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The “EU Factor” and Slovakia’s Globalization: The Role of Foreign Direct Investment

Beata S. JAVORCIK* – Bartłomiej KAMINSKI**

1. Introduction

The developments following the emergence of the Republic of Slovakia offer unique insights into the interaction of policy-induced regional integration and domestic politics and implications for the way that a country goes global. For starters, while there was strong political support for radical approach to reforms among Czechs in 1990–91, opposition against reforms in Slovakia was increasingly strong contributing to the breakup of Czechoslovakia (Fidrmuc et al., 1999). Following the emergence of Slovakia as a sovereign state, the reform process had been stalled. Political transition was also affected. Concerns over democratic consolidation swayed the decision of the European Union (EU) at the 1997 Luxembourg summit not to include Slovakia in the first wave of countries to begin accession negotiations. Yet, in a remarkable turnaround two years later Slovakia moved from the “disqualified” status to an “acceptable” candidate and was subsequently invited to participate in the first wave of accession in 2004. As a result of the second transition – to borrow an apt term from Krause (2003) – following the 1998 elections, Slovakia ceased to be perceived as an “international pariah” and gained acceptance of the international community (Pridham, 2001).

Political dimensions of the second transition have been extensively discussed in literature (Harris, 2003), (Krause, 2003), (Pridham, 2002), (Rupnik – Zielonka, 2003). While the emphasis varies in various contributions, there seems to be a consensus that accession to the EU has been the driving force of the process, dubbed as “Europeanization”. The observers view the EU as an external democratizing force providing consistent direct pressure for the introduction and elaboration of not only democratic rules and procedures but also civil and other rights with the final goal being the transformation of an acceding state into a highly developed country in terms of institutions and the quality of governance.

The principal instrument of “Europeanization” has been the EU’s assessment of progress in meeting the Copenhagen criteria and harmoniza-

* The World Bank, Development Economics Research Group (bjavorcik@worldbank.org)

** Department of Government, University of Maryland (bkaminski@gvpt.umd.edu)

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tion of domestic regulations with the *acquis communautaire*. Until the Essen Summit of the European Council in December 1994, the European Associations Agreements (EAA) signed with Czechoslovakia, Hungary and Poland in 1991 were devoid of incentive and punishment mechanisms.¹ They offered many easy exits and, perhaps more importantly, lacked a well-defined promise of membership. But the situation changed with the Council's request to the European Commission to design a strategy for preparing Central European countries for accession. The White Paper approved by the Cannes European Council Summit in 1995 identified key legislative, regulatory and institutional aspects of the *acquis* required for accession to the EU. As a result, a strong punishment mechanism for exit has been put in place.²

Slovakia was the first victim of the punishment mechanism. The Commission's *avis* (July 1997) accused the country of not fulfilling "[...] in a satisfactory manner the political conditions set out by the European Council in Copenhagen, because of the instability of Slovakia's institutions, their lack of rootedness in political life and the shortcomings in the functioning of its democracy" (EC, 1997, p. 31). In consequence, the European Council at its summit meeting in Luxembourg in December 1997 did not include the Slovak Republic in the group of countries invited to start accession negotiations. Slovakia was not alone. Other excluded countries for broadly similar reasons were Bulgaria, Latvia, Lithuania and Romania. But while Slovakia expected to be part of the Luxembourg group, the others did not. Indeed, it has turned out that "[...] democratic conditionality has been central to Slovakia's relations with the EU from the mid-1990s to the end of the decade" (Pridham, 2002, p. 209).

Public fears that government policies jeopardized prospects for accession to the EU seem to have tipped the political balance in favor of reformers in Slovakia. The change of government in October 1998 has led to a new positive phase in Slovakia's relations with the EU. The new government undertook liberal reforms and the desire to converge to the *acquis communautaire* as its guiding principle. As a result, Slovakia began accession negotiations in February 2000 and was included in the first wave of entrants into the EU.

The second transition has not only set the stage for democratic consolidation but also for Slovakia's integration into the global economy through integration into the EU. Accession negotiations put relations between the EU and Slovakia on a new track of accelerated convergence of Slovakia's institutions and policies to the *acquis communautaire*. This has called for deep reforms of the country's economic regime – frequently politically painful, as measures taken infringed upon entrenched vested inte-

¹ After the breakup, Slovakia renegotiated the EAA and signed it in October 1993 with the agreement coming into effect in February 1995.

² Agenda 2000, published in 1997, was the first official document of the European Commission comprehensively addressing the link between the EU's future evolution, its financing system, and progress in EU integration and enlargement. It also provided explanation of the accession criteria, obligations of membership and laid out the strategy for enlargement. Agenda 2000 together with the EAA has been the core of the institutional vehicle for eastern enlargement.

rests. All these factors have changed investors' perception and boosted foreign direct investment (FDI) inflows to Slovakia.

This paper addresses two missing dimensions in the analyses of political, "Europeanization" dimension of Slovakia's second transition. First, the second transition has activated the "EU-factor" conspicuously absent in Slovak economic development over 1993–98. Slovakia was then one of the worst performers in terms of attracting FDI inflows despite its extremely favorable proximity and preferential access to EU markets, both of which lessened the importance of the domestic market size. The increase in FDI inflows contributed to the improvement in economic performance and seems to have strengthened pro-EU coalitions thus exerting a positive impact on political change towards improved governance. Furthermore, deeper penetration of FDI has not only firmly inserted Slovak firms into the more sophisticated division of labor within the Pan-European economic structures but has also created potential for boosting the productivity of domestic firms through knowledge spillovers.

The remainder of the paper is organized as follows. Section 1 briefly examines the change in the quality of governance and cost of conducting business and linking the surge in FDI inflows to the improvement in business climate. Section 2 discusses the role of FDI in Slovakia's foreign trade performance and addresses a question of foot-looseness of FDI. Section 3 looks at the international experience of FDI spillovers and compares it with developments in the Slovak economy.

2. "Europeanization" of Politics: Its Impact on Investment Climate and FDI

The emergence of a new governing political coalition (September 1998) claiming unequivocal commitment to close ties with the EU and structural reforms has brought about significant change in Slovakia's integration into the global economy. While countries that opted in favor of radical reforms in the aftermath of the collapse of central planning experienced a virtuous cycle of economic change, Slovakia was in a vicious cycle in 1993–10398. It failed miserably to create institutional foundations for sustained economic growth and attract FDI, whereas radically reforming countries experienced large FDI inflows attracted by a business friendly investment climate and preferential conditions for access to the EU.

Both the "EU-factor" and business climate have been crucial to attracting FDI flows, albeit the EU-factor alone would not have achieved much unless accompanied by structural reforms. The policy-induced integration process into the EU has offered economies of scale associated with preferential access to EU markets³. It has also provided legal guarantees of the right of establishment to EU firms. Further, it has compelled EU asso-

³ The EU shortened transition periods for eliminating tariffs and quotas on industrial imports from EU associates – by 1997 exporters of manufactures from Central Europe had duty-free market access. Thus, investors seeking unfettered access to EU markets would also consider locating production facilities in EU associates.

ciates to liberalize access to services, which are usually an important pull factor. Taken together with other provisions envisaging an orderly process of interaction between the EU and its associate members, these measures have served as a credibility-enhancing mechanism. Last but not least, provisions aligning economic regimes with those in the EU were particularly significant because their implementation amounted to the promise of an orderly transition to an economy based on competitive markets with positive implications for the pace of implementing second-generation, structural reforms.

The link between structural reforms and FDI is straightforward and well established, albeit with a caveat.⁴ Garibaldi et al. (2002) have shown that the quality of institutions explain the variation in FDI flows to transition economies. In a similar vein, in the econometric analysis of factors affecting the decision of multinational firms to establish a presence in transition countries in the first half of the 1990s, Javorcik (2004a) demonstrated that a greater progress of the reform process, a higher effectiveness of the legal system, a low level of corruption and a high share of GDP accounted for by the private sector have encouraged FDI inflows.

Slovakia's experience with FDI since its independence gives further credence to the finding linking progress in second-generation reforms – one of the major determinants of the quality of governance and ultimately business climate – to FDI inflows. Indeed, until 2000 Slovakia has not been scoring high in various international assessments shedding light on the progress in second-generation, structural reforms, quality of governance or corruption.

But it has not been the worst performer among Central and Eastern European countries (CEEC-10) in the eyes of the international community as captured by the annual survey of Transparency International. For instance, Slovakia's score in the Corruption Perception Index, providing assessment of the quality of business as perceived by foreign businessmen and compiled annually by Transparency International, has been below the average for CEFTA-3 (Czech Republic, Hungary and Poland), but above that for the remaining CEEC-10 in 1998.⁵ One may add that viewed from this perspective, the decision of the EU to exclude Slovakia from the Luxembourg group of EU candidates in 1997 took into consideration not only political criteria but also economic institutional criteria.⁶

Table 1 presents more detailed data on the level of corruption in Slovakia as measured against the average for CEFTA-3, two other countries not included in the first Luxembourg group but accepted for accession in 2004 (Latvia and Lithuania) and the EU-15. The higher value of the index corresponds to a lower incidence of corruption. Three interesting observations

⁴ There is an important caveat distorting this relationship. Privatization of state assets to foreign investors may result in significant FDI inflows, even though the quality of governance may leave much to be desired.

⁵ Slovakia was not included in the earlier rankings.

⁶ The political criteria were much more important. As Fidrmuc (1999, p. 633) noted: "[...] the Slovak Republic could be included in the first wave of accession if it makes significant progress with respect to the political criteria."

TABLE 1 Perception of Corruption in Slovakia Relative to CEFTA-3, Latvia, Lithuania and the EU

	1998	1999	2000	2002	2003	Index, 2003 1999 = 100
CEFTA-3 average = 100	82	79	77	88	89	112
Latvia = 100	n.a.	109	103	100	100	92
Lithuania average = 100	146	98	85	78	77	79
EU-average = 100	51	49	46	49	48	98
Average CEFTA-3 as percent of the EU average	62	62	60	56	54	88

Source: derived from data available at <http://www.transparency.org/pressreleases>

TABLE 2 The Quality of Governance in Comparative Perspective

	1998	2000	2002	Index, 2002 1998 = 100
EU = 100	76.0	75.3	82.5	109
CEFTA-3 = 100	85.2	90.5	95.3	112
Latvia = 100	90.8	98.3	98.1	108
Lithuania = 100	105.5	100.2	96.4	91

Source: derived from data presented in (Kaufman et al., 2003)

can be made. First, the gap between acceding countries (CEFTA-3 and Slovakia) and the EU in terms of corruption has been on the increase since 1999. Secondly, there was a significant improvement in Slovakia's standing vis-à-vis the Czech Republic, Hungary and Poland (CEFTA-3). Thirdly, the two other countries which in addition to Slovakia were excluded from the Luxembourg group, Latvia and Lithuania, have made much larger progress in terms of eliminating corruption and are regarded as 'cleaner' than Slovakia.

An examination of the selected indicators of the quality of governance, as measured by Kaufman et al. (2003), yields broadly similar results.⁷ Table 2 reports the average of three governance indicators – political stability, government effectiveness and regulatory quality⁸. As above, the aggregate indicator of the quality of governance is normalized in relation to the values of governance indicators for EU-15, CEFTA-3 and Latvia and Lithuania. Higher values of the aggregate indicator suggest higher overall quality of governance. Slovakia's has improved vis-à-vis both CEFTA-3 as well as the EU. It appears that the largest progress took place in 2000–02.

⁷ Kaufman et al. (2003) used statistical methods to combine several types of governance indicators coming from multiple sources (including enterprise surveys, citizen surveys and expert assessments produced by survey institutes, think tanks, non-governmental organizations and international organizations) into a consistent set of indices comparable across time and countries.

⁸ Three other indicators measuring such dimensions of governance as the rule of law, control of corruption, and voice and accountability are not taken into account. For post communist countries, they are strongly correlated with other three indicators, with the values of correlation coefficients equal or above 0.9. Hence, taking them into account into a single aggregate indicator of governance would not bring new information.

TABLE 3 Annual FDI Inflows per capita in Slovakia, CEFTA-3 (Czech Republic, Hungary and Poland) and Slovakia's Share in Total FDI Inflows to CEEC-10 (in USD and percent)

	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
Slovakia	37	38	34	52	16	127	72	384	326	789	333
CEFTA-3	73	60	167	123	95	169	229	231	241	235	150
Slovakia CEFTA-3 = 100 Share in CEEC-10	51 4 %	63 4 %	20 2 %	42 3 %	17 1 %	75 4 %	31 2 %	166 10 %	135 8 %	336 17 %	222 12 %

Source: Economic Commission for Europe (various issues) and IMF Balance of Payments database

TABLE 4 Annual Average FDI Inflows per capita in CEEC-10 in 1990–99 and 2000–02 (in USD)

Average 1990–99	Hungary	Czech R.	Estonia	Croatia	Latvia	Poland	Slovenia	Lithuania	Slovak R.	Bulgaria	Romania
		187	150	122	86	81	71	69	55	41	28
Average 2000–02	Czech R.	Slovak R.	Slovenia	Croatia	Estonia	Hungary	Poland	Lithuania	Latvia	Bulgaria	Romania
	550	500	438	325	271	178	169	141	128	101	50

Source: Economic Commission for Europe (various issues) and IMF Balance of Payments database

How has this change in the perception of the overall investment climate, as captured by the perception of corruption and quality of governance, affected FDI inflows? As can be seen from data in *Table 3*, the largest difference between Slovakia and CEFTA-3 in annual FDI inflows per capita can be found in 1995 and 1997.⁹ In 1995, as we argue below, this was a result of change in the approach to privatization of strategic sectors in CEFTA-3.

The difference between the 1993–99 and the 2000–03 period is staggering. The annual average FDI inflows per capita to CEFTA-3 were more than twice as high as for Slovakia in the 1993–99 period – USD 131 vs. USD 54. In 2000–03, this relationship was reversed, with the average FDI inflow per capita in Slovakia soaring to USD 458 and CEFTA-3 merely doubling to USD 215. The share of Slovakia in total FDI inflows increased from 5 % in 1999 to 10 % in 2000 and 17 % in 2002 (*Table 3*). As a result, Slovakia was the second largest recipient of FDI among CEEC-10 on a per capita basis in 2000–02 (*Table 4*).

This sudden increase in FDI inflows can be attributed to the change in the government's approach to privatization and the improvement in the business climate as to ensuing change in Slovakia's international perception. Slovakia's privatization policies and the way they were implemented over 1993–98 were essentially biased against foreign investors. For starters, they were highly unstable, with frequent changes in rules contributing to uncertainty. In 1995–97 alone there were 12 legislative acts enacted (Rep-tova, 1999). The approach changed as well. Voucher privatization lost steam

⁹ While there are clearly differences in GDP per capita among founders of CEFTA, there are not large enough to make comparisons of FDI in terms of per capita misleading.

after independence, i.e., was replaced by other methods in 1992–94,¹⁰ revived in 1995 and discarded for good in 1995. While voucher privatization by definition excludes foreign direct investors, privatization through direct sales, public auction or tender must, in order to attract foreign firms, “[...] ensure transparency in their preparation, course and assessment” (Pazitny, 1999, p. 85). According to many observers, the actual practice was far from transparent (Sicakova, 1999).

As a result, FDI inflows were limited until 2000. Hungary in 1995 alone – as a result of privatization of then so-called strategic sectors, mainly telecommunications and banking – received twice as much FDI as did Slovakia during the whole 1993–99 period. More importantly, privatization-related FDI inflows induced other forms of FDI including green- and brown-field investments and reinvested profits (Mihalyi, 2001). Similarly, mainly thanks to telecommunication privatization, the Czech Republic received slightly less FDI in 1995 alone than the total of FDI entering Slovakia in 1993–99. By the end of 1998, Slovakia received only 2.9 % (as compared to 33 % in the case of Poland, 26.8 % Hungary, and 18.5 % the Czech Republic) of all FDI that entered the CEEC-10 since the beginning of the decade.

The change in the government in 1998 and the associated acceleration in economic reforms led to a dramatic increase in FDI inflows in 2000–02. Privatization was also brought under control in 1999.¹¹ As a result, Slovakia’s share in CEEC-10 FDI stock rose to 5 % by 2001, and to 7 % by 2003.

Privatization, structural reforms and better governance alone do not explain the strong response of foreign investors. Although investors are usually highly responsive to liberal and transparent economic regimes, had Slovakia not bordered the EU and had not been part of the EU Eastern Enlargement project the response would have been much less pronounced. In other words, their occurrence on this scale would be rather unthinkable in the absence of the “EU-factor.” “Externalities” associated with the EU-driven process of Europe-wide commercial integration that had led to the emergence of a single European market for industrial products played a key role in the favorable FDI response.

The experience of Slovakia supports the view that conditionalities associated with EU accession have been central to developments in both Slovakia’s policy and economy. Yet, this centrality emerged only in the mid-1990s, once the EU has developed the Eastern Enlargement project. The EU policy-induced integration process has instilled two necessary ingredients for sustainable economic developments – framework for peaceful cooperation and free trade in industrial products and an environment attractive to foreign investment. But the European Commission was not a substitute for domestic governments – countries that liberalized prices early, pursued well-designed privatization programs and established market friendly environments were able to take advantage of opportunities offered by the “EU factor”. Slovakia did so fully only beginning in 1999.

¹⁰ Privatization in 1994 was described as “wild privatization” (Sicakova, 1999).

¹¹ As Reptova and Valentovic (1999, p. 48) noted privatization encroachments have terminated in 1999.

TABLE 5 Top Five CEEC-10 Export Performers in EU Markets over 1993–2002

	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	Index, 2002, 2000 = 100
Estonia	100	214	320	371	432	450	432	594	598	652	110
Slovak Republic	100	145	186	190	197	254	261	236	275	360	153
Romania	100	136	164	163	177	194	199	205	245	326	159
Czech Republic	100	120	136	137	145	170	178	178	202	255	143
Hungary	100	114	132	145	167	200	218	207	225	249	120
CEEC10	100	118	135	135	143	161	164	164	183	219	133
Memorandum: Slovak share in CEEC-10	5.01	6.15	6.86	7.04	6.90	7.90	7.96	7.18	7.51	8.23	115
Slovak share in EU imports	0.25	0.37	0.47	0.49	0.50	0.65	0.67	0.60	0.70	0.92	153
Share of EU in Slovak exports	30	35	37	41	47	56	59	59	76	75	128

Source: based on EU as reporter from UN COMTRADE Statistics and IMF Direction of Trade database

3. FDI and Foreign Trade Performance

Since FDI inflows have been decisive in shaping the trade performance of most of the CEEC-10 in the EU markets, the impressive performance of Slovakia is somewhat puzzling. In spite of low FDI inflows, Slovakia recorded the second largest increase in the share in EU external imports among CEEC-10 economies after Estonia (*Table 5*). The top three performers – Estonia, Slovakia and Romania – had two traits in common, that is, the initial base was very low and there was a significant amount of redirection of trade involved. Indeed, they all recorded the largest annual increases in their respective shares in 1994–95 ranging from 45 % and 28 % (Estonia), 20 and 14 % (Romania) to 36 and 20 % (Slovak Republic). In the case of Estonia and Slovakia, the disintegration of states of which they were a part was an additional contributing factor. However, while Estonia was one of the most successful economies among the CEEC-10 in attracting FDI inflows, both Slovakia and, in particular, Romania were among the worst performers in this area.

Yet, neither Slovakia nor Romania provides ammunition against the observation that the “EU factor” has been decisive in attracting FDI and consequently in shaping foreign trade patterns of the CEEC-10. While Romania’s superb performance can be explained among others by its specialization in low capital-intensive and low-tech, unskilled labor intensive products, the automotive industry (almost totally penetrated by foreign capital) has been the lever of Slovak exports. Automotive exports accounted for one-third of Slovakia’s EU-destined shipments of goods. In consequence, the significance of skilled labor intensive and capital intensive products – usually associated with FDI – impressively increased from 59 % in 1995 to 68 % in 1998–99. Foreign firms were responsible for the shift in Slovak exports towards the EU, with its share doubling between 1993 and 1999 to 59 % and further increasing to 76 % in 2001. A 75% increase in the value of FDI in-

ward stock in the industrial sector in 2000 relative to the previous year might have contributed to the EU taking 75 % of Slovak exports in 2002 with the growth in non-EU-destined sales not lower than that of EU exports for the first time since Slovak independence.

Taking advantage of Slovakia's geographic proximity to the EU and duty free access to EU markets, FDI has served as a force integrating the country into international systems of production. The tight connection of FDI projects in Slovakia with an international division of labor can be clearly seen in the trade statistics, particularly in those pertaining to the automotive industry. While in 1993 Slovakia exported only USD 43 million worth of automobiles, this figure was thirty-one times higher in 2000 amounting to USD 1.37 billion. Together with the Czech Republic, Slovakia has become a Central European automotive powerhouse. The increase in automobile exports has been accompanied by a large increase in the imports of parts and components, however, the statistics also indicate growing exports of domestically produced parts and components. Exports associated with the network accounted for about a third of Slovakia's manufacturing exports to the EU, and the overall trade balance in this network was positive and equal to USD 570 million in 1998 and USD 370 million in 2000. As the example of the Czech Republic and Hungary illustrates, there is a lot of potential for Slovakia to further increase its participation in the network.

Behind the impressive performance of Slovakia in the automotive network stands not only Volkswagen but also other foreign firms, such as Siemens (cable harnesses, lights), INA Werke Schaffeler (ball bearings), Sachs Trnava (coupling assemblies for passenger cars), to name but a few. Siemens has ownership shares in fourteen Slovak companies, which employ more than 8,900 people. Two thirds of the total of USD 353 million revenues in 2002 were due to exporting. Figures on exports of selected Siemens subsidiaries, presented in *Table 6*, also indicate Siemens increasing contribution to Slovakia's exports in the automotive network.

Siemens subsidiaries have been involved in a variety of export activities, all centered around providing inputs into global networks of production and distribution. Osram Slovakia (part of the Siemens group) contributed to the growth of exports of electrical lighting and signaling equipment which is being sold to the EU and the Czech Republic. Siemens has also been the driving force behind the exports of pumps – one of the fastest growing product category exported to the EU.

Overall, about USD 2 billion worth of Slovakia's exports was associated with networks (including the automotive, office machinery, telecommunications equipment and furniture networks) in 2000 as compared to less than USD 130 million in 1993. These exports accounted for almost 30 % of Slovak sales to the EU in 2000. While in absolute values, Slovakia's involvement in EU-based networks is less pronounced than that of Estonia, Hungary or the Czech Republic, in terms of its share in EU-destined manufacturing exports it is comparable to the performance of the Czech Republic and Poland. Furthermore, Slovakia's involvement in the automotive and information revolution networks is to a large extent responsible for

TABLE 6 Exports of Selected Companies in Siemens Group in Slovakia

Company	Products and Exports	EXPORTS (million USD)							NET EXPORTS (million USD)		
		1995	1996	1997	1998	1999	2000	2001	1999	2000	2001
BSH Drives and Pumps, s.r.o., Michalovce	<ul style="list-style-type: none"> – Production of high-quality electro-motors for domestic appliances, exported throughout the world – 100 % of production is exported to the US, Germany, Spain, UK, Poland, etc. 	n.a.	n.a.	n.a.	n.a.	85.6	74.5	79.4	n.a.	n.a.	n.a.
Siemens Automotive, s.r.o., Michalovce	<ul style="list-style-type: none"> – Production of cable harnesses for Ford Fiesta, Volvo, Mitsubishi, Volkswagen and Honda cars – 100 % of production exported mainly to the UK, Germany and Netherlands 	39.6	82.7	95.5	124.7	49.0	36.6	39.4	5.9	8.3	6.6
VW Elektrické systémy, s.r.o., Nitra	<ul style="list-style-type: none"> – Production of cable bundles for Volkswagen, Audi, Seat, Skoda – Clients: VW Slovakia, Czech Republic, Hungary, Germany – Exports: 100 % 	0.0	0.8	4.7	18.3	66.4	66.4	0.0	n.a.	n.a.	n.a.
Osram Slovakia, a.s., Nové Zámky	<ul style="list-style-type: none"> – Products include: bulbs for motor vehicles, for general use, special lighting sources, miniature lamps and high pressure sodium vapor lamps – Clients include automotive industry in Slovakia, Czech Republic, Hungary and Germany – 87 % of production is exported 	0.0	n.a.	15.9	21.8	21.3	26.5	30.4	n.a.	n.a.	n.a.
SWH, s.r.o., Bratislava	<ul style="list-style-type: none"> – Production of software for banks, insurance companies, mostly for foreign customers, such as German Telecom or the subway in Taiwan – Exports approximately 80 % 	2.7	4.7	5.4	7.0	10.2	11.2	14.2	10.2	11.2	14.2

the shift towards skilled labor and capital intensive EU-oriented exports (Kaminski – Smarzynska, 2003).

The prominent role FDI has played in Slovakia's international trade, goes beyond the automotive sector. For instance, in each year during the 1995–2001 period foreign investment enterprises (FIEs), defined as com-

panies with foreign equity exceeding 10 % of the total, exported a larger share of their output than domestic firms. In 2001, on average, a FIE sold abroad 54 % of its output, a compared to 40 % in the case of local private firms and 48 % in the case of public enterprises. Moreover, in 1995–96 and 1999–2001 FIEs had higher exports per worker than local companies. In 2001, the value of exports per worker was equal to USD 153 thousand in FIEs, USD 19 thousand and USD 24 thousand in domestic private and public companies, respectively (Kaminski – Smarzynska, 2003). It is interesting to note that similar patterns have been observed in Hungary (Kaminski – Riboud, 2000).

Further, FIEs accounted for the majority of the country's exports and imports. In 2000, FIEs (excluding trading companies) were responsible for 61 % of total Slovak exports and almost 60 % of imports. In 2001, these corresponding figures were equal to 52 and 53 %, respectively (Hoskova, 2001, 2002).

While FDI has served as a strong force behind integration with the EU, investment inflows have not translated into a large trade deficit. The fact that the overall contribution of FIEs to the trade balance was negative, albeit small in absolute value, was not surprising. The surge in FDI inflows is, as international experience indicates, often associated with a rise in the import of capital goods. And indeed between 1999 and 2000, the value of imports of capital goods from the EU increased around USD 100 million or by 5 %.¹²

On the other hand, massive inflows of FDI eased adjustment to the legacy of current account deficits of the 1995–98 period and appear to have prevented what might have been a serious balance-of-payments crisis. Impressive economic growth performance in this period has been deemed unsustainable (Fidrmuc, 1999). FDI inflows have been an important source of financing current account deficits and increasing international reserves during Slovakia's second transition.¹³

Based on the data presented in this section, we can conclude that FDI inflows have led to increased integration of Slovakia into the global production systems with focus on the manufacturing of both parts and final products. Foreign-owned firms, which are more export-oriented than domestic firms, have been using Slovakia as an export platform to the EU and have been the driving force behind exports of capital and skilled-labor intensive products. Is this process likely to continue? To shed some light on this question, the next session examines whether foreign firms are strongly rooted in the Slovak economy and thus likely to remain in the country and contribute to knowledge transfer to domestic firms.

¹² FDI may also affect the host country's trade balance through other channels. For instance, large capital inflows may lead to currency appreciation and thus decrease the competitiveness of the country's exports. On the other hand, spillovers from FDI may boost the productivity of domestic firms and thus allow them to enter export markets. While the former effect can be observed immediately the latter usually takes place with a lag.

¹³ This view is supported by the evidence from other countries. For instance, Frankel and Wei (2004) find that macroeconomic crises are less likely to take place in countries with high shares of FDI in capital inflows.

4. Spillovers through FDI: Slovakia's Experience in Comparative Perspective

The international experience indicates that the process of developing networks of local suppliers in a host country requires time and effort on the part of multinationals. Thus foreign investors who have developed strong linkages to the host country's economy are less likely to leave as the move would be associated with the cost of building new supplier networks (UNCTAD, 2001, p. 130).

While it is difficult to assess Slovakia's experience in terms of linkages between foreign investment enterprises and domestic firms without performing a detailed national survey, casual observation and anecdotal evidence lead to two observations. First, many foreign investors who entered Slovakia have been followed by an inflow of FDI by key foreign suppliers. Secondly, a slow but steady increase in local sourcing by foreign investment enterprises can be observed.

The first phenomenon is referred to as "sequential investment", and in many parts of the world it is most prominent in the automotive and automotive components industry and in some segments of the electronics industry. Brazil's experience may serve as an example. General Motors and its 16 global suppliers jointly designed and developed a plant in Gravatai. While all but one of General Motors' first-tier suppliers of the Gravatai plant are foreign owned, all of them use Brazilian suppliers at the second- or third-tier of the supply chain (UNCTAD, 2001, p. 132).

There are strong indications that sequential investment has been taking place in Slovakia. Volkswagen Slovakia has already been followed by more than ten foreign investors stimulating production of electrical equipment, machinery, metallurgical products and industrial chemicals (Trend, 2001, p. 11). SAS Automotive, a fully-owned subsidiary of SAS Autosystemtechnik GmbH (a joint-venture of Siemens Automotive and Sommer Allibert Industrie AG) established in Bratislava in 2000, is another example of sequential investment. The company is closely integrated with Volkswagen supplying the German manufacturer with complete assembled cockpits consisting of dashboards, electronic components, air-conditioning, airbags, steering rods and pedals. The deliveries are done under the just-in-time delivery system, which requires very precise coordination, logistics and production. For instance, one must ensure a sufficient supply of more than 100 parts from various European countries and their timely removal from the warehouse. In order to comply with the high standards set by Volkswagen the modules must be assembled error-free and delivered directly to the production line of the specific car within two hours from receiving the order.

While it is often the case that foreign affiliates purchase locally a lower share of their inputs than domestic firms (UNCTAD, 2001, p. 134), the international experience suggests that local sourcing of foreign affiliates increases over time. For instance, in Ireland raw materials purchased locally as a percentage of total raw material inputs in non-food manufacturing increased from 16 % in 1986 to 19 % in 1994 and in a sample of affiliates in the electronics sector, the percentage of raw materials and components procured locally increased from 8 to 24 % in the same period (Gorg – Ruane,

TABLE 7 Suppliers of Volkswagen Slovakia Located in the Slovak Republic, 1997–2000

	1997	1998	1999	2000
Number of direct suppliers	4	19	21	30
Value of supplied inputs (mn USD)	5.3	311.7	334.7	252.8
Number of indirect suppliers	9	17	23	35
Value of supplied inputs (mn USD)	5.4	9.9	14.8	25.7
Total value of supplied inputs (mn USD)	10.7	321.6	349.6	278.5
1997 = 100	100	3,017	3,280	2,613

Source: Skoda Auto Slovensko, s.r.o.

1998). In Hungary, the supply contribution of Hungarian-registered firms to the production of FIEs rose from 16 % in 1997 to 21 % in 1998 (Farkas, 2000, p. 15). In Poland, a sample of some 30 foreign affiliates responding to a 1997 survey reported that three quarters of their inputs were then sourced from local firms, as compared to 65 % at the time of their establishment in the early 1990s (Floyd, 2000). In the Czech Republic, Volkswagen-Skoda in the mid-1990s was sourcing roughly three-quarters of its inputs from suppliers based in the country. Of Skoda's 279 registered suppliers, 174 (62 %) were Czech-owned, 19 were Slovak-owned and 86 were foreign affiliates and joint ventures with firms from the US, UK, Germany, Italy and France.

Volkswagen Slovakia has been successful at increasing its sourcing from firms operating in the country, albeit not all of them domestically owned. While in 1997, Volkswagen had only 4 direct and 9 indirect suppliers, this number increased to 30 and 35, respectively, in 2000. Moreover, the value of inputs sourced locally rose rapidly from USD 10.7 million in 1997 to USD 278.5 million in 2000 (*Table 7*).

Affiliates of Siemens operating in Slovakia also source a significant share of their inputs locally. As *Table 8* indicates, the sourcing pattern varies by industry. As the major obstacle to sourcing from Slovak companies, the affiliates list low quality of locally produced inputs, lower flexibility and insufficient technological sophistication of Slovak suppliers. On the positive side, foreign affiliates tend to appreciate the good technical skills of the Slovak labor force.

The existence of linkages between FIEs and local firms is beneficial for the host country for two reasons. First, the linkages increase integration of FIEs with the local economy and thus make FDI less footloose. Since the development of backward linkages with domestic firms entails costs and effort on the part of affiliates, stronger linkages make it more difficult for them to divest. Secondly, linkages are likely to boost the productivity of domestic firms through knowledge spillovers, which is the issue to which we turn next.

Productivity spillovers from FDI take place when the entry or presence of FIEs increases productivity of domestic firms in a host country and the FIEs do not fully internalize the value of these benefits. Spillovers may take place when local firms improve their efficiency by copying technologies of foreign affiliates operating in the local market either based on observation or by hiring workers trained by the affiliates. When local firms

TABLE 8 Sourcing Patterns in Selected Companies in the Siemens Group

	Share of domestic/ foreign suppliers	Production inputs from Slovak companies (%)	Trend in Slovak suppliers	Disadvantages/ advantages of Slovak suppliers	Assistance to local Slovak suppliers	Contract with local suppliers
SMS Slovakia	85/15	25	Increase	–	–	Specific project
Reaktor-test Trnava	85/15	74	Increase (1992–2002)	Low quality, lower flexibility	All kinds	Specific project
Telegir Slovensko	75/15	62.5	–	Insufficient technological sophistication		Long-term cooperation
SBS, s.r.o.	69/31	n.a.	n.a.	n.a.	Project management Management of quality	Specific project
BSHG Michalovce	25/75	2–5	Expected increase (to 40–60 %)	Poor infrastructure, low quality, low flexibility, good technical skills	Infrastructure Trade management	Long-term
SBT Fire & Safety Securities	10/90	n.a.	0	Poor quality, good technical skills	Training	Specific project
SAS Automotive Bratislava *	1/99	0	0	Low quality Suppliers not available	–	–

Note: * All suppliers are selected by client – Volkswagen.
Source: (World Bank Survey, 2002)

benefit from the presence of foreign companies in their sector, we refer to this phenomenon as horizontal spillovers. To the extent that domestic firms compete with multinationals, the latter have an incentive to prevent technology leakage and spillovers from taking place. And indeed recent studies based on firm level data from Morocco (Haddad – Harrison, 1993), Venezuela (Aitken – Harrison, 1999) and the Czech Republic (Djankov – Hoekman, 2000) cast doubt on the existence of horizontal spillovers from FDI in developing and transition countries.

The evidence is more encouraging in the case of vertical spillovers, namely, benefits accruing to domestic suppliers of multinational corporations. Such spillovers can take place through several channels: (i) direct knowledge transfer from foreign customers to local suppliers;¹⁴ (ii) higher requirements

¹⁴ As numerous case studies indicate – see, for instance, (Moran 2001) – multinationals often provide technical assistance to their suppliers in order to raise the quality of their products or facilitate innovation. They help suppliers with management training and organization of the production process, purchasing raw materials and even finding additional customers. Note that the existence of linkages does not necessarily guarantee that spillovers take place nor does the fact that multinationals may charge for services provided preclude the presence of spillovers. Spillovers take place when foreign affiliates are unable to extract the full value of the resulting productivity increase through direct payment or lower prices they pay for intermediates sourced from the local firm.

regarding product quality and on-time delivery introduced by multinationals, which provide incentive to domestic suppliers to upgrade their management or production technology; (iii) indirect knowledge transfer through the movement of labor; (iv) increased demand for intermediate products due to foreign entry, which allows local suppliers to reap the benefits of scale economies.

The following case study from Javorcik (2004b) may serve as an illustration of the vertical spillover channel. After a Czech company making castings of aluminum alloys for the automotive industry signed its first contract with a multinational customer, the staff from the multinational company visited the Czech firm's premises for two days each month for an extended period of time to assist with the quality control system. Subsequently, the Czech firm applied these improvements to its other production lines (not serving this particular customer) thus reducing the number of defective items produced and improving overall productivity.

The evidence consistent with the existence of vertical productivity spillovers has been found in Hungary (Schoors – van der Tol, 2001), Indonesia (Blalock – Gertler, 2004) and Lithuania (Javorcik, 2004b). The results of the Lithuanian study suggest that a three-percentage-point increase in the foreign presence in downstream sectors (i.e., sectors purchasing inputs) is associated with a fifteen-percent rise in a firm's output in the supplying industry.

Since the positive trend in FDI inflows is likely to continue in the coming years, the focus of policies should shift from simply attracting FDI to making FIEs more rooted in the local economy by increasing their local sourcing. One way of promoting local sourcing is to provide assistance to successful local companies which with some help stand a chance of becoming FIE suppliers. Such a program has been operated by CzechInvest for several years, and one could draw lessons from that experience.

5. Conclusions

To review the main points of this paper, one can make the following observations. First, the post-1998 change in the Slovak political environment combined with the "Seal of Approval" from the EU altered foreign investors' perception of Slovakia. Inflows of FDI have had a beneficial impact on the economy and, one suspects, helped the continuation of structural reforms aimed at meeting conditions for accession to the EU.

Secondly, the surge in FDI inflows observed in recent years combined with the favorable location of Slovakia and free access to EU markets is likely to have a positive impact on export growth in the medium- and long-run. Growing integration of Slovakia into international production and distribution networks established around EU markets, sequential FDI and growing reliance on local sourcing will result in the rooting of multinationals in the country and prevent their exit as labor costs continue to rise. In turn, increasing contacts between FIEs and their local suppliers are likely to result in knowledge transfers, which may lead to faster economic growth in the country and increased competitiveness in international markets.

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SUMMARY

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The 'EU Factor' and Slovak International Integration: the Role of Foreign Direct Investment

BEATA S. JAVORCIK – The World Bank, Development Economics Research Group
(bjavorcik@worldbank.org)

Bartłomiej KAMINSKI – Department of Government, University of Maryland (bkaminski@gvpt.umd.edu)

While the impact of EU 'conditionalities' associated with recent EU-accession negotiations has been widely discussed, little attention has been given to the effect of post-1998 EU reforms on Slovakia's greater integration with the global economy. The convergence of Slovakia's institutions and policies with the EU's *acquis communautaire* has led to a dramatic increase in inflows of foreign direct investment into Slovakia in 2000–02. The available information suggests that the entry of foreign firms has been beneficial in inserting the Slovak economy firmly into the pan-European division of labor and raising the productivity of domestic firms.