*International Research Journal of Social Sciences*_________________________________ ISSN 2319–3565
Vol. **2(7),** 1-7, July **(2013)** *Int. Res. J. Social Sci.*

Effective Tool for Improving the Central and Eastern European Countries Attractiveness for Foreign Direct Investment: Reducing Corruption

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Available online at: www.isca.in
Received 12th June 2013, revised 22nd June 2013, accepted 8th July 2013

Abstract

Improving institutions' quality is one of the main tool at hand for governments in order to attract foreign direct investments (FDI). The present paper draws on the location decision for FDI. The analysis starts from identifying the major obstacles for doing business in five Central and Eastern European (CEE) countries as compared with the main FDI inflows recipients in the European Union (EU). Corruption appears to be one of the main problems faced by the businessmen in the CEE countries, while it is poorly detected among the obstacles for the businesses in Western European (WE) countries. Therefore, we will identify if corruption is also problematic for foreign investors. For this aim, an empirical model of the determinants of inward FDI stock is derived. Our main result is that corruption has a strong negative impact on FDI. Hence, for CEE countries, reducing corruption level is a suitable strategy for improving business environment and attracting foreign investments.

Keywords: foreign direct investment, corruption, Central and Eastern European Countries, European Union, panel analysis.

Introduction

The location importance in choosing a host country for investment is strongly emphasized in the OLI paradigm of foreign investments, developed by John Dunning[1]. Countries must improve their location advantages in order to attract investors. Today, location comprises not only the natural resources a country can offer, but also the more attractive market conditions, stronger protection for investors, better infrastructure – either energy infrastructure, transport or telecommunications infrastructure – factors known in the literature as created resources[2].

As concern the EU, the most recent action as regards FDI is the joint statement established with the USA on the seven bilateral principles for the international investment environment[3]. The statement reflects the EU desire in improving the institutions' quality. There are seven principles that the EU and USA agrees to enforce: i. Open and non-discriminatory investment climates, ii. A level playing field for both the state-owned entities and the commercial enterprises, iii. Strong protection for investors and investments, including protection against discriminatory treatment. iv. Fair and binding dispute settlement, v. Robust transparency and public participation rules, vi. Responsible business conduct, vii. Narrowly-tailored reviews of national security considerations.

Still, when talking about FDI, Europe is divided into two regions: the Western European (WE) countries and the Central and Eastern European (CEE) countries, also known as transition economies. Not even the EU accession process contributed much at reducing the foreign investment gaps between the two blocks of countries. In full economic expansion, the inward FDI were discouraged by the economic and financial crisis.

The most recent Ernst and Young's European attractiveness survey[4] indicate that the United Kingdom (UK), Germany and France are the top three countries with the highest number of FDI projects in 2011. Poland is the only CEE country in top ten, ranking the 8th. Western Europe remain the most attractive region for foreign investors (29% of respondents ranked Western Europe as their favourite location for investments), very closely followed by Northern Europe. Eastern Europe comes the third, with 22% of the investors' location preferences, while Central Europe ranks the fourth, being attractive to only 16% of the investors.

In the next three years, the investment attractiveness landscape will not suffer many changes, as Germany remains in the top of the investors' preferences with a large number of business leaders in favour of its attractiveness potential (35% of respondents), UK ranks the third (10% of respondents) and France the fifth (4% of respondents). For the CEE countries, 10% of the investors grant Poland as the most attractive country in Europe for investments. Therefore, Poland places the second in this attractiveness top, followed by Romania and the Czech Republic on the 6th and 7th places (3% of respondents).

Ernst and Young's signals that now, when choosing location, investors search for market opportunity (factor considered relevant for 39% of the investors questioned in the Ernst and Young's survey) and the stability and transparency of the

political, legal and regulatory environment (36%) are now the most critical factors for investors when choosing locations.

Moreover, in the last decade, the six countries in CEE that are not yet part of the Euro area (Bulgaria, the Czech Republic, Hungary, Poland and Romania) never had inward FDI stocks higher than 13 per cent of the inward FDI stocks of the five main recipients of foreign investments (Belgium, France, Germany, the Netherlands and United Kingdom), as can be seen in figure-1.

The share of the FDI stocks of the mentioned CEE countries in the WE countries FDI stocks grew almost annually since 2000 (except for the year 2003, when they saw a minor drop) with a maximum of 12.2 per cent in 2010. In 2011, it dropped again.

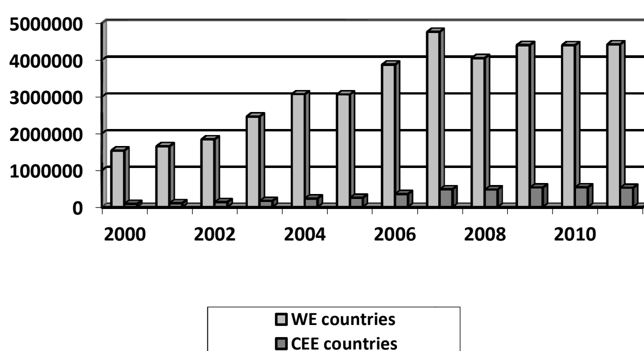

Figure-1
Inward FDI stocks in WE and CEE countries between 2000-2011, million USD
Source: UNCTAD database

The question is how the CEE countries can accelerate their efforts in attracting foreign investors, due to their known positive impact on the economic growth. The present paper purpose is to answer this question, at least partially.

Therefore, we will analyse the FDI determinants in five CEE countries: Bulgaria, the Czech Republic, Hungary, Poland and Romania. We chose these countries as they are among the newest EU member states and, as compared to other states (Estonia, Slovakia or Slovenia) are not yet members of the Euro area.
We begin by identifying the major obstacles for doing business in each of the analysed CEE countries. We start our analysis by assessing the main obstacles that the investors and businessmen already present on the market are facing. We further extend our comparison to the WE countries, also known as the largest destinations for FDI in the last period. We try to identify if there are differences between the two groups of countries and how these differences has evolved during the crisis. We will answer two questions: what are the strengths of the WE countries and what are the lessons for the CEE countries? After we established the main problems faced by the already present investors, we will identify if these are also problematic factors for foreign investors too.

In this respect, we use different editions of the Global Competitiveness Report[5,6] that provides insights on the most stringent problems of the business environment in each country based on the surveys applied to business leaders.

Analysis of the major obstacles for doing business in the CEE countries: For each country, each problem faced by the business environment receives a score (as found in the Global Competitiveness report, representing the businessmen rankings of the most problematic factors). The highest the score, the more compelling is the problem.

Bureaucracy remains the main problem of the CEE business environment, as can be seen in table-1. The high level of bureaucracy is seen as the major obstacle for businesses both before and after the crisis. The Czech Republic and Poland are the most affected by bureaucracy, as their individual score is above the average score of the five countries. Corruption emerged as a problem in the latter period, ranking second in the top ten major obstacles for doing business. The first two factors' position in the ranking is very close. The Czech Republic and Romania are from far the most affected by corruption, while Poland scores the best.

Tax regulations keep its place in top three even after the crisis, denoting that fiscal instability and opacity are an impediment to the smooth running of the business and are translated in supplementary costs for a business. Not least, the difficult access to financing impedes investors in their activity. This problematic factor knew the most dramatic ascension during the crisis, climbing from the 8th place on the 4th in only five years.

Table 2 allows an overview of the business environment situation before the crisis. Bureaucracy represented the main problem even before the crisis, while corruptions came on the fourth place.

During the crisis, only Hungary, the Czech Republic and barely Romania improved their business environment. If we look at the total score, after the crisis Romania and Poland are the countries with the highest scores, indicating the most problematic environment for doing business.

Analysis of the major obstacles for doing business in the WE countries: The ranking of the major obstacles for doing business in the WE countries is completely different than that of the CEE countries. In 2012, restrictive labour regulations, the high level of tax rates and difficult access to financing were the main issues investors accused for impeding their businesses, as can be seen in table 3.

Table-1
The major obstacles for doing business in CEE countries in 2012

	Problem	Bulgaria	Czech Rep.	Hungary	Poland	Romania	Average score
1	Bureaucracy	12.9	15.1	10.5	13.4	12.8	12.94
2	Corruption	13.1	19.1	9.8	2.6	17.4	12.4
3	Tax regulations	5.2	9.2	11.7	20.4	7.6	10.82
4	Access to financing	8.4	8.1	13.7	10.3	12.1	10.52
5	Tax rates	3.5	8.4	12.2	11.5	13.9	9.9
6	Policy instability	8.1	6.6	14.5	2.1	5.4	7.34
7	Labour regulations	4.7	7.6	2.8	13.6	3.3	6.4
8	Infrastructure	11	2.4	2.3	8.2	7.1	6.2
9	Educated workforce	8.6	4	3.4	3.2	4.2	4.68
10	Inflation	6.1	0.8	4.3	2.7	7.1	4.2
	Total score	**81.6**	**81.3**	**85.2**	**88**	**90.9**	-

Source: The Global Competitiveness Report 2012-2013 and author's calculations

Table-2
The major obstacles for doing business in CEE countries in 2008

	Problem	Bulgaria	Czech Rep.	Hungary	Poland	Romania	Average score
1	Bureaucracy	14	17	12.1	14.6	10.8	13.7
2	Tax regulations	1.2	7.4	17.7	14.9	11.2	10.48
3	Tax rates	2.8	11.6	16.4	6.8	12.8	10.08
4	Corruption	15.7	13.3	6.7	5.9	8.4	10
5	Infrastructure	10.2	5.9	3.5	12.8	9.7	8.42
6	Educated workforce	11.2	9.1	6.1	4.6	9.2	8.04
7	Policy instability	3.6	3.3	13.1	7	13.2	8.04
8	Access to financing	6.6	4.9	7.5	7.2	6.8	6.6
9	Inflation	10.2	2.6	6.8	2.3	5.5	5.48
10	Labour regulations	3.5	9.2	1.4	9.3	3.4	5.36
	Total score	**79**	**84.3**	**91.3**	**85.4**	**91**	-

Source: The Global Competitiveness Report 2008-2009 and author's calculations

Table-3
The major obstacles for doing business in WE countries in 2012

	Problem	Germany	France	Netherlands	Belgium	UK	Average sore
1	Labour regulations	16.7	20.6	15.2	14.6	6.4	14.70
2	Tax rates	12	14.5	5.1	21.1	15.3	13.60
3	Access to financing	7.9	16	19.9	7.7	15.3	13.36
4	Tax regulations	18.1	13	3.3	15	10.2	11.92
5	Bureaucracy	7.7	7.5	11.9	14.3	8.6	10.00
6	Educated workforce	12.7	3.1	7.8	4.1	7.9	7.12
7	Policy instability	7.3	4.7	9.1	7.7	5.5	6.86
8	Inflation	2.3	1.8	3.5	4.5	5.8	3.58
9	Infrastructure	2.4	1.8	1.7	1.2	6.9	2.80
10	Corruption	0.8	0.8	0.4	0.3	0.4	0.54

Source: The Global Competitiveness Report 2012-2013 and author's calculations

Labour regulations and tax rates were also before the crisis in the top three problems an investor must deal with. The WE countries barely succeeded in reducing these problems for a smoother development of businesses. Still, in the two tables analysing the WE situation, corruption is on the last place in the businessmen obstacles list.

Table-4
Major obstacles for doing business in WE countries in 2008

	Problem	Germany	France	Netherlands	Belgium	UK	Average score
1	Labour regulations	22.8	26.7	20.4	19.2	8	19.42
2	Tax regulations	23.4	17.5	9.5	11.1	13.3	14.96
3	Tax rates	17.7	17.2	8.8	17.3	11.4	14.48
4	Bureaucracy	12.2	10.8	17.8	12.2	11.5	12.90
5	Educated workforce	9.5	5.4	12.6	9.8	9.9	9.44
6	Access to financing	6.8	9.9	4.2	6.1	9.2	7.24
7	Infrastructure	1.6	1.7	15.3	2.1	6	5.34
8	Inflation	1.3	2.3	5	6.3	9.2	4.82
9	Policy instability	1.9	4.9	1.9	6.7	4.8	4.04
10	Corruption	0.1	0.1	0	1	1.7	0.58

Source: The Global Competitiveness Report 2008-2009 and author's calculations

Differences and similarities between CEE and WE countries: There are some major differences as regards the major obstacles factors between the two regions. Corruption, the second most disturbing issue for doing business in the CEE countries is the least important in the WE countries. Bureaucracy comes only on the fourth or fifth place. Likewise, restrictive labour regulations rise more troubles for the hard EU core than for the new EU member states. The inadequately educated workforce is seen more problematic in the Western region than in the Eastern one.

Tax regulations seem to have the same importance for the business environment in the two regions. The difficult access to financing had the same ascension for the WE countries, climbing from the 6th to the third place during the economic crisis.

If the top three major obstacles are almost similar for the two regions in 2008 (tax regulations and tax rates are considered the second and the third most major obstacles for both regions), the ranking is completely changed after the crisis. We can draw the conclusion that the economic crisis confrontation revealed the weaknesses of each of the regions.

For concluding this part of our analysis, corruption seems to have a strong impact on the businessmen located in CEE countries, while it is poorly detected among the obstacles for the businessmen in WE countries. Therefore, we will identify if corruption have a strong impact on foreign investors in CEE countries. Based on this finding, we will have the possibility to establish the chances of CEE countries for attracting investors if efforts for reducing corruption are enforced.

The rest of the paper is organised as follows: we present a brief literature review related to the impact of corruption on FDI, emphasizing its effects on the transition economies. The next part comprises the methodology we use for assessing the relationship between corruption and foreign investment. The part of results and discussions develops on the issues arising from our econometric model and finally the last part concludes.

Literature review: Smarzynska and Wei[7] focus their investigation paper on the factors that affect the investor's choice of entry mode in the Eastern Europe and the Former Soviet Union during 1989-1995. Their main conclusion is that corruption is a major impediment for new investment from the United States firms. The evidence is more valuable as the authors use two corruption indexes, in order to cover as well as possible the transition economies. Wei[8] finds a substantially reduction of FDI flows in countries with high level of corruption. The foreign investors' aversion to corruption is also confirmed by the study of Habib and Zurawicki[9], who carry out a complex analysis using FDI flows from seven source countries and 89 host countries.

Also, Abed and Davoodi[10] emphasize that transition countries with low levels of corruption are more attractive for investors. Still, when searching for the impact of structural reforms, they find that for the analysed period (1994-1998), enforcing structural reforms is more important than the efforts in reducing corruption.

Wei[11] finds a negative relationship between FDI and both the tax rate and corruption, but emphasizes the stronger negative impact on foreign investors of a higher level of corruption than a rise in the tax level.

Al-Sadig[12] enlarges the analysis regarding the impact of corruption on FDI and analyse 117 countries over the period 1984–2004 using two different econometric methods and a wider set of control variables. The author finds that, when using cross-sectional regressions, there appears a significant negative effect of corruption on FDI inflows, but when using panel data methods, the host country's institutional quality becomes more important for investors than corruption. Still, this conclusion does not abolish the negative impact of corruption; instead, the results point to the quality of institutions as a whole. Busse and Hefeker[13] find an insignificant, although negative, effect of corruption on 83 developing countries during 1984-2003; yet, the authors also

uses a large fan of indicators assessing the quality of institutions.

For Goodspeed et al.[14], corruption is an appropriate proxy for measuring good governance. The authors detect a higher sensitivity at the corruption levels for investors in developing countries, while the indicator is not significant for developed economies.

Methodology

In this study, we investigate the impact of corruption on FDI in five CEE countries: Bulgaria, the Czech Republic, Hungary, Poland and Romania. In this respect, we perform a panel data analysis of the mentioned EU member states during 2001-2011.

The dependent variable is the inward FDI stock expressed in US Dollars at current prices and current exchange rates in millions. Data are taken from the UNCTAD database[15]. Among corruption, as independent variables we also employ several factors provided in the literature as significant FDI determinants: the level of GDP per capita, the nominal compensation of employees and the tax level.

We employ the Corruption Perception Index as provided by Transparency International[16] in order to assess for the level of corruption. Still, as a higher value of the corruption index computed by Transparency International indicates a low level of corruption, we expect a positive sign.

The level of GDP per capita is as used as a proxy for the purchasing power of the local consumers and also for assessing the level of development. The indicator is frequently used in the literature as a determinant for FDI 17-20. We expect a positive sign on the estimated coefficient. We employ the GDP at current market prices per head of population as provided by Ameco, the European Commission's Directorate General for Economic and Financial Affairs (DG ECFIN) database[21].

Another independent variable we use is the Nominal compensation per employee in Euros, provided again by the Ameco database[21]. We use this determinant as the CEE countries are well-known among investors for their competitive advantage as regards the low level of wages. The attractiveness of low labour cost for foreign investors is strongly emphasized in the literature, although using different proxies, as in the studies of Demekas et al.[20]; Bellak, Leibrecht and Riedl[22]; Bellak and Leibrecht[23]; Carstensen and Toubal[24]; Jha et al. 2013[19] and so on. We expect a negative sign, as a higher compensation of employees means higher labour costs and therefore deter investors.

Finally, we test if the tax level is important for investors that choose CEE countries as investment location. We use the effective average tax rate as provided by the European Commission in the report regarding the “Taxation Trends in the European Union”[25]. Studies usually find a strong negative relation between FDI and tax burden, such as: Bellak and Leibrecht[26]; Bellak, Leibrecht and Damijan[27]; Bellak, Leibrecht and Riedl[22]. Still, there are contradictory findings: Lahrèche-Révil[28] result points to insignificant effect of effective average tax rates on FDI. Therefore, we normally expect a negative significant impact, but we do not exclude the apparition of divergent results.

We employ panel data analysis[29]. The model used is the following one:

$$\ln(FDIST) = a1*\ln(CPI) + a2*\ln(GDPC) + a3*\ln(NC) + a4*\ln(TAX) + e$$

where FDIST represents inward FDI stock, CPI is the corruption perception index, GDPC is the GDP level per capita, NC is the nominal compensation per employee and TAX is the effective average tax rate.

Table 5 provides the means, medians and standard deviation for all variables used together, together with the minimum and maximum values.

Results and Discussion

Table 6 presents the results of our econometric analysis.

Only CPI, GDPC and NC were are found to be significant at 5per cent level.

The corruption index shows an elasticity of almost 1.2 implying that efforts in assuring less corrupt environment by one per cent increases FDI by about 1.2 per cent. Our result is therefore in line with the studies that certify a negative relationship between the level of corruption and FDI.

Per capita GDP remains a significant determinant for FDI, showing that the market potential still represents an attractive factor for investors. A higher per capita GDP means more FDI, indicating a positive relationship. The result is in line with the studies mentioned above.

As expected, we obtain a negative relationship between FDI and the nominal compensation per employee. Our result shows the preference for low labour costs when investing in CEE countries. The coefficient on NC suggests an elasticity of about -1.14.

Although we found a negative relationship between the effective average tax rate and FDI stocks, the result is not significant for our countries and period sample.

Table-5
Descriptive statistics for the pool of the 5 CEE countries

	Mean	Median	Maximum	Minimum	Std. Dev.
Log (FDIST)	0.010903	0.012019	0.502503	-0.335310	0.203107
Log (CPI)	-0.004640	-0.001396	0.157858	-0.150262	0.072752
Log (GDPC)	0.019622	0.026120	0.218404	-0.281363	0.105648
Log (NC)	0.011836	0.028957	0.314066	-0.337846	0.117272
Log (TAX)	0.044418	0.000000	0.421213	-0.197487	0.115112

Source: authors' analysis

Table-6
Estimation Results

Variable	Coefficient	Std. Error	t-Statistic	Prob.
Log(CPI)	1.184307	0.369045	3.209111	0.0025
Log(GDPC)	0.961344	0.476311	2.018311	0.0495
Log(NC)	-1.138163	0.429412	-2.650515	0.0111

Source: authors' analysis

Conclusion

The main conclusion of the empirical analysis is that the CEE countries have a powerful tool at hand for increasing the FDI level, even in time of crisis. Reducing the corruption level is important for creating a more transparent environment for doing business and improving stability and predictability.

The era of low labour cost for attracting foreign investors is not over yet for the CEE countries, as our empirical analysis shows. Still, the re-location of labour-intensive activities in countries with lower wages is not a total new trend for these transition economies. No further than 2011, the Nokia production plant in Romania announced its relocation in Asia due to a strategy of cost reducing. If the CEE countries will no longer be able to count on the low level of labour cost for attracting new investors, reducing corruption level is a suitable strategy for improving business environment.

Acknowledgements

The work of Călin Adrian Cantemir was co-financed from the European Social Fund through Sectoral Operational Programme Human Resources Development 2007-2013; project number POSDRU/107/1.5/S/77213 "Ph.D. for a career in interdisciplinary economic research at the European standards".

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