Re-Thinking the Obsolescing Bargain:

Do Foreign Investors Really Surrender their Influence over Economic Reform in Transition States?

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Abstract

How much additional leverage on our understanding of economic transition can we garner by taking seriously the notion that foreign direct investors are pushing for economic reform rather than just riding in to reward policy changes according to the narrow interpretation of the obsolescing bargain? In this paper, I argue quite a lot; demonstrating the independent influence of FDI on reform with a cross-national test of investor influence in 28 transition states. Indicators of economic transition are tested against stocks of foreign direct investment (FDI), controlling for economic legacy, political constraints, the structure of the economies, and the presence of post-communists in the legislature. The paper begins with a pooled time series model as a first-cut, but ultimately demonstrates the endogenous relationship between FDI and reform by instrumenting FDI with the predicted exchange rate of the transition countries based on movements in a basket of OECD currencies. Using the predicted exchange rate as an instrument in a two-stage least squares (2SLS) operation, I find strong evidence that cumulative stocks of FDI have a strong influence on economic reform progress and institutionalization.

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1. **Introduction**

Most studies of foreign direct investment (FDI) into the transition economies either explicitly or implicitly pay deference to the obsolescing bargain theory (OBT) of Raymond Vernon by assuming that investors have limited influence on the investment environment *ex post*, because the sunk costs associated with start-up shift the bargaining position to the host-government.[1] This is not to say that foreign investors lose all bargaining power; only that through strategic interaction, their power is *ex ante*. To attract foreign investment, transition countries need to make the institutional changes that investors desire and offer a credible commitment that these institutions will remain in place; otherwise they will lose to their neighbors in the investment attraction race.[2] All bargaining over the regulatory regime, policy changes, and institutional structures is essentially concluded before investors ever break ground. Reform of economic institutions has come to be seen as just another variable to be added to the long lists in analysts' existing economic models of FDI determinants.

As I will argue in this paper, these arguments are flawed in three respects. First, political scientists have expanded the scope of OBT far beyond the initial parameters it was intended. Secondly, international investment has changed a great deal since the inception of OBT thirty-five years ago. Finally, studies of the impact of economic reform on economic attraction have

[1] Vernon, Raymond, 1971. *Sovereignty at Bay*. New York: Basic Books. Vernon, Raymond, 1980, "The Obsolescing Bargain: A Key Factor in Political Risk," In *The International Essays for Business Decision Makers 5*, ed. Mark B. Winchester. Houston: Center for International Business.

[2] Schneider, Friedrich and Bruno S. Frey. 1985, "Economic and Political Determinants of Foreign Direct Investment, *World Development 13* (2): 161-175; World Bank. 1997. "Improving the environment for business investment in the CIS and Baltic Countries. Views from entrepreneurs and World Bank Country economists." Washington DC: World Bank. Henisz, Witold J. and Oliver J. Williamson. 1999. Comparative Economic Organization—Within and Between Countries. *Business and Politics 1 (*3): 261-277; Weingast, Barry R. 1993. *"Constitutions as Commitment Devices." Journal of Institutional and Theoretical Economics*. 149 (1).

almost willfully ignored the enormous energy that MNCs have invested in lobbying for economic reform in the transition counties and the successes lobbying has garnered.[3]

The neglect of investor influence has taken place, because scholars do not look deeply into the endogeneity of investment and economic reform. In doing so, they throw out the politics -- the very essence of our discipline -- with the bathwater. Moreover, the transition field specifically has ignored one solution to the Joel Hellman's Partial Economic Reform Equilibrium (PRE), by not taking seriously the endogeneity of investment.[4] Hellman hypothesizes that due to the sequencing of economic reform, the benefits of transition are often captured by selective interests, who are the winners of the initial reforms, be they privatization insiders, state owned enterprise managers, natural resource exploiters, or Mafiosi. These "winners" use their new found economic power to block future progress on economic reform that might endanger the rents they gained from an earlier stage in the reform process. If the institutions of economic reform are blocked by entrenched interests, how can they develop? As John Paul Lewis notes, "One answer is to import them. Since 1989 multinationals have brought their attitudes and economic power, and doing so have become an effective force…" More precisely:

> Multinational Companies may not have not done much more than to add their voices to the general call for reform. But they have played a direct role in changing attitudes at lower levels of bureaucracy, as a result of their daily interaction with officials, and their long slog to improve laws that were drafted in ignorance or haste. Through foreign companies' diligent attention to detail, patient explanation, and the specialist expert knowledge that committed investors have acquired, the more effective laws, customs, and business practices began seeping into the business environment.[5]

How much additional leverage on our understanding of economic transition can we garner by taking seriously the notion that foreign direct investors are pushing for economic

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[3] Lewis, Charles Paul. 2005. *How the East Was Won: The Impact of Multinational Companies on Eastern Europe and the Former Soviet Union*. New York: Palgrave MacMillan, 115.
[4] Hellman, Joel 1998. "Winners Take All. The Politics of Partial Reform in Post-communist Transitions," *World Politics 50(2)*: 203-34.
[5] Lewis, 2005, 185.

reform rather than just riding in to reward policy changes according to the narrow interpretation of OBT?

In this paper, I argue quite a lot by demonstrating the independent influence of FDI on reform with a cross-national test of investor influence in 28 transition states. Indicators of economic transition from the European Bank of Reconstruction and Development (EBRD) are tested against stocks of foreign direct investment (FDI), controlling for economic legacy, political constraints, the structure of the economies, and the presence of post-communists in the legislature. The paper begins with a pooled time series model as a first-cut, but ultimately demonstrates the endogenous relationship between FDI and reform by instrumenting FDI with the predicted nominal exchange rate of the transition countries based on movements in a basket of OECD currencies. In short, I take the part of the local exchange rate that is determined by international economic forces rather than domestic political manipulations. Because the exchange rates of OECD countries are completely exogenous to political processes, this variable makes a perfect instrument. Using this approach in an instrumental variable two-stage least squares (IV-2SLS) operation, I find strong evidence that cumulative stocks of have a strong influence on economic reform progress and institutionalization.

2. Literature Review: Handcuffed by the a 35-Year Old Theory

The basic intuition of OBT begins with two actors- a host government and a multinational corporation (MNC). The host government has valuable natural resources that it is unable to exploit because of a lack of financial resources, technological capacity, or marketing prowess. To overcome this problem, the host government seeks to lure a technologically advanced MNC from a developed economy to extract the natural resources, but knows that it is at a serious bargaining disadvantage relative to the corporation. The MNC is relatively mobile; it can invest wherever those resources exist. To induce the firm to accept the risk of investing in the economy, the host government offers range of concession agreements such as tax holidays which promise lucrative profits for the MNC. Once the investment has had a few successful years of operations, however, the perceived risk to the firm drops and the host country begins to perceive the high returns garnered by the MNC as inappropriate. Meanwhile, the MNCs valuable technology has already been transferred or is available in some form on the open market and gaps in management skills between foreigners and locals have declined.[6] At the same time, national priorities may have changed, with new political leaders entering power and voters altering their perceptions of economic development. But the MNC has already invested tremendous capital into a profitable project that it certainly wants to continue running. [7]

The increased pressure on the host government to raise demands on the investor and the *ex post* immobility of the MNC create a situation where the attractive agreement first carved out by the MNC will inevitably "obsolesce."[8] Theoretically, obsolescence can take the form of renegotiated contracts, higher taxes, expropriation of assets, or seizure of the income stream of the firm.[9] As Raymond Vernon put it elegantly, "almost from the moment that signatures have dried on the document, powerful forces go to work that render the agreements obsolete in the eyes of the government."[10] The bargaining advantage now rests with the host country.

After Vernon's articulation OBT, two changes were made in the way political scientists studied investment decisions. Bargaining over investment contracts was a one-shot game, so

[6] Kobrin, Stephen J. 1987. "Testing the Bargaining Hypothesis in the Manufacturing Sector in Developing Countries." *International Organization 41 (4)*: 609-638.
[7] Jenkins, Barbara. 1986. "Reexamining the "obsolescing bargain": a study of Canada's National Energy Program. *International Organization 40 (1): 139-165.*
[8] Vernon, 1980, 47-53.
[9] Gatignon and Anderson, 1988; Williamson, 1996, Kobrin, 1984, Jenson, 2004.
[10] Vernon, 1980, 47.

foreigners could only hope to influence the specific details of the contract; they would have little impact on local institutions or policies. As a result, foreign investors would only invest in countries where they believed the political institutions offered little risk for nationalization of their property and the most profitable opportunities.[11] From an analytical perspective, this discovery meant that the interesting insights were more likely to be gleaned not from studying what happened after direct investment had taken place, but in how investors chose where they were going to invest in first place.

There were problems with the notion of the obsolescing bargain from the very beginning. First, it is quite clear Vernon only had natural resource based investors in mind when he first articulated the theory. Mineral extractors can only invest where the minerals are and suffer very large upfront expenditures. They are therefore more susceptible to post-investment expropriation. Manufacturing investors are less limited by geographical constraints on inputs and due to more complicated production chains are much less exposed to the ex-post changes in the national bargain. It would be quite easy for an investor in the garment industry to shut-down a factory, sell off or move sewing equipment to another country, and leave the country at the first sign that an initial agreement had gone sour. Manufacturers, thus, hold a great deal of ex-post bargaining power. Stephen Kobrin showed that direct foreign investment in the manufacturing industry and export oriented investment was less vulnerable to such host country tactics, but it lessons have been largely ignored.[12] These days software production is similarly mobile and less prey to predatory governments, which is why Steve Keil and American entrepreneur chose to move his

[11] Stephen J. Kobrin. 1984. "Expropriation as an Attempt to Control Foreign Firms in LDCs: Trends from 1960 to 1979," *International Studies Quarterly 28 (*3). (September): 329-348; Jenson, Nathan. 2006. *Nation-States and The Multinational Corporation: A Political Economy of Foreign Direct Investment.* Princeton: Princeton University Press.
[12] Kobrin, Stephen, 1987.

software company *Sciant* from Bulgaria to Vietnam, reckoning he would face lower production costs and a less obtrusive government in the nominally communist regime.[13]

Not only are manufactures more mobile, economic theory implies weak host country institutions might be an incentive for investment rather than a deterrent. Ceteris Paribus, manufactures should prefer direct contractual relationships with overseas suppliers, provided they can enforce quality in the production. Similarly, multinational companies wishing to sell product in the host country would likely prefer to use overseas distributors of their product rather selling to foreign customers directly. The problem is that in regimes with limited property rights protection and limited contract enforcement, companies cannot adequately protect proprietary technology, intellectual property rights, and brands through this arrangement. This is known as the “hold-up” problem in the economic literature.[14] Under these conditions, foreign investment becomes a means of protecting property when a regime cannot. That is, FDI in manufacturing should theoretically be correlated with weaker property rights not stronger ones. Knowing that manufacturing and service sector investors may invest as a means of protecting property rights, it makes sense that once on the ground they would begin to lobby local officials for legal changes that would protect their investments. But the present political science scholarship does not endogenize FDI, so it overlooks this relationship and attributes the correlation between property rights and FDI to OBT and credible institutional commitments.

Secondly, Vernon only described the relationship between an individual investor and a state government; he would have certainly conceded that coalitions of foreign investors could use their aggregate bargaining strength to fend off expropriation by a predatory state or lobby for

[13] *The Economist 2005*. “Bulgaria: Blowing Hot and Cold.’ December 3.
[14] Etheier. William J. 1986. “The Multinational Firm.” *Quarterly Journal of Economics 101:* 805-833. Navaretti, Barba Giorgio and Anthony J. Venables. 2004. *Multinational Firms in the World Economy.* Princeton: Princeton University Press.

change in the host government's institutions and policies, especially if they were large contributors to employment or revenue in the economy.

Third, international investment has changed a great deal since the inception of OBT thirty-five years ago. MNCs in all sectors have learned to hedge their entries into risky environments through incremental implementation of capital and thereby mollify the shift in bargaining power to the host government. It is striking that scholars in the international business literature rarely, if ever, cite OBT. When they do, the articles tend to have titles celebrating its passing such as, "Has the obsolescing bargaining model obsolesced?"[15] Referring to OBT, Ravi Ramamurti of Northeastern Business School said, "The traditional bargaining model of MNC-host country relations has become obsolete."[16]

Despite these three clear parameters on the generalizability of OBT, political scientists have not been deterred from using the argument as a starting point for their analysis of the role of institutions in attracting foreign investment. In so doing, they often use total investment flows or stocks, which has exacerbated the gap between their studies and the original notion of the obsolescing bargain by conflating different types of investment to which OBT was never meant to apply. Studying total FDI also ignores the individual firm to host country negotiations of Vernon's original model. Finally, studying total flows augments the endogeneity problem, because coalitions of investors are more powerful lobbyists then individual firms.

A number of important discoveries have been made in the politics of FDI, but nearly all of them neglect the endogeneity problem. Predictability of economic and foreign policies have

[15] Eden, Lorraine, Stefanie Lenway, and Douglas A. Schular. 2005. "From the obsolescing bargain to the political bargaining model," In *International Business and Government Relations*, ed. Robert Grosse. Cambridge: Cambridge University Press: 251-273; Wint, Alvin. G. 2005. "Has the obsolescing bargaining model obsolesced? In *International Business and Government Relations*, ed. Robert Grosse. Cambridge: Cambridge University Press: 315-339.

[16] Ramamurti, Ravi. 2001. "The Obsolescing 'Bargaining Model'? MNC-Host Developing Country Relations Revisited. *Journal of International Business Studies 32(1)* (First Quarter): 23-39.

been identified as key determinants of investment,[17] as have political stability[18], and corruption.[19] Other scholars have identified the impact of political constraints or veto players (in the rational choice vernacular) as positively influencing investor decisions, because investors are less likely to suffer rapid changes in policies that affect them.[20] Recently, a great deal of scholarship has highlighted democracy as influential, though the evidence is mixed. When controls are added for the more salient indicator of property rights protection, the more coarse measurement of democracy tends to drop out.[21] This final result may be a direct result of the endogeneity of property rights, which is over-determined, while investor lobbying may have much less influence on the long-term growth of democratic development.

The neglect of endogeneity of FDI and economic reform has been most severe in the study of transition states. An enormous number of articles have been written on determinants of investment,[22] including one by John Dunning, the forefather of modern FDI theory, who asserts, "The extent and quality of nation's institutions and its institutional infrastructure (II) are becoming a more important component of its overall productivity and drawing power to attract

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[17] Gastanaga, Victor, M., Jeffrey B. Nugent, and Bistra Pashamova. 1998. "Host Country Reforms and FDI Inflows: How Much Difference Do They Make?" *World Development 26 (7)*: 1299-1314,
[18] Schneider and Frey. 1985.; Jensen, Nathan, M., 2003, "Democratic Governance and Multinational Corporations: Political Regimes and Foreign Direct Investment." *International Organization, 57 (3)*: 587-616.
[19] Wei, Shang-Jin, 2000. "How Taxing is Corruption on International Investors?" *The Review of Economics and Statistics* 82 (1): 1-11.
[20] Henisz, Witold, J, 2000, "The Institutional Environment for Multinational Investment." *Journal of Law, Economics, and Organization 16 (2)*: 334-364.
[21] Li, Quan and Adam Resnick, 2002. "Reversal of Fortunes: Democratic Institutions and Foreign Direct Investment Inflows to Developing Countries." *International Organization* 57 (1): 175-211. Jenson 2003.
[22] Bevan, Allan A., Saul Estrin, and Klaus Meyer. 2004. "Foreign Investment Location and Institutional Development on Transition Economies." *International Business Review 13*: 43-64; Meyer, Klaus E. 2005. "Foreign Direct Investment and Government Policy in Central and Eastern Europe," In *International Business and Government Relations*, ed. Robert Grosse. Cambridge: Cambridge University Press: 119-146. Bevan, Allan A. and Saul Estrin. 2000. "The Determinants of Foreign Direct Investment in Transition Economies." *William Davidson Institute Working Paper 342*, October.; Jensen, Nathan. 2002. "Economic Reform, State Capture, and International Investment in Transition Economies. *Journal of International Development 19:* 821-824.; Lankes, Hans Peter and Nicholas Stern. 1999. "Capital Flows to Eastern Europe." In *International Capital Flows: A National Bureau of Economic Research*, ed. Martin Feldstein. Chicago: University of Chicago Press.

inbound FDI."[23] This may be true, but Dunning's 2006 piece is a cross-sectional analysis of average measures over several years, making it almost impossible to sort out causality.

To make this more tangible, in 2004 Azerbaijan received a 36% increase in FDI/GDP primarily into the oil industry. In 2005, a host of economic reforms were instituted including: a new anti-corruption law; a resolution on improving monitoring and financial discipline in state owned companies, including the State Oil Company (SOCAR); a presidential decree on civil service reform; new anti-monopoly legislation; and a rationalization of the pay structure of budgetary organizations.[24] Most experts expect reform indicators of Azerbaijan to be much higher when 2006 indicators are released. Cross-sectional analysis of the kind performed by Dunning in 2006 would indicate that reform and investment had both increased, but would not be able to say with any certainty which caused which.

Time series analyses, such as Bevan, Estrin, and Meyer (2004), does a better job of demonstrating changes in reform over time and their relationship to investment attraction, but still does not attempt to sort out causality in an empirical sophisticated way. The authors conclude simply by saying that while endogeneity may be true, they constrained time series of 1995-1999, does not offer them the luxury of sorting out the "reverse causality." This is more than most scholars, who while acknowledging the problem, tend to wave their hands at the dilemma rather than dealing with it directly. Figure 1 explores the relationship between FDI and economic reform in four countries. There is little reasons to suspect that FDI is following reform improvements.

(**Figure 1 about Here)**

[23] Dunning, John, 2005. "Institutional Reform, Foreign Direct Investment, and European Transition Economies," In *International Business and Government Relations*, ed. Robert Grosse. Cambridge: Cambridge University Press: 49-78.
[24]European Bank of Reconstruction and Development. 2006. *EBRD Transition Report*London: EBRD. EBRD. 2006: 102.

Hand waving, however, is just not enough when the problem of endogeneity is more than just a theoretical exercise. Often endogeneity affects the very operationalization of authors' key causal variables. Lankes and Stern, for instance, rely heavily on a survey of enterprises performed by the World Bank in 1997, which led them to believe that investment decisions were influenced by major institutional changes in the transition countries.[25] But the survey probed only foreign investors who already had significant business operations in the region. These investors may have been dissatisfied with the present economic institutions, but their frustration had not deterred them from taking the investment risk in the first place. To put it another way, this study was actually serving as yet another channel for investors to *lobby* for the reform in economic institutions of their host country, by holding out the carrot of future investors.

Most importantly, the statistical significance of political variables as determinants of FDI is always tiny when compared to the traditional economic variables, even in the very best models (though sometimes scholars neglect to control for alternative economic explanations altogether). This is particular true of the Bevan, Estrin, and Meyer (2004) estimation.[26] Only price reform and trade liberalization are statistically significant at the 5% level. These are the easiest of reforms, completed very early in the transition process. Hard institutional reforms such as large-scale privatization and bank reform were only significant at the 10% level, while competition policy was not significant in any specification. By contrast, distance from the European Union and relative labor costs were significant at the 1% level in every specification.

[25] World Bank, 1997. They are not the only ones, the Global Competitiveness Rankings, the World Enterprise Performance Survey, the Business Environment and Enterprise Performance survey, and Kaufman and Kray all build their indicators from surveys of already-invested firms. Even the International Country Risk Group, which is often described as less vulnerable to such endogeneity originally coded its variables using survey data from Knack, S. and Phillip Keefer. 1995, "Institutions and Economic Performance: Cross-Country Tests using Alternative Institutional Measures," *Economics and Politics 7* (3) (November): 207-227.

[26] Bevan, Estrin, Meyer, 2004, 57-59.

The small statistical relationship quite accurately reflects our understanding of investment into developing countries. A large portion of investors discount political factors heavily in their location choices. The *Economist* might mock the political naiveté of direct investors in an article entitled "Fools Rush In," but the fact remains that they did rush in despite the well-known bureaucratic mazes and corruption. Indeed, FDI streamed into countries such as Kazakhstan, Azerbaijan, China, and Vietnam; a process that represented the very antithesis of the predictions of institutions as determinant theories. These regimes had very high discretionary power and offered very little in property rights protection. *Ad hoc* explanations based on economic variables can certainly be derived for these states. Massive opportunities for gains in oil may have lubricated decision making for investors in Azerbaijan and Kazakhstan, while China and Vietnam offered both large domestic markets in addition to cheap labor costs for production in ideal platforms for servicing the Asian region. Nevertheless, these *ad hoc* explanations confirm the fact that business opportunities rather than economic reform drive a great deal of the decision making of investors. FDI was willing to assume a certain degree of political risk based on the expected returns of their investment and investors felt they could even ameliorate that risk by working closely with government actors. Carl Hahn, former chairmen of Volkswagen and present consultant to the Prime Minister of Kyrgyzstan summed up investors thinking,

> "No wonder China has been the largest developing country recipient since 1992, averaging $35 billion annually. China is attractive to all of us not only because of its size but because of its economic growth potential, which will probably make it the world's number one economy by the early 2000s on the basis of their political and economic policies….Naturally, there are risks, but I do not know of any entrepreneurial activity—or any kind of progress, for that matter without risk, and I don't think China tops the list of risky countries.[27]

[27] Hahn, Carl, 1999. "The Role of FDI in International Capital Flows," In *International Capital Flows* ed. by Martin Feldstein. Chicago: University of Chicago Press: 350-357.

These anecdotes are far from atypical, while scholars a view reform packages as *fait accompli*, both foreign investors and governments have a much more piecemeal notion of the reform process and ascribe a much larger role to foreign investors in altering particular reform strategies. The different views are surprising. Before a researchers can even orient themselves when visiting one of the world's thirty-something transition economies, they are bombarded in both English and native languages with information on international chamber of commerce meetings, investor forums, foreign investor magazines, daily tabloids, and privately sponsored conferences on particular aspects of regulatory and commercial development. Though quicker to develop in some countries than others, the opportunity for foreign investors to vent frustration and weigh-in on economic policies is a hallmark of the transition states. Moreover, the robustness of the voice for foreign investors is clearly stronger in more reform oriented economies, such as Hungary and Poland, than in the stalwart defenders of central planning in Belarus and Turkmenistan. So why is it that viewing investors as gadflies and "pushers" of economic reform has been ignored in our present literature on the political economy of transition, which prefers to emphasize investors being pulled into transition states by the lure of positive reforms?[28]

Studies of the impact of economic reform on economic attraction have almost willfully ignored the enormous energy that MNCs have invested in lobbying for economic reform in the transition counties, and the successes they have garnered – many of these anecdotes are profiled colorfully in Charles Paul Lewis' *How Multinationals Saved the East.* Companies such as Italy's Fiat, Korea's Daewoo, and General Motors of the U.S. had taken major stakes in Central and Eastern Europe prior to any serious progress on economic reform programs in 1991. When

[28] My approach resembles in many ways the second-image reverse literature pioneered by Peter Gourevitch, as I look at the impact of international forces on the politics of the nation-state. Gourevitch, Peter Alexis. 1978. "The Second Image Reversed." *International Organization* 32:881-912.

Volkswagen decided to buy Czechoslovakia's Skoda car plant in 1992 there wasn't yet any law on privatization, so legal principles on privatization law and FDI regulation were developed in the course of the negotiations.[29]

John Hewko, a lawyer in Moscow, reiterated this point in the *East European Constitutional Review*:

> Most foreign investors who have committed resources to a country have probably accepted the fact that in general terms, the legislative and legal systems are inadequate. They are also prepared to accept that any given piece of legislation is unlikely to conform to an ideal standard. The immediate focus of committed investors tends to center around a succinct list of specific complaints about that one piece of legislation or regulation that, if rectified, would greatly facilitate the success and continued viability of their investment….In light of the lessons learned from past efforts, a fundamental shift is required in the manner in which the international development community views certain aspects of legal reform in post-communist countries…[30]

OBT has handcuffed our scholarship in a way it was never intended to be used. Due to its influence, the present paradigm of economic transition only emphasizes rational payoffs to institutions. We have neglected to problemmatize the role of foreign investment in shaping those institutions in the first place. In the following sections, I offer a correction to this dominant paradigm by using instrumental variable regression to assess the independent impact of FDI on economic reform.

3. The Data

Dependent Variable:

The dependent variable for this analysis is based on progress on economic reform as measured by the European Bank of Reconstruction and Development (EBRD).[31] The EBRD

[29] Lewis, 2005, 115.
[30] Hewko, John, 2003. "Foreign Direct Investment in Transitional Economies: Does the Rule of Law Matter?" *East European Constitutional Review* (Fall 2002/Winter 2003): 71-79.
[31] European Bank of Reconstruction and Development. 1994-2006. *EBRD Transition Report*, Several editions, London: EBRD.

ranks countries from 1 to 4.3 on eight different economic reform policies between 1992 and 2004. These policies are listed in Table 1.

(Table 1 About Here)

While all reforms may have the same weight on the EBRD sale, they are not equal in the political capital and energy that must be mobilized for their enactment. Following Kitschelt, I run a factor analysis on the entire set of economic reforms to create two components.[32] The first component is labeled "easy reforms" and includes liberalization programs, small-scale privatization, and enterprise reform. Easy reforms comprise essentially negative reforms or state withdrawal from the economy, where private actors are allowed to pursue business contracting and opportunities unimpeded by state authority, but also without assistance of subsidies. In addition, these reforms are easy because there appears to be general consensus among most elite actors that they are necessary for strong economic performance without destabilizing budget imbalances and dangerous hyperinflation.[33]

The second component Kitschelt classifies as "hard reforms" and includes the construction of the institutional framework to allow competitive markets to function efficiently. In this category of reforms is the privatization of large scale SOEs, which in many states involves bumping up against powerful actors with important assets at their disposal. Privatization must be accompanied by a strong competition policy to avoid simply creating a new problem of well-connected, but inefficient monopolists able to charge monopoly prices in the domestic market. Bank and non-bank financial sector reform is necessary to facilitate efficient allocation of capital. And finally, all of these reforms must be under-girded by judicial institutions, which allow for the enforcement of contracts, property rights, and bankruptcy. These reforms are

[32] Kitschelt, Herbert. 2001. "Post-Communist Economic Reforms: Causal Mechanisms and Concomitant Properties. Paper presented at the Annual Meeting of the American Political Science Association, San Francisco, August 31-September 3.
[33] Kitschelt, 2001.

difficult, because they all involve proactive state policy and severely threaten the interests of powerful actors at all levels of government and society, who have some ability to block or slow down these reforms. It is these institutional or hard reforms that Hellman had in mind when he devised his PRE theory because they usually follow liberalization in reform sequencing. Because progress toward institutionalization is impossible if countries became stuck in the PRE during the liberalization stage, using the sum of institutionalization scores is the best gauge of escape from PRE.

To measure percentage progress on hard economic reforms (PROGRESS), I sum the four hard reforms, divided by the maximum possible score (17.2), and multiply the entire quantity by 100.

$$\text{PROGRESS} = \left[\frac{\sum \text{(Large Privitization, Competition Policy, Bank Reform, Non-Bank Financial Reform)}}{17.2} \right] * 100$$

Key Causal Variable:

I measure the cumulative stock of foreign direct investment as a percentage of GDP (CUMFDI_GDP) in the economy based on the UNCTAD on-line database, after confirming that the data was highly correlated with the EBRD's and IMF's FDI measures. [34]

Control variables:

Hellman theorizes that because coalitions-oriented systems like parliaments must include a wide swathe of society in order to win election, they are more likely to include some potential losers from particular reform sequencing and are less likely to be captured by early winners. Witold Henisz creates the ideal measure for Hellman's coalition-orientation by combining the number of veto points

[34] United Nations Conference on Trade and Development. 2005. *World Investment Report.* New York: United Nations. United Nations Conference on Trade and Development data set: http://stats.unctad.org/fdi/eng/

in the political system which constrains the executive modified by the party composition of the different branches of government in his POLCON3 dataset. Over the time period covered in the dataset, the highest average political constraint recorded was Slovenia at .553 followed closely by Latvia at .518. A number of countries (particularly in Central Asia) had average constraints of 0.[35]

A second political control (POSTCOM) is the number of seats in the highest branch of the national literature occupied by communist parties or unreformed communist successor parties as a measure of the societal inclination for economic reform. If high numbers of communist leaders continue to be elected, it is indication that significant portions of the population including pensioners and former state owned enterprise employees support a slower approach to economic reform.[36] At the extreme, communists average over 30% of the seats in Moldova and Uzbekistan between 1992 and 2004.[37]

Third, I control for the time since the first independent election in the country as indicator of how long the country has been engaging in reform (TIME).[38] A quadratic function of time is measured to account for the fact that later reforms should become more difficult as the reform ceiling of 100% is approached.

To gauge initial conditions for economic reform, I rely on two measures created by World Bank economists using a factor analysis of several pieces of data from collected from the communist period. "Macroeconomic Distortion" (IC1) includes trade dependence on the Council for Mutual Economic Assistance, the black market exchange rate premium, repressed inflation in the form of monetary overhang and the memory of the society for market mechanisms. "Socialist Development Overhang (IC2) includes per capita income in 1989 purchasing power parity

[35] Henisz, W. J. 2000. "The Institutional Environment for Economic Growth." *Economics and Politics 12(1)*: 1-31. Henisz, W. J. 2002. "The Institutional Environment for Infrastructure Investment." *Industrial and Corporate Change 11(2)*: 355-389.
[36] Norgaard, Ole. 2000. *Economic Institutions and Democratic Reform: A Comparative Analysis of Post-Communist Countries.* Cheltenham, UK: Edward Elger.
[37] Klaus Armingeon and Romana Careja, 2004. *Comparative Data Set for 28 Post-Communist Countries, 1989-2004*, Institute of Political Science, University of Berne.
[38] Armingeon and Careja, 2004.

dollars, urbanization, and over-industrialization (true industrialization over sustainable levels).[39] Figure 2 displays these initial conditions on a scatter plot. Viewing the scatter plot demonstrates that these measures are highly collinear with many other possible control variables, including a dummy for the Former Soviet Union and a categorical variable for the European Union Member/Association Status, geographic distance from the European Union, and Kitschelt's Bureaucratic Legacy Variable.[40] Due to the problems multicollinearity can cause for hypothesis testing in a multivariate regression, I do not use these alternative measures.[41]

(Figure 2 about Here)

WARTORN is a dummy variable measuring whether the country was at war during a particular year in the time series.[42] OILDUM measures whether the country is a net energy exporter according to World Bank's *World Development Indicators,* capturing whether the rent-seeking activities may deter have under-mined political will for economic reform.[43]

4. Identification Strategy – Predicted Exchange Rates as an Instrument for FDI

My argument rests on the notion that economic reform is endogenous to FDI and that analysts should account for this endogeneity in their analysis. As a result, I need to show that change in stocks of FDI have an independent impact in promoting economic reform. The basic strategy in instrumental variable estimation in a panel framework is to find an estimator that is both contemporaneously uncorrelated with the error term from the original model and that is

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[39]De Melo, Martha, Cevdet Denizer, Alan Gelb, and Stoyan Tenev. 1997."Circumstance and Choice: The Role of Initial Conditions and Policies in Transition Economies." *World Working Papers 1866.* Washington D.C.: World Bank and IFC.
[40] Kitschelt, Herbert. 1999. "Accounting for Outcomes of Post-communist Regime Change. Causal Depth or Shallowness in Rival Explanations. Paper presented at 1999 Annual Meeting of the American Political Science Association, Atlanta.
[41] Horowitz, Shale. 2003. "Sources of Post-Communist Democratization: Economic Structure, Political Culture, War, and Political Institutions." *Nationalities Papers 31 (2)* (June): 119-37.
[42] Horowitz, Shale. 2003. War after Communism: Effects on Political and Economic Reform in the Former Soviet Union and Yugoslavia," *Journal of Peace Research 40* (1) (January).
[43] World Bank. 2005, *World Development Indicators*. CD-ROM; Ross, Michael, 1999."The Political Economy of the Resource Curse," *World Politics* 51(1): 297-322.

correlated (preferably highly so) with the regressor for which it is to serve as an instrument.[44] In time series, finding this variable is particularly problematic because the instrument must also vary over time.

Fortunately, the economics literature provides an ideal instrument – exchange rates. Froot and Stein have demonstrated that imperfect capital markets mean that the MNCs in developed countries face internal capital costs that are lower than borrowing from external sources. As a result, a currency appreciation relative to another country leads to increased firm wealth that provides MNCs with greater low-cost funds to invest relative to counterpart firms in the foreign country which experiences the devaluation.[45] Blonigen hypothesizes a similar change in investment resulting from currency appreciation, but offers a different causal story. He tests the proposition that a depreciation of a foreign country's currency will lower the price of the asset for an MNC, but will not necessarily lower the nominal returns. In short, currency depreciation will lead to a "fire sale" of transferable assets to foreign firms operating in the global markets as opposed to domestic firms without international access.[46] Other economic studies offer confirmatory evidence that inward FDI responds to short-run exchange rate movements.[47]

We can not simply take reported exchange rates as the instrument, however, because of a wealth of political science literature that has shown that exchange rates are the product of domestic political manipulation in order to achieve particular economic goals and therefore

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[44] Kennedy, Peter. 1992. *A Guide to Econometrics*. 3rd Edition. Cambridge: MIT Press. John Bound, David A Jaeger and Regina M. Baker (1995) "Problems with Instrumental Variables Estimation when the Correlation Between the Instruments and the Endogenous Explanatory Variable is Weak." *Journal of the American Statistical Association* 90 (430): 443-450. Richard Timpone. 2001. "Concerns with Endogeneity in Statistical Analysis: Modelling the Interdependence Between Economic Ties and Conflict." In Economic Interdependence and International Conflict. eds. Edward D. Mansfield and Brian M Pollins. Ann Arbor: University of Michigan Press.
[45] Froot, Kenneth A. and Jeremy C. Stein. 1991. "Exchange Rates and Foreign Direct Investment: An Imperfect Capital Market Approach." *Quarterly Journal of Economics 106(4)*: 1191-1217.
[46] Blonigen, Bruce. 1997. "Firm-Specific Assets and the Link Between Exchange Rates and Foreign Direct Investment.' *American Economic Review*, 87(3): 447-65.
[47] Svenson, Deborah, L. 1994. "The Impact of U.S. Tax Reform on Foreign Direct Investment in the United Sates," *Journal of Public Economics 54 (2)*: 243-66; Kogut, Bruce and Sea Jin Chang. 1996. "Platform Investments and Volatile Exchange Rates: Direct Investment in the U.S. by Japanese Electronic Companies," *Review of Economics and Statistics 63(4)*: 4888-94.

highly related to the dependent variable of economic reform.[48] Most relevant to this paper is the work of Christina Bodea demonstrating that former communist parties in transition countries use currency commitments to signal their willingness to become respectable, mainstream political organizations that can carry out stabilization policy. Her works demonstrates poignantly that exchange rates and economic reform in the transition context are linked.[49]

But only a portion of the exchange rate is truly set by domestic processes. Exchange rates are also set by demand for currencies on international markets. This is especially true of floating exchange rate regimes, but crawling pegs and fluctuation bands, which are the dominant regime choices among transition countries, must also respond to shifts in international prices with a slight lag in the response time. Pegged rates are the least responsive, but even under this regime devaluations will take place to accommodate international pressure on the currency.[50] Slovakia, for instance, devalued its currency five times between 1993 and 1998.[51] Foreign investors are just as likely to respond to "fire sales" based on international price pressure as they are domestic exchange rate manipulation. Thus, by separating the exchange rate movements based on international price pressure from the domestic determinants of exchange rate choice, one could create an instrument for FDI completely exogenous to economic reform.

To this end, I use a Prais-Winsten Time Series Model to predict the exchange rates of 31 transition economies (including the East Asian communist countries) based on a basket of OECD currencies, of a number of countries among the largest investors in the transition. Currencies

[48] Simmons, B., 1994. *Who Adjusts?* Princeton: Princeton University Press; Leblang, David and William Bernhard. Democratic Institutions and Exchange Rate Commitments," *International Organization 53* (1) (Winter):71-97; Leblang, David. A. 1999. "Domestic Political Institutions and Exchange Rate Commitments in the Developing World," *International Studies Quarterly 43* (1): 599-620. Frieden, Jeff. 1997." The Politics of Exchange Rates." In *Anatomy of an Emerging Market Crash*, eds. Sebastian Edwards & Moises Nam . Washington D.C.: Carnegie Endowment for International Peace: Chapter 3.
[49] Bodea, Christina. 2004. "The Opportunistic Use of Exchange Rates: From Communists to Social Democrats in Eastern Europe." Presented at American Political Science Association Annual Meeting in Boston.
[50] Eichengreen, Barry, Andrew Rose, C. Wyplosz,. 1995. Exchange Market Mayhem: The Antecedents and Aftermath of Speculative Attacks, *Economic Policy (21)*: 249-312.
[51] Bodea, 2004, 37.

included the U.S. Dollar, British Pound, Euro, German Mark, Austrian Kroner, Korean Yuan, and Japanese Yen.[52] To create the basket, I first ran a factor analysis procedure on the nominal exchange rates of the six international currencies between 1992 and 2004. The currencies loaded onto one factor with an Eigen value of 4.3, explaining 80% of the variance in the currencies. Comfortable that this was a very strong relationship and a good proxy for international price movements, I took the factor scores from this operation and used them as the key causal variable in a model estimating the nominal exchange rates of the transition states. I chose the nominal rate, because I reasoned that price liberalization strategy is also a key economic reform and highly politically malleable. Nominal rates offer the rate most divorced from any domestic political strategy.

I use a Prais-Winsten Model with an AR1 process to deal with autocorrelation in the data. The resulting model was: $y_{it} = \beta_0 + \beta_1(OECD)_{it} + u_{it}$, where y is the cumulative stocks of FDI, i and t are the country and year indices respectively, and OECD represents the nominal exchange rates for the basket of OECD countries and the error term is a residual capturing the domestic determinants of the exchange rate. The coefficient on the OECD term for each of the countries is displayed in Table 2.

(Table 2 about Here)

Next, I calculate the predicted values from the Prais-Winsten Models. It is these values that will serve as the instrument in the two-staged least squares procedure. A sample of the yearly averages in the predicted exchange rates compared to the first difference in the stocks of FDI are shown below in Table 3 for the four transition economies.

(Table 3 about Here)

[52] Exchange Rate statistics between 1992 and 2004 were taken from World Bank 2004.

The bivariate correlation between predicted exchange rates and stocks of FDI is positive though weekly so, while the relationship with the dependent variable progress is virtually indistinguishable from 0. This can be seen in the boxed portion of Table 4.

(Table 4 about Here)

In a multivariate regression, the impact of exchange rate appreciation changes in the stock of FDI is much stronger. This is shown conclusively in Table 5. The first three models use the panel corrected standard errors procedure, while the fourth model shows the same relationship in a time series model with fixed effects. All four models employ an AR1 procedure for autocorrelation and first differences on variables which trend over time according to the Hadri Lagrange Multiplier test.[53] The number of panels included in the model fluctuates because the World Bank did not record initial conditions scores for Cambodia, Laos, and Bosnia-Herzegovina. In the fixed-effects model when time invariant properties are dropped, these panels are included but dropped elsewhere.

The main specification shown in model 2 and excluding the FSU dummy will serve as the first stage regression for the subsequent IV-2SLS analysis. It is important to note that the instrument is highly statistically significant with a t-statistic of 2.6 in the main specification.

A remaining econometric concern is whether the instrument violates the exclusion restriction, meaning that predicted exchange rates have an independent effect on economic reform beyond any effect working through FDI (conditional on the control variables). In essence, is it possible that appreciation of the exchange rate caused by international factors would independently spur transition states to take-on hard economic institutionalization? This seems highly unlikely. If anything, we would expect a slightly negative relationship between exchange rate appreciation

[53] Hadri, Kaddour. 2000. "Testing for Stationarity in Heterogeneous Panel Data." *The Econometrics Journal 3:* 148-161.

and reform, as countries sought to insulate themselves from international price fluctuations by reversing economic openness.

Of the other explanatory variables, only TIME and the oil exporting dummy are related to stocks of FDI in a consistent way across the specifications. Because TIME is included in a quadratic term, the coefficient on the term must be interpreted as the slope from a shift from t_0 to t_1. This indicates that all states received significant boosts in FDI attraction in the year following the first independent election. This makes intuitive sense, as for the most part, states did not have legal regimes covering FDI under communist governments. The significant and negative quadratic in the fixed effects model indicates that the longer the period since that year, the yearly increases in FDI begin to decline the farther one a state is from the productive first year. The inflection point on the quadratic term is about 10 years. The oil dummy is also highly significant in models 2 and 3, indicating that FDI tended to flow to countries with large natural resource deposits.

(Table 5 about Here)

5. The Impact of FDI on Economic Reform Progress on Transition States

With this identification strategy, I can move on to explore the impact of changes in the cumulative stock of FDI on economic reform progress.

$$PROGRESS_{it} = \beta_0 + \beta_1 (CUM\_FDI)_{it} + \beta_2 X_{it} + u_{it} ,$$

where X_{it} represents a matrix of control variables indexed by country and year. This analysis is shown in Table 6.

The first two models show the result of a model with panel corrected standard errors; the second model demonstrates the same relationship with fixed effects, dropping the time-invariant properties; and the final two models show the IV-2SLS results with and without fixed effects. All models use an AR1 procedure with first differences used to de-trend variables. The number of panels in this model is limited to the 26 countries for which the EBRD records economic progress.[54]

(Table 6 about Here)

The results are striking. In all models, FDI has a significant and positive impact on economic reform, but this impact increases dramatically in the IV regressions once I have isolated the independent impact of changes in the cumulative stock of FDI on reform. Each 1% increase in the cumulative stock of FDI/GDP would lead to a 1.2% increase in progress on hard economic reforms. Thus, a shift from the 25th percentile of yearly change in stocks of FDI (0.25%) to the 99th percentile (4.2%) would yield a yearly 5.34% increase in hard economic reforms in the subsequent year.

The coefficient on time is highly significant in non-instrumented specifications, indicating that economic reform received large boosts in the first year after an independent election. The transition literature has attributed this to three factors. First, countries were starting at very low levels and therefore small changes led to major increases in economic reform. Secondly, independent elections in many cases provided a definitive break from the communist leaders of the past, who may had their support bases undermined by easy reforms prior to the election. Poor election returns weakened the bargaining position of powerful communist actors, especially government bureaucrats and enterprise managers whose existence depends on the central

[54] As yet, it is very difficult to compare the East Asian transition economies to those covered by the EBRD. In 2000, the World Bank duplicated the EBRD scores for Vietnam, Cambodia, Laos, Mongolia and China, but the one-year does not allow for employment in a time series model. The Heritage Foundation Economic Freedom Index has a similar scorecard including the East Asia transition countries, but the time series is constrained to 1995-2004.

planning institutions threatened by the market. [55] As a result, after initial elections politicians were able to drive forward with difficult economic reform until populations began to feel some of the pain and communist successor parties began to reassert themselves in many countries.

Once the instrument is included, however, we find that the first year after elections is not nearly as important. In the instrumented equations, the quadratic term is significant, indicating increasing returns to time after the first year both in the random and fixed effects model.

Economic legacies are highly important in both all random effects specifications. A one standard deviation increase in macroeconomic distortion reduces overall progress on economic reform by about 6 percentage points, while a one standard deviation shift in socialist overhang actually increases progress on economic reform by almost 9%. This is likely due to the fact that rich countries with large state sectors could gain exorbitant financial returns from large-scale privatization. Of course, both of these variables need to be treated with caution. The countries with the lowest distortion and highest socialist overhang (the NW quadrant of Figure 2) are the countries of Eastern Central Europe, who also score the highest on EU admission, distance from Western Europe, and Kitschelt bureaucratic legacy. These terms are really only a proxy for a wide array of economic legacies.

Finally, war has a large negative impact on reform in model 2, as is to be expected, given the fact politicians were busy with other issues than driving through reform packages. Nevertheless, that effect is insignificant in the instrumental variables model.

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[55] Fish, Steven. 1999. "The Determinants of Economic Reform in the Post Communist World." *East European Politics and Societies 12(1):* 31-78; Norgaard, Ole. 2000. *Economic Institutions and Democratic Reform: A Comparative Analysis of Post-Communist Countries.* Cheltenham, UK: Edward Elger.

6. Conclusions

The most important finding from the analysis, of course, is that once we have instrumented, FDI continues to have a large, positive influence on economic reform progress. The obsolescing bargain does not appear to apply to stock of FDI in transition economies. The more FDI in the economy, the more incentive there is for the host government to push forward with reforms.

When an earlier generation of political science scholars looked into the interaction of FDI and developing states in the 1960s and 1970s, they were explicitly interested in how FDI impacted local institutions and policy making processes. Though their work was highly influenced by research on natural resource extracting industries, they took seriously the notion that foreign investors could influence political institutions of the host country, primarily because of the bargaining advantage that MNCs possessed over very poor and isolated developing countries. For a while these arguments provided fuel for the raging *dependencia* fires, because they confirmed developing countries' and dependendistas' fears that industrialized countries manipulated local institutions in order to exploit them for raw materials.[56] The notion of multinationals as "agents of change," lost its steam in the early eighties due to the Vernon's illustration of the OBT theory and the perception that evidence marshaled by dependistas was biased by their own political agendas against MNCs.

This paper has endeavored to show that it is time to re-focus political science on the politics of FDI -- coalitions of investors do indeed lobby for political change and often have a significant impact on the economic reform trajectory of their host counties. Instrumental variable regression

[56] Diebold, J. 1974. "Why Be Scared of Them?" *Foreign Policy 3*: 79-95; Biersteker, Thomas J. 1978, *Distortion or Development? Contending Perspectives on the Multinational Corporation.* Cambridge: Massachusetts Institute of Technology Press; Moran, Theodore. 1974. *Multinational Corporations and the Politics of Dependence: Copper in Chile.* Princeton: Princeton University Press; Evans, Peter. 1979. *Dependent Development: The Alliance of Multinational, State, and Local Capital in Brazil.* Princeton, NJ: Princeton University Press; Moran, Theodore. H. 1978. *Multinational Corporations and Dependency: A Dialogue for Dependentistas and Non-Dependentistas*; Moran, Theodore. H. 1978. "Dependence and Dependency in the Global System." *International Organization 32* (1): 79-100.

over a twelve-year time span confirmed the independent effect of FDI on the transition trajectories of host countries, particular in the hard institutional reforms where reforms can be blocked by entrenched interests. In so doing, the paper also demonstrated that FDI offers one solution to the Hellman's partial reform trap.

More works certainly remains to be done. This paper had an explicit macro-focus, but the micro-logic of how coalitions of investors actually go about influencing transition countries' policies remains to be demonstrated in future work. In the rare case where scholars do think seriously about the circular relationship between investment and governance, the results can be fascinating. Henisz and Delios, for instance, find that Japanese investors will be less likely to exit from a host country with a politically hazardous environment if they have significant experience in that country.[57] The authors surmise that this is because the firms' relationships with local institutions give them an actual or perceived influence over a political regime and thereby an advantage over their counterparts.[58] Investors can reap dividends by influencing short-term political decisions and lower level institutions in politically hazardous environments such as China and Vietnam, but would be at risk if they cultivated such relationships only to see multi-party democracy develop in those states and destroy their influence.

On the other hand, it certainly seems possible that the net result of concentrated lower level influence and policy changes may in fact lead to wide-scale regime change.[59] Now that we can safely put the politics back in the political economy of FDI, this question is once-again a testable hypothesis.

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[57] Henisz, Witold J. and Andrew Delios. 2004. "Information or Influence? The Benefits ofExperience for Managing Political Uncertainty." *Strategic Organization 2 (4)*: 389-421.
[58] Henisz, Witold J. and Andrew Delios, 2004, 35.
[59] This logic, of course, underlies the well-known American foreign policy of constructive engagement. See Keohane, Robert O. and Joseph Nye. 1977. *Power and Interdependence*: *World Politics in Transition.* Boston: Little Brown for their discussion of sensitivity and vulnerability interdependence and more recently Steven Levitszky and Lucan Way's work on economic linkage.

Table 1: Two components of Economic Reform

European Bank of Reconstruction and Development- Transition Policies.	*Factor I "Liberalization or Easy Reforms"*	*Factor II "Institutionalization or Hard Reforms "*
Small-Scale Privatization	.85	.01
Price Liberalization	.79	.14
Trade Liberalization	.76	.31
Enterprise Reform	.44	.58
Competition Reform	.36	.59
Large-Scale Privatization	.48	.62
Non-Bank Finance	-.33	.71
Bank Reform	.24	.77
% Explained Variance	*32.8*	*28.6*
Eigenvalues	*2.62*	*2.20*

Sources: Kitschelt, 2001; EBRD 1994-2006.

Table 2: Prais-Winsten Time Series Estimates
Impact of Movements in Basket of OECD Nominal Exchange Rates on Exchange Rates in Transition Country†

Dependent Variable = Units of Local Currency/US $	**Coefficient**	**Standard Error**
Albania	20.56**	(7.60)
Armenia	35.45	(62.2)
Azerbaijan	-592.1	(546)
Belarus	144.9	(216)
Bosnia	0.349***	(0.093)
Bulgaria	0.811***	(0.15)
Cambodia	468.7	(278)
China	0.131	(0.45)
Croatia	1.149***	(0.30)
Czech Republic	3.853**	(1.27)
Estonia	2.028***	(0.44)
F.Y.R. Macedonia	9.884***	(1.24)
Georgia	0.275*	(0.14)
Hungary	34.86**	(12.4)
Kazakhstan	10.83	(11.4)
Kyrgyz Republic	7.230*	(3.79)
Laos	780.5	(821)
Latvia	0.0467*	(0.023)
Lithuania	-0.00907	(0.32)
Moldova	1.348	(1.19)
Mongolia	75.63	(79.7)
Poland	0.301	(0.20)
Romania	3702	(2137)
Russia	2.726	(3.07)
Slovenia	5.616***	(1.42)
Slovakia	31.12**	(10.9)
Tajikistan	0.256	(0.20)
Turkmenistan	1624**	(547)
Ukraine	0.305	(0.49)
Uzbekistan	62.92*	(24.3)
Vietnam	716.6*	(358)

Notes: Standard errors in parentheses. *** $p<0.01$, ** $p<0.05$, * $p<0.1$ Basket of OECD currencies includes U.S. Dollar, British Pound, Euro, German Mark, Austrian Kroner, Korean Yuan, Japanese Yen. Model performed with adjusted AR1 autocorrelation procedure.

Table 3: Predicted Values from Prais-Winsten Procedure

Predicted Yearly Exchange Rates from movements in basket of OECD Currencies[†], Change in Rates, Compared to First Difference in FDI as a Percentage of GDP for Selected Countries

Czech Republic				**Russia**			
Year	*Predicted Exchange Rate*	*Change (Base Year =1992)*	*First Difference of Stock of FDI/GDP*	*Year*	*Predicted Exchange Rate*	*Change (Base Year =1992))*	*First Difference of Stock of FDI/GDP*
1992	27.922	100	0.00	1992	14.627	100	0.00
1993	26.510	94.94	0.00	1993	13.628	93.17	0.10
1994	25.992	98.05	1.20	1994	13.262	97.31	-0.50
1995	23.719	91.26	2.90	1995	11.654	87.88	0.00
1996	25.650	108.14	0.60	1996	13.020	111.72	-0.10
1997	29.533	115.14	2.40	1997	15.767	121.10	0.00
1998	31.979	108.28	7.20	1998	17.497	110.97	0.30
1999	32.152	100.54	6.20	1999	17.620	100.70	-0.50
2000	34.003	105.75	9.40	2000	18.928	107.43	11.90
2001	35.363	104.00	5.50	2001	19.891	105.09	5.70
2002	35.060	99.14	8.20	2002	19.677	98.92	2.90
2003	32.258	92.01	-2.50	2003	17.694	89.92	-1.00
2004	31.062	96.29	2.60	2004	16.849	95.22	-3.10

Estonia				**Vietnam**			
Year	*Predicted Exchange Rate*	*Change (Base Year =1992)*	*First Difference of Stock of FDI/GDP*	*Year*	*Predicted Exchange Rate*	*Change (Base Year =1992)*	*First Difference of Stock of FDI/GDP*
1992	12.774	100	0.00	1992	12741.000	100	0.00
1993	12.031	94.18	6.90	1993	12478.330	97.94	0.70
1994	11.758	97.73	5.00	1994	12382.020	99.23	7.00
1995	10.562	89.83	-1.70	1995	11959.390	96.59	1.50
1996	11.578	109.62	0.00	1996	12318.380	103.00	6.30
1997	13.623	117.66	6.00	1997	13040.660	105.86	7.30
1998	14.910	109.45	10.00	1998	13495.570	103.49	8.90
1999	15.001	100.61	12.60	1999	13527.840	100.24	6.40
2000	15.975	106.49	3.90	2000	13871.990	102.54	2.30
2001	16.692	104.48	5.00	2001	14125.090	101.82	4.20
2002	16.532	99.04	8.60	2002	14068.740	99.60	3.80
2003	15.057	91.08	14.00	2003	13547.500	96.30	-1.90
2004	14.428	95.82	6.10	2004	13325.150	98.36	-5.50

[†] Basket of OECD currencies: U.S. Dollar, British Pound, Euro, German Mark, Austrian Kroener, Korean Yuan, and JapaneseYen.

Table 4
Bivariate Correlations of Independent Variables

Column	***Variable***	***1***	***2***	***3***	***4***	***5***	***6***	***7***	***8***	***9***	***10***	***11***	***12***	***13***
1	PROGRESS	1												
2	First difference of FDI/GDP.	0.1311*	1											
3	First difference of FDI/GDP (1 lag)	0.1600*	0.5170*	1										
4	Change in Predicted Exchange Rate	-0.0055	0.0451	-0.0063	1									
5	Change in Predicted Exchange Rate (1 lag)	-0.0366	0.0161	0.039	0.0671	1								
6	First difference of Post-Communist Seats	-0.0587	-0.0103	-0.0118	0.0031	0.0231	1							
7	First difference of POLCON3	-0.0485	-0.0209	-0.1256*	-0.0036	-0.019	-0.0027	1						
8	Time	0.6929*	0.033	0.0757	-0.0335	-0.0146	-0.0781	-0.0674	1					
9	Time Squared	0.6337*	-0.034	0.0134	-0.0499	-0.0351	-0.0669	-0.0523	0.9249*	1				
10	Initial Condition 1	-0.5528*	0.0299	0.0074	0.0584	0.0619	0.0082	0.0108	-0.4999*	-0.4347*	1			
11	Initial Condition 2	0.4752*	0.0502	0.05	-0.0581	-0.062	-0.0048	-0.041	-0.2508*	-0.3838*	0.0325	1		
12	War torn	-0.3790*	0.0248	0.0374	-0.0647	-0.0613	0.0402	0.0179	-0.0381	-0.0423	-0.022	-0.1850*	1	
13	Oil Dummy	-0.2688*	0.1481*	0.1707*	0.0035	0.0021	0.0108	0.0242	-0.0901	-0.051	0.2583*	-0.4102*	-0.1055	1

Table 5: Predicting Changes in the Stock of Foreign Direct Investment

Dependent Variable: *First Difference of Stock of FDI/GDP*	**1. PCSE**	**1. PCSE**	**3. PCSE**	**4. Fixed Effects**
Change in Predicted Exchange Rate	0.0222**	0.0130***	0.0130**	0.0124*
	(0.0090)	(0.0050)	(0.0052)	(0.0074)
Seats held by Post-Communist Successor Parties	0.00663	0.0228	0.0242	0.000654
	(0.014)	(0.028)	(0.028)	(0.025)
Political Constraints	-1.552	-1.673	-1.752	-0.797
	(2.12)	(3.08)	(3.08)	(2.35)
Time Since First Independent Election	0.339*	0.486*	0.500*	0.393**
	(0.19)	(0.28)	(0.28)	(0.17)
$Time^2$	-0.0154*	-0.00836	-0.00843	-0.0208**
	(0.0092)	(0.022)	(0.022)	(0.0096)
Initial Conditions 1: Macroeconomic Distortion	-0.0907	0.447	0.339	
	(0.31)	(0.40)	(0.74)	
Initial Conditions 1: Socialist Overhang	0.475	0.225	0.130	
	(0.45)	(0.55)	(0.54)	
Oil Exporter Dummy	2.065	4.660***	4.484***	
	(1.79)	(1.27)	(1.41)	
War Dummy		0.383	0.310	
		(0.64)	(0.59)	
Former Soviet Union Dummy			0.352	
			(1.12)	
Constant	-1.687	-1.739*	-1.916	0.150
	(1.35)	(0.94)	(1.18)	(1.04)
Observations	326	326	326	359
Number of country_	28	28	28	31
R-squared	0.04	0.15	0.15	0.03

Notes: Standard errors in parentheses. *** $p<0.01$, ** $p<0.05$, * $p<0.1$
The first three estimates are panel corrected standard error estimates with a panel-specific AR1 process and panel-level heteroskedatic errors. The fourth model is OLS with fixed effects and AR 1 autocorrelation correction. Due to non-stationarity according to the Hadri Lagrange Multiplier, the first difference of Post-Communist Seats and Political Constraints was taken.

Table 6: Impact of Foreign Direct Investment on Economic Reform Progress

Dependent Variable: Percentage Progress Toward Completion of Hard Economic Reforms(EBRD Data)	**1. PCSE**	**2. PCSE**	**3. Fixed Effects**	**4. IV-2SLS**	**5. IV with Fixed Effects**
Lagged Stock of Foreign Direct Investment	0.0679*	0.0804*	0.149**	1.176**	1.121**
	(0.038)	(0.041)	(0.063)	(0.56)	(0.51)
Seats held by Post-Communist Successor Parties	-0.0103	-0.00878	0.0229	-0.00876	-0.00769
	(0.015)	(0.015)	(0.031)	(0.047)	(0.044)
Political Constraints	0.234	0.204	1.399	5.115	4.690
	(1.74)	(2.09)	(2.21)	(3.75)	(3.52)
Time Since First Independent Election	1.097***	1.056***	0.806***	0.368	0.426
	(0.29)	(0.22)	(0.22)	(0.34)	(0.32)
$Time^2$	0.0102	0.00733	0.0249*	0.0389**	0.0394**
	(0.017)	(0.013)	(0.013)	(0.020)	(0.019)
Initial Conditions 1: Macroeconomic Distortion	-4.583***	-5.630***		-5.166***	
	(0.58)	(0.23)		(1.48)	
Initial Conditions 1: Socialist Overhang	9.197***	9.049***		7.690***	
	(2.14)	(0.54)		(1.99)	
Oil Exporter Dummy	2.231	2.829		-2.603	
	(2.55)	(2.69)		(4.88)	
War Dummy		-2.451*		0.0303	1.461
		(1.31)		(1.48)	(1.54)
Constant	39.22***	40.09***	43.73***	42.36***	43.16***
	(1.88)	(0.89)	(0.80)	(2.24)	(1.59)
Observations	263	263	276	263	263
Number of country_	26	26	29	26	26
R-squared	0.88	0.91	0.56	.61	.21

Notes: Standard errors in parentheses. *** *p<0.01*, ** *p<0.05*, * *p<0.1*
The first two estimates are panel corrected standard error estimates with a panel-specific AR1 process and panel-level heteroskedatic errors. The second model is OLS with fixed effects. The fourth model's estimates are two-stage least squares with and instrumented by the lagged change in predicted exchange rates from a basket of OECD currencies. The fifth model is two-stage least squares with fixed effects. Both of the fourth and fifth model employ AR1 autocorrelation corrections. Due to non-stationarity according to the Hadri Lagrange Multiplier, the first difference of the Stock of FDI Post-Communist Seats and Political Constraints was taken.

Figure 1
Time Series Plots of Selected Transition Countries

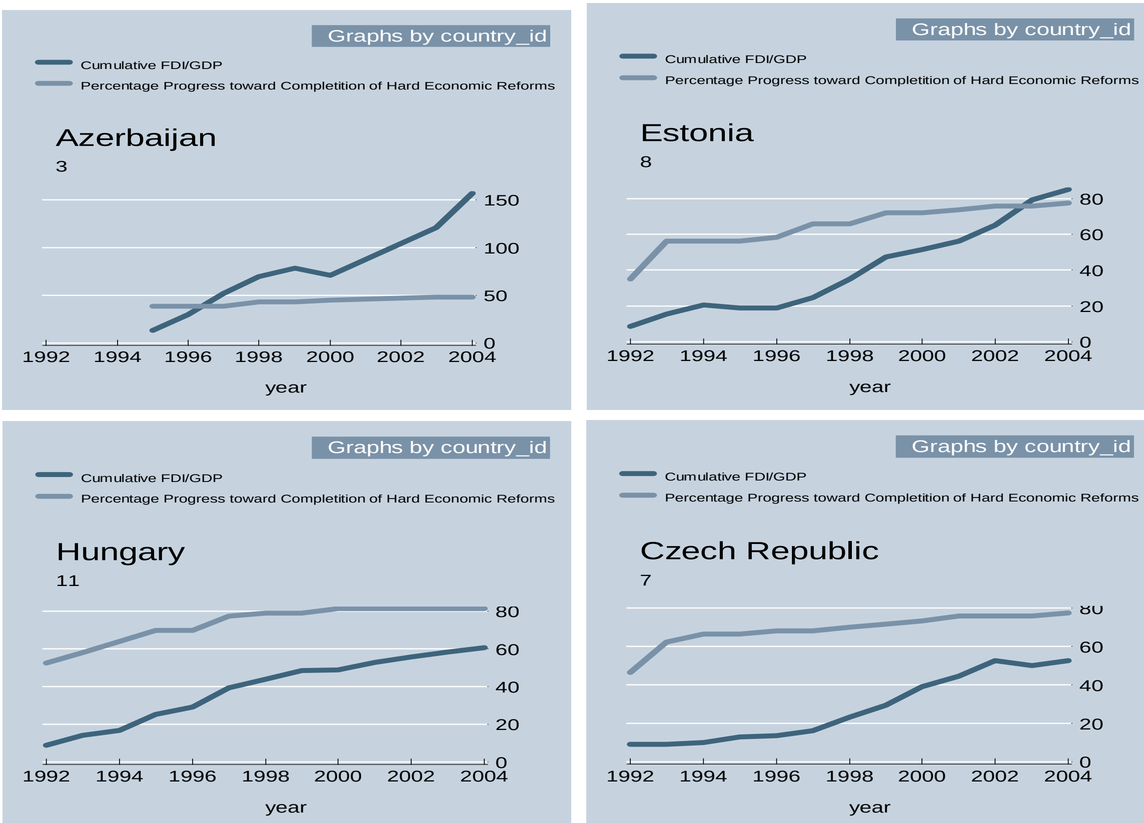
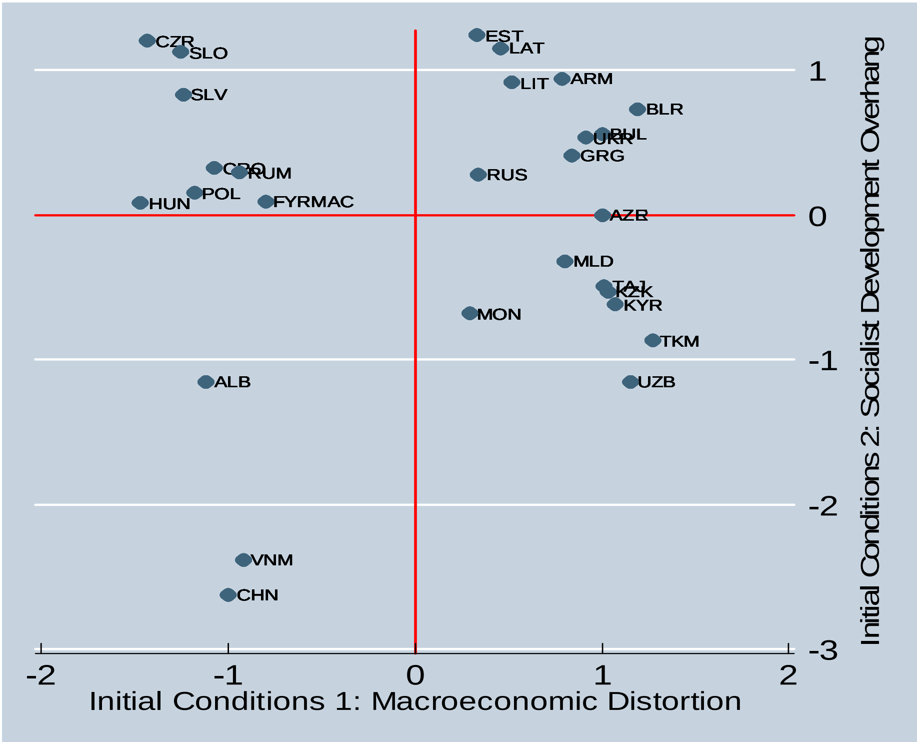


Figure 2: Two Types of Initial Conditions



Appendix
Descriptive Statistics of Variables Used in Model

Variable	*Mean*	*Std. Dev.*	*Min*	*Max*
Progress Toward Completion of Hard Economic Reforms (EBRD Data)	52.516	14.001	23.256	81.395
Lagged Stock of Foreign Direct Investment (fd)	2.840	4.475	-7.200	35.100
Seats held by Post-Communist Successor Parties (fd)	0.361	7.210	-43.000	59.800
Political Constraints (fd)	0.006	0.092	-0.456	0.537
Time Since First Independent Election	7.357	4.031	0.000	16.000
Time2	70.316	61.853	0.000	256.000
Initial Conditions 1: Macroeconomic Distortion	0.096	1.013	-1.470	1.270
Initial Conditions 1: Socialist Overhang	0.228	0.737	-2.380	1.240
Oil Exporter Dummy	0.183	0.387	0.000	1.000
War Dummy	0.163	0.371	0.000	1.000

fd: first difference taken