THE IMPACT OF GOVERNANCE OBSTACLES AND STATE CAPTURE OF TRANSITION COUNTRIES ON FOREIGN DIRECT INVESTMENT

Jennifer Ping-Ngoh Foo, Stetson University
Jane Chein-Hsing Sung, Truman State University

After almost ten years of transitioning from a planned economy to a market economy, the former Soviet Union and the Balkan countries are still lagging behind in attracting foreign investment and achieving sustainable growth. Institution building and reforms are crucial to transition success. Institutional framework, such as a viable corporate governance system and a reduction in the state sector’s role while increasing that of the private sector, is needed to support a market economy. However, little empirical work has been done to test the impact of governance obstacles and state capture on the ability of transition countries to attract foreign direct investment. In this paper, we used two sets of models to examine empirically the impact of governance obstacles and state capture on foreign direct investment flows in transition countries, using ordinary least squares with adjusting constant diagonal matrix for variance-covariance matrix of error terms. The results indicate that governance obstacles are significant in determining FDI inflows in the transition countries and that the European Union accession countries, because of their economic development, were able to attract more FDI inflows. State capture does not seem to affect significantly the level of foreign investment but plays a positive role in the annual growth rate of foreign direct investment in the transition countries.

INTRODUCTION

The economics of transition has attracted considerable attention from researchers in recent years because of the difficulty of transitioning to a market economy. The degree of transition from a planned administrative economy to a market economy varies across transition countries. Numerous studies exist that analyze various
aspects of the transition efforts. In the initial transition efforts, privatization has been consistently pushed as the answer to market reforms and economic success for transition countries (Kenway 1993, Laban & Wolf 1993, North 1996). However, the benefits from the aftermath of rapid privatization efforts by the transition countries have been cast in doubt (Spechler 1996, Goldman 1997, Saving 1998, Nellis 1999). Other studies assess the progress of economic growth since the initiation of market reforms. Barbone and Zalduendo (1996) estimate the time required for the transition countries to attain the Western level of development using growth regressions. Raiser, Di Tommaso and Weeks (2000) find that changes in economic reforms and political liberalization are stronger determinants than changes in economic structures induced by the economic reforms. Johnson, McMillan and Woodruff (1999) find that macroeconomic stability is not sufficient for private sector growth and that insecure property and ownership rights are greater inhibitors to private sector growth. One study even questions whether the special treatment received by these transition countries from international financial institutions, such as the European Bank for Reconstruction and Development (EBRD), is justified after ten years of transition (Gros & Suhrcke 2000).

The former Soviet Union, which now makes up most of the Commonwealth of Independent State (CIS) countries, and the Baltic and Eastern European countries (BEEC) have undergone remarkable changes, since the breakup of the Soviet Union in 1989, in the pursuit of a market economy. GDP has improved since 1990 from mostly negative growth to positive growth in 2000, as indicated in Table I. China, on the other hand, achieved positive and high economic growth over the same period relative to the EU Accession countries (EUAC), the Commonwealth of Independent States and the Balkan and Eastern European Countries.

Foreign Direct Investment (FDI) inflows to these countries have been negligible relative to China. Foreign Direct Investment in China increased 1,053% compared to 75% for Russia, over the period from 1990 to 1999. Hungary, the Czech Republic and Poland, countries with EU accession hopes and therefore with the highest potential for market reform achievements and economic growth, because of their
Table 1. GDP growth in CIS and BEEC countries and China (in percentage change)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>EUAC</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bulgaria</td>
<td>-9.1</td>
<td>-11.7</td>
<td>-7.3</td>
<td>-1.5</td>
<td>1.8</td>
<td>2.1</td>
<td>-10.9</td>
<td>-6.9</td>
<td>3.5</td>
<td>2.4</td>
<td>5.8</td>
</tr>
<tr>
<td>Czech Rep</td>
<td>-1.2</td>
<td>-11.6</td>
<td>-0.5</td>
<td>0.1</td>
<td>2.2</td>
<td>5.9</td>
<td>4.8</td>
<td>-1.0</td>
<td>-2.2</td>
<td>-0.8</td>
<td>3.1</td>
</tr>
<tr>
<td>Hungary</td>
<td>-3.5</td>
<td>-11.9</td>
<td>-3.1</td>
<td>-0.6</td>
<td>2.9</td>
<td>1.5</td>
<td>1.3</td>
<td>4.6</td>
<td>4.9</td>
<td>4.2</td>
<td>5.2</td>
</tr>
<tr>
<td>Poland</td>
<td>-11.6</td>
<td>-7.0</td>
<td>2.6</td>
<td>3.8</td>
<td>5.2</td>
<td>7.0</td>
<td>6.0</td>
<td>6.8</td>
<td>4.8</td>
<td>4.1</td>
<td>4.0</td>
</tr>
<tr>
<td>Romania</td>
<td>-5.6</td>
<td>-12.9</td>
<td>-8.8</td>
<td>1.5</td>
<td>3.9</td>
<td>7.1</td>
<td>3.9</td>
<td>6.1</td>
<td>5.4</td>
<td>-3.2</td>
<td>1.6</td>
</tr>
<tr>
<td>Slovak Rep</td>
<td>-2.5</td>
<td>-14.6</td>
<td>-6.5</td>
<td>-3.7</td>
<td>4.9</td>
<td>6.7</td>
<td>6.2</td>
<td>6.2</td>
<td>4.1</td>
<td>1.9</td>
<td>2.2</td>
</tr>
<tr>
<td>Slovenia</td>
<td>-4.7</td>
<td>-8.9</td>
<td>-5.5</td>
<td>2.8</td>
<td>5.3</td>
<td>4.1</td>
<td>3.5</td>
<td>4.6</td>
<td>3.8</td>
<td>5.2</td>
<td>4.6</td>
</tr>
<tr>
<td>BEEC</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Albania</td>
<td>-10.0</td>
<td>-28.0</td>
<td>-7.2</td>
<td>9.6</td>
<td>8.3</td>
<td>13.3</td>
<td>9.1</td>
<td>-7.0</td>
<td>8.0</td>
<td>7.3</td>
<td>7.8</td>
</tr>
<tr>
<td>Estonia</td>
<td>-6.5</td>
<td>-13.6</td>
<td>-14.2</td>
<td>-8.8</td>
<td>-2.0</td>
<td>4.6</td>
<td>4.0</td>
<td>10.4</td>
<td>5.0</td>
<td>-0.7</td>
<td>6.9</td>
</tr>
<tr>
<td>Croatia</td>
<td>-5.4</td>
<td>-21.1</td>
<td>-11.7</td>
<td>-8.0</td>
<td>5.9</td>
<td>6.8</td>
<td>6.0</td>
<td>6.5</td>
<td>2.5</td>
<td>-0.4</td>
<td>3.7</td>
</tr>
<tr>
<td>Latvia</td>
<td>-2.9</td>
<td>-10.4</td>
<td>-34.9</td>
<td>-14.9</td>
<td>0.6</td>
<td>-0.8</td>
<td>3.3</td>
<td>8.6</td>
<td>3.9</td>
<td>1.1</td>
<td>6.6</td>
</tr>
<tr>
<td>Lithuania</td>
<td>-5.0</td>
<td>-5.7</td>
<td>-21.3</td>
<td>-16.2</td>
<td>-9.8</td>
<td>3.3</td>
<td>4.7</td>
<td>7.3</td>
<td>5.1</td>
<td>-3.9</td>
<td>3.9</td>
</tr>
<tr>
<td>CIS</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Armenia</td>
<td>-7.4</td>
<td>-11.7</td>
<td>-41.8</td>
<td>-8.8</td>
<td>5.4</td>
<td>6.9</td>
<td>5.9</td>
<td>3.3</td>
<td>7.2</td>
<td>3.3</td>
<td>6.0</td>
</tr>
<tr>
<td>Azerbaijan</td>
<td>-11.7</td>
<td>-0.7</td>
<td>-22.6</td>
<td>-23.1</td>
<td>-19.7</td>
<td>-11.8</td>
<td>1.3</td>
<td>5.8</td>
<td>10.0</td>
<td>7.4</td>
<td>11.1</td>
</tr>
<tr>
<td>Belarus</td>
<td>-3.0</td>
<td>-1.2</td>
<td>-9.6</td>
<td>-7.6</td>
<td>-12.6</td>
<td>-10.4</td>
<td>2.8</td>
<td>11.4</td>
<td>8.4</td>
<td>3.4</td>
<td>5.8</td>
</tr>
<tr>
<td>Georgia</td>
<td>-12.4</td>
<td>-20.6</td>
<td>-44.8</td>
<td>-25.4</td>
<td>-11.4</td>
<td>2.4</td>
<td>10.5</td>
<td>10.8</td>
<td>2.9</td>
<td>3.0</td>
<td>1.9</td>
</tr>
<tr>
<td>Kazakhstan</td>
<td>-0.4</td>
<td>-13.0</td>
<td>-2.9</td>
<td>-9.2</td>
<td>-12.6</td>
<td>-8.2</td>
<td>0.5</td>
<td>1.7</td>
<td>-1.9</td>
<td>2.7</td>
<td>9.6</td>
</tr>
<tr>
<td>Kyrgyz Rep</td>
<td>3.0</td>
<td>-5.0</td>
<td>-19.0</td>
<td>-16.0</td>
<td>-20.1</td>
<td>-5.4</td>
<td>7.1</td>
<td>9.9</td>
<td>2.1</td>
<td>3.7</td>
<td>5.1</td>
</tr>
<tr>
<td>Moldova</td>
<td>-2.4</td>
<td>-17.5</td>
<td>-29.1</td>
<td>-1.2</td>
<td>-31.2</td>
<td>-1.4</td>
<td>-7.8</td>
<td>1.3</td>
<td>-6.5</td>
<td>-4.4</td>
<td>1.9</td>
</tr>
<tr>
<td>Russia</td>
<td>-4.0</td>
<td>-5.0</td>
<td>-14.5</td>
<td>-8.7</td>
<td>-12.7</td>
<td>-4.1</td>
<td>-3.5</td>
<td>0.9</td>
<td>-4.9</td>
<td>5.4</td>
<td>8.3</td>
</tr>
<tr>
<td>Ukraine</td>
<td>-3.4</td>
<td>-8.7</td>
<td>-9.9</td>
<td>-14.2</td>
<td>-22.9</td>
<td>-12.2</td>
<td>-10.0</td>
<td>-3.0</td>
<td>-1.9</td>
<td>-0.2</td>
<td>5.8</td>
</tr>
<tr>
<td>Uzbekistan</td>
<td>1.6</td>
<td>-0.5</td>
<td>-11.1</td>
<td>-2.3</td>
<td>-4.2</td>
<td>-0.9</td>
<td>1.6</td>
<td>2.5</td>
<td>4.4</td>
<td>4.1</td>
<td>4.0</td>
</tr>
<tr>
<td>China</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>3.8</td>
<td>9.2</td>
<td>14.2</td>
<td>13.5</td>
<td>12.5</td>
<td>10.5</td>
<td>9.6</td>
<td>8.8</td>
<td>7.8</td>
<td>7.2</td>
<td>8.0</td>
</tr>
</tbody>
</table>


strong commitment to reforms, attracted FDI flows of 11%, 525% and 7,033%, respectively, over the same period. External capital flows can contribute significantly by reducing financing costs and enabling the transition countries to realize the region’s growth potential if the funds are channeled into genuine investment.

TRANSITION PROGRESS

Despite the considerable achievements during the past decade of transition, the promise of spectacular growth similar to that achieved by the Asian Four Tigers during their economic struggle is still
beyond the region’s reach. Transition progress has been very uneven among the CIS, EUAC and BEEC countries, with differing progress in different regions as shown in Figure 1. The EUAC countries show the highest level of transition based on the European Bank for Reconstruction and Development (EBRD) transition indicator, followed by the BIS countries. The CIS countries have the lowest degree of transition progress relative to the other two regions.

**Figure 1. Progress in Reforms by Regions: EBRD 1999 Transition Indicator**

![Figure 1: Progress in Reforms by Regions: EBRD 1999 Transition Indicator](image)

*Source: International Monetary Fund World Economic Outlook, October 2000*

EU Accession Countries (EUAC)

Baltic and Eastern European Countries (BEEC)

Commonwealth of Independent States (CIS)

The transition to a market economy has posed major challenges to policy and economic formulations and systemic restructuring. The key goals in the pursuit of a market economy are higher economic efficiency and sustainable economic growth. The transition process generally consists of macro-stabilization, market, price and trade liberalization, systemic institutional restructuring and privatization of state enterprises. However, the transition process also provides opportunities for the darker sides of economic development to emerge, such as corruption, rent-seeking behavior and agency problems, and a widening gap between the have and have-nots. What have the transition countries achieved to date and what are the main obstacles to the market reform process?

In 2000, none of the 22 countries under study experienced negative GDP growth, compared to 20 countries in the beginning of
the transition process in 1990. The EU accession countries experienced the greatest transition progress, as measured by the EBRD 1999 transition indicator, while the CIS countries experienced the least transition. Large-scale and small-scale privatization have taken place, with the private sector share of GDP increasing from an average of 41% in the CIS and BEEC countries in mid-1995 to 55% in mid-1997 and 54.3% to 67.1% for the EU accession countries over the same period. The increase is even more remarkable in 1998 for the EU accession countries, where the private sector share of GDP rose to an average of 70%. The EU accession countries have achieved greater success in the transition process than the other transition countries. Proximity to the EU countries and shorter lengths of time under planned economy have been cited as some of the reasons for their success (Fischer & Sahay 2000).

Macroeconomic imbalances and economic frictions that were notable under the central planning economy were improved in the transition process. Hyperinflation immediately following price liberalization at the start of the transition process was brought under control. As of 2000, only two countries have inflation above 20%, with Uzbekistan close to 22% and Belarus the only country above 80%. At the same time, only three countries have government budget deficit as a percentage of GDP above 5%, Kyrgyz Republic, Croatia and Albania, the latter having the highest deficit at close to 10%.

The transition countries have also instituted currency regimes, adopting either a pegged or a flexible exchange rate regime at the start of the transition period. Croatia, the Czech Republic, Hungary, the Slovak Republic and Poland adopted pegged exchange rate regimes, while Estonia instituted a currency board. The fear of destabilizing capital inflows prompted Poland, the Slovak Republic and the Czech Republic during the transition process to adopt flexible exchange regimes, which are more manageable, because large foreign exchange reserves are not required to support a peg. The integration of the transition countries into the global economy and trade will enable them to benefit from export markets and the import of technology and consumer goods and private and official capital inflows.
The need for institutional infrastructure building has been recognized from the onset of the transition process, but in practice the institutional changes have turned out to be more difficult than anticipated or have not been given proper importance by the authorities. The lack of institutional and legal reforms or enforcement has been cited frequently as a major obstacle in the pursuit of market-oriented success. The continued forward movement after the initial transition process has met obstacles in a number of transition countries, in particular Russia. The privatization of the Russian state enterprises has resulted in vested interests becoming entrenched, blocking or stalling further significant reforms from moving forward. Errors in sequencing and implementing reforms allowed former political elites to capture the reform process for their personal benefits and stall the reform process (Havrylyshyn & Odling-Smee 1999). Berg and Berg (1997) found a trade-off between the speed of privatization and the quality of transition and equity and improved corporate governance. Goldman (1997) and Nellis (1999) advocated that the countries abandon speed as a priority in transition and instead concentrate on slower, case-by-case reforms and encourage brand-new start-up businesses. The market distortions caused by incomplete reforms enabled the vested interests to influence and modify policies to their personal advantage. This has led to greater wealth and income inequality and the greater poverty has weakened public support for the reform process.

After ten years of transition, poverty and unemployment have increased above the rates of the pre-transition period. The pre-Soviet behavior of protecting full labor employment in spite of inefficiency and output contraction continues to carry over into the transition period. This pre-Soviet behavior also caused a monetary overhang to flow over into the start of the transition process, making it difficult for the reform process to take a strong hold.

Structural reforms are least advanced in the regulation and supervision of the banking and financial sector. As a result, banks have made little progress in developing prudent and sound risk management lending. Under official pressure to lend to loss-making, state-owned enterprises, the banks are burdened with large non-
performing loans and therefore were hit hard when the contagious Asian financial crisis spread to the vulnerable transition countries.

The growth of barter transactions and tax arrears persisted, because the transition countries did not carry out institutional reforms completely or failed to do so, which has undermined macroeconomic stability and economic growth (Mumssen 2000). Market operations cannot take hold or are not efficient when the enterprise or the public sector structure is not in place to support them. The building of a financial sector independent of state policy is needed to provide liquidity for enterprise growth. While privatization of the state owned enterprises is relatively easy, the building of a corporate governance framework is also needed to protect the basic rights of stockholders with respect to property and ownership rights (Foo 2001). Furthermore, enterprise reform is complicated by the unclear distinction between state and commercial interests. The enterprise sector is trapped in a vicious cycle of increasing arrears, inefficient barter transactions, endemic state capture and decreasing capitalization. The expected high unemployment resulting from the closing of loss-making state enterprises should be absorbed by this new enterprise growth, while the closing of unprofitable state and state-supported private enterprises would reduce tax arrears and barter transactions. For example, 77% of firms in Georgia are willing to pay an average of 11 percentage points more of their gross revenues if corruption is eliminated.

A serious problem that emerged from the CIS transition experience, particularly in Russia, is the growth of tax arrears and barter transactions. Subsidies and state directed credit to industrial firms were drying up as part of the transition process and the firms resorted to barter and tax arrears to overcome their liquidity problems, instead of the much needed corporate restructuring. These problems are a reflection of the lack of vigor and consistency by these countries in implementing market reforms. “Tax offsets” were sanctioned and tolerated particularly by the Russian state until 1998. The growth in tax arrears means that Russia was unable to collect needed tax revenues, while the payment-in-kind to the state tends to be overvalued. Tax arrears served only to substitute the explicit subsidies practiced under the Soviet regime with implicit subsidies
and the cycle of barter and tax arrears transactions continued to be practiced by the firms. This was a problem of the transition countries’ failure to impose hard budget constraints. Vested interests also saw greater opportunities for graft and corruption, because of the lack of transparency in such non-monetary transactions. The attraction of such immediate greater personal benefits not only discouraged corporate restructuring by managers-owners, but more importantly provided a cushion against market scrutiny and discipline. When privatized firms continue to receive implicit subsidies through tax arrears and soft budgets, firm managers will continue their rent-seeking behavior rather than focus on firm restructuring.

The uncertainty over property and ownership rights engenders a short-term perspective of maximization of personal benefits by manager-owners. Capital flight is a reflection of this agency problem, particularly in Russia, which further hinders the progress of reforms (Grigoryev & Kosarev 2000). The cumulative problems ultimately undermined the confidence of both the domestic and international investors. The Russian currency crisis of 1998 was a reflection of the failure of vigorous and complete institutional and restructuring reforms.

STRUCTURAL AND INSTITUTIONAL REFORMS

Policymakers and country advisors to transition countries underestimated the importance and difficulty of institution building underpinning the healthy operations of a market economy. The “gradualism” school of thought for the transition process suggested that adapting an existing planned institutional framework and gradually transforming the institutions to support market operations is a better process to a successful transition. This was the approach followed in China’s transition process. In contrast, the former Soviet countries and the Balkan and Eastern European countries took the “big bang” approach, through wholesale liberalization. Essential institutions, such as banks, financial markets, commercial laws and codes, are necessary for day-to-day market operations. However, corporate governance and financial institutions were not sufficiently
implemented in the transition countries to protect investors’ rights. Without market-supporting institutions in place, the transition process has the unintended consequences of asset stripping, graft and corruption by vested interests manipulating the transition process for their own benefit. Kaufmann and Siegelbaum (1996) found that privatization and the increase in corruption had a strong negative impact on aggregate investment and growth in the region.

The question that may be of interest is what are the common factors among the CIS, EUAC and BEEC countries to attract FDI flows into the region. Few of the transition countries have achieved significant success with institutional reforms. Among the countries under study, Poland has been the most successful. The Solidarity government in 1989 quickly and steadily liberalized prices and trade and simplified regulations and made elimination of corruption a strong priority. Strategic foreign investors were also encouraged to participate in the privatization of the enterprise sector. Poland is the showcase example of the transition success in the region, with sustained growth, because of a growing vibrant private sector (Johnson & Loveman 1995). It is therefore not surprising that Poland is one of the EU accession countries. The Slovak Republic and Romania have also achieved partial success in macrostability and control over corruption but are slow in implementing reforms in the banking and financial sector. On the other hand, Russia and Ukraine attracted foreign financing at the start of the transition process but corruption and state capture became persistent impediments to further progress. Johnson, McMillan & Woodruff (1999) found that elimination of corruption is an essential institutional reform if entrepreneurship is to develop.

Transition countries have to address the degree to which governance obstacles hinder the progress of transition reforms and the degree to which state capture, corruption and crime impede private enterprise restructuring and growth. The failure of governance reforms in the financial sector, tax infrastructure, policy stability and judiciary fairness has affected the growth of the private sector and business performance. State capture, in the form of purchase of state decisions by vested interests, continues to permeate all aspects of the basic economic infrastructure of the transition countries from the
central bank to parliamentary legislation, from criminal and commercial courts to political party influence. Unless the transition countries pursue enterprise governance and restructuring reforms needed to support market operations, international investors will continue to avoid the transition countries as possible investment locations. The progress of the transition countries, particularly the CIS countries, in pursuing and implementing market reforms is shown in Figure 2, with the EU accession countries achieving greater progress in transition than the CIS and BEEC countries.

**Figure 2. Progress in Governance and Enterprise Reforms, 1999**

![Progress in Governance and Enterprise Reforms, 1999](image)

*Source: International Monetary Fund World Economic Outlook, October 2000*

EU Accession Countries (EUAC)

Baltic and Eastern European Countries (BEEC)

Commonwealth of Independent States (CIS)

Various studies have indicated that weak governance and slow economic development are strongly interrelated. For example, Russia and Ukraine have faced steadily declining standards of living during the 1990s. This decline has been attributed to weak governance, inconsistent and ineffective rule of law, inadequate protection of property rights, pervasive corruption and the influence of vested interests on policy decisions (Kaufmann, Kraay & Zoido-Lobaton 2000). Kaufmann *et al.* also found that good governance spurs economic growth, that the poor are discriminated against in the provision of public goods and services, and that the cost of corruption falls disproportionately on the poorer households and small enter-


prises. Shleifer and Vishny (1997) suggested that corporate governance that provides legal protection of investors rights and concentrated ownership is important to solve agency problems that pervade the privatized enterprise sector in the transition countries. Emmons and Schmid (1999) found that better investor protection through the legal protection and non-discriminatory rule of law are associated with better corporate performance. Hellman and Schankerman (2000) found that the effectiveness of governance reforms carried out by transition countries depends critically on the degree of state capture. Countries were able to implement reforms more effectively in states that are less subject to state capture by vested interests. In countries with high state capture, even when reforms are implemented, governance has not improved. In a related study, Hellman, Jones and Kaufmann (2000b) found that state capture was a de novo strategy used by privatized monopoly firms with former close ties to the state and political elite to compete in the emerging market environment. These influential firms engage in state capture, not in place of innovation, but as a complement strategy, to compensate for the deficiencies in the legal framework and judicial enforcement. State capture therefore tends to weaken further the ability and commitment of the state to improve on corporate governance and to undertake reforms. This creates a monopolistic enterprise structure of a few firms supported by powerful political elites, which in turn creates an interdependence relationship between these newly privatized firms and the state. The severing of such connections will increase efficiency, subject entrepreneurs to market discipline and competition and wean them off state dependence.

The flow of foreign direct investment has increased to the transition countries (Figure 3). The greatest inflows have been to the EU accession countries, with the greatest level of transition progress in market reforms and policy implementation, driven by the prospects of EU membership. In contrast, the BEEC countries with the least progress have experienced the least private foreign investment inflows, followed by the CIS countries. The exception is Azerbaijan, an oil-rich country. The CIS countries suffered an even further setback during the 1998 Russian financial crisis.
Recent studies have found that the best performing firms in the transition countries were those that have a large foreign participation in ownership and with concentrated ownership rather than dispersed ownership (Saving 1998, Emmons & Schmid 1999). In 1999, the EU accession countries received more than $2,000 millions in net foreign direct investment while the BEEC and CIS countries received $500 million. Perkins (1995), using the example of Russia, concluded that transition to a free market economy requires foreign investment. However, foreign investment inflows will not be significant unless foreign investors have confidence in how companies are governed and whether their rights are protected. Effective corporate governance is needed to assure prospective investors of possible returns for the risks undertaken.

Johnson, McMillan & Woodruff (1999) argued that external financing occurs only after property rights are in place to provide some acceptable minimum security to foreign investors. The authors further found that variation in private sector development was explained by variation in external financing to the countries under study: Poland, Romania, the Slovak Republic, Russia and Ukraine. The variation in FDI flows in turn was a result of insecure property rights, which discouraged entrepreneur investing. Countries like
Poland, the Slovak Republic and Romania that had secured reasonable property rights for investors attracted significant foreign investment. In contrast, initial external capital flows to new firms in Russia and Ukraine in the early 1990s did not sustain investment and growth. Hellman, Jones & Kaufmann (2000b) suggest that state capture is more prevalent in transition countries where property rights are most insecure and that foreign and domestic firms are just as frequently involved in state capture practices.

Early external capital flows from 1989 to 1993 were primarily in the form of official funding from multilateral financial organizations, such as the IMF and the World Bank, to support and to spur the profound political and economic changes taking place. However, early private capital flows were cautious and slow, because of uncertainty over country and commercial risks and the macroinstability, and whether the changes would be permanent. There is a clear consensus in the literature of a negative association between progress in transition and perceived country risks. This is further supported by the EBRD survey of enterprises worldwide (Lankes & Stern 2000). The survey results supported the observations of other studies that the obstacles to doing business are excessive taxes and regulations, inconsistent policies, crime, theft and corruption.

Kirkow (1999) examined the extent of Russia’s reliance on foreign capital used to stimulate economic growth and found that foreign capital was primarily used to finance current consumption and the budget deficit. In addition, Kirkow found similar governance obstacles and state capture factors to be impediments to a full commitment of foreign capital and that foreign capital flows in spurts to localized domestic markets. Bergsman, Broadman & Drebentsov (2000) argued that pre-Second World War notions aimed at protecting domestic markets characterize Russian foreign investment policies and that Russia needed foreign capital inflows characterized by state-of-the art technology and global competitive production. Lankes and Stern (2000) argued that the level, location and motive of FDI were strongly determined by the progress in transition, regardless of whether it was portfolio or direct investment. Hunya (2000 a), in particular, argued that FDI inflows into the eastern and central European countries had resulted in economic growth and interna-
tional competitiveness and that market transition was much faster with than without FDI inflows. The progress in transition in turn determined how rapidly the transition countries were integrated into the global economy. The degree and continuance of reforms are expected to elicit additional growth in investment.

The countries with the least progress in reforms attract less foreign direct capital and at the same time face capital flight as well. In contrast, the more successful transition countries were able to gain easier and faster access to foreign capital markets and to reduce their dependence on international official and multilateral financing. This is supported by a cursory comparison of the progress in reforms in Figure 1 with the progress in governance and enterprise reforms in Figure 2 and the net foreign direct investment in Figure 3. The EUAC countries with the furthest progress in reforms as measured by the transition indicator and in governance and enterprise reforms had the highest inflows of net FDI in 1999. This beneficial cycle of progress in transition and the penchant to attract FDI which spurs further reforms is clear.

The various problems resulting from the uncertainty over the inconsistent pursuit of market reforms eventually led to a loss of confidence among both domestic and international creditors and investors which was manifested in the Russian financial crisis of 1998. The rapid withdrawal and reversal of private capital flows reflect the fragility of the transition countries and their reliance on foreign capital for economic growth.

EMPIRICAL METHODOLOGY AND RESULTS

Foreign direct investment is the key to long-term success in transition to a market economy by providing a source of financing to support sustainable growth and expertise to the cash-strapped transition countries. External financing also serves to integrate the countries into the global economy. Furthermore, foreign direct investment brings employment, technological transfers, new organization of business and infrastructure building, and management expertise. Thus foreign direct investment has a far greater impact
than just the simple capital flows. This paper looks at a cross-section study of the FDI flows to the CIS, EUAC and BEEC countries with respect to the impact of transition progress in the form of governance obstacles and state capture. The higher the level of governance obstacles and state capture, the greater the expected deterrence to FDI.

The data used in this study include the 1999 BEEP survey data from a study by Hellman, Jones and Kaufmann (2000b), data constructed by the authors from the European Bank for Reconstruction and Development Transition Report 2000, IMF World Economic Outlook 2000 and the World Bank Country Data. The major goal of this empirical study is to observe whether governance obstacles and state capture significantly deter foreign direct investment. We also included the gross domestic product to reflect a country’s degree of economic development and main telephone lines per 100 inhabitants to reflect its degree of infrastructure.\(^1\) Two sets of regression equations are used in the study: one is to see how transition progress affects a country’s foreign direct investment and the other is to look at whether the growth rate of foreign direct investment is affected by transition progress. In the first set of regressions, we regress the natural log of foreign direct investment on a number of explanatory variables, which include the natural log of a country’s gross domestic product, degree of infrastructure, governance obstacles and state capture index and a dummy variable for EUAC countries. The equations are:

\[
\ln FDI = \alpha_1 + \alpha_2 \text{GOI} + \alpha_3 \text{SCI} + \alpha_4 \text{EUAC} + \alpha_5 \ln GDP + \alpha_6 \text{TEL} + \epsilon \\
\ln FDI = \beta_1 + \beta_2 \text{GOI} + \beta_3 \text{INVS CI} + \beta_4 \text{EUAC} + \beta_5 \ln GDP + \beta_6 \text{TEL} + \epsilon \\
\ln FDI = \gamma_1 + \gamma_2 \text{GOI} + \gamma_3 \text{SCI} + \gamma_4 \text{SCISQR} + \gamma_5 \text{EUACC} + \gamma_6 \ln GDP + \gamma_7 \text{TEL} + \epsilon
\]

where \(\ln \text{FDI}\): Natural log of Foreign Direct Investment  
\(\text{GOI}\): Governance Obstacles Index, \(1 \leq \text{GOI} \leq 4\)

\(^1\) Infrastructure data for some of the countries are limited. The main telephone lines are the most complete data for this category.
EUAC: \[
\begin{cases}
0 & \text{for Non-EUAC countries (i.e., BEEC & CIS countries)} \\
1 & \text{for EUAC countries}
\end{cases}
\]

SCI: State Capture Index, \(0 \leq SCI \leq 1\)

SCISQR: Square of State Capture Index

INVSCI: Inverse of State Capture Index

lnGDP: Natural log of Gross Domestic Product

TEL: Main telephone lines per 100 inhabitants

\(\epsilon\): Error terms

The \(\alpha_s\), \(\beta_s\) and \(\gamma_s\) are unknown coefficients to be estimated. The signs of \(\alpha_2\), \(\beta_2\) and \(\gamma_2\) are expected to be negative, because of the negative relationship between foreign direct investment and the governance obstacles index. The higher the state capture index, the greater the deterrence to foreign direct investment. The sign of \(\alpha_3\) is expected to be negative and the sign of \(\beta_3\) is expected to be positive, because of the application of the inverse form—the larger the state index, the smaller the inverse value, and the less the FDI. A quadratic form is used for the state capture index variable in the third equation. It is more likely that the flow of foreign direct investment declines by a decreasing rate with respect to the value of state capture index, because FDI may reach saturation at a given level of transition progress. Therefore, the sign of \(\gamma_3\) is expected to be nonnegative and the sign of \(\gamma_4\) is expected to be negative. The signs of \(\alpha_4\), \(\beta_4\) and \(\gamma_5\) are expected to be positive for EUAC countries, which may attract more foreign investment than non-EUAC countries. The signs of \(\alpha_5\), \(\beta_5\) and \(\gamma_5\) are expected to be positive, because a country with a higher level of development may attract more foreign investment. The signs of \(\alpha_6\), \(\beta_6\) and \(\gamma_7\) are expected to be positive when better infrastructure services are available and therefore more attractive to foreign investors. Because heteroskedasticity is more likely to occur in cross-sectional data, the ordinary least squares method with adjusting constant diagonal matrix for variance-covariance matrix of error terms is used to obtain more efficient estimators of the unknown coefficients. The models are tested for the existence of heteroskedasticity and nested and non-nested tests among models are also performed in the study.
The second set of regressions is used to observe whether transition progress affects the growth rate of FDI. Although the empirical study in this paper is cross sectional, the growth rate of FDI for only one year may not truly reflect a country’s degree of growth. Therefore, the average annual growth rate of foreign direct investment from 1997 to 2000 is used as the dependent variable in the regression. The governance obstacles index, the state capture index, the dummy variable for EUAC countries, a country’s economic development, and the degree of infrastructure facility are the explanatory variables in the regression. The econometric models are:

\[
\begin{align*}
GRFDI &= \alpha_1 + \alpha_2 GOI + \alpha_3 SCI + \alpha_4 EUAC + \alpha_5 lnGDP + \alpha_6 TEL + \epsilon \\
GRFDI &= \beta_1 + \beta_2 GOI + \beta_3 INVS CI + \beta_4 EUAC + \beta_5 lnGDP + \beta_6 TEL + \epsilon \\
GRFDI &= \gamma_1 + \gamma_2 GOI + \gamma_3 SCI + \gamma_4 SCISQR + \gamma_5 EUAC + \gamma_6 lnGDP + \gamma_7 TEL + \epsilon \\
\end{align*}
\]

where

- \(GRFDI\): Average Annual Growth rate of FDI from 1997 to 2000
- \(GOI\): Governance Obstacles Index, \(1 \leq GOI \leq 4\)
- \(EUAC\): \(= 0\) for Non-EUAC countries (i.e., BEEC & CIS countries) \(= 1\) for EUAC countries
- \(SCI\): State Capture Index, \(0 \leq SCI \leq 1\)
- \(SCISQR\): Square of State Capture Index
- \(INVS CI\): Inverse of State Capture Index
- \(lnGDP\): Natural log of GDP
- \(TEL\): Main telephone lines per 100 inhabitants
- \(\epsilon\): Error terms

The signs for coefficients of the variables are conceptually the same as in the first set of regressions. The sign for the GDP coefficient variable could be negative in this model, because after the initial FDI inflows, further FDI inflows may not grow unless the country shows further improvement in the transition progress and economic development. The method of ordinary least squares with correction for heteroskedasticity and autocorrelation is implemented to obtain efficient estimators of coefficients. The descriptive statistics for all variables in the regressions are shown in Table 2.
Table 2. Descriptive Statistics for Variables in the Regression

<table>
<thead>
<tr>
<th>Name of Variable</th>
<th>Mean</th>
<th>Standard deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>FDI</td>
<td>931.36a</td>
<td>1538.3a</td>
</tr>
<tr>
<td>GDP</td>
<td>29637a</td>
<td>47772a</td>
</tr>
<tr>
<td>TEL</td>
<td>22.914</td>
<td>12.154</td>
</tr>
<tr>
<td>GOI</td>
<td>2.5866</td>
<td>0.33776</td>
</tr>
<tr>
<td>SCI</td>
<td>0.19636</td>
<td>0.1118</td>
</tr>
<tr>
<td>GRFDI</td>
<td>25.972</td>
<td>48.19</td>
</tr>
<tr>
<td>EUAC</td>
<td>0.31818</td>
<td>0.47673</td>
</tr>
</tbody>
</table>

a: In millions of U.S. dollars

The first set of regression results is shown in Table 3. In terms of the goodness of fit, the p-values for the chi-square test statistics are less than 5% for all three regression equations, and R² for each regression is 0.69, 0.74 and 0.71, respectively. These results indicate that all models fit the data well. The test for heteroskedasticity is also implemented for each regression. The results show all p-values are at least 0.15, indicating no heteroskedasticity problems. Because the first model is nested in the third model, the nested test is applied to compare these two models. The F-statistic of 0.2501 shows that the third model is not significantly better than the first model. When the J-test is used to compare the non-nested models for the first and second model, the second model is accepted, whereas the first model is rejected at the 5% significance level. In comparing the second and third models, the J-test rejects the third model but does not reject the second model at the 5% significance level. Therefore, the statistical results support the selection of the second model among the three equations. The results of the J-test are shown in Table 4. In terms of the coefficients, the regression shows that the governance obstacles variable significantly negatively affects the value of FDI at the 5% level, and the coefficient of GDP is also significantly positive at the 1% level. All other variable coefficients are insignificant from zero to 5% level.
<table>
<thead>
<tr>
<th>Dependent variable</th>
<th>Countries in Sample</th>
<th>GOI</th>
<th>SCI</th>
<th>SCISQR</th>
<th>INVSCI</th>
<th>EUAC</th>
<th>lnGDP</th>
<th>TEL</th>
<th>Constant term</th>
<th>R²</th>
<th>Log of likelihood function</th>
</tr>
</thead>
<tbody>
<tr>
<td>ln(FDI)</td>
<td>22</td>
<td>-1.7474** (-2.394)</td>
<td>2.202 (1.276)</td>
<td>0.1625 (0.3659)</td>
<td>0.87838** (5.186)</td>
<td>-0.0198 (-1.069)</td>
<td>0.6777 (10.2764)</td>
<td>0.6927</td>
<td>-26.3909</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>22</td>
<td>-2.1991*** (-4.051)</td>
<td>-0.1216** (-2.615)</td>
<td>0.2280 (0.3936)</td>
<td>0.8524** (5.686)</td>
<td>-0.0315* (-1.775)</td>
<td>5.117** (2.164)</td>
<td>0.7415</td>
<td>-24.4922</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>22</td>
<td>-1.1889* (-1.902)</td>
<td>12.004 (-1.020)</td>
<td>0.14629* (-0.3429)</td>
<td>0.85969** (-1.24)</td>
<td>-0.0275 (-1.6273)</td>
<td>1.6273 (-0.6803)</td>
<td>0.7053</td>
<td>-25.9334</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Mean of dependent variable = 5.884
** Significant at 2.5% level, one tail
* Significant at 5% level, one tail
t-ratio in parenthesis

Table 3. Regression result of FDI
Table 4. Result of J-Tests for ln FDI

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>t-ratio of $\lambda$</th>
<th>Conclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>$H_0$: First model (against second model)</td>
<td>2.263*</td>
<td>Reject $H_0$</td>
</tr>
<tr>
<td>$H_0$: Second model (against first model)</td>
<td>-1.389</td>
<td>Do not reject $H_0$</td>
</tr>
<tr>
<td>$H_0$: Third model (against second model)</td>
<td>2.504*</td>
<td>Reject $H_0$</td>
</tr>
<tr>
<td>$H_0$: Second model (against third model)</td>
<td>-1.139</td>
<td>Do not reject $H_0$</td>
</tr>
</tbody>
</table>

* Significant at 5% level, two tails

According to the results in Table 3, the overall empirical findings support the conclusion that governance obstacles do deter foreign investment into a country, which is consistent with our theoretical expectations. The statistical results also support that a country with higher economic development would attract more foreign investment inflows. Most EU accession countries have higher economic development than non-EU accession countries. The EU accession countries have achieved greater progress in transition than the CIS and BEEC countries. Therefore, the effect of the EUAC dummy variable may be included in these two variables and the coefficient of the EUAC dummy variable becomes insignificant from zero. The empirical findings also suggest that infrastructure advancement in the transition economies is not a major factor in attracting foreign investment. In terms of the effect of the state liberalization, the results show that the sign of $\alpha_3$ is negative but insignificant from zero. When an inverse functional form is used for this variable, the estimated coefficient is significant from zero at a 5% level but with an unexpected sign. If a quadratic functional form is applied, the coefficients of the variable in linear and quadratic terms are insignificant from zero. Given these unusual findings, we cannot conclude that the state capture factor is a major determinant of foreign direct investment in transition economies in this model. It may imply that the degree of state liberalization may not directly influence foreign investing decisions in transition countries, in as much as an effective “rule of law” is needed to protect investors’ rights, which is not captured in this model.
### Table 5. Regression Result for Growth Rate of FDI

<table>
<thead>
<tr>
<th>Dependent Variable</th>
<th>Countries in Samples</th>
<th>GOI</th>
<th>SCI</th>
<th>SCISQR</th>
<th>INVSCI</th>
<th>EUAC</th>
<th>lnGDP</th>
<th>TEL</th>
<th>Constant term</th>
<th>R²</th>
<th>Log of the likelihood function</th>
</tr>
</thead>
<tbody>
<tr>
<td>Growth Rate of FDI</td>
<td>22</td>
<td>43.624</td>
<td>-145.07* (-1.839)</td>
<td>14.429 (0.5534)</td>
<td>-15.392** (-2.240)</td>
<td>1.854** (2.274)</td>
<td>39.216 (0.3804)</td>
<td>0.2599</td>
<td>-112.647</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>22</td>
<td>2.2566</td>
<td>-0.038</td>
<td>-0.5915 (-0.1559)</td>
<td>19.95 (0.813)</td>
<td>-15.255** (-2.110)</td>
<td>1.4763 (1.264)</td>
<td>127.27 (0.584)</td>
<td>0.1949</td>
<td>-113.573</td>
<td></td>
</tr>
<tr>
<td></td>
<td>22</td>
<td>-12.023 (-0.2174)</td>
<td>831.69 (0.2071)</td>
<td>-2118.9* (-1.645)</td>
<td>12.810 (0.6096)</td>
<td>-17.255** (-2.526)</td>
<td>1.091 (1.144)</td>
<td>133.83 (1.127)</td>
<td>0.3776</td>
<td>-110.734</td>
<td></td>
</tr>
</tbody>
</table>

Mean of dependent variable = 25.972

** Significant at 2.5% level, one tail
* Significant at 5% level, one tail
t-ratio in parenthesis
The regression results for the growth rate of FDI for transition countries are shown in Table 5. In this set of regressions, the $R^2$ for each regression equation is 0.26, 0.19 and 0.38, respectively. All three models do not show a strong fit of the data. Tests for heteroskedasticity are also performed for each regression. The results show all p-values are at least at the 0.10 level significance, which indicates there are no heteroskedasticity problems for the models. When the J-test is used to compare the first and second model, both models are rejected at the 5% significance level. When the J-test is applied to compare the second and third models, the second model is rejected, whereas the third model is not rejected at the 5% significance level. The results are shown in Table 6. The nested test is also applied to compare the first and third models and the F-statistic of 4.364 shows that the third model fits the data significantly better than the first model. In comparing all three models, the statistical results conclude that the third model is a better fit.

**Table 6. Result of J Tests for GRFDI**

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>t – ratio of $\lambda$</th>
<th>Conclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>$H_0$: First model (against second model)</td>
<td>2.702’</td>
<td>Reject $H_0$</td>
</tr>
<tr>
<td>$H_0$: Second model (against first model)</td>
<td>3.043’</td>
<td>Reject $H_0$</td>
</tr>
<tr>
<td>$H_0$: Third model (against second model)</td>
<td>1.9</td>
<td>Do not reject $H_0$</td>
</tr>
<tr>
<td>$H_0$: Second model (against third model)</td>
<td>2.209’</td>
<td>Reject $H_0$</td>
</tr>
</tbody>
</table>

* Significant at 5% level, two tails

Based on the results of the third regression equation, it is surprising that the coefficient of the governance obstacles variable is negative but insignificant from zero, whereas the coefficient for the state capture index is significant from zero with the expected sign. The coefficient of the EUAC variable is insignificant from zero and the coefficient of GDP is negative at the 5% level. The coefficients of the EUAC and infrastructure variables are also insignificant from zero.

The results of the findings for the second set of regression can be summarized as follows: First, although the country’s level of
development plays a positive role in foreign investment, a country’s development level may lead to a slower rate of growth for foreign direct investment, because a transition country may attract initial FDI at a given stage of its economic development and FDI may not grow until a higher stage of economic development is reached to attract further foreign investment inflows. Second, the statistical results show that the state capture index does significantly negatively affect the growth rate of FDI. A higher state capture index deters the growth rate of FDI in transition economies. Third, because the third model is statistically selected, the results indicate that the relationship between the growth rate of FDI and the state capture index has an inverse u-shaped curve relationship. This suggests that a country’s annual growth rate of FDI declines at a decreasing rate with respect to a higher state capture index. Lastly, the data in this study are constrained to a cross-sectional study, which may not successfully explain the determinants of the countries’ growth rate of FDI. Greater success may be achieved by working with cross-section and time-series data for FDI growth rates. Further research on FDI growth rates will be done for a time-series and cross-section study when the availability of data makes this possible.

CONCLUSIONS

The quality and progress in economic growth in the CIS, BEEC and EUAC countries improve with improvement in institutional governance and a decrease in state capture. In particular, the lack of growth in institutional governance and the high degree of state capture are impediments to a successful transition to a market economy and are significant deterrence to foreign capital inflows. The challenge to the transition countries is to achieve robust and sustainable growth rates similar to those of market economies in western countries. An economic climate has to be created that will attract new capital investment to the languishing private enterprise sector.

The empirical findings show that progress in institutional governance would attract foreign capital inflows in transition economies. The European Union accession countries have achieved
greater economic growth than the non-EUAC countries in terms of their GDP growth, and therefore attract more foreign investment. State liberalization, however, does not significantly affect the level of foreign investment but does play a positive in determining the annual growth rate of foreign investment in the transition countries. Transition countries clearly have to pay particular attention to institutional governance reforms if they are to be successful in their transition to a market economy and to be integrated into the global economy, as evidenced by the experience of the EUAC countries.

REFERENCES


