{\dot{V}_1, \dot{V}_2, \dots, \dot{V}_n\} = \{(\max_i v_{ij} | i \in I'), (\min_i v_{ij} | i \in I'')\}$$

where I' is associated with the benefit criteria. The negative ideal solution is represented by:

$$\bar{A} = \{\bar{V}_1, \bar{V}_2, \dots, \bar{V}_n\} = \{\left(\min_i v_{ij} | i \in I'\right), \left(\max_j v_{ij} | i \in I''\right)\}$$

where I" is associated with the cost criteria.

- 5th step: the calculation of the separation measure. The concept of the n-dimensional Euclidean distance is used in order to measure the separation distances of each alternative from the ideal solution and the negative-ideal solution. Separation from the ideal solution:

$$S_i^* = \sqrt{\sum_{j=1}^n (v_{ij} - v_j^*)^2}$$
, $S_i^* = \sqrt{\sum_{j=1}^n (v_{ij} - v_j^*)^2}$, i =1, 2, ... m

Separation from the negative-ideal solution:

$$S_i^- = \sqrt{\sum_{j=1}^n (v_{ij} - v_j^-)^2} S_i^- = \sqrt{\sum_{j=1}^n (v_{ij} - v_j^-)^2}, j = 1, 2, \dots n$$

- 6th step: Calculation of the relative closeness to the ideal solution.

$$C_i^* = \frac{S_i^-}{S_i^* + S_i^-} C_i^* = \frac{S_i^-}{S_i^* + S_i^-}$$
, i =1,2, ... m

- 7th step: Ranking the preference order.

4. Results

The crisis revealed that the entire Europe needed a fundamental change of the economic paradigm towards investments as a major pillar. Public and private investments were found to be the key to overcome the crisis, due to their capacity to create jobs, to enhance revenues and finally to boost economic growth. Still, when states in Europe were in most need of foreign investment for supporting economic recovery, in 2008, they saw FDI decreasing; and this negative trend continued. As Ernst&Young survey on European attractiveness shows, the CEE region, which ranked second in attractiveness in 2009 behind Western Europe, saw its attractiveness as an FDI destination collapsing by 15 percentage points in 2010 (Ernst&Young, 2010, p. 9).

In order to maintain their attractiveness for investors, most countries chose to improve public policy and especially to reduce the administrative burden. Improving infrastructure and growing public sector efficiency was seen in these times the single maneuver space for attracting investors.

The index calculated for each of the four pillars allows a comparison between countries. At the same time, we correlate the results obtained with the developments on the public policy side implemented in each of the analyzed country, as drawn from the European Commission reports (European Commission, 2010; 2011).

4.1. Assessing infrastructure

As regards infrastructure index scores presented in Table 2, Estonia is the leader. Slovenia is on the second place, while Romania and Poland are the worst performers. At a close look, the top remain the same in 2007 and 2010. The measures regarding infrastructure were lately implemented, especially for the countries on the last places. It is just in April 2010 that the Bulgarian Government adopted a Strategy for the development of transport system for the next ten years. Poland also put in place many road infrastructure projects during 2009, most of them needed in the view of the UEFA European Football Championship during the summer of 2012. Romania is the last as regards the quality of transport infrastructure. According to the Global Competitiveness report, it is placed the 139th among 142 countries at the quality of overall infrastructure. The infrastructure problems are well-known and just recently started to be deal with. The ICT is still at an early development stage, especially on the enterprises and administration side.

Table 2: Infrastructure index

Country	Infrastructure			
Country	2007	2010		
Bulgaria	59.96 62.90			
Czech Republic	80.45 82.83			
Estonia	88.97 92.91			
Hungary	74.87 75.84			
Latvia	70.81	71.27		

Country	Infrastructure		
	2007	2010	
Lithuania	82.52	81.62	
Poland	59.09 60.34		
Romania	52.38 58.10		
Slovakia	67.29	70.41	
Slovenia	84.28	86.92	

Source: Author's findings

An actual trend for further improvements of administrative procedures in order to reduce the administrative burden and the red-tape is the development of e-government and e-procurement services. All the countries must implement the Services Directive aiming at setting up Points of Single Contact, namely e-government portals allowing businesses to get all relevant information and complete procedures online. At EU level, Slovenia scores much above the EU average in terms of e-government usage by enterprises. In 2010, in the EU, such portals were operational in 22 Member States, and 17 offered the possibility to complete procedures online.

Almost all the analyzed countries in CEE already started to offer these services or are developing such services. However, the current efforts for constructing the important infrastructural projects are accelerating, as the countries realized the positive effects on the business environment

4.2. Assessing institutional quality

All the countries adopted targets for the reduction of administrative burden. The measures were taken in the 2007-2009 period, with the goal of being accomplished until 2012. Bulgaria assumed in 2009 a reduction of 20% of the administrative burden, while Slovenia and Slovakia targeted a 25% reduction by 2012. Other countries implemented this type of measures earlier: since 2007, the Czech Republic adopted the target to reduce the administrative burdens by 20% until 2010. In 2008, Romania and Hungary assumed a national target of 25% administrative burden reduction. In the same year, Poland drew the same target in seven priority areas: environment, land development plan, social security, economic activity law, hallmarking law, employment law, and tourist services, until 2010. Estonia implemented a more comprehensive program since 2007. Designed on two parts, it regards a better regulation strategy through codification (administrative burden reduction and simplification) and effective structures (impact assessment framework). The simplification program is scheduled to last until 2013 and includes four main sectors over the period 2007-2009: environmental law, construction law, social law, permits and licenses.

The results are clearly indicated in Table 3: Estonia scores the best at quality of institutions, mainly based on its capacity to eradicate corruption and to create a free framework for investments. The other Baltic countries also have good performances.

Table 3: Institutions' quality index

Country	Institutions' quality		
Country	2007	2010	
Bulgaria	70.85	67.56	
Czech Republic	72.48 78.01		
Estonia	98.26 99.42		
Hungary	79.73	83.88	
Latvia	77.26	83.68	

Country	Institutions' quality		
	2007	2010	
Lithuania	84.26	83.48	
Poland	58.09 70.00		
Romania	63.09 75.69		
Slovakia	76.28	79.85	
Slovenia	86.52	92.59	

Source: Author's findings

Slovenia is on the second position both in 2007 and 2010. It has the advantage of having about 90% of the basic government services available online. Still these are hampered by the low actual usage (a reason why Slovenia scores best at business freedom in 2010).

These targets were doubled by other measures meant to improve institutional quality, but most of them were adopted starting with 2008 and are still relatively recent. For example, Bulgaria adopted a Better Regulation Program for simplification of more than 30 regulations. The program finished in 2010, but it is too early to assume that the results are encompassed in this analysis. Furthermore, other 136 reduction proposals were adopted in the same year.

Latvia developed in 2009 comprehensive guidelines for the next six years in order to attract FDI and promote exports. A strategic plan constructed on 22 measures for improvement of the business environment was adopted the same year, focusing on company registration, microenterprises, tax administration, real estate, as well as e-procurement and e-government. Eight of the planned measures were already implemented by August 2010.

In 2008, Lithuania adopted a national program for creating an adequate institutional framework and improving the quality and efficiency of regulations. A similar measure was implemented in Hungary, as here the burden of the government regulation is significantly higher than the EU average

The Czech Republic administrative reform focused on the ten most burdensome legal acts. The Action plan launched in 2008 had immediately results: until the end of the year, approximately 8% reduction of administrative burden was already achieved.

The business environment in Romania is characterized by the lack of transparency in the decision-making process, significant red tape in all sectors of administration and heavy regulation. Still, in the Stand-By Agreement concluded between Romania and the International Monetary Fund in 2009, the Government assumed the responsibility for the "Law on the reorganization of public authorities and institutions, streamlining public spending and supporting the business environment". It is an important step towards supporting the business environment and tackling the burning issues as regards the administrative capacity at both central and local levels.

4.3. Assessing labor market

As regards the labor market, the most attractive market for investors is the Czech one, as Table 4 indicates. Analyzed per component, the freest labor market is that of Bulgaria both in 2007 and 2010. Slovenia scores high at the tertiary education enrolment rate.

The flexibility in hiring and firing practices, the more expandable timetables and so on are the determinants of a free labor market. Since 2007, no significant changes are seen, except for the Czech Republic. Instead, some countries saw a reduction in their performance, such as Estonia, Hungary, Latvia or Slovakia.

The reforms are rare and very recent: Romania adopted a new Labor Code in 2011, aiming to increase the labor market flexibility and to adapt its regulations to the best practices in the Western European countries.

Table 4: I abor market index

Country	Labor	Labor market		
Country	2007	2010		
Bulgaria	51.65	52.94		
Czech Republic	44.94 55.14			
Estonia	47.07 44.55			
Hungary	56.25 53.84			
Latvia	57.50	51.83		

Country	Labor market			
	2007	2010		
Lithuania	54.62 54.69			
Poland	51.99 51.97			
Romania	45.19 51.00			
Slovakia	49.98 48.39			
Slovenia	50.54	51.90		

Source: Author's findings

4.4. Assessing taxation

The crisis saw an important increase in taxation all over Europe. Bulgaria is between the few countries that managed to leave tax rates at low levels during the crisis. For 2010, Bulgaria has the best performance on taxation levels, as shown in Table 5.

Table 5: Taxation and costs index

Country	Taxation & costs		
Country	2007	2010	
Bulgaria	63.73	47.01	
Czech Republic	78.33 78.05		
Estonia	64.70 83.2		
Hungary	68.90	86.06	
Latvia	60.45	67.61	

Country	Taxation & costs		
Country	2007	2010	
Lithuania	66.31	71.75	
Poland	60.31 68.92		
Romania	63.56 68.75		
Slovakia	64.30	81.08	
Slovenia	71.57	81.01	

Source: Author's findings

The Baltic countries raised their taxation level the most, while companies are most charged in Hungary. The social security contributions also followed an increasing trend. Part of this increase in taxation level is due to the austerity measures centered on increasing the VAT level that were implemented since 2008. Five of the analyzed countries proceeded to an increase in VAT: in 2009, Estonia increased the VAT level with 2 percentage points from 18% to 20% and Lithuania to 21%. Romania and Hungary had the largest increases of the standard VAT in the same year, from 19% to 24% in case of Romania and from 20% to 25% in case of Hungary. The Czech Republic increased the standard level of VAT from 19% to 20% in 2010. Romania also saw an increase of 3.3 percentage points in the social security contribution in this period. Still, we must take into account that these increases must be compensated with the reductions in the wage levels, also part of the austerity measures. Although these cuts occurred in the public sector, our variable expressing the labor cost commensurate the wages for the national economy.

4.5. TOPSIS approach final results

The final results obtained following the TOPSIS approach based on the indexes computed above are presented in the Table 6. The divergent results obtained as compared to Popovici and Călin (2012) are clearly due to the more extensive composition of indexes and the TOPSIS methodology used in the present analysis.

Table 6: CEE countries ranking (TOPSIS method, 2007 and 2010)

Country	20	07	2010	
Country	Score	Rank	Score	Rank
Bulgaria	0.337	8	0.500	5
Czech Republic	0.495	6	0.431	4
Estonia	0.872	1	0.562	1
Hungary	0.576	4	0.364	7
Latvia	0.539	5	0.487	6
Lithuania	0.721	2	0.522	3
Poland	0.274	9	0.281	9
Romania	0.221	10	0.311	10
Slovakia	0.461	7	0.306	8
Slovenia	0.720	3	0.530	2

Source: Author's findings

Estonia ranks first, both in 2007 and in 2010. Lithuania and Slovenia switch places in the two years, but maintain their position in the top three best performing countries as regards public policy instruments to attract FDI. Bulgaria saw the best improvement of its position, increasing three places, from the 8th place in 2007 to the 5th in 2010, followed by the Czech Republic, which gained the 4th place, from the 6th in 2007. Hungary situation worsened, and decreased three places. For the rest of the countries, the ranking fluctuates upward or downward with only one position. Poland and Romania are in the last places and no change is seen.

In order to assess the public policy ranking accuracy, we compare it with the ranking provided by the inward FDI performance index, as constructed by UNCTAD. The inward FDI performance index ranks countries by the inward FDI relative to the economic size. It is the ratio of a country's share in global FDI inflows to its share in global GDP. We prefer to use the performance index to correctly evaluate the FDI inflows. Instead of using the FDI net inflow, the performance index measures the FDI inflow relative to one country's GDP. The comparison is provided in Table 7.

Estonia is in the lead for the two years, regarding both the public policy attractiveness and the inward FDI performance. Similarities between the two rankings are observed only for Poland and Slovakia in 2007.

A huge discrepancy is seen in the Bulgarian case: while in 2007 it was on the 8th place as regards the public policy attractiveness, it has the best inward FDI performance. In 2010, Bulgaria lost a place as regards FDI performance, and according to the

Table 7: Country rankings according to public policy attractiveness and inward FDI performance

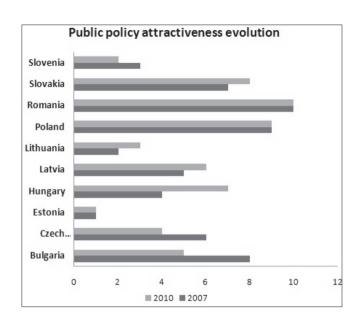
	20	07	2010	
Country	Public policy attractiveness	Inward FDI performance rank	Public policy attractiveness	Inward FDI performance rank
Bulgaria	8	1	5	2
Czech Republic	6	5	4	3
Estonia	1	2	1	1
Hungary	4	6	7	6
Latvia	5	3	6	9
Lithuania	2	8	3	8
Poland	9	9	9	5
Romania	10	4	10	4
Slovakia	7	7	8	10
Slovenia	3	10	2	7

Source: Author's findings

public policy attractiveness, it is ranked on the 5th place. Romania had in both years the last position in public policy attractiveness, but kept the 4th place as inward FDI performance. We notice a certain rigidity of investment flows, due to the difficulty to quickly establish a new location or to immediately close a deal.

The other countries seem to follow a rule: an improvement in the public policy attractiveness determined more FDI inflows. It is the case of the Czech Republic, Slovenia and even Estonia: the high performance of public policy attractiveness lead to an increase of inward FDI performance. On the other side, a decrease in the attractiveness worsened the inward FDI performance, as in the case of Latvia or Slovenia. For Romania, no change is seen in public policy attractiveness, and according to the inward FDI performance, Romania remained on the same place. In this case, the difference between the ranks (lacking of public policy attractiveness but a favorable place as inward FDI performance) can be explained by the fact that market dimension or the favorable geographical position are more important for investors than other factors.

For Hungary, the loss of three positions determined no movement in inward FDI performance. Only Bulgaria loses a place in inward FDI performance, while increasing its public policy attractiveness. But it is no surprise, given the Estonian performances, which deserve the first rank. This decrease cannot be assumed as a worsened situation. The direct relation can be better seen in Figure 1 (the rankings are expressed on the vertical axis, with their decrease evaluated as good performance).



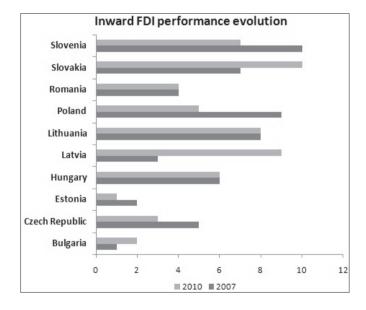


Figure 1: Public policy attractiveness and inward FDI performance evolution in 2007 and 2010

Source: Author's findings

5. Conclusions

In this paper we examined the impact of a country's public policies in the areas of infrastructure, quality of institutions, labor market and taxation on inward FDI flows. Our findings indicate that a direct relation can be assumed between the FDI inflows and the attractiveness derived from public policies instruments. The role of the state

in creating the appropriate framework for attracting FDI remains important, as market forces cannot substitute for the role of governments in this domain.

Improving infrastructure, increasing institutional quality, promoting the flexibility of labor market and keeping taxes at low levels are the main public policies paths recommended for the CEE in order to increase their attractiveness for FDI. But we also must take into account that there is no common path the CEE countries must follow for attracting foreign investments; the combination of public policies depends on already taken measures and on the state of the fact regarding each of the analyzed pillars. There is room for improvement especially in the infrastructure and institutions' quality in the short run. Also, an improvement in the infrastructure is a long-term strategy, as it will also attract more value-added investments.

The main challenge for CEE countries and especially for those on the last places is to strongly pursue the reforms dedicated to improving the business environment. These are equivalent with fighting against corruption and organized crime and increasing transparency in the decision making process. Bulgaria, Romania, Poland, Hungary and Lithuania in particular must adopt measures to increase institutional quality. Also, one of the most recent positions of the EU as regards the investment climate is oriented right toward improving the institutions' quality. EU is committed to provide an open and non-discriminatory investment climate together with protection for investors and investments, a high degree of transparency and a fair and binding dispute settlement (European Commission, 2012). Best practices regarding public policy measures can successfully be adopted from the neighbors, such as the Czech reform of the most burdensome legal acts. An effective tool for increasing the business environment attractiveness is to strongly collaborate with entrepreneurs and investors for solving the major obstacles signaled as impediments in doing business. We also suggest the construction of a specialized institution able to evaluate the impact of the public policy propositions for the business environment and to protect entrepreneurs and investors from the inappropriate application of the laws.

The modernization of the transport infrastructure is a major challenge after years of underinvestment in core areas such as highways, ports and rails. For the transport infrastructure, a useful tool for attracting foreign investors is the establishment of the legal framework and the implementation of public private partnerships. Also, the CEE countries must pursue the development of infrastructure projects using the EU funds; in this respect, special attention must be paid to reducing bureaucracy in the initial part of project requirements and evaluation. Another pillar that must be reformed is the ICT and energy infrastructure. Increasing investments in infrastructure such as improving broadband connections and reforming and liberalizing the energy market to ensure low energy prices and energy security mean a strong basis for a solid growth in the future. The development of telecommunication infrastructure should continue with the effective implementation of e-government and e-procurement services. Also, the possibility of online fee payments means a significant decrease of the

time spent with the payment of the taxes and a significant improvement of the business environment.

The tax competitiveness of the CEE countries worsened during the economic crisis. The result is not satisfactory for investors in countries with low infrastructure endowment, as the literature points to the fact that reduced taxes are often seen as a compensation for underdeveloped infrastructure. An appropriate decision of public policy decision making is to use revenues from taxes for improving infrastructure. Another priority action is to start tackling the high level of taxes, as their initial increase during the crisis was a decision taken for a limited period.

The CEE countries have at their disposal EU funds in order to improve the competitiveness of the labor market through training programs more focused on the specific needs of the market. The EU funds in the 2014-2020 period are more focused on creating jobs, providing professional training or internships, especially for the young people.

A special characteristic of a large part of these measures is their effectiveness even in times of economic crisis: investments in infrastructure create jobs, performing online previous time consuming operations increases the attractiveness of the business climate and could compensate in some degree for an increase in taxes.

Although some of the proposed measures for improving FDI attractiveness are not expensive, such as the reduction of the government's role in regulating and providing a higher freedom for investments and business climate, there are some limitations in implementing such measures. On one hand, CEE countries lack experience in harnessing the capital abundance at their disposal, such the EU funds, and need a longer time for removing bureaucratic obstacles. On the other hand, the political instability that characterized the CEE countries in their first transition years tended to reappear in the economic crisis context, generating instability as regards the economic priorities or tensions due to fast changes of regulations. Another characteristic of these countries is that, often, the long term vision is sacrificed to more short term pressing issues. Therefore, a good part of such measures remain in the hands of the political class and its determination.

References:

- 1. Addison, T. and Heshmati, A., 'The New Global Determinants of FDI Flows to Developing Countries: The Importance of ICT and Democratization', Discussion Paper No. 2003/45, Helsinki: World Institute for Development Economic Research, 2003.
- Bellak, C., Leibrecht, M. and Damijan, J.P., 'Infrastructure Endowment and Corporate Income Taxes as Determinants of Foreign Direct Investment in Central and Eastern European Countries', LICOS Discussion Paper No. 19307, Leuven: LICOS - Centre for Institutions and Economic Performance, 2007.
- 3. Bellak, C., Leibrecht, M. and Stehrer, R., 'The Role of Public Policy in Closing Foreign Direct Investment Gaps: An Empirical Analysis', Working Paper No. 48, Vienna: The Vienna Institute for International Economic Studies, 2008.

- 4. Bellak, C., Leibrecht, M. and Liebensteiner, M., 'Attracting Foreign Direct Investment: The Public Policy Scope for South East European Countries', 2010, Eastern Journal of European Studies, vol. 1, no. 2, pp. 37-53.
- 5. Benacek, V., Gronicki, M., Holland, D. and Sass, M., 'The Determinants and Impact of Foreign Direct Investment in Central and Eastern Europe: A Comparison of Survey and Econometric Evidence', 2000, Transnational Corporations, Journal of United Nations, vol. 9, no. 3, pp. 163-212.
- Bevan, A.A. and Estrin S., 'The Determinants of Foreign Direct Investment into European Transition Economies', 2004, *Journal of Comparative Economics*, vol. 32, no. 4, pp. 775-787.
- Botric, V. and Skuflic, L., 'Main Determinants of Foreign Direct Investment in the Southeast European Countries', 2006, Transition Studies Review, vol. 13, no. 2, pp. 359-377.
- 8. Daude, C. and Stein, E., 'The Quality of Institutions and Foreign Direct Investment', 2007, *Economics and Politics*, vol. 19, no. 3, pp. 317-344.
- 9. Dixit, A., 'Governance, Institutions and Economic Activity', 2009, *American Economic Review*, vol. 99, no. 1, pp. 5-24.
- 10. Dunning, J.H., 'Location and the Multinational Enterprise: A Neglected Factor?', 1998, *Journal of International Business Studies*, vol. 29, no. 1, pp. 45-66.
- 11. Dunning, J.H., 'Institutional Reform, FDI and European Transition Economies', Economics and Management Discussion Papers No. 2004-14, Reading: Henley Business School, 2004.
- 12. Ernst & Young, 'Ernst & Young 's 2010 European Attractiveness Survey: Waking Up to the New Economy', 2010, [Online] available at http://www.eyeim.com/pdf/Ernst%20 &%20Young's%202010%20EAS%20Waking%20up%20to%20the%20new%20economy.pdf, accessed on February 1, 2013.
- 13. European Commission, 'Member States Competitiveness Performance and Policies', COM (2010) 614, 2010, [Online] available at http://ec.europa.eu/enterprise/policies/industrial-competitiveness/industrialpolicy/files/member_states_competitiveness_performance_and_policies_en.pdf, accessed on February 1, 2013.
- 14. European Commission, 'Member States Competitiveness Performance and Policies', COM (2011) 0642, 2011, [Online] available at http://ec.europa.eu/enterprise/policies/industrial-competitiveness/industrial-policy/files/ms_comp_report_2011_en.pdf, accessed on February 1, 2013.
- 15. European Commission, 'Statement of the European Union and the United States on Shared Principles for International Investment', 2012, [Online] available at http://trade.ec.europa.eu/doclib/docs/2012/april/tradoc_149331.pdf, accessed on July 23, 2013.
- 16. Eurostat database, [Online] available at http://epp.eurostat.ec.europa.eu/portal/page/portal/eurostat/home/, accessed on February 1, 2013.
- 17. Fabry, N. and Zeghni, S., 'Inward FDI in Seven Transitional Countries of South-Eastern Europe: A Quest of Institution-based Attractiveness', 2010, Eastern Journal of European Studies, vol. 1, no. 2, pp. 77-91.
- Goodspeed, T., Martinez-Vazquez, J. and Zhang, L., 'Public Policies and FDI Location: Differences between Developing and Developed Countries', International Studies Program Working Paper GDU paper 0910, Andrew Young School of Policy Studies, 2009.

- 19. Gordon, R.H. and Hines, J.R., 'International Taxation', NBER Working Paper No. 8854, Cambridge, M.A.: National Bureau of Economic Research, 2002,
- 20. Gramlich, E.M., 'Infrastructure Investment: A Review Essay', 1994, *Journal of Economic Literature*, vol. 32, no. 3, pp. 1176-1196.
- Groh, A.P. and Wich, M., 'A Composite Measure to Determine a Host Country's Attractiveness for FDI', IESE Business School Working Paper No. 833, Barcelona: IESE, 2009.
- 22. The Heritage Foundation, 'Index of Economic Freedom', [Online] available at http://www.heritage.org/index/explore, accessed on February 1, 2013.
- 23. Karimi, M.S, Yusop, Z. and Siong Hook, L., 'Location Decision for Foreign Direct Investment in ASEAN Countries: A TOPSIS approach', 2009, *International Research Journal of Finance and Economics*, no. 36, pp. 196-207.
- 24. Leibrecht, M. and Riedl, A., 'Taxes and Infrastructure as Determinants of Foreign Direct Investment in Central and Eastern European Countries Revisited: New Evidence from a Spatially Augmented Gravity Model', Discussion Papers SFB International Tax Coordination, 42, Vienna: WU Vienna University of Economics and Business, 2010.
- 25. Madies, T. and Dethier, J.-J., 'Fiscal Competition in Developing Countries: A Survey of the Theoretical and Empirical Literature', The World Bank Policy Research Working Paper Series 5311, 2010.
- 26. Morgan, R.E. and Katsikeas, C.S., 'Theories of International Trade, Foreign Direct Investment and Firm Internationalization: A Critique', 1997, *Management Decision*, vol. 35, no. 1, pp. 68-78.
- 27. Nonnemberg, M.B. and Mendonça, M., 'The Determinants of Foreign Direct Investment in Developing Countries', Anais do XXXII Encontro Nacional de Economia No. 061, ANPEC, 2004.
- 28. Olson, D.L., 'Comparison of Weights in TOPSIS Models', 2004, Mathematical and Computer Modelling: An International Journal, vol. 40, no. 7-8, pp. 721-727.
- 29. Pantelidis, P. and Nikolopoulos, E., 'FDI Attractiveness in Greece', 2008, *International Advances in Economic Research*, vol. 14, no. 1, pp. 90-100.
- 30. Popovici, O.C and Călin, A.C., 'Attractiveness of Public Policies for FDI in Central and Eastern European Countries', 2012, *The Annals of the University of Oradea. Economic Sciences*, vol. XXI, nr. 1, pp. 61-67.
- 31. Porter, M.E. and Schwab, K., *The Global Competitiveness Report* 2008-2009, Geneva: World Economic Forum, 2008.
- 32. Porter, M.E. and Schwab, K., *The Global Competitiveness Report 2010-2011'*, Geneva: World Economic Forum, 2010.
- 33. Suder, K.J. and Sohn, C.H., 'FDI in Central and Eastern European Countries: Impact to Neighbors and Regional Agglomeration Effect', 2010, [Online] available at http://www.apeaweb.org/confer/bus11/papers/Sohn-Suder.pdf, accessed on February 1, 2013.
- 34. The Romanian Fiscal Council, 'Raport Anual pe anul 2011. Evoluții și perspective macroeconomice și bugetare' (Annual Report on 2011. Macroeconomic and Budgetary Perspectives and Evolutions), 2012, [Online] available at http://www.consiliulfiscal.ro/Raport2011.pdf, accessed on February 1, 2013.
- 35. United Nations Conference on Trade and Development, 'World Investment Report 2010. Investing in a Low-carbon Economy', 2010, [Online] available at http://unctad.org/en/docs/wir2010_en.pdf, accessed on February 1, 2013.

- 36. Vasyechko, O., 'A Review of FDI Theories: An Application for Transition Economies', 2012, *International Research Journal of Finance and Economics*, no. 89, pp. 118-137.
- 37. Vienna Institute for International Economic Studies, www.wiiw.ac.at.
- 38. Wilhelms, S.K.S. and Witter, M.S.D., 'Foreign Direct Investment and its Determinants in Emerging Economies' African Economic Policy, Paper Discussion, Paper Number 9, Washington, D.C.: United States Agency for International Development, 1998.