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Trade Performance and Regional Integration of the CIS Countries

Lev Freinkman
Evgeny Polyakov
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Abstract

The study provides a detailed quantitative analysis, based on standard econometric models, of the trends and the configuration of trade of the CIS countries, with an emphasis on its low-income members. It also contains an analysis of the CIS countries' trade potential and its realization in a comparative perspective, as well as examination of the nature of the existing CIS intra-bloc trade.

The study revealed no evidence that the CIS countries as a group underperform significantly in terms of either trade openness or export levels when compared to the countries of similar per capita GDP and population size. This means, however, that the low-income economies in the CIS (CIS-7) have been performing on average just marginally better than other low-income countries and that, overall, they have been falling behind the countries that benefit most from globalization.

Overall, progress in the trade area was slower in the CIS-7 countries than in the higher income CIS members. This is reflected in: (i) lower overall export levels and slower export growth in the second half of the 1990s; (ii) higher trade deficits; (iii) lower share of manufacturing exports; (iv) incomplete re-orientation of trade flows from the CIS to global markets; and (v) lower incidence of intra-industry trade.

The study found that the CIS free trade area is, on balance, a beneficial, trade-facilitating bloc. It features a free trade regime, agreements on mutual recognition of standards, and non-restrictive rules of origin. There is no evidence so far that the CIS integration is of the "South-South" type and thus may be harmful for some of its members. However, the potential benefits of CIS trade integration remain badly underutilized. The study suggests several directions for strengthening the legal and administrative framework for intra-CIS trade arrangements.

PREFACE

The impetus for this study stems from the fact that weak export performance is the indicator of lagging economic restructuring in low-income CIS countries. This study's main objective is to develop a set of trade policy recommendations for the CIS as a trading bloc based on:

- A detailed quantitative analysis of the trends and the configuration of trade of the CIS countries, with an emphasis on its low-income members;
- An analysis of the CIS countries' trade potential and its realization in a comparative perspective. This analysis includes the geographical dimension and is based on the model of openness and the gravity model; and
- An examination of the CIS countries' existing regional trade arrangements, their developmental impact, and ways to improve the CIS trade arrangements.

This study is related to the continuing trade work of the World Bank in the ECA region, such as ongoing or recently completed Trade Diagnostic Studies for the CIS-7 countries (country studies for Armenia, Azerbaijan, Georgia, Kyrgyz Republic, and Moldova) and the completed study on the integration of the CIS-7 countries in the world trading system (Michalopoulos 2002). The focus of this report is different from those studies, however, in that it focuses on regional trade integration and the CIS as a trading bloc.

The report builds on existing work on CIS trade[1] and takes into account the literature on regionalism.[2] As Krugman (1993) pointed out, the contemporary theory of trading blocs is complex and rather ambiguous, and a reasonable way of moving forward would be to advance a detailed empirical study. This study applies a stronger quantitative basis than was previously possible, including an array of trade indicators, indices, and models. It uses an improved dataset based on the recently enhanced CIS trade coverage, as well as on the results of the study's fieldwork. The report examines recent developments and trends (especially those that emerged after the 1998 Russia crisis) in regional trade, covers the main themes of regionalism in a consistent manner, and examines new facets of the regional trade policy agenda.

In contrast to several earlier studies of CIS trade which focused on comparisons of trade flows before and after the collapse of the former USSR, this report intends to analyze developments in intra-CIS trade during the 1990s by comparing them with trade developments in countries that are fundamentally similar to the former Soviet republics. This helps to avoid a major weakness of the earlier studies, which was related to the analysis of data that were not fully comparable, as they were the product of different statistical reporting/monitoring systems.

We seek qualified and data-supported answers to such questions as:

- How does the CIS trade performance compare with that of developing countries with similar characteristics?
- What changes have occurred recently in the trade geography of the CIS countries: Do they continue to over-trade with each other and undertrade with the rest of the world?
- What is the nature of the CIS intra-bloc trade: Do the CIS countries benefit from intra-industry specialization with increasing returns to scale?
- Is there any evidence that the CIS integration is of the "South-South" type and thus may be harmful for some of its members?

1. Such as Belkindas and Sagers (1990), Bradshaw (1993), Michalopoulos and Tarr (1994, 1996, 1997), Kaminski et al. (1996), Webber (1997), Havrylyshyn and Al-Atrash (1998), Kandogan (1999), Roberts and Wehrheim (2001), Djankov and Freund (2002).

2. Such as Helpman and Razin (1991), Krugman (1991a, 1991b, 1993), Frankel (1997), Baldwin (1997), Bhagwati etal. (1999), and Baldwin et al. (1999).

The report was prepared by Lev Freinkman (Task Team Leader), Evgeny Polyakov, and Carolina Revenco (ECSPE). Samuel Otoo was the Sector Manager. Cheryl Gray was the Department Director. Olga Pindyuk provided research assistance. Usha Rani Khanna assisted with editing the paper. The national statistical agencies of Armenia, Moldova, and the Kyrgyz Republic, and the World Bank Country Offices in Ukraine (Valery Gladkiy) and Uzbekistan (Sayyora Umarova) supplied the data. The team is grateful for comments and suggestions received from Bartek K. Kaminski, Beata Smarzynska, Paul Brenton, Jeffrey Lewis, Jakob von Weizsacker, Ali Mansoor, Marina Bakanova, Constantine Michalopoulos, and David Tarr.

Acronyms and Abbreviations

ASEAN	Association of Southeast Asian Nations
CEE	Central and Eastern Europe
CIF	Cost, Insurance, and Freight
CIS	Commonwealth of Independent States
EBRD	European Bank for Reconstruction and Development
EFTA	European Free Trade Agreement
ESI	Export Specialization Index
EU	European Union
FDI	Foreign Direct Investment
FOB	Free on Board
FTAs	Free Trade Agreements
GDP	Gross Domestic Product
GOST	The Soviet System of Standards
HS	Harmonized System
IMF	International Monetary Fund
ISO	International Standards Organization
LDCs	Least Developing Countries
MFN	Most Favored Nation
NAFTA	North American Free Trade Agreement
OECD	Organization for Economic Cooperation and Development
PPP	Purchasing Power Parity
RCA	Revealed Comparative Advantage
SITC	Standard International Trade Classification
TIR	Transports Internationaux Routiers International Road Transport Convention
UN COMTRADE	United Nations Statistical Division Commodity Trade
USSR	Union of Soviet Socialist Republics
WITS	World Integrated Trade Solutions
WTO	World Trade Organization

CHAPTER 1

TRADE PORTRAIT AND PERFORMANCE OF THE CIS BLOC[3]

Poor Quality Of Trade Data Or Trade Deflection?

This report makes extensive use of the UN COMTRADE database (see Box 1.1) as well as national statistics of the CIS members. The commonwealth of independent states (CIS) countries have recently improved their reporting to the UN COMTRADE. Data for most CIS countries for the period from 1996–2000 became available recently in two international classifications, the Harmonized System and Standard International Trade Classification (SITC). Nevertheless, a number of CIS countries fail to provide the UN with trade data for some years or do not report at all. In the course of the study, we conducted an extensive trade data compilation exercise involving national statistical agencies and the World Bank country offices in a number of CIS countries. The report's focus is exclusively on merchandise trade, while trade in services remains outside of the analysis.

The available data for CIS members have two apparent deficiencies. One is the unavailability of consistent price (unit value) data. A major limitation of the data set used in this report is the lack of consistent information on unit values of the trade flows of the CIS countries. Therefore, the impact of changing international prices on the structure and volume of trade cannot be evaluated. For example, the surge of energy exports is clearly reinforced by the rising price of oil and energy. Another example is the rising unit values in the intra-CIS trade, as at the outset of

3. Throughout the paper, we will discriminate between two groups of countries in the CIS. One is CIS-7 composed of low-income countries with IDA status. This group includes Armenia, Azerbaijan, Georgia, Kyrgyz Rep., Moldova, Tajikistan, and Uzbekistan. The other group, here called the Central CIS, includes four CIS countries—Belarus, Kazakhstan, Russia, and Ukraine. Turkmenistan is outside either group, as it may be viewed as a low-income Central Asian country from the geographic and the economic perspective, but its official level of per capita GDP is just outside the World Bank range for low-income countries eligible for IDA status.

Box 1.1: The UN COMTRADE Database

The United Nation Statistical Division Commodity Trade (UN COMTRADE) database contains exports and imports by commodity and partner country. Values are recorded in US dollars along with a variety of quantity measures. The database includes information for over 130 countries, some of which have been reporting these types of statistics to the United Nations since 1962. The data are recorded according to six internationally recognized trade and tariff classifications.

Source: The World Bank. The World Integrated Trade Solutions (WITS) database.

transition most prices within the CIS were very low in relation to international prices. Rising unit values in the intra-CIS trade translate into higher dollar volumes.

The other data deficiency is the limited timeliness. Trade data supplied by the CIS national authorities to international trade database administrators are subject to long delays. For instance, the modestly reliable data encompassing most of the CIS countries available in early 2003 refer to the year 2000. The 2001 data are quite unreliable; many data for that year available in international databases are, in fact, estimates made under strong assumptions (i.e., the data in the IMF Direction of Trade Statistics). Nevertheless, this data delay does not devalue the analysis of this report. Recent trends in, and the fundamental characteristics of, the CIS countries' international trade that developed after the 1998 Russia crisis became fully established by 2000 and are continuing today without major changes.

CIS trade statistics are known to have many flaws that are not just small and random errors, but persistent problems in the recording of international transactions. Weak control over borders or, in the case of some countries, the lack of control over parts of the territory result in smuggling and, therefore, in the under-recording of trade flows. Widespread corruption among the border agencies can also influence the quality of trade data through flawed imports evaluation that introduces a bias toward the under-valuation of imports. Intense pressure applied on the governments by the importers opposing introduction of the reshipment inspection indicates that the importers may incur significant losses with the introduction of more rigorous evaluation procedures.[4] In addition, before the Russia crisis, a considerable proportion of intra-CIS trade was conducted through barter arrangements at below market prices.

Mirror statistics can provide some insight into the degree of trade data distortion. Table 1.1 presents the ratio of imports (as reported by the importer) divided by exports (as reported by the exporter). For example, the ratio of 1.09 located at the intersection of the column for Russia and the row for Kazakhstan means that the imports of Kazakhstan from Russia, as reported by Kazakhstan, were 9 percent higher than the exports of Russia to Kazakhstan, as reported by Russia.

Table 1.1 has two panels—one for total trade and the other for non-energy trade. The reason for this dual presentation is the systemic problems with Russia's under-reporting of its energy exports to the CIS countries. The problems are especially serious with the exports of natural gas, which renders the overall estimates of Russian energy exports (HS 27) to be unreliable.

One important note about the CIS trade statistics is that imports are recorded in CIF prices while exports are recorded in FOB prices. The difference between the two valuations equals transportation and insurance costs; therefore, the ratio should be greater than one. If both the destination and the origin country are correctly recording the trade flows, the index should range somewhere between 1.05 and 1.20, depending on the commodity structure of trade and the transport costs for major exports. The table, nevertheless, contains a large number of entries

4. The difficult fate of the pre-shipment inspection in such countries as Moldova and Georgia illustrates powerful vested interests benefiting from the status quo.

TABLE 1.1: QUALITY OF TRADE DATA, 2000

Imports of country *i* originating in country *j*, as reported by the importer, divided by exports of country *i* to *j*, as reported by the exporter.

Total Exports/Imports

		EXPORTERS												
		Armenia	**Azerbaijan**	**Belarus**	**Georgia**	**Kazakhstan**	**Kyrgyzstan**	**Moldova**	**Russia**	**Tajikistan**	**Turkmenistan**	**Ukraine**	**Uzbekistan**	**Avg.by row**
	Armenia			..	1.35	..	..	..	4.60		0.71	0.99	..	1.91
I	Azerbaijan			1.04	0.49	1.22	1.92	..	1.83	..	0.26	0.97	..	1.10
M	Belarus	..	5.51		..	2.75	1.72	1.58	1.00	1.65	..	1.25	2.01	2.18
P	Georgia	0.85	0.74	..		1.27	..	..	2.17	..	0.90	0.94	0.25	1.02
O	Kazakhstan	0.93	1.49	2.04	1.10		0.63	1.56	1.09	0.97	8.31	1.04	0.73	1.81
R	Kyrgyzstan	..	1.69	1.22	..	1.15		..	0.98	1.40	0.31	0.95	0.91	1.08
T	Moldova	..	..	0.83	..	2.60	..		0.57		..	0.60	..	1.15
E	Russia	1.08	1.37	1.01	1.10	1.23	1.13	1.56		0.92	0.46	1.05	1.21	1.10
R	Tajikistan		3.22	0.97	..	1.58	0.72	..	1.86		1.01	0.87	1.84	1.51
S	Turkmenistan	3.60	4.45	1.18	0.96	2.65	1.49	15.83	1.96	1.41		1.44	0.20	3.20
	Ukraine	1.08	1.01	1.08	0.94	1.54	1.46	1.07	1.16	..	5.74		1.16	1.62
	Uzbekistan	4.60	4.01	2.49	..	1.55	1.82	1.21	1.69	0.20	3.04	1.57		2.22
	Avg.by column	2.03	2.61	1.32	0.99	1.75	1.36	3.80	1.72	1.09	2.30	1.06	1.04	

Non-energy Exports/Imports

		EXPORTERS												
		Armenia	**Azerbaijan**	**Belarus**	**Georgia**	**Kazakhstan**	**Kyrgyzstan**	**Moldova**	**Russia**	**Tajikistan**	**Turkmenistan**	**Ukraine**	**Uzbekistan**	**Avg.by row**
	Armenia			..	1.47	..	..	..	1.51		..	0.71	..	1.23
I	Azerbaijan			1.04	0.49	1.18	0.80	..	1.76	..	0.95	0.97	..	1.03
M	Belarus	..	5.65		..	2.73	3.12	1.58	1.01	1.65	..	1.27	2.01	2.38
P	Georgia	0.62	0.92	..		1.75	..	..	1.19	..	0.94	0.91	0.18	0.93
O	Kazakhstan	0.93	1.52	2.04	1.10		0.92	1.56	1.23	1.01	2.28	1.04	0.36	1.27
R	Kyrgyzstan	..	1.26	0.94	..	0.83		..	1.27	..	..	1.14	1.26	1.12
T	Moldova	..	..	0.69	..	..	..		0.57		..	0.42	..	0.56
E	Russia	1.08	1.71	1.01	1.10	1.41	1.37	1.56		0.92	1.32	1.04	1.24	1.25
R	Tajikistan	..	3.23	0.97	..	1.39	0.81	0.24	1.75		..	0.84	0.72	1.24
S	Turkmenistan	3.62	4.45	1.18	0.96	2.65	1.68	15.83	1.96	1.41		1.44	0.22	3.22
	Ukraine	1.08	1.41	1.00	0.94	1.32	2.12	1.07	1.25	0.48	0.70		0.62	1.09
	Uzbekistan	..	4.11	2.49	..	1.49	0.55	1.21	1.69	1.74	3.32	1.58		2.02
	Avg.by column	1.47	2.70	1.26	1.01	1.64	1.42	3.29	1.38	1.20	1.58	1.03	0.83	

Source: WITS COMTRADE; National statistics for Uzbekistan.

outside of the above range. Only 13 percent (for total exports and imports) and 16 percent (for the non-energy exports and imports) of the non-zero indices in the table fall into the interval between 1.05 and 1.20. However, these indices represent over a half of total trade flows.

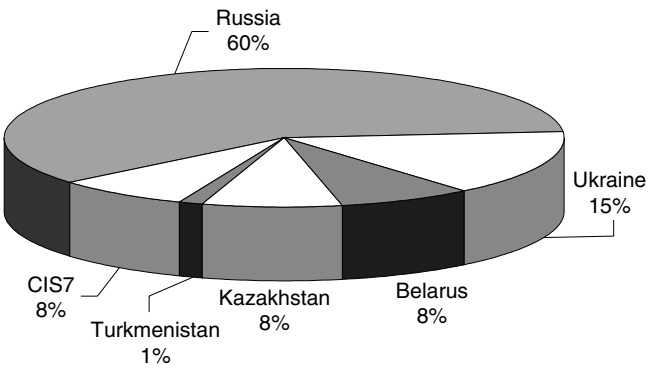
In some cases, the data discrepancies stem from a lack of control of the central governments over secessionist territories. Thus, the Moldavian and Georgian official trade statistics miss a significant portion of trade flows that originate in the secessionist regions, which are recorded by their trading partners as being of Moldavian or Georgian origin. Therefore, in the case of these two countries, large differences in trade data are explicable. However, in the remaining countries, other factors must be at work, which mask accurate trade flows.

First, the immediate conclusion is that the quality of trade statistics in the CIS countries is quite poor, since a very low percentage of observations fall into the "expected" range. A closer examination reveals that "abnormal" values appear mostly in the CIS-7 countries and Turkmenistan. Flows within the central CIS—Russia, Ukraine, Belarus and Kazakhstan (with the exception of small Belarus-Kazakhstan trade)—generally fall into the "expected" range, which may indicate that these countries (which are larger and more affluent) have a better capacity for recording and evaluating external transactions. Since the central CIS economies account for 92 percent of the overall intra-CIS trade (Figure 1.1), the analysis of trade performance based on the existing statistics does not produce a distorted picture for the region as a whole. The caveat is, however, that the results of analysis of over- or under-trading for individual CIS-7 countries are less robust owing to problems with the quality of these trade data.

Second, the CIS-7 and Turkmenistan trade flows exhibit large divergences with the data recorded by their trading partners. A number of explanations are possible: weak border control, a lack of control over parts of territories (in the case of Moldova and Georgia), poor customs procedures and evaluation techniques, government meddling in official statistics (in the case of Turkmenistan and Uzbekistan) and, possibly, a greater impact of corruption in the low-income CIS countries.

Third, imports from three countries—Russia, Kazakhstan, and Azerbaijan—as reported by the low income CIS countries are significantly higher than reported exports, while no large distortions are noticeable in the Russian and Kazakh imports from these countries. For example, Armenian non-energy imports from Russia are 51 percent higher than Russian exports to Armenia, while Russian imports from Armenia are only 8 percent higher than Armenian exports—a difference that can well be attributed to transportation costs. The same is true for Russian trade with Azerbaijan,

FIGURE 1.1: COMPOSITION OF THE CIS TRADE FLOWS, 2001 COUNTRIES



Source: Authors' calculations.

TABLE 1.2: INTRA-CIS EXPORTS MINUS IMPORTS

	1997	2001	2002
CIS			
Exports minus imports, US$ million	–3,056	–4,464	–3,686
Ratio of exports minus imports to merchandise exports, %	9.0	18.6	12.5
CIS without Russia			
Exports minus imports, US$ million	–1,463	–1,273	–1,153
Ratio of exports minus imports to merchandise exports, %	30.6	26.8	24.9

Source: Authors' calculations.

Georgia, Tajikistan, and Uzbekistan. It seems that import statistics in the CIS-7 are more distorted than export statistics, which is unusual, because imports, not exports, are subject to taxation[5] and thus are supposed to be better recorded (Kaminski and Rocha 2002).

We would like to offer a possible explanation for this effect. Geographically, Russia and Kazakhstan connect other countries in the region with Europe and the Far East. Also, due to their large economic size and economies of scale, Russia and Kazakhstan (for Central Asia) serve as regional distribution centers that service the smaller economies of the region. However, after transit through Russia or Kazakhstan, goods face a risk of misspecification of the country of origin. There is a powerful incentive for such a misspecification, because Russian exports enjoy duty-free access to the CIS markets (in instances where the bribes offered for forging the certificate of origin are much lower than the applied tariff rate). Anecdotal evidence from some countries (e.g., Armenia and Moldova) suggests that such a practice is largely used for the imports of third country cars that are registered at the border as imports from Russia. This explanation, however, does not apply to Azerbaijan, which is not a transit country. Plain under-reporting by Azerbaijani exporters probably explains this situation; there is anecdotal evidence suggesting that powerful business and political groups, which do not disclose the true volumes of exports, control the main Azerbaijani exports.

Table 1.2 presents aggregate intra-bloc trade balance for CIS countries (exports minus imports of CIS countries in their trade with each other). By definition, this balance should equal zero (minus transport costs, which would be about 5–10 percent of intra-bloc exports). However, the total balance was 18.6 percent of total exports in 2001 falling to 12.5 percent the next year. If we remove Russia (the major transit country) from the sample, the imbalance becomes even higher: intra-CIS imports exceed exports by 24.9 percent in 2002. These data further support the hypothesis of trade deflection.

To conclude, the analysis of mirror statistics suggests that, besides the poor quality of the CIS-7 trade data, there are some indications of the deflection of trade flows to the CIS countries via Russia and Kazakhstan.

Overall Trade Performance

Table 1.3 presents the overall trade performance of the CIS members for 1991–2000. For the entire period 1991–2000, the total intra-CIS exports declined by 81 percent, while the extra-CIS exports almost doubled. Total exports from the CIS in 2000 are estimated to be about one-third lower than in 1991, that is, the reorientation of exports outside of the CIS, therefore, did not

5. All CIS countries are on the destination principle of value added taxation, except for Russian exports of oil and oil products, which pay VAT both at origin and destination thus leading to double taxation of exports. Also, energy and some other Russian exporters pay export tax.

TABLE 1.3: TRADE INDICES OF THE CIS MEMBERS (1993 = 100)

	Merchandise Exports				Merchandise Imports			
	1991	1997	2000	2000/97	1991	1997	2000	2000/97
CIS-7								
Armenia	1667	133	183	1.38	1667	350	350	1.00
Intra-CIS	2000	38	38	1.00	2000	180	100	0.56
Extra-CIS	227	534	868	1.63	909	682	818	1.20
Azerbaijan	909	100	227	2.27	909	127	182	1.43
Intra-CIS	1667	55	36	0.67	1250	88	88	1.00
Extra-CIS	91	53	200	3.75	333	183	330	1.80
Georgia	769	54	77	1.43	714	164	107	0.65
Intra-CIS	833	167	167	1.00	667	87	60	0.69
Extra-CIS	303	153	288	1.88	909	373	236	0.63
Kyrgyz Rep.	1000	160	130	0.81	833	158	125	0.79
Intra-CIS	1429	150	100	0.67	909	127	91	0.71
Extra-CIS	41	372	389	1.05	500	245	230	0.94
Moldova	1000	190	100	0.53	769	192	123	0.64
Intra-CIS	1429	200	86	0.43	909	136	55	0.40
Extra-CIS	87	160	118	0.74	333	313	287	0.91
Tajikistan	588	206	218	1.06	417	142	129	0.91
Intra-CIS	1429	300	400	1.33	667	187	213	1.14
Extra-CIS	122	436	379	0.87	167	98	42	0.42
Uzbekistan	476	181	143	0.79	526	189	142	0.75
Intra-CIS	667	233	133	0.57	833	92	75	0.82
Extra-CIS	90	310	279	0.90	139	319	236	0.74
Central CIS								
Belarus	909	364	364	1.00	667	347	340	0.98
Intra-CIS	1429	229	193	0.84	1000	400	410	1.03
Extra-CIS	208	161	244	1.52	175	258	223	0.86
Kazakhstan	303	200	282	1.41	357	111	132	1.19
Intra-CIS	500	143	117	0.82	357	68	82	1.21
Extra-CIS	52	252	483	1.92	333	397	463	1.17
Russia	204	143	173	1.21	278	147	94	0.64
Intra-CIS	476	135	112	0.83	588	153	124	0.81
Extra-CIS	115	161	211	1.31	167	145	83	0.57
Ukraine	476	181	186	1.03	370	178	144	0.81
Intra-CIS	714	131	108	0.82	417	142	117	0.82
Extra-CIS	149	261	304	1.17	250	273	223	0.82
CIS total (weighted aver.)	286	154	183	1.19	357	164	125	0.76
Intra-CIS	625	150	121	0.81	588	147	129	0.88
Extra-CIS	114	171	226	1.32	182	171	115	0.67
Simple Averages:								
CIS total	755	174	189	1.09	683	191	170	0.89
Intra-CIS	1143	162	135	0.84	872	151	129	0.85
Extra-CIS	135	259	342	1.32	383	299	288	0.96
CIS-7	916	146	154	1.05	834	189	165	0.88
Intra-CIS	1350	163	137	0.84	1034	128	97	0.76
Extra-CIS	137	288	360	1.25	470	316	311	0.98
Central CIS	473	222	251	1.13	418	196	178	0.91
Intra-CIS	780	160	132	0.83	591	191	183	0.96
Extra-CIS	131	209	311	1.49	231	268	248	0.93

Note: Uzbekistan 2000 data refer to 1998.

Source: World Bank staff calculation based on *Ten Years of the CIS*. Statistical Abstract, The CIS Statistics Committee, Moscow, 2001: 63–64.

compensate for the decline in intra-CIS exports. It is important to note that the larger CIS countries, and Russia in particular, determine the overall CIS trade dynamics. However, these results are subject to one important caveat: Soviet and post-Soviet data are not fully compatible. The Soviet trade flows were valued in nonconvertible Soviet rubles and then converted into dollars using some artificial exchange rate. Attempts to re-evaluate the Soviet trade flows based on international prices produced unrealistically large estimates of the intra-republic exports/imports within the former Soviet Union.[6] Moreover, the applicability of these estimates as benchmarks is debatable, because the intra-republic trade was, in fact, planned deliveries of goods at artificial prices. The very concepts of supply and demand and of trade itself cannot be easily applied to these flows. Therefore, it is difficult to compare the volumes of planned deliveries within the USSR with the volumes of international trade that emerged after its dissolution.

The period under consideration falls into two parts—the initial shock caused by the breakup of the Soviet Union (1991–93) and consequent improvement in trade volumes punctuated by the Russia crisis of 1998. From 1991 to 1993, all CIS countries experienced a precipitous decline in trade caused by the shock of the dissolution of the USSR, the breakdown of the central planning system, and the introduction of national currencies. Total merchandise exports of the CIS countries declined by 65 percent between 1991 and 1993, and imports by 72 percent. Merchandise exports and imports within the CIS declined by 83–84 percent in the same period. Intra-republic flows within one country authorized by the central planners turned into international trade flows based on market or quasi-market principles, which triggered a shift toward a more natural direction of trade, and also gave rise to powerful border effects inhibiting trade flows. (See Michalopoulos and Tarr 1994 and 1996 for discussions of trade collapse in the wake of the breakup of the USSR.)

Since 1993, trade volumes have been steadily improving, with the exception for the period of the Russia crisis. Overall CIS exports increased by 54 percent in dollar terms from 1993 to 1997 (the latest year preceding the Russia crisis) and by another 19 percent from 1997 to 2000. A significant part of the pre-crisis surge can be explained by the recovery from the initial trade shock. (The recovery has not been complete, however.) Intra-CIS exports moved in line with overall exports before the Russia crisis but declined by 29 percent afterwards. The 1998 crisis greatly accelerated the restructuring of trade flows in the region owing to a significant real depreciation of most local currencies. During 1997–2000, the expansion of exports outside the CIS by 55 percent more than compensated for the decline of intra-CIS exports.

Overall, export performance of the CIS-7 countries was inferior to the rest of the CIS. In the period 1993–2000, three countries—Armenia, Azerbaijan, and Tajikistan—increased their exports roughly in line with the overall CIS trend while the rest lagged behind. At the same time, the exports of Georgia and Moldova did not recover from the 1993 slump. From 1993–97, the majority of the CIS-7 countries (with the exception of Georgia and Azerbaijan) showed a growth of exports (ranging from 33 percent in Armenia to 106 percent in Tajikistan). In the later period (1997–2000), four countries—Kyrgyz Rep., Moldova, Tajikistan, and Uzbekistan—decreased their overall exports while three countries—Armenia, Azerbaijan, and Georgia—registered an increase in exports.

On the import side, the CIS as a whole showed a modest increase for the period 1993–2000, with a slump after the Russia crisis. Intra-CIS imports grew slightly faster than total imports indicating a modest increase of the CIS share. The situation was quite different in the CIS-7. Except for Tajikistan, all CIS-7 countries registered a dramatic shift in imports to markets outside the CIS.

6. The 1990 estimates of intra-republic exports/imports within the former Soviet Union exceeded $300 billion each. Exports/imports to/from the rest of the world exceeded another $100 billion dollars in the same year (Brown and Belkindas 1992, Belkindas and Ivanova 1995). Thus, the total exports/imports stood at over $400 billion, which equals the GDP of all CIS countries combined in 2001.

TABLE 1.4: TRADE FLOWS AND BALANCES OF THE CIS ECONOMIES, 1988–2000 (AS PERCENT OF GDP)

	Exports of Goods and Services				Imports of Goods and Services				Balance			
	1988	1993	1997	2000	1988	1993	1997	2000	1988	1993	1997	2000
CIS	39.5	43.8	38.7	48.4	46.0	51.4	51.8	51.0	–6.5	–7.6	–13.1	–2.6
Turkmenistan	40.3	57.3	39.0	63.0	44.6	41.5	62.6	53.4	–4.3	15.8	–23.6	9.6
CIS-7	42.1	43.0	37.9	40.6	50.0	55.9	55.8	51.4	–7.9	–12.9	–17.9	–10.8
Armenia	54.7	47.2	20.3	23.3	70.8	60.8	58.3	50.8	–16.1	–13.6	–38	–27.5
Azerbaijan	54.4	57.4	29.0	40.7	45.5	75.9	53.0	38.4	8.9	–18.5	–24	2.3
Georgia	43.9	46.9	15.3	23.3	48.3	71.8	41.4	40.1	–4.4	–24.9	–26.1	–16.8
Kyrgyz Republic	32.1	33.5	38.3	41.8	46.2	41.2	46.2	47.6	–14.1	–7.7	–7.9	–5.8
Moldova	46.1	39.3	54.8	49.7	55.5	55.4	74.3	76.8	–9.4	–16.1	–19.5	–27.1
Tajikistan	30.8	n.a.	80.8	80.7	45.5	n.a.	87.7	84.7	–14.7	n.a.	–6.9	–4.0
Uzbekistan	32.6	33.7	27.0	24.6	38.4	30.5	30.0	21.5	–5.8	3.2	–3	3.1
Central CIS	34.7	41.7	39.9	58.4	39.4	47.0	42.1	49.7	–4.7	–5.3	–2.2	8.7
Belarus	62.0	67.6	59.9	67.8	55.5	83.4	65.7	69.3	6.5	–15.8	–5.8	–1.5
Kazakhstan	20.9	37.9	34.9	58.8	37.4	46.7	37.4	47.3	–16.5	–8.8	–2.5	11.5
Russia	20.2	35.5	24.1	44.5	26.8	31.6	21.5	24.1	–6.6	3.9	2.6	20.4
Ukraine	35.7	25.9	40.6	62.4	37.9	26.2	43.7	57.9	–2.2	–0.3	–3.1	4.5

Note: All averages are simple averages.

Source: Authors' estimates based on *World Development Indicators* and Belkindas and Sagers (1990).

Table 1.4 shows the dynamics of the CIS economies' openness (expressed as the shares of exports and imports in nominal GDP) in the decade following the collapse of the Soviet Union. It shows the general trend toward a greater openness of the CIS economies over the 1990s. At first sight, this result may look paradoxical, because these counties traded very extensively with each other during the Soviet period as a result of a common economy, subsidized transportation tariffs, and the policy of geographical dispersion of production within the USSR pursued by central planners. The primary explanation of the opening up of the CIS economies relates to the collapse of manufacturing industries during the transition. The production of raw materials, basic commodities, and energy did not experience as steep a decline as manufacturing; a larger share of the above goods was shifted from domestic consumption to international markets. The resulting decline in exports was less than the decline in gross output, hence the increase in openness. The latter effect was additionally strengthened by shifts in relative prices.

Despite this general trend towards openness for the CIS as a whole, it was less pronounced in the CIS-7. Only three countries among the CIS-7—Kyrgyz Rep., Moldova, and Tajikistan—increased the shares of both exports and imports in their GDP, while four economies—Armenia, Azerbaijan, Georgia, and Uzbekistan—became more closed.[7] All CIS countries, with the exception of Azerbaijan and Belarus, had trade deficits in 1988. In 2000, trade balance deficits were concentrated (with the exception of Belarus) within the CIS-7. Three countries in this

7. Considerable real appreciation of local currencies in most CIS members in 1993–1997 was an additional factor that compress the trade-to-GDP ratio in the region. Real appreciation helps to explain simultaneous growth in exports (Table 1.3) and decline in export shares in GDP (Table 1.4).

group—Armenia, Georgia, and Moldova—were consistently running trade deficits measuring in the double-digit percentages of GDP.

Withering of Manufactured Trade

The disintegration of the Soviet Union and the dismantling of central planning had a dramatic impact on production and trade of the Newly Independent States. Intra-CIS trade was now defined as international trade subject to the border effect and other international barriers to trade. Moreover, the pre-1992 inter-republic flows did not qualify as trade at all: as there were no markets, they were determined by the administrative decisions on the allocation of resources within the Soviet economy.

After the collapse of the Soviet Union, chaotic political, legislative and business developments and military conflicts did not provide a beneficial environment for the restructuring of enterprises, many of which went bankrupt. Enterprises in larger countries, such as Russia, reoriented their supply chains away from former republics and toward domestic production, seeking to reduce the various risks mentioned above. As a result, manufacturing industries in the smaller CIS countries suffered an even greater demand shock and a precipitous decline.[8]

Table 1.5 presents the 1988 and 2000 export composition by industry using the Soviet industrial classification. The composition of exports changed noticeably during the transition decade. The most marked trend is the decline in manufacturing trade, except for Belarus. Kazakhstan, Kyrgyz Rep., Russia, and Tajikistan registered the biggest drop in this share—more than 30 percentage points. Because, for most of the CIS, trade in absolute values in 2000 was much lower than in 1988, the decline in manufactured trade was even more dramatic than the one observed in the table if absolute values are considered. In addition to the demand shock, relative price change was a critically important factor behind the shifts in export composition. In 1988, energy and raw materials in intra-republic trade were severely under-priced relative to other sectors.

Trade in energy and raw materials experienced a boost and compensated for the decline in manufacturing trade. Of course, such a switch was possible only in the resource-rich countries. Azerbaijan, Kazakhstan, Russia, and Turkmenistan experienced an upsurge in oil and gas exports, accounting for about 40 percent of Russian trade and more than 50 percent in the case of the other three countries. Ukraine compensated for the decline in manufactures by an increase in iron and steel production that reached the 40 percent share. Tajikistan exports are dominated by aluminum. Uzbekistan, Kyrgyz Rep., and, to a lesser extent, Russia rely extensively on exports of gold, which, in the case of Kyrgyz Rep., accounted for 40 percent of total trade in 2000. Armenia managed to develop inward processing in its diamond cutting industry that cushioned the decline in the more traditional food, apparel, and machinery industries. Countries that do not possess energy or raw materials (for example, Moldova, Georgia, and, to a lesser degree, Kyrgyz Rep.) had to depend increasingly on agricultural exports, which are essentially their only natural resource.

Conclusion

Since the breakup of the USSR, the CIS countries witnessed a dramatic change in export composition, marked by a sharp decline in manufacturing exports and a shift toward exports of natural resources in oil, gas, and gold—universal commodities that can easily be sold on international markets. Because these industries employ a small fraction of the countries' work force, while manufacturing is labor intensive, the shift was marked by increased unemployment and severely reduced incomes. Countries that lack such resources also experienced a shift away from manufacturing towards exports of agricultural products, which, however, failed to arrest the higher decline of GDP in predominantly agricultural countries.

8. Avanessian and Freinkman (2003) use the example of Armenia to estimate the magnitude of the demand shock effect in the early 1990s.

Table 1.5: Export Composition by Sector (in percent)

	Armenia		Azerbaijan		Belarus		Georgia		Kazakhstan		Kyrgyzstan		Moldova		Russia		Tajikistan		Turkmenistan		Ukraine		Uzbekistan	
	1988	2000	1988	2000	1988	2000	1988	2000	1988	2000	1988	2000	1988	2000	1988	2000	1988	2000	1988	2000	1988	2000	1988	2000
Total	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Electric power	1	7	0	1	0	0	0	2	2	0	3	11	2	0	1	0	3	13	2	1	1	1	2	3
Oil and gas	0	0	17	56	8	1	2	4	10	50	0	0	0	0	17	39	1	0	28	60	2	1	6	7
Ferrous metals	1	4	2	0	1	4	6	17	11	14	0	0	1	0	7	7	0	0	0	0	17	41	1	1
Nonferrous metals	3	14	2	3	0	0	1	16	8	18	6	5	0	1	5	8	17	54	0	0	2	8	4	7
Chemicals and petrochemicals	11	4	9	30	13	33	5	13	11	4	1	4	4	2	11	16	4	1	6	21	8	13	8	5
Machinery	22	11	15	4	43	25	14	13	10	2	37	10	19	7	36	6	10	8	2	1	37	13	12	4
Light industry	40	5	23	2	19	13	22	1	17	1	26	7	22	20	8	1	49	16	50	15	6	5	44	41
Food industry	16	8	25	1	9	4	41	16	7	1	20	3	40	35	4	0	10	1	4	0	15	4	8	2
Wood, paper and pulp	1	0	0	0	2	4	1	3	0	0	0	0	2	1	7	4	0	0	0	0	1	3	0	0
Other industry	6	39	2	1	3	9	2	4	6	2	2	5	4	6	5	4	2	4	1	0	6	4	2	1
Agriculture	0	1	4	2	2	3	5	11	17	6	5	13	6	27	1	1	4	4	6	0	4	5	8	4
Other sectors	0	6	0	0	0	3	0	1	1	2	0	40	0	0	1	13	0	0	1	2	1	3	4	26
Memo: Manufacturing[1]	78	59	49	36	79	83	44	33	39	8	64	25	49	35	64	30	64	28	58	37	54	36	65	50

1/ Manufacturing includes chemicals and petrochemicals, machinery, light industry, wood, paper and pulp and does not fully correspond to the internationally accepted classification. Table 1.7 below presents data in the international classification.

Source: Vestnik Statistiki, No.3, 1990 for 1988 and authors own calculations for 2000 based on WITS COMTRADE.

Changing Geography of Trade

Since their independence, and owing to the subsequent trade liberalization, the CIS countries underwent an impressive reorientation of trade away from the CIS region. As can be seen from Table 1.6, at the end of the 1980s, the CIS countries were primarily trading with each other—about 80–90 percent of exports and 70–80 percent of imports went to/came from other republics. Russia was the only republic whose trade was less inward-oriented; only 68 percent of its exports and 51 percent of imports were inter-republican. The big adjustment in terms of the direction of trade took place immediately after independence, and by 1995, or only about three years into the transition period, the majority of countries were trading quite extensively outside of the CIS region. In the second half of the 1990s, exports and imports continued to shift away from the CIS, albeit slower. The process of trade diversification accelerated again in the late 1990s after the Russia crisis of 1998.

By 2001, the geography of CIS trade changed dramatically in comparison to the Soviet period. The countries also became less homogeneous with respect to the CIS market's share in their overall trade. Two countries, Belarus and Moldova, continued to export primarily to the CIS, which accounted for about 60 percent of their exports. At the other end, Azerbaijan and Russia had only 10 percent of their exports going to the CIS, while the majority of other CIS countries were in the 20–30 percent range. Imports followed a similar pattern, though, in general, CIS countries rely more heavily on the CIS region for imports than for exports. However, as noted above, the import share of the CIS may be exaggerated by trade deflection. Armenia and Russia are the only countries that receive less than 20 percent of imports from their CIS peers. At the same time, over 50 percent of imports of Belarus, Kazakhstan, Kyrgyz Rep., Tajikistan, and Ukraine originate in the CIS.

Russia was the single most dominant trading partner for the majority of the CIS countries both in terms of exports and imports. It accounted for over 70 percent of the total imports from the CIS in the case of Belarus, Kazakhstan, Moldova, and Ukraine and for over 50 percent for such countries as Armenia, Georgia, Tajikistan, and Uzbekistan. It plays a similarly important role as a destination for exports, because it is the biggest market among the CIS countries and also has the highest per capita income. Russia was consistently a net exporter to the majority of CIS countries, except for Georgia and Moldova. Almost half of all Russian exports to the CIS accounts for mineral fuel. In the case of the central CIS, trade deficits with Russia were quite significant both in absolute and relative terms while for the low-income CIS these were rather small (see Annex Table A2). However, Russia's positive trade balance with the CIS is entirely based on its energy exports. Russia had a deficit in non-energy trade with the CIS in the amount of $1.5 billion (or 30.5 percent of its non-energy exports to the CIS) in 2001.

Intra-CIS-7 trade is rather limited, which is not surprising taking into account the countries' geographical dispersion and the small sizes of their economies. For instance, Moldova, which is farthest from the other CIS-7 countries, traded extremely little with the other members of the group, while trade among the central Asian countries was more dynamic. Kyrgyz Rep. had the highest share of trade with the CIS-7 (about 19 percent), followed by Tajikistan (14 percent). For both countries, this is mostly owing to intense trading with Uzbekistan.

The non-CIS trade is quite diverse and largely depends on the geographical position of the CIS countries. For the Caucasus countries, Turkey and Iran have become very important trading partners; for the Central Asian countries, trade with China is on the rise, and the European CIS countries trade actively with Southeastern Europe. However, the EU members have become the most important trading partners for the majority of the CIS. The EU markets' share grew significantly throughout the 1990s. In 2001, the percentages stood in: the teens for Belarus, Turkmenistan, and Uzbekistan; the twenties for Armenia, Kazakhstan, Kyrgyz Rep., Moldova, Ukraine; the thirties and forties for Georgia, Russia and Tajikistan; and as high as 70 percent for Azerbaijan.

Table 1.6: Geographical Composition of Exports and Imports (in percent)

	Armenia				Azerbaijan				Belarus				Georgia				Kazakhstan				Kyrgyz Rep.			
	1988	1995	1997	2001	1988	1995	1997	2001	1988	1995	1997	2001	1988	1995	1997	2001	1988	1995	1997	2001	1988	1995	1997	2001
Exports	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Total CIS	98	48	40	30	94	39	48	10	91	63	73	60	93	63	60	23	91	55	46	24	98	73	52	48
CIS-7[1]		1	5	7		10	18	5		3	2	1		21	22	4		6	5	4		20	19	21
Russia		25	27	18		18	23	3		44	64	53		31	30	13		45	35	17		24	16	15
Other CIS		21	8	5		12	7	1		15	7	6		10	8	6		4	6	3		29	17	12
Non-CIS	2	52	60	70	6	61	52	90	9	37	27	40	7	37	40	77	9	45	54	76	2	27	48	52
EU		22	29	22		17	11	69		12	7	11		5	9	40		21	26	24		12	5	27
USA & Canada		0	3	13		0	0	1		1	1	1		0	2	6		1	2	3		0	3	1
China, Iran & Turkey		11	21	12		35	30	3		1	2	3		24	15	22		8	10	12		5	8	10
CEE[2]		0	0	1		2	2	1		17	9	18		4	5	2		5	3	1		9	4	2
Other		19	7	22		6	8	16		6	9	7		5	10	7		10	13	36		0	28	12
Imports	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Total CIS	82	48	34	17	75	34	44	31	79	69	67	70	80	40	36	27	83	70	54	51	79	69	61	53
CIS-7[1]		9	4	4		5	7	1		2	1	1		15	15	14		9	4	2		21	20	17
Russia		19	24	11		13	19	11		56	54	65		12	13	6		50	46	46		27	27	17
Other CIS		20	5	3		16	19	19		12	12	4		13	8	6		11	5	3		21	14	19
Non-CIS	18	52	66	83	25	66	56	69	21	31	33	30	20	60	64	73	17	30	46	49	21	31	39	47
EU		15	20	30		13	13	19		16	17	15		16	23	27		14	22	25		2	13	12
USA & Canada		16	14	9		2	3	16		2	2	2		4	13	12		2	5	3		2	6	7
China, Iran & Turkey		13	15	15		33	30	17		1	1	1		21	13	17		5	5	8		9	12	18
CEE[2]		2	4	3		5	3	2		8	8	6		16	8	9		3	5	3		0	2	3
Other		5	14	25		13	8	14		4	6	7		3	7	9		7	9	9		19	6	8

TABLE 1.6: GEOGRAPHICAL COMPOSITION OF EXPORTS AND IMPORTS (CONTINUED)

	Moldova				Russia				Tajikistan				Turkmenistan				Ukraine				Uzbekistan			
	1988	1995	1997	2001	1988	1995	1997	2001	1988	1995	1997	2001	1988	1995	1997	2001	1988	1995	1997	2001	1988	1995	1997	2001
Exports	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Total CIS	95	63	70	61	68	19	19	10	86	34	34	32	91	49	24	38	85	49	39	30	85	32	33	33
CIS-7[1]		2	1	1		2	2	1		18	23	14		15	12	19		3	5	3		7	4	6
Russia		48	58	44						13	8	16		4	8	3		40	26	23		16	18	17
Other CIS		13	10	17		16	17	9		3	3	3		31	4	16		6	8	3		10	11	10
Non-CIS	5	37	30	39	32	81	81	90	14	66	66	68	9	51	76	62	15	51	61	70	15	68	67	67
EU		12	10	21		34	33	39		46	33	33		8	6	11		11	12	20		15	19	15
USA & Canada		1	7	5		7	6	7		2	1	0		2	0	4		3	2	5		0	1	3
China, Iran & Turkey		2	1	0		7	8	10		2	3	16		9	24	26		6	14	9		4	3	6
CEE[2]		20	11	10		13	15	18		7	10	8		1	0	2		9	12	12		3	1	3
Other		3	1	2		22	19	16		9	19	10		31	46	20		21	21	24		46	43	39
Imports	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Total CIS	82	68	52	38	51	29	27	19	87	59	64	78	85	55	57	33	73	45	58	48	86	41	27	38
CIS-7[1]		1	0	0		4	5	4		32	36	28		14	13	6		1	2	2		3	2	3
Russia		33	29	16						17	15	19		7	13	10		38	46	34		26	18	20
Other CIS		34	23	22		25	22	15		11	13	32		33	31	16		7	10	12		12	8	16
Non-CIS	18	32	48	62	49	71	73	81	13	41	36	22		45	43	67	27	55	42	52	14	59	73	62
EU		14	19	28		39	37	40		26	4	6		11	12	16		16	20	30		18	21	21
USA & Canada		1	4	3		6	8	9		4	0	0		4	7	17		1	4	1		1	8	7
China, Iran & Turkey		1	1	3		3	4	6		1	3	3		15	16	16		1	2	4		3	7	5
CEE[2]		13	18	20		10	8	7		1	2	3		2	3	3		12	11	8		9	5	5
Other		3	5	8		13	15	19		9	27	9		14	5	16		25	6	9		28	32	24

1/ Armenia, Azerbaijan, Georgia, Kyrgyz Rep., Moldova, Tajikistan and Uzbekistan.

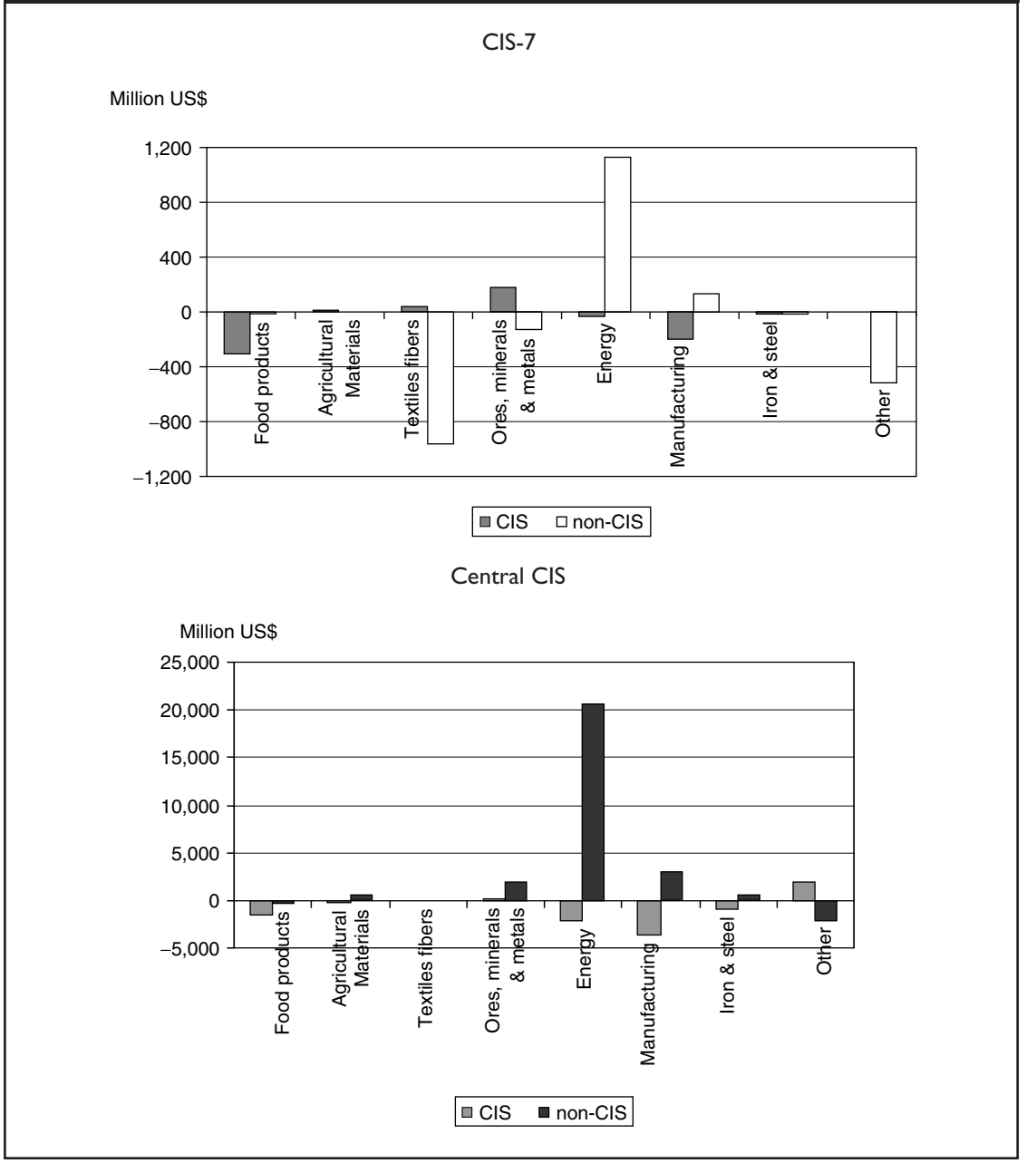
2/ Bulgaria, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Romania & Slovakia.

3/ Gold exports are included in this category, since their geographical destination is unknown (estimated at about 25 percent of the total exports).

Export Reorientation or Loss of Markets?

By superimposing the geographical and the merchandise dimensions of trade, a deeper analysis of the East-West trade shift can be undertaken. Figure 1.2 and Table 1.7 compare merchandise trade composition in 1996 and 2000 for the CIS-7 and the central CIS countries. A detailed trade composition by country is contained in Annex Table A1. Although these data do not tell the story of the 1992–93 collapse of trade, they reveal the shifts that have occurred in the aftermath of the crisis of the early 1990s.

FIGURE 1.2: CHANGES IN THE MERCHANDISE COMPOSITION OF EXPORTS, 1996–2000 (MILLION US$)



We already have discussed the overall trade performance in the CIS-7 and the central CIS, we will now concentrate on shifts in the sectoral composition of trade. The CIS-7 countries' abovementioned poor export performance stems from two basic facts: (i) during the 1990s, these countries were withdrawing from the CIS markets, while being unable to compensate by exporting more to other markets; and (ii) their overall non-energy-export in 1996–2000 was stagnant. Hence, it is erroneous to state that the CIS-7 countries have been able to redirect their exports away from the CIS in any meaningful way. The overall statistical effect of re-direction was mostly due to both rising oil exports and oil prices that benefited just one CIS-7 country, Azerbaijan. The only other sector that registered an increase in exports was ores and minerals as exports of these commodities increased both in the CIS and the non-CIS markets. At the same time, food products and textiles, areas that were traditionally strong, declined significantly.[9]

The CIS-7 countries' manufactured exports to the CIS dropped, while those to the rest of the world increased only slightly, with the total change being negative. A more detailed analysis would reveal that this is the result of a change in the product mix. Apparel, polished diamonds, and a couple of other products are the only ones that supported the increase of manufacturing exports to Western markets. The growth of manufactured exports to the EU was made possible via outward processing arrangements in the above sectors. Although still insignificant at this time, outward processing provides longer-term opportunities for future export and income growth.

In 2000, the share of CIS exports in CIS-7 countries was 76 percent for food products, 21 percent for textiles, 34 for ores and minerals, 0 percent for energy and 51 percent for manufacturing. This product breakup explains the varying shares of the CIS-7 exports to the CIS. The 2000 CIS share in exports of oil-producing Azerbaijan was only 13 percent, while this share for the agricultural producer Moldova was 58 percent.

When looking at individual CIS-7 countries, Azerbaijani exports, which were entirely dominated by oil, more than doubled thanks to increased oil extraction and favorable oil prices. Azerbaijani food and mineral exports grew at a fast rate also, although these remained insignificant against the background of tremendous oil export growth. Armenian exports were dominated by diamond cutting (classified as manufacturing), which accounted for more than a half of manufactured exports; at the same time, its manufacturing exports to CIS countries declined dramatically. Armenia also succeeded in increasing exports of food, electricity, and agricultural materials, but those still remained rather low. Georgia registered some export growth in almost all categories, especially in scrap metal and manufacturing directed to the non-CIS countries. Gold exported to Western markets was the only export item that exhibited a positive development in the case of the Kyrgyz Republic. All the other sectors declined. Moldova experienced a dramatic drop in exports, led by declining food exports to both CIS and non-CIS markets. Its manufacturing exports outside the CIS have grown due to inward processing of apparel directed to the EU. Aluminum and, to a lesser extent, manufacturing, were the only sectors that supported Tajikistan's export growth. Uzbekistan's exports dropped by about a third owing to declining exports of cotton (for which both export prices and volumes have fallen) and of gold.

At the same time, as noted above, the central CIS, especially Russia and Kazakhstan, were much more successful in terms of their export performance. In 1996–2000, growth was supported exclusively by energy and mineral ores exports, while exports in all other sectors declined, with the exception of manufactured trade in Russia. Russia increased its overall manufactured exports by redirecting them out of the CIS, while losing steel export values in both markets. Belarus and Ukraine showed insignificant overall growth rates. Belarus mostly benefited from refining of Russian oil. Its manufacturing exports to Russia had dropped but remained very strong. Ukraine's food exports to Russia declined by about 50 percent. Ukraine and Kazakhstan experienced a loss of manufacturing markets (excluding steel) in the CIS, which was compensated by increased

9. A large decline of the CIS exports of textiles and fibers is largely due to the precipitous decline of Uzbek exports. Uzbekistan experienced declining cotton prices and declining export volumes of cotton fiber.

Table 1.7: Merchandise Composition of CIS and Non-CIS Exports in Millions US$, Unless Otherwise Indicated

	1996			2000			Change			CIS Share, %	
	Total	CIS	non-CIS	Total	CIS	non-CIS	Total	CIS	non-CIS	1996	2000
CIS-7											
Food products (0+1+22+4)	1,068	879	189	755	576	179	–313	–303	–11	82	76
Agricultural Materials (2–22–26–27–28)	31	3	28	43	19	25	12	16	–4	10	43
Textile fibers (26)	2,085	225	1,860	1,220	262	890	–865	37	–971	11	21
Ores, minerals & metals (27+28+68)	581	105	476	828	285	350	246	179	–126	18	34
Energy (3)	925	633	292	2,020	596	1,424	1,095	–36	1,132	68	30
Manufacturing (5 to 8–67–68)	1,018	703	315	980	508	472	–38	–195	157	69	52
Iron & steel (67)	67	26	41	47	14	33	–20	–12	–8	38	30
Other	1,453	4	1,449	956	3	929	–497	–1	–520	0	0
Total	7,230	2,578	4,652	6,851	2,263	4,301	–379	–315	–351	36	33
Growth rates											
Food products (0+1+22+4)				–29	–34	–6					
Agricultural Materials (2–22–26–27–28)				38	520	–14					
Textile fibers (26)				–41	16	–52					
Ores, minerals & metals (27+28+68)				42	171	–26					
Energy (3)				118	–6	387					
Manufacturing (5 to 8–67–68)				–4	–28	50					
Iron & steel (67)				–30	–45	–20					
Other				–34	–23	–36					
Total				–5	–12	–8					
Central CIS											
Food products (0+1+22+4)	5,602	3,628	1,974	3,721	2,043	1,678	–1,880	–1,584	–296	65	55
Agricultural Materials (2–22–26–27–28)	3,153	325	2,827	3,553	137	3,415	400	-188	588	10	4
Textile fibers (26)	313	117	196	276	128	148	–37	11	–48	37	46
Ores, minerals & metals (27+28+68)	11,207	1,155	10,051	13,331	1,285	12,046	2,124	130	1,995	10	10
Energy (3)	41,401	7,883	33,518	59,937	5,787	54,150	18,536	–2,096	20,631	19	10
Manufacturing (5 to 8–67–68)	27,032	11,952	15,080	26,436	8,296	18,139	–596	–3,656	3,059	44	31
Iron & steel (67)	13,051	2,718	10,334	12,705	1,741	10,963	–347	–976	630	21	14
Other	14,325	3,688	10,638	14,069	5,625	8,444	–256	1,938	–2,194	26	40
Total	116,084	31,466	84,618	134,028	25,044	108,984	17,944	–6,422	24,366	27	19

Growth rates											
Food products (0+1+22+4)				–34	–44	–15					
Agricultural Materials (2–22–26–27–28)				13	–58	21					
Textile fibers (26)				–12	9	–24					
Ores, minerals & metals (27+28+68)				19	11	20					
Energy (3)				45	–27	62					
Manufacturing (5 to 8–67–68)				–2	–31	20					
Iron & steel (67)				–3	–36	6					
Other				–2	53	–21					
Total				15	–20	29					
Total											
Food products (0+1+22+4)	6,670	4,507	2,163	4,477	2,620	1,857	–2,193	–1,887	–307	68	59
Agricultural Materials (2–22–26–27–28)	3,184	328	2,856	3,596	156	3,440	412	–172	584	10	4
Textile fibers (26)	2,398	342	2,056	1,496	390	1,107	–902	48	–949	14	26
Ores, minerals & metals (27+28+68)	11,788	1,261	10,528	14,159	1,570	12,589	2,371	309	2,062	11	11
Energy (3)	42,326	8,516	33,811	61,957	6,384	55,574	19,631	–2,132	21,763	20	10
Manufacturing (5 to 8–67–68)	28,051	12,655	15,395	27,416	8,804	18,612	–634	–3,851	3,216	45	32
Iron & steel (67)	13,118	2,743	10,375	12,752	1,755	10,996	–366	–988	621	21	14
Other	15,778	3,691	12,087	15,026	5,628	9,397	–753	1,937	–2,689	23	37
Total	123,314	34,044	89,270	140,878	27,307	113,572	17,565	–6,737	24,301	28	19
Growth rates											
Food products (0+1+22+4)				–33	–42	–14					
Agricultural Materials (2–22–26–27–28)				13	–52	20					
Textile fibers (26)				–38	14	–46					
Ores, minerals & metals (27+28+68)				20	25	20					
Energy (3)				46	–25	64					
Manufacturing (5 to 8–67–68)				–2	–30	21					
Iron & steel (67)				–3	–36	6					
Other				–5	52	–22					
Total				14	–20	27					

[1/] For Turkmenistan 1997, for Belarus and Tajikistan 1998 data are included.

Note: This table adheres to the standard international definition of manufacturing, which is different from the ex-Soviet definition presented in Table 1.5.

Source: WITS, COMTRADE. National trade statistics (HS96) was used for the missing data (Armenia '96, Georgia '96, Tajikistan '98, Uzbekistan '96 and '00).

exports to the rest of the world. Conversely, both countries more than compensated for the loss of sales of steel to the CIS by boosting exports to the rest of the world. The total iron and steel exports from Ukraine increased by 20 percent in 1996–2000 and amounted to about 35 percent of the total export in 2000.

Conclusion

CIS trade diversification to non-CIS markets was accompanied by significant changes in the merchandise composition of trade flows. This diversification was accomplished mostly by shifts in the exports of resource-intensive commodities: energy, raw materials, and both ferrous and non-ferrous metals. For other commodity groups, lost exports to the CIS were not compensated for by gains in new markets. There was very little substitutability of intra- and extra-CIS exports except in the case of resource-intensive exports. Nevertheless, manufactured exports to non-CIS countries are slowly developing; they are mostly based on resource-intensive goods and, to a smaller extent, on outward processing agreements.

Export Specialization of the CIS Countries

The Revealed Comparative Advantage index[10] (RCA) was used to investigate whether CIS countries exhibit similar or different comparative advantages on the CIS and non-CIS markets. Following the conventional notation, we will further call the RCA indices for specific markets export specialization indices (ESIs). (RCA does not determine the true comparative advantages, but simply compares the composition of exports of one country to a certain market with the composition of total exports that are absorbed by this market.) Because RCA takes into account the product characteristics of the destination market, it allows for a deeper understanding of export performance. For example, Russian exports of manufactured goods (SITC group 7) outside the CIS accounts for a significant 20 percent of its exports to that market but it does not have a RCA in this product category, because other countries' export of manufactured goods to this part of the world is actually more than 20 percent.

The ESIs for the CIS presented in Table 1.8 are concentrated in the following groups: food, beverages, crude materials, and mineral fuels.[11] Only a couple of countries exhibit ESIs in manufacturing: Armenia (diamond processing), Ukraine (steel manufacturing), Tajikistan (aluminum), and Moldova (apparel). It is striking that only two countries, Georgia and Moldova, have RCA in the food products group, whereas none of the other countries seems to have a distinct advantage in this category, even on the CIS market.

On the aggregate level, for most groups the ESIs are very similar for both the CIS and the non-CIS markets. However, in the "beverages and tobacco" group, the CIS countries exhibit very different RCAs on the CIS and non-CIS markets. Armenia, Georgia, and Moldova have particularly high RCAs in these products on the CIS markets but much lower ones on the non-CIS markets. This could be explained by differences in tastes, quality requirements, as well as market access conditions in the CIS and non-CIS markets. Two groups, crude materials and mineral fuels, have accumulated the most ESIs. The highest ESIs correspond to scrap metals (Georgia), oil seeds (Moldova, Ukraine, Uzbekistan, and Kyrgyz Rep.), wood (Russia and Ukraine) and textiles (Central Asia).

A more detailed, two-digit SITC trade composition (see Table 1.9) reveals that there are only a few products in which the CIS countries have a strong comparative advantage. Moreover,

10. The index for country i good j is $RCA_{ij} = (X_{ij}/X_{it})/(X_{wj}/X_{wt})*100$, where w = world and t = total for all goods.

11. An RCA index considerably higher than one indicates that a country has a strong revealed comparative advantage in this product. The RCA index smaller than one indicates that the country has a comparative disadvantage in that product. The RCA close to one indicates that the country has neither advantage nor disadvantage.

Table 1.8: Export Specialization Indices at the 1-digit SITC Level, 2000

	Armenia		Azerbaijan		Belarus		Georgia		Kazakhstan		Kyrgyzstan	
	CIS	non CIS	CIS	non CIS	CIS	non CIS	CIS	non CIS	CIS	non CIS	CIS	non CIS
Food and live animals	0.4	0.1	0.6	0.2	0.8	0.3	1.2	2.1	1.7	0.4	1.1	0.2
Beverages and tobacco	**19.3**	1.1	**4.1**	0.1	0.2	1.1	**20.1**	**4.5**	0.5	0.0	**12.6**	3.1
Crude materials, inedible, except fuel	3.5	**4.6**	3.2	1.3	1.1	1.7	1.1	**15.9**	**5.4**	1.2	2.1	**4.9**
Mineral fuels, lubricants and related materials	1.3	0.5	**4.2**	**9.4**	1.0	**3.5**	0.5	1.1	**4.2**	**5.7**	2.6	0.0
Animal and vegetable oils, fats and waxes	0.0	0.0	1.3	0.3	0.1	0.0	0.0	0.0	0.1	0.0	0.2	0.2
Chemicals and related products	0.5	0.0	0.6	0.2	0.8	2.4	1.3	1.0	0.4	0.2	0.2	0.5
Manufactured goods classified chiefly by material	0.5	3.9	0.1	0.1	1.5	1.1	0.6	0.7	0.5	2.3	0.6	0.1
Machinery and transport equipment	0.7	0.2	0.8	0.0	1.3	0.2	0.8	0.2	0.2	0.0	0.6	0.1
Miscellaneous manufactured articles	0.5	0.8	0.1	0.0	0.8	0.8	0.2	0.1	0.1	0.0	0.3	0.2
Commodities and transactions not else classified	11.8	2.6	0.0	0.0	34.3	1.3	27.6	0.1	0.0	0.9	0.3	22.9

	Moldova		Russia		Tajikistan		Turkmenistan		Ukraine		Uzbekistan	
	CIS	non CIS	CIS	non CIS	CIS	non CIS	CIS	non CIS	CIS	non CIS	CIS	non CIS
Food and live animals	2.0	**4.0**	0.2	0.1	0.5	0.0	0.0	0.0	1.1	0.5	1.1	0.4
Beverages and tobacco	**32.3**	**6.4**	0.2	0.1	0.9	0.1	0.0	0.0	1.3	0.1	1.6	0.4
Crude materials, inedible, except fuel	1.4	**5.1**	0.7	1.6	1.4	**7.3**	0.3	**6.9**	**3.1**	**4.6**	**7.8**	**12.9**
Mineral fuels, lubricants and related materials	0.0	0.0	**2.7**	**5.7**	2.2	0.0	**8.7**	**6.7**	0.2	0.7	3.1	0.5
Animal and vegetable oils, fats and waxes	0.4	**4.2**	0.3	0.2	0.0	0.0	0.0	0.7	2.7	**5.1**	0.6	0.2
Chemicals and related products	0.3	0.1	0.4	0.6	0.3	0.0	0.0	0.1	0.8	1.1	0.3	0.3
Manufactured goods classified chiefly by material	0.5	0.4	0.6	1.4	**3.4**	**4.6**	0.1	0.5	2.6	3.5	0.7	0.9
Machinery and transport equipment	0.3	0.1	0.4	0.1	0.4	0.1	0.0	0.0	0.9	0.2	0.3	0.0
Miscellaneous manufactured articles	0.1	3.6	0.1	0.1	0.0	0.1	0.0	0.2	0.2	0.4	0.1	0.0
Commodities and transactions not else classified	0.1	0.3	902.6	2.9	1.3	2.5	0.0	1.1	0.8	1.1	44.8	12.4

Source: WITS, COMTRADE. SITC composition for Uzbekistan is estimated based on data reported by Uzbekistan trading partners

Table 1.9: Export Specialization Index at the 2-digit SITC Level

		Armenia		Azerbaijan		Belarus		Georgia		Kazakhstan		Kyrgyzstan		Moldova		Russia		Tajikistan		Turkmenistan		Ukraine		Uzbekistan	
		CIS	non CIS	CIS	non CIS	CIS	non CIS	CIS	non CIS	CIS	non CIS	CIS	non CIS	CIS	non CIS	CIS	non CIS	CIS	non CIS	CIS	non CIS	CIS	non CIS	CIS	non CIS
01	Meat and meat preparations	..	..	..	–	0.5	0.0	..	–	..	..	..	..	2.2	0.6	..	..	–	–	..	..	1.9	0.0	..	..
02	Dairy products and eggs	..	..	–	–	3.0	2.0	..	–	..	..	0.7	0.2	0.1	8.9	..	..	–	–	–	–	2.0	1.5	..	..
04	Cereals and cereal preparations	..	–	..	..	0.3	0.0	..	–	8.8	2.2	1.2	0.3	2.6	0.9	..	..	..	–	–	..	0.6	1.1	..	..
05	Fruit and vegetables	..	..	..	1.0	0.6	0.5	2.3	8.8	..	..	3.1	0.3	6.3	11.3	..	..	3.6	0.0	..	..	0.3	0.4	**7.1**	1.4
06	Sugar, sugar preparations and honey	..	–	–	..	1.7	0.0	1.5	0.0	..	..	2.3	0.1	0.2	7.5	..	..	..	–	–	..	1.6	0.2	..	..
07	Coffee, tea, cocoa, spices and manufact, thereof	..	..	..	..	0.4	0.0	3.1	2.4	..	..	..	–	..	..	..	..	..	–	..	–	1.1	0.1	..	..
11	Beverages	**50.9**	1.4	4.3	0.0	0.6	1.1	**47.8**	7.1	..	..	..	..	**71.6**	8.3	..	..	..	–	..	–	..	..	..	..
12	Tobacco and tobacco manufactures	..	..	4.0	0.4	..	..	..	..	..	..	**19.5**	8.1	9.8	3.2	..	..	1.4	0.2	–	..	1.6	0.0	2.2	0.9
21	Hides, skins and fur skins, undressed	–	5.7	..	..	..	..	–	5.8	..	..	0.3	9.1	1.4	**24.5**	..	..	..	..	..	..	..	..	..	..
22	Oil seeds, oil nuts and oil kernels	–	–	–	..	..	..	..	..	..	..	7.1	1.0	7.3	**39.1**	..	..	..	–	–	..	5.4	6.7	6.6	0.9
24	Wood, lumber and cork	..	..	..	..	2.4	5.0	0.3	6.6	..	..	..	..	..	..	2.5	4.2	–	–	–	–	0.6	3.4	..	..
26	Textile fibers, not manufactured and waste	–	–	2.5	7.6	6.7	3.8	..	..	0.9	3.8	9.8	**19.3**	..	..	..	..	**10.1**	**70.1**	2.3	**62.0**	..	..	**62.1**	**117.1**
27	Crude fertilizers and crude minerals	0.9	..	..	..	..	..	1.4	1.3	3.5	0.6	2.5	0.0	1.8	0.9	..	..	..	–	..	..	2.7	3.1	..	..
28	Metalliferous ores and metal scrap	–	**16.5**	5.4	1.7	..	..	1.6	**56.1**	9.2	2.6	0.3	9.4	0.0	3.8	0.7	1.2	..	..	..	..	4.9	**12.4**	0.0	2.0
29	Crude animal and vegetable materials, nes	..	..	..	..	..	..	0.4	1.6	..	..	2.6	0.1	8.8	0.9	..	..	..	..	..	..	..	..	2.1	1.4
32	Coal, coke and briquettes	–	–	–	–	..	..	..	–	12.1	0.0	..	–	–	–	2.5	3.7	–	–	–	–	0.4	3.5	–	–
33	Petroleum and petroleum products	..	–	7.7	11.5	2.1	4.2	0.9	0.8	7.5	7.0	0.1	0.0	..	..	1.9	4.7	..	–	1.7	6.9	0.2	0.5	0.9	0.2
34	Gas, natural and manufactured	–	–	–	–	..	..	..	–	0.3	0.0	–	..	–	..	3.7	**12.9**	–	–	**16.9**	8.3	0.0	1.3	4.2	2.1
35	Electric current	**41.7**	**31.9**	**24.8**	–	..	..	0.3	23.2	..	–	**85.7**	0.0	**–**	**–**	..	..	**74.2**	–	3.7	0.1	2.1	3.7	**25.4**	6.5
51	Organic chemicals	..	..	3.2	0.2	0.6	1.6	..	..	..	..	..	–	..	..	0.9	0.6	..	–	–	–	1.6	0.7	..	..
52	Inorganic chemicals	..	..	..	..	..	..	4.0	1.6	4.2	3.5	0.8	8.1	..	..	0.9	1.8	..	–	0.5	0.6	1.6	4.8	1.0	2.5
53	Dyeing, tanning and coloring materials	1.6	0.0	..	..	1.1	0.0	..	..	..	..	..	..	..	..	..	..	–	..	–	–	1.6	0.6	..	..
54	Medicinal and pharmaceutical products	0.8	0.0	..	..	0.6	0.0	0.8	0.8	..	..	..	..	0.2	0.3	..	..	..	–	–	–	..	..	..	..
55	Perfume materials, toilet and cleansing materials	..	..	..	..	0.4	0.1	0.2	0.5	..	..	..	..	..	..	..	..	..	–	..	–	..	..	..	..
56	Fertilizers, manufactured	–	..	..	..	**6.0**	**68.3**	**65.4**	**20.8**	..	..	–	–	–	–	1.8	7.5	–	–	..	..	1.8	**17.3**	**22.0**	3.5
58	Artificial resins, plastic material, etc.	–	..	0.9	0.5	1.5	0.5	0.3	0.1	..	..	..	..	..	..	0.3	0.3	–	–	–	–	0.6	0.1	..	..

61	Leather, lthr manufactures, fur skins	..	–	–	..	..	..	0.0	1.5	..	..	..	..	0.1	2.5	..	..	–	–	..	..	0.6	2.2	..	..
62	Rubber manufactures	..	..	..	..	2.6	1.0	..	..	..	..	..	..	..	..	..	..	..	–	..	..	2.9	0.4	..	..
63	Wood and cork manufactures, excl. furniture	..	..	..	..	1.9	2.7	..	..	..	..	..	..	0.3	1.6	..	..	..	–	–	..	..	..	..	..
64	Paper, paperboard and manufactures thereof	..	..	..	..	1.3	0.3	..	..	..	..	..	..	..	..	0.4	0.6	..	–	–	..	1.5	0.3	..	..
65	Textile yarn, fabrics, made-up articles, etc.	0.2	0.1	..	..	2.2	1.5	..	..	..	..	1.0	0.2	0.5	0.5	0.2	0.1	0.6	1.4	0.4	2.7	0.3	0.3	1.6	2.7
66	Non-metallic mineral manufactures, nes	2.3	**21.4**	..	..	1.9	0.4	0.8	0.0	..	..	1.9	0.0	2.2	1.0	0.5	0.1	..	–	..	..	1.1	0.2	..	..
67	Iron & steel	0.2	1.6	..	..	0.6	2.8	1.7	2.2	1.6	**6.4**	..	..	..	..	0.9	2.9	..	–	..	..	**7.7**	**17.6**	0.2	0.4
68	Nonferrous metals	0.1	3.6	0.0	0.3	..	..	0.2	1.4	1.5	**9.9**	0.6	0.6	..	..	0.5	5.0	**43.7**	**33.4**	..	..	2.3	2.9	2.9	2.2
69	Manufactures of metal	..	..	..	..	1.9	0.9	0.3	0.5	..	..	0.6	0.0	0.9	0.2	0.5	0.9	..	–	..	..	1.0	0.3	..	..
71	Power generating machinery and equipment	1.1	0.1	..	..	1.1	0.3	1.8	0.0	..	..	1.6	0.0	..	..	1.9	0.4	0.0	1.4	..	..	2.4	0.3	..	..
72	Machinery specialized for particular industries	0.3	0.2	0.7	0.2	1.3	0.8	1.5	0.7	0.2	0.1	0.6	0.1	0.3	0.6	0.2	0.1	..	..	..	..	0.6	0.2	0.2	0.1
73	Metalworking machinery	3.1	2.3	..	..	..	..	0.2	1.6	..	..	1.1	0.4	..	..	..	..	..	–	–	–	3.1	0.6	..	..
74	Gen. Industry machinery & equipm., and parts	0.4	0.1	0.6	0.0	0.8	0.2	0.5	0.4	0.3	0.1	0.2	0.0	0.7	0.2	0.4	0.2	..	..	..	..	1.4	0.3	..	..
77	Electrical machinery, apparatus and appliances	3.2	0.4	..	..	1.7	0.2	..	..	..	..	1.2	0.1	0.5	0.0	0.3	0.1	..	..	..	..	1.0	0.2	0.2	0.0
78	Road vehicles	..	..	..	..	3.1	0.3	0.1	0.0	..	..	1.0	0.3	0.1	0.0	0.5	0.0	0.0	0.1	..	..	0.5	0.0	1.1	0.1
79	Other transport equipment	..	..	7.9	0.0	..	..	4.5	1.1	0.4	0.1	..	..	..	..	0.6	0.5	6.7	0.1	0.6	0.1	1.2	0.7	..	..
82	Furniture	..	..	..	..	1.7	0.9	..	..	..	..	..	..	..	..	..	..	..	..	..	..	0.4	0.2	..	..
84	Articles of apparel	0.3	1.5	..	..	0.5	1.9	0.1	0.1	..	..	0.2	0.1	0.0	12.2	..	..	0.0	0.5	0.1	0.8	0.0	1.3	0.2	0.1
85	Footwear	..	..	..	..	..	..	0.7	0.1	..	..	..	..	0.1	2.5	..	..	..	–	–	–	0.2	0.7	..	..
87	Professional, scientific & controlling instrum.	..	..	..	..	0.6	0.9	..	..	..	..	..	..	0.5	0.3	0.4	0.3	..	..	..	..	0.7	0.1	..	..
89	Miscellaneous manufactured articles	0.5	1.1	..	..	0.8	0.2	0.4	0.1	..	..	0.9	0.6	0.1	0.2	0.2	0.2	..	..	..	..	0.2	0.1	..	..
95	Arms of war and ammunitions	–	–	–	–	..	–	67.4	1.7	–	–	–	–	–	..	3.5	9.9	–	–	–	–	–	–	–	–
97	Gold	–	**12.0**	–	–	..	–	–	–	–	7.2	–	**192.5**	–	–	–	**16.0**	–	**22.2**	–	–	–	–	2.5	112.2

..Denotes immaterial flows, defined as any flow at the two-digit SITC level that is less than 0.3 percent of the total country exports; –Stands for zero flows.

Source: WITS, COMTRADE. SITC composition for Uzbekistan is estimated based on data reported by Uzbekistan trading partners in WITS.

Table 1.10: Shares in Employment and Exports, 2000 (Percent of total)

Employment Sectors	Share in Employment,%	Share in Exports, %	Difference
Armenia			
Ores, minerals & metals (27+28+68)	0.5	15.0	–14.5
Manufacturing (5 to 8–68)	12.2	59.2	–47.0
Energy (3)	2.1	7.1	–5.0
Agricultural Materials (2–22–26–27–28), Food products (0+1+22+4), Textiles fibers (26)	44.4	12.9	31.5
Azerbaijan			
Ores, minerals & metals (27+28+68)	1.1	2.9	–1.8
Manufacturing (5 to 8–68)	4.5	6.5	–2.0
Energy (3)	1.1	85.1	–84.0
Agricultural Materials (2–22–26–27–28), Food products (0+1+22+4), Textiles fibers (26)	40.9	5.5	35.4
Georgia			
Ores, minerals & metals (27+28+68)	0.1	28.2	–28.1
Manufacturing (5 to 8–68)	5.9	32.4	–26.5
Energy (3)	1.7	8.5	–6.8
Agricultural Materials (2–22–26–27–28), Food products (0+1+22+4), Textiles fibers (26)	52.1	30.6	21.5
Ukraine			
Ores, minerals & metals (27+28+68), manufacturing (5 to 8–68)	15.6	89.2	–73.6
Energy (3)	3.59	2.9	0.7
Agricultural Materials (2–22–26–27–28), Food products (0+1+22+4), Textiles fibers (26)	23.20	5.4	17.8

Source: National Statistics of Ukraine, Statistical Yearbook of the South-Caucasus, and WITS.

because immaterial export flows have been excluded from the table, it is clear that CIS countries have quite a high product concentration of exports. Moreover, exports are concentrated in natural resource- and capital-intensive sectors, with a limited potential for employment generation. This, on the one hand, makes these economies vulnerable to external price and demand shocks and, on the other hand, weakens the links among export expansion, economic growth, and poverty reduction. Table 1.10 illustrates the latter point by presenting aggregated employment and export structures of selected CIS countries.

As seen from the table, there are vast differences between employment and export structures in all selected countries. As a result, the main gains from improved export performance are captured by the minority of labor employed in export industries.

The similarity of the ESIs of the CIS countries in both the CIS and the non-CIS markets may indicate that the access issues to the non-CIS markets are not out of the ordinary for most of the export products. If the CIS countries could not expand their manufacturing exports to their CIS neighbors, why should one expect them to be in a strong competitive position outside the CIS, for

instance, in the EU? The only sectors in which access problems may be essential are beverages and tobacco. However, these products account for a small percentage of the overall CIS exports, with the exception of Armenia, Georgia and Moldova.[12] At the same time, other CIS countries, including Russia and Ukraine, do not seem to face serious access problems.

Conclusion

Aggregate RCA of the CIS countries is similar in the CIS and the non-CIS markets. The ESIs for the CIS are concentrated resource- and capital-intensive sectors: food, beverages, crude materials, and mineral fuels. This makes CIS countries vulnerable to external shocks and weakens the link between export growth, on one hand, and employment generation and poverty reduction, on the other.

It is striking that only two countries, Georgia and Moldova, have RCAs in the food products group, while none of the other countries seems to have an advantage in this category, even on the CIS market. The similarity of the ESIs of the CIS countries in both CIS and non-CIS markets may indicate that the CIS countries' access problems to non-CIS markets for most of their exports are not out of the ordinary, with the probable exception of beverages and tobacco.

Predominance of Inter-Industry Trade

Trade theory and empirical studies point to extra benefits of intra-industry trade in comparison with traditional inter-industry trade. Intra-industry trade, exploiting the advantages of exchanges in differentiated products, has the potential to tap increasing returns to scale leading to faster economic growth and income conversion for all participants (Krugman and Helpman 1985). At the same time, inter-industry trade, based on the classical notion of comparative advantage determined by factor proportions, exhibits decreasing returns to scale and may lead to regional income diversion and protectionist pressures (Kaminski and Rocha 2002). Recent world trade history has shown an amazing increase of intra-industry trade to the point that some speak of the death of trade, because intra-industry flows are often directed within the same multinational firm and are intra-firm flows rather than conventional inter-firm trade. Intra-industry trade is flourishing among the developed countries and between developed and more successful developing counties, such as the East Asian tigers and, more recently, China. The precondition for the growth of intra-industry trade is the countries' ability to enter international value chains. In turn, a robust expansion of intra-industry trade is often an indication that a country is successful in attracting strategic foreign investors, and that there is a noticeable spillover effect of FDI on the local industry.

It is well established that CIS countries had been very closely integrated within the former Soviet Union. Market transition had broken many of the old production and trade links, and the CIS economies have been struggling to replace and recover them. In order to assess the degree of integration of CIS countries with their traditional trading partners, the other CIS countries, and the rest of the world, we calculated the Grubel-Lloyd index[13] (see Table 1.11). The G-L index measures the magnitude of intra-industry flows in total manufacturing trade. The higher the index the larger the portion of intra-industry trade. The index ranges from 0, meaning complete lack of intra-industry trade, to 100, indicating a fully integrated manufacturing trade.

A couple of observations can be made from the analysis of Table 1.10. First, the CIS countries exhibit a very large discrepancy in terms of intra-industry integration. European CIS countries (Russia, Belarus, and Ukraine) are highly integrated with their CIS partners. Tajikistan and Turkmenistan, on the other hand, have very low levels of integration. Other countries lie in between these extremes.

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12. The share of beverages and tobacco in overall exports to the CIS in 2000 was 53 percent for Moldova, 33 percent for Georgia, 32 percent for Armenia, 21 percent for Kyrgyz Rep., 7 percent for Azerbaijan, and 2 percent or less for the other CIS countries.

13. The G-L index, $I = [\Sigma_i (X_i + M_i) - \Sigma_i |X_i - M_i|]/\Sigma_i (X_i + M_i)^*100$, where X_i and M_i are, respectively, exports and imports in sector i (Grubel and Lloyd 1975).

TABLE 1.11: THE GRUBEL-LLOYD INDEX (AT THE 2-DIGIT SITC LEVEL)

	Total Trade		CIS		Non CIS		Manufacturing, % of Trade, 2000	
	1996	2000	1996	2000	1996	2000	CIS	non CIS
Armenia	51.7	54.0	42.3*	38.6	40.8*	51.0	37	66
Azerbaijan	32.8	20.2	38.5	41.0	24.2	9.4	29	3
Belarus	69.8	66.3	60.1**	57.1	44.6**	44.2	75	54
Georgia	n.a.	36.9	n.a.	54.2	n.a.	20.2	43	25
Kazakhstan	44.2	30.4	56.1	32.7	22.8	15.8	15	18
Kyrgyz Republic	40.2	42.4	47.8	55.6	25.0	22.3	31	13
Moldova	53.6	31.6	50.9	53.7	46.8	16.3	20	56
Russia	47.6	54.7	75.1	71.5	36.3	44.5	24	22
Tajikistan	n.a.	11.8	n.a.	11.3	n.a.	5.5	15	10
Turkmenistan	8.1	9.1	8.3*	8.0	8.0*	9.6	3	11
Ukraine	42.5	44.9	58.2	60.0	27.7	28.7	69	66
Uzbekistan	26.7	25.3	30.8*	26.1	13.8*	14.1	20	4
Average CIS-7			42.0	40.1	30.1	19.8	28	25
Average Central CIS[1]			62.4	55.3	32.8	33.3	46	40

Note: The index is calculated for manufacturing trade only (groups 5 through 8 minus 68, sing SITC2 classification)

* 1997 ** 1998

Source: Authors' calculations based on data from WITS, COMTRADE, and the national statistical agencies of CIS countries.

Second, despite the broken production relations and decreasing intra-CIS trade, countries remain much more integrated with their traditional trading partners in the CIS than with their new partners. Armenia is the only exception to this rule, because its main export activity is concentrated in cutting imported raw diamonds, which are sent outside the CIS. The analysis of sectoral contributions into the G-L index within the CIS shows that, in Russia and Ukraine, a quarter of the index is made up of just two sectors—steel and heavy machinery. Steel makes up a third of the index in Kazakhstan and a fifth in Georgia. In Azerbaijan, one-half of the index consists of transport equipment. A quarter of the index can be attributed to the two machinery sub-sectors in Kyrgyz Rep.; a quarter of the index is made up of glass/cement and agricultural machinery in Moldova; a third of the index consists of textiles and explosives in Tajikistan; textiles make up almost one-half of the index in Turkmenistan; and a third of the index can be attributed to textiles and automobiles in Uzbekistan.

The difference in G-L indexes between the CIS and non-CIS markets is quite significant for eight out of 12 CIS countries. In general, the level of intra-industry integration on the non-CIS markets is very low.[14] Armenia (thanks to diamond cutting), Belarus, and Russia are the only countries that have a moderate level of intra-industry trade with non-CIS countries.

14. According to Greenaway and Hine (1991) the mean G-L index for trade among the OECD countries in 1985 was 64.5 with standard deviation of 0.169 and the coefficient of variation of 0.262. The distribution of the G-L index by country was as following: the EU/EFTA: Belgium—86.7, Denmark—72.6, France—88.5, Germany—68.2, Ireland—70.3, Italy—69.5, Netherlands—76.3, the UK—84.3, Austria—79.2, Finland—66.4, Norway—62.1, Sweden—71.9, Greece—46.3, Portugal—54.6, Spain—68.2, Turkey—46.8, Yugoslavia—70.0, North America: the US—66.5, Canada—76.4, Australasia: Japan—29.3, Australia—36.4, New Zealand—30.6. Except for remote Australasia, the G-L indices are quite high for each OECD country.

Third, there are a few cases of positive evolution over the observed period of 1996 and 2000. Armenia and Russia notably increased their level of integration with non-CIS partners. At the same time, Azerbaijan, Kazakhstan and Moldova experienced significant declines. In terms of CIS integration, only Kazakhstan's position worsened significantly, while the rest of the countries maintained their status quo.

Fourth and most importantly, there appears to be a direct relationship between the level of integration of a country and its share of manufacturing trade. Countries with very low G-L indexes also have low levels of manufacturing trade, while those that maintained a high level of integration are better off in terms of manufacturing trade. To test this hypothesis, we estimated the Sherman rank correlation between the G-L index and the share of manufactured exports for the pooled sample (all countries, both markets, two years). The correlation estimate equals 0.65 (with the significance level of 0.0 percent), which confirms our observation that there is a strong positive relationship between the G-L index and share of manufacturing trade.[15]

Conclusion

CIS countries have so far been unsuccessful in integrating into global production value chains. They continue to engage mostly in inter-industry trade and, therefore, forgo the trade and economic benefits associated with intra-industry integration. By doing so, they limit their opportunities to increase their trade and income levels, and also breed protectionist pressures. In general, they remained more integrated within the CIS, but the less-developed CIS countries have fallen out of value chains also. The poor integration of the CIS countries in global value chains is an obvious reason for the poor performance of their manufactured trade. At the same time, European CIS countries maintain a high level of intra-industry exchange within the CIS.

15. The rationale for using the Sherman rank correlation rather than the linear correlation is that we do not know if this relationship is linear; it probably is not. Nevertheless, we estimated the linear correlation coefficient for the pooled sample. It equals 0.54, which also shows a positive correlation between the G-L index and the share of manufactured exports.

CHAPTER 2

REALIZING TRADE POTENTIAL: OPENNESS AND TRADE PATTERNS

Trade Openness: How Open are the CIS Countries?

In order to understand how CIS members compare to other countries in terms of openness, we developed an empirical model of openness that intends to broadly determine the association between income level and openness. Following Rodrik (1998), openness, as measured by the share of trade in goods and services in GDP, was regressed on the country population, which was used as a proxy for country size, and GDP per capita.

The theoretical hypothesis underlying this approach to the analysis of openness is that richer countries trade more (as a percentage of their GDP) and larger counties trade less. Both theoretical and empirical literature suggests a positive correlation between openness (trade integration) and income levels.[16] This positive correlation can be attributed to the increasing diversification of the economy and deepening international specialization in the course of economic development. At the same time, as recent research suggested, both income and trade are dependent on the quality of local institutions. In their analysis of the interplay between growth, trade integration, geography, and institutions, Rodrik and others (2002) showed the supremacy of institutional variables as the determinant of both income and trade levels. Thus, income level may also be viewed as a proxy for institutional variables that underlie trends in both overall economic development and international trade. 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.

Within this framework, we should expect the levels of trade openness in the CIS, especially in the CIS-7, to be rather modest. This is owing to weaknesses in at least two types of their fundamentals. First, their institutions for market-based economy were slow to emerge.[17] Second,

16. Although the direction of causality is unclear. See Kormendi and Mequire (1985), Fischer (1991), Dollar (1992), Edwards (1993), Harrison (1996), and Frankel and Rodrik (1995), Romer (1999), Rodrik and others (2002).

17. See Vandycke (2003) and Dethier (2003).

they have rather concentrated economic structures dominated by raw materials and energy. In the course of market transition, their economies have become even less diversified as the manufacturing sector collapsed and a large informal sector emerged that consists primarily of subsistent agriculture and subsistent urban entrepreneurship in trade and services. The shares of both the nontradable sector and subsistence economy, which do not contribute much to the trade aggregates, have grown in all CIS countries, but especially in the lower-income CIS-7 countries. In addition, a large portion of the recent economic growth in the CIS countries was associated with import substitution in the consumer goods sector, which additionally weakens the link between growth and trade expansion.

As a measure of income level two variables are used in our analysis, GDP per capita in current US$ and GDP per capita in PPP terms. Table 2.1 presents the modeling results. In order to combat apparent endogeneity between the measures of openness and GDP, we used the instrumental variables estimator (two-stage least squares). 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 of Economic Freedom as a proxy for policy and institutions (ranging from 1 to 5; the higher is HFI value, the lower is 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 1994–2001. In addition, dummies for regional country groupings were included as independent variables in four models. Because the dummy for Sub-Saharan Africa has been insignificant in all specifications, the table presents specifications without the Sub-Saharan Africa dummy.
As many of the CIS countries, especially a number of low-income countries, have been running significant current account deficits, it was interesting to see whether the relative high trade openness of these countries has been mostly influenced by imports or was it due to good export performance. Models 5–8 include the export-to-GDP ratio as the dependent variable with the same independent variables as in Models 1–4, which were estimated for total merchandise trade. The estimated coefficients for Models 5–8 are qualitatively similar to those in Models 1–4.

Model 2 has a similar structure to Rodrik's original model. Regression coefficients of Model 2 are in line with the ones in Rodrik's equation estimated on the 1980s data for a smaller number of countries. All country groupings preserved the sign of their respective dummies. As for the CIS dummy, it is highly significant in the regressions with nominal GDP (Models 2 and 6) that show that CIS countries trade more than a typical country at their income level and of their size would do. The level of the CIS dummy indicates that, controlling for the income level and size, the CIS are more open on average than any other regional country group in the sample, except for East Asia. At the same time, the CIS dummy in regressions with GDP in PPP (Models 4 and 8) is statistically insignificant, meaning that the CIS trades generally in line with the cross-country norm. Therefore, it is safe to say that the CIS as a whole at least does not under-trade.

However, in our view, a measure of GDP in nominal dollars is more appropriate for the trade analysis of CIS countries. While nominal GDP per capita tends to underestimate income levels of low-income countries owing to the price factor, it should be noted that this underestimation is, to a significant extent, due to underpriced nontradables, which have little to do with merchandise trade. Respectively, using GDP-in-PPP measure could grossly inflate a country's trade potential by assigning too much weight to the portion of local economy that does not and cannot participate in international trade. These problems are especially serious for the CIS countries, whose PPP coefficients are among the highest in the world. That is, CIS countries as a group are outliers in the global sample by the values of their PPP coefficients. This limits the applicability of the models based on GDP in PPP for the analysis of CIS trade performance. For instance, if we use the GDP-in-PPP measure, the Kyrgyz GDP (with the highest PPP coefficient in the world) increases nine times over nominal GDP and the Russian GDP four times. Other CIS countries lie in between. The above many-fold differences between the two GDP estimators could transform in multiple differences in the estimates of potential trade flows. In this view, CIS countries trade quite well relative to their size and development level.

TABLE 2.1: TRADE OPENNESS MODELS

	Dependent Variable								
	Ratio of Exports and Imports to GDP in Current USD			Ratio of Exports and Imports to GDP in PPP		Ratio of Exports to GDF Current USD		Ratio of Exports to GDP in PPP	
	Model 1	Model 2	The Rodrik Model (1980–1989 data)	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8
ln population	–13.4 (2.0)*	–14.5 (2.2)*	–15.5 (1.8)**	–7.3 (1.5)*	–8.7 (1.9)*	–5.7 (1.0)*	–6.2 (1.1)*	–3.5 (0.8)*	–4.3 (1.0)*
ln GDP per capita	6.1 (2.0)**	12.7 (4.0)*	12.1 (3.8)**	18.2 (3.2)*	19.7 (4.7)*	4.8 (1.6)*	8.3 (2.0)*	9.8 (1.7)*	10.3 (2.4)*
CIS	—	23.7 (7.8)*	—	—	–2.3 (3.9)	—	11.6 (4.6)**	—	–0.5 (2.3)
East Asia	—	72.0 (18.0)*	28.8 (9.6)**	—	55.8 (26.2)**	—	37.7 (9.4)*	—	29.8 (13.5)*
Latin America	—	–23.3 (10.6)***	–25.6 (7.5)**	—	–19.3 (5.2)*	—	–11.9 (5.1)**	—	–9.8 (2.6)*
OECD	—	–35.4 (14.5)*	–15.7 (9.2)***	—	–10.0 (16.5)	—	–19.0 (7.6)**	—	–3.9 (8.6)
Sub Saharan Africa	—	—	–1.8 (7.8)	—	—	—	—	—	—
Intercept	159.1 (28.7)*	119.8 (38.2)*	118.6 (36.9)**	–28.2 (23.1)	–25.5 (35.3)	53.9 (14.5)*	32.7 (18.8)***	–21.4 (12.3)***	–18.1 (18.4)
R^2	0.27	0.52	0.60	0.43	0.55	0.25	0.52	0.43	0.55
Number of countries	149	149	119	149	149	149	149	149	149

Note: Standard errors in parentheses. Significance level: * 1 percent ** 5 percent *** 10 percent.

Source: Authors' calculations; Rodrik (1998).

Table 2.2 presents the comparisons of actual trade openness indicators for individual CIS countries with the theoretically expected openness that reflects their actual size and income. The "theoretical openness" estimates correspond to the regression line in the above models with nominal GDP.

The first conclusion that follows from Table 2.2 is that the central CIS countries noticeably increased their trade openness and exports-to-GDP ratios from 1995 to 2001, while most of the CIS-7 did not. At the same time, these results suggest no evidence of under-trading by most CIS countries, including the European CIS_Russia, Ukraine, and Moldova. In the absence of such under-trading, it is difficult to claim that the CIS members as a group have been affected by either distortionary domestic trade policies or by severe market access problems.

Secondly, if compared with their peers both within and outside the CIS (Model 1 for total trade and Model 3 for exports), four CIS countries stand out as serious underperformers. In the case of total trade, these are Armenia, Georgia, the Kyrgyz Republic, and Uzbekistan. In the case of exports, these are Armenia, Georgia, and the Kyrgyz Republic. It is notable that all these countries belong to the CIS-7. Armenia shows the worst export performance in relation to its own overall trade openness (due to its large current account deficit financed by foreign aid and remittances from abroad); Georgia's export performance is also worse than its trade performance

TABLE 2.2: CIS ACTUAL VS THEORETICAL OPENNESS (MODELS WITH NOMINAL GDP)

	Exports Plus Imports to GDP in Current US$				Exports to GDP in Current US$			
	Actual Openness (%)		2001 Realization Ratios (actual/predicted by the model)		Actual Openness (%)		2001 Realization Ratios (actual/predicted by the model)	
	1995	2001	Mode 1 (no dummies)	Model 2 (w/dummies)	1995	2001	Model 5 (no dummies)	Model 6 (w/dummies)
Armenia	86	72	0.74	0.57	24	26	0.51	0.39
Azerbaijan	86	81	0.92	0.70	32	42	0.99	0.74
Belarus	104	139	1.54	1.12	50	68	0.90	0.65
Georgia	68	60	0.65	0.50	26	22	0.51	0.38
Kazakhstan	83	95	1.28	0.90	39	46	1.37	0.96
Kyrgyz Republic	72	73	0.78	0.61	29	37	0.85	0.64
Moldova	130	124	1.32	1.03	60	50	1.20	0.91
Russian Federation	52	61	1.10	0.70	28	37	1.24	0.80
Tajikistan	..	140	1.64	1.31	..	64	1.68	1.31
Turkmenistan	71	94	0.98	0.74	35	47	1.03	0.77
Ukraine	97	111	1.69	1.19	47	56	1.76	1.22
Uzbekistan	74	56	0.79	0.59	37	28	1.30	0.95
Averages:								
CIS-7	86	87	0.98	0.76	35	38	1.00	0.76
Central CIS	84	101	1.40	0.98	41	52	1.32	0.91

Source: Authors' calculations based on data from *World Development Indicators.*

for the same reason. In our view, two factors contribute to the underperformance of these four countries: geographical (they are land-locked, except Georgia, small, except Uzbekistan, and remote) and endowments (they are poor in energy and mineral resources). Armenia's serious trade underperformance confirms that the blockade imposed on Armenia as a result of the regional conflict remains costly (Polyakov, 2001). As to the speed of market reforms, this group includes both fast reformers (Armenia) and slow reformers (Uzbekistan), so this relationship is not clear.

Conclusion

In sum, except for the four CIS-7 countries, the CIS countries measure well in terms of their trade ratios if compared to their peers. The current volumes of trade in the CIS are mostly a reflection of their production structure and underlying institutional parameters. The effect of distortionary trade policies by either CIS governments or by governments in their partner countries seems to be of secondary order. Nevertheless, most CIS-7 countries underperform relative to both the central CIS and their global peers. As the role of trade policy in economic growth is largely of an auxiliary (enabling) nature, the key to these countries' trade success lies in following a set of good integrated developmental policies rather than being focused on pure trade policy agenda. These policies should include improvements in the business environment, support for new entry and FDI, etc., as outlined e.g., in the Trade Diagnostic Integration Studies on-going in the CIS-7. Such integrated policies, if successful, would eventually improve trade performance, as well as accelerate growth.

However, this does not mean that trade issues are not significant for the CIS. First, their peers belong to the developing or less developed world with severe trade problems both in terms of market access and behind-the-borders issues. In this context, the absence of trade underperformance simply means that CIS countries face a similar set of problems to those of most developing countries and perform in a similar manner. The significance of these problems is acknowledged and is being dealt with by the WTO in its current Doha round (Hoekman 2002). Second, the low GDP per capita in the CIS countries can partly be attributed to the transitional shock. The CIS countries still have some development indicators, such as infrastructure and, more significantly, human capital, that far exceed those in countries comparable in terms of per capita nominal GDP. For this reason, the UN does not classify even the poorest CIS-7 countries as least developed countries. This may suggest that the volumes of trade they are now exhibiting are below their mid- and long-term potential and there is room for the quick recovery of both trade and economic growth.

The Gravity Model: Recent Adjustments in Direction of Trade

An issue of redirection of trade flows as a result of market transition has been explored since the early 1990s (see, for example, Baldwin 1994 and Kaminski and others 1996). The consensus view is that at the outset of transition the former Soviet republics and the members of the Council for Mutual Economic Assistance (Comecon) were grossly over-trading among themselves and under-trading with the rest of the world, especially with the EU as their closest and richest partner. After more than a decade of transition, the trade flows of the former Soviet republics have substantially changed. As predicted ten years ago, they trade now much less with each other and more with the rest of the world, especially with the EU.

The standard framework for the analysis of the direction of trade and, more specifically, of the potential and realized trade flows, involves the application of the gravity model. Despite theoretical controversies surrounding the model since its inception (which have been somewhat alleviated recently),[18] the gravity model has proven to be the most accurate tool for the explanation and prediction of bilateral trade flows. A number of studies were devoted to the gravity analysis of Central and Eastern Europe (CEE) trade.[19] Early estimates of intra-CIS trade based on the gravity model were derived by Kaminski, and others (1996). The authors of that paper used

18. See Bergstrand (1985), Helpman and Krugman (1985), Daerdorff (1997), and Feenstra and others (2001) for different theoretical justifications of the gravity model.

19. See Wang and Winters (1991), Hamilton and Winters (1992), Baldwin (1994), and Piazolo (1996).

TABLE 2.3: POTENTIAL AND REALIZED SHARES OF INTRA-CIS AND EU EXPORTS (PERCENT)

	Actual Share of Inter-republic Exports, 1985	Predicted Share of Inter-republic Exports	Actual Share of Intra-CIS Exports, 2001
Armenia	97	27	30
Azerbaijan	94	24	10
Belarus	90	32	60
Georgia	94	20	23
Kazakhstan	90	27	24
Kyrgyz Republic	98	37	48
Moldova	95	26	61
Russian Federation	68	16	10
Tajikistan	86	26	32
Turkmenistan	91	22	38
Ukraine	84	33	30
Uzbekistan	84	26	33
Estonia	93	27	12
Latvia	93	23	10
Lithuania	92	36	20
Averages			
CIS-7	93	27	34
Other CIS	85	26	32
Baltics	93	29	14

Note: Inter-republic exports included the Baltic states, which are not members of the CIS. Nevertheless, this statistical discrepancy does not constitute such a great error, because CIS trade with the Baltic countries (both potential and actual) is rather small.

Source: Kaminski and others (1996); authors' estimates.

a global model estimated on the 1980s data (using the sample that excluded the Soviet Union). They inserted the data for the 15 then Soviet republics in their global gravity equation and compared the predicted and the actual shares of the inter-republic exports within the USSR (see Table 2.3).

One interesting observation from the above table is that the share of the CIS in total exports for the majority of the CIS countries, including Russia and Ukraine, is close to that predicted by the gravity model, estimated on the historical (1980s) data on countries' incomes. It is an indication that the dramatic re-orientation of exports outside the CIS which occurred in the last decade was in line with earlier predictions. Only Belarus, Moldova, Turkmenistan, and, to a smaller extent, Kyrgyz Rep. continue to send a much larger share of their exports to the CIS than predicted by the model.

The above model pertains to the mid-1980s and its parameters and, more importantly, underlying factors, such as the CIS countries' GDP, have dramatically changed during the transition period. Therefore, in order to clarify both the scale and the direction of trade adjustments, we applied a newer version of a gravity model, estimated by Frankel (1997) with the 1992 data on the sample of 63 countries (with CIS members not included). The main distinction of this more recent gravity model is that it explains bilateral total trade flows (exports plus

imports), while the earlier model dealt with exports only. Therefore, the newer model helps to answer the question of whether given trade partners undertrade or over-trade among themselves in comparison with other countries with similar characteristics.[20] The Frankel's model has also an additional important advantage: it has an expanded set of dummies explicitly incorporating the trade bloc effects, which are of special relevance for the analysis of CIS regional trade.

The theoretical underpinnings of the gravity model gave rise to two model types. The first type is based on the derivation of the gravity equation from the Herckscher-Ohlin model (Deardorff 1997). Given the classical nature of Herckscher-Ohlin world, the model can be applied to total trade flows. The second type of gravity model is derived under the assumption of competition in differentiated products (Helpman and Krugman 1985, Helpman 1987). Because trade in differential products pertains primarily to manufactured trade, this model describes only manufactured trade flows. Baldwin (1994) provides an example of an empirical gravity model of this type.

For the analysis of potential trade in the CIS, we used the model of the first type, which describes total bilateral trade flows, as estimated by Frankel (1997). The applied gravity equation is the following (with standard errors is parenthesis):

$$\begin{aligned}\log(T_{ij}) = &-12.146 + \underset{(0.469)}{0.930}\log(GNP_i\,GNP_j) + \underset{(0.018)}{0.128}\log(GNP/pop_i\,GNP/pop_j)\\ &\underset{(0.019)}{-0.770}\log(Dist_{ij}) + \underset{(0.038)}{0.445}(Adj_{ij}) + \underset{(0.157)}{0.768}(Lang_{ij}) + \underset{(0.090)}{\_}(Bloc_{ij})\\ &+ u_{ij}\end{aligned} \tag{1}$$

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 the nominal Gross National Product, *GMP/pop* is the nominal per-capita GNP, *Dist* is the great circle distance between the main commercial centers (countries' capitals with a few exceptions[21]), *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[22]), *Bloc* is the bloc dummy (equals one for countries in the same trading bloc), and u_{ij} is the error term. We followed Frankel in estimating the trade flow (the sum of exports and imports) between countries i and j as the average of the estimates reported by countries i and j.

The bloc dummy is the most powerful dummy in this model. The higher the estimate for the bloc dummy, the more trade is predicted among members of the bloc, controlling for all other factors. At the same time, a high bloc dummy coefficient does not indicate lower trade estimates between members of the bloc and the rest of the world. Therefore, each dummy estimates the trade creation effect of the bloc (rather than trade diversion). Moreover, rather than one dummy representing a joint participation of two counties in any trade bloc, the model has six dummies for six different trade blocs: the EU, the NAFTA, the Mercosur bloc, the Andean bloc, the ASEAN, and the Australia-New Zealand Free Trade Area. The estimators for the trade bloc dummies vary widely—from insignificantly different from zero for the EU and NAFTA[23] to 1.766 for the ASEAN.[24] This wide a variation of the bloc coefficients leads to significantly different potential bilateral trade flows in different trading blocs.

20. The model used by Kaminski and others answers the question if the given country under- or over-exports to certain destinations.

21. Almaty for Kazakhstan, Yekaterinburg for Russia in the case of trade with Asia and Moscow otherwise, Bonn for Germany, and Chicago for the U.S.

22. All CIS countries share the same language (Russian) while conducting trade.

23. Frankel (1997) explains the insignificance of the bloc effect for these two groupings through higher-than-average openness of the participating countries. As these countries trade more than average with all their partners, the bloc effect could not be detected under this equation specification. Frankel goes on to single out the bloc effects for these countries by controlling for openness in the gravity equation.

24. The estimates for other bloc dummies are as follows: Mercosur—0.690, the Andean bloc—0.965, and the Australia-New Zealand FTA—1.716.

We calculated two alternative sets of estimates for potential trade flows in the CIS. They differ in their underlying assumption about the nature of the CIS trade bloc.[25] The first set of estimates is based on the assumption that the CIS is not a natural bloc with a trade creating potential. These low-end estimates were obtained by applying the EU-NAFTA coefficient for the bloc dummy (i.e., $\gamma = 0$ in Equation 1). The second set of (high-end) estimates corresponds to the ASEAN coefficient ($\gamma = 1.766$) of the bloc effect. Therefore, for each bilateral trade flow, we have a range rather than a point estimate of potential trade.

The model without the bloc effect (see Table 2.4) shows that, in 1994, the CIS countries on aggregate traded in line with the gravity potential while overtrading among themselves and under-trading with the EU and other non-CIS countries. By 2001, the CIS countries continued to overtrade among themselves and normalized their trade with all other partners, except the U.S. As a result, they overtraded by 43 percent overall. The latter result suggests that the model without the bloc effect is missing a considerable amount of actual trade. In our interpretation, because there is no evidence that trade in CIS is overdeveloped, this result supports the conclusion that we should reject the assumption of zero bloc effect for the CIS. On the contrary, our estimates in this chapter indicate that trade in the region may be close to its potential.

Therefore, in our analysis below we focus primarily on the results that correspond to the model with the bloc effect (see Table 2.5), which, in our view, reflects rather well the trade developments in the CIS throughout the 1990s.

The results in Table 2.5 show inter-temporal dynamics of the realization ratios. In 1994, the collapse of trade translated into the depressed levels of realization ratios across the board. The CIS countries undertraded, both inside and outside the CIS, with the exception of trade with their Asian partners (China, Turkey, Iran). Not surprisingly, undertrading within the CIS was much less than outside the CIS. Hence, it was trade collapse rather than an adjustment in the direction of trade that defined the trade performance at that time.

Over the following years, trade has been picking up and the CIS countries overcame their aggregate under-trading. This result is fully consistent with the models of openness presented above. Moreover, trade diversification has accelerated after the 1998 crisis. In 2001, the CIS countries on aggregate traded close to the level predicted by the gravity model both among themselves and with the rest of the world, with the exception of trade with the US. However, this aggregate result was determined by a major adjustment in the central CIS, especially by the dominant traders—Russia and Ukraine. These countries have essentially completed the process of trade diversification. In contrast, smaller countries, such as Kyrgyz Rep., Moldova, Tajikistan, Uzbekistan, Kazakhstan, and Turkmenistan, continued overtrading with the CIS. Four out of seven CIS-7 countries are in this category. Overtrading is especially strong for Tajikistan and Moldova. Three South Caucasus countries—Armenia, Azerbaijan, and Georgia—trade with the CIS less than predicted by the gravity model. However, they paid for this adjustment with the overall trade volumes: their trade diversification out of the CIS has not been matched by realized trade opportunities elsewhere.

We included in the analysis the Baltic states as a benchmark for trade reorientation. These countries demonstrate a high degree of trade openness and have successfully diversified their trade out of the CIS and by 1997 achieved their potential volumes in trade with the EU.[26] At the same time, they seem to continue to trade relatively more with the CIS, not being members of the bloc, than with the EU. However, this over-trading stems exclusively from imports not exports. The Baltic states have completely re-oriented their exports out of the CIS (as shown in Table 2.3). At the same time, they continue to import large volumes of energy and raw materials from the CIS (mainly Russia) running large bilateral trade deficits. For example, the ratio of imports from Russia

25. In other words, we added one more, the seventh, bloc dummy to the model, and made two sets of assumptions regarding the coefficient for such a new variable.

26. It is worth noting that, compared to the rest of the FSU, the Baltic states had their trade with the EU much better developed already in 1994.

TABLE 2.4: REALIZATION RATIOS FOR THE GRAVITY MODEL WITHOUT THE BLOC EFFECT

	Armenia	Azerbaijan	Georgia	Kyrgyzstan	Moldova	Tajikistan	Uzbekistan	Belarus	Kazakhstan	Russia	Turkmenistan	Ukraine	Estonia	Latvia	Lithuania	CIS	CIS-7	Central CIS	Baltics
1994																			
Total	0.96	1.86	0.68	3.30	1.59	1.34	0.88	0.75	1.71	1.01	2.04	1.01	1.33	1.04	1.41	1.03	1.14	1.02	1.26
CIS	5.81	6.24	3.06	12.53	10.92	4.61	3.85	3.35	6.64	4.53	9.54	4.38	2.88	2.84	4.53	4.58	5.21	4.50	3.54
CIS-7	1.78	5.90	3.62	15.69	7.18	4.29	5.13	2.53	3.60	4.77	29.00	5.89	3.59	3.07	8.37	5.21	5.31	5.20	5.25
Other CIS	6.58	6.28	3.00	11.77	11.07	4.75	3.74	3.37	7.28	4.48	5.03	4.32	2.85	2.84	4.42	4.50	5.20	4.42	3.49
Russia	5.05	2.98	1.00	9.55	12.51	4.11	4.62	3.59	6.78	N/A	2.49	4.52	2.63	2.50	4.15	4.53	4.77	4.48	3.16
EU	0.17	0.30	0.12	0.68	0.20	0.86	0.46	0.19	0.63	0.73	0.79	0.25	1.38	0.90	0.99	0.60	0.38	0.61	1.07
CEE	0.24	0.44	0.37	0.58	2.14	1.22	1.01	0.65	2.46	2.31	1.51	1.07	0.54	0.59	1.30	1.80	1.12	1.84	0.95
OTHER	0.86	2.94	0.62	2.35	0.23	0.57	0.32	0.11	0.59	0.64	1.44	0.53	0.25	0.28	0.18	0.61	0.70	0.60	0.23
China	0.30	0.52	0.13	9.67	0.44	0.22	1.24	0.50	1.75	2.36	0.56	4.43	0.83	0.73	0.24	2.31	1.31	2.39	0.57
Iran	4.26	37.40	0.67	12.39	0.00	1.05	0.83	0.04	1.91	0.76	3.94	0.48	0.01	0.03	0.04	1.82	7.13	0.92	0.03
Turkey	0.02	4.56	4.60	9.63	0.90	2.46	2.94	0.27	4.17	1.77	11.35	1.77	0.14	0.23	0.51	1.95	2.87	1.85	0.32
USA	0.71	0.12	0.26	0.50	0.15	0.52	0.09	0.09	0.21	0.37	0.65	0.21	0.22	0.26	0.15	0.32	0.20	0.33	0.21
1997																			
Total	1.76	1.56	1.22	2.78	2.89	6.02	2.05	2.01	1.96	0.95	3.31	1.35	2.20	1.59	1.47	1.13	2.07	1.09	1.68
CIS	6.31	4.58	3.41	10.99	16.25	31.48	8.30	8.80	6.89	5.47	19.07	4.55	3.62	3.46	3.82	5.98	8.25	5.77	3.68
CIS-7	7.36	20.12	20.67	35.69	8.17	93.60	38.00	12.10	5.34	5.93	29.92	12.22	9.63	8.10	6.93	8.25	32.05	6.75	7.88
Other CIS	6.16	3.75	2.23	8.09	16.46	16.71	6.89	8.75	7.07	5.39	17.73	4.36	3.52	3.38	3.77	5.77	6.75	5.68	3.60
Russia	5.99	2.74	1.85	8.04	17.20	11.09	6.53	8.95	6.63	N/A	6.11	3.84	2.95	2.91	2.98	5.47	5.93	5.39	2.96
EU	0.94	0.46	0.48	0.67	0.80	2.37	0.98	0.50	0.98	0.69	0.64	0.51	2.48	1.57	1.26	0.67	0.81	0.67	1.66
CEE	1.61	1.13	2.79	1.85	4.46	5.34	3.24	1.21	1.35	1.91	0.74	1.64	0.96	0.98	1.07	1.84	3.01	1.80	1.03
OTHER	1.66	2.02	1.22	1.60	0.73	1.15	0.99	0.26	0.81	0.57	2.34	0.83	0.46	0.45	0.34	0.64	1.26	0.60	0.40
China	0.38	0.47	0.14	3.61	0.13	1.68	1.84	0.90	1.66	1.34	0.62	3.30	0.57	0.18	0.52	1.45	1.53	1.45	0.43
Iran	9.13	12.57	0.51	6.22	0.05	10.39	3.66	0.59	2.60	1.04	7.08	2.37	0.08	0.03	0.03	1.84	6.15	1.39	0.04
Turkey	1.16	6.51	7.24	10.77	1.67	4.42	7.31	0.67	5.41	1.94	17.89	3.55	1.24	0.27	1.32	2.51	5.78	2.28	1.01
USA	0.99	0.20	0.64	0.46	0.68	0.38	0.38	0.17	0.30	0.33	0.70	0.31	0.42	0.50	0.26	0.33	0.46	0.32	0.37
2001																			
Total	1.35	1.69	1.56	2.21	2.66	4.82	1.53	1.48	2.34	1.28	1.83	1.81	2.45	1.34	1.39	1.43	1.81	1.41	1.62
CIS	5.07	3.41	3.60	8.92	15.05	31.26	8.15	7.20	9.07	6.20	10.82	6.65	4.76	2.80	3.53	6.85	7.25	6.81	3.58
CIS-7	4.37	12.86	14.81	25.41	2.65	60.42	26.12	9.33	7.19	4.68	18.03	13.97	5.22	2.63	3.94	7.25	20.17	6.16	3.83
Other CIS	5.20	2.81	2.41	7.01	15.48	24.05	7.01	7.16	9.31	6.47	9.76	6.43	4.75	2.80	3.52	6.81	6.16	6.88	3.57
Russia	5.39	1.40	1.69	6.46	14.69	16.03	6.09	7.35	8.64	N/A	2.14	5.63	4.01	1.87	3.12	6.20	4.68	6.47	2.95
EU	0.95	1.91	1.05	1.09	1.35	1.69	0.87	0.63	1.70	1.10	0.51	1.02	2.75	1.50	1.41	1.09	1.25	1.08	1.76
CEE	0.53	0.57	2.46	1.00	3.81	7.13	2.02	1.03	2.01	2.30	1.38	2.09	1.51	1.13	1.12	2.14	2.03	2.15	1.18
OTHER	1.19	0.94	1.50	1.24	0.84	1.40	0.47	0.31	0.96	0.79	1.54	0.90	0.88	0.30	0.38	0.81	0.89	0.81	0.47
China	0.35	0.63	0.28	3.57	1.10	0.34	0.58	1.28	2.59	2.07	0.61	3.47	6.70	0.56	0.85	2.09	0.87	2.15	2.02
Iran	6.12	1.52	0.81	3.98	0.01	12.91	0.00	1.59	4.32	1.59	5.67	1.28	0.06	1.07	0.13	2.04	2.06	2.04	0.39
Turkey	0.94	5.06	15.36	8.13	2.73	24.07	5.30	0.72	3.65	4.01	9.24	6.19	0.98	0.57	1.92	4.42	6.20	4.24	1.34
USA	0.74	0.40	0.62	0.32	0.69	0.29	0.31	0.17	0.33	0.41	0.72	0.35	0.42	0.25	0.27	0.40	0.43	0.40	0.30
BALTICS	1.71	0.72	0.93	3.90	5.15	13.70	6.91	5.88	3.45	2.95	1.78	4.53	16.33	17.23	17.78	3.32	3.83	3.31	17.17
Estonia	0.53	0.41	1.31	1.74	6.66	12.22	11.37	9.98	3.14	4.01	1.86	8.67	not applic	15.97	16.93	4.48	5.22	4.47	16.33
Latvia	1.19	0.89	0.00	5.62	3.19	26.49	2.79	11.31	5.36	1.87	1.98	2.67	15.97	not applic	18.17	2.61	2.63	2.61	17.23
Lithuania	2.55	0.75	1.32	3.87	5.65	6.39	7.34	3.61	2.39	3.12	1.62	4.14	16.93	18.17	not applic	3.25	3.94	3.24	17.78

TABLE 2.5: REALIZATION RATIOS FOR THE GRAVITY MODEL WITH THE MAXIMUM BLOC EFFECT

	Armenia	Azerbaijan	Georgia	Kyrgyzstan	Moldova	Tajikistan	Uzbekistan	Belarus	Kazakhstan	Russia	Turkmenistan	Ukraine	Estonia	Latvia	Lithuania	CIS	CIS-7	Central CIS	Baltics
1994																			
Total	0.63	1.09	0.40	1.76	1.02	0.78	0.54	0.41	0.93	0.78	1.30	0.58	1.33	1.04	1.41	0.72	0.69	0.72	1.26
CIS	0.99	1.07	0.52	2.14	1.87	0.79	0.66	0.57	1.14	0.77	1.63	0.75	2.88	2.84	4.53	0.78	0.89	0.77	3.54
CIS-7	0.30	1.01	0.62	2.68	1.23	0.73	0.88	0.43	0.62	0.82	4.96	1.01	3.59	3.07	8.37	0.89	0.91	0.89	5.25
Other CIS	1.12	1.07	0.51	2.01	1.89	0.81	0.64	0.58	1.25	0.77	0.86	0.74	2.85	2.84	4.42	0.77	0.89	0.76	3.49
Russia	0.86	0.51	0.17	1.63	2.14	0.70	0.79	0.61	1.16	N/A	0.43	0.77	2.63	2.50	4.15	0.77	0.82	0.77	3.16
EU	0.17	0.30	0.12	0.68	0.20	0.86	0.46	0.19	0.63	0.73	0.79	0.25	1.38	0.90	0.99	0.60	0.38	0.61	1.07
CEE	0.24	0.44	0.37	0.58	2.14	1.22	1.01	0.65	2.46	2.31	1.51	1.07	0.54	0.59	1.30	1.80	1.12	1.84	0.95
OTHER	0.86	2.94	0.62	2.35	0.23	0.57	0.32	0.11	0.59	0.64	1.44	0.53	0.25	0.28	0.18	0.61	0.70	0.60	0.23
China	0.30	0.52	0.13	9.67	0.44	0.22	1.24	0.50	1.75	2.36	0.56	4.43	0.83	0.73	0.24	2.31	1.31	2.39	0.57
Iran	4.26	37.40	0.67	12.39	0.00	1.05	0.83	0.04	1.91	0.76	3.94	0.48	0.01	0.03	0.04	1.82	7.13	0.92	0.03
Turkey	0.02	4.56	4.60	9.63	0.90	2.46	2.94	0.27	4.17	1.77	11.35	1.77	0.14	0.23	0.51	1.95	2.87	1.85	0.32
USA	0.71	0.12	0.26	0.50	0.15	0.52	0.09	0.09	0.21	0.37	0.65	0.21	0.22	0.26	0.15	0.32	0.20	0.33	0.21
1997																			
Total	1.16	0.89	0.71	1.52	1.86	3.64	1.24	1.08	1.06	0.78	2.12	0.75	2.20	1.59	1.47	0.83	1.24	0.81	1.68
CIS	1.08	0.78	0.58	1.88	2.78	5.38	1.42	1.50	1.18	0.93	3.26	0.78	3.62	3.46	3.82	1.02	1.41	0.99	3.68
CIS-7	1.26	3.44	3.54	6.10	1.40	16.01	6.50	2.07	0.91	1.01	5.12	2.09	9.63	8.10	6.93	1.41	5.48	1.15	7.88
Other CIS	1.05	0.64	0.38	1.38	2.81	2.86	1.18	1.50	1.21	0.92	3.03	0.75	3.52	3.38	3.77	0.99	1.15	0.97	
Russia	1.02	0.47	0.32	1.37	2.94	1.90	1.12	1.53	1.13	N/A	1.04	0.66	2.95	2.91	2.98	0.93	1.01	0.92	2.96
EU	0.94	0.46	0.48	0.67	0.80	2.37	0.98	0.50	0.98	0.69	0.64	0.51	2.48	1.57	1.26	0.67	0.81	0.67	1.66
CEE	1.61	1.13	2.79	1.85	4.46	5.34	3.24	1.21	1.35	1.91	0.74	1.64	0.96	0.98	1.07	1.84	3.01	1.80	1.03
OTHER	1.66	2.02	1.22	1.60	0.73	1.15	0.99	0.26	0.81	0.57	2.34	0.83	0.46	0.45	0.34	0.64	1.26	0.60	0.40
China	0.38	0.47	0.14	3.61	0.13	1.68	1.84	0.90	1.66	1.34	0.62	3.30	0.57	0.18	0.52	1.45	1.53	1.45	0.43
Iran	9.13	12.57	0.51	6.22	0.05	10.39	3.66	0.59	2.60	1.04	7.08	2.37	0.08	0.03	0.03	1.84	6.15	1.39	0.04
Turkey	1.16	6.51	7.24	10.77	1.67	4.42	7.31	0.67	5.41	1.94	17.89	3.55	1.24	0.27	1.32	2.51	5.78	2.28	1.01
USA	0.99	0.20	0.64	0.46	0.68	0.38	0.38	0.17	0.30	0.33	0.70	0.31	0.42	0.50	0.26	0.33	0.46	0.32	0.37
2001																			
Total	0.97	1.09	1.00	1.33	1.88	3.23	1.02	0.90	1.46	1.08	1.29	1.13	2.45	1.34	1.39	1.11	1.19	1.10	1.62
CIS	0.87	0.58	0.62	1.53	2.57	5.35	1.39	1.23	1.55	1.06	1.85	1.14	4.76	2.80	3.53	1.17	1.24	1.16	3.58
CIS-7	0.75	2.20	2.53	4.34	0.45	10.33	4.47	1.60	1.23	0.80	3.08	2.39	5.22	2.63	3.94	1.24	3.45	1.05	3.83
Other CIS	0.89	0.48	0.41	1.20	2.65	4.11	1.20	1.22	1.59	1.11	1.67	1.10	4.75	2.80	3.52	1.16	1.05	1.18	3.57
Russia	0.92	0.24	0.29	1.10	2.51	2.74	1.04	1.26	1.48	N/A	0.37	0.96	4.01	1.87	3.12	1.06	0.80	1.11	2.95
EU	0.95	1.91	1.05	1.09	1.35	1.69	0.87	0.63	1.70	1.10	0.51	1.02	2.75	1.50	1.41	1.09	1.25	1.08	1.76
CEE	0.53	0.57	2.46	1.00	3.81	7.13	2.02	1.03	2.01	2.30	1.38	2.09	1.51	1.13	1.12	2.14	2.03	2.15	1.18
OTHER	1.19	0.94	1.50	1.24	0.84	1.40	0.47	0.31	0.96	0.79	1.54	0.90	0.88	0.30	0.38	0.81	0.89	0.81	0.47
China	0.35	0.63	0.28	3.57	1.10	0.34	0.58	1.28	2.59	2.07	0.61	3.47	6.70	0.56	0.85	2.09	0.87	2.15	2.02
Iran	6.12	1.52	0.81	3.98	0.01	12.91	0.00	1.59	4.32	1.59	5.67	1.28	0.06	1.07	0.13	2.04	2.06	2.04	0.39
Turkey	0.94	5.06	15.36	8.13	2.73	24.07	5.30	0.72	3.65	4.01	9.24	6.19	0.98	0.57	1.92	4.42	6.20	4.24	1.34
USA	0.74	0.40	0.62	0.32	0.69	0.29	0.31	0.17	0.33	0.41	0.72	0.35	0.42	0.25	0.27	0.40	0.43	0.40	0.30
BALTICS	1.71	0.72	0.93	3.90	5.15	13.70	6.91	5.88	3.45	2.95	1.78	4.53	2.79	2.95	3.04	3.32	3.83	3.31	2.94
Estonia	0.53	0.41	1.31	1.74	6.66	12.22	11.37	9.98	3.14	4.01	1.86	8.67	not applic	2.73	2.90	4.48	5.22	4.47	2.79
Latvia	1.19	0.89	0.00	5.62	3.19	26.49	2.79	11.31	5.36	1.87	1.98	2.67	2.73	not applic	3.11	2.61	2.63	2.61	2.95
Lithuania	2.55	0.75	1.32	3.87	5.65	6.39	7.34	3.61	2.39	3.12	1.62	4.14	2.90	3.11	not applic	3.25	3.94	3.24	3.04

over exports to Russia in 2001 stood at 1.9 for Estonia, 2.8 for Latvia, and 3.2 for Lithuania. Therefore, Baltic countries' large trade with the CIS does not compete with their trade with the rest of the world.[27]

Without developing a new global gravity model that would explicitly have a separate bloc dummy for the CIS, we may suggest only a preliminary indication of the revealed bloc effect for the CIS. For this purpose, we will assume that all the difference between potential (in effect, predicted by the Frankel's model) and realized trade flows within the CIS are attributed to the effect of the CIS bloc. If we write the gravity equation in the following form:

$$\ln (X_{ij}) = \ln (f_{ij}(GDP_i, GDP_j, GDP/cap_i, GDP/cap_j, Dist_{ij}, Adj_{ij}, Lang_{ij})) + \gamma\, Bloc_{ij} \quad (2)$$

Under the above assumption, the bloc effect estimate will equal[28]:

$$\gamma = \ln (\Sigma_{i,j:\, i,j\_\,\mathrm{CIS}} (X^R_{ij})) - \ln (\Sigma_{i,j:\, i,j\_\,\mathrm{CIS}} (f_{ij}(\cdot))), \quad (3)$$

where the subscript *R* stands for the realized trade.

Thus, the calculated bloc effect coefficient for the CIS stood at 1.521 in 1994, 1.788 in 1997, and 1.924 in 2001, which is close to the ASEAN and the Australia—New Zealand FTA effect. The powerful bloc effects for these two groupings can be largely explained by geography: These countries are located on the periphery of the world trade flows (the largest of which would be transatlantic, intra-NAFTA, intra-EU, and US-Japan flows), far from the global trade center of gravity and this geographic factor pushes them to trade relatively more among themselves (Smarzynska 2001). In our opinion, the same geographic factor affects the CIS. Other factors underlying the strength of the CIS bloc effect include their common economic history, high complementarities of members' economies, similarities in the accumulated stock of technologies and skills, and the same market transition process they all undergo, albeit with various speeds and detours. One indication of those features is the above-mentioned differences in the intra-industry trade, which is much more intensive within than outside the CIS. These factors far exceed the usual effects of shared borders and common language, captured by the relevant variables of the gravity model.

In contrast to our findings, the recent EBRD gravity model with regional dummies suggests that CIS countries as a group still undertrade on aggregate and with the rest of the world (EBRD Transition Report, 2003, and the underlying background paper of Babetski and others 2003). However, this model's results are based on three, in our view, questionable premises:

- The model uses GDP in PPP rather than nominal GDP (as in the Frankel model). As noted above, CIS country PPP coefficients are among the highest in the world, indicating a serious measurement problem deriving from the sample heterogeneity.
- The GDP-per-capita variable is missing in the model. As a result, the model does not have a variable that reflects the development level of trading partners. Such a variable is important for the gravity model, because countries tend to trade more at higher income levels. Within the existing specification of the model, regional dummies represent not so much trade intensities of respective countries, but the average income levels in the respective

27. Another factor that might increase the apparent trade volumes of Baltic countries is large Russian transit trade flows that go through these countries' ports. Transit trade may be not fully netted out in the IMF Direction of Trade Statistics, which we are using here.

28. We want to find such γ for the CIS bloc that total intra-CIS trade predicted by Equation 2 ($\Sigma_{i,j:\, i,j\_\,\mathrm{CIS}} (X_{ij})$) will equal the observed-CIS trade ($\Sigma_{i,j:\, \mathrm{i,j\_\,CIS}} (X^R_{ij})$. In other words, the realization ratio for intra-CIS trade flows equals one. We will consider such γ as representing the CIS trade bloc effect. Under this assumptions:

$\Sigma_{i,j:i,j\_\,\mathrm{CIS}} (X^R_{ij}) = \Sigma_{i,j:i,j\_\,\mathrm{CIS}} (\exp (\ln (f_{ij}(\cdot)) + \gamma\, Bloc_{ij}))$. $Bloc_{ij} = 1$ for all intra-CIS trade dyads, hence $\Sigma_{i,j:i,j\_\,\mathrm{CIS}} (X^R_{ij}) = \exp (\gamma)\, \Sigma_{i,j:i,j\_\,\mathrm{CIS}} (f_{ij}(\cdot))$ and $\gamma = \ln \Sigma_{(i,j:i,j\_\,\mathrm{CIS}} (X^R_{ij})) - \ln (\Sigma_{i,j:i,j\_\,\mathrm{CIS}} (f_{ij}(\cdot)))$.

regions. The fact that the two regions in the sample with the lowest coefficients for their regional dummies (the CIS and South Asia) are the two regions with the highest concentration of low-income countries supports this observation.

- The sample used in the EBRD analysis is biased towards high- and middle-income countries, while low-income countries are under-represented (for instance, there is no sub-Saharan Africa in the sample). Because the CIS contains a relatively high concentration of low-income economies (the CIS-7, Turkmenistan, and Ukraine out of twelve), this is another factor that may explain the low estimates of the CIS dummy coefficient in the EBRD model. Once again, the low CIS dummy would reflect not as much trade underperformance but rather lower income levels.

While the CIS members made significant progress in overall trade diversification, trade expansion has been rather uneven with respect to main trade partners. In 1994, trade with the USA was less than half of the potential and increased very little since then. All the CIS countries also grossly undertraded with the EU. The realization ratio was 0.61 for the central CIS and only 0.38 for the CIS-7. The picture had dramatically improved over the following seven years. In 2001, the CIS countries traded with the EU in line with the model predictions, with the only exception for Belarus. The share of the EU stood at 33 percent for total CIS exports and 32 percent for imports in 2001. During the entire period 1994–2001, CIS members traded very actively with the CEE countries and their three main Asian partners—more than predicted by the model.

However, this overall trade normalization with the EU masks sharp deficits in bilateral trade for some CIS countries, namely for Armenia, Belarus, Moldova, Turkmenistan, Ukraine, and Uzbekistan (see Table 2.6). Therefore, while the hypothesis of CIS under-trading with the EU is not confirmed, some CIS countries, which export much less to the EU than they import, might underexport to the EU. This CIS group can offer less resource-intensive products in EU markets than the rest of the CIS, which run positive or zero balances in their trade with the EU thanks mainly to their energy and raw material exports.

These six countries, however, run trade deficits on aggregate and with most of their partners. For instance, Ukraine's trade deficit with the EU increased from 2.9 percent of GDP in 1995 to 5.0 percent in 2001, and Moldova's trade deficit with the EU—from 0.9 percent in 1995 to 8.6 percent in 2001. Annex Table A2 compares the deficit of each CIS country in its trade with non-CIS countries with trade deficit with the EU. In 2001, the latter was larger than the former for Armenia, Belarus, Turkmenistan, and Ukraine. The highest differential (trade deficit with the EU

TABLE 2.6: FSU TRADE WITH THE EU

	Ratio of Exports to Imports, 2001		
Armenia	0.30	Tajikistan	5.15
Azerbaijan	5.87	Turkmenistan	0.51
Belarus	0.66	Ukraine	0.61
Georgia	0.87	Uzbekistan	0.70
Kazakhstan	1.57	Estonia	0.89
Kyrgyz Rep.	1.81	Latvia	0.67
Moldova	0.49	Lithuania	0.78
Russia	2.15		

Source: IMF DOTS.

minus trade deficit with all non-CIS partners) was recorded for Ukraine. In 2001, Ukraine incurred a trade deficit with the EU of 24 percent of total bilateral trade while it recorded a 10 percent surplus in trade with all non-CIS countries. This situation might indicate problems with market access. If trade deficit with the EU is halved as a result of improved market access, this will translate into the expansion of the 2001 total exports by 25 percent for Armenia, 11 percent for Moldova, and 7 percent for Ukraine.

The nature of trade relationship between the CIS and the EU has been recently explored in Åslund (2003) and Åslund and Warner (2003). Their conclusion is that the CIS countries underexport to the EU owing to discriminatory market access offered by the EU. Åslund's article states that the EU share in total CIS exports based on a gravity model stands at 58 percent thus indicating that the CIS countries still grossly undertrade with the EU.[29] It is not clear, however, what specific model was used to make this conclusion and for what particular countries this figure applies. (It is understandable that in the equilibrium, say, Moldova must have a much higher export share to the EU than, say, Kyrgyz Rep.).

Åslund and Warner's underexport conclusion is based on a cross-country regression that links transition economies' shares of exports to the EU with the distance of individual countries' capital city to Düsseldorf, EBRD reform index (lagged two years) and the CIS dummy, which turned to be negative. However, there are serious problems with the model specification and data, which were used for its estimation.

The most important problem with the Åslund-Warner model specification is that this model is not a gravity equation, because it does not take into account three core gravity factors—GDP, GDP per capita, and trade volumes with other partners, which exert their own gravitational pull. When only one partner—the EU—is included, this biases the resulting estimates of potential trade flows in favor of that partner. The basic logic of the gravity model suggests that the share of countries' trade with the EU should diminish with the distance to the EU not only because the EU is farther away but because other important partners are becoming closer and are starting to dominate the trade. For instance, the Central Asian countries have to have smaller shares of the EU trade than determined solely by their distance from Düsseldorf, because, in addition, they experience the pulls of large regional partners—such as China and Russia. From the geographical perspective, the pull of non-European trading partners is much larger for the CIS than for the CEE, which could provide an alternative explanation for the fact the CIS dummy has a negative coefficient in Åslund and Warner's model.

There is also a serious data problem in Åslund and Warner's paper: their data for 1992 and 1993, the base years, do not include the intra-CIS trade but the data for the subsequent years do, hence the big jumps in 1994 and 1995 and an erroneous decline in the share of the EU in the CIS exports between 1993 and 1996.[30]

Elborgh-Woytek (2003) also claims that CIS countries sharply undertrade with the EU. However, the estimation methodology applied in her paper leads to an upward bias of the normative estimates for both the overall trade openness of the CIS countries and their trade with the EU.[31]

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29. As mentioned above, our estimate for the potential share of EU in the overall CIS trade is about one-third.

30. Thanks to Paul Brenton for pointing out these issues.

31. The paper regresses each country's trade openness toward the EU (the ratio of trade with the EU over GDP) on population, GDP in PPP, and the distance to Frankfurt. It was run on two samples—CEE and the CIS. The CEE sample yielded a nice regression of the expected form, while the CIS sample produced a regression with wrong signs and statistically insignificant coefficients. Potential trade flows of CIS countries were further calculated by substituting the data for CIS countries in the equation for CEE ("out-of-sample estimation"). However, this procedure is not justifiable in this situation. The first model made it is clear that the CIS and CEE samples are very different, which is quite intuitive, given the differences between the CEE and the CIS in development levels, geography, etc. Hence, out-of-sample estimation is not applicable in this case.

Under-exporting of the six CIS countries to the EU, as identified above, has both market access and behind-the-border origins. On the market access side, all these counties enjoy the GSP preferences in the EU, although this gives them much less benefits compared to several other regional groupings (such as countries in the Balkans and Mediterranean) as well as to the LDCs. While we did not find any significant evidence that market access to the EU constitutes a major problem for CIS members, a further improvement of market access would always help. Some of these countries could potentially negotiate free trade agreements with the EU like the CEE countries did in the 1990s. It is clear that for Moldova, for instance, this would be greatly beneficial, especially given the latest round of EU expansion. However, the experience with the existing FTAs with the EU shows that these agreements per se would not guarantee a surge of exports. These free trade agreements tend to exclude "sensitive" products such as textiles, clothing, agriculture, and steel from the free trade regime (while these are exactly the products that CIS countries would be the most interested to export). Also, the rules of origin applied in such agreements tend in effect to deny free trade treatment to a large portion of exports (Brenton and Manchin 2002).

At the same time, much more serious barriers for trade expansion in these countries rest at home. Business environments, trade infrastructure (both physical and institutional), and local marketing skills present major challenges for foreign investors willing to include the CIS producers in their international value chains (see Vandycke 2003).

CIS-7: Lagging Behind in Trade Diversification and Export Performance

This section summarizes the trade performance of CIS-7 countries in comparison with the larger and wealthier CIS members. As follows from the previous sections of this study, our results indicate that the CIS-7 underperform considerably relative to their neighbors. This is reflected in the following indicators (see also Table 2.7):

- lower overall export levels and slower export growth in the second part of the 1990s;
- lower manufacturing exports (both per capita and as a proportion to GDP);
- lower share of non-CIS trade;
- higher residual over-trading with the CIS;
- lower level of intra-industry trade; and
- significant trade deficit.

What are the main factors that explain such a difference in performance? First, the central CIS had a stronger historical export base and managed to preserve a larger share of it, including through various subsidies during the early years of transition. The CIS-7 did not have sufficient resources to provide their key companies with transitional subsidies, which would help them to maintain their participation in the traditional export-oriented technological cooperation. It is also worth noting that a dominant share of non-energy export from Russia, Ukraine, and Belarus is heavily concentrated in a handful of traditional post-Soviet producers, for example, in metallurgy and chemicals; these are not new exporters, but just a USSR legacy. What major exporters in the central CIS did was just expand their traditional non-CIS export through a partial re-direction of their CIS sales. It is clear that the CIS-7 members, who did not have this kind of export originally, were not capable of developing it quickly almost from scratch. From the short-term perspective, metallurgical and chemical plants, which Ukraine and Belarus inherited from the USSR together with their established export markets, play the same role in shaping their current export potential as, for example, oil deposits in Russia and Kazakhstan.

Second, the central CIS, especially Russia, inherited much stronger marketing capabilities (knowledge of traditional Soviet export markets), which helped to preserve some traditional high-value niches (such as arms, nuclear, and space technologies). Russian suppliers effectively

TABLE 2.7: AVERAGE TRADE PERFORMANCE OF THREE GROUPS OF THE FORMER SOVIET REPUBLICS—CIS-7, CENTRAL CIS, AND THE BALTICS

	CIS-7 (without Azerbaijan)	Central CIS	Azerbaijan and Turkmenistan	Baltics
Export growth, country average for the period 1996–2001, %	106	112	287	136
Manufacturing export growth, average for the period 1996–2000	137	93	182	142
Share of non-CIS exports in 2001, percent	62	76	67	85
Change in the share of non-CIS export from 1996-2001, percent points[32]	39	18	19	46
Exports per capita, $, 2001	105	573	254	1703
Manufacturing exports per capita in 2000, US$	24	238	23	1037
Ratio of manufacturing exports to GDP in 2000, percent	6	20	2	30
Over-trading with the CIS in 2001 as determined by the gravity model, percent	48**	9**	15**	224*
Openness, percent of GDP in 2001	97	88	97	128
Grubel-Lloyd Index	40	55	25	n.a.
Trade balance, percent of GDP in 2001	–11	6	4	–13
FDI per capita, annual average for 1997–99, US$	18.2	32.3	74.9	184.8
Heritage Index of Liberalization, 2003: rating	3.47	3.79	3.75	2.20
average rank	108	134	125	23
Contract enforcement costs, as percent of GNI per capita	58.8	20.7	n.a.	10.3 (w/o Estonia)
Corruption Index (BEEPS), 2002	–0.93	–0.92	–1.14	0.33

All averages are unweighted.

* Based on the model without trade bloc effect, as the Baltics are not CIS members (see the model earlier in Chapter 2).

** Based on the model with trade bloc effect, as all CIS countries belong to the same bloc (see the model earlier in Chapter 2).

Source: The World Bank, IMF, Heritage Foundation, and authors' estimates.

32. The data for Georgia are for 1997.

substituted CIS-7 enterprises, which were elements of traditional Soviet chains. Belarus managed to preserve an unusually high level of industrial cooperation with Russia due to political factors and excessive reliance on barter arrangements.

Third, the central CIS due to their size and incomes have been more attractive for foreign investments than the CIS-7, even at the same level of reform effort. Moreover, Russia, and to some extent Ukraine, benefited from both capital flight and migration of skilled labor from the CIS-7.

In addition, individual CIS-7 countries, Armenia and the Kyrgyz Republic, were heavily affected by the policies of their larger neighbors that greatly hurt trade developments by restricting commercial border crossing.

The ultimate explanation for a difference in trade performance could be linked to the levels of FDI flows. For a small poor economy, attraction of FDI is a key for export diversification and expansion. So far, the CIS-7 underperformed considerably in terms of improvements in the business environment, compared to both the Baltic states and the smaller economies of central Europe. As a result, the amounts of non-energy FDI inflows in the CIS-7 remained depressed,[33] which in combination with weaknesses of the local private sector largely explain the slow development of nontraditional, manufacturing export.

The Baltic states provide a positive example of small FSU economies, which succeeded in full reorientation of their trade, based on the major policy reform effort that followed by a considerable FDI inflow. Table 2.7 also confirms that reform progress in the CIS-7 was much slower than in the Baltics, which is reflected in both various reform indices as well as in corruption indicators.

The main policy recommendations from this analysis could be summarized as follows:

- The CIS-7 members have been affected by major comparative disadvantages relative to most of their neighbors within and outside of the CIS. These disadvantages, which derive from their size, location, political factors and major losses in their traditional manufacturing base, make it difficult for them to compete for FDI and therefore delay their trade diversification efforts. The main compensatory mechanism that these countries could use is the acceleration of their reform effort, using the Baltic states and other small economies of central Europe (but not higher income CIS members) as reform benchmarks.
- Given the fact that the higher income CIS members have so far been more successful in their global trade integration efforts, additional integration within the CIS in the medium term could be beneficial to the CIS-7, which would be able to use more globally integrated CIS economies as a tool for broadening their own market opportunities.
- International donors should expand technical assistance to CIS-7 on export development, investment promotion, business linkages, trade information access, etc.
- The international community should help CIS-7 members to negotiate the removal of existing trade barriers that derive from trade policies and practices of their larger neighbors and potential major trade partners.

Conclusion

According to modern views on regional trade, some overtrading among the members of regional trade groupings may be a result of natural forces and is not necessarily distortionary. This effect is especially strong for those blocs that are located far away from the global trade center. We have reasons to believe, and found some evidence, that CIS countries form such a natural trade bloc

33. Note that official data on FDI in CIS-7 somewhat overestimate the volume of conventional FDI in manufacturing, which is usually associated with the improved export performance. In many small countries, such as Armenia, a large portion of actual FDI was associated with the privatization of the local infrastructure networks and could not lead directly to improvements in exports.

with a strong trade creating bloc effect, which is still within the range for effects observed for several other trade blocs.

The gravity analysis indicates that, by 2001, the largest CIS countries, such as Russia and Ukraine, have largely completed reorientation of their trade flows from traditional partners in the CIS towards new markets. The 1998 Russia crisis accelerated trade re-orientation. In 2001, CIS countries on aggregate traded close to the level predicted by the gravity model both among themselves and with the rest of the world, with the exception of the USA. Trade with the EU is close to potential, except for Belarus. However, this redirection of trade flows in the CIS was due primarily to the energy price increases and the re-direction of energy flows. Redirection of trade in manufacturing has been lagging. Moreover, trade diversification in the CIS-7 has been lagging behind the developments in the central CIS.

However, overall normalization in the direction of trade flows masks sharp deficits in bilateral trade for some countries. For instance, Armenia, Belarus, Moldova, Turkmenistan, Ukraine, and Uzbekistan run sharp deficits in their trade with the EU. These counties can offer less mineral-resource-intensive products for the EU markets than the rest of the CIS. The underexporting of non-resource-intensive goods to the EU is caused both by market access restrictions (usual for most developing countries) and more specific behind-the-border problems in the CIS.

All central Asian countries and Moldova continue overtrading with the CIS and under-trading with the rest of the world. Four out of seven CIS-7 countries are in this category. Three South Caucasus countries trade with the CIS less than predicted by the gravity model. However, this was achieved at least partially through the overall decline in their trade volumes but not through re-direction of trade: the loss of their trade with the CIS has not been compensated by trade expansion elsewhere. In addition, both Armenia and Azerbaijan have their export to non-CIS dominated by a single commodity (diamonds and oil, respectively, shipped to the EU).

CHAPTER 3

THE CIS FREE TRADE AREA AND TRADE INTEGRATION

Free Trade Agreements (FTAs)

Plans to establish a CIS free trade area were initiated in 1992. However, the main plurilateral Agreement on the Establishment of the Free Trade Area, signed by all CIS countries except Turkmenistan in April 1994, was of a framework nature and has never been ratified by the Russian Parliament and therefore remains ineffective. Over the last decade, a web of bilateral free trade agreements among CIS members has substituted the ineffective plurilateral agreements. The texts of the signed bilateral free trade agreements are rather similar. The agreements stipulate duty-free trade in all goods, while allowing for unspecified potential exemptions, and free transit of goods through the signatories' territories.

The exemptions from the free trade regime are introduced in the protocols of many bilateral free trade agreements. These protocols are considered inseparable parts of the agreements and are defined by bilateral trade committees, which meet on an annual basis. Exempted products are subject to most favored nation (MFN) tariff rates. These exemptions can be non-symmetric different products can be excluded by each partner in the same trade dyad. The introduced exemptions are normally accompanied by a schedule to eliminate them. However, those schedules are not adhered to and there are no penalties for schedule slippages.

As seen from Table 3.1, Russia, Ukraine, and Moldova have bilateral FTAs with all or the absolute majority of CIS members but with many exemptions from the free trade regime.[34]

The core exemptions (those typically used by countries that introduce exemptions) include sugar, tobacco, and cigarettes, alcohol and (sometimes) non-alcoholic beverages. The driving force of the exemptions is CIS trading majors Russia, Ukraine, and Kazakhstan. Smaller countries

34. The materials presented in this Chapter, including this table, benefited from work done under Trade Diagnostic Integration Studies for a number of CIS-7 countries, which the authors participated in (World Bank 2002, 2003a, 2003b, and unpublished background papers on Moldova and the Kyrgyz Republic)

TABLE 3.1: BILATERAL FREE TRADE AGREEMENTS IN THE CIS

	Arm	Aze	Geo	Kyr	Mol	Taj	Uzb	Bel	Kaz	Rus	Tur	Ukr
Armenia	X	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes, w/ exe.	Yes, w/ exe.	No	Yes
Azerbaijan	No	X	Yes	No	Yes	No	No	No	Yes, w/ exe.	Yes, w/ exe.	No	Yes
Georgia	Yes	Yes	X	No	Yes	No	Yes	No	No	Yes, w/ exe.	Yes	Yes
Kyrgyz Rep.	Yes	No	No	X	Yes	No	Yes	No	Yes, w/ exe.	Yes, w/ exe.	No	Yes
Moldova	Yes	No	No	Yes	X	No	Yes	Yes	Yes	Yes, w/ exe.	Yes ?	Yes
Tajikistan	Yes	No	No	No	Yes	X	No	No	Yes, w/ exe.	Yes, w/ exe.	No	No
Uzbekistan	Yes	No	Yes	Yes	Yes	No	X	No	No	Yes, w/ exe.	No	No
Belarus	Yes	No	No	No	Yes, w/ exe.	No	No	X	No	Yes, w/ exe.	No	Yes, w/ exe.
Kazakhstan	Yes, w/ exe.	Yes, w/ exe.	Yes, w/ exe.	Yes, w/ exe.	Yes	Yes, w/ exe.	No	No	X	Yes, w/ exe.	No	Yes, w/ exe.
Russia	Yes, w/ exe.	Yes, w/ exe.	Yes, w/ exe.	Yes, w/ exe.	Yes, w/ exe.	Yes	Yes, w/ exe.	Yes, w/ exe.	Yes, w/ exe.	X	Yes, w/ exe.	Yes, w/ exe.
Turkmenistan	No	No	Yes	No	Yes	No	No	No	No	Yes, w/ exe.	X	Yes, w/ exe.
Ukraine	Yes	Yes	Yes	Yes	Yes, w/ exe.	No	No	Yes, w/ exe.	Yes, w/ exe.	Yes, w/ exe.	Yes, w/ exe.	X

introduce exemptions reciprocally in response to the exemptions of these countries. There are also some non-core exemptions, which appear in individual trade dyads. For instance, Russia exempts Kazakh steel. Nevertheless, according to the Russian Minister of Economy and Trade, Gref,[35] exemptions currently account for only 0.2 percent of mutual trade in the CIS. However, as the

35. Address to the Russian Parliament (the Federation Council) on February 26, 2003.

BOX 3.1: RUSSO-UKRAINIAN TRADE WARS

Here are some recent salvos of the protracted trade confrontation between Russia and Ukraine. In 1999, Ukraine imposed special quotas on electric filaments, artificial furs, and worsted canvas, and, in 2000, on some polyurethane products. The same year, it replaced the quota on electric filaments with an anti-dumping tariff of 97.5 percent for a period of five years. Russia immediately responded with anti-dumping tariffs on Ukrainian metal pipes. In 2001, after bilateral negotiations, Russian antidumping measures on pipes were lifted but replaced with negotiated quotas. In 2002, Ukraine imposed an anti-dumping tariff of 59.4 percent on crossing pieces. The same year it threatened to impose tariff quotas on a variety of Russian products from the light and chemical industries if Russia re-introduced a special tariff on Ukrainian metal pipes. Russia introduced safeguard tariffs on Ukrainian zinc, steel, some metal products, and candies. Ukraine introduced a safeguard tariff on cars with an engine capacity of 1,000–1,500 cu. cm (the majority of Russian-produced cars are of this capacity). The informal agreement between the presidents of the two countries on lifting all contingency measures in 2003 was disavowed by the Governments of both countries.

Source: Background paper produced by the Institute of Economic Reforms, Kiev.

exemptions are concentrated in a small number of products, their trade-restrictive effect is disproportionately high for these products. The exemption structure reflects the perception of "sensitive" sectors by the larger CIS countries.

The free trade agreements also stipulate the possibility of contingent protection temporary protection, anti-dumping measures, and safeguard measures. Larger countries, such as Russia, Ukraine, and Kazakhstan, are actively using these measures. Temporary quantitative restrictions for imports or exports can be introduced unilaterally (normally for up to two years) in case of an acute shortage of the goods in question on internal markets, large deficits in the balance of payments, realized or potential injury for domestic producers, and re-export control measures.[36] The laws on antidumping and safeguards in Russia, Ukraine, and most other CIS members (those who have enacted such laws) are in line with WTO rules. Nevertheless, contingent protection tends to pose a major barrier to trade.

Contingent protection measures are most pronounced in Russia-Ukraine trade, in which reciprocal protection measures have been plaguing bilateral trade relations for years (see Box 3.1). There are other instances as well. In order to boost foreign exchange revenues during the 1998 Russia crisis, the Government of Russia introduced an additional three percent surcharge on all imports. It was in effect from July 17, 1998 to March 12, 1999. This extra tariff did not apply to the members of the then Customs Union (later cum EURASEC)—Belarus, Kazakhstan, Kyrgyz Rep., and Tajikistan. Kazakhstan used temporary protection measures from 1999 to 2000 on cement, metal pipes, agricultural products, and foods. These measures were caused by weakened Kazakh trade competitiveness due to a relative appreciation of the Kazakh Tenge vis-à-vis the currencies of its main trading partners in the CIS (due to the Russia crisis) and were lifted soon after the depreciation of the Tenge.

The very existence of contingent protection has a chilling effect on trade even if not exercised (Kaminski and Rocha 2002). For this reason, it is advisable to eliminate the contingent protection clauses from the free trade agreements, as accomplished in some free trade areas (EU-EFTA, Canada-Chile FTA, and Australia-New Zealand FTA). The desirable elimination of contingency protection in the CIS agreements will require the conclusion of a (plurilateral) Competition Agreement and the creation of institutional infrastructure for its implementation. Current CIS

36. The latter provision seeks to curtail the re-export of CIS products out of the CIS.

agreements are open to the possibilities of export subsidies of different types, which may lead to increased pressure for contingency protection.
Overall, the main problems with the existing bilateral trade agreements in the CIS are:

- Potential exemptions from the free trade regime are not specified in the free trade agreements, which leave considerable scope for the parties to restrict trade, thus creating a degree of uncertainty concerning future market access. At present, the exemptions cover only a small percentage of intra-CIS trade but the agreements do not guarantee that this situation will persist.
- The agreements lack permanency. Each bilateral agreement is subject to changes.
- Contingent protection measures are allowed under free trade agreements and are frequently used and frequently changed in some trade dyads, which creates an environment of uncertainty.
- Unlike multilateral agreements that cover the entire CIS, bilateral free trade agreements do not. Thus extra complexities in agreement application arise.

The rules of origin applicable in the CIS free trade area were established by the Decision of the CIS Government Heads on the Rules of the Determination of a Country of Origin of Goods in 2000. The signatories elaborated a certificate of origin of a special type for the CIS free trade area (type ST-1). It is issued by the national ministries of trade or the Chambers of Commerce.

According to the rules of origin, exports subject to free trade treatment must be conducted by tax residents in the free trade area. This is important, for it implies that the exports of foreign owned companies can be denied duty-free treatment if these companies or their subsidiaries are not registered in the CIS free trade area.[37]

The basic criterion of sufficient processing/treatment is change in tariff heading. According to this rule, a product is considered to be of CIS origin if it is fully produced in the CIS country or, when imports are used in its production, if the designation of the product is different from the designation of the inputs according the 4-digit CIS trade nomenclature (which is concordant with the Harmonized System at this level of aggregation). This is the default principle; however, a long list of goods, as specified in the Annex to the agreed Rules of Origin, is exempted from this rule. The Annex includes two other rules, which are applied either separately or in combination, as specified by product:

- *Ad valorem rule:* Specified shares of imported materials or value added in the price of final production should be met, as detailed by the product. The specified share of value added in the free trade area in the final price of the product is normally set at 50 percent.
- Technological requirements: Specified technological operations should be performed in the free trade area.

These rules of origin do not seem overly restrictive. For example, the products traditionally considered sensitive, such as footwear, textiles, and clothing, are subject to the tariff heading criterion rather than more restraining technological requirements.

The *ad valorem* rule allows for full cumulation of origin among all 12 CIS countries, not just those countries that signed the bilateral free trade agreements between themselves. Hence, all materials originating in the CIS area can be included to satisfy requirements concerning sufficient domestic processing. This is an important arrangement providing incentives for trade integration among CIS countries and avoiding the adverse effects of the hub-and-spoke model, whereby, in

37. We know of at least one such case when a Swiss company not registered in Ukraine exported flour from Ukraine to Georgia. Although the two countries have a bilateral FTA, the shipment was denied free trade treatment and the Swiss company subsequently lost the case in the Georgian court.

the absence of a comprehensive set of free trade agreements between a group of countries, the dominant center (Russia) can capture most of the benefits of bilateral free trade with the individual members of such a group.

The clear and honest enforcement of the rules of origin raises some doubts, however. As was pointed out in Chapter 1, mirror statistics suggests that there are some indications of misstated origin during transit (see discussion following Table 1.1 in Chapter 1). Goods imported through Russia may often be given the status of Russian origin regardless of the share of its content that actually comes from Russia.

Standards

Another important multilateral agreement is the 1992 plurilateral Agreement on Mutual Policies in the Area of Standards, Metrology, and Certification and the 2000 Protocol on amendments to this agreement. The Agreement established the Interstate Council on Standards, Metrology, and Certification, which develops a system of harmonized standards. Within this system, the CIS members honor each other's certificates of conformity and quality. This is an important trade advantage for the CIS members because, despite their membership in the ISO, their national standards are not honored in the rest of the world.

At the outset of the market transition, the standards system of the CIS countries was based on the Soviet GOST system, which was not recognized in the rest of the world. The Council has been gradually introducing new standards in line with the ISO standards, European Norms, and other international and sectoral systems of standards. These standards have been incorporated in the national standards systems of the individual members, thus facilitating a movement of the bloc members towards the international system. This movement has been slow, however. At this time, about 20 percent of positions in the standards nomenclature are harmonized with international standards, while the rest are still based on GOST.

The harmonized set of standards is, however, only a part of the national standards systems of the CIS members. The reciprocal recognition applies only to interstate standards not national standards, which represent a sizable minority of all CIS standards. This is an important drawback, as new national standards are often introduced on an ad hoc basis, without due process of notification. Mishaps occur when exporters suddenly face a new standard for their product, which they do not know about, and their certificate of conformity, issued for another standard, suddenly becomes invalid.

The Interstate Council on Standards can potentially act as a vehicle of integration of the CIS into the world trading system if the evolving interstate CIS standards system is built in accordance with WTO guidelines and international standards systems. This means not only developing new standard positions but also bringing the entire national systems of standards in line with international practices. For instance, the current, overwhelmingly mandatory, system of standards should be broken down into mandatory standards (in WTO terms, technical regulations) and voluntary standards, defined by industry bodies rather than the government. So far, the Council designates its standards as mandatory, which contradicts obligations of WTO members.

In practice, national customs or standards officers at the Customs posts routinely recognize the certificates of conformity issued by each CIS member. However, it is the national Customs or standards official that has the ultimate responsibility to issue or confirm the certificate of conformity for imports. Certificates issued by the partner country are taken into consideration but can be questioned. Anecdotal evidence suggests that border officers abuse their responsibilities and extract bribes for the confirmation of certificates of conformity.

Another problem of the CIS trade bloc is the weak administration of the free trade area and underdeveloped plurilateral institutions. Trade is only one of many activities of the CIS, and the departments of the CIS Executive Committee and Secretariat (the main bodies of the CIS) that deal with trade do not have strong administrative power and can hardly influence the policies of national trade agencies, especially those of the larger CIS members. As a result, trade relations among the CIS countries are regulated mostly at the bilateral level. The CIS Committee does not

have an inquiry point or information facilities allowing trade actors to follow the rapidly changing rules and regulations, many of which are introduced at the national level. National trade representatives do not have reliable plurilateral means of recourse against other members' actions.

Transit

A large number of plurilateral (CIS) and bilateral agreements on transit have been largely ineffective and failed to bring about free transit in the region, despite the fact that many of these agreements provide for the national treatment of transport companies in transit. The principle of transit freedom and non-discrimination as well as the use of transit fees that take into account the cost of services rendered are upheld in a number of CIS agreements and in the WTO agreements, such as:

- GATT Article V on freedom of transit (mandatory for WTO members—Armenia, Georgia, the Kyrgyz Republic, and Moldova);
- Articles on free transit included in all bilateral free trade agreements; and
- Plurilateral transit and transport agreements—Agreement on Transit through Territories of CIS members (1997), Agreement on Common Transport Policies in the CIS (1997), the Agreement on Transport Tariffs in the CIS (1997), Agreement on Road Transport Union of EURASEC (1998, not ratified by Kazakhstan) and Agreement on Common Railway Tariffs in EURASEC (2002).

However, these arrangements are largely ineffective, have not been implemented or have limited impact. They tend to serve as political statements and strategic intentions, outlining general policy and strategic goals rather than actual arrangements. The WTO disciplines apply only to its members while major transit countries in the region are still outside the WTO. Nevertheless, transit on rail is freer than on road.

Because neither plurilateral nor multilateral agreements are in practice observed and the major transit countries in the CIS are outside of the WTO, CIS countries entered into a number of bilateral agreements on transit and road transport with its neighbors. Bilateral agreements, as a rule, do not stipulate free transit but instead establish quotas for vehicles benefiting from preferential access to parties' territories. However, these quotas can change, and indeed change, unilaterally and there is no sound dispute resolution mechanism between parties.

Transit countries often use their geographical advantage to restrict movement of goods of the transiting countries. For example, Ukraine creates restrictions on Moldovan transit to Russia and Kazakhstan, on Kyrgyz transit to Russia and Uzbekistan, on Tajik transit to Kazakhstan, Russia, and Georgia, and on Armenian transit to the ports on the Black Sea. Transiting countries retaliate in-kind but with very little results, because the trade flows are geographically unbalanced. There are also instances of outright hostilities, trade blockades, and uncontrollable secessionist regions in the CIS (Armenia-Azerbaijan conflict being a prime example). As a result, CIS countries often tend to focus on uneconomical (in the longer term) investments to by-pass their neighbors. Hence, after more than a decade of transition, the political dimension of trade and transit normalization remains very important.

Customs Cooperation

An extra barrier for transit in the region is customs regulations. On the positive side, the CIS Customs Committee, including all twelve CIS members, addresses the development and regulation of transit trade flows along the traditional corridors and routes via the Russian Federation. The Committee also plays an important role in the efforts to harmonize Customs documentation and procedures, training of Customs personnel, technical assistance, and other matters. However, the results of the Committee's activities remain limited and customs coordination among CIS members far from efficient.

There are also agreements and protocols in EURASEC on customs convoy, registration, and some other conditions of transit, monitoring and information exchanges. There are also several bilateral and trilateral agreements broadly covering customs matters among Kazakhstan, the Kyrgyz Republic, Tajikistan, Uzbekistan, and China. However, despite this multitude of plurilateral and subregional agreements, transit countries tend to create extra hurdles in customs clearance, often in violation of such agreements. These hurdles include mandatory high-cost customs convoying, insurance, and other high fees.

In principle, cargo movements between borders, and between borders and inland customs offices can be insured not by international customs systems but by national systems of the individual CIS-7 countries. These national transit systems are based on individual countries' legal frameworks and include customs controls and guarantee measures (insurance). However, these national systems involve high costs and substantial difficulties to secure guarantees and, hence, they are rarely used. As a result, a significant proportion of in-country transit movements are either subject to a costly customs convoy or have to be cleared at borders before moving to inland customs offices, which creates delays and raises costs.

Because bilateral mechanisms proved ineffective in resolving free transit issues, there is a clear need to create regional bodies defending non-discriminatory transit. The CIS could serve as a forum for such efforts. CIS-7 countries and their partners should rationalize the existing "spaghetti bowl" of agreements on transit. The "spaghetti bowl" should be replaced by straightforward and clear plurilateral arrangements. The most important deficiency of the existing CIS agreements that should be addressed is a weakness in (bordering on a total lack of) plurilateral dispute resolution mechanism and enforcement agencies. WTO members should use the accession negotiations of their neighbors as leverage to achieve free transit.

The TIR Customs Transit System is the only international transit system implemented in the region. It is predominantly used for long-distance transit relating to movements to and from the region but is rarely used for intra-regional trade: TIR is a very costly system due to complicated licensing and guarantee requirements, which suits developed countries but are excessive for the CIS. It also has limited benefits for short distance movements. The key issue is, therefore, to build a regional transit system to facilitate short-distance intra-regional trade while at the same time improving the implementation of TIR to facilitate external trade with distant major markets.

The CIS Bloc and the South-South Integration

Trade theory and some empirical evidence point to the conclusion that trade blocs consisting of poorer countries (with a level of development[38] below the world average) may, under certain conditions, lead to the divergence of welfare among bloc members, with the benefits captured by the most developed member of the bloc. This effect is called the impact of South-South integration (Frankel 1997). The mentioned adverse outcome of South-South integration is not unavoidable but depends on the specific nature of regional trade arrangements (Spilimbergo and Stein 1996). External tariff schedules (applied to non-members of the bloc) are an important determinant for the outcome of such integration. If external tariffs are high, the resulting severe trade diversion coupled with the shift of economic activity towards the dominant (richest) member of the trade bloc would cause the adverse effects of South-South integration. In the case of the CIS, there are some preconditions for the emergence of the effects of the South-South integration. While the average CIS per capita nominal GDP is below the world average, the differences within the bloc are quite large. Russia is clearly the richest and the largest member of the CIS. In 2001, Russian nominal per capita GDP was 4.8 times the average per capita GDP of the CIS-7 and 12.6 times the per capita GDP of the poorest CIS country, Tajikistan. Russian GDP

38. More strictly, the capital-labor ratio.

TABLE 3.2: AVERAGE IMPORT TARIFFS

	1997	1998	1999	2001	2002
Armenia	5.0	3.7	4.3	4.3	4.3
Azerbaijan	12.0	12.0	12.0	10.8	10.8
Georgia	10.0	10.0	10.6	10.9	10.9
Kyrgyz Republic	11.0	11.0	9.2	5.2	5.2
Moldova	9.4	9.4	8.9	6.9	7.0
Tajikistan	5.0	5.0	8.0	8.3	8.3
Uzbekistan	21.0	29.0	29.0	19.0	19.0
Belarus	12.6	12.6	12.6	12.2	12.2
Kazakhstan	13.3	13.3	7.8	7.9	7.9
Russian Federation	12.6	12.6	12.6	11.3	11.3
Turkmenistan	0.5	0.5	0.5	0.5	0.5
Ukraine	10.0	12.7	14.7	12.7	12.7

Source: The IMF.

was three times the combined GDP of all other CIS countries. Therefore, Russia may be viewed as the dominant member.

There are no common external tariffs in the CIS. Throughout the transition period, multiple efforts were made to establish a Customs Union among all or some CIS members. Michalopoulos and Tarr (1997) examine such a union from the theoretical and the policy perspectives. The Customs Union incorporating Russia, Belarus, Kazakhstan, Kyrgyz Rep., and (later) Tajikistan was even formally established in 1995. In 2000, it was transformed into the Eurasian Economic Community. However, the members failed to harmonize their import tariffs and customs regimes, and the Union exists only on paper. One of the members—the Kyrgyz Republic—joined the WTO in 1998 while the other members are still outside the WTO. Hence, the Kyrgyz Republic cannot harmonize its tariffs due to its tariff commitments to the WTO. It is highly unlikely that a Customs Union incorporating CIS-7 and central CIS countries will be formed any time soon. A new effort to establish a Common Economic Space among the central CIS countries (Russia, Ukraine, Kazakhstan, and Belarus) has also had no real consequences so far.

Table 3.2 shows that average import tariffs are relatively low in all CIS countries, including Russia. Tariffs are lower than Russia's in all CIS-7 countries except for Uzbekistan, but the differential is small. Therefore, trade diversion due to differential tariffs should not be a major problem. The only conceivable source of trade diversion could be the harmonization of tariff peaks across the CIS, which is unlikely. The membership in the WTO of four of the CIS-7 countries puts a ceiling on the tariff peaks for these countries and further precludes such a development. In sum, there has been little danger of adverse effects of South-South type trade integration in the CIS so far.

Conclusion

The CIS as a trading bloc has many potentially beneficial features, the most important being the free trade agreements, agreements on mutual recognition of standards, and generally non-restrictive rules of origin. However, the current trade arrangements within the CIS are far from being efficient and need improvement. Main directions for strengthening the legal and administrative framework for intra-CIS trade are as follows:

- Re-negotiate the free trade agreements, moving from a web of bilateral agreements to an effective multilateral agreement. While doing this, take into account the lessons learnt from the unsuccessful multilateral free trade agreements of the early 1990s.
- Move to a full elimination of exemptions from the free trade regime; negotiate and adhere to a timetable for the elimination of exemptions.
- Eliminate contingent protection clauses from free trade agreements; conclude Competition Agreement and create a framework for its administration.
- Facilitate the harmonization of the plurilateral and bilateral agreements and institutional arrangements with the WTO agreements and practices. In doing this, the CIS free trade arrangements may serve as a vehicle for global trade integration.
- Accelerate the reform of standards on the plurilateral level in the CIS. Harmonize the ongoing reforms in standardization systems at the national level. The optimal use of the Mutual Recognition Agreements within the CIS will be achieved if the set of mutually recognized standards covers a full nomenclature of national standards and conforms to international standards.
- Create regional bodies ensuring non-discriminatory transit. The existing ineffective "spaghetti bowl" of transit and customs agreements should be replaced by straightforward and clear plurilateral arrangements. The TIR Transit System should be implemented in its fullest. At the same time, a regional transit system to facilitate short distance intra-regional trade should be developed.
- Restructure administrative arrangements that support the enforcement of the free trade regime in the CIS by strengthening the capacity of the CIS Executive Committee and improve cooperation between the respective national agencies.
- Develop and carry out a program identifying and mitigating the nontariff and informal barriers to trade in the CIS free trade area.
- Strengthen cooperation and information exchange between the Customs and Tax Agencies in the CIS in order to reduce incidence of smuggling and trade deflection.
- Bring WTO disciplines to the rescue: the CIS has elements of deeper than multilateral trade integration and at the same time lacks some basic features of multilateral trade integration, as defined by the WTO. There is a need to introduce WTO disciplines in intra-bloc affairs thus establishing consistent rules at least as favorable as the WTO.

There is no evidence at this point that the CIS bloc brings about the adverse effects of South-South integration. Nevertheless, in order to avoid such effects in the future, bloc members should not adopt higher external tariffs, and especially should avoid the harmonization of the tariff peaks used by the largest members of the bloc.

CHAPTER 4

CONCLUSIONS AND RECOMMENDATIONS

Our analysis revealed no evidence that the CIS countries as a group underperform significantly in terms of either trade openness or export levels when compared to the countries of similar per capita GDP and population size. However, this finding means that the low-income economies in the CIS (CIS-7), which are effected by both weaker institutions and highly concentrated economic structures, have been performing on average just marginally better than other low-income countries and that, overall, they have been falling behind the countries that benefit most from globalization. Moreover, three lower-income countries in the CIS (Armenia, Georgia, and Kyrgyz Rep.) have shown a much weaker export performance than both the average CIS member and their peers worldwide.

The CIS countries would attain only limited benefits from improvements in trade policies if they tackle the trade agenda separately from a larger set of integrated trade and development policies. Recently prepared Trade Diagnostic Integration Studies for low-income CIS countries represent cases of such integrated strategies, which feature improvements in the business and regulatory environments, support for new entry and FDI, development of financial markets, transport and trade facilitation, and other broad developmental issues. Such integrated policies, if successful, would accelerate growth and improve trade performance.

During the second part of the 1990s, CIS economies experienced major changes in trade direction and composition, and this process has seemed to accelerate since the 1998 Russia crisis. Its main features include:

- Both share and volumes of manufactured exports dwindled, while energy and natural resource exports soared; and
- The share of intra-CIS trade fell, while the share of the rest of the world increased.

Overall, the CIS countries were able to keep their trade growing at a rate comparable with their peers' primarily because of the expansion in energy and other natural resource exports, also supported by high oil and gas prices after 1999.

Gravity analysis of the overall trade flows indicates that by 2001 the largest CIS countries, such as Russia and Ukraine, had mostly completed reorientation of their trade flows from traditional partners in the CIS toward new markets. The CIS countries on aggregate traded close to the level predicted by the gravity model both among themselves and with the rest of the world, with the exception of the USA. Overall trade with the EU has been close to potential, except for Belarus. However, this redirection of trade flows in the CIS has been highly unbalanced because:

- In the CIS-7 the process of trade diversification away from the CIS remains incomplete;
- The redirection that occurred was due primarily to the redirection of energy flows, while manufacturing exports to non-CIS countries are quite slow to develop; and
- Overall normalization in terms of trade turnover masks sharp deficits in bilateral trade for some countries; for instance, CIS countries that cannot offer mineral-resource-intensive products run considerable trade deficits with the EU, which in part reflect market access problems, especially in the food and beverage group.

Five central Asian countries and Moldova are still overtrading with the CIS and undertrading with the rest of the world, especially with the USA and China. Three South Caucasus countries trade with the CIS less than predicted by the gravity model. However, this was achieved, at least partially, through the overall decline in their trade volumes, but not through redirection of trade: the loss of their trade with the CIS has not been compensated for by trade expansion elsewhere. In addition, both Armenia and Azerbaijan have their export to non-CIS dominated by a single commodity (diamonds and oil, respectively, shipped to the EU).

The ongoing redirection of trade flows was accompanied by significant changes in the composition of merchandise trade. The CIS countries were losing their presence on the CIS markets for food and manufacturing products, while their share of global markets expanded mostly through increases in exports of resource-intensive commodities, such as energy, raw materials, and metals. There was very little substitutability of intra- and extra-CIS exports outside of resource-intensive exports.

Like many other developing economies, the CIS-7 members face their share of market access problems, but the ultimate source of their weak trade performance is internal and relates to their low development level and weaknesses in their domestic business environment.

The Export Specialization Indices of the CIS countries are quite similar for both the CIS and the non-CIS markets at the aggregated level. This finding does not support the hypothesis about unusually strong market access problems that the CIS members supposedly face in non-CIS markets. However, more detailed sectoral breakdown shows individual product groups (mainly beverages and tobacco products) that have revealed a significant difference in export specialization indices between the CIS and in the rest of the world. This could be explained by different tastes, quality requirements, as well as by market barriers that prevent expansion of export in these groups in non-CIS countries. However, these product groups account for a small percentage of overall CIS exports, with the exception of Moldova, Georgia, and Armenia.

The ESIs for the CIS are concentrated resource- and capital-intensive sectors: food, beverages, crude materials, and mineral fuels. This makes CIS countries vulnerable to external shocks and weakens the link between export growth, on the one hand, and employment generation and poverty reduction, on the other.

The level of intra-industry trade in the CIS, as measured by the Grubel-Lloyd index, remains low, which indicates that these countries have so far been unsuccessful in integrating into global production value chains. They continue to engage mostly in inter-industry trade and, therefore, forgo the main economic benefits associated with trade expansion and integration (such as economy of scale and specialization). On average, CIS members remained more integrated (in terms of intra-industry cooperation) within the CIS but major differences have emerged between two groups of CIS members. The European, higher-income CIS members have managed to preserve a relatively high level of intra-industry cooperation within the CIS, while the CIS-7 have

by and large fallen out of intra-CIS value chains. Neither group has succeeded in expanding its participation in intra-industry trade with the rest of the world.

Overall, progress in the trade area was slower in the CIS-7 countries than in the higher income CIS members. This is reflected in: (i) lower overall export levels and slower export growth in the second half of the 1990s; (ii) higher trade deficits; (iii) lower share of manufacturing exports; (iv) incomplete reorientation of trade flows from the CIS to global markets; and (v) lower incidence of intra-industry trade. The reasons for such underperformance of the CIS-7 include:

- The central CIS inherited a stronger industrial base and managed to preserve a larger share of it, including through various subsidies during the initial years of transition. A dominating share of non-energy export from Russia, Ukraine and Belarus is heavily concentrated in a handful of traditional post-Soviet producers, for example, in metallurgy and chemicals, for which these countries inherited the traditional Soviet export markets.
- The central CIS, especially Russia, inherited much stronger marketing capabilities that helped to preserve some traditional high-value market niches (such as arms, nuclear, and space technologies). For various political reasons, Ukraine and especially Belarus were much more successful in preserving cooperation with Russia in these sectors than CIS-7 countries.
- Due to their size and incomes, the central CIS have been more attractive to foreign investments than CIS-7, even at the same level of reform effort. At the same time, CIS-7 underperformed badly in terms of improvements in the business environment compared to both the Baltic states and the smaller economies of central Europe; as a result, the amounts of non-energy FDI inflows in the CIS-7 remained depressed, which in combination with weaknesses of the local private sector explain the slow development of nontraditional manufacturing exports.
- In addition, individual CIS-7 countries, like Armenia, were heavily affected by the policies of their larger neighbors that greatly hurt trade developments by restricting commercial border crossing.

At the same time, in contrast to other low-income economies, the CIS members still have somewhat stronger development indicators in particular areas, such as more developed infrastructure and human capital, which provide them with an opportunity for a faster catch-up. Removal of the existing domestic barriers to trade and a stronger effort to build capacity of critical institutions could greatly accelerate this process by encouraging investments, growth, and simultaneously expanding international trade flows.

Analysis undertaken with the help of the modified gravity model suggests the CIS as a group may have the characteristics of a regional trade bloc, whose members would tend to benefit from higher levels of intra-bloc trade. The factors that support such a positive bloc effect include the CIS's distance from the main global trade centers, as well as their common history, which left them with a common language and a common set of technologies and skills.

Trade data in the CIS, especially in the CIS-7, remain of poor quality. Analysis of the mirror statistics suggests that statistical discrepancies may be caused by trade deflection, associated with massive misreporting of the country of origin in import documentation. Due to the differences in the tax regime, a considerable portion of non-CIS imports seems to be reported as originating from the CIS, primarily Russia. This suggests that the actual share of intra-CIS trade is somewhat lower than that indicated in the official data. While this data distortion may be significant for analysis of individual countries' performance, it does not distort significantly the analysis of the overall trends in regional trade because the larger CIS members, who have better reporting procedures, are responsible for more than 90 percent of the total CIS trade.

The CIS free trade area is, on balance, a beneficial, trade-facilitating bloc. It features a free trade regime, agreements on mutual recognition of standards, and non-restrictive rules of origin. However, these benefits, as follows from the analysis of recent trade performance, remain badly

underutilized. In sum, the main weaknesses of the existing trade patterns are: (i) members' inability to penetrate new markets with nontraditional exports; (ii) inability to preserve their market share of manufacturing exports within the CIS; (iii) low level of intra-industry cooperation within the CIS; and (iv) frequent incidence of restrictions on trade in sensitive goods. This confirms that the current trade arrangements within the CIS are far from efficient and need improvement. Key directions for strengthening the legal and administrative framework for intra-CIS trade are as follows:

- Re-negotiate the free trade agreements, moving from the current web of bilateral agreements to an effective multilateral agreement. While doing this, take into account the lessons learnt from the unsuccessful multilateral free trade agreements of the early 1990s.
- Move to full elimination of exemptions from the free trade regime; negotiate and adhere to a timetable for the elimination of exemptions.
- Eliminate contingent protection clauses from free trade agreements.
- Facilitate the harmonization of the plurilateral and bilateral agreements and institutional arrangements with WTO agreements and practices. In doing this, the CIS free trade arrangements may serve as a vehicle for global trade integration.
- Accelerate the reform of standards on the plurilateral level in the CIS. Harmonize the ongoing reforms in the standardization system at the national level. The optimal use of the Mutual Recognition Agreements within the CIS will be achieved if the set of mutually recognized standards covers a full nomenclature of national standards and conforms to international standards.
- Bring WTO disciplines to the rescue: adopt WTO-type regulations to support CIS trade relations, thus establishing a consistent and transparent set of rules for managing the intra-bloc trade affairs.
- Restructure administrative arrangements that support the enforcement of the free trade regime in the CIS through strengthening the capacity of the CIS Executive Committee and improving cooperation between respective national agencies.
- Develop and carry out a program to identify and mitigate the non-tariff and informal barriers to trade in the CIS free trade area.
- Strengthen cooperation and information exchange between the Customs and Tax Agencies in the CIS in order to reduce the incidence of smuggling and trade deflection.

CIS countries should improve trade data reporting to the UN, the CIS Statistical Committee, and other international organizations in terms of timeliness and completeness of trade data.

There is no evidence at this point that the CIS bloc brings about the adverse effects of South-South integration. Nevertheless, in order to avoid such effects in the future, bloc members should not adopt higher external tariffs and especially the tariff peaks of the larger members of the bloc. Given the fact that the higher income CIS members have so far been more successful in their global trade integration efforts, additional integration within the CIS in the medium term could be beneficial to the CIS-7, which would be able to use more globally integrated CIS economies as a tool for broadening their own market opportunities. At the moment, it appears that the CIS countries are not ready to form a full-fledged Customs Union despite much talk to this effect in the past decade. But, if and when such intentions translate into a real policy agenda, it is important to ensure that external tariffs of such a union do not rise substantially, thus avoiding the trap of trade diversion.

The main policy recommendations of the study in regards to the CIS-7 countries could be summarized as follows:

- The CIS-7 members have been affected by major comparative disadvantages relative to most of their neighbors within and outside of the CIS. These disadvantages, which derive from their size, location, political factors, and major losses in their traditional

manufacturing base, make it difficult for them to compete for FDI and therefore delay their trade diversification efforts. The main compensatory mechanism that these countries could use is the acceleration of their reform effort, using Baltic states and other small economies of central Europe (but not higher income CIS members) as reform benchmarks.

- International donors should expand technical assistance to CIS-7 on export development, investment promotion, business linkages, trade information access, etc.
- International donors should expand cooperation with the Trade Department in the CIS Executive Committee with the aim to build its capacity in the area of trade reform, analysis of trade information, and enforcement, and to improve the functioning of the CIS trade area.
- The international community should help CIS-7 members negotiate the removal of existing trade barriers that derive from the trade policies and practices of their larger neighbors and potential major trade partners.

Possible extensions of the analysis of CIS trade performance:

- **Market access:** Detailed analysis of the existing tariff barriers faced by the CIS countries in the OECD (mainly the EU and the USA) and the utilization ratios of existing trade preferences in these markets. How important are the tariff barriers for CIS exports?
- **Regionalism:** (i) Development of a new global gravity model, which would generate explicit estimates of CIS trade bloc effect that are comparable with the effects of all other major international trade blocs. This would help to clarify the assessment of relative importance for these countries of regional integration efforts; and (ii) analysis of the current tariff structure in the CIS countries, with an emphasis on tariff peaks, which would help evaluate potential trade diversion and adverse effects of the common external tariffs of the CIS countries.
- **Trade facilitation:** (i) Evaluation of the tariff equivalents for existing nontariff trade barriers within the CIS. How large are they compared with the current official import tariffs? and (ii) analysis of transportation costs in CIS trade, including issues such as:
  - How do transport costs (both in trade within the CIS and between the CIS and their outside world) compare to those in the rest of the world? What is their impact on trade volumes?
  - To what extent do prevailing transport costs act as a tariff on trade with non-CIS countries? Does the existing transport cost differential provide the foundation for forming the trade bloc in CIS? and
  - Can the transport cost factor explain the divergence of CIS trade patterns from the gravity equation?

Annexes

TABLE A1: MERCHANDISE COMPOSITION OF EXPORTS IN MILLIONS US$, UNLESS OTHERWISE INDICATED

	1996			2000			Change			CIS Share, %	
	Total	CIS	non-CIS	Total	CIS	non-CIS	Total	CIS	non-CIS	1996	2000
Armenia											
Food products (0+1+22+4)	13	10	3	28	25	3	15	15	0	77	90
Agricultural Materials (2–22–26–27–28)	0	0	0	10	8	2	10	8	2	14	76
Textile fibers (26)	1	0	1	0	0	0	–1	0	–1	14	0
Ores, minerals & metals (27+28+68)	50	5	45	44	0	43	–7	–5	–2	10	1
Energy (3)	0	0	0	21	9	11	21	9	11	95	46
Manufacturing (5 to 8–67–68)	216	113	103	165	25	140	–51	–88	37	52	15
Iron & steel (67)	10	0	10	9	0	8	–1	0	–1	3	5
Other	0	0	0	18	0	18	18	0	18	0	2
Total	290	128	162	294	68	226	4	–60	64	44	23
Azerbbaijan											
Food products (0+1+22+4)	28	24	4	55	33	22	28	10	18	85	60
Agricultural Materials (2–22–26–27–28)	7	1	6	4	0	4	–3	0	–2	9	11
Textile fibers (26)	46	6	40	37	2	35	–8	–4	–5	13	6
Ores, minerals & metals (27+28+68)	7	5	3	51	22	29	43	17	27	66	43
Energy (3)	419	167	252	1,485	109	1,376	1,066	–58	1,123	40	7
Manufacturing (5 to 8–67–68)	121	87	34	112	68	44	–9	–19	9	72	61
Iron & steel (67)	3	1	2	1	0	1	–2	–1	–1	47	19
Other	1	0	0	0	0	0	–1	0	0	43	0
Total	631	290	341	1,745	235	1,510	1,114	–55	1,169	46	13
Belarus[2]											
Food products (0+1+22+4)	603	557	45	495	416	79	–108	–142	34	93	84
Agricultural Materials (2–22–26–27–28)	102	39	63	117	30	87	15	–9	24	38	26
Textile fibers (26)	116	74	42	149	114	34	33	40	–7	64	77
Ores, minerals & metals (27+28+68)	73	50	23	55	27	28	–18	–23	5	68	49
Energy (3)	553	344	208	1,453	463	990	901	119	782	62	32
Manufacturing (5 to 8–67–68)	5,112	3,788	1,324	4,596	3,193	1,403	–516	–595	79	74	69
Iron & steel (67)	389	237	152	280	94	186	–108	–143	34	61	33
Other	123	71	52	186	67	119	63	–4	67	58	36
Total	7,070	5,160	1,910	7,331	4,405	2,926	261	–755	1,017	73	60
Georgia											
Food product) (0+1+22+4)	60	55	5	91	61	29	31	1	24	92	68
Agricultural Materials (2–22–26–27–28)	0	0	0	10	0	9	10	0	9	91	2
Textile fibers (26)	3	2	0	0	0	0	–2	–3	0	87	26

TABLE A1: MERCHANDISE COMPOSITION OF EXPORTS IN MILLIONS US$, UNLESS OTHERWISE INDICATED (CONTINUED)

	1996			2000			Change			CIS Share, %	
	Total	CIS	non-CIS	Total	CIS	non-CIS	Total	CIS	non-CIS	1996	2000
Ores, minerals & metals (27+28+68)	28	4	23	93	4	89	66	–23	66	16	5
Energy (3)	37	19	19	28	8	20	–10	–30	2	50	27
Manufacturing (5 to 8–67–68)	58	43	14	90	50	40	32	–8	26	75	55
Iron & steel (67)	12	4	7	17	8	10	6	–4	2	37	44
Other	1	0	1	2	2	0	1	0	–1	0	85
Total	199	128	70	330	132	197	131	–66	127	65	40
Kazakhstan											
Food products (0+1+22+4)	701	638	63	604	471	134	–97	–167	71	91	78
Agricultural Materials (2–22–26–27–28)	71	11	60	33	8	25	–38	–3	–35	16	25
Textile fibers (26)	115	28	87	86	8	78	–29	–19	–9	24	10
Ores, minerals & metals (27+28+68)	1,163	288	874	1,794	442	1,352	632	154	478	25	25
Energy (3)	1,943	1,221	722	4,827	1,094	3,733	2,884	–127	3,012	63	23
Manufacturing (5 to 8–67–68)	1,107	831	276	499	239	260	–608	–592	–16	75	48
Iron & steel (67)	798	158	640	1,097	123	974	299	–35	335	20	11
Other	14	0	14	175	0	175	161	0	161	0	0
Total	5,911	3,175	2,736	9,116	2,384	6,732	3,205	–791	3,996	54	26
Kyrgyz Republic											
Food products (0+1+22+4)	144	134	10	79	68	11	–65	–66	2	93	86
Agricultural Materials (2–22–26–27–28)	16	1	15	5	2	3	–11	1	–12	5	35
Textile fibers (26)	41	10	32	25	8	18	–16	–2	–14	23	30
Ores, minerals & metals (27+28+68)	31	10	22	29	5	25	–2	–5	3	31	15
Energy (3)	78	77	0	59	59	1	–18	–19	0	100	99
Manufacturing (5 to 8–67–68)	189	157	32	100	62	39	–89	–96	7	83	61
Iron & steel (67)	6	4	2	1	0	0	–5	–4	–1	69	42
Other[3]	2	2	0	203	0	203	201	–2	202	95	0
Total	507	395	112	502	203	299	–5	–192	187	78	40
Moldova											
Food products (0+1+22+4)	578	418	160	282	211	71	–295	–207	–89	72	75
Agricultural Materials (2–22–26–27–28)	9	2	7	14	8	6	5	6	–1	17	57
Textile fibers (26)	2	0	2	1	1	0	–1	0	–1	24	75
Ores, minerals & metals (27+28+68)	8	2	6	8	2	6	0	0	0	22	25
Energy (3)	0	0	0	0	0	0	0	0	0	92	1
Manufacturing (5 to 8–67–68)	190	119	71	164	54	110	–26	–65	39	63	33

(Continued)

TABLE A1: MERCHANDISE COMPOSITION OF EXPORTS IN MILLIONS US$, UNLESS OTHERWISE INDICATED (CONTINUED)

	1996			2000			Change			CIS Share, %	
	Total	CIS	non-CIS	Total	CIS	non-CIS	Total	CIS	non-CIS	1996	2000
Iron & steel (67)	5	2	3	0	0	0	–5	–2	–2	45	40
Other	4	0	4	2	0	2	–2	0	–2	0	1
Total	795	543	252	472	276	196	–323	–267	–56	68	58
Russia											
Food products (0+1+22+4)	1,567	469	1,098	1,283	413	869	–284	–55	–229	30	32
Agricultural Materials (2–22–26–27–28)	2,849	258	2,592	3,161	84	3,077	312	–174	485	9	3
Textile fibers (26)	69	9	59	37	3	34	–32	–6	–25	14	8
Ores, minerals & metals (27+28+68)	8,797	418	8,379	9,423	291	9,132	627	–127	753	5	3
Energy (3)	38,258	6,157	32,100	52,846	4,140	48,706	14,588	–2,017	16,605	16	8
Manufacturing (5 to 8–67–68)	15,492	4,182	11,310	16,731	2,910	13,822	1,239	–1,272	2,511	27	17
Iron & steel (67)	7,651	642	7,009	6,166	389	5,778	–1,485	–253	–1,232	8	6
Other[3]	14,020	3,617	10,403	13,361	5,556	7,804	–660	1,940	–2,599	26	42
Total	88,703	15,751	72,952	103,008	13,787	89,222	14,305	–1,965	16,270	18	13
Tajikistan[2]											
Food products (0+1+22+4)	35	34	1	29	29	0	–6	–5	–1	98	99
Agricultural Materials (2–22–26–27–28)	0	0	0	1	0	0	1	0	0	100	80
Textile fibers (26)	141	8	133	84	15	69	–57	6	–64	6	17
Ores, minerals & metals (27+28+68)	243	18	225	373	181	193	130	162	–32	8	48
Energy (3)	114	114	0	92	92	0	–22	–22	0	100	100
Manufacturing (5 to 8–67–68)	36	28	8	89	57	32	53	29	24	78	64
Iron & steel (67)	0	0	0	0	0	0	0	0	0	0	0
Other[3]	28	0	28	25	0	24	–3	0	–3	0	1
Total	597	203	394	692	374	319	96	171	–75	34	54
Turkmenistan[1]											
Food products (0+1+22+4)	6	5	1	7	3	5	1	–3	4	89	37
Agricultural Materials (2–22–26–27–28)	7	0	7	8	1	7	0	1	0	5	12
Textile fibers (26)	90	4	86	240	12	228	150	8	142	4	5
Ores, minerals & metals (27+28+68)	10	5	5	10	3	7	0	–2	2	50	29
Energy (3)	575	146	429	2,030	1,253	777	1,455	1,108	347	25	62
Manufacturing (5 to 8–67–68)	61	18	44	172	42	130	111	25	86	29	25
Iron & steel (67)	2	0	2	0	0	0	–2	0	–2	0	42
Other	2	0	2	38	0	38	36	0	36	1	0
Total	753	177	576	2,506	1,314	1,191	1,752	1,137	615	24	52
Ukraine											
Food products (0+1+22+4)	2,731	1,964	767	1,339	743	596	–1,392	–1,221	–172	72	56

TABLE A1: MERCHANDISE COMPOSITION OF EXPORTS IN MILLIONS US$, UNLESS OTHERWISE INDICATED (CONTINUED)

	1996			2000			Change			CIS Share, %	
	Total	CIS	non-CIS	Total	CIS	non-CIS	Total	CIS	non-CIS	1996	2000
Agricultural Materials (2–22–26–27–28)	130	17	113	242	15	227	112	–2	114	13	6
Textile fibers (26)	13	6	7	4	2	2	–9	–3	–6	44	60
Ores, minerals & metals (27+28+68)	1,174	399	775	2,058	525	1,534	884	126	758	34	25
Energy (3)	648	160	488	811	90	721	163	–70	233	25	11
Manufacturing (5 to 8–67–68)	5,321	3,152	2,169	4,610	1,955	2,655	–711	–1,197	485	59	42
Iron & steel (67)	4,214	1,681	2,532	5,161	1,136	4,025	947	–545	1,493	40	22
Other	168	0	168	348	2	346	179	2	178	0	0
Total	14,400	7,379	7,021	14,573	4,468	10,104	172	–2,911	3,083	51	31
Uzbekistan											
Food products (0+1+22+4)	211	204	7	191	149	43	–20	–56	36	97	78
Agricultural Materials (2–22–26–27–28)	0	0	0	1	1	0	1	1	0	0	63
Textile fibers (26)	1,852	198	1,653	1,072	236	836	–779	38	–817	11	22
Ores, minerals & metals (27+28+68)	214	61	153	229	71	158	15	10	5	28	31
Energy (3)	277	256	21	335	319	16	59	64	–5	92	95
Manufacturing (5 to 8–67–68)	209	156	53	261	193	68	52	37	15	75	74
Iron & steel (67)	31	13	18	18	5	13	–13	–8	–5	43	29
Other[3]	1,417	2	1,416	707	1	707	–710	–1	–709	0	0
Total	4,211	890	3,321	2,816	975	1,840	–1,395	85	–1,480	21	35

1/1997 data is presented instead of 1996; 2/1998 data is presented instead of 1996; 3/ includes gold.

Source: WITS, COMTRADE. National trade statistics (HS96 converted into SITC) was used for missing data for Armenia (1996), Georgia (1996), Tajikistan (1998), Uzbekistan (1996 and 2000).

TABLE A2: MERCHANDISE TRADE DEFICIT WITH MAJOR PARTNERS (EXPORTS MINUS IMPORTS) AS PERCENT OF BILATERAL TRADE (EXPORTS PLUS IMPORTS)

	Armenia			Azerbaijan			Belarus			Georgia			Kazakhstan			Kyrgyzstan		
	1988	1995	2001	1988	1995	2001	1988	1995	2001	1988	1995	2001	1988	1995	2001	1988	1995	2001
Total	–13	–32	–41	9	–10	24	5	–9	–4	–5	–44	–27	–28	16	24	–18	10	–11
Total CIS	–4	–33	–16	20	–3	–33	13	–13	–11	3	–25	–33	–24	4	–13	–8	14	–16
CIS-7		–90	–12		23	79		29	6		–31	–73		–8	48		9	–1
Russia		–20	–18		6	–33		–20	–14		–2	8		11	–25		4	–17
Other CIS		–29	–15		–25	–83		4	22		–52	–27		–29	30		26	–33
Non-CIS	–82	–32	–48	–54	–14	36	–37	1	9	–53	–61	–24	–54	35	44	–86	3	–6
EU		–14	–54		5	71		–20	–20		–80	–7		37	22		80	29
USA & Canada		–99	–27		–85	–88		–32	–26		–92	–54		–22	26		–45	–88
China, Iran & Turkey		–42	–49		–8	–51		29	50		–40	–15		42	39		–15	–37
CEE[2]		–94	–71		–49	–36		25	49		–82	–80		40	–17		100	–18
Other		33	–46		–43	31		9	0		–20	–35		30	74		–100	9

	Moldova			Russia			Tajikistan			Turkmenistan			Ukraine			Uzbekistan		
	1988	1995	2001	1988	1995	2001	1988	1995	2001	1988	1995	2001	1988	1995	2001	1988	1995	2001
Total	–9	–6	–22	–14	25	38	–19	–4	–3	–5	16	–14	–3	–14	–5	–8	11	0
Total CIS	–2	–10	1	0	3	10	–20	–31	–44	–2	11	–7	5	–10	–28	–9	0	–6
CIS-7		14	50		–7	–15		–31	–36		16	–37		27	19		48	39
Russia		13	27		N/A	N/A		–18	–11		–18	–62		–12	–22		–13	–7
Other CIS		–49	–35		5	15		–61	–86		13	–16		–14	–59		2	–20
Non-CIS	–62	1	–43	–34	31	42	–17	20	49	–28	21	–18	–32	–17	10	–5	18	3
EU		–14	–34		18	37		25	67		–2	–32		–29	–24		1	–17
USA & Canada		–9	2		29	27		–35	–44		–25	–71		23	51		–50	–34
China, Iran & Turkey		27	–85		57	57		48	69		–10	11		56	38		20	4
CEE[2]		14	–51		38	69		63	41		13	–37		–24	14		–45	–24
Other		–13	–75		47	33		–3	3		50	–3		–22	40		34	25[1]

Source: Authors' calculations.

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Trade Performance and Regional Integration of the CIS Countries is part of the World Bank Working Paper series. These papers are published to communicate the results of the Bank's ongoing research and to stimulate public discussion.

This paper provides a detailed quantitative analysis, based on standard econometric models, of the trends and the configurations of trade of the CIS countries, with an emphasis on its low-income members. It also contains an analysis of the CIS countries' trade potential and its realization in a comparative perspective, as well as examination of the nature of the existing CIS intra-bloc trade.

The study revealed no evidence that the CIS countries as a group underperform significantly in terms of either trade openness or export levels when compared to the countries of similar per capita GDP and population size. However, the low-income economies in the CIS (CIS-7) have been performing on average just marginally better than other low-income countries and, overall, they have been falling behind the countries that benefit most from globalization. Overall, progress in the trade area was slower in the CIS-7 countries than in the higher income CIS members. This is reflected in: (i) lower overall export level and slower export growth; (ii) higher trade deficit; (iii) lower share of manufacturing exports; (iv) incomplete reorientation of trade flows; and (v) lower incidence of intra-industry trade.

This report found that the CIS free trade area is, on balance, a beneficial, trade-facilitating bloc. There is no evidence so far that the CIS integration is of the "South-South" type (harmful for some of its members). However, the potential benefits of CIS trade integration remain badly underutilized. The paper suggests several directions for strengthening the legal and administrative framework for intra-CIS trade arrangements.

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