

Trade Patterns and Performance of Eastern Europe and the Former Soviet Union since the Transition

Introduction

This chapter documents and assesses the trade patterns and performance of the countries of Eastern Europe and the Former Soviet Union over the course of the transition. The analysis focuses on not only the historical evolution but also the emerging trends of the extent, nature, and direction of international integration in the countries of the Region.

The Region's trade flows are examined from several perspectives: by geography, including intra-Regional as well as global dimensions; by product and sector composition, including primary commodities, manufacturing products, and other industrial sectors, including services; and in terms of labor, capital, and other factor intensities. The analysis covers both trade in goods and services and, to the extent of its impact on trade, foreign direct investment. The data reveal the two "trading blocs" emerging in the Region—one Euro-centric and the other Russia-centric—which manifest themselves along several dimensions of trade flows and other significant aspects of trade-related activity.

The chapter also investigates how the openness of the trade flows of the countries in the Region—both in goods and services—has evolved. Our metric for trade openness is "output-based" (in the next chapter we assess trade openness from the policy [or "input-based"] perspective). We explore how the extent of a country's trade open-

ness compares with that of other countries and regions in the world. This is done by estimating econometrically the determinants of merchandise trade flows, on both multilateral and bilateral bases, using an “openness model” and a “gravity model,” respectively. The empirical evidence suggests that most of the economies in the Region today register merchandise trade flows as a share of GDP largely in line with other countries of comparable levels of development, size, and geographical characteristics around the world.

Taken together, the evidence suggests a clear trend that the countries in the Region that have integrated more effectively into international commerce are those that have also supervised greater economic development. At the same time, the countries that have remained relatively closed and continue to embrace the old structures have lower national incomes and are being left out of the global economy’s modern “division of labor.”

The chapter concludes by highlighting the key factors likely to influence the extent to which the Region’s trade performance can leverage growth in the future. Trade policy can play only part of the role. Equally, if not more, important will likely be behind-the-border policies and institutions that promote vigorous domestic interenterprise competition and sound governance; flexibility in factor markets that will facilitate labor and capital mobility as market conditions evolve as a result of changes in trade flows (as well as other factors); well-developed trade facilitation systems; vibrant services sectors open to international trade and investment; and FDI flows that provide links to global production networks. This sets the stage for the more detailed discussion of these factors that is the focus of subsequent chapters.

It is important to bear in mind that the data on this Region for the pre-1993 period are necessarily fraught with imperfections. They are based in large part on estimates because market valuations—by definition—did not exist under central planning (see box 2.1). Therefore, where there is a paucity of economically meaningful data, the focus is necessarily on the last decade and, in some cases, on even more recent periods.

Regional Dichotomy in the Growth of Merchandise and Services Trade Flows

Trends in Merchandise Trade

Merchandise trade flows of the countries in the Region over the years since the start of the transition have grown overall, but have exhibited

BOX 2.1**Quality of Foreign Trade Statistics for the Region**

The statistics on foreign trade issued by the Soviet Union were always distorted. In the 1980s the USSR Goskomstat estimated trade volumes based on information collected from enterprises and trade organizations about the destination of their shipments to other Soviet republics and the rest of the world. Foreign trade transactions were then recorded in valuta rubles at the official exchange rate, set for a long period at \$1.70 per valuta ruble, which grossly overvalued the ruble. Little had changed in the system by 1990. The subsequent switch to world prices and market exchange rates, starting in 1991, resulted in the gross overestimation of the contraction of Soviet trade.

The breakup of the Soviet Union in late 1991 had disastrous effects on the quality of the already shaky statistical information on trade. Enterprises stopped reporting because they were either unable or unwilling to do so, resulting in serious underreporting, especially of imports. New enterprises sprang up to conduct foreign trade, and their transactions were never recorded. High inflation rates and rapidly depreciating market exchange rates made it difficult to estimate changes in the volume of trade. Capital outflows led to overinvoicing of imports and underinvoicing of exports. Mirror statistics were used to estimate trade with the rest of the world. Even the mirror statistics were seriously flawed because of misreporting of transshipments, especially of energy: in 1992, Latvia's biggest export to Organisation for Economic Co-operation and Development (OECD) countries was reported to be oil, although the country produces none; for a long period in the 1990s, Turkmenistan's exports of natural gas were attributed to Russia, since its natural gas is transported through pipelines to Russia and commingled there with Russian natural gas.

The problems were greater in estimating trade among the CIS countries. Until 1994, customs controls among the countries were not in place throughout their borders; a great deal of trade was conducted in barter either through formal "interstate trade" agreements or privately, and the prices charged by various countries, especially by Russia, for energy exports varied significantly from each other and from the world price.

Accurate information on trade flows was critical to estimating financing needs by the International Monetary Fund (IMF) and the World Bank, the institutions entrusted by the international community to play a leading role in assisting with CIS transition. In the World Bank, the work was undertaken by a small statistical unit led by a Lithuanian statistician. The focus was on getting better estimates of volumes and prices of trade transactions among the CIS members in order to estimate net trade positions and changes in the terms of trade faced by many CIS countries as a consequence of moving trade to international prices.

This work yielded, among other things, estimates of trade among the countries of the Former Soviet Union and total trade, in the period 1990–1994, valued at the implicit exchange rates used in the barter transactions that governed trade among many of these countries (except the

(Box continues on the following page.)

BOX 2.1 (continued)

Baltics). It also yielded intra-CIS trade valued in constant 1990 ruble prices, recognizing that until 1994, the bulk of the trade among the CIS was denominated in rubles. These analyses provide several measures of the great overestimation of the reduction in foreign trade, using the official dollar exchange rates, reported in table 2.1. Using the official exchange rates, intra-CIS trade declined by 90 percent between 1991 and 1992, but “only” about 25 percent using implicit exchange rates or valued in constant rubles. At the same time, using these estimates for intra-CIS trade gives a different picture of total CIS trade flows over time: using the official rates, total CIS trade hit bottom in 1992 and rose thereafter. Valuing the intra-CIS trade at the prevailing implicit exchange rates results in total trade declining through 1994 and rising after that.

Source: Belkindas and Ivanova 1995.

a highly heterogeneous pattern, both over time and across subregions. Table 2.1 and figure 2.1 present the latest, most complete data available on merchandise exports and imports—in absolute value and as a proportion of GDP—for the Region over the period 1990–2003.

The data illustrate clearly the well-known collapse of trade that occurred before 1993 in the aftermath of the breakup of CMEA and the related command and control institutions that governed international transactions in the transition countries. Among the three large groups of countries that are the main focus of this monograph—the EU-8, the

TABLE 2.1
The Region’s Merchandise Trade Flows, 1990–2003

Group	Total trade (goods, \$ millions)					
	1990			1993		
	Exports	Imports	Balance	Exports	Imports	Balance
CIS	400,600	412,924	-12,324	89,791	76,001	13,790
SEE	33,405	22,483	10,922	17,804	12,381	5,423
EU-8	57,697	62,419	-4,722	62,330	49,669	12,661
EU-15	1,370,890	1,538,964	-168,074	1,319,720	1,394,886	-75,166
LAC	128,325	105,171	23,154	160,864	185,752	-24,888
MENA	171,789	131,342	40,447	151,656	151,758	-102
Africa	38,172	38,437	-265	34,360	40,968	-6,608
East Asia	698,293	527,224	171,069	949,419	663,356	286,063
South Asia	27,361	38,871	-11,511	33,917	39,980	-6,063
Memo Items						
Region	434,005	429,283	4,722	429,372	442,033	-12,661
CIS less Russian Fed.	193,073	215,983	-22,910	30,139	32,355	-2,216
Turkey	13,384	23,147	-9,763	15,346	29,355	-14,009

Sources: IMF DOT statistics; data for CIS 1990–93 from Michalopoulos and Tarr 1994.

SEE, and the CIS—the CIS countries experienced the deepest decline in merchandise trade flows as a percentage of GDP. Today, on an aggregate basis, all of the countries in the Region generate a level of merchandise exports as a share of GDP that is higher than it was in 1993. The same is true for imports, except for the SEE countries.

For the Region as a whole, trade flows in 2003 (in dollar value and in real terms) had grown significantly since 1993; exports almost tripled and imports increased by a factor of two and one-half. In comparison, over the same period, exports and imports for the EU-15 roughly doubled; in Latin America and the Caribbean (LAC), exports rose two and one-half times while imports doubled; and in East Asia, exports and imports doubled.

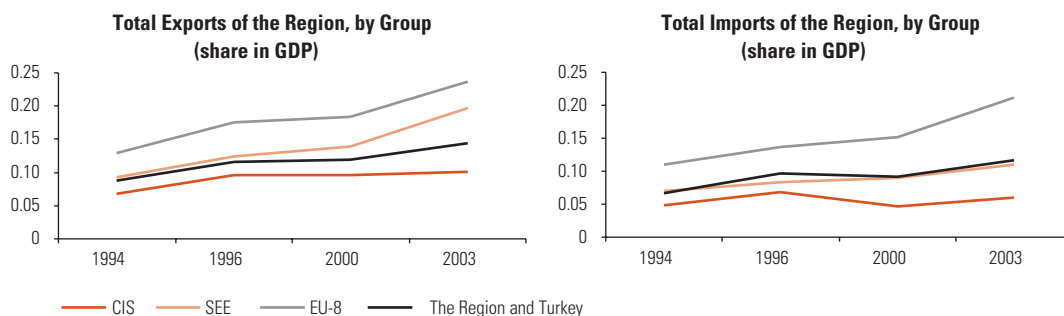
Growth in trade flows was greatest for the EU-8, where exports and imports increased by a factor of 3.6 and 4.1, respectively. The CIS is at the other end of the spectrum: exports and imports expanded by a factor of 2.1 and 1.5, respectively. In between is SEE, where exports grew by three and one-half times and imports increased 2.7 times.

Another perspective is provided by examining how the share of world trade accounted for by the countries of the Region—either as an entire region or in terms of various subgroupings of countries—has evolved since the advent of the transition. The data in table 2.2 and figure 2.2 illustrate that the overall Region generated a significantly large increase in the world share of exports and imports. The rate of increase in the Region's share of world exports (almost 39

Total trade (goods, \$ millions)									
	1996			2000			2003		
	Exports	Imports	Balance	Exports	Imports	Balance	Exports	Imports	Balance
	119,098	84,027	35,071	144,904	69,588	75,316	191,649	113,068	78,581
	29,521	19,156	10,365	36,247	22,482	13,765	62,654	35,673	26,981
	112,272	86,784	25,488	149,583	123,230	26,353	224,483	200,670	23,813
	1,899,930	1,956,314	-56,384	2,286,920	2,291,360	-4,440	2,896,280	2,800,565	95,715
	262,891	275,243	-12,352	371,007	396,929	-25,922	400,782	387,629	13,153
	211,393	175,149	36,244	302,294	199,883	102,411	342,013	300,517	41,496
	51,177	49,496	1,681	88,402	78,396	10,006	110,046	112,170	-2,124
	1,306,000	1,015,084	290,916	1,612,140	1,134,332	477,808	1,882,730	1,366,085	516,645
	49,557	62,189	-12,632	63,438	78,826	-15,388	84,975	102,689	-17,714
	379,430	404,918	-25,488	342,119	368,472	-26,353	267,219	291,032	-23,813
	35,119	39,523	-4,404	41,906	35,735	6,171	60,195	56,391	3,804
	23,100	42,462	-19,362	27,769	54,502	-26,733	47,255	69,458	-22,203

FIGURE 2.1

The Region's Merchandise Exports and Imports as a Share of GDP, 1994–2003



Source: IMF DOT statistics.

Note: Gross domestic product (GDP) in purchasing power parity (PPP).

percent) was considerably larger than that of its imports (about 23 percent).

The data bear out quite strikingly that, while the share of world exports generated by each of the three country groupings increased between 1993 and 2003, there is a great deal of variation. The CIS countries have performed the worst: the rate of increase in their collective share of world exports over the period was only 5 percent. However, if Russia is netted out, the CIS share of world exports has

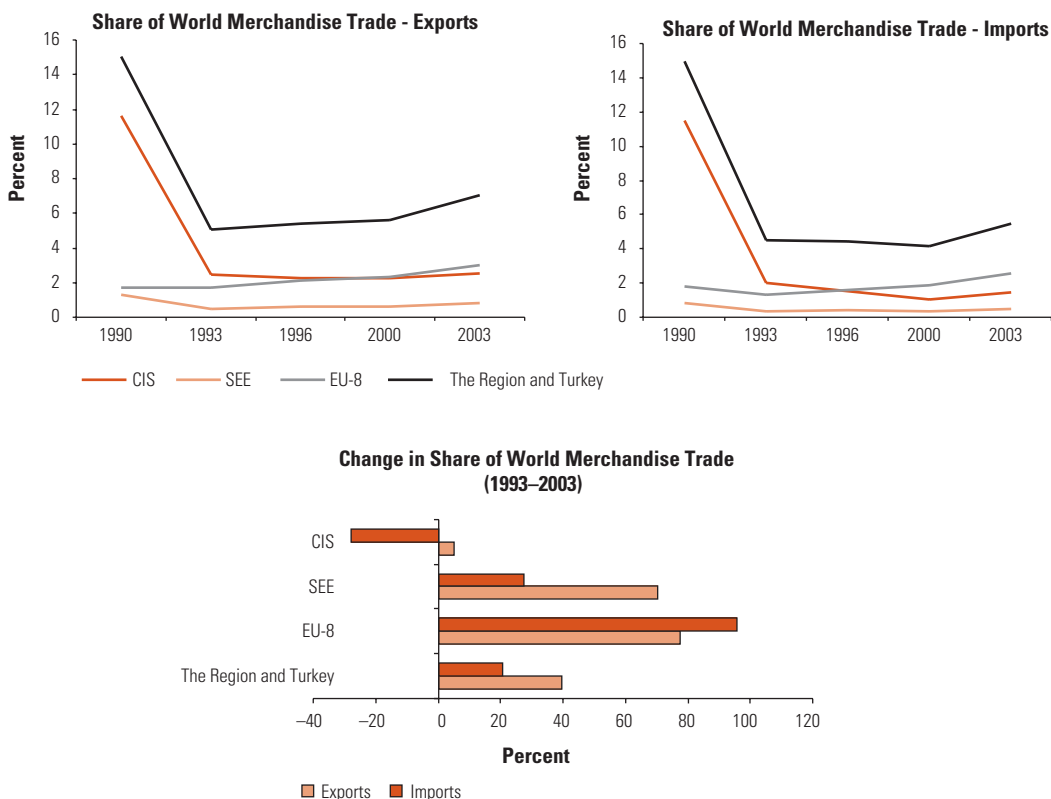
TABLE 2.2

Shares in World Trade of the Region's Countries, 1990–2003

Group	Share of world merchandise trade (%)										Rate of increase (decrease) in share change (%) 1990–2003	
	1990		1993		1996		2000		2003		Exports	Imports
	Exports	Imports	Exports	Imports	Exports	Imports	Exports	Imports	Exports	Imports		
CIS	11.9	11.8	2.4	2.0	2.3	1.6	2.3	1.1	2.6	1.5	5.2	-27.9
SEE	1.0	0.6	0.5	0.3	0.6	0.4	0.6	0.3	0.8	0.5	70.5	27.5
EU-8	1.7	1.8	1.7	1.3	2.1	1.6	2.3	1.9	3.0	2.6	77.5	95.9
EU-15	40.8	44.0	35.7	37.0	36.0	36.5	35.9	34.7	38.7	36.0	8.2	-2.6
LAC	3.8	3.0	4.4	4.9	5.0	5.1	5.8	6.0	5.4	5.0	22.8	1.2
MENA	5.1	3.8	4.1	4.0	4.0	3.3	4.7	3.0	4.6	3.9	11.2	-4.0
Africa	1.1	1.1	0.9	1.1	1.0	0.9	1.4	1.2	1.5	1.4	57.9	32.8
East Asia	20.8	15.1	25.7	17.6	24.8	18.9	25.3	17.2	25.1	17.6	-2.2	-0.1
South Asia	0.8	1.1	0.9	1.1	0.9	1.2	1.0	1.2	1.1	1.3	23.5	24.6
Region	14.6	14.2	4.6	3.7	4.9	3.5	5.2	3.3	6.4	4.5	38.9	22.7
CIS less Russia	5.8	6.2	0.8	0.9	0.7	0.7	0.7	0.5	0.8	0.7	-1.5	-15.5
Turkey	0.4	0.7	0.4	0.8	0.4	0.8	0.4	0.8	0.6	0.9	51.8	14.7

Sources: IMF DOT statistics; data for CIS 1990–93 from Michalopoulos and Tarr 1994.

FIGURE 2.2
Shares in World Merchandise Trade of the Region's Countries, 1990–2003



Sources: IMF DOT statistics; data for CIS 1990–1993 from Michalopoulos and Tarr 1994.

actually declined. The rates of increase in the world share of exports of the SEE and the EU-8 economies were virtually identical (71 percent and 78 percent, respectively).

The pattern that emerges on the import side is more mixed. In contrast to the other groupings in the Region, where the share of world merchandise imports rose during 1993–2003, the level of imports to the CIS as a share of world imports declined overall, and did so at a rate of approximately 28 percent. (Netting out Russia reduces this rate of decline to 15.5 percent.) The most advanced countries in the Region, the EU-8, registered the greatest increase in the share of world imports—their share rose almost 96 percent.

Trends in Trade in Services

Services industries were accorded low priority under central planning. Indeed, in many cases they were not considered “productive” activity. However, the increasingly globalized marketplace that is

characterized by rapid technological advances has changed things. The services sectors have begun to emerge as a dynamic force in economic growth in an increasing number of countries in the Region. Especially in recent years, telecommunications, transportation, and energy services, among other network industries, as well as banking, are examples of services sectors that have been core targets of domestic reform in some countries. As in other regions of the world, international trade (and investment) in such services sectors also has begun to increase.¹

Table 2.3, figure 2.3, and annex table 2.1 detail the trends in services trade in the Region based on the most complete data currently available. Although the tables contain some data beginning in 1990, because of the lack of any meaningful data on services in the CIS in the early 1990s, the focus of our discussion is on the period beginning in 1993. The growth in the value of services exports and imports for the Region in 1993–2003 significantly exceeds other regions, including Latin America and the Caribbean, the Middle East and North

TABLE 2.3
The Region's Trade in Services: Exports and Imports

	Export value of services (\$ billion)							
	1990	1991	1992	1993	1994	1995	1996	
CIS	n.a.	n.a.	n.a.	n.a.	12	15	20	
SEE	1	1	2	4	5	5	6	
EU-8	6	6	10	16	21	29	31	
Region	1	1	2	4	17	20	27	
EU-15	372	384	435	408	421	495	523	
LAC	31	32	36	38	42	44	46	
MENA	23	23	28	29	30	32	34	
Africa	11	11	11	12	11	13	13	
East Asia	99	108	123	138	167	200	221	
South Asia	7	8	8	8	10	11	12	
	Import value of services (\$ billion)							
	1990	1991	1992	1993	1994	1995	1996	
CIS	n.a.	n.a.	n.a.	n.a.	17	24	23	
SEE	1	1	2	3	4	5	5	
EU-8	5	5	8	13	15	20	22	
Region	n.a.	n.a.	n.a.	n.a.	21	28	28	
EU-15	349	362	421	395	411	484	506	
LAC	36	39	44	49	54	56	58	
MENA	48	69	63	57	49	50	57	
Africa	20	21	21	22	22	25	25	
East Asia	145	153	172	188	220	272	294	
South Asia	10	10	11	11	13	16	17	

Source: IMF balance of payments statistics.

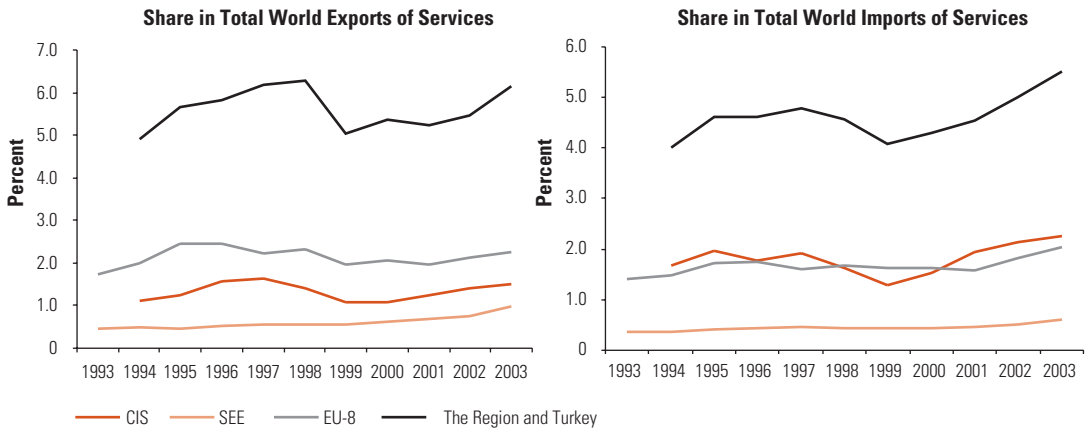
Note: n.a. = not available.

Africa (MENA), East Asia, and South Asia. However, and more important, within the Region there are significant differences. Services trade flows—whether in terms of exports or imports—grew fastest in the SEE countries over the 1993–2003 period, followed by the EU-8. In contrast, the CIS economies' services sectors remained largely closed to international trade. This is likely due to the fact that their services sectors are heavily burdened by regulation, which provides protection from the competitive pressures that accompany exposure to international trade.

In terms of services exports, the growth in value over the period for the overall Region (about 22 percent) was about quadruple the growth of services exports for the next-fastest-growing services-export-comparable region—East Asia (at 5.5 percent). The growth in the value of imports of services to the total Region in 1993–2003 was about 8 percent, twice that for the next fastest-growing comparator region, again, East Asia. Within the Region, services trade flows—whether in terms of exports or imports—grew fastest in the SEE countries over the

Export value of services (\$ billion)								Growth
	1997	1998	1999	2000	2001	2002	2003	1993–2003
	22	19	16	17	19	23	26	7.6%
	7	8	8	9	10	11	16	13.1%
	29	32	28	31	29	34	39	8.3%
	29	27	23	25	29	34	42	22.6%
	528	555	581	591	614	711	844	6.8%
	49	53	53	59	57	54	54	3.2%
	36	37	37	40	38	37	41	3.3%
	13	13	14	13	12	12	12	0.2%
	231	229	237	262	257	274	249	5.5%
	13	16	19	23	25	30	4	-6.6%
Import value of services (\$ billion)								Growth
	1997	1998	1999	2000	2001	2002	2003	1993–2003
	25	22	19	23	30	34	39	7.6%
	6	6	6	6	7	8	10	10.5%
	21	23	23	25	24	29	35	9.1%
	32	28	24	29	36	42	49	7.9%
	506	548	572	581	596	683	808	6.7%
	65	68	66	74	73	66	67	2.9%
	61	52	52	60	52	52	52	-0.7%
	25	25	24	19	20	19	14	-3.6%
	299	282	297	319	311	326	283	3.8%
	18	20	23	22	22	23	5	-7.1%

FIGURE 2.3
The Region's Shares in World Trade in Services



Source: IMF balance of payments statistics.

1993–2003 period, followed by the EU-8 and then the CIS. For all three of the Region’s transition country groupings, the flows of services exports and imports grew faster than those in the EU-15.

Not surprisingly, as a share of world services trade, however, today the volume (by \$ value) of exports and imports of services in the Region is generally still smaller than (or about equal to) that of most comparator regions (see annex table 2.1). The world shares of services exports and imports by all of the Region’s countries in 2003 were 2.5 percent and 2.9 percent, respectively. East Asia’s world shares of services exports and imports in 2003 were 14.5 percent and 16.5 percent, respectively, while for Latin America and the Caribbean, the analogous shares were 3.2 percent and 3.9 percent.

Bifurcation in the Destinations and Origins of the Region’s Trade Flows

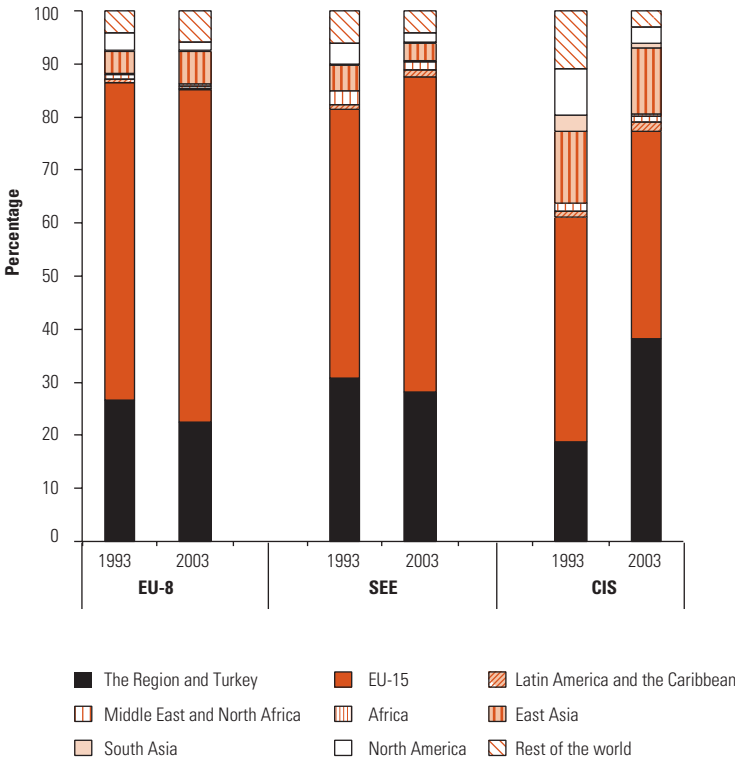
Over the course of the transition, there have been significant changes in the global destination and origin markets of both the merchandise and services trade of the Region. While age-old destination and origin markets on the Eurasian continent still figure prominently for most of the countries, newer, less traditional, locations have also been gaining strength in certain instances. Most striking about this phenomenon, however, is the emerging bifurcation of the Region into two trade “poles”: the geographic pattern of trade flows is becoming characterized by a “Euro-centric” clustering and a “Russia-centric” clustering.

Merchandise Trade

Global merchandise trade flows among the Region's countries. On a *global* basis—that is, considering the countries' trade flows both outside and inside the Region—for the most developed economies, the EU-8, the major merchandise *export* destination market today remains the more advanced countries in Europe—the EU-15 (figure 2.4 and table 2.4). Indeed, the share of the EU-8's global merchandise exports sold in the EU-15 rose over the decade, while their corresponding export share within the Region fell. Among the country groups in the Region, the global share of exports sold in the EU-15 by the EU-8 is still the largest.

The increased international integration of the EU-8 countries has been also manifested in significant growth since 1993 in the share of their merchandise exports to East Asia, their largest export market outside the European continent. On the other hand, the shares of EU-8 countries' exports sold in the markets of North America (NAFTA), Latin America and the Caribbean, the Middle East and North Africa, and

FIGURE 2.4
Global Destinations of the Region's Merchandise Exports
 Distributional Shares of Merchandise Exports of the Region's Groups, by Destination



Source: IMF DOT statistics.

TABLE 2.4

Global Geographic Destination of the Region's Merchandise Exports (%)

Group	Year	Region	Share of total world merchandise exports (%)										ROW
			Of which			EU-15	LAC	MENA	Africa	East Asia	South Asia	NAFTA	
			CIS	SEE	EU-8								
CIS	1993	21.0	37.6	12.9	36.7	46.2	1.1	1.7	0.2	14.7	3.3	9.4	12.0
	1996	47.7	70.2	4.5	19.0	32.5	1.1	2.2	0.1	8.6	1.2	5.2	2.8
	2000	47.6	78.0	2.8	14.3	33.6	1.4	1.2	0.3	8.3	1.6	4.6	2.9
	2003	39.3	73.7	2.3	18.2	39.6	1.9	1.1	0.5	12.4	0.9	3.1	3.1
SEE	1993	30.9	44.0	16.7	31.7	53.9	0.8	2.9	0.1	5.0	0.2	4.1	6.4
	1996	27.7	29.9	21.4	37.0	59.3	1.4	2.1	0.2	4.3	0.2	2.6	7.5
	2000	28.4	28.1	21.1	40.9	61.2	1.0	2.1	0.2	3.3	0.1	2.1	5.2
	2003	27.9	22.3	18.4	45.9	62.2	1.3	1.7	0.2	3.6	0.2	1.7	4.3
EU-8	1993	27.5	45.2	7.0	45.4	61.7	0.6	1.0	0.2	4.2	0.3	3.4	4.2
	1996	25.1	46.0	4.9	47.3	65.1	0.6	0.5	0.3	4.6	0.2	2.2	6.0
	2000	25.0	52.0	4.1	42.5	65.3	0.5	0.4	0.1	5.0	0.2	2.1	5.5
	2003	23.7	42.3	4.5	50.7	65.4	0.4	0.4	0.3	6.5	0.2	1.6	6.2
Memo Items Region	1993	25.7	42.9	10.3	40.6	55.2	0.8	1.5	0.2	8.0	1.4	5.6	6.8
	1996	34.6	58.0	6.3	30.5	51.2	0.9	1.4	0.2	6.2	0.6	3.5	4.4
	2000	32.2	60.8	5.4	29.9	55.3	0.8	0.9	0.2	5.8	0.6	2.8	4.4
	2003	29.3	53.4	5.4	35.9	56.6	1.0	0.8	0.3	8.0	0.4	2.1	4.6
CIS less Russian Fed.	1993	36.3	48.1	7.8	27.7	41.2	0.5	2.3	0.0	8.3	1.3	8.7	4.1
	1996	68.0	78.6	2.7	14.1	19.1	0.3	3.0	0.1	4.0	0.5	4.1	1.3
	2000	64.6	81.3	1.8	12.2	21.8	0.7	2.0	0.4	6.0	0.6	3.2	1.3
	2003	58.6	79.9	1.5	13.7	25.1	0.5	1.8	0.4	9.7	0.6	2.4	1.4
Turkey	1993	9.0	70.7	13.8	15.2	51.7	1.3	10.3	0.0	11.1	0.9	12.8	32.4
	1996	8.9	67.7	24.0	8.1	57.2	1.3	10.7	0.3	9.5	1.0	7.8	37.9
	2000	13.2	70.7	18.8	10.3	56.0	1.0	7.6	0.4	10.6	1.0	8.1	15.9
	2003	15.5	68.0	17.5	14.5	52.6	1.3	9.8	0.9	11.1	1.3	5.1	15.6
EU-15	1993	6.0	22.2	11.5	48.2	62.2	1.8	5.1	1.2	8.6	0.8	9.5	4.9
	1996	7.5	18.6	11.9	53.1	62.3	2.0	3.8	1.0	9.2	0.7	8.8	4.8
	2000	7.8	12.2	12.8	58.8	61.9	1.7	3.6	1.3	7.3	0.6	11.8	3.9
	2003	9.5	14.9	15.0	57.2	61.6	1.3	4.1	1.4	6.9	0.6	10.5	4.0

Source: IMF DOT statistics.

South Asia all have declined. (Apart from NAFTA, the initial EU-8 export shares for these regions were small to begin with.) The EU-8's share of exports to the rest of the world (ROW), however, increased sizably over the decade, another attribute reflecting the EU-8's increased international integration.

In 2003, as in 1993, the CIS countries arguably had the greatest diversification in location of global merchandise export markets compared with other country groups of the Region. Over the course of the decade, however, the geographic spread of CIS exports' global shares had become more concentrated. The largest destination market for CIS merchandise exports in 2003 was the same as it was in 1993—the EU-15—but only marginally so: the share of CIS exports shipped to countries in

the Region grew substantially, while the share of exports shipped to the EU-15 declined substantially. LAC and, to a much lesser extent, Africa, proved to be new markets for CIS exports, with a doubling of the export shares over the decade. In contrast, the shares of exports from the CIS group of countries to South Asia, East Asia, and North America all declined, particularly for the NAFTA and South Asian markets.

The global pattern of merchandise export penetration for the SEE countries falls somewhere between those of the EU-8 and the CIS. The largest shares of SEE exports are accounted for by customers in the EU-15 and in the Region and, like their wealthier EU-8 counterparts, the SEE countries sold proportionally more exports in EU-15 markets than in the Region's markets over the 1993–2003 period. On the other hand, as is the case for the CIS, the share of exports from the SEE group of countries destined for LAC markets increased substantially. At the same time, SEE export shares in NAFTA, South Asia, and East Asia declined.

The two-pole paradigm is becoming equally evident with respect to imports. The global merchandise *import* side of the story is presented in figure 2.5 and table 2.5. Globally, for the most developed economies—the EU-8—the dominant merchandise import origin market was still the EU-15. As in exports, the share of the EU-8's global merchandise imports purchased from the EU-15 rose over the 1993–2003 period, while their corresponding import share within the Region fell. Among the three country groupings in the Region, the global share of merchandise imports bought in the EU-15 was still the largest for the EU-8.

Outside the European continent, the change in the share pattern of EU-8 global imports is largely the reverse of what happened regarding exports. There was significant growth since 1993 in the share of EU-8 merchandise imports from North America, which remained its largest non-European import market. On the other hand, the share of EU-8 merchandise imports purchased in the markets of East Asia declined. The share of EU-8 imports from MENA and LAC also declined between 1993 and 2003.

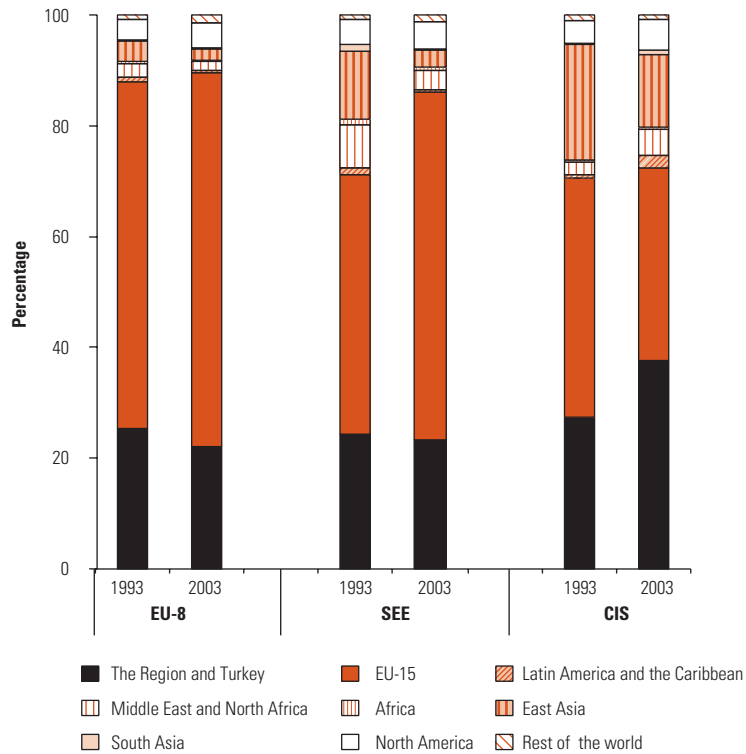
As in the case of exports, the CIS countries tend to have a pattern of global import markets that is more diversified in comparison with the other country groups of the Region. Unlike the changes exhibited in CIS export destinations, however, over the course of the decade the geographic spread of CIS import shares became somewhat more diversified.

The CIS' largest origin market for its merchandise imports in 2003 was the Region; this differs from 1993, when it was the EU-15. The share of CIS imports shipped from the Region grew substantially, while the share of imports shipped from the EU-15 declined, albeit by a modest amount. LAC, NAFTA, and MENA all have become more

FIGURE 2.5

Global Distribution of the Region's Merchandise Imports

Distributional Shares of Merchandise Imports of the Region's Groups, by Destination



Source: IMF DOT statistics.

significant import source markets for the CIS. In contrast, the share of imports to the CIS from East Asia declined. This is a different pattern from the one that evolved for CIS exports.

As in exports, the global pattern of merchandise import sourcing for the SEE countries falls somewhere between those of the EU-8 and the CIS. The largest shares of SEE imports are accounted for by EU-15 and Regional producers and, like their wealthier EU-8 counterparts, SEE bought proportionally more imports in EU-15 markets than in the Region's markets over the 1993–2003 period. On the other hand, as is the case for the CIS, the share of imports by the SEE group of countries bought in East Asian markets decreased substantially. At the same time, SEE import shares from LAC, MENA, South Asia, and North America declined.

Intra-Regional merchandise trade flows. The patterns of the *intra-Regional* destination of the countries' merchandise exports are particularly

TABLE 2.5
Global Geographic Origin of the Region's Imports (%)

Country Group	Year	Region	Share of world imports originating from (%)										
			Of which			EU-15	LAC	MENA	Africa	East Asia	South Asia	NAFTA	ROW
			CIS	SEE	EU-8								
CIS	1993	27.7	23.4	20.8	40.2	42.9	0.7	2.2	0.4	20.8	0.3	4.0	1.0
	1996	47.9	63.6	7.9	23.3	28.7	0.8	2.4	0.2	13.5	1.0	4.3	1.1
	2000	39.0	53.1	8.2	28.8	33.1	1.9	3.3	0.4	12.3	0.7	7.0	2.3
	2003	37.8	53.3	8.3	28.0	34.8	2.1	4.7	0.4	13.0	0.8	5.6	0.8
SEE	1993	22.8	22.7	29.5	36.0	47.9	1.1	7.9	1.1	12.5	1.2	4.6	0.9
	1996	24.3	20.3	34.9	26.5	52.0	1.1	6.7	2.5	7.2	1.7	3.7	0.8
	2000	24.6	9.5	40.7	28.0	61.1	0.3	3.9	1.3	2.3	0.3	5.4	0.8
	2003	22.2	7.6	40.2	30.5	63.7	0.4	3.6	0.6	3.1	0.3	4.8	1.4
EU-8	1993	25.3	26.2	12.0	60.9	62.6	0.8	2.5	0.4	3.5	0.3	3.7	0.8
	1996	26.1	25.9	12.7	59.6	64.1	0.7	1.4	0.2	2.7	0.3	3.3	1.1
	2000	19.9	16.7	16.5	63.6	68.6	0.7	1.0	0.3	2.2	0.1	5.9	1.3
	2003	22.1	17.2	17.4	61.3	67.5	0.4	1.5	0.3	2.0	0.2	4.7	1.4
Memo Items Region	1993	26.2	24.5	18.0	48.2	51.7	0.7	2.9	0.5	12.8	0.4	4.0	0.9
	1996	37.6	51.3	10.7	32.9	44.1	0.8	2.4	0.4	8.9	0.8	3.9	1.1
	2000	30.1	40.5	12.5	38.1	49.8	1.3	2.4	0.4	7.4	0.4	6.4	1.8
	2003	29.4	38.2	13.4	39.4	51.9	1.2	3.2	0.3	7.2	0.5	5.1	1.1
CIS less Russian Fed.	1993	45.3	41.7	19.5	23.0	29.2	0.6	5.0	0.0	15.3	0.3	3.9	0.4
	1996	71.5	82.0	3.7	9.8	12.2	0.9	3.4	0.3	7.5	0.8	3.2	0.2
	2000	54.7	74.6	5.3	11.4	21.1	4.3	4.6	0.4	9.0	0.9	4.7	0.3
	2003	50.1	67.8	7.3	16.4	20.6	5.3	8.2	0.6	10.9	1.2	2.6	0.4
Turkey	1993	10.3	76.0	12.4	11.6	51.5	0.7	17.1	0.1	9.7	0.7	8.6	1.2
	1996	10.5	67.1	19.2	13.7	56.8	0.6	14.1	0.5	6.1	0.8	9.1	1.5
	2000	9.8	49.1	28.7	22.2	59.9	0.9	10.8	1.0	2.8	0.7	12.7	1.4
	2003	13.5	35.7	34.4	29.8	56.6	0.5	14.1	1.0	3.0	0.5	9.2	1.6
EU-15	1993	6.0	22.2	11.5	48.2	62.2	1.8	5.1	1.2	8.6	0.8	9.5	4.9
	1996	7.5	18.6	11.9	53.1	62.3	2.0	3.8	1.0	9.2	0.7	8.8	4.8
	2000	7.8	12.2	12.8	58.8	61.9	1.7	3.6	1.3	7.3	0.6	11.8	3.9
	2003	9.5	14.9	15.0	57.2	61.6	1.3	4.1	1.4	6.9	0.6	10.5	4.0

Source: IMF DOT statistics.

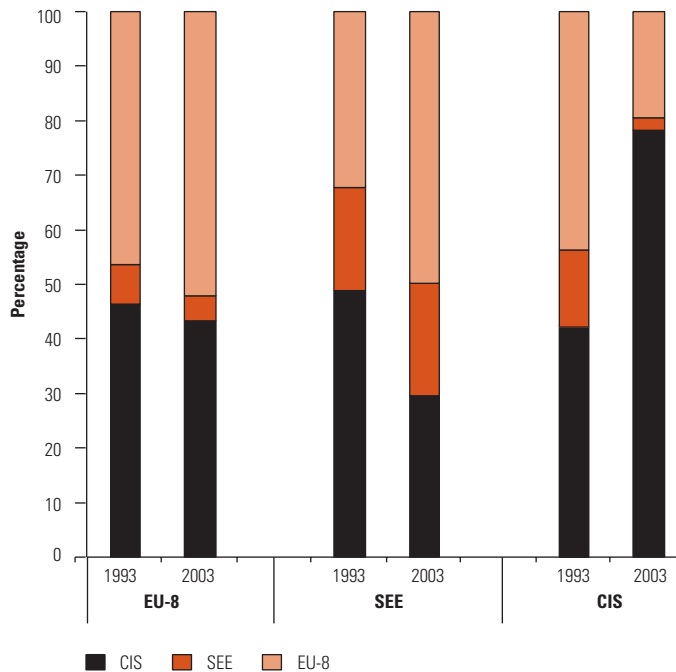
revealing (see figure 2.6). While the major destination market for intra-Regional merchandise exports by the EU-8 in 1993 was the CIS, in 2003, following a major locational shift over the decade, most of the intra-Regional exports sold by EU-8 countries were to other EU-8 countries themselves.

This change in trade patterns is a hallmark of the EU-8 countries' development progress, particularly regarding the restructuring and modernization of the enterprise sector. Although the SEE market remained the smallest for EU-8 intra-Regional exports, there was also a decline in the share of the EU-8's intra-Regional merchandise exports sold in SEE.

FIGURE 2.6

Intra-Regional Distribution of Merchandise Exports

Share of Intra-Regional Merchandise Exports



Source: IMF DOT statistics.

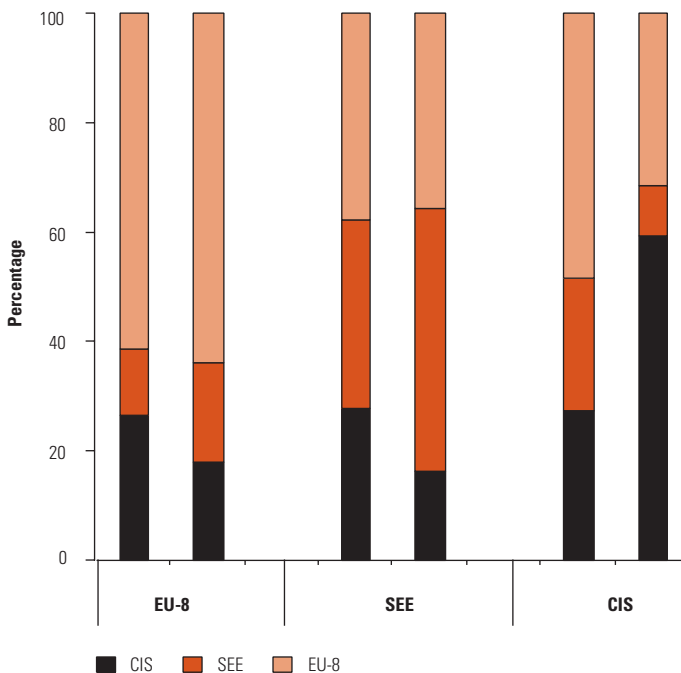
The dynamics of the pattern of intra-Regional merchandise exports for the CIS is just the reverse. Rather than enlarging their share of exports to the wealthier countries as development in the overall Region has proceeded, the CIS' share of intra-Regional exports in the EU-8 market decreased while it increased in the CIS market itself. The share of CIS exports within the Region also declined in the SEE market. Taken together, these data suggest that CIS exports within the Region became more (sub-) regionalized and concentrated.

For the SEE economies, there was a significant shift between 1993 and 2003 from the CIS to the EU-8 becoming the dominant destination for intra-Regional merchandise exports. Indeed, the share of SEE's intra-Regional exports rose in the EU-8 market and fell—even more dramatically—in the CIS market. The share of intra-Regional exports sold in the SEE market by SEE producers remained relatively the same over the decade.

The pattern of merchandise *imports* for the EU-8 within the Region is different from that for exports (see figure 2.7). Although the share of EU-8 intra-Regional imports from the CIS declined and the share from the EU-8 rose (as did the share of imports from SEE), the EU-8

FIGURE 2.7**Intra-Regional Distribution of Merchandise Imports**

Share of Intra-Regional Merchandise Imports



Source: IMF DOT statistics.

market remains the dominant origin for EU-8 merchandise imports.

On the other hand, the story for the shares of the CIS' intra-Regional imports is not different from that for exports. The CIS' share of intra-Regional imports from the EU-8 market decreased, while it increased in the CIS market itself. The share of CIS imports from the SEE market also declined within the Region. Again, as in exports, these data suggest that the CIS' intra-Regional imports have become more (sub-) regionalized and concentrated.

For the SEE economies, there was a significant shift over 1993–2003. Whereas in 1993 the EU-8 was the major origin market for intra-Regional merchandise imports for SEE, by 2003, the share of SEE intra-Regional imports was greater from the SEE market itself. At the same time, as it did for their wealthier EU-8 counterparts, the share of the SEE's intra-Regional imports purchased from the CIS declined.

Services Trade

While there are few systematic data available on the direction of trade in services, telecommunications traffic flows suggest that much of the

trade in services that occurs is oriented toward Western Europe. More than half of all outgoing telecommunications traffic originating in the eight new EU member states and in SEE goes to the EU. This compares with less than 2 percent for Central Asia and the Caucasus and 8 percent for Belarus, Russia, and Ukraine. This bifurcation of the Region's countries—in this case in terms of services trade—is a characteristic increasing along multiple dimensions of the overall pattern of international integration in the Region.

A similar dichotomy is present regarding services sector FDI in the Region. Indeed, largely as a result of growing inflows of FDI in the services sectors, the share of domestic economic activity accounted for by services in the EU-8 and SEE economies has rapidly converged on that of the EU. For example, the Baltic countries of Estonia and Lithuania have attracted significant inflows of FDI in services, and in the coastal countries of the Balkans, FDI in tourism services has become increasingly predominant. In other countries of the Region, however, especially Central Asia and the Caucasus, services account for only 40 percent of economic activity. In these countries there are extremely limited FDI flows in services and an absence of private sector participation in services delivery.

Liberalization of foreign investment in services in the Region—usually capitalized on by the privatization of deregulated incumbent businesses—has been most pronounced in network and backbone industries, such as telecommunications, energy, and banking, as well as in tourism, wholesale and retail commerce, and business services. In contrast, many new, higher-technology services activities, such as the information technology (IT) and software development sectors, have developed from the start within relatively liberalized frameworks. (A more detailed discussion of trade and investment in the services sectors in the Region is the focus of chapter 6.)

Bipolar Clustering in Product Concentration, Commodity Composition, and Factor Intensity

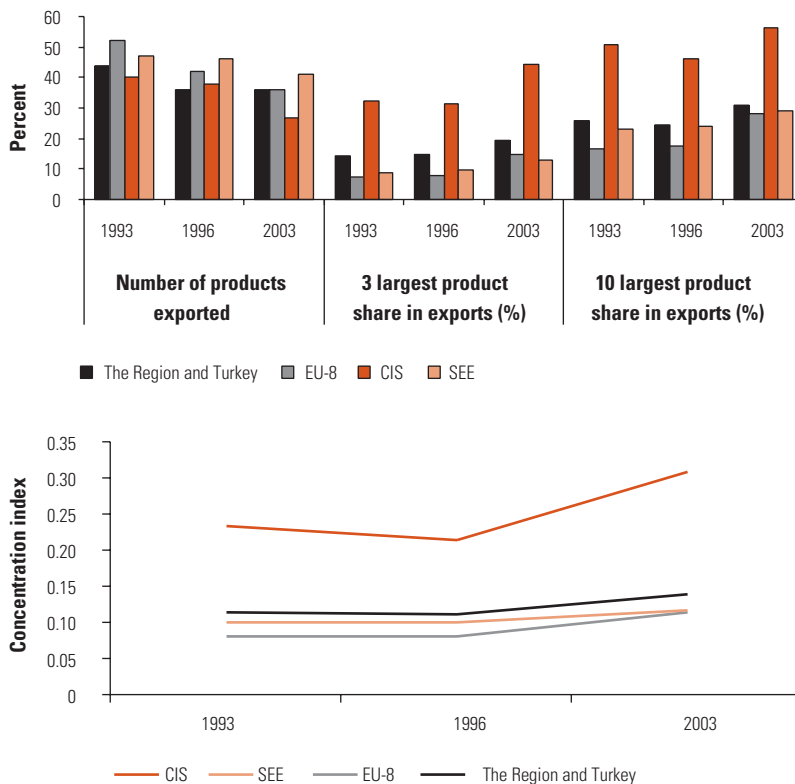
Product Diversification vs. Concentration

It is often assumed that with greater development of a market economy and overall economic prosperity, diversification of the composition of a country's trade increases. In this case, has the transition from central planning to market-oriented development resulted in increased diversification of the Region's exports? Analyses of the magnitude and effects of export diversification in various regions of

the world have typically employed three types of indices: (a) a count of the number of products exported, (b) the share of a country's total exports accounted for by a set number of the largest products (a simple measure of export concentration), and (c) the index of export concentration (a more sophisticated measure of concentration than the second).² Analysis of these indices calculated for the Region's trade provides valuable insights into the evolution of trade diversification in these countries since the start of transition.

As figure 2.8 shows, the Region's progress in diversification of export products has been generally limited, with concentration of trade worsening markedly for the CIS countries. The number of products exported generally declined between 1993 and 2003, and the share of the largest 3 or 10 products in total exports generally increased. The Hirschman concentration index for most of the Region increased only slightly, while for the CIS countries it rose significantly, reflecting a decrease in the diversification of export products.

FIGURE 2.8
Changes in Product Concentration of the Region's Merchandise Exports in Global Markets



Source: Computations based on UN COMTRADE statistics.

Overall, across all of the indices, the CIS countries score the worst. Indeed, their indices have deteriorated substantially over time, especially since 1996. This has been most striking in Azerbaijan, Georgia, Kazakhstan, and Russia, where oil and gas are increasingly the prominent exports.

Concentration of trade has also been increasing, though taking a different form, in the EU-8 countries, notably in Hungary and the Slovak and Czech Republics, particularly in heavy industries such as automotive and parts. The Baltic countries, particularly Latvia and Lithuania, have nevertheless managed to improve their export diversification profile. The SEE countries, on the other hand, remain the most diversified, most likely the result of a relative specialization in low value added exports, such as textiles.

Commodity Composition

Export prospects are affected by the commodity composition of trade.³ Important negative effects from a high concentration of exports may take place depending on the nature of the commodities exported. Some studies show that countries with highly concentrated exports may experience relatively unstable export earnings, a factor that makes economic planning difficult.⁴ This can occur if the commodities exported see their prices fluctuate in an unpredictable manner, which is often the case with primary commodities such as oil and gas and many agricultural products.

What does the commodity composition of exports in the Region look like? As depicted in table 2.6, a common feature for almost all the countries in the Region is the relative decline in the importance of

TABLE 2.6
The Structure of the Region's Exports by Major Product Category, 1996 and 2003

Exporter	Year	Total exports (\$ millions)	Food & feeds	Agric. raw materials	Ores & metals	Fuels	All manuf.
Region and Turkey	1996	247,493	17.1	4.9	6.3	13.2	56.5
	2003	461,051	12.3	4.4	7.4	15.7	56.6
EU-8	1996	83,456	11.5	5.7	3.2	5.5	71.5
	2003	195,259	7.0	5.9	2.7	5.1	78.9
CIS	1996	119,813	19.2	5.3	8.2	26.6	38.4
	2003	182,718	14.1	4.7	12.1	31.4	30.3
SEE	1996	20,687	16.4	4.6	8.5	4.9	64.7
	2003	35,408	11.8	3.3	6.3	5.3	71.8

Source: Computations based on UN COMTRADE statistics.

agricultural products in exports. The share of food and agricultural raw material exports of the total of the Region's exports has declined from 22 percent in 1996 to 16.7 percent in 2003. This decline was paralleled by an increase in the share of manufacturing exports for some of the countries, which was offset by a reallocation toward primary commodities (namely ores, minerals, and fuels) by other countries, the export shares of which increased from 19.5 percent to 23.1 percent.

The concentration of the Region's exports in (nonagricultural) primary commodities, however, remains large and is increasing. This is particularly the case for the CIS countries, where the shares of ores, metals, and fuels in total exports increased from 38 percent to 47 percent over the period 1996–2003. With the collapse of manufacturing exports following the breakup of the Union of Soviet Socialist Republics (USSR), most of these countries had shifted toward exports of natural resources. Exports of manufactures declined by 10 percentage points over the period 1996–2003. In the natural resource-rich countries like Azerbaijan, Kazakhstan, Russia, and Turkmenistan, trade in energy and raw materials experienced a boost and compensated for the decline in manufacturing trade. These are universal commodities that can easily be sold on international markets. By the same token, Tajikistan's exports are dominated by aluminum, and the Kyrgyz Republic relies extensively on exports of gold. As discussed below (and in chapter 7) in the analysis of intraindustry trade and buyer- versus producer-driven global production-sharing networks, Armenia managed to develop inward processing in its diamond-cutting industry that cushioned the decline in the more traditional food, light, and machinery industries. In the Kyrgyz

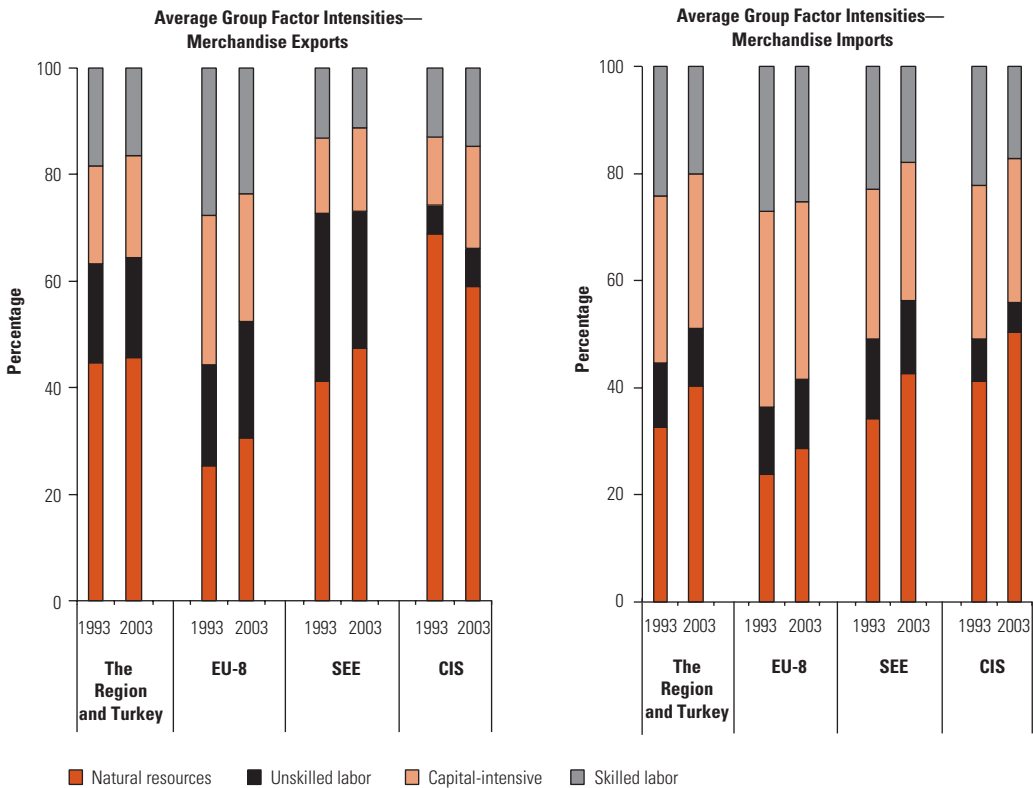
	Chemical	Wood & papers	Leather & rubber	Textiles & clothing	Machinery excl. auto	Motor veh. & parts	Misc. manuf.
	8.7	2.4	2.3	13.0	11.2	3.2	6.2
	5.7	2.5	2.5	11.7	13.9	4.4	6.2
	9.5	5.2	2.1	12.1	17.0	6.6	9.3
	7.0	5.4	2.1	8.0	26.5	10.7	10.4
	7.6	0.7	0.9	7.4	8.0	2.0	3.0
	3.5	0.7	0.5	6.9	6.9	1.3	2.0
	9.7	1.7	5.4	18.2	10.2	1.3	7.6
	5.6	2.1	7.1	22.9	12.7	1.4	8.2

Republic, however, gold exports have generated only limited positive spillovers into the local economy.

Factor Intensity

Differences among the Region’s countries in factor endowments, initial conditions, and levels of development have largely conditioned the observed factor intensities of the countries’ exports and imports. Figure 2.9 and tables 2.7 and 2.8 present the most recent and complete data available on this score, across various groupings of countries in the Region, by individual country, and over time. (Annex tables 2.2 and 2.3 show the distribution of factor use in value terms for exports and imports.)

FIGURE 2.9
Factor Intensity of Merchandise Exports and Imports in the Region, 1993 and 2003



Source: Computations based on UN COMTRADE statistics.

Note: The import share of the CIS may be exaggerated by trade deflection; see Freinkman et al. 2004.

At present, the variation in the factor intensity of merchandise exports of the Region's countries generally falls along two lines. In less developed, resource-rich, and labor-endowed countries such as the Central Asian Republics and the Caucasus, exports of natural-resource-intensive and labor-intensive products tend to be dominant on average. Merchandise exports of the more developed economies, such as the EU-8, are on average more capital-intensive and less natural-resource-intensive. Indeed, many of the more developed countries in the Region have increased the technological content of their traded goods: the EU-8 countries, and to a much lesser extent only a few of the SEE countries, have more capital-intensive exports than the other countries in the Region. However, the EU-8's merchandise exports are, on average, *more* unskilled-labor-intensive than the exports of the CIS, but *less* unskilled-labor-intensive relative to SEE exports—an issue that has implications of potential importance for prospective employment trends in the EU-8, a topic addressed below.

On the other hand, a core portion of the SEE countries, mostly in the Western Balkans, has exports with relatively low capital intensity and relatively high unskilled-labor intensity. In large part, this is the result of these countries' not attracting significant amounts of FDI, especially in greenfield (or wholly new) investments. This leaves them with a pattern of trade specialization that does not correspond to their competitive position. (This point is further reinforced by the empirical evidence on determinants of trade openness presented below.)

On an individual country basis the pattern generally holds, with the aggregate share of skilled-labor-intensive and capital-intensive exports highest for the most developed economies in the Region, as well as for Croatia. At the other extreme, Moldova, the poorest country in Europe in terms of GDP per capita, has the lowest share of such products in its exports. A substantial deviation from the pattern appears to be Serbia and Montenegro, with a share very close to that of Croatian exports. This, combined with a very low share of unskilled-labor-intensive products in its exports, may point to weaknesses in the economic policy regime of Serbia and Montenegro in preventing allocation of resources to sectors with potential comparative advantage.

With respect to the factor intensity of the Region's merchandise imports, roughly the same broad dichotomy holds, but the differences across the country groupings is less significant.⁵ Merchandise imports into the CIS countries on average tend to be more natural-resource-intensive and less capital-intensive than the EU-8's imports. Although

TABLE 2.7

Factor Intensity of Merchandise Exports by Country in the Region, 1996, 2000, and 2003

Country	Share of total exports (%) ^{a, b}									
	1996					2000				
	Total exports	Natural resources	Unskilled labor	Capital-intensive	Skilled labor	Total exports	Natural resources	Unskilled labor	Capital-intensive	
Albania	100.0	59.7	33.0	3.4	3.9	100.0	50.3	42.8	2.2	
Armenia ^c	100.0	70.0	5.8	16.8	7.4	100.0	71.1	3.4	18.3	
Azerbaijan	100.0	45.3	10.7	38.2	5.8	100.0	92.3	1.9	5.0	
Belarus ^c	100.0	17.7	19.4	29.0	33.9	100.0	19.5	18.6	29.8	
Bulgaria	100.0	37.7	17.1	28.3	16.9	100.0	35.2	27.1	21.5	
Croatia	100.0	32.8	35.1	24.0	8.1	100.0	33.3	34.3	23.3	
Czech Rep.	100.0	20.8	18.3	30.0	30.8	100.0	15.0	16.6	32.3	
Estonia	100.0	36.3	24.4	22.1	17.2	100.0	30.4	17.8	39.0	
Georgia	100.0	63.9	3.2	14.7	18.3	100.0	71.3	3.0	21.9	
Hungary	100.0	31.1	19.3	30.2	19.3	100.0	13.2	11.7	51.1	
Kazakhstan	100.0	72.4	1.3	15.3	11.0	100.0	83.0	0.3	6.4	
Kyrgyz Rep.	100.0	64.3	8.8	22.1	4.8	100.0	70.1	5.4	16.6	
Latvia	100.0	45.3	24.2	14.4	16.1	100.0	52.8	22.9	11.8	
Lithuania	100.0	43.2	20.2	21.9	14.7	100.0	43.7	25.9	20.0	
Macedonia, FYR	100.0	43.3	34.7	10.3	11.7	100.0	35.4	31.4	7.9	
Moldova	100.0	80.7	8.8	6.5	4.0	100.0	67.6	23.6	5.8	
Poland	100.0	30.0	28.3	19.1	22.6	100.0	23.8	24.1	23.3	
Romania	100.0	22.7	39.0	19.9	18.4	100.0	22.3	41.3	21.4	
Russian Fed.	100.0	70.7	3.0	11.9	14.4	100.0	71.8	3.5	12.0	
Serbia & Montenegro	100.0	54.4	12.1	17.7	15.8	100.0	44.9	17.2	17.9	
Slovak Rep.	100.0	21.2	18.3	28.0	32.5	100.0	14.2	15.5	25.2	
Slovenia	100.0	16.5	22.4	24.9	36.3	100.0	15.6	19.7	26.4	
Tajikistan	n.a.	n.a.	n.a.	n.a.	n.a.	100.0	86.7	3.6	8.9	
Turkmenistan ^c	100.0	92.5	6.3	0.7	0.6	100.0	91.2	7.5	1.2	
Ukraine	100.0	34.5	5.2	24.5	35.8	100.0	32.3	5.7	21.9	

Source: Computations based on UN COMTRADE statistics.

Note: a. Because of missing data, Bosnia and Herzegovina and Uzbekistan are excluded.

a. Sum of individual country shares may not exactly equal totals because of rounding methodology.

b. Calculated based on SITC four-digit products.

c. Armenia and Turkmenistan are using 1997 data, and Belarus is using 1998 instead of 1996 data.

n.a. = not available.

the EU-8's imports are on average more unskilled-labor-intensive than the CIS' imports, the differences in this factor intensity are much smaller than the similar pattern exhibited regarding exports.

How have the development and greater modernization of the Region's economies shifted the factor composition of trade since the start of transition? Looking over the 1996–2003 period, the merchandise imports of most of the Region's economies at lower levels of development—largely, but not exclusively, the CIS—are now importing relatively more skilled-labor-intensive and capital-intensive products and fewer natural-resource-intensive products. At the same time, the merchandise exports of the CIS countries have become even

Share of total exports (%) ^{a, b}								
Skilled labor	2003					Change 1996–2003 (%)		
	Total exports	Natural resources	Unskilled labor	Capital-intensive	Skilled labor	Unskilled labor	Capital-intensive	Skilled labor
4.6	100.0	48.1	40.8	3.8	7.3	24	13	88
7.2	100.0	92.8	0.9	3.2	3.1	-84	-81	-58
0.8	100.0	93.6	0.5	4.4	1.5	-95	-89	-74
32.1	100.0	23.8	16.7	28.9	30.5	-14	0	-10
16.2	100.0	34.0	32.2	18.9	14.9	88	-33	-12
9.0	100.0	29.0	33.6	26.4	10.9	-4	10	35
36.1	100.0	12.5	14.6	37.1	35.8	-20	24	16
12.7	100.0	33.5	19.4	28.0	19.1	-20	27	11
3.8	100.0	75.0	1.3	19.2	4.4	-59	31	-76
24.0	100.0	13.2	10.3	53.9	22.7	-47	78	17
10.3	100.0	86.1	0.3	4.8	8.8	-76	-69	-20
7.8	100.0	66.3	15.6	11.6	6.5	78	-48	35
12.5	100.0	51.6	22.3	12.3	13.8	-8	-15	-14
10.4	100.0	40.1	28.5	18.2	13.2	41	-17	-10
25.3	100.0	37.3	37.1	7.8	17.8	7	-24	53
3.1	100.0	69.3	20.9	5.4	4.4	137	-17	10
28.8	100.0	21.5	23.8	24.0	30.7	-16	25	36
15.0	100.0	22.7	40.5	19.0	17.8	4	-4	-4
12.7	100.0	77.1	1.2	11.6	10.1	-59	-3	-30
20.1	100.0	48.2	15.4	17.4	19.0	27	-1	20
45.0	100.0	15.4	14.3	21.7	48.6	-22	-23	50
38.3	100.0	14.9	17.9	29.8	37.5	-20	20	3
0.8	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
0.1	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
40.1	100.0	36.5	6.0	19.5	38.0	15	-21	6

more natural-resource-intensive and less skilled-labor-intensive on average, although among individual countries there are exceptions.

Over the same period, the SEE countries on average recorded a significant increase in exports of labor-intensive products and a slight decline in capital-intensive exports. Indeed, SEE exports remain largely concentrated in unskilled-labor-intensive products, the intensity of which grew between 1996 and 2003. For the EU-8, over the 1996–2003 period, both merchandise exports and imports became more skilled-labor-intensive and capital-intensive.

Overall, while there has been substantial change over the course of the transition in the commodity composition and factor intensity of

TABLE 2.8

Factor Intensity of Merchandise Imports by Country in the Region, 1996, 2000, and 2003

Country	Share of total imports (%) ^{a, b}									
	1996					2000				
	Total exports	Natural resources	Unskilled labor	Capital-intensive	Skilled labor	Total exports	Natural resources	Unskilled labor	Capital-intensive	
Albania	100.0	50.0	13.8	21.8	14.3	100.0	45.2	16.3	18.7	
Armenia ^c	100.0	62.7	5.5	21.5	10.3	100.0	57.7	6.1	24.0	
Azerbaijan	100.0	49.7	4.7	25.0	20.7	100.0	32.0	8.3	40.3	
Belarus ^c	100.0	42.8	6.4	28.0	22.8	100.0	50.7	6.2	25.6	
Bulgaria	100.0	53.2	9.7	23.2	14.0	100.0	40.3	14.5	25.8	
Croatia	100.0	31.4	15.7	29.4	23.7	100.0	29.7	15.5	28.4	
Czech Rep.	100.0	24.1	11.7	39.9	24.5	100.0	22.5	11.4	41.3	
Estonia	100.0	26.0	16.2	30.2	27.8	100.0	21.4	12.0	43.4	
Georgia	100.0	77.1	4.4	12.7	5.9	100.0	40.3	7.6	35.5	
Hungary	100.0	28.0	14.0	35.7	22.5	100.0	14.0	10.6	50.9	
Kazakhstan	100.0	37.6	5.6	28.6	28.3	100.0	23.6	6.0	40.8	
Kyrgyz Rep.	100.0	54.0	3.6	28.6	13.9	100.0	40.2	4.9	40.8	
Latvia	100.0	29.8	14.6	31.3	24.5	100.0	25.5	15.1	32.5	
Lithuania	100.0	39.4	10.6	25.8	24.5	100.0	39.5	13.9	26.2	
Macedonia, FYR	100.0	35.0	19.6	23.2	22.3	100.0	42.7	6.7	26.5	
Moldova	100.0	53.8	8.3	23.1	14.9	100.0	43.5	15.3	27.2	
Poland	100.0	26.0	13.5	37.2	23.5	100.0	24.3	12.1	38.9	
Romania	100.0	36.9	15.8	32.0	15.5	100.0	28.8	20.8	34.5	
Russian Fed.	100.0	36.6	8.9	34.6	20.2	100.0	36.3	8.0	37.6	
Serbia & Montenegro	100.0	38.2	12.7	28.5	21.0	100.0	29.3	9.9	33.1	
Slovak Rep.	100.0	30.0	9.4	34.5	26.3	100.0	30.4	11.0	33.4	
Slovenia	100.0	25.9	14.3	31.6	28.3	100.0	26.8	12.7	33.1	
Tajikistan	n.a.	n.a.	n.a.	n.a.	n.a.	100.0	42.2	2.0	49.1	
Turkmenistan ^c	100.0	32.3	6.0	41.9	19.9	100.0	17.1	7.3	43.7	
Ukraine	100.0	61.0	5.3	21.3	12.5	100.0	55.3	6.6	24.4	

Source: Computations based on UN COMTRADE statistics.

Note: Because of the missing data, Bosnia and Herzegovina and Uzbekistan are excluded.

a. Sum of individual country shares may not exactly equal totals because of rounding methodology.

b. Calculated based on SITC four-digit products.

c. Armenia and Turkmenistan are using 1997 data, and Belarus is using 1998 instead of 1996 data.

n.a. = not available.

trade in the EU-8 and the SEE economies, relatively little has changed in these regards among the CIS countries, which effectively have been almost “frozen in time.” The result is that these countries are not active participants in the evolving modern international division of labor.

The existing composition and factor intensity of exports put the future growth prospects of the CIS at risk. Skilled-labor-intensive and capital-intensive industries tend to pay higher wages, and growth of exports in these sectors can lead to expanded production, an increase in economic growth. On the other hand, excessive reliance on exports of natural-resource-based products that involve little processing—

Share of total imports (%) ^{a, b}								
Skilled labor	2003					Change 1996–2003 (%)		
	Total exports	Natural resources	Unskilled labor	Capital-intensive	Skilled labor	Unskilled labor	Capital-intensive	Skilled labor
19.9	100.0	42.9	16.4	20.1	20.6	19	–8	44
12.3	100.0	62.3	6.5	17.4	13.8	18	–19	34
19.4	100.0	29.0	12.1	31.3	27.5	160	25	33
17.4	100.0	47.1	6.9	27.8	18.1	8	–1	–21
19.4	100.0	22.9	20.2	31.9	25.0	108	37	79
26.5	100.0	24.2	15.8	31.1	28.9	1	6	22
24.8	100.0	19.5	11.0	42.8	26.7	–6	7	9
23.1	100.0	24.6	11.5	33.9	30.1	–29	12	8
16.6	100.0	39.5	6.3	28.7	25.5	46	126	328
24.5	100.0	15.5	10.0	51.5	23.0	–29	44	2
29.5	100.0	24.6	7.5	37.1	30.8	33	30	9
14.1	100.0	45.0	9.6	25.2	20.2	169	–12	46
26.8	100.0	28.5	14.2	30.2	27.1	–3	–4	11
20.3	100.0	31.5	15.9	28.5	24.0	51	11	–2
24.2	100.0	42.4	7.2	27.2	23.2	–63	17	4
14.0	100.0	43.2	14.8	23.3	18.7	80	1	25
24.7	100.0	21.6	14.2	36.8	27.4	5	–1	17
15.9	100.0	27.9	20.4	30.9	20.8	29	–3	34
18.1	100.0	29.5	8.3	37.5	24.7	–6	8	22
27.8	100.0	36.5	9.2	31.0	23.3	–27	9	11
25.2	100.0	23.8	11.7	34.6	30.0	24	0	14
27.3	100.0	25.6	12.2	34.0	28.2	–15	8	–1
6.7	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
31.9	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
13.7	100.0	53.2	6.0	24.3	16.5	13	14	32

such as is the case of many CIS countries—will not have the same effect on wages. While the concentration of trade patterns in natural-resource and unskilled-labor-intensive activities acted as a short-run cushion for job losses for unskilled workers in the CIS in the early to mid-1990s, in the aftermath of the collapse of CMEA, this is not a sustainable growth strategy. Over the long term, increased international competition from other low-price labor countries means that these countries would be unlikely to retain a strong comparative advantage, making it all the more important to focus on upgrading exports and shift into higher value added goods. Indeed, in such a situation, increased international competition in the face of little or stalled eco-

conomic reform could well exacerbate poverty in these already poor countries, a topic that is further explored in chapter 3.

At the same time, the increase in unskilled-labor-intensive merchandise exports in the EU-8—if persistent—poses risks to the wage regime of workers entering the labor market in trade-related sectors and to the incentives affecting workers' investment in human capital in these countries. Moreover, since labor costs in these countries are relatively high, reliance on unskilled-labor-intensive exports, such as textiles and footwear, may not be sustainable in the long run, given the growing competition from low-wage countries, in Asia and elsewhere.

Sub-Regional Variation in Sources of Intertemporal Change in the Region's Export and Import Market Shares

It is informative to analyze the extent to which the changes in the observed patterns of the Region's trade flows over the past decade are the result of variations in (a) demand, (b) export competitiveness, or (c) product diversification (or lack thereof). We examine this decomposition over 1996–2003 for trade both among the Region's countries and between the Region's countries and the EU-15. (For information about the methodology used for this decomposition, see annex box 2.1.)

Decomposing Intra-Regional Trade, by Country

Growth of intra-Regional trade since 1996 has been largely driven by *demand* for exports from the Czech Republic, Hungary, Poland, Russia, the Slovak Republic, Turkmenistan, and Ukraine. (As table 2.9 illustrates, for Russia, Turkmenistan, and Ukraine, the overwhelming bulk of exports comprised natural gas and oil products.) The same pattern holds for the more recent portion of the period (that is, since 2000), except that the demand for Turkmenistan's exports has significantly declined.

More important, the vast majority of the countries did not improve their *competitiveness* in intra-Regional trade over the 1996–2003 period; of the seven that did improve their ability to be more competitive in intra-Regional trade, three (Hungary, Poland, and Lithuania) are in the EU-8; two (Georgia and Tajikistan) are in the CIS; and one (Romania) is in the SEE. However—yet not surprisingly—intra-Regional trade competitiveness improved markedly for most countries in the years following the Russian economic crisis and ruble devaluation in August 1998 (although the three CIS and SEE coun-

TABLE 2.9
Role of Demand, Export Competitiveness, and Product Diversification in Intra-Regional Merchandise Trade

	Exports to the Region (\$ millions)			Factors underlying the 1996–2003 export change (\$ millions)			Factors underlying the 2000–3 export change (\$ millions)		
	1996	2000	2003	Demand factor	Competitive factor	Diversi- fication	Demand factor	Competitive factor	Diversi- fication
Albania	37	10	19	25	-42	-2	4	4	0
Armenia	108	85	108	125	-78	-47	54	-31	-1
Azerbaijan	339	445	570	534	-280	-23	152	51	-78
Belarus	4,098	5,122	6,206	986	-709	1,832	423	94	567
Bosnia & Herzegovina	319	373	391	225	-145	-8	159	-112	-29
Bulgaria	1,386	1,430	1,749	1,051	-692	3	552	22	-256
Croatia	995	805	1,601	823	-343	127	402	272	122
Czech Rep.	6,066	5,964	9,763	4,680	-693	-290	3,025	846	-73
Estonia	485	598	768	346	-25	-38	285	-104	-10
Georgia	149	295	471	83	214	25	258	-103	22
Hungary	2,976	3,745	6,338	2,230	1,156	-24	2,010	576	8
Kazakhstan	3,673	3,772	3,507	715	-776	-105	668	-1,050	117
Kyrgyz Rep.	274	158	189	169	-253	-1	43	-12	-1
Latvia	598	595	655	471	-369	-46	308	-214	-34
Lithuania	815	1,087	1,846	611	576	-156	514	417	-172
Macedonia, FYR	474	319	195	340	-610	-10	140	-256	-8
Moldova	1,059	503	600	696	-1,149	-6	359	-261	0
Poland	3,570	4,867	9,135	4,829	6,336	-5,599	4,630	3,933	-4,294
Romania	1,311	1,983	2,783	988	399	86	1,010	-39	-171
Russian Fed.	28,429	36,907	37,561	62,601	-54,643	1,174	12,950	-11,634	-661
Serbia & Montenegro	522	606	803	456	-188	14	291	-98	4
Slovak Rep.	4,297	3,962	5,942	4,101	-2,329	-127	2,024	71	-115
Slovenia	1,797	1,907	3,422	1,698	-59	-13	1,106	414	-5
Tajikistan	158	320	341	139	42	1	96	-77	1
Turkmenistan	2,056	1,649	509	11,364	-12,890	-21	1,214	-2,316	-38
Ukraine	9,299	7,706	10,695	5,748	-4,449	97	4,165	-977	-199
Uzbekistan	1,290	1,435	778	1,086	-1,561	-37	543	-1,133	-67
The Region and Turkey	78,782	89,241	112,717	108,422	-71,264	-3,224	38,498	-9,604	-5419
EU-8	20,604	22,726	37,870	16,608	1,387	-729	11,890	3,682	-428
CIS	50,932	58,395	61,534	4,047	-76,532	2,887	20,925	-17,448	-337
SEE	4,524	4,920	6,739	3,452	-1,433	184	2,268	-109	-341
Turkey	1,979	2,452	5,546	1,165	2,416	-14	1,011	2,106	-23

Source: Computations based on UN COMTRADE statistics.

Note: The demand factor isolates the effects of the increase or decrease in Regional demand for exports from other countries in the Region. This factor shows the increase or decrease in exports that would have occurred had there been no change in the country's market shares from the 1996 or 2003 base period. The competitive factor shows the change in exports, over or under that associated with demand changes, resulting from changes in a country's import market shares. Any difference between the change in the total exports and the sum of these two factors is the result of product diversification.

tries that gained competitively in the years before the crisis actually became less competitive in the postcrisis period).

Virtually none of the countries in the Region were able to garner any intra-Regional trade gains through greater *product diversification*. This has been the case most starkly for Poland, Russia, and Ukraine.

Decomposing the Region's Trade with the EU-15, by Country

A different picture emerges with regard to trade between the Region and the EU-15 (see table 2.10). Not only is *demand* for exports from the EU-8 countries—especially the Czech Republic, Hungary, Poland, and Slovenia—largely responsible for the growth in trade flows between the EU-15 and the Region between 1996 and 2003, but so is the competitiveness of these countries' exports. In other words, successful export penetration into EU-15 markets has required countries in the Region to exploit any cost-effective advantages they have—in addition to capitalizing on the market opportunities that have arisen as a result of income growth.

While, again, demand for Russian exports has been a prominent element in the growth of the Region's trade with the EU-15, such demand was not sustained over the entirety of the 1996–2003 period (this stands in contrast to the role of demand for Russia's exports in the growth of intra-Regional trade flows noted above); indeed the demand for Russian exports has declined significantly since 2000. On the other hand, Russia's export competitiveness has contributed substantially to the country's trade growth, especially in the post-2000 period (as would be expected, in light of the devaluation of the ruble in late 1998).

Increased product diversification has played a more positive role in the growth of trade between the Region and the EU-15 than in intra-Regional trade. This is particularly the case for Croatia and Ukraine. On the other hand, Russia's trade growth has been constrained considerably as a result of limited export product diversification, and the extent of diversification improved only marginally following the devaluation of the ruble. Lithuania, Poland, and Slovenia also have experienced losses in trade growth resulting from restricted export product diversification.

Overall, these results suggest that “fixed” factors, such as geographic proximity, may not have been predominant in influencing changes in export and trade performance for many of the Region's countries. Some non-EU-8 transition economies have been able to increase their exports because of improved competitiveness and higher demand in the more distant markets of the EU-15, rather than among themselves. (The role of geography in explaining the Region's trade flows is explored in greater detail below.)

Decomposing Intra-Regional Market Share Changes, by Product Category

In order to better understand the reasons behind the loss of market share in “home” markets by the countries in the Region, an exami-

TABLE 2.10

Role of Demand, Export Competitiveness, and Product Diversification in Merchandise Trade between the Region and EU-15

	Exports to EU (\$ millions)			Factors underlying the 1996–2003 export Change (\$ millions)			Factors underlying the 2000–3 export change (\$ millions)		
	1996	2000	2003	Demand factor	Competitive factor	Diversi- fication	Demand factor	Competitive factor	Diversi- fication
Albania	251	267	426	98	74	3	75	82	2
Armenia	57	110	274	8	209	0	-9	173	0
Azerbaijan	38	904	1,193	-15	1,171	-1	-43	339	-7
Belarus	527	693	1,194	213	460	-6	140	369	-8
Bosnia & Herzegovina	87	477	804	36	677	5	96	229	3
Bulgaria	2,204	2,840	4,272	929	1,083	57	546	827	59
Croatia	2,248	1,913	2,806	1,251	-900	207	586	64	243
Czech Rep.	12,380	19,726	33,482	7,422	13,593	87	5,853	7,878	25
Estonia	1,581	3,094	3,575	494	1,502	-1	645	-144	-20
Georgia	52	258	298	15	230	2	-4	43	1
Hungary	11,357	19,896	28,219	8,760	7,465	637	6,128	1,552	642
Kazakhstan	512	2,869	3,873	11	3,352	-2	72	951	-19
Kyrgyz Rep.	42	119	14	6	-36	2	-4	-102	1
Latvia	1,868	1,918	2,366	178	354	-35	263	196	-11
Lithuania	1,535	2,126	3,448	344	1,575	-6	276	1,113	-67
Macedonia, FYR	545	700	732	199	-11	0	94	-61	-1
Moldova	114	177	305	28	162	2	45	82	2
Poland	15,688	21,817	35,756	9,691	10,437	-59	7,657	6,388	-106
Romania	4,666	7,153	12,723	2,351	5,612	95	2,042	3,433	95
Russian Fed.	30,173	36,895	48,448	9,141	12,670	-3,536	1,501	12,799	-2,747
Serbia & Montenegro	616	737	1,452	229	605	2	192	522	1
Slovak Rep.	4,300	6,513	13,741	2,628	6,708	105	2,100	5,004	124
Slovenia	5,502	5,579	7,365	4,041	-2,275	98	1,966	-244	64
Tajikistan	120	40	98	-64	42	0	-7	65	0
Turkmenistan	91	205	240	-54	203	0	-119	155	0
Ukraine	1,836	2,575	3,972	303	1,814	20	306	969	124
Uzbekistan	670	453	279	-367	-24	-1	-113	-61	0
The Region and Turkey	112,198	156,992	239,464	55,147	74,369	-2,250	36,370	47,623	-1,522
EU-8	54,212	80,671	127,953	33,558	39,358	826	24,889	21,743	652
CIS	34,232	45,297	60,188	9,219	20,253	-3,521	1,766	15,781	-2,654
SEE	10,001	13,351	21,764	4,863	6,533	366	3,438	4,573	400
Turkey	12,579	16,267	27,441	7,047	7,756	59	5,767	5,347	61

Source: Computations based on UN COMTRADE statistics.

Note: The demand factor isolates the effects of the increase or decrease in Regional demand for exports from other countries in the Region. This factor shows the increase or decrease in exports that would have occurred had there been no change in the country's market shares from the 1996 or 2003 base period. The competitive factor shows the change in exports, over or under that associated with demand changes, resulting from changes in a country's import market shares. Any difference between the change in the total exports and the sum of these two factors is the result of product diversification.

nation of the underlying statistics by product category (four-digit SITC level) is warranted. The extent to which different countries outside the Region have expanded their shares of the Region's imports and therefore displaced home country suppliers by product category is depicted in table 2.11.

TABLE 2.11

Changes in Market Share of the Region's Imports, by Major Product Category and by Source of Imports

SITC	Major export product	Total imports of Region, ^a as of end-2003 (\$ millions)	1996–2003 market share changes (%)							
			The Region ^a	EU-15	NAFTA	East Asia incl. Japan	South Asia	Latin America and the Caribbean	MENA	ROW
3330	Petroleum oils and crude oils	16,849	14.0	-3.0	0.0	0.0	0.0	0.0	-12.0	1.0
7810	Passenger motor cars, for transport	16,907	6.2	1.5	-1.0	-4.4	-0.1	0.0	0.0	-2.2
3341	Motor spirit and other light oils	7,357	7.3	-8.0	-0.3	-1.9	-0.4	0.2	0.9	2.2
7849	Other parts and accessories of motor veh.	10,078	-6.6	9.7	-0.8	-2.0	0.0	0.3	0.0	-0.5
7132	Int. combustion piston engines	2,777	6.3	1.1	0.5	-7.7	0.3	0.1	0.0	-0.7
7731	Insulated, electric wire, cable	3,160	4.6	-10.6	-1.3	4.4	0.1	0.1	1.6	1.0
8211	Chairs and other seats and parts	1,670	17.3	-13.8	-2.2	1.3	0.0	0.1	-0.1	-2.5
7611	Television receivers, color	1,278	35.4	0.2	-0.7	-33.8	0.0	0.0	0.0	-1.1
8462	Undergarments, knitted of cotton	880	12.3	-18.8	-0.8	1.8	2.7	0.1	1.4	1.2
8439	Other outer garments of textile fabrics	686	13.0	-32.0	-1.7	18.4	1.4	0.0	2.1	-1.2
8219	Other furniture and parts	1,823	8.2	-8.9	-0.9	1.9	-0.1	0.2	-0.1	-0.3
7721	Elec. appl. such as switches and relays	6,052	-1.4	-3.1	0.1	5.1	0.1	0.2	0.0	-1.0
8451	Jerseys, pull-overs, twinsets	724	19.6	-30.8	-0.5	11.1	-0.4	0.1	0.5	0.4
8510	Footwear	1,760	-4.3	-16.9	-1.0	22.9	-0.6	0.0	0.4	-0.7
3414	Petroleum gases	8,277	-10.5	3.6	0.0	0.0	0.0	0.0	0.2	6.8
6841	Aluminum and alum. alloys	1,776	6.3	-10.4	-0.9	0.0	0.0	1.7	-1.3	4.5
8423	Trousers, breeches of textile fabric	435	9.9	-25.3	-1.0	10.5	3.2	-0.1	3.3	-0.6
7643	Radiotelegraphic and radiotelephonic	5,633	6.5	-29.1	-11.4	35.2	0.0	0.1	0.0	-1.4
7649	Parts of apparatus of telecom	3,451	3.2	-16.0	-2.4	17.0	0.0	0.7	0.0	-2.6
2482	Wood of coniferous species, sawn	603	-2.3	3.7	-1.5	0.1	0.0	0.1	0.0	-0.1
7523	Complete digital central processing	1,143	8.1	-9.7	-12.0	13.4	0.0	0.1	0.1	-0.1
8459	Other outer garments, knit	570	8.7	-11.9	-0.9	5.8	0.0	0.0	0.3	-2.0
7821	Motor vehicles for transport of goods	4,441	-14.0	25.2	-1.2	-7.8	0.0	-0.1	0.0	-2.2
3222	Other coal, whether/not pulverized	2,018	-2.3	-0.2	-2.6	3.8	0.0	3.3	0.1	-2.1
6842	Aluminium and alum. alloys	2,520	-2.9	4.2	-1.3	0.8	0.0	0.2	-0.2	-0.8
7139	Parts of int. comb. piston engines	3,612	-18.0	23.0	-3.9	-0.5	0.2	0.6	-0.1	-1.1
8939	Plastic articles	5,642	0.4	0.4	-1.7	2.3	0.0	0.0	-0.1	-1.3
2820	Waste and scrap metal of iron or steel	2,301	36.2	-29.1	-7.8	0.0	0.0	0.0	2.0	-1.3
6821	Copper and copper alloys, refined	500	-24.6	-1.2	-0.9	-2.0	0.0	29.8	1.7	-2.7
6584	Bed linen, table linen toilet, kitchen	288	3.9	-14.5	-0.2	6.0	6.8	0.3	-0.3	-2.0
	All above products	115,214	-7.5	9.4	-1.0	3.0	0.1	0.3	-4.3	0.1

Source: Computations based on UN COMTRADE statistics.

Note: UN COMTRADE statistics do not include data on Bosnia and Herzegovina, Tajikistan, and Uzbekistan.

a. Region includes Turkey.

Changes in import shares are reported for the 30 largest four-digit products that the Region imports globally, which together account for around a quarter (25 percent) of the Region's total imports. The data show that, on average, the countries lost their Regional market share across all the product categories by about 7.5 percent. In five product categories, the loss exceeded 10 percent. The erosion of market shares of producers based in the Region was greater than that registered by producers from NAFTA and MENA, the only other producers that also saw their market shares decline in the Region's markets. The largest competitive gains by the Region's suppliers occurred within a limited number of product groups, notably waste and scrap metal of iron and steel; televisions; sweater garments; and petroleum products.

EU-15 and East Asian suppliers made the greatest market share gains in imports into the Region. On average, the EU-15 increased its market share by more than 9 percent, with the largest gains recorded in motor vehicles, engine parts, and motor accessories. East Asian producers increased their market shares by an average of 3 percent. They realized the greatest increases in radio electronics, footwear, garments, and digital processing equipment.

The CIS as a group enjoyed competitive gains in EU markets mainly from the largest oil and gas CIS producers; such market share gains reached around \$20 billion and were largely accounted for by Azerbaijan, Kazakhstan, Russia, and Ukraine. These gains exceeded those associated with higher demand by about \$10 billion, reflecting the critical importance of larger shares in EU markets for the oil and gas products originating in these countries.

A Dichotomy in the Interactions between Trade Intensity and Domestic Competition and Governance

There are several ways in which the relationship between greater integration and domestic competition and governance conditions have been manifested in the countries of the Region throughout the transition, as discussed in detail in chapter 4. In the countries where import penetration has been greatest, firms have been most prone to reduce production costs and innovate. This finding is strongest for firms of smaller scale and those with greater private ownership. Particularly telling is that private foreign-invested firms operating in "host" markets have been more likely to react to import competition than have their domestically owned counterparts. More important, in the countries where there has been less progress in fostering a competitive market environment—especially in the CIS—the effects of

imports on business decisions have been more muted than in countries, such as the EU-8, where markets are more competitively structured as a result of more advanced reforms.

The state of competition in the domestic sphere also affects international integration on the export side. Two pieces of evidence are significant here. First, in the Region's countries where there has been greater introduction of private sector participation in the economy, export intensity by businesses—measured by the percentage of export revenues as a share of total sales revenues—is much higher. This is true whether the increased private sector participation is the result of the privatization of existing firms or *de novo* investment. Moreover, the export intensity tends to be greater for foreign invested firms than it is for domestically owned businesses. This is evidence of a two-way relationship between international integration and behind-the-border conditions, such as greater competition: foreign firms investing in countries in the Region are more prone to react to import competition than are their domestic counterparts and at the same time are more likely to further their host countries' integration into world markets than are domestic businesses.

The ability to effectively resolve commercial disputes associated with international trade transactions "at home" is greatest in the emerging Euro-centric pole and weaker in the emerging Russia-centric pole. This evidence implies that there might be an important relationship between the sophistication and availability of instruments for dispute resolution and institutional development. Not surprisingly, firms in the CIS have relied on bribes to overcome institutional hurdles to a greater extent than those in the rest of the Region.

The incidence of corruption in the Region's countries is quite varied. More important, there is now evidence that these differences appear to be strongly related to the extent of international integration achieved—whether in terms of exports or imports—among the countries in the Region. In particular, the countries where corruption is more prominent tend to be those with the least amount of integration into the world economy.

Uneven Development of Trade-Facilitation Infrastructure and Institutions

Over the course of the transition, the institutional and physical capacity in trade facilitation have varied significantly across the Region; it has also been shaped by different local geographical, political, and economic conditions, as detailed in the discussion in chapter 5.

Broadly, the trend toward two poles is evident in regard to the state of customs, the development of trade-related transport facilities, the level of technical product standards, and the use of modern mechanisms, such as IT, in carrying out logistical operations.

The most serious problem in customs—the incidence of unofficial payments in order to move goods across national borders—is extraordinarily pernicious in Central Asia and the Caucasus, and to a lesser extent in certain areas of SEE. This handicap compounds other customs impediments, such as the lack of coordination among border-related agencies, the complexity of customs procedures, unclear customs codes and regulations, and the low utilization of IT in customs operations. Most important perhaps, some of these countries are still experiencing political tensions with neighboring countries, and therefore the level of regional cooperation in facilitating trade remains low.

For the EU-8 and EU accession and candidate countries—Bulgaria and Romania, and Croatia and Turkey, respectively—in contrast, customs administrations have significantly improved over the last decade, at least in part because of the reforms necessary to accede to the EU. Still, more progress is needed in adopting and fully implementing relevant EU legislation.

In trade-related transport, much of the Caucasus and most of the CIS countries confront poor quality of service and high transportation and handling costs. Many of these countries are landlocked, making it important to extend their transport infrastructure to transit neighbors. For the Caucasus and the Balkans, war-damaged infrastructure and inoperable links from the transport network inherited from the central planning period are especially problematic.

With respect to the EU-8 countries, by comparison, the transport systems have been well maintained and have benefited from new investment over time. The result is lower transport costs and better service quality. In part, the improved quality of the transport networks in the EU-8 is rooted in the relatively early adoption of market-oriented policies, including bringing rates more in line with costs, reducing subsidies, and privatization. While privatization of trade-related transport has been most widespread among the EU-8 compared with other portions of the Region, the overall level of private sector participation in these countries is still low by global standards.

Low product standards and technical barriers to trade are also important contributors to high trade logistics costs, especially as they relate to border-crossing procedures and administrative rules. On a cross-country basis, there is empirical evidence that they play a key role in export performance in the Region. By dint of complying with

EU accession requirements, the EU-8 countries have adopted world-class standards. Increasingly the EU accession and candidate countries will also do so. In contrast, the remaining Balkans, the Caucasus, and the Central Asian Republics are still at an early stage of reform in standardization.

The development of e-commerce in trade transactions and adoption of IT are low in the Region relative to other regions of the world. Here again, there is a marked bifurcation among the countries. While significant advances have been made in the EU-8, the development of trade-related Internet infrastructure in the CIS, and to a more limited extent in the Balkans, is not adequate to support effective use of e-commerce in trade transactions.

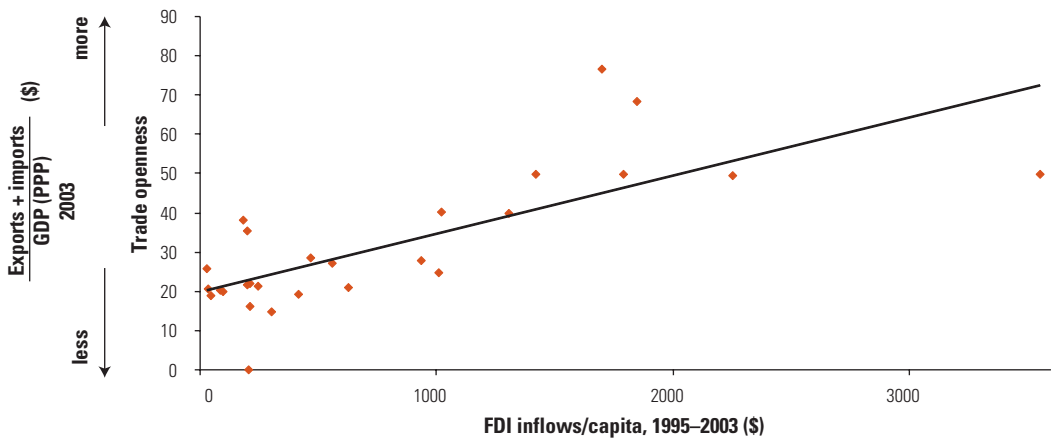
Intraindustry Trade and Global Production-Sharing Networks: Can FDI Enable Mobility between the Two Poles?

As in other parts of the world, the increasing globalization of the international economy and the fragmentation of production processes have changed the economic landscape facing the nations, industries, and individual firms of the Region. Through FDI, multinational corporations have been key agents in this transformation, creating international production and distribution networks spanning the globe. In essence, network trade in parts and components, where countries complete different stages of final products, is the internationalization of the manufacturing process.

Production sharing usually involves the development of specialized (and often) skilled-labor-intensive activities within a vertically integrated international network. Such production sharing has been growing rapidly on a global scale, with growth rates that have exceeded other dimensions of manufacturing trade. Worldwide, the many industries where major parts of a production process have been internationalized include television and radio receivers, sewing machines, calculators, office equipment, electrical machinery, power and machine tools, typewriters, cameras, and watches, among others. The result has been the growth of intraindustry or increasingly intraproduct trade at the expense of traditional interindustry trade.

As is the case elsewhere in the world, in the Region, trade and FDI are largely complements (see figure 2.10). Trade in parts and components (P&C) has increased in importance in the Region's global trade. In the aggregate, the Region's trade in goods used in production sharing grew at an annual rate of 17 percent from 1996 to 2003 (see table 2.12). Today, trade in parts and components by the Region's countries

FIGURE 2.10
Trade and FDI Inflows in the Region Are Complements, 1995–2003^a



Source: IMF DOT statistics.

Note: a. Includes Turkey.

accounts for 9 and 12 percent of total exports and imports, respectively, up from 5 and 10 percent in 1996.

As discussed in detail in chapter 7, many EU-8 and some SEE countries have been heavily involved in network trade. During the initial phase of the transition, most of these countries relied on unskilled-labor-intensive exports associated with “buyer-driven” production chains in clothing and furniture. However, rising wages have prompted these countries to shift toward skilled-labor-intensive and capital-intensive exports conducted through “producer-driven” networks, especially in the automotive and IT industries. The other SEE economies and a few CIS countries—notably those active in natural-resource trade—have been active in buyer-driven production chains but have not managed to make a transition toward producer-driven supply chains. The remaining CIS countries have effectively remained outside network trade of any form.

Sizable FDI inflows have been instrumental in participation in network trade. In fact, the countries that experienced the largest FDI inflows have registered the largest increase in exports of network components and parts. Many countries in the Region have attracted sizable inflows of FDI, but the cross-country differences in the amount of FDI received are striking (see table 2.13). While Tajikistan received only \$35 of FDI per capita as of end-2003, for example, the corresponding figure for Estonia is 138 times larger at \$4,823. Generally the EU-8 countries have attracted the largest stock of FDI per capita within the Region,

TABLE 2.12

Trade in Parts and Components in the Region, 1996–2003

Country	Year	Total exports of P&C (\$ millions)	Total imports of P&C (\$ millions)	Exports of P&C as % of total exports	Imports of P&C as % of total imports	Share of P&C as % of manufacturing exports	Share of P&C as % of manufacturing imports
Region ^a	1996	10,984	25,716	4.6	9.5	10.0	16.1
	2000	20,324	37,493	6.5	12.4	13.2	20.0
	2003	38,058	53,694	8.8	12.4	15.8	19.0
EU-8	1996	7,653	13,432	9.2	12.0	13.6	18.8
	2000	15,656	22,603	13.2	15.9	17.8	23.8
	2003	31,062	31,919	16.7	15.9	21.7	22.9
CIS	1996	1,719	6,062	1.5	6.8	6.3	13.2
	2000	1,865	5,433	1.3	7.3	6.0	13.9
	2003	2,032	10,966	1.2	9.4	5.5	15.4
SEE	1996	653	1,774	3.7	6.8	6.2	11.3
	2000	1,272	2,611	5.9	8.8	9.3	13.6
	2003	2,232	4,098	6.8	8.7	9.6	12.6

Source: Computations based on UN COMTRADE statistics.

Note: a. Includes Turkey.

while among CIS countries, only Azerbaijan and Kazakhstan have managed to attract significant FDI, mainly in their oil sectors.

These data suggest, again, that the Region has been evolving toward a bifurcated pattern of international integration: the countries that have integrated more into the global economy through producer-driven production-sharing networks have significantly advanced developmentally, whereas those not participating in such networks and hence less integrated internationally are generally poorer. Participation in producer-driven production-sharing networks has enabled countries in the Region to shift output from unskilled-labor-intensive to skilled-labor-intensive products. It has also provided gains to these economies in terms of transfers of advances in technology, which have engendered productivity growth. By fostering greater product diversification, global production sharing has strengthened the “virtuous cycle” between trade and growth. In this regard, it has helped avoid the deterioration in countries’ export prices resulting from expansion of exports of the same products.

One important feature of global production sharing is that through FDI, the Region’s countries may be able to create opportunities to engage in network trade, capitalize on certain aspects of their comparative advantage that otherwise might not readily present themselves in traditional interindustry trade, and achieve some mobility across trading blocs. In other words, increasing the prospects for trade in parts and components could facilitate the international integration

TABLE 2.13
Stock of Foreign Direct Investment in Countries in the Region,
End–2003

Country	Cumulative FDI per capita 2003 (\$)
Albania	344
Armenia	275
Azerbaijan	1,049
Belarus	192
Bosnia & Herzegovina	279
Bulgaria	650
Croatia	2,547
Czech Rep.	4,022
Estonia	4,823
Georgia	202
Hungary	4,241
Kazakhstan	1,178
Kyrgyz Rep.	99
Latvia	1,430
Lithuania	1,436
Macedonia, FYR	500
Moldova	186
Poland	1,365
Romania	572
Russian Fed.	366
Serbia & Montenegro	410
Slovak Rep.	1,904
Slovenia	2,184
Tajikistan	35
Turkmenistan	270
Ukraine	144
Uzbekistan	36

Source: UNCTAD FDI database.

of the Region's countries that to date have not effectively done so and further their growth potential.

Therefore, a significant policy challenge for the less-developed countries in the Region is to attract FDI. For this to happen, several ingredients are key. For one, industry decisions regarding investment location depend on countries in the Region having in place market-oriented, open-trade policy regimes, so as to permit ease of exportation and importation of parts and components, as well as assembled, "final" products. Well-developed trade facilitation systems and related institutions (such as customs), as well as modernized services sectors (such as the transport and communication infrastructure), also will be critical. But most important, countries need to create favorable behind-the-border business environments. This means establishing incentives and institutions to foster domestic markets that are competitively structured; that have low barriers to entry and exit; that

have rules-based checks on anticompetitive conduct and on undue government interference in commercial decisions; and that have adherence to the rule of law, protection of property rights, and good governance. These are the focus of chapter 4.

How Does the Region's Openness to Trade Compare with That of Other Regions?

The Region's Progress in Openness to Trade

Against the backdrop of the rapid growth in trade flows for the Region over the last decade, how significant is trade in the overall economic activity of the Region's countries today? Using the conventional "output-based" metric of "trade openness," calculated as the sum of a nation's total exports and imports as a percentage of GDP, on average for the Region (as well as Turkey), total merchandise exports and imports today account for about 40 percent of GDP, as compared with about 35 percent in 1994.⁶ That said, there is significant variation in trade performance across the countries, with trade openness in the EU-8 reaching 65 percent, while the corresponding measure for the CIS is only 24 percent; openness in the SEE countries lies somewhere in between (see figure 2.11).

In services trade, not surprisingly, the extent and pattern of openness are different (see figure 2.12). Today, on average, services trade accounts for about 14 percent of GDP in the Region (as well as Turkey). But SEE's services trade accounts for about 18 percent of GDP on average—the highest in the Region. Until 1999, the EU-8's services trade openness was the highest. For the CIS countries, although openness in services trade has more or less continued to rise over the decade, today, on average, services trade among the CIS accounts for about 11 percent of GDP.

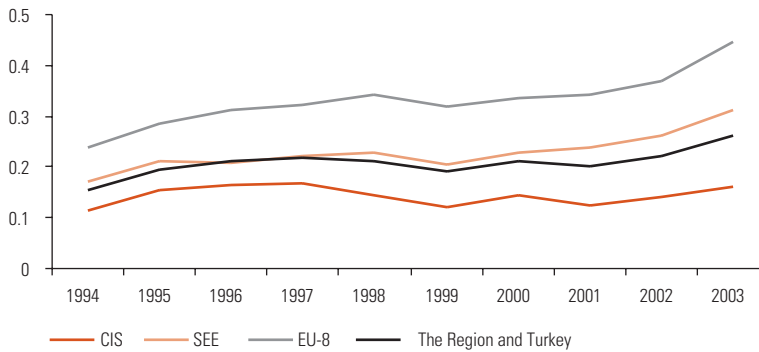
The Region's Trade Performance in the Global Context: Determinants of Aggregate Trade Openness

In order to understand how the Region's members compare with other countries worldwide in terms of trade openness, an empirical model was developed for 149 countries, including the 27 countries in the Region and Turkey. This model of trade performance is designed to determine broadly, other things being equal, the average association between a country's national income level and its *aggregate* (or multilateral) trade openness—that is, its gross trade flows, regardless of their destination or origin. (We assess in the next section the coun-

FIGURE 2.11

Merchandise Trade Openness in the Region, 1994–2003

Imports and Exports as Percentage of GDP PPP

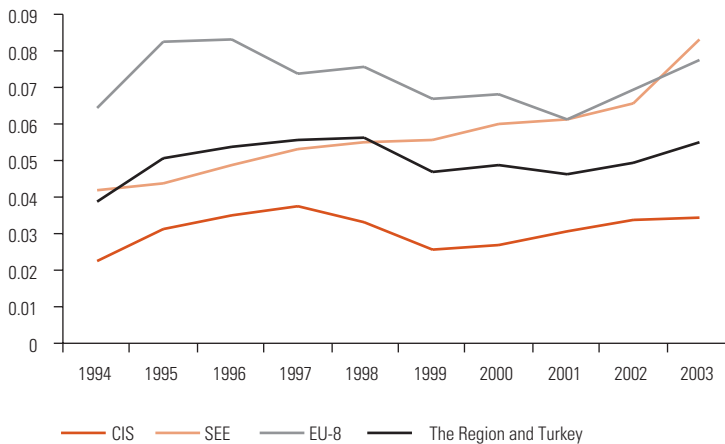


Source: IMF DOT statistics.

FIGURE 2.12

Services Trade Openness in the Region, 1994–2003

Imports and Exports as Percentage of GDP PPP



Source: IMF balance of payments statistics.

tries' trade performance based on destination and origin of *bilateral* trade flows.) Openness, as measured by the share of trade in goods in GDP, was regressed on the country's population (which was used as a proxy for country size), geographic distance to major markets (which was used to measure market access), and GDP per capita.

The hypothesis underlying this approach is that richer countries trade more (as a percentage of their GDP), while larger countries and those that are relatively far away from major markets trade less. The theoretical and empirical literature suggests a positive correlation between openness (trade integration) and income levels.⁷ This positive correlation can be attributed to the increasing diversification of

an economy and to deepening international specialization in the course of development. At the same time, as the recent research suggests, both income and trade are dependent on the quality of institutions. In this regard, a country's income level may be viewed as a proxy for institutional variables that underlie trends in both overall economic development and international trade.⁸ On the other hand, a country's large size (the number of domestic economic agents and consumers) creates larger opportunities for within-country trade, so these countries will be less open, all other things being equal.

The empirical results, summarized in table 2.14, suggest that, for all 149 countries, larger countries and those farther from major markets on average tend to trade less, and countries that are more advanced economically and institutionally tend to trade more.⁹

How does the trade openness of the Region's countries compare with that of other regions of the world? The estimated model suggests that the vast majority of the countries tend to trade largely in line with countries elsewhere in the world having similar income levels, size, and geographic distance from major markets. The only exception is many (though not all) SEE countries, where there is evidence of "undertrading."¹⁰ In other words, more than a decade into the transition, most of the countries in the Region, as a whole, trade generally in line with the global cross-country norm: they neither "under-" nor "overtrade."¹¹

TABLE 2.14

The Region's Merchandise Trade Openness in Comparison with That of Other Regions, 1994–2003

Explanatory variable	Dependent variable			
	Ratio of exports and imports to GDP in PPP (\$)			
	Base Model	Model 1	Model 2	Model 3
Ln population	-3.45 (0.9)***	-5.29 (1.2)***	-5.40 (1.3)***	-5.40 (1.3)***
Ln GDP per capita (PPP)	11.44 (2.0)***	11.62 (4.1)***	12.67 (4.4)***	12.82 (4.0)***
Ln distance to major market	-6.06 (2.79)**	-5.30 (3.0)*	-5.15 (3.1)*	-5.28 (3.1)*
The Region			-2.66 (3.2)	
EU-8				-2.16 (3.5)
SEE				-7.29 (3.8)*
CIS				4.66 (4.9)
East Asia		18.20 (7.7)**	18.36 (7.6)**	19.76 (8.8)**
Latin America		-1.23 (3.7)	-1.54 (3.8)	0.12 (4.5)
OECD		7.62 (8.1)	5.92 (8.4)	6.93 (7.5)
Sub-Saharan Africa		—	—	—
Intercept	34.92 (30.5)	55.16 (46.3)	46.84 (46.2)	45.06 (42.8)
R ²	0.56	0.61	0.61	0.61
Number of countries	122	79	79	79

Source: Author's calculations.

Note: Standard errors in parentheses. Significance level: *** 1 percent; ** 5 percent; * 10 percent. IV (2SLS) regressions with robust standard errors.

How does the *actual* trade openness of individual countries in the Region compare with the *expected* openness that reflects their actual size, access to markets, and income level (that is, the “theoretical openness” estimates being those corresponding to the regression line in the model)? The data show that there is significant variation among the countries within the Region (table 2.15).

As the table demonstrates, two features are prominent. Actual openness increased from 1995 to 2003 for the Region overall. But

TABLE 2.15

Actual vs. Theoretical Trade Openness in the Region

Merchandise exports plus imports to GDP in PPP (\$)

	Actual openness (%)		2003 realization ratios (actual/predicted by the model)
	1995	2003	
Albania	10.5	15.8	0.53
Armenia	19.0	15.9	0.74
Azerbaijan	9.5	16.2	0.96
Belarus	31.2	36.2	1.35
Bosnia & Herzegovina	14.6	20.6	0.56
Bulgaria	21.8	29.6	0.94
Croatia	39.6	40.5	0.98
Czech Rep.	33.2	62.3	1.41
Estonia	45.0	75.4	1.63
Georgia	7.3	12.2	0.61
Hungary	30.2	61.0	1.78
Kazakhstan	17.3	21.8	0.83
Kyrgyz Rep.	17.0	14.9	1.32
Latvia	24.2	35.1	1.04
Lithuania	28.8	43.7	1.09
Macedonia, FYR	27.7	23.9	0.61
Moldova	25.9	34.4	^b
Poland	19.3	27.4	0.92
Romania	14.5	25.9	1.02
Russian Fed.	14.1	14.3	0.88
Serbia & Montenegro	^a	^a	^a
Slovak Rep.	39.2	60.5	1.40
Slovenia	74.2	70.1	1.33
Tajikistan	40.5	23.7	^b
Turkmenistan	27.1	20.8	0.90
Ukraine	17.3	18.3	1.07
Uzbekistan	20.5	10.0	^b
<i>Averages:</i>			
The Region	25.8	31.9	1.37
CIS	20.6	19.9	0.96
SEE	21.5	26.0	0.77
EU-8	36.8	54.4	1.33

Source: Author's calculations.

Note: Coefficients from model with dummy variables used.

a. data unavailable.

b. Moldova, Tajikistan, and Uzbekistan are outliers because of large measurement errors.

while it increased for SEE and (quite dramatically) for the EU-8, it actually decreased for the CIS. Thus, for most of the countries where international integration increased markedly, especially in the EU-8—notably the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, and the Slovak Republic—economic growth was relatively fast. Where integration declined, largely in the CIS—especially Armenia, the Kyrgyz Republic, Tajikistan, Turkmenistan, and Uzbekistan—growth was considerably slow or stagnant. This is part of the evidence that international integration can spur growth.

At the same time, the results once again suggest that the CIS countries—as a group, not necessarily every country individually—are actually trading broadly in line with their current potential (as reflected by the estimated model). On the other hand, most of the EU-8 countries appear to be measurably overtrading; on average the sub-Region overtrades by one-third. In contrast, the estimation results suggest that a core group of the SEE countries—largely the Western Balkans nations of Albania, Bosnia and Herzegovina, and FYR Macedonia—are undertrading, such that on average SEE is trading at just over three-quarters of its potential.¹² This evidence concerning the CIS and the SEE is consistent with that presented above.

The Region's Trade Performance: The Gravity Model Approach to Determinants of Bilateral Trade Flows

A similar pattern emerges from analysis of a gravity model of bilateral trade openness, that is, one where the units of analysis are the trade flows between the origin and destination countries. (In contrast, the openness model presented earlier measures a country's aggregate [or multilateral] flows of trade, that is, trade flows irrespective of the origin and destination of trade.) Despite controversies surrounding the gravity model since its inception (which have been somewhat alleviated recently),¹³ the gravity model has proven to be the most accurate tool for the explanation and prediction of bilateral trade flows. A number of studies have applied the gravity model to assessing trade flows among various countries in the world, including some of those in the Region.¹⁴ Following the recent analysis of Freinkman et al. (2004), who examine trade flows within the 12 CIS countries, applying the gravity model developed by Frankel (1997), we perform a similar analysis for all 27 countries in the Region and Turkey.¹⁵

Sub-Regional groupings. The intertemporal dynamics of the bilateral realization ratios—that is, the ratios of actual-to-predicted trade flows—aggregated at the sub-Regional level over 1994–2003 are

depicted in table 2.16. There is a marked pattern in the data. Although total world trade flows of the CIS were significantly lower than their potential in the early 1990s (owing to the collapse of CMEA), over the course of the decade, the CIS countries steadily and sizably exploited their global trade opportunities. The bulk of these trade flows, as noted earlier, have been largely in the natural resources sectors. In contrast, the results suggest that the EU-8 and SEE countries largely maintained their pattern of total world trade flows during the same period.

More important, the “reconstitution” of a Russia-centric trading bloc that has been taking place over the course of the decade is clearly discernible in table 2.16. In contrast to the EU-8 and SEE countries, where the ratio of actual-to-potential trade among the countries *within* each of these two sub-Regions declined over the 1994–2003 period, for the CIS countries, the comparable ratio steadily increased; that is, the ratio of actual-to-potential intra-CIS trade flows has been rising over time.

TABLE 2.16

Gravity Model Bilateral Trade Openness Realization Ratios (Sub-Regional)

Actual bilateral trade/potential trade

	CIS	EU-8	SEE
1994			
World total	0.72	0.80	0.85
CIS	0.78	2.34	3.72
EU-8	1.97	0.86	1.38
SEE	2.87	1.18	3.54
EU-15	0.60	0.80	0.82
1997			
World total	0.83	0.90	0.96
CIS	1.02	2.31	4.10
EU-8	2.04	0.76	1.29
SEE	3.32	1.25	3.43
EU-15	0.67	0.98	1.02
2001			
World total	1.11	1.00	1.24
CIS	1.20	2.62	4.88
EU-8	2.28	0.70	1.42
SEE	3.96	1.21	3.72
EU-15	1.08	1.19	1.45
2003			
World total	1.64	0.80	0.85
CIS	1.89	1.82	2.70
EU-8	3.06	0.53	0.90
SEE	5.17	0.88	1.83
EU-15	1.56	0.94	0.89

Source: Author's calculations using new data applied to Frankel (1997).

Country-level analysis. Disaggregating the gravity model analysis to the country-level (table 2.17)¹⁶ reveals a pattern of individual countries' trade performance that largely parallels the sub-Regional perspective shown above. For example, the generally consistent increase in trade openness of the CIS countries over time is again evident. Indeed, in contrast to the EU-8 and SEE countries, all CIS countries, without exception, increased their trade openness between 2001 and 2003.

The country-level analysis also shows the heterogeneity among countries *within* the two trading blocs. For example, Russia and Georgia are prominent among the CIS countries that have steadily increased their ratios of actual-to-potential trade flows toward the CIS. They are at the forefront of the re-creation of the "Russia-centric" trading bloc. By comparison, the already relatively significant orientation of trade flows to the CIS by Tajikistan and Uzbekistan did not change much between 1997 and 2003.

At the same time, within SEE, in 2003, Bulgaria and Romania registered relatively strong trade performances on both a global basis and

TABLE 2.17
Gravity Model Bilateral Trade Openness Realization Ratios (by Country)

Actual bilateral trade/potential trade

Country	Sub-Region	CIS											
		Arm	Azr	Bel	Geo	Kaz	Kyr	Mol	Rus	Taj	Trm	Ukr	Uzb
1994													
World Total		0.63	1.09	0.41	0.40	0.99	1.76	1.02	0.78	0.78	1.31	0.57	0.54
CIS		0.99	1.07	0.57	0.52	1.25	2.14	1.87	0.76	0.79	1.67	0.75	0.66
EU-8		0.34	1.08	0.82	0.40	2.70	1.06	0.93	2.43	2.46	2.07	1.29	1.32
SEE		0.26	0.63	0.83	1.36	2.65	0.82	4.76	3.68	1.22	0.18	1.61	0.33
EU-15		0.17	0.30	0.19	0.12	0.63	0.68	0.20	0.73	0.86	0.79	0.25	0.46
1997													
World Total		1.16	0.89	1.08	0.71	1.12	1.52	1.86	0.77	3.64	2.14	0.75	1.24
CIS		1.08	0.78	1.51	0.58	1.27	1.88	2.78	0.92	5.38	3.31	0.78	1.42
EU-8		1.54	1.27	1.76	2.27	2.05	2.24	3.19	2.07	10.63	1.19	1.88	3.83
SEE		5.58	1.66	2.01	11.89	1.13	1.48	9.55	3.38	11.49	2.10	2.68	2.37
EU-15		0.94	0.46	0.50	0.48	0.98	0.67	0.80	0.69	2.37	0.64	0.51	0.98
2001													
World Total		0.96	1.09	0.91	0.83	1.49	1.33	1.88	1.08	3.22	1.77	1.13	1.02
CIS		0.87	0.58	1.24	0.62	1.62	1.53	2.57	1.05	5.35	2.83	1.19	1.39
EU-8		0.61	0.54	1.83	1.22	1.85	1.21	2.58	2.42	7.41	0.63	2.14	2.50
SEE		1.54	2.34	1.44	7.35	3.45	1.00	7.28	4.05	6.56	4.08	4.13	1.64
EU-15		0.94	1.91	0.63	0.81	1.70	1.09	1.35	1.10	1.68	0.81	0.93	0.87
2003													
World Total		1.59	1.68	1.97	1.22	2.11	1.81	2.93	1.57	3.95	2.24	1.63	1.08
CIS		1.26	0.94	3.03	0.99	1.99	2.18	4.06	1.75	5.21	3.56	1.63	1.31
EU-8		1.31	3.86	2.37	1.59	3.31	1.73	3.60	3.09	15.02	0.72	3.41	1.52
SEE		4.11	1.08	2.44	9.54	8.14	2.35	10.49	4.98	31.03	2.72	5.86	1.05
EU-15		2.01	2.43	1.13	1.15	2.25	0.72	2.25	1.58	2.10	1.08	1.41	0.69

Source: Author's calculations using IMF DOT data applied to Frankel (1997).

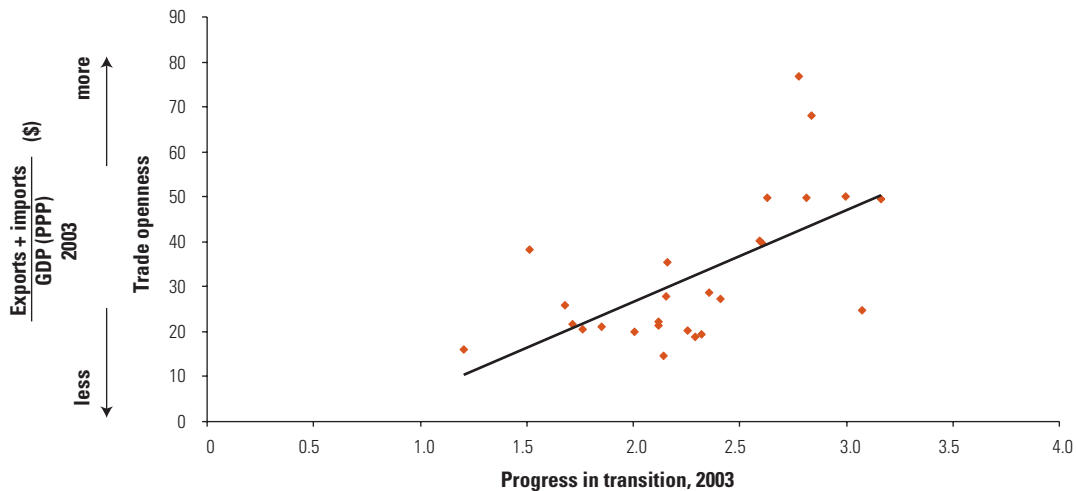
with respect to trade with the EU-15. In contrast, the analogous trade flows during the same period for the core of the Region, the Western Balkan countries (Albania, Bosnia and Herzegovina, Croatia, FYR Macedonia, and Serbia and Montenegro) were significantly below their potential, reinforcing the earlier evidence that this sub-Region is not fully exploiting its competitive advantage.

Capturing the roles of institutional and policy-related factors. Interpretation of empirical results of openness and gravity models—both in the literature and in this study—must be done with care. In part this stems from the complexity of the reality that is being modeled econometrically. In particular, it is important to realize that institutional and policy-related variables do not likely play an exogenous role; rather, such variables are often endogenous and directly related to the level of trade itself. Some steps have been taken in this analysis to deal with this problem, but data availability limits the sophistication of the approach that can be taken.

	EU-8								SEE						
	Cz	Est	Hu	Lat	Lit	Pol	Slk	Slv	Alb	BH	Bul	Crt	Mac	Rom	SM
	0.80	1.33	0.83	1.04	1.40	0.59	1.27	1.16	0.65	0.60	1.32	0.95	1.41	0.97	0.02
	2.38	2.86	5.86	2.87	4.51	1.04	4.63	4.02	0.07	16.58	5.40	3.52	5.19	3.89	0.21
	1.26	1.42	0.31	1.39	1.84	0.25	8.22	2.58	0.59	3.95	0.30	3.49	14.48	0.98	0.00
	1.16	0.53	0.69	0.57	1.19	0.23	1.82	5.23	2.17	16.72	4.65	5.20	13.02	1.19	0.00
	0.70	1.38	0.99	0.90	0.99	0.70	0.65	1.19	0.76	0.35	1.48	0.98	1.04	0.94	0.02
	0.88	2.19	1.07	1.60	1.46	0.64	1.32	1.30	0.87	2.22	1.24	1.04	1.21	1.07	0.27
	2.02	3.59	5.77	3.48	3.81	1.22	4.52	5.10	0.30	2.48	7.08	4.63	5.95	3.97	0.03
	0.94	2.29	0.32	2.18	1.62	0.34	5.77	2.98	0.81	18.20	0.23	3.57	5.65	0.96	0.60
	1.42	0.33	1.09	0.46	0.65	0.28	1.98	5.67	2.44	33.91	2.02	9.02	5.64	0.85	0.43
	0.89	2.48	1.45	1.57	1.26	0.76	0.88	1.35	1.11	2.19	1.36	1.10	1.10	1.19	0.31
	1.19	2.45	1.03	1.34	1.39	0.67	1.70	1.45	1.44	3.29	1.33	1.05	1.27	1.46	0.42
	2.57	4.76	5.96	2.82	3.52	1.52	6.21	6.18	2.39	7.80	6.21	7.57	8.25	4.55	0.03
	0.85	2.21	0.27	2.04	1.58	0.38	5.23	3.44	0.91	25.87	0.27	3.13	4.33	1.61	1.30
	1.87	0.50	0.94	0.35	0.51	0.37	2.58	6.37	2.94	31.26	2.67	8.32	5.43	1.71	1.42
	1.41	2.75	1.54	1.50	1.41	0.83	1.39	1.54	1.87	3.48	1.81	1.12	1.30	1.81	0.46
	0.84	1.68	0.90	1.10	0.86	0.58	1.30	0.84	0.50	0.68	0.90	0.63	0.74	1.13	0.28
	1.54	3.08	3.95	2.01	1.95	1.20	3.34	3.47	1.97	1.34	3.14	2.86	2.14	3.33	0.06
	0.59	1.72	0.27	1.58	1.08	0.30	3.37	1.87	0.32	4.78	0.19	1.53	2.86	1.17	0.81
	1.13	0.26	0.81	0.27	1.38	0.32	1.67	2.56	0.81	5.47	1.52	3.87	2.80	1.00	0.47
	0.97	1.83	1.28	1.17	0.80	0.72	1.09	0.84	0.60	0.70	1.21	0.65	0.73	1.33	0.30

FIGURE 2.13

Trade Openness and Behind-the-Border Reforms in the Region: A Mutually Reinforcing Relationship^a



Source: World Bank, using IMF DOT data and EBRD transition index.

Note: a. Includes Turkey.

Moreover, as is the case in almost all similar analyses in the literature, institutional and policy-related variables in such models have very strong—sometimes the most—explanatory power. This suggests that the most acute barriers to trade expansion probably do not rest in “fixed” factors, such as geography. Rather, trade performance is likely to be greatly influenced by actions taken (or not taken) at home.

In fact, countries in the Region that have been most successful in implementing domestic market reforms over the course of the transition have also tended to be the ones that were most effective in integrating into the world marketplace (see figure 2.13). It thus appears that growth in the Region has been engendered through a mutually reinforcing two-way effect between international integration and domestic structural reforms. In effect, while reform of trade policies is necessary to ensure sustainable growth, it is not sufficient. Consequently, for most of the countries in the Region, this leaves unfinished a significant behind-the-border trade reform agenda.

It is in this context that policy makers need to interpret these empirical results. Behind-the-border factors are likely to be critical in complementing trade-related policy actions if international integration of the Region is to deepen. These factors are the focus of subsequent chapters of this book.

Conclusions

The portrait that emerges of the Region's international trade landscape today is one depicting a movement from "integration" to "disintegration," and now "reintegration." More important, however, the "new" integration differs significantly from the old. Virtually all of the EU-8 countries have substantially integrated into the global marketplace and moved away from the old structures. And some SEE countries are not far behind. In contrast, the vast majority of the CIS countries, with a few important exceptions (such as with respect to the large increase in oil and gas exports by a few countries), have tended to stay together. Indeed, there is actually an increasing amount of sub-Regionalized trade among the CIS, arguably driven more by political imperatives than by fundamental economic dynamics.

The result is that two "new" trading blocs are emerging: one, a "Euro-centric" bloc, and the other, a "Russia-centric" bloc. As illustrated in this chapter, and as buttressed by further evidence presented in later chapters, these two blocs have begun to coalesce in a variety of dimensions of trade and trade-related institutions and activity. These include the direction of trade flows, the commodity and factor intensity of trade, the degree of export competitiveness, and the state of development of trade facilitation institutions and infrastructure. Other important dimensions in which this bifurcation is apparent are the extent of intraindustry trade, both in the services sectors and in participation in global production-sharing networks through FDI; and the interaction between trade flows and domestic competition and governance.

To be sure, the reality is more complicated than this dichotomized portrait. For example, there is a sizable difference in scale between the two blocs. In addition, total merchandise trade flows for the EU-8 and SEE are almost twice the size of those of the CIS. At the same time, however, there is intra-bloc heterogeneity. Some of the larger CIS countries, such as Russia and Ukraine, have certain trading attributes akin to those of the EU-8 or SEE, while some of the slower-reforming countries in SEE, such as Bosnia and Herzegovina and Serbia and Montenegro, resemble portions of the CIS. Nonetheless, there are unmistakable trends toward a bifurcated Region in international trade. Further, the countries in the Region that have integrated more effectively into international commerce are those that have higher national incomes. At the same time, the countries that have remained relatively closed and embracing the old structures have lower national incomes, and are being left out of the global economy's modern "division of labor."

The econometric evidence suggests that the “reintegrated” Region has largely become more like a typical region regarding trade, with most of the economies registering merchandise trade flows as a share of GDP largely in line with other countries of comparable levels of development, size, and geographical characteristics around the world. But, taken together, the data are sober evidence that the relatively limited openness of trade by most of the CIS—the poorest countries in the Region—reflects the already substantial utilization of their existing production structure and underlying institutional parameters. Taking into account their geographic location, the CIS appears to be trading in line with their peer groups of poor developing countries in other regions of the world. Against this backdrop, it would be difficult to claim that the CIS members—as a group—are either being adversely affected by severe market-access restrictions imposed by their trading partners or suffering greatly from highly distortive domestic trade policies.

By the same token, the fact that the evidence points to undertrading by some of the SEE countries suggests that, in part, domestic policy and institutional distortions are present. These distortions may well be preventing some of these countries from registering larger trade volumes in line with their favorable geographic access to the major markets in Europe, production potential, relatively well-educated workforce (but reflective of the countries’ relatively low levels of FDI). It is unlikely to be coincidental that it is in the poorer countries in the group—Albania, Bosnia and Herzegovina, FYR Macedonia, and Serbia and Montenegro—where undertrading is most severe.

All of this is not to suggest that improving trade policy regimes in most of the countries of the Region is unlikely to induce greater international integration to facilitate increased growth; quite the contrary. Rather, as elaborated in greater detail below, the conclusion from this analysis is that enhancing and transforming domestic, behind-the-border production structures and institutional regimes of many countries in the Region are critical to bringing about this goal and that these should be done in concert with further reform of trade policies.

ANNEX

ANNEX TABLE 2.1

Share in Total World Exports of Services (%)

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	Share change 1993–2003
CIS	n.a.	n.a.	n.a.	n.a.	1.1	1.3	1.6	1.6	1.4	1.1	1.1	1.3	1.4	1.5	35.0
SEE	0.2	0.1	0.2	0.5	0.5	0.4	0.5	0.5	0.6	0.6	0.6	0.7	0.7	1.0	113.6
EU-8	0.8	0.7	1.1	1.7	2.0	2.5	2.5	2.2	2.3	2.0	2.0	2.0	2.1	2.3	31.3
EU-15	46.7	45.9	46.6	43.4	40.9	41.9	41.3	40.1	40.7	40.9	39.3	40.9	44.8	49.2	13.5
LAC	3.9	3.9	3.9	4.1	4.0	3.7	3.6	3.7	3.9	3.8	4.0	3.8	3.4	3.2	-22.2
MENA	2.9	2.8	3.0	3.1	2.9	2.7	2.7	2.7	2.7	2.6	2.7	2.5	2.4	2.4	-21.3
Africa	1.4	1.3	1.2	1.2	1.1	1.1	1.0	1.0	1.0	1.0	0.8	0.8	0.8	0.7	-43.7
East Asia	12.5	12.9	13.1	14.7	16.2	16.9	17.5	17.5	16.7	16.7	17.5	17.1	17.3	14.5	-1.2
South Asia	0.9	0.9	0.9	0.9	1.0	0.9	0.9	1.0	1.1	1.3	1.5	1.7	1.9	0.2	-74.0
The Region and Turkey	n.a.	n.a.	n.a.	n.a.	1.6	1.7	2.1	2.2	2.0	1.6	1.7	1.9	2.1	2.5	53.2

Share in Total World Imports of Services (%)

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	Share change 1993–2003
CIS	n.a.	n.a.	n.a.	n.a.	1.7	2.0	1.8	1.9	1.6	1.3	1.5	2.0	2.1	2.3	34.6
SEE	0.2	0.2	0.2	0.4	0.4	0.4	0.4	0.5	0.4	0.4	0.4	0.5	0.5	0.6	65.2
EU-8	0.7	0.6	0.9	1.4	1.5	1.7	1.7	1.6	1.7	1.6	1.6	1.6	1.8	2.0	43.6
EU-15	43.8	43.3	45.1	42.0	39.9	41.0	39.9	38.5	40.1	40.3	38.7	39.6	43.1	47.2	12.3
LAC	4.6	4.7	4.8	5.3	5.2	4.7	4.6	4.9	5.0	4.7	4.9	4.9	4.2	3.9	-25.2
MENA	6.0	8.3	6.7	6.0	4.7	4.3	4.5	4.6	3.8	3.7	4.0	3.5	3.3	3.0	-49.4
Africa	2.6	2.5	2.2	2.3	2.1	2.1	2.0	1.9	1.8	1.7	1.3	1.3	1.2	0.8	-63.3
East Asia	18.2	18.3	18.5	20.0	21.4	23.0	23.2	22.7	20.6	20.9	21.2	20.7	20.5	16.5	-17.5
South Asia	1.2	1.1	1.2	1.2	1.3	1.3	1.4	1.4	1.3	1.4	1.4	1.4	1.5	0.3	-74.5
The Region and Turkey	n.a.	n.a.	n.a.	n.a.	2.1	2.4	2.2	2.4	2.0	1.7	2.0	2.4	2.6	2.9	38.7

Source: IMF balance of payments statistics.

ANNEX TABLE 2.2

Factor Use in Exports by Country in the Region, 1996, 2000, and 2003

Country	Export value (\$ millions)					
	1996					
	Total exports	Natural-resources intensive	Unskilled-labor intensive	Capital-intensive	Skilled-labor intensive	
Albania	211	123	68	7	8	
Armenia	213	145	12	35	15	
Azerbaijan	631	104	25	87	13	
Belarus	7,070	1,139	1,246	1,864	2,183	
Bulgaria	4,890	1,680	763	1,259	752	
Croatia	4,512	1,478	1,582	1,085	366	
Czech Rep.	21,882	4,562	4,009	6,561	6,750	
Estonia	2,078	730	489	444	345	
Georgia	199	127	6	29	36	
Hungary	13,138	3,813	2,366	3,707	2,369	
Kazakhstan	5,911	4,169	73	883	636	
Kyrgyz Rep.	507	325	44	112	24	
Latvia	1,443	636	340	202	226	
Lithuania	3,356	1,450	678	734	493	
Macedonia, FYR	1,147	492	395	117	132	
Moldova	653	527	58	42	26	
Poland	24,387	7,273	6,841	4,634	5,467	
Romania	8,084	1,698	2,918	1,489	1,380	
Russian Fed.	88,703	52,821	2,218	8,903	10,743	
Serbia & Montenegro	1,842	971	216	315	281	
Slovak Rep.	8,824	1,501	1,298	1,989	2,304	
Slovenia	8,309	1,370	1,861	2,066	3,012	
Tajikistan	n.a.	n.a.	n.a.	n.a.	n.a.	
Turkmenistan	751	694	47	5	4	
Ukraine	14,400	4,790	729	3,409	4,975	

Source: IMF balance of payments statistics.

Note: n.a. = not available.

Export value (\$ millions)										
	2000					2003				
	Total exports	Natural-resources intensive	Unskilled-labor intensive	Capital-intensive	Skilled-labor intensive	Total exports	Natural-resources intensive	Unskilled-labor intensive	Capital-intensive	Skilled-labor intensive
	261	132	112	6	12	447	215	182	17	33
	195	132	6	34	13	540	482	5	17	16
	1,745	1,611	33	88	13	2,592	2,422	13	114	40
	7,331	1,124	1,073	1,723	1,853	9,964	1,817	1,274	2,206	2,327
	4,822	1,397	1,075	855	641	7,540	2,420	2,291	1,343	1,060
	4,431	1,476	1,521	1,034	400	6,156	1,663	1,929	1,517	626
	29,028	4,350	4,823	9,383	10,472	48,660	6,087	7,091	18,058	17,424
	3,830	1,127	660	1,445	469	5,622	1,882	1,091	1,577	1,073
	330	231	10	71	12	455	341	6	87	20
	28,082	3,597	3,192	13,953	6,548	43,007	5,599	4,355	22,872	9,618
	8,621	7,063	24	544	879	12,793	11,005	39	615	1,126
	454	182	14	43	20	322	211	50	37	21
	1,869	967	420	215	230	2,893	1,490	642	354	399
	3,809	1,660	986	761	394	7,162	2,866	2,037	1,301	942
	1,323	467	413	104	334	1,363	508	505	106	242
	456	307	107	26	14	776	537	162	41	34
	31,610	7,512	7,617	7,380	9,101	53,535	11,332	12,556	12,655	16,204
	10,367	2,148	3,977	2,064	1,446	17,618	3,973	7,097	3,331	3,116
	103,008	57,175	2,782	9,539	10,108	133,717	88,874	1,417	13,351	11,661
	1,711	751	287	299	336	2,275	1,071	342	387	422
	11,883	1,581	1,720	2,805	5,004	21,544	3,324	3,076	4,664	10,480
	8,731	1,363	1,713	2,301	3,335	12,762	1,896	2,274	3,792	4,774
	668	579	24	59	6	n.a.	n.a.	n.a.	n.a.	n.a.
	2,506	1,774	145	24	2	n.a.	n.a.	n.a.	n.a.	n.a.
	14,573	4,477	793	3,040	5,556	17,927	6,460	1,071	3,450	6,741

ANNEX TABLE 2.3

Factor Use in Imports by Country in the Region, 1996, 2000, and 2003

Country	Import value (\$ millions)				
	1996				
	Total imports	Natural-resources intensive	Unskilled-labor intensive	Capital-intensive	Skilled-labor intensive
Albania	921	461	127	201	132
Armenia	645	404	36	139	66
Azerbaijan	949	472	44	237	196
Belarus	8,282	3,541	533	2,320	1,888
Bulgaria	4,841	2,571	471	1,123	676
Croatia	7,434	2,331	1,163	2,184	1,756
Czech Rep.	27,760	6,679	3,254	11,043	6,784
Estonia	2,997	777	486	902	832
Georgia	687	529	30	87	41
Hungary	15,795	4,412	2,208	5,628	3,547
Kazakhstan	4,181	1,571	235	1,193	1,182
Kyrgyz Rep.	838	452	30	240	116
Latvia	1,998	594	292	624	488
Lithuania	4,448	1,749	468	1,143	1,088
Macedonia, FYR	1,585	555	310	367	353
Moldova	1,070	575	88	248	159
Poland	36,338	9,425	4,885	13,512	8,516
Romania	10,900	4,015	1,720	3,478	1,687
Russian Fed.	41,950	15,311	3,705	14,488	8,446
Serbia & Montenegro	3,828	1,457	484	1,087	800
Slovak Rep.	9,328	2,789	875	3,216	2,448
Slovenia	9,397	2,431	1,346	2,961	2,659
Tajikistan	0	n.a.	n.a.	n.a.	n.a.
Turkmenistan	1,170	378	70	490	232
Ukraine	16,465	10,032	876	3,505	2,052

Source: IMF balance of payments statistics.

Note: n.a. = not available.

Import value (\$ millions)										
	2000					2003				
	Total imports	Natural-resources intensive	Unskilled-labor intensive	Capital-intensive	Skilled-labor intensive	Total imports	Natural-resources intensive	Unskilled-labor intensive	Capital-intensive	Skilled-labor intensive
	1,089	492	177	203	217	1,864	799	306	374	385
	750	433	45	180	92	1,164	725	76	203	160
	1,172	375	98	472	227	2,626	761	319	823	723
	8,133	4,125	508	2,081	1,419	10,599	4,995	735	2,951	1,918
	6,153	2,479	894	1,584	1,196	9,198	2,106	1,861	2,936	2,295
	7,884	2,341	1,219	2,236	2,088	13,791	3,340	2,177	4,295	3,979
	32,231	7,243	3,686	13,306	7,996	51,227	9,967	5,650	21,920	13,690
	4,743	1,015	570	2,060	1,098	7,944	1,952	914	2,691	2,387
	578	233	44	205	96	1,133	447	72	325	289
	30,379	4,241	3,229	15,471	7,438	46,268	7,161	4,631	23,814	10,662
	4,743	1,119	286	1,937	1,401	8,396	2,065	629	3,117	2,585
	557	224	27	227	79	716	322	69	180	145
	2,954	754	447	961	792	5,242	1,492	746	1,582	1,422
	5,311	2,100	740	1,394	1,077	9,649	3,041	1,536	2,754	2,318
	1,565	668	104	414	379	1,851	785	133	504	429
	669	291	102	182	94	1,398	604	207	326	261
	48,833	11,864	5,916	18,993	12,060	67,097	14,508	9,526	24,673	18,390
	12,766	3,674	2,658	4,405	2,029	23,942	6,687	4,875	7,389	4,991
	29,269	10,631	2,339	10,992	5,307	52,101	15,347	4,345	19,544	12,865
	2,919	854	288	966	811	5,975	2,181	550	1,853	1,391
	12,664	3,847	1,389	4,231	3,197	22,170	5,269	2,593	7,662	6,646
	10,100	2,707	1,285	3,347	2,761	13,837	3,544	1,688	4,706	3,899
	555	234	11	273	37	0	n.a.	n.a.	n.a.	n.a.
	1,658	283	121	725	529	0	n.a.	n.a.	n.a.	n.a.
	12,265	6,785	804	2,992	1,684	16,751	8,911	1,007	4,072	2,761

ANNEX BOX 2.1

Methodology for Decomposing Factors Affecting Trade Performance

GATT (1966) lays down the methodology for the decomposition of factors affecting trade performance between demand and competitive factors:

- **The influence of demand** for a specific product can be measured by the change in the total (global) value of regional imports of the item. In calculating the influence of this factor, one assumes that a given country maintains its regional trade share for the commodity. Specifically, if $D_{o,j}$ and $D_{t,j}$ represent regional trade in product j , at time period o and t , respectively, the change in a specific country's exports attributed solely to demand $DE_{d,i}$ is

$$\Delta E_{d,i} = \sum (s_{o,j}) \times (D_{t,j} - D_{o,j})$$

where $s_{o,j}$ is the share of country i in regional imports of product j (defined at the four-digit level of the Revision 2 SITC) from all countries in the base period o , and the summation is over all goods traded.

- **The change in the competitive position** of country i is measured by the difference between the exports that would have occurred if the country's market share had not changed and those regional exports that were in fact realized. This competitive factor ($\Delta E_{c,i}$) is

$$\Delta E_{c,i} = \sum (s_{t,j} - s_{o,j}) (D_{t,j})$$

where $s_{t,j}$ is the share of the country in regional imports of the product in period t , and the summation is over all goods imported.

- Any differences between changes in a country's total exports and the sum of these two "demand" and "competitive" factors are the result of **product diversification**.

An illustrative example may help explain this approach. Assume country i exports one product j and has a 20 percent share of the regional markets with exports of \$20 million in 1996 and a 25 percent share with exports of \$37.5 million in 2003. During this period regional demand for j rose from \$100 to \$150 million. The change in i 's exports attributed solely to changes in demand would be $\Delta E_{d,i} = .20(\$150 - \$100) = \$10$ million; while the change resulting from the competitive factor is $\Delta E_{c,i} = (.25 - .20) \times \$150 = \$7.5$ million. This example assumes that the country experiences no diversification in its exports.

Source: Ng and Yeats 2003.

Endnotes

1. Trade and investment in the services sectors and the regulatory regimes governing them are discussed in greater detail in chapter 7.
2. These concentration indexes are based on those typically used in the field of industrial organization when measuring product market concentration. The Hirschman index is defined as $H_j = \sqrt{(\sum(x_i/X)^2)}$ where x_i is the value of exports of commodity i (normally defined at the four-digit SITC level) and X is the total value of country j 's exports; see Ng and Yeats (2003).
3. If exports are concentrated in goods with low income elasticities of demand, export prospects are likely to be limited (Ng and Yeats 2003).
4. For an earlier related analysis, see Macbean (1966); Labys and Lord (1990) stress the need for many developing countries to diversify their exports.
5. The import share of the CIS may be exaggerated by trade deflection; see Freinkman et al. (2004).
6. Trade openness is calculated using GDP in purchasing power parity (PPP).
7. Although the direction of causality is unclear. See Kormendi and Meguire (1985), Fischer (1991), Dollar (1992), Edwards (1993), Harrison (1996), and Rodrik et al. (2002).
8. We note the likely critical role of institutional and policy factors as determinants of trade performance *apart from* income. Indeed, our estimation methodology employs an approach that uses institutional variables to combat endogeneity problems; see below.
9. In order to combat apparent endogeneity between the measures of openness and GDP, an instrumental variables estimator (two-stage least squares) was used. GDP was instrumented by the following variables: infant mortality rate (per 1,000 live births); telephone lines (per 1,000 people); and the Heritage Foundation Index (HFI) of Economic Freedom as a proxy for policy and institutions (ranging from 1 to 5; the higher the HFI value, the lower the economic freedom in a country). All 149 countries for which trade and income data are available from the World Development Indicators database have been included in the pool. The model was estimated on the averages for 1994–2003. In addition, dummies for regional country groupings were included as independent variables. Since the dummy for Sub-Saharan Africa has been insignificant in all specifications, the table presents specifications without the Sub-Saharan Africa dummy.
10. This interpretation derives from the fact that across Models 1, 2, and 3, the estimated coefficients on all of the “dummy” variables depicting the Region—except for SEE in Model 3—are never statistically significant.
11. In contrast, the results suggest that the East Asian countries tend to overtrade.
12. These results are in line with earlier statistical analysis of the determinants of openness for the CIS countries alone by Freinkman et al. (2004). Statistical analysis carried out by the EBRD (2003) on most of the Region's countries yields roughly similar conclusions to those of this study with respect to the CIS and SEE countries. However, the EBRD analysis does not find evidence of overtrading by the EU-8.

13. See Bergstrand (1985), Helpman and Krugman (1985), Deardorff (1997), and Feenstra et al. (2001) for different theoretical justifications of the gravity model.
14. See Wang and Winters (1991), Hamilton and Winters (1992), Baldwin (1994), Piazzolo (1996), Frankel (1997), EBRD (2003), and Freinkman et al. (2004).
15. The applied gravity equation is the following (with standard errors in parentheses):

$$\begin{aligned} \log(T_{ij}) = & -12.146 + 0.930 \log(GNP_i GNP_j) + 0.128 \log(GNP/pop_i GNP/pop_j) \\ & (0.469) (0.018) \qquad (0.019) \\ & -0.770 \log(Dist_{ij}) + 0.445 (Adj_{ij}) + 0.768 (Lang_{ij}) + \gamma(Bloc_{ij}) \\ & (0.038) \qquad (0.157) \qquad (0.090) \\ & + u_{ij}, \end{aligned}$$

where T_{ij} is the trade turnover between countries i and j (that is, exports from country i to country j plus imports of country i from country j), GNP is Gross National Product, GMP/pop is per capita GNP, $Dist$ is the great circle distance between the main commercial centers (countries' capitals, with a few exceptions), Adj is the adjacency dummy (equals one for adjacent countries and zero otherwise), $Lang$ is the language dummy (equals one for countries sharing the same language), $Bloc$ is the bloc dummy (equals one for countries in the same trading bloc), and u_{ij} is the error term.

16. The following abbreviations are used in table 2.17: Arm = Armenia; Azr = Azerbaijan; Bel = Belarus; Geo = Georgia; Kaz = Kazakhstan; Kyr = Kyrgyz Republic; Mol = Moldova; Rus = Russian Federation; Taj = Tajikistan; Trm = Turkmenistan; Ukr = Ukraine; Uzb = Uzbekistan; CZ = Czech Republic; Est = Estonia; Hu = Hungary; Lat = Latvia; Lit = Lithuania; Pol = Poland; Slk = Slovak Republic; Slv = Slovenia; Alb = Albania; BH = Bosnia and Herzegovina; Bul = Bulgaria; Crt = Croatia; Mac = Macedonia, FYR; Rom = Romania; SM = Serbia and Montenegro.