

**Creation of Foreign Direct Investment Markets in
Central and Eastern Europe***

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Abstract

This paper examines the creation of foreign direct investment markets in eleven post-socialist countries of Central and Eastern Europe since 1989 to 2000. Previous research suggests that economic conditions, which promise highest returns and minimal risk, will attract FDI flows. In contrast to this investor-centered perspective on efficiency calculations, I argue that FDI is a social process, constrained and enabled by both the investors' *and* hosts' actions and their institutional underpinnings. Using pooled cross-sectional time series analysis, I find that economic characteristics and risk ratings contribute little to explaining the FDI trends in Central and Eastern Europe. Instead, post-socialist states' decisions to sell large state monopolies to foreigners significantly shape the FDI trajectories across countries over time, creating turning points in the series. In light of this finding, I conduct a discrete time event history analysis estimating the hazard of states to start selling strategic sectors to foreign investors. I find that the states' decisions, converging over time, are not pressured by economic necessity but dependent upon the historically institutionalized conditions of economic organization and the efforts to protect domestic ownership in the newly established states. This study provides quantitative evidence for the role of institutions in creating markets and highlights the fundamentally social character of economic processes.

Two major processes of social change have merited substantial attention of scholars in the past decade: globalization and transition from state-socialism. Much has been written and speculated about the complexity and significance of each of these two transformations. It is surprising, however, that we know very little about how they shape each other. How are places undergoing social, economic and political transformation affected by global flows of commodities, capital and culture? And how, in turn, do local transitions shape large-scale globalization forces?

This paper deals with the intersection of the global and local transformations by examining the establishment of international capital markets in the transition countries of Central and Eastern Europe in the first decade after 1989. Specifically, I focus on foreign direct investment (FDI)¹, advocated by prominent international organizations as an engine in the transition from state socialism and a powerful force for integration of this region into the global economy (IMF 1997, UNCTAD 1998). Analysts suggest that, “without massive inflows of foreign capital, successful transition [from planned to market economies] in Central and Eastern Europe is unlikely” (Schmidt 1995: 268). As a catalyst in the transition, FDI would affect the balance of payments and employment. Bringing financial, managerial, and technological resources, foreign investors would also induce corporate restructuring of formerly state-owned enterprises.

While the international community emphasizes the key role of FDI for market transition, empirical evidence shows that foreign investment flows into Central and Eastern

¹ Official IMF and OECD statistics define FDI flows between countries as a sum of initial investments (in capital and in-kind) and any subsequent investments in a given year from the investor country to a host country. FDI refers to business transactions and does not include portfolio foreign investments in domestic capital markets or contributions (such as aid or grants) from foreign governments. At the organizational level, FDI is the investment made by a foreign investor company with the objective of obtaining a lasting interest and an active role in a host company. Following the OECD definition, an investment is considered FDI if it represents 10% or more of a company’s equity. The lasting interest implies the existence of a long-term relationship between the investor and the host and a significant degree of influence by an investor on the management of a company in a host country. FDI can take the form of foreign acquisition, in which the investor obtains an equity share in an existing company in a host country. On the other hand, FDI as greenfield investment, involves the investor’s establishment of a new company, wholly foreign-owned or in partnership with investors from a host country (Dunning and Rojec 1993).

Europe have been consistently *smaller* than flows into the developing countries of Asia and Latin America (UNCTAD 1998). In addition, individual Central and East European countries have attracted substantially *different* FDI levels over time. What explains these trends? What determines FDI flows into the transition countries of Central and Eastern Europe?²

Empirically puzzling, FDI in Central and Eastern Europe is also a strategic research site because the analysis contributes and connects two sets of literature: economic transformation after state-socialism and global macro-economic exchange. Previous research on the transition from state-socialism offers detailed national case analyses or qualitative comparisons of a few countries (usually Hungary, Poland, Czech Republic and/or Russia). Generally, these studies trace different “postsocialist pathways” (Stark and Bruszt 1998) or a variety of capitalisms after post-socialism (Eyal et al. 1998). Establishing that transitions are “uncertain” (Buroway and Verdery 1997), however, transition studies have not yet quantified potential cross-national over time patterns in creation of markets after state-socialism.

In the literature on global macro-economic processes, FDI has been mostly studied from an economic perspective, which assumes that economic outcomes are determined by investors’ profit maximization. This research can be complemented by a sociological perspective on embeddedness of economic processes in social, political and cultural relations (DiMaggio and Zukin 1990). Sociologists also propose that any study of global exchange be “sensitive to local variations and to how agency, interest, and resistance mediate in the relationship between globalization causes and outcomes” (Guillen 2001: 235). Since the fall of state-socialism often resulted in nationalism and assertion of national identities (Calhoun 1993, Brubaker 1996, Caratan 1997, Verdery 1998), the local responses to global pressures merit special attention in the analysis of FDI flows into Central and Eastern Europe.

² In this paper, Central and Eastern Europe is a geo-political term which refers to eleven former state socialist countries: Bulgaria, Croatia, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, Slovakia, and Slovenia. Due to unstable political situation and incomplete data, this analysis omits Albania, Bosnia, FR Macedonia, and Yugoslavia.

In what follows, I first describe the national trajectories and flows of FDI in Central and Eastern Europe since 1989 and review the capitalism-by-design and path-dependency theories of economic transformation after state-socialism, privileging the creation of new and persistence of old institutions, respectively. Second, I examine the existing literature on FDI determinants, which focuses on the influence of economic potential of host countries, assuming that foreign investors independently choose those locations which maximize profitability. In contrast to this investor-centered perspective, I argue that FDI is a social process, constrained and enabled by both the investors' *and* hosts' actions and their institutional underpinnings. I construct a data set of eleven transition countries from 1990-2000 and conduct a pooled cross-sectional time series analysis to test the explanatory power of the two perspectives. I find that economic potential and country risk indicators contribute little to explaining the FDI trends in Central and Eastern Europe. Instead, post-socialist states' decisions to sell large state monopolies to foreigners significantly shape the FDI trajectories across countries over time, creating turning points in the series. In light of this finding, I conduct a discrete time event history analysis that estimates the factors affecting the hazard of states to sell large state-monopolies to foreign investors. I find that the states' decisions, converging over time, are dependent upon the historically institutionalized conditions for economic organization and mediated by efforts to protect domestic ownership in the newly established states.

FDI Trajectories in the Transition Countries of Central and Eastern Europe

Analysis of FDI in Central and Eastern Europe provides an excellent opportunity to trace economic trajectories since their origins. Central and Eastern Europe attracted virtually no foreign investment before the fall of the Berlin wall in 1989 due to the closed economic and political regimes in these former state-socialist countries. The stock of investment in the

Central and East European region represented 0.1% of the total world's investment stock.

After 1989, foreign capital began to flow into the region, but the initial regional inflows were minimal compared to the global FDI. The median per capita inflow for the sample of eleven countries studied here was only \$2 per capita in 1990. With FDI expanding globally, 1995 marked the year of the first substantial surge of foreign investment into the Central and East European region; flows grew by 80 percent over the prior year, amounting to 4.3% of total world FDI. In 1995, the average inflow into the eleven countries studied here was \$108 per capita. After 1989, FDI flows into individual Central and East European countries show a general growth trend with a leveling off by 2000 (Figure 1). While the average FDI inflow per capita is \$8 in 1990, flows increase to \$191 in 1998 (the year of the highest inflows) and then subside slightly to \$185 in 2000.

Despite a general growth trend, individual country trajectories exemplify a variety of paths, differing in the timing of the initial increase in FDI inflows (from early to late developers), and in size and frequency of the peaks in the series (from more to less steady series). Hungary, for example, has a most noticeable increase in FDI inflows right after 1989. With a median inflow at \$2 per capita across the eleven countries in 1990, Hungary attracted \$30. Regional analysts suggest that the main reason for this increase is that Hungary opened itself to FDI through their privatization policy. Hungarians decided to sell their state-owned enterprises to whoever paid most for them, domestic or foreign, in order to manage their high external debt (Bruszt 1992, Stark and Bruszt 1998, King 2001). However, after a sharp initial increase and a substantial surge in FDI in 1995, inflows into Hungary have stagnated at the regional 2000 average level.

In Poland, on the other hand, we see a relatively linear FDI trajectory with inflows increasing slowly but consistently, hence no peaks and valleys characteristic of most other countries. The shape of the Bulgarian FDI trajectory is similar to the Polish trend, although it

takes several more years for the FDI inflow to start growing in Bulgaria, and the absolute levels remain under the regional average. A few other countries, like Romania and Lithuania, also stagnate at the bottom for several years before they show any growth in FDI, albeit non-steady. How can knowledge about the transitions from state-socialism help us explain these economic trajectories?

Existing studies propose two different accounts of social change after communism, capitalism-by-design and path-dependent transformation. The capitalism-by-design perspective suggests that the economic transition occurs by establishing new, market, institutions proven to work in the western capitalism (Sachs 1989, Sachs and Lipton 1990, Blanchard et al. 1991, Kosolowski 1992). This perspective proposes that capitalist institutions should be replicated according to Western experts' blueprints and they assume both *tabula rasa* conditions after the fall of socialism as well as an ability to design market institutions by blueprint at a systemic level (for critiques see Stark 1992, Murrell 1992).

On the other hand, path-dependent transformation perspective focuses on the ways in which structures inherited from before and during the state-socialist period influence the transformation processes, so that transformations occur out of the ruins of the former regime and often result in reproduction rather than social change (Seleny 1991, Stark 1992, Szelenyi and Kostello 1996, Stark and Bruszt 1998). While this perspective renounces an institutional vacuum after the fall of socialism assumed by the capitalism-by-design theories, its focus on institutional path dependency limits the understanding of significant change.

Recently Eyal et al. (1998) proposed a third alternative of "trajectory adjustment" which combines the capitalism-by-design and path-dependent perspectives to argue that "evolutionary adjustment to new challenges and the path-dependent transformation of previous institutions/behaviors occur simultaneously" (Eyal et al. 1998:8). Applying their theory to the role of various elites in building capitalisms in Hungary, Czech Republic and

Poland, the authors suggest that new institutions shape the dispositions of individuals who in turn contest and transform those institutions, which leads to individual trajectory adjustment.

Theories of transition after state-socialism inform the present study on creation of FDI markets in Central and Eastern Europe. All three perspectives underscore the role of institutions - new, old or both – for social transformations. I follow in this vein to suggest that institutional arrangements significantly determine the FDI trajectories into Central and Eastern Europe but I also examine the role of politics and culture in structuring economic exchange (Fligstein 1990, 1996, 2001). After placing this study in its specific regional context, I now turn to review the existing research on the foreign direct investment determinants, which helps to identify the factors that influence this particular aspect of economic exchange.

Previous Research on FDI Determinants: Economic Rationality of Investors

Most prior research on FDI is premised on the utilitarian assumption that investors select investment sites that maximize profitability. In order to account for the patterns of macroeconomic exchange, this approach suggests that host country characteristics provide information about potential returns on investment. Profit-maximizing investors then choose those countries whose characteristics promise the highest returns. While adopting this broad assumption, particular empirical studies have operationally distinguished different economic and political country characteristics as determinants of investment profitability and FDI flows.

Most research on FDI determinants examines the effects of economic opportunities generated by the demand and costs associated with the supply at the investment site. Market potential is commonly measured by the size and growth of GDP and sometimes by size and growth of population, overurbanization or government consumption (Dunning 1994 and

Crenshaw 1991, respectively). Key cost factors include the availability of labor, as reflected in the unemployment rate, labor costs and inflation, development of infrastructure of the host country as well as the skill and education levels of the work force (Agarwal 1980, Schneider and Frey 1985, Dunning 1994). Overall, this research suggests that FDI will flow to countries with economic indicators that increase revenues and human and physical capital indicators that promote productivity and decrease costs.

Previous research also finds that political stability of host countries influences FDI. Political instability provides a hostile environment for foreign corporations, discouraging their investment (Bennett and Green 1972). Thus, executives report that political instability is the most important variable influencing their foreign investment decisions, aside from market potential (Basi 1963, Ahargoni 1966). While early research focused on developing countries, Welfens (1993) suggests that in transition economies like Central and Eastern Europe, a set of credible political institutions, and stabilizing monetary and fiscal policies are also needed to attract FDI. Consequently, frequency of changes in a country's legal policies and bureaucratic/administrative barriers decisively shape investment choices (OECD 1994). However, discussions of political instability are often speculative and do not quantify the effects of political, fiscal and legal conditions on FDI flows in Central and Eastern Europe. Some evidence also discredits the importance of political stability as a determinant of FDI. Studying FDI in the motor vehicle industry from 1948-65, Bollen and Jones (1982) found that the effect of political instability was much weaker than suspected. Although previous research yielded mixed findings, political instability may be a strong deterrent of FDI flows in Central and Eastern Europe. The collapse of state socialism created volatility in public policy and in some cases civil disorder and war. In light of this, political instability would have a negative effect on FDI inflows.

In sum, prior research³ on the determinants of FDI flows studies this economic process primarily from the perspective of economically rational investors. This research treats foreign investment markets as *atomistic* and investment decisions as unilateral. In contrast, I propose to understand FDI as a relational social process. This perspective suggests two amendments to the existing FDI studies. First, understanding FDI as a relational process prompts us to incorporate in our analyses the influence of both investors' and hosts' actions in structuring FDI. By definition, foreign investment is an economic exchange between two parties, investor and host. Consequently, the determinants of FDI must likewise be traced to both parties' actions. Second, understanding economic action as a social process implies a focus on its institutional underpinnings, as highlighted by the transition theories. Specifically, I propose to examine how institutions *constrain* economic processes by mediating and channeling economic outcomes, as well as how institutions *enable* economic processes because socially constructed rationalities constitute economic strategies.

FDI Determinants: Institutional Underpinnings of Investors' and Hosts' Actions

My focus on institutions implies a concern with “how social choices are shaped, mediated, and channeled by institutional arrangements” (DiMaggio and Powell, 1991: 2).⁴ I understand institutions as “socially constructed, routine-reproduced (*ceteris paribus*) rule systems” (Jepperson 1991: 149). These self-reproducing patterns can range from, on the one hand, formal organizations to, on the other hand, intangible taken-for-granted rules impinging on thought and action. In the first sense, institutions are arenas where economic behavior

³ At least one study does not approach FDI as a problem of gain and risk calculation of potential investors. London and Ross (1995) adopt a theory of global capitalism, which contends that developed countries seek more docile and less costly Third World labor. The authors argue that labor control and labor cost are key determinants of FDI, net of level of development. Although grounded in a conflict rather than rational choice perspective, this research nevertheless similarly predicts that national development and political stability would encourage FDI, using the same types of variables than the traditional studies.

⁴ Interest in institutions and institutional effects dates back to social science classics (e.g. Durkheim, Veblen and Commons) and has been renewed since the mid 1970s with an emergence of a variety of theoretical neo-institutional perspectives: organizational (Powell and DiMaggio 1991), historical (Steinmo et al. 1992), rational choice (North 1990, Knight 1992). See also collections of Brinton and Nee 1998; Campbell and Pedersen 2001.

occurs and they impose external constraints on such behavior. In the second sense, institutions constitute actors' preferences, and render certain strategies of action more plausible than others.

Specifically, for a study of economic processes, such as foreign investment, studying the role of institutions means investigating: 1. formal institutions and how economic action is shaped in the process by which states construct markets (Polanyi 1944), and 2. institutional path-dependence and how historically developed patterns of social organization in the economy shape the self-sustaining conditions in the present, including, but not limited to, the economic alternatives that actors envision plausible (Biggart and Guillen 1999).

State Institutions

A central precept of sociological perspectives on economic action is that markets do not emerge naturally or inevitably. Much research substantiates the role of states in creating capitalisms and organizing economic activity (Evans, Rueschemeyer, and Skocpol 1985; Campbell, Hollingsworth, and Lindberg 1991; Hollingsworth, Schmitter, and Streeck 1994; Evans 1995; Hollingsworth and Boyer 1997). This line of research suggests that the role of post-socialist states will be crucial in explaining the variations in FDI trajectories.

States can become involved in the economic processes more or less directly in the following three ways. First, in an indirect way states can establish those non-economic institutions that will facilitate economic transformation. As recent transition research proposes, far from hindering it, the establishment of democratic institutions in post-socialism assisted the marketization (Bartlett 1997). Second and more directly, states can be involved in the actual economic processes. In the transformation of property rights, post-socialist states institutionalize conditions for market exchange by developing privatization schemas and deciding when and how to transfer the ownership rights of state assets (Bruszt 1992). In terms

of FDI, privatizing state assets would provide opportunities for investment to foreigners. Finally, in the most direct way states can act as economic agents and negotiate the sale of state-property with foreign investors directly. This might be especially the case for large state monopolies involving substantial amounts of money as well as control.

Institutional Path-Dependence

An institutional perspective would also examine how pre-existing institutional arrangements create path-dependent contexts for future economic action (e.g. Seleny 1991, Stark 1992). In fact, most of the literature on the post-socialist transformations recognizes some role of path-dependency (Eyal et al. 1998). It is important to note, however, that the conception of path dependency advocated here does not condemn actors to simple repetition or retrogression. It is unrealistic to expect that actors are rigorously locked into certain paths. Nevertheless, the established shared understandings of how the world works and established institutions that cement these understandings, will leave a mark on the creation of historically subsequent institutional forms, even when the conditions that created initial institutions evaporate.

In terms of foreign investment, institutional path-dependence would suggest that the decisions to involve foreign investment in national economies *after* state-socialism might be dependent on the social organization of the economy, and the place of foreign participation in it, *during* state-socialism. In closed political regimes in pre-1989 Central and Eastern Europe, there was formally no place for foreign participation in the socialist economies, since private property was either non-existent or marginal (Eyal et al. 1998: 4). In practice, however, foreign economic actors did establish differential presence, albeit minor, in individual countries. In Hungary, for example, foreigners participated in the domestic economy through special forms of joint ownership with Hungarians since 1974 (Joint Venture Association

1999). Similar organizational arrangements also happened in Poland before 1989 (Dunning and Rojec 1993).

In path dependent ways, pre-existing institutional arrangements will influence the economic activity in the future. This implies that the higher extent of experiences with foreign investment and concomitant institutions in place before the fall of state-socialism, the more will the inclusion of foreign investors in national economies appear as a plausible and accessible economic alternative to pursue in the reorganization to market in Central and Eastern Europe after 1989. In addition, institutions created in the Central and East European states exposed to different forms of foreign participation in domestic economies before 1989, would be likely self-sustaining, even when the conditions change as drastically as they did with the fall of socialism.

Culture and Politics

Economic transformation and decisions to include or exclude foreign investment in the privatization of state-owned enterprises need to be also viewed in the context of nation-building efforts. After 1989 several of the Central and East European countries not only started with a transition to democracy and capitalism but were simultaneously establishing an identity of a nation-state. This creation of an imagined community inherently limited and sovereign (Anderson 1983) reinforced the idea of a self-government whose highest priority is to preserve and protect the interests of the national community and what defines its uniqueness. When it came to foreign investment, this could take a form of resistance to “contamination” and “taking over efforts” through foreign ownership of domestic land and firms, voiced among political elites as well as in public opinion. In fact, citizens of newly established states in Central and Eastern Europe were twice as likely to agree that foreigners should be prohibited from owning land in their countries and that the import of foreign

products should be limited in order to protect the national economy, compared to citizens from the Western states (ISSP National Identity Survey 1995). In sum, the prevalence of nationalist arguments about domestic ownership protection needs to be acknowledged as a force that mediates in the process of economic liberalization in the Central and Eastern Europe.

Data and Analysis of Cross-National FDI Flows 1990-2000

An institutional analysis of FDI flows would argue for the importance of supra-organizational factors that enable and constrain individual organizations, which cannot be reduced to a simple aggregation of organizations' attributes and motives, and can thus be only revealed at a supra-organizational level of analysis. Moreover, economic indicators proposed as FDI determinants by traditional economic research are attributes of countries. For these reasons, the units of analysis in this study are nation-states.

Longitudinal FDI inflows to Central and Eastern Europe

Specifically, the dependent variable in this analysis is the per capita foreign direct investment flow into a particular country in a given year. The dataset includes annual observations of the following countries: Bulgaria, Czech Republic, Hungary, Poland, Slovenia (1990-2000), Romania, Slovakia (1991-2000), Croatia, Estonia, Latvia, and Lithuania (1992-2000). To help establish causal priority, the predictors are measured at time $t-1$, which limits the sample to 101 observations.

As a measure of yearly FDI flows into a host country, the outcome can have positive or negative values (signaling dis-investment) although there are no negative values in my sample. Since the dependent variable is clustered at zero, it is logged to reduce skewness

and heterogeneity of error variance. Because of error correlation within countries across time, the analysis will also include a lagged dependent variable.

The variables used in the analysis are listed in Table 1.

[Table 1 about here]

Economic Potential

GDP per capita: Most commonly used as a general indicator of economic performance of a country, GDP per capita also captures the size of the potential market for a foreign investor. Therefore, *higher GDP levels will be associated with higher FDI inflows*.

GDP growth: A growing domestic economy signals economic potential and future revenues for potential foreign investors. Hence, *GDP growth is positively related to FDI inflows*.

Country Credit Rating: A country's general risk of default on investment is an often-consulted measure by potential investors. It includes not only economic potential for revenues, but also evaluations of general investment climate and thus provides an overall assessment of country risk. For this analysis I use the Institutional Investor Credit Ratings, which correlate strongly with the Euromoney ratings, both used widely among the investment professionals. Institutional Investor Credit Ratings range from 0 to 100 with 100 representing those countries with the least chance of default. Based on the profit maximization thesis, *the higher the assessed risk and lower Credit Rating Score, the lower the FDI inflow*.

Role of States

Democratization Score: Measuring democratization in Central and Eastern Europe overtime is constrained by the data availability. In this study I use one democratization indicator, i.e. a measure of political processes derived by Freedomhouse. High scores on the *Freedomhouse index* indicate low levels of fairness and freedom at national executive and legislative elections, a weak development of multiparty systems, and low participation in the political process. For simplicity, I reverse this index, so that low values indicate less democratization. If democratization facilitates marketization, *higher democratization scores will be associated with higher FDI levels.*

Private Sector Share in GDP: The pace of privatization can be captured by the changes in the size of the private sector. A larger private sector signals that more state property was privatized and this provided opportunities for foreign investment. Thus, *higher percent of private sector share in GDP will be positively associated with FDI inflow.*

Direct Sale to Foreigners: If states directly engage in the economic activity, they negotiate sales of strategic state-owned monopolies to foreigners. Qualitative evidence shows that these strategic sectors most often include banks, telecommunications and utilities. States' decisions to start selling these sectors signals an important shift in state's official attitudes toward foreign investment and would thus represent a significant turning point in the longitudinal FDI inflow into a country. It follows, then, that *years when and after post-socialist states sell banks, telecommunications or utilities to foreign owners should show generally increased FDI levels.*

Model Specification: Fixed Effects Regression

To investigate the determinants of FDI across countries and overtime, we need to pool the individual country time series cross-sectionally. Pooling creates correlations in the data due to country-specific effects. Such clustering would yield coefficient standard errors smaller than those obtained for independent data. To address this concern, the regression models correct for potential bias by fitting fixed effects for each country and fits a lagged term to account for time dependencies. Regression results for FDI inflows are reported in Table 2.

[Table 2 about here]

Because observations are time and section dependent, I a priori suspect heteroscedasticity or dependence of regression error variance. When errors are heteroscedastic, the estimator remains unbiased but becomes inefficient which renders the usual procedures for hypotheses testing no longer appropriate. To adjust for the inefficiency, Long and Ervin (2000) recommend that in small samples ($N < 250$) HC3 correction be made to regression errors, rather than the commonly used Huber-White correction. Hence, I use the HC3 correction in all the models.

Results

Model 1 is the baseline model for predicting FDI flows in Central and Eastern Europe over a ten-year period including only country-specific fixed effects, lagged term and a variable that controls for the propensity of foreign investors to invest in the region. A relatively high R-square of .842 suggests that much of the variation in the FDI trajectories in

Central and Eastern Europe is due to time dependencies in the series and characteristics idiosyncratic to particular nation-states.

Models 2 and 3 evaluate the impact of economic factors, most commonly investigated as determinants of FDI. Controlling for country specific effects, GDP per capita, GDP growth and Country Credit Rating do not affect significantly the FDI inflow overtime. Since Country Credit Rating includes information on GDP and GDP growth, these cannot be combined in a single model.

Model 4 tests for the role of states in economic liberalization. The regression coefficients show that establishment of democratic institutions and the extent of privatization in a country do not have significant positive effect on FDI inflows, signaling perhaps that democratization does not necessarily promote actual market exchanges and that establishment of property rights regimes by itself does not generate conditions for emergence of foreign direct investment markets in post-socialist states.

Model 5 tests the impact of direct state intervention in economic processes. Specifically, it tests how yearly FDI flows into countries change after a state's first sale of strategic (and in Western economies, highly regulated) sectors, such as banks, telecommunications or utilities. The results show that direct state involvement has a very substantial consequence for creation of FDI markets in post-socialist states. After the first large state sale to foreign owners, FDI inflows generally increase by 87 percent. The model also shows that after the first sale, not only the mean inflows shift but also the stickiness in the series becomes qualitatively different. While before the first sale, the yearly dependency is high (lagged FDI inflow coefficient is positive and significant), after the first sale, dependence between yearly observations is less, and the series becomes more volatile. Collectively, the indicators of state involvement contribute to a better fit of the model than the economic and risk factors, yielding R-square of .862. Also, the BIC (Bayesian

Information Criterion) statistic is lower for Model 5 than the others, indicating that this is the better model.

To test the robustness of the state involvement in marketization effect, Model 6 includes the institutional variables together with the country economic potential predictors. The impact of state sale of strategic monopolies to foreigners remains a significant and even more powerful predictor of FDI inflows into the eleven Central and East European countries in the first decade after the fall of socialism. Sensitivity analyses including models with different specifications of economic factors (such as inflation, unemployment, account balance, government balance) additionally point to the robustness of the state effect.

Determinants of State Privatizations to Foreigners

Since the state decisions to sell large monopolies to foreigners seem to be the most influential determinant of FDI trajectories in Central and Eastern Europe, it would be important to investigate what influences the timing of these decisions. I propose that the historically institutionalized conditions for economic organization and nation building efforts in the newly established states are crucial factors. However, since many studies of post-socialist transformation argue for the importance of economic conditions in determining the policy outcomes, I will also test how the extent indebtedness, balance of payments and general indicators of economic development in post-socialist countries might influence the decisions of states to sell large monopolies.

Specifically, the outcome for this discrete time event history (Allison 1982) model is the hazard for post-socialist economies to sell large state monopolies after 1992, which is the first year when data for all the countries is available. (None of the countries in the analysis sells before 1992). The models also include a measure of time dependence, to investigate whether the hazard to sell significantly varies with time.

The variables for this part of the analysis are presented in Table 3.

[Table 3 about here]

Institutional Path-Dependence

Initial FDI Stock: Path dependence arguments suggest that historically institutionalized organization of economy will have an impact on the future operation of markets. Those countries, where foreigners have historically participated in the economy will open more readily to foreign investment in the future. In other words, the higher extent of experiences with foreign investment before the fall of state-socialism will make the inclusion of foreign investors in national economies a more plausible and accessible economic alternative to pursue in the reorganization to market in Central and Eastern Europe after 1989. Thus, *the higher the FDI stock accumulated during the state socialism, the earlier the decisions to privatize to foreigners in the post-socialist period.*

Nationalism

Newly established states: Economic activity is mediated by a larger political context. Decisions to sell to foreigners are likely to be resisted where political discourse and actions are focused on nation building efforts. This suggests that *being a newly established state will delay the decisions to privatize to foreigners.*

Economic Necessity

Based on case studies, researchers argue that FDI privatization policy is related to initial economic conditions in post-socialist states, whereas high foreign debt would induce policy makers to open domestic economies to foreign capital. This reasoning suggests that *higher*

foreign debt as percent of GDP should increase the probability for states to sell their assets earlier. Likewise, countries might decide to sell in order to make up for deficits in account or general government balances, or because they are facing low GDP or GDP growth. Thus, lower account and government balance and lower GDP growth should increase the probability of states to sell.

Results of Discrete Time Event History Analysis

I performed the logistic regression and estimated the probability of state sale of large monopolies to foreigners. The results are reported in Table 4.

[Table 4 about here]

As the models show, both FDI stock in 1992 and whether a country is a newly established state contribute significantly to the timing of the decision to sell strategic sectors to foreigners and the effects are in the hypothesized directions, while none of the tested economic indicators seem to be consequential. It is also important to note that the time effect is significant and positive indicating that as the years pass, the states are more likely to decide to sell their large state monopolies. It is possible that the states feel pressured to institute neoliberalism by the prominent international organizations (such as IMF, World Bank or the United Nations) or from the European Union to which all of the states in the sample have applied for membership (Meyer et al. 1997, Campbell and Pedersen 2001).

Discussion

This paper examines sources of foreign direct investment in Central and Eastern Europe, using longitudinal data for eleven Central and East European countries. Studying the

determinants of FDI over time allows us to identify the factors, which lead some countries to establish strong connections to transnational corporations, and others to remain less tightly integrated into the world economy. The empirical findings of this study provide support for the institutional underpinnings of macroeconomic processes and for examining the actions of both investors *and* hosts in structuring the economic globalization. Strong effects of the direct state's interventions in the economy shaped by the historically institutionalized patterns of economic organization and culture and politics of nationalism point to limitations of previous studies emphasizing the economic country characteristics and risk ratings as key FDI determinants.

The analysis in this paper also provides quantitative evidence for the capitalism-by-design and path-dependency theories of post-socialist transformation. In terms of the capitalism-by-design approach, the findings of this study suggest that building new formal institutions such as democratic order and property rights is generally not consequential for the actual liberalization of these economies with respect to foreign investment. What matters for shaping the FDI inflow is the states' direct intervention in the economic processes. In sum, the post-socialist states acting as economic agents importantly mediate the market processes, while mere establishment of new democratic institutions and property-rights regimes is less important. This is consistent with an established strand of research finding a discrepancy (or decoupling) between formal policies and actual practice (Meyer and Rowan 1977, Calavita 1992, Meyer et al. 1997, Bandelj 2000). It is also consistent with the research documenting the pervasiveness of informality in restructuring in Central and Eastern Europe (Borocz 2000, King 2001).

In terms of path-dependency theories, this study provides quantitative evidence for the influence of institutions and practices established before and during state-socialism on the post state-socialist period. Alternatives that economic actors envision possible are predicated

upon their historical experiences and concomitant institutions. In particular, the choices that the states make to attract foreign investment and liberalize the post-socialist economies are shaped by the extent of the experience with foreign investment before 1992 and mediated by the political pressure of the nation-building discourse in the newly established states. Qualitative evidence also suggests that the post-socialist states' decisions about foreign investment are influenced by the broader international community, which promotes neoliberalism, and by the European Union, which makes economic liberalization a condition for the EU accession. Except for Croatia, all of the countries included in this study are partaking in the EU enlargement negotiations, hence this transnational force could very well have an impact on the national economic decisions regarding foreign investment.

In sum, the FDI inflows into the transition countries of Central and Eastern Europe are influenced not only by the interest of foreign investors but also (and crucially) by the decisions of domestic state actors. While previous research emphasizes the importance of establishing new institutions (either by a Western blueprint, or in a path-dependent manner) that facilitate market exchange, this study points to a more basic role of the states in creating markets, whereby the state is an economic actor. Overall, tracing the national FDI trajectories in Central and Eastern Europe since 1989 provides insights into the emergence of markets in post-socialist countries, highlighting the role of states, culture and politics, and thus a fundamentally social character of economic processes.

REFERENCES

- Agarwal, Jamuna P. 1980. "Determinants of Foreign Direct Investment: A Survey." *Welwirtschaftliches Archiv* 116: 739-773.
- Aharoni, Yair. 1966. *The Foreign Investment Decision Process*. Cambridge, Mass.: Harvard Graduate School of Business.
- Allison, Paul. 1982. "Discrete-Time Methods for the Analysis of Event Histories." *Sociological Methodology* 13: 61-98.
- Alter, Rolf. 1994. "Investing in Eastern Europe: Catalyst for Transition". *OECD Observer* 186: 28-32.
- Alter, Rolf and Frederic Wehrle. 1993. "Foreign Direct Investment in Central and Eastern Europe: An Assessment of the Current Situation." *Intereconomics* May/June.
- Anderson, Benedict. 1983. *Imagined Communities: Reflections on the Origin and Spread of Nationalism*. London, UK: Verso.
- Bandelj, Nina. 2000. "Embedded Economies: Determinants of Foreign Direct Investment in Central and Eastern Europe." Paper presented at 2000 American Sociological Association Meetings in Washington, D.C.
- Bartlett, David. 1997. *The Political Economy of Dual Transformations: Market Reform and Democratization in Hungary*. Ann Arbor, Mich.: University of Michigan Press.
- Basi, R. S. 1963. *Determinants of United States Private Direct Investment in Foreign Countries*. Kent State University Press.
- Bennett, Peter D. and Robert T. Green. 1972. "Political Instability as a Determinant of Direct Foreign Investment." *Journal of Marketing Research* 9: 182-186.
- Biggart, Nicole Woolsey and Mauro Guillen. 1999. "Developing Difference: Social Organization and the Rise of the Auto Industries of South Korea, Taiwan, Spain, and Argentina." *American Sociological Review* 64(5): 722-747.
- Blanchard, Olivier, Rudiger Dornbusch, Paul Krugman, Richard Layard and Lawrence Summers. 1991. *Reform in Eastern Europe*. Cambridge, MA: Cambridge University Press.
- Bollen, Kenneth A. and Scott T. Jones. 1982. "Political Instability and Foreign Direct Investment: The Motor Vehicle Industry, 1948-65." *Social Forces* 60(4): 1070-1088.
- Bornschier, Volker and Christopher Chase-Dunn. 1985. *Transnational Corporations and Underdevelopment*. New York: Praeger.
- Bornschier, Volker, Chase-Dunn, Christopher and Richard Rubinson. 1978. "Cross National Evidence of the Effects of Foreign Investment and Aid on Economic Growth and Inequality: A Survey of Findings and a Reanalysis." *American Journal of Sociology* 84: 651-683.
- Borocz, Jozsef. 2001. "Change Rules." *American Journal of Sociology* 106(4): 1152-68.
- Borocz, Jozsef. 2000. "Informality Rules." *East European Politics and Societies* 14 (2): 348-380.
- Bradshaw, York. 1987. "Urbanization and Underdevelopment: A Global Study of Modernization, Urban Bias, and Economic Dependency." *American Sociological Review* 52: 224-239.
- Brinton, Mary C. and Victor Nee. 1998. *The New Institutionalism in Sociology*. New York: Russell Sage Foundation.
- Brubaker, Rogers. 1996. *Nationalism Reframed: Nationhood and the National Question in the New Europe*. Cambridge [England]; New York: Cambridge University Press.

- Bruszt, Laszlo. 1992. "Transformative Politics: Social Costs and Social Peace in East Central Europe." *Eastern European Politics and Societies* 6 (1): 55-76.
- Burawoy, Michael and Katherine Verdery. 1999. *Uncertain Transition: Ethnographies of Change in the Postsocialist World*. Lanham, MD: Rowman & Littlefield Publishers.
- Calavita, Kitty. 1992. *Inside the State: The Bracero Program, Immigration and the I.N.S.* New York: Routledge.
- Calhoun, Craig. 1993. "Nationalism and Ethnicity." *Annual Review of Sociology* 19: 211-239.
- Campbell, John and Ove Pedersen. 2001. *The Rise of Neoliberalism and Institutional Analysis*. Princeton, NJ: Princeton University Press.
- Campbell, John, Rogers Hollingsworth, and Leon Lindberg. 1991. *Governance of the American Economy*. New York: Cambridge University Press.
- Caratan, Branko. 1997. "The New States and Nationalism in Eastern Europe." *International Politics* 34: 285 – 302.
- Crenshaw, Edward. 1991. "Foreign Investment as a Dependant Variable: Determinants of Foreign Investment and Capital Penetration in Developing Nations, 1967-1978." *Social Forces* 69(4): 1169-1182.
- Eyal, Gil, Ivan Szelenyi and Eleanor Townsley. 1998. *Making Capitalism Without Capitalists*. New York: Verso.
- Fischer, Stanley and Allan Gelb. 1991. "The Process of Socialist Economic Transformation." *Journal of Economic Perspectives* 4: 91-106.
- DiMaggio, Paul and Walter Powell. 1991. "Introduction." Pp. 1-40 in *The New Institutionalism in Organizational Analysis*, edited by Walter Powell and Paul DiMaggio. Chicago: University of Chicago Press.
- Dobbin, Frank. 1994a. *Forging Industrial Policy*. Cambridge, MA: Cambridge University Press.
- Dobbin, Frank. 1994b. "Cultural Models of Organization: The Social Construction of Rational Organizing Principles." Pp. 117-142 in the *Sociology of Culture*, edited by Diana Crane. Cambridge, MA: Blackwell.
- Dunning, John H. 1994. "The Prospects for Foreign Direct Investment in Central and Eastern Europe." In *The Economics of Change in East and Central Europe*, edited by Peter J. Buckley and Pervez N. Ghauri. London: Academic Press Limited.
- Dunning, John and Matija Rojec. 1993. *Foreign Privatization in Central and Eastern Europe*. Ljubljana: CEEP Technical Paper Series, No. 2.
- EBRD. 1997. *Transition Report 1997: Enterprise Performance and Growth*. United Kingdom: EBRD Publication Desk.
- Evans, Peter. 1995. *Embedded Autonomy: States and Industrial Transformation*. Princeton, NJ: Princeton University Press.
- Evans, Peter, Dietrich Ruschemeyer and Theda Skocpol. 1985. *Bringing the State Back In*. New York: Cambridge University Press.
- Fligstein, Neil. 1990. *The Transformation of Corporate Control*. Cambridge: Harvard University Press.
- Fligstein, Neil. 1996. "Markets as Politics: A Political-Cultural Approach to Market Institutions." *American Sociological Review* 61: 656-673.
- Fligstein, Neil. 2001. *The Architecture of Markets: An Economic Sociology of Twenty-First Century Capitalist Societies*. Princeton: Princeton University Press.

- Granovetter, Mark. 1985. "Economic Action and Social Structure: The Problem of Embeddedness." *American Journal of Sociology* 91: 481-510.
- Guillen, Mauro. 2001a. "Is Globalization Civilizing, Destructive or Feeble? A Critique of Five Key Debates in Social Science Literature." *Annual Review of Sociology* 27: 235-260.
- Guillen, Mauro. 2001b. *The Limits of Convergence*. Princeton, NJ: Princeton University Press.
- Hollingsworth, Rogers, Philippe Schmitter and Wolfgang Streeck. 1994. *Governing Capitalist Economies*. New York: Oxford University Press.
- Hollingsworth, Rogers and Robert Boyer. 1997. *Contemporary Capitalism: The Embeddedness of Institutions*. New York: Cambridge University Press.
- IMF. 1997. *World Economic Outlook*. Washington, D.C.: International Monetary Fund.
- Kahneman, Daniel. 1994. "New Challenges to the Rationality Assumption." *Journal of Institutional and Theoretical Economics* 150:18-36.
- King, Lawrence. 2001. *The Basic Features of Postcommunist Capitalism in Eastern Europe: Firms in Hungary, The Czech Republic and Slovakia*. Westport, CT: Praeger.
- Knight, Jack. 1992. *Institutions and Social Conflict*. New York: Cambridge University Press.
- Kosolowski, Rey. 1992. "Market Institutions: East European Reform, and Economic Theory." *Journal of Economic Issues* 26: 673-705.
- London, Bruce and Robert J.S. Ross. 1995. "The Political Sociology of Foreign Direct Investment." *International Journal of Comparative Sociology* 36(3-4): 198- 218.
- Long, Scott J. and Laurie H. Ervin. 2000. "Using Heteroscedasticity Consistent Standard Errors in the Linear Regression Model." *The American Statistician* 54(3): 217-224.
- Meyer, John and Brian Rowan. 1977. "Institutionalized Organizations: Formal Structure as Myth and Ceremony." *American Journal of Sociology* 83(2): 340-363.
- Meyer, John W., Boli, John, Thomas George M. and Francisco Ramirez. 1997. "World Society and the Nation-State." *American Journal of Sociology* 103: 144-81.
- Meyer, John, John Boli and George M. Thomas. 1987. "Ontology and Rationalization in the Western Cultural Account." Pp. 12-38 in *Institutional Structure: Constituting State, Society, and the Individual*, edited by George M. Thomas, John W. Meyer, Francisco O. Ramirez and John Boli. Newbury Park, CA: Sage.
- Meyer, Klaus. 1998. *Direct Investment in Economies in Transition*. Massachusetts: Edward Elgar Publishing.
- Murrell, Peter. 1992. "Conservative Political Philosophy and the Strategy of Economic Transition." *East European Politics and Societies* 6(1): 3-16.
- North, Douglass. 1990. *Institutions, Institutional Change, and Economic Performance*. New York: Cambridge University Press.
- Polanyi, Karl. 1944. *The Great Transformation: The Economic and Social Origins of Our Time*. Boston: Beacon Press.
- Polanyi, Karl. 1992. "The Economy as Instituted Process." In Mark Granovetter and Richard Swedberg, eds. *The Sociology of Economic Life*. Boulder, Colorado: Westview Press.
- Powell, Walter and Paul DiMaggio. 1991. *The New Institutionalism in Organizational Analysis*. Chicago: University of Chicago Press.

- Sachs, Jeffrey. 1989. "My Plan for Poland." *International Economics* 3: 24-29.
- Sachs, Jeffery and David Lipton. 1990. "Poland's Economic Reform." *Foreign Affairs* (Summer): 47-66.
- Schmidt, Klaus-Dieter. 1995. "Foreign Direct Investment in Eastern Europe: State-of-the-art and Prospects." In *Transforming Economies and European Integration*, edited by Rumen Dobrinsky and Michael Landesmann. Aldershot, UK: Edward Elgar.
- Schneider, Friedrich and Bruno S. Frey. 1985. "Economic and Political Determinants of Foreign Direct Investment." *World Development* 13(2): 161-175.
- Seleny, Anna. 1991. "Hidden Enterprise and Property Rights Reform in Socialist Hungary." *Law and Policy* 13 (2): 149-169.
- Stark, David. 1992. "Path Dependence and Privatization Strategies in East Central Europe." *East European Societies and Politics* 6(1): 17-54.
- Stark, David and Laszlo Bruszt. 1998. *Postsocialist Pathways: Transforming Politics and Property in East Central Europe*. Cambridge, MA: Cambridge University Press.
- Steinmo, Sven, Kathleen Thelen, and Frank Longstreth. 1992. *Structuring Politics: Historical Institutionalism in Comparative Analysis*. New York: Cambridge University Press.
- Szelenyi, Ivan and Eric Kostello. 1996. "The Market Transition Debate: Toward a Synthesis?" *American Journal of Sociology* 101(4): 1082-96.
- Thelen, Kathleen. 1999. "Historical Institutionalism in Comparative Politics." *Annual Review of Political Science* 2: 369-404.
- UNCTAD. 1998. *World Investment Report*. United Nations Conference on Trade and Development.
- Verdery, Katherine. 1998. "Transnationalism, Nationalism, Citizenship, and Property: Eastern Europe Since 1989". *American-Ethnologist* 25 (2):291-306.
- Weber, Max. 1968. *Economy and Society*. New York: Bedminster Press.
- Welfens, Paul J. J. 1993. "The Growth of the Private Sector: Privatization and Foreign Direct Investment in Eastern Europe." Pp. 119-166 in *Overcoming the Transformation Crisis*, edited by Horst Siebert. Tuebingen, Germany: J. C. B. Mohr.
- Wint, Alvin G. 1992. "Liberalizing Foreign Direct Investment Regimes: The Vestigial Screen." *World Development* 20(10): 1515-1529.
- WIIW -Wiener Institut für Internationale Wirtschaftsvergleiche. 1998. *Foreign Direct Investment in Central and East European Countries and the Former Soviet Union*. WIIW-WIFO Database.

Table 1. List of Variables Used in the Pooled Cross National Time Series Analysis of Foreign Direct Investment Flows into Central and Eastern Europe

Variable	Description	Mean (S.D.)	Effect
DEPENDENT VARIABLE			
Foreign Direct Investment	Inflows of FDI (US\$ per capita)	105.82 (107.07)	
ECONOMIC CONDITIONS			
Economic Potential	Gross Domestic Product (US\$ per capita)	3304.20 (2147.56)	+
	Gross Domestic Product growth (percent)	-.187 (7.43)	+
Investment Risk	Institutional Investor Country Credit Rating, 100-point scale indicating the expert assessed risk of default on investment for a particular country (0=highest risk, 100=lowest risk)	37.017 (13.61)	+
ROLE OF STATES			
Democratization	7-point scale indicating freedom and fairness of elections and popular participation in the political process (7=highest, 1=lowest)	3.14 (1.10)	+
Privatization	Private Sector Share in GDP (in percent)	50.97 (19.28)	+
Direct Sale to Foreigners	Dummy variable indicating a period before and after the first host state sale of banks, telecommunications, or utilities to foreigners (before=0, after=1)	.37 (.48)	+
FDI SUPPLY			
Inflow of FDI into CEE	Total FDI into Central and Eastern Europe (in billion dollars)	14.01 (7.94)	+
TIME DEPENDENCE			
Lagged FDI per capita Inflows	Inflows of FDI in time t-1 (US\$ per capita)	94.40 (103.47)	+

Note: See Appendix A for data structure and sources.

Table 2. Regression Coefficients for the Effects on Logged FDI Inflow per capita in Eleven Central and East European Countries (1990-2000)

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
ECONOMIC POTENTIAL						
GDP per capita		-.0001 (-1.04)				.000 (0.22)
GDP growth		.005 (1.25)				.007 (1.28)
Country Credit Rating			-.003 (-0.74)			
STATE INVOLVEMENT						
Democratization				-.009 (-0.18)		-.012 (-0.23)
Private Sector Share in GDP				-.0003 (-0.10)		.002 (0.40)
Direct Sale to Foreigners					.874* (3.41)	.962* (2.78)
Direct Sale * Lagged FDI					-.380* (-3.21)	-.379* (-2.47)
TIME DEPENDENCE						
Lagged FDI Inflow (log)	.384* (4.34)	.352* (3.68)	.410* (4.45)	.384* (4.06)	.390* (4.39)	.342* (3.24)
FDI SUPPLY						
Total FDI into region	.019* (3.59)	.022* (3.09)	.021* (2.98)	.020* (2.79)	.017* (3.08)	.011 (1.03)
COUNTRY FIXED EFFECTS						
Constant	.984* (6.99)	1.370* (4.02)	.976* (5.09)	1.045* (2.80)	.998* (6.43)	1.092* (2.00)
R-square	.842	.851	.848	.842	.862	.874
BIC ^a	-56.83	-54.54	-54.94	-52.68	-58.82	-53.96
N	101	100	99	101	101	100

Note: t-values in parentheses. All models apply HC3 standard errors correction for heteroscedasticity.

^aBayesian Information Criterion assesses the goodness of model fit {BIC= $n \log(1-R^2) + k \log n$; n = sample size, k = number of parameters, R^2 = model fit}. The lower the BIC statistic, the better the model. * $p < .05$ (two-tailed tests)

Table 3. List of Variables Used in Discrete Event History Analysis Predicting Hazard of First Sale of Large State Monopolies to Foreign Investors

Variable	Description	Mean (S.D.)	Effect
DEPENDENT VARIABLE			
State Sale of Monopolies to Foreign Investors	Event of first sale of telecommunications, utilities or banks to foreign investors	.14 (.35)	
INSTITUTIONAL PATH-DEPENDENCE			
Pre-existing FDI	Level of FDI stock in 1992 (US\$ per capita)	82.94 (115.30)	+
NATIONALISM			
Newly Established Nation-State	Dummy variable indicating whether the host state is a nation-state established after 1989	0.55 (0.52)	-
ECONOMIC CONDITIONS			
Indebtedness	External Debt as Percent of Gross Domestic Product	32.37 (28.63)	+
Balance of Payments	Account balance as percent of GDP	-3.28 (5.89)	-
	General government balance as percent of GDP	-2.94 (2.76)	-
Economic Development	Gross Domestic Product (US\$ per capita)	3150.12 (2342.21)	-
	Gross Domestic Product growth (percent)	.01 (7.87)	-
	Inflation rate (%)	118.84 (279.69)	+
	Unemployment rate (%)	10.88 (4.27)	+
TIME DEPENDENCE			
	Counter of years as discrete time units	4.33 (2.40)	+

Note: See Appendix A for data structure and sources.

Table 4: Estimates for Logit Models Predicting the Probability of First Sale of Telecommunications, Utilities or Banks to Foreigners after 1992

	Model 1	Model 2	Model 3	Model 4	Extreme Bounds ^a
INSTITUTIONAL PATH-DEPENDENCE					
FDI Stock 1992	.017* (2.62)	.017* (2.61)	.017* (2.52)	.019* (2.62)	(.032,.017)
NATIONALISM					
Newly Established State	-3.206* (-2.48)	-3.179* (-2.39)	-2.996* (-2.22)	-2.660* (-2.11)	(-2.66,-4.05)
ECONOMIC NECESSITY					
External Debt		.001 (0.09)			
Government Balance			-.159 (-.85)		
GDP growth				-.173 (-1.90)	
TIME DEPENDENCE					
Year counter	1.119* (3.05)	1.119* (3.05)	1.130* (2.97)	1.204* (3.12)	(1.115,1.683)
Constant	-7.271* (3.27)	5.551* (6.71)	-8.043* (-3.13)	-8.058* (-3.16)	
LR Chi Square	23.87	23.58	23.37	27.40	
Pseudo R-square	.409	.406	.409	.470	
N	73	72	69	73	

Note: z-values in parentheses

* p < .05 (two-tailed tests)

^aExtreme bounds sensitivity analysis including specifications with the following alternative economic variables: External Debt, Domestic Product Account Balance, General government balance, GDP, GDP growth, Inflation rate, Unemployment rate.

Appendix A. Data Structure and Sources

SAMPLE: POOLED CROSS-NATIONAL TIME SERIES

Countries: Bulgaria, Croatia, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, Slovakia, Slovenia.

Time Period: 1990-2000 (for Bulgaria, Czech Republic, Hungary, Poland, Slovenia), 1991-2000 (for Romania, Slovakia), 1992-2000 (for Croatia, Estonia, Latvia, and Lithuania)

Note: Time series start at different years because several of these countries did not exist as national units before 1992 and thus data are not available. Moreover, none of these countries (or then territories) kept a record of FDI before the fall of socialism or right after 1989 because FDI was officially prohibited during state-socialism.

DEPENDENT VARIABLE

Foreign Direct Investment Flows (Source: WIIW 2001, International Investment Statistics Yearbook 2000, EBRD Transition Report 2000)

ECONOMIC INDICATORS

GPD per capita (Source: International Financial Statistics Yearbook 1999, EBRD Transition Report 2000, Business Central Europe Statistics)

GDP growth (Source: International Financial Statistics Yearbook 1999, EBRD Transition Report 2001)

Country Credit Rating (Source: Institutional Investor)

External Debt (Source: EBRD Transition Report 2001)

Account balance (Source: EBRD Transition Report 2001)

General government balance (Source: EBRD Transition Report 2001)

Inflation rate (Source: International Financial Statistics Yearbook 1999, EBRD Transition Report 2001)

Unemployment rate (Source: International Financial Statistics Yearbook 1999, EBRD Transition Report 2001)

ROLE OF STATES

Democratization index

(Source: Freedomhouse Nations in Transit

<http://www.freedomhouse.org/research/nattransit.htm>)

Private Sector Share in GDP

(Source: EBRD Transition Report 2000, Freedomhouse Nations in Transit for 2000)

Privatization to Foreigners

Year of foreign privatization of bank, utilities, and telecommunication sectors (Source: EBRD Transition Report 2000, National Accounts)

INSTITUTIONAL PATH-DEPENDENCE

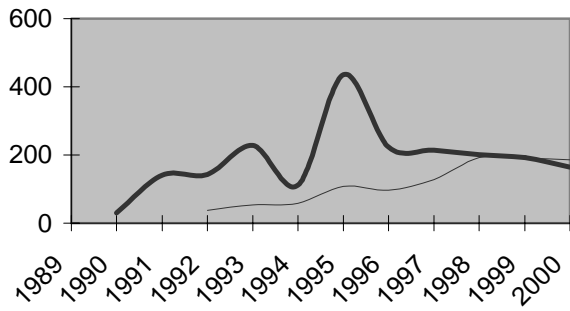
FDI Stock in 1992

Note: Direct investment flows over time build up into a foreign direct investment position (stock). This FDI stock differs from a mere summary

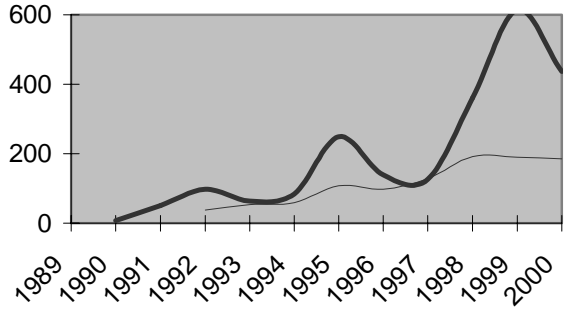
of the accumulated flows because of reevaluation (changes in prices or exchange rates, and other adjustments like rescheduling or cancellation of loans, debt forgiveness or debt-equity swaps).
(Source: WIIW 2001, International Investment Statistics Yearbook 2000, EBRD Transition Report 2000)

Figure 1: FDI per capita inflows 1990-2000 (in \$)

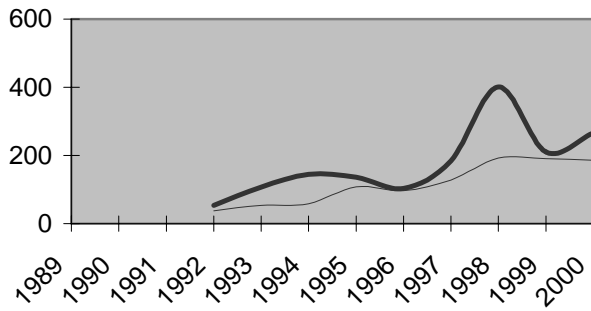
HUNGARY



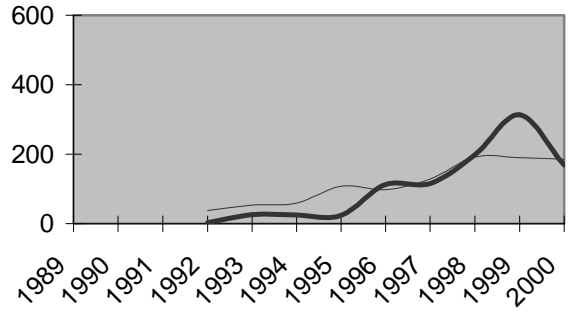
CZECH REPUBLIC



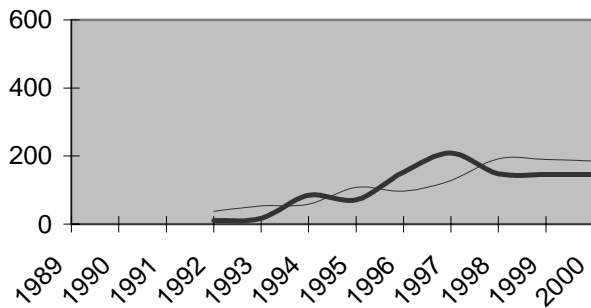
ESTONIA



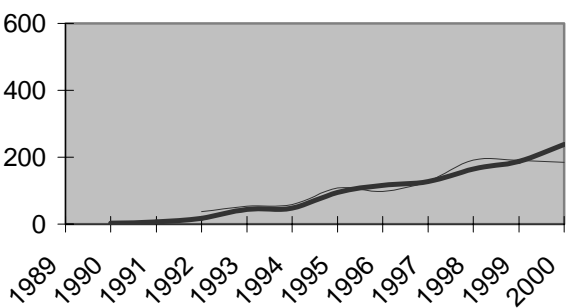
CROATIA



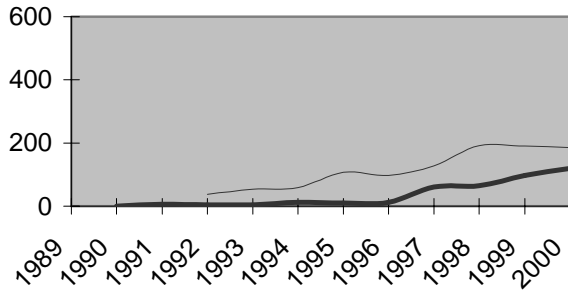
LATVIA



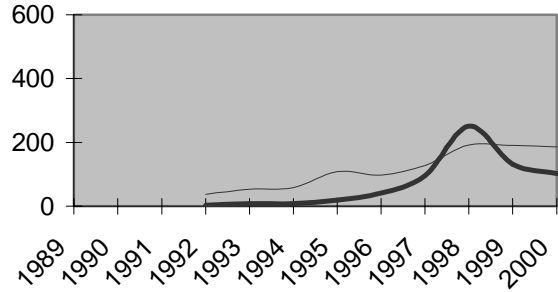
POLAND



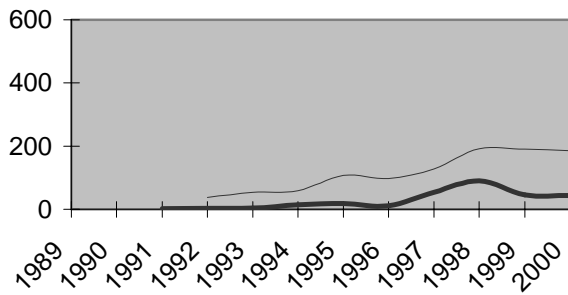
BULGARIA



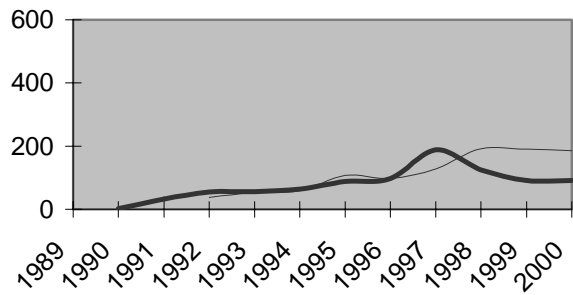
LITHUANIA



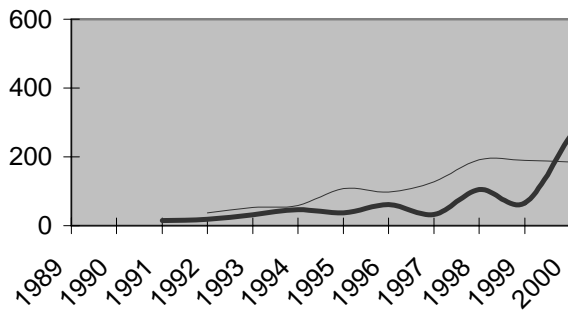
ROMANIA



SLOVENIA



SLOVAKIA



Note: Bold lines represent country trends, thin lines represent average regional trends.