July 2003
IMF Country Report No. 03/211

Republic of Kazakhstan: Selected Issues and Statistical Appendix

This Selected Issues paper and Statistical Appendix for the **Republic of Kazakhstan** was prepared by a staff team of the International Monetary Fund as background documentation for the periodic consultation with the member country. It is based on the information available at the time it was completed on **May 14, 2003**. The views expressed in this document are those of the staff team and do not necessarily reflect the views of the government of the **Republic of Kazakhstan** or the Executive Board of the IMF.

The policy of publication of staff reports and other documents by the IMF allows for the deletion of market-sensitive information.

To assist the IMF in evaluating the publication policy, reader comments are invited and may be sent by e-mail to publicationpolicy@imf.org.

Copies of this report are available to the public from

International Monetary Fund • Publication Services
700 19th Street, N.W. • Washington, D.C. 20431
Telephone: (202) 623 7430 • Telefax: (202) 623 7201
E-mail: publications@imf.org • Internet: http://www.imf.org

Price: $15.00 a copy

International Monetary Fund
Washington, D.C.

INTERNATIONAL MONETARY FUND

REPUBLIC OF KAZAKHSTAN

Selected Issues and Statistical Appendix

Prepared by staff team consisting of Peter M. Keller (head), Paul Mathieu, Veronica Bacalu, Geoffrey Oestreicher, Paulo Medas (all EU2), and Yongzheng Yang (PDR)

Approved by European II Department

May 14, 2003

Contents Page

Text Tables

Text Boxes

Figures

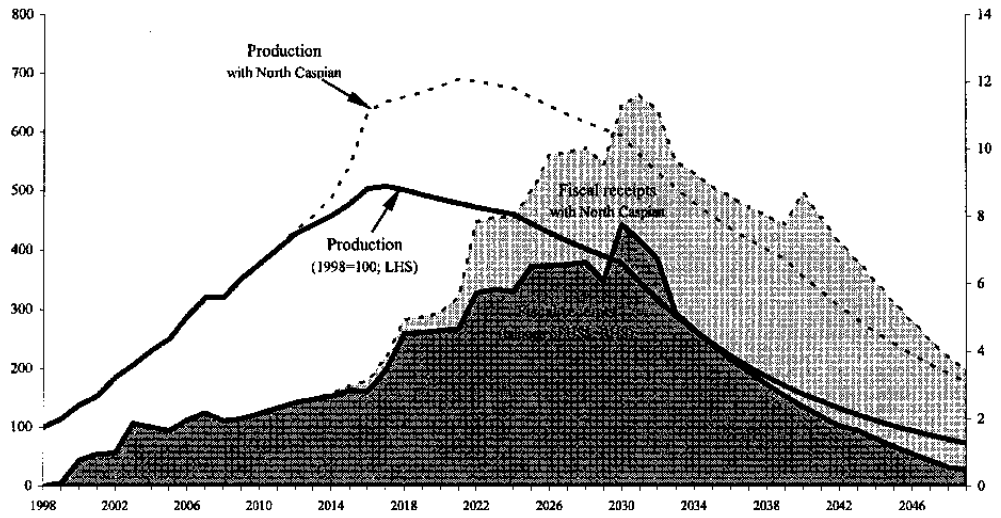
I. The Petroleum Sector—An Overview of Developments, Issues and Prospects[1]

A. Introduction

1. **Kazakhstan's petroleum sector continues to develop rapidly and highly favorable prospects for the medium-to-long-term are becoming more concrete.** Large and rising investment, almost entirely from abroad, continue to flow to the still relatively young sector. In addition to the rapid development of existing onshore petroleum fields, development of potentially much larger reserves in the offshore Caspian region is about to begin. Proven and probable crude oil reserves are now estimated to approach the 30 billion barrel mark. The petroleum sector accounts for almost one quarter of GDP and about one-half of export earnings. Importantly, Kazakhstan secured in 2002 several strategic agreements with Russia—on the delimitation of the Caspian Sea bed and improved access to oil and gas pipelines to western markets—which further significantly secure the medium-term outlook.

2. **Over the long term (15-20 years), Kazakhstan can reasonably expect crude production to approximately triple to around 3 million barrels a day (bpd), of which at least one third would come from the Caspian Sea.** This would place Kazakhstan in the top ten world crude oil exporters, on a level comparable to the present production levels of Iran, Mexico, Norway, and Venezuela. Fiscal revenues from the sector would rise more than commensurately (to as much as $8 billion per year) but with several years lag (Figure I-1).

Figure I-1. Kazakhstan: Medium-Term Petroleum Outlook 1/



1/ Solid lines are based on proven crude oil reserves. Production and revenues are likely to be much higher because of expected additional North Caspian fields other than Kashagan (broken line).

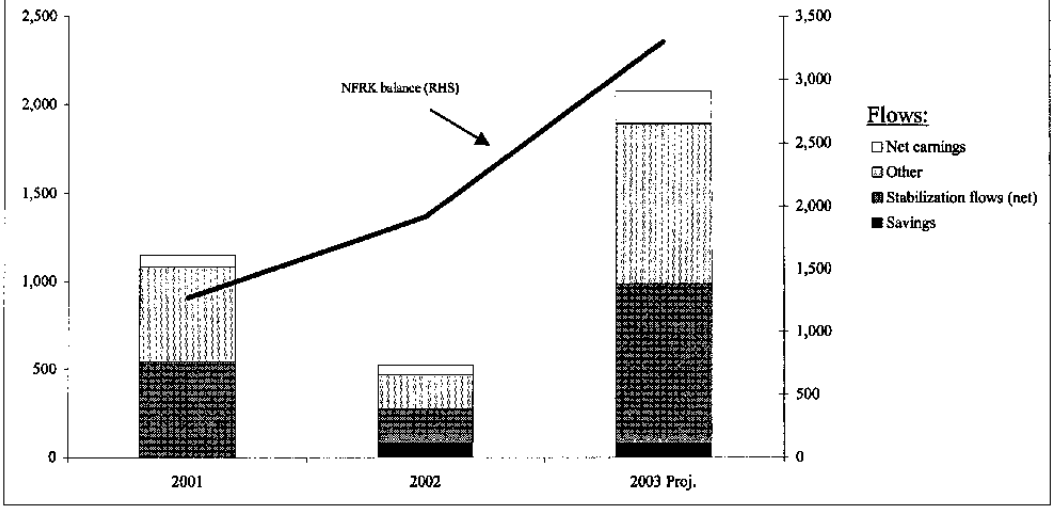
[1] Prepared by Paul Mathieu.

Production of natural gas, until now largely undeveloped, is beginning to emerge. The authorities have elaborated a development plan, which projects a several-fold output rise in gas over the long term. Given the strategic nature and size of Kazakhstan's petroleum reserves,[2] investment in the sector and production are relatively isolated from short-term price fluctuations. Only in the event of investor perceptions of a significant long-term oil price decline (to well below $15/bbl), or a sharp deterioration in the business climate, would there be cause for serious concern. Nevertheless, issues remain relative to the stability and quality of the investment environment and long-term pipeline access to world markets.

3. **The petroleum sector has already produced sizeable tax and royalties flows to the budget (some $2.8 billion since 2000), a significant portion of which (approximately $1 billion), since 2001, has been saved in the National Fund (NFRK).** Current fiscal receipts from the sector, excluding one-time payments, have accounted for almost 20 percent of general government revenue since 2000. The authorities have also elected to save the receipt from the sale of 5 percent of the TengizChevroil (TCO) field in 2001 and two oil "bonus" payments in 2001 and early 2003, altogether totaling almost $900 million (Figure I-2). The assets of the off-budget NFRK are managed by professional managers under the supervision of the National Bank of Kazakhstan (NBK) and entirely invested abroad. Initially complex funding and stabilization rules were considerably simplified in late 2002.

Figure I-2. Kazakhstan: Flows to the NFRK

(In millions of U.S. dollars)



[2] Many observers have put the Caspian basin reserves (including those which would belong to Azerbaijan, Iran, Russia, and Turkmenistan) on a par with those of the North Sea.

4. **As discussed in the next chapter, strong petroleum sector growth is also being felt in the non-oil sector** through the increasing domestic sourcing of intermediate inputs;[3] the income effect on domestic consumption, especially of nontradables; and indirectly through the alleviation of the financing constraint on government, which has resulted in a "crowding-in" of the private sector and spurred financial market development.

B. Recent Developments and Short-Term Outlook

5. **In 2002, crude oil output rose by 20 percent to reach almost 1 million bpd, double the level of 1996.** Export volumes rose about 24 percent to around 39.5 million metric tons (MT) and petroleum export earnings reached $5.2 billion.[4] Fiscal receipts from the sector declined to T165 billion ($1.1 billion) even though the average price rose somewhat, reflecting the switch to a much faster depreciation schedule by TCO as well as receipt of a large bonus payment in 2001 (Table I-1). Some 14.8 billions of cubic meters (BCM) of natural gas was produced in 2002, net of around 3 BCM reinjected,[5] of which a large share is still flared.[6]

6. **Kazakhstan's petroleum sector is still young and large investment flows, averaging $3 billion a year, were recorded in 2001-02.** Three large projects—Karachaganak, Tengiz, and the new offshore field of Kashagan, which is just beginning development, account for the bulk of investment. Investment has been directed not only at raising output but also at establishing linkages to the Caspian Pipeline Consortium (CPC)

---

[3] The authorities estimate that around 10 percent of investment is currently domestically sourced, although this varies widely by field. The government's objective is to raise the average domestic sourcing to 20 percent in the medium-term.

[4] A metric ton of crude oil is equivalent to around 7.5 barrels in volume terms depending on the specific gravity of the individual crude, which varies considerably. The crude from the older Kazakhstani fields is close to the heavy Russian Urals blend (7.3 bbls/MT). Newer fields have been much lighter crude—Tengiz (7.9 bbls/MT); Karachanak condensate (8.1 bbls/MT); Kashagan (about 7.8 bbls/MT).

[5] Natural gas in Kazakhstan is almost entirely associated gas (a by-product of oil extraction) and several fields are, or will be, reinjecting significant quantities of gas back into the ground to maintain crude wellhead pressure.

[6] While flaring is declining, it remains significant owing to stranding of gas, often a nonmarketable by-product of crude production. In addition to efforts to build pipeline links to the existing system, gas is being used for well reinjection; small-scale electricity generation; and some domestic sales.

pipeline.[7] Investment is expected to rise to, and remain at, around $4 billion in 2003 and for most of the decade.

Table I-1. Petroleum Production, Exports, and Fiscal Revenue, 1998-2003
(In millions of metric tons, unless otherwise indicated)

	1998	1999	2000	2001	2002	2003
	Estimates					Projection
Crude oil production	25.6	29.4	35.4	39.3	47.3	52.8
Domestic consumption	5.2	5.7	6.0	7.6	8.1	8.5
Exports	20.4	23.7	29.4	31.7	39.5	44.2
of which: through CPC	...	...	...	1.0	12.5	20.0
	(In millions of dollars)					
Exports	1,650	2,164	4,429	4,463	5,157	7,015
Budget revenue from oil	...	158	604	1,430	1,075	2,276
NFRK assets	--	--	--	1,240	1,917	3,330
Natural gas production (BCMs)	...	...	...	...	14.8	19.2
Memorandum items:						
World oil price ($/bbl)	13.1	18.0	28.2	24.3	24.9	28.0
Oil revenue (in percent of General Government revenue)	...	5.5	15.3	25.8	19.5	30.2

7. **The Tengiz field, operated by Chevron, is by far the largest active field in the country and the fifth largest in the world** (with recoverable reserves of 6–9 billion barrels). A 3-year investment program totaling $3 billion was recently relaunched,[8] which will almost double production to around 22 million MT per year by 2006.

8. **The Karachaganak gas and gas condensate** field in the northwest of the country is nearing completion of the second phase of its development. Condensate output will more than double (to around 12 million MT) and exports will be reoriented from Orenburg, Russia

[7] The $2.6 billion, 1,500 km pipeline from the Tengiz field area through to the Russian Black Sea port of Novorossiysk has an initial capacity of 28 million MT per year. The CPC is the first independent, privately owned and commercially operated line in Kazakhstan and Russia. It opened in autumn 2001. It includes a quality bank mechanism, which became operational in mid-2002 with the shipment of the first batch on non-Tengiz crude. (A quality bank is an equalization scheme to compensate shippers of different quality crude oils being mixed in a pipeline.) The CPC has cut export costs from the Tengiz area about in half.

[8] The investment program was put on hold for several months in late-2002 and early-2003 because of a dispute over a switch to an accelerated depreciation schedule and the financing of the investment program.

to reach world markets. A 600 km link up with the CPC is nearing completion. As a result, the sales price for condensate is expected to approximately triple from mid-2003.

9. **In early 2003, the international consortium, which is developing the "super-giant" offshore Caspian Sea concession including the Kashagan field,[9] submitted a commercial development plan to the government for approval.**[10] The find is reported to be the fourth largest field in the world and the largest discovery in the past 30 years. The total reservoir is estimated to contain 45 billion barrels (5.8 billion MT), of which 8-13 billion barrels are recoverable with existing technologies. Considerable associated natural gas reserves are also present. Some $25 billion would be invested over 20 years, of which some $2 billion has been spent so far. The first phase of development through 2008 would require around $9 billion in investment and result in production beginning in 2006.

10. **The operators of two other major fields have also invested significantly in export transport development.** A 450 km, $160 million, pipeline was completed in early 2003 linking the Aktobe oil field in the north (operated by the Chinese National Petroleum Company) to the CPC. Aktobe's production is expected to rise to 6 million MT by 2005 from around 2.5 million MT in the late 1990s. A small independent Canadian firm,[11] developing the Kumkol fields in central Kazakhstan, has arguably the most to gain from export pipeline development. While presently the third largest producer at over 7 million MT per year, its light crude reserves are stranded in the center of the country, east of the Aral Sea, and far from export markets and existing pipeline infrastructure. The firm has reported very high export transport costs of around $12/bbl and its rapid rate of production increase (over 20 percent annually over the past 6 years) is constrained by a lack of export capacity. The firm is investing, in partnership with the crude pipeline subsidiary of the national oil firm, Kazmunaigas, in internal pipeline projects, which will significantly reduce transports costs over the next few years. The firm has been exporting by rail car east to China and west through to the Russian Transneft system. It recently signed a swap arrangement for 1 million MT a year of its crude with Iran. Delivery of Kazakhstani crude would be by rail to the Tehran refinery in exchange for delivery of Iranian light crude on the Persian gulf.

11. **With the investment in transport links to world markets continuing, the share of exports going to CIS countries is expected to decline further.** The role of swaps with

---

[9] Formerly known as OKIOC, in 2002 AGIP petroleum became lead manager and the name was changed to AGIP KCO.

[10] A commercial discovery bonus is due upon approval of the plan.

[11] Hurricane Hydrocarbons has recently changed its name to PetroKazakhstan in recognition of the fact that its assets are predominantly in Kazakhstan.

Russia and triangulated deals with the Ukraine continue given the significant cost savings such deals produce.[12]

12. **As noted above, Kazakhstan signed several important agreements with Russia in 2002, which together represent a major strategic advance**. A bilateral treaty delimiting the Caspian Sea bed between the two states was signed and a joint venture development of a large offshore field on the border was agreed.[13] While a multilateral agreement on the Caspian Sea has not yet been agreed between the littoral states, the agreement with Russia removes a potential roadblock to the development of the rich north Caspian area. Agreement with Turkmenistan on the southern border is not as pressing because of the expected absence of significant deposits in the area. Nevertheless, a multilateral agreement on the Caspian would be beneficial, and necessary for any undersea pipeline projects to be undertaken.

13. **Agreement was also reached with the Russian authorities on a medium-term framework for enhanced access to the state-owned Transneft pipeline system**. It is apparent that the CPC pipeline has improved Kazakhstan's negotiation position with Transneft. Nevertheless, monopsonistic practices remain, including through Transneft's refusal to implement a quality bank system.

14. **A third major agreement with Russia involves the creation of a joint venture on gas, KAZROSGAZ, with the state monopoly Gazprom**. The equal-share joint venture will reportedly enjoy access to Western European gas markets through Gazprom's pipeline system at Russian domestic tariffs. Gazprom is known to face declining supply of gas from its existing fields and a shortage of financing to develop new fields. On the Kazakhstan side, access to western markets represents a major long-sought-after objective. The initial source of supply will be the stranded gas from the Karachaganak field. The purchase price of gas from Karachaganak is reported to be very attractive at around the $10 per thousand cubic meters. KAZROSGAZ projects sales volume of about 5 BCM by 2004.

15. **In late-2002, the authorities made welcome revisions to the revenue stabilization funding rules for the NFRK**.[14] Until then a matrix of quarterly estimates of tax and royalty obligations by major firms had set out the minimum revenue baseline for the budget. Quarterly overages or shortfalls by company and by tax type triggered flows to or from the

---

[12] See Section I of the previous Selected Issues Paper for Kazakhstan (SM/02/11;1/8/02)

[13] Lukoil and Kazmunaigas subsequently signed an equal-share joint venture agreement to develop the Khvalynskoye field in April 2003. Recoverable reserves of 100 million MT (about 750 million barrels) and an exploration program totaling $150-170 million were announced.

[14] The saving rule of 10 percent of baseline revenue remains unchanged.

NFRK. In a revision to the budget system law (published November 5, 2002)[15], these complex targets were replaced with an overall annual revenue target. Further, compensating flows from the NFRK to the budget were made subject to an overall revenue shortfall and limited to a maximum of either the natural resource revenue shortfall or the overall revenue shortfall. Thus, if petroleum and mineral receipts were below target, but overall government revenue was not, no stabilization reflows to the budget from the NFRK would occur. These changes have made the mechanism much more transparent and easier to manage.

C. Issues

Access to world markets—the transit issue

16. **Kazakhstan has suffered from is landlocked position and dependence on the dual Russian state-run oil and gas pipeline monopolies (Transneft and Gazprom, respectively).** Its main fields are at least 1,500 km from access to world markets through the Black Sea. Until late 2001, Kazakhstan had been virtually entirely dependent on the Russian Transneft pipeline system (from Atyrau, Kazakhstan to Samara, Russia, and onwards) for its primary access to international markets. As previously described,[16] the Russian state owned crude oil pipeline monopoly, Transneft, engages in monopsonistic practices, including artificially high assessments of technical losses, arbitrary longer route allocations, and discriminatory pricing for transport services for Kazakh crude oil.[17] Transit tariffs for crude from Kazakhstan are typically more than double what is charged to Russian domestic producers (Table I-2). Both Kazakhstan and Russia are signatories of the Energy Charter Treaty, which has strong nondiscrimination and national treatment provisions on energy transit (Box I-1).

---

[15] See the 2002 Article IV staff report (SM/02/5;4/1/02), Appendix VII for a fuller description of the NFRK.

[16] See the 2002 report for a fuller discussion.

[17] See "Cross-Border Issues in Energy Trade in the CIS Countries" IMF Policy Discussion Paper (PDP/02/13), December 2002, and "The Commonwealth of Independent States' Troubled Energy Sectors" in Finance and Development, September 2002, pp 34-38, for a fuller discussion of the trade distorting effects of the state-owned energy monopolies in oil and gas in the CIS.

Box I-1. The Energy Charter Treaty

The Energy Charter Treaty and the Energy Charter Protocol on Energy Efficiency and Related Environmental Aspects were signed in December 1994 and entered into force in April 1998. To date the treaty has been signed or acceded to by 51 states—all of the European and central Asian nations, plus Australia and Japan, although five countries (including Belarus and Russia) have not ratified the treaty.

The treaty was born out of a political initiative in Europe in the early 1990s to overcome the previous economic divisions on the European continent, especially in the energy sector. Russia and many of its neighbors were rich in energy resources but needed major investments to ensure their development, while the states of western Europe had a strategic interest in diversifying their sources of energy supplies. There was a recognized need to ensure a common foundation for developing energy cooperation between the states of the Eurasian continent, based on the principles of open, competitive markets and sustainable development.
The treaty is a legally binding multilateral instrument, the only one of its kind dealing specifically with intergovernmental cooperation in the energy sector. The fundamental aim of the Energy Charter Treaty is to strengthen the rule of law on energy issues, by creating a level playing field of rules to be observed by all participating governments.

The treaty's provisions focus on five broad areas: (i) the protection and promotion of foreign energy investment, based on the principle of non-discrimination. The signatory state takes on the obligation to extend national treatment, or most-favored nation treatment (whichever is more favorable), to nationals and legal entities of other signatory states who have invested in its energy sector. The treaty thus carries the equivalent legal force of a unified network of bilateral investment protection treaties. The majority of the treaty's investment-related provisions, are self implementing, although there are regular assessments, through survey activities and peer reviews, of investment practices among its participating states. (ii) free trade in energy materials, products, and equipment, based on WTO rules; (iii) freedom of energy transit through pipelines and grids; (iv) mechanisms for the resolution of state-to-state or investor-to-state disputes; and (v) energy efficiency and related environmental aspects.

The treaty places considerable emphasis on freedom of transit as the key to the development of energy markets in eastern Europe and the Baltic and CIS countries and provides for a dispute settlement mechanism for transit issues. The treaty's transit provisions oblige its members to facilitate the transit of energy on a non-discriminatory basis consistent with the principle of freedom of transit. However, as evidenced by the still pervasive problems in energy transit, the treaty's provisions have not been put into place effectively in many CIS countries, notably in Belarus, Russia, and Ukraine, which hold the key to improved efficiency in regional trade.

The transit provisions are being enhanced through the elaboration of a Transit Protocol, on which formal negotiations commenced in early 2000. The aim of the Transit Protocol is to develop a regime of commonly-accepted legal principles covering transit flows of energy resources, both hydrocarbons and electricity, designed to ensure the security and non-interruption of transit. It will help to further consolidate an approach towards energy transit based on fair, transparent and non-discriminatory criteria, and on the primacy of the principle of the "sanctity of contracts".

Business law commentators on the treaty have noted the multitude of deep–rooted transit disputes and the nonexistence or immature nature of transit law in the region, which the treaty seeks to address. Some commentators have called for a further strengthening of freedom of transit through the creation of an international pipeline organization for the region to manage pipelines, modeled after the European waterways commissions, to break the political and economic logjam that has stifled energy trade in the Baltic and CIS countries.

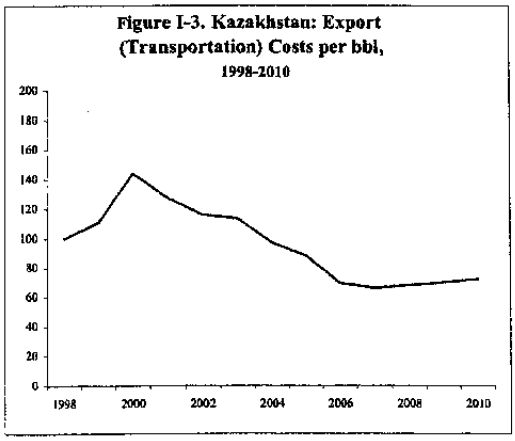
Sources: The Energy Charter web page; www.encharter.org, and Clark (1998).

Table I-2. Transit Tariffs for Crude Oil through Russia
(US dollars per MT; net of VAT)

As of February 2003	Russian oil	Kazakh oil
Samara – Novorossiysk	7.12	14.81
Samara – Adamova Zastava 1/	3.59	11.68
Samara – Odessa 1/	2.59	7.96

Source: Kazakhstan Ministry of Energy
1/ Only covers the part of the route which lies in Russia.

17. **In 2002, Kazakhstan was able to secure a medium-term agreement with higher volume quotas on transit pipeline access through Russia.**[18] While the transit volumes have risen in recent years, Transneft has steadfastly resisted the introduction of a quality-bank mechanism and national treatment on tariffs.[19] The absence of a quality bank has resulted in significant discounts on better quality Kazakhstan crude.[20] There have also been so far unsuccessful attempts to bring the CPC pipeline, which represents an important threat to Transneft's monopoly, under the control of the Russian monopoly regulation agency. However, a recently launched technical study of CPC operations by the Russian Federal Energy Commission may ultimately lead to an undermining of CPC's commercial independence. Export costs (transportation) are expected to continue to drop in 2003 and over the medium-term as domestic pipelines linkages to the CPC come on stream (Figure I-3).



[18] Essentially the full capacity of the Atyrau-Samara pipeline (15-16 million MT) has been allocated to Kazakhstan (up from 10 million MT in 2001). Also a quota of 2.5 million MT was agreed for shipments through the pipeline from the Russian Caspian port of Makhachkala to Novorossiysk. The crude oil reaches Makhachkala by ship across the Caspian from the Kazakh port of Aktau.

[19] National treatment for transportation services for oil and gas as well as rail and other infrastructure is one of the objectives driving the economic integration initiatives of Kazakhstan with Russia and other CIS major countries.

[20] Oil from the Karachaganak and Tengiz fields is much lighter and sweeter than the typical Urals blend of older Russia fields. The discount for Tengiz crude in the absence of a quality bank is estimated at about 10 percent.

18. **The construction of domestic lines to link up the major fields to the CPC will lead to major economic gains.** By mid 2003, the link-up of two large fields, noted in paragraph 10, above, will be complete. In particular, the giant Karachaganak gas and gas condensate field stands to benefit substantially. Enclaved in northwestern Kazakhstan, its highly valuable condensate output was only saleable to the neighboring gas treatment and refining facility in Orenburg, Russia, owned by Gazprom. The sales price for the condensate has remained at about 30 percent of world market levels, while gas sales have seen even higher discounts of around 90 percent of levels prevailing in western Europe. On this basis, the average differential between prevailing world market prices and average export (border price) prices for Kazakhstani crude will continue to decline from over $8/bbl in 2000 to around $5/bbl or less over the medium term.

19. **Several recent developments have raised the prospects of a long-talked-about crude oil pipeline to China.** The recent construction of an internal line in China linking the west to the south of the country has improved the economics of a pipeline to the Chinese border. Also, Chinese national firms have shown increasing interest in acquiring shares in Kazakh oil fields. In early 2003, two Chinese state firms together purchased the 16.7 percent share of the Kashagan venture of British Gas for $1.23 billion.[21] In mid-April, the oil transport subsidiary of Kazmunaigas announced that an engineering study of the feasibility of a 1000 km line from central Kazakhstan to the Chinese border would be undertaken in 2003. While capital costs would be quite high (around $1.5-2 billion for a 20 million MT/year line), as would the minimum through-put, the line would further diversify transit opportunities.

Investor relations

20. **Investor relations have been uneasy since 2002.** Foreign investors voiced concern about high profile public calls by senior government officials for a "rebalancing of oil contracts". The authorities believe that they have made significant strides in macroeconomic stabilization, structural reforms, and in establishing a sound legal basis for investment, all of which, coupled with tax rate reductions, have significantly benefited existing investors. The reduction in the country's investment risk is reflected in the significant upgrading of Kazakhstan's credit rating by international agencies. There is also the perception that the revenue for the state from the world class fields have been quite low. TCO's decision in early 2002 to switch the depreciation schedule to the new Kazakh tax code standard of 5 years provoked a major dispute. More fundamentally, although the TCO dispute apparently has been satisfactorily resolved, differences in perceptions of fairness, risk, and the relative attractiveness of Kazakhstan's assets may prove to be the source of continuing friction.

---

[21] However, existing shareholders have a right to pre-empt the sale and purchase the stakes themselves.

21. **The role of the national oil and gas company, Kazmunaigas, is also a source of uncertainty**. The state firm is both an investor and partner in several ventures in the sector as well as the monopoly operator of both the gas and crude oil pipeline systems. The firm appears to continue to exercise a regulatory and supervisory role over the sector. The regulatory and management tasks have changed on several occasions in recent years between the Ministry of Energy and Kazmunaigas. In 2001, the World Bank recommended that an independent oil and gas regulatory agency be created to oversee the sector and ensure an even playing field for pipeline access. This would address the potential for conflicts between the commercial and regulatory roles.

Revenue management

22. **The efficient management of potentially very large revenues from petroleum will pose a major challenge over the medium-term**. There are three principal components of this challenge: the need to avoid macro imbalances; the efficient use of the resources; and sharing prosperity across segments of society and between current and future generations. The creation of the NFRK and initial actions to save a significant portion of the new financial wealth is encouraging. Staff estimates of future fiscal inflows from the petroleum sector, on the basis of existing reserves, but excluding privatization earnings, bonuses, and exploration license fees, suggest an undiscounted total of some $165 billion over the next 45 years; or $11,000 per capita, based on present population estimates. Government outlays will need to rise significantly over the medium-term to address the very significant social and infrastructure needs of Kazakhstan. While part of this windfall would be spent on social and infrastructure needs (increasing the non-oil budget deficit from current low levels), a significant part of the oil wealth is likely to be accumulated in the form of financial assets, which will require continued careful management.

23. **The authorities are already beginning to consider how their investment of the oil funds might change over the medium-term**. Some thought is being given to a policy of channeling part of the oil flows into investments in neighboring countries, in sectors such as transportation, infrastructure, and utilities. Investments would be targeted to support the development of the Kazakhstani non-oil sector. Such a policy could also play a positive role in regional development.

D. Long-Term Outlook

24. **As noted above, Kazakhstan is endowed with very substantial oil and gas reserves which can be expected to lead to further major output increases**. Industry and official agency analyses of Kazakhstan's hydrocarbon potential vary considerably, although there appears to be a broad consensus around some 30 billion barrels of proven and probable reserves (Table I-3). While there are major output increases still to come from the existing

Table I-3. Proven and Potential Reserves of Oil and Gas
(Oil in billions of barrels; gas in trillions of cubic meters)

	Oil	Gas
Proven reserves	30	3
Undiscovered[22]	10-15	2-3
Enhanced recovery	10-15	...
Total	50-60	5-6

Sources: Kazakh and industry sources and staff estimates.

onshore fields, especially from Tengiz and Karachaganak, the most promising area is the offshore North Caspian region, including, but not limited to, the Kashagan field. Kazakhstan could see output levels reach 2.5-3.0 million barrels per day and 40-60 BCM per year for an extended period of time (20-30 years) from about 2015-20 (Table I-4).

Table I-4. Petroleum Production, Exports, and Fiscal Revenue, 2004-40
(In millions of metric tons, unless otherwise indicated)

	2004	2005	2006	2007	2010	2015	2020	2030	2040
					Projections				
Crude oil production	59.1	64.1	73.9	82.0	96.7	127.6	139.4	135.7	80.0
Exports	50.1	54.6	63.8	71.3	83.8	110.9	118.1	101.0	22.0
Of which: through CPC	28.0	28.0	36.0	48.0	67.0	67.0	67.0	67.0	
					(In millions of dollars)				
Exports	6,949	7,045	7,831	8,801	10,322	15,081	17,780	19,050	5,060
Budget revenue from oil & gas	1,952	1,849	1,971	1,985	2,150	2,830	4,600	7,750	2,400
Natural gas production (BCMs)	24.0	26.3	30.3	34.4	39.3	40.6	45.0	50.0	50.0
Memorandum items:									
World oil price ($/bbl) 1/	23.5	22.0	21.0	21.0	20.8	23.0	25.4	30.0	37.7
Oil revenue (in percent of General Government revenue)	25.4	22.4	21.3	19.0	...	...	...	...	...

Sources: Kazakhstani authorities and staff estimates and projections.
1/ On the basis of reserves from existing fields. WEO price projections (March 2003 vintage) through 2008; thereafter a 2 percent annual nominal increase is assumed.

[22] Essentially the offshore Caspian shelf.

25. **Production from the offshore Caspian field of Kashagan is expected rise sharply from 2006 through about 2015 and can be expected to plateau at around 55 million MT through 2030.** Financial flows to the state, as is typical with PSAs, are strongly backloaded, given the enormous investment involved in developing the field, but would rise strongly from around 2020. The field could be exploitable for 70-80 years. Initially output from the field is expected to use the CPC pipeline. By the early 2010s, as production expands, alternative export capacity would be needed. The BTC pipeline, from Baku, Azerbaijan, to the Turkish Mediterranean port of Ceyhan could be a good fit in this regard as output from the Azeri AOIC field is projected to begin declining by around 2012. The BTC is presently under construction and will have a capacity of 50 million MT per annum (1 million barrels a day).

26. **It is widely expected that the north Caspian region holds significant new reserves on top of those already discovered in the Kashagan field.** It is thought that the as yet unexplored regions of the north Caspian could be broadly equivalent in size to Kashagan. An announcement of the government's intensions for exploration and development of the north Caspian region is under final consideration and is expected to be announced shortly. A tender for exploration licenses of 70-150 offshore exploration blocks is expected to take place in 2003.

References

Clark, Bryan, 1998, "Transit and the Energy Charter Treaty: Rhetoric and Reality," *Web Journal of Current Legal Issues* (www.encharter.org).

Dodsworth, John R., Paul H. Mathieu and Clinton Shiells, 2002, "Cross-Border Issues in Energy Trade in the CIS Countries," IMF Policy Discussion Paper 02/13, (Washington: International Monetary Fund).

Enav, Peter, 2003, "*The Russian Gas Industry to 2020*," CWC Publishing Limited, London.

Energy Charter Secretariat, January 2003, "What is the Energy Charter?": An Introductory Guide."

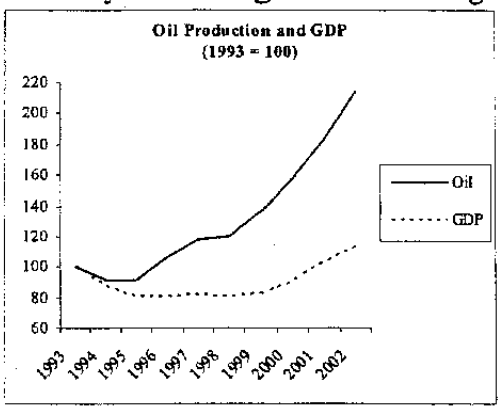
Mathieu, Paul, and Clinton Shiells, 2002, "The Commonwealth of Independent States' Troubled Energy Sectors," *Finance and Development*, Vol. 39, No. 3, September 2002, pp. 34-38.

Republic of Kazakhstan, "The Concept of the Development of the Gas Sector of the Republic of Kazakhstan Until the Year 2015," Government Resolution No. 25, January 11, 2002.

II. The Non-Oil Sector in Kazakhstan: Links with the Oil Industry and Contribution to Growth[23]

A. Introduction

27. **Kazakhstan, as other CIS economies, saw its output collapse after the disintegration of the Soviet Union.** From 1996, the economy started to grow at an average rate of 5 percent per year between 1996-2002.[24] The initial recovery was mostly based on the emerging oil industry. The non-oil economy decreased or stagnated for most of the decade, but started to show significant growth from 2000 on.



28. **Kazakhstan's transformation into an oil rich country brings a series of challenges to the economy in general and in particular to the non-oil sector.** Natural resource sectors tend to rely on economies of scale, with low levels of employment and slow technical progress. Their potential growth is also constrained by the existing reserves of non-renewable resources. Economies dominated by those sectors tend to have lower long-term growth,[25] high income and asset inequalities, and face larger volatility associated with the changes in commodity prices, such as oil. To avoid the negative impact of increasing oil wealth, including the "Dutch disease" type of phenomenon,[26] it is important to develop the policies and reforms that support sustainable growth of the non-oil economy.

---

[23] Prepared by Paulo Medas.

[24] 1996 has been identified, previously, as the start of the recovery after the disintegration of the Soviet Union. According to De Broeck and Kostial (1998) the economy shrank at an average of about 10 percent a year between 1991-95. However, others like Aslund, Boone and Johnson (2001) argue that the large decline in the official economy was partially offset by an increase of the unofficial economy.

[25] There is substantial evidence that natural resource-rich countries tend to have lower long-term growth. However, the reasons for such a "curse" are not fully understood. Sachs and Warner (2001), and Auty (2001), discuss some of the potential reasons. These include "Dutch disease" effects, dominance of rent-seeking activities over productive ones, import-substitution strategies, and lower investment in human capital, among others.

[26] Krugman (1979) presents some arguments why temporary losses of competitiveness, due to an appreciation of the exchange rate, can have long-term effects.

29. **The oil sector can have a positive impact on the overall economy through the linkages to sectors such as the services, and investment projects associated with oil extraction.** Moreover, the growth of the oil sector has contributed to rising household incomes and consumption demand. In Kazakhstan, the recent surge in overall growth of the economy, with substantial gains in non-oil employment, is partially due to positive externalities from booming oil revenues. However, it is important that the non-oil economy be able to sustain its growth independent of volatile oil revenues, in order to achieve a balanced development, creation of jobs, and a reduction of poverty.

30. **This chapter analyzes the recent strong growth in the economy, taking a closer look at the links between the oil and the non-oil sector, and assesses the contribution of each sector.** Section B gives an overview of the sources of growth in the economy. In section C, an attempt is made to estimate the links between the oil and non-oil sectors. The last section presents a more detailed view of two large sectors in the non-oil economy, namely agriculture and manufacturing.

B. Sources of Growth in Kazakhstan

31. **The economic revival was initially based on increasing productivity gains.** Since 2000, factor accumulation has also played a significant role, even though productivity gains remain the major engine of growth.[27] Transition economies typically have a first stage of recovery mostly based on large productivity gains, specially total factor productivity (TFP) gains,[28] due to macroeconomic stabilization, structural reforms, and a more efficient use of existing capital stock and labor. While a similar trend can also be observed in Kazakhstan,

---

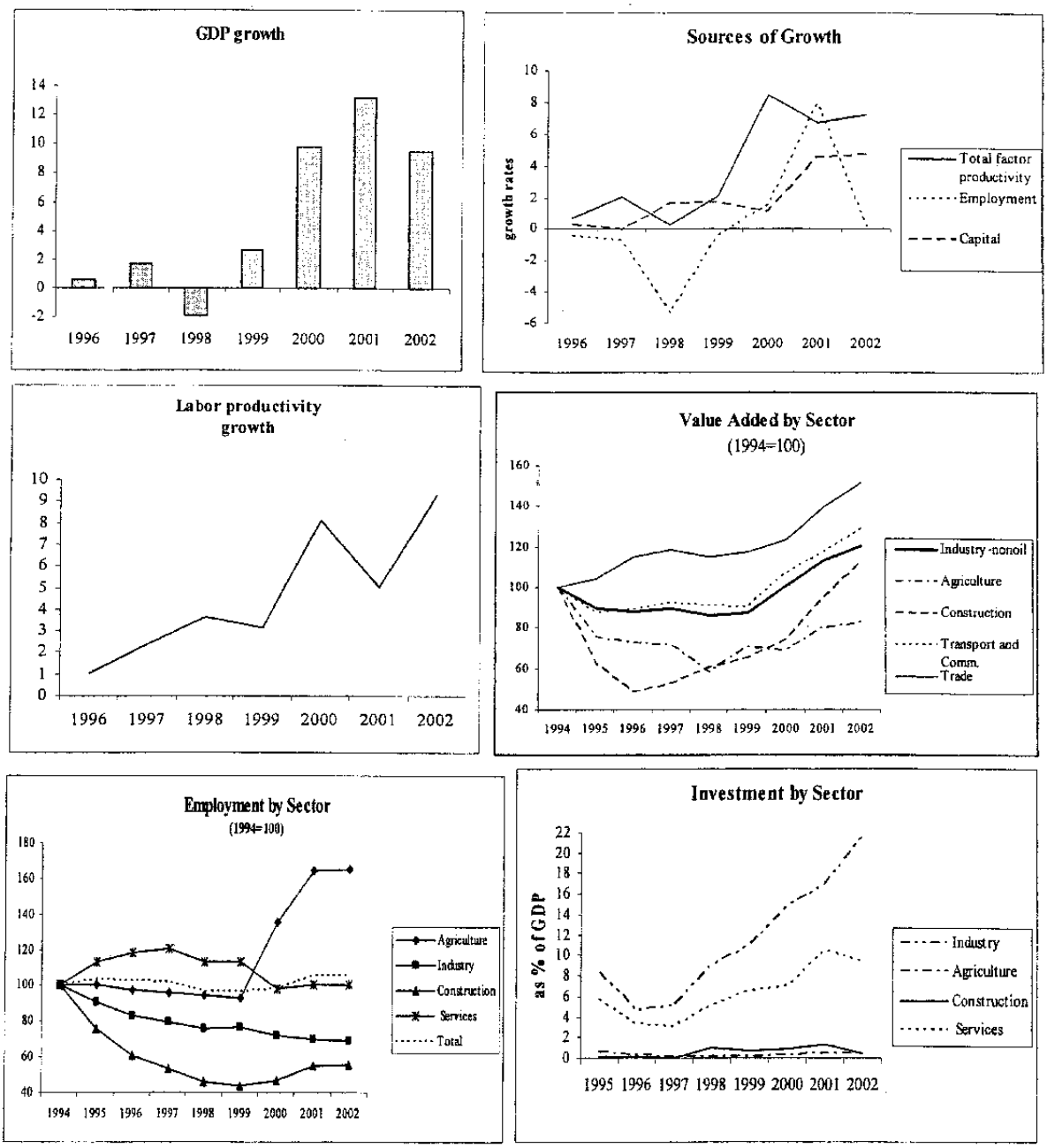
[27] Figure II-1 shows the results of an analysis of sources of growth, based on a growth accounting exercise. The analysis uses the standard assumption that output follows a Cobb-Douglas production function, with employment and capital as factors of production, such that:

$$\Delta y = \Delta a + \alpha \Delta l + (1-\alpha)\Delta k,$$

where y, a, l, and k stand for GDP, total factor productivity, employment, and capital respectively; Δ represents percentage change. α is assumed to be 0.55, an estimate based on the labor share in total income.

[28] In practice, changes in total factor productivity (TFP) reflect not only changes in technology, but also improvements in efficiency due to diverse factors, such as improvements in infrastructures or reforms in general. Havrylyshyn (2001) presents a survey of several studies on transition economies, which show that the initial recovery was generally based on efficiency gains.

Figure II-1: Sources of Growth 1/



Sources: National Statistics Agency of Kazakhstan and staff estimates.

1/ The investment values for the growth accounting exercise are based on national accounts except for 2002, which is based on surveys of enterprises and staff estimates, and may differ from the National Accounts. The graph with investment by sector is also based on the surveys data. The large increase in agricultural employment in 2000-01, and the decline in Services in 2000, reflects only in part a better measurement of the unofficial economy and some reclassification of employment between sectors.

there was an early move towards large investments in capital due to structural changes in the main industries.

32. **The oil industry, which had only a small share in total output in the early 1990s, has become the dominant industry.** Investment in the sector accounts for about half of all investment in the country. For the remaining sectors of the economy, the capital stock started to grow in 2001, but accounted for only a quarter of the overall growth of capital. The capital-output ratio has been decreasing since 1996 as obsolete capital has been replaced, and new investments prove to be more efficient. However, investment in the non-oil economy remains relatively low, particularly in agriculture and non-oil industry. Kazakhstan is a landlocked and sparsely populated country, which brings even greater challenges for trade and dampens investment. It becomes, therefore, more urgent to invest in public infrastructure, particularly roads and communications, create a stable legal framework and promote free trade inside and across borders, in order to improve the profitability of private sector investment, both domestic and foreign.

33. **Labor accumulation contributed negatively to growth during the 1990s, when employment declined substantially, and there was large emigration.** After the Russian crisis, this trend started to change, and there has been a strong recovery in the last years, especially after 2000. However, the largest share of the increase was in agriculture, where productivity remains low. The increase in agricultural employment seems to be partially a response to government incentives,[29] and also reflect a move from the unofficial to the official economy. After independence the rural economy collapsed, rural enterprises disappeared and a large segment of the population moved to subsistence agriculture. Since 1999, the state has introduced several programs to support agriculture which resulted in a progressive move towards market activities and the official economy. The surge in official agricultural employment in 2000 and 2001 was in large part a reflection of these changes.[30] Services and construction have seen some gains in employment, while industrial employment has been declining, reflecting better use of labor resources. The oil industry employs directly a very small share of the work force, less than one percent, and has no significant impact on overall employment.

34. **A decomposition of growth accounting by sectors, shows that agriculture has been the worst performer of all sectors, particularly in terms of productivity.** In agriculture, growth has been based on extensive use of labor and land, in particular since 1999. The sector has an increasingly obsolete capital stock, and only recently have there been

---

[29] These incentives to agriculture production and expansion of land use, consist of several instruments, from loans and subsidies, to schemes to sustain high prices in agriculture.

[30] The analysis of the labor market is also complicated by changes in methodology in the last years. However, the trend seems to be for a recovery in employment in the last 3 years.

some productivity gains. The recorded large increases in agriculture production, are only in part related to better measurement of the non-official economy. Sectors where the links with the oil industry are strong, for example construction and transportation, are the fastest growing. Services have been soaring in the last three years following the increase in real incomes. The services sector has enjoyed both productivity gains and an increase in the capital stock.

Table II-1: Economic Growth and Productivity by Sector[31]

Annual average 1996-2001

(percentage change)

	Value Added	TFP	Labor productivity	Capital-Output Ratio
Agriculture 1/	2.0	-1.8	-8.2	-4.2
Industry	5.6	5.8	10.3	-0.9
Construction	6.5	9.5	12.5	-6.1
Services	3.3	4.0	5.4	-2.8
of which: Transport. and Comm.	5.0	5.1	1.2	-10.4

Source: National Statistics Agency and staff estimates.
1/ 1997-2001

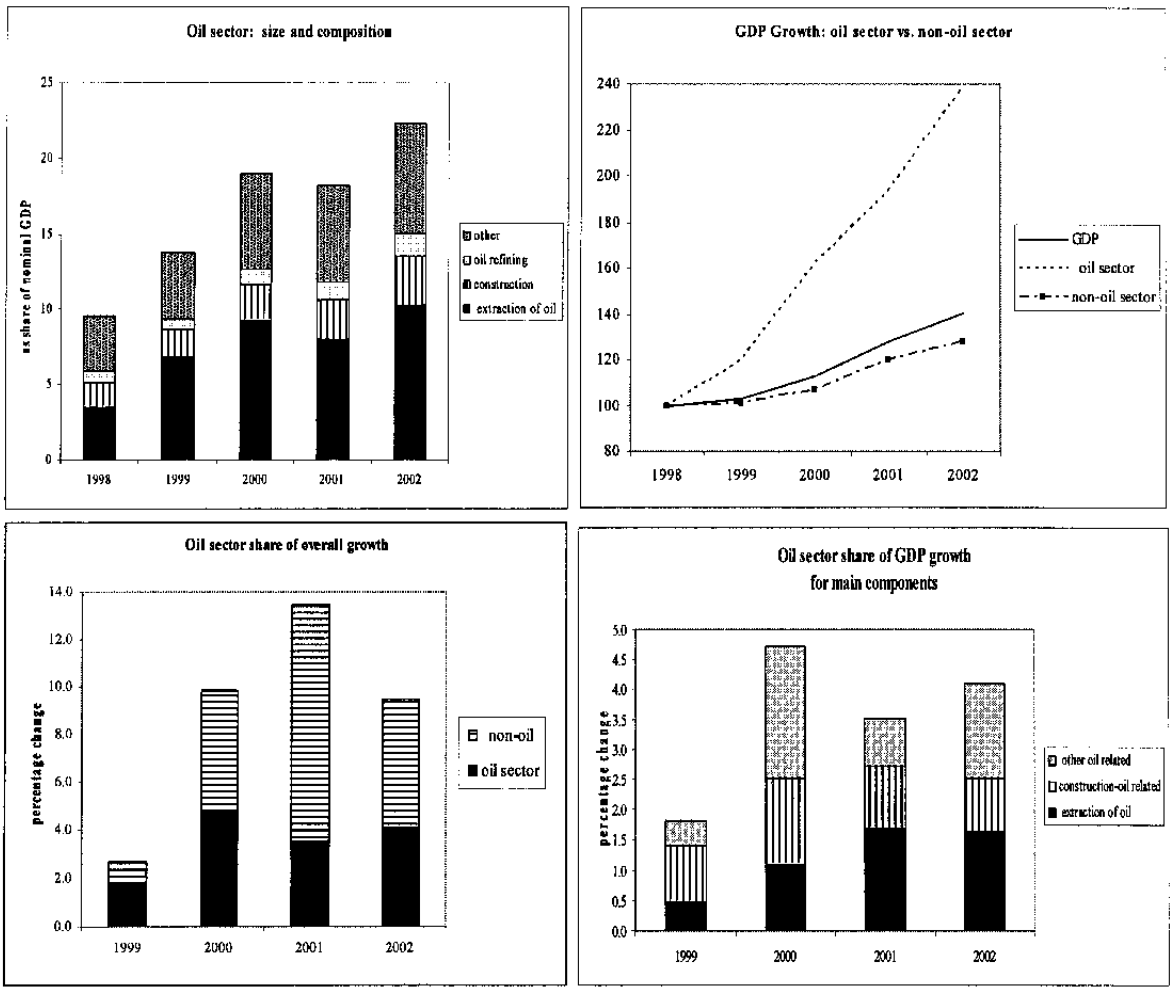
C. The Impact of the Oil Sector

35. **In Kazakhstan, perhaps in contrast to more mature oil economies, the impact of oil production goes much beyond the oil industry's direct contribution to GDP.** The industry is just emerging, with several new oil fields to be explored and developed, and will need large investments and services associated with the expansion of extraction and transportation of oil. In order to study the impact of oil on the economy, a broad measure of the oil sector will be used, including not only the value added of the oil industry, but also the associated services and goods, the industry's investments, and the oil refining industry.[32]

[31] The estimates for capital stock changes are based on the data for the capital stock in 1994 and amortization until 2000 from the Statistics Agency of the Republic of Kazakhstan (2002). The data on investment are from the National Accounts and surveys of enterprises. The computation of sectoral total factor productivity assumes a Cobb-Douglas production function with labor and capital as factors of production. Land was also included as a factor of production for agriculture.

[32] The estimates are based on data from the National Statistics Agency of Kazakhstan. The input-output tables for the period 1998-2001, that have been developed by the NSA were an important source. The estimates do not capture the total multiplier impact associated with oil production, but represent the main effects.

Figure II-2 : The Oil Sector: Size and Contribution to Growth[1]



Sources: National Statistics Agency of Kazakhstan and staff estimates.

[1] The size of the oil sector has been steadily increasing in real terms in the recent years. However, in 2001 there was a decline in its share of nominal GDP due to lower oil prices and a strong performance of the non-oil economy, particularly agriculture.

36. **The value added by oil extraction represents about one third of the total value of output.** Among the inputs used services account for about 40 percent. While transportation is the largest component, there are also significant expenditures on real estate and related services, and on a lesser scale on financial services and trade. A large part of remaining inputs is related to the oil industry itself and related industries like oil refining. The metallurgical industry also provides inputs to the oil industry.

37. **Overall the oil sector, which in 1998 represented less than 10 percent of GDP, has been responsible for almost half of economic growth since 1998.** Oil extraction alone has contributed about 1.2 percentage points a year to overall growth. The contribution to GDP growth of services related to oil extraction, transportation and investment projects in the sector, has averaged 2.3 percentage points. The non-oil economy, while posting a respectable average rate of growth of about 6 percent between 1999 and 2002, is lagging the oil sector, which grew at 24 percent per year over the same period.

38. **The impact of investments in the oil industry has been impressive, particularly in the construction sector.** Construction associated with oil has grown at an annual rate of 50 percent over the last four years. The rest of the construction sector saw an average annual decline of 7 percent in the same period, notwithstanding a recovery in non-oil construction since 2001. Also, services associated with oil production and investment projects have grown substantially in the last years.

39. **Oil sector growth depends not only on oil extraction but also on the oil price.** Under higher oil revenues, due to higher prices or production, there is a spill-over effect on the rest of the economy. The rise in revenues translates into higher spending on related services and, to a lesser degree, accelerated investment projects. In 2000, as the oil price increased substantially, the oil sector expanded at an impressive rate of 35 percent, more than twice the rate of oil extraction. As the oil price declined slightly in 2001, there was a slowdown in growth in the oil sector, mainly due to a sharp decline in services provided to the oil sector. The impact of declining oil prices, however, was smoothed out by investment in the sector, less affected by temporary declines in prices, and increased oil production. There is also a role for policy in smoothing out the impact of oil prices volatility. Since 2001, the government sends a share of oil revenues to an oil fund to be invested abroad. In periods of high oil prices the fund works to sterilize part of the foreign exchange inflows. In periods of low oil prices, the state budget can receive revenues from the fund to prevent sudden shortfalls in the budget. The fund also helps to stabilize the exchange rate and eases the burden on the conduct of monetary policy.

40. **The links between the oil industry and the rest of the economy will likely increase in the next years as production rises and the sector implements its investment plans.** However the dimension and composition of the links are not completely clear. In terms of transportation, there have been large investments to move towards more efficient

and less costly transportation.[33] This will reduce the impact of increasing oil production on the transportation sector. In terms of other services to the sector, the links will depend on the development of competitive domestic suppliers. Such associated services would benefit from foreign investment and expertise at this early stage of development.

Table II-2. Oil and Non-Oil Sectors
(1999-2002 average)

	Growth rates	Share of GDP
GDP	8.8	100
Oil sector	24.1	18
Other	6.3	83
Industry	10.3	30
Oil related	13.8	11
oil extraction	16.0	9
Transportation	8.3	10
Oil related	14.4	1
Construction	17.0	5
Oil related	52.3	3
Other Sectors	7.3	54
Oil related	41.4	5

A computable general equilibrium model

41. **Over the next decade, the contribution of the oil sector to overall growth is likely to increase substantially.** As the oil sector grows in size, the economy will become increasingly subject to oil price volatility. To complement the previous analysis, this subsection presents a general equilibrium model to illustrate some of the challenges that the Kazakhstani authorities will face. The model used is based on the work developed by Dervis, Melo, and Robinson (1982), usually known as DMR model.[34] However, several adjustments are introduced to reflect the specifics of the Kazakhstan case. In particular, there is a detailed

[33] Mainly from railway to pipelines.

[34] The DMR model is a multisector general equilibrium model, and has been applied to several countries and is used by the World Bank. For a more detail discussion on the model see Dixon et al (1992).

Box II-1. Outline of the Model

A multisector Computable General Equilibrium (CGE) model is used, which is based on input-output tables and national accounts. Given the focus on the oil industry, the model incorporates a detailed description of this sector. The structure of the model is as follows:

1. There are 8 sectors: agriculture, oil extraction, machine building, other industry, construction, trade, transportation and communications and other services.

2. The economy comprises households, the government, and firms. Households supply labor and capital, receiving wages and capital rents. Their income is used for consumption and savings. The government collects taxes from firms and households, it uses the revenues to consume and save. Firms use intermediate goods, labor and capital to produce goods that can be sold domestically or exported.

3. Households spend a constant share of their income for each type of composite good (combination of imported and domestically produced). There is imperfect substitution between foreign and domestically produced goods. Households preferences assume a constant elasticity of substitution between the two.

4. There is limited labor mobility between sectors, and the model permits wages to differ among sectors by allowing for different factor productivities. Capital is assumed to be sector specific and is given for the period.

5. The economy is assumed to be a small economy, having no impact on world prices.

6. The model incorporates specific rules for the oil industry. In particular, it assumes that variations in oil revenues will lead to changes in payments to foreign shareholders. Also increases in taxes from this industry, except production taxes (VAT), will revert to an oil fund, and are invested abroad.

7. The model used is a differential linearized version of the DMR. The model is solved for percentage changes in the variables.

8. The underlying data are from the input-output tables and national accounts for 2000 for Kazakhstan, and staff estimates.

9. The results reported here were obtained using the GEMPACK economic modeling software (Harrison and Pearson (1996)).

description of the impact of oil related flows on the balance of payments.[35] The main advantage of multisector models, with linkages between the different sectors, is that it allows the estimation of the impact of changes in exogenous variables, such as oil prices, and reactions to changes in policy variables, for example exchange rate policy. However, the model only focuses on the real side of the economy, and has no explicit role for money.

42. **The simulation carried out in here is an increase in oil prices by 10 percent, with two different policy responses.**[36] The first scenario assumes that the central bank does not intervene in the foreign exchange market, allowing the exchange rate to float. These results are compared with an alternative scenario, where the nominal exchange rate is kept constant, and any excess of foreign exchange is accumulated in the form of reserves by the central bank.

43. **Under both scenarios, there is an improvement of the balance of trade due to the rise of the oil price.**[37] In scenario I, the rise in exports is partially compensated by increased imports, as the nominal exchange rate appreciates by 1.4 percent. Higher oil prices will also result in outflows of capital associated with the repayment of intra-company loans (by oil companies) and other payments to foreign shareholders, and flows to the oil fund. It is assumed that increases in tax revenues from the oil industry, except for VAT revenues, will be transferred to the oil fund and invested abroad.[38]

---

[35] See Box II-1, which describes the main features of the model. For further information on the model and data used contact pmedas@imf.org.

[36] Domestic prices are not allowed to increase by more than half of the world price increase. This reflects the restrictions in the domestic market, which keep domestic prices below market prices, using different mechanisms such as export restrictions and subsidies. Such policies are common to oil producer countries, including Kazakhstan. For a more detailed discussion on these issues see Gupta, et al (2002).

[37] There is also a small increase in exports of oil. Changes in the oil price have a limited impact on oil production because the oil industry in Kazakhstan has only limited capacity to increase production and exports in the short run, and oil prices currently exceed, in general, production costs. See also the earlier chapter on the petroleum sector. Any production increase will come mainly from marginal producers that have higher production and transportation costs.

[38] The Kazakhstani government started to transfer oil revenues to the oil fund in 2001. In 2001-02, the rule has been that 90 percent of oil revenues up to a price of $19/bbl go to the budget, while revenues from higher prices go fully to the oil fund.

Table II-3. Summary of Results
(percentage change, unless otherwise noted)

	Scenario			Scenario	
	I	II		I	II
Macro variables			**Sectoral variables**		
Real Variables			**Production**		
GDP	0.14	0.10	Agriculture	-0.7	-0.4
Private Consumption	1.4	1.0	Oil extraction	1.4	1.5
Public Consumption	0.2	0.0	Machine building	-0.8	-1.0
Investment	1.6	-1.4	Other Industry	-0.6	-0.4
Wages	0.2	0.1	Construction	1.1	-0.9
Domestic Demand	1.2	0.4	Transportation	0.1	0.2
			Trade	0.5	0.4
Prices			Other Services	0.3	0.2
GDP deflator	2.1	2.9			
CPI	0.2	1.1	**Prices**		
			Agriculture	0.6	1.3
Exchange Rate (appreciation -)	-1.4	0	Other Industry	-0.8	0.5
Exports (foreign currency)	3.2	3.6	Transportation	0.3	1.2
Imports (foreign currency)	1.5	0.6	Trade	0.7	1.4
Reserves (change in percentage of GDP)	0.0	0.6	Other Services	0.6	1.4
Trade balance (change in percentage of GDP)	1.1	1.8			

44. **Under scenario I, the economic growth rate increases by about 0.14 percent.**[39] The surge in oil revenues results in increased private expenditures, via higher wages and capital rents. This increase in domestic demand is in large part offset by a decline in real net exports which is a typical reaction to a positive shock to the terms of trade and the appreciation of the exchange rate. Exports rise in value, but because of the appreciation of the currency there will be a decline in the volume of non-oil exports and an increase in the volume of imports. Although nominal budget revenues increase, the increase in public expenditures in real terms is limited due to the flow of most of the increased oil revenues to the oil fund and to some extent also by rising prices.

[39] The impact of changes in the oil price on GDP is limited partly because the oil industry is still emerging and has limited capability to increase production and exports in the short run. The oil fund and payments to foreign shareholders of the oil companies also contribute to dampening the impact of changes in the oil price.

45. **The nominal appreciation of the currency limits the increase in the CPI, but also reduces the competitiveness of the non-oil economy.** The exporting and import-competing sectors, namely agriculture and industry, lose competitiveness not only because of the nominal appreciation, but also because of the increase in prices of non-tradable inputs (mostly services).[40] Machine building is the hardest hit industry due to import competition and the decline in demand from other industries. In contrast, construction grows fueled by larger demand for investment and services. The increased domestic demand also limits the decline in agriculture and non-oil industry.

46. **Under the second scenario, the central bank intervenes to keep the nominal exchange rate stable.** Given the outflows to the oil fund and foreign shareholders, the central bank would need to offset only a portion of the trade surplus. Because the exchange rate is kept constant, there is a smaller increase in imports and a lower decline in non-oil exports than under scenario I. By preventing an appreciation of the currency, price increases will be higher than in scenario I, leading to a relatively lower real domestic demand. Given the parameters of the model, real investment actually declines under the second scenario.[41]

47. **The scenarios presented here are sensitive to the assumptions made.** They constitute illustrative examples of policy responses, involving fixed and flexible nominal exchange rates, respectively. They highlight the difficult choices the authorities face when deciding on how to respond to oil price fluctuations.

---

[40] The model does not capture the potential for large long-run gains in productivity in transition economies, such as Kazakhstan.

[41] The exact impact on consumption and investment depends on the specifications of the model.

D. Sectoral Analysis

The non-oil industry

48. **The industrial sector has been undergoing a dual restructuring process, because of the transition to a market economy, and the emergence of the oil industry.** After independence the sector saw production collapse faster than employment. The recovery in industry started with the extractive sector, particularly the oil industry, which now accounts for about 45 percent of total industrial output (versus a share of 11 percent in 1990).

49. **Manufacturing revival began in its two largest industries, metallurgy and food processing.** Growth has been associated with large gains in productivity, reflecting both structural and cyclical factors. As the industry had large under-utilized capacity and excess labor, increases in demand lead to large jumps in productivity. Structural adjustment has led to the release of excess labor and some replacement of obsolete capital with new investment. However, investment in the non-oil industry remains low.

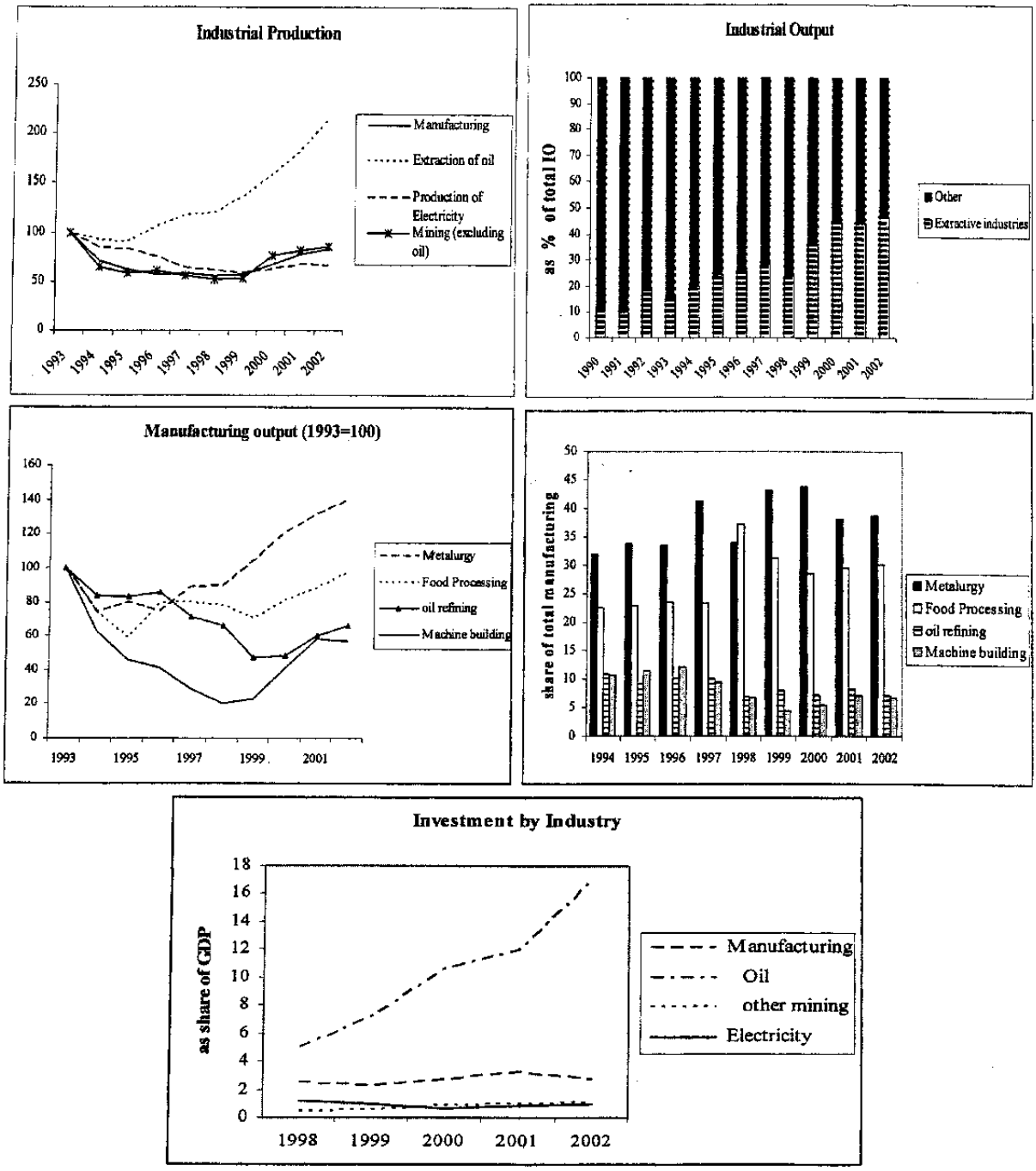
50. **While industries such as food processing and machine building have benefited from increasing domestic demand for consumer and investment goods, there was also pressure from import competition.** The development of these industries has been based in part on import substitution strategies, with support from high tariffs and financing from the state through subsidies or loans. Such strategies tend to result in lower incentives for the development of competitive industries, as examples of other countries show.[42]

51. **The developments in manufacturing since 2000 were also related to the oil sector.** The continuing expansion of oil extraction and a period of high oil prices have resulted in larger demand for manufacturing products and the rebounding of the oil refining and the chemical industries. The development of a diverse and efficient industrial base will depend on complementary infrastructure investments and improvements in the conditions for internal and regional trade. The EBRD transition report for 2002, shows that there is still a need to strengthen competition policy. Improving access to regional and world markets would allow companies to enjoy economies of scale from selling to larger markets.

---

[42] Sachs and Warner (1995) present an extensive analysis of the impact of reforms linked with international trade, particularly trade policies, on economic growth for several countries.

Figure II-3: Industry



Sources: National Statistics Agency of Kazakhstan and staff estimates.

Agriculture

52. **Agriculture was one of the hardest hit sectors during the initial transition process and has been lagging the rest of the economy during the recovery process.** During the first years of independence, the sector went through the disintegration of the rural structures that existed during Soviet times and the collapse of animal and capital stock. The sector also suffered from the extensive use of low quality land during the Soviet times. In 1996 a gradual recovery of the economy began. However, agriculture lagged and had the lowest growth rates, and the worse performance in terms of productivity. Cattle breeding, in particular, showed a very poor performance until recently.

53. **Since about 1998, the agricultural sector has started to recover in large part due to the fast growth of private farms and, on a lesser scale, household plots.** While private farms and household plots have shown better performance than the declining number of agricultural enterprises,[43] growth was mostly based on extensive use of land and labor.[44] There have been, however, significant gains in yields for plant growing, associated with the use of better land, improved management following a land code reform in 1999, and increased use of labor.[45] Agriculture still faces the problem of over-employment, associated with the large share of subsistence farmers, specially in cattle breeding.[46]

54. **Small- and medium-size farmers have a difficult financial position, a legacy of the initial years of transition.** They lack access to credit not only for working capital, but also for investment. As a result, there has been little investment and the capital stock has become largely obsolete. The difficulty in accessing credits has been in part associated with a lack of clear property rights for agricultural land. The recently proposed land code appears to be a step towards introducing private ownership, but there are concerns with the transparency and length of the process. It will also be necessary to increase investment in rural infrastructures, improve water management and marketing institutions, particularly for accessing export markets.

---

[43] Which are the remains of the state enterprises.

[44] After independence, there was a collapse on the use of arable land. Since 1999, there has been an increase in planted areas close to the levels that are though to be economically viable.

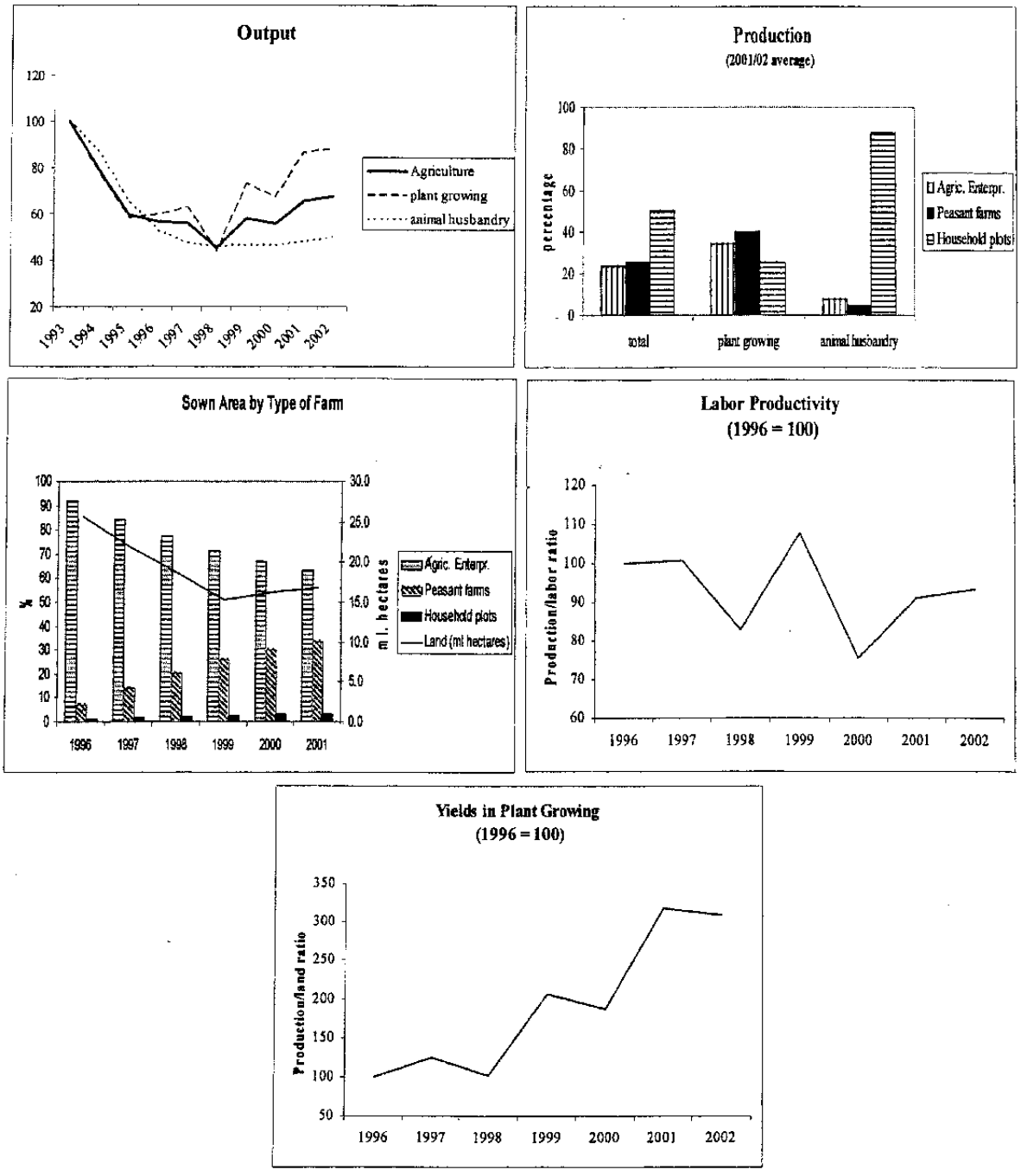
[45] The change in coverage of agricultural employment statistics makes an accurate measurement of changes in labor input difficult.

[46] The sector also has a large proportion of part-time and two-jobs workers, who have their household plots for self-consumption or to supplement income.

55. **In contrast to plant growing, where there has been a development of medium and large farms, cattle breeding is mostly related to household plots or small family farms.** These farms tend to face even greater challenges in gaining access to credit or markets. They do not have strong associations to coordinate common interests. In plant growing, there is a much larger concentration of production among a smaller number of farms, specially for grain. There has been also a higher degree of support from the state, such as the creation of credit partnerships to improve credit to farmers. There is also a variety of other tools used by the state to provide inputs, such as seeds, and keep prices at above market levels.

56. **The price support mechanism, introduced in 1999 to purchase wheat at above market prices, is now being expanded to other goods and increasing quantities.** As a result, there has been a rise in the production of grain, much beyond domestic market needs, and increasing accumulation of stocks of grain. In response, the government, through state owned companies, has started to increase its intervention further, by buying more wheat and exporting it directly to foreign markets. This discourages the emergence of private distribution channels.

Figure II-4: The Agricultural Sector



Sources: National Statistics Agency of Kazakhstan and staff estimates.

References

Aslund, A., Boone, P., and Johnson, S., 2001, "Escaping the Under-Reform Trap," IMF Staff Papers, Vol. 48.

Auty, R., 2001, "The Political Economy of Resource-Driven Growth," European Economic Review No. 45.

De Broeck, M., and Kostial, K., 1998, "Output Decline in Transition: The Case of Kazakhstan," IMF Working Paper No.45.

Dervis. K., Melo, J., Robinson, S., 1982, General Equilibrium Models for Development Policy, Cambridge University Press, New York.

Dixon, P., Parmenter, B., Powell, A., and Wilcoxen, P., 1992, Notes and Problems in Applied General Equilibrium Economics, North-Holland.

Easterly, W., and Fischer, S., 1994, "The Soviet Economic Decline: Historical and Republican Data," World Bank Policy Research Working Paper No. 1284.

Gupta, S., Clements, B., Fletcher, K., and Inchauste, G., 2002, "Issues in Domestic Pricing in Oil-Producing Countries," IMF Working paper, WP/02/140.

Harrison, W. and Pearson,K.,1996, "Computing Solutions for Large General Equilibrium Models Using GEMPACK", Computational *Economics*, Vol. 9, pp.83-127.

Havrylyshyn, O.,2001, "Recovery and Growth in Transition: A Decade of Evidence," IMF Staff Paper, Vol. 48.

Krugman, Paul, 1979, "The Narrow Moving Band, The Dutch Disease and the Competitive Consequences of Mrs. Thatcher: Notes on Trade in the Presence of Dynamic Scale Economies," Journal of Development Economics No. 27.

Robinson, S., Yunez-Naude, A., Hinojosa-Ojeda, R., Lewis, J., and Devarajan, S., 1999, "From Stylized to Applied models: Building multisector CGE models for policy analysis," The North American Journal of Economics and Finance No. 10.

Sachs, J., and Warner, A., 1995, "Economic Reform and the process of global integration," Brookings Papers on Economic Activity, Issue 1, Washington.

Sachs, J., and Warner, A., 2001, "The curse of natural resources," European Economic Review No. 45.

Statistics Agency of the Republic of Kazakhstan, 2002, Fixed Assets and Non-tangible Assets of the Republic of Kazakhstan: Statistical handbook, Almaty.

III. Trade Strategy for Sustained Growth[47]

A. Introduction

57. **This chapter explores medium- and long-term trade policy options facing Kazakhstan.** Despite the strong trade performance in recent years, there are several constraints that have to be overcome to sustain the growth momentum. The rapid growth of exports has been largely led by the oil sector; non-oil exports have grown less rapidly and fluctuated considerably over time. This partly results from the concentration of exports in primary commodities whose demand in the world market is volatile. With continued large inflows of foreign exchange from the oil sector, the tenge will inevitably appreciate in real terms over the medium and long term which could jeopardize the competitiveness of non-oil exports. How to achieve sustained growth of non-oil exports is therefore a difficult challenge.

58. **Kazakhstan's trade policy is at a crossroads.** After some bold trade reforms in the earlier years of transition, the trade liberalization process has lost its momentum. Reforms planned under the 1999 EFF-supported programs were not implemented. While the average tariff has stayed at about 8 percent since 1998, non-tariff barriers and ad hoc trade restrictions have continued. Negotiations on the accession to the World Trade Organization (WTO) have entered their eighth year. Despite the renewed efforts by all interested parties in the past year, there are still stumbling blocks to accession. Kazakhstan needs to make some critical decisions before the accession process can be accelerated. These decisions could determine the future path of the trade regime. Meanwhile, there are strategic policy issues that have to be considered in the context of regional trade. Trade policy directions in these key areas will help shape Kazakhstan's medium and long-term growth environment.

59. The chapter is laid out as follows. The next section examines Kazakhstan's trade performance in the recent past. The objective is to identify what has driven past trade growth and what constraints Kazakhstan may face in moving forward. Section C focuses on how trade policy affects the development of the non-oil sector. This is followed in Section D by discussions of Kazakhstan's WTO accession process in the context of trade reform. Section E deals with policies relating to regional trade, and Section F concludes on policy implications.

B. Trade Performance

60. **Growth of trade in Kazakhstan has been remarkable in the past seven years.** Total exports of goods and services grew 14 percent per annum during 1996-2002, while imports grew 11 percent. The share of exports (imports) of goods and services in GDP reached 48 percent (47 percent) in 2002, up from 33 percent (36 percent) in 1996. Most of the trade expansion occurred after 1998, as GDP growth began to accelerate.

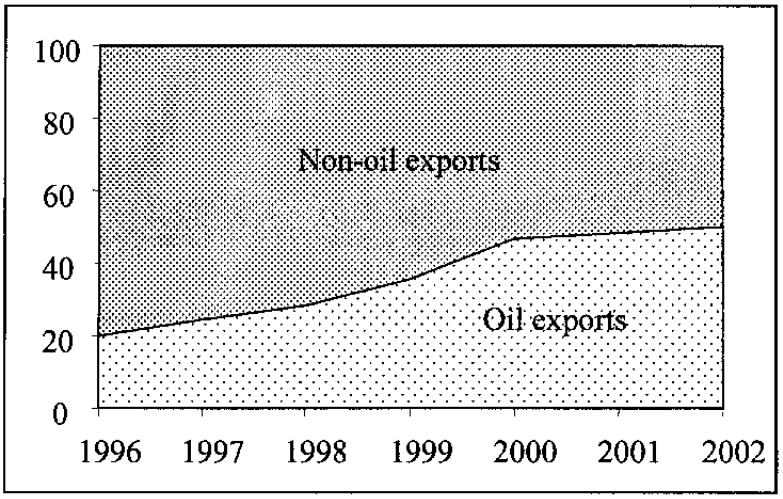
---

[47] Prepared by Yongzheng Yang

61. **Oil exports played a key role over this period.** Total oil export value grew 27 percent per annum during 1996-2002. Part of the rapid oil export growth resulted from an increase of the world oil price (over 20 percent during 1996-2002). The growth of non-oil exports accelerated after 1998, achieving an annual growth rate of 5 percent. In 2002, they grew by 9 percent.

62. **Kazakhstan's exports have become increasingly dependent on oil (Figure III-1).** In 2002, oil exports exceeded non-oil merchandise exports for the first time. Even as late as 1998, oil was less than 30 percent of total merchandise exports. In general, Kazakhstan's exports are heavily dependent on primary commodities. Minerals and primary agricultural products accounted for two-thirds of total merchandise exports. Even manufactured exports are dominated by metal products.

Figure III-1. Kazakhstan: Oil versus Non-Oil Exports, 1996-2002
(percent of total)



Source: Kazakhstani authorities and staff estimates.

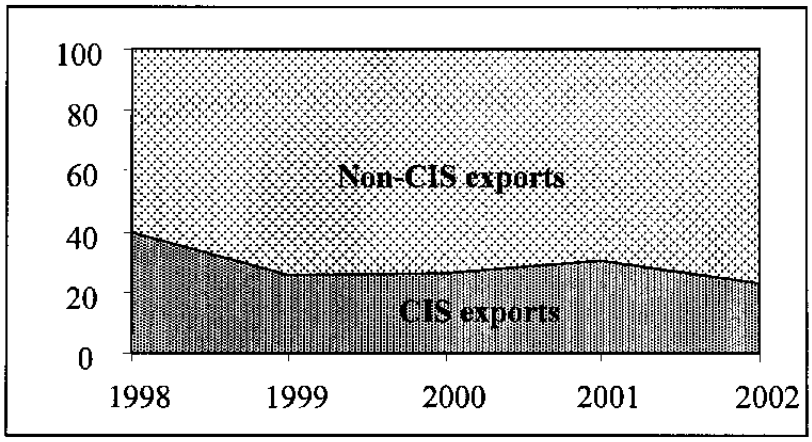
63. **Kazakhstan's export destinations have also undergone profound changes in recent years.** As late as 1998, CIS countries took nearly 40 percent of Kazakhstan's total merchandise exports. By 2002, this share had nearly halved. Among non-CIS markets, China has become increasingly important, taking more than 10 percent of total merchandise exports in 2002. The importance of the EU, the largest non-CIS market, has declined since 1998, while exports to the North America Free Trade Area (NAFTA) market have stagnated and remained small. The rest of the world has gained substantial market share, largely as a result of increased oil exports.[48] In 2002, oil made up 74 percent of Kazakhstan's exports to the rest

[48] Some of the reported exports to the rest of the world may have been subsequently re-exported to other markets, including the EU and NAFTA markets, or even simply

(continued...)

of the world, up from 39 percent in 1998. Overall, non-CIS countries accounted for 97 percent of the total increase in exports between 1998 and 2002.

Figure III-2. Kazakhstan's Exports by Destination, CIS versus Non-CIS countries, 1998-2002
(percent of total exports)



Source: Kazakhstani authorities and staff estimates.

64. **Increased competitiveness has been the driving force for Kazakhstan's non-oil export growth.** The real effective exchange rate has depreciated continuously since 1998, after a period of sharp appreciation in the early years of transition. Other competitiveness measures, such as the unit labor cost and the relative price of non-tradables to tradables, also suggest that Kazakhstan's external sector remains competitive (See Box III- 1). A tight fiscal stance and prudent monetary policy have helped avoid the Dutch disease syndrome so far. In the long run, however, the real appreciation of the tenge is inevitable given the projected large inflows of oil revenue.

---

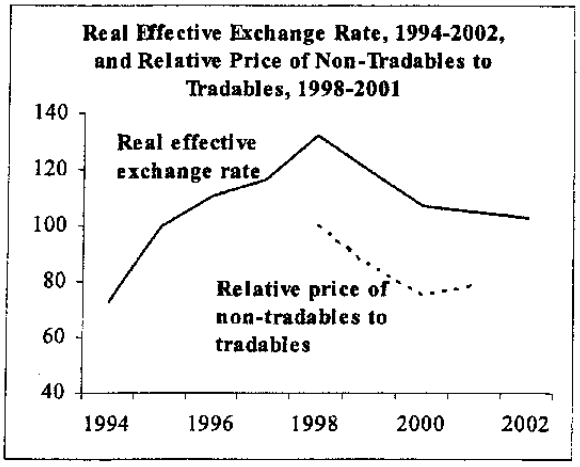
transshipped to these markets. Thus, exports to the rest of the world may be considerably overstated, while exports to the EU and NAFTA may have been understated.

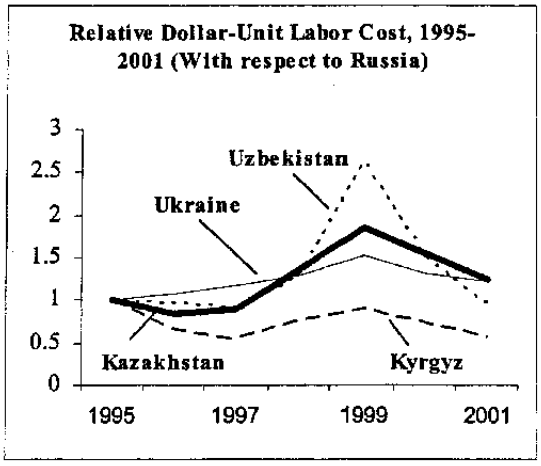
Box III-1: Competitiveness and Its Indicators

It is difficult to assess a country's international competitiveness, despite a large number of available indicators. These range from price or cost-based indicators, such as the real effective exchange rate (REER), to broadly based indicators that take into account various economic and non-economic variables. In general, the price and cost-based indicators are more appropriate for assessing a country's competitiveness in terms of its external (e.g., trade balance) performance, whereas the broadly based indicators are probably more suitable for assessing a country's economic strength and growth potential.

Empirical evidence suggests that the power of price and cost-based indicators in explaining trade performance varies from country to country. The CPI-based REER is potentially misleading because it usually includes the prices of many nontradables. The producer price-based REER, although more representative of tradable goods and services, is not a good measure of competitiveness if the country concerned is a price taker in the world market.[1] In the case of Kazakhstan, this measure would fluctuate widely with oil price developments. The unit labor cost (ULC) index is shown to be more closely correlated with trade flows, despite its main drawback of ignoring other production costs.

In assessing a country's competitiveness it is important to be clear about what is to be assessed and that a range of relevant indicators be used. For this reason, the relative price of non-tradables to tradables is also calculated here. The advantage of this measure is that it can point to the direction of resource allocation based on relative price changes, instead of price comparisons between domestic and foreign goods. It complements other measures. The figures below show that the three measures based on the CPI, ULC, and the relative price point to the same trend in the past few years: Kazakhstan's real exchange rate has depreciated since 1998 and its price and cost-based competitiveness has improved.





[1] For more detailed discussions of the various REER measures, see "Competitiveness in the Baltics in the Run-Up to EU Accession," SM/03/118.

65. **Analysis based on the constant market share model (Box III-2) confirms that Kazakhstan's non-oil export growth was based on increased competitiveness.** As shown in Table III-1, improved competitiveness was the leading force driving the growth of Kazakhstan's non-oil exports from 1996 to 2000.[49] Without this improved competitiveness, Kazakhstan would not have been able to keep pace with world export growth because of its unfavorable export composition and destinations.

Box III-2. The Constant Market Share (CMS) Model

The CMS model can be used to decompose a country's export growth into four factors. Specifically, the change in country A's exports over a period of time can be written as

$$V'_{..} - V_{..} \equiv \sum_i \sum_j r_{ij} V_{ij} + \sum_i \sum_j \left(V'_{ij} - V_{ij} - r_{ij} V_{ij} \right)$$

$$\equiv (rV_{..}) + \sum_i (r_i - r) V_{i.} + \sum_i \sum_j \left(r_{ij} - r_i \right) V_{ij} + \sum_i \sum_j \left(V'_{ij} - V_{ij} - r_{ij} V_{ij} \right)$$

(1) (2) (3) (4)

where

$V_{i.}$ value of A's exports of commodity i in period 1;

$V'_{i.}$ value of A's exports of commodity i in period 2;

$V_{.j}$ value of A's exports to country j in period 1;

$V'_{.j}$ value of A's exports to country j in period 2;

V_{ij} value of A's exports of commodity i to country j in period 1;

$V_{..}$ value of A's total exports in period 1;

$V'_{..}$ value of A's total exports in period 2;

r percentage increase in total world exports from period 1 to period 2;

r_i percentage increase in world exports of commodity i from period 1 to period 2;

r_{ij} percentage increase in world exports of commodity i to country j from period 1 to period 2.

In the above equation, the increase in A's exports is decomposed into parts attributed to: (1) the general rise in world exports; (2) changes in the commodity composition of A's exports; (3) changes in the market distribution of A's exports; and (4) a residual reflecting the difference between the actual export growth and the growth that would have occurred if A had maintained its share of the exports of each commodity to each market. For a more detailed exposition of the CMS model, see Leamer and Stern (1970).

[49] Since the competitiveness of oil exports largely depends on natural endowments rather than economic policy, the analysis was carried out on non-oil exports only.

Table III-1. Decomposition of Kazakhstan's Non-Oil Export Growth, 1996-2000

Contributing factor:	Value (US$ mn)	Percent of total
World Growth	766	86
Product mix	-341	-38
Market distribution	-773	-87
Competitiveness	1239	139
Total	891	100

Source: Staff estimates based on the World Bank WITS Database.

66. **The results show that Kazakhstan's export commodities consist of those that have been growing less rapidly than world exports.** This is consistent with the fact that Kazakhstan's exports are concentrated in primary commodities for which demand in the world market has been growing less rapidly than for manufactured goods. Since the CMS analysis is based on export values, the results also reflect changes in the prices of primary commodities. During 1996-2000, the non-oil price index decreased by 13 percent.

67. **Kazakhstan's greatest disadvantage in export expansion is the distribution of its export markets.** Despite rapid export expansion in the Chinese market, one of the fastest growing in the world, Kazakhstan's main export markets remain in the CIS and Europe, where demand grew relatively slowly during 1996-2000. The rebound of the Russian economy since 1999 should have favored Kazakhstan's exports, but Kazakhstan's exports to Russia and the other CIS countries actually declined between 2000 and 2002. This may be a result of weak complementarity between Kazakhstan's exports and Russia's imports, as the two countries have similar endowments. As will be discussed later in the context of regional trade arrangements, this raises an important question about Kazakhstan's current policy on regional trade arrangements.

68. **The challenge over the medium and long term is how to maintain this competitiveness in light of the increasing pressure for the tenge to appreciate in real terms.** This challenge is especially daunting given Kazakhstan's disadvantages in export composition and market distribution, which reflect its geographic disadvantages. While macroeconomic policies should be the key instrument to ensure a smooth transition in the event of an exchange rate appreciation, microeconomic policies also have a key part to play by accelerating productivity growth and promoting export diversification, both in terms of product mix and market distribution.

C. Trade Policy and Non-Oil Sector Growth

69. **Kazakhstan's simple average tariff rate of 7.9 percent (10 percent if trade-weighted) is relatively low by developing country standards (Table III-2).** At the sectoral level, agriculture tariffs are much higher than those on capital and intermediate goods. Tariffs on consumer goods are almost on a par with those on agricultural products. At the product level, the dispersion of tariff rates is much larger, ranging from zero percent to 100 percent.

About a quarter of tariff lines consists of tariff peaks (equal or above 15 percent). The number of tariff bands at 10 is also relatively large. Moreover, Kazakhstan maintains many specific and mixed tariffs (combinations of ad valorem and specific rates), which are less transparent than simple *ad valorem* tariffs because the extent of protection they provide varies with world prices.

Table III-2. Kazakhstan: Summary Tariff Statistics
(including mixed rates) from 1999 to 2001

	Oct. 1999	March 2001	June 2001	Oct. 2001
Average	7.8	7.1	7.8	7.9
Agricultural goods (1-24)	12.2	12.2	11.9	12.0
Non-Agricultural goods (25-97)	6.5	5.6	6.6	6.7
Capital and intermediate goods	4.6	4.7	4.7	4.8
Consumer goods	9.5	6.9	10.2	10.3
Minimum	0.0	0.0	0.0	0.0
Maximum	100	100	100	100
Std Dev.	7.4	7.5	6.6	6.7
Number of bands	11	10	10	10
Number of tariff lines with mixed rates	1175	1037	1136	1125
Number of tariff lines with rates above 20 percent	360	329	83	83
Number of tariff lines with specific rates	176	164	164	164

Source: Kazakh authorities and staff estimates.

70. **Kazakhstan's tariff structure exhibits a pattern of protection that is typical of countries pursuing import substitution.** Tariffs increase as the level of processing moves up, which can give rise to large variations in the effective rate of protection (protection for value added) across industries.[50] The relatively low tariffs on capital and intermediate goods give downstream and capital-intensive industries greater incentives to expand. They benefit industries such as the oil industry, consumer goods and agricultural industries. The

[50] As an illustration, suppose that a consumer goods industry is protected by a 20 percent tariff. It uses intermediate goods that are subject to a 5 percent tariff. Also suppose that under free trade value added in the consumer goods industry is 50 percent of its gross output value, with the remainder being the value of intermediates. With a 20 percent tariff on the consumer goods and 5 percent on intermediates, the gross output value will be 120 (assuming the free trade value to be 100), the cost of intermediates 52.5, and value added 67.5. The effective rate of protection for the consumer goods industry is then 35 percent, much higher than the 20 percent nominal rate of protection.

government has also formulated an industry policy to assist hi-tech and high-value added industries.

71. **This import substitution policy runs counter to Kazakhstan's comparative advantage and can result in substantial costs to the economy.** Given its rising labor cost, as a result of strong growth and increasing oil wealth, Kazakhstan's comparative advantage at this stage seems to be in industries that have a medium level of value added and technological sophistication. Without protection, labor-intensive industries would find it difficult to compete with countries that have considerably lower labor cost. Increased inflows of migrants from Kyrgyzstan and Uzbekistan would improve the competitiveness of labor-intensive industries. Kazakhstan does not yet have a comparative advantage in high-tech and high value-added industries. The authorities justify their protection and assistance to these industries based on the infant industry theory, but such protection and assistance run the risk of creating permanent infant industries.

72. **Tariff reforms aimed at a low and uniform tariff across all industries would help export diversification in the long run.** It may appear that with a strengthening tenge, an effective way to help non-oil industries is to increase border protection for them. Although higher tariffs may indeed help import substitution in the short to medium term, they would undermine the long-term viability of non-oil industries. A domestic market of the size of Kazakhstan would make it difficult for local firms to reap economies of scale without exports, yet high import barriers would make them uncompetitive in the world market. Inefficient firms would need continued support to survive, constituting a drain on scarce resources. These firms would deprive other firms of scarce resources, especially small and medium-sized firms which are often key to export diversification and provide more jobs than large firms. The latter are, however, better connected to government bureaucracy and therefore better placed for seeking assistance.

73. **Resources can be better spent on improving the investment climate.** The current domestic environment is difficult for small and medium-sized firms, both domestic and foreign. A weak judicial system, entrenched interests, "capture" of important sectors, heavy-handed regulation, and lack of transparency are major obstacles to investment by firms. Kazakhstan has attracted very limited foreign direct investment (FDI) outside the oil sector. International experience shows that FDI can play a major and sometimes critical role in export growth and diversification. Thailand, Malaysia, and more recently, China, for instance, have rapidly moved away from their traditional dependence on the exports of primary commodities and made substantial progress in export diversification.

74. **Agriculture poses more difficult policy challenges.** Emotions run high when it comes to agricultural protection as it relates to the country's food security. The authorities and many local commentators are concerned that liberalizing agriculture would jeopardize the country's food supply in the event of food shortages in the world market or international conflicts. It should be noted, however, that food self-sufficiency does not guarantee food security. A food security policy involves a much broader policy framework, including, among

other things, adequate purchasing power for the poor, reliable food storage, efficient transportation and distribution, and diversified and secured supply sources. Self-sufficiency could cause its own problems in the event of local crop failures. Absence of established channels of overseas supply could delay emergency imports. In a territory as large as Kazakhstan's, it may be more efficient and quicker to ship food supplies to remote areas from neighboring countries than from other parts of Kazakhstan. In general, the global food markets are subject to smaller shocks than an individual country, even a large one such as Kazakhstan. Thus, an open agricultural trade regime can actually help improve food security.

75. **Even under an open trade regime, Kazakhstan's food self-sufficiency will not necessarily decline.** During the period 1998-2002, the country ran a surplus in agricultural trade in two years, more than offsetting the deficit in the other three years. At present, Kazakhstan seems to have a comparative advantage in land-intensive agricultural products (e.g., cereals), and a disadvantage in labor-intensive products (e.g., fruits and vegetables). Agricultural productivity is low, but there is great potential for improvement. A liberal agricultural trade regime would allow the country to specialize in land-intensive products and enhance efficiency. The long-term benefits of such a regime could be substantial.

76. **Broad trade reform is needed to ensure a level playing field.** Non-tariff barriers, ad hoc trade restrictions, relatively frequent changes in trade regulations, and trade remedies continue to hamper trade expansion. For instance, non-automatic import licensing is required for some imports, and there have been bans on the exports of agricultural equipment and scrap metals. Safeguard duties were imposed on construction and extractive inputs. Other non-tariff barriers include local content requirements, and possible sanitary and phytosanitary (SPS) measures and technical barriers to trade (TBT). It is essential that when tariffs are reduced, they are not replaced by other forms of trade barriers, which are often less transparent. Improvement is also needed in trade facilitation.[51] It has been reported, for instance, that unnecessary customs documentation (e.g., "transaction passports") may have been required of importers (United State Trade Representative, 2003).

77. **To support trade reform, the government needs to invest in physical and social infrastructure.** For a land-locked country like Kazakhstan, transport and communications facilities are particularly important to reduce natural barriers to trade. Strategic planning in infrastructure development is necessary in line with Kazakhstan's increasing need for export

[51] According to the WTO Secretariat, trade facilitation is often defined as "the simplification and harmonization of international trade procedures" with trade procedures being the "activities, practices and formalities involved in collecting, presenting, communicating and processing data required for the movement of goods in international trade". This definition relates to a wide range of activities such as import and export procedures (e.g. customs or licensing procedures); transport formalities; and payments, insurance, and other financial requirements. See WTO website at http://www.wto.org.

diversification. To complement physical infrastructure development, spending on education and training needs to be increased to support industrial upgrading. More broadly, Kazakhstan could take advantage of its large and increasing oil wealth to invest in human capital development. This would involve allocating more resources to the social sector.

78. **Structural reforms in areas other than trade are necessary to boost the overall supply response in the export sector.** Kazakhstan needs to bring down the cost of doing business in the country, both for domestic and foreign firms. It should address its restrictive policies on employment of foreign experts, procurement, transfer pricing regulations, the delivery of government services, and corruption. While steps have been taken to reduce overlapping and heavy-handed inspections of small enterprises, more needs to be done. At the same time, industry policy should avoid distorting export incentives. While it is appropriate to facilitate industrial adjustment by building the necessary infrastructure and social support, the government should avoid "picking winners" and channeling oil wealth to favored industries. Government support should not replace private initiatives based on commercial viability.

D. WTO Accession

79. **Kazakhstan submitted its application for WTO membership on January 29, 1996,** and a working party on its accession was established on February 9,1996. The fact-finding phase of the accession process is now complete. Bilateral negotiations on market access in goods and services have been going on since October 1997. Five working party meetings were convened during the period 1997-2002. The next meeting was scheduled for May 2003. No draft working party report has been produced so far (see Box III-3 for WTO accession procedures).

80. **Topics under discussion in the Working Party include a wide range of issues**: agriculture, the customs system (and customs union arrangements), price controls, import licensing, industrial subsidies, sanitary and phytosanitary (SPS) measures, technical barriers to trade (TBTs), transparency of the legal system and legislative reform, services and trade-related intellectual property rights (TRIPS). Kazakhstan has also been requested to join the Zero-for-Zero Initiative, an agreement which aims to phase out, among a group of WTO members, tariffs on selected liquors, pharmaceuticals, medical equipment, furniture, paper products, farm equipment, toys, construction equipment, steel, beer and other products.

81. **Progress in the negotiations has been modest so far.** During the last (5^{th}) working party meeting in December 2002, negotiations on services were moving forward, but little progress was made in key areas of market access for goods, especially for agricultural products. Kazakhstan argued that given the strategic importance of agriculture to its economy and food security, it should be allowed to protect the sector by certain levels of tariffs and subsidies, including export subsidies. Kazakhstan also used high agricultural protection in major OECD countries to justify its own policy position.

Box III-3. The WTO Accession Procedure

The process of accession to the WTO commences when an applicant submits a communication to the Director-General of the WTO expressing its desire to accede to the WTO under Article XII. The General Council then considers the application and establishes a working party. Any member of the WTO can join the working party.

Once the working party is established, the applicant provides a memorandum describing in detail its foreign trade regime, together with information on the currently applicable tariff schedule and copies of relevant laws and regulations. This starts a fact-finding process in which the conformity of the applicant's trade regime with the various requirements of the WTO Agreements is examined through exchanges of questions and answers, and at working party meetings.

When the examination of the foreign trade regime is sufficiently advanced, members of the working party and the applicant commence bilateral market access negotiations on goods and services, as well as on the other specific terms of accession. The negotiating phase and the fact-finding work on the foreign trade regime usually overlap and proceed in parallel.

The discussions in the working party is summarized in the Report of the Working Party together with a draft Decision and Protocol of Accession. The Protocol of Accession contains the terms of accession agreed by the applicant and members of the working party. Following the conclusion of bilateral negotiations between interested Members and the Applicant, the Schedule of Concessions and Commitments on Goods and the Schedule of Specific Commitments on Services are prepared. These schedules are annexed to and are part of the Draft Protocol of Accession.

When the Draft Report, Draft Protocol and Schedules on Goods and Services have been finalized, the working party submits the package to the WTO General Council/Ministerial Conference for approval. Following the decision of the General Council/Ministerial Conference to adopt the package, the Protocol of Accession enters into force. Thirty days after acceptance by the applicant, it becomes a WTO Member.

Source: Based on information at the WTO website at http://www.wto.org.

82. **Kazakhstan's WTO accession is intertwined with its commitments to regional trade arrangements among members of CIS.** Kazakhstan is a signatory to the Eurasian Economic Community (EAEC), whose other members include Belarus, the Kyrgyz Republic, the Russian Federation, Tajikistan. Efforts have been devoted to coordinate member countries' (except for Kyrgyzstan which is already a WTO member) positions in negotiations with WTO members. On April 27, 2003, the presidents of the four non-WTO members of the EAEC further endorsed this approach in the hope that coordination would enable them to negotiate better terms of accession. Coordination would strengthen the bargaining power if the countries involved acted with a common position. However, this is difficult as each of the candidates is now pursuing a separate accession process at a different pace. The best outcome for such coordination is to prevent candidates from undercutting each other. The low levels of protection agreed to as part of the Kyrgyz (and perhaps to a lesser extent Georgian) accession have been widely regarded by other EAEC members to have undermined their negotiation positions.

83. **Russia's accession sets the benchmark for other countries since it is the most influential player in the coordination process and its accession process is more advanced.**[52] The average tariff in Russia is considerably higher than that in Kazakhstan. The Kazakhstani authorities indicated that Russia's tariff levels were an informal benchmark for Kazakhstan's tariff offers to WTO members. This tends to reduce the scope of tariff reductions in Kazakhstan's offers.

84. **WTO accession is likely to result in only limited improvements in market access.** Kazakhstan sets its objectives for WTO accession at improving market access for its exports abroad and promoting export diversification while offering sufficient protection of domestic industries (Abdimoldayeva 2001). It sees benefits of bringing the country's legislation and trade practices into conformity with WTO rules and international norms, as well as the benefits of more predictable, non-discriminatory export markets, and the WTO dispute settlement mechanism. However, it is unlikely that WTO accession will immediately improve market access for Kazakh exports. Most of Kazakhstan's trading partners have granted it most-favored-nation (MFN) status. Both the United States and EU now recognize Kazakhstan as a market economy, reducing the chance of discriminatory actions from these two large economies. Some trading partners may have to remove discriminatory measures against Kazakh exports, but the main market access barriers other than tariffs are antidumping and safeguard actions against iron and steel products and other metals. It is not

---

[52] The Working Party on Russia's WTO accession has produced a draft report which was fully revised in April 2003. The major obstacles to overcome before accession seem to be in agriculture and services and in domestic energy pricing. On goods, Russia has virtually reached agreement with 18 major trading partners out of a total of 32. There are hopes for major breakthroughs before the Cancún WTO Ministerial in September 2003, but timing of accession is still uncertain.

clear how WTO membership would have prevented these actions against Kazakhstan. Tariffs in Kazakhstan's trading partners are almost certainly not to change as a result of Kazakhstan's accession.

85. **The largest gains from WTO accession would come from reforms to Kazakhstan's own trade regime.** Greater allocative efficiency and higher economic growth can be achieved from further trade reforms. Furthermore, the dynamic gains in the form of higher growth are likely to be far greater than the static gains from greater allocation efficiency. As noted earlier, a level playing field supported by a lower, more uniform tariff structure would increase domestic competition, which in turn enhances productivity progress. Greater openness to trade has been shown to contribute to growth and poverty reduction (Krueger and Berg 2002).

86. **WTO accession could help reforms in areas other than trade.** Accession-induced and other domestic reforms are complementary. In a transition economy like Kazakhstan's, WTO commitments could serve to lock in domestic reforms that often have fragile institutional support. WTO accession can be used and has been used in other transition economies as an external catalyst to further domestic reforms. China's 16-year long WTO accession has made important contributions to its domestic reform process (Bacchetta and Drabek 2003). On the other hand, any benefits from WTO accession may only be potential gains until supporting domestic reforms and institutional changes are instituted. This requires an overall strategy that exploits the synergy of trade and other reforms. A liberal trade regime needs and supports a liberal industry policy and supporting institutions to ensure fair and rigorous competition, the rule of law, and transparency.

87. **There will be adjustment costs associated with WTO accession.** Structural unemployment may increase in the short run as the result of WTO accession. Given Kazakhstan's high (albeit declining) unemployment, these costs deserve attention. Although broadly based structural reforms mentioned above are likely to be the most effective measure dealing with the adjustment pressure, social institutions need to be strengthened to protect the vulnerable in the society. Social protection could help build a consensus on structural reforms and WTO accession.

E. Regional Trade

88. **Kazakhstan has signed a number of regional and bilateral agreements which either exclusively deal with trade or have an important component on trade and investment** (see the attachment for the agreements Kazakhstan has signed). Probably the most important among them is the Eurasian Economic Community (EAEC), which was signed in 2001 to replace the 1995 CIS Customs Union. The aim of the EAEC is to create a customs union and eventually a "Single Economic Space" among the member states.

89. **Notwithstanding the regional trade arrangements, progress toward economic integration among CIS countries has been limited.** Under the EAEC agreement, common external tariffs are to be adopted among member countries, thus forming a customs union. However, only about 60 percent of tariff lines (or about 40 percent of the trade value) has so far been harmonized among member countries. Even for these already harmonized tariffs, individual countries may opt for changes twice a year. Non-tariff barriers are not covered by the agreement. Meanwhile, trade frictions continue among the member countries. Some countries have imposed contingency protection on imports from other members, and major obstacles remain in the transit shipment of exports for some member countries. The Kyrgyz authorities, for example, have complained about various fees imposed on their transit trucks crossing Kazakhstan, while Kazakhstan has expressed concerns over Kyrgyzstan's seasonal duties on wheat imports from Kazakhstan.

90. **Preferential trade arrangements among CIS countries have not prevented intra-CIS trade from declining in importance, as noted earlier.** However, trade intensity between Kazakhstan and its CIS partners remains high (Table III-2. See Box III-4 for definitions of trade intensity, complementarity and bias). Trade with Russia, for example, is 27 times more intense than the average. Although this high intensity is at least partly due to geographic proximity between the two countries and long-existed transport infrastructure (in particular, pipelines for oil transport), it may reflect the lasting effects of trade distortions during the Soviet era, and the current trade pattern for individual CIS countries may still not be optimal.

91. **Trade complementarity between Kazakhstan and Russia, Kazakhstan's most important trading partner, is below average.** This is hardly surprising as both countries concentrate in the exports of oil and metal products (such as iron and steel). In contrast, there is a high degree of complementarity between Kazakhstan and Ukraine—Kazakhstan's second largest CIS trading partner. Trade bias explains most of the high trade intensity in both trade with Russia and Ukraine. In addition to historical ties, the long common border with Russia and lower natural barriers in other areas (such as the use of the Russian language in all three countries) contribute to the high bias towards the bilateral trade.

Box III-4. Trade Intensity, Complementarity and Bias

The trade intensity index (I_{ij}) measures the extent to which country j's share of i's total exports is large or small in relation to j's share in world trade:

$$I_{ij} = \frac{x_{ij}}{x_i} \Big/ \frac{m_j}{m^w}$$

where

x_{ij} is country i's exports to country j;

x_i is i's total exports;

m_j is total imports of country j;

m^w is total world imports.

The complementarity index (C_{ij}) provides a measure of the extent to which country i's export specialization matches country j's import specialization:

$$C_{ij} = \sum_k^n \left(\frac{x_{ik}}{x_i} * \frac{T}{T_k} * \frac{m_{jk}}{m_j}\right)$$

where

x_{ik} is i's exports of commodity k;

x_i is i's total exports;

T_k is world imports of commodity k;

T is total world imports;

m_{jk} is j's imports of commodity k;

m_j is j's total imports.

The country bias index (B_{ijk}) provides a measure of the extent to which i's exports of k have more or less favorable access to country j's markets than exports of k from other countries. The country bias index can be weighted and aggregated across commodities to provide an overall measure of bias in bilateral trade (B_{ij}).

The indexes C_{ij} and B_{ij} are so defined that their product equals I_{ij}:

$$I_{ij} = C_{ij} * B_{ij}$$

A unitary value of the indexes indicates average trade intensity, complementarity and bias (or no bias). Values greater (less) than unity indicate higher (lower) than average intensity, complementarity and bias.

Source: Based on Drysdale and Garnaut (1982).

Table III-3. Trade Intensity, Complementarity and Bias between Kazakhstan and its Major Trading Partners, 2000.

Trading partner	Intensity	Complementarity	Bias
Russian Federation	27.70	0.91	30.54
Ukraine	13.60	1.96	6.95
EU	0.66	0.94	0.70
China	2.10	1.74	1.21
Japan	0.02	1.22	0.01
NAFTA	0.09	0.85	0.11
Rest of the world	1.58	1.17	1.34

Source: Calculations based on the World Bank WITS Database.

92. **Relatively low trade complementarity may explain part of the slow growth of trade between Kazakhstan and Russia in recent years.** Russia's rapid economic growth since its recovery from the 1998 crisis has not generated rapid demand for imports from Kazakhstan. This was reflected in the earlier CMS analysis which shows that Kazakhstan still has an unfavorable market distribution for its export growth. In contrast, Kazakhstan has high complementarity in trade with China and the "rest of the world." For instance, 90 percent of Kazakhstan's exports to China consist of manufactured goods, especially metal products in which China generally has a comparative disadvantage. With improvement in transport, oil export to China could play an important role in the future.

93. **The trade diversion effect of regional trade arrangements among CIS countries is potentially large.** Promotion of intra-CIS trade against underlying comparative advantage may slow down overall export expansion. It is likely that non-CIS trade will continue to be more dynamic than CIS trade for some time in the future. In addition, technology transfer embodied in non-CIS trade with industrial countries is likely to be more intense than in CIS trade. This leads the World Bank (2000) to conclude that in general a north-south free trade arrangement is more beneficial than a south-south arrangement. Given the historical distortions during the Soviet era, this is particularly important for Kazakhstan.

94. **One approach to reducing the potential trade diversion effect of EAEC would be to have low common external tariffs (CETs) for the customs union.** This has been made difficult by variations in tariff levels among EAEC countries. As noted earlier, Russia has a considerably higher average tariff (11 percent) than the rest of the member states except Belarus. The pace of Russian trade liberalization tends to have strong influence over other member states. Although the EAEC has been largely ineffective, a free trade area among CIS countries would have given Kazakhstan more independence in trade policy.

F. Policy Implications

95. **Kazakhstan's heavy concentration in the exports of oil and other primary commodities raises difficult challenges.** The oil sector is developing stronger backward and forward linkages to other manufacturing industries, and its high capital and resource intensity

constrain job creation. At the same time, the large oil revenue inflows also generate pressure for the tenge to appreciate in real terms. Maintaining the competitiveness of the non-oil sector and diversifying exports are a daunting task.

96. **Trade policy aimed at import substitution is unlikely to achieve these twin objectives.** Such a strategy may help import-competing industries in the short and medium term, but it would turn the economy inward-looking and reduce the incentive to export. More importantly, it would reduce domestic competition, a key driver for increasing productivity. Temporary protection may be justified on the ground of the infant industry argument, but there is a high risk that protection becomes permanent, as it has happened in so many other developing countries.

97. **A more promising alternative is to have a low and uniform tariff in combination with other structural reforms, which would help create a level playing field and improve the investment environment.** This would also require the government to provide necessary infrastructure, including good transport and communications facilities and an increasingly skilled workforce to enable domestic industries to move up the value added chain as the country's income level and technological sophistication rise. This strategy has a better chance of attracting export-oriented FDI to the non-oil sector and giving small and medium-sized firms a greater role in export diversification and job creation.

98. **WTO accession provides a unique opportunity to implement such an outward-oriented strategy.** If this strategy is adopted, Kazakhstan can use the accession process to accelerate trade and other domestic reforms. Much has been achieved in legislative reforms in support of WTO accession. Comprehensive reforms are needed, however, not necessarily for the sake of WTO accession, but rather for reaping the benefits of an improved investment climate and greater competition. A narrow, mercantilist approach to WTO accession needs to be avoided.

99. **It is critical that Kazakhstan maintains trade policy independence so that it can undertake trade reforms at a pace that suits its own trade strategy and in support of its WTO accession.** Kazakhstan is in the process of diversifying its exports away from CIS countries. Given time, domestic firms could supply an increasing variety of exports to non-CIS countries. It is important that regional trade arrangements do not create a disincentive to diversification.

International Agreements Related to Trade and Investment

- Economic Co-operation Organization, 1992 (Ten member countries: Islamic State of Afghanistan, Republic of Azerbaijan, Islamic Republic of Iran, Islamic Republic of Pakistan, Republic of Kazakhstan, Republic of Kyrgyzstan, Republic of Tajikistan, Republic of Turkey, Turkmenistan, and Republic of Uzbekistan.)
- Free Trade Agreement of CIS, 1994 (Azerbaijan, Armenia, Belarus, Georgia, Moldova, Kazakhstan, the Russian Federation, Turkmenistan, Ukraine, Uzbekistan, Tajikistan, the Kyrgyz Republic)
- Central Asian Economic Union, 1994 (Kazakhstan, Kyrgyzstan, Tajikistan, and Uzbekistan)
- CIS Customs Union, 1995
- Azerbaijan-Kazakhstan Bilateral Agreement, 1997
- Georgia-Kazakhstan Bilateral Agreement, 1999
- Eurasian Economic Community, 2001 (Belarus, Kazakhstan, the Kyrgyz Republic, the Russian Federation, Tajikistan) (replacing the CIS Customs Union)
- Shanghai Cooperation Organization, 2001 (China, Kazakhstan, the Kyrgyz Republic, the Russian Federation, Tajikistan and Uzbekistan)

References

Abdimoldayeva, Nailya, 2001, "Kazakhstan", *Accession to the World Trade Organization: Issues and Recommendations for Central Asian and Caucasian Economies in Transition,* ST/ESCAP/2160, UNESCAP, Bangkok.

Bacchetta, Marc and Zdenek Drabek, 2003, "Effects of WTO accession on policy-making in sovereign states: preliminary lessons from the recent experience of transition countries", Staff Working Paper, DERD-2002-02, World Trade Organization, Geneva.

Berg, Andrew and Anne Krueger, 2003, "Trade Growth and Poverty: A Selective Survey", IMF Working Paper, WP/03/30, Washington, D.C.

Drysdale, Peter and Ross Garnaut, 1982, "Trade intensities and the analysis of bilateral trade flows in a many-country world: a survey," *Hitosubashi Journal of Economics* 22(2): 62-84.

Leamer, Edward and Robert Stern, 1970, *Quantitative International Economics*, Allyn and Bacon, Boston.

United State Trade Representative (USTR), 2003, *2003 National Trade Estimate Report on Foreign Trade Barriers*, USTR, Washington, D.C.

World Bank, 2000, *Trade Blocs,* Oxford University Press, Oxford and New York.

IV. Financial Sector Developments[53]

A. Introduction

100. **Over the last three years, financial deepening has continued, with the ratio of broad money to GDP rising from 15.4 percent in 2000 to 20.4 percent in 2002.** Although the role of financial services in the economy is growing, their share in GDP remains at only about 4 percent in 2002. Against the background of strong economic growth, high income from oil, and prudent monetary and fiscal policies, the banking system's capacity to intermediate efficiently Kazakhstan's financial resources is becoming more critical for sustainable growth. The capital market, comprising both stocks and securities, has been expanding rapidly. The private pension system is advanced compared to that of other CIS countries and has contributed to capital market development. Pension fund assets have been rising steadily to $1.7 billion at end-2002. The insurance market is very small, but emerging.

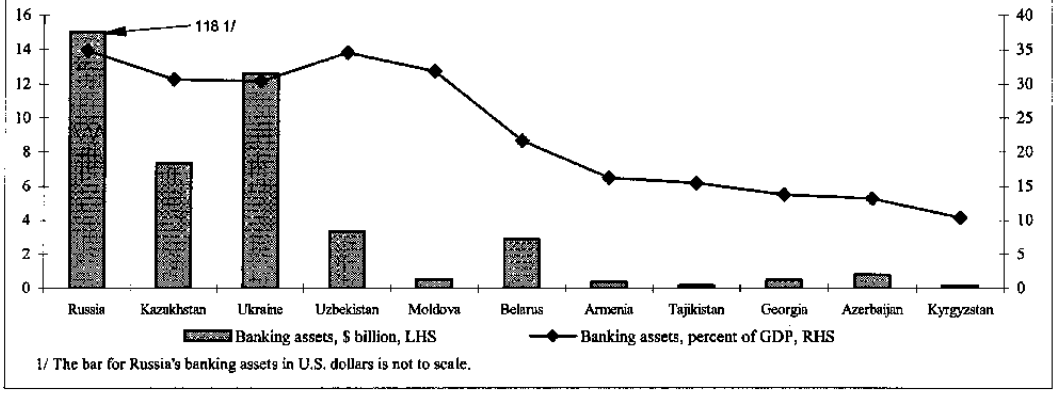
101. The key issues facing regulators are to generalize the significant progress made in banking supervision to the rest of the financial sector and to ensure that adequate risk management techniques are implemented, especially as capital account liberalization proceeds.

102. The rest of this chapter describes the latest developments in the banking sector, insurance, pension funds, capital markets and unified financial sector supervision.

B. Banking System

103. **The banking sector, which dominates the financial system, has witnessed impressive structural changes since 2000.** The size of the commercial banking sector in relation to GDP in Kazakhstan is among the highest in the CIS countries (Figure IV-1), but is far below comparable ratios in Central Europe or the Baltic countries.

Figure IV-1. Commercial Banks' Total Assets in 2002



1/ The bar for Russia's banking assets in U.S. dollars is not to scale.

[53] Prepared by Veronica Bacalu.

104. **Although the growth rates of the commercial banks assets and liabilities has slowed down, their share in GDP has been steadily rising since 1999 (Figures IV-2 and IV-3).** This reflects a number of factors, including successful macroeconomic stabilization and growth since 1999, as well as significant legal and institutional reforms to raise public confidence in the sector.

Figure IV-2. Banking Sector Size, 1999-2002
(In percent of GDP)

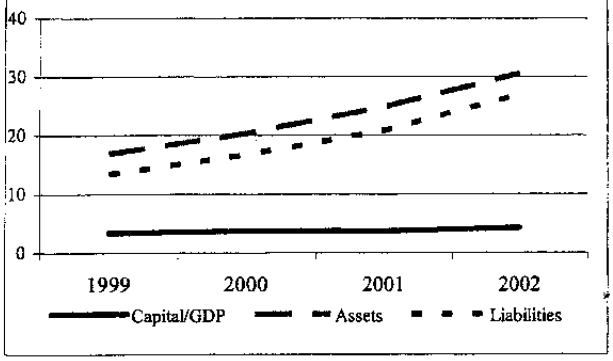
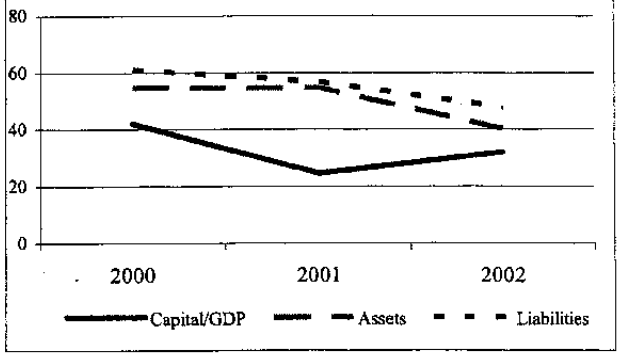
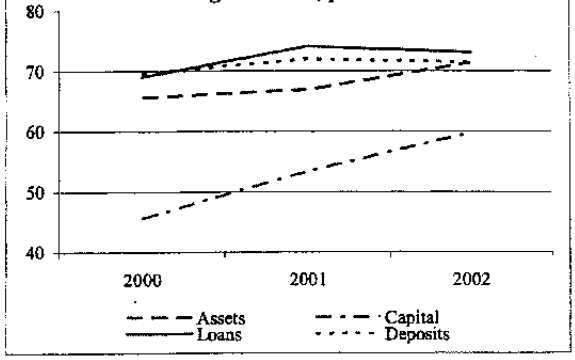


Figure IV-3. Banking Sector Growth, 2000-2002
(Annual percentage change)



105. **The banking system in Kazakhstan is highly concentrated (Figure IV-4).** Kazkommertsbank, Bank TuranAlem and Halyk Bank have a combined market share of around 60 percent. The strong concentration of the banking system has occurred as a result of a number of closures and mergers caused by rising capital requirements and strengthened supervision since the 1998 Russian crisis. The NBK has taken an active role in leading the process of consolidation of the sector, which had 55 banks in 1999 but only 36 banks in 2002. The biggest banks are well ahead of smaller ones in implementing prudential requirements and adhering to International Accounting Standards. Segmentation of the banking sector also reflected the provisions of deposit insurance (introduced in late 1999), which prevented banks that did not comply with supervisory regulations from participation in the scheme.

Figure IV-4. Market Concentration: Share of Five Largest Banks, percent of total



106. **The strengthened budget position has resulted in a "crowding in" of private investment in recent years.** Banks had to compete for private sector lending opportunities as public sector credit demand turned negative. As of end 2002, credit to government constituted only 5 percent of the domestic credit of the banking system, the rest being channeled to the private sector.

Table IV-1. Commercial Banks' Credit to Economy
(In percent)

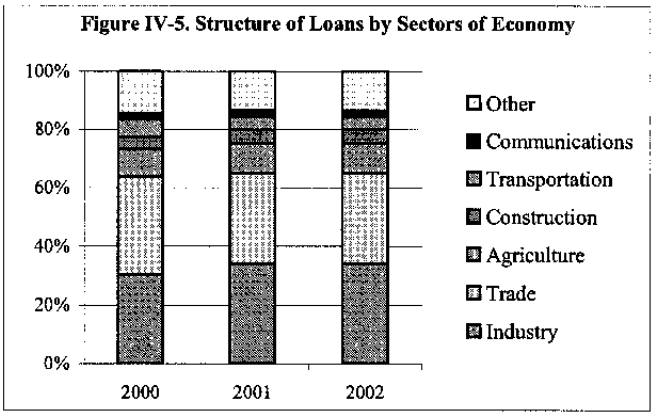
	Total credit/GDP	Structure by currency		Structure by maturity		Structure by sector	
		Tenge	Foreign Currency	Short-term	Medium and long-term	Non-bank legal entities	Households
1999	7	46	54	51	49	94	6
2000	11	49	51	52	48	95	5
2001	15	29	71	49	51	94	6
2002	18	32	68	43	57	91	9

107. **Commercial banks' lending to the economy has increased sharply as a share of GDP over the last three years (Table IV-1).** More than 90 percent of loans were extended to the non-bank legal entities. The share of lending to households is rising slowly, but remains rather small due to the lack of quality collateral and high relative costs associated with the enforcement of creditor rights. Around 70 percent of credit is denominated in foreign currency (mostly in U.S. dollars). Following the Russian crisis one half of all loans had short-term maturities. A substantial shift to longer term maturities was observed in 2002. The share of credit to small and medium enterprises (SME), however, declined (Table IV-2).

Table IV-2. Interest Rates on Loans to Real Sector
(In percent; end of period average weighted)

	2000	2001	2002
Domestic currency loans			
Legal entities	18.8	15.3	14.1
Households	27.0	24.5	21.5
Foreign currency loans			
Legal entities	14.7	13.1	12.3
Households	19.5	19.6	17.1
Loans to SME			
Domestic currency loans	18	16.9	16.4
Foreign currency loans	14.3	15.0	14.3
Loans to SME as share of total loans	26.9	24.9	21.8

The structure of the loan portfolio by branches of the economy has been stable since 2000 with the banks' exposure to industry and trade at above 60 percent (Figure IV-5).



108. **Deposits constituted 70 percent of banks' total liabilities over the last two years.** The deposit-to-GDP ratio doubled to 16 percent of GDP between 1999 and 2002 (Table IV-3). The growth of the share of households in total deposits is a sign of increasing confidence in the banking sector. Around 60 percent of total deposits were held in foreign currency as of end-2002, with households keeping 70 percent of their deposits in foreign exchange. Since mid-2002, the share of households deposits in total foreign currency

Table IV-3. Commercial Banks' Deposits
(In percent)

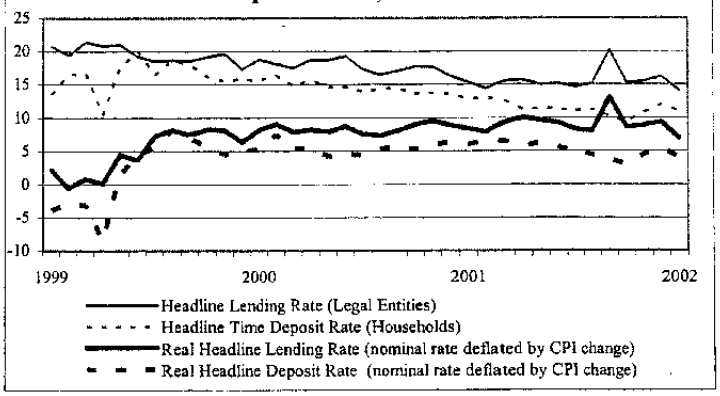
	Total deposits/GDP	Structure by currency		Structure by sectors	
		Tenge	Foreign exchange	Non-bank legal entities	Households
1999	8	52	48	69	31
2000	11	49	51	70	30
2001	14	36	64	58	42
2002	16	40	60	58	42

deposits has exceeded that of firms. The growing trust in the banking system has not yet been accompanied by a strong shift in preference for the domestic currency. This may be partially explained by the fact that the gradual nominal depreciation of the tenge since 2000 has resulted in valuation gains for holders of foreign exchange.

109. **The large banks have borrowed funds from the international capital markets.** Five banks hold ratings from international rating agencies that enabled them to borrow at competitive international rates. Five issues of Eurobonds and several syndicated borrowings totaling $1.4 billion were registered in 2001-2002. Banks have reliably serviced these debts.

110. **Transition economies are characterized by a considerable lag between lowering inflation and a decrease in nominal interest rates.** Kazakhstan is not an exception (Figurre IV-6). Persistence of high deposit rates for banks can be explained by the history of low confidence of households in banking system after the loss of savings twice since independence. High lending rates by banks can be explained in part by the risks associated with the uncertain enforcement of creditor rights. Weak competition among banks may also play a role. Moreover, competition from non-bank financial institutions still remains weak, as these institutions have only started to offer alternative sources of financing to enterprises.

Figure IV-6. Commercial Bank Lending and Deposit Rates, 1999-2002



111. **Nominal lending and deposit interest rates have decreased by more than 4.5 percentage points since 2000.** Interest rate spreads also narrowed by around 3.5 percentage points, but bank profitability has remained high. Deposit interest rates are to some degree administratively constrained by the rules under the mandatory insurance scheme, which exclude from insurance coverage deposits bearing higher than average interest rates.

112. **The Deposit Insurance Fund has been in place since November 1999.** The NBK initially capitalized the fund with T1 billion. At end-2002, the fund's assets reached T4 billion, invested in government securities and deposits with the NBK. Of a total of 36 banks, 22 were included in the mandatory insurance scheme, with different contribution rates, depending on the degree of compliance with the NBK prudential regulations. Insurance coverage differs depending on the type, amount, and currency of households deposits. As a result, only about half of household deposits are covered by the scheme. Since its existence, the Deposit Insurance Fund has covered deposits of one small failed bank.

C. Pension Funds

113. **Pension funds assets, as a ratio to GDP, have grown from 4.3 percent in 2000 to 7.2 percent in 2002.** As mentioned in Chapter V, one of the main challenges continues to be the investment strategy for the rapidly growing funds. Accumulated funds provide a supply of long-term savings, currently unavailable in the banking system. These long-term funds are attractive targets for use in different development projects, including public sector ones. Investment policies are different for the state and private pension funds. The state pension fund invested 64 percent of assets in government and NBK securities, 20 percent in the commercial banks instruments and 16 percent in international financial institutions (IFI) securities as of end-2002. The investment portfolio of the private pension funds was more

diverse, with 43 percent in government and NBK securities, 5 percent in banks instruments, 39 percent in domestic corporate securities, and 13 percent in high quality securities abroad.

D. Capital Markets

114. **Over the last three years, considerable progress has been made in putting in place the institutional infrastructure for the proper functioning of the securities market.** As mentioned above, the growth of pension fund assets has spurred the development of capital markets. In turn, the efficient functioning of the pension system will depend on the depth of the capital market, notably of profitable investment opportunities. Work is ongoing to bring the activities of brokers, custodians, asset managers, and actuaries in line with the requirements of the unified financial sector supervision. A corporate governance code was approved in 2002. Also, regulations have been passed to improve market practices and the quality of company listings.

115. **The corporate bond market has grown to over $700 million since its launch in late 1999.** It has contributed to increases in maturities, reducing interest rates, and better asset-liability management opportunities for financial system participants. The overwhelming majority of bond issues are indexed to the U.S. dollar. The creation of the mortgage securities market in 2002 was an important breakthrough, which is expected to contribute to the development of small and medium sized enterprises and the real estate industry.

116. **Despite its name, the Kazakhstan Stock Exchange (KASE) remains primarily an organized place for trade in government securities (81.4 percent of total turnover in 2002), foreign exchange (12.1 percent), and corporate securities (3.1 percent).** In 2002, the total KASE turnover amounted to $24.6 billion, an increase of 140 percent compared with 2001.

E. Insurance

117. **The insurance industry is still at a nascent stage in Kazakhstan.** Over the last few years, there was a considerable consolidation of the sector, conditioned by increased capital requirements and strengthened supervision by the NBK. The size of the insurance market has remained low, with insurance premia amounting to only 0.6 percent of GDP in 2002 (Table IV-4). There is a growing demand for insurance services from the oil and gas, mining, and transportation sectors. Meeting these requirements is severely limited, however, by the low capitalization of the industry, which results in 68 percent of reinsurance premiums accruing to nonresidents. The development of other types of insurance, such as life and individual property, is limited by the absence of demand by households.

Table IV-4. Insurance Sector Dynamics
(In billions of tenge)

	2000	2001	2002
Capital	4.6	5.3	6.1
Insurance funds	2.3	7.9	12.6
Assets	8.3	14.8	22.4

F. Banking Sector Supervision

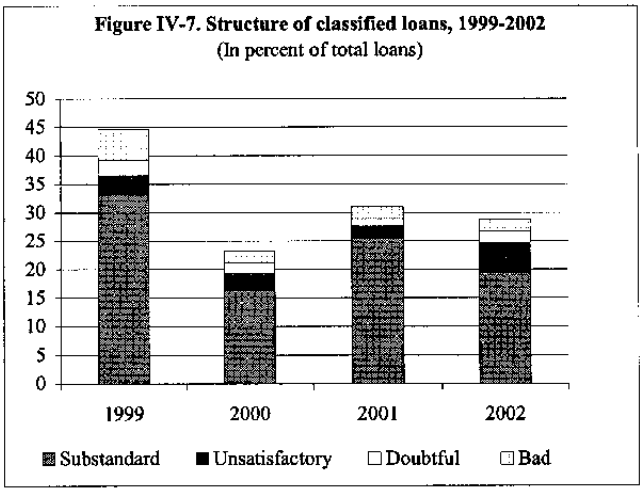
118. **The banking system soundness indicators are broadly satisfactory (Table IV-5).** Capital adequacy ratios are well in excess of minimum Basel standards, and liquidity and profitability are high. The short-term liquidity coefficient, introduced in August 2002, registered 0.87 at the end of 2002, compared with the minimum of 0.4. The number of banks not in compliance with different prudential regulations decreased from seventeen at end- 2000 to one at end- 2002.

Table IV-5. Banking Sector Soundness Indicators, 1999-2002
(In percent)

	1999	2000	2001	2002
Classified loans to total loans	44.7	23.2	31.0	28.7
Loan loss provisions to total loans	9.5	4.5	4.7	5.9
Loan loss provisions to classified loans	21.3	19.5	15.1	20.8
Loan to deposit ratios				
Aggregate	90.4	97.7	117.7	117.8
In tenge	79.0	97.4	95.5	97.8
In foreign currency	102.9	98.0	130.2	131.2
Tier I capital adequacy	15.0	14.0	11.0	9.0
Tier I and II capital adequacy	28.0	26.0	19.0	17.0
Liquidity ratio	95.0	98.0	83.0	78.0
Return on assets	2.8	1.5	0.9	1.8
Return on equity	13.8	7.9	6.1	12.8

119. **The growth of banks' loan portfolios has slowed from around 80 percent in 2000-01 to 37 percent in 2002.** The share of classified loans appears high at 30 percent in 2000-01 (Figure IV-7). Classified loans include, however, loans to new borrowers and also loans without collateral, even though these may be fully serviced on a timely basis. The announced plan to create a credit bureau with information available to all banks would facilitate lending to the new borrowers and especially to SMEs. The share of unsatisfactory, doubtful, and bad loans increased from 7 percent in 2000 to 9.4 percent in 2002.

Figure IV-7. Structure of classified loans, 1999-2002
(In percent of total loans)



120. **Provisioning is reported to be more than adequate, and past history indicates that the ratio of recovery of bad loans is very high.** Besides provisioning for classified loans, banks have the right to make provisions of up to 2 percent against standard loans. New rules for risk classification were adopted in late 2002, which set out the criteria for quality assessment of the banks' assets and liabilities.

121. **Enhancement of the internal control and risk management systems is of high priority for banks and also for the NBK in its supervisory capacity.** Assessment of the internal control and risk management in banks has been required by the NBK as part of the 2002 external audit exercise. These measures are expected to contribute to more balanced credit and investment policies by banks.

G. Unified Financial Sector Supervision

122. **Over the last three years licensing and supervision of all financial market participants, including banks, securities markets, pension funds and insurance, was brought under the NBK responsibility.** There has been a tendency of commercial banks taking stakes in other banks, private pension funds, insurance, leasing, brokerage and asset management companies. As a result, influential financial-industrial groupings dominate the sector. Thus the supervisor's access to financial groups' ownership information has become crucial for the assessment of capitalization and general health of the financial system. Legislation was passed in 2002, enabling the NBK to obtain information on the ownership of banks. Also, a financial groups division was created in the NBK supervision department. Uniform standards, conforming to International Accounting Standards (IAS), were introduced for accounting, auditing and reporting. The challenge for supervisors is to fully implement and enforce the new regulations in order to ensure sound and transparent banking practices. An independent supervisory agency is to be spun-off from the NBK in 2004.

H. Conclusions

123. **There are clear signs of growing trust in banks in Kazakhstan.** Financial soundness indicators have improved, with adequate capitalization, liquidity and profitability in place. The challenges for banks will comprise:

- Further building confidence to mobilize savings;
- improving profitability through stronger credit quality and containing operating expenses;
- meeting the credit needs of borrowers, especially of small and medium-sized businesses.

Financial sector development, with banks playing the central role, is advancing quickly from a low base. Enforcement and adequate implementation of unified supervision will be critical for the health of the financial system over the medium and long term. Looking ahead, the challenge for the system will be to extend effective supervision to the non-bank financial sector, within the context of powerful financial-industrial conglomerates.

V. Pension System Developments[54]

A. Introduction

124. **The Kazakhstani pension system is presently in a period of transition from a defined benefit, pay-as-you-go (solidarity) pension system to the new fully-funded, defined contribution (accumulative) system.** The accumulative system serves those entering the workforce after January 1, 1998, while those already in the workforce for six months or longer at the beginning of 1998 receive, or will receive, a blend of benefits from both schemes. At present, the majority of retirement income for new retirees is still provided by the solidarity system. However, this system does not allow years worked after 1997 to be used in calculating pension benefits, and so with each year an increasing share of retirement income will be provided by the accumulative system.

125. **Operationally, the solidarity and accumulative systems are functioning relatively well, but it is becoming increasingly clear that both suffer from fundamental design problems.** These problems exist in a number of areas, including in the level of pension provision each system is capable of delivering; and in the distribution of pension income across various groups. With respect to the defined contribution scheme, there are additional issues that are likely to become more pressing over the medium term. These include the shortage of domestic investment opportunities for pension assets and falling rates of return; the absence of a redistribution mechanism within the scheme; and the lack of an annuities market, which is needed to transform accumulated funds into lifetime income streams.

B. Solidarity System

126. **The relatively generous benefits and strong link between benefits and contributions that originally characterized the solidarity system have declined over time.** The system was designed to serve a centrally planned economy. It was, however, poorly equipped to function within a market environment of rapidly rising and differentiated wages, and where incentives and possibilities for evasion were strong. Attempts by government to adjust benefits to inflation and changing conditions were ad hoc and by necessity subordinated to budget concerns. As a result, the level of real benefits fell and the link between relative contributions and relative benefits was severely eroded. The solidarity system now delivers a low average pension equivalent to 28 percent of the average wage in 2002 (Table V-1). As wages continue to grow rapidly, this percentage is likely to decline further in the years ahead.

---

[54] Prepared by Geoffrey Oestreicher.

Table V-1. Comparative Pension Statistics

	Present system 1/				Kazakhstan Accumulative system 2/	
	Kazakhstan 3/	Eastern Europe and FSU	Latin America	High-income OECD average	Replacement rate 4/ (On retirement / At time of death)	
					Male	Female
Average replacement rate 4/	28	47	53	38	...	...
20 years work	...	...	...	...	23 / 14	11 / 6
30 years work	...	...	...	...	33 / 20	17 / 8
40 years work	...	...	...	...	45 / 27	22 / 10
All social security taxes 5/	10	41	28	29	10	10
Retirement age, male	63	61	61	65	...	...
Retirement age, female	58	57	69	64	...	...

Source: Preliminary actuarial forecast by World Bank staff.

1/ Average of benefits provided in 2000 for existing retirees. For Kazakhstan, these benefits are provided by the solidarity pension system.
2/ Actuarial projections for Kazakhstan accumulative pension system for those beginning their working careers in 2001. Assumes unchanged policies and real rate of return on pension assets of about 5 percent.
3/ Qualification for Kazakhstan solidarity pension requires a 25 year work history for males and 20 years for females. Benefits rise with additional years work up to a maximum of 33 years.
4/ Average pension as a percent of average wage.
5/ In the case of Kazakhstan, social security taxes consists of the 10 percent accumulative pension system contribution. An additional 21 percent social tax is levied, but these revenues are not explicitly earmarked for either social security or social assistance and the tax functions more as a personal income tax. Social tax revenues accrue only to local government while solidarity pensions are a liability of the Republican government.

127. **The problems associated with this low average replacement rate were exacerbated by the ad hoc nature of past indexation.** This created a significant dispersion of pensions between cohorts, as early retirees' pensions did not keep pace with inflation, while current retirees' pensions are based on current wages.[55] As a result, those retiring after 1994, and particularly after 1998, enjoy significantly higher nominal pensions than those who retired earlier. Post-1998 retirees receive a solidarity pension, based on the number of years worked prior to 1998, plus the lump sum of their contributions to the accumulative system. However, even pensions for recent high wage retirees are capped at a relatively low level.[56]

128. **Over the last two years, this pattern was broken.** Annual increases in pension outlays not only exceeded relatively moderate rates of inflation, but were specifically designed to reduce some of the dispersion between cohorts caused by the imperfect indexation of the past.

[55] The base for calculating the solidarity pension remains the average of wages over the retirees' best three consecutive years.

[56] Pensions are capped at T 13,080 per month for men with 25 years work history (20 years for women), but can rise gradually to as high as T 16,350 per month for 33 years of work.

- **In 2002, overall pension outlays increased by 13 percent, with the increase heavily weighted towards the lowest pensions**. Payments rose by 25 percent for those who retired before 1994, by 8.4 percent for those who retired after 1994 but before 1998; and by a small nominal amount (about $2 per month) for those who retired after December 31, 1997. In early 2003, pensions were uniformly increased by 12 percent, but only up to the maximum pension, which remained capped at T 16,350 per month.

- **The Government is planning to use the mid-2003 pension increase to introduce a more fundamental restructuring of the system of benefit determination.**[57] The aim is to restore a stronger link between relative contributions and relative benefits and to correct the existing inequity between cohorts. The scheme is currently under development. One variant being proposed by the Ministry of Labor and Social Protection will involve recalculating the pensions of everyone who retired prior to January 1, 2003. The ratio of the average of each pensioner's best three years wages to the average wage in his sector of employment at the time of his retirement will be calculated from information in each individual's pension file. An adjustment will then be made to account for length of service, and this ratio will be applied to the 2002 average wage in the pensioner's sector of employment. An alternative formulation calls for the ratio to be applied to the 1997 wage level, and then be indexed to subsequent years' inflation.

129. **The changes to the system in mid-2003 are calculated to increase the average pension by 24½ percent to T 8,000 per month and raise the minimum pension from T 5,000 to T 5,500**. The introduction of this scheme will mean that pension increases in the 2003 supplemental budget and the 2004 budget will be limited to about 1,000,000 recipients out of a total of 1,690,000 pensioners. As 900,000 of these pensioners currently receive only between T 5,000 (the minimum pension) and T 6,000 each month, the increases planned for mid-2003 and 2004 will be largely confined to those at the lower end of the pension scale. Those at the higher end will receive little or no increase, but existing pensions will not be lowered as a result of the recalculation. The plan also includes a provision that future pensions will be fully indexed to inflation.

C. Accumulative Pension System

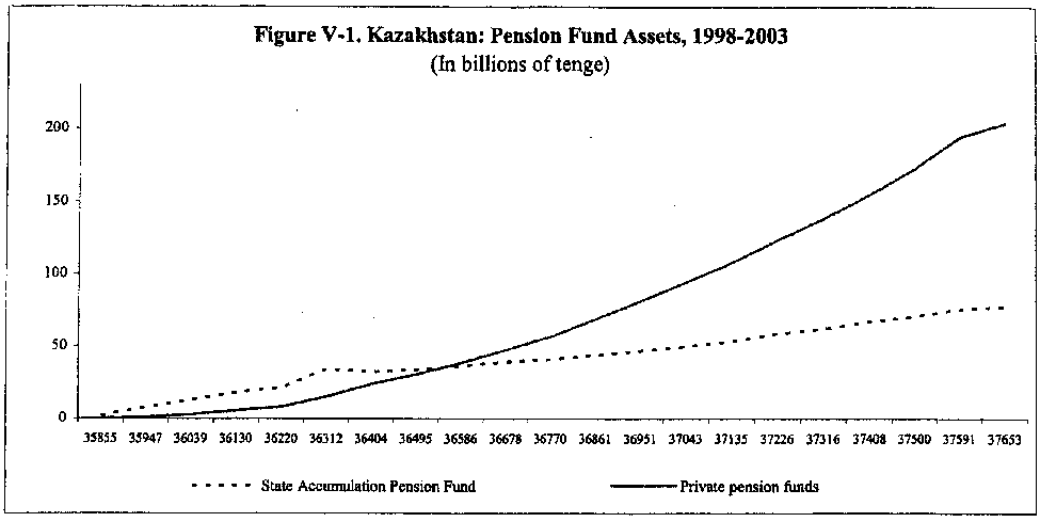
130. **During 2002 and so far in 2003, pension fund assets grew rapidly, the relative importance of the private funds increased, and changes were made in the supervision regime**. Total assets under management in the accumulative pension scheme increased at an average monthly rate of about US$45 million and reached US$1,850 million on March 1,

---

[57] Increases in pensions are to take place in mid-2003 and at the beginning of 2004, with total outlays rising by an estimated T 19 billion in 2003 and by T 40 billion in 2004.

2003 (Figure V-1). At the beginning of March, there were sixteen pension accumulation funds operating in Kazakhstan, and eight pension asset management companies. The State Accumulation Pension Fund (SAPF) continued to lose market share relative to the private funds, with its share declining from 32 percent of total assets under management at end-2001 to 28 percent by end-February 2003. It retains an appeal among lower income earners, however, and its members make up about 47 percent of total contributors. The National Bank of Kazakhstan (NBK) absorbed the duties and staff of the Pensions Committee[58] in August 2002. As a result, the NBK now has full responsibility for regulation and supervision of both pension funds and asset management companies. Both are currently being integrated into the evolving system of consolidated financial supervision, which is to be spun off from the NBK in 2004.

Figure V-1. Kazakhstan: Pension Fund Assets, 1998-2003
(In billions of tenge)



131. **A number of changes to the Law on Pension Security in the Republic of Kazakhstan came into effect on January 1, 2003.** These provided for: (i) the harmonization of the regulations governing the SAPF and the private pension funds; (ii) the extension of the state guarantee of principal contributions to the SAPF to all pension funds; (iii) the opening of the pension fund industry to non-resident participation (subject to certain global restrictions); (iv) modifying ceilings on the size of management fees and a change in the basis of such fees from the value of assets under management to a proportion of the return generated; and (v) the removal of the separation between pension funds and the asset management function. This latter reform resulted from the recognition that the purpose behind the separation of these functions was not being achieved through legal separation, as large financial groups controlled both pension funds and asset management companies.

[58] Formerly under the jurisdiction of the Ministry of Labor and Social Protection.

Furthermore, such separation was deemed as not strictly required once the central bank began exercising supervision over both activities.

132. **Certain efficiency gains were realized from these changes, although the fundamental issues in the system remain unresolved.**

- **Recent actuarial studies by the World Bank demonstrate that the current design of the accumulative pension system is unlikely to generate adequate pensions for most participants**. Moreover, as it is a defined contribution system, and therefore lacks a redistributive function, a significant portion of the population, particularly vulnerable groups such as women, low wage earners, and partially-employed persons will receive little or no retirement income. World Bank projections indicate that even with the optimistic assumption of a 5 percent annual real rate of return on pension fund assets, the replacement rate for males with 30 years of work history would equal only 33 percent of the average wage at retirement (17 percent for women), and would decline to 20 percent at the time of death (8 percent for women) as real wages in the economy continue to rise[59]. This problem is related primarily to the level of contributions, which at 10 percent is too low to generate significantly higher replacement rates.

- **The shortage of investment opportunities for pension assets is beginning to seriously impact pension fund performance, and has the potential to substantially affect the system's long-term performance** (Figure V-2). Pension funds are currently highly vulnerable to exchange rate risk, as assets, even domestic assets, are mainly denominated in US dollars while benefits are paid in tenge.[60] This vulnerability is already being felt. Real rates of return on assets generated by the individual pension funds were between 5 and 7 percent in the period October 2001 to October 2002. However, returns fell in early 2003, largely because of the appreciation of the tenge, and some of the private funds posted tenge-denominated negative returns for the first quarter. With the exchange rate likely to undergo trend appreciation over the medium to long term, increased investment of pension fund assets abroad is unlikely to provide the 5 percent real rate of return considered necessary for even the moderate replacement rates considered above. Meanwhile, the quantity of acceptable domestic instruments is limited by the government's strong fiscal position, the slow

[59] These figures are based on a working career begun in 2001. They assume average real wage growth of 4.6 percent; Average real rate of return on assets of 5.0 percent; and average female wage equal to 70 percent of average male wage.

[60] Sixty percent of total assets at end-January 2003 were invested in foreign-currency denominated assets, of which the great majority were in US dollars, and most of the tenge-denominated assets were indexed to the dollar in one form or another.

(though improving) pace of development of the domestic corporate bond market, and by concerns regarding governance of the corporate sector. With pension fund assets growing rapidly, the issue will become increasingly important over time.

- **The question of how payments will be made from the accumulative system also raises serious issues for the medium- to long-term functioning of the system.** Currently, payments tend to be quite small, and payouts are more supplements to funds obtained under the solidarity system, rather than the main source of retirement income. However, the accumulative system will gain in importance as time passes, and the inability to purchase tenge-denominated annuities will then take on increasing importance.

- **The World Bank currently estimates that given realistic transactions fees, a real balance (in 2002 tenge) of about T 1 million (equivalent to US$6,600) would be required at the time of retirement to justify the purchase of an annuity.** It is further estimated that, as currently designed, only 2 percent of the system's participants will achieve this amount[61]. Given this situation, a phased withdrawal approach may be the only feasible option, although this entails a risk that those whose lifespan exceeds the statistical norm would be left without a retirement income at a late stage.

133. **The government is fully cognizant of these issues and, with assistance from the World Bank, is searching for a broader understanding of the current situation and the options available for reform.** This examination will take place over the next three years. Looking ahead, some alterations to the existing arrangements will likely become necessary, and may justify the expenditure of some of the country's oil wealth. Among the possibilities being explored are increases in mandatory contribution payments, either from employees or from employers; increases in the retirement age; the creation of a second, unfunded, pillar from the budget to supplement pensions up to a minimum level; and the creation of a new parallel pay-as-you-go pillar to complement the existing system.

[61] The average balance in pension fund accounts ranges from only T 33,000 in the SAPF, to T 400,000 in the closed pension fund of a major multinational company resident in Kazakhstan.

Table 1. Kazakhstan: Value Added in the Main Production Sectors, 1998-2002

	1998	1999	2000	2001	2002 preliminary
	(In billions of tenge)				
Nominal GDP	1,733	2,016	2,600	3,251	3,747
Industry	423	569	865	997	1,099
Agriculture	148	199	211	284	298
Construction	86	96	135	178	230
Transport and communication	239	243	299	363	430
Trade and catering	263	274	323	393	450
Real estate, leasing, and serv. for enterprises	227	241	281	401	496
Others 1/	348	394	487	635	746
	(In percent)				
Real GDP growth	-1.9	-2.7	9.8	13.5	9.5
Industry	-2.4	2.7	15.5	13.5	9.8
Agriculture	-18.9	21.7	-3.2	17.1	2.7
Construction	15.0	8.0	14.0	27.4	19.3
Transport and communication	-0.9	-0.5	18.8	9.5	9.9
Trade and catering	-3.2	2.1	5.0	13.5	8.5
Real estate, leasing, and serv. for enterprises	3.5	-1.1	5.9	10.1	9.8
Others 1/	2.2	-1.3	7.4	12.8	9.3
	(In percent)				
Share of GDP					
Industry	24.4	28.2	33.3	30.7	29.3
Agriculture	8.6	9.9	8.1	8.7	7.9
Construction	4.9	4.7	5.2	5.5	6.1
Transport and communication	13.8	12.1	11.5	11.2	11.5
Trade and catering	15.2	13.6	12.4	12.1	12.0
Real estate, leasing, and serv. for enterprises	13.1	12.0	10.8	12.3	13.2
Others 1/	20.1	19.5	18.7	19.5	19.9
Total	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, 1998-2002 1/

	1998	1999	2000	2001	2002 preliminary
	(In billions of tenge)				
Gross output	808	1,143	1,798	2,000	2,292
Manufacturing	445	578	836	937	1,019
Processing of Agricultural products	166	181	239	277	307
Textile and clothing industry	12	18	36	40	44
Manufacturing of coke, refined petroleum products and nuclear fuel	35	55	70	86	78
manufacturing of refined petroleum products	31	46	60	78	71
Chemical industry	11	13	18	24	31
Production of rubber and plastic products	2	2	4	7	8
Manufacture of other non-metal mineral products	14	9	14	24	29
Metallurgy and metal working	158	256	377	374	411
metallurgy	151	250	366	358	396
Machine building	30	26	46	67	69
Other	16	17	32	38	41
Mining	196	413	800	887	1,073
Mining of coal and lignite	27	22	27	34	31
Extraction of crude petroleum and condensate gas	118	333	683	721	877
Extraction of natural gas	11	7	9	13	22
Mining of metal ores	29	37	55	66	81
Other mining	6	7	8	13	14
Production and distribution of Electricity, gas and water	167	152	162	177	200
	(In percent of total)				
Total					
Manufacturing	55.1	50.6	46.5	46.9	44.5
Processing of Agricultural products	20.6	15.8	13.3	13.9	13.4
Textile and clothing industry	1.5	1.6	2.0	2.0	1.9
Manufacturing of coke, refined petroleum products and nuclear fuel	4.4	4.8	3.9	4.3	3.4
manufacturing of refined petroleum products	3.8	4.0	3.3	3.9	3.1
Chemical industry	1.4	1.2	1.0	1.2	1.4
Production of rubber and plastic products	0.3	0.2	0.2	0.3	0.4
Manufacture of other non-metal mineral products	1.7	0.8	0.8	1.2	1.3
Metallurgy and metal working	19.6	22.4	20.9	18.7	17.9
metallurgy	18.7	21.8	20.3	17.9	17.3
Machine building	3.7	2.2	2.5	3.4	3.0
Other	2.0	1.5	1.8	1.9	1.8
Mining	24.3	36.1	44.5	44.3	46.8
Mining of coal and lignite	3.3	1.9	1.5	1.7	1.4
Extraction of crude petroleum and condensate gas	14.6	29.1	38.0	36.1	38.2
Extraction of natural gas	1.4	0.6	0.5	0.6	1.0
Mining of metal ores	3.6	3.2	3.0	3.3	3.5
Other mining	0.7	0.6	0.4	0.6	0.6
Production and distribution of Electricity, gas and water	20.7	13.3	9.0	8.8	8.7

Source: National Statistical Agency.
1/ The values do not include intrafactory turnover.

Table 3. Kazakhstan: Selected Agricultural and Industrial Output Indicators, 1998-2002

	1998	1999	2000	2001	2002 preliminary
	(Percent changes compared to previous year)				
Production volume growth					
Crude oil (in thousands of metric tons) 1/	0.6	16.1	17.2	13.5	17.8
Coal (in thousands of metric tons)	-4.0	-16.3	28.3	5.7	-7.7
Natural gas (in millions of cubic meters)	-2.0	25.1	16.0	0.6	13.2
Iron ore (in thousands of metric tons)	-28.9	3.0	68.0	-1.7	11.2
Electricity (in millions of kwh)	-5.5	-3.4	8.7	7.3	5.6
Processed meat (in thousands of tons)	-33.8	-13.5	-14.4	-3.8	-17.8
Milk products (in thousands of tons)	-45.3	-18.9	22.2	-1.0	17.3
Cereals	-47.7	123.0	-19.0	37.5	0.4
Of which: Wheat	-47.0	136.9	-19.3	40.1	-0.1
Potatoes	-14.2	34.2	0.2	29.1	3.8
Vegetables	22.6	19.3	19.9	15.4	4.2
Meat	-9.9	-2.5	-3.6	1.0	3.0
Milk	5.4	5.1	5.5	3.9	5.0
Eggs	11.8	8.4	11.9	9.6	1[illegible].3
Wool	-22.8	-10.8	4.5	0.0	4.3
Memorandum items:					
	(in billions of tenge)				
Agricultural production value					
Plant growing	101.9	177.7	223.5	325.8	321.2
Of which: Cereals	34.9	85.8	111.5	187.4	168.3
Of which: Wheat	26.8	67.9	89.0	143.9	123.0
Potatoes	17.3	26.3	31.2	36.0	35.2
Vegetables	25.6	25.2	26.9	41.6	36.2
Animal husbandry	144.3	157.3	178.5	207.9	230.8
	(In percent of total production)				
Share of agricultural production by private farms					
Meat	86.4	91.4	93.7	93.9	94.0
Milk	92.2	94.8	95.0	95.4	95.5
Eggs	45.5	47.6	49.8	50.0	46.8
Wool	82.2	87.3	89.1	91.1	91.6
Potatoes	91.5	94.9	95.8	96.0	96.9
Vegetables	88.7	88.6	94.0	93.6	95.2
Production volumes					
Industry					
Crude oil (in thousands of metric tons) 1/	25,945	30,130	35,317	40,091	47,239
Coal (in thousands of metric tons)	69,773	58,378	74,872	79,135	70,603
Natural gas (in millions of cubic meters)	7,948	9,946	11,542	11,610	13,137
Iron ore (in thousands of metric tons)	9,336	9,617	16,157	15,886	17,666
Electricity (in millions of kwh)	49,145	47,497	51,635	55,384	58,475
Agriculture					
Meat (in thousands of metric tons)	1,203	1,182	1,140	1,151	1,186
Cereals (in thousands of metric tons)	6,396	14,264	11,565	15,897	15,960
Of which: Wheat	4,746	11,242	9,073	12,707	12,700

Source: National Statistical Agency.

1/ Includes gas condensate.

Table 4. Kazakhstan: Consumer Prices, 1998-2002

		Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
		(In monthly percent change)											
1998	Total	1.8	1.1	0.7	0.5	0.3	-0.8	-0.2	-1.0	-0.1	-0.7	0.0	0.3
	Food	2.7	1.3	1.2	0.1	0.6	-1.4	-1.8	-1.9	-0.5	-1.1	-0.2	0.6
	Clothing and footwear	0.2	0.2	0.3	0.2	0.2	0.0	0.0	0.1	0.3	0.3	0.3	0.2
	Rent, water, and power	1.4	1.8	0.0	1.0	0.0	0.0	4.5	0.3	0.3	-0.9	0.3	0.2
	Household goods	0.1	0.0	0.0	0.4	-0.1	-0.2	-0.2	-0.1	0.6	-0.1	0.0	-0.1
	Medical care	0.1	-0.2	-0.2	-0.5	-0.3	-0.5	0.0	0.0	-0.7	-0.8	-0.7	-0.5
	Transportation and communication	1.4	0.8	-0.1	1.4	-0.1	-0.3	0.3	-0.4	0.0	-0.2	0.0	-0.4
	Recreation, education and culture	0.3	0.3	0.2	0.5	0.3	0.0	0.7	0.2	1.0	0.4	0.0	0.0
1999	Total	0.9	-0.2	-0.2	4.6	1.4	4.8	1.1	-0.3	0.7	0.7	1.7	1.7
	Food	1.0	-0.3	-0.3	5.7	1.7	6.6	0.6	-1.2	0.3	0.6	2.1	2.7
	Clothing and footwear	0.2	0.1	0.0	3.5	0.6	2.0	0.6	0.6	1.5	1.5	1.3	0.9
	Rent, water, and power	2.1	-0.1	-0.1	0.3	1.2	0.7	1.6	0.4	-0.2	0.0	1.0	0.3
	Household goods	0.0	-0.1	-0.3	9.9	1.7	3.7	0.9	0.5	0.6	1.8	0.7	0.6
	Medical care	-0.5	-1.2	-0.9	6.4	-0.2	0.9	0.4	0.2	0.6	1.1	0.7	0.5
	Transportation and communication	0.0	-0.8	-0.5	3.5	2.4	8.6	4.3	1.8	3.0	0.0	2.0	0.3
	Recreation, education and culture	0.3	1.2	0.4	6.6	0.7	2.8	1.1	0.9	1.8	1.2	0.7	0.7
	Personal care	0.1	0.3	0.4	11.7	2.5	3.1	1.7	0.6	0.6	1.4	1.0	0.7
2000	Total	2.6	0.1	0.0	0.4	0.7	0.7	0.4	0.2	0.5	1.2	1.5	1.3
	Food	3.5	0.2	-0.1	0.3	1.1	1.0	0.1	0.0	0.2	1.6	2.1	2.0
	Clothing and footwear	0.6	0.4	0.3	0.4	0.5	0.4	0.6	0.4	0.5	1.0	1.0	0.7
	Rent, water, and power	3.8	-0.6	0.1	0.1	0.1	0.1	0.2	0.2	1.7	1.1	0.7	0.2
	Household goods	0.4	0.1	-0.3	-0.1	0.5	0.3	0.2	0.2	0.2	0.2	0.5	0.6
	Medical care	0.7	0.5	0.9	0.7	0.2	0.4	0.3	0.1	0.2	0.1	0.4	0.2
	Transportation and communication	-0.1	-0.1	-0.9	1.4	0.6	0.7	2.5	1.1	0.2	0.7	0.9	0.3
	Recreation, education and culture	0.7	0.3	0.4	0.2	0.1	0.1	0.4	0.2	0.3	0.4	0.4	0.7
	Personal care	0.7	0.4	0.1	0.2	0.4	0.7	0.3	0.3	0.2	0.8	0.4	0.2
2001	Total	1.1	0.7	0.7	0.7	0.4	0.1	-0.1	0.0	0.2	0.7	0.9	1.0
	Food	1.2	1.4	1.3	1.2	0.7	0.0	-0.4	-0.6	0.1	0.6	1.3	1.7
	Clothing and footwear	0.4	0.4	0.6	0.5	0.5	0.4	0.3	0.3	0.6	1.1	1.2	0.8
	Rent, water, and power	2.0	-0.6	0.1	0.1	0.1	0.0	-0.4	0.8	0.1	1.0	0.3	0.3
	Household goods	0.4	0.6	0.3	0.3	0.4	0.2	0.4	0.2	0.3	0.2	0.9	0.5
	Medical care	0.6	0.3	0.1	-0.1	-0.1	0.2	0.2	0.3	-0.2	0.2	0.1	0.2
	Transportation and communication	0.0	-0.6	-0.6	-0.3	-0.3	0.3	1.0	1.0	0.5	0.2	-0.5	-1.3
	Recreation, education and culture	0.3	0.5	0.4	0.3	0.1	0.1	0.3	0.2	0.3	0.4	0.5	0.4
	Personal care	0.4	0.3	0.3	0.5	0.2	0.4	0.4	0.3	0.4	0.5	0.6	0.5
2002	Total	0.7	0.3	0.2	0.5	0.9	0.5	0.6	-0.3	0.1	0.6	1.0	1.4
	Food	1.1	0.5	0.2	0.4	0.7	0.2	0.6	-0.6	-0.1	0.3	1.2	2.3
	Clothing and footwear	0.3	0.3	0.5	0.6	0.6	0.4	0.3	0.5	0.7	1.2	1.1	1.0
	Rent, water, and power	1.1	0.6	0.2	0.9	0.0	0.3	1.1	-0.1	0.2	1.0	0.6	0.3
	Household goods	0.2	0.5	0.4	0.4	0.3	0.4	0.4	0.2	0.3	0.4	0.5	0.4
	Medical care	0.2	1.0	0.4	0.6	0.4	0.5	0.6	0.5	0.2	0.6	0.5	0.4
	Transportation	-2.2	-2.8	-2.0	0.1	7.8	3.7	0.0	-0.5	-1.1	0.7	0.6	0.7
	Communication	0.1	0.1	0.1	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Rest, recreation and culture	0.3	0.7	0.4	0.4	0.3	0.1	0.2	0.3	0.5	0.5	0.5	0.6
	Education	0.2	0.6	0.8	0.2	0.2	0.1	0.3	0.1	3.0	1.2	1.4	0.3
	Restaurants and hotels	0.3	0.7	0.6	0.3	0.6	0.1	0.1	0.2	0.3	0.3	0.6	0.8
	Other goods and services	0.5	0.6	0.4	0.5	0.4	0.5	0.4	0.4	0.5	0.4	0.3	0.3
		(Percentage change over previous year)											
Memorandum items													
	Total 1998	10.8	10.1	10.0	9.7	9.6	7.9	6.9	6.1	6.2	4.3	2.8	1.9
	Total 1999	1.0	-0.3	-1.2	2.8	3.9	9.8	11.2	11.9	12.8	14.3	16.3	17.8
	Total 2000	19.8	20.2	20.4	15.6	14.7	10.2	9.5	10.0	9.8	10.4	10.2	9.8
	Total 2001	8.2	8.8	9.6	10.0	9.7	9.0	8.5	8.3	8.0	7.4	6.8	6.4
	Total 2002	6.0	5.7	5.0	4.8	5.4	5.8	6.5	6.2	6.1	6.0	6.1	6.6

Sources: National Statistical Agency.

Table 5. Kazakhstan: Wholesale Prices, 1998-2002

		Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
		(In monthly percent change)											
2000	Total	0.9	2.0	2.2	-1.2	-2.2	3.1	1.7	1.8	3.9	2.2	0.9	2.7
	Mining and extraction industry	1.7	5.5	5.8	-2.8	-9.0	11.2	3.8	1.1	10.0	4.8	2.3	5.1
	Extraction of crude oil and natural gas	1.7	6.2	7.8	-3.4	-11.1	14.8	4.8	1.2	12.9	5.6	2.6	5.7
	Processing industry	1.0	0.4	0.5	-0.6	1.7	-0.8	0.8	3.0	1.1	0.7	0.0	1.6
	Processing of agricultural products	0.1	0.0	-0.1	-0.1	3.6	1.4	1.0	-0.5	0.8	1.0	0.7	1.1
	Textile and sewing industry	0.5	0.2	0.2	0.2	0.8	0.3	0.1	0.7	0.4	0.0	0.5	1.0
	Coal production, oil refinery	-1.8	-6.2	-2.9	0.0	2.5	0.1	1.7	20.8	3.0	5.1	5.6	4.6
	Chemical industry	3.1	1.4	-0.9	1.9	3.7	0.4	-0.7	-2.4	0.2	0.0	0.7	-0.7
	Manufacturing of rubber and plastic products	0.0	4.9	6.1	0.0	-4.6	0.0	0.3	0.1	0.0	0.0	0.1	0.2
	Metallurgical industry and metal working	2.3	2.4	1.8	-1.4	0.9	-2.5	0.7	1.7	0.9	-0.6	-2.4	1.5
	Manufacturing of machinery and equipment	0.8	0.2	-0.8	1.0	-0.2	-0.4	0.0	-0.3	0.5	-0.2	1.9	0.1
	Electricity, gas, and water supply	-0.5	0.2	0.0	0.4	0.0	0.0	0.3	0.1	0.0	1.0	0.1	0.0
2001	Total	-8.5	2.0	1.3	-3.7	0.0	1.1	-0.3	-2.0	0.5	0.1	-1.6	-3.4
	Mining and extraction industry	-18.0	5.4	3.0	-7.8	2.4	3.5	-1.9	-2.8	1.9	-1.0	-3.3	-5.9
	Extraction of crude oil and natural gas	-20.4	5.9	3.5	-9.0	2.5	4.2	-2.2	-3.4	1.8	-1.7	-4.1	-7.1
	Processing industry	-1.2	-0.3	0.0	-1.0	-2.0	-0.7	0.4	-1.9	-0.6	0.9	-0.8	-2.2
	Processing of agricultural products	0.4	0.8	1.1	0.3	0.5	1.0	0.5	-0.1	-0.2	0.0	0.6	-0.1
	Textile and sewing industry	0.3	0.2	0.2	0.2	0.0	0.4	0.3	0.0	0.2	1.7	0.3	0.1
	Coal production, oil refinery	-1.8	-3.6	-4.3	-4.5	-2.5	-0.2	8.1	0.2	1.1	2.8	-0.8	-16.2
	Chemical industry	0.6	-0.8	1.2	2.0	-0.8	-1.2	1.3	1.5	1.2	0.3	-0.3	0.1
	Manufacturing of rubber and plastic products	0.1	0.3	0.1	0.1	0.1	1.3	0.4	0.1	0.2	0.1	0.1	0.3
	Metallurgical industry and metal working	-1.9	0.1	0.6	-0.9	-3.2	-1.7	-1.7	-4.0	-1.6	0.8	-1.7	0.7
	Manufacturing of machinery and equipment	-0.1	0.6	0.7	-0.8	0.9	0.4	1.3	0.1	-0.3	0.1	0.0	-0.1
	Electricity, gas, and water supply	1.0	-0.1	0.0	0.6	0.0	0.0	2.7	0.0	0.1	0.5	0.9	0.3
2002	Total	-4.6	0.6	2.1	3.9	3.5	0.2	2.5	1.7	2.1	2.4	-1.6	-1.1
	Mining and extraction industry	-9.2	1.1	2.2	8.2	6.5	0.1	3.7	3.3	4.8	4.8	-2.8	-3.0
	Extraction of crude oil and natural gas	-11.0	1.0	2.3	9.1	7.3	0.4	4.1	3.6	5.9	5.6	-3.2	-3.5
	Processing industry	-1.7	0.3	2.5	0.5	1.1	0.4	1.5	0.3	-0.4	0.0	-0.5	1.0
	Processing of agricultural products	0.3	0.4	-0.3	-0.1	-0.5	-0.5	-0.3	-0.2	-0.1	-0.3	-0.3	0.1
	Textile and sewing industry	0.9	2.1	2.1	0.0	0.1	-0.1	0.0	0.0	0.4	0.4	2.1	0.0
	Coal production, oil refinery	-3.4	-5.7	0.0	-0.3	-0.2	0.8	-0.1	2.1	0.6	0.4	-0.2	-0.1
	Chemical industry	0.8	0.6	-1.0	1.2	1.6	-1.0	0.4	0.5	0.4	-0.3	-0.2	0.3
	Manufacturing of rubber and plastic products	0.2	0.7	0.7	0.7	0.1	0.5	0.0	-0.2	0.2	0.0	-0.1	2.2
	Metallurgical industry and metal working	-2.5	1.8	4.6	1.1	2.2	0.7	2.8	0.1	-0.9	0.0	-0.8	1.8
	Manufacturing of machinery and equipment	0.3	0.5	0.2	-1.4	0.3	0.1	-0.1	0.0	-0.2	0.0	0.1	-0.3
	Electricity, gas, and water supply	2.2	0.4	0.3	0.6	0.4	0.1	1.5	0.0	0.0	0.4	0.1	0.0
		(Percentage change over previous year)											
Memorandum items:													
	Total 1998	6.3	6.0	4.9	4.6	3.7	2.3	-0.1	-1.0	-2.2	-3.6	-4.6	-5.5
	Total 1999	-6.5	-8.5	-8.4	-1.3	7.2	16.4	20.9	26.9	32.8	44.5	51.2	57.2
	Total 2000	60.2	65.5	69.3	56.0	41.4	35.5	33.7	31.0	31.1	23.7	20.9	19.4
	Total 2001	8.3	8.3	7.3	4.6	6.9	4.9	2.8	-1.1	-4.3	-6.4	-8.7	-14.1
	Total 2002	-10.4	-11.6	-10.9	-3.9	-0.6	-1.5	1.3	5.1	6.8	9.3	9.3	11.9

Sources: National Statistical Agency.

Table 6. Kazakhstan: Energy Prices, 1998-2002 1/

(Average monthly price in tenge)

	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
1998												
Crude oil (mt)	4,479	4,498	4,481	4,459	4,296	4,211	4,314	4,045	3,688	3,627	3,368	3,370
Natural gas (1000m3)	778	778	778	778	782	782	784	787	793	799	803	807
Electricity (1000kwh)	2,640	2,640	2,640	2,580	2,580	2,580	2,590	2,590	2,580	2,540	2,550	2,550
Coal (mt)	735	836	724	725	725	725	721	723	737	737	748	752
Gasoline (mt)	14,790	14,767	14,769	14,867	14,904	14,541	13,097	12,951	13,137	13,162	13,424	12,887
Diesel (mt)	10,000	9,997	9,998	10,424	10,308	9,935	9,368	9,384	9,532	9,555	9,149	9,561
Mazuth (mt)	4,964	4,964	4,964	3,950	3,954	3,747	3,358	3,468	3,510	3,714	3,835	3,949
Heating (Gcal)	1,185	1,186	1,186	1,170	1,168	1,168	1,128	1,128	1,120	1,108	1,095	1,095
Liquid petroleum gas (mt)	4,865	4,865	4,867	4,872	4,875	5,159	5,396	5,461	5,580	5,629	5,742	5,522
1999												
Crude oil	3,756	3,538	3,697	4,770	5,629	7,020	7,691	8,845	10,163	12,409	13,290	14,553
Natural gas	818	821	828	649	656	660	677	676	683	691	726	751
Electricity	2,380	2,380	2,390	2,390	2,400	2,410	2,430	2,430	2,430	2,440	2,440	2,440
Coal	468	489	484	485	518	517	516	530	518	512	512	514
Gasoline	12,584	12,648	10,000	12,221	12,840	12,840	16,602	19,098	22,949	27,385	29,583	31,186
Diesel	9,398	9,492	8,932	10,049	10,310	10,516	9,948	11,089	11,921	14,639	16,293	20,497
Mazuth	3,086	3,095	3,080	3,182	3,235	3,235	2,984	3,293	4,102	6,254	7,512	7,579
Heating (Gcal)	1,138	1,138	1,139	1,134	1,138	1,142	1,160	1,163	1,163	1,161	1,159	1,159
Liquid petroleum gas (mt)	4,117	3,592	3,494	3,891	3,945	4,502	3,928	3,134	3,335	3,409	4,688	4,796
2000												
Crude oil	14,862	15,268	16,327	15,729	13,642	15,941	16,763	16,552	18,778	19,715	20,289	20,401
Natural gas	620	653	799	646	667	698	701	777	779	835	909	957
Electricity	2,460	2,400	2,400	2,410	2,410	2,410	2,410	2,410	2,400	2,410	2,410	2,410
Coal	579	576	563	552	550	542	537	535	526	525	525	516
Gasoline	30,643	26,900	24,451	24,429	26,305	26,322	26,403	32,214	31,427	31,790	33,790	34,505
Diesel	19,716	18,473	18,683	18,621	19,590	19,601	20,344	24,671	26,846	28,276	30,057	31,767
Mazuth	7,978	7,843	7,914	7,913	7,067	7,071	7,075	9,399	9,790	10,841	10,597	11,109
Heating (Gcal)	1,234	1,235	1,234	1,236	1,236	1,236	1,238	1,238	1,238	1,272	1,271	1,271
Liquid petroleum gas (mt)	7,199	7,769	7,404	7,294	7,224	7,230	7,236	9,075	10,919	10,918	12,163	12,515
2001												
Crude oil	15,179	16,150	16,727	15,171	15,603	16,221	15,795	15,229	15,501	15,206	14,546	13,567
Natural gas	1,111	1,157	1,200	1,214	1,208	1,207	1,207	1,213	1,212	1,209	1,331	1,265
Electricity	2,630	2,630	2,630	2,640	2,640	2,640	2,640	2,640	2,640	2,642	2,654	2,660
Coal	425	440	460	458	475	477	456	464	496	544	562	594
Gasoline	35,400	33,782	31,419	27,755	29,515	30,508	33,742	33,837	34,915	34,979	35,127	27,937
Diesel	32,057	31,080	30,313	29,124	24,946	23,363	26,276	26,333	26,494	28,487	27,088	21,402
Mazuth	9,890	8,634	7,674	7,671	7,146	7,186	8,754	8,776	8,882	9,838	9,867	5,450
Heating (Gcal)	1,423	1,423	1,423	1,421	1,421	1,421	1,427	1,427	1,427	1,427	1,427	1,427
Liquid petroleum gas (mt)	13,301	13,319	12,121	12,129	12,175	13,425	15,176	15,222	15,279	15,310	15,367	14,215
2002												
Crude oil	11,910	12,012	12,446	13,763	14,642	14,510	15,145	15,761	16,606	17,554	16,818	15,791
Natural gas	1,288	1,440	1,441	1,443	1,444	1,445	1,447	1,449	1,358	1,356	1,336	1,341
Electricity	2,774	2,787	2,802	2,831	2,861	2,861	2,897	2,900	2,900	2,900	2,903	2,903
Coal	603	599	592	590	592	592	591	590	586	588	584	579
Gasoline	26,720	23,437	22,294	22,200	22,062	22,209	22,050	22,991	23,361	23,589	23,523	23,147
Diesel	19,786	18,362	18,141	18,044	17,853	18,534	18,534	18,463	18,557	18,186	18,128	18,012
Mazuth	5,447	5,499	5,417	5,270	5,355	5,312	5,312	5,875	5,875	6,054	6,054	6,054
Heating (Gcal)	1,354	1,352	1,359	1,361	1,360	1,361	1,361	1,361	1,361	1,376	1,376	1,376
Liquid petroleum gas (mt)	13,038	13,182	13,182	13,182	13,184	13,039	13,039	13,196	13,196	13,196	13,196	13,196

Sources: National Statistical Agency.

1/ Producers' ex-factory prices. Average prices for all customers.

Table 7. Kazakhstan: Employment, 1998-2002 1/

	1998	1999	2000	2001	2002
	(Thousands)				
Total	6,128	6,105	6,201	6,699	6,709
Agriculture and forestry	1,354	1,335	1,941	2,366	2,367
Fishing	6	7	8	13	14
Total industry	903	905	855	830	824
Of which:					
Mining	124	129	137	167	167
Manufacturing	627	628	573	514	504
Electricity, gas and water: production and distr	153	148	146	150	153
Construction	223	211	226	264	268
Trade, repair of cars and household goods	1,405	1,398	971	1,006	1,007
Hotels and restaurants	68	70	61	54	57
Transports and communication	560	576	550	506	504
Financial sector	38	36	40	46	50
Real estate	184	211	226	214	203
Public administration	346	344	314	281	281
Education	522	513	531	576	589
Health and social services	326	320	292	287	293
Community, social and personal service activities	194	172	181	183	186
Services to households	0	8	6	71	67
	(In percent of total)				
Total	100.0	100.0	100.0	100.0	100.0
Agriculture and forestry	22.1	21.9	31.3	35.3	35.3
Fishing	0.1	0.1	0.1	0.2	0.2
Total industry	14.7	14.8	13.8	12.4	12.3
Of which:					
Mining	2.0	2.1	2.2	2.5	2.5
Manufacturing	10.2	10.3	9.2	7.7	7.5
Electricity, gas and water: production and distr	2.5	2.4	2.4	2.2	2.3
Construction	3.6	3.4	3.6	3.9	4.0
Trade, repair of cars and household goods	22.9	22.9	15.7	15.0	15.0
Hotels and restaurants	1.1	1.1	1.0	0.8	0.8
Transports and communication	9.1	9.4	8.9	7.6	7.5
Financial sector	0.6	0.6	0.6	0.7	0.7
Real estate	3.0	3.5	3.6	3.2	3.0
Public administration	5.6	5.6	5.1	4.2	4.2
Education	8.5	8.4	8.6	8.6	8.8
Health and social services	5.3	5.2	4.7	4.3	4.4
Community, social and personal service activities	3.2	2.8	2.9	2.7	2.8
Services to households	0.0	0.1	0.1	1.1	1.0

Source: National Statistical Agency.

1/ Includes self-employment.

Table 8. Kazakhstan: Labor Market, 1998–2002

	1998				1999				2000				2001				2002			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Operation of Employment Offices																				
Number of job placement inquiries (thousands)	46.3	44.5	42.8	45.5	35.7	26.1	28.4	30.6	41.2	30.4	25.2	25.9	30.2	30.1	25.7	24.9	44.4	33.5	23.5	19.5
Number of people placed in jobs (thousands)	7.3	9.4	9.3	9.1	6.5	4.6	5.6	7.6	7.3	11.8	12.0	11.4	8.9	14.1	13.4	11.3	8.9	14.3	14.5	11.7
Number of vacancies (thousands)	8.5	11.2	12.5	9.9	6.6	7.0	8.2	7.8	8.7	11.0	12.5	10.7	8.7	12.9	13.6	11.5	9.9	13.9	14.4	11.9
Number of registered unemployed (thousands)	262.0	272.4	264.8	254.5	245.1	237.1	239.5	248.6	286.6	278.5	256.5	238.6	242.1	234.5	222.8	216.1	265.7	256.1	220.2	193.7
(percent of economically active population)	3.9	3.9	3.9	3.8	3.8	3.7	3.8	3.9	4.5	4.3	4.0	3.7	3.4	3.1	2.9	2.9	3.6	3.6	2.9	2.6
Total unemployment (thousands) 1/	...	...	...	925.0	...	...	...	950.0	950.0	908.0	890.2	877.5	902.4	746.4	715.1	757.7	778.6	679.6	625.1	679.6
(percent of economically active population)	...	...	...	13.1	...	...	...	13.5	13.7	13.0	12.4	12.2	12.7	9.8	9.2	10.2	10.8	9.0	8.3	9.3

Sources: National Statistics Agency and Ministry of Labor.

1/ Includes estimates for the unregistered unemployed. Only annual numbers are available for 1998-1999.

Table 9. Kazakhstan: Nominal and Real Wages, 1998-2002 1/
(In tenge per month, unless otherwise indicated)

	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
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	9,016	9,005	9,722	9,485	9,660	9,919	9,858	9,656	9,934	9,986	9,811	11,192
Real wage index in percent of previous month	84	99	107	97	102	104	100	99	103	101	98	114
Average wage (in U.S. dollars)	119	118	127	124	126	129	128	124	125	123	119	134
1999												
Minimum wage	2,440	2,440	2,440	2,650	2,650	2,650	2,650	2,650	2,650	2,680	2,680	2,680
Average wage	10,520	10,520	9,513	10,520	9,660	10,453	9,858	9,656	11,308	9,986	9,811	12,607
Real wage index in percent of previous month	117	116	105	117	103	110	102	95	110	98	95	122
Average wage (in U.S. dollars)	124	123	109	104	80	81	75	73	83	71	71	91
2000												
Minimum wage	2,680	2,680	2,680	2,680	2,680	2,680	2,680	2,680	2,680	2,680	2,680	2,680
Average wage	11,796	12,039	13,223	13,240	13,300	13,987	14,040	14,068	14,199	14,543	14,378	16,886
Real wage index in percent of previous month	84	102	110	100	100	105	100	100	100	101	97	116
Average wage (in U.S. dollars)	85	86	94	94	94	98	98	99	100	102	100	117
2001												
Minimum wage	3,484	3,484	3,484	3,484	3,484	3,484	3,484	3,484	3,484	3,484	3,484	3,484
Average wage	15,169	15,516	16,170	16,286	16,881	17,288	17,791	17,726	17,918	18,348	17,892	21,183
Real wage index in percent of previous month	89	102	104	100	103	102	103	100	101	102	97	117
Average wage (in U.S. dollars)	105	107	111	112	116	118	121	121	122	124	121	142
2002												
Minimum wage	4,181	4,181	4,181	4,181	4,181	4,181	4,181	4,181	4,181	4,181	4,181	4,181
Average wage	18,078	18,302	20,070	19,502	20,139	20,303	20,479	20,477	20,620	21,171	20,827	24,388
Real wage index in percent of previous month	84.7	100.9	109.4	96.7	102	100	100	100	101	102	97	116
Average wage (in U.S. dollars)	119.6	120.6	131.9	127.8	132	133	133	133	134	137	135	157

Source: National Statistical Agency; and Fund staff estimates.
1/ The real wage index takes December 1993 = 100.

Table 10. Kazakhstan: Monthly Wages by Sector, 1998-2002 1/

(In tenge)

	1998	1999	2000	2001	2002
Total Average	9,683	11,864	14,374	17,303	20,305
Agriculture and forestry	3,800	4,505	5,426	6,851	8,144
Fishing	4,968	5,737	6,685	7,562	8,572
Total industry	13,918	16,662	20,800	23,812	26,059
Of which:					
Mining	20,317	24,197	31,241	36,625	39,683
Manufacturing	11,728	14,246	18,342	19,982	21,999
Electricity, gas and water: production and distribution	14,461	15,685	17,318	20,026	21,312
Construction	11,654	15,625	20,953	26,805	31,480
Trade, car repair, and household goods	8,136	10,859	13,081	15,366	18,566
Hotels and restaurants	11,558	19,176	22,244	21,511	32,833
Transports and communications	11,852	14,798	19,112	24,412	28,556
Financial sector	19,359	33,345	36,037	41,686	48,592
Real estate	10,525	12,228	15,869	22,132	28,787
Public administration	9,943	11,200	12,317	14,970	16,985
Education	7,227	8,163	8,495	9,937	12,698
Health and social services	6,416	6,775	7,235	8,288	10,814
Other municipal, social, and personal services	8,046	10,289	13,045	16,873	19,794

Sources: National Statistical Agency.

1/ Data are not comparable with monthly wages in Table 10, since only the yearly data is revised when new information is available.

Table 11. Kazakhstan: Index of Investment in Constant Prices, 1998-2002 1/
(1997 = 100)

	1998		1999		2000		2001		2002	
	Total	State	Total	State	Total	State	Total	State	Total	State
Total investment	142	131	150	88	281	144	406	231	483	209
Productive investment	121	581	171	12	378	58	452	231	565	150
Industry	146	65	175	25	368	40	413	155	561	100
Agriculture	40	50	40	50	380	50	420	400	580	450
Transport and communication	151	125	61	98	314	64	459	272	533	176
Construction	733	1,714	1,044	143	2,017	943	3,222	986	1,128	200
Trade and catering	447	267	512	483	1,502	433	1,800	150	1,378	333
Other	...	...	...	...	...	...	...	...	...	...
Non-productive investment	304	423	169	140	264	206	367	219	313	275
Housing	108	109	110	47	286	244	105	35	122	53
Other	...	...	...	...	...	...	...	...	...	...

Sources: National Statistical Agency, and staff estimates.

1/ Prices deflated by sectoral price indices calculated by the National Statistical Agency.

Table 12. Kazakhstan: Financing of Investment, 1998-2002

	1998	1999	2000	2001	2002 preliminary
	(In millions of tenge)				
All resources	264,204	369,084	595,664	943,398	1,193,113
State enterprises	65,534	60,607	67,293	136,932	134,944
Budget resources	26,968	24,068	39,253	69,833	90,855
Own resources	13,905	22,231	25,428	64,660	30,927
Other 1/	198,670	308,477	528,371	806,466	1,058,169
	(In percent of total)				
State enterprises	24.8	16.4	11.3	14.5	11.3
Budget resources	10.2	6.5	6.6	7.4	7.6
Own resources	5.3	6.0	4.3	6.8	2.6
Other 1/	75.2	83.6	88.7	85.5	88.7

Source: National Statistical Agency.

1/ Includes mainly private sector investment.

Table 13. Kazakhstan: Sectoral Composition of Capital Investment in Current Prices, 1998-2002

(In percent of total investment)

	1998	1999	2000	2001	2002 preliminary
Total	100.0	100.0	100.0	100.0	100.0
Agriculture, hunting, and forestry	0.4	0.7	1.4	1.3	1.5
Mining industry	41.7	42.0	49.8	44.3	56.6
Manufacturing industry	15.5	12.2	12.0	11.1	8.4
Production and distribution of electric power, gas and water	6.0	5.3	3.0	2.9	3.1
Construction	3.2	3.7	3.6	4.3	1.3
Trade, car repair, household goods	2.5	5.8	3.5	3.3	2.2
Hotels and restaurants	1.5	1.3	0.5	0.2	0.3
Transports and communication	11.3	7.5	9.5	11.1	11.1
Financial sector	0.6	1.8	1.6	1.3	0.8
Real estate	9.3	8.8	9.7	11.5	5.5
State sector	3.6	7.5	3.2	6.7	3.2
Education	0.4	0.3	0.7	0.8	1.5
Health and social sectors	2.0	0.9	0.2	0.4	1.4
Other municipal, social and personal services	2.0	2.2	1.3	0.8	3.1

Source: National Statistical Agency.

Table 14. Kazakhstan: Savings Investment Balance, 1998-2002 1/

	1998	1999	2000	2001	2002 Prel. Estim.
	(In percent of GDP by final use)				
Consumption	89.6	80.7	73.3	72.1	68.3
Net Exports	-4.8	2.3	8.6	0.0	1.6
Investment:	15.1	15.5	17.3	24.6	28.6
Public	2.0	1.7	2.0	3.1	3.4
Private	13.1	13.8	15.3	21.5	25.3
Change in Stocks	0.1	1.5	0.8	3.3	1.5
Total Savings:	15.2	17.1	18.1	27.9	30.1
Domestic Savings	9.6	17.0	22.9	23.9	28.2
Public	-5.8	-2.7	1.5	6.5	5.3
Private	15.4	19.7	21.4	17.4	22.9
Foreign Savings	5.6	0.1	-4.8	4.0	1.9
Statistical Discrepancy 2/	6.6	-3.9	-0.2	3.8	0.0

Source: Kazakhstan authorities; and Fund staff estimates.

1/ The data for 2000-02 include adjustments to reflect revisions of the balance of payments by the National Bank and the staff. 2002 values are staff estimates based on preliminary data for GDP by production, balance of payments, and investment from enterprise surveys.

2/ Difference between GDP by production and by final use.

Table 15. Kazakhstan: Privatized Enterprises, 1998-2002 1/

	1998	1999	2000	2001	2002
			(In units)		
Industry	152	26	26	39	34
Construction	50	16	5	10	5
Agriculture	9	4	-	25	10
Transport	73	147	50	...	...
Transport and communication	....	...	...	13	17
Trade and catering	287	141	69	11	4
Personal and public services	169	74	54	...	...
Financial activity	...	...	...	4	1
Other (unclassified) 2/	2,267	1,855	1,470	2,103	1,752
Of which: unfinished construction	66	55	50	706	805
Total	3,073	2,318	1,724	2,205	1,823
			(In percent of total)		
Industry	4.9	1.1	1.5	1.8	1.9
Construction	1.6	0.7	0.3	0.5	0.3
Agriculture	0.3	0.2	0.0	1.1	0.5
Transport	2.4	6.3	2.9	...	...
Transport and communication	...	...	...	0.6	0.9
Trade and catering	9.3	6.1	4.0	0.5	0.2
Personal and public services	5.5	3.2	3.1	...	...
Financial activity	...	...	...	0.2	0.1
Other (unclassified) 2/	73.9	80.0	85.3	95.3	96.1
Of which: unfinished construction	2.1	2.4	2.9	32.0	44.2
			(In units)		
Privatization by type					
Small-scale privatization	2,535	2,187	1,642	2,059	1,756
Mass privatization	516	131	79	146	67
Case-by-case privatization	13	0	3	4	2

Sources: National Statistical Agency (data for 1998-2000), and State Property & Privatization Committee of MoF (data for 2001-2002).
1/ New classification was introduced since 2001.
2/ Largely individual small scale assets.

Table 16. Kazakhstan: Summary Accounts of the National Bank of Kazakhstan, 2000-March 2003

(In billions of tenge, end period stocks unless otherwise indicated)

	1999	2000	2001				2002				2003
	December	December	March	June	September	December	March	June	September	December	March
Net Foreign Assets	211.5	302.0	356.4	336.1	362.5	377.9	400.0	434.0	483.9	488.5	595.3
Net Domestic Assets	-85.2	-167.4	-225.1	-192.2	-203.5	-201.6	-244.2	-258.0	-298.3	-280.2	-388.9
Domestic credit	24.3	-47.0	-120.1	-81.5	-78.0	-71.9	-111.0	-115.9	-91.0	-113.4	-231.4
Net Credit to Government	13.3	-14.1	-94.1	-73.0	-76.6	-59.5	-91.6	-86.1	-56.7	-56.0	-120.3
Credit to banks (net)	0.4	-38.8	-20.5	-3.8	-3.1	-5.4	-4.6	-7.8	-11.4	-24.6	-62.3
Credit to the rest of the economy 1/	10.7	6.0	-5.5	-4.6	1.7	-7.0	-14.8	-22.0	-22.9	-32.7	-48.9
Other Items net	-109.6	-120.4	-105.0	-110.7	-125.5	-129.7	-133.1	-142.1	-207.3	-166.8	-157.5
Reserve Money	126.2	134.7	131.4	143.8	159.0	176.3	155.8	176.0	185.5	208.3	206.4
Currency outside NBK	110.4	116.3	110.8	119.3	133.9	145.5	135.9	146.9	155.4	177.9	175.8
Commercial bank deposits	13.3	14.0	19.0	22.3	22.7	28.3	17.7	25.9	26.1	29.4	28.1
Demand, time and enterprise deposits	2.5	4.3	1.6	2.2	2.3	2.6	2.2	3.1	4.0	0.9	2.5
Memorandum items:											
						(in millions of US dollars, eop)					
Net International Reserves	1,540.2	2,093.7	2,453.8	2,297.6	2,456.7	2,506.2	2,625.4	2,831.0	3,132.0	3,135.7	3,923.3
National Fund of the Republic of Kazakhstan 2/	...	...	660.0	956.6	1182.3	1,240.4	1,306.3	1,655.6	1,669.6	1,917.3	1,999.0
Reserve money											
Percentage change from end of previous quarter	...	...	-2.4	9.5	10.6	10.8	-11.6	12.9	5.4	12.2	-0.9
Percentage change from end of previous year	56.9	5.3	-2.4	6.8	18.1	30.9	-11.6	-0.2	5.2	18.1	-0.9
12-month percentage change	56.9	5.3	28.6	19.3	15.4	30.9	18.6	22.4	16.7	18.1	32.5
Exchange rate NBK , eop	138.2	144.5	145.5	146.5	147.7	150.9	152.5	153.4	154.6	155.9	151.8

1/ NBK notes holdings by non-banks are staff estimates for 1999, 2000 and March 2001.

2/ Transitory deposits in tenge not included.

Table 17. Kazakhstan: Monetary Survey, 2000-March 2003 1/
(In billions of tenge, end period stocks unless otherwise indicated)

	1999	2000	2001				2002				2003
	December	December	March	June	September	December	March	June	September	December	March
National Bank of Kazakhstan											
Net Foreign Assets	211.5	302.0	356.4	336.1	362.5	377.9	400.0	434.0	483.9	488.5	595.3
Net domestic assets	-85.2	-167.4	-225.1	-192.2	-203.4	-201.6	-244.2	-258.0	-298.3	-280.2	-388.9
Domestic credit	24.3	-47.0	-120.1	-81.5	-78.0	-71.9	-111.0	-115.9	-91.0	-113.4	-231.4
Credit to Government	13.3	-14.1	-94.1	-73.0	-76.6	-59.5	-91.6	-86.1	-56.7	-56.0	-120.3
Credit to banks 2/	0.4	-38.8	-20.5	-3.8	-3.1	-5.4	-4.6	-7.8	-11.4	-24.6	-62.3
Credit to the rest of the economy 2/	10.7	6.0	-5.5	-4.6	1.7	-7.0	-14.8	-22.0	-22.9	-32.7	-48.9
Other items (net)	-109.6	-120.4	-105.0	-110.7	-125.4	-129.7	-133.1	-142.1	-207.4	-166.8	-157.5
Reserve Money	126.2	134.7	131.4	143.8	159.0	176.3	155.8	176.0	185.5	208.3	206.4
Currency outside NBK	110.4	116.3	110.8	119.3	133.9	145.5	135.9	146.9	155.4	177.9	175.8
Deposits	15.8	18.3	20.6	24.5	25.1	30.8	19.9	29.1	30.1	30.4	30.6
Banking System											
Net Foreign Assets	251.8	306.0	348.5	322.5	352.7	313.8	332.8	346.2	399.8	402.1	476.7
Net domestic assets	22.6	101.1	79.4	153.8	182.9	267.1	243.2	295.0	298.3	399.6	369.2
Domestic credit	207.9	346.7	302.8	396.5	449.2	560.1	544.9	616.8	692.2	778.9	756.4
Net credit to Government	37.8	40.6	-32.4	-11.8	-11.4	8.8	-13.2	13.0	44.7	38.5	-15.2
Credit to economy	170.1	306.1	335.1	408.4	460.5	547.6	552.2	599.6	643.9	738.6	767.2
Claims on Local Government	...	...	...	...	...	3.8	6.0	4.3	3.6	1.8	4.4
Capital Accounts and Other Items Net	-185.3	-245.6	-223.4	-242.7	-266.2	-293.0	-301.7	-321.8	-393.9	-379.4	-387.2
NBK Notes outside the banking system 2/	2.0	7.6	9.1	8.2	1.8	10.6	18.4	25.5	26.4	36.8	53.0
Broad Money	272.4	399.5	418.7	468.1	533.8	570.4	557.7	615.7	671.7	764.9	793.0
Currency in circulation	103.5	106.4	102.0	110.5	124.2	131.2	123.9	135.0	141.4	161.7	159.2
Deposits	168.9	293.0	316.7	357.5	409.6	439.2	433.8	480.7	530.4	603.2	633.8
Tenge deposits	88.6	143.6	153.7	177.8	174.5	173.4	168.6	188.3	223.8	241.6	283.6
Foreign exchange deposits	80.3	149.4	163.1	179.7	235.1	265.9	265.2	292.4	306.6	361.6	350.1
Memorandum Item:											
Net International Reserves (in $ millions)	1,540.2	2,093.7	2,453.8	2,297.6	2,456.7	2,506.2	2,625.4	2,831.0	3,132.0	3,135.7	3,923.3
NFRK (in $ millions) 3/	...	...	660.0	956.6	1182.3	1,240.4	1,306.3	1,655.6	1,669.6	1,917.3	1999.0
Annual Growth Rates (in percent)											
Broad money	84.4	45.9	60.8	47.1	48.4	42.8	33.2	31.5	25.8	34.1	42.2
Reserve money	56.9	5.3	28.6	19.3	15.4	30.9	18.6	22.4	16.7	18.1	32.5
Credit to the economy	51.1	81.0	83.7	93.1	87.5	78.9	64.8	46.8	39.8	34.9	38.9

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

1/ The Development Bank of Kazakhstan (DBK) has been removed from the monetary survey as it is not a deposit taking money bank. Nevertheless, some claims on, and liabilities to, the DBK (since September 2001) remain to be reclassified .

2/ NBK notes holdings by non-banks are staff estimates for 1999, 2000 and March 2001.

3/ Transitory deposits in tenge not included.

Table 18. Kazakhstan: Interest Rates, 1998-2002
(In percent; end-of-period)

		Inflation 12-month average	NBK refinance rate	Yield on 3-month Treasury bills	Commercial bank short-term lending rates 1/ 2/	Commercial bank time deposit rates 1/ 2/	
						Households	Legal entities
1998	January	10.8	18.5	15.8	21.5	9.8	9.2
	February	10.1	18.5	16.8	22.2	9.8	10.1
	March	10.0	18.5	18.2	22.5	8.8	8.0
	April	9.7	18.5	17.5	23.2	13.4	7.7
	May	9.6	18.5	15.9	21.2	11.4	5.8
	June	7.9	18.5	18.1	21.8	11.7	7.0
	July	6.9	18.5	18.5	21.7	11.4	9.8
	August	6.1	20.5	20.3	23.5	13.9	10.9
	September	6.2	20.5	21.5	19.8	14.3	10.0
	October	4.3	20.5	21.8	21.2	15.6	11.6
	November	2.8	25.0	24.5	19.7	14.1	18.5
	December	1.9	25.0	25.8	18.4	14.5	8.5
1999	January	1.0	25.0	26.3	18.3	17.2	10.7
	February	-0.3	25.0	26.3	19.8	17.4	13.8
	March	-1.2	25.0	26.3	22.5	18.8	15.2
	April	2.8	25.0	...	24.7	13.3	12.0
	May	3.9	25.0	...	24.2	13.1	9.1
	June	9.8	25.0	...	25.1	14.1	9.7
	July	11.2	22.0	21.6	25.6	16.2	8.1
	August	11.9	20.0	21.6	24.9	16.5	5.6
	September	12.8	20.0	...	26.7	25.6	8.7
	October	14.3	20.0	...	28.1	18.7	9.4
	November	16.3	18.0	16.6	23.3	20.2	7.9
	December	17.8	18.0	16.6	21.4	13.4	7.9
2000	January	19.8	18.0	16.7	19.7	16.5	9.4
	February	20.2	18.0	16.4	21.9	16.7	10.1
	March	20.4	16.0	16.0	22.3	10.5	6.7
	April	15.6	16.0	15.6	22.0	17.6	6.4
	May	14.7	16.0	14.6	20.7	20.0	7.5
	June	10.2	14.0	13.1	20.3	16.5	7.8
	July	9.5	14.0	12.6	20.2	18.6	4.1
	August	10.0	14.0	9.9	19.4	18.0	4.4
	September	9.8	14.0	9.5	20.2	16.2	5.0
	October	10.4	14.0	7.6	20.6	15.5	6.2
	November	10.2	14.0	7.5	18.2	15.9	6.4
	December	9.8	14.0	6.8	19.9	15.6	6.1
2001	January	8.2	14.0	6.7	18.8	16.4	3.7
	February	8.8	12.5	6.6	18.6	14.7	7.6
	March	9.6	12.5	5.6	20.2	15.7	7.7
	April	9.2	12.5	5.4	19.8	14.6	6.5
	May	9.3	12.5	5.2	20.2	14.7	6.2
	June	9.2	12.0	5.0	18.1	13.9	6.4
	July	9.1	12.0	4.9	17.0	14.4	4.5
	August	9.0	12.0	4.8	18.2	14.4	5.8
	September	8.9	11.0	5.1	18.8	13.7	5.7
	October	8.7	11.0	5.4	18.1	13.8	5.1
	November	8.5	9.0	...	17.1	13.6	5.5
	December	8.4	9.0	...	16.4	12.8	5.6
2002	January	6.0	9.0	5.3	14.5	13.1	5.3
	February	5.8	9.0	...	16.1	12.5	5.2
	March	5.6	8.0	...	16.2	11.2	5.1
	April	5.4	8.0	5.3	15.7	11.5	5.0
	May	5.4	8.0	5.3	16.1	11.3	4.8
	June	5.5	8.0	...	15.3	11.1	4.7
	July	5.6	8.0	...	15.6	11.3	5.1
	August	5.7	8.0	...	21.3	10.2	4.9
	September	5.7	8.0	...	15.7	9.4	5.5
	October	5.8	8.0	...	15.6	10.8	5.3
	November	5.8	7.5	...	17.1	12.0	5.3
	December	5.9	7.5	...	14.5	11.0	5.4

Source: National Bank of Kazakhstan.

1/ Credits and deposits in tenge.

2/ Rates on new credits and deposits.

Table 19. Kazakhstan: Stock Exchange (KASE) Weighted Average Exchange Rates , 1998-2002 1/

(End-of-period)

		Tenge per U.S. dollar		Tenge per Euro 2/		Tenge per Russian ruble	
		Period average	End-of-period	Period average	End-of-period	Period average	End-of-period
1998	January	76.32	76.40	42.49	43.31	...	...
	February	76.40	76.38	42.43	42.40	...	...
	March	76.51	76.61	42.08	41.86	...	...
	April	76.60	76.67	42.62	42.90	...	...
	May	76.82	76.86	43.45	43.20	...	...
	June	77.01	77.20	43.18	42.80	...	...
	July	77.37	77.60	43.00	43.00	...	...
	August	78.43	78.88	43.79	43.90	...	...
	September	79.68	80.63	...	...	...	...
	October	81.52	81.90	50.22	51.00	...	...
	November	82.61	83.00	49.36	49.36	...	...
	December	83.68	84.00	50.20	50.20	...	...
1999	January	84.57	85.12	...	...	...	...
	February	85.71	86.45	...	...	...	...
	March	87.42	88.10	...	...	...	...
	April	113.80	114.80	62.16	62.10	...	...
	May	119.14	129.03	67.44	69.31	...	...
	June	131.88	132.31	70.08	70.30	...	...
	July	132.45	131.91	69.96	72.40	...	...
	August	131.81	132.26	71.61	71.08	...	...
	September	135.78	140.11	73.16	76.40	...	...
	October	141.21	140.22	77.43	75.65	...	...
	November	139.16	137.90	73.64	71.41	...	...
	December	138.19	138.25	71.77	71.50	...	...
2000	January	139.06	139.38	72.15	70.78	...	...
	February	139.90	140.44	70.77	71.20	...	...
	March	141.42	141.95	70.24	70.30	...	...
	April	142.21	142.01	69.47	66.78	...	...
	May	142.29	142.30	66.63	65.90	...	...
	June	142.65	142.86	68.70	68.70	...	...
	July	142.79	142.71	69.32	69.50	...	...
	August	142.60	142.52	65.92	65.75	...	...
	September	142.69	142.58	63.28	62.44	...	...
	October	142.57	142.58	63.81	62.50	...	...
	November	144.01	144.15	...	...	...	...
	December	144.98	145.40	65.40	65.30	...	...
2001	January	145.38	145.11	...	...	...	...
	February	145.33	145.28	...	...	5.07	5.07
	March	145.48	145.42	68.25	68.25	5.08	5.06
	April	145.54	145.77	...	...	5.04	5.05
	May	146.13	146.47	65.86	65.86	5.05	5.03
	June	146.59	146.80	...	...	5.04	5.04
	July	146.76	147.07	...	...	5.02	5.02
	August	147.17	147.30	...	...	5.03	5.03
	September	147.70	147.80	...	...	5.01	5.02
	October	148.03	148.13	132.85	132.85	5.01	5.01
	November	148.56	148.95	130.80	130.80	5.00	4.97
	December	150.32	150.94	...	...	5.00	5.00
2002	January	151.62	151.87	...	...	4.96	4.95
	February	152.02	152.12	...	...	4.92	4.92
	March	152.22	152.44	133.03	133.55	4.90	4.90
	April	152.75	152.99	...	...	4.90	4.91
	May	152.96	153.18	...	...	4.91	4.91
	June	153.13	153.27	...	...	4.87	4.86
	July	153.90	154.26	...	...	4.88	4.88
	August	154.31	154.53	...	...	4.89	4.89
	September	154.52	154.72	...	...	4.88	4.89
	October	154.41	154.47	...	...	4.87	4.89
	November	154.38	154.88	...	...	4.86	4.86
	December	155.68	155.85	...	...	4.89	4.90

Source: National Bank of Kazakhstan.

1/ The absense of entry indicates no trade took place.

2/ Tenge per Deutsche Mark up to May 2001.

Table 20. Kazakhstan: Number of Commercial Banks and Branches, 1998-2002

(End-of-period)

		Commercial banks						Branches
		State 1/	Interstate	With foreign capital		Other	Total 1/	Total
				Total	Subsidiaries			
1998		1	1	23	11	46	71	459
1999		1	1	22	12	31	55	426
2000	January	1	1	22	12	30	54	426
	February	1	1	22	12	29	53	423
	March	1	1	21	12	29	52	427
	April	1	1	19	12	27	48	418
	May	1	1	20	12	26	48	419
	June	1	1	20	12	26	48	414
	July	1	1	19	11	26	47	418
	August	1	1	19	11	26	47	419
	September	1	1	18	11	27	47	419
	October	1	1	18	11	27	47	419
	November	1	1	19	12	27	48	418
	December	1	1	16	12	30	48	418
2001	January	1	1	16	12	29	47	420
	February	1	1	16	12	29	47	422
	March	1	1	16	12	28	46	422
	April	1	1	16	12	29	47	424
	May	1	1	16	12	26	44	425
	June	1	1	16	12	26	44	425
	July	1	1	16	12	26	44	422
	August	1	1	15	12	27	44	422
	September	1	1	16	12	27	45	423
	October	2	1	16	12	27	46	423
	November	2	1	16	12	27	46	419
	December	2	1	16	11	25	44	400
2002	January	2	1	16	11	24	43	401
	February	2	1	16	11	23	42	403
	March	2	1	15	11	24	42	381
	April	2	1	16	11	23	42	382
	May	2	1	16	11	22	41	367
	June	2	1	15	11	21	39	368
	July	2	...	15	11	21	38	368
	August	2	...	16	11	20	38	368
	September	2	...	16	11	20	38	369
	October	2	...	17	11	19	38	369
	November	2	...	17	11	19	38	366
	December	2	...	17	11	19	38	368

Source: National Bank of Kazakhstan.

1/ Including Development Bank which does not take deposits from public, and Eximbank which is not active.

Table 21a. Kazakhstan: General Government Fiscal Operations, 1999-2002
(In billions of tenge)

	1999	2000	2001 1/				2002 1/			
			Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Total revenue and grants	354	565	229	436	628	834	177	381	607	848
Total revenue	351	562	229	435	627	833	177	381	607	848
Of which: Oil revenue	19	86	76	123	157	215	31	52	101	165
Current revenue	350	560	227	432	624	825	176	380	601	838
Capital revenue	1	2	2	3	4	9	1	2	5	9
Tax revenues	323	521	181	367	544	724	168	351	562	793
Income Tax	90	215	85	165	239	305	69	134	218	322
Corporate income tax	55	164	70	134	190	237	53	98	162	244
Of which: Oil revenue	7	67	35	67	93	111	20	27	62	97
Non-Oil revenue	47	96	35	67	97	126	33	70	100	147
Personal income tax	35	51	15	31	49	69	16	36	56	77
Social Tax	70	99	29	61	92	124	28	61	95	134
Property taxes	25	27	9	19	27	33	8	18	26	35
Domestic taxes on goods, works and services	125	162	53	109	168	234	54	119	192	258
VAT	90	115	36	69	113	160	38	87	140	176
Excises	19	19	5	11	16	22	6	12	19	25
Receipts from use of natural resources	10	22	10	27	35	48	10	18	31	54
Oil revenues 2/	5	13	9	23	30	41	6	9	17	35
Non-oil	5	9	2	4	5	7	4	10	14	19
Business and professional licences	7	5	1	2	4	5	1	1	2	3
Taxes on international trade and external transactions	12	18	6	12	19	26	7	16	26	39
Other taxes	1	1	0	0	1	1	2	3	5	5
Nontax revenues 3/	27	39	47	65	79	100	8	29	39	46
Income from capital transactions	1	2	2	3	4	9	1	2	5	9
Grants	3	3	0	0	0	1	0	0	0	0
Total expenditure and net lending and transfers	458	584	125	322	497	746	141	350	549	794
Total expenditure and net lending	458	584	125	322	497	746	141	350	549	794
Total expenditure	440	567	124	314	481	725	138	339	531	776
Current expenditures	413	524	116	281	428	634	126	301	457	649
Expenditures on goods and services	...	...	67	170	268	402	...	180	278	403
Wages	...	...	21	51	74	106	...	65	95	134
Employers' contributions	...	...	4	9	12	16	...	9	13	18
Goods and services	...	...	13	29	46	254	...	93	148	218
Other expenditures on goods and services	...	...	30	81	135	25	...	13	22	32
Interest	19	35	5	19	22	38	5	19	24	39
Domestic	...	9	1	4	6	9	1	4	6	10
Foreign	...	26	4	14	16	29	4	15	18	29
Current transfers	...	...	44	92	139	194	...	103	154	208
Capital expenditures	27	43	8	34	53	91	13	38	74	126
Net lending	18	17	1	8	16	21	3	11	17	18
Extending of credits; share participation	...	...	3	13	23	34	...	16	23	32
Repayment of credits	...	...	2	5	7	13	...	5	6	13
Overall budget balance	-101	-20	104	113	131	88	36	31	58	54
Statistical discrepancy 4/	-5	11	-3	-3	-5	-7	26	34	80	-3
Financing	95	31	-107	-116	-135	-95	-10	3	22	-57
Domestic financing (net)	7	-21	-86	-52	-46	-23	-21	1	30	33
Banking system	5	-1	-68	-53	-51	-32	-20	5	36	28
National Bank of Kazakhstan	-12	-29	-75	-59	-63	-45	-32	-27	3	3
Commercial banks	17	28	7	6	11	14	12	31	33	25
Non-bank	3	-20	-19	1	5	9	-2	-4	-6	4
Foreign financing, net	51	30	0	1	3	29	0	-2	-3	-56
Disbursements	86	41	4	9	14	...	4	7	10	18
Amortization	-35	-11	-4	-7	-11	...	-4	-9	-13	-74
Privatization receipts	37	22	75	77	78	82	18	18	19	19
National Fund of Republic of Kazakhstan	0	0	-96	-142	-169	-182	-6	-15	-24	-53
Memorandum items:										
Nominal GDP	2,016	2,600	644	1,453	2,485	3,251	772	1,672	2,754	3,747

Source: Data provided by Kazakhstani authorities.

1/ Cumulative since the end of the previous year.
2/ Oil royalties, bonuses and production sharing agreements.
3/ Includes a US$210 million bonus payment from a large oil company in 2001.
4/ The large discrepancy in the third quarter of 2002 is related to the repayment of a $350 million eurobond, in which funds were transferred from the banking system to an escrow account in the third quarter, but repayment to foreign creditors did not take place until the fourth quarter.

Table 21b. Kazakhstan: General Government Fiscal Operations, 1999-2002
(In percent of GDP)

	1999	2000	2001 1/				2002 1/			
			Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Total revenue and grants	17.5	21.7	35.6	30.0	25.3	25.7	22.9	22.8	22.0	22.6
Total revenue	17.4	21.6	35.6	30.0	25.2	25.6	22.9	22.8	22.0	22.6
Of which: Oil revenue	1.0	3.3	11.8	8.5	6.3	6.6	4.0	3.1	3.7	4.4
Current revenue	17.4	21.5	35.3	29.8	25.1	25.4	22.8	22.7	21.8	22.4
Capital revenue	0.0	0.1	0.2	0.2	0.1	0.3	0.1	0.1	0.2	0.3
Tax revenues	16.0	20.0	28.1	25.3	21.9	22.3	21.8	21.0	20.4	21.2
Income Tax	4.5	8.3	13.1	11.4	9.6	9.4	9.0	8.0	7.9	8.6
Corporate income tax	2.7	6.3	10.8	9.2	7.6	7.3	6.9	5.8	5.9	6.5
Of which: Oil revenue	0.4	2.6	5.5	4.6	3.7	3.4	2.5	1.6	2.2	2.6
Non-Oil revenue	2.3	3.7	5.4	4.6	3.9	3.9	4.3	4.2	3.6	3.9
Personal income tax	1.8	2.0	2.3	2.2	2.0	2.1	2.1	2.2	2.0	2.1
Social Tax	3.5	3.8	4.5	4.2	3.7	3.8	3.6	3.7	3.5	3.6
Property taxes	1.2	1.0	1.4	1.3	1.1	1.0	1.0	1.1	0.9	0.9
Domestic taxes on goods, works and services	6.2	6.2	8.2	7.5	6.8	7.2	7.0	7.1	7.0	6.9
VAT	4.4	4.4	5.6	4.7	4.6	4.9	4.9	5.2	5.1	4.7
Excises	0.9	0.7	0.8	0.8	0.7	0.7	0.8	0.7	0.7	0.7
Receipts from use of natural resources	0.5	0.8	1.6	1.8	1.4	1.5	1.2	1.1	1.1	1.4
Oil revenues 2/	0.2	0.5	1.3	1.6	1.2	1.3	0.7	0.5	0.6	0.9
Non-oil	0.3	0.4	0.2	0.2	0.2	0.2	0.5	0.6	0.5	0.5
Business and professional licences	0.3	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1
Taxes on international trade and external transactions	0.6	0.7	0.9	0.8	0.8	0.8	0.9	1.0	1.0	1.0
Other taxes	0.1	0.0	0.0	0.0	0.0	0.0	0.2	0.2	0.2	0.1
Nontax revenues 3/	1.3	1.5	7.2	4.5	3.2	3.1	1.0	1.7	1.4	1.2
Income from capital transactions	0.0	0.1	0.2	0.2	0.1	0.3	0.1	0.1	0.2	0.3
Grants	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total expenditure and net lending and transfers	22.7	22.5	19.4	22.2	20.0	23.0	18.3	21.0	19.9	21.2
Total expenditure and net lending	22.7	22.5	19.4	22.2	20.0	23.0	18.3	21.0	19.9	21.2
Total expenditure	21.8	21.8	19.3	21.6	19.4	22.3	17.9	20.3	19.3	20.7
Current expenditures	20.5	20.2	18.1	19.3	17.2	19.5	16.3	18.0	16.6	17.3
Expenditures on goods and services	...	...	10.5	11.7	10.8	12.4	...	10.7	10.1	10.7
Wages	...	...	3.3	3.5	3.0	3.3	...	3.9	3.5	3.6
Employers' contributions	...	...	0.6	0.6	0.5	0.5	...	0.6	0.5	0.5
Goods and services	...	...	2.0	2.0	1.9	7.8	...	5.5	5.4	5.8
Other expenditures on goods and services	...	...	4.6	5.6	5.4	0.8	...	0.8	0.8	0.9
Interest	1.0	1.4	0.8	1.3	0.9	1.2	0.7	1.1	0.9	1.0
Domestic	...	0.4	0.2	0.3	0.2	0.3	0.2	0.3	0.2	0.3
Foreign	...	1.0	0.6	1.0	0.6	0.9	0.5	0.9	0.7	0.8
Current transfers	...	...	6.8	6.4	5.6	6.0	...	6.1	5.6	5.5
Capital expenditures	1.4	1.6	1.2	2.3	2.1	2.8	1.7	2.3	2.7	3.4
Net lending	0.9	0.7	0.1	0.6	0.7	0.7	0.3	0.6	0.6	0.5
Extending of credits; share participation	...	...	0.4	0.9	0.9	1.0	...	0.9	0.8	0.8
Repayment of credits	...	...	0.3	0.4	0.3	0.4	...	0.3	0.2	0.4
Overall budget balance	-5.0	-0.8	16.2	7.8	5.3	2.7	4.6	1.9	2.1	1.4
Statistical discrepancy 4/	-0.3	0.4	-0.5	-0.2	-0.2	-0.2	3.3	2.0	2.9	-0.1
Financing	4.7	1.2	-16.7	-8.0	-5.4	-2.9	-1.3	0.2	0.8	-1.5
Domestic financing (net)	0.4	-0.8	-13.4	-3.6	-1.9	-0.7	-2.8	0.1	1.1	0.9
Banking system	0.2	0.0	-10.5	-3.6	-2.1	-1.0	-2.5	0.3	1.3	0.8
National Bank of Kazakhstan	-0.6	-1.1	-11.6	-4.1	-2.5	-1.4	-4.2	-1.6	0.1	0.1
Commercial banks	0.8	1.1	1.1	0.4	0.5	0.4	1.6	1.9	1.2	0.7
Non-bank	0.1	-0.8	-2.9	0.1	0.2	0.3	-0.2	-0.2	-0.2	0.1
Foreign financing, net	2.6	1.2	0.0	0.1	0.1	0.9	0.0	-0.1	-0.1	-1.5
Disbursements	4.3	1.6	0.7	0.6	0.6	...	0.5	0.4	0.4	0.5
Amortization	-1.7	-0.4	-0.6	-0.5	-0.5	...	-0.5	-0.5	-0.5	-2.0
Privatization receipts	1.8	0.8	11.6	5.3	3.1	2.5	2.4	1.1	0.7	0.5
National Fund of Republic of Kazakhstan	0.0	0.0	-14.9	-9.8	-6.8	-5.6	-0.8	-0.9	-0.9	-1.4
Memorandum items:										
Nominal GDP (in billions of tenge)	2,016	2,600	644	1,453	2,485	3,251	772	1,672	2,754	3,747

Source: Data provided by Kazakhstani authorities.

1/ Cumulative since the end of the previous year.
2/ Oil royalties, bonuses and production sharing agreements.
3/ Includes a US$210 million bonus payment from a large oil company in 2001.
4/ The large discrepancy in the third quarter of 2002 is related to the repayment of a $350 million eurobond, in which funds were transferred from the banking system to an escrow account in the third quarter, but repayment to foreign creditors did not take place until the fourth quarter.

Table 22a. Kazakhstan: Republican Government Fiscal Operations, 1999-2002
(In billions of tenge)

	1999	2000	2001 1/				2002 1/			
			Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Total revenue and grants	172	297	135	245	348	497	111	239	389	545
Total revenue	169	294	135	245	347	497	111	239	389	545
Of which : Oil revenue	8	46	57	86	105	203	28	44	89	149
Non-oil revenue	161	249	78	159	242	294	83	194	300	397
Current revenue	168	292	134	243	345	491	111	238	386	540
Capital revenue	1	2	1	2	2	6	0	0	3	6
Tax revenues	152	263	90	183	274	402	104	212	350	498
Income Tax	28	83	37	71	100	158	53	98	162	244
Corporate income tax	27	82	37	71	100	158	53	98	162	244
Of which : Oil revenue	4	34	18	33	46	111	20	27	62	97
Non-Oil revenue	24	48	19	38	53	48	33	70	100	147
Personal income tax	1	1	0	0	0	0	0	0	0	0
Social Tax	2	20	0	0	0	0	0	0	0	0
Property taxes	1	1	0	0	0	0	0	0	0	0
Domestic taxes on goods, works and services	108	141	47	100	154	216	44	97	159	213
VAT	81	103	33	64	106	151	36	83	134	167
Excises	15	15	4	9	13	18	1	1	3	4
Receipts from use of natural resources	9	21	10	26	34	47	7	12	22	42
Oil revenues 2/	4	...	9	22	28	41	6	9	17	35
Non-oil	5	...	1	4	7	6	1	3	5	7
Business and professional licences	3	1	0	0	1	1	0	0	0	1
Taxes on international trade and external transactions	11	18	6	12	19	26	7	16	26	39
Other taxes	1	1	0	0	1	1	1	2	2	2
Nontax revenues 3/	16	29	44	60	71	89	7	26	36	42
Income from capital transactions	1	2	1	2	2	6	0	0	3	6
Grants	2	3	0	0	0	0	0	0	0	0
Total expenditure and net lending and transfers	281	327	52	159	247	406	92	215	337	484
Total expenditure and net lending	288	339	72	180	275	450	85	208	327	469
Total expenditure	266	322	73	174	264	435	79	197	311	453
Current expenditures	249	310	70	168	251	376	...	181	275	390
Expenditures on goods and services	...	...	...	...	...	180	...	78	125	183
Wages	...	...	...	...	...	36	...	19	30	43
Employers' contributions	...	...	...	...	...	4	...	2	3	4
Goods and services	...	...	...	...	...	117	...	46	72	107
Other current expenditures	...	...	...	...	...	23	...	12	20	30
Interest	21	35	5	18	21	37	...	19	24	38
Domestic	...	...	...	...	...	8	...	4	5	9
Foreign	...	...	...	...	...	29	...	15	18	29
Current transfers	...	...	...	...	...	159	...	84	126	169
Capital expenditures	17	13	2	6	13	59	...	16	36	63
Of which : Capital transfers to other levels of government	...	...	...	...	...	8	...	5	10	13
Net lending	21	17	0	6	12	15	6	11	16	16
Extending of credits; share participation						27	8	15	20	27
Repayment of credits						12	2	4	4	11
Net transfers to other levels of government	-7	-12	-20	-21	-28	-44	7	7	10	14
Transfers from other levels of government	37	54	31	57	79	84	12	26	39	49
Transfers to other levels of government	30	42	11	37	51	40	19	33	50	64
Capital transfer from other levels of government	...	...	...	...	...	...	...	0	0	0
Overall budget balance (cash)	-109	-30	83	86	100	92	19	24	52	62
Statistical discrepancy 4/	0	0	0	0	0	-4	6	25	74	6
Financing	109	30	-83	-86	-100	-96	-13	2	22	-56
Domestic financing (net)	24	-21	-61	-37	-38	-23	-24	1	30	34
Banking system	...	...	...	...	...	-32	-22	4	36	30
National Bank of Kazakhstan	...	...	...	...	...	-45	-32	-27	3	3
Commercial banks	...	...	...	...	...	14	10	31	33	26
Non-bank	51	30	0	1	3	9	-2	-4	-6	4
Foreign financing, net	...	...	...	...	...	29	0	-2	-3	-56
Disbursements	...	...	...	...	...	...	4	7	10	18
Amortization	34	21	75	76	77	81	4	9	13	74
Privatization receipts	0	0	-96	-126	-141	-182	18	18	18	18
National Fund of Republic of Kazakhstan (NFRK)							-6	-15	-24	-53
Memorandum items:										
Nominal GDP	2,016	2,600	644	1,453	2,485	3,251	772	1,672	2,754	3,747

Source: Data provided by Kazakhstani authorities.

1/ Cumulative since the end of the previous year.
2/ Oil royalties, bonuses and production sharing agreements.
3/ Includes a US$210 million bonus payment from a large oil company in 2001.
4/ The large discrepancy in the third quarter of 2002 is related to the repayment of a $350 million eurobond, in which funds were transferred from the banking system to an escrow account in the third quarter, but repayment to foreign creditors did not take place until the fourth quarter.

Table 22b. Kazakhstan: Republican Government Fiscal Operations, 1999-2002
(In percent of GDP)

	1999	2000	2001 1/				2002 1/			
			Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Total revenue and grants	8.5	11.4	20.9	16.9	14.0	15.3	14.4	14.3	14.1	14.6
Total revenue	8.4	11.3	20.9	16.9	14.0	15.3	14.4	14.3	14.1	14.6
Of which : Oil revenue	0.4	1.8	8.8	5.9	4.2	6.2	3.6	2.7	3.2	4.0
Non-oil revenue	8.0	9.6	12.1	10.9	9.8	9.0	10.8	11.6	10.9	10.6
Current revenue	8.3	11.2	20.8	16.7	13.9	15.1	14.4	14.3	14.0	14.4
Capital revenue	0.0	0.1	0.2	0.1	0.1	0.2	0.0	0.0	0.1	0.2
Tax revenues	7.5	10.1	13.9	12.6	11.0	12.4	13.5	12.7	12.7	13.3
Income Tax	1.4	3.2	5.7	4.9	4.0	4.9	6.9	5.8	5.9	6.5
Corporate income tax	1.4	3.1	5.7	4.9	4.0	4.9	6.9	5.8	5.9	6.5
Of which : Oil revenue	0.2	1.3	2.7	2.3	1.9	3.4	2.5	1.6	2.2	2.6
Non-Oil revenue	1.2	1.9	3.0	2.6	2.2	1.5	4.3	4.2	3.6	3.9
Personal income tax	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Social Tax	0.1	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Property taxes	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Domestic taxes on goods, works and services	5.4	5.4	7.3	6.9	6.2	6.7	5.6	5.8	5.8	5.7
VAT	4.0	4.0	5.1	4.4	4.3	4.6	4.7	4.9	4.9	4.4
Excises	0.7	0.6	0.6	0.6	0.5	0.5	0.1	0.1	0.1	0.1
Receipts from use of natural resources	0.5	0.8	1.6	1.8	1.4	1.5	0.9	0.7	0.8	1.1
Oil revenues 2/	0.2	...	1.3	1.5	1.1	1.3	0.7	0.5	0.6	0.9
Non-oil	0.3	...	0.2	0.3	0.3	0.2	0.2	0.2	0.2	0.2
Business and professional licences	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Taxes on international trade and external transactions	0.6	0.7	0.9	0.8	0.8	0.8	0.9	1.0	1.0	1.0
Other taxes	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1
Nontax revenues 3/	0.8	1.1	6.9	4.1	2.9	2.7	0.9	1.6	1.3	1.1
Income from capital transactions	0.0	0.1	0.2	0.1	0.1	0.2	0.0	0.0	0.1	0.2
Grants	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total expenditure and net lending and transfers	13.9	12.6	8.1	11.0	10.0	0.0 12.5	12.0	12.9	12.2	12.9
Total expenditure and net lending	14.3	13.0	11.2	12.4	11.1	13.8	11.1	12.4	11.9	12.5
Total expenditure	13.2	12.4	11.3	12.0	10.6	13.4	10.3	11.8	11.3	12.1
Current expenditures	12.4	11.9	10.9	11.6	10.1	11.6	...	10.8	10.0	10.4
Expenditures on goods and services	...	...	...	...	...	5.5	...	4.7	4.5	4.9
Wages	...	...	...	...	...	1.1	...	1.1	1.1	1.1
Employers' contributions	...	...	...	...	...	0.1	...	0.1	0.1	0.1
Goods and services	...	...	...	...	...	3.6	...	2.7	2.6	2.8
Other current expenditures	...	...	...	...	...	0.7	...	0.7	0.7	0.8
Interest	1.1	1.3	0.7	1.3	0.9	1.1	...	1.1	0.9	1.0
Domestic	...	...	...	...	...	0.3	...	0.2	0.2	0.2
Foreign	...	...	...	...	...	0.9	...	0.9	0.7	0.8
Current transfers	...	...	...	...	...	4.9	...	5.0	4.6	4.5
Capital expenditures	0.8	0.5	0.4	0.4	0.5	1.8	...	1.0	1.3	1.7
Of which: Capital transfers to other levels of government	...	...	...	...	...	0.2	...	0.3	0.4	0.3
Net lending	1.1	0.7	-0.1	0.4	0.5	0.5	...	0.7	0.6	0.4
Extending of credits; share participation	0.0	0.0	0.0	0.0	0.0	0.8	...	0.9	0.7	0.7
Repayment of credits	0.0	0.0	0.0	0.0	0.0	0.4	...	0.2	0.2	0.3
Net transfers to other levels of government	-0.3	-0.5	-3.1	-1.4	-1.1	-1.4	...	0.4	0.4	0.4
Transfers from other levels of government	1.8	2.1	4.8	3.9	3.2	2.6	...	1.6	1.4	1.3
Transfers to other levels of government	1.5	1.6	1.6	2.5	2.1	1.2	...	2.0	1.8	1.7
Capital transfer from other levels of government	...	...	...	...	...	...	...	0.0	0.0	0.0
Overall budget balance (cash)	-5.4	-1.2	12.8	5.9	4.0	2.8	2.4	1.4	1.9	1.6
Statistical discrepancy 4/	0.0	0.0	0.0	0.0	0.0	-0.1	...	1.5	2.7	0.1
Financing	5.4	1.2	-12.8	-5.9	-4.0	-2.9	-1.6	0.1	0.8	-1.5
Domestic financing (net)	1.2	-0.8	-9.5	-2.5	-1.5	-0.7	-3.1	0.0	1.1	0.9
Banking system	...	...	...	...	...	-1.0	-2.9	0.2	1.3	0.8
National Bank of Kazakhstan	...	...	...	...	...	-1.4	-4.2	-1.6	0.1	0.1
Commercial banks	...	...	...	...	...	0.4	1.3	1.8	1.2	0.7
Non-bank	0.0	0.0	0.0	0.0	0.0	0.3	-0.2	-0.2	-0.2	0.1
Foreign financing, net	2.6	1.2	0.0	0.1	0.1	0.9	0.0	-0.1	-0.1	-1.5
Disbursements	...	...	...	...	...	...	0.5	0.4	0.4	0.5
Amortization	...	...	...	...	...	...	0.5	0.5	0.5	2.0
Privatization receipts	1.7	0.8	11.6	5.2	3.1	2.5	2.3	1.1	0.7	0.5
National Fund of Republic of Kazakhstan (NFRK)	0.0	0.0	-14.9	-8.7	-5.7	-5.6	-0.8	-0.9	-0.9	-1.4
Memorandum items:										
Nominal GDP (in billions of tenge)	2,016	2,600	644	1,453	2,485	3,251	772	1,672	2,754	3,747

Source: Data provided by Kazakhstani authorities.

1/ Cumulative since the end of the previous year.
2/ Oil royalties, bonuses and production sharing agreements.
3/ Includes a US$210 million bonus payment from a large oil company in 2001.
4/ The large discrepancy in the third quarter of 2002 is related to the repayment of a $350 million eurobond, in which funds were transferred from the banking system to an escrow account in the third quarter, but repayment to foreign creditors did not take place until the fourth quarter.

Table 23a. Kazakhstan: Local Government Fiscal Operations, 1999-2002
(In billions of tenge)

	1999	2000	2001 1/				2002 1/			
			Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Total revenue and grants	180	268	94	190	280	337	65	143	218	302
Total revenue	182	268	94	190	280	336	65	143	218	302
Of which: Oil revenue	11	40	19	37	52	12	3	7	12	16
Non-oil revenue	171	227	75	153	228	324	63	135	206	286
Current revenue	182	267	94	189	278	334	65	141	215	299
Capital revenue	0	0	1	1	2	3	1	2	3	4
Tax revenues	171	258	91	184	270	322	64	139	212	295
Income Tax	...	...	...	...	...	147	16	36	56	77
Corporate income tax	...	...	...	...	...	78	0	0	0	0
Of which: Oil revenue	...	...	...	...	...	0	0	0	0	0
Non-Oil revenue	...	...	...	...	...	78	0	0	0	0
Personal income tax	...	...	...	...	...	69	16	36	56	77
Social Tax	...	...	...	...	...	124	28	61	95	134
Property taxes	...	...	...	...	...	33	8	18	26	35
Domestic taxes on goods, works and services	...	...	...	...	...	18	11	23	33	45
VAT	...	...	...	...	...	9	2	5	6	10
Excises	...	...	...	...	...	4	5	11	16	21
Receipts from use of natural resources	...	...	...	...	...	1	3	6	9	12
Oil revenues 2/	...	...	...	...	...	0	0	0	0	0
Non-oil	...	...	...	...	...	1	3	6	9	12
Business and professional licences	...	...	...	...	...	4	0	1	2	2
Taxes on international trade and external transactions	...	...	...	...	...	0	0	0	0	0
Other taxes	...	...	...	...	...	0	1	2	2	3
Nontax revenues	11	10	3	5	8	11	1	2	3	4
Income from capital transactions	0	0	1	1	2	3	1	2	3	4
Grants	-2	0	0	0	0	0	0	0	0	0
Total expenditure and net lending and transfers	171	257	72	163	250	340	68	139	216	310
Total expenditure and net lending	165	245	52	142	222	304	...	152	236	338
Total expenditure	169	245	51	140	217	298	...	148	230	336
Current expenditures	158	215	46	112	178	258	...	121	183	259
Expenditures on goods and services	...	...	...	...	...	222	...	102	153	219
Wages	...	...	...	...	...	70	...	46	65	91
Employers' contributions	...	...	...	...	...	13	...	8	11	15
Goods and services	...	...	...	...	...	137	...	47	76	111
Other current expenditures	...	...	...	...	...	3	...	1	2	3
Interest	0	0	0	0	0	1	...	0	1	1
Domestic	...	...	...	...	...	1	...	0	1	1
Foreign	...	...	...	...	...	0	...	0	0	0
Current transfers	...	...	...	...	...	35	...	19	29	39
Capital expenditures	11	30	6	28	40	41	...	27	48	76
Of which: Capital transfers to other levels of government	...	...	...	...	...	...	...	0	0	0
Net lending	-4	0	1	2	5	6	...	4	6	2
Extending of credits; share participation	...	...	...	...	...	11	...	5	8	9
Repayment of credits	...	...	...	...	...	6	...	1	2	7
Net transfers to other levels of government	7	12	20	21	28	36	...	-12	-20	-27
Transfers from other levels of government	30	42	11	37	51	40	...	33	50	64
Transfers to other levels of government	37	54	31	57	79	84	...	26	39	49
Capital transfer from other levels of government	...	...	...	...	...	8	...	5	10	13
Overall budget balance	9	11	22	27	30	-4	-3	3	2	-8
Statistical discrepancy	0	11	-3	-3	-5	-3	...	4	2	-9
Financing	-9	1	-25	-31	-35	1	3	1	0	-1
Domestic financing (net)	-11	0	-25	-15	-8	0	2	1	0	-1
Banking system	...	...	...	...	...	0	2	1	0	-1
National Bank of Kazakhstan	...	...	...	...	...	0	0	0	0	0
Commercial banks	...	...	...	...	...	0	2	1	0	-1
Non-bank	...	...	...	...	...	0	0	0	0	0
Foreign financing, net	0	0	0	0	0	0	0	0	0	0
Disbursements	...	...	...	...	...	...	...	...	...	...
Amortization	...	...	...	...	...	...	...	...	...	...
Privatization receipts	3	1	0	1	1	1	0	0	0	0
National Fund of Republic of Kazakhstan (NFRK)	0	0	0	-16	-28	0	0	0	0	0
Memorandum items:										
Nominal GDP	2,016	2,600	644	1,453	2,485	3,251	772	1,672	2,754	3,747

Source: Data provided by Kazakhstani authorities.

1/ Cumulative since the end of the previous year.
2/ Oil royalties, bonuses and production sharing agreements.

Table 23b. Kazakhstan: Local Government Fiscal Operations, 1999-2002
(In percent of GDP)

	1999	2000	2001 1/				2002 1/			
			Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Total revenue and grants	8.9	10.3	14.6	13.1	11.3	10.4	8.5	8.5	7.9	8.1
Total revenue	9.0	10.3	14.6	13.1	11.3	10.3	8.5	8.5	7.9	8.1
Of which: Oil revenue	0.5	1.5	3.0	2.5	2.1	0.4	0.4	0.4	0.4	0.4
Non-oil revenue	8.5	8.7	11.6	10.6	9.2	10.0	8.1	8.1	7.5	7.6
Current revenue	9.0	10.3	14.5	13.0	11.2	10.3	8.4	8.4	7.8	8.0
Capital revenue	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Tax revenues	8.5	9.9	14.1	12.7	10.9	9.9	8.3	8.3	7.7	7.9
Income Tax	...	...	...	...	...	4.5	2.1	2.2	2.0	2.1
Corporate income tax	...	...	...	...	...	2.4	0.0	0.0	0.0	0.0
Of which: Oil revenue	...	...	...	...	...	0.0	0.0	0.0	0.0	0.0
Non-Oil revenue	...	...	...	...	...	2.4	0.0	0.0	0.0	0.0
Personal income tax	...	...	...	...	...	2.1	2.1	2.2	2.0	2.1
Social Tax	...	...	...	...	...	3.8	3.6	3.7	3.5	3.6
Property taxes	...	...	...	...	...	1.0	1.0	1.1	0.9	0.9
Domestic taxes on goods, works and services	...	...	...	...	...	0.6	1.4	1.4	1.2	1.2
VAT	...	...	...	...	...	0.3	0.3	0.3	0.2	0.3
Excises	...	...	...	...	...	0.1	0.7	0.6	0.6	0.6
Receipts from use of natural resources	...	...	...	...	...	0.0	0.4	0.4	0.3	0.3
Oil revenues 2/	...	...	...	...	...	0.0	0.0	0.0	0.0	0.0
Non-oil	...	...	...	...	...	0.0	0.4	0.4	0.3	0.3
Business and professional licences	...	...	...	...	...	0.1	0.1	0.1	0.1	0.1
Taxes on international trade and external transactions	...	...	...	...	...	0.0	0.0	0.0	0.0	0.0
Other taxes	...	...	...	...	...	0.0	0.1	0.1	0.1	0.1
Nontax revenues	0.5	0.4	0.4	0.4	0.3	0.4	0.1	0.1	0.1	0.1
Income from capital transactions	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Grants	-0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total expenditure and net lending and transfers	8.5	9.9	11.2	11.2	10.0	10.5	8.8	8.3	7.8	8.3
Total expenditure and net lending	8.2	9.4	8.1	9.8	8.9	9.4	...	9.1	8.6	9.0
Total expenditure	8.4	9.4	8.0	9.6	8.7	9.2	...	8.8	8.4	9.0
Current expenditures	7.9	8.3	7.1	7.7	7.1	7.9	...	7.2	6.6	6.9
Expenditures on goods and services	...	...	...	...	...	6.8	...	6.1	5.6	5.9
Wages	...	...	...	...	...	2.1	...	2.7	2.4	2.4
Employers' contributions	...	...	...	...	...	0.4	...	0.4	0.4	0.4
Goods and services	...	...	...	...	...	4.2	...	2.8	2.7	3.0
Other current expenditures	...	...	...	...	...	0.1	...	0.1	0.1	0.1
Interest	0.0	0.0	0.0	0.0	0.0	0.0	...	0.0	0.0	0.0
Domestic	...	...	...	...	...	0.0	...	0.0	0.0	0.0
Foreign	...	...	...	...	...	0.0	...	0.0	0.0	0.0
Current transfers	...	...	...	...	...	1.1	...	1.1	1.0	1.0
Capital expenditures	0.5	1.1	0.9	1.9	1.6	1.2	...	1.6	1.7	2.0
Of which: Capital transfers to other levels of government	...	...	...	...	...	...	...	0.0	0.0	0.0
Net lending	-0.2	0.0	0.1	0.2	0.2	0.2	...	0.2	0.2	0.1
Extending of credits; share participation	...	...	...	...	...	0.4	...	0.3	0.3	0.2
Repayment of credits	...	...	...	...	...	0.2	...	0.1	0.1	0.2
Net transfers to other levels of government	0.3	0.5	3.1	1.4	1.1	1.1	...	-0.7	-0.7	-0.7
Transfers from other levels of government	1.5	1.6	1.6	2.5	2.1	1.2	...	2.0	1.8	1.7
Transfers to other levels of government	1.8	2.1	4.8	3.9	3.2	2.6	...	1.6	1.4	1.3
Capital transfer from other levels of government	...	...	...	...	...	0.2	...	0.3	0.4	0.3
Overall budget balance	0.4	0.4	3.4	1.9	1.2	-0.1	-0.3	0.2	0.1	-0.2
Statistical discrepancy	0.0	0.4	-0.5	-0.2	-0.2	-0.1	...	0.3	0.1	-0.2
Financing	-0.4	0.0	-3.8	-2.1	-1.4	0.0	0.3	0.1	0.0	0.0
Domestic financing (net)	-0.6	0.0	-3.9	-1.0	-0.3	0.0	0.3	0.0	0.0	0.0
Banking system	...	...	...	...	...	0.0	0.3	0.0	0.0	0.0
National Bank of Kazakhstan	...	...	...	...	...	0.0	0.0	0.0	0.0	0.0
Commercial banks	...	...	...	...	...	0.0	0.3	0.0	0.0	0.0
Non-bank	...	...	...	...	...	0.0	0.0	0.0	0.0	0.0
Foreign financing, net	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Disbursements	...	...	...	...	...	...	...	...	...	...
Amortization	...	...	...	...	...	...	...	...	...	...
Privatization receipts	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
National Fund of Republic of Kazakhstan (NFRK)	0.0	0.0	0.0	-1.1	-1.1	0.0	0.0	0.0	0.0	0.0
Memorandum items:										
Nominal GDP (in billions of tenge)	2,016.5	2,599.9	643.8	1,453.0	2,485.5	3,250.6	771.6	1,671.6	2,753.9	3,747.2

Source: Data provided by Kazakhstani authorities.

1/ Cumulative since the end of the previous year.
2/ Oil royalties, bonuses and production sharing agreements.

Table 24 . Kazakhstan: General Government Expenditure by Functional Classification, 1999-2002

	1999	2000	2001 1/				2002 1/			
			Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
					(In billions of tenge)					
Expenditure and net lending	458.3	584.2	124.7	322.3	497.2	746.2	141.0	350.2	548.7	794.0
Expenditure	440.3	567.0	124.2	314.3	480.9	724.8	138.4	339.4	531.4	775.6
General Government services	28.9	34.8	9.9	19.4	30.7	50.8	8.5	19.0	30.0	45.1
Defense	17.2	20.5	5.7	13.4	20.1	32.5	5.1	13.5	22.4	37.7
Public order and security	32.5	46.9	9.5	26.1	41.1	64.3	13.5	32.5	52.4	77.7
Education	78.5	84.6	21.9	50.5	75.6	106.4	23.8	58.9	85.9	121.1
Health	44.8	54.2	11.4	26.6	43.4	62.3	12.7	31.0	50.3	71.1
Social insurance and social security	159.1	171.0	42.0	87.6	133.6	186.7	46.1	98.4	149.2	201.3
Housing and public utilities	6.0	22.0	3.9	12.2	19.7	30.5	3.9	9.0	15.4	24.5
Culture, sports and information space	12.2	17.5	3.1	7.5	12.3	18.1	4.0	10.6	15.9	22.8
Fuel and energy complex, and subsoil use	0.0	0.0	0.0	1.4	3.3	5.5	0.6	2.3	5.2	6.8
Agriculture, water industry, forestry, and fishery	6.9	11.4	2.6	9.9	15.1	23.2	1.2	10.3	18.2	27.7
Industry and construction	2.9	7.2	1.1	2.0	2.9	4.8	0.1	0.7	2.2	4.5
Transportation and communications	12.9	33.3	4.4	14.9	27.2	44.2	3.3	12.3	28.5	49.6
Other expenditure	19.1	28.1	3.9	24.1	34.5	58.0	10.3	22.0	31.2	46.6
Debt servicing	19.4	35.4	4.8	18.7	21.6	37.7	5.1	19.0	24.5	39.0
Net lending	18.0	17.2	0.5	8.0	16.2	21.4	2.6	10.8	17.3	18.4
Lending	21.0	25.7	2.6	13.3	23.0	34.1	5.2	15.6	23.3	31.7
Repayments	-3.0	-8.5	-2.1	-5.3	-6.8	-12.7	-2.6	-4.8	-6.0	-13.3
					(In percent of GDP)					
Expenditure and net lending	22.7	22.5	19.4	22.2	20.0	23.0	18.3	21.0	19.9	21.2
Expenditure	21.8	21.8	19.3	21.6	19.4	22.3	17.9	20.3	19.3	20.7
General Government services	1.4	1.3	1.5	1.3	1.2	1.6	1.1	1.1	1.1	1.2
Defense	0.9	0.8	0.9	0.9	0.8	1.0	0.7	0.8	0.8	1.0
Public order and security	1.6	1.8	1.5	1.8	1.7	2.0	1.8	1.9	1.9	2.1
Education	3.9	3.3	3.4	3.5	3.0	3.3	3.1	3.5	3.1	3.2
Health	2.2	2.1	1.8	1.8	1.7	1.9	1.6	1.9	1.8	1.9
Social insurance and social security	7.9	6.6	6.5	6.0	5.4	5.7	6.0	5.9	5.4	5.4
Housing and public utilities	0.3	0.8	0.6	0.8	0.8	0.9	0.5	0.5	0.6	0.7
Culture, sports and information space	0.6	0.7	0.5	0.5	0.5	0.6	0.5	0.6	0.6	0.6
Fuel and energy complex, and subsoil use	0.0	0.0	0.0	0.1	0.1	0.2	0.1	0.1	0.2	0.2
Agriculture, water industry, forestry, and fishery	0.3	0.4	0.4	0.7	0.6	0.7	0.2	0.6	0.7	0.7
Industry and construction	0.1	0.3	0.2	0.1	0.1	0.1	0.0	0.0	0.1	0.1
Transportation and communications	0.6	1.3	0.7	1.0	1.1	1.4	0.4	0.7	1.0	1.3
Other expenditure	0.9	1.1	0.6	1.7	1.4	1.8	1.3	1.3	1.1	1.2
Debt servicing	1.0	1.4	0.8	1.3	0.9	1.2	0.7	1.1	0.9	1.0
Net lending	0.9	0.7	0.1	0.6	0.7	0.7	0.3	0.6	0.6	0.5
Lending	1.0	1.0	0.4	0.9	0.9	1.0	0.7	0.9	0.8	0.8
Repayments	-0.1	-0.3	-0.3	-0.4	-0.3	-0.4	-0.3	-0.3	-0.2	-0.4
					(In percent of total)					
Expenditure and net lending	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Expenditure	96.1	97.1	99.6	97.5	96.7	97.1	98.2	96.9	96.9	97.7
General Government services	6.3	6.0	7.9	6.0	6.2	6.8	6.0	5.4	5.5	5.7
Defense	3.8	3.5	4.5	4.1	4.0	4.4	3.6	3.9	4.1	4.7
Public order and security	7.1	8.0	7.6	8.1	8.3	8.6	9.6	9.3	9.6	9.8
Education	17.1	14.5	17.6	15.7	15.2	14.3	16.9	16.8	15.7	15.3
Health	9.8	9.3	9.1	8.3	8.7	8.4	9.0	8.8	9.2	9.0
Social insurance and social security	34.7	29.3	33.7	27.2	26.9	25.0	32.7	28.1	27.2	25.4
Housing and public utilities	1.3	3.8	3.1	3.8	4.0	4.1	2.8	2.6	2.8	3.1
Culture, sports and information space	2.7	3.0	2.5	2.3	2.5	2.4	2.8	3.0	2.9	2.9
Fuel and energy complex, and subsoil use	0.0	0.0	0.0	0.4	0.7	0.7	0.5	0.7	1.0	0.9
Agriculture, water industry, forestry, and fishery	1.5	2.0	2.1	3.1	3.0	3.1	0.9	2.9	3.3	3.5
Industry and construction	0.6	1.2	0.9	0.6	0.6	0.6	0.1	0.2	0.4	0.6
Transportation and communications	2.8	5.7	3.5	4.6	5.5	5.9	2.4	3.5	5.2	6.2
Other expenditure	4.2	4.8	3.2	7.5	6.9	7.8	7.3	6.3	5.7	5.9
Debt servicing	4.2	6.1	3.9	5.8	4.4	5.0	3.6	5.4	4.5	4.9
Net lending	3.9	2.9	0.4	2.5	3.3	2.9	1.8	3.1	3.1	2.3
Lending	4.6	4.4	2.1	4.1	4.6	4.6	3.7	4.4	4.2	4.0
Repayments	-0.7	-1.5	-1.7	-1.6	-1.4	-1.7	-1.9	-1.4	-1.1	-1.7
Memorandum items:										
Nominal GDP (in billions of tenge)	2,016.5	2,599.9	643.8	1,453.0	2,485.5	3,250.6	771.6	1,671.6	2,753.9	3,747.2

Source: Data provided by Kazakhstani authorities.

1/ Cumulative since the end of the previous year.

Table 25. Kazakhstan: Balance of Payments, 1998-2002

	1998	1999	2000	2001	2002 Prelim.
	(In millions of U.S. dollars)				
Current Account	-1190	-9	880	-880	-472
Trade balance	-801	478	2620	1516	2540
Exports (f.o.b.)	5871	6123	9468	9124	10186
Oil and gas condensate 1/	1650	2174	4429	4463	5157
Non-oil exports	4220	3948	5039	4661	5029
Imports (f.o.b.)	-6672	-5645	-6848	-7607	-7646
Services and income balance	-511	-644	-1989	-2628	-3126
Services, net	-250	-171	-872	-1518	-2147
Income, net	-261	-472	-1117	-1110	-979
of which: income to direct investors	-97	-274	-934	-1033	-916
Current transfers	122	157	249	232	113
Capital and Financial Account	1825	903	811	2249	1232
Capital transfers, net	-9	-234	-291	-197	-107
Foreign direct investment, net	1324	1583	1278	3006	2138
Amortization of intra-company liabilities	-81	-212	-1411	-1792	-1514
Portfolio investment, net	62	-46	-55	-1323	-927
of which: National Fund 2/	...	...	...	-1270	-327
Public sector Eurobonds, net	-47	34	11	-103	-449
Other investment					
Medium- and long-term loans and credits, net	696	192	243	641	786
Short-term and other capital, net	-247	-592	-364	122	-657
Errors and omissions	-1078	-641	-1106	-939	-132
Overall Balance	-443	254	585	431	628
Financing	443	-254	-585	-431	-628
Net international reserves of the NBK (increase -)	443	-254	-585	-431	-628
Memorandum Items					
Current account (in percent of annual GDP)	-5.4	-0.1	4.8	-4.0	-1.9
Exports in percent of GDP	26.6	36.1	51.8	41.2	41.7
of which: oil exports	7.5	12.8	24.2	20.2	21.1
Imports in percent of GDP	30.2	33.3	37.4	34.4	31.3
Annual growth rate (in percent)					
exports	-14.9	4.3	54.6	-3.6	11.6
non-oil exports	-19.3	-6.4	27.6	-7.5	7.9
imports	-7.0	-15.4	21.3	11.1	0.5
Exports of crude oil and gas condensate, million tons	20.4	23.7	27.7	32.4	39.3
NBK gross international reserves (in millions of U.S. dollars)	1964	2003	2096	2508	3136
in months of imports of goods and non-factor services	3.0	3.6	2.8	2.9	3.3
National Fund (incl. interest), end of period stock 3/	...	...	...	1270	1917
External debt in percent of GDP	44.8	71.0	69.0	68.4	71.2
excluding intra-company loans	29.5	34.6	31.2	29.5	29.1
Public external debt service in percent of exports of gnfs	7.7	11.8	8.5	4.8	7.7
World oil price (U.S. dollars per barrel)	13.1	18.0	28.2	24.3	24.9

Sources: The Kazakh authorities and the Fund staff estimates.

1/ Includes a staff estimate for underinvoicing of oil exports to CIS countries.

2/ Data reflect the effect of market valuation in addtion to transactions. The start-up assets in 2001 included $660 million from the sale of 5 percent government share in TCO. The remaining balance was from oil revenue. For 2002, inflows included a transfer from government accounts held abroad.

3/ Includes transitory domestic currency deposits.

Table 26. Kazakhstan: Export Volumes, Prices and Values, 1998-2002

(Volumes in thousands of tons)

	1998			1999			2000			2001			2002		
	Volume	Price 1/	Value (In millions of U.S. dollars)	Volume	Price 1/	Value (In millions of U.S. dollars)	Volume	Price 1/	Value (In millions of U.S. dollars)	Volume	Price 1/	Value (In millions of U.S. dollars)	Volume	Price 1/	Value (In millions of U.S. dollars)
Customs exports															
Crude oil and gas condensate	20,289.1	79.7	1,617.9	25,205.1	91.6	2,309.3	27,713.4	153.3	4,249.0	32,400.6	131.7	4,268.1	39,273.5	128.3	5,036.9
Coal	23,294.3	13.7	319.3	16,843.3	9.3	155.9	25,157.1	6.5	164.5	27,244.2	8.2	222.5	24,270.2	7.6	183.3
Petroleum products	965.4	49.6	47.9	911.5	63.4	57.8	991.5	101.2	100.3	1,457.8	88.7	129.3	1,111.6	107.2	119.2
Alumina	1,094.5	143.3	156.8	1,162.1	116.3	135.2	1,205.5	133.6	161.0	1,249.8	149.4	186.7	1,371.1	126.1	172.9
Refined copper	316.5	1,562.4	494.5	355.1	1,485.8	527.6	391.2	1,701.9	665.8	399.2	1,525.6	609.0	392.5	1,467.0	575.8
Unrefined zinc	214.9	828.3	178.0	211.2	792.6	167.4	212.1	846.8	179.6	235.8	668.8	157.7	262.6	594.4	156.1
Unrefined lead	84.4	476.3	40.2	111.3	440.3	49.0	144.1	414.3	59.7	131.2	416.9	54.7	135.7	404.6	54.9
Chromium ores and concentrates	398.8	35.1	14.0	517.9	36.1	18.7	557.4	38.6	21.5	503.5	45.5	22.9	483.3	47.0	22.7
Iron ores and concentrates	6,448.0	24.4	157.4	3,460.6	11.0	38.2	6,140.2	9.7	59.6	7,384.7	11.5	84.8	9,780.6	12.2	119.1
Ferroalloys	564.6	389.1	219.7	774.0	291.1	225.3	793.9	353.9	281.0	822.6	383.1	315.1	950.6	358.5	340.8
Rolled ferrous metal	2,345.6	217.0	509.0	2,920.4	205.6	600.5	3,261.7	234.3	764.2	3,176.0	181.7	577.2	3,554.1	201.4	715.9
Yellow phosphorus	4.7	1,411.1	6.6	9.7	1,061.9	10.3	12.7	911.3	11.6	19.1	816.8	15.6	31.3	907.3	28.4
Grain	2,896.7	100.8	292.1	3,814.9	81.5	311.0	5,612.4	88.4	496.2	3,309.0	103.3	341.9	4,354.6	80.5	350.5
Cotton fiber	50.8	1,045.3	53.1	58.3	795.9	46.4	90.2	945.7	85.3	95.5	886.9	84.7	139.0	752.5	104.6
Wool	8.4	642.9	5.4	17.2	424.4	7.3	10.6	450.3	4.6	9.0	544.4	4.9	7.9	607.6	4.8
Natural gas (In millions of cubic meters)	2,305.7	9.8	22.6	4,251.7	5.9	25.0	5,213.7	7.2	37.5	5,538.5	14.3	79.1	10,437.3	20.6	215.3
Others	...	...	1,199.6	...	...	1,186.7	...	...	1,470.8	...	...	1,492.7	...	...	1,507.9
Total custom exports			5,334.1			5,871.6			8,812.2			8,646.9			9,709.1
Operations not included in customs statistics			12.6			8.8			191.4			311.6			320.4
Shuttle exports			422.3			387.5			464.5			277.6			334.2
Total exports			5,768.9			6,267.9			9,468.1			9,236.2			10,363.7

Source: Kazakhstan authorities, and staff estimates.

1/ U.S. dollars per ton except for natural gas which is in U.S. dollars per thousand cubic meters.

Table 27. Kazakhstan: Import Volumes, Prices and Values, 1998-2002.

	1998			1999			2000			2001			2002		
	Volume	Price 1/	Value (In millions of U.S. dollars)	Volume	Price 1/	Value (In millions of U.S. dollars)	Volume	Price 1/	Value (In millions of U.S. dollars)	Volume	Price 1/	Value (In millions of U.S. dollars)	Volume	Price 1/	Value (In millions of U.S. dollars)
Customs imports															
Crude oil and gas condensate (in thousands of tons)	2,260.6	152.1	343.8	528.2	16.1	8.5	1,009.6	79.2	79.9	2,336.9	99.4	232.2	2,631.1	87.6	230.6
Petroleum products (in thousands of tons)	843.8	195.3	164.8	627.8	93.4	58.6	1,151.7	216.7	249.6	1,298.4	227.4	295.3	1,060.0	176.9	187.5
Electricity (in millions of kilowatt-hours)	4,087.7	98.6	403.0	3,325.7	67.1	223.2	2,842.0	14.0	39.7	3,434.8	12.2	41.9	2,542.8	11.5	29.3
Natural gas (in millions of cubic meters)	3,056.0	112.9	345.0	2,930.1	105.9	310.3	4,218.9	28.3	119.6	4,279.5	34.5	147.7	8,178.3	29.4	240.1
Coal (in thousnds of tons)	1,240.9	30.0	37.2	1,078.9	18.6	20.1	662.8	18.3	12.1	203.7	23.1	4.7	199.0	26.1	5.2
Rolled ferrous metals (in thousands of tons)	41.4	24.4	1.0	44.3	17.1	0.8	50.6	521.7	26.4	72.8	357.1	26.0	78.1	443.0	34.6
Electrical equipment and mechanical tools	...	...	1,199.9	...	...	969.3	...	...	1,402.4	...	...	1,811.2	...	...	...
Foodstuffs	...	...	241.6	...	...	282.2	...	...	235.9	...	...	324.5	...	...	...
Nonfood consumer goods	...	...	356.0	...	...	410.8	...	...	427.6	...	...	467.8	...	...	...
Vehicles	...	...	434.0	...	...	629.9	...	...	969.1	...	...	619.9	...	...	793.3
Others	...	...	823.1	...	...	769.5	...	...	1,477.6	...	...	2,391.6	...	...	...
Total customs imports			4,349.6			3,683.1			5,040.0			6,362.8			6,490.5
Operations not included in customs statistics and coverage adjustments			97.8			175.8			139.4			...			...
Shuttle imports			2,574.1			2,106.2			2,197.6			1,503.1			1,613.2
Other corrections			-350.0			-320.1			-528.7			...			...
Grants			...			...			...			...			...
Unbalanced barter			114.8			84.1			-14.3			13.8			-0.4
Freight			-464.8			-404.2			-514.4			...			...
Total imports			6,671.5			5,645.0			6,848.3			7607.3			7,646.4

Sources: Kazakhstan 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 28. Kazakhstan: Geographical Distribution of Exports of Energy Products to the Baltics, Russia and Other States of the Former Soviet Union, 1998-2002

	1998	1999	2000	2001	2002
		(In thousands of metric tons)			
Oil and gas condensate	10,258.1	7,751.6	7,943.5	9,076.9	8,828.8
Azerbaijan	36.0	0.0	2.9	...	...
Belarus	115.2	0.0	0.0	...	...
Kyrgyz Republic	0.0	0.0	0.0	...	4.0
Lithuania	0.0	671.4	17.6	...	...
Russia	7,167.4	5,385.5	6,178.0	5346.4	6349.1
Ukraine	2,909.1	1,661.5	1,737.9	3730.5	2475.7
Estonia	30.4	33.2	7.1	...	...
		(In millions of cubic meters)			
Natural gas	2,305.7	3,776.2	4,934.3	4,784.6	9,378.6
Azerbaijan	...	...	...	...	1,910.8
Armenia	...	...	...	...	50.6
Georgia	30.0	127.4	271.7	10.0	73.1
Kyrgyz Republic	...	...	...	...	22.4
Moldova	...	...	...	...	35.0
Russia	2,275.7	3,648.8	4,662.6	4,774.6	7,167.1
Ukraine	...	...	...	...	80.3
Uzbekistan	...	...	...	...	39.3
		(In thousands of metric tons)			
Gasoline	24.3	39.8	59.2	91.1	102.4
Kyrgyz Republic	19.7	36.3	35.0	65.9	85.2
Russia	0.0	0.0	19.8	...	...
Tajikistan	4.6	2.0	4.4	24.2	15.9
Uzbekistan	0.0	1.5	0.0	1.0	1.3
Diesel fuel	55.8	50.8	19.9	189.2	48.9
Kyrgyz Republic	38.8	41.1	19.7	30.2	43.0
Russia	17.0	8.6	0.2	158.7	...
Tajikistan	...	1.1	...	0.2	4.6
Uzbekistan	...	...	...	0.1	1.3
Heavy furnace fuel	137.3	90.2	46.4	153.8	8.4
Kyrgyz Republic	42.2	32.7	0.0	11.2	8.4
Lithuania		56.9	20.4	...	...
Russia	83.8	0.6	25.0	126.5	...
Tajikistan		...	...	3.3	...
Ukraine	11.3	...	1.0	12.8	...
Coking coal	262.0	2.5	91.4	937.8	227.2
Russia	262.0	2.5	91.4	935.7	215.5
Uzbekistan	0.0	0.0	0.0	...	0.8
Ukraine	0.0	0.0	0.0	2.1	10.9

Source: Kazakhstan authorities.

Table 29. Kazakhstan: Geographical Distribution of Exports, 1998-2002

(In percent of total)

	1998	1999	2000	2001	2002
BRO Countries	42.2	29.5	27.7	31.2	33.3
Armenia	0.0	0.1	0.0	0.0	0.0
Azerbaijan	0.5	0.5	0.5	0.8	0.8
Belarus	0.4	0.2	0.2	0.1	0.4
Estonia	2.3	2.0	0.1	0.1	0.1
Georgia	0.1	0.1	0.1	0.0	0.1
Kyrgyz Republic	1.1	1.0	0.7	1.0	0.9
Latvia	0.3	0.4	0.8	0.6	0.5
Lithuania	0.2	1.6	0.2	0.1	0.1
Moldova	0.0	0.0	0.0	0.0	0.1
Russia	29.6	19.5	19.9	20.2	25.1
Taiikistan	0.8	0.7	0.6	0.7	0.3
Turkmenistan	0.2	0.2	0.1	0.2	0.6
Ukraine	4.5	2.2	2.9	5.7	3.1
Uzbekistan	2.2	1.1	1.5	1.7	1.2
Non-BRO Countries	57.8	70.5	72.3	68.8	66.7
Austria	0.1	0.0	0.0	0.0	0.3
Afghanistan	0.1	0.2	0.7	0.2	0.2
Belgium	0.4	0.6	0.1	0.0	0.3
China	7.2	8.0	7.6	7.6	8.2
Czech Republic	0.7	0.1	0.1	0.0	0.4
Finland	1.6	0.7	0.8	0.6	0.7
Greece	0.0	0.0	0.0	0.0	0.3
Germany	4.9	6.0	6.3	5.9	4.8
Hungary	0.1	0.1	0.0	0.1	0.3
Italy	9.3	7.3	10.4	11.2	7.0
Japan	0.9	0.4	0.1	0.2	1.1
Netherlands	5.0	2.8	2.6	1.7	1.3
Oman	0.0	0.0	0.0	0.0	0.0
Poland	0.8	1.6	0.6	1.9	2.4
South Korea	0.7	0.6	0.4	0.5	1.0
Switzerland	5.9	5.6	5.1	4.7	5.2
Sweden	0.1	0.4	0.4	0.1	0.4
Thailand	0.1	0.9	0.2	0.0	0.1
Turkey	1.7	0.6	0.7	0.9	1.6
United Kingdom	8.8	3.2	2.6	3.4	2.4
United States	1.3	1.4	2.4	1.8	3.6
Yugoslavia	0.0	0.0	0.0	0.0	0.0
Other countries	8.0	29.9	31.2	28.0	25.1

Source: Kazakhstan authorities.

Table 30. Kazakhstan: Geographical Distribution of Imports, 1998-2002

(In percent of total)

	1998	1999	2000	2001	2002
BRO Countries	48.4	44.2	54.6	52.1	46.9
Armenia	0.0	0.0	0.0	0.0	0.0
Azerbaijan	0.2	0.1	0.2	0.2	0.2
Belarus	1.4	1.0	0.8	0.7	0.8
Estonia	0.1	0.0	0.0	0.0	0.1
Georgia	0.1	0.0	0.1	0.1	0.1
Kyrgyz Republic	1.2	0.9	0.6	0.5	0.5
Latvia	0.3	0.1	0.1	0.1	0.2
Lithuania	0.4	0.2	0.2	0.1	0.1
Moldova	0.1	0.1	0.1	0.1	0.1
Russia	39.6	37.0	48.4	45.4	39.1
Tajikistan	0.1	0.1	0.1	0.0	0.0
Turkmenistan	0.6	0.5	0.9	1.2	1.1
Ukraine	2.1	1.6	1.6	2.4	3.3
Uzbekistan	2.2	2.5	1.4	1.3	1.3
Non-BRO Countries	51.6	55.8	45.4	47.9	53.1
Austria	0.8	0.5	0.4	0.5	0.7
Canada	0.9	0.4	0.5	0.6	0.7
China	1.3	2.2	3.0	2.7	4.7
Cuba	0.6	0.5	0.6	0.1	0.3
Czech Republic	1.2	0.7	0.7	0.7	0.8
Finland	1.6	1.2	1.1	1.1	1.1
Germany	8.4	7.7	6.7	7.4	8.7
Hungary	1.2	1.0	0.5	0.5	0.6
India	0.8	0.8	0.9	0.8	0.8
Italy	2.0	2.9	3.1	4.2	3.3
Japan	1.6	3.2	2.1	2.2	2.5
Poland	1.1	1.7	1.2	0.9	1.1
Switzerland	1.5	1.1	1.1	1.0	0.9
Sweden	0.4	0.7	0.5	0.6	0.9
United Kingdom	5.1	6.2	4.4	3.9	3.9
United States	6.1	9.4	5.5	5.4	7.0
Yugoslavia	0.0	0.0	0.0	0.0	0.0
Other countries	17.0	15.5	13.2	15.3	15.1

Source: Kazakhstan authorities.

Table 31. Kazakhstan: Breakdown of Foreign Direct Investment by Country of Origin, 1998-2002

(In percent of total)

Country	1998	1999	2000	2001	2002 9 months
Canada	2.4	0.5	5.3	11.7	3.5
China	7.0	2.7	3.2	5.0	1.9
Germany	7.0	2.7	3.2	5.0	1.9
Iceland	0.3	0.0	0.0	0.0	0.0
Indonesia	4.5	0.0	2.5	1.1	0.0
South Korea	2.6	1.6	2.1	1.6	0.8
Switzerland	3.8	1.3	0.7	0.5	13.2
Turkey	7.2	1.7	1.1	1.4	1.5
United Kingdom	7.0	8.6	16.9	14.2	15.9
United States	32.4	48.9	36.1	34.8	25.9
Others	25.8	32.1	29.1	24.7	35.4

Source: Kazakhstani authorities.

Table 32. Kazakhstan: Breakdown of Foreign Direct Investment by Industry, 1998-2002

(In percent of total)

Sector	1998	1999	2000	2001	2002 9 months
Agriculture, Hunting and Related Services	0.3	0.0	0.0	0.1	0.1
Mining and Quarrying	44.2	75.7	73.0	72.7	53.5
Coal and lignite; extraction of peat	0.5	0.1	1.0	0.0	0.3
Crude petroleum and natural gas; service activities incidental to oil and gas extraction, excluding surveying	41.1	74.1	72.0	72.6	52.7
Mining of uranum, metal and thorium ores	2.6	1.6	0.0	0.1	0.5
Manufacturing, of which	8.3	9.1	9.0	7.2	18.7
Farm products	3.7	4.2	2.0	2.0	1.7
Coke, refined petroleum products and nuclear fuel	0.0	0.9	1.0	1.6	2.0
Chemicals and chemical products	0.4	0.3	0.0	0.2	0.6
Basic metals, fabricated metal products, except machinery and equipment	4.0	1.9	4.0	1.3	13.2
Office, accounting and computing machinery; electrical machinery and apparatus; radio, television and communication equipment and apparatus; medical, precision and optical instruments, watches and clocks	0.2	1.5	2.0	1.6	0.7
Electricity, Gas and Water Supply	7.0	1.2	1.0	0.8	0.5
Construction	0.2	0.1	0.0	1.0	1.1
Wholesale and Retail Trade, Repair of Motor Vehicles, Motorcycles and Personal and Household Goods	2.3	1.3	2.0	1.5	2.6
Hotel and Restauraut	1.1	0.3	0.0	0.6	0.3
Transport, Storage and Communications, of which	0.6	1.1	3.0	3.6	2.6
Land	0.2	0.8	3.0	3.0	1.5
Air	0.0	0.0	0.0	0.1	0.1
Post and telecommunications	0.3	0.2	0.0	0.3	0.1
Financial Intermediation	7.1	2.1	1.0	1.1	0.3
Real estate, Renting and Business Activities	28.9	8.8	9.0	11.3	20.1
Public Administration, Education, Health and Social Work	0.1	0.1	0.0	0.2	0.3

Source: National Bank of Kazakhstan.

Table 33. Kazakhstan: Stock of External Debt, 1998-2002

(In millions of U.S. dollars)

	1998	1999	2000	2001	2002
Total external debt	9,845	12,034	12,570	14,950	17,377
Total public external debt	3,926	4,044	3,979	3,800	3,501
IMF Credit	629	454	0	0	0
Government and government guaranteed debt	3,297	3,590	3,979	3,800	3,501
Loans to the government	2,430	2,896	3,284	3,262	2,944
Multilateral Creditors	1,239	1,472	1,508	1,549	1,568
World Bank	927	1,106	1,122	1,164	1,175
EBRD	28	49	45	41	36
ADB	284	307	329	331	328
Islamic Development Bank	0	10	11	13	29
Bilateral Creditors	641	774	776	713	435
Germany (KfW)	4	5	7	9	17
Korea (EXIM bank)	0	5	7	5	4
Japan (JEXIM)	262	262	0	0	0
JBIC	0	0	450	379	401
Austria	5	4	3	3	3
Sweden	3	3	3	3	3
OECF/JCB	94	191	0	0	0
Foreign commercial banks and companies	0	0	294	315	292
Other 1/	274	306	12	0	0
Eurobonds	550	650	1,000	1,000	650
Loans guaranteed by the government (incl. Medium and long term trade credits	866	694	695	538	557
Non-guaranteed External Debts	5,919	7,990	8,590	11,098	13,674
Intra-company loans	3,372	6,162	6,783	8,608	10,264
Liabilities to unaffiliated creditors	2,547	1,828	1,808	2,490	3,410
o/w short term	1,394	1,758	984	1,102	...
Memorandum items:					
Government and government guaranteed debt by creditor (in percent)					
Multilateral creditors, excluding IMF	38	41	38	41	45
Bilateral creditors	19	22	20	19	21
Eurobonds	17	18	25	26	19
Loans guaranteed by the government	26	19	17	14	16

Sources: Ministry of Finance, NBK and Fund staff estimates.

1/ Debt guaranteed by the government and assumed as government debt as of the beginning of 1997, plus debt of commercial banks and firms not included elsewhere.