

# *Central Asia and Russia: Economic Cooperation, Problems and Prospects*

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## **Introduction**

International attention to the independent states of Central Asia-Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan and Uzbekistan has increased significantly. In particular, their roles, policies and problems are now seen differently because of the terrorist attacks on New York and Washington on September 11, 2001. As Central Asia became involved in the anti-terrorist campaign waged by the United States and U.S.-led alliance in Afghanistan, all its neighbors to the north agreed to help Washington in one form or another. Uzbekistan is host to more than 1,000 American troops, and French troops bound for northern Afghanistan were passing through Khanabad military air base. In December 2001, after Secretary of State Colin Powell traveled to Central Asia, Tajikistan and Kyrgyzstan also allowed international coalition troops to use their air bases. In addition, prior to these agreements, the United States established bilateral military-to-military relations with Kyrgyzstan, Uzbekistan and Kazakhstan. These and other Central Asian countries were visited by General Tommy Franks, commander-in-chief of the U.S. Army Central Command (CENTCOM).

Indeed, the geographic location of the Central Asian countries is advantageous in the delivery of relief supplies to Afghanistan by the United Nations. In late October 2001, UN Under-Secretary-General for Humanitarian Affairs Kenzo Oshima visited Turkmenistan, Uzbekistan and Tajikistan. He stated that the northern part of Afghanistan was most vulnerable in terms of humanitarian conditions. As a result, Turkmenistan agreed to open two aid offices close to the Afghan border. Uzbekistan allowed the use of Termiz River Port for shipments and Termiz Airport for the stockpiling of goods. Tajikistan agreed to open a river crossing for the delivery of aid and allowed air operations from its territory.

However, these countries in Central Asia became recognizable long before the crisis in Afghanistan unfolded. For many of them, the 1990's were a decade full of problems and difficulties, including ethnic clashes, threats of domestic extremism, and fighting against outside militant groups and terrorist organizations. The governments of the newly independent states of Central Asia and the Russian Government became increasingly concerned about the traffic in illegal narcotics via Central

Asia.

On the positive side, the regional profile of the states of Central Asia has been boosted through their participation in the "Shanghai Five" framework for multilateral consultations with Russia and China. Central Asia is rich in natural resources, including oil and natural gas, particularly in the Caspian Sea area. In April 2001, the Bush administration reconfirmed its policy towards this energy-rich region as well as the South Caucasus, while towards the end of the year the Trans-Caspian Pipeline Consortium launched a US\$2.6 billion high-capacity oil pipeline jointly financed by companies from Russia, Kazakhstan, the United States and Europe.

Given the growing significance of Central Asia and its relevance to Northeast Asia, this brief overview will focus on the following issues:

- Central Asia's changing economic relations with Russia
- The current macro-economic situation of the five countries of Central Asia
- Population trends, employment and living standards
- The situation in the energy sector.

In the context of this analysis it is worthwhile, whenever possible, to compare the economic and social trends in the newly independent states of Central Asia with those in Russia, including its Far Eastern region.<sup>1</sup>

## **Central Asia, the Commonwealth of Independent States (CIS)<sup>2</sup> and Russia**

Both history and mutual interests elevated Central Asia to the list of Russia's foreign policy priorities. In addition to living with Russians under the umbrella of the Russian Empire and later within the borders of the Soviet Union, the peoples of Central Asia still share with Russia a common cultural, information and security space, and professional and family ties. Only in Kazakhstan does the Russian Diaspora exceed 5 million people, or 30% of the population, while in Kyrgyzstan the share of Russians is 18%, Turkmenistan - 6.7%, Uzbekistan - 5.5%, and Tajikistan - 3.5%. In Russia, according to the latest population census conducted in 1989, there were 636,000 ethnic Kazakhs, 127,000 Uzbeks, 42,000 Kyrgyzs, 40,000 Turkmen and 38,000 Tajiks.<sup>3</sup>

<sup>1</sup> The official CIS statistics are incomplete and do not allow comprehensive comparisons of the economic and social trends in the countries concerned. Whenever is appropriate, data issued by the State Statistical Committee of the Russian Federation (Goscomstat) and other sources were used for the purposes of this analysis.

<sup>2</sup> Commonwealth of Independent States (CIS) includes 12 republics of the former Soviet Union, which are Azerbaijan, Armenia, Belarus, Georgia, Kazakhstan, Kyrgyzstan, Moldova, Russia, Tajikistan, Turkmenistan, Uzbekistan, and Ukraine.

<sup>3</sup> Russian Statistical Yearbook 2000 (Moscow: Goscomstat, 2001), 63-64

On November 30, 2001, the Anniversary CIS Summit in Moscow commemorated the tenth anniversary of its inception and an agreement to work towards a free trade agreement was reached. Before 1992, the five Central Asian states were republics of the Soviet Union. For Russia, Central Asia was and still is a very important element in the changing geo-political environment. Although the density of trade and economic relations has decreased since 1991, Russia's exports to Central Asia in 1999 totaled US\$1.7 billion and imports were about US\$2.3 billion.<sup>4</sup> In other words, in terms of trade volumes, the Central Asian economies combined are in the same category as Japan, Ukraine or the United States.

Before 1992, when the Soviet Union ceased to exist and was replaced by the CIS, the share of mutual trade between its former republics was estimated at about 60% of their total trade, involving up to one-quarter of GDP. Due to the size of its economy, Russia absorbed a large share of goods and materials exported by other republics. This share accounted for more than 50% of Russia's total imports. In the late 1980s, up to 68% of total Russian exports were directed to other republics.<sup>5</sup>

After the dissolution of the Soviet Union, the entire management structure of these interdependent relationships has been dismantled. Reform and a transition to new, market-driven economic relationships, made trade links among them inefficient and difficult to maintain. Economic liberalization immediately affected trade flows. But without government guidance and support, the Russian private sector proved too inexperienced and poorly equipped to take care of the traditional markets, including those in Central Asia. As a result, Russia's geo-economic interests were largely abandoned, creating a geo-political vacuum in Eurasia. Russian exports, including energy, were rapidly redirected towards markets with higher prices and guaranteed payments. The western European economies readily absorbed energy resources, metals, timber and other unprocessed and semi-finished products. New sources of imports, including food and consumer goods, rapidly emerged, defined by a demand for higher quality. The overvalued Russian ruble also affected the competitiveness of domestic producers.

New independent states, including those in Central Asia, chose to diversify their own trade and economic ties, limiting their dependence on Russia. These developments led to the rapid collapse of inter-republic trade (Table 1). However, it is still too early to say whether negative trends in economic ties within the CIS will continue indefinitely. In 2000, inter-CIS trade grew 34% on the 1999 level and all economies expanded exports to their CIS partners. For the first time since 1995, the rates of growth in imports from the CIS economies were higher than those of total imports. However, in absolute volumes, the level of non-CIS exports in 2000 was four times larger compared with that of exports bound for CIS markets, while non-CIS imports were only 20% higher (60% in 1999) than imports from the CIS. These developments reflected both rising prices and the physical volumes of mutual trade. For example, with regard to Russia, export and import prices increased by 14.5% and 6.9% correspondingly, while in terms of physical volume, exports grew 12.5% and imports increased by almost 31%.

It is worth noting that in 2000, CIS-bound exports from Kazakhstan, as well as its imports from CIS, were much higher than in 1999, while almost half of the Tajikistan's and Kyrgyzstan's exports in 2000 were absorbed by CIS markets (Table 2). On the other hand, except for Kazakhstan, foreign trade volumes, including trade volumes with the CIS economies, are very modest. It is also interesting that almost 26.5% of Kazakhstan's exports in 2000 were formally directed to the Bermudas and the Virgin Islands.

The geographical distribution of the Central Asian economies' trade seems to be stable and centered primarily on Russia. The chief reason behind this pattern is the continuing dependence of Central Asia on fuels, energy resources and other goods supplied from Russia (Table 3).

The increased export volumes in inter-CIS trade exchanges partially reflected higher export prices for primary commodities and manufactured goods. By and large, world prices serve as the benchmark prices for inter-CIS exchanges. However, in some cases within the CIS, oil was traded at lower prices compared with international market. In 2000, the world price for Urals oil was about US\$180 per metric ton, while it was sold to CIS partners at

Table 1. CIS Share in Central Asia's External Trade, 1995-2000  
(%)

	Exports			Imports		
	1995	1999	2000	1995	1999	2000
Kazakhstan	54.9	26.7	26.2	69.7	43.3	54.6
Kyrgyzstan	65.8	40.4	41.1	67.7	43.2	53.9
Tajikistan	33.6	45.7	47.7	59.0	77.6	82.9
Turkmenistan	49.4	n/a	n/a	54.6	n/a	n/a
Uzbekistan	39.3	n/a	n/a	40.7	n/a	n/a
Russia	18.6	14.7	13.4	29.2	27.6	34.4
Far Eastern Region	0.2	0.7	n/a	5.3	4.0	n/a

Source: *Interstate Statistical Committee. CIS Statistics. Statistical Bulletin, No. 14, 2001, 7.*

*Data for the Far Eastern Region are from the State Statistical Committee of the Russian Federation, Russian Statistical Yearbook 1996 and Statistical Yearbook "Regions of Russia 2000".*

<sup>4</sup> Russian Statistical Yearbook 2000, 581

<sup>5</sup> *Voprosy Ekonomiki*, No. 3, 2001, 140-144.

Table 2. **Central Asia and Inter-CIS Trade, 2000**

	Exports			Imports		
	Total	To CIS		Total	From CIS	
	US\$ millions	US\$ millions	as % of 1999	US\$ millions	US\$ millions	as % of 1999
Kazakhstan	9,140	2,390	160	5,052	2,757	173
Kyrgyzstan	505	207	113	555	298	115
Tajikistan	779	374	119	674	560	109
Turkmenistan	n/a	n/a	n/a	n/a	n/a	n/a
Uzbekistan	n/a	n/a	n/a	n/a	n/a	n/a
Russia	102,796	13,785	129	33,769	11,648	140

Source: Interstate Statistical Committee. CIS Statistics. Statistical Bulletin, No. 14, 2001, 77.

Table 3. **Russia's Share in the Central Asia's Inter-CIS Trade, 1999-2000**  
(%)

	Exports to Russia		Imports from Russia	
	1999	2000	1999	2000
Kazakhstan	76.3	74.6	84.5	89.2
Kyrgyzstan	38.6	31.4	42.2	44.4
Tajikistan	36.5	69.2	18.0	18.8
Turkmenistan	n/a	n/a	n/a	n/a
Uzbekistan	n/a	n/a	n/a	n/a

Source: Interstate Statistical Committee. CIS Statistics. Statistical Bulletin, No. 14, 2001, 78.

Table 4. **Inter-CIS Trade Balances**  
(US\$, million)

	1995	1999	2000
Kazakhstan	230.8	- 105.6	- 367.1
Kyrgyzstan	- 84.4	- 75.9	- 91.1
Tajikistan	-226.4	- 199.7	- 185.9
Turkmenistan	184.2	n/a	n/a
Uzbekistan	- 8.1	n/a	n/a
Russia	865.7	2,363.9	2,136.9

Source: CIS Statistical Bulletin, No. 14, 2001, 85,

US\$140 per metric ton. At the same time, in 2000 the price of Russian gasoline outside CIS was US\$218 per metric ton, much lower compared with US\$253 per ton within CIS. In 1999-2000, coal was exported from Russia to non-CIS countries at US\$16 and US\$26 per ton respectively, but for the CIS importers the prices were US\$19 and US\$31 per ton respectively.<sup>6</sup>

On the other hand, CIS-bound trade also reflects some positive trends in the horizontal division of labor between Central Asian economies and their CIS partners, including the exchange of chemical products, metals and metal goods and machinery. For example, in 2000, the share of machines and transportation equipment in Kyrgyzstan's exports was 18%, while for non-CIS economies it was only 8%. Quite similarly, in 2000, the share of machines and equipment in Russia's exports was 17%, but only 7% for non-CIS economies. These are not particularly high shares, considering that for some economies of the European Union the share of machines and equipment in total foreign trade is in the range of 30%-50%.

On average, the share of inter-CIS imports meeting the needs of CIS economies increased from 39% in 1999 to 45% in 2000, including, in addition to consumer goods,

energy resources and primary commodities, investment goods such as machinery and industrial equipment, non-ferrous metals and metal products, ores and ore concentrates, cotton yarn and wool, and other items. On the other hand, only Russia maintained a trade surplus in its trade exchanges within the CIS, while Kazakhstan's trade deficit was the largest among all the other economies (Table 4).

The trend towards weakening economic links between Russia and economies of Central Asia is yet to be arrested, with Russia continuing its foreign trade reorientation. Russia's trade surplus with its CIS partners is growing and the total outstanding debt of the CIS economies to Russia reportedly is nearing US\$10 billion. In some cases, Russian exporters are forced by these circumstances to limit their exports to CIS markets. For example, for the period January-September 2000, natural gas exports to the CIS went down from 74 billion cubic meters (Bcm) in the first nine months of 1999 to 45 Bcm, while oil exports were reduced from 18.8 million tons (Mt) to 12.6 Mt. In 2000, compared with 1995, the share of inter-CIS exports in the total exports declined for each economy, except Tajikistan. In addition, the share of inter-CIS imports in total imports

<sup>6</sup> See Interstate Statistical Committee. CIS Statistics. Statistical Bulletin, No. 5, March 2001, 44.

decreased, apart from Russia and Tajikistan.

There is a close link between the negative economic growth of the 1990s, weakened trade connections and the use of transportation services among CIS economies, railway transport in particular. During a decade of economic disruptions, railway cargo traffic in Central Asia decreased by two to ten times. However, the reduction in railway traffic in the Far Eastern region was more pronounced than the national average (Table 5).

Measured in ton-kilometers only in 1999 did the volume of cargo shipped by rail increase by 14% in Russia and by 43% in Tajikistan, while in Kazakhstan and Kyrgyzstan these volumes decreased further by 7% and 25% respectively. However, for the whole of the CIS, total cargo turnover in 1999 increased by 4% on 1998 levels, including a 7% rise for the railways, and 3% each for trucking and pipelines. In general, cargo shipments increased by 4%, including a 13% rise for ground transportation (rail and highway), 11% for air transportation and 2% for pipelines.

However, increasing transportation tariffs are likely to further obstruct the economic reintegration of the economies of Central Asia (except for Kazakhstan) and their geographically distant and price-sensitive CIS partners. In 1999 alone, cargo transportation tariffs increased in Kazakhstan by 10%, Kyrgyzstan by 36% and Russia by 18%. In specific areas of the transport sector the escalation of tariffs was much higher. In Kazakhstan, for example, pipeline transport and air transportation tariffs increased by 40%, while in Kyrgyzstan the cost of travelling by air grew five-fold. In Russia also, the cost of trucking increased by 60% and air cargo by 50%, while passenger tariffs grew on average by 43%.

Despite all these negative developments in trade and transport links, Russia continues to be seen by the states of Central Asia as an important political and economic partner. Even after a decade in which economic links weakened continuously, Russia remains the dominant economic partner for other CIS countries. Its share in the total estimated GDP is close to 70%, compared with 11% for Ukraine, and approximately 6% each for Kazakhstan and Uzbekistan. It also seems that Russia's large market, and material and technological resources, as well as its investment potential could be increasingly important for the economies of Central Asia.

As of today, the central goal adopted by the CIS leaders is "to develop relationships of "strategic

partnership" on the basis of the national interests of the CIS partners." Hopefully, new and expanded trade and economic ties will increasingly be based on cooperation between private enterprises, as well as governmental policies that facilitate economic exchange by removing trade barriers and improving the investment climate.

In particular, closer relationships are developing among Russia, Belarus, Kazakhstan, Kyrgyzstan and Tajikistan within the customs union, which has allowed the abolition of most of the tariffs and non-tariff barriers in their mutual trade, introduced unified tariffs and trade regimes towards "third" countries and made adjustments in legal systems concerning trade and investment. The long-term goal is the strengthening and expanding of the Eurasian Economic Community (EAEC) based on the customs union and the introduction of a free trade regime. In 2000, Russia's total trade with CIS economies reached almost US\$28 billion and increased by 24% compared with the 1999 level. At the same time, trade with Belarus and the whole of the EAEC grew by 33% and 43% correspondingly.

### A New Status ...

The region's new international status led to new links being established by the Central Asian economies with Japan, China, South Korea, the United State, other western countries and international organizations. For example, South Korean companies went ahead with sizable investment projects in Uzbekistan, while China demonstrated a strong interest in developing cooperation with Central Asia in the energy sector, and Japan and the United States lead in bilateral official development aid.

In fact, it was the United States that launched the most elaborate and comprehensive framework for economic, technical and humanitarian assistance to the newly independent states, including those of Central Asia. Some of the programs were suppressed as a result of the 1998 financial crisis in Russia.

However, in 1999 Uzbekistan received US\$256 million in medium and long-term loans, guarantees and insurance authorization from the Export-Import Bank of the United States (Ex-Im Bank), in addition to US\$75 million in aid provided by the government. Assistance to Kazakhstan was estimated at US\$78 million, including US\$14 million from the U.S. Defense Department. In the same year, Kyrgyzstan, Tajikistan and Turkmenistan received US\$81 million, US\$41 million and US\$23 million

Table 5. **Railway Transportation, 1990-1998**

	Cargo, million tons		Passenger, million persons	
	1990	1998	1990	1998
Kazakhstan	345.0	170.0	42.6	21.6
Kyrgyzstan	8.0	1.4	1.4	0.6
Tajikistan	6.7	0.6	1.6	0.7
Turkmenistan	28.1	n/a	8.2	n/a
Uzbekistan	82.9	41.8	16.8	15.2
Russia	2,140.1	834.3	3,142.5	1,471.3
Far Eastern Region	113.5	36.9	75.2	41.5

Source: "CIS in 1996" *Statistical Yearbook* (Moscow: Interstate Statistical Committee, 1997), "Regions of Russia 2000" (Moscow: Goscomstat, 2001).

in aid from the United States respectively.

By 2000, the authorized resources of the Central Asia-American Enterprise Fund totaled US\$150 million. In 1996-1999, cumulative expenditures made in Central Asia through the Small Project Assistance Program of the Peace Corps totaled almost \$350,000.<sup>7</sup>

From 1995, the total amount of Japanese ODA to the countries of Central Asia reached US\$1 billion (Table 6).

The main reason for providing official development assistance to the states of Central Asia is the collapse of the Soviet Union and the "lack of solid foundations for sustainable economic development" in this region.<sup>8</sup> The main targets of ODA programs are the following:

- education and training to support democratization and market reforms
- economic infrastructure development, including transport and telecommunications
- support for social sector development, healthcare and education
- environmental protection.

However, trade links between Central Asia and Japan remain very weak (Table 7).

This situation reflects not only the geographical realities, including extremely long transportation distances and high costs, but also the complex socio-economic situation in Central Asia, the very limited size of the markets, and inadequate export capacity, as well as the substandard local products that the Japanese market cannot absorb.

In this respect, China is closer to Central Asia and direct transport routes are available to Kazakhstan, which is China's largest CIS trading partner after Russia (Table 8).

Trade flows between Central Asia and South Korea are also small, with only Uzbekistan and to some extent Kazakhstan maintaining visible commercial links (Table 9).

On the other hand, the share of the economies of the European Union in the external trade of the whole of the CIS is dominant, exceeding 60%. The problem is that not only Russian producers, but to a much greater degree all those within other CIS economies are new actors in the world markets with their combined turnover reaching only 2% of the world trade.

It is interesting to note that despite this overall modest position, there are significant differences in the status of individual economies as far as their involvement in the

**Table 6. Japanese ODA to Central Asia, 1995-1999**  
(US\$, million)

	1995	1996	1997	1998	1999	Total, 1995-1999
Kazakhstan	4.4	8.9	43.1	95.2	67.5	221.6
Kyrgyzstan	45.8	44.3	18.1	25.2	62.5	241.1
Tajikistan	0.3	0.3	0.3	0.4	1.5	3.2
Turkmenistan	0.5	0.7	0.8	4.4	1.7	8.4
Uzbekistan	16.1	25.3	83.2	103.0	81.6	312.4

Source: *Japan's Official Development Assistance, Ministry of Foreign Affairs, Economic Cooperation Bureau, 2000.*

**Table 7. Trade with Japan, 1995-2000**  
(US\$, million)

		1995	1996	1997	1998	1999	2000
Kazakhstan	Exports	41.9	125.7	196.1	119.5	85.0	92.1
	Imports	15.9	32.7	31.2	52.4	59.7	68.7
Kyrgyzstan	Exports	0.8	1.2	1.2	0.5	0.6	1.4
	Imports	5.7	5.2	2.4	1.1	6.2	4.6
Tajikistan	Exports	20.5	2.7	1.3	0.6	0.2	0.5
	Imports	0.4	1.4	1.8	5.67	3.1	1.4
Turkmenistan	Exports	7.1	3.7	3.0	0.5	0.3	0.7
	Imports	8.9	7.5	3.8	7.7	14.7	56.1
Uzbekistan	Exports	109.4	61.9	36.2	41.1	33.0	78.7
	Imports	81.3	82.0	55.6	66.6	83.6	24.7
Russia	Exports	4,763.3	3,948.8	4,018.4	2,892.1	3,756.0	4,592.3
	Imports	1,170.1	1,024.7	1,014.9	969.3	480.7	571.4
Far Eastern Region	Exports	1,349.0	1,252.0	1,077.0	748.3	684.3	725.7
	Imports	197.5	177.2	253.8	140.6	140.1	131.7

Source: *Japan Association for Trade with Russia & Central-Eastern Europe, Institute for Russian & East European Economic Studies, Monthly Bulletin on Trade with Russia & East Europe, January, 2001, 1, 67-101, Interregional Association of Economic Cooperation "Far East and Zabaikalie."*

<sup>7</sup> U.S. Government Assistance to and Cooperative Activities with the New Independent States of the Former Soviet Union. FY 1999 Annual Report (Washington, D. C.: Office of the Coordinator of U.S. Assistance to the NIS, 2001), 36, 44, 67, 70, 87, 117, 119, 223.

<sup>8</sup> Japan's Official Development Assistance, Ministry of Foreign Affairs, Economic Cooperation Bureau, 2000.

global economy is concerned (Table 10).

For example, Kazakhstan and Uzbekistan improved their export performance somewhat, while Turkmenistan's share of world exports decreased compared with 1992. On the other hand, the role of the Far Eastern region in terms of its exports improved, and was superior to those of the

economies of Central Asia, except Kazakhstan and Uzbekistan which have much larger populations.

### ... And New Problems

Between 1992-2000, all CIS economies had to shift to market-based pricing accompanied by rampant inflation

**Table 8. Trade with China, 1995-1999**  
(US\$, million)

		1995	1996	1997	1998	1999
Kazakhstan	Exports	315.5	364.6	432.8	430.9	644.4
	Imports	75.5	95.3	94.6	204.7	494.4
Kyrgyzstan	Exports	123.5	36.8	36.0	25.7	32.0
	Imports	107.5	68.7	70.6	172.5	102.9
Tajikistan	Exports	9.2	4.1	9.2	8.2	5.7
	Imports	16.4	7.6	11.1	11.0	2.3
Turkmenistan	Exports	6.3	3.0	3.6	2.2	2.0
	Imports	11.3	8.5	11.6	10.3	7.5
Uzbekistan	Exports	71.0	149.1	141.4	32.4	13.0
	Imports	47.6	38.2	61.5	56.9	27.4
Russia	Exports	3,798.6	5,153.4	4,086.1	3,640.0	4,222.6
	Imports	1,664.7	1,692.8	2,032.8	1,839.9	1,497.3
Far Eastern Region	Exports	346.4	744.2	445.7	877.1	385.8
	Imports	159.4	217.2	312.2	172.2	132.7

Source: *China Statistical Yearbook 1997, 1998, 2000, Interregional Association of Economic Cooperation "Far East and Zabaikalie."*

**Table 9. Trade with South Korea, 1995-2000**  
(US\$, million)

		1995	1996	1997	1998	1999	2000
Kazakhstan	Exports	73.5	124.7	83.5	30.9	51.4	49.4
	Imports	52.8	105.5	92.1	104.0	56.6	82.4
Kyrgyzstan	Exports	1.0	2.5	0.2	0.1	0.0	0.2
	Imports	2.2	3.5	7.9	29.0	23.9	17.1
Tajikistan	Exports	1.5	6.1	1.2	2.0	5.6	9.6
	Imports	12.8	4.4	6.4	2.6	2.1	2.7
Turkmenistan	Exports	2.9	1.1	0.2	0.04	0.5	0.1
	Imports	0.5	1.6	3.1	8.5	32.2	15.3
Uzbekistan	Exports	134.8	196.1	297.9	142.4	208.3	104.0
	Imports	244.2	493.8	675.1	384.0	341.4	230.4
Russia	Exports	1,892.9	1,810.3	1,503.6	998.6	1,590.5	2,058.3
	Imports	1,415.9	1,967.5	1,767.9	1,113.8	637.1	788.1
Far Eastern Region	Exports	305.4	418.2	425.7	315.3	352.7	389.9
	Imports	215.1	324.7	476.5	587.2	166.3	184.7

Source: *Korean Customs Service (<http://www.customs.go.kr/eng>), Far Eastern Region - Interregional Association of Economic Cooperation "Far East and Zabaikalie."*

**Table 10. External Trade and Shares of World Exports, 1992-1999**

	External Trade,		Share of World Exports,	
	US\$ Billion		%	
	1992	1999	1992	1999
Kazakhstan	1.4	5.6	0.04	0.1
Kyrgyzstan	0.1	0.5	0.0	0.01
Tajikistan	0.1	0.7	0.0	0.01
Turkmenistan	0.9	0.6	0.02	0.01
Uzbekistan	0.9	3.2	0.02	0.1
Russia	53.6	73.7	1.5	1.3
Far Eastern Region	1.5	2.6	0.04	0.05

Source: *Russian Statistical Yearbook 2000, 630.*

that peaked in Russia in 1992, in Kyrgyzstan and Tajikistan in 1993, and in Kazakhstan in 1994. Inflation was more or less brought under control only in 1995-1996, but not firmly. However, the CIS countries managed to escape the hyperinflation of 1992-1994, and in 1996-1997, the inflation rate was within the 10%-40% range. After the August 1998 crisis, consumer prices in Russia increased by 84.4%, in Kyrgyzstan to 17%, and remained stable in Tajikistan and Kazakhstan. In 1999, however, all Central Asian economies were affected with consumer prices growing by 18% in Kazakhstan, 40% in Kyrgyzstan and 30% in Tajikistan, while in Russia, inflation rate dropped to 36.5%. In 2000, the monthly inflation rate decreased to only 0.8% in Kazakhstan and Kyrgyzstan, and 1.5% in Russia, but increased to 4% in Tajikistan.

In the countries of the CIS and Russia, budgetary prudence was widely recognized as an important tool in controlling inflation. Initially, expansion of the money supply was used for budget deficit financing. Later on, in the second half of the 1990's, the emphasis was on domestic and foreign borrowing. However, after the August 1998 financial crisis, Russia partially reinstated money supply expansion to cover its budget deficit (Table 11).

In the 1990s, all CIS economies, including those of Central Asia, experienced economic decline with their Gross Domestic Products rapidly shrinking, particularly between 1992-1994 (Table 12).

From 1995, negative growth was reduced somewhat, and in 1996-1997 positive growth was restored in ten economies. The period 1998-early 1999 was a time of slower GDP growth, partly due to the crisis in Russia. In general, compared with 1991, the GDP per capita in 2000

fell by about 30%-40% in all CIS economies except Belarus, Kazakhstan and particularly Uzbekistan.<sup>9</sup>

In 1999, Russia produced almost 68% of the CIS GDP. The combined share of Ukraine, Byelorussia and Moldova was about 16%, while the share of Central Asia was estimated at 14%. Before 1998, Russia's share in the GDP of the CIS in current prices was estimated at 79% and the scale of the contraction reflects the appreciation of other CIS currencies vis-a-vis the ruble. Also, in 1999, all the economies of Central Asia, including Kazakhstan, demonstrated positive rates of economic growth before the beginning of economic recovery in Russia.

In 1998, Russia's GDP decreased by 4.9% while the Gross Regional Product of the Far Eastern provinces contracted by 7.5%. In 1999, due to the depreciation of the ruble, the improved competitiveness of domestic producers and rising oil prices, the economic situation improved both in terms of GDP growth and increased industrial production, including 8% for the whole of Russia and 7% for the Far Eastern region.

Despite the positive dynamics of economic indicators in 1999-2001, Central Asia and Russia have yet to overcome the continuing decline in investment activity, including the shortcomings of the banking system and grossly underdeveloped financial markets. In the 1990s, the share of savings in GDP dropped from about one-third to one-fifth and in the largest economies of Central Asia such as Kazakhstan, gross savings are now reduced to 20% of the 1990 level.

The modernization and replacement of industrial equipment is required at much faster rates than the economies of the CIS can currently afford. In Russia, in

**Table 11. Budget Deficit as a Share of GDP, 1991-1999**  
(%)

	1991	1992	1993	1994	1995	1996	1997	1998	1999
Kazakhstan	-	-	-	-	4.0	2.6	3.7	3.9	0.6
Kyrgyzstan	-	-	-	7.7	11.6	5.4	5.2	3.1	2.6
Tajikistan	-	-	-	-	-	-	-	-	3.8
Turkmenistan	-	-	-	5.2	1.3	-	-	-	-
Uzbekistan	3.4	10.9	3.0	4.2	2.8	3.4	2.5	-	-
Russia	2.7	3.4	4.6	10.3	3.1	4.3	5.0	3.6	1.2

Source: *CIS Statistical Bulletin*, No. 3, 2000, 17.

**Table 12. Gross Domestic Product, 1992-1999**  
(% year-on-year, in constant prices)

	1992	1993	1994	1995	1996	1997	1998	1999	2000	2000 to 1991, %
Kazakhstan	94.7	90.8	87.4	91.8	100.5	101.7	98.1	101.7	109.6	77.9
Kyrgyzstan	86.1	84.5	79.9	94.6	107.1	109.9	102.1	103.6	105.0	72.0
Tajikistan	n/a	83.7	78.7	87.6	83.3	101.7	105.3	103.7	108.3	57.8
Turkmenistan	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Uzbekistan	88.9	97.7	94.8	99.1	101.7	105.2	104.4	104.4	104.0	99.0
Russia	85.5	91.3	87.3	95.9	96.6	100.9	95.1	103.2	107.7	67.5

Source: *CIS Statistical Bulletin*, No. 7, 2001, 54.

<sup>9</sup> In the CIS, the accuracy of the GDP measurement depends on estimates of the shadow economy and economic activities that remain unregistered by the state agencies, including the State Statistical Committee. For example, the share of the shadow economy in Kazakhstan and Russia is estimated at about one-quarter of GDP, in Kyrgyzstan at one-sixth, and in Uzbekistan at one-tenth of GDP.

many industries more than 70% of the fixed assets are obsolete. Moreover, because of the prohibitively high commercial credit, enterprises redirected their monies from depreciating accounts to working capital replenishment. Notwithstanding the increase in output in 1999-2000, in most of the industries in the CIS, including Russia and Central Asia, there was almost no replacement or modernization of the capital stock, just more complete utilization of existing facilities.

With the exception of Kyrgyzstan, the share of gross savings (in the current prices) in the GDP of CIS members declined on average from 25% in 1995 to 19% in 1999, including a reduction in investment in fixed assets from 22% to 19%.<sup>10</sup> In Kazakhstan, the share of gross savings (in current prices) in GDP declined from 22% in 1995 to 13% in 1999, in Kyrgyzstan from 20% to 16%, in Russia from 21% to 18%, and in Tajikistan from 23% to 17%.

After 1998, the majority of the CIS economies demonstrated an increase in investment in fixed assets-in 2000, the average growth was estimated at 15% compared with 1999 (5% in 1999 compared with 1998). In Kazakhstan, investment in fixed assets increased by 29%, and in Kyrgyzstan by 4%, while in Russia it increased by 18%. However, even with these improvements, the volume of investment in fixed assets in 2000 on average was only 91% of the 1995 level. In 2000, investment in fixed assets doubled in Sakhalinskaya Oblast and increased by 70% in Yakutia, contributing to the improvement of regional indicators in Far Eastern Russia.

The composition of investment demonstrated that the states in some economies of Central Asia have reduced their involvement in economic activities. More than 90% of total investment in Kazakhstan and Kyrgyzstan, and about 80% of investment in Russia originated from sources other than state budgets. In 2000, enterprises and organizations, relying on their own sources, provided 61% of investment in Kazakhstan, 27% in Kyrgyzstan and 46% in Russia. On the other hand, the state sector in the economy of Tajikistan and Uzbekistan is responsible for more than 60% of gross capital investment.<sup>11</sup>

In 1998, the share of transport in the total volume of fixed capital investments in Kyrgyzstan sharply increased from 6.5% to 22.8% due to the construction of the Balykchi-Kochkor-Kara-Keche railway and other construction projects. Also, in Tajikistan, this share grew from 13.2% to 33.8% because of the Kurgan-Tube-Kuliyab railway project as well as the Kuliyab airport project. In 1999, the transport and telecommunications sectors absorbed 32% of total investment in Kyrgyzstan, 40% in Tajikistan and 22% in Russia, including a 20% share for the Far Eastern region.

The share of industry in investment in fixed assets was 35% in Kyrgyzstan, 37% in Russia, 18% in Tajikistan and 37% in Russia. In the Far Eastern region, the industrial sector absorbed 61% of total investment in fixed assets. The oil and gas sectors, as well as the power generation and petrochemical industries were the leading investment-

recipient sectors, absorbing 74% of industrial investment in Kyrgyzstan, 30% in Uzbekistan, and 49% in Russia. On the other hand, in Tajikistan, 34% of total investment in industry was directed to light manufacturing and 33% in metallurgy, while in Russia the share of food processing increased from 12% in 1998 to 16% in 1999, reflecting stronger incentives for domestic enterprises to expand production.

The economies of Central Asia are still suffering from inadequate household savings and a grossly underdeveloped banking sector. A lack of institutional mechanisms for protecting bank deposits, relatively low interest rates for individual accounts, inflation and the depreciation of local currencies vis-a-vis western currencies has also made households interested in keeping their savings in hard currency, limiting the investment capacity of the banking sector. Also, prior to mid-1998, the lucrative yields offered by short-term treasury bonds distracted investors and greatly distorted the functions of the emerging financial sector. On the other hand, the unfavorable investment climate discouraged the inflow of foreign investment. The August 1998 financial crisis in Russia not only led to a massive outflow of foreign funds, but also sharply reduced personal incomes, undermining not only the capacity of households to save but also their confidence in the reliability of commercial banks.

## Population

The 1990s was a period of heavy losses in terms of human capital. The share of economically active population decreased vis-a-vis both the total population and the working age population. The demographic situation deteriorated sharply, particularly in Russia, Ukraine and Byelorussia, including life expectancy and health conditions. From 1995, the population of the CIS decreased by more than 3 million, including a 2.4 million reduction in the population of Russia alone. Population also declined in the Far Eastern region due to the same negative factors, in addition to a physical outflow of people from the northern areas (Table 13).

In the majority of CIS countries, the population is aging and birth rates are declining (Table 14). In Central Asia, with the exception of Kazakhstan, the population has grown, but at a decreased rate compared with the 1980s.

In Russia (excluding the Far Eastern region), unlike in the countries of Central Asia, population migration has been positive, including the influx of people from the CIS (Table 15). In 1999, about 210,000 foreigners were officially employed in Russia, including 30% who arrived from Ukraine, 15% from other CIS countries, and the rest from outside of the CIS, including Turkey and China as the leading sources of foreign laborers, and also Vietnam and the former Yugoslavia.

Officially registered labor migration in other CIS countries is estimated at 30,000 people per annum, including 12,000 in Kazakhstan, but only one thousand arriving from other CIS countries. It should be noted,

<sup>10</sup> CIS Statistical Bulletin, No. 7, 2001, 10-11.

<sup>11</sup> In 1999, the share of the state sector in total investment in fixed assets in Kazakhstan was 86% (55% in 1995), in Kyrgyzstan 67% (73%), and in Russia 73% (63%).



however, that the real scale of labor migration within the CIS is estimated as being many times larger than official numbers. On the other hand, outbound migration from the CIS was estimated in 1998-1999 at about 200,000 a year, with more than 90% of migrants being accepted by Germany, Israel, the United States and Greece.

### Employment and Social Trends

In 1999, the economically active population of the

whole of the CIS was estimated at 120 million, including 20.4 million in all Central Asian economies and 64.5 million in Russia, with 3.2 million employed in the Far Eastern region. Compared with 1998, employment increased somewhat in all economies of Central Asia, except Kazakhstan. In Russia, the registered increase in employment was 321,000, including 14,000 in the Far Eastern region (Table 16).

With labor markets emerging and the economies of

Table 13. **Population Dynamics and Life Expectancy, 1990-2000**

	Population, million		Population, As % of 1990		Life expectancy 1998	Net growth, per 1,000 1998
	1990	1999	1993	1999		
Kazakhstan	16.4	14.9	99.4	90.9	64.4	4.6
Kyrgyzstan	4.4	4.9	100.0	107.0*	67.1	14.8
Tajikistan	5.3	6.1	108.0	115.0*	68.4	16.1
Turkmenistan	3.8	4.8	113.0	126.0	66.9	14.5
Uzbekistan	20.6	24.5	107.0	0.0	70.3	17.2
Russia	148.5	145.9	99.9	98.2	65.9	- 4.8
Far Eastern Region	8.1	7.2	96.7	88.9	64.4	- 1.6

\*1998 data

Source: *Russian Statistical Yearbook 2000*, 599, 601, "Regions of Russia 2000," *Statistical Yearbook*.

Table 14. **Natural Population Growth Rates, 1995-1999**

(per 1,000)

	1995	1997	1998	1999
Kazakhstan	6.8	4.8	- 4.6	- 4.3
Kyrgyzstan	17.8	14.6	-14.8	-14.6
Tajikistan	22.7	19.2	-16.1	-14.4
Turkmenistan	21.3	15.0	-14.5	-13.1
Uzbekistan	23.4	19.7	-17.2	-17.0
Russia	- 5.7	- 5.2	- 4.8	- 6.4
Far Eastern Region	- 2.4	- 2.1	- 1.6	- 3.1

Source: *CIS Statistical Bulletin*, No. 20, 2000, 108, "Regions of Russia 2000" *Statistical Yearbook*.

Table 15. **Net Migration, 1999**

	Thousand	Per 10,000 of population
Kazakhstan	-126.3	-84.6
Kyrgyzstan	- 9.9	-20.4
Tajikistan	n/a	n/a
Turkmenistan	n/a	n/a
Uzbekistan	- 62.1	-25.4
Russia	154.6	10.6
Far Eastern Region	- 63.1	-87.0

Source: *CIS Statistical Bulletin*, No. 20, 2000, 101, "Regions of Russia 2000," *Statistical Yearbook*.

Table 16. **Employment Trends, 1990-1999**

	Economically active population, million		Unemployment, Thousand		Share of unemployed, %	
	1990	1999	1994	1998	1994	1998
Kazakhstan	7.8	6.1	536	925	7.5	13.1
Kyrgyzstan	1.7	1.7	71	106	4.1	5.9
Tajikistan	1.9	1.8	32	54	1.7	2.9
Turkmenistan	1.5	1.9	n/a	n/a	n/a	n/a
Uzbekistan	7.9	8.9	22	33	0.3	0.4
Russia	75.3	64.5	5,702	8,876	8.1	13.3
Far Eastern Region	4.0	3.2	328	559	8.4	15.1

Source: *Russian Statistical Yearbook 2000*, 602-604, "Regions of Russia" *Statistical Yearbook*, "Labor in Russia 1999.

Central Asia entering a phase of restructuring, the service sector has generated more jobs. On the other hand, in the 1990s, the industry, construction and transportation sectors downsized. Non-state enterprises are the main source in terms of job creation, providing employment to about 4.6 million people in Kazakhstan (75% of employed), 1.3 million in Kyrgyzstan (77% of employed), more than one million in Tajikistan (about 60% of employed), 6.5 million in Uzbekistan (72% of employed), and 39.5 million in Russia (62% of employed). In the Far Eastern region 54% of the entire workforce is now employed in the non-state sector.

Since 1992, unemployment has been growing rapidly, reaching 14 million people by mid-2000, if the methodology of the International Labor Organization were applied. In Russia, the number of those officially registered as unemployed was 3.2 million, but the total number, including those who were searching for a job without state assistance, was estimated at 8.5 million. In Kazakhstan, the number of unemployed in 2000 was close to one million, while officially registered unemployment was only 280,000.

However, compared with the economies of Central Asia, the unemployment situation in Russia appeared less dramatic, considering that the average number of candidates per vacancy was 1.4, while in Kazakhstan the average number of officially registered job seekers per vacancy was 27, in Kyrgyzstan - 32, and in Tajikistan - 9.5.

In the late 1990's, poverty grew, with real incomes and wages falling despite a rise in the cost of living. In 1999-2000, the share of the population with per capita income beneath the poverty line was 34.5% in Kazakhstan, 55% in Kyrgyzstan, and 27% in Russia, including 28% in Khabarovskiy Krai, 55% in Evreiskaya Autonomous

Oblast, and 70% and above in the northern areas of the Far Eastern region such as Chukotskiy and Koriyanskiy districts.

The August 1998 financial crisis in Russia further aggravated socio-economic conditions within the CIS. For example, in 1999, Kyrgyzstan registered a 2% drop in real monetary income compared with 1998, while in Russia the decline in income was estimated at 14%, including a 17% downturn in Primorskiy Krai, and Magadanskaya and Kamchatskaya oblasts. Also, in 1999, minimum living costs grew faster in comparison with monetary income: respectively, 137% and 133% in Kyrgyzstan and 184% and 159% in Russia.

The 1998 per capita GDP estimates in terms of purchasing power parity (PPP) demonstrated that Russia and Belarus are quite far ahead of other CIS economies, while the per capita income in Kazakhstan is at the average CIS income level. Other Central Asian countries have much lower per capita income levels, and the situation in Tajikistan is particularly worrisome (Table 17).

Social conditions as well as the capacity to develop human resources have deteriorated in all countries of the CIS (Table 18). Compared with Central Asia, Russia is still leading in terms of university-level enrollments, with the Far Eastern region lacking far behind the national average. On the other hand, the Far Eastern provinces are ahead of the rest of Russia and the countries of Central Asia in health care and passenger vehicle ownership. In 1996-1999, the number of private cars in Kyrgyzstan and Russia increased by 7%, while in Kazakhstan it decreased by 5% and in Tajikistan by 5%.

In 1998 alone, the number of privately-owned trucks increased by 4% in Kazakhstan, 10% in Kyrgyzstan, 12% in Tajikistan and 13% in Russia. The number of privately-

Table 17. **Wealth and Incomes: Selected Indicators, 1999**

	Share in the CIS Gross Domestic Product, %	Per capita GDP relative to CIS average, %	GDP per capita (PPP), US\$	GDP per capita (PPP) as share of U.S. level (1996), %
Kazakhstan	5.3	100	5,158	15.6
Kyrgyzstan	0.8	46	2,374	7.6
Tajikistan	0.4	20	1,031	3.3
Turkmenistan	1.4	76	3,934	10.7
Uzbekistan	3.8	44	2,266	7.2
Russia	68.7	133	6,839	24.2

Source: *CIS Statistical Yearbook 1999 (Moscow: Interstate Statistical Committee, 2000), 87-89.*

Table 18. **Standards of Living: Selected Indicators**

	Students per 1,000 population	Number of people per one medical doctor	Passenger motor vehicles per 100 families	Newly built apartments per 10,000 population	
	1997	1997	1999	1990	1999
Kazakhstan	28	272	25	68	6
Kyrgyzstan	27	306	17	51	9
Tajikistan	16	499	14	54	7
Turkmenistan	n/a	336	27	58	n/a
Uzbekistan	16	306	21	61	32
Russia	37	219	28	71	27
Far Eastern Region	31	203	35	86	17

Source: *Russian Statistical Yearbook 2000, 605-606, 619, "Regions of Russia 2000" Statistical Yearbook.*

owned buses in Kazakhstan and Kyrgyzstan increased by 20% and 33%, while in Tajikistan and Russia it increased by 12% and 16% respectively, reflecting the growing commercialization of privately-owned motor vehicles. Towards the end of the 1990s, the number of privately-owned trucks and buses, including those owned by individuals, reached almost 2.8 million, while the number of individually-owned motorcars was about 28 million and growing rapidly. On the other hand, the truck fleet is decreasing and in 1998 alone it shrunk by 27% in Kazakhstan, 11% in Kyrgyzstan, 44% in Tajikistan and 17% in Russia.

The economic downturn of the 1990s badly affected housing construction. In 2000, the floor space of the newly build apartments throughout the CIS totaled 48 million square meters, while 96.4 million square meters of apartments were commissioned in 1991. In general, housing construction shrank by 17% since 1995 and on average was at the same level as 1953. Unlike the period prior to 1992, non-state enterprises and individual investors are by and large now financing the construction of new apartments. For example, in Kyrgyzstan, Tajikistan and Uzbekistan, the share of the latter reached 90%, while in Kazakhstan it was about 70%. By 2000, individual financing accounted for 50% and 47.7% of new housing construction in Russia and the Far Eastern region respectively.

### Energy Sector

Before 1992, the supply of energy resources was among the main pillars of economic development and social advancement in Central Asia, with Russia fulfilling the role of a critical source of subsidized oil, petrochemicals, electric power and natural gas. Kazakhstan is the second largest oil producer within the CIS after Russia (Table 19).

Kazakhstan's future as a potential exporter of oil

appears bright, considering the \$20-billion Tengizchevroil joint venture with Chevron to develop the Tengiz oil field, with 6 to 9 billion barrels of estimated oil reserves. The Tengiz-Novorossiisk oil pipeline, which will be capable of transporting more than 60 Mt of oil each year, and which opened in November 2001, should be seen as a major development in energy cooperation between Russia and Kazakhstan. Kazakhstan could earn \$700 billion in revenues (including taxes) from offshore oil and gas fields over the next 40 years. Also, the government hopes to attract \$65-70 billion to its promising oil and gas sector over the next decade. With predictions of up to 10 billion barrels of recoverable oil in the Kashagan offshore oilfield, Kazakhstan could become one of the world's major oil producers in the next decade.

Before 1992, Kazakhstan was integrated into the Russian pipeline system, which provided the means for oil exports. Kazakhstan's urban and industrial centers in the east also receive oil from Siberia. Russia and Kazakhstan can swap some volumes of oil with Kazakhstan delivering oil to Russian refineries and Russia delivering its oil for processing at refineries in Kazakhstan. In addition, there is a possibility of Kazakhstan swapping oil with Iran via the Caspian Sea for local consumption in Iran, while Iran would deliver the equivalent volume for export via Persian Gulf ports. An agreement on such transactions was signed in 1996.

Currently Kazakhstan imports natural gas from Uzbekistan and Russia. About 40% of its reserves are concentrated in the giant Karachaganak field in northwest Kazakhstan, which is to be developed under a US\$8 billion production-sharing contract. In 2000, this field produced 4.6 million tons of gas condensate and this volume could triple in the future, while the natural gas output could reach 40-50 Bcm a decade from now. Major gas fields are located close to the Russian gas pipeline system that could facilitate exports. In addition, Kazakhstan provides transit services for natural gas delivered from Uzbekistan and

Table 19. Energy Sector: Selected Indicators, 1999-2000

		Kazakhstan	Kyrgyzstan	Tajikistan	Turkmenistan	Uzbekistan	Russia
Proven Oil Reserves	Mln. t	1,370-2,411	5.5	1.6	74.8	82.2	6,712-7,534
Oil Production	1,000 t/year	34,650	220	19	7,400	7,600	335,500
Oil Consumption	1,000 t/year	11,000	550	1,450	3,250	6,800	117,000
Net Oil Exports	1,000 t/year	22,600			4,150		218,500
Net Oil Imports	1,000 t/year			1,432			
Crude Refining Capacity	1,000 t/year	21,350			11,850	11,100	330,000
Natural Gas Reserves	Bcm	1,820-1,960	5.6	5.6	2,830	1,850	47,600
Natural Gas Production	Bcm	4.54	0.0098	0.0588	46.5	5,488	582.4
Natural Gas Consumption	Bcm	13.44	1.89	1.1564	12.9	39.8	392.0
Net Natural Gas Exports	Bcm				33.6		190.4
Net Natural Gas Imports	Bcm	8.9		1.1			
Coal Reserves	Mln. sh. t	37,500	895		none	4,400	173,000
Coal Production	Mln. sh. t	64.2	0.46	0.0207	none	3.2	276.3
Coal Consumption	Mln. sh. t	39.5	1.22	0.0138	minimal	3.2	268.3
Electric power capacity	GW	17.4	3.8	4.4	3.9	11.8	204
Electricity production	Bln. kWh	44.4	13	15.6	8.4	43.5	798
Electricity consumption	Bln. kWh	44.1	10.2	14.7	4.8	42.9	728
Net electricity exports	Bln. kWh		2.8	0.9	3.6		70

Source: Energy Information Administration, <http://www.eia.doe.gov>

Turkmenistan to Russia. Meanwhile, a gas pipeline project between Kazakhstan and China is under consideration, with Uzbekistan a potential partner.

Kazakhstan also remains the third largest coal producer, after Russia and Ukraine. The Ekibastuz basin is the third largest coal producing area in the CIS. In the 1990s, high railway tariffs limited exports of coal to Russia and other CIS economies to only one-third of the 1990 level. Along with a sharp decline in domestic demand for coal in the 1990s, this led to a 50% decline in coal output. However, Kazakhstan remains the largest coal exporter within the CIS, with the Russian market serving as the leading importer and Ukraine second only to Russia. In 1996, two Russian utilities from neighboring regions acquired two coal-mines in Kazakhstan as payment for unpaid debts for power supplies. In general, Russia is likely to expand imports of coal from Kazakhstan to 30-40 million tons a year.

Kazakhstan has 54 fossil fuel-powered plants, mostly concentrated in the northern region adjacent to Russia, five hydroelectric power plants, and a nuclear power plant. The country's electric power transmission system is connected to grids in Siberia and Western Russia, as well as to networks in Kyrgyzstan and Uzbekistan. Kazakhstan is both an exporter and importer of electricity, and its national power network is working with United Energy System of Russia and with the national energy companies of Kyrgyzstan, Turkmenistan, Tajikistan, and Uzbekistan. Imports from Russia and Kyrgyzstan account for more than 10% of domestic power consumption.

In Turkmenistan, about nine-tenths of foreign direct investment flows into the oil and natural gas sectors. Work is underway on a \$1.4-billion upgrade and modernization of one of its two refineries with financing from German and Japanese sources. France's Technip was awarded a contract in July 1999 to build a lubricant blending plant at the same refinery.

Exxon/Mobil has a 40% stake in Turkmenistan's Burun field, as well as a 52.4% interest in the Kotor Tepe/Barsa Gelmis PSA and a share of the Garahsyzlyk PSA, although Turkmenistan laws prevent foreign companies exporting oil and gas, and foreign investors do not have access to export pipelines.

However, the only export option for oil and gas was to the north via Uzbekistan, Kazakhstan, and Russia. Turkmenneft oil company, owned by the state, accounts for 90% of total oil extraction, while the rest of the output was accounted for by Turkmengaz and foreign companies, operating under production-sharing contracts. The official goal set by the government is to raise crude oil production to 1 million bbl/d by 2010.

Turkmenistan's proven natural gas reserves are estimated at about 2.8 Tcm. Gazprom owns 44% of TurkmenRosgaz, the state-owned company that exports gas via Russia. Prior to 2000, Turkmenistan was involved in a dispute with Russia over the export prices of its gas; gas production tripled after an agreement was reached, with the Ukrainian market providing most of the demand. It is important to note that by October 2000, Ukraine's unpaid debt to Turkmenistan for gas shipments had reached US\$281 million. By 2001, Azerbaijan owed Turkmenistan

US\$59 million, and was in debt to Kazakhstan to the tune of US\$58 million. Furthermore, at one point, Gazprom's subsidiary threatened to halt gas transit to Ukraine, which owed at least \$1.4 billion for gas. On May 14, 2001, Turkmenistan and Ukraine agreed to a major gas export deal through 2006 under the condition that Ukraine would make its payments on time. Ukraine agreed to pay 60% in cash and the remaining via participation in 20 construction and industrial projects in Turkmenistan, worth US\$412 million.

On the other hand, export restrictions and other factors complicate foreign investment inflow in the oil and gas sectors. For example, in 2000, Turkmenistan reached an agreement with Russia's Transneft Company to export up to 50,000 bbl/d of its oil, using the Baku-Novorossiisk pipeline. However, due to the high sulfur and paraffin content of its oil, the agreement did not materialize and Turkmenistan is still relying on shipments by tanker and railway. Moreover, Turkmenistan has demonstrated an interest in entering swap agreements with Iran in order to export its oil. Turkmenistan exports its gas to northern provinces of Iran and these links are likely to expand. In addition to Iran, other possible export routes for Turkmen gas include China and Pakistan.

Armenia, Turkmenistan, and Iran cooperate through their interconnected power grids. In May 1998, Turkmenistan announced that a new 220-400 kV power transmission line would be extended to the border with Iran to export electricity. Armenia's power grid has been connected to Iran's since 1998. On the other hand, the five CIS countries surrounding the Caspian Sea remain divided over who owns the resources in the seabed. In particular, Turkmenistan has a conflict of interest with Azerbaijan, claiming that oil and gas reserves in the disputed sector are estimated at 11 billion tons of oil and 5.4 trillion cubic meters of natural gas.

Uzbekistan's oil and gas reserves have been estimated to be worth more than \$1 trillion, being as large as the oil and gas reserves of all other Central Asian economies combined. Uzbekistan is the only CIS country that has more than doubled its oil production compared with 1990. The Bukhara refinery was the first refinery to be built in the CIS since 1992. This project cost in excess of \$400 million and its current capacity is 2.5 Mtpa, to be expanded to 5 Mtpa. In 1998, Mitsui won a \$200-million contract to upgrade and expand desulfurization capacity at the Fergana refinery. In 1996, Texaco formed a joint venture at the Fergana refinery to produce and market Texaco-branded products. In 2000, all three Uzbek refineries processed more than 5 million tons of crude oil and gas condensate.

In 1999-2000, Uzbekistan accumulated US\$2 billion in foreign investment and loans with the government announcing plans to privatize 49% of Uzbekneftegaz, the state holding company, and grant foreign companies engaged in prospecting preferential treatment, exclusive rights and exemption from certain taxes and dues.

Furthermore, 80 fields are likely to be offered to prospective investors from the list of the 171 currently discovered fields, which have total oil reserves estimated at 82.2 million tons. As of 2000, oil was produced at 51 fields, gas at 27, and gas condensate at 17 fields. On the

other hand, Uzbekistan is one of the two landlocked countries in the world that are surrounded by other landlocked countries. One export option is to utilize an existing pipeline that brought oil from Omsk to the refineries.

Uzbekistan is the third largest natural gas producer in the CIS and one of the top ten gas-producing countries in the world. Since 1992, gas production has increased by 30%, but domestic consumption has increased at about the same rate. Uzbekistan exports natural gas to Kazakhstan, Kyrgyzstan, Russia, and Tajikistan via the Central Asia-Central Russia pipeline, but frequent non-payment by Kazakhstan and Kyrgyzstan is a particular problem. Kyrgyzstan buys gas for US\$42 dollars per 1,000 cubic meters, paying 50% in cash and 50% in goods, in addition to supplying Uzbekistan with water during the cotton-growing season. Uzbekistan also provides a transit route for gas from Turkmenistan.

Uzbek gas requires processing due to its high sulfur content. The Gas-Chemical Complex, which is located in the southwest, was completed in December 2000 at a cost of US\$1 billion. Uzbekneftegaz financed the project with loans from international financial institutions, including more than US\$400 million from the Japanese Bank of International Cooperation and around US\$200 million from the U.S. Export-Import Bank. In 2001, Trinity Energy of the United Kingdom committed to investing more than \$400 million, over a 40-year period, for the exploration and production of gas condensate deposits.

To diversify its gas exports, Uzbekistan has sought to develop alternative export routes, with the expansion of the existing Central Asia-Central Russia pipeline system one possible option. It discussed prospects for the export of gas to Pakistan and possibly, India via the Central Asia Gas pipeline project with Turkmenistan, Afghanistan and Pakistan, and was looking at a proposed 8,000-kilometers pipeline from Turkmenistan and Kazakhstan to China.

Power generation in Uzbekistan, unlike oil and gas production, has been displaying a downward trend. Uzbekistan has gone from being a net electricity exporter to a net importer. Much of Uzbekistan's electric power is generated from natural gas-powered plants, with smaller amounts generated from coal and hydroelectric facilities. In 2000, Siemens AG of Germany, using a US\$27.8 million line of credit from the European Bank for Reconstruction and Development, began modernizing two of the ten power-producing units at the Syr Darya Power Plant. In addition, Mitsubishi has allocated \$234 million to the construction of a new power-producing combined cycle unit.

Uzbekistan imports electricity from and exports electricity to its Central Asian neighbors, with some of these exports and imports governed by an agreement between Uzbekistan, Kyrgyzstan, and Kazakhstan to cooperate in using the region's water and energy resources. In general, Kyrgyzstan supplies Uzbekistan with electricity using the surplus power from its hydroelectric plants in the summer, during which period Uzbekistan exports natural gas in return, exporting natural gas, fuel oil, and electricity during the winter. In December 2000, Kyrgyzstan pledged to supply 2.2 billion kWh of electricity to Uzbekistan, but

Uzbekistan's decision to suspend gas supplies to Kyrgyzstan blocked the deal.

In conclusion, Kyrgyzstan's and Tajikistan's energy sectors are focused predominantly on hydroelectric power, which accounts for more than 90% of their electricity production. Oil, gas and electricity shortages are common. These two economies are the poorest of the Central Asian countries and experience more economic hardships. Their capacity to deal with the energy sector problems is extremely limited, requiring assistance on the part of their CIS neighbors and international agencies such as the World Bank, and official development assistance from advanced economies. It is noted that the current capacity of Russia to provide such assistance is very limited. However, as Table 17 demonstrates, much of the potential in the energy sector was inherited by Central Asian CIS economies from the Soviet era. This may represent a formidable contribution to their current wellbeing and economic development that could be difficult to overestimate.

It is obvious that the energy sector contains major sources of disagreements and risks of competition. At the same time, it also offers ample opportunities for cooperation involving the economies of Central Asia and Russia. For example, a Trans-Siberian gas pipeline could become a viable option for Kazakhstan and Turkmenistan to export-together with Russia- natural gas to China. On the other hand, with domestic prices for natural gas in Russia rising in the next two to five years, this could be an alternative direction for exports. In any event, the coordination of interests in both the oil and gas sectors, the complementarity of development plans and joint efforts in cross-border infrastructure construction may together form the best way for Russia and the Central Asian economies to expand their market share in the regional energy markets of Eurasia. This also represents a unique opportunity for the "Shanghai Five" framework in developing long-term bonds in the energy sector that promise to bring stability and prosperity to Central Asia. At a press conference on November 29, 2001, during the CIS summit in Moscow, the President of Kazakhstan, Nursultan Nazarbayev proposed forming a "gas and oil alliance" involving Kazakhstan, Russia, Turkmenistan, Uzbekistan and Azerbaijan.

## Conclusion

As the new independent states of Central Asia became involved in the anti-terrorist campaign and humanitarian relief efforts in Afghanistan, international attention to this region increased. The five countries were repeatedly visited by high-level officials from the United Nations, the United States and Europe.

A decade of self-reliance brought mixed results to the economies, people and even stability of Central Asia. The list of problems includes explosion of poverty, ethnic clashes, extremism and terrorism. In some countries, nationalism and authoritarianism were on the rise, leading over the last 10-15 years to the outflow of non-Central Asians from this area. Russia is increasingly concerned about the traffic in illegal drugs through Central Asia. The 1990's was a period of heavy losses in terms of human capital. The share of economically active population

decreased vis-a-vis both the total population and the working age population. Social conditions as well as the capacity to develop human resources have deteriorated. The economic downturn of the 1990s badly affected housing construction.

Despite the positive dynamics of economic indicators in 1999-2001, Central Asian economies have yet to overcome the continuing decline in investment activity, the shortcomings of the banking system and grossly underdeveloped financial markets. The composition of investment demonstrated that the states in some economies of Central Asia have reduced their involvement in economic activities. On the other hand, the state sector in the economy of Tajikistan and Uzbekistan continues to play the dominant role. The August 1998 financial crisis not only led to an outflow of foreign funds from Russia in particular, but also reduced personal incomes. Also, before the crisis, Central Asia's trade with the rest of the CIS has been weakened and revived somewhat only in 1999-2000.

On the positive side, non-state enterprises are now serving as the main source in terms of job creation. Central Asia attracts attention as the region rich in energy resources, including oil and natural gas in the Caspian Sea area, from where the Trans-Caspian Pipeline Consortium has already launched a high-capacity oil pipeline. South Korean companies went ahead with sizable investment projects in Uzbekistan, while China demonstrated a strong interest in developing cooperation in the energy sector, and Japan and the United States lead in bilateral official development aid. In fact, it was the United States that

launched the most elaborate and comprehensive framework for economic, technical and humanitarian assistance

The 1990's also demonstrated that diversification of trade and investment links, Central Asia retained close economic links with CIS, particularly Russia. On November 30, 2001, their leaders took part in the CIS 10th Anniversary Summit held on in Moscow. As this overview shows, in terms of markets, trade opportunities, transport links and the routes for oil and gas exports and transit there is little alternative to cooperative relations with the northern neighbor. However, one should wait and see whether the interdependent relationships among Central Asia and Russia could be restored.

Through a comparison of some statistical data for Central Asia and Far Eastern Russia this overview also demonstrates that in overall the Far Eastern region was not too different in social and economic trends, but in relative terms was ahead of Central Asia in export performance, university level enrolments, public health standards and income level. In general, the future of Eastern Russia, including the Far Eastern region depends on the capacity to develop and export regional energy resources to Northeast Asia. This is also true for some Central Asian economies, including Kazakhstan, Turkmenistan and Uzbekistan. It is, therefore, important that at the CIS Anniversary Summit cooperation and coordination of the export-oriented energy projects was proposed. Indeed, in the context of recent developments in Afghanistan eastern provinces of Russia and some economies of Central Asia appear as promising sources of "secure energy" for both Europe and Asia.