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Republic of Kazakhstan: Recent Economic Developments

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INTERNATIONAL MONETARY FUND

REPUBLIC OF KAZAKHSTAN

Recent Economic Developments

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Approved by the European II Department

June 5, 1998

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I. INTRODUCTION AND OVERVIEW

1. Since independence, **Kazakhstan has made significant progress in transforming its economy into a market-based system.**¹ By 1997, macroeconomic stabilization had been largely achieved, its domestic market had become fairly liberalized and opened up to foreign competition, and the role of the state in the economy had been considerably reduced.

2. Kazakhstan has made substantial progress in **macroeconomic stabilization** in recent years (Box 1). Following a cumulative decline of 31 percent during 1992–95, real GDP began to recover in 1996, and the resumption of growth now seems to have been firmly established with growth rates of 2 percent being recorded in 1997 and in the first quarter of 1998. At the same time, inflation has fallen continuously since reaching a peak of more than 3,000 percent (annual rate) in mid-1994. By the end of 1997, the rate of price increase had fallen to about 11 percent and, by April 1998, the twelve-month change was in single digits for the first time since transition began. The external current account deficits have been fairly large in relation to GDP in recent years, due in particular to imports of capital goods needed to develop Kazakhstan's vast natural resources. The financing of the deficits has, however, not posed major problems since Kazakhstan has benefitted from large foreign direct investment inflows, mainly into the oil and gas sectors.

3. In the area of **structural reform**, Kazakhstan has made significant progress especially in price and trade liberalization, in privatization, and in enterprise and banking sector restructuring.² In addition to strengthening and deepening the reforms in these areas, the authorities' reform agenda currently focusses in particular on pension reform, tax administration, expenditure policy, and public sector reform, with the main challenge being the implementation of the new pension system which was introduced on January 1, 1998 (Appendix I).

4. The authorities' **economic program for 1998** envisages a reduction in inflation to 9½ percent (end-period), a further pick-up in economic growth to 3 percent, and a widening in the external current account deficit to almost 6½ percent of GDP, due to the acceleration in economic activity and the decline in international oil prices. **The medium-term outlook** for the Kazakh economy depends crucially on the timing and the size of the revenues expected from the development of the energy sector. As analyzed in more detail in Appendix II, the

¹The stabilization and reform efforts have been supported by international financial institutions, including the Fund. The authorities' medium-term program for 1996–98 is supported by a three-year extended arrangement approved by the Fund in July 1996.

²The authorities' efforts in the area of banking sector reform are described and analyzed in a forthcoming working paper by David Hoelscher: "Banking System Restructuring in Kazakhstan."

outlook could span the entire range from serious imbalances to a situation characterized by "Dutch disease."

Box 1. Basic Data

Social and demographic indicators (1997)

Area	2,727,900 km ²
Population	15,672 thous.
Rate of population growth	-4.9 percent
Life expectancy at birth (1996-97)	67.5 years
Infant mortality rate (per 1,000 births) (1997)	14.7
Hospital beds (per 10,000 inhabitants) (1996)	100.3

Economic Indicators

(In percent of GDP unless otherwise indicated)

	<u>1993</u>	<u>1994</u>	<u>1995</u>	<u>1996</u>	<u>1997</u>
Real GDP (percent change)	-9.2	-12.6	-8.2	0.5	2.0
Nominal GDP (in billions of US\$)	15.8	11.0	16.6	20.8	22.5
End-year inflation (percent change)	2,169.1	1,160.3	60.4	28.6	11.3
External current account balance	-2.8	-8.6	-3.1	-3.6	-4.2
Gross official reserves (months of imports) 1/	1.5	3.2	3.2	3.1	3.2
Government budget					
Revenue 2/	23.9	18.8	17.5	15.4	16.5
Expenditure 3/	25.2	25.9	19.9	18.6	20.3
Balance 2/	-1.3	-7.2	-2.5	-3.1	-3.8
Of which					
Financing from the banking system	1.1	3.4	1.0	-0.3	0.9
Velocity of broad money 4/	3.5	13.0	10.6	12.5	10.8

1/ Goods and nonfactor services.

2/ Including privatization receipts.

3/ Includes net surplus of extrabudgetary funds and quasifiscal operations for 1994-97.

4/ Annualized quarterly GDP/end-period broad money (including foreign currency deposits).

II. REAL ECONOMY, PRICES AND WAGES

5. Real GDP increased by 2 percent in 1997 following the recovery in output of 0.5 percent in 1996 and a cumulative decline of 31 percent during 1992-95. The largest contributors to growth in 1997 were the construction, trade and industrial sectors which grew by 10 percent, 5 percent, and 4 percent, respectively (Figure 1). Construction had initially lagged during the first half of the year, however, starting in June, activity picked up

Figure 1. Kazakhstan: Output, 1992-97
(1992=100)

Sources: Kazakh authorities; and Fund staff estimates.

dramatically and, during the third quarter, exceeded output during comparable months in 1996 by over 60 percent before slowing down at the end of the year due to seasonal factors. The pick-up in construction could largely be attributed to the preparation of Akmola (now renamed Astana) as the national capital. Some industrial recovery occurred as investment in certain sectors, particularly foreign investment in the energy sector, continued to expand rapidly and the trade sector picked-up in line with the increasing reorientation of the economy away from large manufacturing towards the provision of services.

6. The relative shares of output of the various sectors of the economy have stabilized somewhat in 1997 following the reallocation of factors of production in the early years of transition in line with relative price signals provided by the new market economy. Industry and agriculture, which accounted for 27 and 29 percent, respectively, in 1991 now account for about 20 and 11 percent of total output, broadly similar to 1995-96. The category "other" which mainly includes services has, meanwhile, about doubled its share from 19 percent in 1991 to 37 percent in 1997.

7. Consumer price inflation continued to fall in 1997 to about 11 percent (end-period) compared to 28 ½ percent in 1996 and a peak of over 3,000 percent in mid-1994.³ The indices for food, clothing and footwear, medical care, and household goods remained subdued, the first due in some part to the improvement in agricultural output in 1997. Prices in transport and communication increased rapidly during the first half of the year; however, during the second half of the year only small increases were recorded. In line with the authorities' policy of increasing the prices of communal services towards full cost recovery, significant adjustments to these prices occurred during the summer. As a result, the index for rent, water and power increased by about four times the rate of overall inflation. Prices for recreation, education and culture also increased significantly during the year as enterprises shed their social facilities and the costs of sanitoriums and child care services increased. The encouragement of the private provision of some educational services has also contributed to price increases in the service sector.

8. The wholesale price index increased by about 11½ percent during 1997. While the prices of metals, chemicals and other industrial inputs remained subdued, energy prices increased significantly. The index for electric energy rose by over 33½ percent due to price adjustments towards cost recovery. Prices for oil processing also rose significantly as an increasing number of enterprises engaged in this sector were privatized. Prices for the food industry, however, rose by only about 3 percent during the year reflecting the overall subdued nature of agricultural producer prices following the improvement in output.

9. Growth in the average nominal wage was about 20 percent, and in real terms almost 8 percent, during 1997. The pattern of divergence of wages across sectors continued in 1997

³The development in average annual inflation in Kazakhstan compared with neighboring countries is shown in Figure 2.

with those in the service sectors generally increasing at a higher rate. The development in dollar wages in Kazakhstan compared with neighboring countries is shown in Figure 2.

10. Officially measured employment continued to fall in 1997, recording a decline of over 16 percent. At the same time, the number of those unemployed, both officially and those considered as hidden unemployed, has decreased with the unemployment rate falling from 8.6 percent at end-1996 to 7.1 percent at end-1997.⁴ The simultaneous decrease in employment and in the unemployment rate can be attributed to two factors: net emigration and a shift in employment toward the informal sector and toward smaller firms and enterprises not accounted for in the employment surveys. The decline in population, estimated at almost 5 percent in 1997, is likely to have impacted the unemployment rate significantly, as emigration may well have been a more attractive option than to be unemployed.

11. During the first quarter of 1998, inflation continued to fall, declining to slightly more than 10 percent during the twelve months to March 1998.⁵ Real GDP increased by almost 2 percent in the first quarter compared to the same period in 1997, somewhat less than expected, partly because of difficulties in the agricultural sector.

III. STRUCTURAL REFORM

12. Substantial progress continued to be made during 1997 towards reducing the government's role in economic production while better defining its regulatory, oversight and policy formulating functions. Privatization proceeded well and with regard to smaller enterprises was virtually completed. Progress in privatization of the largest state enterprises, which was substantial during the first half of the year, however, slowed down somewhat during the latter part of the year. In addition to pursuing reform through privatization, numerous other initiatives were taken to reform the transportation and communications, health and education, and agricultural sectors. Enterprise reform continued through restructuring and liquidation and the divestiture of their social assets. Legal reforms included the preparation of laws governing competition and defining the government's regulatory roles in this regard.

A. Privatization and Enterprise Reform

13. The small scale privatization program was officially concluded in mid-1997 and focus shifted to the third stage privatization program. All sector-specific action plans under the latter

⁴Officially unemployed plus those considered hidden unemployed as a percent of the economically active population. The official unemployment rate decreased from 4.2 percent at end-1996 to 3.8 percent at end-1997.

⁵Inflation in April at 0.5 percent and in May at 0.3 percent reduced the year-on-year rate to slightly below 10 percent.

Figure 2. Kazakhstan: Consumer Price Inflation and Average Wages, 1993-97

Sources: National Statistic Agency; Ministry of Labor; and Fund staff estimates.

program were finalized in early 1997 and began to be implemented with substantial progress made in the restructuring of the power and heat, railways, airlines and telecommunications sectors. The case-by-case privatization program, aimed at some of the largest formerly state-owned enterprises, proceeded well through the early part of 1997, although delays were subsequently encountered towards the end of the year. During 1997, a number of very large contracts were, nevertheless, signed with foreign firms, mainly in the non-renewable natural resources sector, covering the sale and management of enterprises and of oil and gas fields.

14. Under the **small-scale privatization** program, 2,736 enterprises were sold during 1997, accounting for 73 percent of the total offered for sale.⁶ A number of administrative difficulties that had earlier hampered the effective implementation of the program were resolved in early 1997. In conjunction with the removal of minimum prices at end-1996, this enabled the successful conclusion of the official program during the summer of 1997, although some residual small-scale enterprises continued to be offered for sale during the remainder of the year. The lengthy and complicated procedural and documental requirements that had earlier constrained the **money auction program** under the mass privatization scheme were also streamlined in 1997 and successful practices from the small-scale privatization program were applied. As a result, state-share packages in 1,297 companies were sold during the year under this program with special emphasis placed on the privatization of warehouses and agricultural facilities. As of early 1998, the mass privatization program had, however, not yet been concluded with money auctions of about 400 joint-stock companies continuing to be planned and implemented.

15. The **case by case privatization** program proceeded well early in 1997 before slowing down during the second half of the year. Among enterprises privatized in 1997, a 60 percent share of Mangistaumunaigaz, one of Kazakhstan's largest oil companies, was sold to a foreign firm in March and Balkhashmys copper plant, one of the largest in the former Soviet Union, was privatized that month as was a large manganese plant. The national telecommunication company, Kazakhtelecom, was also privatized in 1997 with a foreign firm obtaining a 40 percent stake. Aktyubinskunaigaz, a large oil producer, was privatized at mid-year with the sale of 60 percent of its stock. Late in the year, the government also concluded agreements to develop the Karachaganak gas field by private foreign firms and a foreign firm was awarded a 15-year concession to run the western and southern natural gas transport systems.

16. During 1997, the government issued specific criteria regarding the clearing of arrears, ecological liabilities and social assistance commitments with a view to enhancing the privatization efforts. The monitoring of **management contracts** was improved, a number of major companies formerly under such contracts were sold to the management companies and numerous existing contracts were modified or terminated because of failure by management

⁶This figure excludes enterprise social facilities and is, therefore, not comparable to data in Table 18.

companies to meet contractual terms. Under the third stage privatization program, the preparation, through external audit and prospectus issuance, of 13 firms previously excluded from privatization was also completed. Contrary to earlier expectations, however, the sale of these companies did not take place by end-1997. The sale of state share packages in some of these enterprises is expected to be made during 1998 under the "Blue Chip" program.

17. In the area of **enterprise reform**, the government strengthened the structure and operations of the former Enterprise Restructuring Agency (Agency on Reorganization and Liquidation of Enterprises). Uniform policies for monitoring enterprises and assisting them in preparing restructuring plans were adopted which enabled a speedier liquidation of a large number of majority state-owned enterprises or enterprises with large arrears toward the state. The divestiture of enterprise social assets proceeded well; 5,201 such facilities were offered to the Privatization Department to be put up for sale in 1997 and a significant portion of the 3,500 or so facilities that the Department accepted were successfully sold by early 1998.

B. Sectoral Issues

18. The government further reduced its role in the **agricultural sector** during 1997. The mandatory registration of export contracts at commodity exchanges which had already been removed for private farms at mid-year was eliminated altogether at the end of 1997. Procurement of grain by the state continued to be progressively reduced and was limited to under 200,000 tons in 1997. Steps were also taken to reform the financing of the agricultural sector. The government issued implementing resolutions for the Real Estate Registration Law in February and the development of rural credit societies was encouraged with steps taken towards conferring the branches of the former Agroprom Bank to such societies to help ensure the availability of rural banking services.

19. The reform of the **petroleum and coal sectors** focused on the privatization of viable enterprises and the closure of those that were unprofitable. Steps were taken to pursue oil enterprise restructuring and privatization via transparent procedures, wider public participation and attraction of strategic investors. During 1997, the government liquidated eight unprofitable coal mines in the Karaganda basin. The government is currently reassessing its strategy concerning privatization of the oil and gas sector.

20. Reform efforts in the **transportation sector** were geared towards cost-recovery and the elimination of preferential tariffs. With regard to urban transport, the authority to set tariff decisions was transferred to local governments as was the cost of maintaining preferential rates. Intercity railway passenger tariffs were increased by 20 percent and the government moved to start selling majority shares in airport and terminal service companies on a case-by-case basis. A strategy for the privatization of Kazakhstan Airlines was also prepared and submitted to the government for approval.

21. With regard to **health and education**, the government took steps to delineate responsibilities, streamline curricula and introduce user charges. Responsibilities between the Compulsory Medical Insurance Fund (CMIF) and the Ministry of Education, Culture and Health concerning the coverage and quality assurance of health services were clarified by means of a number of government resolutions. Effective from 1998, the charging of fees by polyclinics on a completed-visit basis prior to obtaining a refund from the CMIF was introduced. With regard to education, mechanisms were developed to allocate budgets on a capitated basis and plans were developed and implemented to reduce excessively specialized curricula in secondary schools. The government also increasingly encouraged the private provision of education and, as a result, the number of private facilities has grown from 18 schools in 1994–95 to 124 in 1997. In the area of social protection, the living standards assessment was completed with World Bank assistance and a thorough review of the benefits system is being initiated.

22. As regards **financial sector reform**, the authorities continued their efforts to improve the payments system, banking supervision and the soundness of the commercial banking sector. A settlement and depository system for corporate securities was established and the design of a large value transfer system was completed during the year. With regard to banking supervision, compliance with connected lending, large exposure, and minimum capital regulations improved significantly. During the year, the number of commercial banks was reduced from 101 to 82 as weak banks were liquidated and the number of bank branches was reduced by almost 40 percent to 582. The government has also taken steps to further reducing its participation in the commercial banking sector. In early 1998, the government conducted an audit of Exim Bank with the aim to sell as soon as possible the majority state share in the bank. Also, following the audit of Turan/Alem Bank in early 1998, the bank was privatized in April 1998.

23. **Legal reforms** pursued during 1997 included the preparation and submission to parliament of draft laws on unfair competition, natural monopolies and a new section of the civil code on the protection of consumer rights with the aim of better defining and strengthening the government's regulatory role in the economy. Amendments were also made to the draft water code and a plan, consistent with the revised code, to adjust water charges and improve their collection was adopted.

24. As regards the implementation of the **law on state support of direct investment**, thirteen contracts had been signed by end-December 1997 amounting to US\$58 million in investment and requiring an estimated US\$11 million in tax concessions (cumulative over the period for which incentives are granted). Recently, World Bank experts have worked with the Investment Committee to develop policies for improving its procedures for providing tax and nontax incentives for investment, with a view to further enhancing transparency in the application of the law and to gradually shifting the emphasis from tax concessions to other forms of investment incentives.

IV. MONETARY DEVELOPMENTS

25. Money demand recovered sharply during 1997. Banking sector credit to the economy expanded at a much faster rate than inflation as did credit to government. The money multiplier exhibited substantial changes during the year as the composition of demand shifted away from cash foreign exchange towards domestic cash balances, leading to large increases in the net international reserves of the National Bank of Kazakhstan (NBK). Reflecting the steadily declining rate of inflation, market interest rates fell throughout the year, except at year-end when increased uncertainties in international capital markets contributed to increases in the treasury bill yield. The growth in money demand in 1997 reflected, in part, increased confidence stemming from the authorities' vigorous steps to address the systemic weaknesses of the banking sector, as described above.

26. Monetary developments during 1997 can broadly be divided into two periods (Figure 3). During the first half of the year, the decline in confidence evidenced throughout 1996 was halted. Increases in the velocity of broad money, which had already moderated during the first quarter, had fully stopped by end-June. The authorities, however, maintained tight credit policies, particularly during the first quarter, and as a result, broad money increased by only about 6.5 percent during January-June with both currency in circulation and deposits increasing roughly at about the same rate. The increases in the net international reserves of the NBK during this period, associated with government receipts from privatization, did not have a monetary impact as the fiscal position remained strong and NBK credit to government declined substantially. In support of its tight credit policies, the NBK maintained its refinance rate at 35 percent through end-April despite a decline in the three-month treasury bill yield by a third from end-1996 to less than 22 percent at end-April 1997.

27. During the second half of the year, however, substantial declines in velocity occurred and the composition of money demand also changed with currency in circulation increasing much more than deposits. The stability of the Tenge, whose value against the U.S. dollar remained virtually unchanged in nominal terms from February onwards, increased confidence engendered by the upturn in economic activity, and decreased fears about the health of the banking sector, all contributed to an increase in deposits of almost 12 percent and an increase in currency in circulation of about 37 percent during July-December. The latter occurred in conjunction with reverse currency substitution for cash, and net international reserves of the NBK increased rapidly, bolstered further by receipts from the government of the proceeds of a Eurobond issuance in September/October. Initially, the NBK interpreted the increase in money as a reflection of higher demand and did little to sterilize the inflow of foreign exchange. However, it stepped up the sale of foreign exchange at year-end when there was some build-up of pressure in the foreign exchange market, associated with the turmoil in the financial markets in Asia and its impact on financial markets in Russia. The yield on three-month treasury bills, which had declined to under 13 percent by October, increased sharply at year-end, as the liquidity situation tightened with the sale of foreign exchange by the NBK (Figure 4).

Figure 3. Kazakhstan: Monetary Indicators, 1994-98

Sources: Data provided by the NBK; and Fund staff estimates.

1/ Annualized quarterly GDP/end-period broad money.

2/ End-period broad money/end-period base money.

Figure 4. Kazakhstan: Consumer Price Inflation and Interest Rate Developments, 1995-98

Sources: Kazakh authorities; and Fund staff estimates.

28. Credit to the economy from the banking system increased by almost 9 percent in real terms during 1997. Demand for credit by the private sector increased in line with the pick-up in economic activity. At the same time, commercial banks were also more willing to lend as the financial health of enterprises stopped deteriorating as indicated by reductions in inter-enterprise arrears. Credit to government increased sharply during 1997, exclusively from commercial banks reflecting their willingness to hold increasing amounts of treasury bills, while net credit from the NBK declined in nominal terms. Total credit to the government from the banking system remained low, however, amounting to less than one percent of GDP. NBK credit to commercial banks remained negligible throughout 1997, with gross credit decreasing by about 16 percent. With regard to interbank lending, activity in the organized interbank market had markedly declined during 1996 as banks became unwilling to lend to each other amidst increased uncertainties concerning the soundness of individual banks. This situation was reversed during 1997 as banks increasingly took recourse to direct bilateral trading.

29. Pressures in the foreign exchange market continued during January–February 1998, with the NBK selling substantial amounts of foreign exchange, while also letting the exchange rate for the Tenge depreciate somewhat from the beginning of the year. As a result, base money and broad money declined sharply during the first quarter of 1998. Yields on treasury bills and NBK notes rose further during the first quarter of 1998, particularly following the political uncertainties in Russia in connection with the dismissal of the government and the associated increase in Russian treasury bill yields. The NBK considered these developments to be temporary and therefore found no reason to adjust its refinance rate. Yields on treasury bills and NBK notes have fallen somewhat during April and May.

30. The financial system in Kazakhstan continued to deepen in 1997. The government introduced treasury bills with a maturity of two years and the trading volume continued to shift away from bills with maturities of three months to those with longer maturities. The NBK also introduced a new overnight facility for banks early in the year. The Kazakhstan Stock Exchange was split into the Almaty Financial Instruments Exchange and the new Kazakhstan Stock Exchange, with the first focusing on foreign currency trading and the latter on securities trading. The reserve requirement for commercial banks was reduced to 10 percent in two steps as compliance with prudential norms improved.

V. PUBLIC FINANCES

31. In recent years, the main fiscal problems in Kazakhstan have been: (i) a decline in revenues in relation to GDP, a result of the structural transformation of the economy which led to a shrinking of the state enterprise sector; and (ii) the accumulation of substantial expenditure arrears, especially on wages, utilities, and pensions. The authorities have responded to the revenue contraction and the arrears problem with a wide-ranging effort to reform fiscal institutions, strengthen tax and expenditure policy and management, and repaying arrears to suppliers, workers, and pensioners. These efforts were aided in 1996–97 by large privatization revenues and substantial foreign borrowing. An important issue is how to achieve sustainability in the public finances over the medium term when privatization

receipts are expected to decline.⁷ The focus of fiscal efforts has now shifted toward:

- (i) achieving sustainable increases in non-privatization, non-oil public revenues;
- (ii) successfully implementing the new pension system based on individual accounts;
- (iii) reducing remaining non-pension arrears; and (iv) continuing the reform of government structures and institutions.

These efforts resumed fully in early 1998 after a few problems in late 1997 due in part to the bureaucratic disruptions associated with the move of the capital from Almaty to Akmola (now Astana) in late 1997.

A. Fiscal Developments in 1997

32. The presentation of the official budget in Kazakhstan treats privatization proceeds as a revenue item. As discussed in Box 2, there are a number of arguments for treating privatization proceeds as a financing item in the presentation and analysis of the budget. Fiscal developments in Kazakhstan according to this presentation of the budget are shown in Box 2. Although the Fund now favors the presentation of the budget with privatization proceeds treated as a financing item, the discussion in the following sections of this chapter is based on the presentation used by the authorities, i.e., with privatization proceeds treated as a revenue item. **The 1997 budget**, approved by parliament in late-December 1996, projected revenues at 15½ percent of GDP, expenditure and net lending at 18¾ percent of GDP and a deficit of 3¼ percent of GDP. However, the 1997 budget did not include allocations for the repayment of arrears. When the government decided to clear all pension arrears (about 2 percent of GDP) as preparation for the introduction of the pension reform and to repay part of other expenditure arrears (about 1 percent of GDP) a revision of the budget was made at mid-year. Part of the additional costs of arrears clearance was covered by additional privatization proceeds and another part by expenditure cuts, while the remainder resulted in an increase in the budget deficit to 4¼ percent of GDP to be financed mainly through additional foreign borrowing.

⁷Considerable uncertainty also surrounds the future path of fiscal revenues from the energy sector, due both to: (i) the inherent volatility of international energy prices; and (ii) the geographical and other risks surrounding the long-term plans to develop Kazakhstan's mineral and energy wealth.

Box 2. The Treatment of Privatization Proceeds in the Fiscal Accounts¹

The short-run macroeconomic consequences of privatization are akin to those of a bond issue. Privatization should not reduce consumption because, unlike taxation, it does not reduce private sector wealth. In exceptional cases, it may reduce the propensity to invest. This may occur, for example, when the value of the privatized enterprise is lower in the hands of the public than the private sector. However, if the present value of the income stream generated by the assets to be privatized is the same in the public and private sectors, privatization entails an exchange of assets that does not affect the net worth of the government, or change that of the private sector. The impact on aggregate demand of spending the proceeds from privatization is thus likely to be expansionary. It will be even more so, if the value of the privatized enterprise is higher for the public than the private sector. Therefore, given the difficulty of predicting when the exceptional cases are relevant, and provided the stance of fiscal policy was appropriate to begin with, it would seem prudent to treat the proceeds from privatization as a financing item and not as revenue that may be spent without affecting the government's intertemporal budget constraint.

The **Annotated Outline** for the revised GFS manual (IMF, 1996) advocates treating net lending for policy purposes as a financial transaction, since the government in carrying it out, exchanges one financial asset for another (a claim on the private sector). The **Outline** asserts that consistent treatment of privatization operations requires that they be treated as a financial operation as well.

Most privatization operations will take the form of a sale of shares, a financial asset. Equivalently, the government could sell the physical assets directly. The **Outline** does not take a position on whether or not the sale of physical assets should be part of revenue, but a parallel treatment would require that such a sale not be part of revenue.

In the table below, the general government budget for Kazakhstan is shown with privatization receipts treated as a financing item. Shown as a memorandum item is also the deficit with net lending treated as a (negative) financing item.

Kazakhstan: General Government Budget 1995-98

	1995	1996	1997	1998 ²
	(In percent of GDP)			
Revenues and grants	16.9	13.2	13.3	13.8
Expenditures and net lending	20.8	18.6	20.3	21.5
O/w net lending	2.0	1.2	1.4	1.7
Overall budget deficit excluding privatization receipts	3.2	5.3	7.0	7.8
Financing	2.7	4.7	6.8	7.8
Foreign	2.0	2.6	2.6	3.8
Domestic	0.0	-0.1	1.0	1.8
Privatization receipts	0.7	2.2	3.2	2.2
Memorandum item:				
Overall budget deficit excluding privatization receipts and net lending	1.2	4.1	5.6	6.1

1/ The contents of this box is largely based on PPAA/97/9, **The Macroeconomic Impact of Privatization**, prepared by G.A. Mackenzie.

2/ Approved budget.

33. The budget incorporated a number of revenue-enhancing measures, including a new excise tax for crude oil and higher rates for the gasoline excise tax and for property, land, and vehicle taxes. In addition, the VAT legislation was amended to deny credit on VAT paid to other CIS countries, implying that Kazakhstan had moved closer to the generally accepted international principle of VAT taxation (destination principle) for CIS trade. Measures were also taken to fight smuggling of excisable goods, and amendments were passed to enforce collection of excise taxes on excisable goods in Kazakhstan, regardless of whether or not such taxes had been paid elsewhere in the CIS. Some revenues from users of natural resources, from bonuses and fixed rental charges, were projected to decline, although higher income tax receipts were expected from this sector. Overall, the revenue-enhancing measures were intended to raise tax revenues by about 2 percent of GDP, but this was to be partially offset by lower anticipated nontax revenues due to smaller projected NBK profits and the aforementioned expected reduction in bonuses and other natural resource revenues.

34. Revenue-sharing arrangements between the republican and local governments were also changed in 1997. The VAT and excises on crude oil and gasoline were allocated to the republican budget, and the republican budget shares of the corporate income tax and the personal income tax were set at 60 percent and 15 percent, respectively. The centralization of VAT collections at the republican level was expected to help improve administration, particularly ensuring prompt payment of VAT refunds to taxpayers.

35. The budget envisaged an increase in investment outlays and net lending in support of small- and medium-sized businesses, and higher outlays for enterprise restructuring. The government wage bill was projected to rise at the rate of inflation, but the ongoing reform of the government was expected to bring about reductions in the government workforce of about 20 percent on average, which would therefore enable average real budgetary wages to rise. Retrenched workers would receive two months pay at their last wage and were eligible for unemployment benefits. The average pension was planned to increase by 17 percent, broadly unchanged in real terms. The 1997 budget law "protected" some categories of expenditure (on wages, pensions and stipends) from sequestration. Thus, the expenditure cuts envisaged in the revised budget included investment and nonpriority expenditures, including purchases of materials and equipment, and capital repairs. The authorities also planned to improve budgetary control over local government operations during 1997.

36. The **fiscal outcome** for 1997 resulted in a deficit (cash basis from above the line data) of 3.8 percent of GDP, about ½ percent of GDP less than budgeted (Tables 25 and 26 and Box 3). About 70 percent of the deficit was financed from foreign sources, both via official lending by multilateral agencies and the issue of Kazakhstan's second Eurobond in September 1997.

Box 3. Key Fiscal Indicators, 1995-98

	1995	1996	1997	1998 ¹
		(In percent of GDP)		
Total revenues and grants	17.6	15.4	16.5	16.0
<i>Of which</i>				
Tax revenue	13.0	11.3	12.0	12.2
Privatization receipts	0.7	2.2	3.2	2.2
Total expenditures and net lending	20.8	18.6	20.3	21.5
Extrabudgetary funds (net) and quasi-fiscal operations	0.6	0.0	0.0	0.0
Overall budget deficit	2.5	3.1	3.8	5.5
Financing	2.0	2.5	3.6	5.5
<i>Of which</i>				
Domestic banking system	1.0	-0.1	0.9	0.9
Foreign	2.0	2.6	2.6	3.8
Memorandum item:				
Budget deficit excluding privatization receipts	3.2	5.3	7.0	7.8

¹Approved budget.

37. Revenues reached 16½ percent of GDP, including 1 percent of GDP in noncash receipts that reflected mutual offset operations at the local government level. Tax revenues rose by over ½ percent of GDP over the previous year to about 12 percent of GDP. Privatization receipts in relation to GDP reached 3.2 percent, compared with 1.8 percent in the budget and 2.2 percent in 1996, mostly on account of accelerated privatization in the energy sector. Despite the repayment of substantial amounts of wage arrears in the first half of the year, personal income tax receipts were marginally lower than projected. Corporate income taxes were also lower, reflecting mostly continued financial difficulties of state enterprises. Indirect taxes were as budgeted, with sustained efforts in tax administration leading to a slight overperformance in the VAT late in the year that offset earlier shortfalls. Those earlier difficulties were related to: (i) diminished incentives to collect the tax in some regions after the VAT was assigned to the republican budget; (ii) the double taxation of imports from CIS countries following the adoption of the destination principle in Kazakhstan which led to a reduction in trade with Russia; and (iii) the elimination (for the republican budget) of "mutual settlements" which allowed taxpayers to offset their tax arrears against debts owed to them by budgetary organizations. The improvements in VAT collections followed administrative measures (including replacement of regional heads of tax collection agencies) in the regions with the largest shortfalls. Collections of excises and natural resource taxes were lower than budgeted, reflecting lower output of some excisable commodities and natural resource extraction by domestic subsurface users, the continued practice of barter settlements, and interenterprise arrears.

38. Expenditure and net lending amounted to 20.3 percent of GDP and were, despite the repayment of pension and other expenditure arrears, about ½ percent of GDP below the budget ceiling. The government made progress in reducing non-pension arrears by end-1997 by first attacking the problem of local government wage and payroll tax arrears in the first half of 1997. While no additional allocations from the republican budget were made for this purpose, existing transfers to local governments (subventions) were earmarked for wage and payroll arrears repayment. Since local governments were unable to borrow, this measure forced them to rely on their own revenue-raising capacities to meet other local expenditures or to cut such expenditures.

B. Structural Fiscal Issues

39. Kazakhstan's new tax code (introduced in 1995) is considered a model for transition economies, having minimized tax-induced distortions, eliminated favorable tax treatment of specific taxpayers, and generally made Kazakhstan's tax laws consistent with established international practices. Simultaneously, the government has embarked on a wide-ranging and ongoing reform of tax collection systems and procedures. These efforts played a central role in revenue enhancement in 1997. The authorities are gradually implementing a specific set of measures during 1997–98 which includes the strengthening of criminal liability for taxpayer violations of tax legislation, the adoption of programs to detect unregistered taxpayers, to detect and control the largest stopfilers, and the tightening of procedures for granting tax deferrals. Although a large taxpayer unit has not yet been established, all large enterprises that have been privatized or are under management contracts are already subject to a special schedule of Tax Committee inspections. Tax arrears rose significantly during 1997, from the equivalent of 1.4 percent of GDP at end-1996 to 2.7 percent of GDP at end-1997. Arrears on the VAT and the corporate income tax more than doubled in nominal terms during 1997.

40. Institution building in the fiscal area also included the further development of the treasury system. At end-1997, the treasury absorbed the functions of the Budget Bank, which had been established on the basis of the cash clearing centers formerly managed by the NBK. The authorities have also incorporated most Akmola (Astana)-related expenditures into the 1998 budget. During 1997, the extrabudgetary fund established for this purpose, financed by loans and/or grants from individuals, corporations and friendly governments, had receipts of US\$78 million and expenditures of US\$94 million.

C. The 1998 Budget and Fiscal Developments January–March 1998

41. The 1998 budget envisages an increase in the deficit compared with the previous year mostly due to additional outlays related to pension reform, higher investment, and the inclusion in the budget of previously only partly funded social benefits. The budget deficit (including privatization proceeds as revenue) is to rise to about 5½ percent of GDP from

about 4 percent of GDP in 1997 (Table 26).⁸ As shown in the table below, the 1998 budget deficit is about ½ percent of GDP lower compared with the 1997 outcome when the impact of the pension reform, additional public investment, and other special factors are taken into account.

Fiscal Adjustment, 1997-98

	<u>Change 1997 to 1998</u> (In percent of GDP)
1. Arrears clearance and transfer of partially funded social programs to the budget	-1.0
2. Capital expenditures	0.7
3. Interest payments	0.5
4. Revenue decline, mainly due to pension reform (decrease+)	1.8
5. =1+2+3+4 Change in deficit due to the above factors	2.1
6. Change in overall budget deficit (increase +)	1.7
7. =5-6 "Underlying fiscal adjustment"	0.4

42. Planned sources of budget deficit financing include foreign borrowing amounting to approximately 3.8 percent of GDP, mostly from official multilateral sources for project financing, reform of public sector institutions, and pension reform (World Bank and Asian Development Bank), and another Eurobond placement planned for 1998. About half of the domestic financing is expected to come from the nonbanking system, including from the newly established State Pension Accumulation Fund and private pension accumulation funds. Starting in 1998, direct lending to the budget from the NBK is prohibited.

43. The budget projects revenues and grants conservatively at 15.5 percent of GDP, including tax revenues of 11.7 percent of GDP, and expenditure and net lending rising to 21.1 percent of GDP. On the revenue side, the authorities plan to continue to improve tax administration. On the tax policy side, the most important changes include: (i) the "stretching" of the brackets for the personal income tax and the lowering of marginal tax rates which is expected to expand the tax base by increasing compliance; (ii) the stopping of cash refunds for domestic taxpayers whose VAT on inputs exceeds VAT on sales (zero-rated exports will continue to receive cash refunds); (iii) the imposition of an excise tax on electricity and the elimination of tax preferences for specific groups that were entitled to duty free imports; (iv) the increase of some tax rates on land and property, and license fees; (v) the elimination of the "grandfathering" clause in the foreign investment law; and (vi) the collection of the equivalent of 0.3 percent of GDP in arrears on payroll contributions. The authorities also plan to sharply lower the system of mutual settlements for local budget operations. Privatization receipts are projected at 2.2 percent of GDP, with the sale of part of the state shareholding in

⁸With privatization proceeds treated as a financing item, the deficit in relation to GDP is to rise to nearly 8 percent from 7 percent in 1997. On this definition, the "underlying fiscal adjustment" between 1997 and 1998 referred to in the table above is about 1 percent.

a small number of "Blue Chip" companies alone expected to yield over half of the privatization revenues.

44. On the expenditure side, the budget provides the equivalent of 2.7 percent of GDP in budgetary transfers to the State Center for the Payment of Pensions (SCPP) for the payment of existing pensions, about 1 percent of GDP in additional investment expenditures related to the PIP, about 1.1 percent of GDP in allocations for survivor, disability, and social pensions (previously only partly funded), 0.9 percent of GDP for clearance of 50 percent of remaining non-pension general government arrears, and about 1 percent of GDP for expenditures related to the transfer of the capital to Astana (construction and improvement of infrastructure). A number of measures are planned to reform the size and structure of public expenditures. Specifically, it is planned to further reduce the size of public employment and reform the budgetary wage scale, improve the input mix in health and education by using less personnel and more materials, reduce the number of under-used facilities, and revise the system of intergovernmental fiscal relations. At the same time, the budget envisages a retrenchment of outlays on goods and services owing to the continuing downsizing and rationalization of government structures, and lower subsidies to state enterprises.

45. As regards the fiscal outcome for the first quarter of 1998, the deficit was much lower than expected. Revenues exceeded expectations while expenditures remained restrained and the general government budget registered a small surplus (Tables 25 and 26). Tax revenues were buoyed by a surge in VAT receipts following changes in legislation that effectively eliminated cash refunds for payers other than exporters. Strong corporate profit taxes were offset by weakness in personal income tax receipts that followed the reduction of top marginal tax rates at end-1997. On the expenditure side, lower-than-budgeted expenditures on general government services, public order, and defense were more than offset by higher-than-budgeted outlays for the payment of pensions necessitated by weak collections of payroll taxes that are related to the change to a funded pension system. Nonpension general government arrears also declined in the first quarter of 1998, although slightly less than envisaged in the budget.

D. Extrabudgetary Funds

46. Until its dissolution at end-1997 in connection with the comprehensive pension reform (see Appendix I), the **Pension Fund** was the largest extrabudgetary fund. Its own revenues from a 25.5 percent payroll contribution were expected to reach the equivalent of 5.1 percent of GDP in 1997, while current pension expenditure was projected at 5.6 percent of GDP.⁹ During 1997 the Pension Fund received budgetary transfers amounting to 2.2 percent of GDP to cover pension arrears and its current operating deficits. These pension arrears developed in 1995 and 1996 as a result of (i) the structural transformation of the economy, which led to a decline in the recorded wage bill in GDP, a low coverage rate of the working population, and

⁹Official projection of financial results for the Pension Fund on the basis of data for 9 months.

a high system dependency ratio¹⁰; and (ii) the increases in pensions granted as part of the reforms enacted in mid-1996¹¹. There remain significant arrears in contributions to the Pension Fund (about 2–2 ½ percent of GDP at end-1997), mostly accumulated during 1995–96.

47. The share of payroll contributions allocated to the **Social Insurance Fund (SIF)**, which funds temporary sickness and disability and certain other benefits, was lowered in 1996 from 15 percent to 5 percent of the payroll tax. SIF revenues and expenditures reached 0.3–0.4 percent of GDP. The **Compulsory Medical Insurance Fund (CMIF)** was established in 1996, funded by transfers from local budgets and 10 percent of the payroll tax. CMIF expenditures were projected to reach 1.2 percent of GDP in 1997, financed by own revenues (0.6 percent of GDP) and transfers of local budgets (0.6 percent of GDP). The CMIF budget for 1998 projects an increase in expenditures to 1.9 percent of GDP, financed by revenues from payroll taxes (including some contribution from arrears payment) amounting to 0.8 percent of GDP, and transfers from local budgets of 1.1 percent of GDP.

48. Payroll contributions are also being made to the **Employment Fund (EF)**. The standard rate is 2 percent, and with the prospect of the restructuring of budgetary organizations and downsizing of government payrolls in 1997, starting in January 1997 budgetary organizations, which were previously exempt, were also required to contribute 1 percent of their payroll. Open unemployment remained low in Kazakhstan in 1997 and EF revenues and expenditures amounted to 0.3 percent of GDP. EF revenues and expenditures are budgeted to rise to about ½ percent of GDP in 1998.

49. The last extrabudgetary fund is the **Road Fund (RF)**, which maintains road infrastructure and is financed by earmarked levies on petroleum products. Revenues and expenditures of the RF amounted to 0.6 percent of GDP in 1997. These are expected to remain unchanged (in relation to GDP) in 1998.

VI. EXTERNAL SECTOR

A. Balance of Payments

50. Despite buoyant exports, the *current account* deficit widened in 1997 to 4.2 percent of GDP from 3.6 percent in 1996 (Table 28). The deterioration resulted from increased imports

¹⁰Until 1997, withholding of pension fund contributions was not coordinated with the withholding of income taxes and there was no cross-checking of taxpayers between the tax administration and the pension fund.

¹¹Another element of the reform was an increase in the retirement age by six months every year until a minimum retirement age of 63 years for men and 58 years for women is reached in the year 2002. The contribution rate was also increased from 5 percent to the standard 30 percent for most categories of contributors previously receiving preferential treatment.

of goods and particularly “other services,” reflecting increased foreign direct investment (FDI) inflows to hydrocarbon, ferrous metals, geological exploration, and communication sectors.

51. The trade balance deteriorated only slightly in 1997, recording a deficit of US\$385 million as opposed to US\$326 million in 1996. The dollar value of exports grew by 7.6 percent to US\$6.8 billion, mainly as a result of increased exports of oil and gas condensate (14.8 percent) as well as other mineral products (notably coal, copper, iron, rolled ferrous metal, and zinc) (Table 29). While the exported value of other minerals increased owing to volume growth, exports of oil and gas condensate rose due to favorable price developments in the world market. In fact, the exported volume actually declined somewhat due to constrained transportation capacity. Kazakhstan’s annual access to Russian oil pipelines is limited to 10 million tons, which covered only two-thirds of the exported volume in 1997. This constraint was to some extent overcome at the cost of expensive road and rail transports, as well as by swapping oil with both Russia and Iran. Oil swaps with Iran remained, however, small as Iran suspended them in early 1997 due to a dispute over the quality of Kazakh oil.

52. The value of goods imports increased by 8.1 percent to US\$7.2 billion (Table 30), reflecting both investments in the hydrocarbon sector and an increased demand for imported consumer goods. While the imports of investment goods increased by close to 30 percent, the imports of consumer goods (including shuttle imports, non-food consumer goods, and vehicles) increased by 50 percent. The imported volume of crude oil dropped by half to 1.7 billion tons, reflecting both increased domestic production and smaller recourse to oil swaps.

53. In 1997, the direction of external trade diverted away from BRO countries,¹² which became second to the rest of the world as a recipient of Kazakh exports, and remained only marginally more important than the rest of the world as a source of Kazakh imports (Tables 31, 32, and 33). While BRO countries received 59 percent of Kazakh exports in 1996, they only received 46 percent in 1997. In particular, Kazakh exports diverted away from Russia and towards Western Europe, notably the United Kingdom and Germany. The BRO countries’ share of Kazakh imports dropped from 71 percent in 1996 to 55 percent in 1997 as imports from Russia were substituted for by imports from Germany, the United States and the United Kingdom.

54. The balance of services and current transfers deteriorated as imports of “other nonfactor services”—notably geological exploration, communication services, and government services—grew significantly. Dampening this impact, exports of transportation services (mainly freight) as well as receipts of unrequited transfers (mainly humanitarian aid) increased.

¹²The Baltic countries, Russia, and other countries of the Former Soviet Union.

55. The surplus in the *capital account* originated from continuously high FDI inflows as well as inflows of trade credits, multilateral credits, and receipts of the Eurobond issue in September. Lowering the surplus, capital transfers out of Kazakhstan doubled in 1997 following increased emigration of ethnic Russians. Net FDI inflows amounted to US\$1.3 billion, up from US\$1.1 billion in 1996. The United States lost its position in 1997 as the main source of FDI inflows to South Korea, which now accounts for 35 percent, and China (15 percent) (Table 34). Almost three-quarters of Kazakhstan's FDI receipts go to the hydrocarbon and ferrous metals sectors; however, geological exploration, energy, and communication sectors expanded their shares significantly in 1997 (Table 35). Drawings on trade credits and credits from multilateral agencies, notably the IBRD and the Asian Development Bank, exceeded US\$300 million each, while outflows arising from servicing external debt, measured as a ratio to exports of goods and nonfactor services, remained sustainable at just below 6 percent.

56. The stock of external debt relative to GDP increased somewhat in 1997, but remained comfortably just above 20 percent (Table 36). The single most important factor behind the increase in the external debt stock was the sovereign Eurobond issue at end-September amounting to US\$350 million. This five-year bond, which was issued to finance the clearance of remaining pension arrears, had a primary market yield spread over a comparable U.S. treasury bill of 245 basis points. By way of comparison, the US\$200 million three-year Eurobond which was issued at end-1996 carried a 350 basis point spread.

57. In the secondary market, the repercussions of the Asian financial turmoil for the yield spreads on the two sovereign Kazakh bonds were significant but fairly short-lived. The secondary market yield spread on the 1996 issue jumped from 200 basis points to 400 basis points in the course of a few days in late October, and continued climbing to a high of nearly 600 basis points, which was reached in early January 1998. From there the spread declined steadily back to slightly above 200 basis points by early April, which is much lower than for many other CIS countries. The secondary market yield spread on the 1997 issue fluctuated from 600 basis points right after the issuance in October to 250 basis points in late November, just to climb back to 600 basis points in early December where it stayed until mid-January 1998 before the decline started. By end-April, the spread had stabilized at around 300 basis points.

58. Kazakhstan's sovereign credit rating remained unchanged by Moody's (Ba3) and S&P (BB-). No progress was made in settling disputed debt between Kazakhstan and some other BRO countries, notably Russia.

59. To sum up, Kazakhstan's external position remained comfortable in 1997. The *overall balance of payments surplus* of US\$490 million was accounted for by buoyant oil exports and foreign direct investment, as well as a successful sovereign Eurobond issue. The external surplus increased *gross official international reserves* to cover 3.2 months of imports of goods and nonfactor services.

60. In the first quarter of 1998, the current account recorded a small deficit (US\$50 million). The value of exports was subdued due to the collapse of world market oil prices. The current account deficit was offset by an equal inflow of foreign capital; however, large unidentified balance of payments outflows—reflecting mainly hoarding of foreign currency cash balances in January—brought the overall balance into a deficit of US\$260 million.

B. Exchange Rate and Competitiveness

61. Although the Kazakh Tenge appreciated in real terms in 1997 (Figure 5), the competitiveness of Kazakh exports remained adequate (see Appendix II for more details). The Tenge remained remarkably stable against the U.S. dollar in nominal terms throughout 1997, while depreciating marginally against the Russian ruble. This implied an appreciation of the Tenge's real effective exchange rate of around 5 percent. Despite the real appreciation, both oil and nonoil exports continued to grow in both volume and value terms. In particular, the growth of nonoil exports associated with their diversion away from BRO countries suggests that the external price competitiveness of Kazakh exports has not been excessively eroded by the real appreciation.

C. Exchange and Trade System

62. The legal basis for the foreign exchange system was substantially amended in 1997. The National Bank of Kazakhstan issued five new regulations concerning the conduct of and reporting on foreign exchange operations. While these regulations ensure the convertibility of the Tenge for current account transactions, legal entities' capital account transactions remain subject to a license from the NBK.

63. The external trade system continued to be liberalized, although new import licensing requirements were introduced for alcohol (including denaturalized alcohol). The adoption of a new tariff structure in early 1997 implied a reduction in the weighted average import tariff rate to 10 percent, thus bringing the cumulative reduction since end-1995 to almost 18 percent. Moreover, the compulsory registration of export contracts entered by state farms was abolished at end-1997.

Figure 5. Kazakhstan: Weighted Real Exchange Rate, 1994-98 1/ 2/
(December 1994=1)

Sources: Data provided by the NBK; and Fund staff estimates.

1/ Estimated as an equally weighted average of the real exchange rate of the tenge versus the dollar and the ruble.

2/ An increase in the index is a real appreciation.

Table 1. Kazakhstan: Value Added in the Main Production Sectors, 1993-98

	1993	1994	1995	1996	1997	<u>1998</u> QI
(In millions of Tenge)						
Nominal GDP						
Industry	8,444	123,277	238,733	299,958	347,430	96,385
Agriculture	4,837	63,298	125,134	170,223	184,758	12,179
Construction	2,440	40,599	65,501	62,301	70,244	9,278
Transport and communication	2,937	47,283	108,203	159,704	178,951	39,845
Trade and catering	3,051	51,396	174,642	244,916	288,717	71,392
Others 1/	7,714	97,616	301,977	478,648	631,646	168,369
Total	29,423	423,469	1,014,190	1,415,750	1,701,747	397,448
(Percent change from previous year)						
Real GDP growth						
Industry	-14.0	-27.5	-8.6	0.3	4.0	3.8
Agriculture	-6.9	-21.0	-24.4	-5.0	1.9	-13.0
Construction	-25.9	-16.2	-37.6	-21.8	10.0	14.6
Transport and communication	-14.4	-26.3	-12.5	1.5	2.0	1.9
Trade and catering	-13.1	-17.4	6.1	14.7	5.0	1.4
Others 2/	0.5	14.3	1.3	-0.8	-0.4	1.7
Total	-9.2	-12.6	-8.2	0.5	2.0	1.9
(In percent of GDP)						
Share of GDP						
Industry	28.7	29.1	23.5	21.2	20.4	24.3
Agriculture	16.4	14.9	12.3	12.0	10.9	3.1
Construction	8.3	9.6	6.5	4.4	4.1	2.3
Transport and communication	10.0	11.2	10.7	11.3	10.5	10.0
Trade and catering	10.4	12.1	17.2	17.3	17.0	18.0
Others 1/	26.2	23.1	29.8	33.8	37.1	42.4
Total	100.0	100.0	100.0	100.0	100.0	100.0

Sources: National Statistical Agency; and Fund staff estimates.

1/ Mainly services.

Table 2. Kazakhstan: Industrial Production, 1993-97

	1993	1994	1995	1996	1997
(In millions of Tenge)					
Gross output					
Electric power engineering	3,647	64,834	104,157	109,523	115,144
Fuel industry	3,976	79,080	162,191	192,603	222,777
Ferrous metallurgy	2,665	42,842	95,190	77,212	102,054
Nonferrous metallurgy	3,399	41,125	76,288	88,080	119,208
Chemistry and petrochemistry	1,022	12,763	30,785	31,084	17,667
Machine building	2,581	25,174	48,557	52,562	42,399
Timber and wood processing	605	3,809	6,067	6,318	5,970
Construction materials	1,318	14,044	24,697	21,143	19,157
Light industry	1,509	14,230	15,876	18,370	18,150
Food industry	2,964	35,575	73,804	109,129	148,864
Others	1,865	20,576	28,006	28,880	58,172
Total	25,549	354,051	665,618	734,904	869,562
(Percent change from previous year)					
Real output growth					
Electric power engineering	-4.4	-15.2	-12.3	-10.3	-14.7
Fuel industry	-14.8	-14.0	-3.2	2.2	-1.9
Ferrous metallurgy	-24.4	-29.5	13.5	-17.5	24.0
Nonferrous metallurgy	-7.8	-22.8	6.3	3.6	15.2
Chemistry and petrochemistry	-44.6	-41.1	1.6	-27.2	-34.3
Machine building	-12.7	-38.6	-27.3	-9.2	-29.8
Timber and wood processing	-9.4	-37.1	-40.0	8.8	-21.3
Construction materials	-26.8	-44.9	-29.0	-33.8	-20.2
Light industry	-9.4	-57.1	-59.3	18.5	5.3
Food industry	-12.3	-26.1	-37.5	32.8	28.0
Total	-14.0	-27.5	-8.6	0.3	4.0
(In percent of total)					
Share of gross output					
Electric power engineering	14.3	18.3	15.6	14.9	13.2
Fuel industry	15.6	22.3	24.4	26.2	25.6
Ferrous metallurgy	10.4	12.1	14.3	10.5	11.7
Nonferrous metallurgy	13.3	11.6	11.5	12.0	13.7
Chemistry and petrochemistry	4.0	3.6	4.6	4.2	2.0
Machine building	10.1	7.1	7.3	7.2	4.9
Timber and wood processing	2.4	1.1	0.9	0.9	0.7
Construction materials	5.2	4.0	3.7	2.9	2.2
Light industry	5.9	4.0	2.4	2.5	2.1
Food industry	11.6	10.0	11.1	14.8	17.1
Others	7.3	5.8	4.2	3.9	6.7
Total	100.0	100.0	100.0	100.0	100.0

Sources: National Statistical Agency, and Fund staff estimates.

Table 3. Kazakhstan: Production of Selected Industrial Goods, 1993-97

	1993	1994	1995	1996	1997
Production					
Crude oil (in thousands of metric tons) 1/	22,975	20,279	20,641	22,960	25,776
Coal (in thousands of metric tons)	111,880	104,625	83,355	76,831	72,586
Natural gas (in millions of cubic meters) 2/	6,685	4,488	5,916	6,524	8,115
Iron ore (in thousands of metric tons)	13,129	10,521	14,902	12,975	12,966
Electricity (in millions of kwh)	77,444	66,397	66,659	59,038	51,984
Mineral fertilizers (in thousands of tons)	304	126	197	191	151
Textiles					
Cotton yarn (in thousands of tons)	35	20	4	3	2
Woven cotton fabrics (in millions of square meters)	136	85	21	21	14
Paper (in metric tons)	2,108	721	174	67	154
Tires (in thousands)	1,784	264	83	107	1
Building materials (in thousands of tons)	3,963	2,033	1,772	1,115	661
Cast iron (in thousands of tons)	3,552	2,435	2,530	2,536	3,089
Processed meat (in thousands of tons)	609	412	273	173	120
Milk products (in thousands of tons)	755	552	279	250	198
(Percent change from previous year)					
Growth of production					
Crude oil (in thousands of metric tons) 1/	-11.1	-11.7	1.8	11.2	12.3
Coal (in thousands of metric tons)	-11.6	-6.5	-20.3	-7.8	-5.5
Natural gas (in millions of cubic meters) 2/	-17.6	-32.9	31.8	10.3	24.4
Iron ore (in thousands of metric tons)	-25.7	-19.9	41.6	-12.9	-0.1
Electricity (in millions of kwh)	-6.4	-14.3	0.4	-11.4	-11.9
Mineral fertilizers (in thousands of tons)	-65.5	-58.5	55.8	-3.0	-20.8
Textiles					
Cotton yarn (in thousands of tons)	-9.3	-43.4	-79.0	-24.8	-27.9
Woven cotton fabrics (in millions of square meters)	0.3	-37.6	-74.9	-1.4	-33.0
Paper (in metric tons)	201.1	-65.8	-75.9	-61.5	129.9
Tires (in thousands)	-38.1	-85.2	-68.6	29.4	-99.5
Building materials (in thousands of tons)	-38.4	-48.7	-12.8	-37.1	-40.7
Cast iron (in thousands of tons)	-23.9	-31.4	3.8	0.2	21.8
Processed meat (in thousands of tons)	-3.8	-32.3	-33.8	-36.7	-30.3
Milk products (in thousands of tons)	-29.7	-26.9	-49.5	-10.5	-20.6

Sources: National Statistical Agency; and Fund staff estimates.

1/ Includes gas condensates.

2/ Consists of both gas from oil wells (gas-oil) and gas from gas wells.

Table 4. Kazakhstan: Production of Selected Agricultural Goods, 1993-97

	1993	1994	1995	1996	1997
(In thousands of metric tons; unless otherwise indicated)					
Production					
Meat	2,231	2,102	1,774	1,510	1,302
Milk	5,577	5,296	4,619	3,627	3,220
Eggs (in millions)	3,288	2,629	1,841	1,263	1,242
Wool	96	75	58	42	32
Cereals	21,631	16,454	9,506	11,237	12,238
<i>Of which</i>					
Wheat	11,586	9,052	6,490	7,678	8,955
Rice	403	283	184	226	255
Barley	7,149	5,497	2,208	2,696	2,583
Oats	802	822	250	359	286
Soybean	6	6	4	3	3
Potatoes	2,296	2,040	1,720	1,657	1,472
Tobacco	4	3	2	2	2
Vegetables	808	781	780	778	880
(Percent change from previous year)					
Growth of production					
Meat	77.4	-5.8	-15.6	-21.6	-14.0
Milk	5.9	-5.0	-12.8	-22.5	-11.0
Eggs	-7.8	-20.0	-30.0	-30.7	-2.0
Wool	2.9	-21.6	-22.6	-29.8	-23.0
Cereals	-27.3	-23.9	-42.2	18.2	8.9
<i>Of which</i>					
Wheat	-36.6	-21.9	-28.3	18.3	16.6
Rice	-13.7	-29.9	-35.1	23.3	12.8
Barley	-16.0	-23.1	-59.8	22.1	-4.2
Oats	10.2	2.5	-69.6	43.6	-20.3
Soybean	-50.8	-5.2	-32.7	-18.9	0.0
Potatoes	-10.6	-11.2	-15.7	-3.7	-11.2
Tobacco	10.8	-31.7	-39.3	0.0	0.0
Vegetables	-36.5	-3.3	-0.2	-0.2	13.1
(In percent of total production)					
Share produced by private farms					
Meat	49.0	61.0	64.6	66.4	75.4
Milk	58.0	64.0	71.1	77.9	86.7
Eggs	38.6	42.0	39.6	46.4	76.2
Wool	35.0	46.0	51.5	57.5	72.2
Potatoes	74.0	79.0	86.0	88.0	98.8
Vegetables	61.0	64.0	70.0	77.0	98.8

Sources: National Statistical Agency, and Fund staff estimates.

Table 5. Kazakhstan: Livestock Population, 1993-97

	1993	1994	1995	1996	1997
(Thousand heads; end-of-period)					
Animal population					
Cattle	9,400	8,550	7,232	5,425	4,299
<i>Of which</i>					
Cows	3,622	3,525	3,149	2,547	2,098
Sheep and goats	37,660	29,759	23,062	13,679	10,410
Pigs	2,533	2,147	1,632	1,036	884
Horses	1,742	1,649	1,521	1,310	1,081
Poultry	52,308	45,121	26,481	15,378	15,296
(Percent change from previous year)					
Growth of animal population					
Cattle	...	-9.0	-15.4	-14.8	-21.0
<i>Of which</i>					
Cows	...	-2.7	-10.7	-11.3	-18.0
Sheep and goats	...	-21.0	-22.5	-25.5	-24.0
Pigs	...	-15.2	-24.0	-22.0	-15.0
Horses	...	-5.4	-7.7	-6.1	-18.0
Poultry	...	-13.7	-41.3	-35.4	-0.5

Sources: National Statistical Agency; and Fund staff estimates.

Table 6. Kazakhstan: Consumer Prices, 1994-98

	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
(In monthly percent change)												
1994												
Total	42.6	24.2	17.4	31.8	33.8	45.9	25.4	13.3	9.7	20.1	14.2	10.2
Food	52.2	26.0	16.7	29.2	29.6	49.8	18.4	7.3	4.3	23.1	13.8	10.8
Bread and cereals	19.1	22.4	19.6	15.9	20.4	33.3	54.5	20.5	11.4	164.3	14.3	9.4
Meat and poultry	97.8	28.4	12.9	25.1	28.7	30.5	27.2	13.0	5.5	7.9	7.3	4.9
Fish	38.6	26.2	27.8	24.6	26.5	31.7	25.6	14.3	9.7	10.4	8.2	9.5
Dairy products	159.2	40.0	10.5	38.9	21.4	49.1	20.9	6.5	3.3	17.5	25.0	23.8
Eggs	177.5	44.9	21.8	33.8	13.1	7.1	16.2	17.0	6.5	16.5	54.8	23.6
Oils and fats	89.4	39.9	19.4	24.7	29.8	35.7	9.4	6.8	9.5	13.9	17.2	24.5
Fruits and vegetables	33.3	30.3	22.4	39.8	45.9	67.5	-4.1	-14.9	-12.7	-1.9	19.7	13.8
Sugar, coffee, tea and condiments	34.8	18.2	19.2	19.6	33.0	62.5	22.0	14.0	7.8	10.7	10.1	8.1
Beverages at home	15.0	7.3	13.5	18.0	29.7	87.6	17.0	6.1	7.3	8.3	7.2	5.1
Food and beverages away from home	43.4	35.2	19.5	57.3	28.3	45.7	26.7	14.9	8.4	15.5	9.0	8.1
Tobacco	18.0	10.0	6.3	14.3	20.0	23.9	16.1	12.1	6.2	6.1	3.3	2.2
Clothing and footwear	27.0	18.3	16.5	25.3	32.6	42.0	28.6	24.1	18.7	18.2	16.1	9.0
Rent, water, and power	27.5	15.8	10.6	102.7	118.9	38.7	59.4	15.9	18.4	18.9	30.0	12.9
Household goods	24.0	19.5	16.1	25.4	28.9	49.3	33.0	23.8	11.4	11.2	8.5	7.2
Medical care	29.0	53.6	52.8	35.5	40.8	34.7	42.5	22.4	27.2	19.0	12.9	10.3
Transportation and communication	21.3	21.0	10.8	94.4	56.6	30.7	47.8	16.5	10.6	18.4	7.5	10.6
Recreation, education and culture	50.6	33.5	30.0	29.7	29.7	39.9	38.2	23.4	15.5	14.4	10.9	10.1
Personal care	36.5	23.5	26.5	24.0	29.4	37.4	25.0	15.5	14.9	16.2	10.6	5.6
1995												
Total	8.9	6.7	5.1	3.2	2.7	2.3	2.9	2.1	2.4	4.1	4.4	3.6
Food	9.4	7.8	4.2	3.4	3.1	1.6	1.4	1.2	1.7	3.6	5.4	4.8
Bread and cereals	8.9	9.9	2.4	2.8	2.1	3.0	4.1	2.2	4.9	6.3	7.1	5.1
Meat and poultry	9.7	8.1	6.2	6.8	7.8	5.6	2.9	2.6	1.7	1.7	1.2	2.1
Fish	13.9	6.7	2.6	2.1	1.8	1.8	1.4	4.2	1.1	1.9	3.3	2.4
Dairy products	16.9	11.6	9.2	2.3	1.6	-1.1	3.2	0.0	1.0	3.0	12.2	6.0
Eggs	11.0	1.3	-2.6	-4.2	-2.3	-4.3	0.5	0.6	1.7	8.7	22.6	18.1
Oils and fats	22.9	13.7	5.2	0.2	-1.4	-2.2	-0.8	1.2	5.1	5.2	2.5	3.7
Fruits and vegetables	15.1	12.2	6.2	3.5	2.2	-1.8	-11.1	-11.4	-10.1	5.0	11.1	16.2
Sugar, coffee, tea and condiments	7.7	8.4	3.4	1.6	0.9	0.7	4.4	3.4	1.5	0.0	0.0	0.5
Beverages at home	2.3	2.2	0.2	1.5	1.5	0.8	2.2	4.7	2.4	3.1	4.0	1.4
Food and beverages away from home	9.4	7.9	6.6	7.3	6.1	5.0	3.0	5.0	3.2	2.9	3.6	2.6
Tobacco	0.7	1.3	4.2	5.4	3.4	3.2	3.5	2.9	4.6	3.0	2.7	2.2
Clothing and footwear	6.9	4.2	3.5	2.1	1.7	1.3	1.3	2.0	2.0	1.8	1.3	1.2
Rent, water, and power	29.9	5.8	40.2	2.8	4.8	7.0	12.2	5.7	6.5	10.8	5.5	4.2
Household goods	5.7	4.3	3.3	2.4	1.9	1.4	1.6	1.5	1.8	2.2	1.5	1.8
Medical care	6.5	9.4	4.2	3.1	3.3	1.8	1.4	2.3	2.0	1.5	1.7	1.2
Transportation and communication	10.0	7.5	8.9	5.4	2.1	5.9	10.3	4.4	2.2	7.1	6.0	1.0
Recreation, education and culture	8.5	7.5	3.9	5.1	2.8	3.4	3.3	3.6	4.9	2.5	2.0	2.2
Personal care	4.1	6.8	3.4	3.7	2.7	1.9	1.5	2.1	1.1	1.0	0.9	1.5
1996												
Total	4.1	2.5	1.7	3.0	2.0	2.5	1.8	0.7	1.2	2.9	2.4	0.8
Food	5.8	3.1	1.9	2.3	2.1	0.8	-1.0	-1.4	-0.5	-0.1	1.3	1.1
Bread and cereals	3.3	2.2	1.6	3.6	2.4	1.4	1.9	2.0	2.3	0.8	0.4	-0.4
Meat and poultry	6.5	4.2	3.0	4.4	9.2	2.6	0.2	0.0	-0.5	-0.1	-1.3	-0.4
Fish	2.1	4.1	1.6	1.6	-0.4	0.0	0.2	0.4	0.9	0.2	0.2	0.6
Dairy products	6.8	4.7	-0.1	0.1	-1.2	-2.1	-1.2	-0.9	0.9	2.9	5.8	5.5
Eggs	20.4	-1.0	-1.4	1.5	-5.3	-5.4	-5.5	-1.0	0.4	1.1	5.1	3.9
Oils and fats	1.8	0.0	-0.5	-0.6	-1.1	-1.4	-2.5	-1.6	0.6	0.1	2.6	2.2
Fruits and vegetables	29.2	10.0	7.8	4.4	2.9	2.0	-10.3	-17.5	-14.2	-7.6	9.5	10.0
Sugar, coffee, tea and condiments	0.6	0.2	-0.3	-0.1	-0.9	-0.8	-1.1	-0.6	-0.4	-0.9	-0.2	0.0
Beverages at home	1.7	0.8	0.7	0.6	0.7	0.4	0.5	0.5	0.0	0.5	0.3	0.6
Food and beverages away from home	2.5	4.2	1.8	2.0	1.4	4.1	2.7	1.6	1.9	1.5	0.0	1.0
Tobacco	1.4	1.7	0.7	0.2	1.2	0.2	0.4	0.1	0.5	0.4	0.5	0.6
Clothing and footwear	0.9	1.0	1.0	0.8	0.5	0.3	0.4	0.4	0.8	0.9	0.6	0.3
Rent, water, and power	1.2	2.1	2.1	19.0	5.2	22.1	17.2	8.3	7.8	21.8	11.1	0.6
Household goods	1.1	1.1	0.8	1.0	0.3	0.2	0.1	0.2	0.2	0.4	0.2	0.3
Medical care	1.0	3.0	0.9	0.2	1.3	1.0	0.6	1.4	1.0	-0.1	0.3	0.1
Transportation and communication	6.1	2.4	1.4	1.1	3.6	1.2	1.6	1.2	1.0	3.9	1.1	1.5
Recreation, education and culture	2.4	2.6	2.6	2.2	0.6	3.9	2.9	6.3	4.4	4.0	3.2	1.9
Personal care	0.8	0.7	1.2	1.1	0.6	0.5	0.5	0.5	0.5	2.7	1.3	0.8
1997												
Total	2.1	1.7	0.8	0.8	0.4	0.8	0.7	-0.3	-0.1	1.1	1.5	1.3
Food	2.2	1.7	0.8	-0.1	-0.4	0.0	-0.3	-1.2	-0.4	0.2	1.3	1.9
Bread and cereals	-0.4	0.2	-0.2	-0.3	-0.4	-0.1	-0.7	-0.2	-0.1	-0.3	-0.5	-0.4
Meat and poultry	0.9	1.2	0.9	2.7	2.6	0.5	0.5	0.2	0.5	0.1	0.0	1.5
Fish	1.3	1.5	0.2	0.1	-0.9	-2.2	-0.6	0.2	0.5	0.1	2.0	1.4
Dairy products	3.4	2.3	1.2	-2.8	-4.3	-4.5	-0.6	0.5	1.1	3.8	6.4	6.2
Eggs	8.2	0.9	-1.2	-4.0	-6.7	-7.4	-2.8	-2.4	2.5	4.5	5.0	4.1
Oils and fats	2.0	2.3	1.8	0.5	-0.8	-1.9	-1.0	0.1	2.6	2.4	1.3	1.4
Fruits and Vegetables	15.1	8.0	2.7	-2.6	-3.1	-4.5	-10.5	-13.1	-6.7	-0.4	12.0	12.4
Sugar, coffee, tea and condiments	0.6	1.4	1.2	0.9	0.6	8.9	6.6	-1.4	-2.6	-2.2	-1.3	0.5
Beverages at home	0.1	0.5	0.5	0.1	0.4	-0.4	0.5	0.7	0.3	0.1	1.3	1.1
Food and beverages away from home	2.0	0.8	2.6	0.9	0.3	0.4	0.5	0.6	0.0	0.4	0.4	1.4
Tobacco	1.2	0.3	0.4	0.8	0.5	0.7	0.8	0.6	0.8	0.6	1.2	0.8
Clothing and footwear	0.5	0.3	0.3	0.2	0.2	0.1	0.0	0.0	0.2	0.3	0.5	0.4
Rent, water, and power	2.9	3.0	1.3	7.3	1.8	5.1	5.3	2.3	0.1	4.9	3.9	0.5
Household goods	0.3	0.1	0.1	0.3	0.2	0.1	0.0	0.1	0.1	0.2	0.0	0.1
Medical care	0.3	-0.2	0.9	-1.1	1.6	0.5	-0.2	-0.9	0.1	0.1	-0.2	0.1
Transportation and communication	6.4	2.5	-0.6	3.5	1.0	0.8	1.0	0.1	0.2	2.1	1.0	0.9
Recreation, education and culture	1.1	4.0	2.7	1.3	3.3	0.5	1.2	0.5	0.4	0.4	0.2	0.7
Personal care	1.0	2.1	0.6	0.4	0.9	-0.4	-0.1	0.1	0.0	0.4	0.0	0.0
(Percentage change over previous year)												
Memorandum items:												
Total 1994	2,330.3	2,192.2	1,921.8	2,095.3	2,430.3	3,029.5	3,121.5	2,728.3	2,304.5	1,990.1	1,434.7	1,158.3
Total 1995	860.9	725.6	639.2	479.1	344.6	211.9	156.1	130.6	115.2	86.4	70.5	60.3
Total 1996	53.3	47.3	42.5	42.2	41.2	41.4	39.9	37.9	36.5	34.9	32.4	28.7
Total 1997	26.2	25.2	24.1	21.5	19.5	17.6	16.4	15.3	13.7	11.7	10.6	11.2
Total 1998	11.0	10.3	10.2	9.9	9.8							

Sources: National Statistical Agency, and Fund staff estimates.

Table 7. Kazakhstan: Administered Prices, 1994-97 1/

	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
1994	(Administratively set price for the corresponding month, in Tenge)											
Wholesale prices												
Oil 2/ (ton)	100.0	100.0	100.0	633.0	...	...	...	...	...	...	...	...
Coal 2/ (ton)	81.0	81.0	81.0	79.0	146.0	...	...	...	...	...	...	...
Natural gas (1000m3)	5.0	21.0	34.0	88.0	124.0	139.0	150.0	250.0	253.0	291.0	291.0	291.0
Gasoline 3/ (ton)	654.0	678.0	695.0	1,573.0	1,698.0	2,080.0	4,442.0	4,442.0	5,153.0	5,579.0	...	...
Diesel fuel 3/ (ton)	706.0	728.0	757.0	1,339.0	1,463.0	2,087.0	4,119.0	4,119.0	4,401.0	4,401.0	...	...
Fuel oil 3/ (ton)	452.0	448.0	471.0	775.0	823.0	900.0	2,121.0	2,121.0	2,266.0	2,266.0	...	...
Electricity (kwh)	0.1	0.1	0.1	0.4	0.4	0.7	1.1	1.1	1.2	1.2	1.2	1.3
Retail prices												
White bread 3/	0.5	0.5	0.5	0.5	0.5	0.5	1.3	1.3	1.3	...	...	...
Gasoline A93 3/ (per liter)	1.2	1.2	1.2	1.8	3.7	3.7	7.4	7.4	7.4	...	...	...
Gasoline A76 3/ (per liter)	1.2	1.2	1.2	1.7	3.4	3.4	6.7	6.7	6.7	...	...	...
Diesel fuel 3/ (tons)	1.1	1.1	1.1	1.7	3.1	3.1	6.4	6.4	6.4	...	...	...
Fuel 3/ (tons)	0.1	0.1	0.1	0.2	0.4	0.4	0.8	0.8	0.8	...	...	...
Electricity in rural areas (kwh)	...	...	...	0.2	0.2	0.9	0.9	0.9	1.4	1.4	1.4	1.4
Electricity in urban areas (kwh)	0.0	0.0	0.0	0.3	0.3	0.3	0.9	1.0	1.0	1.5	1.5	1.5
Electrical heating	...	...	...	0.2	0.2	0.9	0.9	0.9	1.4	1.4	1.4	1.4
Water and sewage	0.2	0.3	0.3	0.5	0.6	0.6	1.1	1.8	6.5	7.5	9.1	10.3
Hot water	0.3	0.3	0.3	0.4	2.9	4.1	4.4	5.3	5.6	7.0	13.3	15.4
Rent (per square meter)	0.1	0.1	0.1	0.3	0.3	0.5	0.6	0.9	0.9	1.0	1.2	1.3
Transportation (public) 4/	0.1	0.1	0.1	0.5	0.7	1.1	1.6	1.9	1.9	2.3	2.4	2.6
Telephone subscription	4.4	4.4	4.4	13.0	13.0	26.5	40.0	40.0	60.0	60.0	60.0	60.0
1995												
Wholesale prices												
Oil 2/	...	...	...	...	...	...	...	...	...	...	...	...
Coal 2/	...	...	...	...	...	...	...	...	...	...	...	...
Natural gas	291.0	291.0	291.0	343.0	349.0	349.0	404.0	414.0	415.0	415.0	454.0	454.0
Gasoline 3/	...	...	...	...	...	...	...	...	...	...	...	...
Diesel fuel 3/	...	...	...	...	...	...	...	...	...	...	...	...
Fuel oil 3/	...	...	...	...	...	...	...	...	...	...	...	...
Electricity	1.3	1.3	1.3	1.3	1.3	1.3	1.4	1.4	1.4	1.4	1.4	1.5
Retail prices												
White bread 3/	...	...	...	...	...	...	...	...	...	...	...	...
Gasoline A93 3/	...	...	...	...	...	...	...	...	...	...	...	...
Gasoline A76 3/	...	...	...	...	...	...	...	...	...	...	...	...
Diesel fuel 3/	...	...	...	...	...	...	...	...	...	...	...	...
Fuel 3/	...	...	...	...	...	...	...	...	...	...	...	...
Electricity in rural areas	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	n.a.	n.a.	n.a.
Electricity in urban areas	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	2.0	2.0	2.0
Electrical heating	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	n.a.	n.a.	n.a.
Water and sewage	10.5	11.2	11.9	11.9	12.1	12.6	12.9	13.2	14.5	15.3	16.8	16.9
Hot water	20.2	22.6	22.2	22.5	29.0	30.9	33.2	34.8	38.6	44.5	47.3	49.7
Rent	1.4	1.6	1.8	1.9	1.9	2.0	2.1	2.3	2.6	2.8	2.9	3.0
Transportation (public) 4/	3.6	4.5	4.7	5.0	5.1	5.7	6.1	6.7	6.9	8.0	8.8	9.1
Telephone subscription	60.0	60.0	60.0	60.0	60.0	60.0	120.0	120.0	120.0	120.0	120.0	120.0
1996												
Wholesale prices												
Oil 2/	...	...	...	...	...	...	...	...	...	...	...	...
Coal 2/	...	...	...	...	...	...	...	...	...	...	...	...
Natural gas	547.0	551.0	551.0	551.0	551.0	551.0	551.0	549.0	549.0	549.0	529.0	546.0
Gasoline 3/	...	...	...	...	...	...	...	...	...	...	...	...
Diesel fuel 3/	...	...	...	...	...	...	...	...	...	...	...	...
Fuel oil 3/	...	...	...	...	...	...	...	...	...	...	...	...
Electricity	1.6	1.6	1.6	1.6	1.6	1.8	1.9	2.0	2.0	2.2	2.2	2.2
Retail prices												
White bread 3/	...	...	...	...	...	...	...	...	...	...	...	...
Gasoline A93 3/	...	...	...	...	...	...	...	...	...	...	...	...
Gasoline A76 3/	...	...	...	...	...	...	...	...	...	...	...	...
Diesel fuel 3/	...	...	...	...	...	...	...	...	...	...	...	...
Fuel 3/	...	...	...	...	...	...	...	...	...	...	...	...
Electricity in rural areas	...	...	...	...	...	...	...	...	...	n.a.	n.a.	n.a.
Electricity in urban areas	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.2
Electrical heating	...	...	...	...	...	...	...	...	...	n.a.	n.a.	n.a.
Water and sewage	18.0	18.9	19.2	22.7	24.9	29.7	43.7	49.6	56.3	72.2	81.5	81.6
Hot water	49.8	53.8	54.1	64.3	66.8	100.4	139.3	150.8	158.9	198.5	200.6	208.4
Rent	3.0	3.3	3.3	3.5	3.8	3.9	4.6	4.8	4.2	4.6	4.7	4.9
Transportation (public) 4/	9.5	10.0	9.9	10.1	10.1	10.4	10.4	10.4	10.5	10.5	10.6	10.8
Telephone subscription	150.0	150.0	150.0	150.0	150.0	150.0	165.0	165.0	165.0	200.0	200.0	200.0
1997												
Wholesale prices												
Oil 2/	...	...	...	...	...	...	...	...	...	...	...	...
Coal 2/	...	...	...	...	...	...	...	...	...	...	...	...
Natural gas	547.0	547.0	548.0	548.0	563.0	563.0	563.0	563.0	563.0	563.0	594.0	594.0
Gasoline 3/	...	...	...	...	...	...	...	...	...	...	...	...
Diesel fuel 3/	...	...	...	...	...	...	...	...	...	...	...	...
Fuel oil 3/	4,292.0	4,315.0	4,295.0	3,639.0	3,393.0	3,367.0	3,284.0	3,282.0	3,448.0	3,709.0	3,704.0	3,823.0
Electricity	2,589.0	2,664.0	2,726.0	2,726.0	2,738.0	2,740.0	2,988.0	2,999.0	3,021.0	2,999.0	2,970.0	3,093.0

Sources: National Statistical Agency; and Fund staff estimates.

1/ Rents, utility fees (heating, water), and local transportation fares are set administratively at the regional (oblast) level. All other prices are set at the national level.

2/ Prices were liberalized in the second quarter of 1994.

3/ Prices were liberalized in the fourth quarter of 1994.

4/ Prices were liberalized in August of 1994.

Table 8. Kazakhstan: Wholesale Prices, 1994-98

	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
(In monthly percent change)												
1994												
Total	44.9	34.9	29.5	82.8	37.2	45.7	35.8	13.2	16.8	13.1	3.0	4.5
Electric energy	7.8	2.3	0.5	208.4	12.5	102.1	82.0	2.8	5.6	31.8	1.7	-0.1
Fuel	95.5	7.2	5.8	106.9	48.9	27.3	76.9	4.8	3.3	18.9	0.0	-2.6
Oil extraction	0.4	6.2	0.0	436.5	25.7	18.7	86.3	0.3	0.0	14.0	0.0	0.1
Oil processing	112.4	13.5	10.9	78.8	67.5	10.7	119.1	0.0	1.9	4.2	0.1	0.0
Gas extraction	129.9	92.2	61.9	159.0	41.3	11.6	8.3	66.4	1.2	15.0	0.0	0.0
Coal	160.9	0.0	0.0	7.8	64.2	68.3	34.4	11.8	9.9	0.5	0.0	33.3
Ferrous metals	25.8	12.4	20.8	55.8	142.8	57.9	23.4	4.3	4.8	-0.5	14.7	0.7
Nonferrous metals	33.2	123.7	57.4	96.5	18.4	34.7	13.6	20.2	25.1	3.9	1.0	0.1
Chemicals	44.7	26.9	53.8	43.6	67.0	42.8	31.9	27.7	4.0	8.4	3.7	12.3
Petrochemicals	18.3	41.2	38.3	43.5	23.9	103.8	27.8	5.5	37.2	42.6	1.1	0.9
Machine building	46.7	19.4	63.2	25.8	47.0	47.3	15.6	25.2	8.4	8.9	-0.3	19.6
Wood products	19.5	41.1	15.8	67.8	27.6	82.9	15.5	17.4	10.0	15.1	28.0	11.2
Construction materials	12.7	22.5	20.0	91.8	40.3	84.4	25.5	15.7	9.9	37.3	3.2	3.8
Glass industry	0.0	0.0	0.0	100.0	150.0	50.0	0.0	0.0	66.6	0.0	0.0	0.0
Light industry	26.6	27.4	29.2	77.9	30.0	29.7	18.4	45.3	24.9	14.0	9.1	18.1
Food industry	67.2	31.9	18.0	48.2	29.7	44.0	24.3	13.8	13.7	30.5	21.2	15.3
1995												
Total	5.9	5.5	5.1	4.3	0.4	1.2	1.9	6.7	-2.2	3.7	1.6	0.6
Electric energy	5.5	-1.9	-2.4	-2.6	-27.5	-5.9	5.8	49.7	-17.5	5.6	1.1	-7.6
Fuel	29.8	2.6	-1.8	7.2	0.7	0.0	0.9	1.3	0.1	2.9	-0.1	0.1
Oil extraction	69.5	2.9	-1.5	4.0	1.0	0.0	0.0	0.0	0.0	4.2	0.0	0.0
Oil processing	30.6	1.8	-4.4	-0.7	0.0	0.0	1.1	5.3	0.0	5.7	-1.3	0.0
Gas extraction	4.4	0.0	0.1	15.4	2.4	0.0	26.6	0.0	0.0	0.0	22.7	0.0
Coal	23.6	3.0	0.0	0.0	-3.8	3.4	0.2	0.0	0.2	0.0	-0.6	0.1
Ferrous metals	1.4	17.2	13.2	-4.4	-4.3	0.6	5.0	-0.5	-2.2	4.4	0.8	4.1
Nonferrous metals	26.2	4.3	11.5	7.1	2.1	3.4	2.6	-2.3	2.5	1.2	0.9	0.6
Chemicals	8.7	8.1	3.5	6.8	12.2	4.1	1.0	1.5	-1.5	-1.6	0.9	2.2
Petrochemicals	-2.9	5.4	3.8	26.3	-1.7	-0.8	-1.3	-0.1	-3.8	-1.6	0.6	0.3
Machine building	7.7	11.3	7.6	3.6	4.9	0.7	-3.5	6.3	2.0	9.4	0.6	3.6
Wood products	10.1	6.4	3.8	2.8	1.7	1.0	-0.7	1.1	1.3	1.3	2.5	0.6
Construction materials	5.4	4.2	4.3	3.2	6.8	5.3	2.0	0.4	0.3	0.1	1.5	1.1
Glass industry	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Light industry	3.0	5.8	7.4	6.1	5.5	2.4	-0.1	3.0	3.9	2.9	6.0	2.9
Food industry	10.1	5.4	4.5	2.8	3.9	0.5	1.3	2.5	1.6	5.8	4.5	3.6
Other	-3.0	21.0	0.0	0.0	0.0	17.0	0.0	0.0	0.0	0.0	0.0	0.0
1996												
Total	3.5	3.0	0.4	1.0	1.5	1.9	-0.3	1.3	1.0	2.4	0.9	0.7
Electric energy	-0.1	2.0	0.9	1.3	4.9	7.5	2.6	5.1	0.1	9.4	2.2	0.1
Fuel	7.3	2.2	0.6	1.0	0.2	0.0	0.8	0.0	0.2	0.4	0.2	1.9
Oil extraction	0.0	6.6	1.8	2.1	0.1	-0.4	0.0	0.0	0.1	0.1	0.2	0.3
Oil processing	0.6	0.0	0.0	2.0	0.0	0.0	-1.4	0.0	0.0	1.8	0.2	0.5
Gas extraction	0.0	1.2	0.0	0.0	0.0	0.0	0.0	-0.7	0.0	0.0	-5.4	9.8
Coal	19.8	0.2	0.1	-0.4	0.5	0.3	3.0	0.0	0.3	-0.1	0.7	3.7
Ferrous metals	1.5	7.1	-2.3	-4.6	-1.2	-2.1	-2.1	0.1	0.3	0.5	0.6	-0.1
Nonferrous metals	3.5	0.0	-2.6	0.5	0.9	6.3	-7.0	-1.1	0.1	1.2	0.2	0.1
Chemicals	-1.7	6.2	4.4	3.0	5.1	-2.0	-0.2	-1.2	0.3	2.8	1.3	-1.6
Petrochemicals	0.0	1.1	0.0	0.0	10.5	3.9	0.0	-0.3	0.0	0.0	0.0	0.0
Machine building	6.1	6.2	2.3	3.6	1.4	1.6	0.4	1.3	0.6	2.9	1.2	1.0
Wood products	4.6	1.3	-1.1	1.3	0.3	-1.1	-0.2	0.1	-1.0	-2.8	-0.8	1.1
Construction materials	-0.5	3.0	4.9	5.1	3.5	0.2	-1.0	2.3	0.5	1.7	4.6	0.6
Glass industry	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Light industry	0.5	1.2	0.6	1.3	-0.5	0.1	2.6	1.3	1.4	0.4	1.0	2.1
Food industry	4.5	3.7	1.5	2.3	1.9	2.1	0.7	2.8	4.1	2.3	0.5	0.7
Other	0.0	0.0	1.0	8.6	15.2	0.0	0.3	0.0	8.5	9.5	1.8	0.0
1997												
Total	5.3	1.0	0.8	-0.1	0.3	0.4	1.6	-0.1	0.4	1.0	-0.3	0.9
Electric energy	13.3	0.7	1.3	-0.8	0.8	0.1	7.1	-0.2	0.4	5.2	-0.6	2.9
Fuel	10.6	1.7	0.7	-0.4	-0.2	1.5	-0.1	0.3	0.3	0.4	-0.2	1.3
Oil extraction	5.8	2.8	2.0	0.6	0.0	0.0	0.0	0.0	0.0	0.6	0.0	1.8
Oil processing	19.2	0.8	-0.1	-3.3	-0.7	5.5	-0.3	0.1	1.0	2.0	0.3	0.7
Gas extraction	0.0	0.0	0.5	0.0	4.1	0.0	0.0	0.0	0.0	0.0	5.4	0.0
Coal	10.0	1.5	0.2	0.5	-0.3	0.3	-0.1	0.6	0.0	-0.8	-1.0	1.3
Ferrous metals	-1.1	2.8	2.4	-0.5	-1.0	-0.7	0.9	-1.2	2.5	-1.1	1.8	0.0
Nonferrous metals	3.0	0.4	0.5	-0.1	3.5	1.4	1.1	-0.1	-0.6	-0.3	-3.4	-3.6
Chemicals	-0.8	1.7	1.3	0.1	-0.2	1.4	0.0	0.5	3.5	-0.2	-2.6	-0.3
Petrochemicals	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Machine building	3.8	0.5	-1.6	1.4	-0.8	0.6	0.8	-0.2	-0.3	-0.9	0.2	4.1
Wood products	-3.3	1.4	3.7	0.8	2.6	0.0	-0.1	0.1	-0.6	-1.1	0.2	-0.2
Construction materials	0.0	-0.4	0.6	1.2	-0.3	0.5	1.3	0.7	0.3	0.3	0.5	1.0
Glass industry	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Light industry	0.4	-0.9	1.1	0.4	0.4	0.0	0.0	0.1	0.1	-0.2	0.0	0.0
Food industry	0.4	1.4	0.4	0.3	-0.4	-0.8	-0.1	-0.2	0.1	0.4	0.7	0.7
(Percentage change over previous year)												
Memorandum items:												
Total 1994	1,625.0	1,513.7	1,532.0	2,420.5	2,964.8	3,606.1	4,121.9	3,795.2	3,349.9	3,045.3	2,476.1	1,921.8
Total 1995	1,377.7	1,055.6	837.9	435.1	291.6	172.0	104.1	92.4	61.1	47.7	45.7	40.2
Total 1996	37.2	34.0	28.0	23.9	25.3	26.1	23.4	17.2	21.0	19.5	18.7	18.8
Total 1997	20.5	18.1	18.6	17.3	16.0	14.3	16.5	15.0	14.4	12.9	11.5	11.7
Total 1998	6.4											

Source: National Statistical Agency, and Fund staff estimates.

Table 9. Kazakhstan: Energy Prices, 1994-97 1/
(Monthly price, in Tenge)

	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
1994												
Crude oil (ton)	100	100	100	633	780	880	1,683	1,683	1,767	1,820	2,000	2,083
Natural gas (1000m3)	5	21	34	88	124	139	150	250	253	291	291	291
Electricity (1000kwh)	90	90	90	350	370	730	1,120	1,140	1,170	1,220	1,240	1,260
Coal (ton)	81	81	81	79	146	197	319	345	365	504	504	504
Gasoline (ton)	654	678	695	1,573	1,698	2,080	4,442	4,442	5,153	5,579	6,041	6,041
Diesel (ton)	706	728	757	1,339	1,463	2,087	4,119	4,119	4,401	4,401	4,901	4,901
Mazuth (ton)	452	448	471	775	823	900	2,121	2,121	2,266	2,266	2,269	2,322
1995												
Crude oil	3,173	3,173	3,173	3,200	3,200	3,200	3,200	3,200	3,200	3,375	3,375	3,300
Natural gas	291	291	291	343	349	349	404	414	415	415	454	454
Electricity	1,260	1,280	1,300	1,330	1,335	1,341	1,360	1,375	1,380	1,400	1,435	1,460
Coal	630	653	653	653	628	649	650	650	656	656	628	628
Gasoline	9,074	9,169	8,769	8,960	8,960	8,960	9,231	8,950	9,266	9,278	9,324	9,324
Diesel	6,465	6,615	6,615	7,183	7,183	7,183	7,183	7,051	7,165	7,253	7,253	7,034
Mazuth	3,771	3,945	3,578	3,213	3,213	3,213	3,074	3,374	3,374	3,573	3,469	3,469
1996												
Crude oil	3,330	3,542	3,595	3,661	3,665	3,649	3,650	3,651	3,655	3,659	3,665	3,676
Natural gas	547	551	551	551	551	551	551	549	549	549	529	546
Electricity	1,511	1,559	1,567	1,587	1,624	1,840	1,929	2,046	2,046	2,175	2,180	2,180
Coal	776	780	778	765	769	772	782	782	785	784	788	788
Gasoline	9,530	9,530	9,530	10,312	10,312	10,312	9,929	9,929	9,929	9,943	9,943	9,943
Diesel	7,056	7,056	7,056	7,425	7,425	7,425	7,264	7,264	7,264	7,298	7,298	7,298
Mazuth	3,506	3,438	3,438	3,128	3,128	3,128	3,128	3,128	3,128	3,325	3,325	3,390
Heating (Gcal)	744	748	754	765	838	843	837	842	843	968	1,008	1,010
Liquid petroleum gas (ton)	3,129	3,129	3,129	3,345	3,345	3,345	3,345	3,345	3,345	3,345	3,345	3,345
1997												
Crude oil	3,911	4,016	4,099	4,127	4,127	4,127	4,127	4,127	4,127	4,156	4,156	4,242
Natural gas	547	547	548	548	563	563	563	563	563	563	594	594
Electricity	2,589	2,664	2,726	2,726	2,738	2,710	2,988	2,999	3,021	2,999	2,970	3,093
Coal	559	575	577	582	579	581	580	580	580	577	577	577
Gasoline	11,598	11,814	11,848	11,849	11,948	13,162	13,166	13,189	13,177	13,259	13,254	13,263
Diesel	8,707	8,729	8,725	8,855	8,986	9,448	9,580	9,584	9,582	9,581	9,580	9,581
Mazuth	4,292	4,315	4,295	3,639	3,393	3,417	3,281	3,281	3,418	3,709	3,704	3,823
Heating (Gcal)	1,117	1,097	1,097	1,131	1,094	1,094	1,092	1,080	1,082	1,235	1,235	1,252
Liquid petroleum gas (ton)	3,864	3,871	3,869	4,249	4,251	4,267	4,268	4,270	4,270	4,270	4,270	4,270

Sources: National Statistical Agency; and Fund staff estimates.
1/ Producers' ex-factory prices. Average prices for all customers.

Table 10. Kazakhstan: Employment, 1993-97

	1993	1994	1995	1996	1997
(In thousands of people)					
Employment					
Total	5,630	5,415	4,994	4,381	3,659
Sectors of material production	3,868	3,737	3,338	2,839	2,378
Industry	1,195	1,121	1,026	916	812
Construction	492	391	325	251	193
Agriculture	1,108	1,196	1,062	883	740
Forestry	13	11	10	9	9
Transport	497	464	418	378	320
Communication	79	82	80	77	67
Trade and public catering	294	264	225	166	113
Marketing and purchasing	98	84	71	60	51
Information services	10	8	6	5	5
Other	82	116	115	94	68
Sectors of non-material production	1,762	1,678	1,656	1,541	1,281
Municipal services	252	242	249	224	165
Health and cultural services	425	425	412	389	332
Education	732	697	685	632	542
Culture and art	93	82	81	67	43
Science and scientific service	77	38	37	32	27
Credit and state insurance	52	49	47	43	36
Management apparatus	132	145	146	154	135
(In percent of total)					
Share of employment					
Total	100.0	100.0	100.0	100.0	100.0
Sectors of material production	68.7	69.0	66.8	64.8	65.0
Industry	21.2	20.7	20.5	20.9	22.2
Construction	8.7	7.2	6.5	5.7	5.3
Agriculture	19.7	22.1	21.3	20.2	20.2
Forestry	0.2	0.2	0.2	0.2	0.2
Transport	8.8	8.6	8.4	8.6	8.7
Communication	1.4	1.5	1.6	1.8	1.8
Trade and public catering	5.2	4.9	4.5	3.8	3.1
Marketing and purchasing	1.7	1.6	1.4	1.4	1.4
Information services	0.2	0.1	0.1	0.1	0.1
Other	1.5	2.1	2.3	2.1	1.9
Sectors of non-material production	31.3	31.0	33.2	35.2	35.0
Municipal services	4.5	4.5	5.0	5.1	4.5
Health and cultural services	7.5	7.8	8.2	8.9	9.1
Education	13.0	12.9	13.7	14.4	14.8
Culture and art	1.7	1.5	1.6	1.5	1.2
Science and scientific service	1.4	0.7	0.7	0.7	0.7
Credit and state insurance	0.9	0.9	0.9	1.0	1.0
Management apparatus	2.3	2.7	2.9	3.5	3.7

Sources: National Statistical Agency; and Fund staff estimates.

Table 11. Kazakhstan: Labor Market, 1993-97

	1993				1994				1995				1996				1997			
	QI	QII	QIII	QIV	QI	QII	QIII	QIV	QI	QII	QIII	QIV	QI	QII	QIII	QIV	QI	QII	QIII	QIV
(In thousands)																				
Number of job placement inquiries	20.9	18.1	17.6	19.1	20.0	22.7	22.1	25.4	26.4	26.5	28.6	35.9	52.6	47.0	44.5	43.3	50.5	46.6	44.1	37.3
Number of people placed in jobs	7.1	9.5	8.4	8.2	5.7	8.8	8.7	7.9	6.5	8.1	8.2	8.0	6.7	9.3	9.6	7.8	6.4	8.3	8.6	8.6
Number of people granted unemployment status	7.3	6.2	5.6	7.0	7.9	8.9	9.4	11.5	14.4	14.1	16.1	23.1	35.8	32.7	31.6	30.5	32.5	32.9	30.8	31.9
Number of unemployed	37.4	39.2	37.1	39.8	45.9	51.4	56.6	66.4	81.3	92.9	103.3	127.8	183.3	235.4	263.1	279.5	293.1	277.7	268.7	263.5
Of which																				
Beneficiaries	18.0	18.5	16.3	15.0	17.4	21.2	25.1	30.2	40.7	49.0	54.1	65.8	101.5	140.9	157.3	167.5	178.7	177.8	178.5	176.9
Number of vacancies	45.7	61.3	65.6	44.6	28.4	44.2	42.7	33.4	26.1	27.6	25.9	20.0	16.2	17.9	17.6	11.6	8.6	9.8	12.9	9.6
Hidden unemployment 1/ 2/	144.8	139.6	147.7	304.4	675.6	529.0	477.0	556.2	746.5	793.4	766.6	643.3	579.4	364.1	317.1	305.2	331.7	289.5	240.3	235.0
Total unemployment 3/	182.2	178.8	184.8	344.2	721.5	580.4	533.6	622.6	827.8	886.3	869.9	771.1	762.7	599.5	580.2	584.7	624.8	567.2	509.0	498.5
(In percent)																				
Official unemployment rate 4/	0.5	0.6	0.5	0.6	0.6	0.7	0.8	1.0	1.2	1.5	1.8	2.1	2.7	3.5	3.9	4.1	4.3	4.1	4.0	3.9
Actual unemployment rate 5/	2.1	2.0	2.1	4.4	9.2	7.2	6.8	8.1	11.3	12.1	11.5	13.0	11.4	8.9	8.6	8.6	9.2	8.3	7.5	7.3

Sources: National Statistical Agency; Ministry of Labor; and Fund staff estimates.

1/ Defined as workers in part-time jobs and forced leave.

2/ In March 1996, the Ministry of Labor introduced a new methodology of collecting data on hidden unemployment, which has resulted in a reduction in the number for hidden unemployment.

3/ Unofficially unemployed persons are not included.

4/ Ratio of number of officially unemployed to the labor force.

5/ Ratio of number of officially unemployed plus that of hidden unemployed to the labor force.

Table 12. Kazakhstan: Nominal and Real Wages, 1994-98
(In Tenge per month, unless otherwise indicated)

	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
1994												
Minimum wage	30	40	40	100	100	100	150	150	150	200	200	200
Average wage 1/	331	370	475	807	1,036	1,357	1,726	1,971	2,451	3,091	3,360	3,392
Minimum real wage 2/	70	75	64	122	91	62	75	66	60	67	58	53
Average real wage 2/	76	68	74	96	92	83	84	84	96	101	96	88
Average wage (in U.S. dollars)	36	32	27	31	27	32	38	43	52	63	66	63
1995												
Minimum wage	200	200	250	250	250	250	280	280	280	300	300	300
Average wage 1/	3,571	3,650	4,161	4,282	4,613	4,830	5,185	5,352	5,729	5,963	6,194	6,327
Minimum real wage 2/	49	46	54	52	51	50	54	53	52	54	51	50
Average real wage 2/	85	81	88	88	92	94	98	99	104	104	103	102
Average wage (in U.S. dollars)	64	62	69	69	73	76	83	93	95	96	98	99
1996												
Minimum wage	1,100	1,100	1,100	1,400	1,400	1,400	1,700	1,700	1,700	2,000	2,000	2,000
Average wage 1/	5,634	5,713	6,218	6,518	6,452	6,768	7,063	7,105	7,349	7,587	7,423	7,674
Minimum real wage 2/	174	170	167	207	203	198	236	234	232	265	258	256
Average real wage 2/	87	86	92	94	91	93	96	96	98	98	94	96
Average wage (in U.S. dollars)	87	87	95	99	97	101	105	105	107	108	104	105
1997												
Minimum wage	2,030	2,030	2,030	2,060	2,060	2,080	2,085	2,085	2,085	2,340	2,340	2,340
Average wage 1/	7,506	7,472	8,201	7,993	8,313	8,742	8,882	8,621	9,054	9,285	9,035	9,205
Minimum real wage 2/	255	251	249	250	249	250	249	249	250	277	273	269
Average real wage 2/	92	90	98	95	98	103	103	101	106	107	103	104
Average wage (in U.S. dollars)	102	99	109	106	110	116	118	114	120	123	120	121
1998												
Minimum wage	2,360	2,360	2,360	2,380	2,380	2,380	2,400	2,400	2,400	2,440	2,440	2,440
Average wage 1/	9,016	9,005	...	...	...	...	...	...	...	...	...	...
Minimum real wage 2/	267	264	262	...	...	...	...	...	...	...	...	...
Average real wage 2/	100	98	...	...	...	...	...	...	...	...	...	...
Average wage (in U.S. dollars)	119	118	...	...	...	...	...	...	...	...	...	...

Sources: National Statistical Agency; Ministry of Labor; and Fund staff estimates.

1/ For December, excludes estimated bonus.

2/ December 1993 = 100.

Table 13. Kazakhstan: Wages by Sector, 1993-97 1/
(In Tenge)

	1993	1994	1995	1996	1997
Total	128	1,726	4,786	6,841	8,550
Sectors of material production	137	1,960	5,383	7,447	9,244
Industry	171	2,801	7,792	10,198	13,052
Construction	170	2,660	7,850	9,660	11,087
Agriculture	101	1,038	2,392	3,512	3,745
Forestry	75	870	2,442	4,165	5,225
Transport	182	2,408	6,808	9,453	11,142
Communication	120	1,821	5,875	9,156	10,041
Trade and public catering	85	1,175	3,341	4,883	5,835
Marketing and purchasing	140	2,035	6,108	8,708	8,360
Information services	134	1,825	5,417	7,234	10,997
Sectors of non-material production	89	1,158	3,497	5,592	7,111
Municipal services	102	1,642	4,575	6,780	8,156
Health and cultural services	66	797	2,675	4,568	5,825
Education	81	893	2,933	5,069	6,250
Culture and art	67	771	2,332	4,149	5,549
Science and scientific service	119	1,470	4,483	6,786	8,998
Credit and state insurance	288	4,179	10,967	13,022	16,822
Management apparatus	139	1,775	4,475	7,250	9,676

Sources: National Statistical Agency; and Fund staff estimates.

1/ Data are not comparable with monthly wages in Table 12.

Table 14. Kazakhstan: Investment in Constant Prices, 1993-97
(1991 = 100)

	1993		1994		1995		1996 1/		1997	
	Total	State	Total	State	Total	State	Total	State	Total	State
Total investment	32.4	24.4	27.5	14.0	15.8	7.9	9.4	4.3	8.7	2.7
Productive investment	31.0	25.4	29.2	15.0	18.6	8.6	10.6	4.5	9.5	1.9
Industry	42.0	35.1	50.0	22.2	29.9	11.4	17.5	4.9	18.2	1.6
Agriculture	22.5	18.0	5.2	3.5	2.0	0.8	0.9	0.3	0.2	0.2
Transport and communication	32.5	25.3	49.0	45.2	36.0	32.0	26.1	24.2	14.8	13.4
Construction	10.5	6.4	5.5	0.7	3.9	0.6	2.6	1.6	0.9	0.6
Trade and catering	4.9	2.2	3.4	0.6	5.0	0.5	4.1	1.0	0.9	0.4
Other	46.7	53.3	112.5	38.5	12.5	5.1	35.7	4.6	23.2	1.7
Non-productive investment	35.4	22.4	23.9	11.9	11.0	4.4	6.7	3.9	7.0	4.4
Housing	28.9	17.4	14.6	9.8	8.6	3.7	5.2	2.2	8.7	3.5
Other	48.3	32.3	42.3	16.0	12.5	4.8	9.6	7.0	5.8	6.2
Memorandum item:										
Index of houses constructed	62.9	...	36.7	...	27.1	...	...	...	...	...

Sources: National Statistical Agency; and Fund staff estimates.

1/ Adjusted for underreporting.

Table 15. Kazakhstan: Financing of Investment, 1993-97

	1993	1994	1995	1996	1997
(In millions of Tenge)					
All resources	5,516	80,945	148,590	118,981	114,969
State enterprises	4,162	41,257	66,847	48,997	32,016
Budget resources	1,086	7,332	6,075	8,335	15,232
Own resources	3,075	33,926	60,705	40,662	16,784
Other 1/	1,354	39,688	81,743	69,984	82,953
(In percent of total resources)					
State enterprises	75.5	51.0	45.0	41.2	27.8
Budget resources	19.7	9.1	4.1	7.0	13.2
Own resources	55.8	41.9	40.9	34.2	14.6
Other 1/	24.5	49.0	55.0	58.8	72.2

Sources: National Statistical Agency; and Fund staff estimates.

1/ Includes mainly private sector investment.

Table 16. Kazakhstan: Sectoral Composition of Capital Investment, in Current Prices, 1994-97
(In percent of total investment)

	1994	1995	1996	1997 1/
Total	100.0	100.0	100.0	100.0
For production facilities	72.8	75.0	77.4	74.5
Industry	55.2	57.3	55.9	62.7
Electric power generation	7.1	8.2	10.6	4.3
Oil extraction industry	24.4	20.5	20.7	35.7
Oil refining industry	2.5	2.2	2.1	1.4
Gas industry	1.3	1.9	2.6	1.9
Coal industry	5.0	4.5	3.5	3.6
Ferrous metallurgy	4.0	5.7	2.8	3.4
Nonferrous metallurgy	5.3	9.6	7.9	5.2
Construction materials industry	0.5	0.3	1.1	1.7
Light industry	0.3	0.1	0.1	0.0
Medical industry	0.1	0.1	0.1	0.0
Machine building and metalworking	0.6	0.6	0.5	0.3
Other	4.1	3.6	3.9	5.0
Agriculture	6.0	3.6	3.3	0.9
Forestry	0.0	0.0	0.1	0.0
Transportation	7.3	4.6	9.5	7.4
Other	4.2	9.4	8.6	3.5
For nonproduction facilities	27.2	25.1	22.6	25.5
Housing construction	12.4	12.6	12.0	13.7
Municipal construction	7.2	5.8	3.6	6.2
Consumer services	0.1	0.1	0.0	0.0
Public health and social security	2.9	3.0	2.6	1.4
Public education	1.0	0.9	0.6	1.0
Culture and art	0.5	0.4	0.3	0.2
Scientific research	0.0	0.0	0.0	0.0
Other nonproduction sectors	3.2	2.3	3.4	2.9

Sources: National Statistical Agency, and Fund staff estimates.

1/ Preliminary estimates.

Table 17. Kazakhstan: Savings, Investment and Growth, 1994-97

	1994	1995	1996	1997
(In percent of GDP)				
Savings and investment				
Investment	22.6	20.5	11.8	12.9
Gross capital formation	20.0	17.9	10.7	11.9
Public sector	9.7	6.7	3.7	3.7
<i>Of which</i>				
Budget	2.6	1.0	1.7	2.0
Private 1/	10.3	11.2	7.0	8.2
Change in stocks	2.6	2.6	1.1	1.0
Financed by:				
Total savings	22.6	20.5	11.8	12.9
National savings	14.0	17.4	8.2	8.7
Budget 2/ 3/	-4.8	-2.2	-3.5	-5.0
Private	18.8	19.6	11.7	13.7
Foreign savings 4/	8.6	3.1	3.6	4.2
(Percent change over previous year)				
Real GDP	-12.6	-8.2	0.5	2.0
Real GDP per capita	-11.8	-4.3	1.2	3.6
Memorandum items:				
Total factor productivity	...	-8.5	1.5	3.8
Labor force growth	-3.0	-3.0	-2.0	-2.2
Inflation (CPI, end-of-period)	1,160.3	60.4	28.6	11.3
Fiscal deficit (percent of GDP) 3/	-7.4	-3.2	-5.2	-7.0

Sources: Kazakh authorities; and Fund staff estimates.

1/ This reflects in part reclassification of the public sector to the private sector due to privatization.

2/ Government savings equal revenues minus current expenditures, equivalent to deficit (calculated from fiscal data on revenues and expenditures) plus investment.

3/ Excludes privatization proceeds from revenue.

4/ Foreign savings equal the current account deficit.

Table 18. Kazakhstan: Privatization of State Enterprises, 1994-97
(Units)

	Before 1994	1994	1995	1996	1997
Small-scale privatization	5,578	2,748	2,477	3,393	5,590
Mass privatization	...	...	147	497	1,122
Privatization in agriculture	...	918	513	138	18
Case-by-case privatization	...	...	5	28	47
Total	9,269	4,147	3,142	4,056	6,777

Sources: Ministry of Finance; National Statistical Agency; and Fund staff estimates.

Table 19. Kazakhstan: Privatized Enterprises by Sectors, 1994-97

	1994	1995	1996	1997
	(Units)			
Industry	211	48	437	608
Construction	110	52	45	162
Agriculture	918	514	138	18
Transport	180	28	101	331
Trade and catering	1,394	1,358	1,519	1,279
Personal and public services	587	337	280	689
Other sectors	747	806	1,536	3,690
<i>Of which</i>				
Incompleted units	16	19	31	226
Total	4,147	3,143	4,056	6,777
	(In percent of total)			
Industry	5.1	1.5	10.8	9.0
Construction	2.7	1.7	1.1	2.4
Agriculture	22.1	16.4	3.4	0.3
Transport	4.3	0.9	2.5	4.9
Trade and catering	33.6	43.2	37.5	18.9
Personal and public services	14.2	10.7	6.9	10.2
Other sectors	18.0	25.6	37.9	54.4
<i>Of which</i>				
Incompleted units	0.4	0.6	0.8	3.3
Total	100.0	100.0	100.0	100.0

Sources: Ministry of Finance; National Statistical Agency; and Fund staff estimates.

Table 20. Kazakhstan: Summary Accounts of National Bank of Kazakhstan, 1994-98 1/
(In millions of Tenge, end-period stocks at current prices unless otherwise indicated)

	1994	1995	1996	1997				1998
	Dec.	Dec.	Dec.	Mar.	Jun.	Sep.	Dec.	Mar.
Net international reserves	49,555	76,277	101,925	98,356	110,489	124,573	131,286	114,584
Foreign exchange 2/	29,046	42,748	53,067	51,029	64,926	79,657	91,709	72,980
Assets	45,443	72,180	96,285	92,724	108,434	119,832	130,550	110,581
Liabilities, short-term	16,397	29,432	43,218	41,695	43,507	40,175	38,841	37,601
Gold	20,509	33,530	48,858	47,327	45,563	44,916	39,578	41,604
Net domestic assets 3/	-16,203	-12,324	-26,742	-25,017	-29,994	-37,740	-24,382	-22,601
Domestic credit	27,111	32,290	24,316	26,109	18,898	15,480	23,079	29,601
Credit to Government, net	11,899	24,825	23,516	24,399	11,898	10,146	21,327	24,259
Credit to banks, net	13,355	7,328	627	1,535	6,822	5,134	1,393	5,150
Credit	13,355	10,487	9,792	11,270	10,205	11,522	8,248	8,146
Special deposits (NBK notes)	0	-3,160	-9,165	-9,735	-3,382	-6,388	-6,855	-2,996
Credit to the economy	1,857	137	172	175	177	200	359	193
Other items (net) 3/	-43,314	-44,614	-51,057	-51,126	-48,892	-53,220	-47,461	-52,203
Reserve money	33,351	63,954	75,184	73,339	80,495	86,833	106,903	91,983
Currency outside NBK	20,592	48,643	64,269	63,943	70,382	78,661	96,518	84,058
Currency held by public	20,255	47,998	62,812	61,439	67,563	75,098	92,782	80,022
Currency held by commercial banks	337	645	1,457	2,504	2,820	3,563	3,736	4,036
Commercial bank deposits	9,095	11,812	8,188	6,266	7,648	6,002	10,254	7,776
Reserves	717	505	50	45	39	36	31	28
Correspondent accounts	8,332	11,269	8,134	6,218	7,607	5,451	9,552	7,374
Other deposits	46	39	5	2	2	515	671	374
Demand, time and enterprise deposits	3,664	3,498	2,726	3,131	2,464	2,170	131	149
Memorandum items:								
Change from end of previous quarter/year 4/								
Net international reserves	...	26,723	25,648	-3,569	12,133	14,084	6,713	-16,702
Credit to government (net)	...	12,926	-1,309	883	-12,501	-1,752	11,180	2,932
Credit to banks	...	-6,027	-6,701	908	5,287	-1,689	-3,741	3,753
Reserve money								
Percentage change from end of previous quarter	...	23.2	16.0	-2.5	9.8	7.9	23.1	-14.0
Percentage change from end of previous year	...	91.8	17.6	-2.5	7.1	15.5	42.2	-14.0

Sources: Kazakh authorities; and Fund staff estimates.

1/ The accounts of the Budget Bank, which came into existence in 1996 and was dissolved at end-1997, have been consolidated with those of the National Bank of Kazakhstan for the appropriate periods.

2/ Convertible currencies

3/ Including certain medium and long term foreign liabilities.

4/ Compared to the previous year for 1995-1996 and compared to the previous quarter for 1997.

Table 21. Kazakhstan: Monetary Survey, 1994-98
(In millions of Tenge, end-period stocks at current prices unless otherwise indicated)

	1994	1995	1996	1997				1998
	Dec.	Dec.	Dec.	Mar.	Jun.	Sep.	Dec.	Mar.
Net international reserves	40,368	93,229	117,041	112,282	125,373	141,023	139,881	123,436
Foreign exchange 1/	19,859	59,680	67,934	64,944	79,367	96,090	100,303	81,832
Assets	59,479	99,414	113,576	111,196	124,294	138,340	142,482	121,702
Liabilities, short-term	39,620	39,734	45,642	46,252	44,927	42,250	42,179	39,870
Gold	20,509	33,549	49,107	47,339	46,006	44,933	39,578	41,604
Net domestic assets 2/	16,731	24,466	16,906	23,012	17,609	20,244	37,344	29,676
Domestic credit	124,469	96,448	84,523	96,903	86,881	100,261	112,815	111,415
Credit to Government	10,831	24,514	20,851	25,557	16,519	17,715	35,587	27,187
Credit to the economy	113,638	71,934	63,672	71,346	70,362	82,547	77,228	84,228
Other items (net) 2/	-107,739	-71,981	-67,618	-73,891	-69,272	-80,017	-75,471	-81,740
Broad money	57,099	117,695	133,946	135,294	142,982	161,267	177,240	153,112
Currency in circulation	20,255	47,998	62,812	61,439	67,563	75,098	92,782	80,022
Deposits 3/	36,752	67,795	71,040	73,777	75,366	86,140	84,421	73,058
Nonbank institutions	26,725	45,206	39,024	42,825	38,044	44,001	56,797	45,032
Tenge	12,291	19,077	16,285	14,319	17,494	22,697	45,100	30,748
Convertible foreign exchange	13,818	25,195	22,079	27,454	19,807	20,226	11,031	13,558
Nonconvertible foreign exchange	615	934	660	1,052	743	1,078	665	727
Households	10,027	22,589	32,017	30,952	37,322	42,139	27,624	28,026
Tenge	9,064	19,079	26,001	23,683	29,922	34,474	20,734	20,315
Convertible foreign exchange	963	3,509	6,000	7,254	7,385	7,650	6,877	7,694
Nonconvertible foreign exchange	0	1	15	15	15	15	14	17
Bonds/promissory notes of banks	92	1,902	94	78	53	30	36	31
Memorandum items:								
Change from end of previous quarter/year 4/								
Net international reserves	...	52,861	23,812	-4,758	13,091	15,650	-1,443	-16,445
Credit to government (net)	...	13,683	-3,663	4,705	-9,037	1,196	12,554	-1,400
Credit to economy	...	-41,704	-8,262	7,674	-984	12,185	-5,319	7,000
Broad money								
Percentage change from end of previous quarter	...	24.3	11.9	1.0	5.7	12.8	9.9	-13.6
Percentage change from end of previous year	...	106.1	13.8	1.0	6.7	20.4	32.3	-13.6

Sources: Kazakh authorities; and Fund staff estimates.

1/ Convertible currencies.

2/ Including certain medium and long term foreign liabilities.

3/ The composition of deposits at end-December 1997 not strictly comparable to previous periods due to introduction of a new chart of accounts. Inter alia, consumer cooperative accounts are classified with nonbank institutions at end-December 1997 but with households prior to that.

4/ Compared to the previous year for 1995-1996 and compared to the previous quarter for 1997.

Table 22. Kazakhstan: Interest Rates, 1995-98
(In percent; end-of-period)

	Inflation	NBK refinance rate	NBK Lombard rate	NBK overnight	Yield on 3-month	Commercial bank short-	Commercial bank time deposit rates 1/ 2/	
	Year-on-year			rate	Treasury bills	term lending rates 1/ 2/	Households	Legal entities
1995								
December	60.4	52.5	68.0	...	58.8	91.1	25.7	65.0
1996								
January	53.3	59.0	70.0	...	56.9	87.1	25.0	59.8
February	47.3	50.0	60.0	...	54.2	86.6	23.5	58.1
March	42.5	44.0	52.0	...	47.0	85.2	25.2	56.6
April	42.1	40.0	47.0	...	33.9	69.9	23.6	53.6
May	41.1	40.0	47.0	...	33.3	69.2	22.6	41.4
June	41.4	36.0	43.0	...	34.9	72.2	22.1	35.8
July	39.9	32.0	37.0	...	34.2	59.3	19.6	32.8
August	38.0	32.0	37.0	...	29.3	54.8	19.4	33.7
September	36.4	32.0	37.0	...	33.2	65.7	19.5	37.1
October	34.8	35.0	39.0	...	35.1	49.4	17.0	35.5
November	32.2	35.0	39.0	...	32.3	45.1	16.7	28.1
December	28.6	35.0	39.0	...	32.3	46.0	16.0	22.0
1997								
January	26.2	35.0	39.0	...	28.0	40.3	16.4	30.3
February	25.2	35.0	39.0	...	26.8	37.4	14.8	25.1
March	24.1	35.0	30.0	25.0	24.6	36.5	13.5	25.9
April	21.5	35.0	30.0	25.0	21.7	35.9	13.0	22.3
May	19.6	30.0	28.0	23.0	12.9	39.4	12.9	19.7
June	17.7	24.0	23.0	21.0	13.9	37.6	11.3	17.8
July	16.4	21.0	19.0	17.0	14.6	37.3	8.2	16.0
August	15.2	21.0	19.0	17.0	12.8	35.0	8.0	15.2
September	13.7	19.5	17.5	16.0	12.6	34.5	7.2	13.1
October	11.8	18.5	16.5	15.0	12.8	28.8	6.5	12.9
November	10.8	18.5	16.5	15.0	14.6	28.7	5.9	14.4
December	11.3	18.5	16.5	15.0	16.1	23.7	6.0	11.8
1998								
January	11.0	18.5	...	...	15.8	23.4	5.5	11.5
February	10.3	18.5	...	...	16.8	23.6	5.4	10.8
March	10.2	18.5	...	...	18.2	22.5	5.0	10.0
April	9.9	18.5	...	...	17.5	...	...	...
May	9.8	18.5	...	...	16.0	...	...	...

Source: National Bank of Kazakhstan.

1/ Credits and deposits in Tenge.

2/ Rates on existing stocks of credits and deposits through December 1996, rates on new credits and deposits thereafter.

Table 23. Kazakhstan: Interbank Currency Exchange (KICEX) Auction Rates, 1994-98

	Tenge per U.S. dollar		Tenge per deutsche mark		Tenge per 1,000 Russian ruble	
	Period average	End-of-period	Period average	End-of-period	Period average 1/	End-of-period 1/
1994						
January	9.19	10.71	...	...	5.93	6.45
February	11.51	11.58	...	...	6.99	7.30
March	17.51	19.94	...	...	10.09	11.35
April	26.25	29.92	...	...	14.57	16.53
May	38.52	40.73	...	...	21.32	22.95
June	42.02	43.29	...	...	22.58	21.94
July	44.92	45.33	29.54	29.34	21.60	20.00
August	45.75	46.16	29.54	30.16	21.01	21.51
September	47.17	48.00	30.53	30.80	20.82	18.90
October	48.73	49.55	32.37	33.43	16.35	15.48
November	51.07	52.10	33.65	33.84	15.91	16.15
December	53.61	54.26	34.41	35.00	16.21	16.15
1995						
January	55.76	57.15	36.57	38.00	14.63	14.25
February	58.89	59.80	39.26	40.80	13.80	13.34
March	60.62	61.30	43.13	44.40	12.90	12.20
April	62.20	62.80	45.39	45.95	12.49	12.40
May	63.18	63.45	45.27	45.80	12.40	12.50
June	63.53	63.33	45.74	46.00	13.55	14.25
July	62.30	59.45	45.27	43.35	13.85	13.60
August	57.37	59.13	40.02	40.50	13.09	13.40
September	60.27	61.15	41.52	43.50	13.48	13.70
October	61.85	62.71	43.93	43.23	13.81	13.95
November	63.52	64.05	45.02	44.70	14.02	14.14
December	63.92	63.97	44.50	44.45	13.75	13.80
1996						
January	64.61	65.30	44.39	44.07	13.77	13.65
February	65.38	65.36	44.66	45.05	13.72	13.53
March	65.15	65.25	44.28	44.36	13.47	13.38
April	65.83	66.50	43.92	43.70	13.43	13.47
May	66.81	66.71	43.67	43.38	13.40	13.30
June	67.02	67.18	43.95	43.97	13.26	13.16
July	67.36	67.62	44.82	45.80	13.22	13.33
August	67.67	68.14	45.91	46.44	...	...
September	68.93	69.54	45.88	45.75	...	...
October	69.99	70.12	46.04	46.58	...	...
November	71.09	72.71	47.15	47.50	...	...
December	73.32	73.80	47.33	47.70	...	...
1997						
January	75.44	75.79	47.19	46.69	...	...
February	75.67	75.62	45.54	45.06	...	...
March	75.19	74.35	44.69	44.48	...	...
April	75.03	75.49	44.22	44.07	...	...
May	75.50	75.48	44.69	44.75	...	...
June	75.49	75.57	43.89	43.61	...	...
July	75.59	75.74	42.60	41.12	...	...
August	75.79	75.80	41.31	42.50	...	...
September	75.77	75.73	42.34	42.86	...	...
October	75.69	75.80	43.17	44.34	...	...
November	75.75	75.80	44.29	43.43	...	...
December	75.82	75.89	42.99	44.20	...	...
1998						
January	76.32	76.40	...	...	...	...
February	76.40	76.38	...	...	...	...
March	76.50	76.61	...	...	...	...
April	76.71	76.80	...	...	...	...
May	76.82	76.87	...	...	...	...

Source: National Bank of Kazakhstan.

1/ Auctions for Russian rubles ceased to be held from July 1996. The activity for German Marks is low and not followed any longer.

Table 24. Kazakhstan: Number of Commercial Banks and Branches, 1995-98
(End-of-period)

	Commercial banks					Branches	
	State	Interstate	With Foreign Capital		Other	Total	Total
			Total	<i>of which</i> subsidiaries			
1995							
December	4	1	0	0	125	130	1,036
1996							
March	6	1	12	6	110	129	1,013
June	5	1	12	6	95	113	1,006
September	5	1	7	6	89	102	990
December	5	1	7	6	88	101	949
1997							
January	6	1	8	5	86	101	944
February	6	1	7	6	86	100	932
March	6	1	9	5	81	97	785
April	6	1	9	5	81	97	786
May	6	1	9	5	80	96	784
June	6	1	9	5	80	96	783
July	6	1	19	5	72	98	733
August	6	1	19	5	72	98	640
September	6	1	19	5	64	90	637
October	6	1	21	7	62	90	598
November	6	1	21	7	62	90	598
December	5	1	20	7	56	82	582

Source: National Bank of Kazakhstan.

Table 25. Kazakhstan: Government Budgetary Operations, 1995-98 1/
(In billions of Tenge)

	1995	1996	1997					1998	
			Jan.-Mar.	Jan.-Jun.	Jan.-Sep.	Jan.-Dec.	Revised budget	Jan.-Mar.	Jan.-Dec. Budget
Total revenue and grants	178.3	218.3	45.1	108.0	199.8	281.6	290.3	66.8	321.6
Total revenue	178.3	218.3	45.1	108.0	199.8	280.9	289.4	63.9	314.1
Current revenue	171.2	187.2	38.6	91.5	144.9	221.6	250.3	56.8	263.1
Tax revenue	131.6	160.6	35.2	83.8	131.9	203.9	218.1	52.8	245.3
Tax on income, profits and capital gains	58.8	64.5	15.6	37.3	57.2	81.4	85.7	17.6	103.4
Domestic taxes on good and services	39.7	75.0	14.8	33.3	53.8	91.4	102.0	28.0	107.1
Taxes on international trade	12.8	9.0	1.3	3.2	5.2	8.1	8.3	2.1	9.1
Other taxes	20.3	12.1	3.5	10.0	15.7	23.0	22.0	5.1	25.7
Nontax revenue	39.6	26.6	3.4	7.7	13.0	17.7	32.3	4.0	17.8
Capital revenue	7.2	31.1	6.5	16.5	54.9	59.3	39.1	7.1	51.0
Privatization receipts	7.2	31.1	6.1	15.5	51.5	54.5	31.0	6.0	45.0
Other	0.0	0.0	0.4	1.0	3.4	4.7	8.1	1.1	6.0
Total grants	0.0	0.0	0.0	0.0	0.0	0.7	0.9	2.9	7.5
Expenditure and net lending	211.2	262.8	49.6	119.9	208.8	346.2	354.0	68.5	432.1
Expenditure	191.2	245.7	48.5	114.6	195.8	322.5	331.6	63.1	398.7
General Government services	25.4	31.6	4.2	10.4	16.6	31.8	35.1	3.7	37.6
Defense	10.8	15.0	2.5	5.3	9.5	17.2	16.8	2.0	20.0
Public order and security	15.8	23.6	4.8	11.3	17.2	28.8	28.2	4.3	34.1
Education	45.6	48.7	15.3	34.3	50.3	73.0	58.9	14.0	71.9
Health	30.5	39.7	6.4	14.8	22.9	35.0	46.0	4.6	29.0
Social insurance and social security	7.8	43.3	4.5	10.7	16.9	26.4	38.5	10.0	84.4
Recreation and culture	5.6	13.1	2.4	5.9	7.7	11.0	10.7	1.7	12.5
Fuel and energy complex	1.1	1.4	0.1	0.5	0.8	1.1	1.1	0.1	1.2
Agriculture, forestry, and nature conservation	7.2	9.3	1.0	3.3	7.0	10.9	11.0	0.9	9.2
Mining and minerals, processing, construction	3.6	6.1	0.3	1.1	4.6	5.7	4.7	0.1	1.5
Transportation and communications	0.1	0.1	0.1	0.2	0.3	0.4	0.3	0.1	0.3
Other economic services	4.3	6.4	2.8	5.1	9.4	25.4	30.9	3.4	17.9
Other expenditure	33.4 2/	7.4	4.1	11.7	32.7	55.8	49.3	11.3	79.1
Net lending	20.0	17.1	1.1	5.3	13.0	23.7	22.4	2.1	33.4
Regular budget balance	-32.9	-44.5	-4.6	-11.9	-9.1	-64.6	-63.7	-1.7	-110.5
Quasi-fiscal operations (surplus+)	6.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Overall budget balance	-25.2	-44.5	-4.6	-12.7	-9.1	-64.6	-63.7	-1.7	-110.5
Statistical discrepancy	-6.2	-8.7	3.4	-10.6	3.1	-3.9	0.0	-4.0	0.0
Financing	20.7	35.8	7.9	2.0	12.2	60.7	63.7	-2.3	110.5
Domestic, net	0.4	-1.6	7.5	-2.6	-0.3	16.3	13.5	-6.1	...
Banking system	9.7	-3.7	4.7	-4.3	-3.1	14.9	5.6	-8.4	...
Nonbank	-9.3	2.0	2.8	1.8	2.8	1.4	7.9	2.3	...
Foreign, net	20.2	37.4	0.4	4.6	12.5	44.4	50.2	3.9	...
Memorandum items:									
Revenues excluding privatization receipts	171.2	187.2	39.0	92.5	148.3	226.4	258.5	57.9	269.1
Budget balance excluding privatization receipts	-32.4	-75.6	-10.6	-27.3	-60.6	-119.1	-94.6	-7.7	-155.5

Sources: Ministry of Finance; and Fund staff calculations.

1/ Includes financial operations of the consolidated state budget (republican and local budgets) and net position of extrabudgetary funds.

2/ Includes T 21.4 billion in expenditures related to called foreign loan guarantees.

Table 26. Kazakhstan: Government Budgetary Operations, 1995-98 1/
(In percent of GDP)

	1995	1996	1997					1998	
			Jan.-Mar.	Jan.-Jun.	Jan.-Sep.	Jan.-Dec.	Revised budget	Jan.-Mar.	Jan.-Dec. Budget
Total revenue and grants	17.6	15.4	12.8	14.8	16.3	16.5	17.1	17.1	16.0
Total revenue	17.6	15.4	12.8	14.8	16.3	16.5	17.0	16.3	15.7
Current revenue	16.9	13.2	10.9	12.5	11.8	13.0	14.7	14.5	13.1
Tax revenue	13.0	11.3	10.0	11.4	10.8	12.0	12.8	13.5	12.2
Tax on income, profits and capital gains	5.8	4.6	4.4	5.1	4.7	4.8	5.0	4.5	5.2
Domestic taxes on good and services	3.9	5.3	4.2	4.6	4.4	5.4	6.0	7.2	5.3
Taxes on international trade	1.3	0.6	0.4	0.4	0.4	0.5	0.5	0.5	0.5
Other taxes	2.0	0.9	1.0	1.4	1.3	1.4	1.3	1.3	1.3
Nontax revenue	3.9	1.9	0.9	1.1	1.1	1.0	1.9	1.0	0.9
Capital revenue	0.7	2.2	1.8	2.3	4.5	3.5	2.3	1.8	2.5
Privatization receipts	0.7	2.2	1.7	2.1	4.2	3.2	1.8	1.5	2.2
Other	0.0	0.0	0.1	0.1	0.3	0.3	0.5	0.3	0.3
Total grants	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.7	0.4
Expenditure and net lending	20.8	18.6	14.0	16.4	17.1	20.3	20.8	17.5	21.5
Expenditure	18.9	17.4	13.7	15.7	16.0	19.0	19.5	16.1	19.9
General Government services	2.5	2.2	1.2	1.4	1.4	1.9	2.1	0.9	1.9
Defense	1.1	1.1	0.7	0.7	0.8	1.0	1.0	0.5	1.0
Public order and security	1.6	1.7	1.4	1.5	1.4	1.7	1.7	1.1	1.7
Education	4.5	3.4	4.3	4.7	4.1	4.3	3.5	3.6	3.6
Health	3.0	2.8	1.8	2.0	1.9	2.1	2.7	1.2	1.4
Social insurance and social security	0.8	3.1	1.3	1.5	1.4	1.6	2.3	2.6	4.2
Recreation and culture	0.6	0.9	0.7	0.8	0.6	0.6	0.6	0.4	0.6
Fuel and energy complex	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.0	0.1
Agriculture, forestry, and nature conservation	0.7	0.7	0.3	0.5	0.6	0.6	0.6	0.2	0.5
Mining and minerals, processing, construction	0.4	0.4	0.1	0.1	0.4	0.3	0.3	0.0	0.1
Transportation and communications	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other economic services	0.4	0.5	0.8	0.7	0.8	1.5	1.8	0.9	0.9
Other expenditure	3.3 2/	0.5	1.2	1.6	2.7	3.3	2.9	2.9	3.9
Net lending	2.0	1.2	0.3	0.7	1.1	1.4	1.3	0.5	1.7
Regular budget balance	-3.2	-3.1	-1.3	-1.6	-0.7	-3.8	-3.7	-0.4	-5.5
Quasi-fiscal operations (surplus +)	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Overall budget balance	-2.5	-3.1	-1.3	-1.7	-0.7	-3.8	-3.7	-0.4	-5.5
Statistical discrepancy	-0.6	-0.6	1.0	-1.5	0.3	-0.2	0.0	-1.0	0.0
Financing	2.0	2.5	2.2	0.3	1.0	3.6	3.7	-0.6	5.5
Domestic, net	0.0	-0.1	2.1	-0.4	0.0	1.0	0.8	-1.6	...
Banking system	1.0	-0.3	1.3	-0.6	-0.3	0.9	0.3	-2.1	...
Nonbank	-0.9	0.1	0.8	0.2	0.2	0.1	0.5	0.6	...
Foreign, net	2.0	2.6	0.1	0.6	1.0	2.6	3.0	1.0	...
Memorandum items:									
Revenues excluding privatization receipts (in percent of GDP)	16.9	13.2	11.0	12.6	12.1	13.3	15.2	14.8	13.4
Budget balance excluding privatization receipts (in percent of GDP)	-3.2	-5.3	-3.0	-3.7	-4.9	-7.0	-5.6	-2.0	-7.8

Sources: Ministry of Finance; and Fund staff calculations.

1/ Includes financial operations of the consolidated state budget (republican and local budgets) and net position of extrabudgetary funds.

2/ Includes 2.1 percent of GDP in expenditures related to called foreign loan guarantees.

Table 27. Kazakhstan: Government Budgetary Operations, 1995-98 1/
(In percent of total)

	1995	1996	1997					1998	
			Jan.-Mar.	Jan.-Jun.	Jan.-Sep.	Jan.-Dec.	Revised budget	Jan.-Mar. Estimate	Jan.-Dec. Budget
Total revenue and grants	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Total revenue	100.0	100.0	100.0	100.0	100.0	99.7	99.7	95.7	97.7
Current revenue	96.0	85.8	85.6	84.7	72.5	78.7	86.2	85.0	81.8
Tax revenue	73.8	73.6	78.1	77.6	66.0	72.4	75.1	79.0	76.3
Tax on income, profits and capital gains	33.0	29.5	34.6	34.6	28.6	28.9	29.5	26.3	32.2
Domestic taxes on good and services	22.2	34.4	32.8	30.9	26.9	32.5	35.1	41.9	33.3
Taxes on international trade	7.2	4.1	2.9	2.9	2.6	2.9	2.9	3.1	2.8
Other taxes	11.4	5.5	7.9	9.2	7.8	8.2	7.6	7.6	8.0
Nontax revenue	22.2	12.2	7.4	7.1	6.5	6.3	11.1	6.0	5.5
Capital revenue	4.0	14.2	14.4	15.3	27.5	21.0	13.5	10.6	15.8
Privatization receipts	4.0	14.2	13.5	14.3	25.8	19.4	10.7	9.0	14.0
Other	0.0	0.0	1.0	1.0	1.7	1.7	2.8	1.6	1.9
Total grants	0.0	0.0	0.0	0.0	0.0	0.3	0.3	4.3	2.3
Expenditure and net lending	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Expenditure	90.5	93.5	97.7	95.6	93.8	93.2	93.7	92.1	92.3
General Government services	12.0	12.0	8.5	8.7	8.0	9.2	9.9	5.4	8.7
Defense	5.1	5.7	5.1	4.4	4.6	5.0	4.7	2.9	4.6
Public order and security	7.5	9.0	9.6	9.4	8.2	8.3	8.0	6.3	7.9
Education	21.6	18.5	30.8	28.6	24.1	21.1	16.6	20.4	16.6
Health	14.4	15.1	12.9	12.3	10.9	10.1	13.0	6.7	6.7
Social insurance and social security	3.7	16.5	9.2	8.9	8.1	7.6	10.9	14.6	19.5
Recreation and culture	2.7	5.0	4.9	4.9	3.7	3.2	3.0	2.5	2.9
Fuel and energy complex	0.5	0.5	0.2	0.4	0.4	0.3	0.3	0.1	0.3
Agriculture, forestry, and nature conservation	3.4	3.5	2.1	2.8	3.4	3.1	3.1	1.3	2.1
Mining and minerals, processing, construction	1.7	2.3	0.6	0.9	2.2	1.6	1.3	0.1	0.3
Transportation and communications	0.0	0.0	0.1	0.2	0.2	0.1	0.1	0.1	0.1
Other economic services	2.0	2.4	5.5	4.3	4.5	7.3	8.7	5.0	4.1
Other expenditure	15.8	2.8	8.3	9.7	15.6	16.1	13.9	16.5	18.3
Net lending	9.5	6.5	2.3	4.4	6.2	6.8	6.3	3.1	7.7

Sources: Ministry of Finance; and Fund staff calculations.

1/ Includes financial operations of the consolidated state budget (republican and local budgets) and net position of extrabudgetary funds.

2/ Includes T 21.4 billion in expenditures related to called foreign loan guarantees.

Table 28. Kazakhstan: Balance of Payments, 1994-98
(in millions of U.S. dollars)

	1994	1995	1996	1997	1998 Q1
Current account	-905	-516	-752	-953	-50
Trade balance	-920	-222	-326	-385	40
Exports (f.o.b.)	3,285	5,164	6,292	6,769	1,515
Non-oil exports	2,648	4,257	4,950	5,229	n.a.
Oil-exports	638	907	1,342	1,540	n.a.
Imports, (f.o.b.)	-4,205	-5,387	-6,618	-7,154	-1,475
Non-oil imports	-3,916	-5,149	-6,304	-6,772	n.a.
Oil-imports	-289	-237	-314	-382	n.a.
Services, net	-82	-353	-475	-642	-106
Non-Factor services (net)	-35	-208	-253	-336	-51
Credit	427	535	675	853	n.a.
Transport	312	352	432	494	n.a.
Other	116	184	243	359	n.a.
Debit	-462	-743	-928	-1,189	n.a.
Transport	-221	-265	-357	-391	n.a.
Other	-242	-478	-571	-798	n.a.
Factor services (net)	-47	-145	-222	-306	-54
Interest 1/	-47	-65	-78	-133	-38
Credit	9	40	29	50	5
International reserves	1	33	19	49	5
CIS debtors	8	7	10	1	0
Debit	-48	-105	-107	-183	-43
IMF	-5	-17	-23	-24	-6
Other	0	-88	-84	-159	-37
Other factor services	0	-80	-144	-173	-16
Unrequited transfers	97	59	50	75	16
Capital account	1,194	1,160	1,374	1,594	48
Medium and long term credits	697	569	486	752	27
Drawings on official loans (net)	332	352	352	244	51
Drawings on trade credits	425	265	143	332	9
Bond issue (net)	0	0	200	350	0
Of which					
Government	0	0	200	350	0
Amortization 1/	-61	-48	-210	-173	-33
Of which					
Other CIS	0	19	30	0	0
Of which					
Russia	0	-23	0	0	0
Other banking system (NIR)	-137	0	43	-92	2
Non-bank portfolio investment (net)	0	7	24	54	14
Direct investment (net)	635	964	1,137	1,320	76
Capital transfers (migrants-net)	-1,065	-381	-316	-440	-71
Errors and omissions (net)	8	-488	-567	-152	-258
Overall balance	298	156	55	490	-260
Financing	-298	-156	-55	-490	260
NIR of the NBK (increase -)	-326	-375	-228	-490	260
Foreign exchange assets (net)	-176	-232	-55	-490	260
Of which					
Fund credit (net)	192	142	135	-6	-19
Purchases	192	142	135	0	0
SBA	192	142	135	0	0
Repurchases	0	0	0	-6	-19
Exceptional financing	-121	219	0	0	0
Arrears reduction (-)	0	1	0	0	0
Interenterprise arrears (net)	-121	0	0	0	0
Debt relief from Russia	0	217	0	0	0
Memorandum items:					
GDP (in U.S. dollars)	10,555	16,558	20,810	22,514	5,196
Current account / GDP	-8.6	-3.1	-3.6	-4.2	...
NBK gross international reserves	...	...	1,980	2,252	2,116
In months of imports of goods and nonfactor services	...	...	3.1	3.2	...
Stock of external debt (in millions of U.S. dollar)	...	3,428	3,889	4,587	4,640
In percent of GDP	...	20.7	18.7	20.4	...
External debt service	...	...	...	...	...
In percent of exports of goods and nonfactor services	...	2.7	4.6	5.8	...

Sources: Data provided by the Kazak authorities; and Fund staff estimates.

1/ In the context of the CG-meeting held in May 1995, Russia agreed to provide debt relief during 1995 and through end-June 1996.

For 1995, this debt relief was estimated at US\$217 million (including US\$195 million and US\$23 million of interest and amortization obligations, respectively), and at US\$183 million from January-June 1996. The medium-term projection excludes transactions related to both debt owed to Russia and the rental payments on Baikonour.

Table 29. Kazakhstan: Composition of Exports, 1995-97

		1995			1996			1997		
	units for volume	Volume	Price 1/ (In millions of U.S. dollars)	Value	Volume	Price 1/ (In millions of U.S. dollars)	Value	Volume	Price 1/ (In millions of U.S. dollars)	Value
Customs exports										
Oil and gas condensate	thousand tons	13,000.0	69.8	907.4	15,350.0	87.4	1,341.6	14,900.0	103.4	1,540.0
Coal	thousand tons	23,700.0	18.3	433.4	20,000.0	14.3	286.0	24,900.0	14.7	364.9
Oil refining products	thousand tons	900.0	86.4	77.8	850.0	94.2	80.1	1,400.0	87.3	122.2
Alumina	thousand tons	760.9	182.2	138.6	973.8	160.4	156.2	1,201.9	124.4	149.5
Refined copper	thousand tons	216.6	2,636.2	571.0	245.9	2,175.0	534.8	287.9	2,100.4	604.7
Unrefined zinc	thousand tons	147.7	974.3	143.9	140.6	960.9	135.1	191.1	1,147.0	219.2
Unrefined lead	thousand tons	58.2	530.0	30.8	56.7	784.8	44.5	77.8	636.2	49.5
Chromium ores and concentrates	thousand tons	1,029.6	54.7	56.3	218.6	56.7	12.4	579.6	27.1	15.7
Iron ores and concentrates	thousand tons	3,390.0	35.7	121.0	3,457.0	23.4	80.9	9,271.0	20.9	193.7
Ferroalloys	thousand tons	578.3	514.6	297.6	452.4	404.1	182.8	404.8	279.4	113.1
Rolled ferrous metal	thousand tons	1,694.0	279.9	474.2	1,903.2	282.6	537.9	2,795.6	252.0	704.5
Yellow phosphorus	thousand tons	21.2	1,269.0	26.9	27.7	1,258.0	34.8	17.6	1,136.4	20.0
Grain	thousand tons	4,100.0	85.6	351.0	2,900.0	154.6	448.3	3,577.5	143.1	511.8
Cotton fiber	thousand tons	64.7	1,223.0	79.1	69.7	1,385.0	96.5	63.9	1,212.8	77.5
Wool	thousand tons	51.7	1,002.0	51.8	13.8	1,181.2	16.3	21.8	1,233.9	26.9
Natural gas	million cubic meters	2,565.6	7.6	19.5	2,341.8	13.1	30.6	2,431.8	8.5	20.6
Large hides	thousand pieces	3,523.0	14.3	50.4	...	...	35.1	...	...	46.6
Small hides	thousand pieces	10,480.0	1.7	17.8	...	...	24.0	...	...	15.3
Others		...	...	1,142.8	...	...	1,154.6	...	...	1,570.6
Total custom exports		...	...	4,991.3	...	...	5,232.6	...	...	6,366.3
Operations not included in customs statistics		...	...	21.6	...	...	678.4	...	...	4.9
Shuttle exports		...	...	151.1	...	...	381.0	...	...	398.2
Total exports		...	...	5,164.0	...	...	6,292.0	...	...	6,769.4

Source: Kazakh authorities, and staff estimates.

1/ U.S. dollars per unit (ton or piece) except for natural gas which is in U.S. dollars per thousand cubic meters.

Table 30. Kazakhstan: Composition of Imports, 1995-97

	Units for volume	1995			1996			1997		
		Volume	Price 1/	Value	Volume	Price 1/	Value	Volume	Price 1/	Value
		(In millions of U.S. dollars)			(In millions of U.S. dollars)			(In millions of U.S. dollars)		
Customs imports										
Oil and gas condensate	thousand ton	3,500.0	56.5	197.8	3,600.0	87.1	313.6	1,700.0	97.8	166.3
Oil refining products	thousand ton	700.0	57.9	40.5	500.0	168.7	84.4	442.5	196.8	87.1
Electricity	million kilowatt-hours	7,400.0	31.5	233.1	6,615.0	36.5	241.2	3,458.0	27.2	94.2
Natural gas	million cubic meters	9,128.0	40.7	371.8	5,494.5	37.5	205.8	3,003.7	30.7	92.3
Coal	thousand ton	2,000.0	29.2	58.4	1,060.0	30.1	31.9	1.0	27.3	26.8
Rolled ferrous metals	thousand ton	30.3	485.2	14.7	37.0	621.6	23.0	42.3	583.9	24.7
Pharmacological products		...	...	25.8	...	...	37.9	...	...	57.9
Chemical industry products		...	...	422.4	...	...	500.0	...	...	610.5
Equipment and mechanical tools		...	...	522.8	...	...	523.5	...	...	669.9
Electrical equipment		...	...	237.2	...	...	293.0	...	...	333.4
Foodstuffs		...	...	402.7	...	...	446.7	...	...	507.9
Nonfood consumer goods		...	...	143.8	...	...	107.5	...	...	517.9
Vehicles		...	...	266.4	...	...	361.4	...	...	367.7
Others		...	...	834.8	...	...	784.2	...	...	718.5
Total customs imports		...	...	3,772.2	...	...	3,954.0	...	...	4,275.1
Operations not included in customs statistics		...	...	8.7	...	...	7.0	...	...	130.4
Shuttle imports		...	...	1,347.1	...	...	2,772.0	...	...	3,081.0
Other corrections		...	...	259.0	...	...	-115.0	...	...	-376.7
Grants		...	...	25.0	...	...	5.0	...	...	28.3
Non-equivalent barter		...	...	536.0	...	...	239.0	...	...	32.0
Freight		...	...	-302.0	...	...	-359.0	...	...	-437.0
Total imports		...	...	5,387.0	...	...	6,618.0	...	...	7,154.8

Source: Kazakh authorities, and staff estimates.

1/ U.S. dollars per ton except for natural gas which is in U.S. dollars per thousand cubic meters and electricity which is in U.S. dollars per thousand kilowatt-hours.

Table 31. Kazakhstan: Geographical Distribution of Exports of Energy Sources to the Baltics, Russia and Other States of the Former Soviet Union, 1993-97

	1993	1994	1995	1996	1997
(In thousands of tons)					
Oil and gas condensate					
Total	11,740.0	6,592.2	6,707.2	10,567.5	5,213.4
Azerbaijan	946.8	606.9	34.1	0.0	38.6
Belarus	95.0	15.0	0.0	0.0	20.1
Kyrgyz Republic	0.0	0.0	0.0	0.4	1.5
Lithuania	0.0	55.3	880.0	1,763.8	344.0
Russia	10,343.3	4,741.1	4,708.2	6,737.3	1,608.8
Turkmenistan	55.9	50.0	0.0	0.0	0.0
Ukraine	299.0	1,123.9	1,084.9	2,041.9	2,986.1
Estonia	0.0	0.0	0.0	24.1	214.3
(In million of cubic meters)					
Natural gas					
Total	3,450.5	1,635.5	2,565.5	2,341.8	2,431.8
Georgia	0.0	0.0	0.0	177.0	0.0
Russia	3,450.5	1,635.5	2,565.5	2,164.8	2,431.8
(In thousands of tons)					
Gasoline					
Total	273.5	91.7	130.0	186.5	n.a.
Kyrgyz Republic	34.7	36.3	87.9	93.4	n.a.
Latvia	1.0	0.0	0.0	0.0	n.a.
Moldova	2.0	0.3	0.0	0.0	n.a.
Russia	0.9	0.8	10.5	11.8	n.a.
Tajikistan	38.4	3.5	13.6	53.3	n.a.
Uzbekistan	168.9	9.3	12.5	28.0	n.a.
Ukraine	27.6	41.5	5.5	0.0	n.a.
Diesel fuel					
Total	324.8	52.5	94.7	294.3	n.a.
Belarus	0.8	0.0	0.0	0.0	n.a.
Kyrgyz Republic	59.4	29.3	55.3	65.6	n.a.
Latvia	5.2	0.0	0.0	24.6	n.a.
Lithuania	0.0	0.0	1.0	2.5	n.a.
Moldova	0.4	0.0	0.0	0.0	n.a.
Russia	1.6	2.0	8.9	157.0	n.a.
Tajikistan	26.9	7.6	9.5	11.8	n.a.
Uzbekistan	208.4	6.1	1.1	3.7	n.a.
Ukraine	22.1	7.5	17.3	29.1	n.a.
Estonia	0.0	0.0	1.6	0.0	n.a.
Heavy furnace fuel					
Total	49.5	88.7	132.6	198.5	n.a.
Belarus	4.0	3.0	0.0	0.0	n.a.
Kyrgyz Republic	29.6	21.5	35.7	89.6	n.a.
Lithuania	0.0	0.0	0.0	4.4	n.a.
Moldova	1.9	0.0	0.0	0.5	n.a.
Russia	2.1	3.2	38.8	81.0	n.a.
Tajikistan	10.4	0.0	0.0	0.0	n.a.
Uzbekistan	1.5	0.0	0.0	0.6	n.a.
Ukraine	0	61.0	58.1	22.4	n.a.
Coking coal					
Total	4,240.3	3,373.6	1,976.0	1,507.5	1,371.3
Belarus	0.0	2.0	0.0	0.0	0.0
Georgia	46.8	2.5	0.0	0.0	0.0
Kyrgyz Republic	0.0	91.3	5.5	28.6	5.7
Lithuania	0.0	0.0	0.0	1.3	0.0
Russia	3,469.1	2,460.8	1,959.4	1,477.6	1,365.6
Tajikistan	0.0	0.1	0.0	0.0	0.0
Turkmenistan	0.0	5.5	0.0	0.0	0.0
Uzbekistan	0.0	9.1	1.2	0.0	0.0
Ukraine	724.4	802.3	9.9	0.0	0.0

Source: Kazakh authorities.

Table 32. Kazakhstan: Geographical Distribution of Exports 1993-97
(In percent)

	1994	1995	1996	1997
1. BRO Countries	58.89	56.33	58.93	46.47
Armenia	0.03	0.00	0.00	0.00
Azerbaijan	1.44	0.45	0.17	0.37
Belarus	1.36	1.16	0.75	0.67
Estonia	0.11	0.32	0.23	0.67
Georgia	0.04	0.01	0.16	0.03
Kyrgyz Republic	1.86	1.47	1.81	1.04
Latvia	0.45	0.67	0.29	0.32
Lithuania	0.42	2.43	2.68	0.71
Moldova	0.10	0.05	0.05	0.04
Russia	44.40	42.27	44.47	33.88
Tadjikistan	0.29	0.82	0.99	0.86
Turkmenistan	0.78	1.03	0.63	0.78
Ukraine	3.97	2.44	3.42	4.77
Uzbekistan	3.64	3.21	3.28	2.33
2. Non-BRO Countries	41.10	43.68	41.07	53.54
Austria	0.39	0.31	0.23	0.07
Afghanistan	11.56	0.06	0.09	0.14
Belgium	0.20	0.30	0.11	0.39
China	4.62	5.91	7.41	6.95
Czech Republic	2.19	0.54	0.38	0.30
Finland	0.51	1.02	1.79	2.92
Greece	0.09	0.04	0.02	0.04
Germany	2.27	3.43	2.94	5.55
Hungary	1.52	0.17	0.18	0.08
Italy	1.31	2.87	3.16	5.61
Japan	0.84	0.90	1.40	1.69
Netherlands	7.69	9.91	5.19	3.20
Oman	0.82	0.00	0.00	0.01
Poland	1.73	0.76	0.35	0.44
South Korea	1.86	1.84	2.86	2.04
Switzerland	4.03	3.75	3.39	4.49
Sweden	0.31	0.06	0.31	0.11
Thailand	0.51	0.80	0.89	1.00
Turkey	1.52	1.42	0.83	1.61
United Kingdom	2.01	2.25	3.71	8.62
United States	2.33	0.90	0.95	2.19
Yugoslavia	0.02	0.00	0.01	0.00
Other countries	-7.23	6.44	4.87	6.09
Total	100.00	100.00	100.00	100.00

Source: Kazakh authorities.

Table 33. Kazakhstan: Geographical Distribution of Imports 1993-97
(In percent)

	1994	1995	1996	1997
1. BRO Countries	51.43	69.97	70.69	55.40
Armenia	0.05	0.07	0.01	0.04
Azerbaijan	0.42	0.66	0.53	0.45
Belarus	2.30	2.11	2.84	1.37
Estonia	0.12	0.18	0.21	0.19
Georgia	0.11	0.06	0.07	0.13
Kyrgyz Republic	0.96	0.82	2.14	1.30
Latvia	0.37	0.31	0.29	0.75
Lithuania	0.59	0.48	0.63	0.51
Moldova	0.29	0.15	0.19	0.06
Russia	39.52	49.05	54.97	45.98
Tadjikistan	0.29	0.32	0.41	0.15
Turkmenistan	0.21	6.38	4.14	0.76
Ukraine	4.30	2.29	2.17	2.18
Uzbekistan	1.90	7.09	2.09	1.53
2. Non-BRO Countries	48.57	30.05	29.33	44.60
Austria	1.41	1.37	0.46	0.85
Canada	0.54	0.21	0.15	0.57
China	2.51	0.90	0.85	1.09
Cuba	0.33	0.00	0.58	0.50
Czech Republic	1.06	0.59	0.62	0.74
Finland	0.57	0.83	1.32	1.58
Germany	10.53	5.33	4.64	8.60
Hungary	1.12	0.57	0.82	1.24
India	1.20	0.37	0.41	0.46
Italy	2.18	0.79	0.99	1.98
Japan	1.91	0.22	0.42	0.68
Poland	0.84	0.55	0.99	0.96
Switzerland	2.34	1.52	1.07	1.16
Sweden	0.42	0.44	0.26	0.31
United Kingdom	2.38	2.19	1.80	3.31
United States	3.92	1.92	1.56	4.72
Yugoslavia	0.17	0.05	0.06	0.05
Other countries	15.14	12.20	12.33	15.80
Total	100.00	100.00	100.00	100.00

Source: Kazakh authorities.

Table 34. Kazakhstan: Breakdown of Foreign Direct Investment by Country, 1993-97
(In percent of total)

Country	1997	1993-97
Canada	1.10	2.99
China	15.12	3.30
Germany	2.55	1.53
Iceland	3.16	1.64
Indonesia	6.01	1.20
Korea	34.79	17.78
Switzerland	1.50	0.92
Turkey	3.11	6.41
United Kingdom	3.88	1.78
United States	10.06	34.71
Others	18.72	27.74
Total	100.00	100.00

Source: Kazakh authorities.

Table 35. Kazakhstan: Breakdown of Foreign Direct Investment by Industry, 1993-97
(In percent of total)

Sector	1997	1993-97
Oil and gas	35.30	50.00
Ferrous metals	36.80	23.34
Non-ferrous metals	2.91	4.05
Energy	6.20	2.75
Geological exploration	1.49	0.37
Mining	3.27	2.07
Food	3.41	3.93
Banking	1.25	1.00
Communication	6.11	3.01
Hotels and restaurants	0.54	0.21
Other	2.72	9.27
Total	100.00	100.00

Source: Kazakh authorities.

Table 36. Kazakhstan: External Debt Outstanding, 1993-97

	1993	1994	1995	1996	1997
(In millions of U.S. dollars)					
Multilateral	0	189	375	648	892
World Bank	0	189	289	516	716
Import rehabilitation loan	0	176	179	179	...
SAL	0	0	90	180	...
FSAL	0	0	0	90	...
Other	0	13	20	67	...
EBRD	0	0	22	36	10
ADB	0	0	64	96	165
Bilateral	1,274	1,413	1,561	1,609	1,658
Russia I 1/	1,250	1,250	1,250	1,250	1,250
Russia II 2/	11	68	68	68	68
Other CIS 3/	13	8	8	8	...
Japan (JEXIM)	0	87	227	271	...
Other	0	0	8	11	...
Non-CIS credit lines 4/	486	834	1,060	881	942
Eurobonds	0	0	0	200	550
Total external debt (excluding IMF)	1,761	2,435	2,996	3,338	4,042
IMF credit	88	281	432	552	545
Total external debt (including IMF)	1,848	2,717	3,428	3,890	4,587
(In percent of total debt)					
Total	100.0	100.0	100.0	100.0	100.0
Multilaterals (excluding IMF)	0.0	7.0	10.9	16.7	19.4
IMF	4.8	10.3	12.6	14.2	11.9
Bilaterals	68.9	52.0	45.5	41.4	36.1
Of which					
Russia	68.2	48.5	38.4	33.9	28.7
Commercial credits	26.3	30.7	30.9	22.6	20.5
Eurobonds	0.0	0.0	0.0	5.1	12.0
(In percent)					
Memorandum items:					
Debt/GDP (excluding IMF)	...	21.9	16.9	15.9	18.0
Debt/GDP (including IMF)	...	24.5	20.0	18.7	20.4
Debt service/exports (excluding IMF)	-1.4	-3.2	-2.4	-4.3	-5.4
Debt service/exports (including IMF)	-1.4	-3.3	-2.7	-4.6	-5.8

Sources: Ministry of Economy; Ministry of Finance; and staff estimates.

1/ Intergovernmental debt (US\$ 1,250 million) resulting from conversion of 1992-93 correspondent account balances.

2/ Intergovernmental debt resulting from drawings under the Russian ruble 150 billion technical credit.

3/ Through direct contracts with other CIS (Turkmenistan).

4/ Includes credit lines from Austria, Canada, China, European Union, France, Germany, Israel, Pakistan, Spain, Turkey, and the United Kingdom.

PENSION REFORM IN KAZAKHSTAN

I. INTRODUCTION

1. In June 1997 the Kazakh authorities enacted a Chilean-style pension reform that transformed the existing public pension system into a funded system from January 1998. The reform, which is the first of its kind in the BRO,¹ was precipitated by a crisis of mounting arrears in the collection of payroll contributions and payment of pension benefits. The relatively young demographic profile of the Kazakh population, and the corresponding lack of pressure from demographic factors, makes this an opportune time to undertake structural reform of the pension system.² The reform will create a system well-suited to provide adequate old age protection in the period after 2010 when the Kazakh population is expected to age.

2. Despite the long-term benefits, the reform is not without costs or risks. In the short and medium term, Kazakhstan will have, simultaneously, to provide benefits for existing pensioners and forgo a substantial portion of the payroll contributions that currently fund these benefits. In addition, the shortfalls in the collections of payroll contributions experienced in early 1998 underscore the need for a quick buildup of the administrative capacity in the government. Proper administrative, regulatory and legal infrastructure is a prerequisite for the credibility of the new system and for the proper functioning of the financial markets needed to handle large volumes of savings from private and public pension funds. This Appendix first reviews the main features of the previous Soviet-style pay-as-you-go pension system and its shortcomings, and then provides an overview of the new system, the difficulties encountered so far, and some of the transition issues.

II. THE MAIN FEATURES OF THE PAY-AS-YOU-GO SYSTEM

A. The Existing PAYG Pension System

3. Until the 1998 reform, public pensions were administered by the Pension Fund (PF). Retirement, disability, and survivor's benefits were provided according to an earnings-related, defined benefit, formulae to about 2.5 million people, or 15.4 percent of the population

¹Baltics, Russia and other countries of the Former Soviet Union. As described in a paper by Marta Castello-Branco, *Pension Reform in BRO Countries*, WP/98/11, Kazakhstan is far ahead of everyone else in the region in the area of pension reform.

²In 1997, the old-age dependency ratio (the ratio of the population older than retirement age to the working age population) was about 0.26. This ratio is projected to decrease to 0.22 by 2001, and remain at that level during the period 2001–2008 before increasing to 0.32 in 2022. It will then remain stable until 2034 before beginning a steady increase until it stabilizes again at about 0.51 in 2056.

(Table 37). Three quarters of all retirees were receiving old age pensions and about 7 percent were working pensioners. The retirement programs were financed on a pay-as-you-go (PAYG) basis through payroll taxes on the wage bills of mostly state enterprises and budgetary organizations. Payroll tax rates, which stood at 37 percent of the wage bill in 1993, had been reduced to 25.5 percent by 1997. The PF also distributed nonpension social allowances (primarily for families with children), but was inadequately reimbursed from the budget for the payment of these allowances, resulting in more pressure on its finances. Starting in February 1997, the responsibility for paying these allowances was shifted to the Ministry of Labor and Social Protection.

4. The standard pension age, which was 60 years for men (55 years for women) until 1996, is in the process of being raised by six months every year until it reaches 63 years (58 years for women) by 2002. Covered workers were entitled to a *basic* monthly pension equal to 60 percent of the final average salary if they had a minimum length of service of 25 years for men (20 years for women). The final average salary was calculated on the basis of the highest consecutive 12-month period of the last 15 years of employment. The maximum pension, which was 10 monthly minimum wages (i.e. ten times the calculation index) before the reforms of July 1996, was raised to 15 minimum wages afterwards. Pensions also had a *length of service* component, amounting to 1 percent of final average salary for each year of service over 25 years for men (20 years for women). Additional pensions were also provided for *special circumstances* that included the presence of dependents, military service and special public service.

B. Weaknesses of the PAYG System and the Ineffectiveness of the 1996 Pension Reform

5. The structure of the previous system was distorted by several features. On the benefit side, there were early retirement ages for specific categories of workers and a lack of clear relationship with pre-retirement earnings. As a result of general increases in pensions, retirement benefits rose to an average 37 percent of the national wage (about US\$41) in 1997, up from about 29 percent of the national wage in 1993. Although the number of retirees declined by over 8 percent between 1993 and 1997, official employment declined by over 30 percent during the period.³ As a result, old age support ratios have declined. In 1993, there were over 2 contributors for each beneficiary; in 1997 there were fewer than 1.6. No doubt some of this drop represented a shift of workers from officially counted employment to other forms of labor. Nevertheless, it created a serious drain on revenues and has contributed to the financing problems experienced over the past several years. It will also increase the additional resources that must be found to finance the transition to a funded system.

³In 1993, one-third of the population of Kazakhstan was employed; in 1997, less than one-quarter was employed.

6. On the revenue side, the tax base for payroll contributions had been narrowed due to the structural transformation of the economy and the shift of labor away from the state sector. Although increased compliance from the officially employed would be helpful, a more fundamental problem is to ensure that, as the restructuring of the economy continues, all workers, including those in the private sector, will be brought into the pension system. In 1996, the measured wage bill was roughly one-quarter of GDP. Even allowing for full payroll contributions (i.e., adjusting the 25 percent upward for 32 percent payroll contributions), the measured labor share of GDP was roughly one-third. It is unlikely that this presents an accurate picture of the importance of labor in the economy. Since measured employment was 40 percent higher than the present measured level as recently as 1993, it is quite likely that the true labor share now is much higher than the measured share. Broadening the wage base of payroll contributions is necessary not only to support the current pension system, but also to ensure that all workers participate in the new system.

7. A related problem with the PAYG system was the decentralized collection of payroll contributions and pension payments, which likely reduced compliance even on the measured wage bill. Payroll contributions were collected at the local level. Thirty percent of collections were transferred to the central accounts, and the remaining 70 percent were retained locally to pay benefits. The central funds were redistributed to those oblasts in which local contributions were insufficient to pay local benefits. This system led to inefficient incentives to collect contributions. Higher-income oblasts had little incentive to collect more contributions than were needed, net of transfers to central accounts, to pay local benefits.⁴ In addition, even with redistributions from the republican level, some oblasts did not have sufficient funds to pay local benefits. This led to a very uneven distribution across oblasts in the accrual of arrears.⁵

8. An earlier parametric reform of the old-age and survivor's pension system, enacted during 1996, met with limited success. The 1996 reforms were designed around two main elements. *First*, the existing PAYG pension system was to be overhauled via: (i) not introducing new special sector-and profession-related benefits, as per the Civil Service Law already introduced; (ii) increasing the retirement age by six months every year starting no later than January 1, 1997 until a retirement age of 63 years for men and 58 years for women is attained in the year 2002; (iii) linking the minimum (social) pension benefit to the "calculation

⁴The empirical evidence of this problem has been established in *The Pension System of the Republic of Kazakhstan: Policy, Structure, Operations, Reform*, an analysis prepared by Development Alternatives, Inc. for the Ministry of Labor and Social Protection in April 1997.

⁵The recent shift of responsibility for the enforcement of payroll contributions to the Tax Committee should mitigate compliance problems. Consolidating enforcement responsibility for all four of the funds financed with payroll contributions in one organization should increase coordination and reduce redundancy.

index" in 1996;⁶ (iv) unifying and raising the contribution rate from 5 percent to 30 percent for lawyers associations, small farmers and the self-employed from 1997 onwards; and (v) reducing pensions for working pensioners, above a specified threshold. Provisions (ii)–(v) were contained in a Pensions Law which was adopted by Parliament in June 1996. The exact amount of the reduction of pensions for working pensioners was to be significant, and was to be determined by end-December 1996. By December 1, 1996, a study of the existing and prospective financial position of the Pension Fund was to be completed to determine whether additional measures would be needed to preserve its financial viability. *Second*, preparations were to be made during 1996 for introducing private pension funds with voluntary participation. Prudential regulation and supervision of the funds was to be the responsibility of the National Bank of Kazakhstan (NBK) and the Ministry of Labor and Social Protection. The operation of private pension funds was to be allowed beginning in 1997.

9. While the measures adopted with the pension reform of 1996 were a step in the right direction, the financial position of the PF deteriorated significantly in 1995–96. The main reasons for these difficulties were: (i) large increases in real pensions granted by Parliament in mid-1996 that far outstripped wage growth. In 1996, the calculation index was increased 77 percent, while wages increased by about 28 percent; (ii) the buildup of substantial arrears on contributions, including not only by state and private enterprises but also by budgetary organizations;⁷ (iii) low contribution compliance and lack of coordination among the collection operations of the four social funds and the Tax Service; (iv) the excessively decentralized system of collecting contributions and making pension payments; (v) excessively generous eligibility for benefits; and (vi) a very high system dependency ratio.

C. Pension Arrears and Their Repayment

10. In 1996, the PF ran a surplus of T 3.8 billion, or 0.3 percent of GDP (Table 38), but at the cost of accruing substantial arrears, estimated at T 26 billion at end-1996.⁸ The situation became critical in 1997 when the PF incurred additional arrears of T 1 billion in the first half and was projected to incur additional deficits of T 9 billion during the second half of the year. Without additional financing for these deficits, the stock of arrears would reach T 36 billion by end-1997. Given the urgency of the situation, the authorities decided to eliminate all pension

⁶Tax legislation, pensions and other social benefits are linked to the calculation index which is specified in the annual budget law on a quarterly basis.

⁷See Anderson, J.M. et al, *The Pension System of the Republic of Kazakhstan: Policy, Structure, Operations, Reform*, 1997, p. 1–7.

⁸Adjusted for net cash flow from the Savings Bank, the surplus was T 2.3 billion, or 0.2 percent of GDP. Even this figure is slightly optimistic, since the net cash flow underestimates net borrowing, because some of the reflows to the bank represent interest. Adjusted for T 26 billion in arrears, the PF recorded a deficit of about 1.8 percent of GDP.

arrears by end-1997 and to fundamentally restructure the pension system. New measures (described below) and budgetary transfers of T 36 billion (2.1 percent of GDP) enabled the PF to pay during the year current pension liabilities and to repay all pension arrears incurred prior to 1997. Revenue from payroll contributions in 1997 is estimated at T 88 billion (5.1 percent of GDP), while expenditures for current pensions are estimated at T 95.2 billion (5.6 percent of GDP).

11. In order to clear the estimated T 36 billion of pension arrears, the government implemented a combination of revenue-enhancing and expenditure cutting measures and raised the budget deficit ceiling for 1997. The fiscal measures were expected to amount to T 19 billion during July-December 1997, including T 12 billion from additional privatization receipts, while the budget deficit was allowed to rise by T 17 billion, financed by additional foreign financing. Measures were also taken to slow the growth in pension spending in 1997, including: (i) continuation of the gradual increase in the retirement age and reduction in the number of preferential pensions; (ii) the elimination of the option, introduced in 1996, that allowed people to retire at the previous age limits (60 years for men and 55 years for women) at a reduced pension until they reached the new age limits introduced in 1996, at which time they would receive an unreduced pension. In addition, additional emergency measures included (i) freezing benefits in nominal terms until 1998; and (ii) postponing the payment of benefits from the beginning to the end of the month, which provided a one-time "saving" of about T 9 billion.

D. Actuarial Projections in the Absence of a Funded System

12. Despite the savings achieved by the 1996 Pension Law, the financial prospects of the public pension system seemed bleak in the absence of either a parametric reform (that would maintain the PAYG nature of the system but would reduce its generosity) or a more fundamental reform akin to the Chilean model. To assess the prospects of the existing system the government's Working Group on Pension Reform relied on an actuarial model constructed with technical and financial assistance from USAID and the World Bank. A counterfactual case was considered in which the basic features of the PAYG system would continue, including the 25.5 percent payroll tax rate and accrual of pension rights under the defined benefit PAYG system. The model incorporated detailed demographic and economic assumptions and specific features of the Kazakh public pension system. It was conservatively assumed that real wages would grow at 2 percent per year and that compliance in the collection of contributions would continue to decline until 2001–2002 before beginning to improve. Model projections covering the 1998–2026 period confirmed the unsustainable nature of the unreformed system over the projection horizon. In the absence of reform, the net costs of the existing system (the deficit in the public pension system that would have to be financed by transfers from the budget) would increase slightly from 3.9 percent of GDP in

1997 to 4.0 percent of GDP in 1998, mainly as a result of additional pensioners.⁹ The annual cost of the unreformed system would then gradually decline to a steady state net cost of 2.1 percent of GDP in 2012-2026. The NPV of the net cost of the existing system (NPV of benefits less NPV of contributions without reform) was calculated at about 66 percent of 1997 GDP (Table 39). Clearly, if the authorities were not going to engage in fundamental reform of the pension system, it would be necessary to adjust the parameters of the PAYG system, including curtailing growth in the replacement rate, and perhaps reducing it.¹⁰

III. THE FUNDED SYSTEM

A. Main Characteristics of the New System

13. The 1997 reform replaced the existing PAYG system with a defined contribution, funded system of individual accumulation accounts coupled with a minimum pension guarantee from the state. After January 1, 1998, workers accrue new pension entitlement exclusively under the mandatory savings plan, possibly supplemented by private savings. A residual public system remains for workers who have accumulated years of service under the old plan.

14. Under the new system, all workers are required to save 10 percent of their wages in an approved retirement account. At the same time, the payroll tax rate for pensions was reduced from 25.5 to 15 percent, and will on present plans be reduced by one percentage point a year over the next 10 years.¹¹ This tax no longer entitle workers to additional pension benefits under the old system but will help, along with budget transfers, to fund public pension liabilities accrued under the PAYG system. New pensions granted under the PAYG system will be proportional to years of service prior to January 1, 1998. In order to improve the collection of wage taxes, responsibility for the collection of payroll taxes for pensions was transferred to the Tax Committee (TC) in 1997 and procedures are being adopted for the assignment of unique personal identification numbers to all persons of working age by the year 2000.

15. Contributions can be invested in public or private accumulation funds chosen by the contributing workers. The government has established a government-run pension fund, the

⁹These were projections of the impact of unchanged policies, not forecasts for the 1998 outcomes.

¹⁰Such steps would also be critical to the success of pension reform, because it will take decades for the public pension system to be phased out.

¹¹The payroll contribution rates are not set in the pension reform law. Rather they are set each year in the annual law for the republican budget, so the authorities will have continuing discretion in setting rates.

State Accumulation Fund (SAF) to which payroll contributions will be channeled until the private pension funds recently licensed are fully operational. The SAF (akin to the Banco de la Nacion scheme in Argentina) is authorized to invest in securities issued by the government, deposits in state banks, and securities issued by international financial institutions. Assuming a 10 percent contribution rate, the new pension system is expected to generate replacement rates of about 60 percent for workers with long employment histories.

16. Some workers with interrupted employment histories (particularly women) or low incomes, are expected to be unable to accumulate sufficient funds and will be protected by the *minimum pension* guarantee. This guarantee will be indexed retroactively to actual inflation and was set at T 2,400 per month for 1998 (about 26 percent of the national wage). As part of the reform, disability and survivor's pensions have been replaced with flat-rate allowances paid through the state budget. This is an interim measure that will be replaced by mid-year 2000 by mandatory disability and survivor's insurance financed by premia paid by workers to accredited insurance companies.

17. The government has established a regulatory environment that facilitates the operation of a nonstate accumulation funds. The government envisaged that a core group of 4–5 *private pension funds* should be ready to operate at the early stages of the reform, and to date twelve such funds (including the SAF) have been licensed. Private pension funds will be able to invest in government securities, private bonds, bank deposits, equities and, with restrictions, abroad. In the early years of the reform, it is expected that pension funds will invest mostly in government securities. To facilitate the operation of the funds, the authorities are expanding further the range of maturities of government securities, which were lengthened in 1997 to include 2-year notes. Maturities of treasury securities will be further lengthened by mid-1999. It is planned to list government shares of companies on the Kazakh Stock Exchange, including of high-quality, blue-chip companies. Foreign companies (banks, insurers, asset managers, actuaries, accounting and auditing firms) are providing much needed expertise in fund management, account administration, marketing and systems management.

18. *Insurance companies* are expected to be established to provide the annuities which are required to convert the defined contribution pension plans into a regular stream of retirement income. Upon retirement, contributors to the system will be entitled to receive a sum equivalent to their accumulated contributions plus accrued interest, dividends and capital gains. With this sum, retirees are expected to shop around to purchase an annuity from the insurance companies.

B. Actuarial Projections for the Residual PAYG System

19. The residual public system, combined with any minimum pension guarantees of the funded system, will continue to exert considerable pressure on the country's public finances during the next three decades. This is illustrated by simulations of the government's actuarial model that take into account the prospective aging of the population, real growth in wages and pensions, and the lack of accumulation of any new pension rights under the old PAYG

system effective January 1998. The net cost of the residual public system in relation to GDP will decline from 5.7 percent in 1998 to 4 percent in 2013 and 1.9 percent in 2026.

20. There are several reasons why the cost of the residual system remains large. First, despite the natural attrition of existing pensioners from the PAYG system, population growth and population aging when the babyboom generations retire cause the total number of pensioners in the future to rise.¹² Second, replacement rates for new pensioners under the PAYG system decline only slowly during the first several years of reform because many new pensioners have long work histories under the PAYG system and qualify for almost full pensions. In the first decade of reform the average replacement rate for new pensioners under the government's baseline scenario declines from 70 percent in 1997 to 62 percent in 2008. Eventually, however, replacement rates for new pensioners decline faster in the outer years of reform, from 41 percent in 2018 to 19 percent in 2026, as new pensioners entering the remnant system have fewer years of eligibility.

C. Fiscal Impact of the Reform and Fiscal Sustainability

21. Pension reform will place a substantial strain on the budget for many years. From the perspective of the budget, in the short run pension reform is simply a reduction in the contribution rate to the PAYG system. It will take many years for the level of public pension benefits to fall substantially, since the public system will be the primary source of pensions for retirees over the next decade and more. When benefits do fall, however, the pressure on the budget will ease, and the full benefits of prefunding will be realized. To finance the cost of transition, government borrowing from individual accounts will be allowed up to one-half of the accumulation.

22. Under reasonably conservative assumptions, simulations of the government's actuarial model suggest that, in the near term, pension reform will raise the general government deficit by about 1.7 percent of GDP.¹³ The cost of the reform is mainly due to the reduction in the payroll tax rate from 25.5 percent in 1997 to 15 percent in 1998. To cover these costs, the 1998 budget provides an allocation of T 52.5 billion (2.7 percent of GDP) for the payment of existing pensions. Beyond 1998, the net cost of the reform rises gradually during the first decade of reform and reaches 2.8 percent of GDP in the year 2008 before commencing a gradual decline to zero in 2025. The steady rise in the cost of reform during 1998–2008 is primarily due to the further reduction until 2008 in the payroll tax rate by one percent per annum to a level of 5 percent. Thereafter, the payroll tax is assumed to remain constant at 5 percent. The net present value of the stream of deficits due to the pension reform, a

¹²The number of persons 65 years and over will rise from 1.330 million persons in 1997 to 1.639 million in 2008, 2.192 million in 2018 and 2.849 million in 2026.

¹³Simulations using a separate model developed by a Fiscal Affairs Department technical assistance mission on expenditure policy yielded similar qualitative and quantitative results.

summary measure of the aggregate cost of transition, is about T 622 billion (measured in 1997 tenge) or about 36.5 percent of 1997 GDP. The simulations are, of course, sensitive to the underlying assumptions.

D. Macroeconomic, Financial and Social Implications of the Reform

23. The above discussion abstracts from the possible **macroeconomic benefits** of a switch to a fully funded pension system. Economists and public policy analysts have paid considerable attention in recent years to the question of whether a funded pension scheme is superior to a pay-as-you-go system. The proponents of a funded system argue that it would address some of the problems faced by the Kazakh and other public pension systems—most notably low compliance and labor market distortion among the working population and income insecurity for pensioners—and, at the same time, enhance national saving and economic growth. The latter claim is the more controversial: it implies that a switch to a funded pension system can enhance economic growth, and therefore can represent more than just a shift in welfare among generations.¹⁴

24. Not surprisingly, the evidence of the effect of pension reform on saving and growth—both theoretical and empirical—is ambiguous. As a matter of principle, it is easy to show that the introduction of a funded social security scheme leaves aggregate savings unaffected relative to the status quo of having no retirement scheme, if the forced contribution rates are not too high. The introduction of PAYG schemes is generally assumed to lower aggregate savings relative to the status quo.¹⁵ It would follow that the winding down of a PAYG system would increase aggregate saving *in the long run*, once the transition has worked itself out.

25. Whether national savings rises or falls *during the transition* depends critically on the underlying stance of fiscal policies. With the underlying deficit unchanged, a switch to a funded system results in a budget deficit, since payroll contributions to the PAYG system have stopped while accumulated pension liabilities must be paid. The additional government borrowing is matched by higher private savings, so national savings would be unchanged if interest rates are not affected. However, if the interest rate earned under a funded scheme is higher than the rate of growth of the nominal wage bill (the rate of return under PAYG), there is an income effect which would tend to discourage savings. In this case, it is not possible to roll over the government debt forever, so at some point additional fiscal consolidation would

¹⁴See the volume *Averting the Old Age Crisis*, published for the World Bank by Oxford University Press (1994), or Larry Kotlikoff, *Privatizing Social Security in the United States: Why and How*, Chapter 6 in Alan Auerbach (editor), *Fiscal Policy*, MIT Press (1997).

¹⁵For expositions of this in simple overlapping generations models, see Chapter 3 of *Lectures on Macroeconomics* (1989) by Blanchard and Fischer, or Appendix I of “Pension Regimes and Saving,” by G.A. Mackenzie, et al (IMF, Occasional Paper 153).

be in order. The Kazakh authorities have pursued a phased reduction of the implicit debt of the PAYG system in order to distribute the cost of the transition over current and future generations of workers. This implies that the fiscal costs of transition are financed by some borrowing, accompanied by some fiscal consolidation. Kazakh workers during the transition would face taxes to pay for existing pensions and contribute to their own retirement accounts. The fiscal consolidation would increase national savings during the transition, but this is not an unavoidable byproduct of the pension reform itself. According to research cited in Mackenzie et al., the increase in national savings reported in the aftermath of the pension reform in Chile was indeed facilitated by the consolidation of the public finances.

26. The considerable uncertainties of making projections over long periods of time suggest that it is very important for the authorities to maintain flexibility during the transition period. If the costs of transition are trending higher than expected, the authorities will need to adjust by either changing the time path of contribution rates, improving revenue collection performance under existing rates, or adjusting benefits. The authorities have proposed reducing the payroll contribution rate for pensions to 15 percent in 1998, and subsequently reducing it one percentage point a year for another 10 years. The new law on pension provision is silent on these details, however, so the authorities have the discretion to adjust the plan. Likewise, the returns achieved on individual accounts will have to be carefully monitored to see whether they can produce adequate replacement rates.

27. As regards the **social implications of reform**, a crucial question regarding the new system is whether individual retirement accounts will provide sufficient retirement income under reasonable assumptions regarding length of working lifetime and real rates of return. Individual retirement accounts will require a high rate of return on investment to yield benefits similar to the public pension system. Under the pension reform, an individual's initial pension replaces 60 percent of her or his recent wages, and is subsequently indexed for inflation. After the new pension ages are phased in, an individual will qualify for this pension if she (he) has worked for at least 20 years (25 years) and has reached age 58 years (63 years). Taking this as an implied definition of adequacy, what kind of investment returns would be necessary to yield similar performance for funded pensions? Table 40 presents the required real rates of return for a combination of replacement rates and pension ages, assuming a 10 percent contribution rate.¹⁶

28. For a 60 percent replacement at the age of 60 years, after working for 38 years, the real rates of return an individual would have to earn throughout his/her working and retirement years—*after* deducting transactions costs—would be 6.2 percent. To put this into

¹⁶These estimates are derived from a stylized example in which an individual begins working at the age of 22 years, contributes until pension age, and then receives a price-indexed pension with the specified replacement of final wages until the age of 80 years. Real wages are assumed to grow at 5 percent until the age of 50 years, at which point they are constant for the rest of the worker's career.

perspective, consider two facts: (i) the average rate of return on the New York Stock Exchange over long periods is roughly 6 percent per year; and (ii) under the public pension system, a woman would have been eligible for a 70 percent replacement rate 2 years earlier. The required real rate of return for a 70 percent replacement rate at the age of 58 years after 20 years of service would be over 12 percent.

29. Another challenge that must be met in the course of pension reform is to develop the depth and diversity of investment opportunities necessary to achieve a sufficiently high and safe rate of return. To make the new individual accounts work, it will be necessary to develop remunerative investment opportunities to build up retirement savings and carefully designed procedures for drawing these savings down. It is unclear whether the authorities intend that the individual accounts be invested domestically, or whether international diversification will be allowed. In any event, it is safe to assume that likely investment returns will be reduced or risk will be increased until domestic capital markets become more developed. Individuals will also need access to sophisticated financial products, such as annuities and life insurance, in order to protect themselves against the risks of a defined-contribution pension system.

30. It is clear from Table 40 that the rates of return that people will have to earn on their individual accounts to receive pensions as generous as those promised under the public system are very high. The authorities would need to carefully compare the likely benefits under the two systems in setting the parameters of both. A reduction in the generosity of the public system would reduce the transition costs. On the other hand, since individual accounts are the pension system of the future, it is important not to raise expectations artificially about the level of pensions that this system will support. It will probably be necessary to raise contribution levels, especially prior to the maturation of domestic capital markets, in order to achieve replacement rates that approach those under the public system.

31. The new pension law does not set conditions for making withdrawals from individual accounts. Since these accounts are to be the primary source of income in old age, these rules must be carefully structured. Annuities, once they become available, are an important option for withdrawals that eliminate individual risk with respect to longevity. Any other options would have to ensure sufficient resources to cover an unexpectedly long life. These issues must also be addressed to ensure that individuals do not fall back into the social pension system at some point.

E. Administrative Issues

32. Despite the progress made by the authorities with the preparations of the reform, substantial technical difficulties were experienced in connection with the implementation of the new system in early 1998. Among the administrative achievements were: (i) the establishment of the new agencies needed to operate the new system, including the National Pension Agency (NPA), the State Center for the Payment of Pensions (SCPP), and the State Accumulation Fund (SAF); (ii) the promulgation of laws and regulations; and (iii) the licensing of eleven private pension funds, three asset management companies, and five custodial banks.

33. The NPA has been created under the Ministry of Labor and Social Protection (MLSP) as the regulatory authority for non-state pension plans. The National Securities Commission (NSC) and the National Bank of Kazakhstan (NBK) also have regulatory authority for asset management companies and custodial banks. The State Center for the Payment of Pensions (SCPP) has been created to take over the responsibility for paying pensions under the residual state pension and to allocate workers' contributions (collected by the Tax Committee) to the state and non-state accumulation funds in an efficient and timely manner. The SAF is available to hold and invest the defined contributions until individuals have the opportunity to open personal saving schemes.

34. Regulations have also been issued governing the operation of the SAF, nonstate accumulation funds, asset management companies, and custodial banks. These regulations include standards for licensing and license fees, commission structure, reporting and disclosure requirements and standards, accounting and auditing, methods of transferring assets among funds, prudential norms, minimum capital requirements, and portfolio norms. The law and regulations issued by the authorities define minimum capital requirements and regulate commissions while preserving the potential profitability of pension fund management companies. They also cover authorization criteria, "fit and proper" tests for founders and managers, detailed business plans, asset segregation, external custody, audits, actuarial reviews, sound investment policies, professional asset management practices, proper valuation and return calculation methods. In addition, they also specify adequate information disclosure, sensible marketing and advertising policies, effective supervision, workable compliance rules and sanctions, favorable tax treatment, and features of pension plans. Custodial services are to be assigned only to commercial banks of the highest caliber or to the NBK.

35. The numerous implementation difficulties faced by the authorities in the early months of the operation of the funded system were mainly due to the ambitious timetable set by the authorities rather than fundamental flaws in the reform policy framework. The problems encountered included: (i) low collections under the funded scheme; (ii) lack of assignment of unique Personal Identification Numbers (PINs) for most of the individual contributors; (iii) delays in the installation of computer hardware and software in the SCPP; (iv) delays in the establishment of actuarial capacity within the government; and (v) delays in the establishment of an adequate contractual regime governing the relations of pension funds, asset management companies, and custodial banks.

36. Following significant shortfalls in February and March, collection of payroll taxes and of payroll contributions picked up significantly in April and May after the authorities made a determined effort to get the reform back on track. Specifically, efforts were made to unblock the financial flows of the new system, which had been blocked in early weeks owing to employer errors in the submission of the contributions and the lack of the assignment of PINs. The assignment of unidentified contributions by the SCPP is now proceeding well, employer errors in the submission of the contributions to the funded system have declined, and the functioning of the SCPP is improving. In view of the need to avoid the reemergence of

pension arrears, the authorities increased the levels of budgetary transfers relative to the monthly amounts stipulated in the budget in the early months of the year. It is expected that collections of payroll taxes will increase in the coming months, soon eliminating the need for additional budget transfers.

37. As of May 1998, the introduction to PINs continued to be delayed, owing to difficulties with computer hardware and software at the SCPP. The authorities are, however, making a determined effort to solve the remaining problems, and expect to be able to assign PINs to one quarter of all current contributors by mid-June and to all current contributors by end-September 1998.

Table 37. Kazakhstan: Pensions and Allowances Paid, 1993-97

	1993	1994	1995	1996	1997 Estimated
(Number of recipients, thousands of persons)					
All pensioners	2,759	2,572	2,694	2,531	2,534
Working pensions	251	204	236	225	175
Labor pensions			2,567	2,416	2,432
Age pensions			1,993	1,851	1,908
Other labor pensions			574	565	524
Social pensions			113	103	97
Military disability pensions			13	11	5
(Average monthly amount in Tenge)					
All pensioners	37	517	1,400	2,325	3,131
Working pensions	28	524	1,387	2,337	3,467
Labor pensions			1,441	2,385	3,217
Age pensions			1,500	2,456	3,273
Other labor pensions			1,236	2,154	3,014
Social pensions			509	962	1,341
Military disability pensions			1,050	1,732	2,937
(Index of real average benefits 1995 = 100)					
All pensioners	145	102	100	119	134
Working pensions	110	104	100	121	149
Labor pensions			100	119	133
Age pensions			100	118	130
Other labor pensions			100	125	145
Social pensions			100	136	157
Military disability pensions			100	119	166
(Average pension in percent of average wage)					
All pensioners	29	30	28	34	39
Working pensions	22	31	28	34	43
Labor pensions			29	35	40
Age pensions			30	36	40
Other labor pensions			25	32	37
Social pensions			10	14	17
Military disability pensions			21	26	36

Sources: Ministries of Finance and Labor and Social Protection; and Fund staff estimates.

Table 38. Kazakhstan: Pension Fund Accounts, 1995-97

(In billions of Tenge)

	1995	1996	1997 1/ Estimated
Revenues	58.1	79.8	125.8
Contributions from employers	51.0	71.5	87.7
Contributions from self-employed	0.0	0.0	-
Compensation for special benefits	0.1	0.2	0.2
Local budget receipts	5.3	5.9	-
Repayments of contribution arrears	-	-	1.0
Transfers from the budget for arrears clearance	-	-	36.0
Net cash flow from Savings Bank	0.8	1.5	0.9
Other receipts	0.9	0.5	0.0
Expenditures	57.2	75.9	124.3
Pensions	45.3	70.6	121.1
Old-age and social pensions	3.2	67.3	94.5
Special pensions	2.1	3.3	0.7
Clearing of arrears	-	-	25.9
Allowances	7.7	9.2	2.2
Families with children	5.5	7.1	1.2
Other	2.2	2.1	1.0
Subsidies to enterprises	0.9	0.8	-
Net intergovernmental transfers	2.4	-5.8	-
Other expenditures	0.9	1.0	1.0
Balance	1.0	3.8	1.5
(as a percent of GDP)	(0.1)	(0.3)	(0.0)
Balance adjusted for Savings Bank flows 2/	0.1	2.3	0.6
(as a percent of GDP)	(0.0)	(0.2)	(0.0)
Memorandum items:			
Average monthly wage	4,988	6,792	8,477
Average monthly pension	1,446	2,111	3,131
Official wage bill (billions)	299	361	381
Employment (thousands)	4,994	4,432	3,912
Number of nonworking pensioners (thousands)	2,457	2,306	2,359
Working pensioners	236	225	175
Average pension/average wage (percent)	29.0	31.1	36.9
Social insurance cont./official wage bill (percent)	17.1	19.8	23.0
Social insurance contributions/GDP (percent)	5.0	5.1	5.1
Official wage bill/GDP (percent)	29.3	25.5	22.3

Sources: Ministries of Finance and Labor and Social Protection; and Fund staff estimates.

1/ Estimates made on the basis of data for 9 months.

2/ The adjustment to the deficit understates the increase in net borrowing because some of the payments to the bank during the year were interest payments.

Table 39. Kazakhstan: Fiscal Costs of Pension Reform, 1997-2026
(In billions of 1997 Tenge)

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
A. Net cost without reform	66	70	74	76	78	69	68	67	66	66	65	64	63	65	66
B. Net cost to Government, Government baseline (=B1+B2-B3)	66	100	106	110	114	108	110	113	116	120	124	128	129	131	132
B1 Total pensions and social allowances following reform	114	118	120	121	122	115	115	117	118	120	122	124	125	127	128
B2 Government contributions to accumulation funds	0	11	12	12	13	13	14	14	15	15	16	16	17	17	18
B3 Payroll taxes net of Government transfers to SCPP	48	28	26	24	21	20	19	18	16	15	14	12	13	13	14
C. Revised net cost of system, World Bank estimate (=B+C1+C2+C3)	66	100	104	108	112	106	108	111	115	119	124	128	129	130	131
C1 Impact of elimination of category 3 disability	0	1	1	1	1	2	2	3	3	4	4	4	5	5	7
C2 Impact of faster real wage growth	0	-1	-1	-2	-2	-2	-2	-1	0	2	3	5	7	9	11
C3 Impact of lower replacement ratios	0	-1	-1	-2	-2	-2	-3	-4	-5	-6	-8	-10	-13	-16	-19
D. Net cost of reform (=C-B)	0	29	30	32	33	36	39	44	49	53	59	64	65	65	65
E. Memorandum items:															
Net cost of reform (in percent of GDP)	0.0	1.7	1.7	1.7	1.7	1.8	1.9	2.0	2.1	2.1	2.3	2.4	2.3	2.3	2.2
Net cost without reform (in percent of GDP)	3.9	4.0	4.0	4.0	3.9	3.3	3.1	2.9	2.8	2.7	2.5	2.4	2.3	2.2	2.2
Revised net cost of system, World Bank estimate (in percent of GDP)	3.9	5.7	5.7	5.6	5.6	5.0	4.9	4.8	4.8	4.8	4.8	4.8	4.6	4.5	4.3
Real GDP (billions of 1997 Tenge)	1,709	1,760	1,831	1,922	2,018	2,119	2,204	2,292	2,384	2,479	2,578	2,682	2,789	2,900	3,016
Real GDP growth rate (percent per annum)	...	3.0	4.0	5.0	5.0	5.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Payroll tax rate (percent)	25.5	15	14	13	12	11	10	9	8	7	6	5	5	5	5
Compliance rate (percent)	48	46	44	43	41	41	42	42	42	43	44	45	46	47	48
NPV of cost of reform (billions of 1997 Tenge)	622	...	...	...	...	...	...	...	...	...	...	...	...	...	...
NPV of cost of reform (percent of 1997 GDP)	36	...	...	...	...	...	...	...	...	...	...	...	...	...	...
NPV of net cost without reform (billions of 1997 Tenge)	1,131	...	...	...	...	...	...	...	...	...	...	...	...	...	...
NPV of net cost without reform (percent of 1997 GDP)	66	...	...	...	...	...	...	...	...	...	...	...	...	...	...
NPV of revised net cost of the system (billions of 1997 Tenge)	1,753	...	...	...	...	...	...	...	...	...	...	...	...	...	...
NPV of revised net cost of the system (percent of 1997 GDP)	103	...	...	...	...	...	...	...	...	...	...	...	...	...	...

Sources: World Bank; Government Pension Model; and Fund staff calculations.

Table 39 (concluded). Kazakhstan: Fiscal Costs of Pension Reform, 1997-2026
(In billions of 1997 Tenge)

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
A. Net cost without reform	65	68	71	73	76	80	83	86	89	92	96	98	101	105	113
B. Net cost to Government, Government baseline (=B1+B2-B3)	132	133	134	134	135	135	135	134	134	133	131	129	127	125	125
B1 Total pensions and social allowances following reform	128	129	130	130	130	130	130	129	127	126	123	121	118	115	113
B2 Government contributions to accumulation funds	18	19	19	20	21	22	23	23	24	25	27	27	29	30	31
B3 Payroll taxes net of Government transfers to SCPP	14	15	15	16	16	17	17	17	18	18	19	19	19	20	20
C. Revised net cost of system, World Bank estimate (=B+C1+C2+C3)	130	131	131	131	130	130	128	126	124	121	118	114	109	105	102
C1 Impact of elimination of category 3 disability	7	8	8	10	10	11	12	13	12	13	14	15	16	16	16
C2 Impact of faster real wage growth	13	16	18	20	23	25	27	28	30	31	32	33	33	33	35
C3 Impact of lower replacement ratios	-22	-26	-30	-34	-37	-41	-45	-49	-53	-56	-60	-63	-67	-70	-73
D. Net cost of reform (=C-B)	65	62	60	57	54	50	45	41	35	29	22	15	8	0	-11
E. Memorandum items:															
Net cost of reform (in percent of GDP)	2.1	1.9	1.8	1.6	1.5	1.3	1.1	1.0	0.8	0.6	0.5	0.3	0.2	0.0	-0.2
Net cost without reform (in percent of GDP)	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.0	2.0	2.0	2.1
Revised net cost of system, World Bank estimate(in percent of GDP)	4.1	4.0	3.9	3.7	3.5	3.4	3.2	3.1	2.9	2.7	2.5	2.4	2.2	2.0	1.9
Real GDP (billions of 1997 Tenge)	3,137	3,262	3,393	3,529	3,670	3,817	3,969	4,128	4,293	4,465	4,644	4,829	5,022	5,223	5,432
Real GDP growth rate (percent per annum)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Payroll tax rate (percent)	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
Compliance rate (percent)	49	49	50	51	52	53	54	55	56	57	58	59	60	61	62
NPV of cost of reform (billions of 1997 Tenge)	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
NPV of cost of reform (percent of 1997 GDP)	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
NPV of net cost without reform (billions of 1997 Tenge)	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
NPV of net cost without reform (percent of 1997 GDP)	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
NPV of revised net cost of the system (billions of 1997 Tenge)	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
NPV of revised net cost of the system (percent of 1997 GDP)	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...

Sources: World Bank; Government Pension Model; and Fund staff calculations.

Table 40. Kazakhstan: Required Real Rates of Return^{1/}
(10 percent contribution rate)

Retirement Age	Replacement Rate		
	40 Percent	50 Percent	60 Percent
55	6.5	6.3	8.0
56	6.1	6.9	7.6
57	5.7	6.6	7.2
58	5.4	6.2	6.9
59	5.0	5.8	6.5
60	4.7	5.5	6.2
61	4.3	5.2	5.8
62	4.0	4.8	5.5
63	3.7	4.5	5.1
64	3.3	4.1	4.8
65	2.9	3.8	4.4

Source: Fund staff calculations.

^{1/} In percent per annum.

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Developments in and Prospects for the Hydrocarbon Sector in Kazakhstan¹

I. INTRODUCTION

1. The hydrocarbon sector (oil and natural gas) is expected to become the main engine of Kazakhstan's long-run economic growth. Vast hydrocarbon reserves together with a relatively low country risk for the region have already made Kazakhstan the top recipient of per capita foreign investment among the CIS countries. Kazakhstan's reserves are second to only Russia's among the CIS countries, and the economic and political environments have been relatively favorable for foreign investment. The legal base for property rights, foreign investment activities, and extraction of natural resources has been created;² the tax system has been simplified and specifically adapted for the extraction sector;³ the tariffs for oil transport are the lowest in the world⁴; and the management of the extraction sector has been transferred away from the Ministry of Energy and Natural Resources to the state oil company Kazakhoil, representing Kazakh expertise in the hydrocarbon sector. Moreover, Kazakhstan's geographical location in Central Asia opens up access to large markets in both the west (Europe) and the east (China and south-east Asia), thus enabling both expansion and diversification of export markets.

2. These advantages notwithstanding, the successful development of Kazakhstan's hydrocarbon sector is subject to considerable risks and obstacles. First, and most importantly, Kazakhstan's exports of oil and gas are limited by the lack of transport capacity, and the only viable long-term solution is to build a pipeline network which, compared to sea transport, is expensive and vulnerable. Second, the legal status of the Caspian Sea shelf, which hosts the bulk of Kazakhstan's oil deposits, and therefore the access to the sea's hydrocarbon reserves, are disputed among the littoral states. Third, the actual size of hydrocarbon reserves in the Caspian Sea is not known as the basin remains largely unexplored. Fourth, the quality of Caspian oil is fairly poor due to a high sulphur and hydrogen sulphide content. Fifth, Kazakhstan lacks the capacity to refine the extracted crude oil; in fact, there are only three

¹The issues facing another resource-rich transition economy, Azerbaijan, are discussed in Rosenberg, Christoph B.; Saavalainen, Tapio, *How to Deal with Azerbaijan's Oil Boom? Policy Strategies in a Resource-Rich Transition Economy*, IMF Working Paper, WP/98/6 (Washington: International Monetary Fund, 1998).

²Including laws on Privatization, on Licensing, on Foreign Investment, on Oil, and on Deposits and Mineral Use.

³Including a simplified VAT for extraction-related imports, field-specific taxation, and flexible inter-year carry-overs of operational losses.

⁴US\$5.5 per ton per 1,000 km. For comparison, the tariff in Russia is US\$7.

refineries⁵ in the country and only one is capable of producing high-quality gasoline. Sixth, the gas sector is even less developed than the oil sector, lacking processing and transportation capacity. Seventh, uncertainty has been created among foreign investors by indications that privatization in the oil sector will be halted for the time being and that signed agreements may be revised retroactively and unilaterally if they are considered to be harmful to national interests. Finally, a large and rapid increase in the capacity to produce and export oil and gas may be harmful to other tradeables sectors in the economy by giving rise to "Dutch disease," that is, a loss of external competitiveness due to the appreciation of the real exchange rate following a significant increase in exports of natural resources.

3. Subsequent sections aim at providing a more detailed description and analysis of these positive and negative factors affecting the development of the hydrocarbon sector.

II. THE PRESENT SITUATION IN THE HYDROCARBON SECTOR

4. The main oil and gas fields in Kazakhstan are being explored and developed with foreign expertise and financing. By mid-1997, a cumulative total of US\$3 billion had been invested by foreign companies, with future commitments exceeding US\$40 billion. Tengiz, the largest oil field located in the north end of the Caspian Sea, belongs to Tengizchevroil, a joint venture of Chevron (45 percent), Mobil (25 percent), Kazakhoil (25 percent), and Russian-American LukArco (5 percent). The largest gas field, Karachaganak, is located off the Caspian Sea region near the Russian border, and is subject to a dispute between Kazakhstan and Russia: Russia has laid claim on it because it was explored in the late 1980s by the Soviet gas monopoly. Nevertheless, production at Karachaganak is shared between Kazakhstan and a foreign consortium including Lukoil, British Gas, Agip, and Texaco. Furthermore, the China National Petroleum Company (CNPC) has not only acquired exclusive rights to develop the second-largest oil field in Uzensk as well as Zhanazhol and Kenkiyak fields in the Aktyubinsk region, it has also committed to construct a pipeline from Aktyubinsk through Kazakhstan to the Xinjiang province in western China.

5. The Caspian Sea region contains the bulk of Kazakhstan's vast hydrocarbon reserves, which could make Kazakhstan one of the world's top ten oil producers and exporters within a decade⁶. Kazakhstan is estimated to have a claim on half of all oil reserves in the Caspian Sea which, together with its natural gas reserves and off-Caspian oil reserves, amount to some 15–20 billion tons of oil equivalency. Although the Caspian Sea shelf remains relatively unexplored, it is believed to be among the main hosts of the world's hydrocarbon deposits. By the mid-1990s, only 7 percent of the sea shelf had been explored, but its oil reserves were already estimated to exceed 100 billion barrels; more recent estimates put the figure closer to 200 billion barrels, with proven reserves around 30 billion barrels and possible reserves around

⁵In Pavlodar, which treats only Russian oil, and in Shymkent and Atyrao.

⁶The oil sector is currently estimated to account for 20–25 percent of Kazakhstan's exports and some 15 percent of GDP. See also Table 41.

160 billion barrels. In addition, reserves of natural gas are estimated at 2 trillion cubic meters. In some scenarios, the exploitation of these hydrocarbon reserves is expected to make the Caspian Sea region the primary source of oil and natural gas outside the Persian Gulf within a decade. However, the obstacles for a rapid development in the Caspian region remain: the legal status of the sea is unclear; the transportation of oil and gas to markets in the west and the east is dependent on vulnerable and relatively expensive pipeline networks; and there is competition for foreign investments in the hydrocarbon sector from Russia and potentially from Iran and Iraq.

6. While constituting a medium-term risk, the dispute about the legal status of the sea has not halted the exploration and exploitation of the Caspian hydrocarbon resources; moreover, negotiations seem to have borne fruit in early 1998. The littoral countries—Azerbaijan, Iran, Kazakhstan, Russia, and Turkmenistan—are split up into two groups as to the division of the sea: Azerbaijan and Kazakhstan favor a sectoral division of the entire sea area, while Iran, Russia, and Turkmenistan oppose any division beyond 20–40 nautical miles off the coast. The former group refers to a sectoral division made by the Soviet Ministry of Oil Industry in 1970, while the latter group refers to Soviet-Iranian treaties from 1921 and 1940 which open the Caspian Sea for use to all littoral countries. In February 1998, however, negotiations between Kazakhstan and Russia seem to have resulted in an agreement delineating the Kazakh and Russian sectors of the sea.

7. In the absence of its own pipeline network, Kazakhstan has leased access to Russian pipelines and resorted to expensive road and rail transportation. In 1997, Kazakhstan's access to the Russian pipeline network was limited to a quota of 10 million tons of oil (and nothing for gas). Road and rail transportation was used to access western European markets via the Baltic states, but the high cost restricted the use to below 3 million tons of oil. One attempt to relax the present transportation constraint has been an annual swap of some 2 million tons of Kazakh oil supplied to Russia as well as northern Iran, which is easily accessible from the Caspian Region (as opposed to the Persian Gulf), against an equivalent amount of Iranian oil in the Gulf ready for sale and transportation by sea. The swap was, however, suspended by Iran in 1997 due to a dispute over the quality of Kazakh oil. All in all, given the production potential, the current pipeline capacity of around 10 million tons of oil is a binding constraint for the growth of hydrocarbon exports from Kazakhstan.

III. FUTURE HYDROCARBON EXPORTS: A KAZAKH "DUTCH DISEASE"?

8. Several plans exist to expand Kazakhstan's hydrocarbon export transportation capacity, the most important and most advanced being a westward pipeline across the Caspian Sea. The Caspian pipeline, which is financed by the Caspian Pipeline Consortium and scheduled to be built between end-1998 and 2001, would provide a western export route. The consortium was originally formed by Kazakhstan and Oman in 1992, and now includes Russia (24 percent), Kazakhstan (19 percent), and Oman (7 percent), as well as Chevron (15 percent), Mobil (7.5 percent), Oryx (1.75 percent), LukArco (12.5 percent), Rosneft-Shell (7.5 percent), British Gas (2 percent), Agip (2 percent), and Kazakhstan Pipeline (1.75 percent). The Caspian pipeline would connect the Tengiz field and the Russian Black

Sea terminal of Novorossiisk, and the planned initial annual capacity is 28 million tons. This capacity is to be shared between Kazakhstan and Russia so that the Kazakh share would be 20 million tons and the Russian share 8 million tons. By adding pump stations along the pipeline, a final capacity of 67 million tons (48 million tons for Kazakhstan and 19 million tons for Russia) is to be reached by 2012–14.

9. An eastward pipeline connecting the Uzensk field to the Chinese province of Xinjiang, and possibly extending later all the way to Shanghai, is ambitiously scheduled to be operational by mid-2005. Information about the annual capacity of the pipeline varies between 9 million tons and 50 million tons, the median value being 20 million tons. A planned southward branch of the eastward pipeline would both allow Kazakhstan to significantly reduce oil imports by supplying eastern and south-eastern Kazakhstan with oil and provide a potential export route through Turkmenistan and Iran to the Persian Gulf.

10. If these planned pipelines, particularly the westward Caspian pipeline, become operational according to the presented schedules, export capacity will cease to be a binding constraint on the growth of hydrocarbon exports, and the production capacity will become a constraint instead. Although the time profile of the future export capacity is difficult to project owing to uncertainties related to the pipeline projects, it is clear that the completion of each pipeline will imply a large discrete jump in export earnings. These jumps would generate pressures for the real exchange rate to appreciate and therefore warrant a well-planned policy response in order to alleviate a possible “Dutch disease” (see Box 4).

Box 4. "Dutch Disease"

The concept of "Dutch disease" is used in the economic literature to denote the erosion of a country's external competitiveness due to real exchange rate appreciation following the discovery, extraction and exports of a country's natural resources. A significant increase in export earnings can cause real appreciation in two ways. First, under fixed exchange rates the prices of domestic non-tradeables rise as a result of increasing domestic absorption,¹ spurred by increased export earnings. The rise in non-tradeables' prices pushes up wages in non-tradeables sectors, and competition for labor causes wages to rise in domestic tradeables sectors as well.² As tradeables' prices are internationally determined, wage increases weaken tradeables sectors' competitiveness. Second, under flexible exchange rates a surge in exports, ceteris paribus, leads to a nominal appreciation that is sufficient to restore the external balance, possibly accompanied by rising non-tradeables prices accelerating the real appreciation. Consequently, the real appreciation caused either by nominal appreciation or by rise in nontradeables' prices makes domestic tradeables sectors (exporting and import-competing sectors) suffer from loss of competitiveness and some of them may even wither away, thus narrowing the country's production base.

Several policy responses can alleviate the symptoms of "Dutch disease". Real appreciation can be dampened through domestic demand control, particularly through tight fiscal policy, and by encouraging "productive" capital outflows such as investment abroad and early repayment of foreign debt. Demand control through tight monetary policy (sterilization of the monetary impact of foreign assets accumulation) may prove counterproductive as resulting higher interest rates may both curtail domestic investment and attract further inflows in the form of portfolio investments. Real appreciation may also be dampened through trade liberalization, since it increases imports and lowers the price of imported inputs (which would also alleviate the loss of competitiveness in tradeables sectors).

¹It is assumed that the supply of non-tradeables does not adjust instantly to increasing demand.

²Alternatively, centralized wage bargaining may be the cause for wage increases in tradeables sectors, following wage increases in nontradeables sectors.

11. So far, however, Kazakhstan's external competitiveness seems to have escaped excessive deterioration (see Attachment I for a more detailed discussion). Despite a considerable real appreciation of the Tenge since 1994, both exports and imports have been growing at healthy, albeit declining, rates. As is argued in Attachment I, the decline in the growth rates can readily be attributed to factors other than the real appreciation. A comparison with Russia, Kazakhstan's most important trading partner by far, also lends support to the claim that the real appreciation has not been excessive from the viewpoint of external trade developments. Finally, Kazakh competitiveness has benefitted from a slight decline in unit labor costs.

12. Nevertheless, Kazakhstan may have to face and tackle the symptoms of "Dutch disease" in a few years' time. As mentioned above, Kazakhstan might be among the ten largest hydrocarbon producing and exporting countries in the course of a decade following the projected increases in production and exporting capacities. So far, the main obstacle for an outward expansion of the oil and gas sectors has been the lack of transportation capacity, but the completion of two contracted pipelines—the Caspian pipeline to the Black Sea in the year 2001 and a pipeline to western China in 2005—would significantly increase the transportation capacity and, consequently, boost export earnings. The completion of each project implies an increase in annual export capacity by some 20 million tons, which would translate into a

130 percent export capacity increase due to the Caspian pipeline, and a subsequent 60 percent increase due to the Chinese pipeline.

13. There is, however, still considerable uncertainty attached to the future development of the export capacity as well as to the prospects for international oil prices. In the attached Table 42, three different scenarios concerning the future prospects for oil export revenue have been established to illustrate the extent to which “Dutch disease” may become an issue. The three scenarios differ in their assumptions concerning the evolution of both Kazakhstan’s oil export capacity and oil prices in the world market. As for the export capacity, the “central” scenario is built on the assumption that the Caspian pipeline becomes operational as scheduled at mid-2000, while a two-year delay in the Caspian pipeline is built into the “pessimistic” scenario. The completion of both the Caspian and the Chinese pipeline on schedule is depicted in the “optimistic” scenario. As for oil prices in the world market, which are adjusted to reflect the lower quality of Kazakh oil, the central scenario shares the projections in the Fund’s latest World Economic Outlook (WEO) for the *level* of oil prices, while the pessimistic scenario applies the WEO projections for the annual *changes* in average oil prices by using the mid-April 1998 world market price as a base. The optimistic scenario is based on the assumption that the average world market price recovers close to US\$17 per barrel in 1998 and increases thereafter one percent every year.

14. Although the three scenarios illustrate that both the timing and the magnitude of “Dutch disease” are subject to considerable uncertainty, they confirm that at least some degree of intervention will be necessary within the next five years. According to the central scenario, oil export revenues as a percentage of projected GDP double from 5.5 percent in 1998 to 11 percent in 2001, converging thereafter to 8 percent as GDP grows faster than oil export capacity. According to the pessimistic scenario, oil export revenues relative to GDP decline until the completion of the Caspian pipeline (2002), whereafter they jump by almost 2 percent of GDP in two consecutive years. After reaching the peak in 2003, revenues start falling toward 6 percent of GDP. The optimistic scenario depicts jumps amounting to about 3 percent of GDP in the years 2000, 2001, and 5 percent of GDP in 2006 following the completion of the Caspian and Chinese pipelines, respectively.

IV. CONCLUSION

15. Although the development of Kazakhstan’s hydrocarbon sector is well underway, its growth potential remains uncertain. Necessary conditions for the hydrocarbon sector to start leading long run growth in the Kazakh economy are the introduction of additional pipelines and the resolution of legal issues. The relaxation of the transportation capacity constraint and the settlement of international property rights are, however, by no means sufficient conditions guaranteeing the emergence, let alone the sustainability, of hydrocarbon-based long term growth.

16. In the long run, the sustainability of the growth will be determined by the ability of the Kazakh economy to avoid “Dutch disease” and to diversify its production base, as well as by the way the windfall gains originating from the hydrocarbon sector will be used. These gains

may well start emerging in a few years' time—probably well before all major uncertainties concerning the medium-term outlook will have been removed. It is therefore particularly important that the temptation to consume the windfall gains be resisted and that a significant share of the funds be invested for future use.

Table 41. Kazakhstan: Exports and Imports of Oil and Gas Condensate, 1995-97

	1995	1996	1997
Exports			
Volume (million barrels)	95	112	109
<i>Of which</i>			
BRO 1/	49	77	38
<i>Of which</i>			
Non-BRO	46	35	71
Price (U.S. dollar per barrel)	9.6	12.0	14.2
Imports			
Volume (million barrels)	26	26	12
Price (U.S. dollar per barrel)	7.7	11.9	13.4
Memorandum items:			
Value of oil exports (in percent of GDP)	5.5	6.4	6.8
Value of oil imports (in percent of GDP)	1.4	1.5	1.7

1/ Baltics, Russia and other countries of the former Soviet Union.

Source: Kazakh authorities.

Table 42. Kazakhstan: Scenarios for Export of Oil and Gas Condensate, 1998-2014

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Volume (million barrels)																	
Optimistic 1/	111.0	111.0	182.5	255.5	255.5	255.5	255.5	255.5	415.3	430.3	446.8	464.9	484.6	506.2	529.8	555.7	584.0
Central 2/	109.5	109.5	182.5	255.5	255.5	255.5	255.5	255.5	269.3	284.3	300.8	318.9	338.6	360.2	383.8	409.7	438.0
Pessimistic 3/	109.5	109.5	109.5	109.5	182.5	255.5	255.5	255.5	255.5	255.5	269.3	284.3	300.8	318.9	338.6	360.2	383.8
Price (U.S. dollar/barrel; adjusted for quality)																	
Optimistic 4/	13.5	14.5	14.6	14.8	14.9	15.1	15.2	15.4	15.5	15.7	15.9	16.0	16.2	16.3	16.5	16.7	16.8
Central 5/	12.6	12.8	12.9	13.1	13.2	13.4	13.4	13.4	13.4	13.4	13.4	13.4	13.4	13.4	13.4	13.4	13.4
Pessimistic 6/	10.9	11.0	11.2	11.3	11.5	11.6	11.6	11.6	11.6	11.6	11.6	11.6	11.6	11.6	11.6	11.6	11.6
Value (in million of U.S. dollar)																	
Optimistic	1,498	1,609	2,673	3,779	3,817	3,855	3,894	3,933	6,456	6,757	7,086	7,446	7,839	8,271	8,743	9,262	9,831
Central	1,380	1,396	2,356	3,342	3,385	3,430	3,430	3,430	3,615	3,817	4,038	4,280	4,545	4,835	5,153	5,500	5,880
Pessimistic	1,194	1,208	1,223	1,239	2,092	2,967	2,967	2,967	2,967	2,967	3,127	3,302	3,493	3,703	3,932	4,183	4,457
Memorandum items:																	
Value in percent of GDP																	
Optimistic	6.1	6.1	9.4	12.4	11.6	10.9	10.2	9.6	14.6	14.2	13.9	13.5	13.2	13.0	12.8	12.6	12.4
Central	5.6	5.3	8.3	10.9	10.3	9.7	9.0	8.4	8.2	8.0	7.9	7.8	7.7	7.6	7.5	7.5	7.4
Pessimistic	4.8	4.6	4.3	4.1	6.4	8.4	7.8	7.2	6.7	6.3	6.1	6.0	5.9	5.8	5.7	5.7	5.6

Sources: Kazakh authorities; IMF, World Economic Outlook (WEO); and Fund staff estimates.

1/ Assuming the opening of both the Caspian pipeline and the Chinese pipeline on schedule.

2/ Assuming the opening of the Caspian Pipeline on schedule, and no Chinese pipeline.

3/ Assuming two-year delay in the opening of the Caspian pipeline, and no Chinese pipeline.

4/ For 1998, world market price for crude oil of US\$16.88 per barrel, thereafter 1 percent annual growth.

5/ WEO assumption.

6/ For 1998, current world market price (US\$13.6 per barrel), thereafter same growth rate as in the central scenario.

Evolution of Kazakhstan's External Competitiveness

1. Transition from a planned to a market economy is generally expected to be associated with an appreciation of the *equilibrium* real exchange rate. Halpern and Wyplosz¹ list several potential contributing factors, including: (i) price liberalization, raising the relative prices of non-tradeables; (ii) productivity growth, particularly in tradeables sectors, leading to wage increases in non-tradeables sectors as a result of competition for labor, and subsequently to rising relative prices of non-tradeables; (iii) improving terms-of-trade following improvements in the quality of exportables; and (iv) improving overall balance of payments owing to capital inflows, particularly foreign direct investment inflows.
2. Although the equilibrium real exchange rate can be expected to appreciate during transition, the equilibrating magnitude of the real appreciation remains unknown in virtually all cases, not least due to the lack of relevant time series data and estimation problems caused by parameter instability. Therefore, the assessment of the level of the real exchange rate at any point in time must be conducted by means other than comparing the actual and estimated equilibrium levels of the real exchange rate. In the case of Kazakhstan, available data only allow a very rudimentary analysis of the evolution of the real exchange rate and external trade flows.
3. Both the geographical direction and estimated currency composition of Kazakhstan's external trade were used as a basis for constructing a variety of alternative real exchange rate indices. The set of considered indices consists hence of the consumer price index (CPI)-based real effective exchange rate (REER) as well as "proxies" for the REER, based on different price indexes and weighted equally between the U.S. dollar and the Russian ruble (RR). The price indexes used for these "REER proxies" include the CPI, the PPI, and unit labor costs (ULC). The equal weights of the U.S. dollar and the RR demonstrate an estimate of the currency composition, as opposed to the geographical direction, of Kazakhstan's external trade.
4. Although the implied evolution of the Kazakh Tenge's real exchange rate varies across indices, the most commonly used ones point to a real appreciation of about 20 percent between end-1994 and end-1997 (Figures 6–10). The REER as well as the "REER proxy" based on the CPI both indicate a real appreciation of about 20 percent, while the PPI-based "REER proxy" as well as the ULC-based real exchange rate index suggest a real *depreciation* over the period 1995–97. While the real depreciation suggested by the PPI-based index is explained by the fact that Russian producer prices have increased much more rapidly than the Kazakh producer prices, the real depreciation suggested by the ULC-based index results from a decline in Kazakh unit labor costs over the period. While (seasonally adjusted) labor productivity increased by 15.4 percent from 1994 to 1997 (averages January–November), real

¹WP/96/125: "Equilibrium Exchange Rates in Transition Economies".

wages increased only by 11.5 percent. A comparison with Russia confirms that Kazakh wages have evolved with moderation and thus not jeopardized Kazakhstan's external competitiveness (Figure 11).

5. Despite the real appreciation of the Tenge, Kazakh exports of goods and services grew much faster than imports between 1994 and 1996 (Figure 12). In that period, the real appreciation amounted to some 63 percent, as estimated using the CPI-based "REER proxy". The trade deficit relative to GDP narrowed from 8.7 percent in 1994 to 1.6 percent in 1996, and the current account deficit, again relative to GDP, narrowed from 8.6 percent in 1994 to 3.6 percent in 1996.

6. In 1997, the current account deficit relative to GDP widened somewhat to 4.3 percent, but the increase in the deficit was driven by trade in services, most of which are related to the development of the hydrocarbon sector, rather than by trade in goods. In fact, the trade deficit-to-GDP ratio remained at its 1996 level with the value of both exports and imports growing at an annual rate of 8 percent, which fell considerably short of the 22 percent annual growth rates of exports and imports in 1996. This fall was mainly caused by a slowdown in the growth of non-oil trade, although the growth of oil trade, particularly exports, slowed down as well.

7. The evolution of both oil and non-oil export volumes was the main reason for the slowdown in the growth of the value of exports. The volume of oil exports declined in 1997 by 3 percent, against an 18 percent growth in 1996. The volume of non-oil exports grew in 1997 by 4 percent, against 22 percent in 1996. The slowdown in the growth of the oil export volume is explained by the constrained access to pipeline transportation, and as this access limit has now been reached, the evolution of the value of oil exports will henceforth be determined by price developments. The slowdown in the growth of the non-oil export volume stems in turn from the collapse of exports of ferrous and non-ferrous metals to other CIS countries. Although exports of such goods to the rest of the world increased in volume terms by some 20–30 percent, this increase was insufficient to compensate for the collapse in CIS exports.

8. In summary, external trade developments—as well as the decline in unit labor costs—suggest that Kazakhstan's external competitiveness has not been excessively eroded. Exports and imports of goods both continue to grow at similar rates. The drop in the growth rates in 1997 can be attributed to the transport capacity constraint on oil exports and to the redirection of Kazakhstan's external trade away from CIS countries, as not only exports of ferrous and non-ferrous metals but also virtually all other exports to non-CIS countries grew in both volume and value terms in 1997 while declining in both volume and value terms to other CIS countries.

Figure 6. Kazakhstan: Real Exchange Rate Against Russian Ruble, 1994-98
(December 1994=1.00)

Sources: Kazakh authorities; and Fund staff calculations.

1/ Trade-weighted real effective exchange rate.

Figure 7. Kazakhstan: Real Exchange Rate Against U.S. dollar, 1994-98
(December 1994=1.00)

Sources: Kazakh authorities; and Fund staff calculations.

1/ Trade-weighted real effective exchange rate.

2/ Bilateral real exchange rate for the Russian Ruble against the U.S. dollar.

Figure 8. Kazakhstan: Real Exchange Rate Against Russian Ruble and U.S. Dollar, 1994-98
(Equal weights, December 1994=1.00)

Sources: Kazakh authorities; and Fund staff calculations.
1/ Equal weights for the Russian Ruble and the U.S. dollar.
2/ Trade-weighted real effective exchange rate.

Figure 9. Kazakhstan: Real Effective Exchange Rates, 1994-98
(December 1994=1.00)

Sources: Kazakh authorities; and Fund staff calculations.
1/ Trade-weighted real effective exchange rate.

Figure 10. Kazakhstan: Unit Labor Cost Based Real Effective Rate, 1995-97 1/
(January 1995=1.00)

Sources: Kazakh and Russian authorities; and Fund staff calculations.
1/ Trade weighted.

Figure 11. Kazakhstan: Average Wages, 1992-97
(In U.S. dollar)

Sources: Kazakh and Russian authorities; and Fund staff calculations.

Figure 12. Kazakhstan: Balance of Payments Indicators, 1994-97
(In percent of GDP)

Source: International Monetary Fund, International Financial Statistics.

Kazakhstan: Summary of the Tax System as of January 31, 1998

Tax	Nature of the Tax	Tax Deductions and Exemptions	Rates	
<u>National Taxes</u>				
1. Personal Income Tax, Profits Tax, and Capital Gains Tax				
1.1 Personal income tax	<p>Total annual income is defined as:</p> <p>(a) income in the form of employment compensation:</p> <ul style="list-style-type: none">- for individual work for hire;- the difference between the value of goods and services sold to employees and the purchase price or total cost of these goods or services;- employer expenses of reimbursing employees for nonbusiness-related expenses;- employer forgiveness of employee debt to employer;- employer payment of premiums for voluntary life or health insurance for employees;- amounts paid by employers for employee individual income tax withholding;- other employer expenses constituting direct or indirect employee income.	<p>Exempt income: official salaries for diplomatic and consular employees who are not citizens of Kazakhstan; official salaries for a person in the official service of a foreign country where said income is taxable; the value of property received as a gift or inheritance from one individual to another in the form of humanitarian aid, except for property in the form of employment compensation; government pensions, stipends, and allowances; payments and assistance to pregnant women and mothers related to disability as a result of injuries and poor health and the loss of a breadwinner; alimony payments for children and dependents, lump-sum payments, and financial assistance from the national and local governments provided by employers for occupationally-related injuries, death, or disability.</p> <p>Deductions: the value of property and money donated free of charge to non-profit charitable organizations amounting to no more than 2 percent of income; voluntary contributions to charitable funds.</p>	<p>Annual Income Bracket</p> <p>Up to 15 annual reference indices (AI)</p> <p>From 15 to 30 AI</p> <p>From 30 to 65 AI</p> <p>From 65 to 130 AI</p> <p>From 130 to 350 AI</p> <p>Over 350 AI</p> <p>The AI is the sum of the monthly reference indices (MI) specified in the annual budget document. On January 1, 1998, the MI stood at T 630, and will increase to T 640 on April 1; T 650 on July 1; and T 660 on October 1, 1998.</p>	<p>Marginal Tax Rate of Annual Income Bracket</p> <p>5 percent</p> <p>10 percent</p> <p>15 percent</p> <p>20 percent</p> <p>25 percent</p> <p>30 percent</p>

Kazakhstan (Cont'd): Summary of the Tax System as of January 31, 1998

Tax	Nature of the Tax	Tax Deductions and Exemptions	Rates
	(b) business income:		
	- income from the sale of products (work, services);		
	- capital gains resulting from the sale of buildings not subject to depreciation and adjusted for inflation;		
	- income from nonsales transactions, including: (i) interest income; (ii) dividends; (iii) gifts of property and money; (iv) income from property rentals; (v) royalties; (vi) subsidies received by corporations except for government subsidies; (vii) income derived from agreements to limit business operations or close a business; (viii) income from reductions in the reserve funds of banks and insurance companies; (ix) surplus revenues derived from the sale of fixed assets from a group during the tax year in excess of the net value of the group of the year (adjusted for inflation); and (x) recovery of previously deducted expenses, losses, or troubled debts.		

Kazakhstan (Cont'd). Summary of the Tax System as of January 31, 1998

Tax	Nature of the Tax	Tax Deductions and Exemptions	Rates
1.2 Corporate Income Tax	<p>Property income of individuals, including: (i) gains from the sale of assets adjusted for inflation; (ii) real estate which is not the permanent residence of the taxpayer; (iii) securities and stock in a corporation and other nonmaterial assets; (iv) foreign currency; and (v) precious stones and precious metals, jewelry made thereof, and other objects containing precious stones and metals, and works of art and antiques.</p> <p>Annual income of resident taxpayers is income received in the Republic of Kazakhstan and outside the Republic of Kazakhstan, while income of nonresident taxpayers is income received from Kazakhstan sources.</p>	<p>The following organizations are exempt: the Voluntary Society of Disabled Persons of Kazakhstan; the Kazakhstan Society of the Blind; the Kazakhstan Society of the Deaf; the Social Adaptation and Vocational Rehabilitation Center for Physically and Mentally Underdeveloped Children and Adolescents; the Kazakhstan Society of Veterans of the War in Afghanistan (not including production of excisable commodities and trade); organizations declared eligible by the government of the Republic of Kazakhstan, including foreign organizations and organizations created with foreign participation that are registered and participate in construction in the city of Akmola for a period not to exceed 5 years; banks and organizations on income from mortgage loans and agricultural credits; and corporate entities receiving property in the form of humanitarian aid.</p> <p>The total annual income of manufacturing organizations where disabled persons account for at least 30 percent of the employees may be discounted by two times the total payroll expenses for disabled employees for national social insurance and contributions to the National Employment Fund. Interest on securities is tax-exempt. Income earned by World War II veterans, persons considered equivalent to them, Category I and II disabled persons, and one of the parents of a person disabled from childhood up to 480 times the minimum annual salary is tax-exempt. The income of category III disabled persons up to 240 times the minimum annual salary is tax-exempt.</p>	<p>Standard rate: 30 percent.</p> <p>For corporations where land is the primary means of production: 10 percent.</p> <p>For corporations operating in special economic zones: 20 percent.</p> <p>For corporations for whom land is the main productive asset: 10 percent.</p>

Kazakhstan (Cont'd). Summary of the Tax System as of January 31, 1998

Tax	Nature of the Tax	Tax Deductions and Exemptions	Rates
1.3 Tax on dividends withheld at source	Tax on dividends on stocks and other securities.		15 percent
1.4 Tax on interest withheld at source	Tax on interest paid to corporations and individuals except for interest paid to resident banks.		15 percent
1.5 Taxes on the income of non-residents withheld at source	- Dividends and interest;		15 percent
	- Insurance payments pursuant to risk insurance or reinsurance contracts;		5 percent
	- International telecommunications or transportation services;		5 percent
	- Royalties, income from services, including management services, consulting services, rental income, and other income (except for income received as employment compensation).		20 percent

Kazakhstan (Cont'd). Summary of the Tax System as of January 31, 1998

Tax	Nature of the Tax	Tax Deductions and Exemptions	Rates
2. Social Security Taxes and Contributions.	Flat rate tax on wage bill of enterprises.	Organizations of disabled, deaf, or blind persons and retirees and those in which disabled persons constitute more than 50 percent of workforce, charitable funds for children, the Red Cross and Red Crescent, boards of lawyers, and organizations of veterans of and of disabled in the war in Afghanistan (excluding production associations) contribute at a reduced rate of 5 percent. Unincorporated businesses and private entrepreneurs make monthly mandatory social insurance contributions equal to one monthly reference index.	15 percent of the wage bill of enterprises and organizations. (In addition, a 10 percent mandatory contribution is made to individual worker retirement accounts.)
(a) State Center for Pension Payments.			
(b) Employment Fund contribution.		Exempt: organizations and enterprises of societies for the deaf, blind, or disabled.	The standard rate is 2 percent. Rate for budgetary organizations: 1 percent.
(c) Contribution to Mandatory Medical Insurance Fund.		The following entities pay a reduced contribution rate of 1 percent: Budgetary organizations; Red Cross and Red Crescent; SOS Children's Villages in Kazakhstan (a charitable organization for children); and the Voluntary Society of Persons Disabled in the war in Afghanistan (excluding its production organizations).	3 percent of the wage bill.
(d) Contribution to Social Insurance Fund.			1.5 percent of the wage bill.

Kazakhstan (Cont'd). Summary of the Tax System as of January 31, 1998

Tax	Nature of the Tax	Tax Deductions and Exemptions	Rates
3. Taxes on Goods and Services	Taxable turnover: value of goods, or services sold based on applicable prices and rates; for exchange or free-of-charge provision of goods, work, or services, turnover is based on an equivalent price but no lower than actual expenses; goods for business activity and goods used irretrievably for other purposes; the amounts of excise taxes on sold goods.	Exempt: leasing and sale of property and use rights for land or the rental of buildings, except for: (i) hotel lodging charges, automobile and other vehicle parking and storage fees, original sales of newly completed structures; (ii) financial services except for safekeeping and transport of valuables; (iii) postage stamps (except for collectors' stamps), stamped envelopes and postcards; (iv) privatization of property of state-owned corporations; (v) services performed by commercial organizations if they involve medical care or services and social benefits for children, the elderly, and disabled persons, services in the fields of education, culture, physical education, and sports, or the conduct of religious services and ceremonies; (vi) services provided by authorized agencies and subject to government fees; burial rites, the services of cemeteries and crematoria; imports of domestic currency (except for currency used for numismatic purposes) and securities; (viii) geological exploration and prospecting; (ix) imports of goods by individuals up to the limit for duty-free imports; (x) the transfer (sale) of an existing business or separately managed subsidiary of an existing business to another taxpayer; (xi) school supplies; and (xii) import or domestic value added purchased by the budget, the National Bank of Kazakhstan and its subdivisions and by societies of disabled, blind, deaf and their production organizations.	20 percent
3.1 Value-added tax (VAT)	Taxpayers are: corporations and individuals engaged in business activity which are registered for the value-added-tax; for the value-added-tax on imported goods, the corporations and individuals importing said goods.	Zero-rated: exports of goods; international transshipments; sale of goods and services for the official use of foreign diplomatic missions and equivalent agencies and for the personal use of mission employees and their family members; precious metals (gold and platinum).	

Kazakhstan (Cont'd). Summary of the Tax System as of January 31, 1998

Tax	Nature of the Tax	Tax Deductions and Exemptions	Rates
3.2 Excise taxes	For domestic goods:	Exempt: (i) goods subject to excise tax required for the operation of vehicles providing international freight, baggage, and passenger service while the vehicles are in transit and at intermediate stopping points and goods acquired in foreign countries to clean up after an accident (or breakdown); (ii) goods unsuitable for use as products and materials due to damage sustained prior to receiving Kazakh customs clearance; (iii) goods imported as humanitarian aid as provided by the procedure established by the Cabinet of Ministers of Kazakhstan; (iv) goods imported for charitable purposes by the state, government, or international organizations, including technical assistance; (v) confiscated and unclaimed valuables and valuables belonging to the state by inheritance rights; (vi) goods imported for official use by foreign diplomatic and equivalent missions for the personal use of the diplomatic and administrative personnel of these missions and their family members living with them; and (vii) goods transported across the customs border of Kazakhstan exempt under customs procedures according to customs law, except for "Manufacture of Goods for Free Circulation" procedure.	
(a) vodka;	(i) the value is determined on the basis of prices net of excise tax; and		0.7 ecu/liter
(b) all types of alcohol;	(ii) the value of the good based on the prices for domestic-made goods when the manufacturer transfers the good subject to excise tax as in-kind payment or gift or when the manufacturer transfers ownership of collateralized goods to the collateral holder or in an exchange transaction.		3.0 ecu/liter
(c) liquors;			0.6 ecu/liter
(d) fortified beverages, fortified juices and balsams;			0.6 ecu/liter
(e) wines;			0.2 ecu/liter
(f) cognacs;	For imports of goods subject to excise tax:		3.0 ecu/liter
(g) champagnes;	- the customs value determined on the basis of Kazakhstan's customs law.		0.3 ecu/liter
(h) beers;			0.05 ecu/liter
(i) wine materials;			0.2 ecu/liter
(j) tobacco products;	Taxpayers are: corporations and individuals manufacturing goods subject to excise taxes in Kazakhstan or importing goods subject to the excise tax or engaged in the gambling business in Kazakhstan.		0.75 ecu/1000
(k) salmon and sturgeon eggs, and delicacies prepared from sturgeon and salmon fish and eggs;			100 percent
(l) gold, platinum, and silver jewelry;			40 percent

Kazakhstan (Cont'd). Summary of the Tax System as of January 31, 1998

Tax	Nature of the Tax	Tax Deductions and Exemptions	Rates
(m)	dressed and undressed furskins (except for moleskins, rabbit skins, deer skins, and sheep skins);		7 percent
(n)	natural fur products, including overcoats, topcoats, jackets, cloaks, scarves, headware and collars, fur coats (except for items made of rabbit skins, deer skins, and sheep skins);		10 percent
(p)	natural leather clothing;		50 percent
(q)	crystalware and crystal light fixtures;		50 percent
(r)	crude oil including gas condensate;		4.3 ecu/ton
(s)	gasoline (except for aviation gasoline);		31 ecu/ton
(t)	diesel fuel;		6 ecu/ton
(u)	passenger cars;	Varies with engine displacement, model year, and type of fuel.	

Kazakhstan (Cont'd). Summary of the Tax System as of January 31, 1998

Tax	Nature of the Tax	Tax Deductions and Exemptions	Rates
(v) firearms and gas-operated weapons (except for items purchased for the use of the government authorities);			40 percent
(w) gambling.	A tax on gambling revenues.		20 percent
4. Tax on Securities Transactions	The tax base is: the value of original and new issues of securities issued in Kazakhstan; the market value of securities in the following types of transactions: purchase and sale, free-of-charge transfer, division among shareholders, exchange, transfer of the ownership of collateralized securities to the collateral holder, inheritance, and other transactions involving the transfer of property rights.	Issues of government securities are tax-exempt.	Upon registration of first issue: 0.1 percent of face value; upon registration of additional issues: 0.5 percent.
(a) issue registration tax;			
(b) transactions involving securities issued by the central and local government;			
(c) transactions involving other securities.	Tax payers are corporations and individuals engaged in transactions involving the transfer of security property rights and issuing securities.		

Kazakhstan (Cont'd). Summary of the Tax System as of January 31, 1998

Tax	Nature of the Tax	Tax Deductions and Exemptions	Rates
5. Natural Resource Tax		All bonuses and royalties are deductible under the corporate income tax and the excess profit tax	Varies depending on the contract.
(a) bonuses: • subscription;	Lump-sum payment at time of signing of contract.		
• commercial discovery;	Lump-sum payment made at time of commercial discovery.		
• extraction.	Periodic payment made upon reaching output levels specified in the agreement.		
	Basic bonus rates are determined by a specially authorized commission established by the Cabinet of Ministers of Kazakhstan, while other terms are specified in the individual contract.		
(b) royalties.	Royalty payers: mineral resource users engaged in the extraction of mineral resources, including common mineral resources, underground water resources, precious metals and stones, hydrocarbons, and hard rocks other than common mineral resources.		Varies depending on the contract.
	The tax base for royalties is the volume of mineral resources extracted by a mineral resource user or technogenic formations processed by said user.		
	Bonus payers: mineral resource users.		

Kazakhstan (Cont'd). Summary of the Tax System as of January 31, 1998

Tax	Nature of the Tax	Tax Deductions and Exemptions	Rates
(c) Excess profit tax.	<p>Excess profit taxpayers: all mineral resource users conducting activities under any mineral production agreements, except for production sharing agreements, and agreements dealing exclusively with common minerals and underground waters. Tax is payable on or before April 15 of the year following an assessable year.</p> <p>The tax base for the excess profits tax is net income with rate of return in excess of 20 percent.</p>		Excess profit tax rate varies between 4 and 30 percent.

Kazakhstan (Cont'd). Summary of the Tax System as of January 31, 1998

Tax	Nature of the Tax	Tax Deductions and Exemptions	Rates
Local Taxes			
1. Land Tax			
(a) on agricultural land;	A tax on agricultural land, on tracts occupied by buildings and structures, tracts used to maintain these structures, health protection zones, engineering zones, and other zones of facilities not provided to other organizations and citizens and not constituting general use land, on land for rest and recreation purposes whose tenancy or use rights have been granted to corporations and individuals.	Exempt: (i) reserve land, land of natural protection resorts, land having historical and cultural value, and natural conservation land, except as indicated in Articles 117, 119, and 121 of the Tax Code; (ii) general use land in urban areas; (iii) sanatoria and children's facilities, nature preserves, national dendrological parks and zoos, botanical gardens, and cemeteries; (iv) land used by publicly financed organizations; the Voluntary Society of Disabled Persons of Kazakhstan, the Kazakhstan Society of the Blind, the Kazakhstan Society of the Deaf, the National Red Cross and Red Crescent Society (exclusive of enterprises) and children's charities (exclusive of enterprises), the Kazakhstan Republican Organization of Veterans of the War in Afghanistan (exclusive of enterprises); (v) manufacturing businesses and organizations in which at least 50 percent of the total number of employees are disabled persons provided that at least 50 percent of the revenues for the report period were used to provide social benefits for the disabled; (vi) the National bank of Kazakhstan and its divisions; (vii) Kazakhstan corporations and individuals who have received agricultural use or tenancy rights to damaged or low-productivity lands for agricultural purposes for the first 10 years of use; (viii) individuals taking advantage of income tax breaks; (ix) individuals who have received land for personal farming, housing construction, market gardening, and fruit growing, including land occupied by structures not to exceed 0.25 hectares; and (ix) corporations, selected by the government of Kazakhstan, currently carrying on construction activities in Akmola for the term of the business operation but no more than five years.	Tax rates vary depending on soil quality.
(b) on urban land;			Tax rates vary depending on location.
(c) on industrial, transportation, communications, defense, and other non-agricultural land;			Tax rates vary depending on location.
(d) on land used for rest and recreation:	Tax payers are corporations and individuals who are tenants or users of the tracts of land.		Tax rates vary depending on location.
- agricultural purposes			
- for other purposes;			
		Local governments are authorized to reduce by up to 20 percent the tax rate for certain industrial, transportation, communication or other nonfarm lands; local governments are also authorized to raise or lower land tax rates, by up to 20 percent, in a variety of circumstances.	

Kazakhstan (Cont'd). Summary of the Tax System as of January 31, 1998

Tax	Nature of the Tax	Tax Deductions and Exemptions	Rates
(e) on forestry land;			Rate is 5 percent of the taxable value of the timber.
- for agricultural purposes on land occupied by buildings, structures, and other facilities belonging to forestry organizations on land provided for the use of timber producers;			
- on water resources management land for agricultural use on land occupied by buildings, structures, and other facilities belonging to water resource management agencies.			Tax rates vary depending on location.

Kazakhstan (Cont'd). Summary of the Tax System as of January 31, 1998

Tax	Nature of the Tax	Tax Deductions and Exemptions	Rates
2. Vehicle tax	A registration tax on motor vehicles.		In percent of the monthly reference index per kilowatt of vehicle power:
(a) passenger cars;		Exempt: (i) producers of agricultural products using special agricultural machinery, quarry dump trucks with a load capacity in excess of 40 tons; (ii) disabled persons on their personal motorcycles and passenger cars (one vehicle per person); (iii) heroes of the Soviet Union and Heroes of Socialist Labor; (iv) individuals bearing the honorary title of "Khalyk Kakhamany", persons awarded the Order of Glory Third Class and the Order of "Otan", mothers of large families awarded the titles of "Altyn Alka" and "Heroic Mother" (one vehicle per person); (v) the Voluntary Society of Disabled Persons of Kazakhstan; the Kazakhstan Society of the Blind; the Kazakhstan Society of the Deaf; the Social Adaptation and Vocational Rehabilitation Center for Mentally and Physically Underdeveloped Children and Adolescents; and the Kazakhstan Republican Organization of Veterans of the War in Afghanistan (not including businesses); (vi) manufacturing businesses and organizations in which at least 50 percent of the total number of employees are disabled persons provided that at least 50 percent of the revenues for the report period were used to provide social benefits for the disabled; (vii) the National Bank of Kazakhstan and its divisions; (viii) budgetary and non-profit organizations; and (ix) veterans of World War II and equivalent persons (one vehicle per person).	8 percent
(b) motorcycles and mopeds;			1 percent
(c) boats, vessels, tugs, barges, and snowmobiles;			4 percent
(d) yachts and aircraft;			8 percent
(e) trucks and other tire-mounted vehicles and machinery, except for track-mounted vehicles and machinery.			1 percent

Kazakhstan (Concl'd). Summary of the Tax System as of January 31, 1998

Tax	Nature of the Tax	Tax Deductions and Exemptions	Rates	
3. Property tax		Exempt: non-commercial and budgetary organizations for property not used for business activity; the organizations listed under Paragraph 5, Article 129 of the Tax Code for property used for productive and social purposes, the National Bank of Kazakhstan and its divisions; the property of national highways and facilities under contracts of business operation; the property of corporations, selected by the government of the Republic of Kazakhstan, carrying out construction activities in Akmola for the term of the business operation but no more than five years.	Property Value	Marginal tax rate (Percent)
(a) on the property of individuals not used in business activity;			up to T 1 million	0.10
			T 1-2 million	0.15
			T 2-3 million	0.20
			T 3-4 million	0.30
			T 4-5 million	0.40
			T 5-6 million	0.50
		Deductible: the value of property of the following categories of citizens, up to a maximum of 1000 times the monthly reference index: heroes of Socialist Labor, veterans of World War II and equivalent persons, persons awarded the title of "Khalyk Kakhmany", the Order of Glory Third Class, or the Order of Otan; mothers of large families awarded the titles of "Altyn Alka" and "Heroic Mother"; Category I and II disabled persons; pensioners living alone.	T 6-7 million	0.60
			T 7-8 million	0.70
			T 8-9 million	0.80
			T 9-10 million	0.90
			Over T 10 million	1.00

Kazakhstan (Concl'd). Summary of the Tax System as of January 31, 1998

Tax	Nature of the Tax	Tax Deductions and Exemptions	Rates
(b) on the property of corporations or individuals used in business activities.	<p>A tax on fixed productive and nonproductive assets of corporations and individuals engaged in business including residential space, country houses, garages, other structures, facilities, and space of individuals not used for business activity and in the personal use of citizens in Kazakhstan.</p> <p>Tax payers are corporations and individuals having rights of ownership, fiduciary management, business management or operational control of taxable items.</p> <p>The tax is paid in four installments, on February 20, May 20, August 20, and November 20.</p>		1 percent