Economic Review

TURKMENISTAN

International Monetary Fund
Washington, D.C.

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Lithuania
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Azerbaijan
Turkey
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Armenia
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Turkmenistan
Mongolia
Sea of Japan
Kyrghyzstan
Iran
Tajikistan
China
Saudi Arabia
Persian Gulf
Afghanistan
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0 400 800 Miles

Economic Review

TURKMENISTAN

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Preface

Between September 1991 and March 1992 all the states of the former U.S.S.R. applied for membership in the International Monetary Fund. During this period, staff members of the IMF visited each of these countries to hold discussions with the various national authorities, review the domestic procedural and legal steps required for membership, collect economic data to process these applications, and provide policy advice. Following these visits, pre-membership reports were prepared on the countries' economies. Two companion reports were also prepared, the first reviewing the economy of the former U.S.S.R. in 1991 and the second providing an overview of common policy issues and major interrepublican economic relationships. The reports were prepared in the European II Department of the IMF, under the direction of John Odling-Smee. They also draw on the expertise of other IMF departments, as well as the staff of the World Bank.

Because of the importance of and widespread interest in the subject matter, these economic reviews are being published at this time, even though they are of an interim nature and it is still too early to present a comprehensive assessment of most of the economies. The reports are based on information available in early 1992. Although the studies were prepared for the Executive Board of the IMF, the descriptions of developments and policies they contain are those of the IMF staff and should not be attributed to Executive Directors or to the authorities of any of the individual countries.

I. Background

An IMF staff team visited Ashkhabad, Turkmenistan, between February 25 and March 11, 1992, to undertake preparatory work for the country's membership in the IMF, to review economic and financial developments, and to discuss the Turkmen authorities' economic reform program and macroeconomic policies for 1992. The mission was the first full staff visit to Turkmenistan, although a small team visited Ashkhabad (the capital) for three days in December 1991 as part of a trip to all the Central Asian republics of the former Soviet Union. A formal letter of application for membership was received by the IMF on February 26, 1992.

Geography and Political Development

Turkmenistan lies in the southernmost part of the former U.S.S.R. and borders Uzbekistan in the north and east, Kazakhstan in the north, the Caspian Sea in the west, and Iran and Afghanistan in the south. With an area of 488,000 square kilometers, it is the fourth largest former republic of the former Soviet Union. However, because of the Kara Kum desert (comprising 90 percent of the country's total area), Turkmenistan in 1991 was inhabited by only 3.75 million people, making it the fourth smallest former republic in terms of population. The population is predominantly Turkmen but other nationalities—mostly Russian, Uzbek, Kazakh, Tartar, and Ukrainian—make up nearly one third of the population.

Turkmenistan formally declared its independence from the U.S.S.R. on October 27, 1991, the 67th anniversary of the founding of the country, and on December 21, 1991, it joined other former republics in the Commonwealth of Independent States (CIS). President Saparmurat Niyazov, who was elected uncontested on October 27, 1990, had previously been Chairman of Turkmenistan's Supreme Soviet and First Secretary of the Central Committee of the former republic's Communist Party. The Communist Party has been formally disbanded and many of its former members have joined the Democratic faction in the Supreme Soviet. Other factions include war veterans, intellectuals, and representatives of the agricultural sector. President Niyazov has declared his intention to develop Turkmenistan's economic potential by creating a market economy that maintains a role for the state in the development of industry, social policy, science, health, and national culture.

Structure of the Economy

Per capita net material output in Turkmenistan has been estimated at 61 percent of the U.S.S.R. average for 19[illegible], the fourth lowest of all the former republics. Turkmenistan also lies at the lower end of the scale in terms of social development indicators (see Table 1): it has the highest infant mortality rate (54.7 per 1,000 births) and the lowest life expectancy at birth (65.2 years). Moreover, 30 percent of the country's schoolchildren study in shifts and half of the health care, educational, and cultural institutions are housed in inadequate facilities.

Turkmenistan's economy is highly dependent on the production and processing of energy resources and cotton. The country is rich in natural resources: it has 8.1 trillion cubic meters of likely gas reserves and 700 million tons of likely oil reserves.[1] Furthermore, Turkmenistan holds large reserves of iodine-bromine, sodium sulphate, and various types of salts, and there are also indica-

tions that gold and platinum are present. Cotton is the dominant crop grown in the country, accounting for more than 50 percent of the nation's arable land and 60 percent of total agricultural production in 1991.

Although Turkmenistan has considerable potential for diversification into industries based on natural resources, the economy is still predominantly agricultural. In the past three years, agriculture accounted on average for 46 percent of net material product (Table 2) and for about 42 percent of total employment. Agricultural production relies heavily on irrigation which covers about half of the arable land (13,300 hectares).[2] However, agricultural yields remain comparatively low because of years of inefficient water use, salination, inappropriate land irrigation, and overdevelopment of cotton cultivation. Other major crops include grains, vegetables, and fruits. Nearly one fourth of total gross agricultural production in 1991 was accounted for by livestock products. The large degree of specialization in the agricultural sector has rendered the economy heavily dependent on food imports. In 1991, Turkmenistan had to import 65 percent of its grain consumption, 45 percent of its milk and dairy products, 70 percent of its potatoes, and all of its sugar.

The dominance of energy and other mineral resources and cotton has, to a large extent, dictated the path of industrial sector development. In 1991, about one third of total industrial production was generated by 61 textile enterprises. Another third was accounted for by 38 large state enterprises in the chemical, gas, oil processing, and electricity-generating industries. Turkmenistan extracts about 80 billion cubic meters of natural gas a year, most of which is exported because there are no facilities for the chemical processing of natural gas. The main use of gas domestically is as fuel for the thermal power plants, with two thirds of their production also exported. Generation of chemicals from other raw mineral materials is highly developed and includes the production of mineral fertilizers, sulfuric acid, ammonia, sulphur, synthetic detergent, sulphate and chloride salts, iodine, and bromide iron. Oil is refined at the Krasnovodsk refinery, which has a capacity of 5.5 million tons per year. (The other refinery in Turkmenistan, the new Chardzhou refinery, with a capacity of 6 million tons per year, depends on oil imported from Russia via the pipeline from Western Siberia.)

Construction activity accounted for about one fourth of net material product in 1991, reflecting the large number of major industrial and infrastructure projects that have been undertaken to diversify the economy and modernize the inadequate infrastructure. However, there is a large volume of unfinished construction, and transport and telecommunications links with the rest of the world remain weak. The authorities are in the process of constructing a railway that would connect the Turkmenistan with Iran. They have also drawn up plans to expand Ashkhabad airport to accommodate international flights and to expand the Krasnovodsk port on the Caspian Sea.

The specialized orientation of Turkmenistan's production, and the consequent openness of the economy, makes the nation particularly vulnerable to external shocks, as evidenced by the serious economic consequences stemming from the disruptions to interrepublican trade over the past three years. The ratio of exports to net material product was 57 percent in 1991 (compared with 55 percent in 1988–89) and the corresponding ratio for imports exceeded 50 percent (compared with over 60 percent in 1988–89); interrepublican trade represented over 80 percent of total trade in 1991 (compared with close to 95 percent in 1988–89). Exports were largely dominated by gas and oil as well as light industrial goods, mainly cotton fiber. Of the 74.5 billion cubic meters of gas and 380,000 tons of cotton fiber exported in 1991, 84 percent was exported to other republics. As regards imports, the main items of interrepublican trade in 1991 were machinery and metalwork (one third of the total), light manufactured goods (19 percent), and processed food (15 percent), whereas the major components of imports from the rest of the world in 1991 were products of light industry (37 percent) and the food industry (27 percent).

II. Recent Economic Developments

Output, Income, and Price Developments

As in most other republics, Turkmenistan's economy was adversely affected by instability in the U.S.S.R. toward the end of the 1980s. In 1989–90, supplies of imported industrial inputs and intermediate goods became erratic, the use of inefficient domestically produced inputs increased, capacity utilization in industry declined, and net material output in industry contracted at an annual average of 20 percent in real terms (Table 2). The fall in total net material product (NMP) was considerably lower, however—about 3 percent annually in real terms—mainly because of growth in the agricultural and transport sectors. Initially, the authorities tried to cushion the impact of the fall in output on private consumption by raising social expenditures and food imports. However, as trade disruption continued, both consumption and investment declined relative to their pre-1989 levels both in real terms and as a percentage of NMP.[3]

Beginning in 1990, the authorities initiated a restructuring program aimed at reducing the economy's reliance on exports of raw materials, limiting its dependence on imports of finished and intermediate goods, and increasing its capacity to process domestically produced raw materials. As a result of these efforts the ratio of gross production of consumer goods to total industrial output increased slightly between 1988 and 1991; the amount of farmland devoted to cotton production in 1991 was reduced by 5 percent from the previous year while that devoted to wheat production increased by 63 percent in the same period; a major project was initiated to expand production of cotton fiber; and the construction of the Chardzhou refinery with an annual capacity of 6 million tons of oil was completed in 1991.

In part because of these changes, Turkmenistan's economy in 1991 was less severely affected by disruptions in trade and the breakup of the U.S.S.R. than many of the other former republics; net material product declined by less than 1 percent in real terms. Sustained growth in oil and cotton processing, the rise in the production of consumer goods, and the construction activities associated with the Chardzhou plant nearly offset a decline in agricultural production resulting from bad weather and a sharp contraction in the trade and transportation sectors reflecting disruptions in interrepublican trade.

Price performance in 1991 was less encouraging. Retail and wholesale prices increased by 90 percent and 211 percent, respectively, reflecting in part the January-April 1991 price reforms and the accommodative monetary policy in the Soviet Union as a whole. The increasing differential between wholesale and retail price inflation was partially associated with increasing subsidization of consumer goods and consequently larger budgetary expenses.[4] The differential rates of increase persisted into early 1992, with retail prices increasing by 165 percent in January and wholesale prices by 223 percent (see Annex 5).

Employment, Unemployment, and Wages

Average wages increased steadily in real terms between 1987 and 1990 (see Table 3 and Table A21). Wages were tightly regulated and kept within a relatively narrow range by minimum and maximum wage legislation. In April 1991, as part of a Union-wide policy of social protection

against the effects of rising inflation, a flat-rate bonus of 60 rubles (rub 60) per month was given to all wage earners. The bonus was later consolidated into wage rates. Nevertheless, the average and minimum wages declined in real terms during 1991. Wages, pensions, and other benefits were increased substantially on January 1, 1992, in anticipation of price reform. The minimum wage (which is said to apply to only about 1 percent of employees) was increased by 170 percent from rub 130 to rub 350 per month.[5] At the same time, a number of decrees were passed ending strict government regulation of wages; enterprises are now free to determine wages subject only to the minimum wage law.

Despite the disruptions to trade and economic activity over the past three years, total employment has grown steadily and the participation rate has been consistently about 85 percent. Measured unemployment has risen slightly since 1989 and is now just under 40,000, about 2.5 percent of the labor force. In line with a Union-wide policy, Turkmenistan introduced unemployment compensation in April 1991, but benefit payments under this system lasted only six months. At present, there is no unemployment compensation system in place in the country. However, the authorities are concerned that the process of economic reform and stabilization, and in particular privatization, will lead to much higher unemployment and are considering the adoption of an Employment Fund similar to those that exist in other former republics.

Fiscal Position

Turkmenistan's fiscal record in the second half of the 1980s was one of moderate but sustained surpluses (Tables 3 and 4). The major source of revenue was the turnover tax (accounting for 31 percent of total revenue), followed by profit transfers from state-owned enterprises (excluding those enterprises under Union jurisdiction which transferred their profits directly to the Union budget), and the personal income tax. Transfers from the former Soviet Union became progressively more important over the period, reaching close to 10 percent of GDP in 1990. On the spending side, the major items were capital expenditures, implicit subsidies on food, and expenditures on education and health care. (For a description of the structure of general government and the budget, see Annex 2.)

As in many other republics, the management of the public finances was particularly difficult in 1991 because of the various measures that were taken at the Union level to compensate the population for the partial price liberalization in April 1991 and because of uncertainties about Turkmenistan's access to the Union Stabilization Fund (USF) and the Fund for the Social Support of the Population (FSS).[6] Following the April 1991 compensation payments decreed at the Union level and the subsequent increases in domestic subsidies, the underlying budget deficit in 1991 was running at about rub 2.1 billion (11 percent of GDP). Moreover, if account is taken of Turkmenistan's required contribution to the USF for the financing of capital expenditure, the underlying deficit would have amounted to about rub 3.0 billion (17 percent of GDP).

In view of the difficulties and uncertainties regarding access to the USF and FSS funds, the authorities took several revenue measures and intensified their search for financing from the Union in order to close the fiscal gap. On the revenue side, the authorities imposed an additional profit transfer from the state-owned Cotton Corporation, which was assessed on the appreciation in the value of stocks following price liberalization. In addition, a one-time export duty on raw materials was levied. The authorities also withheld a portion of Turkmenistan's contribution to the USF and obtained debt forgiveness from Gosbank-U.S.S.R. on a rub 1.4 billion loan. As a result of these actions, and following a better than expected outturn in a number of smaller revenue sources, fiscal operations for 1991 closed with a surplus of rub 592 million, or 3.2 percent of GDP.

Money and Credit

In line with the policy stance set up for the Union as a whole, monetary policy in Turkmenistan was highly accommodative in 1991. The financing of the 1991 credit plan, drawn up in consultation with Moscow, required a net issue of ruble notes that was substantially larger than in previous years. As a result, currency in circulation increased by 145 percent, compared with 14 percent in 1990. The execution of the credit program resulted in an increase in domestic liquidity (broad money) of more than 2.5 times (Table 5). The main source of monetary expansion was the rapid rise in credit to the nongovernment sector, which rose by 195 percent. This outweighed the contractionary impact of government operations on domestic liquidity and contributed to a threefold increase in the net domestic assets of the banking system. The sharp rise in credit to the nongovernment sector reflected the authorities' passive stance in accommodating the sharp increase in prices occasioned by the price reforms carried out in April 1991. (For a description of the structure of the financial system, see Annex 3.)

The level of interest rates increased markedly during 1990, with some consumer loan rates increasing by as much as 17 percentage points (from a prevailing maximum of 8 percent to a new level of 25 percent). During 1991, on instructions from Gosbank-U.S.S.R., the refinance rates were increased from 3–5 percent to 6–12 percent. Other interest rates remained broadly unchanged.

The bulk of credit given by the banks is short term (repayable within a year). Long-term credit accounted for only 6 percent of the total at the end of 1991. Industry has been the major user of bank credit (absorbing about 46 percent of bank credit outstanding at the end of 1991), followed by the trade sector.

Balance of Payments and External Debt

Prior to 1991, Turkmenistan's interrepublican trade, valued at domestic prices, was persistently in deficit; the deficit peaked at 6 percent of GDP in 1990 (Table 6).[7] The value of imports from other republics rose by 13 percent between 1987 and 1990, while exports increased by only 6 percent over the same period. Given the absence of historical trade data in comparable prices, it has not been possible to characterize the movement in the terms of trade for the period 1987–90.

In 1991, the trade balance appears to have shifted into a surplus of about 6 percent of GDP. This large swing was the result of a sharp increase in the value of exports (about 170 percent), and a rise in the value of imports (about 90 percent). Although these figures are estimates based on information on the execution of interrepublican trade agreements through September 1991, it appears that the trade surplus arose in 1991 because of a shift in the terms of trade in favor of Turkmenistan and possibly a reduction in the volume of imported goods.

The surplus on the interrepublican trade account, together with a sharp increase—albeit lower than planned—in net transfers to Turkmenistan from the Union, more than offset a deficit in the services account. As a result, the interrepublican current account, including transfers, is estimated to have moved from a deficit of 0.4 percent of GDP in 1990 to a surplus of 16 percent of GDP in 1991. The strength of the current account combined with a small deficit in the interrepublican capital account—the result of an increase in the State Bank of Turkmenistan's claims on Gosbank-U.S.S.R.—resulted in an overall surplus in the interrepublican balance of payments, equivalent to about 14 percent of GDP in 1991.

Turkmenistan's trade account with foreign countries, valued at domestic prices, also recorded persistent deficits throughout the period 1987–90, with the deficit peaking at 7 percent of GDP in 1990. The trade balance data prior to 1991 must be qualified because Turkmenistan's recorded export proceeds did not include any shipments of natural gas, which ranged between 75 billion and

79 billion cubic meters per year. In 1991, the foreign trade account, valued at domestic prices, is estimated to have registered a smaller deficit than in the past, following the reassignment of 12 billion cubic meters of natural gas from interrepublican exports to foreign exports[8] and a recovery in exports owing to a favorable shift in the relative price of exported goods. Despite this improvement in the trade balance, the overall balance of payments with foreign countries in 1991, valued at domestic prices, continued to be in deficit (1.5 percent of GDP), but this was more than offset by the large interrepublican balance of payments surplus. The consolidated balance of payments in domestic prices—which would indicate the change in the net external asset position of Turkmenistan and a source of liquidity in the domestic financial system—is estimated to have been in surplus in 1991 by about 12 percent of GDP.

Following the signing of the external debt agreement between the eight republics of the former Soviet Union—including Turkmenistan—in November 1991, the share of Turkmenistan in the total external debt of the U.S.S.R. was set at 0.7 percent of the total, or about $420 million excluding letters of credit. On this basis, scheduled debt service payments on medium- and long-term debt were estimated at $95 million for 1992, of which $41 million was interest. Turkmenistan would be eligible under the agreement with creditors for a deferral of $50 million in principal payments in 1992, provided arrears were reduced by about $29 million and other conditions were met. So far, Turkmenistan has not made any payments on the amount of interest due. The authorities have indicated their concerns about the true amount of foreign debt of the former U.S.S.R., the payment intentions of other former republics, the mode of calculation of Turkmenistan's share, as well as uncertainties regarding the legal and financial status of Vneshekonombank-U.S.S.R. and the level and distribution of external assets of the former Soviet Union. Turkmenistan maintained the same exchange rate system as the rest of the Union for most of 1991; since the breakup of the Union, the system has lacked definition in a number of areas (see Annex 4).

III. Institutional Framework for Economic Policymaking

In common with the other newly independent nations of the former U.S.S.R., Turkmenistan faces a need for substantial changes in its institutional framework for economic policymaking. In the past, the collection and processing of information and the ultimate policy decisions originated mostly in Moscow, and the function of republican administrations was simply to implement economic policy decisions made at the Union level. There was very little capacity to analyze macroeconomic developments in Turkmenistan, even less in the way of institutional structures to formulate economic policies, and qualified personnel were scarce in virtually every branch of government.

Turkmenistan is only slowly developing the institutional framework necessary to formulate and implement the economic policies needed to advance the reform toward a market economy. Unlike many other former republics, the State Committee on Planning (Gosplan) has not been reorganized. Plans are under consideration to merge Gosplan with the Ministry of Finance, but they are not very far advanced. The reform of the State Bank of Turkmenistan (SBT) and the domestic banking system is also proceeding slowly. The present legal framework and the draft central bank law fall short of endowing the SBT with the means necessary to act as a fully fledged central bank. Moreover, administrative and managerial functions for the foreign exchange system are shared among the Vneshekonombank, the Republican Commercial Bank of Turkmenistan, and the SBT.

Economic policy is under the direction of the Economic Committee in the Presidential Council. A great deal needs to be done, however, to improve policy coordination between agencies and to maintain the momentum of economic reform and stabilization. The main principles of Turkmenistan's reform program were set out in a document adopted on January 8, 1991, which was modeled on the Presidential Guidelines issued by Soviet President Mikhail Gorbachev in October 1990. The program includes a list of required legislative, fiscal, and monetary measures and the guiding principles for price formation, privatization, the development of industrial infrastructure, and agricultural reform. The plan, with minor adjustments to reflect the changed circumstances caused by the breakup of the U.S.S.R., remains the latest statement of intention on economic reform. Some of the enabling legislation has now been passed, but the implementation of practical measures has so far lagged behind other former republics.

IV. Economic Reform Program and Policies for 1992

Price Reform

In line with other republics of the former U.S.S.R., price liberalization took place in Turkmenistan on January 10, 1992 (see Annex 5 for details). Wholesale prices were liberalized for all agricultural goods except raw cotton, grain, livestock, and milk; in the industrial sector, controls on wholesale prices were maintained on energy and on transportation and communications services. At the retail level, the prices of a number of goods, amounting to over 20 percent of consumer expenditure, remain controlled, including those of staple foods, fuel, rents, vodka, medical products, and transport. However, the prices of most of these goods were increased substantially. Wholesale prices for controlled agricultural products and transportation services were increased threefold while energy prices were raised by five times. The ceiling on consumer prices for controlled goods was raised by two to six times, although housing costs were restricted to a 50 percent increase. The list of prices that remain controlled is longer than that for Russia but essentially the same as the lists in the other former Central Asian republics.

Although there was some discontent about the price increases, there appears to have been little open opposition. The population was to some extent shielded from the effects of the price rises by enlarged subsidies and an increase in wages, minimum wages, pensions, and family allowances at the beginning of January 1992. However, social unrest in neighboring countries, and fears that it could spread to Turkmenistan, led the authorities to rescind some of the increases and reimpose controls. Effective from January 17, 1992, controls were reinstated on, for example, food grains, pasta, and goods for children; and some price increases were rolled back—for example, the price of liquefied and natural gas sold to the population was reduced by half. Despite this partial reversal, retail prices rose by 165 percent during January 1992 and by a further 18 percent in February 1992.

Turkmenistan has experienced some cross-border trade problems in cases where prices were lower than in other former republics. As a result, a presidential decree prohibiting the export of certain goods by private individuals was recently introduced. In principle, enterprises are free to export to higher-price former republics, but the system of state orders (Goszakhaz) remains in force to ensure that supplies are available for domestic consumption.

An increase in some agricultural producer prices was announced on February 28, 1992, because of concerns about the profitability of the agricultural livestock sector given the increase in input prices following price liberalization. The increase in input prices was partly because other former republics increased prices for inputs imported by Turkmenistan by more than had been agreed. Producer prices for cotton, grain, meat, and milk were therefore increased again. However, the impact on the budget was offset by an increase in the fixed payments required from the cotton industry.

Although the price reform carried out on January 10, 1992, was a commendable step on the path to a market economy, the signals given to the population by the rollback on January 17 could damage the credibility of the reform effort, especially at a time when other former republics appear to be moving faster on price liberalization. The authorities stressed their commitment to price reform, with the twin objectives of bringing goods to the stores and reducing the monetary overhang. The intention is to resume price liberalization in May or June, after food stocks have been replenished by the 1992 harvest and by a planned food import program.

Privatization

Turkmenistan has made relatively little progress in the area of privatization. A housing privatization program began in January 1992, and there have been leasing programs in the agricultural and industrial sectors. Enabling legislation for a more far-reaching privatization program was approved by the Supreme Soviet on February 19, 1992, but the modalities for the sale of state assets remain to be worked out. The authorities expressed their determination to implement the program, and progress is expected this year in the services, light industry, construction, and agricultural sectors, starting with the smaller enterprises. The program does not envisage the privatization of land, water, or the oil and gas industries.

In the agricultural sector, there are two types of leasing already in operation. Under the first type, the Kolkhoz (an agricultural organization similar to a cooperative) agrees to lease part of its land to individual farmers in return for a rental payment and a commitment to deliver a specified amount of a given crop at a fixed price. Additional production can be sold on the free market. Typically, the lease is for one year only. Under the second type of leasing arrangement, land is leased on a long-term basis to farmers for a higher rent, but they are free to grow and sell what they want. So far this program has only been introduced on a trial basis and covers a very small region. The authorities recognize that short-term leases do not give the security of tenure or the incentives that the leaseholder needs in order to improve the quality of the land and increase yields. Under a law just passed, leases have to be for a minimum of ten years and provision is made for rights of inheritance to the lease.

In the industrial sector, about 160 state enterprises have already been leased to their employees as part of a program which began under Union control in January 1991. The staff of the enterprise usually initiates the leasing arrangement, and the rent is set at about 10–15 percent of the depreciated cost of fixed assets plus working capital. So far, the proportion of production covered by these arrangements is very small, less than 1 percent.

According to the privatization law, priority must be given to the workers of the enterprise being privatized, and the employees will also decide on the form of private ownership, which in most cases is likely to be a closed joint-stock company. Foreign participation in the privatization process is to be allowed, but the law gives priority to citizens of Turkmenistan and allows for the possibility of a quota on foreign participation. The law also includes a provision for vouchers ("special means of payment") to be issued to citizens of Turkmenistan to be used for the purchase of state assets. The authorities are studying the modalities of different privatization options, drawing on the experience of others, including Czechoslovakia, Kazakhstan, and Russia.

Fiscal Policy

Budget for 1992

The budget for 1992, Turkmenistan's first as an independent state, includes significant changes to the structure of taxation and several new expenditure categories. The two main assumptions adopted by the authorities in the preparation of the 1992 budget are that the price level would increase 4–5 times and that salaries would rise 2.9 times relative to their 1991 levels. On the basis of these assumptions, the authorities anticipate a deficit of rub 4.2 billion (4.6 percent of GDP) for 1992 (Table 7).

On the *revenue* side, the turnover tax and the sales tax (adopted in 1991) have been replaced in 1992 by a value-added tax (VAT) and a number of excise taxes. Excises are levied on a relatively small number of goods and range from 38 percent on gasoline to 80 percent on vodka. VAT is levied

at a single rate of 28 percent and conforms to the standard international practice in most respects, with the exception that imports from outside the Commonwealth are not subject to VAT, and that the tax paid on capital goods purchases is not creditable. The exemptions from the VAT are relatively few, although new exemptions for some agricultural products were introduced at the end of February. The Government has little experience in the administration of VAT, but the authorities anticipate few difficulties in the short term as most of the tax will be collected from state-owned companies.

The company profits tax, adopted in 1991, applies to all domestic and foreign companies at a flat rate of 35 percent. The personal income tax has been restructured in 1992: marginal tax rates have been reduced from 12–60 percent to 12–40 percent and the exemption for members of collective farms removed, although many other exemptions remain.

The two other major sources of revenue in the 1992 budget are fixed payments to the budget by the state-owned Gas and Cotton Corporations and revenue from foreign economic activity. Fixed payments by the Cotton and Gas Corporations are profit transfers payable to the Government over and above company income tax and VAT payments. Revenue from foreign economic activity comprises the proceeds from the sale of imported food by the Government at domestic retail prices. The cost of acquiring this food, which is paid for in hard currency, appears implicitly as an expenditure item in the budget.

On the *expenditure* side, the financing of the national economy consists mainly of development (capital) expenditure (7 percent of GDP in 1992) and subsidies on account of price differentials (16.5 percent of GDP). The large expenditure on subsidies arises from the compensation paid to the agencies and enterprises required to sell food and medicine at controlled retail prices that fall below wholesale prices. Social and cultural expenditure, consisting of expenditure on education, health care, and social security or welfare, amounts to 30 percent of total expenditure.[9] Other expenditure includes rub 3.5 billion as payment for Commonwealth defense expenditures.

The budget includes an allocation of rub 3.9 billion for government purchases of hard currency. Export companies have to surrender a proportion of their foreign exchange earnings, typically about 70–75 percent, to the central and local governments (see Table A27). In return they receive, in rubles, the domestic price equivalent for the goods exported. As domestic prices are well below international prices, the system constitutes a substantial implicit tax on exporters. The 1992 budget projects that $545 million of hard currency will be surrendered in 1992, at a cost to the budget of rub 3.9 billion, implying an average exchange rate of rub 7.2 per U.S. dollar.[10] The hard currency will be used to purchase imported food on world markets, to purchase imports required by the Government, and to accumulate reserves.

According to the authorities, the overall fiscal deficit of rub 4.2 billion for 1992 is based on conservative revenue projections, and some additional revenues not yet budgeted might be forthcoming that would be sufficient to close the budgetary gap without recourse to financing. For example, about rub 2 billion of additional VAT revenue could be generated as the result of the sale of natural gas to other former republics at prices higher than assumed in the budget, and another rub 2 billion could be raised in the form of additional fixed payments by the Cotton Corporation as the result of higher exports of cotton than assumed in the budget.

Alternative Projections

The 1992 budget, as summarized above, conceals a number of implicit revenues and subsidies that arise from the foreign exchange transactions of the Government. When these transactions are evaluated at an exchange rate closer to that in other former republics and under the assumption of further price liberalization in 1992, a radically different budgetary outlook for 1992 emerges. An

IMF alternative projection is based on an average exchange rate in 1992 of rub 57 per U.S. dollar and on revised assumptions about the outlook for inflation, wages, and output. The IMF projection for the foreign exchange needs of the Government in 1992 is $617 million, with $371 million for food imports, $79 million for imports of capital goods by the Government, $95 million accumulated in the hard currency fund, and $70 million for net external debt service, after taking account of the deferral of amortization payments under the agreement with the Group of Seven industrial countries.

With the foregoing assumptions, the explicit import bill (food and other imports) of the Government would become rub 27.8 billion. In addition, the revised assumptions for nominal GDP, inflation, and wage increases would add about rub 9 billion to the authorities' projections for expenditure on salaries, pension fund contributions, and other items, even after taking account of substantial savings on consumer subsidies as a result of the assumption of price liberalization.[11] On the revenue side, the alternative assumptions would produce higher revenues from the VAT, company income tax, excises, and personal income tax. However, in the absence of corrective fiscal measures, there would be an overall fiscal deficit of rub 16.8 billion and, after taking account of repayments on external debt, a financing requirement of rub 18.6 billion (14 percent of GDP).

It is clear from the projections above that if the Government follows the course of further price and exchange rate liberalization in 1992, in accordance with likely developments in the ruble area, it will need to take further substantial revenue-increasing or expenditure-reducing measures. (It is assumed that the State Bank of Turkmenistan will not be providing any net financing to the Government in 1992 in keeping with the tight monetary policies required to reduce inflation in the ruble area.) It has been suggested that additional revenue could be raised from a windfall profits tax on the export companies that benefit from exchange rate liberalization, and from additional fixed payments and tax payments by the Gas Corporation. A more restrictive wage policy, based on expected inflation in the second half of the year rather than past price increases, should also be considered. The savings generated by these measures would be adequate to cover all projected expenditure, including additional financing for the Pension Fund and an amount to be put toward a social safety net to protect the most disadvantaged groups in society from the impact of more rapid price and exchange rate liberalization. The net impact of these measures would be to bring the budget closer to balance, or to a moderate surplus, in line with the need to repay arrears on external debt and generate current savings for investment in the future diversification of Turkmenistan's productive structure.

Monetary Policy

The authorities have reaffirmed their intention to remain in the ruble area and are aware of the need for members of the ruble area to adopt uniform policies. For conformity to occur, however, the authorities believe that formal arrangements for monetary policy coordination are urgently needed. Pending emergence of full agreement on formal coordination arrangements, the authorities will try to avoid policies that may be in conflict with those of other members of the ruble area. However, as a safeguard, the Turkmenistan Government has considered the possible introduction of a separate currency. No specific steps have yet been taken, however, and there are no plans to print any notes at this time. Irrespective of the monetary arrangements to be used, sound financial policies must be in place to ensure that stabilization is achieved and the full benefits of the reform effort realized.

The SBT estimates the net issue of currency for 1992 will be rub 11–14 billion, compared with an estimated stock of rub 3 billion in 1991. The authorities feel that such a large inflow of ruble notes is required to cover the financing requirement of the enterprise sector in light of recent and prospective price developments. The authorities believe that the Central Bank of Russia (CBR) will not have any problem in satisfying Turkmenistan's requests for currency.[12] Nevertheless, the authorities

experienced some problems with the availability of currency late in 1991. As a result, a presidential decree was signed on January 4, 1992, requiring that: (a) the authorities should not service or redeem Union bonds for 1992;[13] (b) financial instruments issued by other governments of the former republics cannot be cashed in Turkmenistan; (c) checks issued outside the country cannot be honored by the financial institutions; (d) banks are not allowed to transfer their surplus ruble resources to the other former republics; and (e) deposits made through noncash means (transfers, direct debits, payment orders, or checks) cannot be withdrawn for cash for 6 months.

The authorities are aware that the control of credit growth will require substantial improvements in monetary management by the SBT. The legal framework, and the draft central bank law, in its present form, do not allow the SBT to assume the role of a full central bank. The draft law limits SBT credit to the Government to 5 percent of GNP, and the SBT is expected to charge interest on such loans at a rate of 12 percent per year, compared to the current rate of zero percent. It will be some time before these problems are fully addressed. In the meantime, the SBT should establish a quarterly ceiling on refinance credit and discontinue the automatic and unlimited access of banks to its credit facilities. Moreover, refinance policy should not be used as an instrument for the sectoral allocation of credit.

The SBT should also take measures to increase the level of interest rates by raising its refinance rate to at least 20 percent, in line with the rate in other countries of the ruble area; the newly established deposit rates of the Savings Bank should also be raised substantially, with the minimum rate set at 18 percent.[14] In order not to thwart these efforts, the ceiling of 3 percentage points on the margin between the average lending and deposit rates should be raised and later phased out as competition in the banking sector intensifies.

The reserve requirement system, currently set at 15 percent of banks' deposits, except for those of the Savings Bank, is in need of thorough review. For example, having government debt instruments eligible as a reserve asset is detrimental to effective credit control. Only deposits at the SBT and, eventually, cash in banks' vaults should be allowed as reserve assets. The reserve requirement should also be made less rigid by basing the calculation and maintenance of required reserves on an average basis rather than on an end-of-the-period one, and by paying interest on required reserves.

Furthermore, the SBT should be legally entrusted with the management of the foreign exchange reserves of the country and should play an active part in the management of external debt. A better delineation of functions between the Vneshekonombank, the Republican Commercial Bank of Turkmenistan, and the SBT is also required. Banking supervision and surveillance procedures also need to be strengthened. Prudential regulations are currently inhibiting the development of competition, and some streamlining would be desirable.

External Policy

The external outlook for 1992 remains quite uncertain since interrepublican and foreign trade agreements, pricing policies, and payments mechanisms have not yet been clearly defined. The authorities are projecting that export revenues in convertible currencies in 1992 will exceed $1.1 billion, 60 percent of which will be from gas exports. Given the authorities' desire to accumulate $95 million in convertible currency foreign assets in 1992, and taking account of the expected foreign exchange needs for external debt service, the import bill that is to be financed in 1992 would be close to $0.9 billion.

With regard to interrepublican trade, the outlook is also unclear because of uncertainty about the terms of the trade agreements with other former republics. However, according to the prices and volumes of individual exports and imports that the authorities have been using in their discussions with other republics of the former U.S.S.R., Turkmenistan would register a substantial interrepublican trade surplus in 1992.

The authorities are currently in the process of negotiating bilateral trade agreements with other republics of the former U.S.S.R. While there appears to be progress on the determination of the volumes of goods to be traded, agreement on the prices of these goods has been more elusive. In this context, the negotiations between Turkmenistan and Ukraine have encountered substantial difficulties related to the issue of the relative price of gas exports to Ukraine vis-à-vis the price of Ukrainian exports to Turkmenistan. As a result, trade of goods (including gas) between the two countries came to a halt in March 1992. Under the current legislation, a number of goods can only be exported under license. The authorities argued that licensing was needed to ensure that contracts were not signed at prices less favorable than those prevailing in international markets, to monitor foreign exchange earnings, and to limit the use of barter arrangements.

Through early 1992, Turkmenistan has been partially using the exchange rate structure provided by the Central Bank of Russia. There are indications that individual enterprises have been buying and selling foreign exchange among themselves, on a limited scale, through the intermediation of the domestic banking system. In principle, these operations are not subject to any restrictions, as is the case with foreign exchange transactions between individuals. However, most export proceeds have to be surrendered to the Government at highly overvalued exchange rates.

There is presently a serious scarcity of foreign exchange partly owing to Turkmenistan's inability to mobilize what it views as its accumulated foreign exchange holdings in the Vneshekonombank-U.S.S.R.; in addition, no substantial payments have yet been made on exports during the first two months of 1992. Arrangements are being made to obtain payments, particularly from gas exports, by the end of the first quarter of 1992 and thereafter to obtain quarterly settlements of these exports' proceeds. Assuming normalization in export receipts and the realization of the assumptions on energy prices and volumes, Turkmenistan is not likely to face balance of payments difficulties in 1992.

The authorities are preparing legislation aimed at creating the conditions to attract foreign investment to Turkmenistan. The draft law would permit foreign investment in all sectors, provided that the licensing and project specification requirements outlined in the legislation are observed (see Annex 4). Foreign investors in the areas of consumer goods and services are expected to enjoy special concessions. The law would stipulate that foreign investments may not be subsequently nationalized. The draft law still needs to spell out clearly the conditions for granting licenses to foreign investors and for the repatriation of income and should aim to avoid any disincentives to private activity in general, and foreign investment in particular, arising from labor regulations.[15] About 20 joint ventures have been registered, but so far none has begun operations.

Social Safety Net

The authorities of Turkmenistan attach great importance to measures to protect the neediest groups of the population from the effects of inflation and the short-run impact of economic reform. The Government already provides a more generous level of social support than do many other governments of former republics, partly because of the rapid rate of population growth. For example, to protect the incomes of households with large families, a complex system of social security payments and family allowances has been put in place (see Annex 6 for details). These benefits were increased by an average of 90 percent on January 1, 1992.

At the beginning of 1990, the minimum pension was rub 70 per month and the maximum was rub 120. Following the April 1991 price reform, *another* rub 65 per month was added to pensions, giving a range of rub 135–185 per month. On January 1, 1992, the minimum pension was raised by 160 percent to rub 350 per month while the maximum pension was increased substantially to rub 1,050 per month. The main sources of revenue for the pension and social security funds are a levy of

26 percent (increased in 1992 to 37 percent) on employers' wage bill, a 1 percent withholding tax on wages, and transfers from the Ministry of Finance.

At present there is no system of unemployment compensation in place. However, according to the Employment Law passed on November 12, 1991, an Employment Fund is supposed to be established on the basis of a 2 percent levy on the wage fund of enterprises. But the burden of payroll taxes is already high, and the Government is looking for an alternative source of revenue. Solutions being discussed include an increase in the tax on profits from the Gas Corporation or finding the revenue from within the 37 percent social security contributions already levied on wages.

The authorities are also considering the introduction of an indexation mechanism to be applied to all wages, pensions, and benefits. A draft law on indexation has been prepared, but there is considerable debate on whether or not to enact it. Under the proposed system, wages would be increased every three months according to past increases in the price of a minimum consumer basket. Those earning the minimum wage would receive full compensation for inflation. Additional earnings up to twice the minimum wage would receive 80 percent compensation for inflation rate. No indexation is proposed on that part of earnings higher than twice the minimum wage. On the basis of the present wage structure, the mechanism would imply indexation to past inflation of about 60 percent for those on average wages. However, with the current high inflation, wage differentials would narrow very rapidly and pressures for larger wages increases would build up. Because the proposed scheme could entrench inflationary expectations, it would be preferable to retain a discretionary system for adjusting wages while protecting the real value of benefit payments within budgetary constraints.

V. Priority Areas for Technical Assistance

Central banking is, perhaps, the area that requires the greatest, and most immediate, attention, although there is a need for technical assistance in all areas. The State Bank of Turkmenistan urgently requires assistance in accounting and auditing, in the conduct of monetary and foreign exchange operations, in banking supervision and regulation, on payments clearing and settlement systems, and on organizational structure and management methods.

Statistics is the second area where rapid action is required. Although data provided to the IMF have been useful, the economic and financial statistical base has serious methodological and other shortcomings that restrict its usefulness in monitoring economic developments and in devising the quantitative framework required for a sound financial program. It will be necessary to develop the capacity to produce comprehensive statistics on national accounts, prices and employment, government finance, money and banking, balance of payments, and external debt.

In the *fiscal* area, Turkmenistan could benefit from a rapid review of the tax system, especially if the Government decides to move away from a system of implicit taxation. Tax administration is another area where current systems and procedures could be strengthened, especially for the recently introduced value-added tax. Improved management of the Treasury and mechanisms for close coordination with the State Bank and other banking institutions are also required. Social expenditures and programs are another critical area in which broad-ranging assistance is required.

In addition, it will be important to intensify the *training of professional personnel* in different areas. Turkmenistan officials have been informed about the courses and seminars offered by the IMF and have been invited to apply. Training could also be obtained by directly contacting corresponding institutions in other countries. Technical assistance measures being considered by the World Bank are described in Annex 7.

Notes

1. All references to tons are to metric tons. For further details on the energy sector, see Annex 1.

2. At the heart of the irrigation system is the Kara Kum canal. The construction of the canal commenced in the 1950s with plans to link the Amu Darya river in the east of the country with the Caspian Sea on its west. At present, the canal's length is 1,200 kilometers, with plans to extend it to 1,340 kilometers.

3. There are problems in the statistics on use of NMP in 1990 and 1991 (see Table 2), but the available evidence strongly suggests a significant decline in domestic absorption in the past two years.

4. The share of state subsidies and compensation for retail price differentials rose from 17 percent of expenditures in the budget's national economy category in 1990, to 37 percent in 1991, and amounted to 4.5 percent of GDP in 1991 (Table A28).

5. The minimum wage is actually set according to a tariff with about 20 steps for workers with different qualifications. For example, the minimum wage for unskilled workers ranges from rub 350 to rub 732 per month, while the wage for teachers and doctors ranges from rub 812 to rub 1,239.

6. For an explanation of the USF and FSS see the companion Economic Survey, *The Economy of the Former U.S.S.R. in 1991* (Washington: International Monetary Fund, 1992).

7. There is only partial information on the foreign and interrepublican transactions of Turkmenistan, in particular for 1991. On the basis of information made available by different government agencies in Turkmenistan, as well as information available from statistical agencies in Moscow, the IMF staff has put together estimates of the balance of payments for interrepublican transactions (in rubles at domestic prices) and foreign transactions (both in U.S. dollars at international prices and in rubles at domestic prices) (Table 6 and Table A34). In the period up to 1991, foreign trade in U.S. dollars valued at international prices is an inappropriate measure of the impact of international transactions on the economy of Turkmenistan, as essentially all trade was done through Moscow and domestic exporters (importers) received (paid) domestic prices. The situation in 1992 will be different, as Turkmenistan is carrying out its foreign trade directly with its foreign partners.

8. Using a domestic price of rub 34 per thousand cubic meters, foreign exports of gas raised assigned exports abroad by about 60 percent in 1991.

9. Certain social benefits are also provided by the Pension Fund and the Social Insurance Fund, both of which are off budget (see Annex 6).

10. In fact, the Gas Corporation is required to surrender 80 percent of its foreign currency earnings without receiving any ruble payment in return. If gas is excluded, the implicit exchange rate for other enterprises would average about 17 rubles to the dollar.

11. In this projection, it is assumed that the domestic food prices will be fully liberalized and the price differential subsidy will be paid only for six months in 1992. It is further assumed that the Government will make compensatory payments to cover the deficit of the Pension Fund after the increases in salaries and pensions.

12. The Central Bank of Russia (CBR) is expected to charge 21 percent on the notes shipped to Turkmenistan: a flat 1 percent to cover the costs of printing and transport, plus an interest charge of 20 percent per annum for any credit required for the note purchase. The 1992 credit limit for Turkmenistan at the Central Bank of Russia is yet to be well defined.

13. These bonds were issued by the U.S.S.R. until 1991. The proceeds were divided equally between the U.S.S.R. budget and the Turkmenistan budget. The service and redemption of the bonds was executed by the Turkmenistan Government, but they were a liability of the U.S.S.R. Since no counterpart financing was appropriated in 1992 for this operation in Turkmenistan's budget, honoring these obligations would have constituted a budget expense in addition to a source of domestic credit expansion.

14. The deposit rates of the Savings Bank were raised on January 1, 1992, to 4 percent on current accounts, 10 percent on deposits of 1–5 years maturity, and 15 percent for deposits of longer maturity. There is also a proposal to index the return on these deposits to the increase in the retail price index over the previous year. This procedure, however, will jeopardize the attainment of monetary policy objectives, given the present weaknesses in the capacity of the SBT to control credit effectively.

15. The draft law requires that conditions relating to hiring, employment, dismissal, working hours, provision of fringe benefits, guarantees, and compensation be no less favorable in legal entities with foreign participation than the conditions laid down for employees of state enterprises.

Tables

Table 1. Basic Data

Social and demographic indicators

Area	488,000 sq. km.
Population density	7.7 per sq. km.
Population	3.751 million
Rate of population growth	2.6 percent
Life expectancy at birth	65.2 years
Infant mortality rate	5.47 percent
Hospital beds per ten thousand persons	111

	1988	1989	1990	1991 Est.
	(in millions of rubles)			
Net material product (NMP)	4,718	4,828	5,321	13,771
GDP[1]	6,542	6,733	7,344	18,591
Origin of NMP	*(in percent)*			
Industry	26.1	22.8	15.7	19.6
Agriculture	39.0	43.4	47.9	46.4
Construction	20.5	18.1	17.9	22.7
Transport and communications	6.3	6.4	8.5	4.2
Other	6.1	9.4	10.1	7.1
Ratios to GDP				
Exports				
Foreign[2]	1.7	1.8	1.6	11.5
Interrepublican	36.5	35.9	33.6	36.2
Imports				
Foreign[2]	2.7	4.0	4.2	8.2
Interrepublican	38.0	40.8	39.9	30.3
Current account[3]				
Foreign[2]	...	...	-3.2	2.3
Interrepublican	...	...	-0.4	15.6
Government revenue	32.9	34.2	44.1	34.9
Government expenditure	31.4	33.0	42.4	31.7
Public sector overall surplus	1.6	1.2	1.7	3.2
Broad money (end of year)	...	81.5	92.0	98.6
Change in broad money	...	...	17.3	62.2
Annual changes in selected indicators				
Real NMP	10.6	-6.9	1.5	-0.6
NMP at current prices	5.6	2.3	10.2	158.8
Retail prices (annual averages)	0.1	2.1	4.6	90.4
Wholesale prices (industry average)	...	...	4.4	210.6
Government revenue	...	7.0	40.6	100.3
Government expenditure	...	8.2	40.1	89.3
Broad money (M2)	...	...	23.2	171.1
Currency	...	...	13.6	145.3
Deposits	...	...	27.2	180.7

Table 1 *(concluded)*

	1988	1989	1990	1991
Annual changes in selected indicators (concluded)				
Net domestic assets of the banking system	...	...	133.9	232.4
Credit to the government (net)	...	...	...	-93.1
Credit to the economy	...	...	9.8	194.7
Merchandise exports (in dollars)[2]	...	1.6	-16.9	46.9
Merchandise imports (in dollars)[2]	...	13.4	-12.4	-5.3

	1988	1989	1990	1991
General government operations		*(in millions of rubles)*		
Revenue	2,152	2,303	3,239	6,488
Expenditure	2,054	2,222	3,114	5,897
Overall surplus	98	81	125	591
External Trade				
		(in millions of U.S. dollars)		
Foreign balance	-101	-234	-249	341
Merchandise exports[2]	179	197	148	1187
Oil and gas exports	0	5	30	1052
Merchandise imports[2]	280	431	397	846
		(in millions of rubles)		
Interrepublican balance	-97	-328	-458	1,095
Interrepublican exports	2,389	2,418	2,469	6,731
Oil and gas exports	801	745	705	2,155
Interrepublican imports	2,486	2,746	2,927	5,636

[1]GDP was obtained by multiplying Turkmenistan's NMP by the average GDP/NMP adjustment factor of the U.S.S.R.

[2]Foreign trade was converted to rubles using nominal exchange rates. Rates utilized (in rubles per U.S. dollar) were 0.63 in 1988 and 1989, 0.77 in 1990, and 1.75 in 1991.

[3]Includes net public sector transfers which were estimated by the IMF staff by applying Turkmenistan's share in the U.S.S.R. debt to Union-wide flows.

Table 2. Output and Price Indicators

(In percent, unless otherwise indicated)

	1980	1985	1986	1987	1988	1989	1990	1991[1]
Share of net material product								
By origin:								
Agriculture	35.3	41.1	37.3	39.9	39.0	43.4	47.9	46.4
Industry	29.8	28.2	29.9	28.5	26.1	22.8	15.7	19.6
Construction	12.9	16.8	19.8	18.9	20.5	18.1	17.9	22.7
Transport and communications	4.6	4.7	4.6	5.3	6.3	6.4	8.5	4.2
Other	17.5	9.1	8.5	7.4	8.1	9.4	10.1	7.1
By final use:								
Consumption	71.5	78.4	80.0	77.3	76.3	81.1	...	...
Accumulation	21.7	36.8	35.2	28.6	25.7	28.2	...	...
Trade balance	...	-12.4	-6.2	-10.7	-6.0	-13.9	...	...
Growth rate in constant prices								
Net material product	...	...	4.5	4.0	10.6	-7.0	1:5	-0.6
By origin								
Agriculture	...	...	-4.0	5.4	10.4	0.3	7.2	-1.6
Industry	...	...	7.6	5.6	2.0	-17.9	-22.8	4.4
Construction	...	...	23.0	-4.4	16.9	-14.8	1.6	5.3
Transport and communications	...	...	1.9	22.5	25.4	2.3	42.9	-4.9
Other	...	...	-0.5	2.2	20.9	6.0	5.6	-10.5
By final use								
Consumption	...	...	7.9	1.8	2.6	6.3	...	...
Personal	...	...	8.3	1.1	2.6	6.2	...	...
Social	...	...	5.1	7.0	2.5	6.8	...	...
Accumulation	...	...	--	-16.4	-19.4	1.8	...	...
Inflation (percent per annum)								
Consumer prices				0.9	0.1	2.1	4.6	90.4
Wholesale prices	...	...	...	...	...	...	4.4	224.8
Average wages	...	...	1.0	2.7	5.0	6.2	10.1	53.9
Real wages[2]			-0.1	1.8	4.9	4.0	5.3	-19.2
				(In millions of current rubles.)				
Net material product	3,502	3,995	4,198	4,470	4,718	4,828	5,321	13,771
Gross domestic product	...	5,361	5,714	6,146	6,542	6,733	7,344	18,591

Sources: Turkmen authorities; and IMF staff estimates.

[1]Preliminary figures.

[2]Average wages deflated by retail price index.

Table 3. Consolidated (Central and Local) Fiscal Accounts

(In millions of rubles)

	1985	1986	1987	1988	1989	1990	1991	1992 Proj.
Revenue	1,629	1,786	1,846	2,155	2,303	3,236	6,489	47,964
Tax	826	834	856	895	1,042	1,038	1,972	22,352
Turnover tax[1]	583	576	593	619	711	780	669	--
Value-added tax[2]	--	--	--	--	--	--	--	14,058
Company profits tax	--	--	--	--	--	--	518	5,696
Excises	--	--	--	--	--	--	--	1,502
Sales tax[3]	--	--	--	--	--	--	314	--
Co-ops/public companies tax[4]	44	51	48	46	71	92	122	76
Personal income tax	199	207	215	230	260	166	349	1,020
Nontax	803	952	990	1,260	1,261	2,198	4,517	25,612
Foreign economic activity[5]	--	--	--	--	--	--	11	7,100
State duties	9	9	10	10	9	15	34	274
State lottery	3	3	3	3	3	3	3	--
Funds from social security	104	116	126	140	172	167	--	--
Profit transfers[6]	233	257	283	322	259	312	--	--
Fixed payments[7]	--	--	--	--	--	--	1,551	17,354
Other revenue	240	295	295	397	330	917	1,503	864
Union transfers	197	240	245	364	460	726	1,409	--
State bonds[8]	17	32	28	24	28	36	6	--
Expenditure	1,541	1,703	1,767	2,053	2,221	3,114	5,897	52,151
Financing of national economy[9]	732	813	701	955	1,033	1,848	2,302	25,952
Of which:								
Development expenditure (net)	288	307	317	459	449	510	627	6,425
Social and cultural	723	786	863	967	1,039	1,162	3,356	15,479
Education and science	431	467	518	573	602	655	1,159	7,833
Health care	156	171	186	220	246	283	556	3,458
Direct state subsidies	17	17	18	19	18	17	69	87
Social security	119	131	141	155	173	207	1,572	4,101
Administration	31	31	31	32	30	49	161	1,445
Other[10]	55	73	172	99	119	55	78	9,275
Surplus(+)/Deficit(-)	86	83	79	102	82	122	592	-4,187

Source: Ministry of Finance.

[1]Abolished in 1992.

[2]Adopted in 1992.

[3]Introduced in 1991, abolished in 1992.

[4]Same as company income tax.

[5]Income arising from the sale of goods imported with hard currency.

[6]Transfers from state-owned enterprises (formerly of the Union).

[7]Transfers required from the state-owned Gas and Cotton Corporations. After paying the company profits tax, these two corporations are allowed a margin to cover development expenditure, and the rest of their profit is transferred to the budget.

[8]Not a financing item: state bonds were issued by the former U.S.S.R. government and sold in Turkmenistan. The receipts were divided evenly between the Union and Turkmenistan. However, these bonds were the liability of the Union government making Turkmenistan's share a transfer from the Union.

[9]Including development (capital) expenditure, and subsidies on account of price differentials (for details, see Table A28).

[10]Figures for 1991 include appropriations for acquiring foreign exchange from exporters under the provisions of the hard currency fund regulations.

Table 4. Consolidated Fiscal Accounts

(In percent of GDP)

	1985	1986	1987	1988	1989	1990	1991	1992 Proj.
Revenue	30.4	31.3	30.0	32.9	34.2	44.1	34.9	52.1
Tax	15.4	14.6	13.9	13.7	15.5	14.1	10.6	24.3
Turnover tax[1]	10.9	10.1	9.6	9.5	10.6	10.6	3.6	--
Value-added tax[2]	--	--	--	--	--	--	--	15.3
Company profits tax	--	--	--	--	--	--	2.8	6.2
Excises	--	--	--	--	--	--	--	1.6
Sales tax[3]	--	--	--	--	--	--	1.7	--
Co-ops/public companies tax[4]	0.8	0.9	0.8	0.7	1.1	1.3	0.7	0.1
Personal income tax	3.7	3.6	3.5	3.5	3.9	2.3	1.9	1.1
Nontax	15.0	16.7	16.1	19.3	18.7	29.9	24.3	27.8
Foreign economic activity[5]	--	--	--	--	--	--	0.1	7.7
State duties	0.2	0.2	0.2	0.2	0.1	0.2	0.2	0.3
State lottery	0.1	0.1	--	--	--	--	--	--
Funds from social security	1.9	2.0	2.1	2.1	2.6	2.5	--	--
Profit transfers[6]	4.3	4.5	4.6	4.9	3.6	4.2	--	--
Rent payments	--	--	--	--	--	--	8.3	--
Fixed payments[7]	--	--	--	--	--	--	--	18.9
Other revenue	4.5	5.2	4.8	6.1	4.9	12.5	8.1	1.0
Union transfers	3.7	4.2	4.0	5.6	6.8	9.9	7.6	--
State bonds[8]	0.3	0.6	0.5	0.4	0.4	0.5	--	--
Expenditure	28.7	29.8	26.8	31.4	33.0	42.4	31.7	56.7
Financing of national economy[9]	13.7	14.2	11.4	14.6	15.3	25.2	12.4	28.2
Of which:								
Development expenditure (net)	5.4	5.4	5.2	7.0	6.7	6.9	3.4	7.0
Social and cultural	13.5	13.6	14.0	14.8	15.4	15.6	18.1	16.6
Education and science	8.0	8.2	8.4	8.6	8.9	8.9	6.2	8.5
Health care	2.9	3.0	3.0	3.4	3.7	3.9	3.0	3.6
Direct state subsidies	0.3	0.3	0.3	0.3	0.3	0.2	0.4	0.1
Social security	2.2	2.3	2.3	2.4	2.6	2.8	8.5	4.5
Administration	0.6	0.5	0.5	0.5	0.4	0.7	0.9	1.6
Other[10]	1.0	1.3	2.6	1.5	1.8	0.7	0.4	10.1
Surplus(+)/Deficit(-)	1.6	1.5	1.3	1.6	1.2	1.7	3.2	-4.6
before union transfers	-2.0	-2.7	-2.8	-4.1	-5.7	-8.2	-4.4	-4.6

Sources: Ministry of Finance; and IMF staff estimates.

[1]Abolished in 1992

[2]Adopted in 1992.

[3]Introduced in 1991, abolished in 1992.

[4]Same as company profit tax.

[5]Income arising from the sale of goods imported with hard currency.

[6]Transfers from state-owned enterprises (formerly of the Union).

[7]Transfers required from the state-owned Gas and Cotton Corporations. After paying the company profits tax, these two corporations are allowed a margin to cover development expenditure and the rest of their profit is transferred to the budget.

[8]Not a financing item: state bonds were issued by the former Soviet Union government and sold in Turkmenistan. The receipts were divided evenly between the Union and Turkmenistan. However, these bonds were the liability of the Union government, making Turkmenistan's share a transfer from the Union.

[9]Including development (capital) expenditure, and subsidies on account of price differentials (for details, see Table A28).

[10]Figures for 1991 include appropriations for acquiring foreign exchange from exporters under the provisions of the hard currency fund regulations

Table 5. Monetary Survey[1]

	1989 est.	1990 est.	1991 est.	Absolute changes 1989-90	Absolute changes 1990-91	Percentage changes 1989-90	Percentage changes 1990-91
			(In millions of rubles)			(In percent)	
Net external claims[2]	*3,780*	*2,768*	*6,064*	-1,012	2,295	-26.8	82.9
Net domestic assets	*1,706*	*3,990*	*13,261*	2,285	9,271	133.9	232.3
Credit to government (net)	...	306	21	...	-285	...	-93.1
Credit to the economy	2,950	3,240	9,548	290	6,308	9.8	195.0
Other items (net)	...	444	3,692	...	3,248	...	731.5
Broad money (M2)	*5,486*	*6,759*	*18,325*	1,273	11,566	23.2	171.1
Currency in circulation	1,604	1,823	4,471	219	2,648	13.6	145.3
Deposits	3,881	4,936	13,854	1,055	8,918	27.2	180.7
Memorandum items							
Narrow money (M1)	4,011	4,883	13,060	872	8,178	21.8	167.5
Broad money in 1990 prices	5,957	6,759	7,037	801	279	13.5	4.1
Currency deposits ratio	0.41	0.37	0.32				
Velocity of broad money	1.6	1.2	1.5				
			(In percent)				
Ratios to money stock at beginning of period							
Change in net domestic assets	...	*41.6*	*137.2*				
Change in credit to government (net)	...	...	-4.2				
Change in credit to the economy	...	5.3	93.3				
Ratios to GDP							
Net domestic assets	25.3	54.3	71.3				
Credit to government (net)	...	4.2	0.1				
Credit to the economy	43.8	44.1	51.4				
Broad money	81.5	92.0	98.6				

Sources: State Bank of Turkmenistan; and IMF staff estimates.

[1]Data refer to January 1 of the following year. The preparation of a monetary survey for Turkmenistan poses several difficulties. In particular, the figures for currency in circulation and the money stock are subject to a large margin of error. Since 1985, the authorities estimate these aggregates on the assumption that about 65 percent of the net issue of currency leaks out of Turkmenistan. This ratio seems inordinately high, especially for 1991 when the balance of payments recorded a large surplus. Moreover, interrepublican and other foreign assets and liabilities of the banking system are not transparent, and the accounting rules of the banking system differ from conventional practice. In addition to these difficulties, it was not possible to provide a complete monetary survey for 1989 because of discrepancies between the banking system accounts on the one hand, and the fiscal and external accounts on the other.

[2]Includes foreign exchange held by the Government. This item also includes certain ruble claims and liabilities of Turkmenistan vis-à-vis other republics of the former U.S.S.R.

Table 6. Balance of Payments in Domestic Prices

	Interrepublican transactions					Transactions with foreign countries				
	1987	1988	1989	1990	1991	1987	1988	1989	1990	1991
					(*In millions of rubles*)					
Trade balance	-269	-97	-328	-458	1,095	-208	-187	-348	-513	-197
Exports	2,327	2,389	2,418	2,469	6,731	120	245	241	172	1,105
Imports	2,596	2,486	2,746	2,927	5,636	328	432	589	685	1,302
Services, net				-172	-422				-77	-144
Transportation				-166	-415				-57	-97
Travel				-6	-8				-1	--
Interest				--	--				-19	-47
Other				--	--				--	--
Net public sector transfers				600	2,222				--	--
Current account balance										
Including transfers				-30	2,894				-590	-341
Excluding transfers				-630	673				-590	-341
Capital account				-1,062	-447				18	60
Debt transactions (net)[1]				--	--				18	60
Disbursements				--	--				59	157
Amortization				--	--				44	100
Repayment from abroad				--	--				3	4
Interrepublican capital transactions				-1,062	-447				...	...
Inflows				--	--				...	...
Outflows[2]				1,062	447				...	...
Errors and omissions				542	113				86	22

Table 6 *(concluded)*

	Interrepublican transactions					Transactions with foreign countries				
	1987	1988	1989	1990	1991	1987	1988	1989	1990	1991
Overall balance				-549	2,561				-487	-259
Financing				549	2,561				487	259
Net foreign assets of the banking system				549	-2,561				462	265
Arrears[1]				--	--				24	-10
Debt deferral[1]				--	--				--	4
					(In percent of GDP)					
Memorandum items:										
Exports	37.9	36.5	35.9	33.6	36.2	2.0	3.7	3.6	23	5.9
Imports	42.2	38.0	40.8	39.9	30.3	5.3	6.6	8.7	9.3	7.0
Trade balance	-4.4	-1.5	-4.9	-6.2	5.9	-3.4	-2.9	-5.2	-7.0	-1.1
Current account balance				-0.4	15.6				-8.0	-1.8

Sources: Goskomstat, Gosbank, Gosplan, Ministry of Finance; and IMF staff estimates.

[1]In the case of transactions with foreign countries, figures were imputed by applying Turkmenistan's share in external debt to flows for the U.S.S.R. as a whole. This share was determined in the context of the interrepublican agreement on the external debt of the U.S.S.R. in November 1991.

[2]Outflows reflect an increase in State Bank of Turkmenistan claims on Gosbank-U.S.S.R.

Table 7. Alternative Projections for the 1992 Budget

	1992 Budget	Alternative Projection[1]	1992 Budget	Alternative Projection[1]
		(In millions of rubles)		*(In percent of GDP)*
Revenue	47,964	68,309	52.1	51.9
Tax	22,352	35,204	24.3	26.7
Value-added tax	14,058	20,121	15.3	15.3
Company profits tax[2]	5,696	10,541	6.2	8.0
Excises	1,502	2,962	1.6	2.2
Coops/public comps. tax	76	109	0.1	0.1
Personal income tax[3]	1,020	1,471	1.1	1.1
Nontax	25,612	33,106	27.8	25.1
State duties	274	392	0.3	0.3
Fixed payments[4]	17,354	17,354	18.9	13.2
Other revenue	884	1,265	1.0	1.0
Sale of imported food	7,100	14,094	10.7	10.7
Expenditure	52,151	85,078	56.7	64.6
Expenditure on salaries	8,494	12,302	9.2	9.3
Salaries	6,200	8,979	6.7	6.8
Pension fund contributions	2,294	3,322	2.0	2.5
Other ruble expenditure	39,725	44,972	43.2	34.1
Price differential	15,203	7,602	16.5	5.8
Development expenditure (net)	6,425	9,197	7.0	7.0
Other expenditure	18,098	27,227	19.7	20.7
Social security	4,101	7,190	4.5	5.5
Other[5]	13,997	20,037	15.2	15.2
Pension Fund compensation[6]	--	947	--	0.7
Foreign exchange expenditure	3,932	27,805	4.3	21.1
Imports[7]	3,247	25,650	3.5	19.5
Food imports	2,669	21,147	2.9	16.1

Table 7 *(concluded)*

	1992 Budget	Alternative Projection[1]	1992 Budget	Alternative Projection[1]
Nonfood imports	578	4,503	0.6	3.4
Hard currency fund[7]	685	--	0.7	--
Foreign interest payments[7]	--	2,155	--	1.6
Surplus(+)/Deficit(-)	-4,187	-16,769	-4.6	-12.7
Financing gap	--	18,564	--	14.1
Financing	4,187	-1,795	4.6	-1.4
Domestic bank	4,187	--	4.6	--
Credit to government	4,187	5,415	4.6	4.1
Hard currency fund deposits[7]	--	-5,415	--	-4.1
External financing (repayments)[7]	--	-1,795	--	-1.4
Principal	--	-120	--	-0.1
Arrears	--	-1,676	--	-1.3

Sources: Ministry of Finance; and IMF staff estimates.

[1]Based on assumptions made by the IMF but before allowing for any discretionary fiscal measures taken by the authorities. The principal assumptions include a decline in output in comparable prices; price liberalization in the second half of 1992; some indexation of wages and social benefits; and the adoption of a new exchange system with uniform, and lower, surrender requirements, at the commercial rate of exchange in use in Russia and other republics.

[2]Increased in the alternative projection in proportion to the increase in GDP, plus an allowance for increase in profits, because of the change to surrender requirements. It is assumed that the increased profits of Gasprom on hard currency trade are not automatically taxed.

[3]Personal income tax is adjusted in line with the wage assumption.

[4]The overall impact on the budget of the recent increase in the fixed payment rate on cotton is assumed to be neutral, owing to the increase in subsidies after the recent increase in the wholesale prices of agricultural products.

[5]Net of salaries, pension fund contributions, and foreign exchange related expenditures.

[6]It is assumed that the government covers the deficit of the Pension Fund that would result from the wage and price assumptions underlying the alternative scenarios.

[7]The alternative projections are calculated using the explicit exchange rate of rub 57 per dollar assumed by the IMF.

Annexes

Annex 1. Energy Sector

This annex describes the structure of Turkmenistan's energy sector, the energy pricing policies pursued by the Government, and the country's gas exports.

Structure of the Energy Sector

Turkmenistan is rich in both gas and oil. It has an estimated 8,087 billion cubic meters of *gas reserves*, of which 326 billion cubic meters are proven, albeit not operative (Table A1). Gas reserves are predominantly of the natural gas type and are rich in ethane, butane, and propane. Most of the proven gas reserves are located in the southeast of the country. Turkmenistan also has an estimated 698 million tons of *oil reserves*, of which 101 million tons are proven. Turkmenistan's oil is of the heavy type and it is considered to be of higher quality than Siberian oil. Most of the oil reserves are located in the central part of the country although small amounts have been found on the shelf of the Caspian Sea.

Exploration activities in the nation have slowed recently. The ratio of prospective to operational reserves has fallen from 18 percent in 1986 to 12 percent in 1990; the corresponding ratio for oil has fallen from 53 percent to 47 percent (Table A1). (Prospective reserves are defined as proven but not yet operational reserves.) The authorities are seeking to expedite the process by selling exploration rights to foreign firms: an Argentine company has already won a bid that would give it an exclusive right for seven years to explore for gas in all but the southeast regions of Turkmenistan. The company paid the Turkmen Government a front-end fee of $5.5 million and will receive 32 percent of the proceeds from gas that it locates and extracts. A similar bid for the exploration of offshore oil is being considered.

In 1991, Turkmenistan's *production* of gas was 84 billion cubic meters, of which only 9.5 billion cubic meters were consumed domestically. The plan for 1992 is to produce 80.6 billion cubic meters; the reduction in output reflects a desire to conserve gas until plans for domestic gas processing materialize (Table A2). The country processed 7.1 million tons of oil in 1991, of which approximately 2.2 million tons were imported from Russia (Table A3). The plan for 1992 is to increase oil processing to 8.6 million tons, of which 3.3 million tons would be imported from Russia.

Industrial processing of energy resources in Turkmenistan is carried out by 38 enterprises (out of a total of 1,381 industrial enterprises) employing 18 percent of the total industrial labor force. There are two major oil refineries, at Krasnovodsk and at Chardzhou. The Krasnovodsk refinery is located on the Caspian Sea; it was built in the 1950s, and its technology is by now relatively outdated and inefficient. It processes domestically produced oil and has a capacity of 5.5 million tons per year. The Chardzhou refinery was built in 1991 and it processes imported oil. It has a potential capacity of 6 million tons per year but its current output is only 2.2 million tons. The domestic processing of gas is less developed, although the construction of a plant producing polyethane is due to begin soon.[1] The nation's Gas Corporation (Gasprom) is also investigating the possibility of producing liquefied natural gas on the Caspian Sea and exporting it directly to Europe. Gasprom is also considering the construction of a new gas pipeline that would run to Europe via Iran and Turkey.

Energy Prices

As part of the January 10, 1992, price reform, the Turkmen authorities announced large increases in *energy prices*: most important domestic energy products rose threefold to fivefold, with larger increases for energy for industrial use than for household use (Table A4). Together with the price reform, the Government introduced subsidies on household energy consumption (see Annex 5). Despite the price increases, domestic energy price levels bear virtually no relation to world prices. The authorities' stated policy is to keep those prices as low as possible within existing fiscal constraints.

With respect to *export prices*, Turkmenistan is expecting to receive in 1992 the full world price for its gas exports to Europe—currently about $80 per thousand cubic meters. For its interrepublican gas exports, Turkmenistan has proposed raising the price it charges the former Central Asian republics and Ukraine from rub 34 to rub 870 per thousand cubic meters of gas, while arrangements have been made to charge rub 3,500 per thousand cubic meters for its deliveries to Georgia, Armenia, and Azerbaijan under special barter trade agreements.[2] These prices are not final for 1992 since Russia, the other main gas exporter to the former republics, has already raised its gas prices for interrepublican exports from rub 330 to rub 2,386 per thousand cubic meters and has announced that it will move to world pricing for its energy exports in the second half of the year. Officials in Turkmenistan have announced their intention to follow the same policy.

Gas Exports

In 1991, Turkmenistan was given credit by the Union for gas exports estimated at 12 billion cubic meters (11 percent of total U.S.S.R. *foreign gas exports*). Exports were directed to Poland, Hungary, Czechoslovakia, Yugoslavia, and Romania. In 1992, there are plans to export 11.28 billion cubic meters of gas to Europe, of which 8.33 billion cubic meters would be sold for hard currency, 1.87 billion cubic meters exchanged for consumer goods in barter deals, and the remainder (1.08 billion cubic meters) used to cover transmission and other costs.[3]

Turkmenistan does not have separate contracts with European countries for the export of natural gas (except for one regarding the exporting of 270,000 tons of gas condensates to Finland in 1992). The gas is transmitted to Russia, which in turn pools it with the gas from other sources. Turkmenistan has to renew an agreement with Russia on the ratio of total exports originating from Turkmenistan. There has been a dispute between the two countries on this issue: while Russia proposed that the ratio be determined by Turkmenistan's share of gas production in the two nations (planned at 12 percent in 1992), Turkmenistan wants it to be determined by its share of foreign and interrepublican exports (planned at 30 percent). While most macroeconomic projections worked out by the Government have used the 12 percent ratio, the authorities expressed their desire to reach a compromise solution at a ratio of 23 percent.

Turkmenistan is also a major *gas exporter to other republics* of the former U.S.S.R. (with the exception of the Baltic states and Moldova); Turkmenistan's most important markets are Ukraine, Kazakhstan, the Trans-Caucasian nations, and the northern parts of Russia. In 1991, Turkmenistan exported an estimated 62.9 billion cubic meters to those countries and expects to export a further 59.8 billion cubic meters in 1992.

Because of unsettled disputes over foreign export proceeds and over interrepublican export prices, Turkmenistan has not yet received payment for its 1992 foreign gas exports and for some of its interrepublican gas exports.

Annex 2. Structure of General Government and Budget

Administrative System

Tax administration in Turkmenistan is carried out by the Ministry of Finance, though creation of a tax inspectorate independent from the Ministry of Finance is currently under consideration and is likely to be adopted. The Ministry oversees five tax regions (corresponding to the oblasts) and the special Ashkhabad region. The regions are divided into a total of 70 district branches. The auditing of the largest enterprises is conducted on a regular basis with about 50 percent of these enterprises audited each year. The legal system allows for stiff penalties for tax evasion. Treasury operations are currently handled by the State Bank of Turkmenistan.

Revenue and Expenditure Composition

During the period 1985–90, tax revenue accounted on average for 43 percent of total government revenue, with the remainder coming from nontax revenue sources. On average, the main revenue categories over this period were the turnover tax (31 percent), the personal income tax (10 percent), profit transfers from state-owned enterprises (15 percent), and Union transfers (16 percent of total revenue). The relative importance of nontax revenue in total revenue rose in 1991 to 70 percent mainly because fixed payments from state-owned enterprises were increased following the April 1991 price reform (Tables A5 and A6). The major expenditures in 1985–90 consisted of outlays for the financing of the national economy (including development expenditure and subsidies to cover price differentials) and social and cultural expenditures (including education, health care, and social security). The share of social and cultural expenditure rose from 37 percent of total expenditure in 1990 to 57 percent in 1991 mainly owing to a substantial increase in social security payments (which include direct subsidization and other forms of compensation) as part of the Government's effort to protect the population from the effects of economic reforms.

Relative Importance of Central and Local Governments

In the past two years, the trends in the allocation of revenues and expenditures between the central and local governments point toward greater centralization of public finances. On the revenue side, the main changes observed between 1990 and 1991 were: (i) the Central Government's share in total tax revenue changed from 50 percent in 1990 to about 60 percent in 1991, mainly as a result of the introduction in 1991 of a company profits tax (70 percent of which accrues to the Central Government) and a sales tax (which accrues in full to the Central Government); (ii) the Central Government's share in nontax revenue also rose from 51 percent in 1990 to 72 percent in 1991 as all fixed payments, amounting to 24 percent of total revenue, accrued to the Central Government. The concentration of revenue has been accompanied by a concomitant rise in the concentration of expenditure as the Central Government has taken the lead in implementing the subsidization and compensation program following the April 1991 price reform. The Central Gov-

ernment's share in expenditures rose from about 51 percent of total expenditure in 1990 to 65 percent in 1991, mainly on account of larger expenses to cover retail price differentials, direct subsidies, and administrative expenditures. A continuation of the trend of the past two years is envisaged in the budget for 1992 as a greater proportion of newly introduced taxes will accrue to the Central Government to help finance an enlarged expenditure program.

On the revenue side, it is expected that in 1992 the Central Government will be collecting all fixed payments charged to the state-owned Gas and Cotton Corporations (36 percent of projected total revenue), all the revenue from foreign economic activity (sales of imported food by the Government, constituting 15 percent of total revenue), and all the collections of excise taxes. The company profits tax is to be divided between the local and central governments with the local governments receiving 22 percent of revenue from this source in 1992. Similarly, the revenue from the value-added tax, introduced in 1992, is to be shared by the local and central governments with the oblasts receiving 21 percent of the revenue and the Ashkhabad special region receiving 2 percent. Other minor sources of revenue, including the personal income tax, company profits tax on cooperatives, and state duties, will be transferred to the local governments. The implementation of the above revenue-sharing scheme is projected to give the Central Government a share of about 80 percent of total revenue (excluding a grant to local governments of rub 3.9 billion, or 8 percent of total revenue), which is estimated at rub 48 billion. On the expenditure side, the Government's share in total expenditure is expected to rise to 80 percent in 1992 from 65 percent in 1991, mainly on account of higher subsidies to cover price differentials and an enlarged program to purchase foreign exchange from exporters.

The centralization of public finances at the level of the Central Government appears to have resulted in a deterioration of the budgetary position of the local governments. These governments' fiscal accounts, which were in surplus in 1990 and in balance in 1991, are now expected to show a moderate deficit in 1992.

Impact of Former Union Enterprises on the Budget

Prior to the independence of Turkmenistan from the former Soviet Union in 1991, enterprises under Union control located in Turkmenistan made profit transfers and paid company income tax to the Union budget; their expenditures were also met from the Union budget. After Turkmenistan's independence, the Union enterprises came under the former republic's jurisdiction. The transfers and taxes paid to the former Union, as well as expenditures by these enterprises, reverted to Turkmenistan's budget as of 1992. Payments to the budget by the enterprises in the form of company income tax are expected to amount to rub 4.4 billion in 1992. Most of the projected increase in company income tax collections from rub 0.5 billion in 1991 to rub 5.7 billion in 1992 is therefore attributable to bringing the former Union enterprises under the Turkmenistan's jurisdiction. On the other hand, expenditure by the former Union enterprises is projected to be about rub 2 billion, or 4 percent of total expenditure in 1992. Thus, the net impact on the budget owing to former Union enterprises in 1992 is rub 2.4 billion, which is equivalent to 2.6 percent of GDP.

Annex 3. Structure of Financial System

In line with developments in the rest of the former Soviet Union, the structure of the financial system in Turkmenistan has been changing since 1988, when a two-tier banking system was introduced in the U.S.S.R. Three new banks, each specializing in lending to and borrowing from a particular sector of the economy, were created to undertake some of the functions of the Turkmenistan branch of Gosbank and began operating on January 1, 1988.[4] These banks reported, through their head offices in Moscow, to the Gosbank of the U.S.S.R. The branches were incorporated as independent banks in 1989 and began reporting to Gosbank in Ashkhabad.

Two other institutions, one privately owned, were created in the following two years, and the Ashkhabad branch of Vneshekonombank was incorporated as an independent foreign trade bank. The banking system also now includes the State Bank of Turkmenistan (SBT, the country's central bank) and the Savings Bank.[5]

Despite these changes, Turkmenistan can be characterized as a relatively late starter in establishing a legal and institutional framework to formalize the independence of its financial institutions from Moscow. The SBT, for instance, continued to function as a branch of the Gosbank of the U.S.S.R. until the end of 1991. Its independence from the central institution was affirmed by a presidential decree issued in January 1992, but its statutes have not yet been presented to the Supreme Soviet. Similarly, the Vneshekonombank remained a branch of the U.S.S.R. institution until May 1991 and has not yet become an active player in the financial system.

The draft central bank law, to be issued initially as a presidential decree, will entrust the SBT with the responsibility for money and credit policy, prudential regulation, and supervision of banking institutions, including bank licensing, clearing arrangements, and exchange rate management. However, the role of the SBT in the management of foreign exchange reserves and the administration of foreign exchange regulations has not been clearly defined.

The Savings Bank continues to have a virtual monopoly on household deposits (with its deposit liabilities amounting to over 95 percent of household deposits, all guaranteed by the Government). It provides some small loans to individuals, but the bulk of its funds were placed at the Gosbank in Moscow until the end of 1991. These funds, amounting to rub 2,685 million, have not yet been returned to Turkmenistan. For 1991, it has been agreed that 80 percent of the Savings Bank's funds should be placed at the SBT. The latter pays interest on the deposits at the weighted average cost of funds paid by the Savings Bank. The country's draft law on indexation proposes that the deposit rate paid by the Savings Bank should be indexed to the rate of change of the consumer price index.

Despite recent institutional changes, sectoral specialization of banks remains an important feature of the financial system. However, one bank has been active in competing with the Savings Bank for deposits from the household sector. Moreover, the draft law on banking activities, expected to be presented to the Supreme Soviet of Turkmenistan in May 1992, removes all legal restrictions on banks in this respect, and banks will be allowed to lend to and collect deposits from households and enterprises in all sectors. The draft law on banking activities also obliges the banks to establish and fund a deposit insurance scheme.

Except in the case of the Savings Bank, whose interest rates are fixed by presidential decree, there are no direct administrative controls on banks' interest rates, and banking institutions have a large degree of freedom in setting their deposit and lending rates. In principle, the margin between the weighted average of banks' deposit and loan rates cannot exceed 3 percentage points, but data on banks' interest rates (Table A7) suggest that this limit is not fully effective.

As regards monetary policy instruments, the authorities followed the practice of the Gosbank-U.S.S.R. until the end of 1991. Accordingly, during 1991 and early 1992, the main instruments of credit control included reserve requirements and refinance policy.[6] In practice, however, the level of banks' access to central bank credit was determined outside the control of the central bank and within the framework of a credit plan that was derived from the country's production plan. The credit plan identifies priority sectors, for which the SBT can refinance loans at preferential rates. Changes to the SBT's monetary policy procedures are under consideration, with the aim of creating a framework more suitable for the conduct of monetary policy in a market economy.

Annex 4. Exchange and Trade System

Exchange Arrangements

For most of 1991, foreign exchange operations in Turkmenistan took place under the foreign exchange system of the U.S.S.R. Since the breakup of the Union, the exchange system has lacked clear definition in a number of areas, pending the enactment of a new foreign exchange law.

In principle, Turkmenistan is still using the exchange rate structure provided by the Central Bank of Russia. Weekly cables from Moscow to the State National Bank provide the so-called official, special commercial, and market rates. The official rate is used only as an accounting rate. The special commercial rate, which is the same as the commercial rate used by Russia, plays a role, albeit a limited one, in the calculation of the amount of foreign exchange to be surrendered to the Government and to the local authorities (surrender requirements are discussed below). The market rate is the rate used for the sale of foreign currency between the banks and the public.

There are, in principle, no limitations on the participation of citizens and resident legal entities in foreign currency transactions through authorized banks, although in practice such transactions have been very limited. There are five commercial banks that have been carrying out foreign exchange transactions. Although these banks were licensed to carry out such transactions prior to independence, so far only one bank has obtained the new license which is formally required from the Government of Turkmenistan. Banks authorized to carry out operations in foreign currency are allowed to open foreign currency accounts for any citizen or legal entity that requests such an account. The draft legislation on foreign direct investment would also permit foreign investors to open ruble and foreign currency accounts in Turkmenistan. The Republican Commercial Bank of Turkmenistan, a commercial bank, is at present responsible for handling the foreign exchange operations of the Government.

Imports and Import Payments

According to a presidential decree, certain categories of imports from countries outside the ruble area either are prohibited or require an import license. The State Committee for Foreign Economic Relations has been instructed to work out and submit to the Government the lists of goods and services whose importation would be subject to licensing or prohibition. The customs system of the former U.S.S.R. has been retained for the time being while a new system and a set of import taxes and customs duties are being prepared.

The conditions under which foreign exchange would be made available for the importation of goods and services have not been clearly specified. Indications are that foreign exchange would readily available for goods which the Government considers priority items, a list of which i already been compiled.

Exports and Export Proceeds

Licenses for exports to countries outside the ruble area are provided by the State Committee for Foreign Economic Relations, with the list of goods exported under license specified by presiden-

tial decree. Most licenses are contract-specific and specify the quantity and the foreign currency price of the goods to be exported. A limited number of general licenses is also made available. In principle, the nature of the exporting firm should not affect whether it obtains an export license. The authorities maintain that licensing is necessary to ensure that contracts are not signed at prices less favorable than those prevailing in international markets, to monitor foreign exchange earnings, and to limit the use of barter arrangements. In spite of these objectives, it appears that a substantial fraction of the 62 export licenses granted between September 1991 and March 1992 were for trading within barter arrangements.

A proportion of foreign exchange proceeds from the export of certain goods has to be surrendered to provide for the creation and support of the Government's foreign exchange fund and the foreign exchange budgets of local governments. The compulsory surrender requirements are differentiated according to the degree of processing of exported goods. One set of surrender requirements applies to exports made under specified state plan targets, while another set of surrender requirements applies to foreign exchange proceeds from exports in excess of export targets and state production quotas. Surrender requirements of the first type are in the range of 50–80 percent, including a surrender requirement of 5 percent of export proceeds for local governments' hard currency funds. Surrender requirements for exports in excess of target are one third of those for exports under the export plan, but the minimum surrender rate is specified at 20 percent. This does not apply to exports of goods by producers who have not been given export targets. The surrender of foreign currency receipts has to take place within ten working days from the date payment is received by the exporter.

The surrender of hard currency earnings from exports under the export plan, either to the former republics of the U.S.S.R. or to other countries, is made on the basis of ruble wholesale prices. That is, exporters receive the equivalent of the domestic ruble price of the goods exported in return for the foreign exchange surrendered. However, the ruble amount received may not exceed the limits implied by the special commercial exchange rate set by the State Bank of Turkmenistan. To the extent that domestic wholesale prices are set by the Government at levels that are below international prices, the current system of surrender requirements involves implicit taxes on exporters. Moreover, the implicit exchange rate varies substantially depending on the product.

Foreign currency earnings from exports of natural gas are treated differently from other exports. Effectively, hard currency export earnings are taxed at 80 percent, and the proceeds are transferred to the foreign currency fund of the Government. Furthermore, foreign currency earnings from transportation and insurance are taxed at 20 percent, and the proceeds are transferred to the hard currency fund.

The surrender requirement for hard currency earnings does not apply to: (a) dividends and income received from investments of various sorts; (b) charitable contributions; (c) commission and supply fees for services rendered by Soviet intermediaries; (d) foreign currency paid to foreign firms for transportation and insurance; and (e) capital contributions, payments for shares or securities, and foreign currency sold on the domestic market.

The foreign exchange earnings retained by firms have to be deposited with authorized banks in Turkmenistan or their correspondents abroad.

Capital Transactions

The authorities are preparing legislation that would, in principle, permit foreign investment in all sectors. Investors would be required to obtain a license from the State Committee for Foreign Economic Relations and to meet project requirements defined in the legislation of Turkmenistan. In the areas of banking, foreign exchange, and insurance, special licenses would be needed from the

SBT and other authorized state bodies. Foreign investors would also be permitted to acquire financial assets. With regard to repatriation, foreign investors would be permitted to transfer their property abroad and to transfer financial assets subject to the (as yet unspecified) law on foreign exchange regulations. The conditions that would apply to the transfer abroad of income from foreign investment in Turkmenistan remain to be clarified.

The authorities are also preparing legislation concerning economic activity in free economic areas, including the activity of legal entities with foreign participation. There are as yet no laws regulating the contracting and servicing of foreign debt by residents of Turkmenistan, while the legal framework for the export of capital by residents is still to be specified.

Annex 5. Key Features of January 1992 Price Reform

Price Liberalization

On January 4, 1992, a presidential decree stipulated that from January 10, 1992, prices of most consumer, industrial, and agricultural goods in Turkmenistan would be determined according to the market principles of supply and demand. Gosplan-Turkmenistan was given the responsibility for regulating, monitoring, and (if necessary) modifying the processes of market price determination and the mechanisms for revaluing the existing stocks of goods. The regulations subsequently issued by Gosplan are virtually identical to those adopted by some of the other Central Asian republics of the former U.S.S.R.[7]

The decree also defines a number of "socially important" goods to which market pricing does not apply. The prices of most of those goods, however, were increased significantly on January 10, 1992. The new, and fixed, prices of those goods are determined by applying a coefficient (specified by the decree) to each good's previous price. Tables A8–A10 provide a listing of the consumer, industrial, and agricultural goods to which price limits still apply and their respective coefficients.

In order to protect households from the adverse effects of price liberalization, the decree instructed the Minister of Finance to provide, as necessary and according to budgetary considerations, subsidies on essential goods whose prices are state-determined.

The decree specified a number of measures intended to guard against abuses of the new price regime. They included giving Gosplan the right to establish a ceiling on the prices charged by firms that possess a monopoly position and to confiscate excess profits and impose fines. Gosplan was also instructed to define clearly the mechanisms for punishing offenders within the context of the existing antimonopoly laws. Finally, Goskomstat was asked to monitor price changes continuously.

Reversals in the Liberalization of Prices

On January 17, prompted by concern over social unrest in neighboring countries and fears it might spread to Turkmenistan, the authorities reversed some of the above price liberalization measures. The reversals included expanding the list of products whose pricing is subject to state control to include grains, fish, children's products, and natural gas sold by intermediaries to households and providers of community services; a complete list of the additions is provided in Table A11. The decree also reduced the controlled increase in the prices of meats, liquefied gas, and electricity (see the second column of Tables A8). (Paradoxically, the same decree raised the controlled price increases for some types of flour).

Agricultural Price Increases

On February 28, 1992, prompted by the need to provide additional incentives to agricultural production, especially following the increase in the prices of agricultural inputs, the authorities further increased the state procurement prices for the 1992 grain and raw cotton crops and for cattle

and milk sold in 1992.[8] Table A12 compares the prices of those products before and after the January 10 and February 28 price increases: it shows that in the first round prices went up by amounts ranging from 40 percent to 400 percent, while in the second round prices increased by a further 40–140 percent. The increase in producer prices, without corresponding increases in retail food prices, resulted in changes to the structure of relative prices and to increased subsidies from the budget. The authorities stated their intention to finance the additional outlays associated with the subsidies and other measures by higher fixed payments from the Cotton Corporation.

Annex 6. Social Safety Net

The Government of Turkmenistan has made it clear that it attaches high priority to protecting its population from the adverse effects of economic change. On March 25, 1991, the Supreme Soviet of Turkmenistan adopted a law which allowed the former country to follow its own social security policy. The authorities have used this independence to provide a more generous level of social support than in many other former republics. The main forms of support are described below.

The Pension Fund

Most of the social assistance in Turkmenistan is paid out by the Pension Fund. The categories of recipients who qualify for assistance and the amount of payments are detailed in Table A13. The most important recipients are retirees (who number approximately 400,000)[9] and the disabled (about 400,000); the two groups together are projected to receive rub 3.1 billion in 1992 (Table A14). The Fund also disburses payments to the mothers of 1.3 million children under 16 years of age: they are projected to receive rub 1.8 billion from the Fund's own resources and another rub 2.8 billion financed by the Government but administered by the Pension Fund.

The monthly pension averaged rub 86.5 in 1989, rub 122 in 1990, and rub 270 in 1991. On January 1, 1992, and in anticipation of the price liberalization, the minimum and maximum monthly pensions were raised to rub 350 and rub 1,050, respectively; the average monthly pension increased by 190 percent to rub 785. Similar increases also applied to the family allowances and other stipends.

The Pension Fund's resources are derived from wage contributions and from government transfers. Specifically, each enterprise contributes 37 percent of its wage bill[10] of which 80.5 percent is allocated to the Pension Fund;[11] the Fund also receives a 1–percent-of-salary deduction from employees. Both resources equaled rub 1.2 billion in 1991 and are projected to total rub 5.4 billion in 1992. Additional transfers are made by the Ministry of Finance to the Pension Fund, which acts on behalf of the Government in administering welfare payments.

Unemployment Compensation and the Employment Fund

At present, there is no compensation system for the unemployed in Turkmenistan. The unemployment payments introduced in April 1991 by the Union were limited to a six-month duration. Moreover, unlike other former republics, Turkmenistan has no Employment Fund although the creation of one was foreseen by the Employment Law passed on November 12, 1991.

According to preliminary calculations by the authorities, the expenditures of the Employment Fund would be expected to total rub 500 million in 1992. The Fund would finance: (i) training programs and education grants (45 percent of the total); (ii) payments of unemployment benefits and early retirement pensions, and the creation of a reserve fund for benefits (27 percent); (iii) temporary work programs (15 percent); (iv) transfers to enterprises for the disabled (6.2 percent); and (v) employment services, labor exchanges, and the purchase of computer and other equipment (3.6 percent).

No decision had been taken as of early March 1992 on the financing of the Employment Fund's expenditures. The original intention was to impose a 2 percent levy on the wage fund of enterprises. Since the burden of payroll taxes is already high, the Government is seeking alternative sources of revenue. The authorities treat the creation of this Fund as a priority since there is concern that the process of privatization will lead to increased unemployment.

Annex 7. World Bank Group Relations

Turkmenistan applied for membership in the World Bank Group on March 2, 1992. A World Bank staff team visited Ashkhabad during February 1992 for the purpose of acquainting the Government with the World Bank Group and learning about the economy and the Government's strategy for market-oriented reform.

Based on information provided by the authorities on priority needs for external assistance, the World Bank mission developed a preliminary assessment of areas where World Bank support could be useful to Turkmenistan's development goals. The priorities identified include: (i) training government officials in market economic management and the adaptation of business methods and public administration to the needs of a decentralized market economy; (ii) providing technical assistance in the design and implementation of reforms in the areas of privatization, the financial sector, trade, government finance, and the social safety net; and (iii) playing a coordinating role in addressing the problems caused by the deterioration of the Aral Sea and its environmental implications.

Annex Notes

1. The plant will be constructed by an Italian firm at a total cost of $700 million. It will be located in the Chardzhou region and is expected to have capacity to produce 200,000 tons of polyethane a year. A quarter of total production would be used by local industries and the rest would be exported as granules.

2. For a transitional period in December 1991, the price was increased to rub 210 per thousand cubic meters. The proposed prices exclude transportation costs. Ukraine has declared that it is not willing to bear those costs and that until this issue is resolved it will not pay for its imports of Turkmen gas. On March 3, Turkmenistan cut off gas supplies, and in retaliation Ukraine is threatening to cut off all its exports of consumer goods to Turkmenistan. Russia has been called upon to arbitrate in the dispute.

3. Gas transmission costs are paid in kind to the Russian concern in charge of gas transportation, which in turn apportions it to the relevant gas companies in the former republics through which the gas passes on its way to Europe (Uzbekistan, Kazakhstan, and Russia).

4. The new institutions included the Agroprombank (capital rub 198 million; 51 branches); the Industry and Construction Bank (capital rub 84.5 million; 11 branches), and the Republican Commercial Bank of Turkmenistan (capital rub 4.9 million, 9 branches). The statistics on the banking system in Turkmenistan for 1988 do not include the operations of these banks and are not, therefore, comparable to those for latter years, due to the change in the institutional structure.

5. The two new institutions included the Senagat Bank, created in 1990 with a capital of rub 44.8 million (with a current network of 6 branches), and the Commercial Bank "Gas," created in 1991 with a capital of rub 5 million. The latter has not yet opened any branches. The State Bank has a capital of rub 5.8 million and three branches. The Savings Bank has a capital of rub 36.8 million, 53 branches, and 481 offices.

6. The instructions from the Gosbank-U.S.S.R. called for a reserve requirement system differentiated according to the type of deposit and applied to all banks except the Savings Bank. In practice, the SBT did not apply a differentiated system of requirements, primarily because of the low volume of time deposits outside the Savings Bank.

7. For a detailed review of those regulations, see the companion study, Economic Review: Kazakhstan (Washington: International Monetary Fund, 1992).

8. The decree included other measures such as removing the value-added tax on most agricultural products and lowering the amount of social security deductions made by collective and state farms and other agricultural organizations. The budgetary outlays associated with these measures will be financed by higher fixed payments from the Cotton Corporation; the net effect on the 1992 budget is expected to be neutral.

9. In Turkmenistan, the retirement age is generally 55 for women and 60 for men. As an exception, carpet workers and cotton farmers can retire five years earlier.

10. The contribution rate was recently raised from 26 percent of the wage bill. Collective farms were exempted from this increase.

11. The other 19.5 percent is allocated to the Social Insurance Fund which is managed by the trade unions and which provides maternity and sick leave payments to members.

Annex Tables

Table A1. Energy Reserves, 1986 and 1990

	Reserves in 1986			Reserves in 1990		
	Likely	Prospective[1]	Operative	Likely	Prospective[1]	Operative
			(*In billions of cubic meters*)			
Gas	6,429.0	553.0	3,147.4	8,087.0	326.0	2,783.0
			(*In millions of tonnes*)			
Oil	317.2	118.5	222.3	697.8	100.9	212.8

Source: Turkmen authorities.

[1]Defined as proven but not yet operative reserves.

Table A2. Energy Balances

	1988	1989	1990	1991	1992 Plan
			(In billions of cubic meters)		
Gas					
Extraction	88.3	89.9	87.8	84.3	80.6
Import	0.2	0.2	0.2	0.2	0.2
Consumption	9.0	8.7	9.2	9.5	9.6
Industry	6.74	6.79	6.84	6.97	7.03
Construction	0.03	0.05	0.03	0.03	0.03
Agriculture	0.04	0.05	0.05	0.06	0.07
Transportation	1.4	1.41	1.41	1.42	1.43
Community needs	0.77	0.8	0.85	0.91	0.92
Other sectors	0.2	0.02	0.02	0.02	0.02
Losses	0.1	0.1	0.1	0.1	0.1
Interrepublican exports	79.5	80.9	78.7	62.9	59.6
Exports to Europe	...	...	...	12	11.3
Other	0.5	--	0.4	0.4	0.4
			(In millions of kilowatt hours)		
Electricity					
Domestic production	14,846.3	16,624.3	16,637.2	17,171.4	15,814.0
Import	979.2	1,058.4	1,113.2	1,132.5	1,280.0
Consumption	7,460.0	8,054.7	8,215.4	8,337.1	9,060.0
Industry	3,401.4	3,864.8	3,532.8	3,589.1	3,600.0
Construction	201.0	218.1	246.8	246.8	250.0
Agriculture	1,610.1	1,643.1	1,817.2	1,831.5	2,510.0
Transportation	794.4	809.2	1,043.7	1,059.1	1,060.0
Community needs	947.2	986.7	1,020.4	1,028.5	1,040.0
Other sectors	505.9	532.8	554.5	580.1	600.0
Losses	1,071.8	1,209.0	1,237.8	1,399.3	94.0
Exports	5,335.3	6,302.2	6,070.8	6,302.5	5,380.0
Heat					
			(Calories)		
Production	6,572.2	6,650.2	6,789.2	6,870.0	6,880.0
Consumption	4,792.1	5,990.6	6,048.0	6,150.0	6,200.0
Households	1,854.6	2,265.7	2,019.6	2,050.0	2,070.0
Community needs	1,053.5	1,043.8	1,255.1	1,280.0	1,260.0
Industrial	1,884.0	2,681.1	2,773.3	2,820.0	2,870.0
Losses	1,780.1	659.6	741.2	720.0	680.0

Source: Turkmen authorities.

Table A3. Oil Processing

(In thousands of tons)

	1988	1989	1990	1991
Processing	5,092.8	5,075.4	5,140.0	7,131.8
Of which:				
Gasoline	685.3	758.5	773.3	813.9
Consumption	658.0	670.0	675.0	690.0
Exports	27.3	88.5	98.3	123.9
Kerosene	113.1	69.1	110.4	98.1
Consumption	28.0	31.0	32.0	33.0
Exports	85.1	38.1	78.4	65.1
Diesel oil	1,541.8	1,618.3	1,572.5	2,236.1
Consumption	862.0	889.0	896.0	903.3
Exports	679.8	729.3	676.5	1,332.8
Mazout[1]	1,437.8	1,302.9	1,218.0	1,991.0
Consumption	286.0	290.0	294.0	398.0
Exports	1,151.8	1,012.9	924.0	1,593.0
Coke	199.8	183.4	177.7	196.0
Other	1,115.0	1,143.2	1,288.1	1,796.7

Source: Turkmen authorities.

[1]Mazout is a semi-refined oil product used for large vehicles and for heating.

Table A4. Energy Prices

(In rubles)

	Unit	Producer prices		Intermediary prices		Household prices		Industrial prices		Export prices	
		1991	Jan.10 1992	1991	Jan.10 1992	1991	Jan.10 1992	1991	Jan.10 1992	1991	Jan.10 1992
Gas	'000 cu.m.	34	170	35	185	50	150	45	235	34	870
Oil	Ton	80	400	...	...	...	...	80	400	80	...
Gasoline AI-93	Ton	137	1,841	260	2,031	520	2,031	260	2,031	260	33,280
Gasoline A-76	Ton	109	1,333	195	1,523	390	1,523	195	1,523	195	24,960
Kerosene											
Industrial	Ton	100	755	135	892	80	...	135	892	135	14,618
Lighting	Ton	103	785	142	922	80	400	142	922	142	15,104
Jet	Ton	114	730	166	867	...	...	...	867	166	14,374
Electricity	Kilowatt hour	4.02	19.75	...	...	4.00	8.00	4.02	19.75	3.14	113.00
Heating	Calorie	...	...	...	...	17.30	52.65	19.00	88.25	...	...

Source: Turkmen authorities.

Table A5. Summary of Public Finances, Central and Local Government

(In millions of rubles)

	1990			1991			1992 (budget)		
	Central Govt.	Local Govt.	Total Govt.	Central Govt.	Local Govt.	Total Govt.	Central Govt.	Local Govt.	Total Govt.
Revenue	1,648	1,589	3,236	4,413	2,075	6,487	38,039	9,924	47,963
Tax	518	519	1,038	1,171	801	1,971	16,717	5,634	22,351
Turnover tax	495	285	780	487	182	669	--	--	--
Value-added tax	--	--	--	--	--	--	10,784	3,274	14,058
Company profits tax	--	--	--	369	149	518	4,431	1,265	5,696
Excises	--	--	--	--	--	--	1,502	--	1,502
Sales tax	--	--	--	314	--	314	--	--	--
Co-ops/public companies tax	1	91	92	--	122	122	--	76	76
Personal income tax	23	143	166	1	348	349	--	1,020	1,020
Nontax	1,129	1,069	2,199	3,242	1,274	4,516	21,323	4,290	25,612
Foreign economic activity	--	--	--	11	--	11	7,100	--	7,100
State duties	--	15	15	7	26	34	--	274	274
State lottery	--	3	3	--	2	3	--	--	--
Funds from social security	187	--	187	--	--	--	--	--	--
Profit transfers	155	158	312	--	--	--	--	--	--
Rent payments	--	--	--	1,551	--	1,551	--	--	--
Fixed payments	--	--	--	--	--	--	17,354	--	17,354
Other revenue	52	865	917	261	1,243	1,504	-3,131	4,016	884
Union transfers	728	--	728	1,409	--	1,409	--	--	--
State bonds	7	29	36	3	3	6	--	--	
Expenditure	1,597	1,517	3,114	3,822	2,074	5,896	41,735	10,415	52,150
Financing of national economy	1,087	762	1,848	1,627	676	2,302	23,292	2,660	25,952
Social and cultural	459	703	1,162	2,049	1,306	3,355	7,945	7,533	15,478
Education and science	189	466	655	337	822	1,159	3,027	4,805	7,833
Health care	51	232	283	82	474	556	785	2,673	3,458
Subsidies	17	--	17	69	--	69	87	--	87
Social security	202	5	207	1,563	9	1,572	4,046	55	4,101
Administration	19	30	49	103	58	161	1,270	175	1,445
Other	33	22	5	42	35	78	9,226	47	9,275
Surplus(+)/Deficit(-)	50	72	122	591	1	592	-3,696	-491	-4,187
(in percent of GDP)	0.7	1.0	1.7	3.2	--	3.2	-4.0	-0.5	-4.6
Memorandum items									
Development expenditure	...	...	510	...	...	627	...	...	6,425
GDP	--	--	7,344	--	--	18,591	--	--	92,000

Source Ministry of Finance

Table A6. Summary of Public Finances, Central and Local Goverment

(In percent)

	1990			1991			1992 (budget)		
	Central Govt.	Local Govt.	Total Govt.	Central Govt.	Local Govt.	Total Govt.	Central Govt.	Local Govt.	Total Govt.
Revenue	50.9	49.1	100.0	68.0	32.0	100.0	79.3	20.7	100.0
Tax	16.0	16.0	32.1	18.0	12.3	30.4	34.9	11.7	46.6
Turnover tax	15.3	8.8	24.1	7.5	2.8	10.3	--	--	--
Value-added tax	--	--	--	--	--	--	22.5	6.8	29.3
Company profits tax	--	--	--	5.7	2.3	8.0	9.2	2.6	11.9
Excises	--	--	--	--	--	--	3.1	--	3.1
Sales tax	--	--	--	4.8	--	4.8	--	--	--
Co-ops/public companies tax	--	2.8	2.8	--	1.9	1.9	--	0.2	0.2
Personal income tax	0.7	4.4	5.1	--	5.4	5.4	--	2.1	2.1
Nontax	34.9	33.0	67.9	50.0	19.6	69.6	44.5	8.9	53.4
Foreign economic activity	--	--	--	0.2	--	0.2	14.8	--	14.8
State duties	--	0.5	0.5	0.1	0.4	0.5	--	0.6	0.6
State lottery	--	0.1	0.1	--	--	--	--	--	--
Funds from social security	5.8	--	5.8	--	--	--	--	--	--
Profit transfers	4.8	4.9	9.6	--	--	--	--	--	--
Rent payments	--	--	--	23.9	--	23.9	--	--	--
Fixed payments	--	--	--	--	--	--	36.2	--	36.2
Other revenue	1.6	26.7	28.3	4.0	19.2	23.2	-6.5	8.4	1.8
Union transfers	22.5	--	22.5	21.7	--	21.7	--	--	--
State bonds	0.2	0.9	1.1	--	--	0.1	--	--	--
Expenditure	51.3	48.7	100.0	64.8	35.2	100.0	80.0	20 0	100.0
Financing of national economy	34.9	24.5	59.4	27.6	11.5	39.1	44.7	5.1	49 8
Social and cultural	14.7	22.6	37.3	34.8	22.1	56.9	15.2	14.4	29.7
Education and science	6.1	15.0	21.0	5.7	13.9	19.7	5.8	9.2	15.0
Health care	1.6	7.4	9.1	1.4	8.0	9.4	1.5	5.1	6.6
Subsidies	0.6	--	0 6	1.2	--	1.2	0.2	--	0.2
Social security	6.5	0.2	6.6	26.5	0.2	26.7	7.8	0.1	7.9
Administration	0.6	1.0	1.6	1.8	1.0	2.7	2.4	0.3	2.8
Other	1.1	0.7	1.8	0.7	0.6	1.3	17.7	0.1	17.6

Source: Ministry of Finance.

Table A7. Interest Rates on Bank Deposits and Loans

(In percent a year)

	1980	1985	1986	1987	1988	1989	1990	1991
Deposit rates								
Deposits in commercial banks[1]	0.5-3	0.5-3	0.5-3	0.5-3	0.5-2	0.5-2	0.5-8	0.5-8
Deposits in savings bank	0.5-3	0.5-3	0.5-3	0.5-3	0.5-2	0.5-2	0.5-8	2-9
Interbank deposits	0.5-10	0.5-10	0.5-10	0.5-10	0.5-10	0.5-10	6-25	6-25
Credits for socialized economy								
Credits to enterprises	1-10	1-10	1-10	1-10	1-10	1-10	6-25	6-25
Credits to housing cooperatives	0.5-3	0.5-3	0.5-3	0.5-3	0.5-3	0.5-3	0.5-3	0.5-3
Credits to Kolhoz and Sovhoz	1-5	1-5	1-5	1-5	1-5	1-5	6-25	6-25
Credits for nonsocialized economy								
Credits for housing	1-8	1-8	1-8	1-8	0.75-8	0.75-8	6-25	6-25
Credits for car purchases	3	3	3	3	3	3	6-25	6-25
Other consumer purchases	2-3	2-3	2-3	2-3	2-5	2-5	3-6	3-6
Refinance credit of central bank	...	...	...	...	...	...	3-5	6-12

Source: State Bank of Turkmenistan

[1]Deposits in Gosbank of Turkmenistan before 1988

Table A8. Increases in Regulated Retail Prices[1]

Type of Good and Service	Adjustment coefficients applied to existing price on:	
	January 10	*January 17*
Food and household items		
Bread and rolls made of wheat and rye flours, and national breads	3.0	...
Milk, dairy products, cottage cheese	3.0	...
Sour milk products	3.0	...
Meat	4.3-5.5	4.3
Table salt sold to population	2.1	...
Vegetable oil	2.0	...
First-grade flour	2 rubles/kg.	3.5
Second-grade flour	1.5 rubles/kg.	...
Rice	2.8 (avg. 6 rubles/kg.)	...
Sugar	3.7 (avg. 8 rubles/kg.)	...
Baby food (including concentrate)	3.0	...
Tea	Avg. 30 rubles/kg.	...
Vodka and alcoholic beverages	4.5	...
Laundry soap	2.5	...
Rent, including dormitory rent	1.5	...
Medicines and medical products (avg.)	4.0	...
Equipment and appliances for the rehabilitation of the disabled	Unchanged	...
Energy products and utilities		
Fuel (household furnace fuel, firewood, etc.)	5.0	...
Liquefied gas	6.0	3.0
Centralized supply of gas	5.0	...
Electricity sold to:		
Rural population	8 kopeks per kwh	3.0
Urban population (w/o electric stoves and heaters)	8 kopeks per kwh	3.0
Urban population (w/ electric stoves and heaters)	6 kopeks per kwh	..
Gasoline	3.8	...
Diesel fuel	2.8	...
Kerosene used for lighting	5.0	...
Communications services (average)	3.0	...
Communal services (including waterpipe services, sewage, and supply of hot water)	2.0	...
Transportation		
Railway transport	3.0	...
Sea transport	2.0	...
Air transport	4.0	...
River transport	2.0	...
Road transport	3.0	...
Taxi transportation	3.3	...

[1]Consumer goods and services whose retail prices are still regulated by the state and their adjustment coefficients (including the value-added tax)

Table A9. Increases in Regulated Wholesale Prices[1]

Type of Good or Service	Adjustment coefficients applied to existing price
Energy Products	
Oil, petroleum gas	5.0
Condensed gas	5.0
Natural gas	5.0
Liquefied gas	5.0
Motor and furnace fuel	5.0
Electricity	4.8
For agricultural consumers	8 kopeks per 1 kwh.
Thermal energy	5.0
Transportation services	
Railway transportation	5.0
Sea transportation, loading and unloading in ports	5.0
Air transportation	5.0
River transportation (except transportation abroad)	3.5
Road transportation	4.0
Basic communications services	3.0

[1]Producer goods and services whose wholesale prices are still regulated by the state and their adjustment coefficients (not including the value-added tax).

Table A10. Regulated Producer Prices for Agricultural Products[1]

Type of Good	Adjustment coefficients applied to existing price
Livestock, including:	
Large-horned cattle	3.3
Small-horned cattle	4.6
Pigs	4.0
Milk	2.8
Raw cotton	2.4
Grain	2.6

[1]Agricultural goods whose producer prices are still regulated by the state and their adjustment coefficients (not including value-added tax).

Table A11. Additions to the List of Regulated Prices[1]

Type of Good	Adjustment coefficients applied to pre-January 4, 1992 price
Food grains (except rice)	3.0
Cakes and pies	5.0
Confectionery	3.0
Pasta (top-grade flour)	4.5
Pasta (first-grade flour)	3.5
Mineral water and soft drinks	3.0
Fish (except expensive varieties)	3.0
Forage	3.0
Sunflower seeds	3.0
Goods for children	3.0
Services	3.0
Natural gas sold by intermediaries for community and household needs	3.0

[1]The January 17 additions to the list of goods and services whose prices are still regulated by the state and their adjustment coefficients (including the value-added tax).

Table A12. Agricultural Prices

(In rubles per ton)

Type of Good	1990	1991	Jan. 10 1992	Feb. 28 1992	Rate of Change (percent) 1991	Jan. 10 1992	Feb. 28 1992
Cotton	1,380	2,880	7,500	17,800	108.7	160.4	137.3
Wheat	270	1,000	1,800	2,500	270.4	80.0	38.9
Barley	260	300	1,000	1,500	15.4	233.3	50.0
Rice	560	2,000	2,800	4,800	257.1	40.0	71.4
Corn	230	375	1,200	2,500	63.0	220.0	108.3
Vegetables	295	700	2,000	2,000	137.3	185.7	--
Melons	150	500	1,000	1,000	233.3	100.0	--
Grapes	530	1,200	4,000	4,000	126.4	233.3	--
Potatoes	515	1,500	3,000	3,000	191.3	100.0	--
Beef	3,210	5,100	15,000	31,000	58.9	194.1	106.7
Lamb	2,730	3,500	15,000	30,500	28.2	328.6	103.3
Pork	1,980	3,800	13,700	29,500	91.9	260.5	115.3
Poultry	2,840	7,000	15,000	15,000	146.5	114.3	--
Milk	420	700	1,700	3,600	66.7	142.9	111.8
Eggs	114	300	1,000	1,000	163.2	233.3	--
Wool	10,200	30,000	110,000	110,000	194.1	266.7	--
Karakul	50	77	350	350	54.0	354.5	--
Silk	7,200	17,100	85,500	85,500	137.5	400.0	--

Sources: Turkmen authorities; and IMF staff calculations.

Table A13. Recipients of Social Assistance from the Pension Fund

(In rubles per month unless otherwise indicated)

Category of Pension Recipient	Amount
Maternity benefit (one-time payment)	525
Mothers with children who are:	
under 18 months of age	158-210
under 3 years of age	123
under 16 years of age	88
Single mothers	158-175
Wives of conscripts with children	210
Nonworking mothers of children under 14 years of age	105
Nonworking mothers caring for a disabled child under 16 years of age	123
Students under 18 years of age	88
Children under guardianship	210
Pensions for the disabled	350
Temporary disability	60
People with AIDS	210

Table A14. Pension Fund Budget, 1992

(In millions of rubles)

Total receipts	8,179	Total expenditure	7,813
Own resources	5,379	Own expenditure	5,013
Employer contributions	5,188	Pension payments	3,062
Collective farms[1]	1,212	Subsidies[5]	1,791
Government[2]	1,846	Operational expenses	160
Others[2]	2,130		
Employees' contributions[3]	191	For the Government	2,800
Collective farms	58	Surplus	366
Government	62		
Others	72		
Receipts from government[4]	2,800		

Source: Ministry of Finance

[1]Employers contribute 26 percent of wages and salaries.
[2]Employers contribute 37 percent of wages and salaries.
[3]Employees contribute 1 percent of gross salary.
[4]Receipts from Government are the additional subsidies to families with children; these subsidies are paid by the Government and administered by the Pension Fund.
[5]For families with children, financed from own resources.

Table A15. Agricultural Production

	1980	1985	1986	1987	1988	1989	1990	1991 Est.
				(In millions of rubles)				
Total gross production	1,748	2,315	2,302	2,557	2,617	2,922	3,702	8,753
Crop production	1,339	1,773	1,764	1,959	2,004	2,238	2,836	...
Of which:								
Cotton	1,048	1,389	1,381	1,534	1,569	1,752	2,223	...
Grains	43	57	56	63	64	72	91	...
Vegetables	66	87	86	96	98	110	139	...
Fruits	24	32	32	35	35	40	52	...
Animal production	409	542	539	598	612	684	866	...
Of which:								
Livestock for slaughter	211	279	277	308	315	352	446	...
Of which:								
Cattle	95	126	125	139	142	158	201	...
Sheep	77	102	101	112	115	129	163	...
Poultry	15	20	20	22	22	25	32	...
Milk	77	102	102	113	116	129	163	..
Eggs	16	22	22	24	25	27	34	..
				(In millions of rubles in 1983 prices)				
Total gross production	2,054	2,357	2,314	2,429	2,639	2,647	2,833	2,787
Crop production	1,371	1,548	1,503	1,635	1,820	1,826	2,000	1,964
Of which:								
Cotton	1,110	1,162	1,087	1,210	1,337	1,409	1,519	1,492
Grains	36	45	46	49	59	53	61	65
Vegetables	83	92	99	115	112	125	122	119
Fruits	16	21	98	100	107	82	107	94
Animal production	663	809	811	794	819	821	833	823
Of which:								
Livestock for slaughter	333	404	381	352	372	371	375	369
Of which:								
Cattle	153	200	191	178	179	176	181	177
Sheep	124	144	152	134	147	149	148	148
Poultry	23	22	29	24	27	29	29	29
Milk	100	138	148	159	163	168	172	175
Eggs	36	26	29	31	31	31	31	28

Source. Turkmen authorities.

Table A16. Industrial Production

	1980	1985	1986	1987	1988	1989	1990
				(In millions of rubles)			
Total industry	*3,498*	*4,049*	*4,183*	*4,313*	*4,489*	*4,641*	*4,800*
Electricity	116	186	208	222	219	248	250
Fuel	933	964	972	990	987	1,004	989
Chemicals and petroleum products	108	145	165	192	207	184	192
Machinery and metallurgy	167	223	220	236	230	244	246
Wood and paper products	35	58	67	70	67	68	64
Construction materials	137	255	271	287	271	275	285
Glass	14	12	14	15	15	14	13
Light industry	1,511	1,649	1,697	1,679	1,834	1,904	2,028
Textiles	(1,311)	(1,321)	(1,452)	(1,434)	(1,570)	(1,636)	(1,745)
Food processing	460	530	541	589	631	670	700
Medicines	7	9	10	11	11	10	12
Printing	5	6	6	6	7	7	8
Other	6	13	13	16	12	13	15
Memorandum item:							
Production of consumer goods at wholesale prices	604	762	791	867	938	1,004	1,070
				(In millions of rubles in comparable prices)[1]			
Total industry	*3,653*	*4,149*	*4,347*	*4,482*	*4,643*	*4,808*	*4,963*
Electricity	120	192	214	229	225	253	258
Fuel	1,042	1,076	1,085	1,105	1,102	1,121	1,104
Chemicals and petroleum products	108	145	165	192	207	191	192
Machinery and metallurgy	174	232	229	246	240	245	256
Wood and paper products	34	57	66	69	66	67	63
Construction materials	140	260	276	292	276	280	290
Glass	14	12	14	15	15	14	13
Light industry	1,516	1,566	1,703	1,684	1,839	1,911	2,035
Textiles	(1,311)	(1,321)	(1,452)	(1,434)	(1,569)	(1,636)	(1,745)
Food processing	485	580	565	615	640	691	715
Medicines	6	9	10	11	11	10	12
Printing	5	6	6	7	7	7	18
Other	10	15	15	18	16	16	17
Memorandum item:							
Production of consumer goods at wholesale prices	626	790	819	899	972	1,040	1,109

Source: Turkmen authorities.

[1]Figures for 1980 valued in 1975 prices; figures for 1985-91 valued in 1982 prices.

Table A17. Construction Activity

(In millions of rubles)

	1980	1985	1986	1987	1988	1989	1990	1991
Gross output of construction	963.5	1,488.8	1,659.0	1,765.8	1,886.3	1,704.2	1,808.1	5,949.2
Of which:								
State	831.5	1,254.1	1,380.7	1,483.2	1,544.0	1,324.2	1,386.8	...
Cooperatives	105.9	155.0	170.5	163.4	177.9	197.1	228.3	...
Private	26.1	79.7	107.8	119.2	164.4	182.9	193.0	...
Material input	410.7	677.1	685.8	762.1	759.6	677.0	736.2	2,696.9
Depreciation	101.0	139.0	142.0	158.0	159.0	152.0	132.0	132.0
Net material product	451.8	672.7	831.2	845.7	967.7	875.2	939.9	3,120.3

Source: Turkmen authorities.

Table A18. Structure of the Industrial Enterprise Sector

Type of Industry	Number of Enterprises	Number of Workers
Total Industry	*1,381*	*139,934*
Electricity	23	6,958
Fuel	6	9,177
Chemicals and petroleum products	9	8,915
Machines and metallurgy	434	22,607
Wood and paper products	119	4,750
Construction materials	287	19,519
Glass	1	968
Light industry	197	45,054
Textiles	(61)	(23,923)
Food processing	255	17,530
Medicines	1	301
Printing	10	1,495
Other	39	2,660

Source: Turkmen authorities.

Table A19. Population, Labor Force, and Employment

(In thousands of persons; end-of-year)

	1980	1985	1986	1987	1988	1989	1990	1991
Population	*2,864*	*3,225*	*3,309*	*3,395*	*3,477*	*3,565*	*3,657*	*3,751*
Working age population[1]	1,397	1,604	1,646	1,689	1,730	1,775	1,847	1,870
Males	(713)	(820)	(842)	(864)	(883)	(904)	(939)	(951
Females	(684)	(784)	(804)	(826)	(847)	(871)	(907)	(920
Nonworking age	1,467	1,621	1,663	1,706	1,748	1,790	1,810	1,880
Males	(694)	(765)	(785)	(808)	(831)	(854)	(866)	(899
Females	(773)	(856)	(877)	(897)	(917)	(936)	(945)	(981
Total employment	*1,140*	*1,338*	*1,368*	*1,407*	*1,445*	*1,492*	*1,542*	*1,582*
Males	601	696	707	721	735	745	760	754
Females	539	642	660	686	710	747	783	828
Of which: in state enterprises	(750)	(857)	(879)	(898)	(915)	(918)	(926)	(935
Unemployed	35	35	36	36	38	36	38	39
Males	(8)	(8)	(9)	(9)	(9)	(9)	(9)	
(9)								
Females	(27)	(27)	(28)	(28)	(29)	(28)	(29)	
(30)								
Participation rate (in percent)[2]	84.1	85.6	85.3	85.4	85.7	86.1	85.6	86.7

Sources: Turkmen authorities; and IMF staff calculations.

[1]Defined as men between 16 and 59 years of age and women between 16 and 54 years of age.

[2]Calculated as the sum of employed and unemployed persons divided by the working age population.

Table A20. Employment by Sector

	1980	1985	1986	1987	1988	1989	1990	1991
	(In thousands of persons, end of year)							
Total employment	1,143.6	1,341.7	1,371.7	1,410.7	1,447.3	1,494.4	1,545.7	1,585.4
Material sphere	860.8	1,011.8	1,028.0	1,054.9	1,074.4	1,111.5	1,148.9	1,175.0
Agriculture[1]	439.0	542.5	552.3	572.0	592.2	622.7	648.5	673.0
Industry	136.3	150.2	152.8	156.9	158.3	159.5	166.4	168.0
Forestry	1.8	2.2	2.2	2.1	1.7	1.8	1.7	1.8
Trade and Catering	76.8	86.4	87.6	88.6	90.7	89.7	87.5	90.0
Construction	113.8	129.8	133.4	135.6	131.2	149.1	154.4	151.3
Transport and communication	70.5	77.1	76.0	75.3	77.3	64.7	62.5	63.5
Other	20.6	23.6	23.7	24.4	23.0	24.0	27.9	27.4
Nonmaterial sphere	282.8	329.9	343.7	355.8	372.9	382.9	396.8	410.4
Education	113.4	134.9	141.4	148.8	158.9	167.8	175.5	184.4
Health	54.9	63.7	67.1	71.1	76.9	81.4	86.4	91
Science, research, and development	22.3	26.7	26.0	26.6	27.1	27.5	28.3	28.5
Housing services and transport	59.1	66.9	69.8	69.4	71.0	68.9	67.8	65.0
Other services	33.1	37.7	39.4	40.3	39.0	37.3	38.8	41.5
	(In percent of total employment)							
Total employment	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Material	75.3	75.4	74.9	74.8	74.2	74.4	74.3	74.1
Agriculture[1]	38.4	40.4	40.3	40.5	40.9	41.7	42.0	42.4
Industry	11.9	11.2	11.1	11.1	10.9	10.7	10.8	10.6
Forestry	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1
Trade and Catering	6.9	6.4	6.4	6.3	6.3	6.0	5.7	5.7
Construction	10.0	9.7	9.7	9.6	9.1	10.0	10.0	9.5
Transport and communication	6.2	5.7	5.5	5.3	5.3	4.3	4.0	4.0
Other	1.8	1.8	1.7	1.7	1.6	1.6	1.8	1.7
Nonmaterial sphere	24.7	24.6	25.1	25.2	25.8	25.6	25.7	25.9
Education	9.9	10.1	10.3	10.5	11.0	11.2	11.4	11.6
Health	4.8	4.7	4.9	5.0	5.3	5.4	5.6	5.7
Science, research, and development	1.9	2.0	1.9	1.9	1.9	1.8	1.8	1.8
Housing services and transport	5.2	5.0	5.1	4.9	4.9	4.6	4.4	4.1
Other services	2.9	2.8	2.9	2.9	2.7	2.5	2.5	2.6
Memorandum items:								
Women employed (in percent)	47.2	46.0	48.3	48.7	49.2	50.0	50.7	52.3
Workers in the state (in percent)	65.8	64.1	64.2	63.8	63.3	61.6	60.0	59.1

Source. Turkmen authorities; and IMF staff calculations.

[1]Includes workers on pnvate plots.

Table A21. Monthly Wages and Salaries by Sector of the Economy

	1980	1985	1986	1987	1988	1989	1990	1991
				(In rubles)				
Total national economy	176.2	191.2	193.1	198.4	208.4	221.3	243.7	375.0
Material Sphere								
Industry	189	206	209	213	228	242	265	446
Agriculture	164	180	184	192	209	242	275	366
Collective farms	165	180	185	195	210	249	279	...
Transport	204	214	220	224	237	250	282	461
Railway	193	207	220	236	253	261	302	...
Water	200	204	226	216	239	283	293	...
Car and other cargos	207	217	220	222	233	245	276	...
Communications	162	173	173	179	206	223	243	429
Construction	232	261	263	264	288	292	315	462
Building jobs	227	258	258	254	272	277	297	...
Trade and catering	146	153	154	153	154	174	206	311
Information and accounting	125	135	150	153	161	193	210	377
Nonmaterial sphere								
Municipality services	136	151	153	160	170	182	196	322
Health care, physical training, and social protection	132	134	135	142	143	149	165	326
National education	153	172	171	186	186	186	189	323
Culture	122	131	129	130	129	129	153	317
Fine arts	134	149	153	150	155	155	183	344
Science and technology	198	220	224	235	266	297	320	455
Finance and state insurance	151	162	168	171	174	196	321	739
Staff of government, economic bodies of government, and budget organizations	160.0	165.0	169.0	176.0	185.0	214.0	306.0	472.0
				(Percentage change over previous year)				
Total national economy	...	...	1.0	2.7	5.0	6.2	10.1	53.9
Material Sphere								
Industry	...	...	1.5	1.9	6.0	6.1	9.5	68.3
Agriculture	...	...	2.2	4.3	8.9	15.8	13.6	33.1
Collective farms	...	...	2.8	5.4	7.7	18.6	12.0	...
Transport	...	...	2.8	1.8	5.8	5.5	12.8	63.5
Railway	...	...	6.3	7.3	7.2	3.2	15.7	...
Water	...	...	10.8	-4.4	10.6	18.4	3.5	...
Car and other cargos	...	...	1.4	0.9	5.0	5.2	12.7	...
Communications	...	...	...	3.5	15.1	8.3	9.0	76.5
Construction	...	...	0.8	0.4	9.1	1.4	7.9	53.0
Building jobs	...	...	...	-1.6	7.1	1.8	7.2	...
Trade and catering	...	...	0.7	-0.6	0.7	13.0	18.4	51.0
Information and accounting	...	...	11.1	2.0	5.2	19.9	8.8	79.5
Nonmaterial Sphere								
Municipality services	...	...	1.3	4.6	6.3	7.1	7.7	64.3
Health care, physical training, and social protection	...	...	0.7	5.2	0.7	4.2	10.7	97.6
National education	...	...	-0.6	8.8	...	...	1.6	70.9
Culture	...	...	-1.5	0.8	-0.8	...	18.6	107.2
Fine arts	...	...	2.7	-2.0	3.3	...	18.1	68.0
Science and technology	...	...	1.8	4.9	13.2	11.7	7.7	42.2
Finance and state insurance	...	...	3.7	1.8	1.8	12.6	63.8	130.2
Staff of government, economic bodies of government, and budget organizations	...	...	2.4	4.1	5.1	15.7	43.0	54.2

Source: Turkmen authorities.

Table A22. Money Incomes and Expenditures of the Population

(In millions of rubles)

	1980	1985	1986	1987	1988	1989	1990	1991
Total money incomes	2,721.5	3,514.2	3,610.9	3,703.6	4,110.7	4,618.0	5,300.9	10,684.3
Wages	1,609.0	2,019.7	2,104.4	2,211.6	2,376.9	2,544.6	2,779.5	4,770.2
Wages of Kolhoz	544.5	661.9	646.9	591.1	675.0	740.3	928.8	1608.3
Wages of cooperatives	...	...	...	...	16.5	78.1	174.4	229.8
Nonwage income of enterprise workers	57.4	62.8	65.9	72.0	77.4	100.7	124.7	285.3
Income from agricultural sales	93.3	194.7	189.1	208.3	219.3	295.3	341.9	1010.3
Pensions, grants, and others	417.3	575.1	604.6	620.6	745.6	859.0	951.6	2780.4
Total money expenditures	2,399.0	3,027.7	3,221.7	3,278.2	3,601.9	3,971.7	4,446.7	7,145.4
Goods	1,940.6	2,434.7	2,615.8	2,648.7	2,910.3	3,199.6	3,595.1	5,673.0
Services	207.5	255.2	272.1	296.3	331.6	366.1	381.6	720.9
Taxes and other payments	217.6	292.4	304.8	319.0	349.0	393.5	456.2	720.5
Other	33.3	45.4	29.0	14.2	11.0	12.5	13.8	31.0
Excess of money incomes over expenditures	322.5	486.5	389.2	425.4	508.8	646.3	854.2	3,538.9

Source: Turkmen authorities.

Table A23. Volume of Retail Sales

	1980	1985	1986	1987	1988	1989	1990	1991
				(In millions of rubles)				
Total sales[1]	2,018	2,555	2,755	2,809	3,109	3,419	3,904	6,216
Of which:								
Foodstuffs	901	1,103	1,122	1,172	1,299	1,478	1,583	2,735
Manufactured goods	1,117	1,452	1,633	1,637	1,810	1,941	2,322	3,481
				(Percentage change over previous year)				
Total sales[1]	...	...	7.8	2.0	10.7	10.0	14.2	59.2
Of which:								
Foodstuffs	...	...	1.8	4.4	10.8	13.8	7.1	72.8
Manufactured goods	...	...	12.5	0.3	10.6	7.2	19.6	49.9

Sources: Turkmen authorities; and IMF staff calculations.

[1]Includes state and commerce stores and private sales.

Table A24. Retail Prices

(Percentage change over previous year)

	1980	1985	1986	1987	1988	1989	1990	1991
Retail Prices	1.3	0.4	1.1	0.9	0.1	2.1	4.6	90.4
Food	0.4	2.3	4.4	4.1	0.3	0.2	2.7	71.3
Of which:								
Meat	0.6	--	0.1	3.5	0.7	0.1	7.5	171.9
Fish	--	-1.4	--	--	--	--	0.5	136.3
Milk and dairy products	--	--	--	--	--	--	--	14.2
Eggs	--	--	--	--	--	--	0.6	133.0
Sugar	--	--	--	--	--	--	--	123.6
Confectionery	--	--	--	--	--	--	3.3	114.1
Tea	--	--	--	--	--	--	2.1	86.6
Salt	--	--	--	--	--	--	--	173.5
Bread and bread products	--	--	--	3.1	--	--	-0.1	19.3
Alcohol	--	6.8	26.5	16.7	--	--	0.4	25 8
Potatoes	2.0	44.1	-14.6	3.6	15.7	21.4	22.5	31.3
Consumer goods	2.0	-1.0	-0.9	-1.0	--	3.4	5.9	105.1
Of which:								
Cotton clothes	--	--	-0.4	-0.5	--	7.4	0.8	160.4
Wool	--	-1.5	--	--	--	3.1	8.3	152.9
Silk clothes	--	-2.0	--	--	--	0.8	2.6	192.9
Fur wear	0.7	-1.1	-1.0	-1.4	--	5.2	4.1	160.9
Knitwear	--	-2.0	-1.8	-2.3	--	5.8	8.4	146.4
Soap and detergent	--	--	--	--	--	5.3	--	90.3
Cultural goods	-0.2	-0.2	-0.3	-0.3	--	4.2	3.3	74.0
Household items	6.3	-1.2	-1.2	-8.9	--	3.6	1.4	116.2
Of which:								
Furniture	4.4	--	--	--	--	1.7	2.4	186.7
Carpets	16	-0.7	-6.6	-7.5	--	-3.9	11.7	213.5

Source: Turkmen authorities.

Table A25. Monthly Retail Prices[1]

	Food Products	Nonfood Products	Total
	(Percentage change over corresponding month of previous year)		
1991			
April	78.1	141.5	110.9
May	73.7	128.6	102.4
November	131.4	123.8	126.5
December	89.8	111.0	103.0
	(Percentage change over previous month)		
1991			
January	3.4	8.8	6.5
February	7.0	10.4	9.0
March	5.6	12.4	9.5
April	47.6	84.8	67.5
May	2.0	20.5	12.2
June	-1.9	0.3	-0.7
July	-7.5	3.9	-1.0
August	-2.7	1.3	-0.4
September	2.6	5.6	4.3
October	3.6	1.9	2.5
November	5.0	2.6	3.5
December	8.2	4.6	5.8
1992			
January	163.7	165.8	165.1
February	...	...	17.9

Source: Turkmen authorities.

[1]Prices in state stores, cooperatives, and agricultural markets.

Table A26. Industrial Wholesale Prices

Year/Month	Percentage change over previous month	Percentage change over corresponding period of previous year
1990	...	4.4
1991	...	210.9
January	72.2	253.2
February	1.0	250.3
March	1.6	227.6
April	27.4	259.9
May	-0.4	289.1
June	1.2	292.7
July	4.1	295.6
August	2.1	300.2
September	15.6	343.0
October	2.0	363.8
November	37.7	443.1
December	1.1	412.6
1992		
January	222.7	584.2

Source: Turkmen authorities.

Table A26. Industrial Wholesale Prices

Year/Month	Percentage change over previous month	Percentage change over corresponding period of previous year
1990	...	4.4
1991	...	210.9
January	72.2	253.2
February	1.0	250.3
March	1.6	227.6
April	27.4	259.9
May	-0.4	289.1
June	1.2	292.7
July	4.1	295.6
August	2.1	300.2
September	15.6	343.0
October	2.0	363.8
November	37.7	443.1
December	1.1	412.6
1992		
January	222.7	584.2

Source: Turkmen authorities.

Table A27. Fiscal Accounts 1992, Calculation of Hard Currency Fund Accumulation[1]

Product	1992 export quota	Average dollar price	Total revenue ($1,000)	Distribution of hard currency						Total govt.
				Company		Local govt.		Central govt.		
				Percent	$1,000	Percent	$1,000	Percent	$1,000	
Cotton Products	--	--	146,500	--	37,259	--	7,325	--	101,917	109,242
Fiber (1000t)	100	1,400	140,000	25	35,000	5	7,000	70	98,000	105,000
Seed (1000t)	25	130	3,250	25	813	5	163	70	2,275	2,438
Oil (tons)	1,000	550	550	42	231	5	28	53	292	319
Fabric (million meters)	5	540	2,700	45	1,215	5	135	50	1,350	1,485
Natural gas (billion cubic meters)[2]	4.85	80	388,000	20	77,600	--	--	80	310,400	310,400
Others	--	--	170,711	--	45,225	--	8,536	--	116,950	125,486
Soaps (1000t)	1	157	157	42	66	5	8	53	83	91
Raw silk (tons)	100	22.2	2,220	35	777	5	111	60	1,332	1,443
Raw skins (1000t)	200	22.5	4,500	30	1,350	5	225	65	2,925	3,150
Washed wool (tons)	400	913	365	35	128	5	18	60	219	237
Rugs (1000 sq. meters)	16	204	3,264	50	1,632	5	163	45	1,469	1,632
Roots (tons)	1,709	850	1,452	42	610	5	73	53	770	843
Proc. root (tons)	109	1,314	143	42	60	5	7	53	76	83
Diesel fuel (1000t)	300	226	67,800	25	16,950	5	3,390	70	47,460	50,850
Motor fuel (1000t)	20	258	5,160	25	1,290	5	258	70	3,612	3,870
Jet fuel (1000t)	90	200	18,000	25	4,500	5	900	70	12,600	13,500
Kerosene (1000t)	15	200	3,000	25	750	5	150	70	2,100	2,250
Furnace oil (1000t)	375	80	30,000	25	7,500	5	1,500	70	21,000	22,500
Fertilizers (1000t)	50	140	7,000	25	1,750	5	350	70	4,900	5,250
Sulphur (1000t)	100	85	8,500	30	2,550	5	425	65	5,525	5,950
Carbon (1000t)	1.5	1,400	2,100	30	630	5	105	65	1,365	1,470
Silk waste (tons)	120	3,700	444	35	155	5	22	60	266	289
Celestine (1000t)	5	1,707	8,535	25	2,134	5	427	70	5,975	6,401
Gypsum (1000t)	50	11.2	560	25	140	5	28	70	392	420
Sulp. nitr. (1000t)	20	160	3,200	30	960	5	160	65	2,080	2,240
Binefite (1000t)	15	150	2,250	30	675	5	113	65	1,463	1,575
Epsenite (1000t)	3	150	450	30	135	5	23	65	293	315
Salts (1000t)	5	120	600	30	180	5	30	65	390	420
Sea salt (1000t)	10	101	1,010	30	303	5	51	65	657	707
Total	-	-	705,211	-	160,084	-	15,861	-	529,267	545,127

Source: Ministry of Finance.

[1]The figures shown here are those underlying the 1992 budget. The authorities have since revised their estimates, including a much higher estimate for gas exports and partly offsetting reductions in other items. On the basis of the new figures, the authorities now expect a total accumulation of $640.3 million in the hard currency fund, but this has not yet been reflected in the budget.

[2]No ruble payment is made for the hard currency transfer from the Gas Corporation

Table A28. Fiscal Accounts, Expenditure on the National Economy

	1990	1991	1992 Proj.
		(In millions of rubles)	
Total expenditure on national economy	1,849	2,302	25,952
Capital maintenance	108	111	645
Community expenditures	27	13	165
Prospecting	--	125	--
State subsidies	18	20	165
Operational expenditures	53	193	1,684
Wholesale price difference	107	--	--
Retail price difference	300	819	15,203
Meat	172	287	3,516
Milk	46	227	463
Bread and flour	77	255	6,032
Canned produce	2	--	--
Fish	4	10	15
Sugar	--	--	1,177
Children's goods	--	5	1,000
Some consumer goods	--	4	--
Sausage	--	15	82
Butter	--	17	1,319
Confectionery	--	--	599
Tea	--	--	480
Rice	--	--	244
Soft drinks	--	--	92
Medicines	--	--	184
Development (capital) expenditure	510	600	7,340
Other	725	421	751
		(As a percent of expenditure)	
Total expenditure on national economy	100.0	100.0	100.0
Capital maintenance	5.9	4.8	2.5
Community expenditures	1.5	0.6	0.6
Prospecting	--	5.4	--
State subsidies	1.0	0.9	0.6
Operational expenditures	2.9	8.4	6.5
Wholesale price difference	5.8	--	--
Retail price difference	16.2	35.6	58.6
Development (capital) expenditure	27.6	26.1	28.3
Other	39.2	18.3	2.9

Source: Ministry of Finance.

Table A29. Details of Development Expenditure, 1992 Budget

(In millions of rubles)

Total excluding VAT	5,500
Construction materials	59
Prefabricated construction parts	25
Printing	16
Consumer goods sector	143
Oil transport	--
Motor transportation	1
Roads	3
Air transportation	106
Communications	6
Trade	7
Housing construction	595
Community construction	492
Public education	437
Cultural material	37
Health	183
Scientific	9
Other	47
Agricultural works	1,939
Caspian Sea project	90
Fuel and energy	406
Railways	64
Aral Sea Consortium	814
Customs	20
VAT on expenditure (at 28 percent)	1,540
Allocation including VAT	7,040
Credit debt payments	300
Total (gross)	7,340
Depreciation and maintenance	915
Net development expenditure	6,425

. Source: Ministry of Finance.

Table A30. Bank Lending by Sector

(End of period, in millions of rubles)

	1980	1985	1986	1987	1988	1989	1990	1991
Total bank lending	1,751.4	3,302.4	2,968.0	3,145.6	3,133.5	2,845.7	3,229.0	9,548.4
Short-term loans	1,631.1	3,105.1	2,758.2	2,926.4	2,756.2	2,589.0	2,861.9	8,961.4
Of which:								
Industry	798.0	890.7	835.0	1,176.8	939.1	939.7	1,122.6	4,443.8
Agriculture	57.2	108.0	100.6	148.9	118.0	148.6	92.0	84.7
Kolhozes	66.1	128.0	180.3	176.8	166.4	127.0	57.0	92.8
Transport and communication	10.8	17.6	15.4	9.5	8.8	7.9	2.7	34.1
Construction	150.0	621.0	289.1	302.7	459.8	266.7	530.2	315.8
Material supplies, etc.	131.0	287.6	255.4	270.6	254.2	225.9	244.4	1,219.0
Trade	393.1	927.2	670.0	690.0	652.2	692.2	468.5	903.2
Other	24.9	125.6	412.4	151.1	157.7	181.0	344.5	1,869.0
Long-term loans	120.3	196.7	209.8	219.2	377.3	256.7	367.1	587.0

Source: Turkmen authorities.

Table A31. Interrepublican Trade at Domestic Prices[1]

(In millions of rubles)

	Imports					Exports				
	1987	1988	1989	1990	1991[2] Est.	1987	1988	1989	1990	1991 Est.
Total	2,596.3	2,486.0	2,746.1	2,927.4	5,636.4	2,327.3	2,389.2	2,418.2	2,469.0	6,731.1
Of which:										
Electric power	8.6	8.9	9.6	10.0	...	64.7	58.9	69.6	67	...
Oil and gas industry	100.2	100.2	100.0	79.3	...	742.6	800.6	745.1	705.1	...
Coal industry	6.9	6.6	8.8	9.6	...	--	--	--	--	...
Other fuel industry	--	--	--	--	...	--	--	--	--	...
Ferrous metallurgy	105.9	107.0	83.9	105.8	...	3.3	3.3	3.4	3.3	...
Nonferrous metallurgy	5.6	9.4	9.5	9.1	...	6.3	5.2	5.2	6	...
Chemical and petrochemical industry	182.2	200.1	209.4	202.6	...	139.5	150.4	151.5	146.7	...
Machine building	935.1	925.6	949.4	958.8	...	43.7	44.2	38.5	35.3	...
Timber, woodwork, paper	119.6	103.1	124.9	96.7	...	0.3	0.3	0.3	0.3	...
Construction materials	54.0	53.5	54.2	50.2	...	23.2	20.9	24.1	28.2	...
Light industry	466.2	395.1	453.3	550.7	...	1,074.2	1,066.1	1,073.8	1,073.2	...
Agricultural production	66.7	28.2	33.6	132.1	...	133.2	137.2	127.6	123.6	...
Food industry	436.6	433.9	477.9	444.7	...	89.8	95.3	85.1	205.9	...
Other industrial production	108.7	114.4	231.6	277.8	...	6.5	6.8	94	74.4	...

Source: Gossnab and Gosplan.

[1]Trade with former U.S.S.R. republics valued at domestic prices. In the case of exports there are wholesale prices paid to domestic producers, while in the case of imports they are realization prices, i.e. retail prices net of transportation costs.

[2]Total import figures for 1991 are consistent with the most recent (September 1991) figures in interrepublican agreements. An alternative total and breakdown by product group was provided by Gossnab but the prices are relatively outdated. The total import figure may be an underestimate.

Table A32. Foreign Trade at Domestic Prices[1]

(In millions of rubles)

	Imports					Exports				
	1987	1988	1989	1990	1991 Est.	1987	1988	1989	1990	1991 Est.[2]
Total	328.3	432.2	589.1	685.3	1,302.1	120.2	245.0	241.2	171.9	1,104.6
Of which:										
Electric power	--	--	--	--	...	--	--	--	--	--
Oil and gas industry	--	--	--	--	...	--	--	2.1	9.3	445.0
Coal industry	--	--	--	--	...	--	--	--	--	--
Other fuel industry	--	--	--	--	...	--	--	--	--	--
Ferrous metallurgy	9.8	8.3	18.5	7.3	...	--	--	--	--	--
Nonferrous metallurgy	--	--	0.1	0.1	...	--	--	--	0.1	--
Chemical and petrochemical industry	8.1	8.7	21.0	26.6	...	1.5	1.5	0.8	6.7	15.5
Machine building	11.3	21.3	92.6	119.5	...	0.5	0.8	0.9	1.6	5.2
Timber, woodworking, paper	29.0	25.7	12.1	9.2	...	--	--	--	--	--
Construction materials	3.0	4.2	4.8	5.9	...	0.4	0.5	0.1	--	1.2
Light industry	136.4	195.6	243.3	254.5	...	112.7	206.6	223.1	138.9	576.0
Agricultural production	3.7	42.4	50.7	60.1	...	2.0	22.0	4.9	3.5	42.0
Food industry	123.7	122.8	143.5	185.1	...	3.1	3.6	1.5	7.1	16.5
Other industrial production	3.3	3.2	2.5	17.0	...	--	10.0	7.8	4.7	3.3

Sources: Gosplan; and IMF staff estimates.

[1]Trade with countries outside the U.S.S.R., valued at domestic prices. In the case of exports there are wholesale prices paid to domestic producers, while in the case of imports they are realization prices, i.e. retail prices net of transportation costs.

[2]Until 1991, Turkmenistan was not credited with any foreign exports of gas. In 1991, registered exports amounted to 12 billion cubic meters, valued at rub 408 million.

Table A33. Foreign Trade at World Prices[1]

(In millions of U.S. dollars)

	Imports[2]				Exports[3]			
	1988	1989	1990	1991 Est.	1988	1989	1990	1991 Est.
Total	279.8	430.8	397.1	846.3	178.7	196.5	148.3	1186.8
Of which:								
Electric power	--	--	--	...	--	--	--	--
Oil and gas industry[4]	--	--	--	...	--	5.4	29.9	1052.1
Coal industry	--	--	--	...	--	--	--	--
Other fuel industry	--	--	--	...	--	--	--	--
Ferrous metallurgy	15.6	37.8	12.6	...	--	--	--	--
Nonferrous metallurgy	--	0.2	0.1	...	--	--	0.3	--
Chemical and petrochemical industry	8.9	22.5	24.7	...	2.0	0.8	6.9	8.5
Machine building	32.5	115.5	110.4	...	1.3	1.0	2.3	0.2
Timber, woodworking, paper	25.2	10.5	6.8	...	--	--	--	--
Construction materials	3.9	2.9	2.9	...	0.7	0.2	--	--
Light industry	86.7	94.0	83.9	...	161.8	171.6	97.4	116.3
Agricultural production	30.7	56.5	60.3	...	6.4	1.3	0.9	4.3
Food industry	73.4	87.9	89.0	...	1.5	0.8	4.7	--
Other industrial production	3.0	2.1	6.6	...	5.1	15.6	6.0	5.4

Source: Goskomstat Moscow; Gosplan; and IMF staff estimates.

[1]Trade with countries outside the U.S.S.R., valued at world prices.

[2]For 1988-90, the data were provided by the authorities in Moscow, in rubles. The dollar amount was calculated by applying the official exchange rate. The figure for 1991 is an estimate.

[3]For 1988-90, the data were provided by the authorities in Moscow, in rubles. The dollar amount was calculated by applying the official exchange rate. For 1991, the dollar value was calculated from price and volume data for Turkmenistan's exports that year.

[4]Gas exports were not credited to Turkmenistan prior to 1991. In 1991, 12 billion cubic meters of gas were registered as exports. The estimate of the dollar value of total foreign exports provided by the authorities assumed a price of rub 85 per thousand cubic meters.

Table A34. Balance of Payments with Foreign Countries at World Prices

(In millions of U.S. dollars)

	1988	1989	1990	1991
Trade balance	-101	-234	-249	341
Exports	179	197	148	1,187
Imports	280	431	397	846
Services, net			-57	-103
Transportation			-31	-76
Travel			-2	--
Interest			-25	-27
Other			--	--
Net public sector transfers			--	--
Current account balance including transfers			-306	237
Capital account			23	34
MLT debt transactions (net)[1]			23	34
Disbursements			73	90
Amortization			56	57
Repayment from abroad			3	2
Direct private investment			--	--
Errors and omissions			...	...
Overall balance			-283	272
Financing			283	-272
NFA banking system (-increase)			252	-268
Arrears (+increase)			31	-6
Debt deferral			--	2
Financing gap			--	--
Memorandum items:				
Trade balance excluding gas	-101	-234	-249	-680
Exports excluding gas	179	197	148	167
Imports	280	431	397	846

Sources: Goskomstat; Gosplan; and IMF staff estimates.

[1]Figures were imputed for the U.S.S.R. as a whole, by applying Turkmenistan's share in external debt to flows. This share was determined in the context of the interrepublican agreement as the external debt of the U.S.S.R. in November 1991.

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