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This study has been prepared under the ENEPO project (EU Eastern Neighbourhood: Economic Potential and Future Development) coordinated by CASE, financed within the Sixth Framework Programme of the European Commission. The paper was prepared within the Workpackage 6 on "Free movement of capital/investment climate" coordinated by Center for Social and Economic Research – CASE Ukraine. The content of this publication is the sole responsibility of the authors and can in no way be taken to reflect the views of the European Union, CASE, or other institutions the authors may be affiliated to.



SIXTH FRAMEWORK PROGRAMME



CASE Ukraine

Keywords: **FDI, CIS, industrial organization, investment motives**

JEL codes: **F21, F23, L22, M15**

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Graphic Design: Agnieszka Natalia Bury

EAN 9788371784705

Publisher:

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Abstract

This paper examines the motives behind foreign direct investment (FDI) in a group of four CIS countries (Ukraine, Moldova, Georgia and Kyrgyzstan) based on a survey of 120 enterprises. The results indicate that non-oil multi-national enterprises (MNEs) are predominantly oriented at serving local markets. Most MNEs in the CIS operate as 'isolated players', maintaining strong links to their parent companies, while minimally cooperating with local CIS firms. The surveyed firms secure the majority of supplies from international sources. For this reason, the possibility for spillovers arising from cooperation with foreign-owned firms in the CIS is rather low at this time. The lack of efficiency-seeking investment poses further concern regarding the nature of FDI in the region. The most significant problems identified in the daily operations of the surveyed foreign firms are: the volatility of the political and economic environment, the ambiguity of the legal system and the high levels of corruption.

1. Introduction

The importance of transition economies as investment sites for multinational corporations has drastically increased over the last decade. With the economic liberalization of the Central and Eastern European countries and the former Soviet republics, as well as major developments in the Chinese and East Asian economies, vast market and production opportunities have opened up for multinational businesses. Although a number of multinational corporations have successfully managed to capitalize on these opportunities, other firms have been significantly less successful in their internationalization efforts. Various internal and external factors were shown to have considerable effects on the success or failure of multinational businesses in transition economies (Peng and Heath 1996; Khanna and Palepu 1997; Luo and Peng 1999; Isobe et al 2000; Peng and Luo 2000; Uhlenbruck and De Castro 2000).

Among the transition economies, the region of the Commonwealth of Independent States (CIS) experienced a boom in foreign direct investment (FDI) in recent years only. The magnitude of capital inflows resembles the FDI that poured into Central and East European (CEE) countries in the 1990s. The FDI coming in to the CEE countries in 1999 contributed to a major growth in the productivity of local industries and services, acting as an important source of modern technology and managerial knowledge.

The aim of the current analysis is to explore the motives for FDI in the selected CIS countries (Ukraine, Moldova, Georgia and Kyrgyzstan), and to analyse how the business and industry environment in these countries affects foreign investors. The study targets three groups of investors with potentially different investment motives: market-seekers, resource/labour-seekers and efficiency-seekers (classification based on Dunning, 1993). This analysis will complement earlier results, which were largely focused on Russia (Rogacheva & Mikerova, (2003), Ledayeva (2007), by showing what aspects of the investment climate are of particular concern to investors in the CIS. It will also increase our understanding of the problems that investors are facing in the CIS, through differentiating among various investment types, which is the novel feature of this analysis.

We approached this task by surveying foreign-owned companies located in the four CIS countries (120 firms in total). The survey took place in 2007–2008 in Georgia, Kyrgyzstan, Moldova and Ukraine¹. Oil and resource-attracting countries were dropped from the analysis. Thus, we were able to see analogies with the CEE or SEE (South Eastern European) countries, which have attracted mainly non-oil FDI.

The paper is organized as follows: The first part presents basic theoretical and empirical studies on the motives for FDI in general and in the CEE/CIS setting in particular. The next section describes key facts about FDI flows into the region. In the subsequent section, we investigate the survey findings. This is followed by an econometric analysis of the data. The last section concludes the paper and offers some suggestions to policy makers.

¹ The authors would like to thank researchers from CASE Ukraine, CASE Kyrgyzstan, CASE Transcaucasus, and CASE Moldova for their help with the administration of the survey, and in particular the researchers from CASE Ukraine who prepared background material for this study.

2. Investment motives

The literature on FDI identifies the three most common investment motivations: resource-seeking, market-seeking and efficiency-seeking (Dunning, 1993). The availability of natural resources, cheap unskilled or semi-skilled labor, creative assets and physical infrastructure promotes resource-seeking activities. Historically, the most important host country determinant of FDI has been the availability of natural resources, e.g. minerals, raw materials and agricultural products.

Although a major FDI determinant, the presence of natural resources by itself is not always a sufficient reason for FDI to take place. A comparative advantage in natural resources usually gives rise to trade rather than to FDI. Investment usually takes place when resource-abundant countries either lack the large amounts of capital typically required for resource-extraction or do not have the technical skills needed to extract or sell raw materials to the rest of the world. In addition, infrastructure facilities for getting the raw materials out of the host country and to its final destination have to be in place or need to be created (UNCTAD, 1998).

Labor-seeking investment is usually undertaken by manufacturing and service multi-national enterprises (MNEs) from countries with high real labor costs. These MNEs set up or acquire subsidiaries in countries with lower real labor costs to supply labor-intensive intermediate or final products. To attract such production, host countries often set up free trade or export processing zones (Dunning, 1993).

Host countries attract market-seeking investment based on factors such as market size, per capita income and market growth. For firms, new markets provide a chance to stay competitive and grow within the industry as well as achieve economies of scale. Traditionally, FDI determinants such as market size and growth were prevalent in markets for manufacturing products which were sheltered from international competition by high tariffs or quotas that triggered "tariff-jumping" FDI (UNCTAD, 1998, 107). Apart from market size and trade restrictions, MNEs may engage in market-seeking investment when their main suppliers or customers have set up foreign producing facilities and in order to maintain their business, they must follow them overseas (Dunning, 1993, 58).

The motivation of efficiency-seeking FDI is to rationalize the structure of established resource-based or market-seeking investment in such a way that the investing company can gain from the common governance of geographically dispersed activities. An efficiency-seeking MNE aims to take advantage of different factor endowments, cultures, institutional arrangements, economic systems and policies, and market structures by concentrating production in a limited number of locations to supply multiple markets (Dunning, 1993, 59). In order for efficiency-seeking foreign production to take place, cross-border markets must be both well-developed and open, thus it often flourishes in regionally integrated markets (Dunning, 1993, 59).

However, it is worth noting that many of the larger MNEs are pursuing pluralistic objectives and most engage in FDI that combines the characteristics of each of the above categories. The motives for foreign production may also change as, for example, in the case of a firm which becomes an established and experienced foreign investor (Dunning, 1993, 56).

3. Evidence on determinants of FDI in the current NMS and Western Balkans

Market-seeking investors

The research on FDI determinants in the Central and Eastern European setting has been abundant. Table 1 presents these studies according to the researched period and region. A number of studies found that investors in the Central and Eastern European (CEE) countries were market-driven. Papers by Resmini (1999) and later ones by Merlevede and Shoors (2004) and Johnson (2004) show that investors were looking for new market opportunities in the CEE countries. The same conclusion was obtained by Gliberman, Shapiro and Tang (2004). This motive was of particular importance in the 1990s, when many investors decided to open production facilities in the CEE due to the high import protection in these countries at the time.

Table 1. Studies on FDI determinants in transition according to the analyzed period

Studies	Period studied	Countries studied
Bevan, Estrin, 2000	1994–1998	CEE
Campos, Kinoshita, 2003	1990–1998	CEE, Baltic, CIS
Carstensen, Toubal, 2003	1993–1999	CEE
Lansbury, Pain, Smidkova, 1996	1991–1993	CEE
Merlevede, Schoors, 2004	1997–1999	CEE, CIS
Resmini, 1999	1990–1995	CEE
Smarzynska, Wei, 2000	1995–1999	Worldwide
Smarzynska, Wei, 2002	1995–1999	USA
Tondel, 2001	1994–1998	CEE, CIS
Bandelj, 2002	1990–2000	CEE
Bevan, Estrin, 2004	1994–2000	CEE
Botric, Skuflic, 2005	1996–2002	SEE
Brada, Kutan, Yigit, 2004	1993–2001	CEE, Balkans
Globerman, Shapiro, Tang, 2004	1995–2001	CEE
Johnson, 2006	1993–2003	CEE
Malesky, 2006	1992–2004	Worldwide
Demekas, Horwath, Ribakova, Wu, 2005	2000–2002	SEE
Hunya, 2002	2000–2002	SEE
Meyer, 2005	late transition	Worldwide
Shiells, 2003	2001	CIS
Strach, Everett, 2006	2001	Czech Republic

Note. SEE stands for countries of Southern and Eastern Europe i.e. usually ex-Yugoslavia plus Albania, Bulgaria and Romania. CEE stands for Central and Eastern European countries, i.e. the Czech Republic, Hungary, Poland, Slovakia (and sometimes Slovenia). CIS stands for the Commonwealth of Independent States.

Resource-seeking investors

It is also widely argued that FDI and the openness of the economy are positively related (Botric and Skuflic 2005, Resmini 1999, Bevan and Estrin 2000, Smarzynska and Wei 2002). Campos and Kinoshita (2003) examined the effect of cumulative external liberalization (which reflected the removal of trade controls and quotas and the moderation of tariff rates and foreign exchange rate restrictions) on FDI inflows and found this indicator to be both highly significant and positive. Botric and Skuflic (2005) concluded that increasing trade with other economies will contribute to the stronger integration of Southern and Eastern European (SEE) countries with other economies in the region and positively influence FDI.

Hopes for increased integration with its highly developed neighbour, the EU, usually meant a fall in overall protection throughout the 1990s. At the end of 1990s and at the beginning of the 2000s, the CEE countries and the Baltic States were already waiting for EU accession. Several studies examined the effects of having a membership perspective on the willingness of outside firms to invest in the CEE (Bevan and Estrin 2000, 2004, Merlevede and Shoors 2004, Globerman, Shapiro, and Tang 2004). Prospects of EU membership were found to be positively and significantly related to incoming FDI.

On the one hand, the removal of trade barriers most likely made imports more profitable than capturing a market through FDI. On the other hand, there is evidence that the fall in protection enhanced further FDI inflows. We argue here that in the case of the CEE and the Balkan countries, prospects of closer economic links with the EU and the fall in the future transaction costs made foreign firms more eager to exploit the cheap and relatively skilled CEE/SEE labour.

Labour costs, which are classical sources of comparative advantage, were often found significant and negative in equations estimating FDI determinants (Demekas, Horvath, Ribakova and Wu 2005, Smarzynska and Wei 2002). Merlevede and Shoors (2004) closely examined the sensitivity of the influence of labour costs in transition economies by relating this variable with the time variable. They measured the evolution of the unit labour cost in each country during the period studied relative to other countries in a sample. They found that this variable alone is insignificant, but when related with the time variable, it reveals a significant, negative impact on FDI. This indicates that the impact of the relative unit labour cost as a determinant becomes more important during a transition period. Another aspect considered by investors was the quality of labour. Lansbury, Pain and

Smidkova (1996) included an indicator of research activity (the relative stock of patents granted to residents of the host economy) as a measure of the quality of human capital. They found both the relative labour cost effect and the indicator of research intensity to be significant, which is consistent with the notion that some investors are attracted to Central Europe due to a combination of relatively low labour costs and the availability of skilled workers in particular sectors and countries.

Efficiency-seeking investors

The efficiency-seeking motive of foreign investors into the CEE countries is a relatively recent one. It started to gain importance around 2004–2007, when ten new CEE and SEE countries entered the EU. However, signs of this motive were observable even earlier. Campos and Kinoshita (2003) showed that foreign investors in the CEE and Baltic states were attracted by the existence of the agglomeration effect, and were positively influenced by the quality of the rule of law and administration. The responsiveness of FDI inflows into the CEE countries to differences in relative taxation vis-à-vis the old EU members could be evidence of the efficiency-seeking motive as well. However, here the results are mixed so far. Lahreche-Revil (2006) added data on some of the current new members² to the EU15 sample and tried to separate the effects of corporate taxation in the new EU members for the 1990–2002 sample. His conclusion was that taxation might drive FDI flows, but only within the EU15. This factor was rather irrelevant in respect to FDI flow from old to new members. A similar conclusion was obtained earlier by Carstensen and Toubal (2004), who applied the difference between the statutory tax rates of two countries as a variable determining bilateral FDI flows for the sample of the CEE countries in 1993–1999 and concluded that the estimated parameter value was small and not significant. On the contrary, Edmiston et al (2003) suggested that the imposition of an additional special tax rate reduced FDI as a percent of GDP and higher tax rates led to lower inflows of FDI in the former Soviet Union (FSU) and CEE countries.

4. Determinants of FDI in the CIS

Resource-seeking investors

The abundance of natural resources in the CIS has been one of the most important determinants of FDI. Shiells (2003) showed that up until the early 2000s, FDI in the CIS was related to the extraction of natural resources, the construction of pipelines transporting these energy resources, large privatizations, and debt/equity swaps to pay for energy supplies. The disappointing level of FDI at that time reflected the weak investment climate in the region, particularly due to incomplete structural reforms. Campos and Kinoshita (2003) also found resource-seeking to be the key motivation for FDI in the CIS, whereas this factor had no effect on non-CIS transition countries.

Tondel (2001) stressed that, according to IMF estimates, between 75% and 82% of total FDI in Azerbaijan was in the oil and gas industries. 30 cents of each dollar invested in other parts of the economy was also related to investments in the oil and gas industries (Tondel 2001). Up until 2006, the vast majority of incoming FDI in Georgia was related to pipeline transportation. In Kazakhstan, which recorded the second highest FDI per capita in the CIS (after Azerbaijan), most investments have also been directed towards the natural resource sector. The abundance of energy resources in Russia were also quoted as an important determinant of FDI (Rogacheva and Mikerowa 2003, Ledayeva 2007). Ledayeva (2007) noted that after the 1998 Russian financial crisis, the importance of large cities, the availability of oil and gas resources, and the legislative risk increased, while the importance of sea ports and political risk decreased. The study also showed that the relatively low costs of production in Russia did not attract FDI.

Market-seeking investors

A number of studies on FDI in the CIS point to the paramount importance of market-seeking as a motivation for investors. The earliest study of this kind is by Collins and Rodrick (1991). Access to the domestic market was reported to be a major motivation for investment at the time when the Soviet Union was falling apart. The survey was conducted among 54 larger companies operat-

² Eight new member states that entered the EU in 2004, the CEECs.

ing in the USSR in 1990–91. The second most important motivating factor was the proximity to the European Community.

The market-seeking motive was also demonstrated to be of high importance in later studies. Tondel (2001) reports a high relevance of both market-seeking and natural resource-seeking motives in the CIS. The more recent results by Johnson (2006) also suggest that FDI in the CIS has been both market and resource-driven. GDP per capita (market size) and oil effect (dummy) were positive and significant in Johnson's equations, while wages were negative.

The market-seeking motive was also found to be a determining factor for FDI in Russia. According to the results of the survey by Rogacheva and Mikerova (2003), the main motive for investment in Russia was market potential (which obtained 9 points out of 10). Natural resources (especially energy) were also important (6 points). Strategic location (1 point) was the main concern for the multinational companies doing business all over the world. Low costs (1 point) were recognized as insignificant. Interestingly, the political and economic situation in Russia was considered stable enough to invest. The market-seeking motive in Russia was also confirmed by Ledayeva (2007).

Table 2 compares the studies of motivations for FDI in the CIS versus new EU member states (NMS). This simplified review shows that foreign investors seek markets both in the CIS and in the NMS. The difference is that natural resource-seeking factors prevail in the CIS, while factors that relate to the efficient use of labour and cross-border efficiency are important in the NMS setting.

Table 2. The relation between FDI determinants and the character of investment decision

Group of countries	Variables determining FDI inflows
CIS	<p>Resource-seeking factors <u>Abundance of natural resources</u> Campos and Kinoshita, 2003 Johnson, 2006 Merlevede and Shoors, 2004 Shiells, 2003</p> <p>Market-seeking factors <u>Market size (growth)</u> Tondel, 2001 Johnson, 2006 Merlevede and Shoors, 2004</p> <p>Efficiency-seeking factors N/A</p>
Current new EU members and Western Balkans	<p>Resource-seeking factors <u>Labour</u> Demekas, Horvath, Ribakova and Wu, 2005 Smarzynska and Wei, 2002 Merlevede and Shoors, 2004 Lansbury, Pain and Smidkova, 1996</p> <p>Market-seeking factors <u>Market size (growth)</u> Johnson, 2006 Merlevede nad Shoors, 2004 <u>Population</u> Johnson, 2006</p> <p>Efficiency-seeking factors <u>Institutions</u> Campos and Kinoshita, 2003 <u>Transition progress</u> Tondel, 2001 <u>Agglomeration</u> Campos and Kinoshita, 2003 <u>Privatization method</u> Merlevede and Shoors 2004 Botric and Skuffic 2005</p>

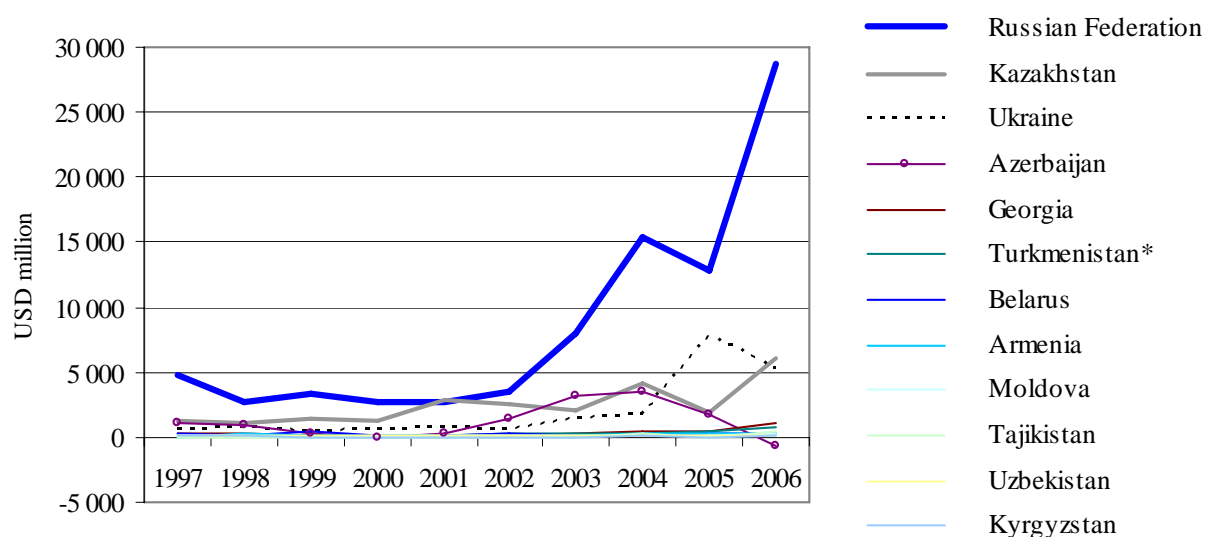
Source: own elaboration.

5. FDI inflows in the CIS

FDI inflows to the CIS region as a whole averaged about USD 19 billion a year in 2000–2006. Over half of this (USD 11 billion a year on average) went to the Russian Federation (see Figure 1). This investment was mainly directed towards the extraction and transportation of energy resources. Two other CIS countries with abundant energy-resources, i.e. Kazakhstan and Azerbaijan, attracted USD 3 billion and USD 1 billion per annum respectively during 2000–2006.

For comparison, the eight CEE countries which joined the EU in 2004³ recorded a total of USD 25 billion FDI inflows per annum on average in 2000–2006. The largest country of this group, Poland, attracted an average of USD 9 billion per year, most of which was directed towards financial intermediation and the manufacturing sectors. Poland was followed by the Czech Republic, which attracted USD 6 billion per year on average in 2000–2006.

Figure 1. FDI inflows to the CIS, 1997–2006



Note. * - Turkmenistan was in the CIS in 1991–2005; associate member since 2005.

Source: UNCTAD.

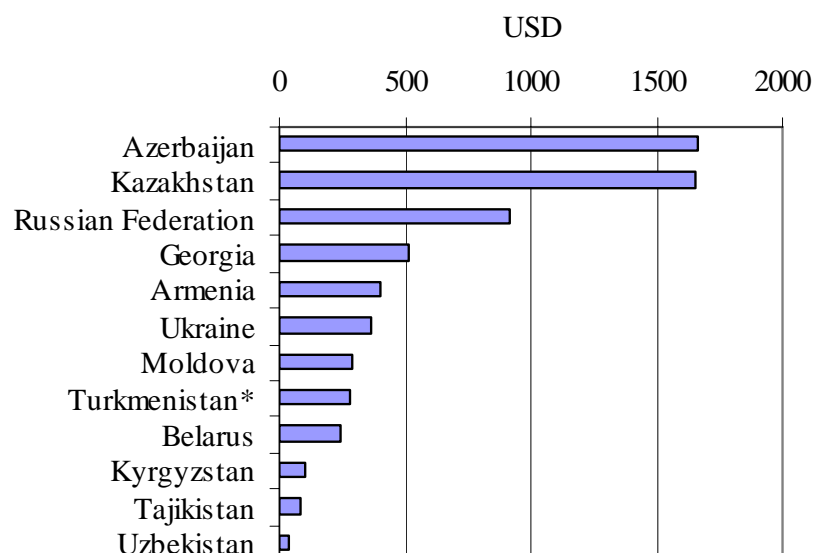
The highest FDI stocks per capita in the CIS were recorded by energy-producing and energy-transit countries (see Figure 2). Azerbaijan and Kazakhstan accumulated over USD 1,500 per capita in 2005. The FDI stock per capita in Russia was close to 1,000 USD, and that of Georgia was about 500 USD. To compare, per capita FDI stock in Croatia in 2005 was 2,800 USD, and in Romania and Bulgaria it was over 1,000 USD. FDI per capita in CEE countries ranged from 2,700 USD in Poland to 9,400 USD in Estonia.

Some of the CIS economies are very FDI-dependent, although their FDI per capita is not very high. Tajikistan has been the extreme example here. FDI inflows in the 2000s accounted for the majority of all investment in the country, which basically reflected the lack of domestic resources. Over 1/3 of overall investment in the resource-rich Azerbaijan and Kazakhstan and in the consumption-driven Moldova were made by foreigners during 2000–2006. On the other hand, Uzbekistan, Belarus and Russia are not very FDI-dependent. Less than 10% of all investment in these countries came from foreign firms.

In spite of the afore-mentioned exceptions (Tajikistan, Azerbaijan and Kazakhstan), the CIS countries are, on average, less FDI-dependent than the CEE and SEE countries. The average share of foreign firms in total investment in the eight NMS (without Bulgaria and Romania) in 2000–2006 was around 23%, while in the SEE countries⁴ it was 26%. This also reflects the fact that the CIS countries are on average still less open to FDI than their Central and South East European neighbours.

³ The Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Slovakia and Slovenia.

⁴ Albania, Bosnia and Herzegovina, Bulgaria, Croatia, Macedonia, Romania, Serbia and Montenegro.

Figure 2. FDI stock per capita in the CIS in 2005

Note. * - Turkmenistan was in the CIS in 1991–2005; associate member since 2005.

Source: UNCTAD.

Table 3. FDI inflows in percent of domestic investment in CIS, 1997–2006

Countries	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Commonwealth of Independent States (CIS)	8.9	9.8	13.4	8.4	9.0	10.5	14.2	17.7	13.3	17.1
Tajikistan	11.1	16.9	3.7	39.6	11.6	48.3	13.0	100.0*	27.5	100.0*
Azerbaijan	71.7	60.0	27.2	2.5	16.8	65.5	83.9	72.0	30.7	--
Kazakhstan	36.7	33.1	53.9	40.5	53.9	43.8	29.4	36.9	11.9	27.6
Moldova, Republic of	20.5	20.2	17.5	64.1	41.7	31.0	20.1	27.1	28.0	29.7
Georgia	37.4	28.7	11.3	17.4	15.2	20.1	32.3	33.6	24.0	54.5
Armenia	19.5	72.0	40.3	29.6	18.7	22.1	18.7	27.2	19.0	16.4
Turkmenistan**	9.8	4.8	8.2	8.9	11.8	22.1	17.5	27.0	24.3	40.2
Kyrgyzstan	37.9	51.7	22.6	--	1.9	1.8	17.4	54.4	11.3	45.7
Ukraine	6.3	9.1	8.2	9.7	10.6	8.5	13.8	11.7	43.0	21.0
Russian Federation	6.6	6.3	11.7	6.2	4.7	5.6	10.0	14.3	9.2	16.3
Belarus	9.9	5.1	13.9	4.5	3.4	7.7	3.8	2.6	4.0	3.4
Uzbekistan	3.2	3.1	2.6	2.3	3.2	3.0	3.3	7.0	3.0	5.4

Note. * - own estimate.

** - Turkmenistan was in the CIS in 1991–2005; associate member since 2005.

Source: UNCTAD.

In our subsequent research, oil and resource-attracting countries were dropped from the analysis as we wanted to capture possible analogies with the CEE/SEE countries (which have attracted mainly non-oil FDI). FDI in the CEE/SEE countries contributed to a major growth in productivity, which is why this kind of investment is of the interest in this paper. Taken together, the survey covers countries that attracted about 16% of the overall FDI flows to the CIS in 2006.

6. Survey results

Survey design

This section presents the results of the survey of 120 foreign owned-companies located in Georgia, Moldova, Kyrgyzstan and Ukraine. The representatives of these companies in each country were asked a set of identical questions about the reasons to invest in the CIS, their business environment, and impediments to their everyday activities. The survey was conducted in 2007–2008.

While drafting the questionnaire, existing findings on the investment motives in the CIS, CEE and SEE (described in the preceding part of this paper) were considered. The questions about the business environment of the foreign-owned firms were formulated in such a way that allowed us to draw conclusions about the nature of production chains and check for the existence of various linkages between foreign-owned and local firms. There is evidence that the existence of such linkages (especially of the vertical type) facilitated knowledge spillovers from foreign-owned to domestically-owned firms in the EU NMS in the 1990s. The most relevant examples may be those of Romania and Lithuania (see Javorcik and Spartaneu 2006, Altomonte and Pennings 2006, Smazynska-Javorcik 2004). Therefore, it was interesting to check whether such spillovers could be detected in the CIS as well.

Description of the sample

The sample consisted of 30 foreign-owned companies in Ukraine, 30 foreign-owned firms in Moldova, 30 foreign-owned companies in Georgia, 29 in Kyrgyzstan and 1 in Kazakhstan. The median company in our sample had been in business for 8 years, had revenues of about USD 4.7 mn, and employed 145 people. Company profiles differed significantly among the countries. The Ukrainian companies were the largest in the sample with average annual revenues 5 times those of the Moldovan companies, which in turn still earned twice as much as Kyrgyz companies, which were the smallest in the sample. The average market share of the Georgian companies was less than 20%, whereas in Ukraine and Kyrgyzstan it was higher at 28%. Still, it was the Moldovan foreign-owned companies which held leading positions in the local markets with an average market share of about 47%.

Table 4. Sample statistics

	Profile	Min	Max	Average
1.	<i>Years in the country</i>			
	Ukraine	2	18	8.4
	Moldova	2	17*	8.8*
	Kyrgyzstan	2	15	7.7
	Georgia	1.0	17.0	6.2
2.	<i>Annual revenue (turnover) of the subsidiary, million USD</i>			
	Ukraine	0.03	1,233.0	80.7
	Moldova	0.009	121.1	13.8
	Kyrgyzstan	0.3	30.0	6.8
	Georgia	0.3	280.0	43.7
3.	<i>Total amount of capital invested, million USD</i>			
	Ukraine	0.06	600.0	67.1
	Moldova	0.0004	112.4	21.0
	Kyrgyzstan	0.2	50.0	8.7
	Georgia	0.15	160.0	39.9
4.	<i>Personnel employed</i>			
	Ukraine	7	3,500	502
	Moldova	10	1,653	370
	Kyrgyzstan	6	1,200	232
	Georgia	12	1,200	237
5.	<i>Domestic market share, %</i>			
	Ukraine	0.5	100.0	28.8
	Moldova	0.4	99.1	46.6
	Kyrgyzstan	5.0	100.0	28.7
	Georgia	0.0	100.0	19.6

Note. Numbers are simple averages. * - for Moldova, the numbers exclude answers given by three companies, which stated that they have been in the market (while being foreign-owned) for 60–134 years ago. We disregarded those answers, as it seems that respondents were usually describing when the given firm started its activities (probably being initially foreign-owned), instead of answering when an enterprise was re-privatised in the post-Soviet years.

Source: survey results.

Most foreign companies operating in these countries started their business in the 1990s. In Moldova, Ukraine and Kyrgyzstan, foreign subsidiaries have been on the CIS market for an average of 8–9 years. In, Georgia, the average amount of time FDI has stayed in the local market was about 6 years.

On average, companies differed significantly among countries in terms of the size of their business. Foreign companies invested much more in Ukraine and Georgia compared to Moldova and Kyrgyzstan, thus gaining higher revenues. The annual revenue of companies investing in Ukraine was about USD 80mn, which is more than 5 times higher than Moldovan companies, while the amount of capital invested exceeded the average investment of Moldovan companies by almost three times. The foreign companies working in Kyrgyzstan that participated in our research were the smallest in terms of the scope of their business.

As for personnel employed, Ukrainian foreign companies were also the largest (with an average of 500 employees), followed by Moldovan (370), Georgian (237), and Kyrgyz companies (232). The distribution of companies according to the personnel employed seemed to be close to the normal distribution with the exception of the ‘thick tail’ in the upper end. The thick tail is made of several large companies which employ more than 1,000 workers.

The industry structure of the interviewed companies reflects FDI distribution by industry in the countries, at least in Ukraine and in Moldova (compare Table 5 below with Appendix 2). Most companies interviewed are active in the financial services, the food industry, trade, transport & communications, and construction. These activities are developing very fast in the CIS countries, producing high revenues and thus attracting foreign investors. At the same time, substantial investment inflow is the key reason behind the rise of these sectors.

Table 5. Distribution of surveyed companies by sector

Industry	Ukraine	Moldova	Kyrgyzstan	Georgia	Total
Agriculture	1			1	2
Food industry	4	4	7	4	19
Woodworking, pulp and paper industry, publishing	1		1		2
Textile and leather industry	1		1	1	3
Oil refineries		3	1	2	6
Production of chemicals	2		1	1	4
Machinery and equipment	2		1		3
Mining	1			2	3
Energy		1		3	4
Financial services	4	7	4	8	23
Retail and wholesale trade	7	2	4	1	14
Transport & Communications	3	4	4	1	12
Construction	1	4	4		9
Other activities	3	5	2	6	16
Total	30	30	30	30	120

Source: survey results.

Factors attracting investors into the CIS

One of the main objectives of this survey was to explore the nature of FDI that is flowing into CIS countries. As mentioned above, investment motives are often classified either as market-seeking (when investing firm wants to supply products and services to a recipient country market) or as resource-seeking (intending to benefit from cost-efficient production in a recipient country) and/or as efficiency-seeking (looking for labour-productivity advantage or local specific creative assets).

We tested the investment motives by asking interviewees to answer several questions: about the strategic role of the subsidiary established in the host CIS country, about their investment motives, and about the share of exported production (for details, see Appendix 1).

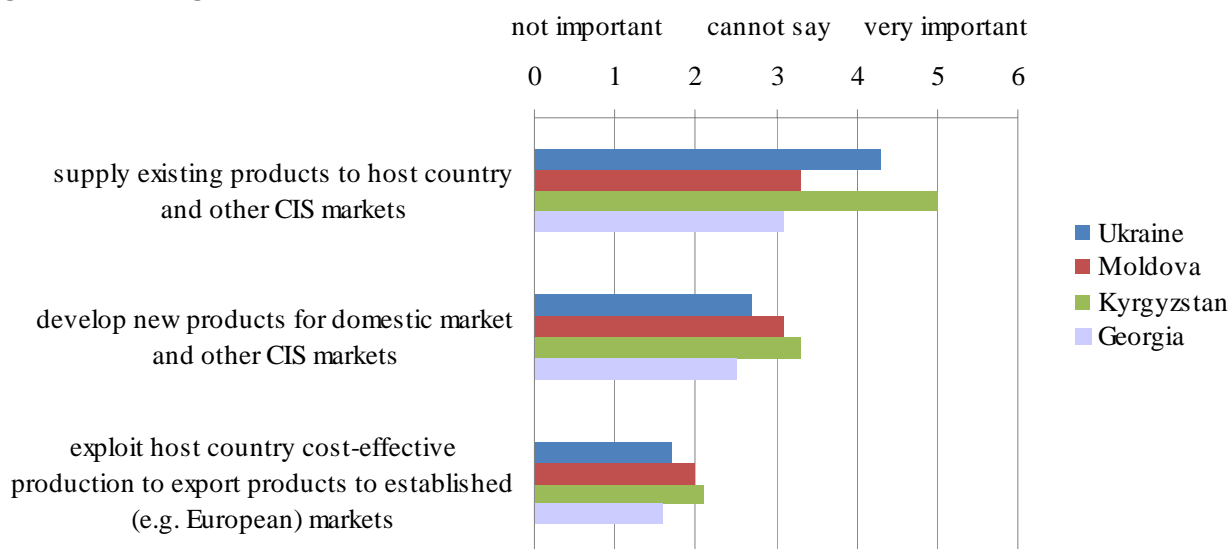
Market seeking

This motive clearly appeared to be the dominant one in the sample. Most of the companies that participated in the survey held a substantial share of the recipient country’s market. The aver-

age domestic market share for Ukrainian and Kyrgyz firms was close to 30%, while Moldovan investors held leading positions with average market share of about 47%. Only in Georgia did foreign investors estimate that they possessed less than 20% of the local market share. This means that the majority of the surveyed firms not only managed to supply their host markets, but also secure dominant positions in these markets.

The percentage of local production of final and intermediate goods that is exported was rather low at 17% and 30% on average (see question 7; Appendix 1), with the exception of Moldova⁵. About 70% of all production of final goods is earmarked for local markets. Some companies even mentioned that they faced a lot of problems when trying to export their products to other countries, particularly to Russia.

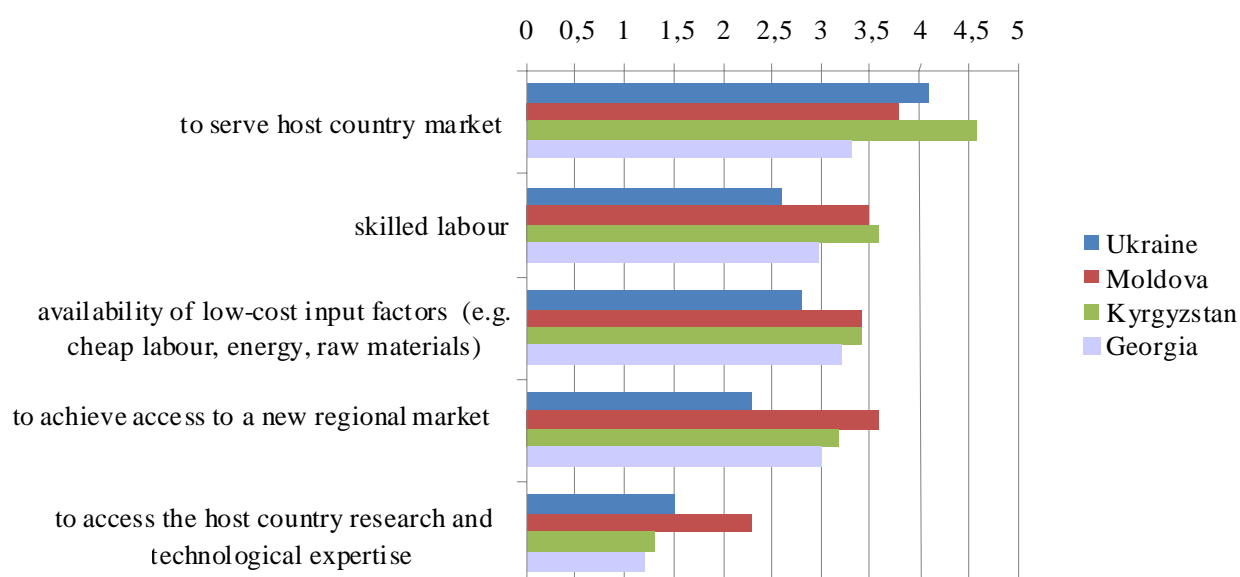
Figure 3. Strategic roles of CIS subsidiaries in the operations of their parent companies



Note. Numbers are simple averages.

Source: survey results.

Figure 4. Reasons to invest in the CIS



Note. higher number indicates that a given reason is more important. Numbers are simple averages.

Source: survey results.

⁵ Where the majority of both intermediate and final goods are exported.

The role of the CIS affiliates in the operations of their parent companies as suppliers of existing products to the host country market and to other CIS markets was found to be rather important (see Figure 3). The companies noted high levels of demand in the growing markets, which is very positive for the further expansion of their businesses.

This outcome is supported by the assessment of investment motives. The interviewees were asked to grade reasons for initiating business activity in the CIS by ranking each of the options on a scale of 1 (unimportant) to 5 (very important). Most companies mentioned the ability 'to serve the host country market' as the most important motive in all four economies (see Figure 4). On the top of this, companies in Moldova and Kyrgyzstan mentioned the ability to avoid import duties while supplying the domestic market as another reason to invest.

Resource-seeking

The second and third most important investment motives varied across the countries, although they were predominantly concentrated on the use of low-cost factors of production (including natural resources) and skilled labour. In Ukraine and in Georgia, the second most important motive was the availability of low-cost input factors, i.e. cheap labour, energy and raw materials. This is explained by the availability of rich natural resources along with cheap labour force and by the close proximity to the EU in the case of Ukraine. In the case of Georgia it is probably explained by high investments in pipeline transportation. The desire to use Kyrgyz skilled labour, followed by the availability of low-cost input factors were also behind the decision to invest in Kyrgyzstan. Interestingly, the second most important motive for investing in Moldova was the ability to access the new regional market (Central and Eastern European), which can be attributed to the country's proximity to the 'new' EU states. This motive can be also attributed to the willingness to exploit Moldovan labour and other resources (graded as the third most important motive). The possibility to access regional markets was also found to be an important factor for investors in Georgia (meaning access to whole Southern Caucasus) and in Kyrgyzstan (Central Asia).

Efficiency-seeking

Access to a country's research and technological expertise was found to be the least important reason to invest in the CIS (see Figure 4), which suggests that investors do not yet seek efficiency in the CIS. This was confirmed by the answer that the exploitation of the cost-effective production in the CIS for the purpose of exporting products to the EU was not important for the strategy of the parent companies. Moreover, the surveyed firms export rather small volumes of intermediate goods (17% of the production of firms producing intermediate goods is exported, on average), which means that they are weakly integrated into vertical production chains⁶.

The survey results indicated that market-seeking is the predominant motive for investing in the four analyzed countries. The second most important motive is for seeking resources.. Foreign investors do not yet seek efficiency in the surveyed CIS firms.

Industrial organisation of FDI in the CIS

When analyzing industry-specific FDI determinants, we relied upon Jacobides (2008) who assumes that the similarities and dissimilarities in the use of factors of production in the vertically integrated production chains among countries shape globalisation prospects and the effects that FDI may produce in a host country. Hence, the second part of our questionnaire was designed to reveal the impact of FDI in a recipient country. The companies were asked to estimate the extent to which their business can be divided into separate components and the degree of similarity of vertical and horizontal value-chain structures between home and recipient countries, as well as give feedback on the performance of their CIS subsidiary. Also, some additional questions allow us to draw conclusions on the importance of industry-level FDI determinants.

Recipients estimated the similarity of industry value-chain structure at 3.4 points (on a scale of 1 to 5 scale, where 1 is not similar and 5 is very similar). Country averages did not differ much, though the answers of Moldovan FDIs suggested a higher degree of similarity. When asked to dis-

⁶ With the exception of the Moldovan companies. foreign subsidiaries producing intermediate goods in Moldova export over 50% of their production.

tinguish between the differences/similarities in vertical and horizontal industry structures (referring to the vertical structure in terms of the systems of in-bound logistics, manufacturing, outbound logistics, and organised sales), and horizontal industry structures (defined as the number of industry participants, their functions and market shares), the respondents gave similar answers, broadly indicating that they were unable to assess the degree of similarity/dissimilarity of vertical vis-a-vis horizontal value chains.

The differences between home and host country value-chain structures were not perceived as a significant impediment for business expansion in the recipient country. The total average was estimated at 2.0 points, while the results varied among countries (see Question 21 in Appendix 1). Foreign companies that established their businesses in Kyrgyzstan estimated the impact of different structures as insignificant (1.2 points), Ukrainian and Georgian ones as rather insignificant (2.1 and 2.0 points respectively), while the impact on Moldovan subsidiaries was unknown (2.8 points).

The activities of foreign affiliates depended largely on the parent companies' multinational businesses. 42% of companies' value chain components are supplied from the home countries, while only 17% are provided by local suppliers (see Question 15 in Appendix 1 for details). An especially large share of value chain components (about 60%) are imported by Ukrainian foreign affiliates, whereas Moldovan, Georgian and Kyrgyz companies import only 21%, 46% and 39% respectively. Ukraine's reliance on imports can be explained by the fact that a many of the firms that participated in the survey are engaged in retail trade.

The majority of imported value chain components (received from parent companies) were technologies and know-how (42% of total), followed by materials (24%). Components and parts accounted for about 20% and final products accounted for about 14% (see Question 8 in Appendix 1). As for the open option, the majority of Ukrainian companies reported that marketing technologies brought from parent companies were highly valuable. Also, in all the countries surveyed, financing and working capital were named as important resources received from a parent company. Among other resources mentioned were consulting services with regard to major business processes and equipment.

The companies were also asked to comment on the degree to which the success of their business depended on the performance of local and multinational partners. The results showed that, on average, the success of the operations of a subsidiary depended more on the performance of international industry participants (3.4 points) than on the performance of local industry participants (3.0 points). This confirmed the earlier findings about the importance of the parent company and its multinational links to subsidiaries. Unfortunately, the local environment is not developed enough to offer the companies products which are of the necessary quality for their business, so they have to maintain close links with their international partners.

The average number of key local suppliers among all four countries was significantly below the number of key local customers/distributors; the total average among the four countries was 18 and 74 respectively. This finding supports the previously-described outcome of our research on the market-oriented nature of investment in CIS countries. While much of the resources are supplied from abroad, the final products are targeted to internal markets, which explains the significant number of local distributors and customers.

Overall, the results suggest rather pessimistic implications for the influence of technological spillovers on the productivity of domestic firms. It was shown in studies examining CEE data that the highest productivity-increasing gain for local firms takes place when foreign-owned, technologically superior firms buy local supplies, teach suppliers and make them acquire new technologies. Only then do positive technological spillovers occur. However, in the case of this sample, it seems that spillovers from FDI, even if they exist, are rather limited to certain firms and/or sectors of economic activity. Moldova had the most favourable suppliers to customers ratio, which suggests that the potential for spillovers may be the highest there. But even in Moldova, the average number of domestic customers of a foreign subsidiary was three times higher than the average number of local suppliers. Foreign firms in the surveyed CIS markets seemed to buy supplies locally only when necessary, and concentrated instead on capturing domestic demand.

Major impediments

In order to investigate the investors' attitudes towards the investment climate in the CIS, we asked respondents to name the greatest impediments to doing business in the host countries.

Each of the respondents ranked the importance of problems from 1 to 5 (with 1 being the least important and 5 being the most important).

The most urgent problems named in the surveyed CIS countries were the volatility of the political environment, the uncertainty of the economic situation, the ambiguity of the legal system and the high levels of corruption. However, the top three problems differed among countries. Political and economic instability together with the lack of physical infrastructure were of particular concern for the foreign companies operating in Kyrgyzstan and Georgia. All other problems (with the exception of finding a business partner in Georgia) were deemed relatively less important in light of the three mentioned above. Ukraine and Moldova are more stable in political terms and foreign investors perceive extensive bureaucracy, corruption and uncertainties connected to domestic legislations as the main obstacles for their businesses operating in these countries. Neither the difficulties related to the newly-established Ukrainian government in late 2007, nor the problems with the uncertain status of Transnistria in Moldova were named by foreigners as major obstacles to expanding business activities in these two European CIS countries.

Table 6. Assessment of problems faced by foreign investors in the CIS

Problem	Ukraine	Moldova	Kyrgyzstan	Georgia	Total average
Volatility of the political environment	3.4	3.3	4.5	2.8	3.5
Uncertainty about the economic environment	3.3	3.4	4.4	2.9	3.5
Ambiguity of the legal system	3.9	3.5	3.5	2.7	3.4
Corruption	4.0	3.9	3.1	2.1	3.3
Bureaucracy	3.9	3.9	3.1	2.0	3.2
Lack of physical infrastructure	2.5	2.8	3.9	2.9	3.0
Backward technology	2.4	2.9	3.1	2.4	2.7
Lack of business skills	2.4	2.6	3.1	2.7	2.7
Finding a suitable partner	2.5	2.9	2.3	2.8	2.6
Problems in establishing clear ownership conditions	3.2	2.9	1.7	2.4	2.6

Note. Higher number indicates that a given impediment is more important. Numbers are simple averages.

Source: survey results.

High levels of corruption in the CIS are widely acknowledged as a serious deterrent to FDI inflows, as confirmed by the Corruption Perception Index of 2006, in which Ukraine was ranked 104th and Kyrgyzstan 145th out of 163 developed and developing countries in the world (Transparency International, Global Corruption report 2007). Interestingly, Moldova ranked relatively lower at 81st (Transparency International, Global Corruption report 2007). Perception of corruption in Georgia is relatively low, most likely due to the successful efforts of Georgian authorities to fight petty corruption.

Problems in establishing clear property rights appeared to be relatively important obstacles faced by firms operating in Ukraine and Moldova, but were not very problematic for firms in Georgia or Kyrgyzstan. The existing infrastructure, technology and management skills of the local workforce did not seem to be much of a problem for foreign investors operating in Ukraine and Moldova, however they were perceived as important obstacles in Georgia. Finding a suitable partner did not seem to be a problem either in Ukraine or in Kyrgyzstan, whereas it was identified as a relatively important obstacle in Moldova and Georgia. Among other impediments, investors mentioned problems with tax administration, which involves difficulties in paying taxes, in obtaining VAT refunds, and in dealing with complicated tax regulations.

Performance of subsidiaries

Interestingly, companies that have invested in Kyrgyzstan assessed the performance of local subsidiaries as very good (4.5 points). Foreign firms in Ukraine and Moldova were also perceived by their representatives as performing relatively well (Ukraine scored 4.3 points and Moldova scored 4.1 points) while Georgian subsidiaries were rated as performing relatively worse at 3.7 points (although still considered “relatively successful”).

7. Econometric analysis

In this section we will present findings from the subsequent econometric analysis we conducted based on the survey results. In particular, we were interested to see whether there were any differences among the three different types of investors (market-seekers, resource-seekers and efficiency-seekers) with respect to their levels of satisfaction with their CIS operations, problems they were encountering in their countries of operation, and particularities of their modes of operation.

To estimate our models we employed an ordered logistic analysis (based on a maximum likelihood estimation) as we were working with the categorical data. This method is the most appropriate for this type of data as it allows obtaining consistent, efficient, and powerful estimates (see Greene, 2002; Agresti, 2002 and Allison, 1999). We used STATA 9.0 to conduct the estimation.

Dependent variables

We employed a number of dependent variables in this study. Our first dependent variable was the manager's perception of the subsidiary's performance. This and all other variables in our survey were measured on a five-point Likert scale. More specifically, the question was, "Please evaluate the performance of your [the country where the subsidiary is] subsidiary". This, of course, is not a true measure of performance as such, but a satisfaction rating, which is also subject to individual biases. However, by analyzing managers' satisfaction with the performance of a subsidiary we are in a position to gauge which factors contribute to higher or lower satisfaction with performance.

The other dependent variables employed were the various problems the survey participants are encountering during their operations in the host countries. We tried all 10 individual problems specified in the questionnaire. However, we will only report six of them (the ones which yielded significant results). These variables are: 1) volatility of the political environment, 2) uncertainty of the economic environment, 3) ambiguity of the legal system, 4) corruption, 5) difficulties in finding a suitable partner, and 6) problems in establishing clear ownership conditions. With these dependent variables, we analyzed how the different investment motivations/orientations of a subsidiary and other firm-specific and industry-related variables affected the perceived problems of operating in the respective countries.

Independent Variables

This study employed a number of independent/explanatory variables in order to explain possible differences in the perceived performance and problems of operating in a particular country. As previously mentioned, the key independent variables employed were related to the investment motive/orientation of the subsidiary. These were the answers to question 10 of the questionnaire, namely 'Why did you choose to invest in [the country where the subsidiary is]?' The following five options were considered: 1) cheap input factors; 2) skilled labor; 3) local market; 4) regional market; and 5) local R&D expertise.

The two other independent variables employed were related to the similarities/differences in the industry's value chain structures between host and home countries. These factors have been shown to affect the investor's behavior to a significant extent (see Jacobides, 2008). The corresponding two variables are called 'Sector Similarity' and 'Sector Modularity', which were listed as the answers to questions 20 and 16 of the questionnaire, respectively.

The next two independent variables were linked to the subsidiary's embeddedness/dependence on the host/home country environment a propos the links with the local/global value chain partners. The corresponding variables were called 'Local Relationships' and 'Foreign Relationships' and constituted the answers to questions 13 and 14 of the questionnaire, respectively.

The remaining control variables were measured on a continuous scale and related to basic firm characteristics, e.g. turnover (annual, USD mn), years of operation, personnel, investment (initial, USD mn), market share (per cent, in a host country). Also, we added country dummy variables to control for country effects.

The Results

The results of our analysis are reported in Table 7. The table shows 7 specifications with the dependent variables described. The first specification (S1) analyzed the factors which influenced the performance of the foreign owned companies in the CIS. We found that having market-, skilled labor-, and cheap input-orientation positively affected the performance, with market-orientation having the strongest impact in the absolute value. Hence, we found that market-seeking companies were more likely to perform better in our sample of CIS countries⁷. Also, the similarity of the value chains along with the ease of breaking the production process into separate parts increased the probability of good performance of the part of the subsidiaries.

The other variables turned out to be insignificant, apart from the dummy for Georgia (with a negative sign) reflecting that the companies operating in Georgia were less likely to report satisfaction from their performance than firms in other countries.

The other 6 specifications analyzed factors which affect the perceived problems of MNEs' operations in the CIS countries. Differentiating among the different investment orientations, we found that investors who seek cheap inputs in the CIS were more likely to complain about the ambiguity of the legal system and problems in establishing clear property rights. As legal matters are one of the key factors which determine the success of resource-seeking operations, i.e. all contractual arrangements related to the use of the key resource, we found them to be of paramount importance for this type of investor.

At the same time, investors who are seeking skilled labor are most likely to be affected by the uncertainty of the economic environment. We would expect these investors to produce something relatively sophisticated for the local market/exports, and since economic uncertainty amplifies all business-related risks, then this problem becomes of the highest concern to them.

Interestingly, market-seeking investors did not seem to name any specific problem as having higher importance than the rest. The situation was somewhat different with investors who were trying to access the regional market; For them the problem was more likely in finding a suitable partner. Finally, corruption was more likely to be reported as a problem by investors who were seeking to tap in into R&D expertise in the CIS region. Interestingly, the same type of investors (i.e. those interested in R&D potential) were found to be less likely to complain about corruption. This is a surprising outcome, which so far we have failed to explain.

Out of the other variables, sector similarity appeared to be one of the most important alleviators of problems which were encountered in the CIS by foreign investors (as all coefficients have negative signs), hence the similarity of the value chains helped to overcome the problems investors are experiencing in the region. This is in line with the global expansion logic put forward in Jacobides (2008). Sector modularity (i.e. the ease of fragmenting the production process) on the other hand, only helped to alleviate the uncertainty of the economic environment to investors into the CIS.

Investment in activity, which is embedded in local value chains, lowered the probability of complaining about the legal systems in the CIS, whereas close links with foreign value chain partners amplified the problems caused by the uncertainty of the economic environment. As previously mentioned, significant involvement with local partners created a number of situations where legal matters could potentially arise, which then must be resolved within highly imperfect local legal systems. As to the latter finding, it can be explained by the fact that the closer the links with the foreign partners are, the more a firm relies on import/export operations which make it dependent on macroeconomic stability in the host country in terms of the exchange rate stability, inflation, monetary policy etc.

A number of firm-level variables appeared to correlate significantly with the problems caused by the ambiguities of the legal system as well. The number of years of operation in the CIS was negatively related to the difficulties caused by this ambiguity, i.e. if a CIS subsidiary was relatively younger, the probability of legal obstacles being a problem was higher. The companies which had been in the country for a few years had already developed some capabilities which helped them deal with this ambiguity, something which younger companies lacked.

⁷ Or rather are more likely to positively assess their performance in the CIS. In the subsequent discussion, we ignore the fact that these are the perceptions of the managers, not the financial results themselves.

Table 7. Estimation Results

Independent Variables	Dependent Variables						
	Performance	Political Environm.	Economic Environm.	Legal System	Corruption	Finding a partner	Ownership Rights
<i>FDI Motives:</i>	S1	S2	S3	S4	S5	S6	S7
Cheap factors	0.39* (0.10)	-0.11 (0.62)	-0.25 (0.27)	0.43** (0.05)	0.04 (0.85)	-0.40 (0.51)	0.47* (0.07)
Skilled labour	0.49* (0.07)	0.19 (0.45)	0.45* (0.09)	0.14 (0.58)	0.14 (0.57)	0.28 (0.28)	-0.11 (0.69)
Local Market	0.53* (0.07)	-0.5 (0.84)	0.19 (0.47)	0.09 (0.67)	0.05 (0.82)	0.28 (0.23)	-0.04 (0.87)
Regional Market	0.17 (0.327)	0.20 (0.19)	0.19 (0.47)	0.23 (0.12)	0.21 (0.15)	0.32** (0.04)	0.11 (0.51)
R&D expertise	0.09 (0.797)	0.38 (0.19)	0.35** (0.03)	0.23 (0.37)	-0.57** (0.04)	-0.07 (0.76)	0.42 (0.12)
<i>Other Variables</i>							
Local relationships	-0.23 (0.33)	-0.09 (0.23)	-0.19 (0.41)	-0.38* (0.06)	-0.20 (0.32)	0.12 (0.58)	-0.07 (0.74)
Foreign relationships	0.15 (0.48)	0.06 (0.75)	0.42** (0.05)	0.11 (0.59)	0.22 (0.28)	-0.24 (0.23)	0.14 (0.53)
Sector similarity	0.64** (0.02)	-0.28 (0.23)	-0.75*** (0.00)	-0.13 (0.55)	-0.05** (0.03)	-0.33 (0.15)	-0.47** (0.05)
Sector modularity	0.42** (0.05)	0.06 (0.38)	-0.58** (0.02)	-0.013 (0.95)	-0.32 (0.11)	0.07 (0.74)	0.23 (0.34)
Turnover	-0.01 (0.34)	0.00 (0.97)	-0.01 (0.18)	-0.02** (0.04)	-0.01 (0.56)	0.01 (0.58)	0.01* (0.07)
Years of operation	-0.01	-0.01 (0.72)	-0.03 (0.16)	-0.03** (0.04)	0.01 (0.57)	0.00 (0.90)	-0.01 (0.58)
Personnel	-0.00 (0.97)	0.00 (0.29)	-0.01 (0.17)	-0.01* (0.09)	0.00 (0.97)	0.00 (0.72)	-0.001 (0.31)
Investment	0.01 (0.27)	0.01 (0.62)	0.01 (0.18)	-0.01 (0.24)	-0.01 (0.91)	-0.001 (0.86)	-0.001 (0.36)
Market Share	0.01 (0.19)	-0.01 (0.79)	-0.01 (0.55)	-0.02** (0.05)	0.01 (0.39)	0.004 (0.66)	-0.004 (0.61)
D-Ukraine	0.61 (0.462)	-2.89*** (0.00)	-1.15 (0.16)	1.79** (0.02)	2.11*** (0.00)	0.69 (0.39)	4.33*** (0.00)
D-Georgia	-1.58* (0.05)	-3.98*** (0.00)	-3.59*** (0.00)	-1.76** (0.02)	-1.72** (0.02)	1.76** (0.20)	3.04*** (0.00)
D-Moldova	-1.32 (0.15)	-3.39*** (0.00)	-1.83** (0.02)	1.33* (0.08)	2.19*** (0.00)	1.58** (0.040)	3.91*** (0.00)
Pseudo R-squared	0.26	0.23	0.35	0.19	0.20	0.09	0.21
LR chi ²	49.25	59.63	81.40	47.31	55.64	24.18	55.70
Number of observations	87	88	88	88	88	88	88

* p-values in parentheses

Similarly, the size of the company (as measured by both turnover and number of employees) negatively affected the legal ambiguity as well, i.e. the smaller a company was, the more likely it was to suffer from legal problems. Again, smaller companies probably do not have enough resources to deal effectively with legal problems, whereas bigger companies have more leeway which allows them to overcome related difficulties. A company's market share was also negatively related to legal ambiguities. We think that effect here is similar to the size effect as bigger companies typically have a larger market share and vice versa. We interpreted these findings in the following way: It is possible that given the imperfect nature of legal systems in the CIS, larger companies are able to lobby effectively, so that once a company is "big enough", it can cope with the ambiguity of legal systems relatively well and is less likely to report difficulties. In other words, it is possible that informal links with policy makers are more important for bigger companies in the CIS than any given institutional solution.

On the contrary, the relationship between the size of the company (turnover) and problems in establishing clear property rights is positive. The bigger the company, the greater the probability that property rights are problematic. This can be explained by the fact that property rights/corporate governance issues become more significant as the company grows larger, and given the shortcomings of the legal systems in the surveyed countries, these problems are likely to amplify in significance at that stage.

The country effects proved to be one of the most significant factors affecting the various problems foreign companies are facing in the CIS. This is not surprising, if one takes into account the previously described differences among countries with regard to their perceptions of major problems.

8. Conclusions

In this paper, we analyzed of the motives of FDI flowing in to the CIS, focusing on the selected CIS countries. We also explored the problems which foreign investors encounter in these countries. Furthermore, we analysed how different investors' profiles (market-, resource- and efficiency-seeking) affected the problems they are encountering in their countries of operation, and the particularities of their modes of operation.

Our analysis showed that market-seeking was a dominant motive for investors in our sample. The companies hold substantial shares of recipient country markets, and only export a small portion of their products. The growing CIS markets produce high demand, which foreign investors aim to capture in expanding their business to this region. This motivation is similar to the motivation foreign investors in the CEE countries had in the early 1990s. Our econometric analysis revealed that the market-seeking orientation was also the most profitable one. It had the most positive effect on investment performance, followed by skilled labour- and cheap input orientations. Hence, serving the local market was the most beneficial strategy for investors.

The second and third most important investment motives varied across the countries, though they were predominantly focused on the use of low-cost factors of production (including natural resources) and skilled labour. We expect that together with closer integration with the global economy (and particularly with the EU in the case of the European CIS countries) and the fall in overall protection, low-cost CIS labour will attract new waves of investments, similar to what has been happening in the CEE and SEE countries. It is very important, though, that the skills of the CIS labour force were able match the needs of the labour markets at that stage. Investors do not yet seek efficiency by producing in the CIS, which is one of the key reasons for investment in the CEE/SEE countries.

There is a need to address the following impediments so that they do not override the potential profits from using cheap CIS labour: the political instability in Kyrgyzstan and Georgia, and the extensive bureaucracy, corruption and uncertainties connected to domestic legislation in Moldova and Ukraine.

Our econometric analysis showed that the ambiguity of the legal system and problems in establishing clear property rights were the biggest concerns for investors seeking cheap factors of production in the CIS, whereas the uncertainty of the economic environment was most harmful for investors seeking skilled labour. The latter problem was also the most significant for investors who are trying to tap in into local R&D. Thus improving macroeconomic stability should be of primary importance to governments that wish to attract skilled labour- and R&D-seeking FDI, which are the two types of investors that bring the greatest benefits to the development of the host country.

The problems stemming from the ambiguity the legal system are also amplified if a foreign company has close links with local businesses, is of a smaller size and younger age. Hence, improving the legal system will help foreign companies to develop their operations in CIS countries with less trouble, and thus contribute to the host country's development much sooner.

Overall, the results suggest rather pessimistic implications for the influence of technological spillovers on the productivity of domestic firms. In studies examining CEE data, it was apparent that the highest productivity-increasing gain for local firms took place when foreign-owned and technologically superior firms bought local supplies, taught suppliers and made them acquire new technologies. Only in this case do positive technological spillovers take place. However, in the case of our sample, it seemed that potential spillovers from FDI are rather limited to certain firms and/or sectors of economic activity. Moldova has the most favourable suppliers/customers ratio,

which suggests that the potential for spillovers may be highest in that country. But even in Moldova, the average number of domestic customers of a foreign subsidiary is three times higher than the average number of local suppliers. Foreign firms in the surveyed CIS economies seem to buy supplies locally only when necessary, and prefer to concentrate on capturing domestic demand.

Policy makers can assist in attracting more and higher quality FDI into CIS countries by:

- Securing greater macroeconomic and political stability, and reducing the ambiguity of the legal system;
- Removing legal deficiencies to stimulate a more active role for foreign companies in their interactions with local businesses, as well as the development of the infrastructure (transport, industrial);
- Reducing corruption levels in order to attract efficiency-seeking (R&D) investment. Political willingness is the key here as it will define the effectiveness of any action taken in this respect;
- Promoting linkages with the domestic economy (through business incubators, information clearing houses) and/or building local technological capabilities (support R&D, high tech industrial parks, training institutions). This would be helpful in the longer-term. More immediately an improvement in intellectual property rights would go a long way in attracting greater amounts of higher quality FDI.

References

- Agresti, A. 2002, *Categorical Data Analysis* (2nd edition), Hoboken: NJ, Wiley.
- Allison, P. 1999. *Logistic Regression Using the SAS System: Theory and Application*, Cary, NC: SAS Institute Inc.
- Altomonte, C. and E. Pennings (2006). Searching for Horizontal Spillovers Through Incremental Foreign Direct Investment. Tinbergen Institute Discussion Paper 05–101.
- Bevan, A. and Estrin, S. (2000) *The Determinants of Foreign Direct Investment in Transition Economies*. William Davidson Institute, WP No. 342, October 2000.
- Bevan, A. and Estrin, S. (2004) *The Determinants of Foreign Direct Investment into European Transition Economies*. *Journal of Comparative Economics*, 32 (2004), p.775–787.
- Botric, V. and Skuflic, L. (2005), *Main Determinants of Foreign Direct Investment in the South East European Countries*. 2nd Europhrame Conference on Economic Policy Issues in the European Union “Trade, FDI and Relocation: Challenges for Employment and Growth in the European Union?”, June 3rd, 2005, Vienna, Austria.
- Brada, J., Kutan, A. and Yigit, T. (2004), *The Effects of Transition and Political Instability On Foreign Direct Investment Inflows: Central Europe and The Balkans*. William Davidson Institute. WP No. 739.
- Campos, N. and Kinoshita, Y. (2003), *Why Does FDI Go Where It Goes? New Evidence from the Transition Economies*. IMF WP/03/228.
- Carstensen, K., Toubal, F. (2003), *Foreign Direct Investment in Central and Eastern European Countries: A Dynamic Panel Analysis*. Kiel Institute for World Economies. WP No.1143.
- Collins, S., Rodrick, D. (1991), *Eastern Europe and the Soviet Union in the World Economy*. Institute for International Economics, Washington, D.C., 1991.
- Demekas, D., Horvath, B., Ribakova E. and Wu, Y. (2005), *Foreign Direct Investment in Southeastern Europe: How (and How Much) Can Policies Help?* IMF, WP/05/110.
- Dunning, J.H. (1993), *Multinational enterprises and the global economy*. Workingham.: Addison-Wesley.
- Edmiston K., Mudd S., Valev N. (2003), *Tax Structures and FDI, The Deterrent Effects of Complexity and Uncertainty*, William Davidson Working Paper Number 558, April.
- Globerman, S., Shapiro, D. and Tang, Y. (2004), *Governance and Foreign Direct Investment in Emerging and Transition European Countries*. Working Paper – Western Washington University (2004)
- Greene, W.H. 2002. *Econometric analysis* (5th edition). Upper Saddle River, New Jersey: Prentice Hall.
- Hunya, G. (2002), *FDI in South-Eastern Europe in the Early 2000s*. The Vienna Institute for International Economic Studies.
- Isobe, T., Makino, S., & Montgomery, D. (2000). Resource commitment, entry timing, and market performance of foreign direct investments in emerging economies. *Academy of Management Journal*, 43 (3), 468–484.
- Jacobides (2006), *Playing Football in a Soccer Field: Value Chain Structures, Institutional Modularity and Success in Foreign Expansion*, Managerial and Decision Economics, MDE-06–0112.
- Javorcik B., and M. Spatareanu (2006). To Share or Not To Share: Does Local Participation Matter for Spillovers from Foreign Direct Investment?, Working Papers Rutgers University, Newark 2006–001, Department of Economics, Rutgers University, Newark.
- Johnson, A. (2006), *FDI Inflows to the Transition Economies in Eastern Europe: Magnitude and Determinants*. The Royal Institute of Technology. CESIS (Centre for Excellence for Studies in Science in Innovation). Paper No.59.
- Khanna, Tarun, and K. G. Palepu. Why Focused Strategies May Be Wrong for Emerging Markets. *Harvard Business Review* 75, no. 4 (July-August 1997): 41–51.

- Lahreche-Revil A. (2006), *Who's afraid of tax competition? Harmless tax competition from the New European Member States*, CEPII Working Paper no 2006–11.
- Lansbury, M., Pain, N. and Smidkova, K. (1996), *Foreign Direct Investment in Central Europe Since 1990: An Econometric Study*. National Institute Economic Review, May 1996, p.104–114.
- Ledayeva, S. (2007), *Spatial Econometric Analysis of Determinants and Strategies of FDI in Russian Regions in Pre- and Post-1998 Financial Crisis Periods*, Bank of Finland, BOFIT, Institute for Economies in Transition, September, 2007.
- Luo, Y., & Peng, M. W. (1999). Learning to compete in a transition economy: Experience, environment, and performance. *Journal of International Business Studies*, 30 (2), 269–296.
- Malesky, E. (2006), *Re-Thinking the Obsolescing Bargain: Do Foreign Investors Really Surrender Their Influence over Economic Reform in Transition States?* University of California San-Diego-IRPS.
- Merlevede, B. and Schoors, K. (2004), *Determinants of Foreign Direct Investment in Transition Economies*. Department for Economics and CERISE, Ghent University, Belgium.
- Meyer, K. (2005), *Foreign Direct Investment in Emerging Economies*. Templeton College, Oxford.
- Peng, M. and P. Heath (1996). The Growth of the Firm in Planned Economies in Transition: Institutions, Organizations, and Strategic Choice, *The Academy of Management Review*, Vol. 21, No. 2 (April), pp. 492–528.
- Peng, M. W., & Luo, Y. (2000). Managerial ties and firm performance in a transition economy: The nature of a micro-macro link. *Academy of Management Journal*, 43 (3), 486–501.
- Resmini, L. (1999), *The Determinants of Foreign Direct Investment into the CEECs: New Evidence from Sectoral Patterns*. LICOS Centre for Transition Economics, Katholieke Universiteit Leuven, Belgium and Bocconi University, Milano. Italy. Discussion Paper No. 83/1999.
- Rogacheva E., Mikerova, J. (2003), *European FDI in Russia: Corporate Strategy and the Effectiveness of Government Promotion and Facilitation*, OCO Consulting, September 2003
- Shiells, C. (2003), *FDI and the Investment Climate in the CIS Countries*. IMF Policy Discussion Paper PDP/03/5, November 2003.
- Smarzynska-Javorcik B., (2004). Does Foreign Direct Investment Increase the Productivity of Domestic Firms? In Search of Spillovers through Backward Linkages, *American Economic Review*, vol. 94(3), pages 605–627, June.
- Smarzynska, B., Wei, S. (2000), *Corruption and the Composition of Foreign Direct Investment. Firm-Level Evidence*. The World Bank. WPS-2360.
- Smarzynska, B., Wei, S. (2002), *Corruption and Cross-Border Investment: Firm-Level Evidence*. William Davidson Institute WP No. 494.
- Strach, P. and Everett, A. (2006), *Japanese Foreign Direct Investment in the Czech Republic: A Motivational Analysis*. Problems and Perspectives in Management, 1/2006, pp.22–31.
- Tondel, L. (2001), *Foreign Direct Investment During Transition. Determinants and Patterns in Central and Eastern Europe and the Former Soviet Union*. Chr. Michelsen Institute. WP 2001:9.
- Transparency International, Global Corruption report 2007. http://www.transparency.org/policy_research/surveys_indices/cpi/2007
- Uhlenbruck, K., & De Castro, J. (2000). Foreign acquisitions in Central and Eastern Europe: Outcomes of privatization in transitional economies. *Academy of Management Journal*, 43 (3), 381–402.

Annexes

Appendix 1. Detailed results of the survey

Profiles	Min	1st quartile	2nd quartile	3rd quartile	Max	Average
Ukraine						
1. Years in the country	2.0	4.5	9.0	11.0	18.0	8.4
2. Annual revenue (turnover) of the subsidiary, million USD	0.03	3.1	10.5	67.7	1233.0	80.7
3. Personnel employed	7.0	38.0	136.0	272.8	3500.0	501.5
4. Total amount of your capital invested in the subsidiary, million USD	0.06	0.17	3.5	49.8	600.0	67.1
5. Market share in the country, %	0.5	15	22.0	27.0	100.0	28.8
Moldova						
1. Years in the country	2.0	7.0	9.0	12.0	17.0	8.8
2. Annual revenue (turnover) of the subsidiary, million USD	0.0091	0.3	1.8	5.2	121.1	13.8
3. Personnel employed	10.0	82.0	297.0	440.0	1653.0	369.2
4. Total amount of your capital invested in the subsidiary, million USD	0.0004	0.3	3.0	32.6	112.4	21.0
5. Market share in the country, %	0.3790	30.0	44.0	70.0	99.1	46.6
Kyrgyzstan						
1. Years in the country	2.0	4.0	8.0	10.8	15.0	7.7
2. Annual revenue (turnover) of the subsidiary, million USD	0.3	1.8	3.0	7.0	30.0	6.8
3. Personnel employed	6.0	50.0	120.0	300.0	1200.0	232.4
4. Total amount of your capital invested in the subsidiary, million USD	0.2	0.5	3.0	10.0	50.0	8.7
5. Market share in the country, %	5.0	10.0	20.0	30.0	100.0	28.67
Georgia						
1. Years in the country	1	3	4	10	17	6.2
2. Annual revenue (turnover) of the subsidiary, million USD	0.25	1.50	6.00	68.00	280	43.7
3. Personnel employed	12	35.00	120.00	302.50	1200	237.6
4. Total amount of your capital invested in the subsidiary, million USD	0.1500	7.10	20.00	66.25	160	39.9
5. Market share in the country, %	0.0	2.0	8.0	25.0	100.0	19.6

7. What percentage of the following is exported? %	Ukraine	Moldova	Kyrgyzstan	Georgia	Total
- intermediate products	12.63	51.7	1.1	3.0	17.1
- final products	10.63	58.6	28.8	23.7	30.4

8. Which products the subsidiary receives from a parent company?	Ukraine	Moldova	Kyrgyzstan	Georgia	Total	% of total
- technology, know-how	17	22	26	21	86	41.95
- materials	8	8	17	16	49	23.90
- components parts	7	4	16	14	41	20.00
- final products	10	7	11	1	29	14.15
- others (please specify)						0.00
Total	42	41	70	52	205	100.00

	Ukraine	Moldova	Kyrgyzstan	Georgia	Total
9. What is the strategic role of the subsidiary in your MNE group's operations? Please rank from 1 to 5 (1 – unimportant, 5 – very important):					
a) supply existing products to country's and other CIS markets	4.3	3.3	5.0	3.1	3.9
b) develop new products for country's and other CIS markets	2.7	3.1	3.3	2.5	2.9

	Ukraine	Moldova	Kyr-gyzstan	Georgia	Total
c) exploit country's cost-effective production to export products to established (e.g. European markets)	1.7	2.0	2.1	1.6	1.9
10. Why did you choose to invest in the country? Please evaluate each of the reasons presented below. Please rank from 1 to 5. (1 – the least important, 5 – the most important):					
a) availability of low-cost input factors (e.g. cheap labor; energy; raw materials)	2.8	3.4	3.4	3.2	3.2
b) skilled labor	2.6	3.5	3.6	3.0	3.2
c) to serve country's market	4.1	3.8	4.6	3.3	4.0
d) to achieve access to a new regional (Central and Eastern European) market	2.3	3.6	3.2	3.0	3.0
e) to access the country's research and technological expertise	1.5	2.3	1.3	1.2	1.6
f) other (please specify)					
11. What do you think are the current problems investors face in the country? Please rank from 1 to 5. (1 – the least important, 5 – the most important):					
a) volatility of the political environment	3.4	3.3	4.5	2.8	3.5
b) uncertainty of the economic environment	3.3	3.4	4.4	2.9	3.5
c) ambiguity of the legal system	3.9	3.5	3.5	2.7	3.4
d) corruption	4.0	3.9	3.1	2.1	3.3
e) bureaucracy	3.9	3.9	3.1	2.0	3.2
f) finding a suitable partner	2.5	2.9	2.3	2.8	2.6
g) problems in establishing clear ownership conditions	3.2	2.9	1.7	2.4	2.6
h) lack of physical infrastructure	2.5	2.8	3.9	2.9	3.0
i) backward technology	2.4	2.9	3.1	2.4	2.7
j) lack of business skills	2.4	2.6	3.1	2.7	2.7
12. Does your parent MNE company have investments in other Eastern European countries?					
Yes	19	28	13	17	77
No	11	2	17	13	43
13. What is the extent to which the success of your operations in the recipient country depend on the performance of and relationships to other local industry participants (e.g. other supply chain partners, providers, etc)? Please rank from 1 to 5. (1 – very small, 5 – very substantial)					
Score	3.5	3.6	2.4	2.5	3.0
14. What is the extent to which the success of your operations in the recipient country depend on the performance of and relationships to other international industry participants (e.g. other supply chain partners, providers, etc)? Please rank from 1 to 5. (1 – very small, 5 – very substantial)					
Score	3.6	3.4	3.8	2.6	3.4
15. What part of the value chain components or activities are NOT produced in house by your subsidiary?					
% of the respondents	43.4	12.0	48.5	31.0	33.7
15 a. Imported to the country from the home country (or other subsidiaries), %	61.1	21.1	38.8	46.0	41.8
15 b. Supplied by local (recipient country) companies, %	26.1	13.8	10.3	16.0	16.6
16. How easy is it to break up the activities of your sector in separate components / modules? (i.e., to what extent are there or can there be firms specializing in each part of the value chain?) Please rank from 1 to 5. (1 – very difficult, 5 – very easy)					
Score	2.7	3.0	3.1	2.3	2.8
17. What is the number of your local key suppliers/partners? Please indicate					
% of the respondents	12.4	27.9	13.2	17.5	18.2
18. What is the number of your local key customers/distributors? Please indicate					
% of the respondents	53.4	82.4	85.8	71.9	74.3
19. Does your company have close relationships with buyers/suppliers in your home country? Please rank from 1 to 5. (1 – not at all, 5 – very close):					
Score	3.5	3.9	3.5	3.6	3.6
20. How similar is the structure of your industry in your home country to the structure of the industry in the recipient country? Please rank from 1 to 5. (1 – not at all, 5 – greatly):					
Score	3.2	3.6	3.1	3.7	3.4

	Ukraine	Moldova	Kyr-gyzstan	Georgia	Total
20 a. The vertical structure of the industry in my home country is the same as in the recipient country. (i.e., there are similar segments along the value chain) Please rank from 1 to 5. (1 – not at all, 5 – greatly):					
Score	3.3	3.2	3.2	3.5	3.3
20 b. The horizontal structure of the industry in my home country is the same as in Ukraine (i.e., the industry participants in the recipient country are like those in the home country) Please rank from 1 to 5. (1 – not at all, 5 – greatly):					
Score	2.9	3.2	2.8	3.5	3.1
21. To what extent did differences in the structure of the value chain or the way firms in the industry collaborate pose a problem for your expansion? Please rank from 1 to 5. (1 – not at all, 5 – they are a great problem):					
Score	2.1	2.8	1.2	2.0	2.0
22. (If there were some problems due to the value chain / industry structure), we anticipated the differences in the industry structure in the recipient country Please rank from 1 to 5. (1 – strongly agree, 5 – strongly disagree):					
Score	2.4	2.7	3.9	2.6	2.9
23. How difficult was it for you to overcome the differences in the industry structure? Please rank from 1 to 5. (1 – quite easy, 5 – very difficult)					
Score	2.3	2.9	1.8	2.2	2.3
24. How easy is it for your company to work in the recipient country? Please rank from 1 to 5. (1 – very difficult, 5 – very easy)					
Score	3.2	3.2	3.7	3.5	3.4
25. Please evaluate the performance of your subsidiary. Please rank from 1 to 5. (1 – very poor, 5 – very successful)					
Score	4.3	4.1	4.5	3.7	4.2

Appendix 2. Statistics on FDI in CIS⁸

Table 1. FDI stock in Moldova by economic activities, 2000–2005, %

	2000	2001	2002	2003	2004	2005
Agriculture	3.4	4.9	5.7	5.2	6.0	5.9
Manufacturing	14.5	26.7	26.0	31.8	22.3	21.0
Production and distribution of energy	12.8	17.6	10.2	8.8	10.6	7.9
Construction	1.8	1.4	1.2	1.3	1.7	2.6
Wholesale and retail sale	9.0	7.9	6.5	6.9	15.4	11.6
Transport and telecommunications	43.8	24.3	31.1	24.9	22.5	21.3
Financial activities	1.3	2.4	2.6	1.2	1.4	1.4
Real estate transactions	7.1	7.6	8.2	10.6	12.6	16.9
Public administration	0.7	1.0	1.0	1.7	1.6	3.8
Education	2.1	2.0	1.8	1.6	1.1	1.4
Health and social assistance	0.3	0.1	0.3	0.4	1.5	1.0
Other sectors	3.0	4.1	5.4	5.6	3.3	3.9
Total	100.0	100.0	100.0	100.0	100.0	100.0

Source: Moldovan National Bureau of Statistics.

Table 2. FDI stock in Ukraine by economic activities, 2002–2006, %

	2002	2003	2004	2005	2006
Agriculture, hunting and forestry	2	2	3	2	2
Fishery	0	0	0	0	0
Industry	54	52	50	43	31
of which food industry and processing of agricultural products	18	16	15	12	7
Construction	3	3	3	3	2
Wholesale and retail trade	17	17	17	18	12
Hotels and restaurants	3	3	3	3	2
Transport and communication	7	7	8	7	5
Financial activity	8	8	7	8	6
Real estate	4	4	6	7	6
State management	0	0	0	0	0
Education	0	0	0	0	0
Public health protection and social help	3	2	2	2	1
Collective, civil and private services	1	2	2	2	1
Investment undistributed by regions*	0	0	0	4	32
Total	100	100	100	100	100
Total, millions of USD	4 555	5 472	6 794	9 047	16 375

Note. * Data on direct investment are obtained from the National Bank of Ukraine and State Property Fund of Ukraine (on difference between market and nominal value of shares, property, etc., not published in statistical reports of selected enterprises).

Data are for the beginning of a year.

Source: State Statistics Committee of Ukraine.

Table 3. FDI stock in Kyrgyzstan by economic activities, 2002–2006, thsd USD

	2000	2001	2002	2003	2004	2005	2006
Agriculture, hunting and forestry	40.8	130.1	805.3	2009.9	9752.7	763.4	3561.0
Mining industry	4607.6	4320.7	5058.2	12285.4	9952.2	24309.6	55779.8
Manufacturing industry	44026.0	50897.4	52802.4	73164.4	92972.8	94799.6	141013.8
Production and distribution of energy, gas and water			31.5	322.6	2202.8	103.8	11.2
Construction	4670.3	129.3	2166.7	5037.7	5818.2	12121.0	9116.2
Trade and repair of motor vehicles, household appliances and articles of personal use	14686.9	23267.3	19737.8	22626.9	24579.1	21834.6	26693.1
Hotels and restaurants	10587.5	6962.6	4812.0	1960.6	960.8	2485.0	1946.5

⁸ We were not able to receive the statistics for Georgia in a comparable format.

	2000	2001	2002	2003	2004	2005	2006
Transport and communication	3078.5	2309.2	7954.8	4670.4	6880.1	4746.0	9276.7
Financial activity	1560.3	469.5	6005.6	3960.5	10813.5	41024.1	61847.7
Real estate operations and rent services	5600.1	1377.3	13171.7	3544.8	8791.7	7369.4	25281.6
Government management				1393.5	677.3	75.3	250.9
Education	72.6	80.1	2612.2	9325.0	1000.2	0.2	0.9
Health care and social services	0.5	14.9	6.3	5317.6	762.9	0.3	804.2
Housing, social and personal services	676.8	130.1	501.6	1336.2	421.1	673.9	5.6
Total	89607.9	90088.5	115666.1	146955.5	175585.4	210306.2	335589.2

Source: Moldovan National Bureau of Statistics.