Foreign Direct Investment in Central and Eastern Euriopean Countries: Do Institutions matter?

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Abstract

For the most part, the attempts in the literature to explain the uneven allocation of FDIs in the transition economies are descriptive or case studies. Only recently some papers deal with the FDI activity in the transition economies using empirical analysis. Most of these works stress the role of he market as the most significant factors for the attraction of FDI in the transition economies and only discuss the role of institutions. This paper attempts to empirically verify the argument that institutional factors such as civil and political rights and corruption are critical in explaining the behaviour of foreign direct investment inflows in the transition economies during the 1990's. We use a panel data-set for ten countries of the CEE region for the period 1997-2000. The weak civil and political rights status in many countries of the region prevents them from becoming attractive locations for FDI. A transparent business environment, in these countries is a prerequisite to attract FDI from the members of the EU and the US primarily in low tech sectors.

1. Introduction

The dramatic rise in international production in recent years stands out as one of the most decisive factors in globalization of economic activity. Foreign Direct Investment (FDI) has been growing very rapidly while at the same time international trade ceased being the principal mechanism linking national economies. Now, it is rather the inter-linkages of trade and FDI that influence the economic growth and welfare of countries in a global environment, which undergoes continuous change. In this sense, FDI inflow is viewed as a measure of the extent to which a country or a region is integrating into the world economy.

Though FDI increases continuously during the last decade its growth is unevenly distributed between the economic regions of the world. Recent statistics (UNCTAD, 2001), show that 80% of total world FDI inflow is accounted for by the "*Triad*" (EU-Japan-USA) which also hosts 90% of the world's largest (in terms of foreign assets) multinationals. In fact, the top-30 host countries account for the 95% of the total world FDI inflows and 90% of the stocks accounted for by.

As far as the Central and Eastern Europe (CEE) is concerned the regions attracts a very small share of the world FDI. Finally, uneven distribution of the world FDI is also present in the CEE region. The countries of Central Europe and Baltic states have received more FDI per capita than Southern-Eastern Europe and the CIS countries (Sengenberger, 2002).

The literature has tried so far to explain this uneven allocation of the FDI to the transition economies. Most of the studies to explain the uneven distribution of FDIs are descriptive or case studies (i.e. Glaiser and Atanasova, 1998; Tuselmann, 1999; Pournarakis, 2001; Sengenberger, 2002; Barry, 2002). Only recently some new papers deal with the FDI activity in the transition economies using empirical analysis (Tondel, 2001; Willem te Velde, 2001). Most of these works stress the role of he market as the most significant factors for the attraction of FDI in the transition economies and only discuss the role of institutions. This paper tries to empirically verify the argument that institutional factors such as civil and political rights and corruption are critical in explaining the behaviour of the foreign direct investment inflows in the transition economies during the 1990's. The paper uses a panel data-set for ten countries of the region for the period 1997-2000.

The paper is organized as follows: in the second part it presents the theoretical framework, the third describes the data, the fourth presents and discusses the empirical findings and the fifth part offers some concluding remarks.

2. Theoretical Framework

The CEE countries, having lagged behind in this race for FDI attraction, are called upon as a region to agree on an investment regime, to incorporate FDI more fully into their development strategies. The governments of the CEE are now eager for foreign investors. Their deteriorated economic conditions during the early 1990s and the limited financial resources have led them to pursue the restructuring of their economies through the attraction of foreign direct investment. Foreign companies are expected to provide financial and economic assistance through the following channels. First the multinational companies will contribute to the upgrading competitiveness through innovation in products, production processes and organizational structures. Second, foreign direct investment will provide short and

long term relief from their tremendous financial problems. Finally, foreign direct investment will help the society to reduce the social tensions related to low income, job losses and poverty.

According to Dunning (1993) that purse investment abroad MNEs could be classified in four categories: market seekers, natural resources seekers, efficiency seekers and strategic asset or capability seekers. It would seem that it is mainly market seekers that seek investment in Central and Eastern European countries. The presence of cheap labor and the possession of natural resources do not seem to be potentially the main poles of attraction of FDI in the CEE countries at the present time (Pournarakis, 2001). The importance of these factors is decreasing over time. The role of primary products in industrial activity is diminishing and the sophisticated production techniques and new technology lead the MNEs to shift of emphasis to skills rather than low labor costs.

If we use as reference framework for the theoretical consideration of FDI activity Dunning's OLI eclectic paradigm (Dunning, 1993), it is no surprise that FDI inflow in the Balkans part of the CEE is extremely low compared to the Central European countries. The CEE countries exhibit some location advantages from the supply side such as labour costs, corporate taxation and labour skills. From the demand side they offer some other location characteristics such as market size and growth and good social infrastructure. What are, therefore, the main location factors that distinguish the good from the bad performers?

The literature on the FDI in CEE countries has recognized the market size as the most significant factor affecting the decision for FDI. There is widespread argument that most CEE bound FDI has been "market seeking" (Tuselmann, 1999; Tondel, 2001; Willem te Velde, 2001; Sengenberger, 2002) rather than reflecting an attempt to integrate CEE – production into the EU production networks (Barry, 2002). Countries of the region with fast increasing capita income have a potential to attract the market seekers. The evolution of per capita income explains partially why countries of Central Europe have received more FDI per capita than Southern-Eastern Europe countries. Furthermore, in terms of market size, the Southern European countries are in a disadvantageous position in more than one ways. Aside from the fact that the size of their markets is small, both in terms of population and purchasing power, the region suffers from the syndrome of fragmentation rather than unification. Rivalry and instability create distances between the countries of the area and make cross–border FDI activity all the more difficult. This strategic behaviour by the MNEs explains also why the FDI inflows in the CEE countries have been in low- tech sectors. High- tech sectors need high investment and more secure environment to guaranty future profits. Furthermore, since most of the MNEs were "market seekers", the per capita income of the host CEE countries was relatively low, and the high tech products are high income-elastic, the entrance in low-tech sectors was the most appropriate.

However, good market performance does not exclusively depend on market liberalisation and privatization. The enabling market setting demands, among others, an appropriate kind and degree of regulation, institutions, effective law enforcement and qualitative public services (Sengenberger, 2002). Thus, excessive bureaucracies, delays in privatisation, unclear and arbitrarily enforced rules, monopoly control of real sector (Glaister and Atanasova, 1998), the lack of tripartite social dialogue, insufficient industrial relations (Sengenberger, 2002) may increase high investment barriers even for MNEs which see a market opportunity (Ekholm and Markusen, 2002). The above deficiencies depend on the level of the political rights and the civil

liberties prevail in the host country. A necessary but not sufficient condition is the political system, which offers to the voter the chance to make a free choice among the candidates and to endow with real power.

Important for the business decision are also the civil liberties such as the freedom of expression, the association and organization rights and the rule of law and human rights. For example if there are no free trade unions and the collective bargaining is ineffective the feelings of the job insecurity run high and the FDI performance worsens in the country. Empirical research, as Sengenberger (2002) notes, has shown that this feeling is present in the CEE countries. Furthermore, the independence of the judiciary, the prevalence of the rule of law in civil and criminal matters, the treatment of population under law with equality, and other issues that are related such as corruption, mafia, etc, may influence significantly the decision of an MNE to enter into a new market. Thus, for example, even though Bulgaria has established the most liberal legal framework for foreign investors, the endemic nature of the organized crime in business and the official bureaucracy result to lag behind most of the other CCE countries in terms of FDI (Glaister and Attanasova, 1998). Concluding the foregoing discussion, we posit the following hypothesis:

Hypothesis: The more sound the political and social institutions in a country are, the higher the FDI inflow.

3. Data

Following the foregoing discussion and the available data, we use the following indices as measures for the variables defined previously.

Foreign Direct Investment: we use the data for foreign direct investment inflows published by UNCTAD for the period 1997-2000 and FDI inflow per capita.

Political rights: This index published by Freedom House, it is constructed using the survey methodology. The index ranges from one to seven. In countries which receive a rating of one the elections are free and fair; those who are elected rule the country, the opposition plays significant role in the political system, and the citizens enjoy self determination. The countries, which receive a rating of two, are less free and factors such as political corruption, political discrimination against minorities, foreign or military influence may be present. In countries, which receive a rating of three, four or five, the presence of military involvement, the unfair elections, the one party dominance and the civil war may harm civilians' freedom.

Civil Liberties: This index published by Freedom House, is constructed using the survey methodology. The index ranges from one to seven. Countries, which receive a rating of one are distinguished by an equitable system of rule of law, are free of corruption, and enjoy free economic activity. Countries, which receive a rating of two exhibit some deficiencies in civil liberties but could be still characterized as free. Finally, countries, which receive ratings of three, four or five, present significant deficiencies in terms of free association, limitations in business activity imposed either by the governmental institutions or non-governmental agents (i.e. terrorists, mafia).

Corruption: We use the Transparency International's Corruption Perception Index (CPI) as a measure of corruption. This is a composite index based on international surveys of the perception business people and country experts have regarding corruption in over fifty countries. The results of individual surveys are standardized i.e. are expressed in standard deviations from the mean. The index is the simple

average of these standardized values and it is a continuous scale from 0 representing an absolutely corrupted state to 10 representing a completely clean one. Our sample consists of data for the period 1998-2000.

Free- press: It is variable that measures the degree to which each country of our sample permits the free flow of information. Freedom House makes the survey for the construction of the free press index. We used the data reported on the Annual Survey of Press Freedom. The free press is the sum of ratings for the news delivery system as functioning under the country's laws and administrative decisions; the degree of political influence over the content of news media; and the economic influences on media content (i.e. government funding, corruption). The free press index ranges from zero to one hundred, zero indicating the completely free press and one hundred the non- free press. The corresponding variable is denoted as PRESS in our data set.

Per Capita Gross National Income: We use the data (Atlas method in current US dollars) reported in World Bank Economic Indicators for the years 1997-2000.

Country Risk: is composite index, which includes the political risk rating, the financial risk rating and the economic risk rating. It is published by *International Country Risk Guide* and it is uniquely placed to evaluate economic, political and financial risk and warn of major changes—even when the popular opinion points in different directions. The higher the value of the index the lower the country risk. Our sample consists of data for the years 1998 and 1999.

Economic risk: It is an index published by *International Country Risk Guide* and it is placed to evaluate economic risk of country. It deals with issues such as government stability, socioeconomic conditions, investment profile, internal conflict, external conflict, corruption, military in politics, religious tensions, law and order, ethnic tensions, democratic accountability, and bureaucracy quality. Our sample consists of data for the years 1998 and 1999.

Inflation: The annual inflation rate for the country as reported in World Bank Economic Indicators for the period 1997-2000.

4. Empirical Results and discussion

Based on the discussion of the previous section, and the logarithmic transformation of variables FDI, GNI., and PRESS suggested by the scatter matrix, we derive equation (1), which is the model to be estimated:

$$LFDI_{ij} = a + b_1 LGNI_{ij} + b_2 INST_{ij} \qquad (1)$$

where $LFDI_{ij}$ is the logarithm of the per capita foreign direct investment inflows for the country i and the year j, $LGNI_{ij}$ the logarithm of the per capita gross national income and $INST_{ij}$ stands for the institutional variables used in our paper to capture the impact on the foreign direct investment. We use alternatively the CPI_{ij}, the corruption perception index, the $LPRESS_{ij}$, the logarithm of the press freedom index, the $POLIT_{ij}$, the index for the political rights, the $CIVIL_{ij}$, the index for the civil rights, the $ECRISK_{ij}$, the index for the economic risk of the country and $COURISK_{ij}$, the composite index for the total risk of the country. The expected sign of $LGNI_{ij}$, as suggested by the discussion of the section 2, is positive and the expected sign of the institutional variables depend on the measurement scale.

Table 1 offers the descriptive statistics and table 2 the correlation coefficients. The regressions results are reported in tables 3 and 4. Table 3 evaluates a series of pair-wise relationships between LFDI and several measures of the individual determinants. As shown in table 2 the correlation coefficients are relatively high and therefore it is useful to establish the unconditional relationships between each and LFDI. Individually, only LGDI explains almost 60% of the overall variation, while the individual contribution of the other determinants is around 40%. Only CPI and POLIT explain only one fourth of the total variation. The coefficients are strongly significant. Testing for fixed effect specification, that is whether the heterogeneity between countries can be captured by difference in the constant term, otherwise equation (1) is the adequate one by assuming that all parameters are equal for the ten-cross-country units. If the assumption is correct there are no behavioural differences across countries and time and for estimation and inferences purposes the data can be treated as one sample of 39 observations. In order to test for common or different intercepts in individual countries we applied the least squares dummy variable model (Griffiths, Hill, and Judge, 1993) The estimated F-statistic suggests that the null hypothesis, the constant terms of the individual countries, are equal, could not be rejected at p=0.01. Thus the constant term is the same across countries and we proceed by considering the data as one sample.

Table 4 presents the estimates of the LFDI equation. We estimated seven different modes of the eq.(1). We used as control variable the logarithm of the per capita GNI and we test for the overall significance in explaining the variation of the institutional variables. Only the variables LPRESS, the logarithm of press freedom and the CIVIL an index for the development of civil rights are statistically significant. The signs of the estimated coefficients are the expected ones from the theory. Thus, the lower the LPRESS, that is the higher the press freedom in a country, the higher the foreign direct investment inflow. Also, the coefficient of the CIVIL is negative which means the lower the index CIVIL, the more protected the civil rights in the country, the higher the foreign direct investment inflow. Since, the variables CIVIL and LPRESS are strongly correlated with the other institutional variables we may note that their significance in the explanation of the variation of LFDI reflects also the impact of the other variables, especially of corruption, economic risk and country risk whose coefficients are statistically insignificant but their sign is the expected one. We may argue that the relative few observations for these indices contributed to the low significance. Thus, as more data will be provided in the future, research will be able to test for their impact as it is suggested by theory.

Our empirical findings suggest that the quality of institutions does matter in attracting foreign direct investment. Since the partial regression coefficient of the LPRESS variable connects two logarithms a reduction of the press freedom index by one percentage (that is one standard deviation) as a result of the improvement in the factors that are considered as civil rights such as independent judiciary, free trade unions, effective collective bargaining, etc, will increase the foreign direct investment inflow by 0.69%. Thus, if Albania adopts measures that adjusts the press freedom to the levels of Hungary, that is a reduction in the PRESS index by 46.5% it will gain an increase in per capita foreign direct inflow by 32% and comparing to the last available year of 42 millions US dollars the increase will be 13.4 millions US dollars. The partial regression coefficient for CIVIL means that improvement in civil rights reflected in reduction of the CIVIL index by almost one standard deviation is associated with an increase in the per capita foreign direct investment by 0,25%, due to the semi-logarithmic equation (1). Thus, for example, if Bulgaria improves the civil

rights performance to the levels of Hungary, then it will see the per capita foreign direct investment inflows to increase by more than 300 thousands US dollars comparing to the 2000 figure, *ceteris paribus*. Finally, the partial regression coefficient of the LGNI, as reported in all models of table 4, is strongly statistically significant with the correct sign. Our empirical findings verify the previous literature that foreign direct investment entered into this country partly to exploit the local markets. In all modes of equation (1) as reported in table 4, the coefficient is higher than 0.75 suggesting that an increase of the per capita GNI by one percent will increase the attraction of per capita foreign direct investment by more than 0.75%. We must note here that per capita GNI could be considered either as a proxy indicator of the level of wages in the country or as a proxy of the market demand. Since, the sign of the corresponding coefficient is positive in all cases we could assume that it reflects the market demand and not the wage rate.

Our empirical findings for the central and eastern European countries and for the period 1997-2000, first, verify the notion in international business that the local market, size and its growth, is significant factor of the foreign direct investment decision. Second, our findings support the arguments previously set in literature about the role of the institutional factors on foreign direct investment (Glaister and Atanasova, 1998; Tuselmann, 1999; Sengenberger, 2002).

However, one must be very cautious in these findings. The problem of data availability is also present in this paper. Since our data span is narrow, only four years for each country, future research will be able to produce more robust results by including other factors that are missing here. Concluding, we must note that note that although the problems with data are present our findings is an initial hint for the policy orientation of these countries if they want to catch up their western neighbors. The application of policies that aim at the stabilization of the political environment, the implementation of an efficient judiciary and bureaucratic system, the openness to the rest of the world will help them to increase the foreign capital inflow, to create new jobs and finally increase their income.

5. Conclusion

Our discussion suggests that a great deal of ground-work needed in order for the countries of the CEE to increase their share of FDI activity. Of the traditional factors of FDI location mentioned above, only one, the market, is available. This is the strong point of the region in this respect that can be taken advantage of. However, the weak civil and political rights status in many countries of the region prevents them from becoming attractive locations for FDI.

The conclusion that comes out of the above discussion is that if there is a role for the host country government it surely lies in the creation of the necessary preconditions for FDI inflow. The core part of this economic policy must be the development of political and civil institutions together with an efficient bureaucratic system. Emphasis should be given not only to the attraction of the MNEs, since this is part of the picture, but also to the business "after-care programmes " for them and this certainly includes the adoption of efficient institutions (Williams, 1997). Since however, some of these countries will be members of the EU in the near future we expect that the EU membership is a strong guaranty for a transparent legal environment (Barry, 2002). By adopting the EU institutional framework, establishing thus, a transparent business environment, these countries will be able to attract FDI

not only for the other members of the EU but also from US and not only in low tech sectors but also in high tech.

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Table 1
Descriptive Statistics

Variable	Mean	Max	Min	s.d.
COR	3.95	6	2.30	1.04
PRESS	40.07	75	19	15.78
ECRISK	30.54	36.7	18.5	6.17
FDI	143.29	614.22	7.81	132.44
COURISK	71.86	99	52	13.82
CIVIL	2.8	5	2	1.04
POLIT	1.93	4	1	1.1
GNI	3643	10070	400	2700.58
INFL	45.72	949	-1	149.49

Table 2
Correlation Matrix

Variable	COR	PRESS	ECRISK	FDI	COURISK	CIVIL	POLIT	GNI
COR								
PRESS	-.74**							
ECRISK	.45	-.37						
FDI	.32	-.48**	.43					
COURISK	.62*	-.74**	.67	.44				
CIVIL	-.69**	.81**	-.28	-.42**	-.65**			
POLIT	-.77**	.86**	-.15	-.36*	-.66**	.86**		
GNI	.83**	-.52**	.65**	.41**	.604*	-.52**	-.48**	
INFL	-.25	0.7	-.78**	-.15	-.36	.01	.02	-.2

** correlation is significant at the 0.01 level
* correlation is significant at the 0.05 level

Table 3
Single OLS Estimations
Dependent variable LFDI

Variables	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Constant	2.664 (0.000)	10.650 (0.000)	0.457 (0.663)	0.662 (0.568)	6.341 (0.000)	5.444 (0.000)	-2.696 (0.007)
COR	0.517 (0.002)						
LPRESS		-1.701 (0.000)					
ECRISK			0.132 (0.001)				
COURISK				0.0542 (0.003)			
CIVIL					-0.656 (0.000)		
POLIT						-0.488 (0.001)	
LGNI							0.916 (0.000)
R2-adj	0.26	0.40	0.44	0.41	0.39	0.23	0.59
F-stat	11.39**	26.77**	15.86**	12.28**	25.85**	12.49**	58.79**
Observations	29	39	19	16	39	39	39

Note: p-values in parenthesis. *** statistically significant at the 0.01 level

Table 4
OLS Estimations
Dependent variable LFDI

Variables	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Constant	-3.657 (0.023)	1.303 (0.537)	-3.370 (0.032)	-3.351 (0.079)	-0.578 (0.686)	-1.739 (0.156)	-2.696 (0.007)
COR	-0.241 (0.259)						
LPRESS		-0.694 (0.040)					
ECRISK			0.0277 (0.516)				
COURISK				0.015 (0.457)			
CIVIL					-0.252 (0.060)		
POLIT						-0.145 (0.209)	
LGNI	1.174 (0.000)	0.726 (0.000)	0.893 (0.005)	0.872 (0.017)	0.736 (0.000)	0.829 (0.000)	0.916 (0.000)
R2-adj	0.56	0.63	0.63	0.58	0.63	0.60	0.59
F-stat	19.21**	34.37**	17.34**	12.34**	33.43**	30.70**	58.79**
Observations	29	39	19	16	39	39	39

Note: p-values in parenthesis. *** statistically significant at the 0.01 level