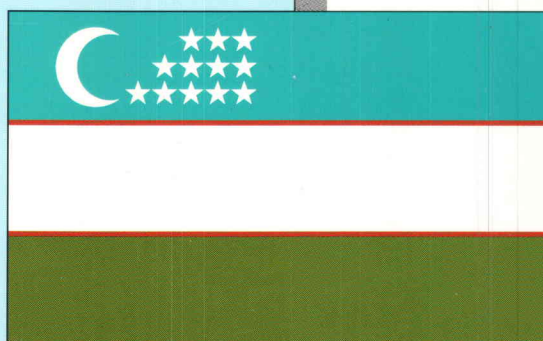


Uzbekistan

**An
Economic
Profile**



October 1993

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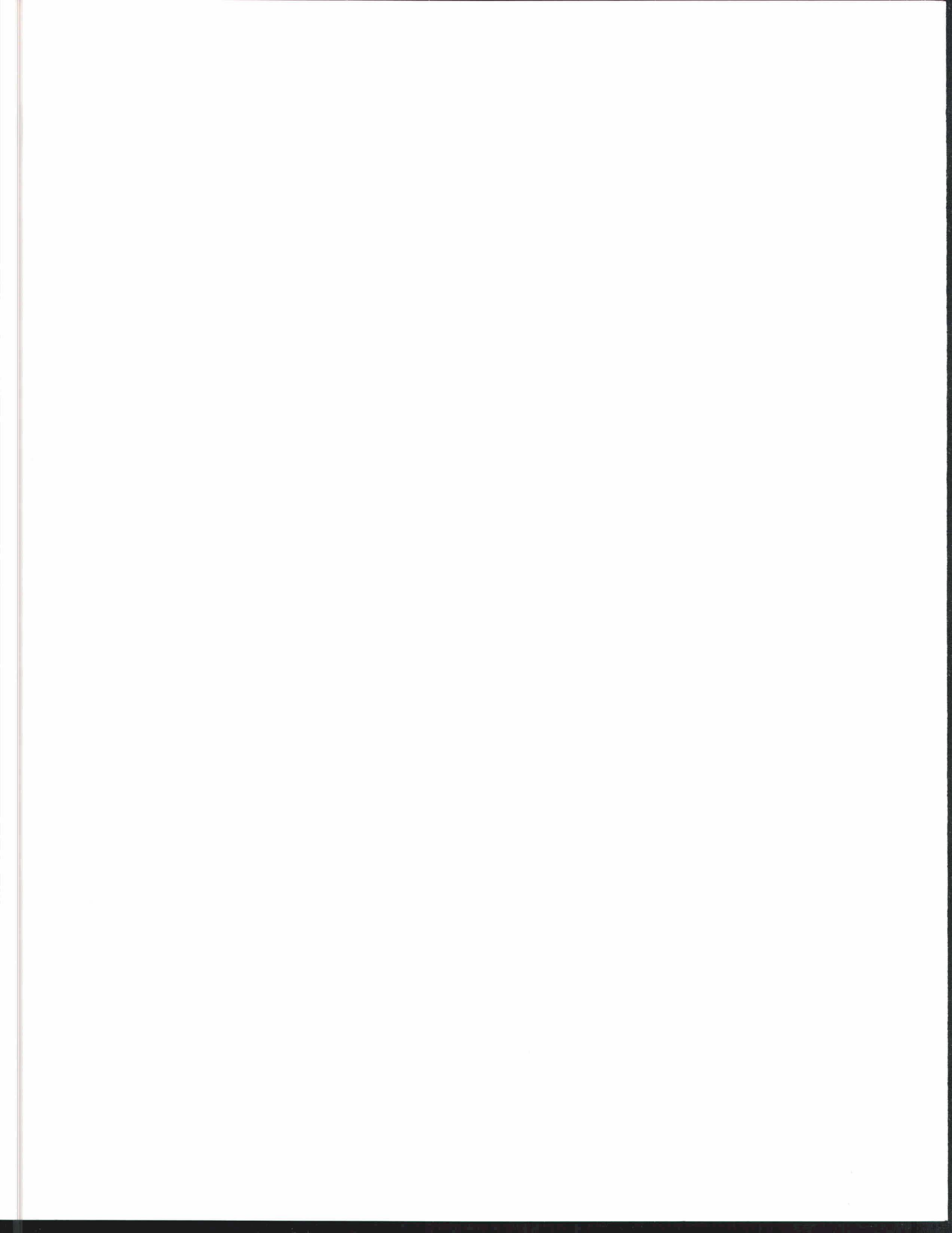
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Uzbekistan: An Economic Profile

October 1993



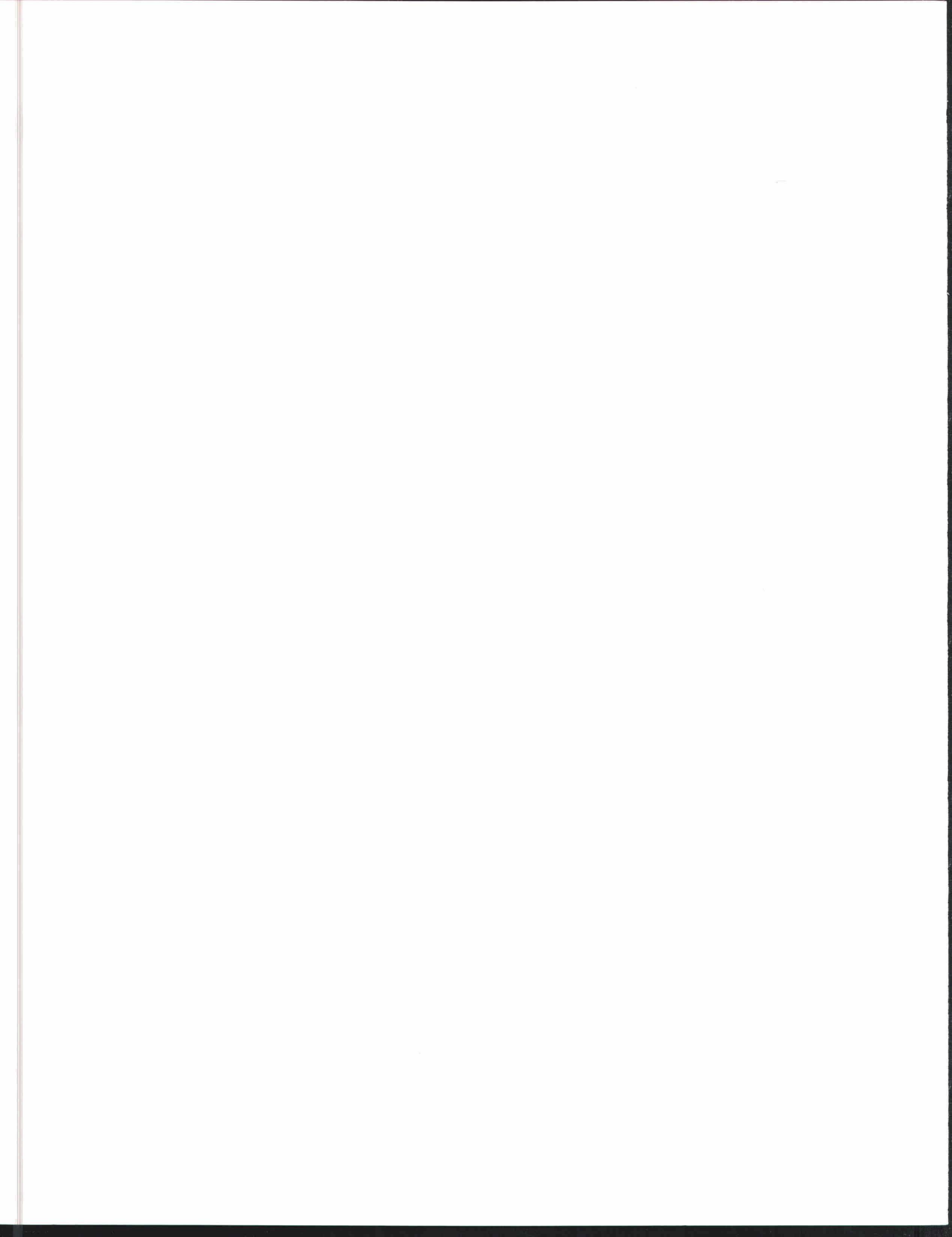
Uzbekistan: An Economic Profile

Preface

This is one in a series of profiles of the republics of the former Soviet Union that are intended to provide basic reference material as a backdrop for assessing future developments in these new states. This profile provides a description of the geography, population, and economy of Uzbekistan and compares its level of development, growth, and social welfare with that of Turkey and Mexico.

International comparisons, particularly for aggregate measures such as GNP, are difficult to make because of differences in definitions and methods used by various countries in compiling statistics. International currency exchange rates are deficient for this purpose because they do not reflect relative purchasing power of different currencies over the whole range of goods and services included in GNP. Because of the lack of these parities, alternative measures have been selected. These measures include data for which comparable international statistics were available.

For the most part, official statistics in the public domain were used in compiling the tables and other numerical entries. The annual statistical abstracts from 1990 and 1991 for Uzbekistan, *Narodnoye Khozyaystvo Uzbekskoy SSSR (National Economy of Uzbekistan SSR)*, was the most important source of data. Extensive use was also made of *Trud v SSSR (Labor in the USSR)* and the *Perepis' Naseleniya, 1989 (Population Census)*. Reference country comparisons relied on the information found in those countries' yearbooks and in various UN and OECD publications covering national accounts, food consumption, and the like. More detailed data on the profile state are included in the appendix.



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Figure 1
Uzbekistan



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Uzbekistan: An Economic Profile

Geography and Climate

Uzbekistan is a land of desert landscapes interspersed with fertile oases. It is located in the heart of Central Asia between the region's two major rivers: the Amu Darya to the southwest and the Sirdaryo (Syrdariya) to the northeast.¹ Uzbekistan's area of 447,400 square kilometers (172,700 square miles)—roughly the size of California—made it the fifth-largest republic of the former Soviet Union. Uzbekistan is bounded on the north and northwest by Kazakhstan; on the east and southeast by Kyrgyzstan and Tajikistan; on the west and southwest by Turkmenistan; and, for a short distance in the south, by Afghanistan. Historically the home of the region's dominant people (Uzbeks), Uzbekistan today remains the most populous and most economically important of the Central Asian republics. The ancient cities of Bukhoro (Bukhara), Khiva, and Samarqand (Samarkand) (the capital of Tamerlane's empire) are all located in Uzbekistan.

Nearly four-fifths of Uzbek territory is flat, monotonous desert topography. The arid Ustyurt Plateau is in the extreme west. It is a slightly undulating plain that rises up to 200 meters above sea level and features low ridges and internal drainage basins dotted with salt marshes, sinkholes, and caverns along the courses of intermittent streams. Another geographical landmark, the vast Kyzylkum ("Red Sands" in Turkic) Desert, begins in the northwest and stretches southeast to the foothills of the Tien Shan.

Spurs of the western Tien Shan and Pamir-Alay mountain systems cover the eastern Uzbek protrusion. The fertile, alluvial basin of the Farghona (Fergana) Valley lies just north of the Alay Range.

¹ Central Asia refers to the four republics of former Soviet Central Asia—Uzbekistan, Kyrgyzstan, Tajikistan, and Turkmenistan.

Uzbekistan lies almost entirely in the internal drainage basin of the Aral Sea. All 600 of Uzbekistan's streams and rivers originate in the mountains and, as they move into drier lowlands, gradually lose their waters to irrigation, filtration, and evaporation. The Amu Darya, Central Asia's greatest river, runs along much of Uzbekistan's southwestern border with Turkmenistan. Its lower reaches have been tapped so extensively for irrigation purposes, that today it barely reaches the Aral Sea. The Sirdaryo, Uzbekistan's second-largest river, formed by the confluence of the Naryn and Kara-Dariya Rivers, supplies the Farghona Valley's extensive irrigation and canal system. Water tapped here reduces much of the flow in neighboring Kazakhstan and ultimately deprives the Aral Sea.

Because Uzbekistan is located far from the immediate influence of an ocean, it has a climate that is very dry and continental in character. In the winter, relatively temperate airmasses of Atlantic origin arrive, heated and dried out from their long journey inland. In summer, warm, dry tropical airmasses intrude, bringing only heat. The resulting arid climate is characterized by an average annual precipitation of only 200 millimeters (8 inches), most of which falls in winter and spring. A hot, dry, cloudless summer lasts from May until October. Mean July temperatures reach up to 32°C (90°F) in the south, and it is not unusual for daytime highs to exceed 40°C (104°F). The winter is very short, with considerable cloud cover and occasional severe frosts. Mean January temperatures reach as low as -12°C (10°F) in the north.

Soils reflect the characteristics of the various topographic regions found within Uzbekistan. Gray salty or alkaline desert soils predominate in the flat desert lands; a variety of brown and meadow soils in the foothills give way to more podzolized (acidic) soils in the mountains; and meadow, bog,

marshy, and even saline soils are found in the river valleys. The soils, natural vegetative zones, and climate of Uzbekistan have their closest North American analogue in Arizona and New Mexico.

History and Government

Turkic tribes coming from the east first arrived in Uzbekistan in the fourth century A.D. Muslim Arabs then came to dominate the region from roughly 600 to 900 A.D. In the year 1220, all of Turkestan, including Uzbekistan, was overrun by the Mongols under Genghis Khan. In the 1300s, Uzbekistan, and the city of Samarqand in particular, became the center of the empire of Tamerlane the Great. Later, Muslim feudal city-states emerged at Khiva, Bukhoro, and Quqon (Kokand).

Although Russian trade with the oases of Central Asia developed in the 16th and 17th centuries, Russian military conquest came mainly after 1860. Complete incorporation of the region was not effected, however, until the consolidation of Soviet power in the early 1920s. The Uzbek Soviet Socialist Republic was originally made a constituent republic of the USSR in 1924. In 1925, its status was elevated to Union Republic, and, until 1929, its boundaries included the Tajik Republic. Territorial expansion occurred in 1936 when the Karakalpak Autonomous SSR, located on the shores of the Aral Sea, was transferred from the neighboring republic of Kazakhstan.

Uzbekistan included over half of the Soviet Union's 1989 population of Turks, most of whom were the so-called Meskhetian Turks. This group was evicted from its Georgian homeland during World War II by Stalin for "likely collaboration with the enemy." The 1989 census, however, took place before the violent clashes in June 1989 between Uzbeks and Meskhetian Turks. This strife led to more than 100 deaths and resulted in nearly 100,000 Meskhetian Turk refugees leaving the Farghona Valley region of Uzbekistan for relocation to the nonchernozem zone of European Russia. Relations have also been strained between the Uzbeks and Kirghiz because of conflicts over resources near the Kyrgyz border city of Osh in

the eastern Farghona Valley. The border region of the western Farghona Valley, where the republics of Uzbekistan, Kyrgyzstan, and Tajikistan all merge, has a particularly heterogeneous ethnic mix. Furthermore, there exist two sovereign Uzbek enclaves, located south of Farghona, which are surrounded by Kyrgyz territory. Tajikistan's Leninabad Oblast also has a small exclave located within the western portion of Uzbekistan's Namangan Wiloyati (Oblast), in the northern Farghona Valley.

Aside from contentious ethnic and land rights disputes, there are several pressing regional issues in Uzbekistan that could lead to further conflict. Health and environmental concerns are perhaps chief among these. Heavy use of fertilizers and pesticides has polluted the water supply and made drinking and consumption of locally grown foods often unsafe. Cancer and mortality rates are particularly high in the downstream drainage zone of the Amu Darya in Khorazm Wiloyati and the Qoraqalpoghiston Respublikasi (Karakalpakstan). Infant mortality is rising throughout Uzbekistan, and rural infant mortality, often associated with poor water quality, was 25 percent higher than urban infant mortality. It should be noted that one of the earliest opposition movements, the nationalist Birlik, was based in part on environmental issues.

The move toward separation from the Soviet Union came quickly as central control from Moscow eroded. On 21 October 1989, Uzbekistan's parliament approved a law that made the Uzbek language the official language of the republic. On 20 June 1991, Uzbekistan issued a proclamation of sovereignty. Just two months later (31 August 1991), in the wake of the failed coup attempt, the move toward statehood was further strengthened by a proclamation of independence. On 21 December 1991, Uzbekistan announced that it was joining the Commonwealth of Independent States. Uzbekistan's status as an independent state was confirmed by its acceptance as a member of the United Nations on 2 March 1992. Uzbekistan is administratively organized into one republic (the Qoraqalpoghiston Respublikasi), 12 *wiloyatlar*, 157 rayons, and 123 cities.



Samarkand

Uzbekistan's Constitution, adopted by the legislature in December 1992, officially provides for a separation of powers between a strong presidency, legislature—the Supreme Council—and a nominally independent judiciary. The president, who is elected for a five-year term, appoints the prime minister and all other members of the cabinet of ministers, although these appointments must be confirmed by the legislature. The president also has the power to dissolve the legislature. The Supreme Council currently consists of 500 members, although this number will be reduced by the next election, tentatively scheduled for early 1995. The legislature elects the Constitutional and Supreme Courts of Uzbekistan. Despite this official separation of powers, in practice the president makes virtually all key decisions.

Local governments have very little independence in Uzbekistan. The president appoints hokims, or governors, of the 12 *wiloyatlar* and the city of

Tashkent, although local legislative bodies are popularly elected and the president's appointments for hokims are subject to confirmation by these bodies. The country's one republic, Qoraqalpoghiston, elects its own legislature, whose chairman serves as the republic's head of state and as a deputy chairman of the Uzbek Supreme Council.

Population and Labor Force

Selected Demographic Characteristics

Uzbekistan was the third-most-populated former Soviet republic with 21.2 million people (1 January 1992). Its population is much smaller than that of both Mexico (92.4 million in 1992) and Turkey (56.5 million in 1991). During the late 1980s and early 1990s, Uzbekistan's population has grown more rapidly than that of Mexico or Turkey,



Registan Square, Samarqand

largely because of higher fertility rates. As a result, relative to the able-bodied population in 1989, there were more children and the same or fewer senior citizens in Uzbekistan than in Mexico or Turkey. Females make up nearly 51 percent of Uzbekistan's population, a somewhat higher share than Turkey's, but nearly equal to Mexico's. Table 1 on page 6 presents a selection of key population characteristics.

Uzbekistan's population is similar to the two reference countries in terms of mortality and life expectancy (though Mexico's life expectancy is slightly higher). The official infant mortality rate for Uzbekistan, a major component of overall mortality, cannot be directly compared with other countries' rates because of definitional differences. The estimated comparable infant mortality for

Uzbekistan is 65 deaths per 1,000 live births in 1989, compared with 33.0 in Mexico and 61.6 in Turkey.²

Both Mexico and Turkey are more urbanized than Uzbekistan. Moreover, Mexico has a greater portion of its total population living in its largest city, Mexico City, than either Turkey or Uzbekistan have living in their largest cities, Istanbul and Tashkent, respectively.

² Because of definitional differences, the official infant mortality rate, which is an important indicator of health conditions in a country, cannot be directly compared with other countries' rates. The reported infant mortality rates are understated in part because they do not include deaths in the first seven days after birth. Estimates for the former USSR suggest that the true rate is about twice the reported rate. The differential has not been estimated for the individual republics.

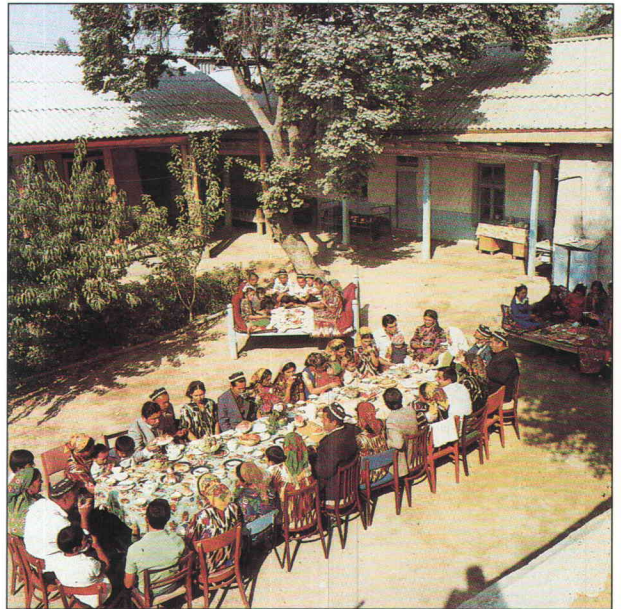


Cabinet of Ministers building, Tashkent

In 1979, ethnic Uzbeks composed 68.7 percent of the population and Russians made up 10.8 percent of the population. Ten years later, owing in part to the higher fertility rates for ethnic Uzbeks, their share grew to 71.4 percent while the Russian share had declined to 8.3 percent.³

The Uzbek language, which belongs to the family of Turkic languages, was originally written in Arabic script. Beginning in the late 1920s the Latin alphabet was used; then a decade later it was replaced with the Cyrillic alphabet. Recently, a law designating Uzbek as the official state language of the republic was passed. Currently, the proportion of Russians who speak Uzbek is very small (less than 5 percent), but 22.7 percent of all Uzbeks

³ Tajiks (4.7 percent), Kazakhs (4.1 percent), Tatars (2.4 percent), and Karakalpaks (2.1 percent) constitute the next largest ethnic groups, with Crimean Tatars, Koreans, Kirghiz, Ukrainians, and others composing the balance of the population.



Uzbek family compound

speak Russian. The share of Russian speakers in the total population decreased from 60.1 to 33.4 percent between 1979 and 1989, while the share of Uzbek speakers increased by nearly 4 percentage points to 75.4 percent.

Literacy is officially near universal, and the population is considered to have attained a level of education comparable to the rest of the former Soviet Union. As of the 1989 census, 69.9 percent of the population aged 15 and over had completed secondary school, up from 51.3 percent in 1979. The share with completed higher education rose from 7 percent to 9.2 percent in that period.

Labor Force

The distribution of the labor force in Uzbekistan differs somewhat from that in Mexico and Turkey (see figure 2 on page 7). The differences reflect not only the impact of Soviet agricultural and industrial policies, but also differing levels of economic development in the three countries. Nearly one-quarter of all workers in Uzbekistan are employed in the industrial and construction sectors compared with marginally lower shares in the reference countries.

Table 1
Selected Demographic Statistics, Selected Years

	Uzbekistan		Mexico		Turkey	
	1979	1989	1980	1990	1980	1990
Population						
Total (thousands)	15,391	19,905	66,847	81,141	44,737	57,130
Male	7,558	9,824	33,039	39,879	22,695	28,949
Female	7,833	10,081	33,808	41,262	22,042	28,181
Average annual growth rate over decade of years shown (percent)	2.6		2.0		2.5	
Age dependency ratios^a (per 100 persons)						
Total	87	81	98 ^b	75	78	71
Young (0-15)	77	74	91 ^b	67	70	63
Old (over 64)	10	7	6 ^b	7	8	8
Percent urban	41	41	66	NA	44	61
Total fertility rate ^c 5.1 (births per woman)	4.0	4.6	3.5	4.6	3.6	
Life expectancy (years)	68	69	67	71	63	69
Largest cities (thousands)	Tashkent	2,096	Mexico City	13,879 ^d	Istanbul	6,407 ^e
	Samarqand	367	Guadalajara	2,265 ^d	Ankara	3,022 ^e

Note: Because of rounding, the components may not add to the total shown.

^a Age dependency is the number of people younger or older than the working ages (15 to 64) per 100 working age persons.

^b Based on 1979 data.

^c Total fertility rate represents the number of children a woman would bear in her lifetime if she survived to the end of the reproductive age and was subject over this period to the regime of age-specific fertility rates observed in the given country and year.

^d Data are for 1980. It is estimated that the 1991 population of Mexico City was about 20 million, which would make it the largest urban concentration in the world.

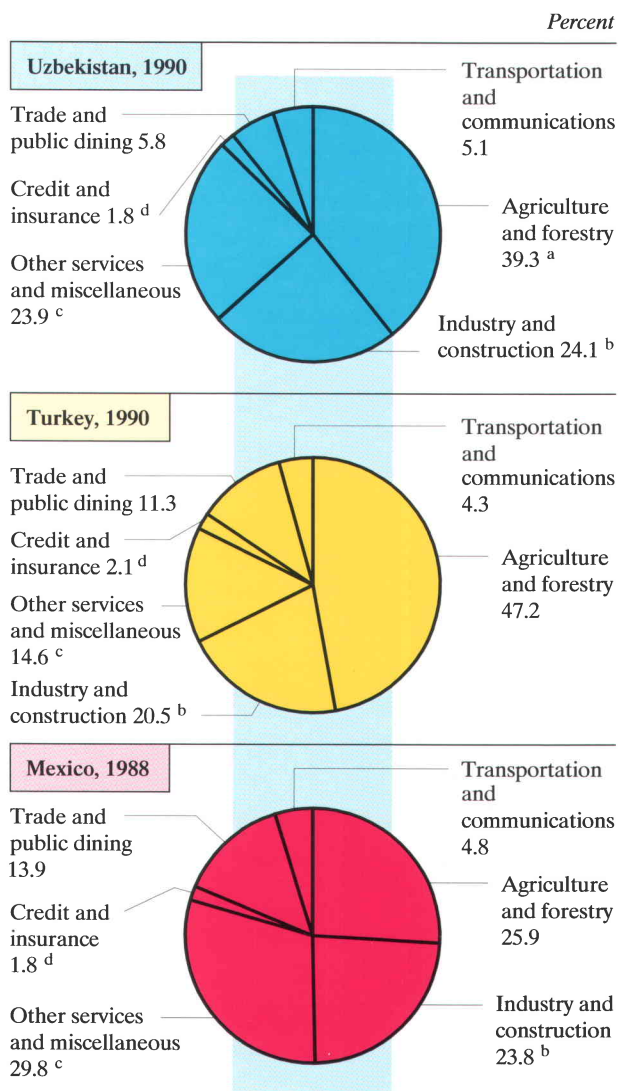
^e Data are for 1989 and include some neighboring urban areas.

Uzbekistan's share of agricultural employment in the total—39.3 percent—was between the shares in Mexico and Turkey.

The size of the labor force as a percentage of the total population is slightly larger in Uzbekistan (39 percent) than in either Mexico (33 percent) or Turkey (35 percent). The higher share in

Uzbekistan stems partly from much higher labor force participation rates, especially among women, that were a consequence of Soviet policies that relied on large annual infusions of labor as a means of stimulating economic growth. In 1990, 45 percent of Uzbekistan's state-sector work force was female, as compared with about one-third in Turkey and Mexico.

Figure 2
Distribution of Labor Force by Sector



^a Includes state farms, collective farms, and private agriculture. The share is probably understated because of undercounting of the labor used on private plots.

^b Includes mining and quarrying industries.

^c For Uzbekistan, this category includes housing—communal economy, health, physical culture and social services, education, culture and art, science, and unclassified labor. For Mexico and Turkey, it includes community, social, and personal services and other activities not elsewhere classified.

^d For Uzbekistan, this category also includes administrative activities. For Mexico and Turkey, it includes finance, insurance, real estate, and business services.

Table 2
Ethnic Uzbek Share in State-Sector
Employment, 1987

Percent

	Percent
Total	61
Industry	53
Agriculture ^a	76
Transportation and communications	55
Construction	50
Trade and public dining	66
Housing-communal economy and nonproductive personal services	55
Health, physical culture, and social security	64
Education	69
Culture and art	63
Science and scientific services	39
Government administration	57

^a State agriculture only.

Another noteworthy feature of the labor force is that Russians are disproportionately represented in the higher-paying sectors such as industry, transportation, and science while the Uzbek presence in the lower-paying sectors such as agriculture and education exceeds its population share. This pattern is repeated in most non-Russian republics of the former Soviet Union, reflecting, in part, the earlier Soviet policy of dispatching comparatively more skilled Russians to the republics to staff new industrial enterprises (see table 2).

Structure and Performance of the Economy

Aggregate Measures

GDP accounts fully comparable to those of the West are not yet available for Uzbekistan. Preliminary estimates suggest, however, that industrial, agricultural, and construction activity contribute nearly three-fourths of total GDP, compared with just over half in Turkey and two-fifths in Mexico (see table 3). Trade and services probably account for about one-fourth of Uzbekistan's GDP, compared with nearly half in Turkey and about three-fifths in Mexico.

Table 3
Gross Domestic Product by Sector of Origin, 1989

Percent share

	Uzbekistan	Mexico	Turkey
Total	100.0	100.0	100.0
Industry	23.1	28.6 ^a	32.9
Agriculture and forestry	37.5	7.6	15.4
Construction	12.6	3.6	4.0
Transportation and communications	4.5	7.6	10.0
Trade and distribution	7.8	27.2	17.2
Services and other	14.5	25.4	20.5

^a Includes gas and water transmission.

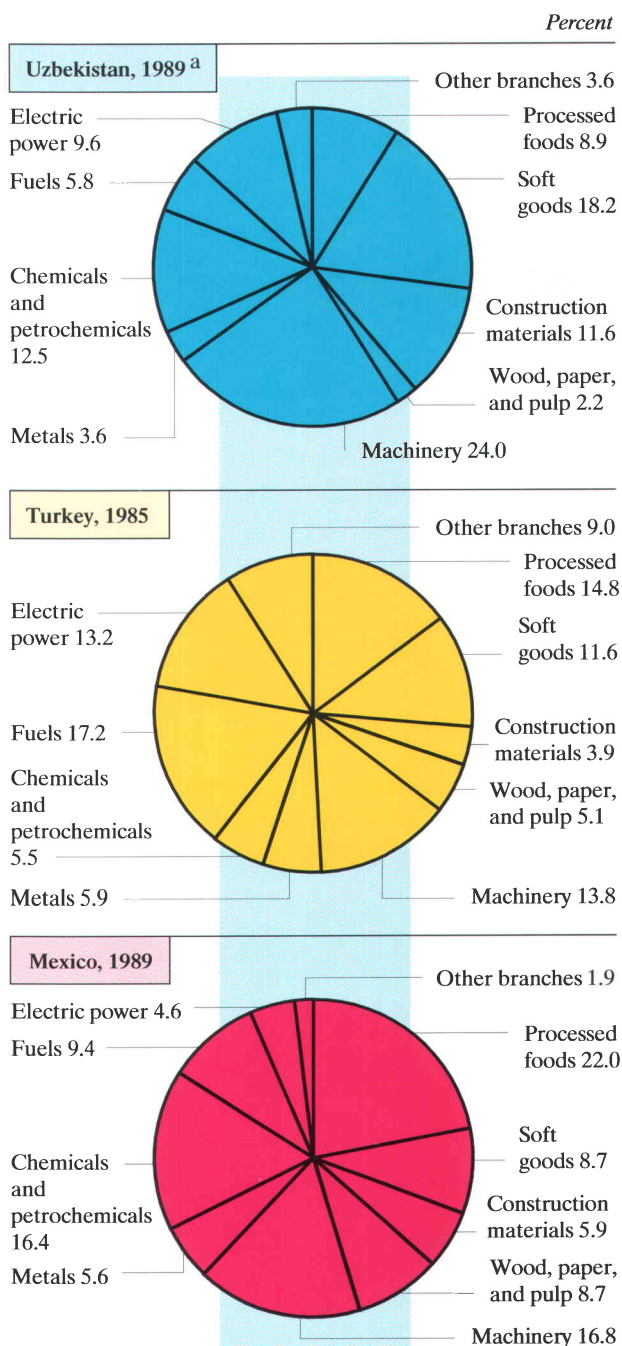
Uzbekistan, Turkey, and Mexico all have similar distributions of domestic product among final uses—consumption, investment, and government services. According to preliminary estimates, Uzbekistan and Mexico devote the same share of GDP (66 percent) to consumption while Turkey's share is slightly smaller (62 percent). The share of investment in Uzbekistan's GDP was somewhat higher than in the reference countries—27 percent as compared with 23 percent in Turkey and 20 percent in Mexico. Government services make up 7 percent of Uzbekistan's GDP and about 15 percent of GDP in Mexico and Turkey.

Preliminary estimates for Uzbekistan suggest that GDP increased at 1.7 percent annually during the period 1981-88. This was 1.5 times the annual growth registered by Mexico (1.1 percent), but substantially below the 5.4 percent achieved by Turkey. Despite the overall expansion of the economy, it appears that the productivity of labor and capital combined stagnated or declined in Uzbekistan during the 1980s as compared with growth rates of 1 and 2 percent, respectively, in the public and private sectors of the Turkish economy.

Industry

Uzbekistan is among the least industrialized of the former Soviet republics with per capita value of industrial output by the mid-1980s less than half the

Figure 3
Structure of Industrial Output by Branch

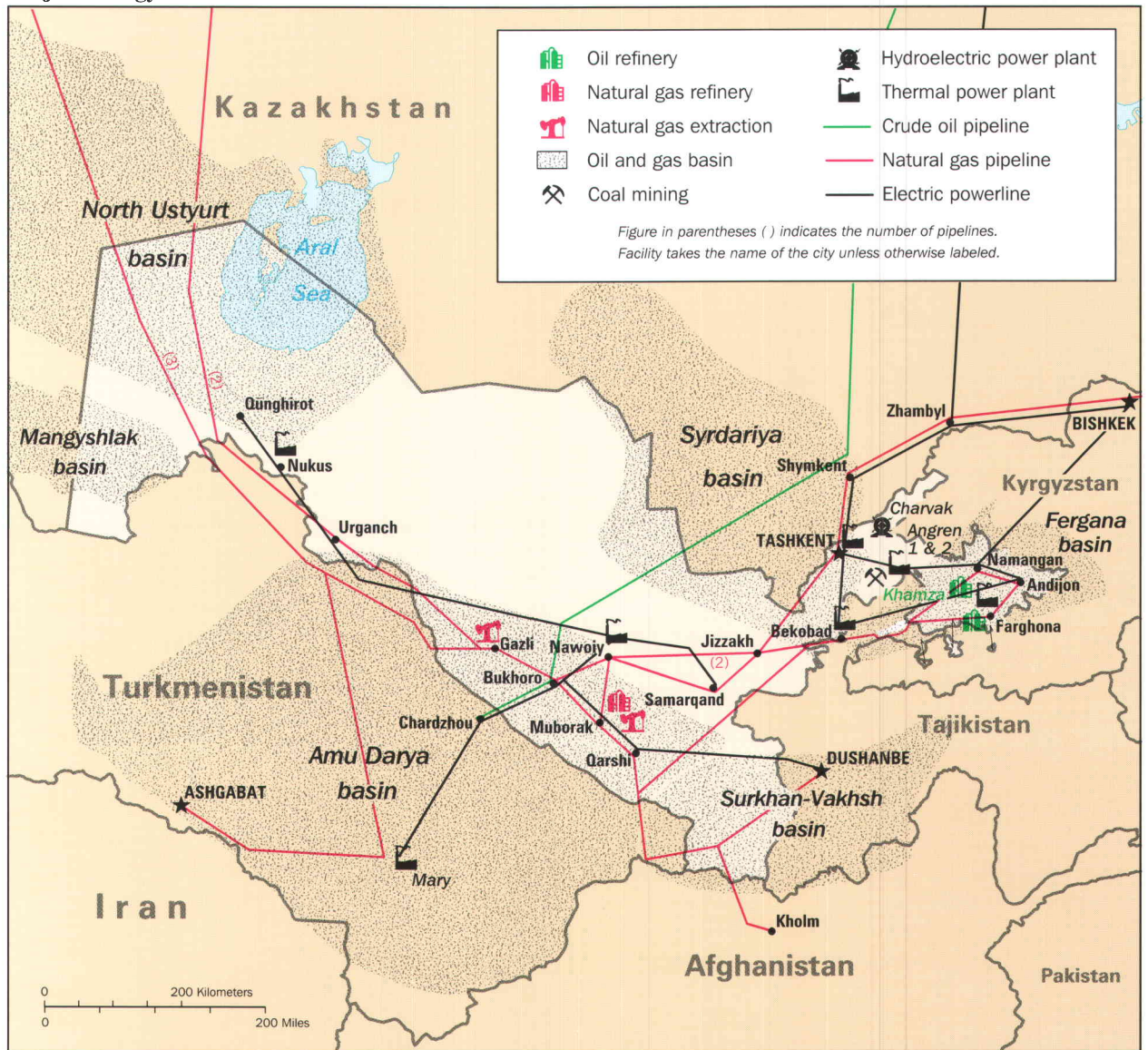


^a Shares reflect domestic prices, which, in terms of world prices, tend to substantially undervalue fuels and metals and overvalue many manufactures.

Unclassified

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Figure 4
Major Energy Facilities in Uzbekistan



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average for the former Soviet Union. For the decade as a whole, industrial output grew at an average annual rate of 3.2 percent. While exceeding the estimated rate of growth achieved by Mexico (2.4 percent), it was less than one-half that posted by Turkey (7 percent).

Uzbekistan possesses substantial reserves of gas, coal, and oil and a considerable potential for hydroelectricity generation. Despite these natural endowments, Uzbekistan has been a net importer of primary energy with natural gas accounting for over four-fifths of the total (see table 4).

Table 4
Uzbekistan: Energy Production,
Consumption, and Exports, 1991

	Production in Natural Units	Thousand Barrels Per Day of Oil Equivalent
Primary energy production		
Total	109	808
Oil (<i>thousand b/d</i>)	56	56
Natural gas (<i>billion cubic meters</i>)	42	678
Coal (<i>million tons</i>)	6	51
Electricity (<i>billion kWh</i>)	5	23
Consumption		
Total (percent)	100	900
Oil	26	234
Gas	65	585
Coal	6	54
Other ^a	3	27
Net imports ^b		92

^a Primary electricity, shale oil, and peat.

^b Net imports are calculated by subtracting production from consumption.

Uzbekistan also exports substantial quantities of natural gas through a pipeline to the rest of Central Asia and to Russia. Although it produces some oil, Uzbekistan currently relies on Russia and Kazakhstan for most of its needs. Discovery of a giant oilfield at Mingbulak in early 1992 could reduce import dependence, but development of the new field will require substantial Western participation, negotiations over which are under way.

Coal deposits at the head of the Angren river valley east of Tashkent as well as gas deposits near Bukhoro have been used to fuel thermal power plants supplementing a well-developed system of hydroelectric facilities on the Sirdaryo, Naryn, and Chirchiq (Chirchik) Rivers. Since these rivers rise beyond its borders, Uzbekistan relies on Kyrgyzstan and Tajikistan for its source of water for both hydropower and irrigation purposes.

During the late 1980s, Turkey relied on net imports for roughly one-half of domestic use of primary energy. Coal and other solid fuels (for example, peat and wood) accounted for four-fifths of this primary energy output. Mexico relies on crude oil for the major share of primary energy production with 70 percent of energy coming from oil extraction in 1989. As recently as 1991, crude oil exports reached 1.4 million barrels a day and accounted for nearly one-fifth of total export earnings. The generation of electric power in Uzbekistan is roughly the same as in Turkey, but is only one-half the level produced in Mexico. On a per capita basis, however, the generation of kilowatt hours in Uzbekistan is 2 and 4 times that in Mexico and Turkey, respectively.

Uzbekistan also has substantial deposits of minerals and nonferrous metals, including gold, which provide the basis for well-developed processing industries. The latter are centered around the Olmaliq-Ohangaran (Almalyk-Akhangaran) complex situated southeast of Tashkent on the northern slopes of the Qurama (Kurama) Mountains. Ohangaran is known primarily for its cement and alumina plants. The city of Olmaliq concentrates, smelts, and refines local deposits of copper, zinc, lead, tungsten, and molybdenum. Sulfuric acid extracted by copper smelters, in turn, is used in an ammonium phosphate plant that obtains phosphate rock from the Qaratau (Karatau) Mountains in nearby Kazakhstan and ammonia from the Chirchiq gas-based nitrogen chemical center. There is also an alloy plant in Chirchiq that manufactures high-temperature metal alloys, wire, rods, and sheets. Gold is found at Muruntau in the Kyzylkum Desert and in the Chadak area of the Farghona Valley on the southern slopes of the Qurama Mountains. This latter region (along with the parallel slopes of the Chatkal range to the north) is also the site of uranium mining and concentrating. Fluorspar, the principal fluorine-bearing mineral, is found at Tuytepa (Toytepa), halfway between Olmaliq and Tashkent.

Table 5
Production of Selected Industrial Products, Selected Years

	Uzbekistan				Mexico				Turkey			
	1985	1989	1990	1991	1985	1989	1990	1991	1985	1989	1990	1991
Primary energy												
Electric power (<i>billion kWh</i>)	47.9	55.9	56.3	54.2	96.7	124.0	120.0	NA	33.3	52.0	56.8	NA
Oil, including gas condensate (<i>million metric tons</i>)	2.0	2.7	2.8	2.8	136.0	131.0	133.0	140.0	2.1	2.9	3.7	4.8
Natural gas (<i>billion cubic meters</i>)	34.6	41.1	40.8	41.9	24.1	22.2	23.0	23.1	0.1	0.1	0.2	0.2
Coal (<i>million metric tons</i>)	5.3	6.2	6.5	5.9	9.8	10.6	10.5	NA	34.4	52.1	51.4	NA
Metallurgy												
Steel (<i>million metric tons</i>)	0.9	1.1	1.0	0.9	7.4	7.8	8.8	8.0	4.9	7.8	9.3	9.3
Rolled ferrous metals (<i>million metric tons</i>)	0.7	0.9	1.0	0.8	5.7	5.6	NA	NA	1.3	6.6	NA	NA
Machinery												
Tractors (<i>1,000 units</i>)	26.4	23.7	23.3	21.1	11.8	10.3 ^a	NA	NA	37.0	19.6	20.0	15.0
Chemicals												
Mineral fertilizers (<i>million metric tons</i>)	1.5	1.9	1.8	1.7	1.4	1.7	1.9	1.9	1.3	1.3	1.2	1.0
Sulfuric acid (<i>million metric tons</i>)	2.3	2.4	2.9	2.4	2.2	1.9 ^c	NA	NA	0.5 ^b	0.6 ^b	NA	NA
Chemical fibers and yarn (<i>1,000 metric tons</i>)	38.0	50.6	52.6	49.3	345.0	376.0	380.0	385.0	200.0	302.0	320.0	350.0
Synthetic detergents (<i>1,000 metric tons</i>) ^d	27.5	35.3	37.2	35.9	582.0	700.0	NA	NA	172.0	210.0	210.0	NA
Forestry products												
Sawn timber (<i>1,000 cubic meters</i>)	466.0	563.3	555.8	455.0	1,990.0	2,090.0	2,100.0		4,900.0	4,900.0 ^c	NA	NA
Composition board (<i>1,000 cubic meters</i>)	19.6	16.5	13.7	NA	395.0	414.0	430.0	447.0	NA	NA	NA	NA
Paper (<i>1,000 metric tons</i>)	25.1	25.7	25.7	20.2	2,189.0	2,425.0	2,570.0		285.0	285.0 ^c	NA	NA
Construction materials												
Cement (<i>million metric tons</i>)	5.3	6.2	6.4	6.2	20.3	23.8	24.5	22.9	17.6	23.8	23.9	24.5
Processed foods												
Meat (<i>1,000 metric tons</i>) ^e	232.3	277.0	261.0	224.8	3,412.0	3,644.0	3,552.0		1,356.0	1,100.0	NA	NA
Vegetable oil (<i>1,000 metric tons</i>)	451.0	513.0	514.0	461.0	603.0	626.0	NA	NA	225.1	429.7	NA	NA
Macaroni products (<i>1,000 metric tons</i>)	76.0	84.0	86.9	94.4	144.0	NA	NA	NA	166.2	198.1	NA	NA
Soft goods												
Cotton, wool, silk, fabrics (<i>million square meters</i>) ^f	496.0	613.0	614.0	519.0	364.0	326.0	335.0	NA	592.0	469.0	471.0	NA
Stocking-hosiery goods (<i>million pairs</i>)	63.9	113.7	113.2	102.0	NA	NA	NA	NA	68.0	98.3	99.4	NA
Consumer durables												
Refrigerators and freezers (<i>1,000 units</i>)	69.1	192.0	201.0	212.0	366.0	264.0 ^a	NA	NA	488.0	816.0	NA	NA

^a Data are for 1988.

^b Data include output from the steel industry only.

^c Data are for 1987.

^d Uzbekistan data given here differ from the data given in the appendix tables because the category used here is less inclusive.

^e Represents production before processing.

^f For Turkey and Mexico, data do not include silk.

Figure 5
Selected Industrial Activity in Uzbekistan



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Manufacturing industry in Uzbekistan is largely centered on agriculturally related activity, either in processing raw materials or in providing machinery or other inputs to farms. Nearly two-thirds of

industrial output is generated in the soft goods, processed foods, machinery, and chemical branches with most of the latter two branch outputs heavily oriented toward support of farming.



Textile factory

Uzbekistan's chemical industry is closely associated with the production of fertilizers used principally for cotton production. The production of fertilizers was first developed at Chirchiq, near Samarqand, and in the Farghona region at Farghona, Quqon, Namangan, and Andijon (Andizhan). Uzbekistan is the primary producer of machinery and heavy equipment in Central Asia and has been the main Soviet producer of machinery for cotton cultivation, harvesting, and processing and machinery for irrigation projects.

The soft goods and food-processing branches in Uzbekistan are located primarily in Tashkent and in the Farghona Valley. Light industries consist mainly of the primary processing of cotton, wool, and silk into fiber, most of which has been shipped to Russia as raw materials for its textile and clothing industries. The relative underdevelopment of such industries in Uzbekistan is a consequence of long-continued Soviet policies that fostered investment in processing rather than finished goods in the republic. Uzbekistan has a fairly diversified food-processing industry. The production of dried fruit (apricots, peaches, raisins) is an Uzbek specialty. There are also cottonseed oil presses, wineries, and tobacco factories.

Agriculture

Despite desertlike conditions, Uzbekistan exceeds other former republics in output per hectare of farming area. Endowed with warmth, a long growing season, and water for irrigation, Uzbekistan is able to obtain high and stable yields of crops not grown outside Central Asia. As a result, Uzbekistan accounted for nearly two-thirds of cotton output of the former Soviet Union with the balance grown in other Central Asian republics. This comparative advantage in growing cotton and similar crops, coupled with a Soviet policy to push cotton production, led to Uzbekistan's being a net exporter of a narrow range of agricultural products while at the same time requiring large imports of grain and other foodstuffs.

Until recently, the private sector, contributing one-fourth of farm output, had practically no individual holdings. State and collective farm households were permitted to cultivate private plots of one-half to 1 acre (less than 0.5 hectare) and maintain up to two head of livestock. In addition, nonagricultural households had, and still have, very small "garden size" plots for cultivation. Thus, even today, Uzbekistan agriculture remains dominated by large state and collective farms—2,108 in the year 1991. Uzbekistan's collective farms are organized nominally as "producers' cooperatives," whereas state farms are organized along the lines of state-operated industrial enterprises. The data in table 6 suggest the immense size of these enterprises.

In contrast, Turkey has about 3.5 million privately operated farming units that produce all farm output. In Mexico nearly one-half of farmland is owned by communal or *ejido* farmers, while the rest is distributed across some 4 million private farms. Until very recently, the holders of communal land did not have property rights. They could pass cultivation rights to direct descendants, but could not sell land, rent it, or use it as collateral for credit. Communal lands could be utilized either individually or collectively. In 1992, these constraints on Mexican farm productivity were lifted, permitting the individual communal



Construction materials factory in Urganch

member to lease or transfer land to other members while providing an environment that could foster private-sector investment in agriculture.

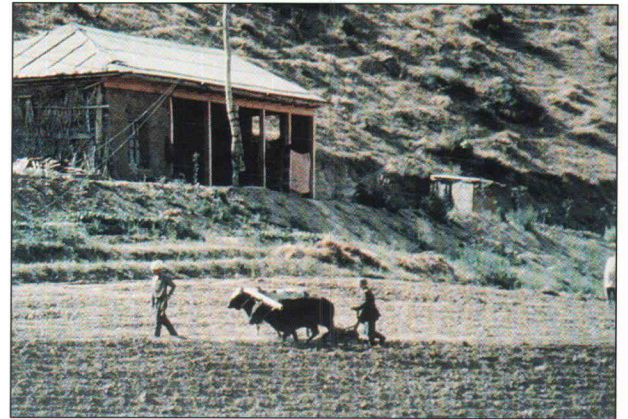
Because less than 1 percent of the value of crop production is grown on nonirrigated acreage, Uzbekistan has relatively small variation in the annual level of farm output when compared with other Eurasian states. Both Mexico and Turkey have large shares of crop production grown under arid and semiarid areas with wide year-to-year variability in precipitation. Nevertheless, during the last half of the 1980s, the variation between the lowest and highest annual level of farm output was similar to that in the two reference countries—over 11 percent for Uzbekistan, compared with 8 and 13 percent for Mexico and Turkey, respectively (see table 7).

As would be expected, given the heavy dependence on irrigated lands, Uzbekistan's crop output in the last half of the 1980s predominated, accounting for nearly two-thirds of total farm output with livestock accounting for the balance.

Overall, when production of crops and livestock (for the years 1989 and 1990) are valued by US "farm gate" prices (1988), Uzbekistan's farm output was two-thirds of that in Mexico and 71 percent of that in Turkey. Livestock production as a share of the dollar value of total farm output varied widely, ranging from roughly one-fifth in Turkey and Uzbekistan to about three-fifths in Mexico. Production of important commodities in Uzbekistan is given for a series of years in table 8.



Harvesting cotton



Amankutan Valley farmland

As a reflection of heavy dependence on irrigated agriculture, crop productivity in Uzbekistan compares favorably to that in Turkey and Mexico. When yields of six major crops (average 1988-89) are weighted together, the yield for Uzbekistan is about the same as for Mexico, but exceeds Turkish yields by nearly one-fifth.

In contrast, milk yield per cow in Uzbekistan is 70 percent above that in Mexico and three times that of Turkey. This superior performance carries over to both the private and socialized sectors, although milk yield in the latter exceeds the yield in the private sector by nearly two-thirds. The dairy operations in the reference countries tend to lag behind. High-energy (grains) and high-protein (oilseeds) feeds make up a relatively higher share of feed rations in Uzbekistan's collective and state farms, whereas feeding in Mexico and Turkey is limited to poor-quality hay and other forage crops.

Transportation

The development of the Uzbek industrial economy has been closely connected with the rise of a transportation network. Rail transport is the major means of freight transport within Uzbekistan. The Trans-Caspian Railroad between the Amu Darya in

Table 6
Selected Characteristics of Agricultural Enterprises, 1990

	Uzbekistan ^a	Mexico	Turkey
Number of farms	2,048	4,280,220	3,650,910 ^b
Agricultural land per farm (hectares)	24,111	26	62
Cattle (per farm)	710	5	4
Sheep and goats (per farm)	2,508	NA	19
Number of workers (per farm)	1,120 ^c	1.2 ^d	3

^a State and collective farms only.

^b Data are for 1980.

^c Annual average per farm.

^d Includes those occupied in forestry and fishing.

Table 7
Growth in Farm Output, Selected Years

1980=100

	Uzbekistan	Mexico	Turkey
1985	101	112	109
1986	99	112	114
1987	100	111	115
1988	108	117	122
1989	104	114	114
1990	110	120	123

the southwest and Tashkent in the northeast constitutes the chief transportation artery of Uzbekistan, linking the oases of Bukhoro and Samarqand to the capital city of Tashkent.

Two major spurs branch off from the main line: one reaches southeast from Kagan through Qarshi (Karshi) to Termiz (Termez), serving the oases of the Qashqadaryo (Kashkadar'ya) and Surkhondaryo (Surkhandar'ya) Valleys; the other branches off at Ursat'yevskaya, east of Jizzakh (Dzhizak), and passes through northern Tajikistan in order to serve the Farghona Valley cities of Quqon, Andijon, Farghona, and Namangan. In addition, numerous short spurs reach toward local mining locations at the periphery of the Farghona Valley. The Kazalinsk line leads directly northwest from Tashkent across the Kazakh desert to Orenburg and beyond, conveying cotton to the mills of Ivanovo and Moscow.

For the country as a whole, there is a greater length of paved roads, but less length of total roads and railroads per unit of area than in the reference countries (see table 9). Railroads' share of freight transport services approached three-fourths of all ton kilometers in 1990 (see appendix table A-7). Passenger transport services were more evenly dispersed among the various modes, with buses carrying nearly three-fifths of all passenger traffic (see appendix table A-8).

The road network is comparatively dense, with roughly twice the road distance per unit of area as in the former USSR as a whole. Roads carry one-fourth of Uzbek freight traffic and over half of passenger traffic (see appendix table A-7). Major roads in Uzbekistan include the Great Uzbek Highway, running from Tashkent to Termiz; the Zarafshon (Zeravshan) Highway, linking Samarqand to Chardzhou; and a road between Tashkent and Quqon. The Farghona Ring, connecting the major settlements of the valley, is also important for local transport. The use of the Amu Darya (the Oxus River of the ancients) for water

transportation has declined relatively from the days when it formed virtually the only link to the regions to the north and west, although the lower reaches remain navigable.

Air transport with Tashkent, a hub city, serves as a major link in Eurasia and international air routes to South and Southeast Asia. The pipeline network, particularly that for natural gas, is well developed; it links Uzbekistan to neighboring Central Asian republics and includes a major spur from the Bukhoro region to the central regions of the former European Soviet Union and the Urals.

Investment

Growth in investment in Uzbekistan in the 1980s proceeded at an average annual rate of 3.1 percent, somewhat below the all-union rate of growth. Nevertheless, by 1990 the level of investment was more than one-third above that of 1980. In Turkey, investment grew substantially faster than this—5.4 percent—while average investment in Mexico declined during the period.

The structure of investment in Uzbekistan differed in major ways from that in Turkey; comparable data are not available for Mexico (see table 10). Reflecting its emphasis on large irrigation projects to support cotton production, Uzbekistan devoted one-quarter of its total investment to agriculture, nearly four times the share in Turkey. In contrast, industry and transport and communications absorbed over half of investment in Turkey and less than 30 percent in Uzbekistan. The two countries devoted similar shares to trade and services and housing.

The pattern of investment in industry reflects Uzbekistan's natural endowment of energy and nonferrous metal resources and its emphasis on industrial branches supporting cotton production. Fuels and power have been the largest claimants on industrial investment followed by nonferrous

Table 8
Uzbekistan: Production of Major Agricultural Products,
Selected Years

Thousand metric tons
 (except where noted)

	1980	1985	1988	1989	1990	1991
Meat	331	386	440	478	484	492
Milk	2,266	2,439	2,837	2,929	3,034	3,331
Eggs (<i>million</i>)	1,461	1,918	2,334	2,429	2,453	2,347
Wool	21	24	25	24	26	25
Cotton	5,579	5,382	5,365	5,292	5,058	4,646
Vegetables	2,459	2,386	2,760	2,585	2,843	3,348
Melons	1,046	790	929	932	1,000	NA
Grain	2,435	1,471	2,083	1,555	1,899	1,908

metallurgy. Substantial investments in chemical and machinery industries are associated with supplying the needs of cotton producers.

Economic Reform

Uzbekistan's political leadership has declared its commitment to developing a market-based economy, but the process is slated to be gradual and to proceed in stages. To that end, the government has freed the bulk of prices, but still maintains price controls on some goods including basic consumer items. The government has also adopted a spate of legislation needed to underpin a market economy. During the period 1991-92, basic laws were adopted dealing with property ownership, land, banking, and privatization. The republic has its own central bank, but its commercial banking system is still in an embryonic state. Although the government has declared its intent to remain in the ruble zone for the present, plans are being made to introduce a national currency. At present, coupons and rations cards are being used in the consumer sector. Uzbekistan has begun to modernize its tax system with the introduction in 1992 of value-added and profits taxes to replace the Soviet-style levies.

Privatization

As in the other former Soviet republics, the socialized sector overwhelmingly predominates the economy of Uzbekistan. In 1991, state enterprises accounted for two-thirds of total employment and collective farms for 14 percent (see table 11).

When producer cooperatives and private nonagricultural activities were legalized in the late 1980s, employment in these ventures rose rapidly to account for 3 percent of total employment in 1990, but their share fell to under 2 percent in 1991. Most of such employment is in cooperatives. At the beginning of 1992, they employed 157,300 workers mainly in construction and the production of consumer goods and services. In addition to these forms, leasing has become important in Uzbekistan's economy. In 1991, 133,400 persons worked in leased enterprises. They accounted for 9 percent of total industrial output, 27 percent of retail trade and public dining, and 13 percent of personal services.

Although the state has a privatization law, a state agency to carry it out, and a goal to privatize 10 to 15 percent of state assets by the end of 1993, little progress has been made. Only some 350 small

Table 9
Land Transport Networks

	Uzbekistan 1990	Mexico 1991	Turkey 1991
Length (kilometers)			
All roads	78,400	292,294	280,953
Paved	67,000	81,961 ^a	44,449
Unpaved	11,400	210,333	236,504
Rail	3,460	26,510 ^a	10,393
Density (kilometers per 1,000 square kilometers)			
All roads	184	152	365
Paved	157	43 ^a	58
Unpaved	27	109	307
Rail	8	14 ^a	13

^aData are for 1989.

shops were privatized in 1992, but privatization of housing has proceeded somewhat faster through free transfers or sales at low prices.

In the agricultural sector, the government began the privatization process in 1990 with the distribution of free parcels of land to the population with the right of inheritance, but not sale. As a result, the number of peasant farms has expanded rapidly. There were 1,358 on 1 January 1991, 1,868 on 1 January 1992, and 5,800 on 1 April 1993. Although they account for a tiny share of all agricultural land, they, along with the expanding traditional private plots, are of great importance to food supply. In addition, the government has launched a program to transform loss-making state farms into cooperatives and to continue the privatization of collective farms (but apparently not those growing cotton).

Inflation and Unemployment

Before 1991, inflation rates were very low in Uzbekistan, a consequence of near-universal price controls. With the sharp increases in retail prices and freeing of many of them in mid-1991, retail prices rose by 211 percent. In early 1992, most consumer prices were freed and high ceilings were set for others. As a consequence, consumer prices rose some eightfold in 1992, and they are continuing to rise in 1993.

Table 10 *Percent share*
**Comparative Investment Allocations,
by Sector^a**

	Uzbekistan 1990	Turkey 1990
Agriculture	26.1	6.9
Industry	21.7	29.8
Construction	3.2	NA
Transportation and communications	6.1	22.1
Trade and services	18.6	16.2
Housing	24.3	25.0

^aComparable data are not available for Mexico.

Both Mexico and Turkey also experienced rapid inflation. In Mexico, the Consumer Price Index (CPI) increased an average of 60 percent per year from 1980 to 1991. The CPI for Turkey rose an average of 50 percent per year between 1982 and 1990.

While Uzbekistan was still part of the Soviet Union, unemployment was not officially acknowledged. According to official statistics, in September 1992, only 3,600 unemployed persons were registered at job placement centers, and, by March 1993, the number had risen to 14,900, less than 0.2 percent of the labor force. These figures understate the rate of unemployment, which may have reached several percent. In October 1990, the unemployment rate in Turkey was about 7 percent. Underemployment is acknowledged to be widespread, especially in rural areas. In Mexico, for the first quarter of 1992, the unemployment rate (for 32 urban areas) stood at 2.9 percent.

Foreign Economic Relations

Foreign trade provides Uzbekistan with supplies of critically needed grain, food, and industrial raw materials, while affording an outlet for domestic production, notably of products associated with nonferrous metals and cotton production. In 1989, imports represented 22 percent of total domestic consumption and exports amounted to 18 percent of production.



Private cloth market in Samarqand

Eighty-seven percent of exports and 81 percent of imports in 1990, expressed in domestic prices, represented trade with other former republics. In such trade, Russia supplied half of Uzbekistan's imports and took nearly 60 percent of its exports. Other Central Asian republics accounted for 23 percent of both imports and exports. Uzbekistan has been a large net importer overall and in all major sectors except electric power, nonferrous metals, and light industry. Uzbekistan imports nearly all of its ferrous metals, and machinery except that related to cotton production. Imports have provided roughly two-fifths of its consumer goods and processed foods and some three-quarters of grain requirements. Uzbekistan's main exports are cotton-related products, both to other republics and abroad. Nearly all of Uzbekistan's soft goods exports were cotton fiber. Unprocessed cotton

accounted for a large share of agricultural trade, and Uzbekistan was the only Soviet manufacturer of cotton harvesters.

Uzbekistan has been aggressively promoting foreign contacts in search of investment. Its foreign investment law, adopted in mid-1991, provides protection against expropriation and tax breaks for foreign investors, but does not provide for third-party arbitration of disputes nor permit repatriation of profits. The country has been only moderately successful in establishing joint ventures, however. At the end of 1992, 135 of more than 450 registered joint ventures were functioning, as compared with 45 in 1991. Their total imports and exports in 1992—only \$83 million—comprised less than half of 1 percent of total trade. Most of the small ventures are engaged in production and trade in consumer goods, agricultural products, and construction. A wide range of countries is represented in Uzbekistan's joint ventures.

Living Standards and Social Indicators

Personal Income

Most families in Uzbekistan derive the bulk of their income from wages earned in state employment. In line with past Soviet policy, wage differences have been fairly narrow. Above-average wages traditionally have been paid in industry, construction, transportation, and "science," while the lowest paid activities were health, education, and other services (see appendix table A-3). Wages differ considerably among regions. In 1990, the wages in the highest paying region—Tashkent city—exceeded the Uzbek average by 14 percent, while those in the lowest paying region—Samarqand Wiloyati—fell below it by nearly 13 percent. Collective farm members have been paid wages well below state farm employees. When all money incomes are taken into account, per capita income of collective farm families in 1990 was only 84 percent of that prevailing in state farms. All wages rose very rapidly in 1991 and 1992 to help compensate for high rates of inflation.

Table 11
Uzbekistan: Employment by Form of Property

Percent

	1987	1988	1989	1990	1991
Total	100.0	100.0	100.0	100.0	100.0
State	73.6	72.1	70.0	68.6	67.3
Collective farms	14.2	13.9	13.8	13.7	14.2
Cooperatives	0.1	0.6	2.4	2.8	1.6
Private	0.1	0.2	0.2	0.2	0.3
Private agriculture	12.0	13.2	13.6	14.7	16.6

Source: Narkhoz Uzbekskoy SSR v 1991, p. 55.

Table 12
Uzbekistan: Distribution of the Population
by Per Capita Monthly Income, 1990*

Percent

	Share of Population
Less than 75.0 rubles	34.1
75.1 to 100.0 rubles	23.0
100.1 to 125.0 rubles	16.6
125.1 to 150.0 rubles	10.2
150.1 to 175.0 rubles	6.4
175.1 to 200.0 rubles	3.8
200.1 to 250.0 rubles	3.7
More than 250.0 rubles	2.2

* Includes pensioners.

Until recently, little information has been available on the distribution of income within the former Soviet Union and its republics. Data available for 1990, the last year before rapid inflation set in, indicated that 57.1 percent of the population in Uzbekistan had incomes of 100 rubles or less per month, the official poverty line. At the same time, 5.9 percent of the population had incomes over 200 rubles per month (see table 12). Although unambiguous statistics on income distribution are difficult to obtain for international country comparisons, the information available suggests that incomes have been distributed more equally in Uzbekistan than in either Turkey or Mexico.

Food Consumption

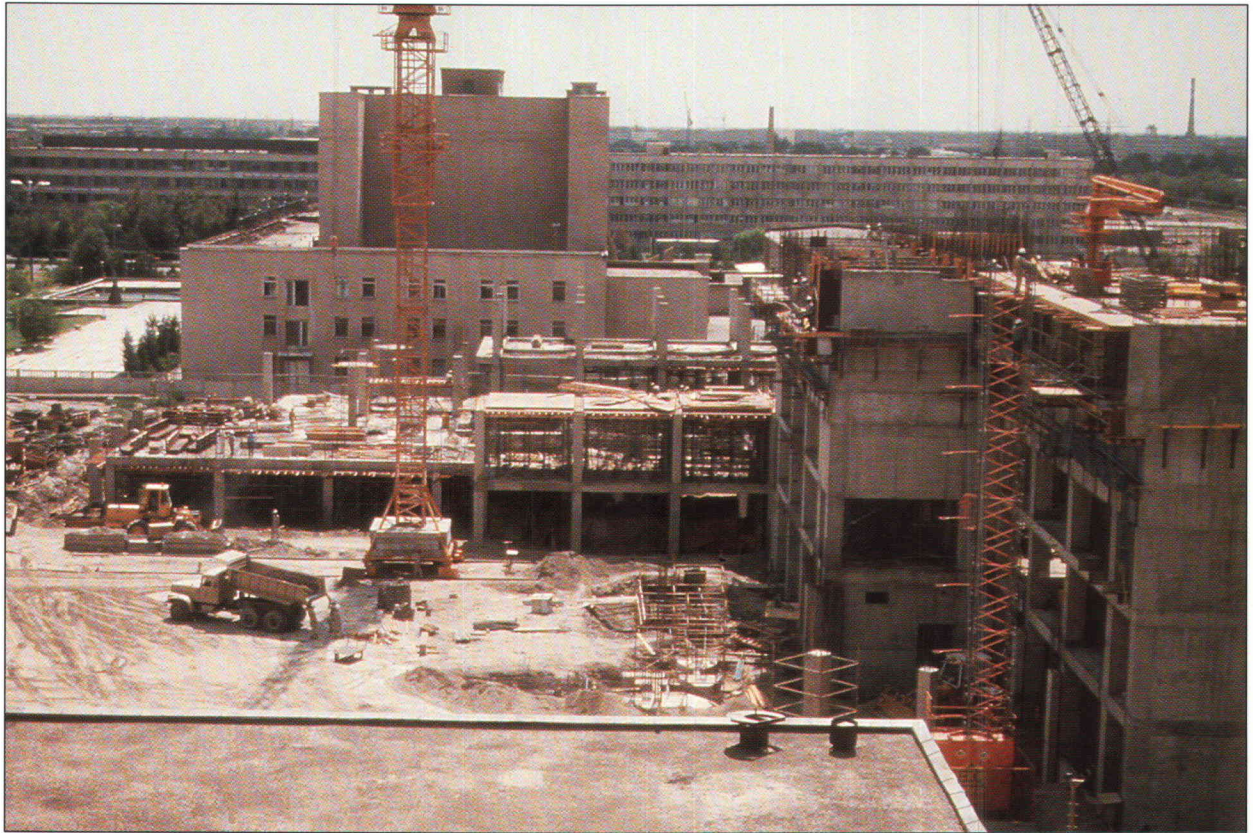
The caloric content of the average daily diet in the late 1980s (2,907 calories) in Uzbekistan as well as in Turkey (3,324 calories) and Mexico (3,048 calories), met or exceeded both US and internationally recommended dietary allowances.⁴ The share of calories from starchy staples (potatoes and grain products), a rough indicator of dietary quality, in all three countries was above that in the developed West.⁵ The share of calories in the Uzbekistan diet from starchy staples (57 percent) exceeded the all-union average (42 percent) but was below that of Turkey (68 percent). Finally, the composition of diets is affected by the fact that relatively high costs of livestock products in Uzbekistan and Turkey lead to a heavier reliance on basic starchy staples.

Inventories of Selected Consumer Durables

Uzbek families are relatively well supplied with consumer durables, although their overall quality and variety are low by Western standards. Virtually all families had radios, television sets, and washing machines in 1991. On the other hand, probably well under one-third of urban families had a telephone in their homes, and 782,000 families were

⁴ Recommended daily caloric allowances for US adults are 2,650 for males and 1,950 for females.

⁵ As household incomes rise, consumers tend to substitute animal products, fruits and vegetables, and other high-quality foods for starchy staples.



Joint-venture hotel

on waiting lists for telephones. The tabulation below provides ownership rates of selected household durables for the three countries:

	<i>Holdings per 1,000 population</i>		
	Uzbekistan	Mexico	Turkey
Telephones ^a	69	127	120
Televisions ^a	277	120	172
Automobiles ^a	46	102	37

^a Uzbek data are for 1991; Turkish and Mexican data refer to 1988-89.

Because the higher quality of Mexican and Turkish consumer durables results in greater reliability, enhanced operating life, and fewer repairs, numerical measures do not capture the full difference.

Housing

As of the late 1980s, the provision of housing in Uzbekistan was probably below that in the two

reference countries. In terms of total housing space per capita, the average Uzbek in 1989 was provided with 12.3 square meters; 12.6 square meters in urban areas; and 12.1 square meters in rural areas. In contrast, the average Turk had roughly 21 square meters. In 1989, over one-half (54 percent) of all Uzbek urban housing was owned by the state, while the remainder was held privately or by housing cooperatives. In rural areas, the share held by the state was much lower (13.5 percent). In terms of the availability of housing amenities, Uzbek standards are probably below the levels of the two reference countries, although the lack of adequate data makes a definitive judgment impossible (see table 13).

Rents on state-owned apartments in Uzbekistan are relatively low and heavily subsidized. Rents have covered only about one-fifth of current maintenance costs, and much housing is in poor repair.

Table 13
Share of Housing Equipped
With Utilities^a

Percent

	Uzbekistan 1989	Mexico 1990	Turkey ^b 1989
Running water	33	79	99
Hot water	14	NA	NA
Central heating	25	NA	17.3
Sewerage	18	75	95.3
Bathing facilities	17	NA	99

^a End of year shown. Figures for Uzbekistan are for urban and rural areas combined. In rural areas only 9 percent of the homes had running water, 1 percent had hot water, 2 percent had sewerage, 7 percent had central heating, and 2 percent had bathing facilities.

^b Does not include housing outside of municipal boundaries or squatter housing, where amenities are far less available.

Despite low rents, housing conditions have been the subject of much complaint. In 1989, 18 percent of Uzbek families (compared with 13 percent for the former Soviet Union as a whole) who were on waiting lists for better housing actually upgraded their circumstances. Such shortages have been chronic and persistent despite a sizable program to build new housing in the 1980s, and the situation has worsened in the past few years.

Pensions, Health, and Welfare

The people of Uzbekistan are covered by a Soviet-style comprehensive system of social security. Old-age, disability, and survivor pensions are provided, along with sickness benefits and family allowances. Legislation adopted in 1991 established separate pension and social insurance funds financed by large payroll taxes, a small employee contribution, and budget funds. The retirement age is set at 60 for men and 55 for women, with pensions depending in part on previous earnings. In 1992 and early 1993, minimum pensions, student stipends, and other benefits were raised periodically to compensate partially for inflation, and free housing was provided to certain low income groups.



Vegetable market in Tashkent

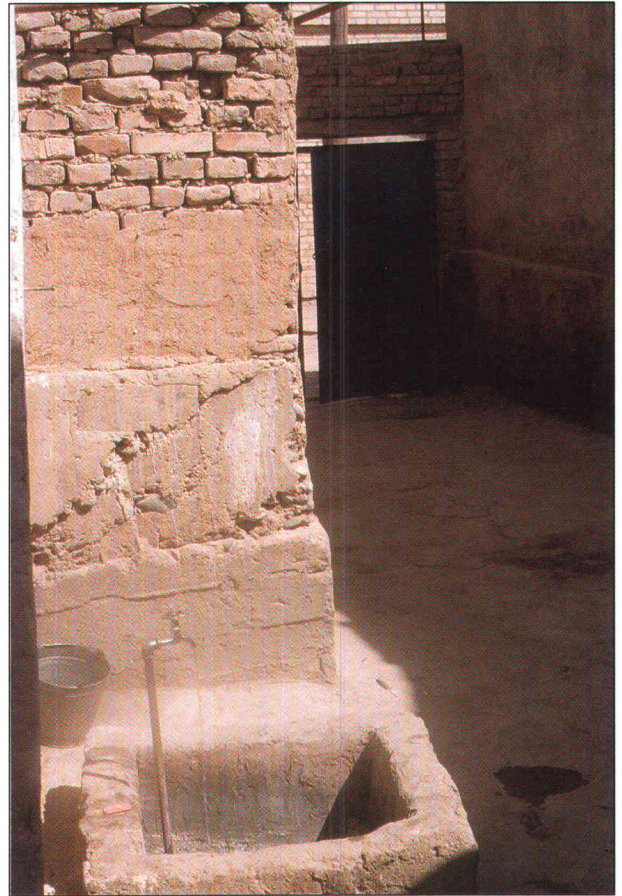
As in Uzbekistan, the populations of Turkey and Mexico also are covered by social welfare programs and unemployment compensation schemes. In Turkey, three separate social insurance funds exist: the Government Employees Retirement Fund, the Social Insurance Institution, and Bag-Kur, a fund to cover the self-employed. The Mexican Social Security Institute provides basic sickness, disability, and old-age benefits to all eligible people, while private health insurance and pension programs provide supplemental benefits. Although comparisons on such complex matters are tenuous, it appears that the reference countries' social safety nets are generally not as comprehensive as Uzbekistan's. Roughly two-thirds of the eligible population received monthly old-age benefits in Turkey in 1990, whereas Uzbekistan's net extended to 92 percent of the eligible population in 1989. In Mexico, the law excludes people in isolated areas of the country and not all self-employed people have registered with the Social Security Institution. Turkey's programs are indexed to inflation, but Mexico's benefits are not. Currently, Uzbekistan's pensions and other benefits are increased through periodic government decrees and are not indexed to inflation.



Apartment block in Tashkent

Unemployment benefits are currently provided in Uzbekistan through a special fund financed by a payroll tax. Unemployed persons become eligible for benefits three months after their dismissal from an enterprise, institution, or organization. The unemployment benefits last for six months and amount to 50 to 75 percent of the average pay at the former place of work, but not less than the minimum wage nor more than the average wage in Uzbekistan.

Following the Soviet model, health care in Uzbekistan has been universally available and provided without direct charge. Private practice has supplemented this system to a small extent. All hospitals and other facilities have traditionally been state owned, and their personnel have been government employees. However, Uzbekistan has recently taken steps to privatize its health care system. The privatization campaign began with the introduction of medical insurance in early 1993 and is being followed by the gradual privatization of health care facilities. Planners expect the transformation to take 2 to 3 years. Future owners of the private institutions will have to guarantee that the facilities maintain their medical service profile and provide a minimum of free health care services for the indigent. Both Mexico and Turkey have mixed health care systems in which the state dispenses some care, while private facilities, coupled with insurance programs, provide care or the means to pay for it for the rest of the population.



Communal water supply

The quality of medical training and support facilities in Uzbekistan and the two reference countries appear to fall well short of the quality standards of the developed West. In terms of health-care-related outcomes, life expectancy of the people of Uzbekistan (69 years in 1989 for both sexes) was similar to that in both Mexico (71 in 1990) and Turkey (69 in 1990). Infant mortality was higher in Uzbekistan than the average for the former Soviet Union, and its estimated rate of 65 deaths per 1,000 births in 1989 was also higher than in both Mexico and Turkey. In 1989, Mexico's infant mortality rate was 33 deaths per 1,000 births and Turkey's was 62 deaths per 1,000 births. For all other age groups, the two leading causes of death in Uzbekistan were circulatory illnesses and

respiratory illnesses. In Mexico, the two leading causes of death were circulatory illnesses and accidents, while in Turkey, the two leading causes of death were circulatory illnesses and cancer.

Other Social Indicators

A collection of social indicators describing aspects of Uzbek society not covered in other sections is shown in table 14. According to official data, Uzbekistan compares fairly well with the reference countries in regard to several indicators. Uzbekistan has many more doctors relative to its population than do Turkey and Mexico, although many physicians in Uzbekistan are engaged in public health and administrative activities that are normally carried out by nonphysicians in other countries. Uzbekistan's suicide rate is considerably below that of Turkey. On the other hand, Uzbekistan compares less favorably with the reference countries in terms of infant mortality, life expectancy, and divorce rates.

Pollution

Uzbekistan suffers from many of the same pollution problems found in the other republics of the former USSR as well as environmental problems that are unique to Central Asia. The best known environmental problem in Uzbekistan is traced to the effect of the shrinking Aral Sea. The sea, which has lost half of its surface area since 1960 (due in large part to massive irrigation projects that draw water from the sea's tributaries), will by some estimates completely evaporate within three decades. The damage already done to the surrounding ecosystem has already had severe consequences for agriculture. The increased salinity of irrigation water has severely diminished crop yields, while salt and dust blown from the sea bed severely retards plant growth.

Air pollution is severe because less than half of Uzbekistan's smokestacks are equipped with pollution control devices. While nearly all such devices are designed to capture particulates, there is little or no capacity to filter gaseous emissions.

Moreover, most of the devices perform below design specifications and are often under repair (or remain inoperable). Given their scarcity and confined area of operation, automobiles are a lesser source of air pollution, except in the capital city of Tashkent, where they generated 88 percent of air pollution emissions in 1989. Although the situation has been improving, industrial emissions are major air polluters in Olmaliq and Farghona.

Even though nearly three-fifths of pollution control funding is devoted to reducing water pollution, such pollution remains widespread. Ninety-five percent of sewage emissions are purified before dumping, but just over one-fourth of Uzbek villages and slightly over one-half of cities have sewers. Agriculture-related pollution (that is, runoff of fertilizers, pesticides, and other agricultural chemicals) is another major source of river pollution. Uzbekistan has by far the most severe agriculture-related water pollution in Central Asia, with an estimated 20 billion cubic meters of such pollutants entering the country's rivers each year. Industrial pollution also contributes to the problem. The Amu Darya, which empties into the Aral Sea, has concentrations of phenol that are five times above accepted health standards and concentrations of oil products that are 80 percent above those standards.

The three Uzbek cities for which air pollution data are available (Olmaliq, Farghona, and Tashkent) each exceed recommended pollution concentrations for particulates and nitrous dioxide. In addition, Olmaliq has levels of sulfur anhydride which exceed those standards. However, all three cities are within "acceptable" pollution levels for carbon monoxide, even though automobiles (a major source of carbon monoxide emissions) are a major source of air pollution in Farghona and Tashkent.

Table 14
Social Indicators in Uzbekistan, Turkey, and Mexico

1990 data
(unless otherwise stated)

	Uzbekistan	Mexico	Turkey
Consumption measures			
Per capita living space (<i>square meters per capita</i>)	12.3	NA	21.0
Running water (<i>percent of urban living space</i>)	90	99	79
Central heat (<i>percent of urban living space</i>) ^a	86	NA	17.3
Doctors (<i>per 10,000 persons</i>) ^{b, c, d}	35.5	10.8	8.0
Telephones (<i>per 1,000 persons</i>) ^{d, e}	69	69.4	57.0
Suicide			
Total (<i>per 100,000 persons</i>) ^f	7.2	NA	20.9
Alcoholism			
Alcohol-related deaths (<i>per 100,000 persons</i>) ^g	0.9	0.2	NA
Crime rates (<i>per 10,000 persons aged 20-69</i>)^h			
Murder and attempted murder	1.1	0.02	20.7
Rape and attempted rape ⁱ	1.2	0.02	21.1
Theft	25.5	0.10	1.8
Fraud	7.0	0.01	10.5
Drug-related	1.7	NA	0.3
Embezzlement	6.4	NA	0.1
People			
Total fertility rate (<i>children born per woman</i>) ^j	4.2	3.3	3.4
Infant mortality (<i>per 1,000 births</i>)	65.0	30.0	55.0
Life expectancy (<i>years at birth</i>)			
Males	64.0	69.0	68.0
Females	70.0	76.0	72.0
Divorces (<i>per 1,000 persons</i>) ^k	1.5	0.6	0.5
Net migration (<i>1,000 persons</i>) ^{j, l}	-45.8	-1.0	0.0

^a Central heat is not typical to Mexico.

^b 1989 data for Turkey.

^c Mexican data are for 1988.

^d Uzbek data are for 1991.

^e Turkish and Mexican data are estimates for 1992.

^f Turkish data are for 1987.

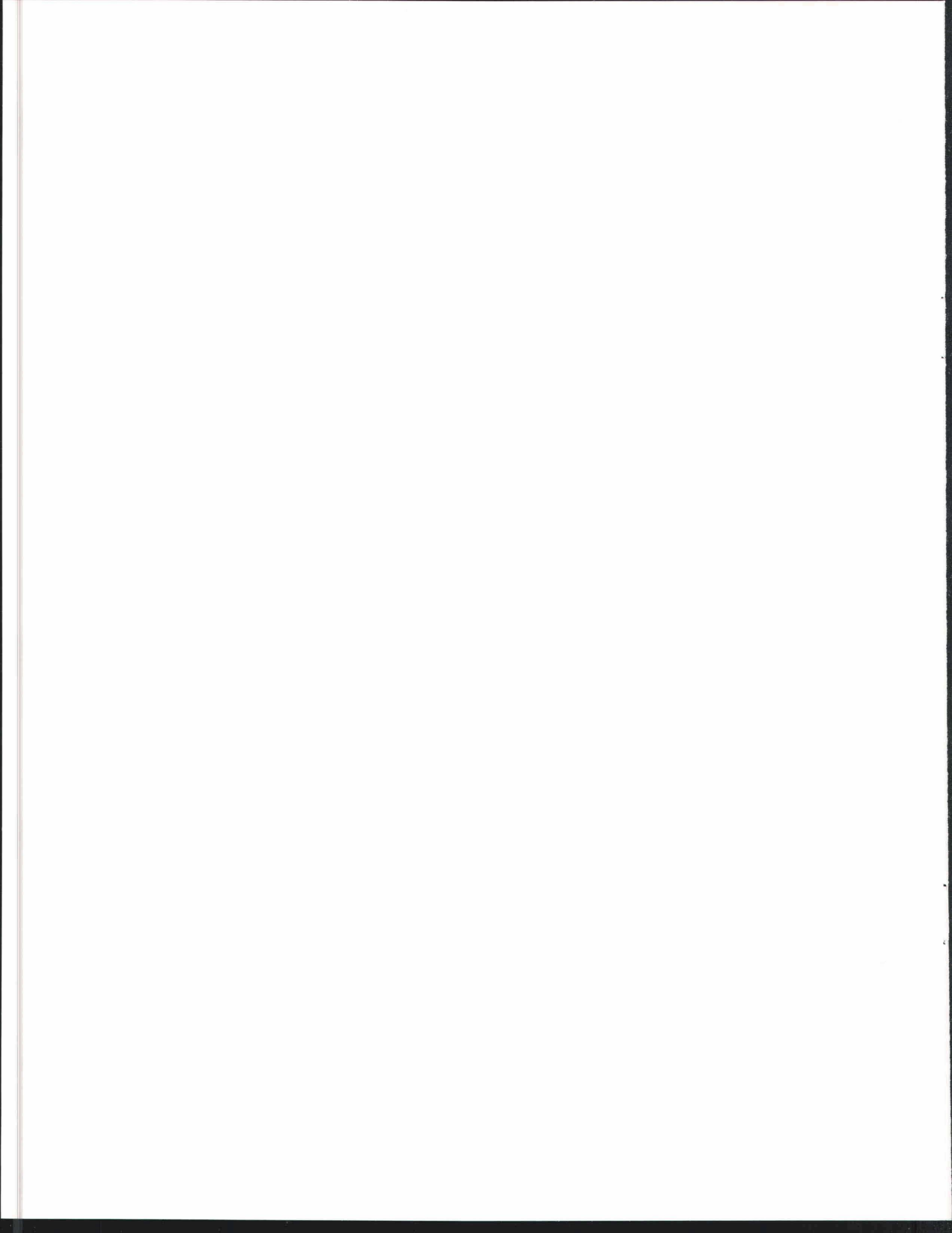
^g Mexican data are for 1991.

^h Mexican data are for 1991.

ⁱ Based on male population.

^j 1992 estimates.

^k 1989 crude (based on total population) divorce rates.



Appendix

Selected Economic Statistics

Table A-1
Uzbekistan: Nationality Structure, 1989^{a b}

Wiloyati (unless otherwise noted)	Total Population		Uzbek		Russian		Tajik		Kazakh		Tatar	
	Thousands		Thou- sands	Percent	Thou- sands	Percent	Thou- sands	Percent	Thou- sands	Percent	Thou- sands	Percent
Total	19,810		14,142	71.4	1,653	8.3	934	4.7	808	4.1	468	2.4
Andijon	1,721		1,507	87.6	45	2.6	25	1.4	...	...	25	1.4
Namangan	1,471		1,252	85.1	27	1.8	130	8.8	...	...	15	1.0
Tashkent city	2,060		910	44.2	701	34.0	15	0.7	31	1.5	129	6.3
Toshkent	2,143		1,075	50.2	314	14.6	90	4.2	266	12.4	106	5.0
Farghona	2,142		1,735	81.0	124	5.8	114	5.3	...	...	33	1.5
Bukhoro	1,622		1,227	75.6	133	8.2	51	3.1	91	5.6	37	2.3
Qashqadaryo	1,596		1,399	87.7	38	2.4	80	5.0	...	...	21	1.3
Samarqand	2,282		1,764	77.3	114	5.0	209	9.2	8	0.4	35	1.5
Surkhondaryo	1,250		993	79.4	38	3.0	161	12.9	...	...	17	1.4
Sirdaryo ^c	1,298		924	71.2	88	6.8	59	4.5	71	5.5	34	2.6
Khorazm	1,012		958	94.7	12	1.2	...	...	14	1.4	8	0.8
Qoraqalpoghiston Respublikasi	1,212		398	32.8	20	1.6	...	...	319	26.3	...	

Note: Because of rounding, the components may not add to the totals shown.

^a Notable shares of the following nationalities are unaccounted for in this table: Kazakhs (7.6 thousand people), Tatars (7.8), Karakalpak (7.0), Korean (25.7), Kirghiz (5.3), and Ukrainians (28.4).

^b After 1989, part of the Sirdaryo Wiloyati was split off to form the Jizzakh Wiloyati. Moreover, in 1992, Nawoiy Wiloyati was formed from parts of Bukhoro and Samarqand. The *wiloyatlar* and populations shown in this table reflect the situation that existed during the 1989 census.

^c Zero, negligible, or data not available.

Table A-1 (continued)

Karakalpak		Crimean Tatar		Korean		Kirghiz		Ukrainian		Other	
<i>Thou-</i> <i>sands</i>	<i>Percent</i>	<i>Thou-</i> <i>sands</i>	<i>Percent</i>	<i>Thou-</i> <i>sands</i>	<i>Percent</i>	<i>Thou-</i> <i>sands</i>	<i>Percent</i>	<i>Thou-</i> <i>sands</i>	<i>Percent</i>	<i>Thou-</i> <i>sands</i>	<i>Percent</i>
412	2.1	189	1.0	183	0.9	175	0.9	153	0.8	693	3.5
...	...	10	0.6	...	...	70	4.1	...	...	40	2.3
...	...	12	0.8	...	...	16	1.1	...	...	18	1.3
...	...	14	0.7	44	2.1	...	...	60	2.9	156	7.6
...	...	65	3.0	76	3.6	10	0.5	27	1.3	114	5.3
...	...	23	1.1	...	...	44	2.1	11	0.5	58	2.7
16	1.0	3	0.2	3	0.2	...	...	13	0.8	48	3.0
...	...	7	0.4	...	...	...	...	...	...	51	3.2
...	...	36	1.6	8	0.4	...	...	14	0.6	93	4.1
...	...	...	...	...	...	...	...	...	...	41	3.3
...	...	19	1.5	17	1.3	29	2.2	...	...	57	4.4
...	...	...	...	...	...	...	...	...	...	21	2.1
389	32.1	...	...	9	0.7	...	...	...	...	77	6.4

Table A-2
Uzbekistan: Births, Deaths, and Natural Growth of the
Population, Selected Years

Per 1,000 persons

	1980	1985	1986	1987	1988	1989	1990	1991
Births	33.9	37.4	37.9	37.3	35.3	33.3	33.7	34.5
Deaths	7.5	7.3	7.1	7.0	6.8	6.3	6.1	6.2
Natural growth	26.4	30.1	30.8	30.3	28.5	27.0	27.6	28.3

Table A-3
Uzbekistan: Average Monthly Wages for Wage and Salary Workers
by Branch of the Economy, Selected Years

Rubles

	1980	1985	1986	1987	1988	1989	1990	1991
Total	155.5	164.2	165.9	169.7	182.0	193.8	215.4	362
Industry	166.7	178.9	179.7	183.6	198.0	214.1	232.4	421
Agriculture	150.9	154.6	158.2	157.9	176.7	197.3	230.7	393
State farms	151.3	154.8	158.7	158.7	178.0	199.1	234.2	NA
Construction	205.4	219.5	218.7	222.7	245.2	260.3	282.1	441
Construction-assembly work	214.7	229.6	227.7	230.8	251.0	261.9	281.9	NA
Transportation	185.9	192.8	192.2	194.8	207.6	221.3	247.9	408
Railroad	165.5	195.6	204.6	222.1	233.2	248.8	276.2	NA
Water	157.7	177.3	170.1	173.9	203.6	220.1	220.0	NA
Urban-electrical, automobile	190.1	192.3	190.2	190.4	203.7	215.9	241.7	NA
Communications	130.9	142.5	146.4	152.4	167.5	176.8	200.0	368
Trade and public dining ^a	129.1	136.7	137.6	134.9	142.1	151.7	180.7	298
Information-processing services	118.5	127.1	134.8	146.2	159.7	198.6	234.8	NA
Housing-communal economy ^b	117.0	123.4	124.5	126.7	137.1	145.6	163.5	286
Health, physical, and social services	120.5	123.4	126.0	135.0	140.7	146.9	159.2	265
Education	132.0	149.8	156.2	166.1	171.8	167.7	173.5	282
Culture	105.6	110.6	105.6	107.7	117.7	116.8	129.7	235
Art	116.1	122.1	123.4	122.4	130.4	135.0	143.9	279
Science	161.8	180.5	184.0	197.1	218.0	247.5	275.5	431
Credit and social insurance	144.8	153.8	159.4	167.8	173.7	181.5	320.1	686
Government administrative services	144.0	148.2	155.5	164.2	176.5	201.5	286.3	395

^a Includes material-technical supply and sale, and procurement.

^b Includes other nonproductive domestic services.

Table A-4
Uzbekistan: The Structure of Gross Industrial Output,
Selected Years

Percent

	1980	1985	1988	1989	1990
Total	100.0	100.0	100.0	100.0	100.0
Heavy industry	42.3	44.1	45.9	45.3	44.4
Fuel-energy	8.8	8.5	8.6	8.9	8.8
Metallurgy	5.2	4.6	4.4	4.5	4.5
Machinery	14.7	16.0	17.1	16.6	16.0
Chemical-forestry	6.4	7.3	8.4	8.0	7.6
Construction materials	5.7	5.9	5.6	5.4	5.2
Heavy industry, n.e.c.	1.5	1.8	1.8	1.9	2.3
Soft goods	40.2	38.5	36.6	37.2	37.6
Processed foods	14.3	13.9	13.9	13.7	14.2
Other branches	3.2	3.5	3.6	3.8	3.8

Table A-5
Uzbekistan: Capital Investment, by Sector of the Economy,
Selected Years

Percent

	1981-85	1985	1986-90	1986	1987	1988	1989	1990
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Industry	23.5	23.2	23.2	22.7	23.4	23.0	24.0	22.7
Agriculture	34.4	30.7	27.3	30.1	28.8	27.7	25.2	25.1
Construction	3.3	4.1	3.3	3.6	2.9	3.3	3.3	3.2
Transportation and communications	7.6	8.0	6.7	7.8	7.3	6.2	6.2	6.1
Housing	16.5	18.7	22.3	19.1	20.8	23.6	23.4	24.3
Other ^a	14.6	15.4	17.3	16.6	16.9	16.2	18.0	18.6

Note: Because of rounding, components may not add to totals shown.

^a Includes trade and public dining, supply and sales, information processing, procurement, forestry, communal economy, science, art, education, and health.

Table A-6
Uzbekistan: Production of Selected Industrial Products,
Selected Years

	1980	1985	1986	1987	1988	1989	1990	1991
Primary energy								
Electric power (<i>billion kilowatt hours</i>)	33.9	47.9	52.2	54.8	50.6	55.9	56.3	54.2
Oil, including gas condensate (<i>million metric tons</i>)	1.3	2.0	2.2	2.3	2.4	2.7	2.8	2.8
Natural gas (<i>billion cubic meters</i>)	34.8	34.6	38.6	39.8	39.9	41.1	40.8	41.9
Coal (<i>million metric tons</i>)	5.7	5.3	6.0	5.0	5.5	6.2	6.5	5.9
Coal briquettes (<i>1,000 metric tons</i>)	137.0	142.0	139.0	143.0	139.0	136.0	129.0	NA
Metallurgy								
Steel (<i>million metric tons</i>)	0.8	0.9	1.0	1.0	1.0	1.1	1.0	0.9
Rolled ferrous metals (<i>1,000 metric tons</i>)	331.1	693.9	786.4	904.5	806.3	895.7	955.2	761.0
Machinery								
Metal-cutting equipment (<i>units</i>)	NA	209.0	171.0	255.0	134.0	55.0	21.0	23.0
Stamping and pressing equipment (<i>1,000 units</i>)	...	...	0.0	0.0	1.2	0.9	0.6	0.5
Tractors (<i>1,000 units</i>)	24.2	26.4	26.6	25.8	22.7	23.7	23.3	21.1
Cotton pickers (<i>1,000 units</i>)	9.1	9.4	9.0	7.7	8.1	6.0	5.3	NA
Excavators (<i>1,000 units</i>)	1.5	1.6	1.5	1.5	1.6	0.8	0.9	1.0
Turbine pumps (<i>1,000 units</i>)	10.0	11.0	12.0	10.0	8.0	9.0	9.0	NA
Spinning machines (<i>1,000 units</i>)	1.7	1.6	1.7	1.3	1.5	1.6	1.5	NA
Electric overhead traveling cranes (<i>1,000 units</i>)	1.4	1.5	1.5	1.5	1.5	1.5	1.4	NA
Chemicals								
Mineral fertilizers (<i>million metric tons</i>)	1.3	1.5	1.8	1.9	2.0	1.9	1.8	1.7
Sulfuric acid (<i>million metric tons</i>)	1.6	2.3	2.5	2.5	2.6	2.4	2.9	2.4
Synthetic plastics and resins (<i>1,000 metric tons</i>)	42.4	124.0	145.5	158.1	159.9	163.9	154.9	142.0
Pesticides (<i>1,000 metric tons</i>)	16.9	28.8	30.5	35.7	44.7	47.6	40.6	34.6
Chemical fibers and yarn (<i>1,000 metric tons</i>)	32.4	38.0	42.3	46.3	48.9	50.6	52.6	49.3
Synthetic detergents (<i>1,000 metric tons</i>)	185.4	182.8	193.8	196.0	209.2	217.9	226.2	NA
Forestry products								
Sawn timber (<i>1,000 cubic meters</i>)	421.2	466.0	424.4	511.2	494.0	563.3	555.8	455.0
Paper (<i>1,000 metric tons</i>)	24.6	25.1	25.6	25.0	25.6	25.7	25.7	20.2
Cardboard (<i>1,000 metric tons</i>)	49.7	54.8	55.2	55.6	55.7	56.1	51.2	41.5
Construction materials								
Cement (<i>million metric tons</i>)	4.2	5.3	5.4	5.5	5.6	6.2	6.4	6.2
Asbestos-cement sheets (<i>million units</i>)	282.0	425.0	438.0	436.0	445.0	430.0	441.0	423.0
Construction bricks (<i>billion units</i>)	1.7	1.9	1.9	2.0	2.0	2.2	2.2	2.1
Prefabricated reinforced concrete (<i>million cubic meters</i>)	4.6	6.1	6.2	6.5	6.8	6.4	6.3	5.7
Processed foods								
Meat (<i>1,000 metric tons</i>)	160.4	232.3	242.9	252.6	266.1	277.0	261.0	224.8
Fish (<i>1,000 metric tons</i>)	17.0	26.9	27.9	26.8	26.2	25.5	26.8	27.4
Cheese (<i>1,000 metric tons</i>)	1.7	2.0	2.1	2.0	2.1	2.2	2.1	2.3
Vegetable oil (<i>1,000 metric tons</i>)	412.0	451.0	508.0	510.0	498.0	513.0	514.0	461.0
Animal fats (<i>1,000 metric tons</i>)	11.8	10.9	14.5	15.0	15.6	16.4	15.9	14.6

Table A-6
Uzbekistan: Production of Selected Industrial Products,
Selected Years (continued)

	1980	1985	1986	1987	1988	1989	1990	1991
Macaroni products (<i>1,000 metric tons</i>)	66.0	76.0	76.2	78.9	81.9	84.0	86.9	94.4
Confectionery goods (<i>1,000 metric tons</i>)	151.0	165.3	168.6	173.2	191.0	205.1	219.0	164.0
Canned foods (<i>billion units</i>)	0.7	0.9	1.1	1.1	1.2	1.2	1.1	1.1
Soft goods								
Cotton fabrics (<i>million square meters</i>)	179.8	353.3	363.0	408.1	454.3	467.5	469.2	392.0
Wool fabrics (<i>million square meters</i>)	NA	0.7	0.7	0.7	0.7	0.8	0.7	0.6
Silk fabrics (<i>million square meters</i>)	113.8	142.3	132.5	134.8	138.4	144.8	144.1	126.0
Stocking-hosiery goods (<i>million pairs</i>)	43.7	63.9	73.0	81.2	96.1	113.7	113.2	102.0
Knitted goods (<i>million units</i>)	50.9	60.8	76.5	95.6	105.8	110.0	104.8	94.0
Footwear (<i>million pairs</i>)	30.4	35.2	36.4	39.2	41.8	44.2	46.7	45.4
Carpets (<i>million square meters</i>)	5.0	5.6	5.9	6.0	6.5	7.1	8.1	NA
Other consumer goods								
Refrigerators (<i>1,000 units</i>)	NA	69.1	90.2	143.0	170.0	192.0	201.0	212.0

^aZero or negligible.

Table A-7 *Billion ton-kilometers*
Uzbekistan: Freight Traffic by
Mode, Selected Years

	1985	1988	1989	1990
Total	91.1	79.45	79.4	78.6
Railroad	70.3	60.6	60.9	58.5
Truck	20.8	18.8	18.3	19.9
Pipeline	... ^a	0.05	0.2	0.2
Air	NA	NA	NA	NA

^aZero or negligible.

Table A-8 *Million passenger-kilometers*
Uzbekistan: Passenger
Transport, Selected Years

	1985	1988	1989	1990
Total	33,822	35,181	34,918	35,758
Rail	4,200	4,100	4,000	3,900
Bus	20,609	20,800	19,908	20,361
Air	9,013	10,281	11,010	11,497

Table A-9
Uzbekistan: Trade in Domestic Prices in 1990

Million rubles

	Total Foreign Trade		Interrepublic Trade		International Trade	
	Exports	Imports	Exports	Imports	Exports	Imports
Total	9,351.5	14,661.8	8,169.1	11,863.8	1,182.4	2,798
Industry	8,670.7	13,071.2	7,532.1	10,651.5	1,138.6	2,419.7
Power	207.1	172.1	207.1	172.1	0.0	0.0
Oil and gas	598.4	888.4	592.5	886	5.9	2.4
Coal	8.1	47.9	8.1	47.9	0.0	0.0
Other fuel	0.0	0.2	0.0	0.2	0.0	0.0
Ferrous	98.9	661.3	98.8	647.4	0.1	13.9
Nonferrous metals	446.7	409.1	428.7	408.7	18	0.4
Chemical and petrochemical	852.7	1,147.3	792.7	973.1	60	174.2
Machinery	1,230.9	3,625.3	1,050.7	3,292.2	180.2	333.1
Forestry products	14.9	559.7	14.9	512.5	0.0	47.2
Construction materials	71.6	205.2	71.4	191.6	0.2	13.6
Light industry	4,241.7	2,963.1	3,384.1	1,938.3	857.6	1,024.8
Food production	824.3	1,982.6	809.9	1,247.3	14.4	735.3
Other industries	75.4	409	73.2	334.2	2.2	74.8
Agriculture	447.4	1,309.2	404.6	932	42.8	377.2
Other products	233.4	281.4	232.4	280.3	1	1.1

Table A-10
Uzbekistan: Trade in World Prices in 1990

Million rubles

	Total Foreign Trade		Interrepublic Trade		International Trade	
	Exports	Imports	Exports	Imports	Exports	Imports
Total	7,701.9	12,288.8	6,889.1	10,992.8	812.8	1,296
Industry	7,285.8	11,177.1	6,481.6	10,172.9	804.2	1,004.2
Power	310.7	258.2	310.7	258.2	0.0	0.0
Oil and gas	1,437.3	2,291.4	1,424.9	2,288.7	12.4	2.7
Coal	7.6	44.8	7.6	44.8	0.0	0.0
Other fuel	0.0	0.1	0.0	0.1	0.0	0.0
Ferrous	120.8	768.7	120.7	750.6	0.1	18.1
Nonferrous metals	741.4	679.2	711.3	678.9	30.1	0.3
Chemicals and petrochemicals	649.9	929.4	605.7	805.7	44.2	123.7
Machinery	1,570.2	3,711.3	1,324.7	3,438	245.5	73.3
Forestry products	11.6	394.2	11.6	367.6	0.0	26.6
Construction materials	68.8	197	68.6	192.5	0.2	4.5
Light industry	2,006.8	832.5	1,542.1	580	464.7	252.5
Food production	311.6	850.6	306.4	570.7	5.2	279.9
Other industries	49.1	219.7	47.3	197.1	1.8	22.6
Agriculture	154.3	801.5	146.7	510.6	7.6	290.9
Other production	261.8	310.2	260.8	309.3	1	0.9

