The Machinery Industry In Kazakhstan: Economic Conditions and Policies

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THE MACHINERY INDUSTRY IN KAZAKHSTAN

Economic Conditions and Policies

Preliminary Draft Report

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Preface

This report represents the collaborative efforts of the national and international specialists in policy issues affecting the machinery industry in Kazakhstan. It provides background material on the economic conditions and policies affecting the machinery industry for the Master Plan Study for the Development of the Machinery Industry in the Republic of Kazakhstan.

The Study Team benefited from contributions from many government officials and numerous individuals in the private sector, as well as the direction provided by the members of the Steering Committee, staff members of the Ministry of Energy, Industry and Trade and numerous other ministries and committees of the Government of the Republic of Kazakhstan, members of the Japan International Cooperation Agency and the Embassy of Japan.

The present report was prepared under the direction of Mr. Teruhiko Wakabayashi, Team Leader. Ms. Nailya Kaliakbarovna Abdymoldaeva, Director of Policy and Legislation of the Ministry of Energy, Industry and Trade was the Government counterpart for the study. Ms. Abdymoldaeva's contributions to the preparation of the trade-related material of this report and her coordination of work with other branches of the Government are gratefully acknowledged. The report also benefited from the excellent translation services provided by Ms. Galina Aleksandrovna Rezakova and other members of the local staff under the direction of Mr. Vasily Ilyich Beshun.

The challenges of presenting a comprehensive analysis of the policies and regulatory issues affecting the machinery industry in Kazakhstan were met by the collaborative efforts of all of these individuals. Nevertheless, the information and recommendations contained herein are the responsibility of the author and do not necessarily reflect the views of the Japan International Cooperation Agency, the Ministry of Energy, Industry and Trade of the Government of Kazakhstan, or the parties interviewed during the course of the study.

CONTENTS

TABLES

FIGURES

BOXES

ACRONYMS

ADB	Asian Development Bank
ASF	Agricultural Support Fund
CAAEF	Central Asian-American Enterprise Fund
CASE	Central Asian Stock Exchange
CCAB	Coca-Cola Almaty Bottlers
cif	Cost-insurance-freight
CIS	Commonwealth of Independent States
CLFEC	Commodity List of Foreign Economic Activity
DEF	Defense Enterprise Fund
EBRD	European Bank for Reconstruction and Development
EPZ	Export processing zone
ERP	Effective rate of protection
EXIM	Export-Import Bank
FDI	Foreign Direct Investment
fob	Free on board
FSU	Former Soviet Union
GATS	General Agreement on Trade in Services
GDP	Gross domestic product
GOK	Government of Kazakhstan
GSP	Generalized System of Preferences
HS	Harmonized System
IBRD	International Bank for Reconstruction and Development
IFC	International Finance Corporation
IMF	International Monetary Fund
ITC	International Trade Center
JICA	Japan International Cooperation Agency
LIT	life inheritable tenure
MFN	Most-favored nation (principle)
MEIT	Ministry of Energy, Industry and Trade
NBK	National Bank of Kazakhstan
NIS	Newly independent states
NRP	Nominal rate of protection
NTM	Non-tariff measures
ODA	Official donor assistance
OECF	Overseas Economic Cooperation Fund
OPIC	Overseas Private Investment Corporation
PRC	Chinese National Oil Company
PSA	Production sharing agreement
RCA	Revealed comparative advantage
SEZ	Special economic zone
SITC	Standard International Trade Classification
SME	Small and medium enterprises
SOE	State-owned enterprise
TCO	Tengizchevroil

TMCC	Tselinny Mining and Chemical Complex
UN	United Nations
USAID	United States Agency for International Development
USIS	United States Information Service
USTDA	United States Trade and Development Agency
VAT	Value added tax
WCO	World Customs Organization
WTO	World Trade Organization

EXECUTIVE SUMMARY

PART I

BACKGROUND AND COVERAGE

1. INTRODUCTION

Contents

1.1 Terms of Reference

The present report addresses the economic conditions, policies and regulatory issues affecting the machinery industry in Kazakhstan. Its coverage is based on the Inception Report of the Master Plan Study for the Development of the Machinery Industry in the Republic of Kazakhstan (JICA, 1997), as well as discussions held by the Study Team in Almaty during 6-10 November 1997, and the recommendations made by the Steering Committee on 11 November 1997.

The resulting terms of reference are as follows:

- Review the range of institutions and policies affecting the Kazakhstan economy in general, and those influencing the machinery industry in particular.

- Consider the socioeconomic conditions underlying the development of the machinery industry in the following areas:

  - transition to a market-oriented economy
  - macroeconomic conditions and policies
  - banking and finance
  - trade and the balance of payments
  - investment
  - privatization
  - legislative and institutional framework
  - national development plan

- Support the formulation of the comprehensive master plan for the development of the machinery industry by identifying measures that need to be taken by the Government of Kazakhstan (GOK) to provide a conducive enabling environment for the machinery industry.

The present report forms part of the master plan study for the development of the machinery industry in the Republic of Kazakhstan under the joint sponsorship of the Japan International Cooperation Agency (JICA) and the Ministry of Energy, Industry and Trade of the Republic of Kazakhstan. The sequencing of activities leading up to the master plan in the area of economic conditions, policies and regulatory issues affecting the machinery industry is as follows:

1. First Field Study (6 November – 16 December 1997): Review and analysis of economic factors influencing conditions in the Kazakhstan economy, with particular emphasis on those factors influencing the machinery industry.

2. First Home-Country Study (second half of January 1998): Preparation of the Progress Report based on the findings of the study team during the first field study.

3. Second Field Study (two-week period between mid-February and end-of-March 1998): Gather supplemental information on the economic conditions, policies and regulatory issues.

4. Second Home-Country Study (March 1998): Preparation of the preliminary report on the machine industry development plan.

5. Third Field Study (one-month period between mid-June and end-of-July 1998): Review of changes that have taken place since the first field study.

6. Third Home-Country Study (August 1998): Preparation of the draft final report on the master plan for the machinery industry

7. Fourth Field Study (mid-September 1998): Presentation and discussion of the draft final report of the master plan.

8. Fourth Home-Country Study (August 1998): Revision and translation of the draft final report.

1.2 Organization of the Report

The report consists of four major parts, plus an executive summary and two annexes:

- Part I: Background and Coverage

  This part presents the terms of reference and plan of the report.

  - Chapter 1: Introduction

    The chapter describes the report in the context of the master plan study for the development of the machinery industry in Kazakhstan under the joint sponsorship of JICA and the Ministry of Energy, Industry and Trade of the Government of Kazakhstan. Box 1.1 contains basic information on the country.

- Part II: Overview of the Economy

  This part contains an overview of the economy and the sectors related to the machinery industry.

  - Chapter 2: The Process of Economic Transition

    Kazakhstan's transition from a centrally planned system to a market economy is shown to have made more progress under the Government's macroeconomic policies aimed at economic stability than in the liberalization policies aimed at structural reforms, for example, through the removal of relative-price distortions and the reduction of state intervention.

  - Chapter 3: Review of the Machinery Industry

    This chapter analyzes production, trade and investment characteristics of the machinery industry, as well as agricultural and mining activities supported by the industry, and the country's transportation and distribution characteristics.

- Part III: Trade, Investment and Financing

  This part examines trade and investment patterns of the machinery industry within the context of agricultural and mineral processing activities, and it analyzes the availability of financing for those sectors.

  - Chapter 4: Trade Policies and Performances

    Trade policies are changing Kazakhstan's trade patterns and are thereby producing dynamic changes in the country's comparative advantage in the production of agroindustrial and mineral products. The results of recent trade arrangements, including those being negotiated with the World Trade Organization (WTO) are likely to profoundly affect the country's regional and international trade patterns.

  - Chapter 5: The Investment Environment

    While investments in the machinery industry have been very limited, the inflow of capital into other sectors has been growing rapidly. The present chapter describes those patterns and the policies affecting foreign direct investment, and it analyzes key issues affecting investment patterns, including those related to taxation, regulatory and procedural issues, and costs of doing business in the machinery industry.

- Chapter 6: Financing Conditions
  The chapter examines constraints on the availability of financial capital inhibiting investments and the ability of private enterprises to operate. It also examines the changing structure of financing and possible channels for accessing capital.

- Part IV: Privatization, Regulations, and Institutions

  This part examines the progress made in privatization, regulatory issues affecting the machinery industry, and the changing public and private institutional framework of the economy.

  - Chapter 7: Privatization Policies

    Privatization in large-scale enterprises has lagged behind small-scale and mass privatization initiatives, which has slowed the restructuring process in the machinery industry. This chapter examines these patterns and shows how they have affected investment activities in the industry.

  - Chapter 8: The Regulatory Environment

    This chapter examines key legislation affecting the machinery industry and its related agroindustrial and mineral sectors, and it reviews the legislative reforms that have been completed and the remaining regulatory reforms that could advance the development of this industry.

  - Chapter 9: The Institutional Framework

    The changing Government structure could have a profound effect on the direction of key productive sectors of the economy, including the machinery industry, and the present chapter examines those changes and their implications. It also reviews machinery-related institutions and their possible role in the master plan for the industry.

  - Chapter 10: Donor Assistance Programs

    Kazakhstan has received widespread support of its economic restructuring program. The present chapter examines recent initiatives in the key areas affecting the machinery industry and it analyzes their possible effects on the overall restructuring of the industry.

- Part V: Conclusions and Recommendations

  This part reviews the progress of macroeconomic and structural adjustment measures aimed at liberalizing the economy within a stabile environment. It also provides recommendations on policy, regulatory and institutional changes that would support the restructuring of the machinery industry and promote investment in the industry.

  - Chapter 11: Policy and Institutional Recommendations

    After reviewing the present state of the macroeconomic and structural policy reforms in the economy, the present chapter examines the broad range of policy initiatives that would support the modernization of the machinery industry in the areas of trade, investment, finance, regulations, privatization.

- The Annex describes the meetings held during the first field trip.

- The Statistical Appendix contains basic statistics.

- The References presented at the end of the report list the documents and studies used in the preparation of this report.

Box 1.1
Basic Information on Kazakhstan

Geography and Natural Resources:

Area: *total area:* 2,717,300 sq km, or 7 times larger than Japan; *land area:* 2,669,800 sq km.

Land boundaries: *total:* 12,012 km; *border countries:* China 1,533 km, Kyrgyzstan 1,051 km, Russia 6,846 km, Turkmenistan 379 km, Uzbekistan 2,203 km.

Coastline: 0 km (landlocked) Kazakhstan borders the Aral Sea (1,015 km) and the Caspian Sea (1,894 km).

Climate: continental, cold winters and hot summers, arid and semi-arid.

Terrain: extends from the Volga to the Altai Mountains and from the plains in western Siberia to oasis and desert in Central Asia.

Natural resources: major deposits of petroleum, coal, iron ore, manganese, chrome ore, nickel, cobalt, copper, molybdenum, lead, zinc, bauxite, gold, uranium.

Land use: *arable land:* 15%; *meadows and pastures:* 57%; *forest and woodland:* 4%; *other:* 24%.

(continued)

Box 1.1 (continued)

Economy

GDP: purchasing power parity - $46.9 billion (1995 est.); real GDP growth rate: 2.0% (1997 est.); per capital GDP: $1,385 (1997 est.).

GDP composition by sector (1996): *agriculture:* 12.8%; *industry:* 21.3%.

Inflation rate (consumer prices): 17.5% (1997 est.)

Labor force: 7.356 million; *by occupation:* industry and construction 31%, agriculture and forestry 26%, other 43% (1992).

Industries: oil, coal, iron ore, manganese, chromite, lead, zinc, copper, titanium, bauxite, gold, silver, phosphates, sulfur, iron and steel, nonferrous metal, tractors and other agricultural machinery, electric motors, construction materials; much of industrial capacity is shut down and/or is in need of repair.

Industrial production growth rate: (second quarterly 1997 change) -2.4%.

Agriculture: grain (mostly spring wheat), cotton, wool, meat.

Exports: $6.2 billion (1996); *commodities:* oil, ferrous and nonferrous metals, chemicals, grain, wool, meat, coal; *major partners:* Russia, Ukraine, Uzbekistan.

Imports: $4.3 billion (1996); *commodities:* machinery and parts, industrial materials, oil and gas; *major partners:* Russia and other former Soviet republics, China.

Foreign Investment $1.172 billion (1996).

Major Investor Countries: Canada, France, Germany, Great Britain, Italy, Japan, NIS Republics, Norway, South Korea, Turkey, USA.

Foreign Investment Breakdown: metallurgy (50%); oil and gas (35%); high technology (3%); agriculture/food processing (2%); telecommunications (3%); banking services (3%); consumer goods (2%).

Electricity: *capacity:* 17,380,000 kW; *production:* 65.7 billion kWh (1995 est.).

Currency: national currency, the tenge, introduced on 15 November 1993.

Exchange rates: 75 tenge per US$ (average 1997 est.).

(continued)

Box 1.1 (continued)

Transportation

Railways:
total: 13,841 km in common carrier service; does not include industrial lines.
broad gauge: 13,841 km 1.520-m gauge (3,299 km electrified).

Highways:
total: 87,873 km public roads; *paved:* 82,568 km; *unpaved:* 5,305 km (1994).

Waterways: 4,002 km on the Syrdariya River and Irtis River.

Pipelines: crude oil 2,850 km; refined products 1,500 km; natural gas 3,480 km (1992).

Ports: Aktau (Shevchenko), Atyrau (Guriev), Oskemen (Ust-Kamenogorsk), Pavlodar, Semey (Semipalatinsk); Airports: 352 (total).

People

Population: 16,916,463 (July 1996 est.)

Age structure: *0-14 years:* 30%; *15-64 years:* 63%; *65 years and over:* 7% (1996).

Population growth rate: -0.15% (1996 est.).

Birth rate: 19.02 births/1,000 population (1996 est.).

Death rate: 9.65 deaths/1,000 population (1996 est.).

Infant mortality rate: 63.2 deaths/1,000 live births (1996 est.).

Life expectancy at birth: *total population:* 64.09 years; *male:* 58.56 years; *female:* 69.9 years (1996 est.).

Ethnic divisions: Kazak (Qazaq) 41.9%, Russian 37%, Ukrainian 5.2%, German 4.7%, Uzbek 2.1%, Tatar 2%, other 7.1%.

Religions: Muslim 47%, Russian Orthodox 44%, Protestant 2%, other 7%.

Languages: Kazakh is the official language spoken by over 40% of population, Russian spoken by two-thirds of population.

(continued)

Box 1.1 (continued)

Government:

Name of country: *conventional long form:* Republic of Kazakhstan; *conventional short form:* Kazakhstan; *former:* Kazakh Soviet Socialist Republic.

Type of government: republic.

Capital: Akmola (new); Almaty ('second capital').

Administrative divisions: 14 oblasts and 1 city (Almaty) - Akmola Oblast, Aktobe Oblast, Almaty Oblast, Atyrau Oblast, East Kazakhstan Oblast, Karaganda Oblast, Kyzylorda Oblast, Kostanai Oblast, Mangystau Oblast, North Kazakstan Oblast, Pavlodar Oblast, South Kazakhstan Oblast, West Kazakhstan Oblast, Zhambyl Oblast.

Independence: 16 December 1991 (from the Soviet Union).

Constitution: adopted 28 January 1993; amended in April 1995 and August 1995.

Legal system: based on civil law system.

Executive branch: *Chief of state:* President Nursultan A. Nazarbayev (since 22 February 1990).

Legislative branch: bicameral Parliament

Judicial branch: Supreme Court

Environment: Radioactive or toxic chemical sites associated with its former defense industries and test ranges throughout the country pose health risks for humans and animals; industrial pollution is severe in some cities; because the two main rivers which flowed into the Aral Sea have been diverted for irrigation, it is drying up and leaving behind a harmful layer of chemical pesticides and natural salts; pollution in the Caspian Sea; soil pollution from overuse of agricultural chemicals and salinization from faulty irrigation practices.

Source: Central Intelligence Agency (1997) and updates by the author.

PART II

OVERVIEW OF THE ECONOMY

2. THE PROCESS OF ECONOMIC TRANSITION

Contents:

2.1 Structural Reforms and Liberalization Initiatives

Under the Soviet Union the economy of Kazakhstan was transformed from a land of pastoral nomads into one with large-scale and diverse industries, and advanced crop-growing and animal husbandry. The transformation was accomplished by the Soviet system's ability to direct massive amounts of resources toward large projects for economic and social development. The transportation infrastructure was of special importance to Kazakhstan because of its vast territory. Over 100,000 kilometers of roads and a rail network of 14,500 kilometers were built during the Soviet era. The country became a large producer of non-ferrous and ferrous metals, coal, petroleum, grain and animal husbandry products. After the Virgin Lands campaign in the second half of the 1950s, Kazakhstan also became a major producer of cereals for the Soviet Union. The country's share in the production of wheat in the Soviet Union exceeded 30 percent.

During the 1970s and early 1980s Kazakhstan's growth began to stagnate because of rigidities in the planning system, and industrial production decreased to one-third the rate of growth of earlier years. Before a reorganization could take place, *perestroika* (restructuring) was launched in the late 1980s without a clear strategy. The results were disappointing and efforts to improve the situation were undertaken in 1990. The Supreme Council of the Soviet Union examined the issue of transition to a regulated market economy, concluding that each republic should begin developing its own concepts and models of economic transformation consistent with its individual circumstances. However, implementation of these decisions was superseded by the dramatic political events in the Soviet Union of August and December 1991 when the leaders of Russia, Belarus and the Ukraine agreed to dissolve the Soviet Union and Kazakhstan gained its independence.

After more than 70 years of operating under a centrally planned economy where the institutions and a system of incentives were far removed from those in market economies, the Kazakh socio-economic system has had to undergo extraordinary adjustments. The initial conditions for the transition were characterized by large internal and external macroeconomic imbalances. Despite the chaos that followed the change and the size and socio-cultural diversity of the country, the GOK has made considerable progress toward a

cohesive market economy. It introduced a comprehensive structural reform program in 1993 to move the economy from a centrally planned system to a market economy. During the early years, the reforms were directed at price liberalization, privatization, and the introduction of a national currency. In general, however, the two major channels of reform have been (i) macroeconomic policies aimed at economic stability through fiscal, monetary and exchange rate policies, and (ii) liberalization policies aimed at structural reform and growth.

Notwithstanding the comprehensive reform measures and the large official donor assistance (ODA) support, the economy experienced a difficult economic transition. The movement from administered prices to more flexible market-determined prices brought about fundamental changes in the way that businesses and households responded to economic conditions. Under the central planning system that prevailed before 1992, prices had no allocative function. The introduction of price liberalization measures improved the allocation of resources throughout the economy, but it created assimilation difficulties for many enterprises in the machinery industry and related activities, particularly in terms of product development and marketing strategies.

Between 1991 and 1995 real GDP declined by a cumulative 50 percent (see Figure 2.1), a phenomenon that was common to most former Soviet Union (FSU) countries. At the same time, unemployment and underemployment grew through early retirement, unpaid leave, late or partial payment of wages, and three-day workweeks. By 1995 Kazakhstan was in a position similar to other economies in transition (see Table 2.1).

Several factors associated with both external and internal adjustments contributed to the output decline:

- The loss of access to resource transfers, first from the Soviet Union and then from Russia, representing between 20 and 25 percent of Kazakhstan's gross domestic product (GDP) (World Bank, 1997a).

- The severe decline in FSU trade and Kazakhstan's heavy reliance on external trade, whose value represented 40 to 50 percent of the country's GDP, was dominated by inter-FSU trade, and Russia absorbed 60 percent of the country's total exports.

- The breakdown of the distribution system of the FSU, whereby three-fourths of Kazakhstan's exports were in the form of raw materials to FSU countries, and imports were mainly in the form of consumer goods.

- Large output declines in Kazakhstan's industrial products in the form of heavy machinery and machine tools, rolled metals, and construction materials as a result of inefficient production processes, poor maintenance and management, outdated technologies, frequent supply disruptions and the growth of inter-enterprise arrears, all of which contributed to high production and distribution costs and low output volumes.

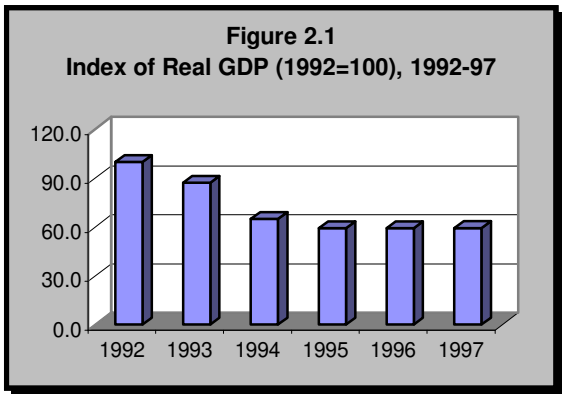
Table 2.1
Comparative National and Regional Statistics for Key Socio-Economic Indicators, 1995

	Kazakhstan	Kyrgyz Republic	Russia	China	East Asia	South Asia
Macroeconomic Indicators						
GDP growth (annual %)	-8.9	-6.3	-4.0	10.7	9.6	5.8
Gross domestic investment (% of GDP)	22.0	15.7	25.0	40.5	39.0	23.2
Private consumption (% of GDP)	65.1	67.4	58.4	45.7	51.3	69.5
General gov't consumption (%GDP)	15.5	22.6	15.9	12.2	11.3	10.8
Inflation, consumer prices (annual %)	176.3	na	196.7	16.6	na	na
Agriculture						
Land use, cropland (% of land area)	13.1	7.4	7.8	10.3	12.7	44.6
Land use, perm. pasture (% land area)	70.0	44.3	5.2	42.9	16.2	10.4
Irrigated land (% of arable land)	6.1	70.4	4.1	51.5	9.8	34.1
Agriculture, value added (% of GDP)	12.3	43.7	na	20.6	18.4	30.0
Machinery and Industrial Activity						
Farm machinery, tractors(1000 units) 1/	210	23	1,148	710	5,629	1,585
Industry, value added (% of GDP)	23.5	23.9	na	48.4	44.2	27.0
Manufacturing, value added (% GDP)	6.2	na	na	37.6	31.9	17.0
Transportation and Communications						
Roads, paved (%)	68.4	91.0	78.8	89.7	na	na
Telephone mainlines (per 1,000 people)	118.0	na	169.9	33.9	33.9	12.9
Trade and Balance of Payments						
Trade (% of GDP)	68.8	58.4	44.0	40.4	na	na
Export growth, value (annual %)	58.2	20.3	17.4	22.9	na	na
Exports of goods and services (% GDP)	34.5	26.3	22.3	21.0	29.5	13.9
Import growth, value (annual %)	38.5	32.9	6.7	11.6	na	na
Imports of goods and services (% GDP)	37.1	32.1	21.7	19.4	30.9	17.6
Current account balance (% of GDP)	-2.4	-9.5	2.8	0.2	na	na
Investment						
FDI, net inflows (% of GDP)	1.3	0.5	0.6	5.1	na	na
FDI, net inflows (mil.US$)	284	15	2,017	35,849	na	na
Finance						
Dom. credit by bank sector (% GDP)	9.5	na	20.7	90.9	na	na
Credit to private sector (% of GDP)	7.1	na	7.6	88.6	na	na
Population and Human Resources						
Labor force growth, total (annual %)	0.5	1.2	0.0	1.1	1.4	2.1
Population growth (annual %)	-1.2	0.9	-0.1	0.8	1.1	1.9
Death rate, crude (per 1,000 people)	9.1	8.2	14.7	6.6	6.9	9.4
Life expectancy at birth (years)	68.8	67.6	64.8	69.4	68.1	61.3

1/ Data for 1994.
Source: World Bank (1996a).

- The severe fiscal adjustment that resulted from the rapidly shrinking revenue base, which translated into a virtual halt of enterprise support, and a drastic reduction in pension payments and other operation and maintenance expenditures of public services.

Price liberalization was completed by the end of 1995, except for state services and natural monopolies such as the power sector, oil and gas pipelines, and communications. Significant trade liberalization measures were also undertaken during the year, including the elimination of import and export licensing for most goods and the removal of export quotas. However, inflation remained high, output continued to decline, and a number of key indicators were substantially below those of other regions (see Table 2.1). For example, overall investment was low, particularly that originating from foreign sources, as was the amount of bank credit being channeled to the private sector. Government consumption, in contrast, remained high.



To alleviate the economy's worsening situation, the Government introduced a revised package of structural reforms in mid-1995. The Medium-Term Program for Deepening Reforms aimed to promote sustainable growth through privatization. The resulting economic stabilization measures, coupled with fundamental structural reforms, brought about an improvement in the market performance of the country. The majority shares of holding company subsidies were offered in mass privatization of state-owned enterprises, and many smaller subsidies were auctioned on the local level. Most state farms have since been privatized, and oil, gas and mineral reserves have been awarded to foreign investors.

The ultimate economic objective of the plan was the establishment of a self-sustained economic growth based on an open market economy, driven by high levels of foreign investment and domestic savings. As an extension of the stabilization policies adopted during the last three years, the new macroeconomic objectives aimed to further lower inflation, reduce the fiscal deficit, and strengthen the domestic currency. The focus of the plan, however, was the development of the real sectors of the economy, and the strengthening of institutions to support that expansion. Institutional strengthening mechanisms included improved ownership rights and the development of the legal system to protect those rights and those established under contract law. As part of that process, privatization was to be completed in the ago-industrial sector. The plan recognized the slow adjustment of agriculture and some other sectors to market-oriented activities. To counter this trend, efforts were to be made to revitalize those sectors by improving managerial skills and reducing corruption.

Table 2.2
Key Macroeconomic Indicators, 1994-97

	1994	1995	1996	1997[c/]
GDP (million US$)	12.6	16.3	20.7	22.9
Per Capita (US$)	757	985	1,252	1,385
Real GDP growth rate (%)	-25.4	-8.9	0.3	2.0
Industry Value Added (% of GDP)	na	23.5	21.3	na
Agriculture Value Added (% of GDP)	na	12.3	12.8	na
Inflation (%) [a/]	1,258	247	39.7	17.5
Average Exchange Rate Tenge/US$	35.5	61.7	71.0	75.0
Real Interest rates [b/]	na	13.2	7.6	15.6
State Budget Deficit (% to GDP)	3.9	3.6	2.8	2.8
Export (million US$)	3,285	5,197	5,894	6,411
Import (million US$)	4,205	5,419	6,296	6,995
Trade Balance (million US$)	-920	-222	-402	-584

Note: e – Estimate
[a/] Based on consumer prices.
[b/] Refinancing rates adjusted for inflation. Data for 1997 based on January to May information.
[c/] Estimate.
Sources: Government of Kazakhstan, Centre for Economic Reform; also derived from National Bank of Kazakhstan and National Statistical Agency.

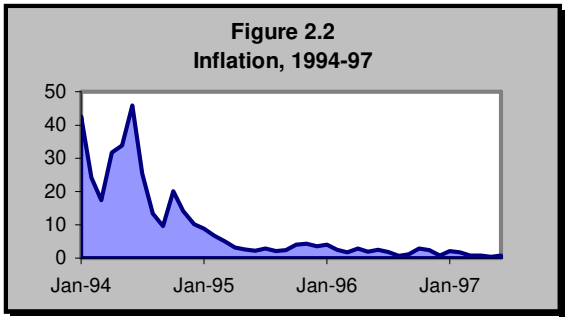
By 1996 the downward trend in the real value of GDP reversed itself and rose for the first time since the country's independence, albeit by a modest amount (see Table 2.2). However, the fall in industrial output during the first half of 1997 has raised doubts about the sustainability of economic growth. To strengthen the country's growth and development, the Government recently introduced the *Kazakhstan – 2030* plan, under which foreign investment is to be encouraged, particularly in the exploitation and processing of natural resources, infrastructure, communications and information technology. The new State Committee on Investment is charged with ensuring that appropriate policies are developed for foreign direct investment. The aim of the investment strategy it to move the country from a labor and resource-intensive economy to one based on capital and technology-intensive activities. In that way, it is expected that the share of agriculture and mining in the overall production of the economy will be reduced in favor of processing and high value-added activities.

To broaden the economic base and reduce the country's vulnerability to external shocks, a number of non-energy related production activities are to be developed, including machinery, light industries, food industries, infrastructure, chemicals, and services such as those related to tourism. In support of these initiatives, the Government plans to adopt pro-active industrialization policies. During the initial period of the program through 2010, those policies will focus on labor-intensive industries in agriculture, light industries, food industries, tourism, construction materials, and infrastructural development.

2.2 The Macroeconomic Policy Environment

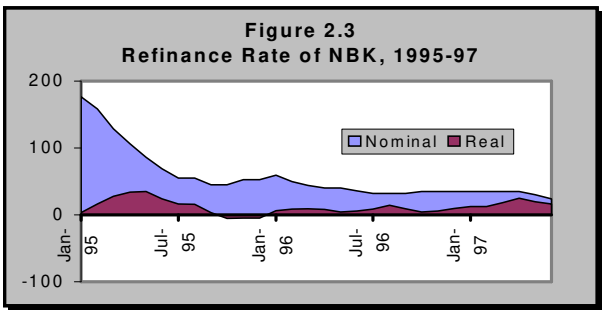
2.2.1 Monetary Stabilization Policies

Kazakhstan has established an increasingly sound macroeconomic policy framework that has contributed to a stable economic environment for investment in the machinery industry and other sectors of the economy. The National Bank of Kazakhstan (NBK) has maintained a tight monetary policy since the introduction of the national currency, the *tenge*, in November 1993. Early in 1994, government credits to clear sizable inter-enterprise arrears led to near hyperinflation and a sharp depreciation of the tenge (see Figure 2.2). After that, the Government and the NBK tightened monetary and fiscal polices to suppress inflation. The annual inflation rate fell to around 60 percent in 1995 and the real exchange rate returned to its level prior to clearing inter-enterprise arrears. Inflation was lowered from 1,160 percent in 1994 to less than 40 percent in 1996, and inflation in 1997 has been officially estimated at 17.5 percent.



The legacy of inefficient credit allocations left by the Soviet system has also given rise to a complex financial reform challenge. The National Bank of Kazakhstan has asserted much-needed control over the banking sector by establishing a bank supervision regime and by enforcing capital requirements. As a result, more than 130 insolvent banks have been closed during the past several years and those that remain are under-capitalized. To compensate for past bad loans and the time lag between inflation and interest rate adjustments, interest rate charges by the remaining banks tend to be substantially higher that the refinancing rate.

The high interest rates accompanying the NBK's tight monetary policy have attracted short-term capital inflows and stabilized the nominal exchange rate of the tenge relative to the US dollar. However, high interest rates have increased the cost of investment growth and created a more protracted recession. The need for both economic stability and greater access to low-cost financial capital that supports profitable activities through the extension of credit facilities from the banking system has raised fundamental questions about the design and implementation of the reform program. As Rodrick (1996) has pointed out, what constitutes appropriate structural reform programs rests on more tenuous theoretical and empirical grounds than the general consensus that exists on the rules for macroeconomic stabilization policies (see Lord *et al*., 1995, for an application to Kazakhstan).



2.2.2 Fiscal Measures and Public Investment Policies

Fiscal policy has operated under strong budget constraints since 1994. The consolidated fiscal revenue dropped from 37 percent of GDP in 1993 to 23 percent of GDP in 1995. In 1996 the Government adopted austere policies and succeeded in cutting the fiscal deficit from just under 7 percent of GDP in 1994 to 2.4 percent of GDP in 1996. Because of a serious drop in revenues from direct taxes, greater emphasis has been placed on the value added tax (VAT) and other indirect taxes. Since the National Bank of Kazakhstan has restricted its lending to cover the fiscal deficit, the Government is increasingly financing its deficit through the issuance of treasury bills. Longer maturities and a larger volume of bills are to be issued to augment access to financial capital, and in 1998 the Government intends to fully finance its budget deficit through treasury bills.

Table 2.3
Major Products of Machinery Industry-Related Activities

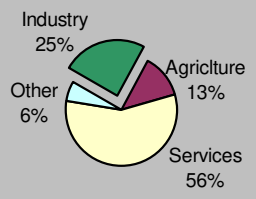
Sector	Major Products
Machine Building	Electromechanical machinery, machine tools, instruments, tractors, agricultural machinery and bulldozers.
Non-Ferrous Metallurgy	Bauxite, refined copper, lead, titanium and zinc.
Ferrous Metallurgy	Iron ore, manganese, chromate, cast iron, steel, rolled products of ferrous metals, sheet iron, tin and coke.
Food Industry	Processed meat, milk products, and confectioneries.
Agriculture	Barley, corn, cotton, eggs, fruit, meat, milk, millet, oat, oilseeds, potatoes, rice, rye, sugar beet, tobacco, vegetables, wheat, wool, cattle, sheep and goats, and pigs.
Light Industry	Fabric, knitted products, and footwear.
Wood Processing, pulp and paper	Timber, paper, lumber and cardboard.
Transport	Rail, maritime, internal waterways, air, road transport of passengers and freight.

Source: Ministry of Energy, Industry and Trade.

2.3 Development of Key Productive Sectors

Kazakhstan's vast hydrocarbon and mineral resources are regarded as the prime engine of growth for the economy. However, these expectations have yet to be met, and current oil production levels are significantly below their pre-independence levels. While Kazakhstan continues to depend on Russia for its oil exports, a recent agreement on the Caspian Pipeline Consortium between the Kazakhstan and Russian governments and oil companies will provide Kazakhstan with an oil export route. This development is likely

Figure 2.4
Importance of Industry, 1996



to accelerate production volumes and the distribution of Kazakhstan's oil and gas to world markets, and it will considerably enhance the investment interests of foreign oil companies. There are also plans to build a 3,000-kilometer pipeline to the Xinjiang province of western China.

Despite the importance given to the energy sector, the Government recognizes that the development of high value-added products from the country's vast agricultural and non-fuel mineral resources must become an essential part of its growth strategy. The industrial sector accounts for one-fourth of GDP and is mainly directed toward the country's rich resource base, which includes petroleum, coal, iron ore, manganese, chrome ore, nickel, cobalt, copper, molybdenum, lead, zinc, bauxite, gold and uranium.

Table 2.4
Contribution of Selected Industries to Total Industrial Production, 1990-96
(percent)

	1990	1993	1994	1995	1996
Electricity	5.2	14.4	18.9	16.4	15.2
Fuel	7.8	15.7	21.9	21.7	26.5
Ferrous Metallurgy	6.3	10.5	11.9	13.9	10.7
Non-ferrous Metallurgy	10.2	13.4	12	11.8	11.8
Machine Building and Metal Working	15.9	9.9	7.3	7.3	7.1
Chemical and Petrochemical	6.5	4	3.7	3.8	3.6
Forestry, Pulp and Paper	2.8	2.4	1	1	0.9
Construction Materials	5.7	5.2	4.1	3.8	2.9
Light Industry	15.5	5.8	3.8	2.6	2.4
Food Industry	16.2	11.4	9.9	13.3	14.6
Flour, Cereals and Animal Feed Industries	6.1	3.5	3.3	2.9	2.4
Total	*100*	*100*	*100*	*100*	*100*

Source: National Statistical Agency.

During the Soviet era Kazakhstan was transformed from an agriculture-based economy to a large scale-industrial complex and a developed agriculture and breeding system that supplied the Soviet Union with grain, livestock products, non-ferrous and ferrous metals, coal and oil. At the beginning of the 1990s Kazakhstan supplied 70 percent of the Soviet Union's production of lead, zinc, titanium and magnesium tin, 90 percent of its phosphorus and chrome, and over 60 percent of its silver and molybdenum (Ayna, 1997).

Table 2.5
Kazakhstan's Industrial Output Changes, 1995-97
(percent change from previous quarter)

	1995			1996				1997	
Quarter:	**2**	**3**	**4**	**1**	**2**	**3**	**4**	**1**	**2**
Machine Building	-4.7	-20.7	4.5	9.2	-1.6	17.9	-23.0	13.5	-17.5
Fuel	4.3	2.0	5.7	-1.9	-5.1	4.7	-3.5	-4.8	0.8
Ferrous Metallurgy	-4.3	6.4	-11.2	-13.7	-6.0	-9.2	8.5	4.7	22.1
Non-Ferrous Metallurgy	7.7	1.8	6.0	2.4	8.2	-8.7	-2.6	1.9	21.3
Chemicals	37.5	1.2	-2.0	-41.8	14.2	-1.0	-8.2	-26.4	21.6
Electricity	-35.8	-16.3	61.9	15.8	-41.8	-25.8	77.4	13.7	-40.2
Wood Paper	3.5	-11.6	16.8	-7.9	2.7	-23.8	19.4	-47.6	16.7
Construction Materials	25.4	-0.8	-15.2	-34.3	18.7	10.0	-37.7	-26.6	48.0
Light Industry	-27.1	-59.3	197.3	-14.4	-14.9	-57.9	166.5	-15.5	-42.0
Food Industry	9.3	10.0	5.8	-18.4	-0.5	-1.6	-1.8	-16.0	33.9
Total	*-9.3*	*-1.8*	*13.6*	*-2.3*	*-14.7*	*-8.2*	*13.7*	*-0.1*	*-2.4*

Source: Center for Economic Reforms, *Kazakhstan Economic Trends – Second Quarter 1997*.

The Government has been actively promoting the development of several key industries it has targeted. Under the earlier Medium-Term Program for Deepening Reforms, it has sought to modernize and expand existing infrastructure, especially transportation, electric power and telecommunications, to improve the legal and regulatory regime, and advance its privatization programs in order to establish a conducive environment for investment. In rail transport, the Government's aim under the plan has been twofold: (a) to expand and modernize the rail network, and (b) to privatize railway-related services.

Despite these efforts, the structure of industrial production in Kazakhstan has been strongly affected by the process of transition to a market economy. As a result, the share of production of the various branches has changed markedly. While the share of the fuel and energy sector has grown three times and that of metallurgy has doubled, there has been a corresponding decrease in the share of other sectors. The fall has been especially pronounced in light industry, food processing, machine assembly, metalworking and the production of construction materials. The production of raw materials has been more or less unaffected by the general drop in industrial production. As a result, the country has shifted away from the production of finished goods and towards the production of raw materials.

The decline of industrial production has been mainly due to (i) the rise of operating costs following the liberalization of prices of energy products, (ii) obsolete technologies and equipment, (iii) the absence of a rational organization of production, management and marketing, (iv) a disruption in demand after the breakup of the Soviet system, and (v) a shortage of operating funds and difficulties in obtaining bank credit. The higher cost of inputs and loss of markets have forced many enterprises to significantly reduce their output and in some cases to shut down completely.

The payments crisis has been one of the most serious problems associated with the decrease in production in industry as well as in other sectors. According to data from the State Committee for Statistics (reported in Center for Economic Reform, 1997), the overdue debts of industrial enterprises in mid-1997 were equal to 541 billion tenge, or US$7.2 billion. That figure is equivalent to 80 percent of Kazakhstan's GDP during the first six months of 1997. The situation in the agricultural sector has also deteriorated. Producers lack financial resources, the private agricultural sector has not developed, and there remains a shortage of modern machinery and technology. Output has fallen in all areas, from grains to livestock.

3. REVIEW OF THE MACHINERY INDUSTRY

Contents:

3.1 Agroindustrial and Mining Activities

3.1.1 The Importance of Agriculture and Mining

Kazakhstan's agricultural and mining sectors are closely linked to the country's rich natural resources and arable land base. The country is endowed with oil, gas, and mineral resources, including gold, iron ore, coal, chrome, wolfram, and zinc, while its vast area of arable land is mainly oriented towards the production of basic products. Kazakhstan has a total land area of about 2.7 million square kilometers of which 221 million hectares or 75 percent are designated as agricultural land. Some 190 million hectares of agricultural land are semi-arid pastures, meadowlands or fallow, leaving 33 million hectares for cultivation. The geographic regions can be divided into the following five areas (UN, 1995):

- *The northern region* is characterized by heavy industries and large-scale grain production. It covers an area of 600,900 square kilometers and is the leading economic region of the country in both agriculture and industry. Major railway and river arteries pass through the area, which is rich in coal, iron and copper ore, bauxite and gold deposits. Its industries include machine building, fuel and energy and mining activities. There are also enterprises involved in petroleum processing and in the production of ferroalloys and aluminum. The agro-industrial complex plays an important role in the region's economy. Grain crops account for three-quarters of the cultivated areas and annual production of wheat is about one-third of that produced in the United States. The region is also a major producer of sunflowers and flax and has a developed food-processing industry.

- The *central region* has mining and mineral processing activities. Its 398,800 square kilometers have a wealth of natural resources, coal mining, chemical production, ferrous and non-ferrous metallurgy, machine building and construction industries.

Table 3.1
Value Added of Selected Activities, 1993-96
(percent of GDP)

Sector	1993	1994	1995	1996
Machine Building	3.07	1.89	1.27	
Agriculture	13.00	14.00	11.39	
Other Industry:	31.00	25.92	21.82	
▪ Ferrous Metallurgy	3.26	3.08	3.01	
▪ Non- Ferrous Metallurgy	4.15	3.11	2.64	
▪ Food Industry	3.53	2.57	2.36	
▪ Light Industry	1.80	0.98	0.57	
▪ Wood Processing, Pulp and paper	0.74	0.26	0.15	
Transport and Communications	6.00	7.89	9.46	

Source: Ministry of Energy, Industry and Trade.

- The *southern region* is mainly oriented towards agricultural activities such as cotton, and it has some light industries and mining activities. It is the least economically developed region of the country. However, the agricultural base has spawned the development of food processing and light industries, and metallurgical, mining, chemical and machine-building industries have been established.

- The *western region* has much of the oil and gas industry. There are also large deposits of chromite, manganese, nickel and copper, and some of the leading industries include fish processing, mineral processing and fertilizers. The Tenghiz oil field holds reserves comparable to the largest petroleum fields in Saudi Arabia.

- The *eastern region* covers 277,000 square kilometers with almost half of all the forested land of the country. It is rich in tin, tungsten and vanadium ores, and its industries produce non-ferrous metallurgy, machines, engineering equipment, power, and chemicals. It is also a food processing center and has light industries.

3.1.2 Agricultural and Agroindustrial Performances

Agriculture is an important part of the Kazakhstan economy, but the performance of the sector has been disappointing. Before 1991 the agricultural sector accounted for about 35 percent of GDP and it absorbed 25 percent of total employment. Since the country's independence, agricultural output has declined dramatically because of the sharp drop in productivity and the fall in the area of land utilized for agriculture. The area planted, including that for cereal production, fell by 20 percent between 1990 and 1995, while the average yield for cereals in 1993-95 was only 0.7 metric tons per hectare, compared with a world average of 2.8 tons (FAO, 1997). Although the grain harvest was better in 1996 than in 1995 when Kazakhstan experienced the worst grain harvest in 30 years, it was still much lower than 1994 figures.

Table 3.2
Agricultural Production, 1993-96
(million tenge in 1994 prices)

Year	Total Agricultural	Total Crops	Crop on Irrigated Lands	Livestock
1993	139,222	94,664	na	44,558
1994	111,627	73,320	11,930	38,307
1995	84,064	55,073	18,109	28,990
1996	77,443	52,837	na	24,606

Source: National Statistical Agency.

Kazakhstan has been able to meet its domestic requirements, but grain exports have been severely reduced. Only in the areas where the private sector has played an important role, such as the production, distribution and marketing of fruits and vegetables, has the performance been favorable.

Kazakhstan's agricultural sector is composed of three types of agricultural enterprises (USDA, 1996):

- *State agricultural enterprises* accounted for more than 65 million hectares, or 30 percent of the total agricultural land in 1995. The number of collective farms (*sovkhozes)* not privatized had fallen to about 260 in 1996, so the land share of state enterprises has fallen to about 28 million hectares.

- *Non-state agricultural enterprises* are collective enterprises that include joint-stock companies and small agricultural enterprises. Collective enterprises are associations of shareholders, similar to the former Soviet collective farm (*kolkhoz*) concept. These enterprises have had little, if any, reorganization in the management and operational activities. These enterprises and the joint-stock companies retain about three-quarters of the land and assets of the privatized collective farms. As such, about three-quarters of agricultural production assets have not changed their economic and social status. Small agricultural enterprises average about 4,000 hectares in size and are significantly larger than peasant farms. Many of these enterprises have been formed around structural units of the former collective farms and are, in fact, another form of collective enterprise.

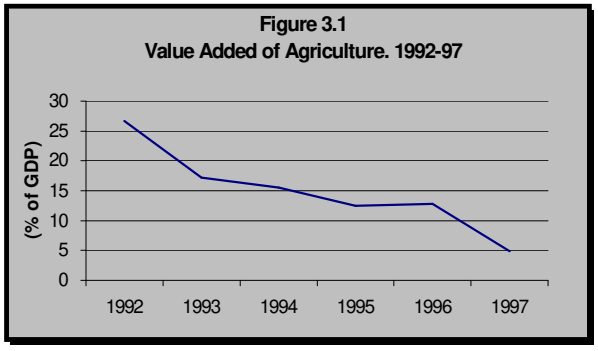
- *Private enterprises* consist of personal household plots, gardens and orchards that are not on agricultural land but are private property. Nevertheless, they play a very significant role in food production. At the beginning of 1996 there were more than 4.4 million personal plots, including gardens which occupy an area of less than 0.5 million hectares. In addition, the private sector has approximately 31,000 peasant farms occupying about 13 million hectares or 5 percent of all agricultural land.

Table 3.3
Yields of Selected Agricultural Crops, 1990-96
(100 kilos per hectare)

Year	Grain	Crude Cotton	Cotton Fiber	Sugar Beet	Sunflower	Potatoes	Vegetables
1990	12	27	9	238	8	113	154
1993	10	18	…	123	3	94	106
1994	8	19	…	77	3	94	104
1995	5	20	…	91	3	84	101
1996	7	17	…	105	2	88	96

Source: National Statistical Agency.

Restructuring efforts have produced large reductions in employment in all sectors, but particularly in agriculture. Based on officially registered employment in large and medium-size enterprises, exclusive of collective farm workers, employment in agriculture fell by 55 percent between 1995 and 1996 (Center for Economic Reforms, 1997). In industry, the decline was more modest (11.5 percent) during the same period.



Overall, registered unemployment has increased moderately to about 2 percent of the labor force in 1996. Using a broader definition of unemployment including involuntary leaves and part-time furloughs, that rate would stand at about 12 percent.

Several factors have contributed to the overall sharp decline in agricultural production:

- droughts and other natural disturbances,
- the absence of any substantive restructuring of farms following their privatization,
- the lack of financial liquidity and access to credit by farm units,
- inadequate water supplies and the salinization of soil,
- inefficiencies in the market distribution systems,
- shortage of spare parts and fuel,
- the lack of liquidity and credit facilities, and

Table 3.4
Composition of Agricultural Processing Industries, 1994-96
(percent)

	1994	1995	1996
Total	*100*	*100*	*100*
Food Industry	32.4	38.0	48.1
Meat and Milk Industry	36.9	33.3	25.7
Cereals and Animal Feed Industries	23.4	20.9	16.9
Light Industry	5.1	5.7	7.3
Fish Industry	2.2	2.0	1.5

Source: National Statistical Agency.

- a deterioration in the terms of trade resulting from rapid rise in prices of agricultural machinery and equipment, fertilizers and fuels relative to those of agricultural commodities.[1]

The absence of liquidity has resulted from the financial losses suffered by farm enterprises, while the lack of credit flows has been due to the high interest rates discussed in the previous chapter. According to the State Committee on Statistics and Analysis, over 75 percent of agricultural enterprises were unprofitable in 1995. Moreover, according to the USDA (1996), the total past due loans in 1996 amounted to 71 billion tenge, of which 4.5 billion tenge represented taxes payable, 39 billion tenge were accounts payable for goods and services (mainly in the form of fuel and electric energy), and 10 billion tenge represented debt on bank loans.

The lack of access to inputs has also had a dramatic effect on productivity levels. The contraction of production by the fertilizer industry, combined with a sharp reduction of fertilizer supplies from Russia has limited the application of fertilizers to irrigated crops such as vegetables and cotton. Only 4 percent of cereals, 14 percent of potatoes, and 25 percent of vegetables are now being grown with fertilizers (USDA, 1996). Trade in fertilizer has also declined. Exports of fertilizers are now only about 10 percent of the levels prevailing at the end of the Soviet era. A similar situation exists with agro-chemicals because of Kazakhstan's reliance on supplies from other FSU members under the previous centralized planning system. That reliance has left the country without its own production of herbicides and pesticides.

[1] According to data from the National Statistical Agency (1997), the following were the year-to-year percentage changes in the producer and wholesale prices of the agricultural and industrial sectors:

	1992	1993	1994	1995	1996	1997 (6mths)
Agriculture	1,032%	776%	1,888%	257%	161%	114%
Industry	2,565%	1,143%	3,020%	240%	124%	117%

Table 3.5
Production of Metallurgical Products, 1994-95
(thousands of tons)

	1994	1995	% Change 1994-95
Iron ore	10,521	14,902	41.6
Manganese ore	295	284	-3.6
Chromite ore	2,103	2,417	14.9
Sinter cake	4,504	4,080	-9.4
Iron ore pellets	4,822	7,212	49.6
Cast iron *of which:*	2,435	2,530	3.9
Pig iron	163	68	-58.6
Foundry pig iron	53	16	-70.5
Steel *of which:*	2,969	3,027	2.0
Open-hearth steel	735	376	-48.9
Oxygen converter steel	2,110	2,581	22.3
Electrical steel	123	71	-42.5
Casting obtained from continuous casting machines	19	4	-81.3
Carbon steel	2,736	2,917	6.6
Low-alloyed steel	27	15	-43.9
Rolled ferrous metal products	2,357	2,153	-8.7
Sheets and plates	2,027	1,927	-4.9
Strips	231	78	-66.3
Steel pipes	15,722	13,316	-15.3
Coated sheets and plates *of which:*	125	222	77.4
Tin-plate	125	222	77.4
Ferroalloys	649	809	24.6
Ferrosilicium	207	255	23.6
Ferrochrome	326	494	51.5
Ferrochrome silicon	27	21	-20.8
Coke, 6% moisture	1,747	1,811	3.7
Refractory materials	12	14	13.3

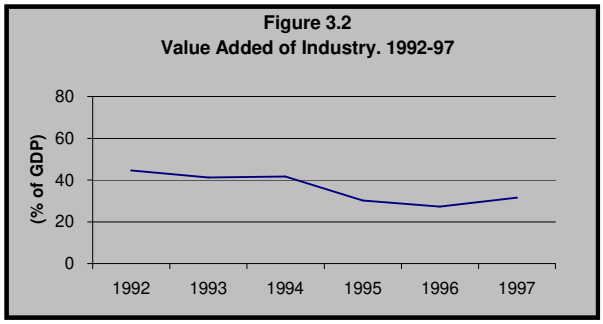
Source: National Statistical Agency.

In the livestock industry, animal numbers and productivity levels have fallen sharply. The lack of liquidity of most farms, the fall in livestock numbers, inadequate machinery and equipment, and the general decline in demand for livestock products have all contributed to this situation. As a result, much of the country's farming structure is reaching the point where it will not be able to maintain operations.

The Government has attempted to alleviate the liquidity crisis in agriculture (Table 3.2). For 1996 the Government's consolidated budget allocation to the agricultural sector amounted to 3.6 billion tenge. Some funds are being provided as grants, while others are being distributed through low-interest rate loans. At the end of 1994 the Agricultural Support Fund (ASF) was established by the Cabinet of Ministers (Resolution 1447), and a subsequent Cabinet resolution in 1995 established a mechanism for the transfer of debts of agricultural producers to the ASF. The bulk of that debt has originated from the farmer rather than from the agro-processing industry. In addition to its debt-resolution function, the ASF provides direct subsidy support to targeted activities such as sheep farming through wool price supports.

3.1.3 Mining and Mineral Processing Activities

Mining activities are largely directed towards extraction and few processing activities take place within Kazakhstan since traditionally, these activities were closely linked to processing activities in other FSU countries, and especially Russia. Since independence in 1991, however, trade has increasingly been redirected toward markets outside the Newly Independent States (NIS), notably China and Germany. Kazakhstan has one-third of the world's chromium and manganese deposits and it has substantial reserves of other minerals: 50 percent of the former Soviet Union's tungsten and lead, 40 percent of its zinc and copper, and 25 percent of its bauxite, silver and phosphorus. Kazakhstan is also the largest NIS producer of beryllium, tantalum, barite, uranium, cadmium, and arsenic.



However, more than half of the country's mining, processing, and smelting enterprises use outdated equipment and are in need of replacement. Although the situation in the mining and mineral processing industry is not as severe as in the country's agriculture and ago-industrial activities, enterprises operating in this area lack expertise in operating within a free market system. The Kazakhstan mining industry operated under a central planning system and lost some of its traditional markets with the breakup of the Soviet Union. There are a number of business opportunities in mining and mineral processing activities, notably in infrastructure development, mine and plant reconstruction, service procurement, and machinery equipment supplies.

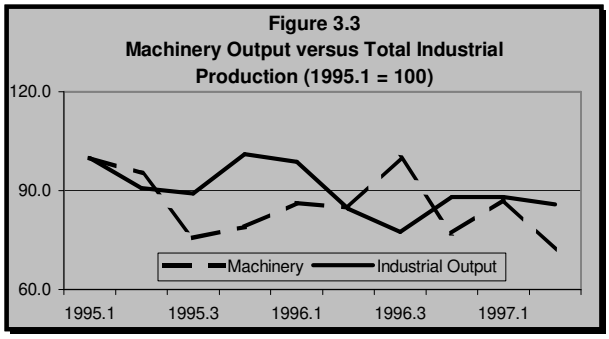
Table 3.6
Output Index of Selected Industries, 1990-96
(1985=100)

	1990	1991	1992	1993	1994	1995	1996
Total of Industrial Sector	*116.9*	*115.5*	*97.9*	*83.9*	*60.1*	*52.1*	*48.7*
All Machinery	110.7	113.4	94.9	81.0	50.9	36.8	34.4
- Tractors and agr.mach.	88.2	85.6	56.8	42.4	25.0	15.9	16.5
- Construction machinery	102.0	91.9	63.3	46.8	24.1	12.8	20.9
Light and food industries	171.1	186.8	178.2	109.2	148.4	92.9	69.0
Energy	131.5	200.4	139.5	135.6	123.4	72.4	76.2
Metallurgy	125.5	142.4	159.1	135.9	146.0	211.4	198.7
Mining	129.7	135.3	137.1	83.6	85.5	55.0	39.1
Chemicals	150.8	156.8	137.4	101.0	79.1	72.9	59.1
Appliances	131.3	143.4	123.6	119.2	74.9	56.6	58.2
Transport vehicles	108.6	126.8	104.7	58.0	36.5	34.7	37.7

Source: Ministry of Energy, Industry and Trade.

3.2 Machinery Industry

One of the largest contractions of production during the transition period has occurred in the machine-building industry. In an effort to adjust to changes that followed the disintegration of the centrally planned economy, a number of enterprises attempted to introduce new products in the early years following independence. In 1993, for example, 73 enterprises started producing more than 200 new goods: buses, transport trucks, dump trucks, trolley buses and mini-tractors (UN, 1995). However, investment has continued to decline and new forms of production have usually failed.



The contraction of the industry has been associated with both the reduction in the derived demand for machinery equipment from the mineral processing and agro-industrial activities, and with supply shortages in the industry itself. The trend growth rate of machinery output was the same as that of total industrial production (both -1.6 percent a year), suggesting that the demand for machinery products followed industry's overall contraction of demand for intermediate products such as machinery and equipment. However, short-term movements of machinery production have differed from those of industrial output. These differences reflect supply adjustments of the machinery industry to support programs, planned output changes that have been unrelated to changing market conditions, production disturbances associated with interruptions in electricity and other utility services, and shipment delays of raw material and intermediate inputs.

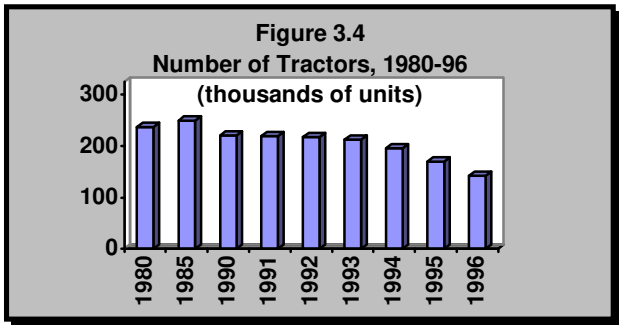
Kazakhstan's capacity to fulfill its agricultural machinery needs is limited. In the past, most of the machinery was imported from other countries and about 15 percent of domestic requirements was met by local manufacturers. As a result of the decline in agricultural activities and the lack of farm liquidity, sales of agricultural machinery have nearly stopped. Equipment inventory has also suffered. The number of operational tractors has declined dramatically since 1990, as has the number of harvesting combines and seeders. Given that excessive investments in equipment and machinery were typical for a command economy, the decline in numbers has been tolerable until recently. Machines have been broken up to provide spare parts, but this process is approaching a saturation level and there is an immediate need for new tractors and harvesting combines, as well as replacement parts. However, until farmers are able to obtain the necessary financial resources to purchase the needed equipment either domestically or from abroad, the situation is likely to remain critical.

Table 3.7
Output of Basic Machinery Products, 1990-96
(volume and value)

	Units	1990	1993	1994	1995	1996
Instruments and Spare Parts	'000 tons	1,092,461	239,902	147,106	199,956	179,062
Metallurgical Equip, *of which*						
Metal cutting machines	units	2,578	1,193	42,957	114	na
Press-forging machines	units	1,173	730	434	269	127
Rolling Stock Machines	'000 tenge	4,353,819	242,125	259,530	605,136	688,604
Chemical Equip and Spare Parts	'000 tenge	389,056	15,430	13,654	36,414	239,681
Agricultural Machines, *of which*						
Agricultural machinery	'000 tenge	5,567,081	854,420	435,832	299,021	257,666
Livestock and feed production machinery	'000 tenge	3,637,553	402,371	156,648	154,332	80,323

Source: National Statistical Agency.

This situation continues to characterize the present state of the industry. During the first nine months of 1997, the National Statistical Agency (1997a) reported shortfalls in the production of most major products of the machinery industry. Overall output for the period was more one-third lower than the level of a year earlier. As in the past, the large shortfall was due to material shortages and the lack of solvency of customers. Lower production in downstream industries caused large cutbacks in the production of alkaline and lead storage batteries for automobiles, power capacitors, and low-capacity electric motors for home appliances. There were also large reductions in the output of machine tools, press-forging machines and spare parts. No production occurred in metal-cutting machine tools in Almaty and the West Kazakhstan oblast, nor was there any production of equipment for processing of polymer materials and equipment for light industry.



There have been very few sales of new tractors or harvesting combines, compared with annual sales of around 30,000 tractors and 7,000 harvesting combines at the end of the Soviet era. The number of tractors available has declined from 248,712 to 142,383 units between 1985 and 1996 (National Statistical Agency, 1997b). Moreover, the inability to replace machinery has inevitably resulted in a marked deterioration of the existing equipment inventory. More recently, the performance of the industry has been mixed. During the first nine months of 1997 output of tractor drills and mowers increased, while that of cultivators, tractor plows, tractors, disc harrows and bulldozers decreased. Tractor-trailers were not produced because of the shortage of financial capital to purchase material input. Disc harrows, tractor drills and electrical shearing machines were also not produced in some oblasts because of fund shortages.

Table 3.8
Production of Major Types of Machinery, 1994-95
(volume and value)

	Unit	1994	1995	% Change 1994-95
Volume:				
Power transformers:	units	2,608	1,376	-47.2
	'000 kWa	371	157	-57.8
Power capacitors	'000 kVa	333	139	-58.3
Storage batteries (lead)	tons of lead	20,586	16,749	-18.6
	'000 amp-hrs	585,984	478,942	-18.3
of which:				
Automobile batteries	units	665,989	470,210	-29.4
Alkaline batteries	'000 amp-hrs	1,281	564	-56.0
Metal-cutting machine tools	units	429	57	-86.7
Press and forge machines	units	434	269	-38.0
Centrifugal pumps	units	7,658	5,713	-25.4
Rolling bearings	units	599,000	546,000	-8.8
Excavators	units	32	-	-
Bulldozers	units	695	521	-25.0
Tractors	units	1,988	1,803	-9.3
Agricultural machines				
of which:				
Tractor plows	units	3,012	283	-90.6
Tractor drills	units	943	349	-63.0
Tractor cultivators	units	1,125	82	-92.7
Tractor mower	units	4,995	2,030	-59.4
Value ('000 tenge):				
Metal cutting machine tools		54,217	16,938	-68.8
Press-forging machines		59,411	99,406	67.3
Instruments, automation devices, spare parts		147,196	199,956	35.8
Rolling machines		259,530	605,136	133.2
Chemical equipment and spare parts		13,654	36,414	166.7
Spare parts for:				
Automobiles		190,760	200,320	5.0
Agricultural machines		250,498	546,606	118.2
Tractors		287,092	406,460	41.6
Livestock and animal feed production machines		57,759	165,837	187.1
Machines and equipment for livestock and animal Feed production		156,648	42,019	-73.2
Agricultural machines		435,832	299,021	-31.4

Source: National Statistical Agency.

In an attempt to revitalize the industry, the Government issued Decree 1344 in September 1997 on the Program of Forming and Developing the Agricultural Machinery Building Industry. The program aims to define the measures needed to resolve the problems confronting the industry. To this end, several tasks are to be undertaken by the Government:

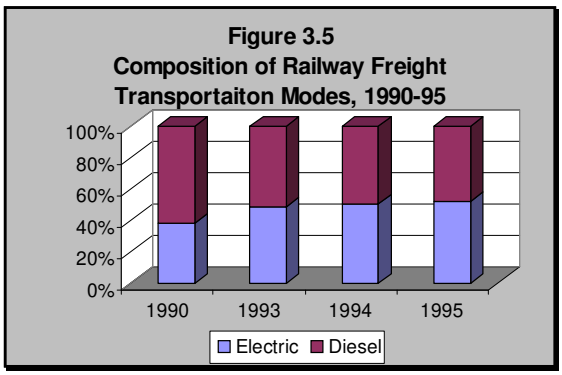
- Evaluate the requirements of the agricultural sector for machinery equipment;
- Design a strategy for the establishment of an efficient industry that can satisfy domestic requirements and compete in foreign markets;
- Identify the types of machinery that need to be produced in the country;
- Revive farm demand for machinery;
- Promote the establishment of research and development in the industry; and
- Develop a plan of action for the program.

The program will be supported by regulatory measures to alleviate some of the major bottlenecks in agriculture and the machinery building industry. The Ministry of Energy, Industry and Trade, the Ministry of Agriculture and the Ministry of Science - Academy of Sciences will jointly carry out the program. It is within this context, that the present Master Plan Study for the Development of the Machinery Industry in the Republic of Kazakhstan is being prepared.

The Government's plan is directed at the promotion of market-driven economic expansion in the machinery industry and other sectors of the economy. It has avoided the promotion of import-substitution policies that were detrimental to many developing countries, notably those in Latin America. Those import-substitution policies sought to develop domestic manufacturing capability for goods previously imported through such policies as import controls, overvalued exchange rates, binding ceilings on interest rates, pervasive price regulation, and a large share of public ownership of productive activities. The effect of those economic policies was the creation of highly inefficient industries.[2] The Government of Kazakhstan's plan instead relies on market-driven expansion that is supported by public sector policies and practices and infrastructural development, and one that forms an integral part of its national development plan.

[2] Several studies have measured the effective rates of protection (ERP) and domestic resource costs (DRC) to countries pursuing import-substituting policies (Little, Scitovsky, and Scott, 1970; Balassa, 1971; Bhagwati, 1978; and Krueger, 1978). Their findings show that the governments' price and trade policies had led to the creation of inefficient industries. More recent works have shown that particular relative price distortions that affect capital and intermediate goods can also be costly to growth (Bradford De Long and Lawrence Summers 1991; Easterly 1993).

3.3 Transportation Characteristics



Kazakhstan is the world's largest land-locked country and its lack of effective transport routes and relative isolation makes it difficult for Kazakhstan to access international markets. Ground transportation of both imports and exports is time-consuming and air transport is costly and limited to relatively low weights and volumes. Moreover, because of its land-locked position, Kazakhstan must rely on the availability of routes through its neighboring countries. For oil in particular, the pipeline through Russia means that Russia has had effective control over Kazakhstan's major source of foreign exchange. Current estimates suggest that transport costs represent up to 60 percent of the value of manufactured imports.

Kazakhstan has 21,600 kilometers of railways, 115,500 kilometers of paved roads, and 4,000 kilometers of navigable waterways. The railroad system links it to Europe via Russia, to the Persian Gulf via Iran, and to the Pacific Rim via China. Although there is a developed road network connecting all major cities, lack of funds has left most routes poorly maintained. Kazakhstan recently signed an agreement with China and the Kyrgyz Republic to upgrade a road network over the Karakarom mountain range to the Indian subcontinent.

Table 3.9
Freight Traffic by Transportation Mode, 1985-97
(millions of net ton kilometers)

	Railway	Air	Road	Maritime
1985	382,507	99	17,721	3,437
1990	406,963	80	18,544	3,851
1991	374,230	67	17,946	3,426
1992	286,109	63	14,705	2,523
1993	192,258	66	10,000	1,546
1994	146,777	87	3,866	818
1995	124,503	138	2,079	802
1996	112,780	137	1,396	444
1997 (6 months)	52,987	61	360	125

National Statistical Agency, *Statistical Bulletin No. 2* (1997).

Table 3.10
Change in Transportation Costs for Freight, 1993-96
(percentage change from the previous year)

	1993	1994	1995	1996
Total, of which:	*1,131.1*	*2,750.4*	*247.1*	*129.4*
Road	861.5	2,616.9	419.8	136.3
Railways	1,331.8	2,394.3	164.2	126.8
Air	1,232.1	1.827.0	314.9	139.7
Maritime	1,640.4	4,377.8	418.2	156.1
Pipeline	1,931.3	3,044.0	209.8	100.3

Source: National Statistical Agency.

Freight transport has fallen dramatically as a result of the fall in customer demand, the deterioration of rolling stock and vehicles, the reduction in the purchasing power of passengers for public transport, high prices for petrol and other sources of energy, and the insolvency of enterprises.

Kazakhstan's crumbling road and railway infrastructure will require significant, long-term financing from international financial institutions and private investors. The same situation confronts other Central Asian countries and there have been recent efforts to coordinate initiatives in the transport sector through the regional Transit Transport Framework Agreement. Member countries include Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan and Uzbekistan and their neighbors Afghanistan, Armenia, Azerbaijan, China, Georgia, the Islamic Republic of Iran, Pakistan, the Russian Federation and Turkey. The objective is to establish a regional regulatory framework that will make transit operations in Central Asia efficient and cost-effective, thereby promoting external trade of the sub-region and bolstering economic growth of the member countries. As part of the agreement, member countries are to harmonize their technical standards in the development of a regional transport networks.

Table 3.11
General-Purpose Rolling Stock at End-1995
(units)

	Total	Almaty Railway	W. Kazakhstan Railway	Tselinnaya Railway
Locomotives, total, *of which:*	3,045	1,060	805	1,180
Vapor locomotives	197	104	37	56
Electric locomotives	654	140	na	514
Diesel locomotives and special systems	2,194	816	768	610
of which:				
Diesel locomotives and special system locomotives over 260 kW	44	31	3	10
Railway motor car, total, *of which*	116	31	3	82
Diesel and special railway motor cars	44	31	3	10
Other	72	-	-	72
Coaches	2,353	1,105	377	871
Freight cars, total	80,242	33,788	27,872	36,642
of which:				
Closed cars, *of which*	80,242	33,788	27,872	36,642
Refrigerator cars	1,636	680	956	-
Open wagons	38,162	11,094	6,648	20,420
Flat cars	12,581	4,627	4,804	4,150
Other	27,863	17,387	15,464	12,072
Cars belonging to private companies	11,253	3,796	3,091	4,366

Source: National Statistical Agency.

PART III

TRADE, INVESTMENT AND FINANCING

4. TRADE POLICIES AND PERFORMANCE

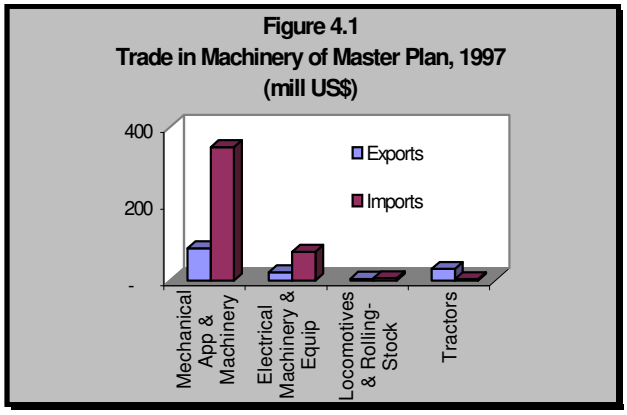
Contents:

4.1 Current Trade Patterns in Machinery and Related Industries

In the HS nomenclature for trade, machinery is composed of the following categories:

- HS 84 - Nuclear Reactors, Boilers, Machinery and Mechanical Appliances
- HS 85 - Electrical Machinery and Equipment
- HS 86 - Railway and Tramway Locomotives, Rolling-Stock and Parts Therein
- HS 87.01 - Tractors

Appendix Table 7.2 presents the breakdown of trade in machinery for HS 84 through HS 87.01. Overall, Kazakhstan is a net importer of the combined value of these products since exports are mainly composed of intermediate products, while imports are dominated by consumer goods. During the first three months of 1997, exports of machinery represented US$157 million while imports of these products equaled US$798 million, yielding a trade balance of -US$641.



The pattern of trade is somewhat different for the products included in the present study for the development of a master plan for the machinery industry of Kazakhstan. Overall, the country remains a net importer of these products. However, the trade balance is considerably smaller (-US$242) since net imports of mechanical appliances and machinery (HS 84) exclude a number of consumer-oriented products (see Table 4.1).

Table 4.1
Machinery Trade, 1997 (Quarters I-III)
(thousands of US dollars)

HS Code		Exports	Imports	Balance
84	Mechanical Appliances and Machinery, Nuclear Reactors and Boilers			
	All Products	86,031	688,229	-602,198
	Products Covered by Master Plan	84,049	348,329	-264,280
85	Electrical Machinery and Equipment			
	All Products	36,931	105,767	-68,836
	Products Covered by Master Plan	21,682	74,578	-52,897
86	Railway Locomotives, Rolling-Stock and Parts			
	All Products	3,368	453	2,915
	Products Covered by Master Plan	4,268	5,775	-1,507
87.01	Tractors			
	All Products	30,665	3,564	27,101
	Products Covered by Master Plan	30,665	3,564	27,101
84 to 87.01	Total of Machinery			
	All Products	156,994	798,012	-641,018
	Products Covered by Master Plan	140,663	432,246	-291,583

Source: Ministry of Energy, Industry and Trade.

Figure 4.2
Major Exports of Selected Machinery, 1997

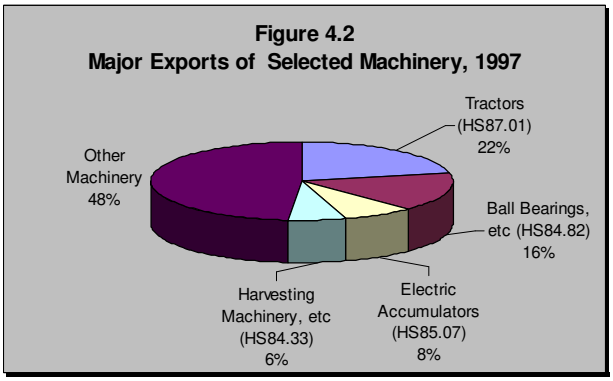
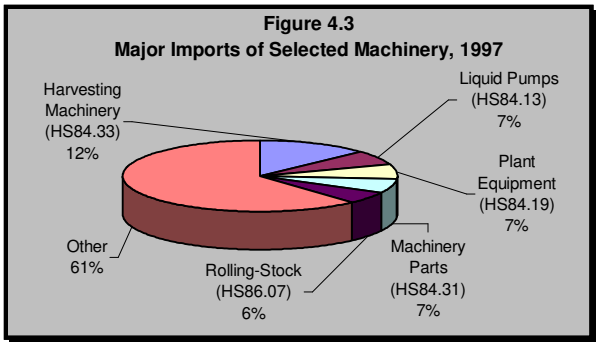


Figure 4.3
Major Imports of Selected Machinery, 1997



In general, exports are concentrated in a narrow group of products made up of tractors, ball or roller bearings, electric accumulators, and harvesting or thrashing machines. Together these products currently account for over half of total export earnings from the selected machinery products included in the study for the development of a master plan.

Imports of the selected machinery, however, are more diversified. The five leading imports together account for less than 40 percent of the selected machinery for the master plan. These five products are (i) harvesting or threshing machinery, (ii) pumps for liquids, (iii) machinery, plant or laboratory equipment for the treatment of materials by a process involving a

Table 4.2
Export-Based Ranking of Major Machinery Products, 1997 (Quarters I-III)
(thousands of US dollars)

RANK	HS Code	Master Plan	Product Description	EXPORTS	IMPORTS	BALANCE
1	87.01	√	Tractors	30,665	3,564	27,101
2	84.82	√	Ball Or Roller Bearings	21,894	7,718	14,176
3	85.28		Television Receivers	12,621	64,512	- 51,891
4	85.07	√	Electric Accumulators, Including Separators.	11,162	8,755	2,407
5	84.33	√	Harvesting Or Threshing Machinery	8,410	56,096	- 47,685
6	84.31	√	Parts Suitable For Use Solely Or Principally With The Machinery Of Heading Nos 84.25 To 84.30	7,224	28,198	- 20,974
7	84.28	√	Other Lifting, Handling, Loading Or Unloading Machinery	5,985	7,215	- 1,231
8	84.29	√	Self-Propelled Bulldozers, Graders, Mechanical Shovels, Excavators, Shovel Loaders, And Road Rollers	5,204	10,932	- 5,728
9	84.75	√	Machines For Assembling Electric Or Electronic Lamps, Tubes Or Valves Or Flashbulbs, In Glass Envelopes	4,219	19,278	- 15,059
10	84.09	√	Parts Suitable For Use Solely Or Principally With The Engines Of Heading No.84.07 Or 84.08	3,928	12,741	- 8,813
11	84.3	√	Other Moving, Grading, Leveling, Scraping, Excavating Tamping Compacting, Extracting Or Boring Machinery	3,065	15,693	- 12,628
12	84.81	√	Taps, Cocks, Valves And Similar Appliances For Pipes, Boiler Shells, Tanks, Vats Or The Like	2,818	11,999	- 9,182
13	84.32	√	Agricultural, Horticultural Or Forestry Machinery For Soil Preparation Or Cultivation	2,191	1,383	808
14	84.62	√	Machine-Tools (Including Presses) For Working Metal By Forging, Hammering Or Die-Stamping; Machine-Tools	2,039	593	1,445
15	85.44	√	Insulated Wire, Cable (Including Co-Axial Cable) And Other Insulated Electric Conductors	1,762	17,384	- 15,622
16	84.13	√	Pumps For Liquids, Whether Or Not Fitted With A Measuring Device; Liquid Elevators	1,736	29,395	- 27,659
17	85.04	√	Electric Transformers, Static Converters (For Example, Rectifiers) And Inductors	1,621	8,950	- 7,329
18	84.79	√	Other Machines And Mechanical Appliances Having Individual Functions	1,518	6,955	- 5,437
19	86.02	√	Other Rail Locomotives; Locomotive Tenders	1,446	3,399	- 1,954
20	86.01	√	Rail Locomotives Powered From An External Source Of Electricity Or By Electric Accumulators	1,268	1,431	- 162
21	84.26	√	Ships' Derricks; Any Type Of Cranes, Including Cable Cranes, Mobile Lifting Frames, Straddle Carriers And Works Trucks Fitted With A Crane	1,219	6,145	- 4,926
22	84.14	√	Air Or Vacuum Pumps, Air Or Other Gas Compressors And Fans; Ventilating Or Recycling Hoods Incorporating A Fan, Whether Or Not Fitted With Filters	1,204	15,799	- 14,595
23	85.32	√	Electrical Capacitors, Fixed, Variable Or Adjustable	1,130	69	1,060
24	85.37	v	Boards, Panels (Including Numerical Control Panels),Consoles, Desks, Cabinet And Other Bases,	912	5,460	- 4,548
25	85.36	√	Electrical Apparatus For Switching Or Protecting Electrical Circuits	887	5,693	- 4,806
26	84.11	√	Turbo-Jets, Turbo-Propellers And Other Gas Turbines	860	4,129	- 3,269
27	84.63	√	Other Machine-Tools For Working Metal, Sintered Metal Carbides, Without Removing Material	841	954	- 114
28	84.25	√	Pulley Tackle And Hoists Other Than Skip Hoists; Winches And Capstans; Jacks	811	1,004	- 192

(continued)

Table 4.2 ***(continued)***
Export-Based Ranking of Major Machinery Products, 1997 (Quarters I-III)
(thousands of US dollars)

RANK	HS Code	Master Plan	Product Description	EXPORTS	IMPORTS	BALANCE
29	85.46	√	Electrical Insulators Of Any Material	801	496	305
30	84.59	v	Machine-Tools For Drilling, Boring, Milling, Threading Or Tapping By Removing Metal	798	431	367
31	84.38	√	Machinery, Not Specified Or Included Elsewhere In This Chapter, For The Industrial Preparation Or Manufacture Of Food Or Drink	758	23,841	- 23,084
32	84.08	√	Compression-Ignition Internal Combustion Piston Engines, Engines Using Fuel With Low Cetan	725	19,702	- 18,977
33	86.07	√	Parts Of Railway Or Tramway Locomotives Or Rolling-Stock	616	24,043	- 23,427
34	85.01	√	Electrical Motors And Generators (Excluding Generating Sets)	602	12,529	- 11,927
35	84.83	√	Transmission Shafts And Cranks, Bearing Housing And Plain Shaft Bearing; Gears And Gearing; Ball Screws	591	3,091	- 2,500
36	84.18	√	Refrigerators, Freezers And Other Refrigerating Or Freezing Equipment, Electric Or Other, Heat Pumps	543	12,607	- 12,064
37	84.21	√	Centrifuges, Including Centrifugal Dryers; Filtering Or Purifying Machinery And Apparatus, For Liquids Or Gases	542	8,756	- 8,214
38	84.07	√	Spark-Ignition Reciprocating Or Rotary Internal Combustion Piston	511	1,534	- 1,023
39	84.5	√	Household Or Laundry-Type Washing Machines	479	4,869	- 4,389
40	84.37	√	Machines For Cleaning, Sorting Or Grading Seed, Grain Or Dried Leguminous Vegetables; Machinery Used In Milling Industry	461	14,103	- 13,642

Source: Ministry of Energy, Industry and Trade.
Note: Checked items indicate that the product is included in the Master Plan for the Machinery Industry.

Table 4.3
Import-Based Ranking of Major Machinery Products, 1997 (Quarters I-III)
(thousands of US dollars)

Rank	HS Code	Master Plan	Product Description	IMPORTS	EXPORTS	BALANCE
1	85.28		Television Receivers	64,512	12,621	- 51,891
2	84.33	√	Harvesting Or Threshing Machinery	56,096	8,410	- 47,685
3	84.13	√	Pumps For Liquids, Whether Or Not Fitted With A Measuring Device; Liquid Elevators	29,395	1,736	- 27,659
4	84.19	√	Machinery, Plant Or Laboratory Equipment For The Treatment Of Materials By A Process Involving A Change Of Temperature	28,520	348	- 28,172
5	84.31	√	Parts Suitable For Use Solely Or Principally With The Machinery Of Heading No 84.25 To 84.30	28,198	7,224	- 20,974
6	86.07	√	Parts Of Railway Or Tramway Locomotives Or Rolling-Stock	24,043	616	- 23,427
7	84.38	√	Machinery, Not Specified Or Included Elsewhere	23,841	758	- 23,084
8	84.08	√	Compression-Ignition Internal Combustion Piston Engines, Engines Using Fuel With Low Cetan	19,702	725	- 18,977
9	84.75		Machines For Assembling Electric Or Electronic Lamps, Tubes Or Valves Or Flashbulbs, In Glass Envelopes; Machines For Manufacturing Or Hot Working Glass Or Glassware	19,278	4,219	- 15,059
10	85.44	√	Insulated Wire, Cable And Other Insulated Electric Conductors, Whether Or Not Fitted With Connectors; Optical Fibre Cables, Made Up Of Individually Sheathed Fibers	17,384	1,762	- 15,622
11	84.72		Other Office Machines	16,641	409	- 16,232
12	84.74	√	Machinery For Sorting, Screening, Separating, Washing, Crushing, Grinding, Mixing Or Kneading Earth, Stone, Ores Or Other Mineral Substances	16,489	259	- 16,230
13	86.06	√	Railway Or Tramway Goods Vans And Wagons, Not Self-Propelled	16,066	24	- 16,042
14	84.14		Air Or Vacuum Pumps, Air Or Other Gas Compressors And Fans; Ventilating Or Recycling Hoods Incorporating A Fan	15,799	1,204	- 14,595
15	84.3	√	Other Moving, Grading, Leveling, Scraping, Excavating Tamping Compacting, Extracting Or Boring Machinery, For Earth, Mineral Or Ores	15,693	3,065	- 12,628
16	84.37	√	Machines For Cleaning, Sorting Or Grading Seed, Grain Or Dried Leguminous Vegetables; Machinery Used In The Milling Industry Or For The Working Of Cereals	14,103	461	- 13,642
17	86.08	√	Equipment For Railways Or Tramways, Mechanical Equipment To Provide Control And Security Of The Railway, Tramway Traffic And Related Objects, Parts Thereof	14,089	445	- 13,644
18	85.17	√	Electrical Apparatus For Line Telephony Or Line Telegraphy, Including Such Apparatus For Carrier-Curraut Line Systems	13,262	435	- 12,827
19	85.21		Video Recording Or Reproducing Apparatus	12,779	9	- 12,770
20	84.09		Parts Suitable For Use Solely Or Principally With The Engines Of Heading No.84.07 Or 84.08	12,741	3,928	- 8,813
21	84.18		Refrigerators, Freezers And Other Refrigerating Or Freezing Equipment, Electric Or Other, Heat Pumps Other Than Air Conditioning Machines Of Heading No.84.15	12,607	543	- 12,064
22	84.55	√	Metal-Rolling Mills And Rolls	12,604	407	- 12,197
23	85.01	√	Electrical Motors And Generators (Excluding Generating Sets)	12,529	602	- 11,927
24	84.81	√	Taps, Cocks, Valves And Similar Appliances For Pipes, Boiler Shells, Tanks, Vats Or The Like, Including Pressure-Reducing Valves And Thermostatically Controlled Valves	11,999	2,818	- 9,182
25	84.78	√	Machinery For Preparing Or Making Up Tobacco, Not Specified Or Included Elsewhere In This Chapter	11,911	5	- 11,906
26	84.29	√	Self-Propelled Bulldozers, Angledozers, Graders, Jewelers, Scrapers Mechanical Shovels, Excavators	10,932	5,204	- 5,728

(continued)

Table 4.3 *(continued)*
Import-Based Ranking of Major Machinery Products, 1997 (Quarters I-III)
(thousands of US dollars)

Rank	HS Code	Master Plan	Product Description	IMPORTS	EXPORTS	BALANCE
27	84.22	√	Dish Washing Machines	9,769	32	- 9,737
28	85.04	√	Electric Transformers, Static Converters And Inductors	8,950	1,621	- 7,329
29	84.15		Air Conditioning Machines	8,768	47	- 8,721
30	84.21		Centrifuges, Including Centrifugal Dryers; Filtering Or Purifying Machinery And Apparatus, For Liquids Or Gases	8,756	542	- 8,214
31	85.07	√	Electric Accumulators, Including Separators, Whether Or Not Rectangular (Including Square)	8,755	11,162	2,407
32	85.16		Electric Instantaneous Or Storage Water Heaters And Immersion Heaters; Electric Space Heating Apparatus	8,447	386	- 8,061
33	85.25		Transmission Apparatus For Radio-Telephony, Radio-Telegraphy, Telegraphy, Radio-Broadcasting Or Television	8,323	119	- 8,204
34	85.29	√	Parts Suitable For Use Solely Or Principally With The Apparatus Of Headings Nos. 85 To 85.28	7,966	157	- 7,809
35	84.82	√	Ball Or Roller Bearings	7,718	21,894	14,176
36	84.28	√	Other Lifting, Handling, Loading Or Unloading Machinery (For Example, Lifts, Escalators, Conveyors, Teleferics)	7,215	5,985	- 1,231
37	84.79		Machines And Mechanical Appliances Having Individual Functions, Not Specified Or Included Elsewhere In This Chapter	6,955	1,518	- 5,437
38	85.45	√	Carbon Electrodes, Carbon Brushes, Lamp Carbons, Battery carbons And Other Articles Of Graphite Or Other Carbon	6,777	331	- 6,446
39	84.03		Central Heating Boilers Other Than Those Of Heading No.84.02	6,339	311	- 6,028
40	84.26		Ships' Derricks; Any Type Of Cranes, Including Cable Cranes, Mobile Lifting Frames, Straddle Carriers And Works Trucks Fitted With A Crane	6,145	1,219	- 4,926
41	85.27		Reception Apparatus For Radio-Telephony, Radio-Telegraphy Or Radio-Broadcasting	5,952	409	- 5,543
42	85.36	√	Electrical Apparatus For Switching Or Protecting Electrical Circuits, Or For Making Connections To Or In Electrical	5,693	887	- 4,806
43	85.02	√	Electric Generating Sets And Rotary Converters	5,683	52	- 5,631
44	85.37	√	Boards, Panels (Including Numerical Control Panels),Consoles, Desks, Cabinet And Other Bases	5,460	912	- 4,548
45	85.23		Prepared Unrecorded Media For Sound Recording Or Similar Recording Of Other Phenomena	5,348	2	- 5,346
46	84.5		Household Or Laundry-Type Washing Machines	4,869	479	- 4,389
47	84.64		Machine-Tools For Working Stone, Ceramics, Concrete, Asbestos Cement Or Like Mineral Materials Or For Cold Working Glass	4,803	1	- 4,802
48	85.26		Radar Apparatus, Radio Navigational Aid Apparatus And Radio Remote Control Apparatus	4,463	203	- 4,259
49	85.48	√	Electrical Parts Of Machinery Or Apparatus	4,320	243	- 4,078
50	84.04		Auxiliary Plant For Use With Boilers Of Heading No. 84.02 Or 84.03 Condensers For Steam Or Other Vapor Power Units	4,161	146	- 4,016

Source: Ministry of Energy, Industry and Trade.
Note: Checked items indicate that the product is included in the Master Plan for the Machinery Industry.

change of temperature such as heating, cooking, roasting, distilling, rectifying, sterilizing, pasteurizing of steaming, (iv) parts suitable for use solely or principally with the machinery of HS heading numbers 84.25 to 84.30; and (v) parts of railway or tramway locomotives or rolling-stock. Imports of consumer products classified as machinery are also important, but are not included in the present analysis. These consumer goods include television receivers (8 percent of all machinery imports) and office equipment (5 percent of total machinery imports).

Kazakhstan's exports are concentrated in a relatively few number of products that generally reflect the country's comparative advantage in natural resource based products. In contrast, imports are diversified across a wider range of products (see Table 4.4). Nevertheless, the types of products imported are often similar to those exports. For example, petroleum is both a leading export and import since there is no pipeline linking the oil-rich western part of Kazakhstan with the populated eastern region. Machinery and electrical appliances are among the leading products exported and imported. Other exports are dominated by non-fuel minerals (ferrous metals, copper, ores and zinc) and agricultural products (grain and meat).

Table 4.4
Kazakhstan's Main Traded Commodity Groups, 1996
(percent)

HS Code	Exports		HS Code	Imports	
27	Fuel and Oil Products	33.0	27	Fuel and Oil Products	19.0
72	Ferrous Metals	15.8	84	Machinery & Mech. Appliances	12.3
74	Copper and Copper Products	9.9	87	Vehicles	7.1
28	Inorganic Chemicals	6.8	85	Electrical Machinery and Equip.	6.9
10	Grain	7.2	73	Ferrous Metal Products	6.2
26	Ores, Slag, Cinders	2.5	40	Rubber and Rubber Products	4.0
84	Machinery & Mech. Appliances	2.5	17	Sugar and Confectionery	3.3
79	Zinc and Zinc Products	2.3	72	Ferrous Metals	2.9
25	Salt, Sulphur, Stone	1.7	28	Inorganic Chemicals	2.4
02	Meat and Meat Products	0.7	90	Optical Devices	1.6
	Other	17.5		Other	34.4
	Total	*100.0*		*Total*	*100.0*

Source: Center for Economic Reforms, *Kazakhstan Economic Trends -- Second Quarter 1997*.

4.2 Comparative Advantage of Machinery-Related Industries

Kazakhstan's trade reflects a pattern of specialization in those goods that are intensive in the factors with which the country is abundantly endowed. Table 4.5 shows Kazakhstan's revealed comparative advantage (RCA) indices classified by factor-intensity category for 1995.[1] The RCA indices have been constructed for industrial and agricultural products at the HS chapter (2-digit) level and are interpreted according to whether their value is greater than one, suggesting a comparative advantage in that product, or less than one, suggesting a comparative disadvantage.

On aggregate, Kazakhstan has a comparative advantage in natural resource-based and agricultural products and a comparative disadvantage in industrial products. At the disaggregated level it has a comparative advantage in each product intensive group.

- In the *natural resource-based* group, Kazakhstan has a comparative advantage in four product groups: inorganic chemicals, mineral products, manufactured fertilizers and vegetable oils.

- In the *unskilled labor intensive* export group, Kazakhstan has a comparative advantage in one product division, leather and leather manufactures.

- In the *human capital and technology* group, it has a comparative advantage in two of the product groups, iron and steel and metal manufactures.

The RCA indices therefore indicate that Kazakhstan has the potential to compete in the world markets for certain products, especially those in the natural resource-based group.

Kazakhstan's observed trade patterns, however, also reflect trade policies, real exchange rate changes, and commercial policy arrangements, among others. Thus its export performance may reflect not so much its comparative advantages (in terms of factors of productivity or endowments) as the effects of preferential arrangements with FSU countries and other policy-based factors.

---

[1] The classification of exports according to their factor intensity is based on the works of Murray (1987) and Fukasuku (1991). The RCA index is calculated as follows:

$$RCA_{ij} = (X_{ij} / X_j) / (X_i / X) \quad \ldots(1)$$

or

$$RCA_{ij} = (X_{ij} / X_i) / (X_j / X) \quad \ldots(2)$$

where,
X_{ij} = exports of product i from country j.
X_i = exports of product i from the world.
X_j = total exports from country j.
X = total exports from the world.

Table 4.5
Revealed Comparative Advantage of Kazakstan's Exports
(based on 1995 RCA values at the HS Chapter level)

Factor-Intensity Category	HS Chapter	RCA Value
Unskilled Labor Intensive:		***0.44***
Leather and leather manufactures	41,43	1.07
Footwear	64	0.10
Travel goods and handbags	42	0.03
Textile yarn and fabrics	50-58,60,63	0.76
Clothing	61,62,65	0.08
Furniture	94	0.14
Human Capital/Technology Intensive:		***0.71***
Iron and steel	72-73	5.02
Organic chemicals	29	0.11
Explosives, pyrotech products	36	0.14
Rubber manufactures	40	0.17
Manufactures of metal	74-76,78-83	6.76
Chemical materials and products	35,38	0.31
Essential oils and perfume materials	33,34	0.08
Plastic materials	39	0.27
Dyeing, tanning and coloring materials	32	0.07
Non-electrical and electrical machinery	84,85	0.09
Misc. manufactured goods	37,46,49,66,67, 71,87-93,95-97	0.10
Medicinal and pharmaceutical products	30	0.19
Natural Resource-Based:		***2.07***
Live animals and animal products	1-5	0.71
Vegetable products	6-15	2.16
Prepared foodstuffs, beverages and tobacco	16-24	0.30
Mineral products	25-27	4.36
Wood and cork manufactures	44,45,47	0.03
Fertilizers, manufactured	31	2.80
Non-metallic mineral manufactures	68-70	0.34
Paper manufactures	48	0.03
Inorganic chemicals	28	9.14
Total Industrial Products	**25-97**	**0.96**
Total Agricultural Products	**1-24**	**1.08**

Source: Calculations based on data from National Statistical Agency and United Nations, COMTRADE data base.

More importantly, Kazakhstan's shift from import substitution policies to outward-oriented policies is likely to produce dynamic changes in the comparative advantage of agriculture, industry and other sectors of the economy. An improved trade and investment framework under the country's forthcoming membership in the WTO will permit Kazakhstan to export products that more closely conform to its factor endowments. It will also allow the country to more fully exploit its comparative advantage in the production of particular goods such as those related to the machinery industry.

This approach builds on the growing worldwide trend towards the globalization of production. It will allow Kazakhstan to reduce its production costs by exploiting economies of scale and expanding extra-regional trade. A larger production area could, in turn, provide the basis with which to develop intra-firm trade, implement marketing processes that take advantage of vertical and horizontal product differentiation in markets outside the region, expand the volume of intra-industry trade, and bring in much needed domestic and foreign investments. Together these changes can provide new opportunities for greater specialization of production in the machinery building industry.

4.3 Nominal Rates of Protection

The legal framework for Kazakstan's customs activities is based on the President's Decree of July 1995 on Customs Activities in the Republic of Kazakhstan (Number 2368). The implementing rules are set out in the President's Resolution Number 2369 and Government Resolution Number 298 of March 1996.[2] Other control measures are provided by Resolution Number 1125 on Tariff Import Rates (August 1995) and its amendment of 12 March 1996 (Decree Number 300), Resolution 1479 on Customs Tariff Payments (November 1995), and Resolution 1035 on the Approval of the Commodity Exchange List (July 1995). Decree Number 960 of June 1997 introduced further changes into the tariff schedule that simplified the duty rates on items classified under the Harmonized System. [3]

An important exception to the June 1997 tariff schedule is provided to goods produced in and imported from developing countries, which are subject to a duty rate that is 50 percent the MFN rate; goods produced in and imported from least developed countries are free of duty.

[2] According to the Ministry of Energy, Industry and Trade, the current import tariff nomenclature is based on the Commodity List of Foreign Economic Activity (CLFEC) and is patterned after the Harmonized System (HS) developed by the World Customs Organization (WCO). There are, however, some structural and coding differences between the tariff nomenclature of Kazakhstan and the Harmonized System. HS 96 changes have not yet been incorporated.

[3] The current import tariff nomenclature is based on the CLFEC and is patterned after the HS developed by the WCO. There are, however, some structural and coding differences between the tariff nomenclature of Kazakhstan and the Harmonized System. HS 96 changes have not yet been incorporated.

Table 4.6
Kazakhstan Non-Zero Import Duties on Machinery, 1997

HS Code	Description	Rate
84.32	Agricultural, horticultural or forestry machinery for soil preparation or cultivation	5%
85.07.10.81	Led-acid electrical accumulators used for starting piston engines	15%
85.17.19.9	Electrical apparatus for line telephony or line telegraphy	10%
85.28	Television receivers	10%
86.09	Containers specially designed and equipped for carriage	5%
87.01	Tractors	5%
8701.30.000	Track laying tractors	15%

Source: Government of Kazakstan, 'On Introduction of Changes in the Decree of the Government of Kazakstan of 14 November 1996'. Almaty. Decree No. 960. 12 June 1997.

Under the new tariff schedule, the following tariffs apply to imports of machinery: [4]

(1) Machinery and mechanical appliances (HS 84) can enter the country duty-free, with the following exceptions:

- Machinery for soil preparation or cultivation 5%
- Household or laundry-type washing machines, other than fully automatic 20%
- Lathes for removing metal 20%
- Taps, cocks and valves for sinks, wash basins, bidets, water cisterns, baths and similar fixtures 10%

(2) Electrical machinery and equipment (HS 85) are accorded duty-free status, excepting the following:

- Led-acid electrical accumulators used for starting piston engines 15%
- Microwave ovens 20%
- Electrical apparatus for line telephony or line telegraphy, other than for telephones sets 10%
- Television receivers 10%

(3) Railway and tramway locomotives, rolling-stock and parts therein (HS 86) enter the country duty-free, with the following exceptions:

- Containers for carriage by one or more modes of transport 5%

[4] The customs value of imported goods is normally defined as the transaction value on a cif (cost, insurance, freight) basis and is largely based on the 1994 WTO Agreement on Valuation.

Box 4.1
Kazakhstan's Customs Levies and Fees for Customs Services

Type of payment	Rate for services rendered in % of customs value or in ECU
• Customs levies for customs processing of goods transferred through the customs boundary by legal and natural persons.	0.2 %
• For customs processing of vehicles transferred by natural persons.	15 ECU per unit
• Customs levies for customs processing of goods and vehicles outside designated areas and outside working hours of customs bodies.	levied in double
• Customs levies for storage of goods in warehouses established by customs bodies for temporary storage.	0.04 ECU per 1 kg gross per day
• For storage of vehicles transferred as goods.	3 ECU per unit per day
• Customs levies for storage of goods in customs warehouses established by customs bodies.	0.02 ECU per 1 kg gross per day
• For goods stored in special adapted premises (with use of specific equipment, establishing special temperature regime etc.).	0.03 ECU per 1 kg gross per day
• Customs levies for customs' accompanying goods within the zone of activities of customs administration.	100 ECU
• Outside the zone of activities of customs administration.	200 ECU
• Payment for information and consultancy.	5 ECU

Source: Ministry of Energy, Industry and Trade.

(4) Tractors (HS 87.01) are generally subject to a 5% duty, except for the following:

- Tack laying tractors 15%

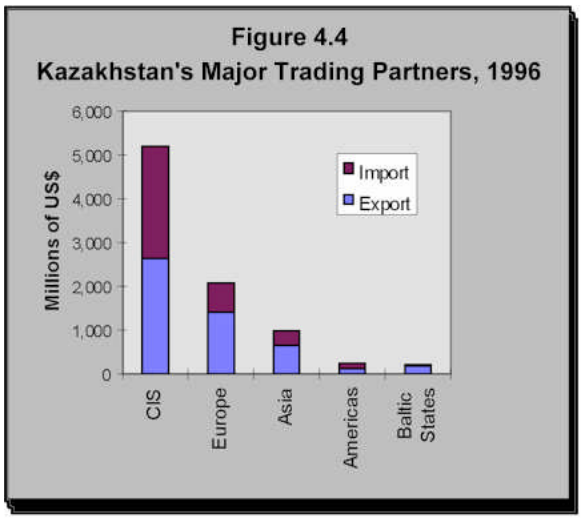
A number of other duties and charges are levied on imports including (i) customs processing fee and other customs services; (ii) value added tax; (iii) excise tax; and (iv) dumping, seasonal, compensatory, and special-purpose duties. In addition, internal taxes are applied to imported goods in the form of the VAT and the excise tax mentioned discussed in Chapter 5. Both taxes apply to domestic products as well as to imported goods.

4.4 CIS Trade and Customs Union Issues

Since the break-up of the Soviet Union, Kazakhstan has maintained strong links with its traditional trading partners. In 1996 trade with CIS accounted for nearly 60 percent of Kazakhstan's total trade, while Europe made up nearly one-fourth of its trade (Figure 4.4).

The share of Asian countries' trade in total trade with Kazakhstan is about 10 percent, while that of the Americas, which includes North and South American trading partners, is only 2 percent. Russia is by far Kazakhstan's most important trade partner, absorbing US$2 million of Kazakhstan's exports and supplying nearly US$2 million of goods to the Kazakh market.

Kazakhstan's focus on the CIS markets is reflected in its preferential trade agreements. All but one of its agreements are with CIS countries. The duty-free access offered by members of these preferential trade arrangements, and the importance of these partners to Kazakhstan, mean that about two-thirds of imports enter the country under preferential arrangements, with nearly three-fourths of those imports originating from Russia. Other important sources of imports are Uzbekistan and Turkmenistan.



Similarly, one-half of Kazakhstan's exports is directed to markets that offer duty-free. In addition to Russia, which absorbs about 40 percent of Kazakhstan's exports, Uzbekistan, Ukraine and Lithuania ranked among the top ten export markets and together absorbed nine percent of Kazakhstan's exports. Despite its dependence on preferential markets as a major outlet for its exports, Kazakhstan has more diversified trade on its exports than on its imports. This pattern of trade has important implications for Kazakhstan as a member of the WTO. Since preferential trade accounts for a large share of the country's overall trade, much of the gains from trade will derive from redirecting trade patterns from less efficient to more efficient markets.

In 1995 Kazakhstan joined the customs union formed between the Russian Federation and Belarus. In addition to creating a common customs tariff, the members of the customs union intend to harmonize their legislation affecting foreign trade. Kazakhstan also has bilateral free trade agreements with Kyrgyzstan, Lithuania, Moldova, the Russian Federation, Ukraine, and Tadjikistan. In addition, a multilateral free trade agreement was signed among Kazakhstan, Kyrgyzstan, and Uzbekistan establishing a unified economic area. A multilateral agreement on the creation of a free trade area among all CIS countries has also been signed. These agreements stipulate free trade

based on exemptions from duties for all kinds of goods and services with certain exceptions. After forming the customs union with Russia and Belarus, Kazakhstan imposed high import tariffs on many goods at the urging of Russia, which wants protection for its heavy machinery, chemical and automobile products sold in Kazakhstan.

4.5 Export Processing Zones and Special Economic Zones

In January 1996 the President issued the Decree on Special Economic Zones (SEZs) to accelerate the economic development of certain regions of Kazakhstan and to promote the integration of those regions into the world economy. According to the decree, development should be achieved, *inter alia*, through the creation of highly efficient export-oriented production, the attraction of investments, and the introduction of modern management methods and social norms. The SEZs enjoy special rights such as tax and duty-free status to encourage economic development. If the SEZs do not achieve the purpose for which they were established, they can be abolished prematurely by a Presidential Decree. A second piece of legislation, Chapter 12 of the Customs Code on 'Free Customs Zones and Free Warehouses', provides for the creation of free customs zones and free warehouses within which any commercial operations, except retail trade, can be conducted, including the transshipment of goods.

The economic zones are administered by the Chairman of the Administrative Council, who is appointed and dismissed by the President. The administrative authority in the special economic zones enjoys considerable degree of autonomy and is financed by taxes and fees paid by legal entities and natural persons registered in the territory of the special economic zone. The territories of free customs zones and warehouses are treated as being located outside the customs territory of Kazakhstan. However, legal entities in the special economic zones are subject to the taxation, registration, and licensing legislation of the Republic of Kazakhstan. Banking activities may also be carried out in special economic zones according to the banking legislation of Kazakhstan. The Customs Committee regulates and supervises the activities of free customs zones and free warehouses, while the Ministry of Justice is responsible for registering businesses within a SEZs. Only Kazakhstani legal entities and natural persons have the right to establish free warehouses. Kazakhstani legal entities can be fully or partially foreign-owned. The Foreign Investment Law of Kazakhstan governs foreign investment in special economic zones, and the national treatment stipulated under that law applies under this condition.

Currently, Kazakhstan has three operational SEZs in Lisakovsk, Kyzyl Orda and Akmola. The Government plans to establish two more SEZs in Zhayrem-Atasuyskaya and Sary-Arka, where unemployment is high and industrial capacity is underutilized. These and other sites could be considered for the establishment of industrial export processing zones, depending on a number of economic, technical, physical and social characteristics determining the relative advantages and constraints of their locations. The suitability of these locations for industrial development generally, and export processing zones (EPZs) in particular, will greatly depend on the types of processing activities envisaged. Light

manufacturing and assembly activities have different locational requirements than, for example, heavy machinery industry. Much of the variance arises from differences in the manufacturing cost structures of each type of activity.

At the simplest level, all manufacturing activities involve three stages: (a) procurement of raw or partially processed materials from supply areas; (b) processing or assembly of these materials into a final product or component at some location; and (c) distribution of the product or component to a specified market or set of markets. Associated with each stage is a set of costs. Traditionally, a good location has been one that allows the minimization of these costs. For this reason, EPZs are traditionally located near transportation hubs; however, determination of a least-cost location varies greatly by the cost structure of the particular firm and its specific requirements for labor, materials, energy, utilities and other inputs. For most firms seeking a production base in an EPZ, the most important factor is the availability and cost of labor and access to materials and transportation. The development of Kazakhstan's free zones will need to be supported by ready access to telecommunications linkages and services that adequately meet the requirements of foreign and domestic investors.

5. THE INVESTMENT ENVIRONMENT

Contents

5.1 Investment Patterns and Policies

5.1.1 Investment Patterns

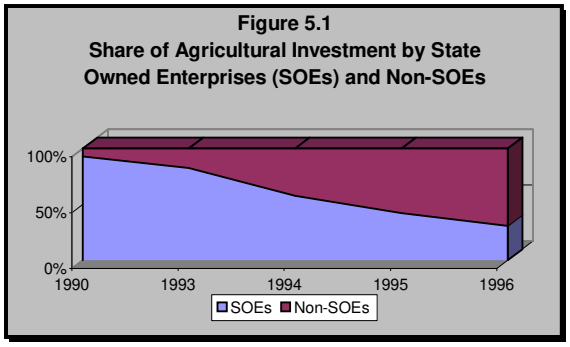
Kazakhstan's industrial base requires massive domestic and foreign investments to support its restructuring and modernization, and to enhance transportation and other infrastructural support activities. Investments in Kazakhstan, however, have increasingly been directed towards the petroleum and gas industries at the expense of other sectors (Table 5.1). The exception is construction activities, which have recently benefited from large investments. The proportion of investments in agricultural activities other than that related to the production of cereals and animal feeds has fallen dramatically, as has that in ferrous and non-ferrous metallurgy, electricity and coal production.

It would be useful to identify the pattern of investment since Kazakhstan's independence. However, in general, national accounts do not separate gross domestic investment data into their private and public sector components. In those countries in which there is information on private investment, the data have been derived from the difference between total gross domestic investment (from national accounts) and consolidated public investment, which can be complied from the consolidated budget of the State (for the IFC's data base on private investment, see Bouton and Sumlinski, 1997). In addition, it would be useful to identify private investment patterns by sector and industry since important differences are likely to exits between private investment in the petroleum sector and that in the agricultural, metallurgy and machinery building industries.

Table 5.1
Fixed Capital Investment, 1995-97
(millions of tenge and percent)

	Jan-Jun 1997 (mil. Tenge)	1995	1996	1997
		(percent composition)		
Crude Petroleum	12,704	13.6	21.2	34.3
Transport	2,225	4.2	8.3	6
Non-Ferrous Metallurgy	2,000	8.3	10.6	5.4
Electric Power	1,745	10.1	9.7	4.7
Coal	1,385	6.7	4.5	3.7
Ferrous Metallurgy	1,279	7.9	3.7	3.5
Construction Materials	1,235	0.3	0.3	3.3
Gas	1,163	2.8	3.4	3.1
Refined Oil	797	3.0	2.5	2.2
Other Agriculture	250	2.1	1.6	0.7
Cereals and Animal Feed	217	0.4	0.6	0.6
Light Industry	39	0.0	0.0	0.1
Other	12,006	40.6	33.6	32.4
Total	*37,045*	*100*	*100*	*100*

Source: National Statistical Agency.



The National Statistical Agency has compiled data on investment patterns in the agricultural sector (see Figure 5.1). The proportion of investments by state-owned enterprises (SOEs) has fallen from over 90 percent in 1990 to about 30 percent in 1996. This change reflects the Government's privatization program directed, among others, at agriculture during the first and second phases of the program during 1991-95.

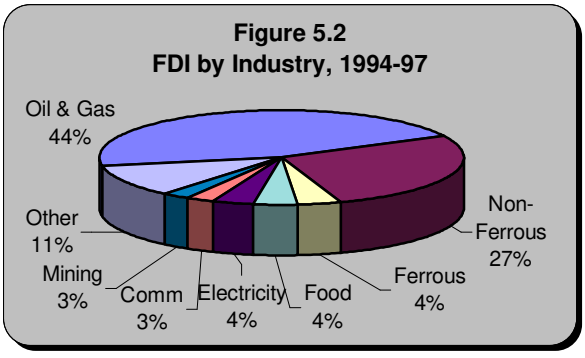
The growing empirical literature on privatization has almost invariably found that the transfer of assets from public to private hands yields both efficiency and welfare gains. A recent International Monetary Fund (IMF) study by Bouton and Sumlinski (1997) found that the most profound changes in privatization have been experienced by countries in Eastern Europe and the former Soviet Union. The study also found that, on a sectoral basis, infrastructure has accounted for the bulk of transactions in these regions, and has occurred in industrial enterprises such as steel and chemical concerns. The effects of these privatization initiatives were shown to have a fixed investment multiplier effect and therefore represented a central ingredient of governments' efforts to improve the business climate and accelerate overall development.

While empirical studies on the determinants of investment have generally associated increased levels of investment with a stable macroeconomic environment, privatization is also being recognized as a key factor affecting the level and growth of investment flows. In the original empirical work of Greene and Villanueva (1991), investment was found to be positively associated with economic growth. In re-estimating the Greene-Villanueva model for a more recent period, Bouton and Sumlinski (1997) included measures of privatization and economic reform. Their findings confirmed the importance of economic growth as a determinant of investment levels, and also showed that high rates of privatization and low external indebtedness and fiscal deficits have a positive and significant influence on investment.

Although much of private investment tends to be financed by domestic savings, increased access to foreign savings has played an important role in the mobilization of resources for the private sector. Foreign investors can participate in privatization either through foreign direct investment (FDI) or portfolio equity investment. The distinction between the two types of investment depends, in part, on the extent of the investor's ownership involvement in the privatized company. Generally, portfolio equity investment is a purely financial investment with the foreign investor's share in equity not exceeding 10 percent of the recipient company's total equity capita. FDI, in contrast, normally involves management control.

According to Bouton and Sumlinski (1997), foreign investors accounted for over 40 percent of the total proceeds from privatization in developing countries and economies in transition during 1988-95. Of this amount, FDI accounted for four-fifths of foreign investment generated from privatization with the remainder coming from portfolio equity investment. However, FDI from privatization has been much more important in Central Asia than in other regions. Moreover, privatization programs are an important vehicle for attracting additional domestic and foreign investment flows above and beyond those directly related to the sale of SOEs. Companies being restructured often require significant new investment to refurbish and modernize existing assets, and the Government can require that purchasers of state-owned assets pledge additional investment resources at a later date.

Figure 5.2
FDI by Industry, 1994-97



In Kazakhstan, FDI reached US$1.1 billion in 1996, representing over 5 percent of GDP. Nevertheless, most of the investment was directed towards the country's oil and gas industries and the non-ferrous metallurgy industry (see Table 5.2). Investment in other sectors represented less than 20 percent, that is, only 1 percent of the country's GDP. There was virtually no foreign investment in either the agricultural sector or the machinery building industry.

Table 5.2
Inflow of Foreign Direct Investment, by Sector, 1993-97
(millions of US dollars and percent)

Sector	1993	1994	1995	1996	1997 a/	Total 1993-97	
			(US$ mill.)				(%)
Oil and gas	976	544	315	389	159	2,383	45.4
Non-ferrous metallurgy	-	18	344	707	352	1,421	27.1
Ferrous metallurgy	-	-	98	115	2	215	4.1
Food industry	45	42	39	41	35	201	3.8
Electricity	-	-	-	126	56	182	3.5
Communication	-	13	17	5	102	137	2.6
Mining	-	-	-	110	26	136	2.6
Consumer goods	-	-	-	56	8	64	1.2
Banking	7	15	9	3	2	36	0.7
Chemical industry	-	-	-	36	-	36	0.7
Transportation	-	-	-	11	-	11	0.2
Hotels, restaurants	-	-	-	9	2	11	0.2
Construction	-	-	-	9	1	10	0.2
Mining exploration	-	-	-	-	3	3	0.1
Agriculture	-	-	-	-	2	2	0.0
Medical and sports facilities	-	-	2	-	-	2	0.0
Services, various	-	-	-	1	-	1	0.0
Other	244	16	115	20	6	400	7.6
Sub-Total	*1,271*	*648*	*939*	*1,638*	*756*	*5,253*	*100*
Repayment b/	-	-	18	534	383	936	
Total	*1,271*	*648*	*921*	*1,104*	*373*	*4,317*	

a/ Based on data for quarters I and II.
b/ Refers to parent company payments in foreign country or affiliate repayments to parent company (e.g., from Japan) to affiliates in Kazakhstan.
Source: National Bank of Kazakhstan.

Foreign investment has been directed towards the formation of joint ventures, usually with SOEs, or subsidiaries. Often these investments have been concentrated in a few large enterprises, such as the following:

- Tengizchevroil (TCO) was formed in a joint venture between Kazakhstanmunaigaz and Chevron in 1993. In 1997 Chevron sold 5 of its 25 percent holdings to the Russian company Lukoil, The agreement commits US$20 billion of investment over a 40-year period, and Chevron had already invested over US$800 million in TCO.

- Agip, British Gas and the Russian company Gazprom signed an agreement in 1992 with the Government for the development of the Karachaganak gas field in western Kazakhstan. In 1996, Gazprom sold its shares to the Russian oil company Lukoil.

- The Caspian Sea Consortium was formed between the Government of Kazakhstan and six international petroleum companies (British Petroleum, British Gas, Royal Dutch Shell, Mobil, Agip and Total). The Consortium members together paid approximately US$350 million for a seismic study and a bonus to the Government for the rights to prospect for oil in the Caspian Sea. Once the seismic work was completed in 1996, negotiations were started in mid-1997 for a 'production sharing agreement' (PSA) for drilling exploration of the estimated offshore reserves of 10 billion barrels of oil and two trillion cubic meters of natural gas.

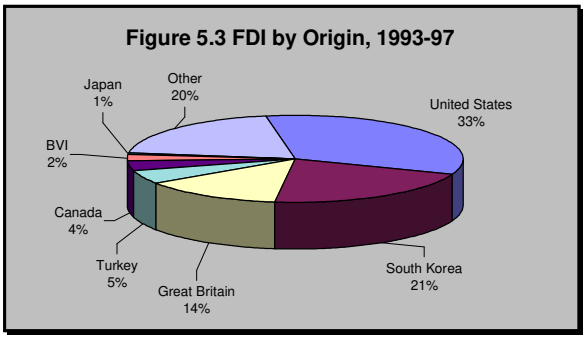
- Japan Chrome purchased 58 percent of the chromium company TNK Kazkhrom and its mine in 1995 for US$67 million and pledged to invest US$398 million.

- Ispat (a United Kingdom company) purchased Karaganda Steel Plant in 1995 for US$225 million, with an investment pledge of US$450 million.

- Samsung (South Korea) purchased the Zhezkazgan copper plant in 1996 for US$49 million, with an investment pledge of US$302 million.

- Samsung also took over the copper smelter Balkhashmys in February 1997, with an invest pledge of US$700 million to improve equipment, develop ore basins, and expand output. Balkhashmys accounts for about 30 percent of total Kazakhstan copper production.

Figure 5.3 FDI by Origin, 1993-97



- Daewoo Corporation (South Korea) purchased 40 percent of Kaztelecom's shares in 1997 for US$329 million and pledged additional investments of US$1.3 billion.

- Chinese National Oil Company (PRC) purchased Aktyubinsk in 1997 for US$325 million and made an investment pledge of US$4 billion.

- Philip Morris signed one of the largest CIS privatization agreements with Almaty Tobacco Company in 1993, under which Philip Morris will invest US$350 million through 1998.

- Coca-Cola Almaty Bottlers (CCAB), the Turkish brewing group Efes Pilsen, and the Kazakhstani bottling company Tonus have invested approximately US$20 million in renovating existing bottling facilities in Almaty, and another US$35 million investment is expected to further expand the facility and the distribution network.

Table 5.3
Foreign Direct Investment by Country of Origin, 1993-97
(millions of US dollars and percent)

	1993	1994	1995	1996	1997 b/	Total 1993-97	
Country a/			(US$ million)				(%)
United States	967	410	153	161	79	1,771	33.7
South Korea	-	1	266	441	396	1,104	21.0
Great Britain	-	26	153	474	67	720	13.7
Turkey	55	64	62	60	22	263	5.0
Canada	-	16	35	136	3	190	3.6
BVI	-	6	14	45	56	121	2.3
Belgium	-	1	-	106	9	116	2.2
Ireland	-	-	-	84	19	103	2.0
France	-	9	81	12	1	103	2.0
Indonesia	-	-	-	-	80	80	1.5
Germany	-	16	8	29	10	63	1.2
Japan	-	12	30	-	-	42	0.8
Switzerland	-	-	-	39	2	41	0.8
Czech Republic	-	40	-	-	-	40	0.8
Italy	-	9	16	12	1	37	0.7
Norway	-	9	11	12	1	32	0.6
Austria	-	-	4	12	1	17	0.3
China	5	5	2	-	-	12	0.2
Lichtenstein	-	-	0	4	4	8	0.2
FSU countries	-	3	3	1	-	7	0.1
Netherlands	-	5	1	-	-	6	0.1
Australia	-	-	3	1	-	5	0.1
Sweden	-	-	-	4	-	4	0.1
Hungary	-	2	-	2	-	4	0.1
Bahamas	-	-	-	2	2	3	0.1
Denmark	-	-	-	1	-	1	0.0
Saudia Arabia	-	-	-	1	-	1	0.0
Venezuela	-	-	-	1	-	1	0.0
Other	244	15	95	-	4	359	6.8
Subtotal	*1,271*	*648*	*939*	*1,638*	*756*	*5,252*	*100*
Repayment c/	-	-	18	534	383	936	
Total	*1,271*	*648*	*921*	*1,104*	*373*	*4,317*	

a/ Ranked by 1993-97 total investment.
b/ Based on data for quarters I and II.
c/ Refers to parent company payments in foreign country (e.g., from Japan) to affiliates in Kazakhstan, or affiliate repayments to parent company.
Source: National Bank of Kazakhstan.

These investments have largely determined the origin of FDI in the last few years (see Table 5.3). Investments originating from five countries (the United States, South Korea, Great Britain, Canada and Belgium) accounted for 80 percent of total FDI in 1996. Most of the other investors were from European countries. Investment flows from South Korea have been rising rapidly, while those from the United States have been declining.

In many cases, foreign companies have entered the Kazakh market through the formation of joint ventures with state-owned or newly privatized companies. A recent IFC survey noted several motivating factors for this type of partnership (Miller *et al*., 1997). For foreign companies, the following factors affected their partnership decision (where numbers in parenthesis indicates the proportion of foreign firms that believe the factor to be critical in their joint venture decision): (i) knowledge of local politics (70 percent), (ii) knowledge of government regulations, (iii) knowledge of local customs (68 percent), (iv) knowledge of local markets (65 percent), (v) provision of financing (58 percent), (vi) local reputation (58 percent), and (vii) access to market (54 percent). For local companies, the dominant motive for the joint venture was access to technology (74 percent), followed by access to the international reputation of the foreign company (72 percent), the provision of finance (65 percent), and management know-how (59 percent).

Another common form of entry for foreign companies has been through management contracts. As a mechanism for phasing in foreign ownership, the Government usually requires the managing company to work out a restructuring plan. According to Akhmetova, Buranbaeva and Radivilova (1997), one-fourth of the management contracts has been cancelled, usually because of the failure of the managing company to fulfill its contract obligations. In 1997, for example, the Government cancelled a contract with the Canadian company World Wide Minerals to manage the Tselinny Mining and Chemical Complex (TMCC). The grounds for the cancellation were that the company failed to pay US$1.8 million in wage arrears and debts to local pension funds and the Government.

Several problems with management contracts have been identified by the survey undertaken by JICA (1997d) in the non-ferrous metal industry, which are likely to be equally applicable to other industries:

- The size of the company's debt and wage arrears are often undisclosed to the contracting management contractor.

- The legal aspects of the management contract are not well defined.

- Sales of companies by the contracting managers to its subsidiaries can take place at below market prices, thereby transferring company profits to those of the management contractor.

- Joint oversight of state-owned company by both the management team and the Government are lacking.

More generally, a number of problems continue to limit foreign investment in Kazakhstan. USAID is currently conducting a survey on the trade and investment climate in Kazakhstan, which aims to identify some of the remaining obstacles to doing business in the country. In a previous survey, the following factors were found to inhibit investment USAID (1996):

- Foreign investments continue to be screened by the Government at the highest levels.

- The tendering process lacks transparency, despite the Government's promise to conduct tenders in an open and fair manner.

- Government procurement procedures lack transparency and foreign investors often complain that awards favor domestic bidders. (The Government's tendering process became more open after a widely publicized scandal in 1995 briefly drove away potential investors.)

- Corruption at all levels of the Government has lowered investor confidence.

- Inconsistencies among the numerous decrees and changes in the regulatory framework have given rise to uncertainty and discouraged investment.

Despite these and some other limitations associated with the country's legal framework, Kazakhstan is generally open to foreign investment and has recently been given a favorable rating for equity investments (see Box 5.1). There are no major sectors that are closed to those investments. Foreigners can take part in all privatization processes, including the enterprise leasing option as a pre-privatization step, and since 1994 foreign companies can undertake long-term management contracts of large industrial enterprises. The regulatory basis for foreign investments in Kazakhstan is the Foreign Investment Law of 1994 and it was amended in 1997. Complementary initiatives on the part of the Government include de-monopolization, privatization, debt restructuring, banking reform, price liberalization, the establishment of a securities and exchange commission, and the enactment of the 1995 Tax Code 1995, which is considered to be among the most comprehensive in the NIS (USAID, 1996). In November 1995, the State Committee on Investment was established in an effort to streamline investment procedures.

5.1.2 FDI Policies

Kazakhstan is in the process of establishing a legal environment that is conducive to investment. Some of the key legislation affecting investment relates to foreign investments (Foreign Investment Law of 1994), taxes (Tax Code of 1995), customs procedures (Customs Code of 1995), insurance (Decree of President having the Force of Law On Insurance of 1995), competition policy (Law on Development of Competition and Restriction of Monopolistic Activity of 1991), land rights (President Decree having the Force of Law "On Land" of 1995), other currency and banking laws and regulations, and intellectual property legislation.

The Foreign Investment Law provides for guarantees for national treatment and non-discrimination among foreign investors. Since Kazakhstan has a policy of free and open admission to foreign investments, it does not subject foreign investment to any prior authorization requirements. The law does not provide any investment incentives in the form of tax holidays or others either in general or with regard to a specific sector. The Government plans to continue improving the legal and regulatory environment for foreign investment and to improve the conditions for stimulating the operations of credit, financial, investment, and insurance institutions servicing the small and medium-size enterprises.

Box 5.1
Kazakhstan's Credit Rating

In November 1996, the international rating agencies Standard & Poor, Moodys and IBCA issued credit ratings for the Republic of Kazakhstan. All three agencies assigned a BB Minus rating for long - term foreign currency and a B rating for short-term foreign currency. For tenge-denominated debt, Standard & Poor assigned a BB Plus long-term and B short-term local currency ratings.

Overall, the ratings are believed to be favorable, since they are in line with those given for Russia, Argentina and Romania; they are above countries such as Turkey and Pakistan. More importantly, the fact that a rating has taken place represents an important step in Kazakhstan's continued economic development and can be considered a catalyst for greater investment into the country's capital markets.

According to press releases from the international rating agencies that were issued in November 1996, and which were reported by the Kazakhstan Post-Privatization Fund (1997), the following factors affected the ratings:

Positive Factors Affecting the Ratings:

- A tight fiscal policy.
- A large reduction in inflation.
- Stabilization of outputs.
- A generally low government debt burden.
- An external debt service that is below most other countries with BB category foreign currency ratings.
- An improving external liquidity position.
- A low current account deficit.
- Potentially large production of oil and gas and minerals.
- Agreement on a planned pipeline to the Black Sea to increase oil exports.
- Strong government control over the domestic financial system.

Negative Factors Affecting the Ratings:

- A relatively young political system.
- The government's lack of experience in economic management.
- A continued weakness in the government's revenue performance.
- The risk of slippage in enterprise and banking reforms.
- The need for greater private sector savings and more activity on the financial markets.
- The need to secure trade and transit arrangements with neighboring countries as a result of Kazakhstan's landlocked position.

Source: Kazakhstan Post-Privatization Fund (1997).

Box 5.2 **Laws and Regulations on Foreign Investments**
• Law on Investment Activity in Kazakhstan (10 June 1991)
• Law on Membership of the Republic of Kazakhstan in the International Monetary Fund, International Bank for Reconstruction and Development, International Finance Corporation, International Development Association, Multilateral Agency of Investments Guarantee and International Center on Investment Disputes Settling (26 June 1992)
• Law on a Returnable System of Financing for Investments (12 April 1993)
• Law on Foreign Investments (27 December 1994)
• Decree 2035 of the President on Measures for Increasing the Efficiency of State Administration and Regulation of Processes for the Attraction of Foreign Capital to the Republic of Kazakhstan's Economy (19 January 1995)
• Government Resolution 139 on Measures for Attracting Foreign Credits to the Republic of Kazakhstan (8 February 1995)
• Law on State Support for Direct Investment (February 1997)
Source: Ministry of Energy, Industry and Trade.

In February 1997 the Law on State Support for Direct Investment was enacted to stimulate domestic and foreign investment in the following priority sectors of the economy:

- Infrastructure (including electrical infrastructure and telecommunications);
- Light manufacturing;
- High-yield varieties of crops and livestock, fertilizers and pesticides;
- Social sector investments (including investments in the health, education, sports, and tourism); and
- Investments associated with the transfer of the capital to Akmola.

As inducements to stimulate additional investments in these sectors, various forms of tax and customs exemptions, together with contributions of real property by the Government, may be individually negotiated with the State Committee on Investments.

Performance requirements generally refer to the investor's requirement to pay back wages, remodel factories and plants, and provide an agreed level of output. Rules on local content, hiring of nationals, and local source of financing vary from contract to contract. While investors are usually not required to purchase from local sources, such terms can be written into contracts (for example, the Petroleum Law requires that petroleum contractors give preferences to the purchase of local equipment, goods and services). There is no requirement in Kazakhstan that nationals own shares in foreign investments. In the banking sector, foreign investors have participated only through joint ventures with local entities, but this is no longer necessary. Likewise, there is no general requirement that the level of foreign equity be reduced over time. Technology transfers frequently occur and sometimes are written into contracts, but do not appear to be a necessary aspect of foreign investment.

Land ownership is provided by Kazakhstan's constitution. Land and other natural resources can be owned or leased by physical persons according to conditions established by law. These conditions are: (i) permanent ownership is restricted to state enterprises; (ii) life inheritable tenure is granted for family farms, household plots, gardens, and dachas; and (iii) other land and natural resources may be leased up to 99 years. Agricultural land is not permitted to be privately owned. Foreign citizens and foreign legal entities are only able to lease land for up to 99 years.

Protection of property rights is recognized under the Civil Code and the 1995 Land Law. Adequate enforcement of these interests, however, is seriously compromised by the absence of central registries for non-fixed and land cadastres for fixed property. The use of mortgages on real property has just begun, with a Law on Mortgages adopted in 1996. There is a traditional system of recording interests in land, buildings and mortgages. However, legal and banking expertise in this area is quite limited and enforcement procedures are uncertain.

Patent and trademarks laws guarantee the right of inventors to the 'name' of their product, but financial rights of patent holders do not appear to be protected. In addition, Kazakhstan lacks patent protection for certain types of products and processes, such as layout designs and plant varieties, and according to USAID (1996), existing protection provided for trade secrets is rudimentary. Registration of trademarks also began in July 1992. Trademark violation is a crime, but enforcement appears to be rare and arbitrary. There are marked disparities in fees charged to domestic patent and trademark applicants, as compared with foreign applicants. The 'Law on Copyrights and Related Rights' was approved in June 1996. USAID (1996) believes that the absence of special border measures in the Customs Code, together with outdated provisions in the current Criminal, Procedural, and Administrative Codes, diminishes the effectiveness of applying appropriate sanctions to violators.

5.1.3 Registration Procedures and Regulatory Issues

Dealing with bureaucratic obstacles related to trade and investment concerns also figure prominently in work being undertaken in the reform process, with a view toward assuring that the economic climate in Kazakhstan is attractive to both local and foreign investors. Private economic actors must know the "rules of the game" at the outset, and potential new investors have to be sure beforehand that they can confidently analyze risks involved in a new venture. Also, greater transparency is essential to counter corruption and ensure a level playing field for all private sector actors.

Licensing requirements remain a major problem. Under the April 1995 Law on the Registration of Legal Entities, the relevant agency must issue the registration license within one month of the submission of all required documents. The actual implementation of this decree has been grossly inadequate, and some foreign companies have complained that the process can take several months. According to USAID (1996), a subsequent implementing regulation (Resolution 1894) identified 28 separate licensing

bodies issuing licenses for more than 235 activities that require such permits. For example, a company must obtain a wide variety of licenses, including environmental and health, before it can begin operations. This procedure has led to confusion among businesses and government officials alike, particularly since in many cases the steps and qualification requirements for issuing these licenses do not exist.

The existence of significant delays in customs clearances has also impeded foreign investment. Kazakhstan is taking steps to improve the functioning of its Customs Committee, including making the Customs Committee an independent body on an equal footing with other ministries. Moreover, membership in the WTO will require that Kazakhstan eliminate trade control measures and simplify its custom procedures.

Other regulatory impediments to foreign investment include delays by the Ministry of Justice for the registration of foreign investments (legal entities); inadequate transparency and inconsistencies in the tendering process; and the lack of timely notification of tenders to allow adequate response time and ensure good, competitive bids (USAID, 1996).

Convertibility and transfer of currency no longer appear to pose a problem for investors, although there appears to be an increase in bureaucratic obstacles to currency transactions. In February 1996 the NBK allowed currency convertibility and in July 1996 restrictions on current account transactions were eliminated under Article 8 of the IMF Articles of Agreement. Money transfers in currency associated with foreign investments (whether inside or outside of the country) can take place without restriction. In addition, foreign investors can convert and repatriate tenge earnings made inside Kazakhstan. Notwithstanding the liberalization of transactions, anecdotal evidence from the Study Team's survey of machine building enterprises indicates that there has recently been an increase in the amount of paperwork involved in foreign exchange transactions. While there are fees associated with the paperwork, businessmen complained about the time wasted in processing the transactions rather than the fees. The time lost in business transactions represented a large cost in terms of delayed shipments leading to the cancellation of orders from buyers who are unable or unwilling to tolerate the procedural requirements.

5.2 Tax Structure and Incentives

5.2.1 Tax Structure

Kazakhstan's 1995 Tax Code (Presidential Decree having the Force of Law No. 2235) is considered by tax experts to be among the most comprehensive in the NIS. In general, taxes are applied universally within the code, allowing only a limited set of exemptions. The code essentially applies the international model of taxation, based on the principles of equity, economic neutrality and simplicity. The Tax Code is the only vehicle employed by the Government of Kazakhstan to specify compulsory nationwide and local taxes. The Code provides for three major central government taxes: income tax for both businesses and individuals; value added tax (VAT); and excise duty.

Income tax is assessed on a residency basis rather than citizenship (normal residency rules apply). There are no preferences given to foreign nationals or foreign owned or joint ventures. Business income is taxed at 30 percent (20 percent in special economic zones) except for income derived principally from land for which the rate is 10 percent. Dividends and interest are subject to a 15 percent withholding tax, and tax credit provisions effectively exempt dividends and interest received by businesses from withholding tax.

The Code provides for a 20 percent VAT that applies to the value added through the various stages of production and distribution up to final sale for consumption or use. It is charged on both goods and services consumed in the country whether domestically produced or imported.[1] The tax is paid at each point in the chain of sales but a system of tax crediting avoids any cascading effect. The tax is comprehensive with very few exemptions. Exports are assessed at a zero rate with credit for all input taxes except for export to CIS countries. There are a few imported goods exempted from the VAT but the most important exemption is on goods originating in and imported from CIS countries (Customs Committee Instruction No. 131-P of 29 September 1995 'On Order of Application of VAT and Excise Related to Goods Imported to the Territory of the Republic of Kazakhstan').

The Tax Code lists the goods that are subject to excise tax and subsequent resolutions specify the various rates for excise taxes. In general these taxes apply to luxury items such as alcoholic beverages, tobacco, automobiles and lorries, jewelry, and clothes. It also applies to diesel fuel and gasoline. Exemptions apply to goods imported or exported on a temporary basis, goods originated in and imported from CIS countries, and alcohol intended for use in production of liqueurs, vodka products, fortified drinks and juice, wine, and balsam. Two other nationwide taxes are collected, one a securities transaction tax, the other a special taxes and payments imposed upon mineral resource users. There are also local taxes, a land tax, property tax and a tax on vehicles. Under the February 1997 changes to the tax law, accelerated depreciation is allowed and companies can deduct their expenses on construction and purchases of technological equipment.

[1] For imports, the VAT is computed as follows:

goods subject to customs duties and excise taxes: T = (V+L+D+E) x 20%;

goods subject to customs duties but not excise taxes: T = (V+L+D) x 20%;

goods subject to neither customs duties nor excise taxes: T= (V+L) x 20%.

where T = VAT; V =cutoms value; L = customs levies; D = customs duties; and E = excise taxes.

5.2.2 Incentives for Foreign Direct Investment

The State Committee on Investment provides a number of incentives for investors. These privileges consist of the following:

- Grants of natural resources belonging to the State,
- Reductions of taxes on land and property, and
- Reductions or exemptions of customs duties on imports of equipment and material inputs for the investment project.

5.3 Infrastructure and Costs Related to the Machinery Industry

5.3.1 Utility Costs

5.3.2 Wages

Kazakhstan's population is relatively well educated, and its literacy rate is almost 98 percent. Under the Soviet system, developments in education, science and culture were marked by impressive achievements. While in 1939, 84 percent of Kazakhs in the 9-39 year old age group were literate, in 1959 the rate had increased to 95 percent. Although Kazakhs lagged behind Russians in terms of formal education during the mid-1950s, by the end of 1970s that was no longer the case. An advanced scientific base consisting of 220 research institutes and regional agricultural stations developed in Kazakhstan over the years. Over half a million students currently attend more than 300 institutions of specialized secondary and higher education. The country produces 125,000 specialists and 190,000 qualified workers each year. However, the education system is geared toward a central, command economy and a basic understanding of how a market economy works is often lacking. The result is an inadequately trained labor force in the manufacturing and service sectors.

Table 5.4
Comparative Utilities and Transportation Services Costs of Kazakhstan

Country	Electricity Rate for Industry (US$/kWh)	Water Rate for Industry (US$/m3)	Telecom-Munications (US$/min for USA call)	High Speed Data Link to USA (US$/month)	Railway Freight Charge to USA (US$/20' container/km)
Kazakhstan	Prior to 8/97, $0.028 (2 tenge). After 8/97, $0.053 (4 tenge).				
Indonesia	$0.10	$0.92-$1.21	$2.21	---	$3,000
Malaysia	For commercial and industrial class 1: avg kWh, $0.12; for commercial class 2: avg kWh, $0.10; industrial class 2: avg kWh, $0.08. d/	$0.32	$1.92 c/	$8.5 c/	$2,500 c/
Philippines	For NPC customers, $0.05 weighted avg; for electric cooperatives, $0.09 weighted average.	0-10 m3: $2.41 11-20m3: $0.30 21-30 m: $0.33 31+ m3: $0.47	$2.25 e/	$10-20 f/	Cagayan to Manila: $585 Zamboanga to Manila:$582 g/

a/ Per 1,000 gallons.
b/ Dedicated 4800 baud telephone line.
c/ Based on national average rates.
d/ Based on data for Sabah.
e/ Prevailing rate throughout the Philippines; pending application has been made for a reduced rate of telephone calls to/from EAGA member countries.
f/ Average monthly charges for Internet hook-up; excludes long-distance telephone charges, if applicable.
g/ Domestic rates only; based on average rates of two major carriers, Aboitiz and Sulpicio.
H/ Based on Philippine Airline rates.
I/ Based on average Philippines Airline rates between Manila and San Francisco, Los Angeles and New York.

Sources:For Malaysia, *Basic Facts and Information*, Department of Industrial Development and Research; for Indonesia, regional statistical offices; for the Philippines, Department of Trade and Industry.

Labor productivity is low by most standards. According to a recent study by Blake (1997), labor productivity in Kazakhstan is only 58 percent of its effectiveness level. The results are based on a survey measuring the amount of time that workers were actively productive during the course of the workday.[2] Apart from inadequate worker training programs, the study found that management-level inadequacies were partially to blame for the low productivity figures, due inadequate management supervision, lack of planning, and poor management techniques. Fundamental problems were also observed in defective machinery and associated recurrent breakdowns, material shortages, and inefficient factory designs.

[2] Comparable labor productivity figures are generally higher in other countries for which data are available. For example, in Germany, labor productivity is 92 percent; in Japan, 83 percent; and in England, 79 percent.

Table 5.5
Monthly Wages in Industry, Agriculture and All Sectors, 1995.1 - 1997.3
(US dollars)

	Industry	Agriculture	All Sectors
1995.1	113	28	66
1995.2	130	36	76
1995.3	146	48	91
1995.4	174	53	107
1996.1	165	40	102
1996.2	163	51	111
1996.3	173	66	118
1996.4	184	68	126
1997.1	164	50	112

Source: Government of Kazakhstan, Center for Economic Reform, based on information provided by the National Statistical Agency of Kazakhstan.

Table 5.6
Cost Structure Of Selected Industries, 1995-96
(percent)

	Total Cost	*Of which:* Materials		Labor	
		1995	1996	1995	1996
All Industries	*100*	*52.9*	*50.4*	*13.9*	*20.4*
Machine Building	100	50.7	52.7	24.8	34.1
Ferrous Metallurgy	100	61.8	58.0	13.1	28.3
Nonferrous Metallurgy	100	52.9	49.8	18.0	23.2
Forestry, Pulp And Paper	100	48.9	53.0	21.5	29.2
Light Industry	100	54.0	55.0	15.6	24.6
Food Industry	100	65.3	66.8	12.6	16.9
Chemicals And Petrochemicals	100	62.9	54.3	13.9	22.6
Electricity	100	41.6	39.8	10.2	12.7
Fuel	100	50.5	49.5	11.1	15.2

Source: National Statistical Agency.

Official estimates show that real wages have more than halved between 1991 and 1995 (Cummings, 1995). As a result, labor costs are low are generally make up a relatively low proportion of output costs (see Table 5.5). At the same time, while officially recorded unemployment remains low, there is a high level of hidden unemployment - perhaps close to 15 percent (US Embassy, 1997a). With significant hidden unemployment in Kazakhstan's enterprises and numerous employees working only part-time or on compulsory leave, wages are often unpaid or are badly in arrears. At the end of 1996, wage arrears (excluding social payments and pensions) were approximately US$789 million. In the spring of 1997, the Prime Minster ordered local governments to begin repaying some US$150 million in back wages owed to workers. Still, there remains a problem of long delays in wage payments among state-owned enterprises and the public sector in general.

5.3.3 Transportation Costs

5.3.4 Other Investment Issues for the Machinery Industry

There are several other laws and regulatory issues that are important to investments in the machinery industry, which are briefly described in the remainder of this chapter.

Domestic Subsidies - Subsidies have been applied to the agricultural and industrial sectors, but they are being reduced as more enterprises are privatized and the economy becomes increasingly market-oriented. Moreover, a number of these subsidies are actionable under the WTO Agreement and, once Kazakhstan becomes a member of that organization, it will probably be required to terminate those subsidies within an agreed-upon timetable.

The Government grants agricultural subsidies to support small and medium size state and private enterprises. Domestic subsidies have been provided through the Agricultural Support Fund, credits through the EXIM Bank of Kazakhstan, loan guarantees and the rescheduling of arrears. Other agricultural subsidies include preferential tariff rates for railroad transport of agriculture and food products produced locally (70 percent of regular rates). In addition, Article 30 of the tax code provides preferential tax rates for income derived from activities where land is the main means of production (e.g. agriculture) 10 percent versus 30 percent for non-agriculture.

The Government also provides a number of subsidies to industry. According to the Ministry of Energy, Industry and Trade, the following subsidies were offered in 1996:

- Non-specific subsidies through preferential internal credits of the EXIM Bank and the Rehabilitation Bank and Government guarantees on external loan — US$461.5 mil.
- Actionable subsidies from tax deferments, debt forgiveness and deferred debt — US$400.4 mil.

- Export subsidies in the form of preferential credits directed to support of export and import substitution — US$50.0 mil.
- Subsidies as percent of GDP — 5.6 percent
- Actionable and export subsidies as percent of industrial production — 12.7 percent

Land Reform - The Land Code of 1991 established distinct land categories for agriculture, settlements, land under industrial enterprises, forestry, national reserves and recreation. According to the Constitution, all land in Kazakhstan is the property of the State and, as a consequence, all other forms of ownership are at the discretion of the state. Building from this base, early legislation did not intend to embrace the concept of private ownership and instead established the following categories: (i) permanent ownership, which was restricted to state enterprises; (ii) life inheritable tenure (LIT), which was granted for peasant farms, household plots, gardens, and dachas; (iii) permanent use; (iv) temporary use; and (v) leasing. Since the State owns all land, the first category of permanent ownership remains a logical consequence of being a state enterprise. The concept of LIT appears to have been an attempt to bridge the gap between the concept of private ownership (non-state) and the constitutional status of land (USAID, 1996). The remaining categories of permanent and temporary use convey the possibility of termination of rights.

The introduction of the Civil Code in early 1995 with its acceptance into law of the concept of private ownership called for the reconciliation of land reform laws with its basic principles. As a consequence, the concept of private ownership of land was recognized in the December 1995 Law on Land. Private ownership can now be held over personal household plots, gardens and dachas and also under private industrial enterprises. However, land of agricultural designation cannot be granted a private ownership status, and foreign citizens and foreign legal entities can only lease land through a domestic partner for a period up to 99 years.

Duty Drawback Scheme - Under the Customs Code, the Duty Drawback Scheme allows goods to be exempted from payment of import duties and taxes when goods are imported for re-export. The goods must be exported in the same condition as imported and within six months of their importation. Otherwise, they are liable to full duties and taxes plus interest.

Provision is also made in the Customs Code for the refund of customs duties and taxes on goods that have been imported, subjected to processing, and then re-exported. The goods must be declared for processing at the time of importation and a permit obtained from customs to undertake the processing. Goods can be used for manufacturing, installation, assembly, processing or repair. The processing of goods must be completed within time limits set by the customs authority. Goods that have been processed in accordance with the requirements of the Customs Code are entitled to a refund of customs duties and taxes if the goods are re-exported within two years of their importation. The foreign components of such processed and re-exported goods are exempt from customs export duties.

6. FINANCING CONDITIONS

Contents

6.1 Banking Structure and Regulations

6.1.1 Banking System

The banking system in Kazakhstan is currently in a state of transition, and attempts are being made by the private sector and the Government with the assistance of international donors[1] to adopt it to Western banking standards. The system is made up of a central bank, domestic and foreign-owned commercial banks and government-owned banks. Nearly 95 percent of the assets of the banking system are in Almaty-based banks (US Embassy, 1997b).

The structure of the banking system has undergone important changes in recent years. In June1997 the Government had shares in only six banks, compared with 64 banks in early 1995. As a result of more stringent reserve requirements, the number of Kazakh banks dropped from over 200 banks in 1995 to less than half that number by mid-1997 (for recent data on banks and branch offices in individual oblasts, see Table 6.1 and Figure 6.1). There have also been several mergers and acquisitions in the banking sector. The development of the stock market, which has only been in operation since 1993, and more competitive pressure to increase capital along with tightened capital requirements by the National Bank of Kazakhstan (NBK), should lead to more effective control and better corporate governance.

The National Bank of Kazakhstan (NBK) is charged with the overall supervision and regulation of all banking activities in the country, and performs standard central bank functions. Under the Decree 'On Banks and Banking Activities' (the 'Banking Decree'), adopted in August 1995 and the Decree 'On the National Bank of the Republic of Kazakstan' (the 'National Bank Decree'), adopted in Mach 1995, the NBK has the responsibility for protecting the stability of the monetary-credit system and the interest of

[1]In June 1996 the World Bank approved a US$180 million Financial Sector Adjustment Loan (FSAL) to help build a sound and efficient banking sector. The objectives of the program are to address outstanding and questionable loans and problematic banks, and to improve the banking environment to reduce operating risks (World Bank news release, July 1, 1996).

creditors, depositors, and other bank clients. More specifically, under the Banking Decree, the NBK determines the criteria for entering into the banking system and the procedures for licensing of banking activities. That decree also sets the conditions under which a controlling interest in a bank can be acquired and the procedures for removing problem banks from the system.

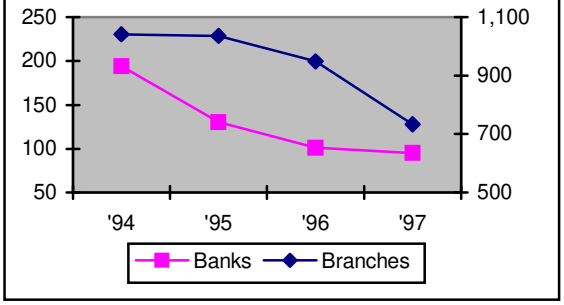
Table 6.1
Number of Banks and Branch Offices in Kazakhstan, by Oblast, 1994-97

Oblast	1994		1995		1996		1997	
	Banks	Branch offices	Banks	Branch offices	Banks	Branch offices	Banks	Branch offices
Akmola	6	...	5	...	5	47	6	44
Aktubinsk	7	...	7	...	6	60	6	43
Almaty	5	...	2	...	2	41	2	41
Atyrau	2	...	1	...	1	35	1	29
E. Kazakhstan	3	...	2	...	2	51	2	54
Jambyl	11	...	7	...	3	56	3	40
Jezkazgan	4	...	3	...	3	39	3	34
Karaganda	3	...	3	...	2	50	3	48
Kyzylorda	2	...	1	...	0	33	0	28
Koshetau	2	...	1	...	1	49	1	45
Kostanai	8	...	4	...	3	59	4	53
Mangistau	1	...	1	...	1	23	1	18
Pavlodar	8	...	6	...	5	60	5	47
Semipalatinsk	1	...	1	...	1	57	1	50
N. Kazakhstan	0	...	0	...	0	45	1	49
Taldykorgan	5	...	5	...	1	48	1	41
Torgai	1	...	1	...	1	32	1	27
W. Kazakhstan	1	...	1	...	1	51	1	42
S. Kazakhstan	25	...	11	...	5	82	4	61
Almaty (city)	89	...	68	...	58	31	54	21
Total	**184**	**1,042**	**130**	**1,036**	**101**	**949**	**95**	**734**

Source: National Bank of Kazakhstan, *Statistical Bulletin*, No. 12 (37), December 1997.

The NBK implements its supervisory policies through prudential normative requirements with which all banks must comply. These requirements include minimum capital requirements, limitations on loans to a single borrower, a minimum liquidity ratio, and the limits of the bank's open currency position. In addition, there are restrictions on relations between banks and persons connected to banks ('special relations' generally defined as management officials, physical persons holding more than 10 percent of the bank's shares, close relatives of such persons, and legal entities in which such persons are large participants). The NBK is authorized to conduct inspections of banking activities. Included in the measures that can be taken by the NBK are the imposition of written instructions or fines, and the suspension or

Figure 6.1
Number of Banks and Branches in Kazakhstan, 1994-97



annulment of a bank's license, and the revocation of its permission to open. Other recent reforms include the NBK's introduction in 1996 of its own chart of accounts that conforms to international standards and that was prepared with the assistance of the IMF. All Kazakh banks implemented new accounting methods that conform to international standards in April 1997 (US Embassy, 1997b).

Box 6.1 Rehabilitation Bank

The Rehabilitation Bank was created in 1995 under a World Bank project to assist in the restructuring of large state-owned enterprises (SOEs) that were considered by the Government to have high levels of accounts payable, while also having special economic or social importance. The eligibility criteria to receive loans as part of a restructuring plan mainly focused on the amount of debt owed to banks, the state budget, suppliers and intermediaries. Once accepted into the restructuring program, the Government isolated the insolvent enterprise from the banking system and became its sole creditor. An important goal of the program was the eventual privatization of the chosen SOEs on a case-by-case basis. Enterprises whose operations were no longer considered justifiable were restructured according to one of the following methods: (a) segmentation of the enterprise to create several potentially profitable legal entities; (b) merging to an operational legal entity according to legally established procedures; (c) removal of excessive property according to legally established procedures and sale of that property through tender or its lease with the right of subsequent buy-out; or (d) liquidation of the enterprise and disposal of its property.

In 1995 the Rehabilitation Bank provided financing in the amount of T600 million to 5 insolvent enterprises, many of which were involved in the machinery industry: (1) Almaty Machine Tool Manufacturing Plant, (2) Belogor Ore Enriching Plant, (3) Oskemen Tire Plant, (4) Petropavlovsk Electric Insulating Materials Plant, and (5) 'Himonerkasip.' Pavlodar Tractor Plant was also included in the Bank's restructuring program. Also in 1995, 33 insolvent enterprises were declared bankrupt and liquidated. By the end of the first quarter of 1996, 16 enterprises were declared bankrupt by decision of the court (*Almaty Akshamy*, April 24, 1996). Other industries were included in the Bank's restructuring program, including:

- Joint Stock Company (JSC) "Aktyubrentgen" in Aktubinsk
- JSC Instrument Making Plant in KoshetavJ
- JSC Electrobytpribor in Almaty
- Almaty Porschen Plant
- Ust-Kamenogorsk Tire Plant
- Petropavlosk Heavy Machinery Plant.

In recent months the Rehabilitation Bank has been faced with many problems, including having its assets frozen by the

Apart from the NBK, there are four main segments that make up the rest of the banking system: (a) nine large domestic banks with branches located throughout Kazakhstan; (b) 13 foreign banks; (c) four fully government-owned banks (the Kazakhstan Eximbank, the Housing Construction Bank, the Rehabilitation Bank, and the Turan Alem Bank[2]); and (d) approximately 35 small Almaty-based banks and 35 regional banks. Foreign banks have been active in Kazakhstan since 1993. Under existing legislation, foreign banks are not permitted to operate branches in Kazakhstan, but can establish subsidiaries, joint ventures and representative offices. Foreign investors are treated equally with Kazakh nationals, but their overall share of Kazakhstan's banking system capital must not exceed 25 percent (excluding portfolio investments), unless the NBK permits this limitation to be exceeded. If a bank is not a subsidiary of another bank, no person can own more than 25 percent of its shares without special permission from the NBK (US Embassy, 1997b).

[2] The Government Budget Bank, also a fully owned Government bank, was established in 1996 under a temporary basis to introduce a new classification system for the Treasury Department and to handle budget operations; it was closed in March 1998. The Government plans to put up for sale its share in the Turan Alem Bank in April 1998.

Chinese and Russian banks have established 100 percent subsidiaries, and several Dutch and Turkish banks have established joint ventures. Citibank maintains a representative office in Almaty, with plans for expansion. Two Kazakh-American banking joint ventures, Texaka Bank and Lariba Bank, offer small, community-based loans. Texaka Bank provides personal banking services. American investment in both banks is very small, approximately $500,000 each. The Dutch bank ABN AMRO serves corporate clients' cash management needs. In 1993, the government began closing banks for failure to comply with reserve ratio regulations. Some of the largest banks in Kazakstan have correspondent arrangements with U.S. banks. The following banks have these arrangements: Kazkommertsbank, Narodny Bank, Center Bank, Texaka Bank, and ABN AMRO Bank. However, private United States banks have been reluctant to extend commercial credits or guarantee Kazakh bank payments (US Embassy, 1997b).

6.1.2 Foreign Exchange Controls

In the early 1990's, the Government of Kazakstan liberally issued sovereign government guarantees for loans from foreign creditors. In 1994-95, as government debt accumulated, Kazakhstan recalled as many as thirty guarantees. This move tarnished Kazakhstan's reputation in the international banking community. In an effort to regain its standing among international creditors, Kazakhstan paid US$87 million in arrears to foreign creditors by the end of 1995 (US EXIMBANK, one of these creditors, was paid its arrearages in April 1995). International creditors will likely continue to approach Kazakhstan with caution and carefully monitor payments on outstanding loans. In November 1996, Kazakhstan was given a BB minus long-term foreign currency rating by Standard and Poor. In addition, in December 1996, Kazakhstan sold its first Eurobond issue that was valued at $200 million (US Embassy, 1997b).

The NBK allows the national currency to float. It is fully convertible with the US dollar. In July 1996, Kazakhstan joined Article 8 of the International Monetary Fund Charter, stipulating that the country would not restrict current account transactions such as currency conversions or the repatriation of investment profits. Money transfers in currency associated with foreign investments, whether inside or outside of Kazakhstan can take place without restrictions. For example, foreign investors are permitted to settle their obligations, including the payment of wages to their resident and non-resident employees, in foreign currency. In addition, foreign investors can convert and repatriate tenge earnings made inside Kazakhstan. In practice, though, the rate of tenge conversions is limited by the still primitive nature of Kazakhstan's currency exchange (US Embassy, 1997b).

Article 10 of the foreign investment law provides that foreign investors can open and maintain foreign currency accounts at any bank in Kazakhstan. Non-residents can open special 'Type I' accounts for conducting investment activities in the country. Transactions from these accounts related to privatization activities can be carried out by any non-resident legal entities, except non-resident legal entities having Kazakh shareholders owning more than 25 percent of the charter fund. Transactions related to other types of

investment activities can be carried out from 'Type I' accounts by all non-residents, excluding individuals who do not have authorization to carry out economic activity in their home country. Non-resident individuals cannot open joint accounts in tenge or make payments in tenge for expenses related to investment operations (including privatization).

'Type C' accounts in tenge can be maintained by non-residents for the purpose of financing export and import operations, excluding certain operations related to exports from Kazakhstan to which non-tariff provisions apply.

6.2 Financial Instruments and Services

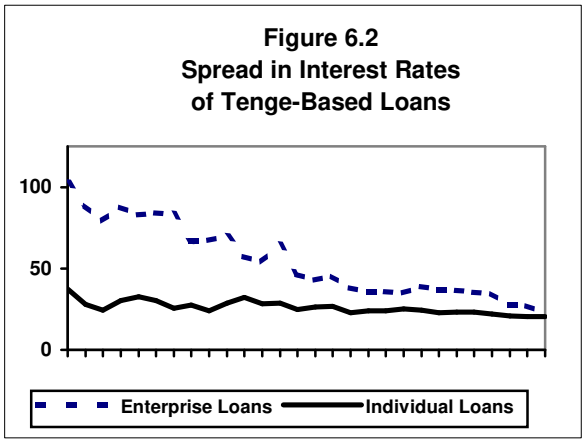
Since the beginning of 1994 commercial banks have almost halved their loan portfolios. There are several reasons for this reduction: (a) there are few companies in the country that banks consider a good risk; (b) the banks themselves have little experience in lending (indeed recent bank crashes have been because of appalling credit management); (c) local citizens are wary of the reliability of Kazakh banks as well as tax authorities, and generally keep their savings at home; (d) theoretically, the banks are more or less covered from a legal standpoint, but in practice bad debt recovery is a long and laborious procedure; and (e) the annual interest rates that banks are charging (in line with the NBK refinancing rate) of between 28% to 40% are similar to the return that can be achieved on the T-Bill market. Therefore, considering that the returns are tax free, as far as local banks are concerned, investing in T-bills carries a lower risk and higher reward than lending. Additionally, most banks are undercapitalized, with only eight or nine banks having paid-in capital of US$5 million or more. Each of the 50 smallest banks have less than US$1 million in assets (US Embassy, 1997b).

As a consequence of reduced portfolios and under-capitalization, commercial banks offer limited choices in financial instruments and services to both consumers and businesses. Another consequence is that Kazakh banks do not have the ability to finance major projects. Tenge-based loans from Kazakh banks carry a very high interest rate, often 20 percent higher than the refinancing rate. These high rates are set partly because the rates lag behind falling inflation and partly because the banks are trying to compensate for losses due to the bad loans of the past. The official NBK refinancing rate as of December 1997 was 18.5 percent, down from a high of 300 percent in March 1994 (NBK, 1997).

6.2.1 Commercial Bank Interest Rates and Loan Terms

Table 6.2 shows the nominal and real interest rates of credits offered to enterprises and individuals by commercial banks in Kazakhstan. The interest rates are for short-term credits that usually have a maximum maturity of one year. Hard currency loans are usually only provided to legal entities. Considerable divergence exists between interest rates for loans issued in Kazakh tenge and hard currencies, with the greatest margin being recorded in real interest rates in September 1995, the time when the NBK began to make such data available (Center for Economic Reforms, 1997b). In contrast, the difference in interest rates on loans made in Kazakh tenge to enterprises and individuals has decreased

dramatically since 1995. For example, in September 1995 that margin was 65 percentage points, compared with 2 percentage points in December 1997.



Complaints voiced by managers of enterprises that participated in interviews during the course of this study not only focused on the current high level of interest rates, but also on the fact that long-term credit is not available, and that collateral and guarantee requirements are strict. Access to loans of more than one year is especially important for manufacturers, who need capital to finance projects or introduce new products. However, commercial banks view manufacturers as a higher than normal risk precisely due to the length of time needed to recover an investment and also because of the recent overall poor performance of loan repayment in all sectors.

6.2.2 Financial Services

Many large banks offer personal banking services, and money transfers from the West can be completed in as little as twenty-four hours through the SWIFT network. Some banks also offer automatic teller machine (ATM) services for cash withdrawals. Day-to-day transactions that are a part of international trade can be cumbersome in Kazakhstan because of weak services provided by banks and their inexperience in dealing with foreign companies. For example, Kazakh banks require that legal entities wishing to withdraw funds from hard currency accounts in local banks present an invoice for goods or services to be purchased to prove that the currency is needed. Foreigners have complained that this requirement is burdensome, as businesses cannot predict future expenses in any given month. Problems have also been reported in processing letters of credit (L/C). In general, importers must deposit enough funds to cover the payment of a shipment of goods before applying for a L/C. Local companies can apply at any one of several local commercial banks to obtain an L/C, which in most cases, according to Kazakh banking legislation, must be confirmed by a reputable Western bank. Performance on L/C's has been poor due to Kazakh commercial banks' inexperience with letters of credit, as well as the frequent inability of Kazakh firms to pay for products and services obtained through letters of credit.

Table 6.2
Nominal and Real Commercial Bank Interest Rates on Credits, 1995-97
(in annual percentages)

		Non-Banking Legal Entities				Individuals	
		Kz. Tenge		Hard currencies		Kz. Tenge	
		Nominal	Real	Nominal	Real	Nominal	Real
1995 a/		**92.7**	**89.6**	**21.2**	**18.1**	**33.1**	**29.9**
	Sep	102.8	102.4	14.2	13.8	37.7	37.3
	Oct	93.0	88.9	13.5	9.4	31.9	27.8
	Nov	83.9	79.5	26.6	22.2	28.7	24.3
	Dec	91.1	87.5	30.4	26.8	33.9	30.3
1996		**65.9**	**63.8**	**22.4**	**20.2**	**30.2**	**28.0**
	Jan	87.1	83.0	27.0	22.9	36.9	32.8
	Feb	86.6	84.1	26.6	24.1	32.8	30.3
	Mar	85.2	83.5	27.4	25.7	27.1	25.4
	Apr	69.9	67.0	22.8	19.9	30.5	27.6
	May	69.2	67.2	23.9	21.9	26.1	24.1
	Jun	72.2	69.7	22.9	20.4	31.3	28.8
	Jul	59.3	57.5	20.1	18.3	34.1	32.3
	Aug	54.8	54.1	20.6	19.9	29.1	28.4
	Sep	65.7	64.5	18.9	17.7	30.0	28.8
	Oct	49.4	46.5	20.7	17.8	27.8	24.9
	Nov	45.1	42.7	19.1	16.7	28.7	26.3
	Dec	46.0	45.2	18.3	17.5	27.6	26.8
1997		**34.6**	**33.7**	**14.9**	**14.0**	**23.6**	**22.7**
	Jan	40.3	38.2	17.5	15.4	25.0	22.9
	Feb	37.4	35.7	17.1	15.4	25.5	23.8
	Mar	36.5	35.7	14.6	13.8	24.8	24.0
	Apr	35.9	35.1	15.1	14.3	25.9	25.1
	May	39.4	39.0	19.2	18.8	24.7	24.3
	Jun	37.6	36.8	15.5	14.7	23.6	22.8
	Jul	37.3	36.6	13.7	13.0	23.7	23.0
	Aug	35.0	35.3	14.0	14.3	22.8	23.1
	Sep	34.5	34.6	13.8	13.9	21.9	22.0
	Oct	28.8	27.7	13.1	12.0	21.9	20.8
	Nov	28.7	27.2	12.6	11.1	22.1	20.6
	Dec	23.9	22.6	12.0	10.7	21.7	20.4

a/ Average based on data for September-December.
Source: National Bank of Kazakhstan, *Statistical Bulletin* No. 12 (37) December 1997.

6.3 Trade and Investment Financing

6.3.1 Traditional Sources of Financing

In Kazakhstan the main sources of financing for trade and investment transactions and projects are commercial banks, a company's own retained earnings, foreign government-assisted loan funds and loans from international and bilateral donor programs. For small and medium size companies in Kazakhstan, most financing is obtained through

commercial banks and a company's retained earnings. Anecdotal evidence gathered during the course of the study indicates that manufacturing enterprises have difficulty in obtaining loans to be used for working capital, capital investment or product improvement because banks prefer to extend credit to companies with a high turn-over of goods and that can ensure quick loan repayment, such as trading houses. Because of these reasons, many manufacturers finance trade transactions and new projects with funds generated from within their own companies.

Limited financing is available for export development, and there are no commercial banking institutions in Kazakhstan that provide financing for sector-specific activities, such as agriculture. Given the limitations of financing within Kazakhstan, most funding for projects is done through international financial institutions or from funds generated within companies. However, financing offered by international institutions is often limited to certain trade and investment projects, and enterprises often find that requesting a loan is cumbersome in terms of paperwork and time and that the loan approval process is lengthy. Moreover, this type of financing is usually offered within a limited timeframe, which does not often correspond to the needs of manufacturers. Those institutions that offer this type of financing are detailed in Box 6.2, and are as follows: Central Asian-American Enterprise Fund, the World Bank, the European Bank for Reconstruction and Development (EBRD), the Asian Development Bank (ADB). Other types of financing mechanisms originate in the United States and usually require a US partner, such as funds offered by the Defense Enterprise Fund (DEF), the EXIM Bank of the United States, the Overseas Private Investment Corporation of the United States (OPIC), the International Finance Corporation (IFC), and the United States Trade and Development Agency (TDA).

6.3.2 Capital Markets

The Kazakhstan Stock Exchange was registered on July 12, 1996, after being founded by the State Committee for Management of State Property, the International Kazakhstan Agroindustrial Exchange, Kazakhstan Center for Support of Entrepreneurship and KazInterBank. It was created as a closed Joint Stock Company with charter capital of 3.8 million tenge, and it received license of the National Securities Commission (NSC) to carry out exchange activity in the securities market on August 1, 1996.

Despite the introduction of a stock exchange, the corporate securities market remains underdeveloped and few companies actively trade on the exchange. The lack of proper legal and institutional infrastructure and a well-established connection between mass and case-by-case privatization and securities market development are the main causes for this situation. According to Marchenko (1997) most of the largest enterprises that are potentially interesting to investors were until recently either kept in government ownership or de-facto privatized through so-called management contracts, whereby initially an enterprise was managed by an outside company, usually foreign, for a share in profits and on condition that the management firm provides for working capital, employment compensation and investment. These management contracts were started in early 1995, and overall there were over 40 of them. For example, the largest steel mill in

the country, Karaganda Steel Works (known as Karmet) is now fully-owned by the British group Ispat. Several other major enterprises such as the Jezkazgan Copper Combine, the Kazchrome Group and the Kazaluminium Group are now also majority-owned by their respective management companies. As for the oil and gas sector, which is extremely attractive for foreign investors because of its huge potential, several enterprises were sold through tenders in 1996: the Shimkent oil refinery to Vitol and Yuzhneftegas (an oil company in Southern Kazakstan) to a Canadian group named Hurricane; however, the rest of the sector was mostly state-owned. Although these companies have been privatized - whether through a management contract or through a tender – few, if any, of their shares found their way to the local stock market as they were bought and held by strategic investors.

The law "On Registration of Securities Transactions" adopted by the Parliament in March 1997 describes the functions of custodians and broker-dealers as nominee owners for their clients, and the functions of the central depository as an apex nominee owner for custodians and broker-dealers. According to Marchenko (1997), this law introduces important changes because it concentrates shares in the central depository, which greatly increases the efficiency of the system and reduces overhead and the possibility of fraud.

In June 1996 the Parliament passed a law "On Voluntary Non-State Pension Funds" which created a legal basis for private pension funds operations with National Bank of Kazakstan (NBK) being the regulatory body. In October, the NBK adopted several regulations on licensing and regulating private pension funds and their investments. There are two types of pension funds anticipated: corporate (for employees of a corporation only), and open (which would be catering to other companies). In the new legislation that is already adopted by the Parliament, private pension funds will be receiving mandatory contributions but will act as accumulation vehicles only as they are required to invest through professional asset managers and these managers are to be licensed and regulated by the National Securities Commission.

Box 6.2 Sources of Financing for the Private Sector from International and Bilateral Agencies

- ***Central Asian-American Enterprise Fund (CAAEF):*** The CAAEF has offices in all five Central Asian republics, and makes loans to small enterprises for private sector development. The U.S. government-sponsored US$150 million fund makes equity investments, loans, and offers technical assistance to new private companies and entrepreneurs in the Central Asian republics. Emphasis is placed on small and medium-sized enterprises. The CAAEF also offers assistance to Kazakhstani entrepreneurs for business plan development. The CAAEF's mandate is similar to U.S. government-supported funds operating in Poland, Russia, Ukraine and the western Newly Independent States (NIS), and The Czech Republic. For more information, contact: Fred Hodder, Vice President, Central Asian-American Enterprise Fund, 531 Seyfullina St., Almaty, Kazakstan 480083; Tel: 7-(3272)638-815; 635-848; Fax: 7-(3272)694-589.

- ***Export-Import Bank of the United States (EXIMBANK):*** The U.S. EXIMBANK is an independent U.S. government agency that provides support for U.S. exports through export credit insurance, loan guarantees, and loans. Its affiliated agent, the Foreign Credit Insurance Association, assists U.S. exporters shipping on short and medium-term credits by insuring against nonpayment. Coverage is usually limited to irrevocable letters of credit issued by either the Kazakstan Eximbank or one of several large Kazakhstani commercial banks, including Kazkommertsbank and Center Bank. Other transactions are examined on a case-by-case basis. The U.S. EXIMBANK has provided short and medium-term financing to several projects in Kazakhstan, particularly in the agricultural sector. For further information on U.S. EXIMBANK programs contact: EXIMBANK, 811 Vermont Avenue NW, Washington, DC 20571; Tel: 1-(202)566-4779, Fax: 1-(202)566-7524.

- ***Overseas Private Investment Corporation (OPIC):*** OPIC is an independent U.S. government agency that provides project financing, political risk insurance, and a variety of investor services in approximately 140 developing countries and emerging economies around the world. OPIC encourages U.S. private investment in sound business projects overseas, thereby improving U.S. global competitiveness, creating American jobs, and increasing U.S. exports. OPIC focuses its efforts mainly on the following areas: 1) financing of investments through direct loans and loan guarantees; 2) insuring investments against a broad range of political risks; and 3) providing investor services such as trade missions and outreach. To be eligible for OPIC financing, an overseas venture must either be wholly owned by a U.S. company or a joint venture between a local partner and an American company. The U.S. investor should contribute at least 25 percent of the required equity investment. For more information contact: OPIC, 1100 New York Avenue NW, Washington, DC 20527; Tel: 1-(202)336-8651; Fax: 1-(202)408-5145.

- ***U.S. Trade and Development Agency (TDA):*** The Trade and Development Agency, an independent U.S. government agency, provides funding for U.S. firms to carry out feasibility studies related to major projects in developing countries in emerging markets. TDA provides funding mainly in the form of non-reimbursable grants for studies to determine the technical, economic, and financial feasibility of major projects and to provide detailed data for making decisions on how to proceed with project implementation. Historically, TDA has provided funding for public-sector undertakings, planned and implemented by government ministries and agencies. Increasingly, countries including some NIS countries have begun to promote private sector involvement in major infrastructure and industrial projects. An official request for TDA assistance must be made directly to TDA in writing by the appropriate Kazakhstani sponsoring organization (government or private sector). If the U.S. firm is already working with a Kazakhstani entity, the American partner should submit a separate proposal to TDA, following an outline available from TDA. For more information about TDA activities contact: Tanya Shamson, Country Manager, U.S. Trade and Development Agency, SA-16, Room 309, Washington, DC 20523-1602; Tel: 1-(703) 875-4357; Fax: 1-(703) 875-4009.

(cont'd)

Box 6.1 Sources of Financing for the Private Sector from International and Bilateral Agencies *(cont'd)*

- ***International Finance Corporation (IFC):*** The IFC, the private sector arm of the World Bank, provides loans for small-scale projects (not exceeding US$10 million) in developing countries and emerging markets. The IFC is focusing its efforts in Kazakhstan on private sector development, and is actively analyzing small and medium-scale undertakings in the medical, agricultural (including food processing), and consumer goods sectors. For more information, please contact: International Finance Corporation, 1801 K St. NW, Room No. K 6003, Washington, DC 20433; Tel: 1-(202)473-5639; Fax: 1-(202)334-8744.

- ***European Bank for Reconstruction and Development (EBRD):*** The EBRD provides loans for large projects, as well as technical assistance, in the areas of oil and gas development, mining, agriculture, and infrastructure development. The EBRD has developed a 100 million ECU program for small and medium enterprises (SMEs) with the former Kazakhstani Ministry of Economy and Finance and the NBK.The funds from this program will be channeled through selected participating banks in Kazakhstan to help local entrepreneurs draft a business plan to develop a bankable project, and issue loans to SMEs for up to US$5 million. For further information on EBRD programs in Kazakhstan, contact: Ronald Freeman, First Vice President, Banking Dept., EBRD, One Exchange Square, London, EC2A, 2EH, United Kingdom; Tel: 44-(171)338-6609; Fax: 44-(171)338-6680.

- ***Defense Enterprise Fund (DEF):*** With U.S. government funding, the DEF was created as a not-for-profit capital fund in March 1994 to assist the New Independent States of Russia, Kazakhstan, Ukraine, and Belarus to privatize defense industries and to convert military technologies and capabilities into civilian activities. The DEF will make both equity investments and loans, and can make grants to qualified joint venture projects, with a preference for joint business initiatives involving U.S. firms or a U.S. subsidiary of a foreign-owned firm. The DEF will invest only in initiatives involving privatized enterprises or in enterprises that have committed, in writing, to privatization. For more information on the DEF's activities in Kazakhstan, contact: Michael Lehner, Vice President and Investment Manager, Defense Enterprise Fund, 20 Custom House St., Suite 1040, Boston, MA 02110; Tel: 1-(617)261-1929; Fax: 1-(617)261-1935.

- ***Asian Development Bank (ADB):*** The ADB focuses its efforts largely on the energy sector, followed by social infrastructure, transport and communications, agriculture and agro-industry, finance, and industry and non-fuel minerals. The ADB's medium-term strategy centers on poverty reduction, improving the status of women, population planning, and environmental protection. While most of its projects are undertaken directly with the Government, the ADB recently financed a US$400 million loan for food processing equipment to be purchased by private companies. For more information on the ADB's activities in Kazakhstan contact: Cantwell Walsh, U.S. Liaison to the Asian Development Bank, Fax: 10(632)890-9713; e-mail: (cwalsh@doc.gov).

Source: United States Embassy (1997b).

PART IV

PRIVATIZATION, INSTITUTIONS AND DONORS

7. PRIVATIZATION POLICIES

Contents

7.1 Privatization Policies and Progress

The Government's privatization program has so far undergone three phases:

(1) The *first stage* (1991-92) consisted of the privatization of approximately 10 percent of State assets mainly through the sale of enterprises to managers and employees in agriculture, retail and consumer services.

(2) The *second stage* (1993-95) consisted of four separate privatization programs based on the type of enterprises and number of employees:

- Small-scale privatization (less than 200 employees, although manufacturing and construction companies of this size were privatized under mass privatization),
- Mass privatization (200-5,000 employees),
- Case-by-case privatization (more than 5,000 employees), and
- Agro-industrial complex privatization (all enterprises in the agriculture sector).

(3) The *third stage* (1996-98) aims to complete privatization of the remaining state assets. Privatization during this stage mainly consists of cash privatization and is open to foreign investors without any limitations.

Small-scale privatization has been conducted through cash auctions and commercial tenders. The total number of enterprises and objects qualifying for small-scale has been estimated to be approximately 20,000 and has concentrated mainly in the general retail, distribution, and consumer services sectors.

Mass privatization has encompassed over 1,712 companies from all sectors of the economy. The procedure for this type of privatization has been as follows: 10 percent of the company shares were given to employees; around 51 percent were sold through coupon auctions to investment funds in which the citizens of Kazakhstan invested coupons distributed by the Government; and the remaining shares (around 39 percent) were sold through open cash auctions to domestic and foreign investors. Cash auctions under mass privatization were initiated at the end of 1995.

Case-by-case privatization covers about 200 large enterprises involved in the chemical industry, the extraction and processing of natural resources, energy, metallurgy, transportation (oil and gas pipelines, roads, railways, and air transport), major department stores, and telecommunications. The privatization of these enterprises can take the form of direct sale, auctions, management contract, or commercial tender (conditional sale). Case-by-case privatization has been open to foreign investors without any limitations on foreign participation. Contract management is viewed as an intermediate stage prior to sale since companies having management contracts can have the option to purchase the enterprise at a later stage. (Chapter 5 discusses the problems associated with this type of arrangement).

Agro-industrial complex privatization covers the agro-processing sector and includes such industries as food processing, mills and storage facilities. These types of enterprises have been sold or transferred under the following scheme: 10 percent non-voting shares have been given to employees; another 10 percent with priority sales have been offered to employees; 51 percent have been given to producers, suppliers and related companies; and the remaining 29 percent has been kept by the State. The remaining State shares are now being privatized through the mass privatization open cash auction, which includes foreign and local participation.

Although Kazakhstan has made significant progress in small-scale and mass privatization, only about one-third of all state enterprises eligible for sales through cash auction has actually been sold to the private sector. The Government had expected the completion date of the privatization to be December 1997, but it no longer expects that target to be achieved. The privatization of large-scale enterprises, which represent an important part of Kazakhstan's productive assets and which dominate production activities in the machinery industry, is proceeding particularly slowly (see Table 7.1). Moreover, privatization of the larger state-owned enterprises remains to be undertaken on a case-by-case basis. Only 40 of the 203 case-by-case enterprises targeted for privatization have been completed to date. In an effort to accelerate the privatization of these enterprises by the end of 1997, the Government has held tenders for a number of companies to be managed under contract, rather than be directly purchased.

Several problems have constrained privatization of large-scale enterprises in the machinery industry and related production activities in agriculture, mineral processing and transportation. These are summarized as follows:

- Lack of enterprise restructuring before privatization.
- Large enterprise debt, including wage arrears.
- Underdeveloped stock exchange.
- Discrepancies between laws and their application.
- Decree reversals and associated uncertainty.
- Lack of enterprise experience with new tax code.
- Inadequate government guarantees.

Table 7.1
Privatization of State Owned Enterprises, 1994-97

	Small-Scale Privatization	Mass Privatization	Agriculture Privatization	Case-by-Case Privatization	TOTAL
Pre-1994	153	0	602	0	755
1994	2,645	382	888	3	3,918
1995	3,920	1,056	472	2	5,450
1996	3,467	839	644	28	4,978
1997(1/2)	3,417	1199	62	23	4,701
Total	*13,602*	*3,476*	*2,668*	*56*	*19,802*

Source: Center for Economic Reforms, *Kazakhstan Economic Trends -- Second Quarter 1997.* Almaty: Government of Kazakhstan.

The fist problem relates to the lack of any restructuring of the enterprises. The Kazakhstan Post-Privatization Fund (1997a) reports that foreign investors have been despondent over the state of the enterprises. Significant progress in the restructuring of large-scale privatization within the machinery industry will be needed before privatization efforts can succeed.

A second problem inhibiting progress in privatization of large-scale enterprises of machinery-related activities is the size of inter-enterprise debt. Table 7.2 shows the amount of total and industrial enterprise debts and arrears. The GOK has made little progress in resolving the problem and foreign investors have been relied upon to absorb the debt when companies are privatized. According to discussions held with the former State Privatization Committee (now a department within the Ministry of Finance), the State often prohibits investors from selling an enterprise for a specified period after its initial purchase. Although no specific period was given, it appears that the restriction often extends for three years.

Another problem is the lack of a well-developed stock exchange that would allow foreign investors to purchase and liquidate holdings of privatized enterprises. The anticipated growth and development of the exchange, however, is likely to broaden the range of investment opportunities. To date, the Central Asian Stock Exchange (CASE) has been used for privatization of state property. A small number of these companies have state shares that can be traded with the permission of the State Property Committee.

The tax and legal situation has improved considerably and does not pose as great a problem to investors and the privatization process as it once did. A basic tax and legal

structure has been established, and further improvements are being planned by the Government, particularly in the discrepancies between laws as they exist on paper and their implementation. Advances are also being made in laws governing movable property. The tax code is already generally considered as the best in the former Soviet Union, according to the Kazakhstan Post-Privatization Fund (1997b). The Fund also believes that the new civil code offers a framework that is very close to the continental European civil law system, and the proposed bankruptcy law is well drafted.

Table 7.2
Enterprise Debts and Arrears, mid-1996 to mid-1997
(billions of tenge, end of month)

	May 1996	Dec. 1996	May 1997
Debt Receivable			
All Enterprises 1/	496.5	521.9	524.0
of which: Percent Overdue	*62.4%*	*63.9%*	*65.0%*
Industry Sector Enterprises	244.1	256.3	270.0
of which: Percent Overdue	*65.1%*	*64.5%*	*64.4%*
Debts Payable			
All Enterprises 1/	735.6	1,019.6	1,065.3
of which: Percent Overdue	*62.0%*	*52.4%*	*53.7%*
Arrears in Wages	*40.0*	*47.9*	*42.3*
Industry Sector Enterprises	371.6	612.9	665.1
of which: Percent Overdue	*59.4%*	*42.1%*	*44.1%*
Arrears in Wages	*16.0*	*17.6*	*16.4*

1/ Based on surveys of large and medium-size enterprises.
Source: Center for Economic Reforms, *Kazakhstan Economic Trends -- Quarter II 1997*.

According to the Congress of Entrepreneurs, the lack of adequate government remains a major constraint to the privatization process. The Foreign Investment Law of the Government of Kazakhstan (1995) does not allow the Government to issue guarantees, and there is presently no legislation to guarantee foreign investments. The issue is complicated by the distinction that exists between guarantees that are deemed a 'administrative' and those that are other guarantees. According to Maltsev (1996), only administrative guarantees appear to be permitted. Without an adequate legal regime and the enactment of specific legislation, a government guarantee to an investor may be contested and should not be considered binding.

7.2 Privatization-Related Institutions

The State Committee on Privatization was established in 1995. In November 1997 it was reorganized and it become part of the Department of Privatization and State Property under the Ministry of Finance. The Committee (now the Department of Privatization) has performed a key function in the privatization process since late 1993. Under the program, enterprises that are to be privatization are first restructured into 'corporations' as joint-stock companies. Initially the State holds 100 percent of the shares, either through the Department of Privatization, or through the local committee of State Property in each of the oblasts (i.e., the 14 administrative divisions of Kazakhstan).

Following the mass privatization approach used in Poland, each company transfers up to 10 percent of its shares free of charge to its workers, and another 51 percent is offered for sale through privately-owned and licensed private investment funds. The State retains a maximum of 39 percent of the company shares. Beginning in late 1993, all citizens of Kazakhstan were able to receive coupon books (100 coupons for urban dwellers and 120 coupons for rural dwellers). The coupons could only be invested in the private investment funds, who in turn were able to bid for the shares of the state enterprises at specially organized coupon auctions.

A related organization, the Kazakhstan Post-Privatization Fund, was established by the EBRD to support the restructuring and modernization of medium-sized enterprises in Kazakhstan. According to the Kazakhstan Post-Privatization Fund (1997b), the fund provides equity capital of up to ECU 30 million to eligible private companies. The Fund is managed by GIMV, a Belgium venture capital company. Because of the lack of a well-developed stock exchange, the Fund co-invests with foreign partners who are willing to buy out the Fund's shares at the moment of exit.

Table 7.3
Case-by-Case Privatization of State Owned Enterprises, 1995-97

Industry	Objective	1995	1996	1997	Total to Date
Oil and Gas	29	0	2	21	23
Electricity	21	0	8	10	18
Coal	6	0	0	4	4
Mining	34	5	18	6	29
Machinery	38	0	0	3	3
Chemical	20	0	0	0	0
Transportation	32	0	1	1	2
Others	23	0	0	2	2
TOTAL	*203*	*5*	*29*	*47*	*81*

Source: Department of Privatization and State Property (formerly State Committee on Privatization), Ministry of Finance.

Table 7.4
Mass Privatization by Industry Category, 1995-97

	1995			1996			1997		
	Target	Actual		Target	Actual		Target	Actual	
Industry	Number	Number	Value 1/	Number	Number	Value 1/	Number	Number	Value 1/
Transport	42	42	129.6	215	150	308.5	205	166	244.4
Construction	36	36	120.8	134	66	129.4	1198	148	127.0
Food Processing	28	26	361.9	154	111	1,595.6	143	118	425.3
Retail Services	59	55	242.4	115	75	403.4	124	97	210.6
Machinery	*10*	*7*	*30.5*	*121*	*78*	*152.6*	*139*	*96*	*105.8*
Agriculture	9	7	21.6	73	46	105.9	122	79	98.3
Light Industries	10	9	19.1	55	29	90.6	48	35	43.8
Construction Materials	20	17	190.9	32	15	26.0	44	33	104.6
Chemicals	0	0	-	6	4	11.0	13	11	3.5
Pharmaceuticals	2	2	1,181.9	7	6	162.7	10	8	5.2
Oil and Gas	0	0	-	6	1	1.0	9	6	16.8
Woodworking	12	11	16.9	5	4	13.8	9	6	4.2
Metallurgy	1	1	2,636.3	5	3	4.3	6	5	87.0
Electricity	0	0	-	2	1	0.1	3	2	0.5
Other	21	19	83.6	62	37	387.0	214	94	192.3
TOTAL	*250*	*232*	*5,035.5*	*992*	*626*	*3,391.9*	*2287*	*904*	*1,669.3*

1/ Millions of tenge.
Source: Department of Privatization and State Property, Ministry of Finance.

7.3 Privatization Patterns in the Machinery Industry

Most foreign investments in privatized enterprises have taken place within the oil and gas and the mining and metals sectors. Table 7.3 shows that of 52 of the 81 case-by-case enterprises that have been privatized to date are in those sectors. The electricity generating industry has also privatized most of the larger enterprises that were target by the Government. Few enterprises in the machinery industry, however, have been privatized, as have those in the transportation industry (2 out of the 32 targeted enterprises) and the chemical industry (none of the 20 targeted enterprises).

Only 3 of the 36 machinery-building enterprises that were targeted by the Government have been privatized (see Table 7.4). These enterprises were the following:

- Kaynar Company in the Almaty Oblast (the State sold its 27 percent shareholdings of this joint-stock company).
- Parhomenko Company in the Karaganda Oblast (the State's 31 percent shareholdings were sold to the Stoid Company).
- Izumrud Company in the West Kazakhstan Oblast (the State's 90 percent shareholdings were sold to the Graal Company).

During mass privatization, the performance of the machine-building enterprises has been somewhat more favorable. Between 1995 and 1997, there were 181 out of a targeted 270 machinery enterprises that were privatized. The 290-million tenge value of these privatized enterprises, however, represented less than 3 percent of the total value of the enterprises that participated in mass privatization during that period. In machinery-related activities, the food processing industry had the third largest number of enterprises that were privatized during 1995-97 and it ranked number one in terms of the combined value of its privatized enterprises during both 1996 and 1997. Under the agro-processing program, the shares of state-owned enterprises are being given to collectives, individual employees and agricultural producers.

8. THE INSTITUTIONAL FRAMEWORK

Outline

8.1 The Changing Government Structure

Nursultan Nazarbayev, a strong leader, serves under a constitution which was adopted by referendum in 1995. The powers of the president permit him to dominate the legislative and judicial branches and constitutional changes can only be made with his consent. Even though he has the power to legislate by decree, the president has worked through the new bicameral parliament to introduce new legislation required by the constitution. There is not an independent judiciary, and this makes it difficult to root out corruption. The constitution provides for freedom of the press, yet the government controls all broadcasting facilities and instances of repression continue to be reported. Kazak is the official language; although Russian may be used on an equal basis in organizations and bodies of local self-administration, language issues continue to cause tension between the Kazak and Russian speaking populations. Kazakstan belongs to the Organization for Cooperation and Security in Europe (OSCE), the Customs Union (with Russia, Kyrgyzstan and Belarus), and seeks entry to the World Trade Organization (WTO). Nazarbayev is a strong supporter of Central Asian cooperation.

Economic policies are largely directed by Prime Minister Mr. Akezhan Kazhegeldin, who has been Prime Minister for over three years. During his tenure, Mr. Kazhegeldin has formed a cabinet with reform-oriented ministers.

President Nursultan A. Nazarbayev (since 22 February 1990) was elected chairman of the Supreme Soviet 22 February 1990, and president by popular election 1 December 1991; was elected for a five-year term by universal suffrage; election last held 1 December 1991 (next to be held NA 2000); results - Nursultan A. Nazarbayev ran unopposed; note - President Nazarbayev's term was extended to the year 2000 by a nationwide referendum held 30 April 1995 (*note:* President Nazarbayev has expanded his presidential powers by decree: only he can initiate constitutional amendments, appoint and dismiss the government, dissolve parliament, call referenda at his discretion, and appoint administrative heads of regions and cities.)
Head of government: Prime Minister Akezhan Kazhegeldin (since 12 October 1994) and First Deputy Prime Ministers Nigmatzhan Isingarin (since 12 October 1994) were appointed by the president
Cabinet: Council of Ministers was appointed by the prime minister
Legislative branch: bicameral Parliament
Judicial branch: Supreme Court

The relocation of the capital to the city of Akmola is to be completed by the end of 1997, according to President Nazarbayev. A number of reasons have been given for the move, including a better strategic position and appeasing the Russian population by moving the capital closer to the Russian border. A number of ministries, including the Ministry of Communications and the Ministry of Agriculture, have already moved to Akmola, and other ministries and the parliament will make the transition by the end of 1997. It is generally accepted that Almaty will remain the business center of the country.

The government of Kazakstan, especially the President's office, takes a leading role in directing national economic development. For example, in the ten months between April 1995 and January 1996, President Nazarbayev signed into law more than two dozen decrees, including decrees on

the following: banking, bankruptcy, customs, taxes, stock exchanges, insurance, oil, land, aviation, accounting, and electric power. Although implementing regulations are still being developed, the legal system is considerably clearer in outline than before. Legal reform efforts to improve the commercial law infrastructure, especially for business, are expected to continue through 1997. Prime Minister Akezhan Kazhegeldin declared 1996 "The Year of Privatization," and privatization is continuing at a rapid pace in 1997. Although the government of Kazakstan remains an equity partner in a wide variety of parastatals - from banks to agricultural joint stock companies - state-held shares in hundreds of enterprises have been reduced or even eliminated in many cases. In one case, Kazakstan sold half of its 50 percent share in the Tengizchevroil oil joint venture to a major American firm. The national airline has spun off the Almaty airport and a number of other entities. The government of Kazakstan is increasingly a referee, not a participant, in business transactions. Future efforts will likely focus on reducing or eliminating the role of state holding companies, invigorating the stock market to allow new issues and secondary trading, and establishing regulatory agencies for electric power and other natural monopolies.

Brief Synopsis of the Political System

Kazakstan is a constitutional republic with a strong presidency. Throughout most of 1995, Kazakstan had no legislature; the President and the Cabinet of Ministers governed the country through decree. President Nursultan Nazarbayev, initially elected in 1991 to a five-year term as President, is the country's central political figure. In April 1995, his term was extended by referendum to the year 2000. A new constitution was adopted, also by referendum, in August 1995, that concentrates power in the presidency, permitting it to dominate the parliament, judiciary and local government. Parliamentary elections were held in December 1995.

The President is the head of state. He is also the commander-in-chief of the armed forces and may veto legislation that has been passed by the parliament. The Prime Minister, who serves at the pleasure of the President, chairs the Cabinet of Ministers and serves as Kazakstan's head of government. There are several deputy prime ministers (the number is not fixed), 20 ministers, and 19 chairmen of state committees.

Kazakstan has a bicameral parliament, comprised of a lower house (the Majilis) and upper house (the Senate). Forty members of the Senate are indirectly elected by members of the regional assemblies; the remaining seven senators are appointed by the President. The 67-seat Majilis is popularly-elected. The December 1995 parliamentary elections were considered to have been an important, albeit flawed, step on Kazakstan's road to democracy. Majilis deputies and the government both have the right of legislative initiative. In September 1996, Majilis deputies, for the first time, proposed several draft laws; prior to that time, all legislation considered by the parliament had been proposed by the government.

Political parties in Kazakstan are generally small and nearly unknown outside of the major cities. There are six political parties officially represented in the Kazakstani parliament. Three of these parties - the Party of People's Unity, the Democratic Party, and the People's Cooperative Party - are pro-presidential. Two small opposition parties, the separatist and the communist parties, have seats in parliament. Outside of parliament, small Kazak ethnic and Slavic ethnic parties are

active in some cities. Party affiliations play little role in local Kazakstani politics, where personal and family ties are more important.

Kazakstan is divided into 19 provinces (oblasts) and the territory of the capital (Almaty), each of which is headed by a provincial governor (akim) appointed by the Prime Minister. There are also city and village governments. Oblast and city administrations can play an important role in facilitating or hindering trade and investment in Kazakstan.

By the beginning of 1997, Kazakstan had in place important elements of participatory democracy. Citizens enjoy basic rights to free speech, press and assembly; however, some rights are restricted by complicated bureaucratic requirements and an imperfect legal system. The government generally respects the human rights of its citizens.

GOVERNMENT SYSTEM: Parliamentary Democracy
Main government officials (please also see Appendix E):
President: Nursultan Nazarbayev
Prime Minister: Akezhan Kazhegeldin
First Deputy Prime Minister: Akmetzhan Yesimov
Deputy Prime Minister: Diusembay Duisenov
Deputy Prime Minister/
Minister of Finance: Aleksander Pavlov
Minister of Oil and Gas: Nurlan Balgimbayev
Minister of Energy and
Coal Industry: Victor Khrapunov
Minister of Geology and
Earth Protection: Serikbek Daukeyev
Minister of Industry and
Trade: Khayrulla Ospanov

From Foreign Trade Memorandum:

1. Powers of the Executive, Legislative, and Judicial Branches of Government

The Republic of Kazakstan is a Presidential State with power divided among executive, legislative and judicial branches.

(a) Powers of the Executive

The President is Head of State and executive powers in the Republic of Kazakstan are exercised by the President and the Government. The President is elected to 5 year terms of office on the basis of universal, equal and direct suffrage by secret ballot. The members of the Government, including the Prime Minister, Ministers, and heads of State committees are appointed, and may be dismissed, individually or collectively, by the President. The President also appoints three of the seven members of the Constitutional Council, seven of the forty-seven members of the upper house of Parliament, executive heads of local government units in the Oblasts and major cities , all diplomatic representatives of the State, the highest commanding officers of the armed forces and the Chairperson of the State Budget Committee. With the consent of both houses of Parliament, the President appoints the head of the

National Bank and, with the consent of the Senate, the Procurator General and the Chairperson of the National Security Committee.

The President is authorized to prioritize draft laws for consideration by Parliament and, once adopted, to either sign them into effect or to exercise power to veto them. In order to override a Presidential veto, both houses of Parliament must generate a vote of at least two thirds of total members. The Parliament may delegate its legislative powers to the President for a period of up to one year. The President, moreover, may dissolve Parliament in the following cases: where insurmountable differences arise between the houses of Parliament or between Parliament and another branch of State power giving rise to a "political crisis;" where Parliament votes no-confidence in the Government or twice refuses to give its consent to the appointment of the Prime Minister. Finally, the President may call a national referendum and adopt decrees and resolutions implementing legislation.

The Government is organized and supervised by the Prime Minister who is, in turn, accountable to the President. The Government is authorized to develop, implement and enforce the main directions of socio-economic policy in the State including policies in the area of foreign relations, foreign economic relations, revenue generation, defense, and public order. "Sub-law acts" in the form of resolutions and directives, which implement legislative acts, may be issued by the Government. The sub-law acts of the Government, as well as the acts of the executive heads of units of local government may be annulled by the President. The mandate of the Government expires with that of the President unless otherwise terminated by the President.

(b) Powers of the Legislature

The Parliament is a bi-cameral body with an upper house called the "Senate" and a lower house called the "Majilis." There are sixty-seven deputies comprising the Majilis elected to four year terms on the basis of universal, equal and direct suffrage by secret ballot. The deputies of the Senate are elected to four year terms with half subject to re-election every two years. In addition to the 7 deputies appointed by the President, two deputies from each "Oblast," major city and the capital, are elected at a joint session of the representative bodies of all local government units.

Upon the initiative of the President, Parliament may amend the Constitution. Parliament may also adopt Constitutional Laws, Laws, resolutions and decrees on issues that, "regulate the most important public relations." At joint sessions, Parliament approves of, and may issue changes to, the State budget and put forward an initiative calling for a national referendum. At separate sessions, the Majilis and then the Senate may ratify or denounce international treaties and decide issues of State loans and other forms of economic assistance. The Senate *inter alia* has exclusive jurisdiction to elect and discharge the Chairperson and all Justices of the Supreme Court and the Chairpersons of the Collegium of Justice. The Majilis *inter alia* has exclusive jurisdiction to accept draft Laws for consideration and to announce regular and extraordinary Presidential elections. The Government prepares most draft laws which are subsequently initiated for consideration by Parliament either by the Government or Parliament members.

(c) Powers of the Judiciary

Judicial power in the Republic of Kazakstan is exercised within the framework of a unitary court system divided among three tiers. The Supreme Court is a court of general appellate jurisdiction (and in certain contexts a court of original jurisdiction) with power to review all judicial decisions rendered by lower-tiered courts including those of the military courts. The Supreme Court, however, is divided into specialized "Collegiums" with one Collegium reviewing cases in each of the following four areas: economic, civil, criminal, and military. The Supreme Court, moreover, may issue normative resolutions based upon court practice. These normative resolutions form binding precedents for courts subsequently considering similar cases and as such form part of the corpus of active law of the Republic of Kazakstan.

At the next tier below the Supreme Court are the "Oblast" Courts, the Almaty City Court and the Military Court of Troops. The Oblast and Almaty City Courts are courts of general jurisdiction which may function as courts of original or appellate jurisdiction depending upon the gravity or importance of a case assessed according to rules of civil and criminal procedure. Like the Supreme Court, the Oblast Courts are specialized into Collegiums. The Oblast Courts, moreover, exercise powers of appellate review over the decisions of "District Courts." Unlike the Supreme and Oblast Courts, the District Courts are exclusively courts of general and original jurisdiction and are not organized into specialized Collegiums. Finally, the Military Courts are courts of original and specialized jurisdiction.

While the Republic of Kazakstan does not have a Constitutional Court *per se*, cases before the courts which give rise to questions challenging the constitutionality of laws or sub-law acts and which appear to infringe the rights or liberties of individuals are suspended and reviewed by the Constitutional Council. The Constitutional Council may declare the law or sub-law act unconstitutional, rendering that law or sub-law act without legal force, and issue normative resolutions which will then have the force of law.

2. Government Entities Responsible for Making and Implementing Policies Affecting Foreign Trade

The Government is responsible for developing the Republic of Kazakstan's economic policy including policy on foreign trade which is expressed in the form of draft laws, resolutions, and directives prepared by a Government "Working Group" ordinarily comprised of members of the Ministries of Justice, Economy, Trade and Industry, the Antimonopoly Committee and other relevant ministries and departments. Overall policy in the area of foreign relations is overseen by the Ministry of Foreign Affairs. The Government's general economic policy, including its foreign economic policy, is developed and coordinated through the Ministry of the Economy. Foreign economic policy concerning CIS member countries, however, is coordinated through the Committee for Economic Cooperation with the CIS.

The Ministry of Industry and Trade is the principal Governmental body responsible for generating State policy on international trade, including proposals on customs rates and duties which are subsequently implemented by the State Customs Committee; attraction and allocation of foreign investments; and preparation of proposals concerning settlement and credit relations in the context of international agreements. The Ministry of Industry and Trade also assumes responsibility for issuing import and export licenses. State finance policy, including currency control and currency aspects of foreign economic relations, is determined by the Ministry of Finance. Administration of currency control is carried out by the National Bank through the issuance of licenses to conduct currency transactions.

3. Division of Authority Between Central and Sub-Central Governments

The devolution of governmental authority from central to sub-central units occurs at several tiers from national to Oblast and finally District with the city of Almaty occupying the status of Oblast and other major cities the status of District. Local governmental power is divided between representative bodies called Maslikhats and local executives called Akims. Each Oblast (including the City of Almaty) has an Akim (appointed by the President) and a Maslikhat. Each major city has an Akim appointed by an Oblast Akim. The deputies of Maslikhats are elected to four-year terms on the basis of universal and equal suffrage by secret ballot.

Governmental powers affecting foreign trade are devolved from national to local authorities in accordance with the following six principles: (a) relative autonomy to regulate region-specific economic relations; (b) delineation of specific jurisdictional activities in accordance with the Constitution and the Law on Local Representative and Executive Bodies; (c) reciprocal obligations among the different tiers of government to conform business operations to requirements of social, environmental and moral standards;

(d) State support of specific sectors[1] and regions and the promotion of inter-relations among local authorities, management bodies and business bodies; (e) allocation of budget resources and regional property within commercially sensitive margins; and (f) inter-governmental relations which promote a unified approach to issues affecting *inter alia* foreign trade.

4. Any Legislative Programs or Plans to Change the Regulatory Regime

The recently adopted Constitution, approved by national referendum on 30 August 1995, gives priority to international treaties over laws where such treaties have been ratified and are self-executing. The Constitution, moreover, requires all Constitutional Laws to be enacted within one year and all existing legislation to be brought into conformity within two years of the date the Constitution was approved. There are currently 2 draft laws before Parliament which impact foreign trade: copy right law and amendments to President decree On Licensing.

The Government's current legislative drafting agenda[2] for the next three years includes the adoption of new laws, and the re-drafting or amendment of existing laws as follows:

(a) Agenda for Drafting New Laws:

- The Law on Individual Entrepreneurship;
- The Law on Notaries;
- The Law on Government Procurement
- The Law on Anti-Dumping
- The Law on Depository Activities;
- The Law on Selection Achievements;
- The Law on Export Control;
- The Law on Joint Stock Companies;
- The Law on Advertising;
- The Law on Pedigree, livestock breeding, and Poultry;
- The Law on the Protection of Computer Programs;
- The Law on Secret Inventions;
- The Law on Ecological Control;
- The Law on the Issuance of Sovereign Guarantees;
- The Law on State Control of Foreign Economic Activities;
- The Law on Foreign Credits;
- The Law on Payments for Utilization of Biological Resources;
- The Law on Banking Guarantees;
- The Trade Sea Navigation Code;
- The Code on Automobile Transport;
- The Code on Railroad Transport;
- The Code on River Transport;

[1] See Section IV 3(a) *infra.*
[2] Adopted by Resolution No. 56 of the Government dated 12 January 1996.

- The Code on Subsurface and its Use
- The Law on the Commercial Utilization of Outer Space; and
- The Law on Investments of Entrepreneurial Agencies.

(b) Agenda for Re-drafting Existing Laws

- The Law on Development of Competition and the Restriction of Monopolistic Activities;
- The Civil Code, Part II (the "Specific Part");[3]
- The Labor Code;
- The Law on Consumer Rights and Protection;
- The Law on State Duties;
- The Criminal Procedure Code;
- The Criminal Code;
- The Law on Local Self-Government;
- The Law on Currency Regulation;
- The Law on Bankruptcy;
- The Law on Employment of Population
- The Code on Administrative Violations; and
- The Law on Standardization and Certification.

(c) Agenda for Amending Existing Laws

- The Law on Medical Insurance;
- The Law on State Statistics;
- The Law on State Registration of Legal Entities;
- The Law on Oil;
- The Law on Peasant Farms
- The Current Tax Legislation[4]; and
- The Law on Protection of Historic and Architectural Sites of Value.

The Government of the Republic of Kazakstan recently issued Resolution No. 211 of 19 February 1996 requesting that all ministries and state committees submit proposals regarding changes to the legal environment and the foreign trade regime to conform to WTO. Accordingly, the aforementioned drafting agenda of the Government will most likely be changed during the preparation and submission of this memorandum.

[3] [Footnote #2] Including the basic legal regime for intellectual property protection.

[4] Concerning refinement of system of local taxation, taxation of payments for special utilization of natural resources, responsibilities of tax and customs officials in the sphere of tax collection, and borrowers, banking clients and depositors.

9. DONOR ASSISTANCE

Contents

9.1 Donor Assistance in Kazakhstan

There are a number of bilateral and multilateral donor agencies that provide assistance to Kazakhstan. Of particular concern to the machinery industry is the availability of support offered to investors by these institutions, as well as the assistance provided for the development of human capital and infrastructure supporting that industry. The following provides an overview of the activities of the leading bilateral and multilateral development agencies operating in Kazakhstan.

- *The World Bank* is a source of long-term financing for projects in Kazakhstan. The World Bank traditionally finances infrastructure projects such as road and bridge building, oil and gas development projects, and power facilities. It has provided structural adjustment loans to Kazakhstan to assist the country in resolving some of its financial problems through market-oriented policy and institutional reforms. Kazakhstan has signed agreements with this institution for approximately US$560 million in technical assistance and financing in such areas as urban transport, oil and gas field development, and social protection. The World Bank also has many projects under preparation for financing in the areas of treasury modernization, highway infrastructure, agriculture privatization, and private enterprise support. Total financing involved in these projects is more than US$800 million.

- The *International Finance Corporation* (IFC) is the private sector branch of the World Bank that provides loans for small-scale projects (not exceeding US$10 million). The IFC has focused its efforts in Kazakhstan on private sector development, and has analyzed small and medium-scale undertakings in the medical, agricultural (including food processing), and consumer goods sectors.

- The *European Bank for Reconstruction and Development* (EBRD) provides loans for large projects, as well as technical assistance, in the areas of oil and gas development, mining, agriculture, and infrastructure development. The EBRD has recently approved financing for the reconstruction of the Aktau Port Facility in western Kazakhstan. The EBRD has also developed a program for small and medium enterprises (SMEs) worth 100 million ECU. The SME Program for Kazakhstan was jointly created by the EBRD, the Kazakhstani Ministries of Finance, and the National Bank of Kazakhstan (NBK). The funds allocated to this program will be channeled through selected participating banks in Kazakhstan to help local entrepreneurs develop business plans that represent bankable projects. Loans by the EBRD are issued to small and medium-sized enterprises for up to US$5 million.

- The *Asian Development Bank* (ADB) focuses its efforts largely on the energy sector, followed by social infrastructure, transport and communications, agriculture and agro-industry, finance, and industry and non-fuel minerals. The ADB's medium-term strategy centers on poverty reduction, improving the status of women, population planning and environmental protection. In Kazakhstan, the ADB is involved in the agricultural sector and a road rehabilitation project on a portion of the Almaty - Akmola highway. The ADB leverages its financial resources through co-financing and other techniques to attract additional private capital in funding the development needs of its member countries.

Bilateral assistance to Kazakhstan is provided by a number of countries, including Japan, the United States, the European Union and individual member countries.

- *Japan* provides assistance through grants and loans. The Japan International Cooperation Agency (JICA) undertakes most of the grant aid and technical cooperation assistance, while the Overseas Economic Cooperation Fund (OECF) administers loan assistance.

- The *United States* offers technical assistance through a variety of programs and agencies. The US Agency for International Development (USAID) has administered more than US$220 million in technical assistance programs in Kazakhstan since 1993. These programs include cooperation in privatization, fiscal and financial policy, commercial law, judicial reform, support for democratic institutions and non-governmental organizations, energy, social transition (especially in the health care sector) and efforts to improve Kazakhstan's environment. Other United States agencies that are active in Kazakhstan include the Department of Defense, which has provided significant amounts of humanitarian assistance; the Departments of State and Justice, which have sponsored law enforcement and counter-narcotics training and assistance; the United States Information Service (USIS), which has provided support to independent media and manages an active exchange program; and the Peace Corps, which has provided approximately 95 volunteers who are working throughout Kazakhstan in small business development, English teaching, and the development of environmental non-governmental organizations (US Embassy, 1997a).

- The *Export-Import Bank of the United States* (EXIM BANK) is an independent U.S. government agency that provides support for exports through export credit insurance, loan guarantees, and loans. Its affiliated agent, the Foreign Credit Insurance Association, assists exporters to process shipments on short and medium-term credits by insuring against non-payment. Coverage is usually limited to irrevocable letters of credit issued by either the Kazakhstan Eximbank or one of several large Kazakhstani commercial banks, including Kazkommertsbank and Center Bank. Other transactions are examined on a case-by-case basis (USAID, 1996).

- The *Overseas Private Investment Corporation* (OPIC) is an independent U.S. government agency that provides project financing, political risk insurance, and a variety of investor services. OPIC focuses its efforts mainly on the following areas: (i) financing of investments through direct loans and loan guarantees; (ii) insuring investments against a broad range of political risks; and (iii) providing investor services such as trade missions and outreach (USAID, 1996).

- The *Central Asian-American Enterprise Fund* (CAAEF) makes loans to small enterprises for private sector development. CAAEF focuses on small and medium-sized enterprises, and it offers assistance to Kazakhstani entrepreneurs for business plan development.

- The *United States Trade and Development Agency* (USTDA) is an independent U.S. government agency providing funding for firms to carry out feasibility studies related to major projects. The TDA provides funding in the form of non-reimbursable grants for studies to determine the technical, economic, and financial feasibility of major projects and to provide detailed data for making decisions on how to proceed with project implementation. The TDA has provided funding for public-sector undertakings that are planned and implemented by government ministries and agencies.

- The *Defense Enterprise Fund* (DEF) assists Kazakhstan and other NIS countries to privatize defense industries and to convert military technologies and capabilities into civilian activities. The DEF invests in initiatives involving privatized enterprises or in enterprises that have committed to privatization.

- The *European Union* and its TACIS program and individual bilateral donors such as Germany, Britain, and Japan provide additional aid, usually in the form of technical assistance and training. The European Investment Bank offers financing for major investment projects.

9.2 Activities Related to the Machinery Industry

Table 8.1 lists the ongoing projects by multilateral and bilateral development agencies that are related to the machinery industry. These projects are either in the form of loans or technical assistance initiatives and are either directly related to the industry or to upstream or downstream activities. They also include infrastructural and human capital development projects.

The following sections examine some of the activities of the major institutions operating in Kazakhstan and projects that are directly or indirectly related to the machinery industry.

9.2.1 The World Bank

The World Bank's lending program is designed to support the Government's efforts in the transition to a market economy through balance of payments support for macroeconomic stabilization; structural reforms through enterprise restructuring, financial sector reforms, and privatization; protection of vulnerable groups through an effective social safety net; and sector reforms, through operations in energy, agriculture, infrastructure, and environment.

In 1993 a US$38 million technical assistance loan was approved to support privatization, financial sector modernization, and social sector and human resources development. A US$180 million rehabilitation loan was approved in 1993 to finance critical imports, support the development of the Almaty foreign exchange auction market, and facilitate access of the private sector to foreign exchange. Also, a US$40 million urban transport loan was approved in 1994 targeted towards Kazakhstan’s three largest cities. In 1994 a US$15.7 million petroleum technical assistance loan was approved to provide assistance for preparing sectoral strategies, negotiating investment deals, and undertaking project feasibility studies. In 1995 a US$62 million loan was approved in support of a finance and enterprise development project to support the creation of the Rehabilitation Bank and Restructuring Advisory Unit. Also, a US$41.1 million loan was approved for a social protection project destined to strengthen employment services and to support the transfer of social welfare responsibilities from public enterprises to local governments, and to establish programs for the unemployed.

Table 9.1: ODA Projects Related to the Development of the Machinery Industry in Kazakhstan

Title	Donor	Sector	Objective	Type	Duration	Description	Cost
Management In The Natural Resources Sector Training Program	Canada	Energy	Regional Development	Technical Assistance	1-Mar-96 - 30-Sep-98	Design of self-financing training program for the management staff at the Kazakh Institute of Management Economics and Forecasting (KIMEP).	$1 200 000
Program Loan In Agriculture	ADB	Agriculture	Infrastructure Development	Technical Assistance	1-Jan-97 - onward	Preparation of feasibility study for second ADB agricultural loan.	$600 000
Feasibility Study Of The Rehabilitation And Repair Of Priority Sections Of Roads	ADB	Transport	Infrastructure Development	Technical Assistance	1-Jan-97 - onward	Feasibility study of the rehabilitation and repair of road sections for the second ADB loan.	$250 000
Bank Twinning Arrangement	EBRD	Industry	Economic Restructuring	Technical Assistance	1-Jun-96 - onward	Technical assistance for the preparation of credit line for small and medium-size enterprises.	$3 015 000
Apex Group Expansion For The Development Of SMEs	EBRD	Industry	Economic Restructuring	Technical Assistance	1-Jun-96 - onward	Technical assistance for the preparation of a credit line for small and medium-size enterprises.	$485 675
Institutional Development Of The Aktau Sea-Port	EBRD	Transport	Economic Restructuring	Technical Assistance	1-Aug-96 - onward	Technical assistance for the institutional development of the Aktau seaport.	$1 262 369
Pilot Agricultural Projects In Cattle-Breeding And Production Of Fresh Foodstuff	European Union	Agriculture, Food, Forestry	Economic Restructuring	Technical Assistance	1-Sep-95 - onward	Reconstruction of the privatized middle and large scale agricultural enterprises in Almaty, Northern Kazakhstan and Aktubinsk Regions; introduction of modern management and accounting systems; pilot projects implementation and production methods optimization.	$2 194 400
Support To The Reorganization Of Food Processing In The Aktubinsk Oblast	European Union	Agriculture, Food, Forestry	Economic Restructuring	Technical Assistance	15-Jan-96 - 31-Dec-97	Technical assistance for processing enterprises in Aktubinsk Region; preparation of recommendations on the functioning of meat and dairy industries under market-oriented conditions; improvement of high-quality food products supply.	$260 000
Additional Support to SMEs; Post-Privatization Support Of Consumers Cooperatives	European Union	Enterprise and Industry	Economic Restructuring	Technical Assistance	18-Dec-96 - onward	Post-privatization support to co-operatives for credit line preparation aimed at SME; training of Khabar officials, consultancy services.	$1 625 000

(cont'd)

Table 9.1: ODA Projects Related to the Development of the Machinery Industry in Kazakhstan *(cont'd)*

Title	Donor	Sector	Objective	Type	Duration	Description	Cost
Support To The Centre For Business Relations In Almaty.	European Union	Enterprise and Industry	Private Sector Development	Technical Assistance	25-Jan-96 - 31-Dec-97	Support and expansion of Centre for Business Relations in Almaty.	$1 755 000
Technical Assistance To The GIMV Kazakhstan Post-Privatization Fund	European Union	Enterprise and Industry	Private Sector Development	Technical Assistance	1-Mar-96 - 1-Mar-06	N/A	$32 500 000
Support To The State Property Department In Case-By-Case Privatization Programme	European Union	Enterprise and Industry	Economic Restructuring	Technical Assistance	10-Sep-96 -	N/A	$2 925 000
Trade Conditions, Customs Procedures And Shipping Clerks Services	European Union	Trade and Commerce	Legal Regulation / Infrastructure	Technical Assistance	1-Jan-96 -	Elaboration of recommendations on harmonization of customs procedures and development of shipping clerks services.	$1 300 000
Multimodal Transportsation Systems	European Union	Transport	Structural Adjustment	Technical Assistance	1-Jan-96 -	Introduction of a multi-modal transportation system in the Traseka and Europe-Asia corridors. Improvement of operations of existing terminals from commercial and technical points of view.	$812 500
Proposals To Create The Unified Information System For Transasiatic Main Line	European Union	Transport	Legal Regulation / Infrastructure	Technical Assistance	1-Jan-96 -	Introduction of systems to provide exchange of information on infrastructure, customers and train schedule for transportation between Russia, Ukraine, Belarus, Kazakhstan and China.	$494 000
Improvement Of Roads Maintenance In Central Asia	European Union	Transport	Structural Adjustment	Technical Assistance	1-Jan-96 -	Collection of the necessary technical recommendations based on European standards, taking account of combined transportation parks, their deterioration, application of new models and their adaptation.	$975 000
System To Control Road Surfacing	European Union	Transport	Infrastructure Development	Technical Assistance	1-Jan-96 -	Reduction of technical maintenance expenses. Review of latest technologies for road surfacing control.	$1 625 000
TRASEKA And Law Enforcement Structures	European Union	Transport	Legal Regulation / Infrastructure	Technical Assistance	1-Jan-96 -	Elaboration of recommendations to harmonize the currently existing transportation systems involved in commercial, customs and regulation databases. Elaboration of new legal standards for legislation optimization on the basis of material and information collected in Kazakhstan	$2 437 500
Grant	IBRD with Japan	Environment	Legal Regulation	Technical Assistance	1-Sep-96 - 31-Dec-97	N/A	$800 000 *(cont'd)*

Table 9.1: ODA Projects Related to the Development of the Machinery Industry in Kazakhstan *(cont'd)*

Title	Donor	Sector	Objective	Type	Duration	Description	Cost
Preparation Of Study on Almaty-Uzun-Agach-Bistrovka Road Construction	Islamic Develop-ment Bank	Transport	Infrastructure Development	Technical Assistance	27-Jul-94 -	Preparation of feasibility study for Almaty-Uzun-Agach-Bistrovka of the following: (a) volume of transport flows; (b) evaluation of cost of construction of Uzun-Agach-Bistrovka road section; (c) evaluation of the number and location of motels and service stations along the road.	$257 000
Preparation Of The Feasibility Study Of Karaganda-Akmola Motorway Construction	Islamic Develop-ment Bank	Transport	Infrastructure Development	Technical Assistance	19-Sep-96 -	Feasibility study of the Karaganda-Akmola road, based on volume of future transport flows; review and exposition of the road sections and constructions, which require repair; recommendations concerning the conforming design and construction standards for the motorway.	$298 500
Preparation Of The Feasibility Study Of Almaty-Akmola Railway	Islamic Develop-ment Bank	Transport	Infrastructure Development	Technical Assistance	19-Jun-96 -	N/A	$290 000
Japan 0012	Japan	Agriculture, Food, Forestry	Regional Development	Technical Assistance	1-Mar-96 -	N/A	N/A
Japan 0014	Japan	Agriculture, Food, Forestry	Infrastructure Development	Technical Assistance	1-Mar-97 -	N/A	N/A
Japan 0016	Japan	Agriculture, Food, Forestry	Democratic Institution Building	Technical Assistance	1-Apr-97 - 31-Mar-98	N/A	N/A
Japan 0015	Japan	Enterprise and Industry	Economic Restructuring	Technical Assistance	1-Mar-97 -	N/A	N/A

Source: External Loans Committee, Ministry of Finance.

The World Bank recently approved a US$73 million financial sector adjustment loan that will help build a sound and efficient banking sector. The Bank has also provided Kazakhstan with policy advice in the agriculture, financial and energy sectors, and is helping with petroleum legislation, taxation reform and legal reform and training. In addition, three activities financed by the World Bank's Institutional Development Fund are providing training and technical support for the coordination and management of external assistance to strengthen the country's statistical system; a study tour is also being organized of industrial countries for government officials and managers of industrial enterprises. In addition, the Bank is actively coordinating with international efforts to reverse the severe environmental degradation of the Aral Sea basin. More specifically, the Bank is supporting GOK projects on the Syr Darya River that aim to reduce pressures on the water resources of the Aral Sea.

9.2.2 The EBRD

The Kazakhstan Post-Privatization Fund was established by the EBRD to support the restructuring and modernization of medium-sized enterprises in Kazakhstan. The Fund provides equity capital up to an amount of ECU 30 million to eligible private companies. In the coming years the fund will make equity investments of between ECU300,000 and ECU 3 million in individual enterprises in the country. Strategic investors are likely to have significant opportunities in the area of import substitution since many basic products are currently imported. Of current concern is the lack of liquidity of the capital markets. Without a well-developed stock exchange, foreign investors face limitations in exiting from holdings. To overcome this limitation, the Fund co-invests with a partner that is willing to buy out the Fund's shares at the moment of exit. As more players enter the market, however, capital markets should gain liquidity and this mechanism should become less important to the Fund's operations. The EBRD recently approved a US$42 million loan to support medium size enterprises, and there is a US$80 million loan currently being considered for small and medium-size enterprises.

9.2.3 JICA

The Japan International Cooperation Agency (JICA) has carried out several key surveys in the areas of transportation, infrastructure, agriculture and mining. These surveys are usually followed by two-tier loans from the Overseas Economic Cooperation Fund (OECF) that channel capital to development banks, which in turn provide credits at low-interest rates for designated activities targeted by the surveys. To date, six surveys have been completed and, in several cases, loans issued:

- A US$73 million railway capacity-building project to improve and renovate the tracking system.
- A US$210 million bridge constructed over the Irtysh River in Northern Kazakhstan.
- A US$25 million airport development project in Akmola, following the completion of the March 1997 survey.

- A western Kazakhstan road network survey that was completed in October 1996 and which may be supported by an OECF loan after the Akmola airport development project (JICA, 1996).
- An irrigation and drainage system and water management project in Kzyl-Orda, under which several pilot projects are being selected to undertake feasibility studies (JICA, 1997c).
- A non-ferrous metal industry study which targeted policy reforms to improve business operations and the investment environment (JICA, 1997d).

The railway capacity-building project is designed to strengthen the railway infrastructure between the Druzhba and Aktogai depots to develop freight transportation between Kazakhstan and China. The major components of the project are the strengthening of the Druzhba depot load factor capacity, the reconstruction of the Almaty-1 passenger depot, the rehabilitation of the Beskol – Druzhba railway, and the modernization of telecommunications modernization on the Aktogai – Druzhba site.

The Irtysh River bridge project is designed to expand motor vehicle traffic across the river in Semipalatinsk, and it includes the improvement of access roads to the bridge. The bridge will not only serve local and regional traffic, but passenger and cargo traffic of the Kazakstan and other Central Asian republics in general.

9.2.4 USAID

USAID is focusing on legal and regulatory reform, with emphasis on trade and investment, bankruptcy and general business law reform, and training. Achievements to date include facilitating the re-drafting of foreign investment legislation; guiding the development of decrees to streamline business licensing requirements; assisting in developing the customs reform process, and guiding the GOK in its efforts to join the WTO. USAID has played a pivotal role in establishing a stock exchange, improving banking management, and providing policy assistance with budget planning and implementation processes. A new modern tax code was adopted in July 1995 that was supported by USAID technical assistance. The Central Asian American Enterprise Fund, also supported by USAID, is established in Almaty and provides loans in support of private enterprise.

In 1998 USAID's strategy for helping Kazakhstan achieve a democratic, market-based society focuses on three main areas: the economic, democratic, and social aspects of the transition process. Economic restructuring remains the single most significant part of the portfolio, with emphasis gradually shifting from privatization (in which USAID funding is now being phased out, though the World Bank continues to lead the large-scale privatization effort) to broader legal and regulatory policy reforms.

The planned 1998 program anticipates a continued evolution of the USAID program in the area of economic restructuring. In the past few years, the USAID economic restructuring program in Kazakhstan has gradually moved through a three-stage progression: (1) initial focus on short-term economic stabilization measures designed to help bring government spending and inflation under control; (2) support for privatization of small-and medium-sized enterprises; and (3)

establishment of financial markets and development of an appropriate legal infrastructure for commercial activities. The first two stages of this process will be largely complete during FY1997. In FY1998, it is envisaged that the USAID program will continue to focus on the third stage by helping to deepen the now nascent financial sector through direct support to financial market institutions, further development of commercial legal infrastructure, and further rationalization of intergovernmental financial relations.

9.2.5 Asian Development Bank

The ADB is currently financing a farm restructuring and development program that consists of US$1.2 million of technical assistance and US$100 million of loans. The technical assistance is preparing financially self-sustaining projects suitable for bank financing that will deepen the process of agricultural transformation in Kazakhstan by establishing the required support mechanisms to facilitate farm restructuring and the development of a market-oriented economy. There are five components in these projects:

(i) supporting farm restructuring and management,
(ii) revitalizing input distribution,
(iii) developing agro-processing enterprises and marketing,
(iv) strengthening rural finance, and
(v) assisting household food security and improving possible transitional social costs of farm restructuring.

It is expected that the projects will support (i) training and capacity building at the farm, province (oblast), and national levels; (ii) the financing of private and public sector investments at the farm and oblast levels; and (iii) appropriate refinements of agriculture sector policies and the reorientation of public institutional roles and functions as required at both the oblast and national levels.

The proposed TA will build on the Government's initial policy, legal and institutional reforms, including farm privatization, which have been intended to facilitate the transition of agriculture to a market economy. To encourage farm restructuring and growth in the selected oblasts, the policy dialogue may involve, inter alia, reforms of rural credit, further easing of restrictions on commodity marketing and trade, and, most importantly, the more refined and intensive implementation of existing national policies at the oblast level.

It is expected that the projects will be undertaken on a pilot basis in two oblasts chosen to represent dominant agro-ecological zones and farming systems of Kazakhstan. Target beneficiaries will include the rural communities associated with privatized farms (both family and cooperative) and agribusiness enterprises. Benefits of the projects will include the regeneration of farm productivity and income, the revitalization of farm credit and agricultural commodity distribution systems, enhanced human resource capacity for agribusiness management in a market economy, and the development of sustainable farm and agribusiness support programs and financial services which can be replicated in other regions of Kazakhstan using largely domestic training capacity and other resources. Representative farms and farm

communities will be directly involved in the formulation of projects interventions which could be implemented quickly on a trial basis following approval of the proposed bank loan.

9.2.6 TACIS

A project designed to support the improvement of farm machinery will begin in February 1998 and will be implemented over a 16-month period. The initial phase of the project will review the current situation and policies in relation to the development of private manufacturers, plant leasing companies and the formation of machinery associations at the farm level. In the second phase, technical assistance will be provided to the Ministry of Agriculture and assistance will be provided for the implementation of training programs in the Almaty, Talgy Kargan and Akmola oblasts at administrative and farm association levels. The project will also elaborate joint strategies and cooperation with other TACIS projects and multilaterally funded programs relevant to the machinery sub-sector.

9.3 Areas of Complementarity and Coordination

The World Bank, JICA and the ADB have been the major sources of assistance for large infrastructure projects. The other bilateral and multilateral agencies have focused on technical assistance and institution-building activities, which affect the machinery industry and its related sectors. Opportunities for coordination of activities in the machinery industry exist between the current JICA project to develop a master plan for the industry and the TACIS project to develop skills in the use of that machinery. In related areas, opportunities for cooperation exists in policy formulation initiatives and the support of management information systems. The development of the agriculture and mining sectors, as well as trade and investment, are areas of interest to many donors, notably the ADB, JICA, and the World Bank. All three agencies provide assistance in the form of sector-specific projects. Technical assistance for policy improvements, private sector and institutional development are areas targeted by USAID and the EBRD.

Beyond the obvious need to closely coordinate activities and avoid duplication of competing institutional development initiatives, there are a number of specific areas that require strengthening in donor assistance:

- Few donors are engaged in financial sector intervention, yet the lack of credit represents one of the most important constraints to the development of the agricultural sector, and one that severely limits purchases of agricultural machinery.

- Specific shortcoming exists in bank credit, insurance schemes and capital markets development.

- Education and training programs are being developed for the machinery industry by TACIS, but at a small scale.

- There is fragmentation of business development training programs, which could be strengthened through the consolidation of various donor-supported programs.

- Private sector development by donors has focused on small and medium size enterprise (SME) development, and there is increasing recognition that support is needed for large state-owned enterprises (SOEs) that are being privatized in the machinery industry and elsewhere.

Early project notification and the EBRD donor project database have provided an important channel through which to coordinate donor activities. Discussions of areas requiring additional donor support are being identified in the master plan for the machinery industry in Kazakhstan. These finding could provide additional direction to donors for their overall policy direction, as well as project, program and institution-building initiatives that could be developed to support the restructuring and development of the industry.

PART V

CONCLUSIONS

10. SUMMARY AND RECOMMENDATIONS

Contents

10.1 Overview

Since 1994 the Government's liberalization measures have moved the economy from a state of declining output and employment to one that can lead to sustainable economic growth. While the shift was initially fueled by debt-financed government expenditures, more recent private sector fixed capital formation and international trade and investment expansion have dominated the growth process.

To date, many of the adjustments have reflected 'first generation' reforms of macroeconomic policies, trade and financial policies, and public sector divestitures. While these policies have sought to enable the operation of market signals so that resources can be efficiently allocated in the economy, they have not fully addressed the procedural issues of doing business in Kazakhstan. These issues include the regulatory, institutional, infrastructural, and macroeconomic environments inhibiting the competitive structure of the economy. As a result, there remains a high degree of underemployment in agriculture and other productive sectors of the economy, and an unequal distribution of the gains from income growth, both of which exacerbate the problems now confronting the Kazakh economy.

Based on the findings of the JICA Study Team, our recommendations focus on 'second generation' reforms that address the most important remaining factors limiting private sector activities and public sector reforms in Kazakhstan. The experiences of Japan and the more advanced East Asian countries show that a strong and pro-active role for the government will need to go hand in hand with the removal of policy-induced distortions that hold back the competitiveness of the private sector (World Bank, 1993). The team's support of an improved competitive structure in the machinery industry is based on the selection, prioritization and sequencing of the second-generation reform activities required to overcome the most important obstacles that continue to inhibit competitive business practices in the industry.

Table 10.1
Macroeconomic and Structural Adjustment Policies for a Successful Machine Development Strategy

Policy	Implemented	Included in 'Kazakhstan 2030' Development Plan
Fiscal discipline	Yes	Yes
Redirection of public expenditure priorities towards health, education and infrastructure	General movement towards goal	Yes
Tax reform, including the broadening of the tax base and cutting marginal tax rates	Generally yes	Yes
Unified and competitive exchange rates	Yes	Generally yes
Secure property rights	No	Generally yes
Deregulation	Limited	Limited
Trade liberalization	Underway as part of WTO accession negotiations	Generally yes
Privatization	Generally yes, but not for all large-scale enterprises that dominate machinery industry	Yes
Elimination of barriers to direct foreign investment (DFI)	Yes in terms of policy, but not in terms of bureaucratic and administrative obstacles	Limited to policy; procedural issues not fully considered
Financial liberalization	Limited	Yes

As a mechanism for facilitating this process and for improving the coordination of the broad range of issues being addressed by the Study Team, the present report has addressed the economic policies and regulatory issues affecting the machinery industry within the following three inter-related areas:

(a) macroeconomic sustainability and predictability of fiscal and monetary policies, trade policy reforms and issues related to economic stability;

(b) liberalization policies aimed at structural reform and growth, including the removal of relative price distortions and the reduction of state intervention; and

(c) the regulatory environment and procedural issues affecting investment flows and business activity.

The proposed strategy to restructure the machinery industry and enhance its competitive framework is based on a broad-based, market-driven expansion of investment that is supported by public sector policies and practices and infrastructural development, and that is integrated and consistent with national development plan of the GOK. It also takes into account the linkages that exist between processing activities in the agricultural and mining sectors and the development of the machinery industry, and broad-based policies that facilitate trade and investment in the economy.

The proposed initiatives have the following objectives:

- For *agriculture and mining*, the enhancement of the public sector's 'facilitating' role through policy and procedural reforms to assist the private sector in overcoming existing constraints will aim to promote product specialization and high value-added production activities directed towards the domestic and international markets.

- For *machinery*, the restructuring of the industry will strive to improve production processes and managerial skills, and facilitate entry, operation and exit of businesses, and develop marketing processes that take advantage of vertical and horizontal product differentiation in domestic and foreign markets.

- For *trade*, the reduction or elimination of barriers to trade, including administrative and bureaucratic obstacles, and the improvement of incentives promoting trade will aim to bring about dynamic changes in the country's comparative advantages to reduce production costs by exploiting economies of scale and expanding extra-regional trade, thereby augmenting the international competitiveness of high value-added production activities.

- For *investment*, the globalization of production processes through the mobilization of domestic and foreign direct investment aims to bring in much-needed financial resources and encourages the transfer of technology to the machinery industry and high value-added production activities in the agricultural and mining sectors.

- For *financial services*, the mobilization of financial resources and the expansion of banking and insurance activities strive to provide the much-needed capital for private sector investment and export-oriented activities.

- For *transportation, communications, and other infrastructural development*, the enhancement of facilities to support the movement of raw materials to production processing facilities and their products to domestic and foreign markets will aim to provide a favorable infrastructure environment to attract investment and facilitate the specialization of production in high value-added production activities.

- For *fiscal, property tax, and tax administration policies*, the maintenance of a sound fiscal stance, coupled with the implementation of property tax reforms and improved tax administration will aim to improve investor confidence in economic management.

- For *private sector development*, the focus on the procedural issues inhibiting business activity will aim to reduce administrative constraints and create the institutional framework needed to support successful private sector activities.

10.2 Market Information System

Background -- Interviews conducted by the JICA Study Team with managers of companies located throughout Kazakhstan revealed that there is an acute shortage of market information. Under the former Soviet system, all state orders and supply contracts were developed and maintained by company contacts in Russia. When that system broke up, Kazakhstan and its neighboring countries lost those orders along with the contacts and information needed to maintain businesses and establish new channels of operation. This situation has resulted in a shortage of information on production technologies and markets that would help companies promote their existing products and develop new product lines.

The lack of market information is especially evident in the agriculture sector, and particularly in the manufacture of agricultural machinery and food processing equipment. The changing structure of farms and manufacturing enterprises has also impacted on the availability and use of market information. For example, since Kazakhstan gained its independence the collective farms that once dominated agricultural production have broken up into many small independent farms. These farms are now struggling financially because of low crop yields and the need to sell livestock for cash to meet daily operating requirements. The poor financial situation has, in turn, dampened the demand for new agricultural equipment and dramatically reduced purchases of new equipment from manufacturing enterprises. At the same time, the situation has led to complaints by food processors about shortages of raw materials such as grain, milk and meat, which in turn has reduced the need for companies to purchase new food processing equipment.

The manner in which equipment is supplied to the food processing industry has also undergone large changes in recent years. Under the Soviet Union, the large state-owned dairy, meat processing and brewery companies imported food-processing equipment from Russia and Europe, and only a limited amount of equipment was purchased from domestic sources in Kazakhstan. Other types of food processing companies, such as confectioneries, traditionally relied on European manufacturers to supply their equipment since this type of technology was not available from manufacturers in Kazakhstan. In recent years the food processing industry has undergone changes similar to those of farms whereby the state-owned enterprises have split into many small processing enterprises. Some of these new small enterprises have purchased food-processing equipment from Europe with loans from international agencies. In other cases, companies have placed orders with Kazakh companies that do not necessarily specialize in the manufacture of food processing equipment. However, this situation does not appear to hold for the brewery industry, which usually purchases equipment from companies specializing in brewery equipment. Under these conditions, it is unclear whether the domestic markets for food-processing equipment will expand, or whether most of the growth will occur in the foreign markets. Moreover, small processors lack information about the types of food processing equipment needed to manufacture high quality foods that are competitive with imported food products.

Proposed Solution and Recommendations -- The development of a comprehensive and easily accessible market information system is essential for investment decisions and the efficient allocation of resources at both the farm and enterprise levels. The market information system should encompass the information required by primary producers, intermediaries and manufacturers of final products. As a first step, it will be necessary to determine the existing sources of market information and to identify the types of information required of agricultural and mineral producers and processors. The expected outcome of a comprehensive information system available to all key players is an improvement in the allocation of resources and the more effective utilization of scarce capital.

The immediate information needs of a producer would likely include (a) the sources (domestic versus foreign by country of origin) and distribution (domestic versus foreign markets by country of destination) of each type of machinery; (b) prices of each type of machinery on the Kazakh, CIS and world markets, including barter and cash prices; (c) customs duties and other fees for foreign machinery imports; (d) transportation costs; (e) types of technologies available; and (f) wage trends by industry and category of professional, technical, skilled, and unskilled workers.

Beyond these short-term requirements, an industry profile should include the following components: (a) market size and structure; (b) consumer demand patterns and characteristics; (c) competing industries and their characteristics; (d) competing products, their quality and their prices; (e) existing infrastructure to support the industry; (f) alternative sources of inputs; and (g) sources of domestic and foreign capital.

To undertake this task, it is recommended that the JICA team members first identify the information needs of producers and potential investors, and then identify the information sources that are currently available. A standardized form should be used across industries and sectors to facilitate comparative analyses. The data gathering process would help to reveal the areas where information is lacking, and a proposal should be completed for the changes that are needed to update and improve the current data collection and processing system as part of the master plan. That proposal should include the steps needed to develop a comprehensive and easily accessible market information system.

10.3 Trade Policies

Background -- Kazakhstan has liberalized trade in many of its products and has increasingly sought to integrate itself into the world economy through its membership application into the World Trade Organization (WTO). Membership in the WTO will ensure open and non-restrictive access to international markets, reciprocal national and most-favored-nation (MFN) treatment, access to the WTO dispute settlement mechanism, and greater stability in the country's trade and investment environment. Under the present tariff schedule, machinery and related equipment, including rolling-stock and parts, enter Kazakhstan duty-free, with some exceptions on products for which duties range from 5 to 20 percent.

The negotiations of the last two years with the WTO may be nearing a conclusion as the Government prepares to present a new and improved set of concessions on tariff concessions on goods and services. The initial offer providing for a trade-weighted average binding rate equal to somewhat over 50 percent was not satisfactory to members of the WTO working party meetings. During the early part of 1998 progress in the accession process was nearly halted by the restructuring of the Government and its move from Almaty to Akmola, as well as by the external pressures to implement the Customs Union composed of Russia, Belarus, Kazakhstan and Kyrgyzstan. In addition to establishing a free trade area, the Customs Union calls for the implementation of a common external tariff and a monetary union. If a significant improvement in the offers on goods and services is made during 1998, the WTO accession negotiations will proceed with the implementation of a number of laws governing anti-dumping, countervailing duties and subsidies, safeguard measures, and others covering the customs code, patents and trademarks, licensing, and intellectual property rights.

Recommendations -- The Customs Union of Russia, Belarus, Kazakhstan and Kyrgyzstan contains significant long-term risks for the machinery industry insofar as it locks into place traditional technologies and production structures, reduces innovation and competition, and propagates inefficient industries that absorb scarce resources that could be better used elsewhere. Given these inherent inefficiencies, there are serious costs to Kazakhstan's efforts to develop its agro-industrial and mineral processing capabilities by implementing its existing customs union commitment and further extending its commitments to the harmonization of foreign trade legislation, a common external tariff and a monetary union.

Instead, Kazakhstan's effort to maintain an open trade regime that facilitates entry into the world economy is the best policy for ensuring the efficient allocation of resources in the machinery industry and its related sectors. The development of dynamic comparative advantages in these areas will require markets that are large enough to promote competition and encourage the flow of new investments embodying new technologies. In this context, the sectoral policy design that is most compatible with policies promoting the efficient allocation of resources is neutral between sectors. For this reason, Kazakhstan's inter-sector neutrality of trade policies should parallel the progress being made in its domestic market reforms and macroeconomic stabilization policies.

10.4 Investment Policies

Background -- The regulatory basis for foreign investments in Kazakhstan is the Foreign Investment Law of 1994. It was amended by the 1997 Law on State Support for Direct Investment to stimulate domestic and foreign investment in infrastructure, light manufacturing, high-yield varieties of crops and livestock, social sector investments, and investments associated with the transfer of the capital to Akmola. In July 1997 Article 6 of the Foreign Investment Law was amended to provide a wide-ranging guarantee of stability over the legal regime applied to investments. Complementary initiatives on the

part of the Government include de-monopolization, privatization, debt restructuring, banking reform, price liberalization, the establishment of a securities and exchange commission, and the enactment of the 1995 Tax Code, which is considered to be among the most comprehensive in the NIS.

Kazakhstan's openness to foreign investment has attracted foreign capital into the natural resource activities related to oil and gas and nonferrous metallurgy. However, it has been less successful in introducing fixed capital investment into other sectors, and there have been virtually no new foreign investments in the machinery industry. A number of problems limit foreign investment into Kazakhstan, which exacerbate the structural problems already facing the machinery industry and which have been identified during the course of the present study:

- Foreign investments continue to be screened by the Government at the highest levels.
- The tendering process lacks transparency.
- Government procurement procedures lack transparency and foreign investors often complain that awards favor domestic bidders.
- Corruption at all levels of the Government has lowered investor confidence.
- Inconsistencies among the numerous decrees and changes in the regulatory framework have given rise to uncertainty and discouraged investment.

In addition, there are a number of problems with the long-term management contracts of large industrial enterprises that are offered to foreign companies, including the enterprise leasing option as a pre-privatization step:

- The size of the company's debt and wage arrears are often undisclosed to the contracting management contractor.
- The legal aspects of the management contract are not well defined.
- Sales of companies by the contracting managers to its subsidiaries can take place at below-market prices, thereby transferring company profits to those of the management contractor.
- Joint oversight of state-owned company by both the management team and the Government is lacking.

Proposed Solution and Recommendations -- There is a need to rationalize the tendering process so that clear Government guidelines exist for the manner in which state-owned enterprises should be transferred to the private sector, either through privatization, concession, leasing arrangements, or management contracts. Moreover, in

order for the tendering process to be conducted in an open and fair manner, the Government should adopt the Law on Concessions that is now in its draft stage. This law should provide for permanent rights over State-owned properties to private investors once the transfers have been completed, unless adequate notice is given and investors have sufficient opportunity to correct alleged deficiencies.

At this time, it is questionable whether the Government's 1997 amendment to Article 6 of the Foreign Investment Law can provide the broad-based investment guarantees of stability over the legal regime. The key issues revolve around the language of the guarantees, the legal rights of private investors to defend themselves against Government actions, and the extension of those guarantees to labor laws and regulations, licensing procedures and other areas of the law. For this reason, alternative mechanisms to protect investors from political, economic and other risks should be considered, including insurance facilities that protect against sovereign risk.

It would also be useful to undertake a comparative analysis of the investment policies that have been adopted by Kazakhstan and other developing and transition economies that have successfully encouraged investment and technological transfers in their countries. The sample of countries should comprise those with relatively similar levels of development and they should include lessons from the South East Asian countries. The study would help to guide policymakers in the remaining investment policy reforms that Kazakhstan needs to complete to attract investment and technology transfers into the machinery industry and its related sectors.

10.5 Investment Procedures and Regulations

Background -- Bureaucratic and administrative obstacles to investment remain one of the largest obstacles to doing business in Kazakhstan. The State Committee on Investment has made considerable effort to streamline investment procedures and to establish a one-stop shop to facilitate investments in certain sectors. Nevertheless, problems remain in licensing requirements, customs clearances, registration of foreign investments (legal entities), inadequate transparency and inconsistencies in the tendering process, and the lack of timely notification of tenders to allow adequate response time and ensure competitive bids. The large number of licensing requirements has led to confusion among businesses and government officials alike, particularly since in many cases the steps and qualification requirements for issuing these licenses do not exist in printed form.

Moreover, the restructuring of the Government that has been taking place and the recent move of the capital from Almaty to Akmola have exacerbated the problems of investors seeking to obtain licenses or negotiate contracts. Documents have been lost in the transfer to the new capital and investors have had to re-initialize licensing procedures. At other times, documents needed for investment approval have been lost in transit between Akmola and Almaty. Together with the great risk in undermining investor confidence, the increased time required by these bureaucratic delays has further eroded investor interest

in the machinery industry and other sectors requiring major restructuring and investment resources.

The existence of significant delays in customs clearances has also impeded foreign investment. Membership in the WTO will require that Kazakhstan eliminate trade control measures and simplify its custom procedures. However, the Government's slowdown of negotiations with the WTO following its move to the new capital, and the implementation of the Customs Union with Russia, Belarus and Kyrgyzstan have further delayed efforts to streamline customs procedures.

Proposed Solution and Recommendations -- To date, there is inadequate information on the complete set and rankings of the remaining bureaucratic and administrative factors influencing the business environment. To redress this situation, a private sector assessment should be undertaken of the obstacles to doing business in Kazakhstan. Once completed, a comprehensive list of procedural and qualification requirements should be adopted for the all activities requiring licensing and other administrative approvals. These requirements should be clearly articulated and made available to the public through easily accessible documentation.

In an effort to resolve the remaining procedural issues, the State Committee on Investment should adopt a more active role than in the recent past to identify and eliminate the bureaucratic and administrative obstacles to doing business in Kazakhstan. While some efforts have been made to identify these obstacles, there have not been any recent comprehensive and ongoing surveys of businesses to monitor the remaining constraints on investment activity. Such surveys should be made part of the ongoing functions of the State Committee on Investment if it is to succeed in streamlining the rules and procedures that implement the laws.

Following the recommendations for investment policies, it would also be useful to undertake a comparative analysis on the regulatory reforms that have been undertaken by other developing and transition economies that have successfully attracted investment into their countries. The sample of countries should comprise those with relatively similar levels of development and they should include lessons from the South East Asian countries. The study would help to guide policymakers in the remaining regulatory reforms that Kazakhstan needs to complete to attract investment into the machinery industry and its related sectors.

10.6 Special Economic Zones

Background -- Special Economic Zones (SEZs) have been established to attract investment in export-oriented products that benefit from modern management methods. At present, there are SEZs in the Lisakovsk, Kyzyle Orda, Akmola, Zhayrem-Atasuyskay, and Sary-Arka regions. Investors in these areas enjoy special rights such as tax and duty-free status. A parallel initiative provides for the creation of free customs zones and free warehouses within which any commercial operations, except retail trade,

can be conducted, including the transshipment of goods. The Customs Committee regulates and supervises the activities of free customs zones and free warehouses, while the Ministry of Justice is responsible for registering businesses within SEZs. Only Kazakh legal entities and natural persons have the right to establish free warehouses. Kazakh legal entities can be fully or partially foreign-owned. The Foreign Investment Law of Kazakhstan governs foreign investment in special economic zones, and the national treatment stipulated under that law applies under this condition.

Recommendations – Possible linkages of SEZs and free customs zones to the restructuring of the machinery industry should be assessed in the context of industry 'clusters' whereby companies support one another on the vertical or horizontal chain of production. Important externalities could be gained from clusters that provide information, technology, skills and physical inputs in support of the overall competitiveness of industries. Since the development of Kazakhstan's SEZs and other free zones need to be supported by ready access to telecommunications linkages and other services, a cluster approach to the restructuring process of the machinery industry and its related activities could lead to important economies of scale.

10.7 Privatization Policies

Background -- Kazakhstan has made significant progress in small-scale and mass privatizations. However, the privatization of large-scale enterprises, which dominate production activities in the machinery industry, is proceeding particularly slowly. Most foreign investments in privatized enterprises have occurred in the oil and gas and the mining and metals sectors. Very few enterprises in the machinery industry have been privatized. The major problems limiting privatization of large-scale enterprises in the machinery industry and related production activities in agriculture, mineral processing and transportation are as follows:

- Lack of enterprise restructuring before privatization.
- Large enterprise debt, including wage arrears.
- Underdeveloped stock exchange.
- Discrepancies between laws and their application.
- Decree reversals and associated uncertainty.
- Lack of enterprise experience with new tax code.
- Inadequate government guarantees.

Proposed Solution and Recommendations -- The foremost challenge facing the machinery industry and its related activities is the restructuring of the state-owned enterprises that needs to occur before privatization efforts can take place. While the present master plan for the industry aims to address those restructuring needs, there are several urgent initiatives that must also take place in related areas. First, progress must be made in resolving the currently large inter-enterprise debt. Recent experience shows that foreign investors are unwilling to absorb the debt and, where limited investments have

taken place, it has been targeted at new initiatives that are independent of the state-owned enterprises.

Secondly, while the tax and legal situation has improved considerably and does not pose as great a problem to investors and the privatization process as it once did, ambiguities remain in the manner in which those laws are implemented. For example, machinery-building enterprises often complain about the difficulties of processing the VAT and the excessive burden of double taxation from foreign and domestic taxes on imports. These and other reimbursement procedures need to be rationalized and improved.

A third area relates to the need for adequate and stable government guarantees. While this topic has been discussed earlier in the context of investment policies and the regulatory framework, its importance to the privatization initiatives in the machinery industry needs to be underscored. Without an adequate legal regime and the enactment of specific legislation, government guarantees to investors can be contested and cannot be considered binding. Until these inadequacies are resolved, investors should have recourse to insurance facilities covering sovereign risk and other investment-related risks associated with an unstable regulatory environment.

10.8 Coordination of Donor Activities

Background -- There are over 25 ongoing or recently-completed project, programs and institution-building activities related to the machinery industry in Kazakhstan that are being financed by multilateral and bilateral development agencies. These projects are either in the form of loans or technical assistance initiatives and are either directly related to the industry or to upstream or downstream activities in Kazakhstan. They also include infrastructural and human capital development projects throughout the country.

Among the most important donor-supported activities that complement the current JICA study are (a) the TACIS project designed to support the improvement of farm machinery, (b) the World Bank's lending program to support the Government's efforts in the transition to a market economy, (c) the EBRD’s Kazakhstan Post-Privatization Fund to support the restructuring and modernization of medium-sized enterprises, (d) JICA’s earlier surveys in key sectors of the Kazakh economy that have led to Overseas Economic Cooperation Fund (OECF) loans to development banks to support strategic industries and infrastructural projects, (e) USAID’s activities the area of economic restructuring, and (f) the ADB’s farm restructuring and development program.

The start-up in early 1998 of the TACIS project to support the implementation of farm machinery is a key adjunct to the present study on the machinery industry. The initial phase of that project will review the current situation and policies in relation to the development of private manufacturers, plant leasing companies and the formation of machinery associations at the farm level. In the second phase, technical assistance will be provided to the Ministry of Agriculture and assistance will be provided for the implementation of training programs in several oblasts at the administrative and farm

association levels. Thus it complements the current machinery industry study of JICA by creating the framework for helping to implement new machinery technology at the farm level.

Within the agricultural sector, the ADB's farm restructuring and development program loan is critical to the revitalization of that sector, and to the successful mechanization of its activities. The technical assistance is preparing financially self-sustaining projects suitable for bank financing that will deepen the process of agricultural transformation in Kazakhstan by establishing the required support mechanisms to facilitate farm restructuring and the development of a market-oriented economy. Of particular importance to the machinery industry is the project component related to the development of agro-processing enterprises and marketing facilities.

In other areas related to the machinery industry, JICA has completed several key surveys in the areas of transportation, infrastructure, agriculture and mining that are essential to the successful restructuring of the machinery industry. These surveys have usually been followed by two-tier loans from the OECF that channeled capital to development banks, which in turn provided credits at low-interest rates for designated activities targeted by the surveys. To date, six surveys have been completed and, in several cases, loans have been issued for a railway capacity-building project to improve and renovate the tracking system, a western Kazakh road network and other infrastructural projects, an irrigation and drainage system and water management project, and a non-ferrous metal industry project.

The World Bank's lending program also complements the present restructuring initiative in the machinery industry through a set of wide-ranging activities. To support the Government's efforts in the transition to a market economy, these activities cover balance of payments support for macroeconomic stabilization; structural reforms through enterprise restructuring, financial sector reforms, and privatization; and sector reforms through operations in energy, agriculture, infrastructure, and environment. Of particular interest to the machinery industry and related sectors are (i) the 1993 technical assistance loan to support privatization, financial sector modernization, and human resources development; (ii) the 1995 loan to support finance and enterprise development; and (iii) a recently approved financial sector adjustment loan to help build a sound and efficient banking sector. These loans both directly or indirectly support the restructuring of the machinery industry and its related sectors, and are therefore important to the design of the present master plan for the machinery industry in Kazakhstan.

Finally, the activities of both the EBRD and USAID will help to support the financing of trade and investment initiatives within the machinery industry and its related sectors. The EBRD's Kazakhstan Post-Privatization Fund provides equity capital up to an amount of ECU 30 million to eligible private companies. In the coming years the fund will make equity investments in individual enterprises throughout the country. To overcome the lack of capital market liquidity, the Fund co-invests with partners that are willing to buy out the Fund's shares at the moment of exit. The EBRD recently approved a loan to support medium-size enterprises, and there is another loan currently being considered for

small and medium-size enterprises. In a similar way, USAID's activities the area of economic restructuring will support the proposed adjustments in the machinery industry and its related sectors. In particular, the USAID program will continue to focus on establishment of financial markets and development of an appropriate legal infrastructure for commercial activities. It will support the development of the financial sector through direct support to financial market institutions, further the development of the commercial legal infrastructure, and help to rationalize intergovernmental financial relations.

Recommendations: The Ad Hoc Group of ODA Activities Related to the Machinery Industry in Kazakhstan should be created to elaborate joint strategies and cooperation with other projects and multilaterally funded programs relevant to the machinery sub-sector. Beyond the obvious need to closely coordinate activities and avoid duplication of institutional development initiatives, a number of specific areas require strengthening in donor assistance within the activities related to the machinery industry:

- What additional mechanisms can be invoked to improve existing shortcomings in bank credit, insurance schemes and capital markets development.

- How to widen the support for the education and training programs that are being developed for the machinery industry by TACIS through other ODA activities.

- How to strengthen the currently fragmented business development training programs through the consolidation of various donor-supported programs.

- What projects and programs could be used to support the privatization of large state-owned enterprises (SOEs) in the machinery industry and elsewhere.

There is also a need to ensure donor participation in early project notification. While the EBRD donor project database has provided an important channel through which to coordinate donor activities, greater donor participation will be needed to ensure that detailed information is available on specific initiatives related to the machinery industry. The proposed ad hoc group could also use this channel to provide direction to the country and sector programs of their respective institutions to support the restructuring of the machinery industry.

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ANNEX

MEETINGS DURING THE FIRST FIELD TRIP

Date	***Person(s) Present at Meeting and Position(s)***
6-10 Nov, 1997	Study Team meetings with counterparts at Ministry of Energy, Industry and Trade:
	Mr. Amantai Kanahin, Deputy-Head of Industrial Development Department.
	Ms Nailya Abdymoldaeva, Director of Policy and Legislation Department.
	Ms Galina Gritsenko, Senior Specialist, Agricultural Machinery Industry.
	Mr. Vladimir Musiiko, Senior Specialist, Mining Machinery Industry.
	Mr. Boris Tabiev, Senior Specialist, Railway Machinery Industry.
6 Nov, 1997	Study Team meeting with Mr. Yuichiro Uoi, 3rd Secretary, Embassy of Japan.
10 Nov, 1997	Study Team meeting with the Steering Committee:
	Mr. Mazhit A. Turmagambetov, Deputy Director, Ministry of Energy, Industry and Trade.
	Mr. Bakytjan T. Zhumagulov, President, Engineering Academy of the Republic of Kazakstan.
	Mr. Zhumadil Baigunchekov, Director, Institute of Mechanics and Machine Sciences, National Academy of Sciences, Republic of Kazakstan.
	Ms. Lila Erghanova, Director, Committee for External Loans, Ministry of Finance.
11 Nov, 1997	Study Team meetings with counterparts at Ministry of Energy, Industry and Trade:
	Mr. Amantai Kanahin, Deputy-Head of Industrial Development Department.
	Ms Nailya Abdymoldaeva, Director of Policy and Legislation Department.

	Ms Galina Gritsenko, Senior Specialist, Agricultural Machinery Industry.
	Mr. Vladimir Musiiko, Senior Specialist, Mining Machinery Industry.
	Mr. Boris Tabiev, Senior Specialist, Railway Machinery Industry.
12 Nov, 1997	Meetings with counterpart at Ministry of Energy, Industry and Trade:
	Ms Nailya Abdymoldaeva, Director of Policy and Legislation Department.
13 Nov, 1997	Dr. Tatiana Ribakova, Director, TACIS project on Kazakstan Economic Trends.
	Mr. Vasiliy g. Guslyakov, Deputy Chairman of the Bank Board, Temis Bank, Joint-Stock Railway Bank.
14 Nov, 1997	Mr. Serzhan Kanapyanov, Executive Director, State Investment Committee, Republic of Kazakstan.
	Ms. Natalia Diugai, Chief, Balance of Payments and Capital Movement Division, National Bank of Kazakstan.
	Mr. Hugh Coulter, Team Leader, TACIS Project for Agricultural Management and Market Information System and Wholesale Market.
	Mr. Mike Burchell, Wholesale Market Specialist, TACIS Project for Agricultural Management and Market Information System and Wholesale Market.
	Mr. Michel Lecomte, Project Team Leader, TACIS Pilot Project on Agricultural Enterprises.
	Study Team meeting with Mr. Umirbek A. Joldasbekov, Deputy of Mazhilis of the Parliament of the Republic of Kazakstan, and Chairman of the Committee of Social-Cultural Development.
17 Nov, 1997	Crispin Meelboom, TACIS Coodinator, European Economic Commission.
	André Bialowas, TACIS Coordinator, European Economic Commission.
	Ms. Natalia Diugai, Chief, Balance of Payments and Capital Movement Division, National Bank of Kazakstan.
	European Economic Commission, Office of Donor Coordination Program.

18 Nov, 1997	Vitaly Kiy, Director of TACIS Business Communication Center.
	Dr. Elmar Korntheuer, Chief Advisor, Kazakstan Centre for Support and Development of Entrepreneurship.
	Ms. Gulnara Omarbekova, Director, Business Plan Department, Kazakstan Centre for Support and Development of Entrepreneurship.
	Mr. Alexander Trofimov, Eximbank Kazakstan.
	Mr. Yuichiro Uoi, 3rd Secretary, Embassy of Japan.
20 Nov, 1997	Abai Erekenov, Business Advisor, Business Plan Department, Kazakstan Centre for Support and Development of Entrepreneurship.
22 Nov, 1997	Team Meeting.
24 Nov, 1997	Ms. Mazhit Yesenbayev, Chairman, State Tax Committee.
25 Nov, 1997	Dr. Zhumadil Baigunchekov, Director, Institute of Mechanics and Machine Sciences, National Academy of Sciences.
26 Nov, 1997	Ms. Gulnar Tankibaeva, Head of Division, Aid Coordination Department; and Ms. Sharipaya Kakimova, Leading Expert, Aid Coordination Department. Committee for External Loans, Ministry of Finance.
26 Nov, 1997	Dr. Valery V. Moginy, Chief of the Department of State Scientific and Technological and Innovations Programs, Ministry of Science – National Academy of Science.
27 Nov, 1997	Mr. Mazhit Yesenbayev, Chairman of the Kazakstan Entrepreneurs Congress.
	Mr. Bolat S. Kyrykbaev, Head of Department, Department of Privatization and State Property (Formerly State Committee on Privatization), Ministry of Finance.
28 Nov, 1997	Team Meeting.
29 Nov, 1997	Team Meeting.
1 Dec, 1998	Svetlana Alzhanova, Senior Economist, and Andrey Moiseev, Economist, USAID Trade and Investment Project, Booz Allen and Hamilton.

STATISTICAL APPENDIX
BASIC DATA

6. TRANSPORT STATISTICS

6. INTERNATIONAL TRADE

Appendix Table 1.1
Consolidated State Budget, 1993-96
(millions of tenge)

Budget Items	1993	1994	1995	1996
Total Revenue	**7,103**	**84,239**	**197,202**	
A. Current Revenue	**6,319**	**82,772**	**189,969**	
A.1 Tax Revenue	**3,345**	**36,936**	**108,415**	
Value added tax	1,159	10,798	33,259	
Excise tax	160	2,181	6,308	
Corporate tax	1,249	14,550	35,270	
Personal tax	743	8,259	25,802	
Local tax	13	551	3,421	
Capital gains tax	2	106	401	
Land tax	18	225	2,059	
Other taxes	1	269	1,896	
A.2 Revenue from foreign economic activities	**139**	**6,075**	**22,588**	
Customs levies	22	376	600	
Import customs duties	32	422	3,023	
Export customs duties	77	5,264	9,145	
Barter operations	4	12	296	
Other revenue from foreign economic activity	3	0.7	9,525	
A.3 Other Current Revenue	**2,836**	**39,761**	**58,966**	
Rent payment	44	201	1,033	
Revenue from bonuses and royalties	--	3	3,802	
Profit of NBK	343	8,303	800	
Revenue from NBK	--	8,414	2,826	
Purpose-oriented funds revenue	984	12,821	21,107	
Fees and other non-tax revenues	842	7,668	17,845	
Other current revenue	623	2,351	11,554	
B. Capital Revenue	**784**	**1,467**	**7,233**	
Revenue from privatization	784	1,467	7,233	
Total expenditure	**7,488**	**94,809**	**223,443**	
A. National Economy	1,881	11,328	37,957	
B. SocioCultural and Scientific projects	2,460	28,594	92,406	
Education and Science	1,310	14,417	47,697	
Social Security	268	3,194	7,837	
Health, Tourism, and Sport	687	9,282	29,954	
C. Foreign Economic Activity	5	3,345	5,558	
D. Funds	82	3,782	7,901	
E. Defense	331	3,776	10,830	
F. Public Order and Safety	413	5,387	15,800	
G. State Authorities and Administration	388	4,240	9,982	
H. Repayment of Internal Government Debt	98	17,518	7,802	
I. Repayment of External Debt	--	1918	10,024	
J. Subsidies	--	583	1,193	
L. Other expenditures	--	14,338	16,348	
Debt repayment to budget	**--**	**2,407**	**3,173**	
Overall balance	**-385**	**-8,162**	**-23,067**	
Budget Financing	**385**	**8,162**	**23,067**	
A. Domestic	868	5,900	4,485	
B. External	177	6,378	18,583	

Source: Ministry of Finance.

Appendix Table 1.2
Balance of Payments, 1994-96
(million of US dollars)

	1994	1995	1996
A. Current Account	-878	-516	
Trade Balance	-923	-223	
Exports (fob)	3,333	5,197	
Imports (fob)	-4,256	-5,419	
Services, net	-2	-205	
Transportation	69	87	
Passenger	15	21	
Other services	-71	-292	
Travel	-98	-158	
Income	-49	-150	
Interest	-49	-144	
Other income	0	-6	
Current transfers	97	61	
B. Capital & Financial Account	-737	488	
Capital transfers	-1065	-381	
Migrants transfers	-1065	-381	
Other transfers	0	0	
Direct investment	635	723	
Other investment	726	497	
Trade credits	439	119	
Drawings	543	256	
Repayment (paid)	-103	-119	
Arrears on principal repayment	-0.5	-18	
Loans	287	378	
Drawings	275	359	
Repayment (accrued)	12	19	
Other capital	-1,032	-352	
C. Net Errors & Omissions	1,153	136	
D. Overall Balance	-461	107	
E. Financing	461	107	
International reserves	-403	-252	
Monetary gold	0	0	
Net asset in foreign exchange	-403	-252	
Foreign assets in NBK	-403	-252	
Banks	0	0	
IMF credit	192	141	
Exceptional financing	672	4.	
Interest payable	16	-14	
Arrears on rincipal	0.5	18	
Debt among enterprises	655	0	

Source: Ministry of Energy, Industry and Trade.

Appendix Table 1.3
Prices, Interest Rates and Exchange Rates, 1994-97
(percent)

	Inflation	Exchange Rate	Interest Rate	
			Nominal	Real
Jan-94	42.6	9.3		
Feb-94	24.2	11.6		
Mar-94	17.4	17.0		
Apr-94	31.8	25.4		
May-94	33.8	35.7		
Jun-94	45.9	41.7		
Jul-94	25.4	44.7		
Aug-94	13.3	45.7		
Sep-94	9.7	47.0		
Oct-94	20.1	48.6		
Nov-94	14.2	51.0		
Dec-94	10.2	53.5		
Jan-95	8.9	55.4	176	3.4
Feb-95	6.7	58.7	158	16.0
Mar-95	5.1	60.5	129	27.7
Apr-95	3.2	61.3	106	33.8
May-95	2.7	63.1	86	34.6
Jun-95	2.3	63.5	69	23.7
Jul-95	2.9	62.6	55	16.2
Aug-95	2.1	56.7	55	15.7
Sep-95	2.4	59.9	45	3.3
Oct-95	4.1	61.5	45	-5.5
Nov-95	4.4	63.4	53	-5.1
Dec-95	3.6	64.0	53	-5.1
Jan-96	4.1	64.2	59	6.5
Feb-96	2.5	65.2	50	8.2
Mar-96	1.7	65.2	44	8.8
Apr-96	2.9	65.5	40	7.8
May-96	2	66.4	40	4.5
Jun-96	2.5	66.8	36	6.0
Jul-96	1.8	67.0	32	8.3
Aug-96	0.7	67.3	32	14.0
Sep-96	1.2	68.1	32	9.2
Oct-96	2.9	69.2	35	4.4
Nov-96	2.4	69.9	35	6.1
Dec-96	0.8	72.5	35	9.4
Jan-97	2.1	74.5	35	12.5
Feb-97	1.7	75.6	35	12.5
Mar-97	0.8	75.5	35	18.4
Apr-97	0.8	75.2	35	24.7
May-97	0.4	75.5	30	20.0
Jun-97	0.8	75.5	24	16.0

Source: Ministry of Finance.

Table 1.4
Employment by Sector, 1990-96
(Thousands of Persons)

	1990	1993	1994	1995	1996
Total	*6476*	*5630*	*5415*	*4994*	*4380*
Industry	1360	1195	1121	1025	916
Agriculture	1202	1108	1196	1062	883
Forestry	13	13	11	10	9
Construction	745	492	391	325	251
Transport, *of which:*	610	497	463	418	378
▪ Railway	182	167	176	171	169
▪ Maritime	4	4	4	4	4
▪ Road	424	326	283	243	154
Communications	89	79	82	80	77

Source: National Statistical Agency.

Appendix Table 1.5
Privatized Enterprises by Sector, 1996-97
(percent)

	1996		1997
	Jan-Jun	Jul-Dec	Jan-Jun
Total	100	100	100
Industry	8.9	12.8	9.7
Construction	0.8	1.5	2.4
Agriculture	5.3	1.3	0.5
Transport	1.4	3.7	4.1
Trade and public catering	41	33.6	26.2
Consumer service and commercial services	6.1	7.7	10.2
Other sectors	36.5	39.4	46.9

Source: National Statistical Agency.

Appendix Table 1.6
Distribution of Enterprises by Sector, July 1997
(number)

	Total	State	Private	Joint without Foreign Participation	Joint with Foreign Participation	Foreign
TOTAL	**182,163**	**25,607**	**149,049**	**3,664**	**2,121**	**1,722**
Small	160,428	13,820	141,037	1,946	1,958	1,667
Medium	20,848	11,235	7,772	1,635	155	51
Large	598	361	169	58	7	3
Very large	289	191	71	25	1	1
Industry	**19,720**	**1,452**	**16,433**	**929**	**658**	**248**
Small	18,123	1,048	15,742	504	593	236
Medium	1,518	386	671	390	61	10
Large	49	12	14	19	3	1
Very large	30	6	6	16	1	1
Agriculture	**53,424**	**49,834**	**3,217**	**314**	**45**	**14**
Small	49,649	49,491	102	42	14	na
Medium	3,578	331	3,037	207	3	na
Large	79	8	67	4	na	na
Very large	16	4	11	1	na	na
Unspecified	102	-	-	60	28	14
Forestry	**313**	**178**	**129**	**3**	**2**	**1**
Small	216	85	126	2	2	1
Medium	97	93	3	1	na	na
Large	na	na	na	na	na	na
Very large	na	na	na	na	na	na
Transport	**3,242**	**918**	**1,896**	**316**	**55**	**57**
Small	2,114	338	1,609	71	51	45
Medium	1,068	532	283	239	4	10
Large	38	29	1	6	na	2
Very large	22	19	3	na	na	na
Communications	**843**	**522**	**270**	**18**	**30**	**3**
Small	497	187	268	13	26	3
Medium	324	315	2	3	4	na
Large	13	11	na	2	na	na
Very large	9	9	na	na	na	na

(cont'd)

Appendix Table 1.6 *(cont'd)*
Distribution of Enterprises by Sector, July 1997
(number)

	Total	State	Private	Joint without Foreign Participation	Joint with Foreign Participation	Foreign
Commercial Establishments	**28,022**	**989**	**25,275**	**394**	**622**	**742**
Small	26,314	643	24,129	227	587	728
Medium	1,660	337	1,119	157	33	14
Large	40	6	24	8	2	na
Very large	8	3	3	2	na	na
Banking	**1,060**	**336**	**599**	**92**	**25**	**8**
Small	801	199	530	51	13	8
Medium	251	131	68	40	12	na
Large	7	5	1	1	na	na
Very large	1	1	na	na	na	na
Insurance	**457**	**176**	**248**	**27**	**5**	**1**
Small	411	144	240	22	5	na
Medium	46	32	8	5	na	1
Large	na	na	na	na	na	na
Very large	na	na	na	na	na	na

Source: National Statistical Agency.

Appendix Table 2.1
Total Land Area and Distribution of Agricultural Land by User, January, 1997 ('000 hectares)

	Total Land Area	Agricultural Land	Total Arable Land	Hay Fields	Pasture
Total land	272,490	222,585	29,222	5,037	184,314
State farms and other agricultural enterprises	11,017	9,876	1,452	156	8,088
Individuals engaged in individual farm and collective gardening	451	391	270	5	48
Peasant farms	20,032	19,485	2,238	483	16,230
Farm cooperatives	56,755	49,567	8,126	1,013	39,482
Partnerships and joint-stock companies	39,309	33,893	5,206	769	27,265
Other non-state agricultural Organizations and agencies	53,588	48,380	11,440	1,529	34,167
Forestry Fund	11,795	2,476	29	250	2,184
Stock land	41,330	32,434	184	435	31,503

Source: National Statistical Agency.

Appendix Table 2.2
Cultivation of Selected Products, 1996-97
(thousands of hectares)

	1996	1997	Percent change 1996-97
Total area	25,476	21,676	-14.9
Wheat	12,246	11,437	-6.6
Sugar beet	32	14	-56.3
Cotton	105	114	8.6
Sunflower	331	221	-33.2
Potato	190	171	-10.0
Vegetables	78	80	2.6
Fodder crops	7,430	5,391	-27.4
Other	5,064	4,248	-16.1

Source: National Statistical Agency.

Appendix Table 2.3
Capital Investment in Agriculture, 1990-96
(millions of tenge)

Year	Total	State Enterprises	Non-State Enterprises
1990	2,934	2,731	203
1993	1,038	859	179
1994	4,785	2,771	2,014
1995	5,371	2,267	3,104
1996	3,921	1,204	2,717

Source: National Statistical Agency.

Appendix Table 2.4
Output of Processed Agricultural Products, 1994-95
(volume)

	Unit	1994	1995	% Change 1994-95
Cotton fiber	tons	72,191	68,968	-4.5
Steel wool	tons	19,242	7,902	-58.9
Fishing and sea hunting	tons	49,174	44,633	-9.2
Fish products except canned fish	tons	39,340	32,886	-16.4
Meat including by-products	tons	38,340	32,886	-14.2
Sausage products	tons	55,257	34,820	-37.0
Animal fat, edible	tons	6,134	2,983	-51.4
Half-finished meat products	tons	8,325	3,094	-62.8
Animal oil	tons	46,498	30,433	-34.5
Cheese and sheep cheese	tons	18,323	11,618	-36.6
Whole milk products	tons	552,142	278,809	-49.5
Powdered whole milk and powdered cream	tons	4,884	3,557	-27.2
Ice cream	tons	8,996	4,667	-48.1
Canned food	'000 cans	177,116	81,041	-54.2
Dried vegetables	tons	605	18	-97.0
Dried fruits	tons	63	115	82.5
Granulated sugar	tons	97,187	112,516	15.8
Lump sugar	tons	13,589	15,986	17.6
Bread and baked goods	tons	1,507,711	852,751	-43.4
Bakery yeast	tons	9,330	4,368	-53.2
Confectionery	tons	77,455	29,281	-62.2
Macaroni products	tons	122,669	78,792	-35.8
Vegetable oil	tons	44,513	43,455	-2.4

Source: National Statistical Agency.

Appendix Table 3.1
Production of Non-Ferrous Metals, 1994-95
(volume)

	Unit	1994	1995	Percent change 1994-95
Silica	tons	822,297,000	1,024,494,000	24.6
Copper ore	tons	25,276,400	21,592,100	-14.6
Lead and zinc ore	tons	4,960,000	5,678,000	14.5
Bauxite	tons	2,584,000	3,318,500	28.4
Magnesium and magnesium alloys	tons	2,967	8,972	202.4
Lead including secondary lead	tons	137,678	88,541	-35.7
Titanium sponge	tons	3,809	9,592	151.8
Refined copper	tons	278,461	255,559	-8.2
Zinc	tons	172,531	169,171	-1.9
Niobium metal as beads and ingots	kg	41,717	17,861	-57.2
Barite ore	tons	18,000	na	na
Barite concentrate	tons	90,236	82,997	-8.0
Tungsten concentrate	tons	154	314	103.9
Copper concentrate	tons	724,800	685,900	-5.4
Molibdenum concentrate	tons	218	156	-28.4
Lead concentrate	tons	63,800	48,500	-24.0
Zinc concentrate	tons	273,600	323,000	18.1
Bismuth metal	kg	84,494	32,900	-61.1
Cadmium metal	tons	1,097	794	-27.6
Tin	tons	14	4	-74.1
Refined gold as ingots	kg	10,444	10,921	4.6
Refined silver	kg	408,359	370,993	-9.2
Rolled bronze products	tons	811	455	-43.9
Rolled brass products	tons	3,523	2,497	-29.1
Rolled copper products	tons	2,085	2,008	-3.7
Rolled copper-nickel products	tons	53	92	73.6
Rolled lead products	tons	1,888	1,654	-12.4

Source: National Statistical Agency.

Table 3.2
Output of Selected Ferrous Metal Products, 1990-96

		1990	1993	1994	1995	1996
Production of Steel	thou.tons	6754	4558	2969	3027	3217
Mining of Iron Ore	thou.tons	23846	13129	10521	14902	129775
Production of Rolled Ferrous Metal	thou.tons	4955	3489	2357	2153	2288
Cast Iron	thou.tons	5226	3552	2435	2530	2536
Production of Coated Metal Sheet	tons	312988	177800	125184	222031	125465
Ferroalloys, *of which*		1328.6	908.5	649.4	809.1	606.6
▪ Ferrosilicium,45%	thou.tons	689.9	418.2	208.2	255.4	118.1
▪ Ferrochrome, 60%	thou.tons	485.3	425.9	373.3	511.6	345.9
▪ Ferrosilica Chrome,40%	thou.tons	147.8	60.8	26.9	21.3	69.8

Source: National Statistical Agency.

Table 3.3
Extraction of Selected Commercial Ores, 1990-96
(Thousands of Tons)

	1990	1993	1994	1995	1996
Iron Ore	23,846	13,129	10,521	14,902	12,975
Manganese Ore	169	89	295	284	469
Chromite Ore	3,660	2,968	2,103	2,417	1,103

Source: National Statistical Agency.

Appendix Table 3.4
Production of Metallurgical Products, 1994-95
(thousands of tons)

	1994	1995	% Change 1994-95
Iron ore	10,521	14,902	41.6
Manganese ore	295	284	-3.6
Chromite ore	2,103	2,417	14.9
Sinter cake	4,504	4,080	-9.4
Iron ore pellets	4,822	7,212	49.6
Cast iron	2,435	2,530	3.9
of which:			
Pig iron	163	68	-58.6
Foundry pig iron	53	16	-70.5
Steel	2,969	3,027	2.0
of which:			
Open-hearth steel	735	376	-48.9
Oxygen converter steel	2,110	2,581	22.3
Electrical steel	123	71	-42.5
Ready casting obtained from continuous casting machines	19	4	-81.3
of which:			
Carbon steel	2,736	2,917	6.6
Low-alloyed steel	27	15	-43.9
Rolled ferrous metal products	2,357	2,153	-8.7
Sheets and plates	2,027	1,927	-4.9
Strips	231	78	-66.3
Steel pipes	15,722	13,316	-15.3
Coated sheets and plates	125	222	77.4
of which:			
Tin-plate	125	222	77.4
Ferroalloys	649	809	24.6
Ferrosilicium	207	255	23.6
Ferrochrome	326	494	51.5
Ferrochrome silicon	27	21	-20.8
Coke, 6% moisture	1,747	1,811	3.7
Refractory materials	12	14	13.3

Source: National Statistical Agency.

Appendix Table 4.1
Output of Major Industrial Products, 1996-97

	Unit	1996	1997					
		Jan-Dec	Jan	Feb	Mar	Apr	May	Jun
Electric power	mill.kW/h	59,048	5,665	4,966	5,195	4,435	4,006	3,530
Thermal energy	Thou.Gcal	76,577	8,659	8,772	7,634	4,747	2,711	4,949
Coal	Thou. tons	76,831	6,679	6,918	7,651	5,740	3,907	4,949
Crude oil	Thou. tons	21,050	1,903	1,725	1,965	1,960	2,053	2,013
Primary oil refining	Thou. tons	11,127	743	653	745	710	998	756
Petrol	Thou. tons	2,296	107	123	117	202	126	149
Kerosene	Thou. tons	268	11	9	16	12	25	11
Diesel fuel	Thou. tons	3,295	166	185	208	252	310	225
Furnace fuel oil	Thou. tons	3,858	344	294	265	230	225	
Natural gas	mill.cub.m	6,524	683	614	679	655	496	791
Iron ore	Thou. tons	12,975	953	1,016	755	1,169	1,151	1,289
Chromite ore	Thou. tons	1,103	104	115	127	151	164	202
Iron ore pellets	Thou. tons	5,465	382	370	261	576	599	585
Cast iron	Thou. tons	2,536	240	227	256	267	272	239
Steel	Thou. tons	3,217	297	285	329	337	342	300
Rolled ferrous metals	Thou. tons	2,247	196	231	265	250	268	253
Tin plate	Thou. tons	na	6	8	9	13	12	13
Ferroalloys	Thou. tons	607	60	47	66	69	76	72
Coke, 6% moisture	Thou. tons	1,727	182	170	193	190	182	164
Refined gold	kg	10,300	351	452	641	773	891	1,152
Refined silver	ton	414	28	34	30	30	37	33
Boxite	thou. tons	3,346	182	277	252	243	292	332
Copper in concentrate	thou. tons	62	23	22	24	27	27	24
Alumina	thou. tons	1,080	92	86	95	89	92	89
Refined copper	thou. tons	267	20	19	24	26	27	26
Refined lead	thou. tons	62	3	3	8	8	8	6
Zinc	thou. tons	152	14	14	15	15	16	16
Lead storage batteries	thou.units	383	na	20	38	30	11	na
Metal cutting machine tools	units	114	na	na	na	na	na	na
Press-forging machines	units	127	8	na	2	na	1	19
Automobiles	units	32	1	1	na	3	7	10
Bulldozers	units	247	42	13	13	20	na	na
Excavators	units	11	2	2	4	2	3	4
Tractors	units	2,465	157	358	187	350	250	na
Calcium carbide	thou. tons	67	2	1	2	4	3	2
Chromium oxide	thou. tons	9	1	1	1	1	1	1
Yellow phosphorus	thou. tons	36	2	1	2	4	3	3
Sodium tripolyphosphate	thou. tons	21	na	na	4	1	3	2
Mineral fertilizers	thou. tons	191	20	21	25	19	19	18
Tires	thou.units	107	na	na	na	0	na	na
Removal of logs	thou.cub.m	663	25	39	40	29	37	70
Merchantable wood	thou.cub.m	350	14	19	22	17	17	29
Lumber	thou.cub.m	247	11	14	14	16	11	18
Fiber boards	thou.sq.m	3,864	240	230	281	300	272	230

Source: National Statistical Agency.

Table 4.2
Output of Major Products of Forestry, Woodworking and Pulp and Paper Industries, 1990-96
(thousands of cubic meters)

	1990	1993	1994	1995	1996
Removal of wood	2,337	1,170	979	883	815
of which:					
Commercial wood	1,764	828	533	445	350
Lumber	1,764	774	398	371	247
Fiber board	8,643	8,439	1,651	2,620	3,864
Wood particle board	112	33	12	2	0.1
Wooden bonded construction	15			1.0	
Cellulose	45	4	1	0.6	0.2
Paper	2	2	1	0.2	0.1
Board	156	43	16	8	7

Source: National Statistical Agency.

Appendix Table 4.3
Production by Technology-Intensive Industries, 1990-96

	Units	1990	1993	1994	1995	1996
Oxygen converter steel	'000 tons	4,699	3,267	2,110	2,581	2,534
Electrical steel	'000 tons	522	261	123	71	83
Rolled products from low-alloyed steel	'000 tons	303	220	128	68	69
Sheets and plates	'000 tons	313	178	125	222	125
Cold rolled steel strip	'000 tons	51	26	14	14	7
Synthetic resins and plastic, of which						
- polypropylene	tons	30,262	9,770	15,770	10,718	3,748
- polystyrene and styrene copolymers	tons	175,668	67,133	37,175	45,575	301,44
Synthetic fibres and threads	tons	12,081	1,905	750	3	88
Pipes and pipeline parts from thermoplastic material	tons	3,775	1,112	117	70	75
Wood particle boards	'000 m2	122	33	14	2	0.1
Fiber boards	'000 m2	8,643	8,439	1,651	2,620	3,864
Cement from clinker	'000 tons	2,020	843	447	285	na
Asbestos cement pipes and couplings	'000 m	7,965	1,671	516	338	320

Source: National Statistical Agency.

Appendix Table 4.4
Production by Light Industries, 1990-96

	Units	1990	1993	1994	1995	1996
Cotton fiber	thous. tons	99	75	72	69	80
Scoured wool	thous. tons	75	37	19	8	6
Cotton yarn	thous. tons	40	35	20	4	3
Wool yarn	thous. tons	21	13	6	2	2
Hosiery	mil. pairs	88	72	41	12	6
Knitted goods	mil. units	127	50	29	9	3
Carpets	mil. m3	2	1	1	0	0
Chrome-tanned leather goods	mil. m2	414	208	59	10	11
Russian leather goods	mil. m2	92	32	8	5	3
Hard leather goods	mil. m2	118	36	5	4	2
Sewn goods	mil. tenge	2,653	4,897	3,039	2,799	2,321

Source: National Statistical Agency.

Appendix Table 5.1
Production of Individual Machinery Products, 1996-97
(volume and value)

	Unit	1996 Jan-Dec	1997					
			Jan	Feb	Mar	Apr	May	Jun
Low-capacity electric motors for domestic appliances	units	14,508	na	1,060	1,106	1,500	900	1,300
Power transformers	thou.kVa	208	23	14	14	20	0	7
Power capacitors	thou.kVa	371	23	27	31	na	na	3
Storage batteries, lead, for automobiles	units	382,977	19,924	38,436	29,657	10,807	na	na
Power cables for voltage up to 1 sq.km		1,369	na	7	532	47	24	40
Metal cutting machines	units	114	na	na	na	na	na	na
Press-forging machines	units	127	8	na	2	na	1	19
Machining tool	thou.tenge	64,546	6,201	6,372	4,500	4,997	10,216	9,969
Instruments and their spare parts	thou.tenge	179,062	14,028	5,067	11,398	13,962	19,972	27,175
Rolling equipment	thou.tenge	688,604	54,251	61,482	66,340	62,049	58,028	44,385
Loading machines for mines	units	6	na	na	na	na	na	na
Centrifugal pumps	units	3,012	na	19	na	2	na	70
Polymer processing equipment and spare parts	thou.tenge	15,538	166	149	197	378	132	129
Light industry production equipment and spare parts	thou.tenge	15,188	200	755	4,374	2,392	2,724	na
Electrical traveling cranes	units	23	1	4	na	na	na	2
Traveling gantry cranes	units	3	na	1	na	na	na	na
Excavators	units	11	2	2	4	2	3	4
Bulldozers	units	247	43	42	13	20	na	na
Automobiles	units	32	1	1	na	3	7	10
of which trucks		21	na	na	na	1	7	na
Trailers and semi-trailers, automobile		92	na	na	9	5	20	na
Tractor trailers	units	451	na	na	na	na	na	na
Automobiles with special bodies	units	4	na	3	na	1	na	na
Tractors	units	2,465	157	358	187	350	250	na
Machines for cultivation and harvesting	thou.tenge	257,666	23,569	8,840	10,234	21,245	24,188	28,119
Tractor plows	units	339	na	70	na	40	27	na
Disc harrows	units	175	na	na	30	20	10	10
Tractor drills	units	190	81	na	na	na	60	38
Tractor cultivators	units	163	36	na	na	1	na	10
Windrow harvesters	units	7	na	na	3	na	25	15
Plant growing and feed processing machines	thou.tenge	80,323	7,201	7,731	7,226	7,652	15,390	na
Tractor mowers	units	974	123	133	115	120	150	140
Rolling bearings	thou.units	707	25	41	50	22	41	23
Fittings, valves, locks, bolts, gates	thou.units	437	10	13	21	11	24	42
Fire extinguishers	thou.units	24	na	10	na	na	2	na

Source: National Statistical Agency.

Appendix Table 5.2
Stocks of Tractors and Other Agricultural Machines as of January 1997 (units)

Total, excluding tractors with attachments	142,383
Tractors with attachments	11,064
Harvester	24,112
Tractor plows	31,557
Cultivators	28,990
Grain drills	54,004
Corn seeding machines	6,341
Grain combine harvester	53,918
of which:	
DON-1500	1,070
Maize combine harvester	1,185
Potato harvester	681

Source: National Statistical Agency.

Appendix Table 5.3
Volume of Machinery Production by Region, 1994-95
(units)

	1994	1995	% Change 1994-95
Metal-Cutting Machine Tools	*429*	*57*	*-86.7*
Akmola oblast	-	-	-
City of Almaty	265	42	-84.2
West Kazakhstan	5	-	-
North Kazakhstan	-	8	-
South Kazakhstan	150	-	-
Other	9	7	-22.2
Press-Forging Machines	*434*	*269*	*-38.0*
East Kazakhstan	1	-	-
South Kazakhstan	433	269	-37.9
Lead Storage Batteries for Automobiles	*665,989*	*470,210*	*-29.4*
Almaty oblast	73	-	-
East Kazakhstan	-	12	
Taldykorgan	665,916	470,198	-29.4
Seeders	*943*	*349*	*-63.0*
Akmola oblast	943	349	-63.0
Cultivators	1,125	82	-92.7
Akmola oblast	1,125	82	-92.7
Tractor plows	3,012	283	-90.6
Akmola oblast	3,012	283	-90.6
Tractor mowers	4,996	2,030	-59.4
Akmola oblast	4,995	2,030	-59.4
Karaganda oblast	1	-	-

Source: National Statistical Agency.

Appendix 5.4
Value of Machinery Production by Region, 1994-95
(thousands of tenge)

	1994	1995	% change 1994-95
Agricultural Machinery	435,832	299,021	-31.4
Akmola oblast	348,849	225,038	-35.5
City of Almaty	3,324	965	-71.0
East Kazakhstan	4,068	93	-97.7
Zhambyl	275	3,467	1160.7
Zhezkazgan	-	-	-
West Kazakhstan	462	-	-
Karaganda	2,070	17,325	737.0
Kyzylorda	9,070	7,443	-17.9
Kokshetau	2,765	14,440	422.2
Kostanai	27,490	2,635	-90.4
Pavlodar	2,544	1,408	-44.7
North Kazakhstan	2,865	11,383	297.3
Taldykorgan	-	-	-
South Kazakhstan	32,050	14,824	-53.7
Animal Breeding and Feed Processing Machinery	156,648	154,332	-1.5
Akmola oblast	72,706	115,663	59.1
Aktyube	53,374	3,955	-92.6
Almaty oblast	-	-	-
East Kazakhstan	734	143	-80.5
Zhambyl	-	-	-
West Kazakhstan	8,742	-	-
Karaganda	99	1,297	1210.1
Kokshetau	7,634	500	-93.5
Kostanai	-	-	-
Pavlodar	6,145	672	-89.1
North Kazakhstan	3,101	5,110	64.8
Semipalatinsk	13	-	-
Taldykorgan	-	1,492	-
Torgai	-	-	-
South Kazakhstan	4,100	25,500	522.0

(cont'd)

Appendix Table 5.4 *(cont'd)*
Value of Machinery Production by Region, 1994-95
(thousands of tenge)

	1994	1995	% Change 1994-95
Spare Parts for Automobile	190,760	200,330	5.0
Akmola	26,278	43,359	65.0
Aktyube	554	1,800	224.9
East Kazakhstan	5,377	3,986	-25.9
Karaganda	11,275	15,205	34.9
Kokshetau	1,057	308	-70.9
Kostanai	10,884	4,861	-55.3
Pavlodar	2,524	2,779	10.1
North Kazakhstan	-	45	-
Taldykorgan	11,567	20,211	74.7
West Kazakhstan	1,376	956	-30.5
South kKazakhstan	29,300	26,850	-8.4
City of Almaty	82,965	76,591	-7.7
Semipalatinsk	7,603	3,379	-55.6
Spare Parts for Agricultural Machines	250,498	546,596	118.2
Akmola	136,591	305,203	123.4
Aktyube	14,680	27,083	84.5
Almaty	81	-	-
East Kazakhstan	785	1,975	151.6
Zhambyl	186	17,090	9088.2
West Kazakhstan	6,788	6,255	-7.9
Karaganda	6,898	45,830	564.4
Kyzylorda	3,124	2,870	-8.1
Kokshetau	56,280	56,291	-
Kostanai	5,220	60,275	1054.7
Pavlodar	16,071	14,208	-11.6
North Kazakhstan	-	9,204	-
South Kazakhstan	3,794	312	-91.8
Spare Parts for Tractors	287,092	406,460	41.6
Akmola	12,337	26,457	114.5
Aktyube	2,331	6,102	161.8
Almaty	-	-	-
City of Almaty	64,846	204,044	214.7
Zhambyl	6,744	1,074	-84.1
Kostanai	29,186	12,493	-57.2
Pavlodar	123,257	115,729	-6.1
West Kazakhstan	42,878	16,913	-60.6

(cont'd)

Appendix Table 5.4 *(cont'd)*
Value of Machinery Production by Region, 1994-95
(thousands of tenge)

	1994	1995	Percent change 1994-95
Spare Parts for Tractors *(cont'd)*			
South Kazakhstan	954	6,490	580.3
Karaganda	2,530	6,053	139.2
Kyzylorda	2,029	7,119	250.9
Taldykorgan	-	3,986	-
Spare Parts for Animal Breeding and Feed Processing Machinery	*57,759*	*165,837*	*187.1*
Akmola	40,587	102,697	153.0
Aktyube	7,765	53,244	585.7
Almaty	556	1,154	107.6
City of Almaty	231	990	328.6
North Kazakhstan	8,620	7,752	-10.1
Instruments and Their Spare Parts	147,196	199,956	35.8
Aktyube	49,482	49,357	-0.3
City of Almaty	21,501	35,222	63.8
East Kazakhstan	2,416	21,969	809.3
Kokshetau	63,262	48,512	-23.3
Kostanai	910	9,038	893.2
Karaganda	9,625	35,858	272.6

Source: National Statistical Agency.

Appendix Table 6.1
Transportation of Freight, 1996-97

	1996	Jan-Sep 1997
Total volume of freight transportation (thousands of tons)	965,969	978,631
of which:		
Railway	104,941	102,451
Road	827,516	847,312
Pipeline	32,533	28,037
Maritime	960	820
Air	19	11
Total freight turnover (millions of tons per kilometer)	118,294	112,104
of which:		
Railway	84,183	79,518
Road	16,240	16,623
Pipeline	17,301	15,593
Maritime	462	296
Air	108	74

Source: National Statistical Agency.

Appendix Table 6.2
Volume of Cargo Shipment by Transportation Mode, 1985-95
(millions of tons)

	1985	1990	1993	1994	1995
Total transport	2,448	2,612	1,649	1,189	1,155
Railway	337	345	221	175	161
Road, total	2,081	2,236	1,382	980	954
of which:					
General-purpose road transport	610	615	296	128	60
Other	1,471	1,621	1,086	851	894
Maritime	10	11	4	3	2
Air	0	0	0	0	0
Pipeline	21	21	42	32	38

Source: National Statistical Agency.

Appendix Table 6.3
Railway Transport of Selected Cargo, 1990-96
(million tons)

	1990	1993	1994	1995	1996
Coal	123.6	103.3	97.6	79.5	71.4
Coke	0.4	0.2	0.1	0.1	0.1
Oil	26.3	14.8	11.4	11.5	12.7
Iron and manganese ore plus non-ferrous ore and sulphur raw materials	51.6	31.4	23.5	18.7	15.4
Ferrous metals	7.2	5.3	3.8	3.4	3.1
Chemical and mineral fertilizers	18.1	5.2	2.7	3.2	3.2
Cement	7	3.2	1.8	1.6	1
Forestry products	1.3	0.4	0.3	0.2	0.2
Grain and milling products	12.9	12.9	9	6.3	4.4

Source: National Statistical Agency.

Appendix Table 7.1
Kazakhstan Trade in Major Product Categories, 1995
(thousands of US dollars)

HS	Chapter	Exports	Imports	Balance
	Total All Products	4,975,491	3,742,102	1,233,389
1	Live animals	4,347	426	3,921
2	Meat and edible meat offal	59,595	7,550	52,045
3	Fish and crustaceans, molluscs etc	10,792	4,230	6,563
4	Dairy produce; birds' eggs; honey	21,698	16,343	5,356
5	Other products of animal origin	3,707	143	3,564
6	Live trees and other plants	16	59	(43)
7	Edible vegetables	13,567	3,391	10,175
8	Edible fruit and nuts	628	8,675	(8,047)
9	Coffee, tea, mate and spices	402	33,598	(33,196)
10	Cereals	331,796	2,264	329,532
11	Products of the milling industry	42,614	1,542	41,072
12	Oil seeds and oleaginous fruits	3,078	5,867	(2,789)
13	Lac; gums, resins and other vegs	428	610	(182)
14	Vegetable plaiting materials	15,177	7,102	8,074
15	Animal or vegetable fats and oils	2,834	20,767	(17,933)
16	Preparations of meat and fish	23,737	8,380	15,357
17	Sugars and sugar confectionery	4,793	125,136	(120,343)
18	Cocoa and cocoa preparations	445	14,270	(13,825)
19	Preparations of cereals, flour, milk	5,159	31,694	(26,535)
20	Preparations of vegetables and fruit	3,655	14,296	(10,641)
21	Miscellaneous edible preparations	787	12,176	(11,389)
22	Beverages, spirits and vinegar	7,403	43,940	(36,537)
23	Residues and waste from the	8,934	1,069	7,865
24	Tobacco and manufactured	4,895	39,230	(34,335)
25	Salt; sulphur; earths and stone	81,895	28,961	52,933
26	Ores, slag and ash	118,752	109,499	9,253
27	Mineral fuels, mineral oils and products	1,184,198	927,042	257,156
28	Inorganic chemicals	365,081	86,797	278,284
29	Organic chemicals	15,048	56,181	(41,133)
30	Pharmaceutical products	10,793	25,773	(14,981)
31	Fertilizers	46,372	4,063	42,309
32	Tanning or dyeing extracts	2,202	23,244	(21,042)
33	Essential oils and resinoids	1,731	16,671	(14,941)
34	Soap, organic surface-active agents	1,668	29,711	(28,043)
35	Albuminoidal substances	6,354	2,481	3,872
36	Explosives; pyrotechnic products	207	29,831	(29,624)
37	Photographic or cinematographic goods	15	1,970	(1,955)
38	Miscellaneous chemical products	12,389	47,380	(34,991)
39	Plastics and articles thereof	42,454	34,502	7,952
40	Rubber and articles thereof	10,465	89,620	(79,155)
41	Raw hides and skins and leather	37,398	932	36,467
42	Articles of leather	534	2,528	(1,994)
43	Furskins and artificial fur	3,223	926	2,298
44	Wood and articles of wood	1,969	62,413	(60,444)
45	Cork and articles of cork	1,014	12	1,002
46	Manufactures of straw	12	4	8
47	Pulp of wood or of other fibrous mats	213	3,924	(3,712)
48	Paper and paperboard	3,076	70,762	(67,686)

Appendix Table 7.1
Kazakhstan Trade in Major Product Categories, 1995
(thousands of US dollars)

HS	Chapter	Exports	Imports	Balance
49	Printed books	443	16,232	(15,789)
50	Silk	568	1,188	(621)
51	Wool, fine and coarse animal hair	51,678	3,302	48,375
52	Cotton	45,924	8,511	37,413
53	Other vegetable textile fibre	72	941	(869)
54	Man-made filaments	644	3,156	(2,512)
55	Man-made staple fibres	6,105	6,249	(144)
56	Wadding, felt and nonwovens	6,710	7,388	(678)
57	Carpets and other textile floor-coverings	413	2,933	(2,520)
58	Special woven fabrics	223	2,113	(1,890)
59	Impregnated, coated textile fabrics	1,339	6,506	(5,167)
60	Knitted or crocheted fabrics	132	283	(152)
61	Articles of apparel and clothing accs	6,824	15,433	(8,609)
62	Articles of apparel and clothing accs	4,088	22,796	(18,708)
63	Other made up textile articles	2,542	13,132	(10,590)
64	Footwear, gaiters and the like	3,379	33,178	(29,798)
65	Headgear and parts thereof	97	503	(407)
66	Umbrellas and parts thereof	62	38	24
67	Prepared feathers and down	-	31	(31)
68	Articles of stone, plaster, cement	14,675	15,874	(1,199)
69	Ceramic products	4,215	32,918	(28,703)
70	Glass and glassware	938	15,192	(14,254)
71	Natural or cultured pearls, stones	11,495	5,204	6,291
72	Iron and steel	958,766	76,561	882,205
73	Articles of iron or steel	67,244	165,346	(98,102)
74	Copper and articles thereof	612,327	12,801	599,527
75	Nickel and articles thereof	151,136	32	151,104
76	Aluminum and articles thereof	29,249	17,138	12,112
78	Lead and articles thereof	32,452	6,917	25,535
79	Zinc and articles thereof	145,025	1,706	143,319
80	Tin and articles thereof	-	8,431	(8,431)
81	Other base metals	54,785	518	54,267
82	Tools, implements, cutlery	1,764	7,840	(6,076)
83	Miscellaneous articles of base metal	4,337	13,034	(8,697)
84	Nuclear reactors, boilers, machinery	95,500	522,782	(427,282)
85	Electrical machinery and equipment	45,344	237,153	(191,809)
86	Railway or locomotives, rolling stock	2,089	48,268	(46,179)
87	Vehicles and parts	49,956	215,648	(165,692)
88	Aircraft, spacecraft, and parts thereof	3,750	2,727	1,023
89	Ships, boats and floating structures	842	71	771
90	Optical, photographic instruments, etc.	9,904	79,182	(69,278)
91	Clocks and watches and parts thereof	7	1,275	(1,267)
92	Musical instruments	255	130	125
93	Arms and ammunition	23,613	1,572	22,041
94	Furniture; bedding and the like	6,426	45,727	(39,301)
95	Toys, games and sports requisites	379	3,917	(3,538)
96	Miscellaneous manufactured articles	230	2,245	(2,015)
97	Work of art	0	0	-

Source: National Statistical Agency.

Appendix Table 7.2
Export-Based Ranking of Kazakhstan's Machinery Products, 1997 (Quarters I - III)
(thousands of US dollars)

RANK	HS Code	Master Plan	Product Description	EXPORTS	IMPORTS	BALANCE
1	87.01	√	Tractors	30,665	3,564	27,101
2	84.82	√	Ball Or Roller Bearings	21,894	7,718	14,176
3	85.28		Television Receivers (Including Video Monitors And Video Projectors), Whether Or Not Incorporating Radio-Broadcast Receivers Or Sound Or Video Recording Or Reproducing Apparatus	12,621	64,512	- 51,891
4	85.07	√	Electric Accumulators, Including Separators.	11,162	8,755	2,407
5	84.33	√	Harvesting Or Threshing Machinery, Including Straw Or - Fodder Balers; Grass Or Hay Mowers; Machines For Cleaning, Sorting Or Grading Eggs, Fruit Or Other Agricultural Produce.	8,410	56,096	- 47,685
6	84.31	√	Parts Suitable For Use Solely Or Principally With The Machinery Of Heading Nos 84.25 To 84.30	7,224	28,198	- 20,974
7	84.28	√	Other Lifting, Handling, Loading Or Unloading Machinery	5,985	7,215	- 1,231
8	84.29	√	Self-Propelled Bulldozers, Angledozers, Graders, Jewellers,Scrapers Mechanical Shovels, Excavators, Shovel Loaders, Tamping Machines And Road Rollers	5,204	10,932	- 5,728
9	84.75	√	Machines For Assembling Electric Or Electronic Lamps, Tubes Or Valves Or Flashbulbs, In Glass Envelopes; Machines For Manufacturing Or Hot Working Glass	4,219	19,278	- 15,059
10	84.09	√	Parts Suitable For Use Solely Or Principally With The Engines Of Heading No.84.07 Or 84.08	3,928	12,741	- 8,813
11	84.3	√	Other Moving, Grading, Leveling, Scraping, Excavating Tamping Compacting, Extracting Or Boring Machinery, For Earth, Mineral Or Ores; Pile-Drivers And Pile-Extractors; Snow-Ploughs And Snow-Blowers	3,065	15,693	- 12,628
12	84.81	√	Taps, Cocks, Valves And Similar Appliances For Pipes, Boiler Shells, Tanks, Vats Or The Like, Including Pressure-Reducing Valves And Thermostatically Controlled Valves	2,818	11,999	- 9,182
13	84.32	√	Agricultural, Horticultural Or Forestry Machinery For Soil Preparation Or Cultivation; Lawn Or Sports-Ground Rollers	2,191	1,383	808
14	84.62	√	Machine-Tools (Including Presses) For Working Metal By Forging,Hammering Or Die-Stamping;Machine-Tools (Including Presses)	2,039	593	1,445
15	85.44	√	Insulated (Including Enamelled Or Auodised) Wire, Cable (Including Co-Axial Cable) And Other Insulated Electric Conductors	1,762	17,384	- 15,622
16	84.13	√	Pumps For Liquids, Whether Or Not Fitted With A Measuring Device; Liquid Elevators	1,736	29,395	- 27,659
17	85.04	√	Electric Transformers, Static Converters (For Example,Rectifiers) And Inductors	1,621	8,950	- 7,329
18	84.79	√	Other Machines And Mechanical Appliances Having Individual Functions	1,518	6,955	- 5,437

(Continued)

Appendix Table 7.2 (*continued)*
Export-Based Ranking of Kazakhstan's Machinery Products, 1997 (Quarters I - III)
(thousands of US dollars)

RANK	HS Code	Master Plan	Product Description	EXPORTS	IMPORTS	BALANCE
19	86.02	√	Other Rail Locomotives; Locomotive Tenders	1,446	3,399	- 1,954
20	86.01	√	Rail Locomotives Powered From An External Source Of Electricity Or By Electric Accumulators	1,268	1,431	- 162
21	84.26	√	Ships' Derricks; Any Type Of Cranes, Including Cable Cranes, Mobile Lifting Frames, Straddle Carriers And Works Trucks Fitted With A Crane	1,219	6,145	- 4,926
22	84.14	√	Air Or Vacuum Pumps, Air Or Other Gas Compressors And Fans; Ventilating Or Recycling Hoods Incorporating A Fan, Whether Or Not Fitted With Filters	1,204	15,799	- 14,595
23	85.32	√	Electrical Capacitors, Fixed, Variable Or Adjustable	1,130	69	1,060
24	85.37	v	Boards, Panels (Including Numerical Control Panels),Consoles, Desks, Cabinet And Other Bases,	912	5,460	- 4,548
25	85.36	√	Electrical Apparatus For Switching Or Protecting Electrical Circuits, Or For Making Connections To Or In Electrical Circuits	887	5,693	- 4,806
26	84.11	√	Turbo-Jets, Turbo-Propellers And Other Gas Turbines	860	4,129	- 3,269
27	84.63	√	Other Machine-Tools For Working Metal, Sintered Metal Carbides Or Cements, Without Removing Material	841	954	- 114
28	84.25	√	Pulley Tackle And Hoists Other Than Skip Hoists; Winches And Capstans; Jacks	811	1,004	- 192
29	85.46	√	Electrical Insulators Of Any Material	801	496	305
30	84.59	v	Machine-Tools (Including Way-Type Unit Head Machines) For Drilling, Boring, Milling, Threading Or Tapping By Removing Metal, Other Than Lathes Of Heading No.84.58	798	431	367
31	84.38	√	Machinery, Not Specified Or Included Elsewhere In This Chapter, For The Industrial Preparation Or Manufacture Of Food Or Drink	758	23,841	- 23,084
32	84.08	√	Compression-Ignition Internal Combustion Piston Engines(Diesel Or Semi-Diesel Engines), Engines Using Fuel With Low Cetan	725	19,702	- 18,977
33	86.07	√	Parts Of Railway Or Tramway Locomotives Or Rolling-Stock	616	24,043	- 23,427
34	85.01	√	Electrical Motors And Generators (Excluding Generating Sets)	602	12,529	- 11,927
35	84.83	√	Transmission Shafts (Including Cam Shafts And Crank Shafts) And Cranks, Bearing Housing And Plain Shaft Bearing; Gears; Ball Screws	591	3,091	- 2,500
36	84.18	√	Refrigerators, Freezers And Other Refrigerating Or Freezing Equipment, Electric Or Other, Heat Pumps Other Than Air Conditioning Machines Of Heading No.84.15	543	12,607	- 12,064
37	84.21	√	Centrifuges, Including Centrifugal Dryers; Filtering Or Purifying Machinery And Apparatus, For Liquids Or Gases	542	8,756	- 8,214
38	84.07	√	Spark-Ignition Reciprocating Or Rotary Internal Combustion Piston	511	1,534	- 1,023
39	84.5	√	Household Or Laundry-Type Washing Machines	479	4,869	- 4,389
40	84.37	√	Machines For Cleaning, Sorting Or Grading Seed, Grain Or Dried Leguminous Vegetables; Machinery Used In The Milling Industry	461	14,103	- 13,642
41	84.23	√	Weighing Machines Including Weight Operated Counting Or Checking Machines; Weighing Machines Of All Kinds	448	843	- 395
42	86.08	√	Equipment For Railways Or Tramways, Mechanical (Including Electromechanical) Equipment To Provide	445	14,089	- 13,644

Appendix Table 7.2 (*continued)*
Export-Based Ranking of Kazakhstan's Machinery Products, 1997 (Quarters I - III)
(thousands of US dollars)

RANK	HS Code	Master Plan	Product Description	EXPORTS	IMPORTS	BALANCE
			Control And Security Of The Railway, Tramway Traffic And Related Objects, Parts Thereof			
43	85.17	√	Electrical Apparatus For Line Telephony Or Line Telegraphy, Including Such Apparatus For Carrier-Curraut Line Systems	435	13,262	- 12,827
44	84.72		Other Office Machines	409	16,641	- 16,232
45	85.27		Reception Apparatus For Radio-Telephony, Radio-Telegraphy Or Radio-Broadcasting	409	5,952	- 5,543
46	84.55	√	Metal-Rolling Mills And Rolls	407	12,604	- 12,197
47	85.16		Electric Instantaneous Or Storage Water Heaters And Immersion Heaters; Electric Space Heating Apparatus And Soil Heating Apparatus; Electro-Thermic Hair-Dressing Apparatus	386	8,447	
48	84.66	√	Parts And Accessories Suitable For Use Solely Or Principally With The Machines Of Heading Nos.84.56 To 84.65	363	750	- 387
49	84.71	√	Automatic Data Processing Machines And Units Thereof; Magnetic Oroptical Readers, Machines For Transcribing Data Onto Data Media Encoded Form And Machines For Processing Such Data	360	2,481	- 2,121
50	84.58	√	Lathes For Removing Metal	355	160	195
51	84.19	√	Machinery, Plant Or Laboratory Equipment,. Whether Or Not Electrically Heated, For The Treatment Of Materials By A Process Involving A Change Of Temperature	348	28,520	- 28,172
52	85.45	√	Carbon Electrodes, Carbon Brushes, Lamp Carbons, Batterycarbons And Other Articles Of Graphite Or Other Carbon, With Or Without Metal, Of A Kind Used For Electrical Purposes	331	6,777	- 6,446
53	85.1	√	Shavers And Hair Clippers, With Self-Contained Electric Motor	329	130	199
54	85.35	√	Electrical Apparatus For Switching Or Protecting Electrical Circuits, Or For Making Connections To Or In Electrical Circuits	316	2,687	- 2,371
55	84.03		Central Heating Boilers Other Than Those Of Heading No.84.02	311	6,339	- 6,028
56	85.13		Portable Electric Lamps Designed To Function By Their Own Source Of Energy	273	956	- 683
57	86.04		Railway Or Tramway Maintenance Or Service Vehicles, Whether Or Not Self-Propelled	260	880	- 620
58	84.74		Machinery For Sorting, Screening, Separating, Washing, Crushing, Grinding, Mixing Or Kneading Earth, Stone, Ores Or Other Mineral Substances, In Solid (Including Powder Or Paste) Form	259	16,489	- 16,230
59	84.12	√	Other Engines And Motors	250	931	- 681
60	85.48	√	Electrical Parts Of Machinery Or Apparatus, Not Specified Or Included Elsewhere In This Chapter	243	4,320	- 4,078
61	84.47		Knitting Machines, Stitch-Bonding Machines And Machines For Making Gimped Yarn, Tulle, Lace, Embroidery, Trimmings Braid	227	na	na
62	85.39		Electric Filament Or Discharge Lamps, Including Sealed Beam Lamp Units And Ultra-Violet Or Infrared Lamps	208	3,950	- 3,742
63	85.26		Radar Apparatus, Radio Navigational Aid Apparatus	203	4,463	- 4,259
64	85.15	√	Electric (Including Electrically Heated Gas), Laser Or Other Light Or Photon Beam, Ultrasonic, Electron Beam, Magnetic Pulse Or Plasma Arc Soldering, Brazing Or	198	1,286	- 1,088

Appendix Table 7.2 (*continued)*
Export-Based Ranking of Kazakhstan's Machinery Products, 1997 (Quarters I - III)
(thousands of US dollars)

RANK	HS Code	Master Plan	Product Description	EXPORTS	IMPORTS	BALANCE
			Welding Machines And Apparatus			
65	84.36	√	Other Agricultural, Horticultural, Forestry, Poultry-Keeping Or Bee-Keeping Machinery	197	2,756	- 2,558
66	86.09	√	Containers (Including Containers For The Transport Of Fluids) Specially Designed And Equipped For Carriage By One Or More Modes Of Transport	195	295	- 100
67	84.24		Mechanical Appliances (Whether Or Not Hand-Operated) For Projecting, Dispersing Or Spraying Liquids Or Powders; Fire Extinguishers, Whether Or not Charged; Spray Guns And Similar Appliances	195	1,549	- 1,355
68	85.03	√	Parts Suitable For Use Solely Or Principally With The Machines Of Heading No.85.01 Or 85.02	161	2,729	- 2,568
69	85.29	√	Parts Suitable For Use Solely Or Principally With The Apparatus Of Headings Nos. 85 To 85.28	157	7,966	- 7,809
70	84.04		Auxiliary Plant For Use With Boilers Of Heading No. 84.02 Or 84.03 Condensers For Steam Or Other Vapor Power Units	146	4,161	- 4,016
71	84.77		Machinery For Working Rubber Or Plastics Or For The Manufacture Of Products From These Materials, Not Specified Or Included Elsewhere In This Chapter	143	2,774	- 2,631
72	85.09	√	Electro-Mechanical Domestic Appliances, Self-Contained	127	3,779	- 3,651
73	85.25		Transmission Apparatus For Radio-Telephone, Radio-Telegraphy, Telegraphy, Radio-Broadcasting Or Television	119	8,323	- 8,204
74	84.43		Printing Machinery; Machines For Uses Ancillary To Printing	117	3,464	- 3,347
75	84.6	√	Machine-Tools For Deburring, Sharpening, Grinding, Honing, Lapping, Polishing Or Otherwise Finishing Metal, Sintered Metal Carbides Or Cements By Means Of Grinding Stones	108	140	- 32
76	85.05	√	Electro-Magnets; Permanent Magnets And Articles Intended To Become Permanent Magnets After Magnetization; Electromagnetic Or Permanent Magnet Chucks, Clamps And Similar Holding Devices	106	26	81
77	85.31	√	Electric Sound Or Visual Signaling Apparatus, Other Than Those Of Heading No. 85.12 Or 85.30	88	1,252	- 1,163
78	84.16		Furnace Burners For Liquid Fuel, For Pulverized Solid Fuel Or For Gas; Mechanical Stokers	77	605	- 528
79	84.34	√	Milking Machines And Dairy Machinery For Industrial And Agriculture Use	73	2,458	- 2,386
80	85.11	√	Electrical Ignition Or Starting Equipment Of A Kind Used For Spark-Ignition Or Compression-Ignition Internal Combustion Engines; Generators	64	1,202	- 1,138
81	84.06		Water Steam Turbines And Other Vapor Turbines	63	3,547	- 3,484
82	85.02	√	Electric Generating Sets And Rotary Converters	52	5,683	- 5,631
83	84.65	√	Machine-Tools (Including Machines For Nailing, Stapling, Gluing Or Otherwise Assembling	49	1,116	- 1,068
84	84.35	√	Presses, Crushers And Similar Machinery Used In The Manufacture Of Wine, Cider, Or Similar Beverages	48	5	43
85	85.14	√	Industrial Or Laboratory Electric (Including Induction Or Dielectric) Furnaces And Ovens; Other Industrial Or Laboratory Induction Or Dielectric Heating Equipment	47	2,321	- 2,274
86	84.15		Air Conditioning Machines, Comprising A Motor-Drive Fan And Elements For Changing The Temperature And	47	8,768	- 8,721

Appendix Table 7.2 (*continued)*
Export-Based Ranking of Kazakhstan's Machinery Products, 1997 (Quarters I - III)
(thousands of US dollars)

RANK	HS Code	Master Plan	Product Description	EXPORTS	IMPORTS	BALANCE
			Humidity, Including Those Machines In Which The Humidity Cannot Be Separately Regulated			
87	84.27	√	Fork-Lift Trucks; Other Works Trucks Fitted With Lifting Or Handling Equipment	47	1,678	- 1,632
88	84.41		Other Machinery For Making Up Paper Pulp, Paper Or Paperboard, Including Cutting Machines Of All Kinds	46	426	- 380
89	84.8		Molding Boxes For Metal Foundry; Mould Bases; Molding Patterns; Moulds For Metal (Other Than Ingot Moulds), Metal Carbides, Glass, Mineral Materials	46	366	- 320
90	85.08	√	Electro-Mechanical Tools For Working In The Hand, With Self-Contained Electric Motor	44	1,080	- 1,037
91	84.02		Steam Or Other Vapor Generating Boilers; Super-Heated Water Boilers	43	3,450	- 3,408
92	84.52		Sewing Machines, Other Than Book-Sewing Machines Of Heading No.84.40; Furniture, Bases And Covers Specially Designed For Sewing Machines	41	98	- 57
93	85.43	√	Electrical Machines And Apparatus, Having Individual Functions, Not Specified Or Included	40	1,567	- 1,527
94	84.22		Dish Washing Machines; Machinery For Cleaning Or Drying Bottles Or Other Containers; Machinery For Filling, Closing, Sealing, Capsuling Or Labeling Bottles	32	9,769	- 9,737
95	84.54		Converters, Ladles, Ingot Moulds And Casting Machines, Of A Kind Used In Metallurgy Or In Metal Foundries	29	2,355	- 2,326
96	85.34	√	Printed circuits	28	85	- 57
97	84.2		Calendering Or Other Rolling Machines, Other Than For Metals Or Glass, And Cylinders	27	13	14
98	84.67		Tools For Working In The Hand, Pneumatic Or With Self-Contained Non-Electric Motor	26	978	- 952
99	86.06	√	Railway Or Tramway Goods Vans And Wagons, Not Self-Propelled	24	16,066	- 16,042
100	85.18		Microphones And Stands Therefor; Loudspeakers, Whether Or Not Mounted In Their Enclosures	24	1,154	- 1,129
101	84.53		Machinery For Preparing, Tanning Or Working Hides, Skins Or Leather Or For Making Or Repairing Footwear Or Other Articles Of Hides, Skins Or Leather	22	1,193	- 1,171
102	85.42		Electronic Integrated Circuits And Microassemblies	21	716	- 695
103	85.22		Parts And Accessories Of Apparatus Of Headings Nos. 85.19 To 85.21	19	270	- 251
104	85.3	√	Electrical Signaling, Safety Or Traffic Control Equipment For Railways, Tramways, Roads, Inland Waterways, Parking Facilities, Port Installations Or Airfields	18	943	- 925
105	84.51		Machinery, Bleaching, Dyeing, Dressing, Finishing, Coating Or Impregnating Textile Yarns, Fabrics Or Made Up Textile Articles	18	401	- 384
106	85.12		Electrical Lighting Or Signaling Equipment (Excluding Articles Of Heading No.85.39), Windscreen Wipers, Defrosters And Demisters	17	401	- 385
107	85.2		Magnetic Tape Recorders And Other Sound Recording Apparatus	16	2,326	- 2,310
108	84.68	√	Machinery And Apparatus For Soldering, Brazing Or Welding, Whether Or Not Capable Of Cutting, Other Than Those Of Heading No.85.15;	14	655	- 641
109	86.03	√	Self-Propelled Railway Or Tramway Coaches, Vans And Trucks, Other Than Those Of Heading No.86.04	14	8	6
110	84.17		Industrial Or Laboratory Furnaces And Ovens, Including Incinerators, Non-electric	12	966	- 954

Appendix Table 7.2 (*continued)*
Export-Based Ranking of Kazakhstan's Machinery Products, 1997 (Quarters I - III)
(thousands of US dollars)

RANK	HS Code	Master Plan	Product Description	EXPORTS	IMPORTS	BALANCE
111	84.45	√	Machines For Preparing Textile Fibers; Spinning, Doubling Or Twisting Machines And Other Machinery For Producing Textile Yarns; Textile Reeling Or Winding (Including Weft-Winding)	10	13	- 3
112	85.21		Video Recording Or Reproducing Apparatus, Whether Or Not Incorporating A Video Tuner	9	12,779	- 12,770
113	84.85	√	Machinery Parts, Not Containing Electrical Connectors, Insulators, Coils, Contacts Or Other Electrical Features, Not Specified Or Included Elsewhere In This Chapter	9	518	- 509
114	85.24		Records, Tapes And Other Recorded Media For Sound Or Other Similarly Recorded Phenomena, Including Matrices And Masters For The Production Of Records	8	1,199	- 1,190
115	85.33	√	Electrical Resistors (Including Rheostats And Potentiometers), Other Than Heating Resistors	8	102	- 94
116	85.38	√	Parts Suitable For Use Solely Or Principally With The Apparatus Of Heading No.85.35,85.36 Or 85.37	8	722	- 714
117	84.84	√	Gaskets And Similar Joints Of Metal Sheeting Combined With Other Material Or Two Or More Layers Of Metal; Sets Or Assortments Of Gaskets And Similar Joints	8	1,004	- 997
118	85.41		Diodes, Transistors And Similar Semi-Conductor Devices; Photo-Sensitive Semi-Conductor Devices, Including Photovoltaic Cells	7	813	- 805
119	84.01		Nuclear Reactors; Fuel Elements (Cartridges), Non-Irradiated For Nuclear Reactors; Machinery And Apparatus For Isotopic Separation	7	1,001	- 994
120	84.61	√	Machine-Tools For Planing, Shaping, Slotting, Broaching, Gear Cutting, Gear Grinding Or Gear Finishing, Sawing, Cutting-Off And Other-Machine Tools	6	231	- 225
121	84.05		Gas Producer Or Water Gas Generators, With Or Without Their Purifiers; Acetylene Gas Generators And Similar Gas Generators, With Or Without Their Purifiers	6	214	- 208
122	84.78		Machinery For Preparing Or Making Up Tobacco, Not Specified Or Included Elsewhere In This Chapter	5	11,911	- 11,906
123	85.19		Turntables (Record Decks), Record-Players, Cassette-Players And Other Sound Reproducing Apparatus, Not Incorporating A Sound Recording Device	4	1,467	- 1,463
124	85.47	√	Insulating Fittings For Electrical Machines, Appliances Or Equipment, Being Fittings Wholly Of Insulating Material Apart From Any Minor Components Of Metal	3	1,090	- 1,087
125	84.73		Parts And Accessories Suitable For Use Solely Or Principally With Machines Of Headings Nos.84.69 To 84.72	3	2,032	- 2,029
126	85.23		Prepared Unrecorded Media For Sound Recording Or Similar Recording Of Other Phenomena, Other Than Products Of Chapter 37	2	5,348	- 5,346
127	84.49		Machinery For The Manufacture Or Finishing Of Felt Or unwoven In The Piece Or In Shapes, Including Machinery For Making Felt Hats; Blocks For Making Hats	2	15	- 13
128	85.4		Thennionic, Cold Cathode Valves	2	275	- 273
129	84.42		Machinery, Apparatus And Equipment For Type-Founding Or Typesetting, For Preparing Or Making Printing Blocks	1	505	- 504
130	84.64		Machine-Tools For Working Stone, Ceramics, Concrete, Asbestos Cement Or Like Mineral Materials Or For Cold Working Glass	1	4,803	- 4,802
131	84.57		Machining Centers, Unit Construction Machines (Single Station And Multi-Station Transfer Machines, For	0	120	- 120

Appendix Table 7.2 (*continued)*
Export-Based Ranking of Kazakhstan's Machinery Products, 1997 (Quarters I - III)
(thousands of US dollars)

RANK	HS Code	Master Plan	Product Description	EXPORTS	IMPORTS	BALANCE
			Working Metal			
132	84.7		Calculating Machines; Accounting Machines, Postage-Franking Machines, Ticket-Issuing Machines And Similar Machines,I ncorporating A Calculating Device	0	99	- 99
133	86.05	√	Railway Or Tramway Passenger Coaches, Not Self-Propelled; Luggage Vans, Post Office Coaches And Other Special Purpose Railway Or Tramway Coaches Not Self-Propelled	0	84	- 84
134	85.06	√	Primary Cells And Primary Batteries	0	762	- 761
135	84.1		Hydraulic Turbines, Water Wheels, And Regulators	0	420	- 420
136	84.39	√	Machinery For Making Pulp Of Fibrous Cellulosic Material Or For Making Or Finishing Paper Or Paperboard	0	191	- 191
137	84.4		Book-Binding Machinery, Including Book-Sewing Machines	0	265	- 264
138	84.44		Machines For Extruding, Drawing, Texturing Or Cutting Manmade Textile Materials	0	5	- 5
139	84.46	√	Weaving Machines (Looms)	0	55	- 55
140	84.48		Auxiliary Machinery For Use With Machines Of Heading No.84.44,84.45,84.46 Or 84.47; Parts And Accessories Suitable For Use Solely Or Principally With The Machines Of This	0	108	- 108
141	84.56		Machine-Tools For Working Any Material By Removal Of Material, By Laser Or Other Light Or Photon Beam, Ultra-Sonic, Electro-Discharge, Electrochemical	0	20	- 20
142	84.76		Automatic Goods-Vending Machines (For Example, Postage Stamps Cigarette, Food Or Beverage Machines), Including Money-Changing Machines	0	344	- 344

Source: Ministry of Energy, Industry and Trade.
Note: Checked items indicate that the product is included in the Master Plan for the Machinery Industry.

Appendix Table 7.3
World Exports of Agricultural Machinery, Excl. Tractors (SITC, Rev. 3= 721), 1992-96 (thousand US dollars)

	1992	1993	1994	1995	1996
United States	1,641,475	1,894,597	2,014,791	2,094,059	2,417,155
Germany	1,626,022	1,347,011	1,547,995	1,869,969	1,964,538
Italy	769,423	762,805	910,112	1,097,037	1,290,606
France	642,985	525,448	595,105	722,271	743,496
Denmark	389,790	312,929	441,969	561,183	602,913
Canada	323,115	410,861	441,923	484,136	587,139
Belgium-Lux	415,185	306,644	437,997	491,111	580,553
Netherlands	513,763	471,032	499,206	578,772	513,258
Untd Kingdom	364,141	261,889	321,983	392,077	432,729
Austria	179,551	165,540	185,010	220,194	232,598
Japan	322,706	270,403	249,864	210,582	200,449
Brazil	74,433	93,234	126,180	133,373	190,462
Sweden	292,696	238,447	337,994	198,577	160,327
Norway	111,501	91,786	127,006	135,683	148,443
Spain	101,149	69,664	93,773	99,873	134,156
Mexico	28,111	68,636	80,641	101,927	
Czech Rep		59,248	63,695	86,715	95,336
Finland	52,945	48,225	68,760	72,089	82,812
Australia	45,409	51,800	53,357	73,636	76,872
Switz.Liecht	57,024	52,911	49,029	69,342	73,465
Hungary				72,798	
New Zealand	30,420	39,364	44,049	54,850	53,834
Ireland	38,334	33,343	43,142	45,458	52,824
Poland	22,204	23,474	34,573	44,419	
Israel	32,162	32,640	41,979	49,240	41,600
China	19,932	26,203	30,318	30,604	36,536
Slovakia			10,740	17,150	23,303
Singapore	9,896	14,857	13,808	15,927	22,957
Korea Rep.	20,211	14,728	16,130	17,908	19,933
Malaysia	1,480	2,654	2,988	5,428	18,659
Slovenia	10,993	10,122	13,916	18,036	
S.Afr.Cus.Un	12,575	8,772	11,840	16,068	
Argentina	8,245	10,627	9,973	10,928	13,259
Portugal	12,597	6,601	10,021	10,429	11,000
Turkey	7,912	7,885	8,702	9,689	
Romania	4,027	5,569	11,631	4,520	6,510
Croatia	5,429	3,711	3,224	5,302	5,464
Estonia					5,376
Yugoslavia					4,903
Algeria	1,441	121	2,039	4,512	
Latvia			5,435	4,664	4,196
Thailand	3,609	4,787	5,612	3,640	
Lithuania	749		3,360		
Greece	2,037	4,052	2,267	3,041	
Tunisia	2,851	2,950	2,237	3,887	2,884
Colombia	2,427	1,837	2,961	2,659	
Rep.Moldova			558	1,723	
Zimbabwe	1,418	1,329	5,565	1,685	
Costa Rica			1,470	1,163	1,523
Chile	604	702	1,910	989	1,502
Philippines	54	9	66	240	1,434
Kyrgyzstan				469	1,421
Indonesia	147	279	1,126	1,715	1,388
Venezuela	1,126	820	1,036	1,187	
Total	**8,204,304**	**7,760,546**	**8,989,066**	**10,152,934**	**10,857,813**

Source: United Nations (UN), COMTRADE Database.

Appendix Table 7.4
World Imports of Agricultural Machinery, Excl. Tractors (SITC, Rev.3 = 721), 1992-96
(thousand US dollars)

	1992	1993	1994	1995	1996
France	933,112	792,275	1,010,019	1,217,064	1,310,075
United States	674,746	806,193	897,164	940,096	981,675
Germany	969,070	696,335	819,398	1,007,594	979,042
Canada	635,253	816,422	853,247	853,280	905,424
Untd Kingdom	523,671	505,816	566,545	676,429	712,249
Australia	129,978	173,078	233,290	241,442	397,661
Netherlands	371,314	245,053	298,620	331,184	311,138
Spain	218,203	172,943	194,990	220,434	286,854
Austria	191,698	162,896	187,856	258,050	281,641
Belgium-Lux	305,436	242,367	278,847	321,511	280,972
Italy	256,553	191,711	192,145	277,991	278,185
Denmark	152,876	108,875	148,693	234,753	247,932
Czech Rep		83,844	108,388	184,014	231,066
Korea Rep.	218,177	190,994	160,390	181,472	207,344
Sweden	151,583	119,705	161,806	183,860	199,063
Switz.Liecht	144,248	145,000	180,082	203,555	190,714
Argentina	51,325	73,769	129,090	119,028	186,048
Japan	157,329	153,466	140,759	169,996	176,023
China	127,980	128,395	134,899	122,441	166,205
Norway	105,694	89,980	107,037	132,411	152,567
Ireland	113,625	88,876	111,792	138,103	148,664
Poland	55,423	48,232	77,994	135,204	
S.Afr.Cus.Un	37,512	51,077	73,703	102,163	
Finland	55,744	35,852	48,642	94,563	100,723
Hungary				97,660	
Slovakia			40,974	76,153	89,643
Indonesia	22,370	36,867	37,794	69,822	89,039
Chile	41,222	38,823	40,782	60,093	85,455
Brazil	20,797	22,833	49,432	80,029	
Romania	16,970	35,198	88,075	103,386	79,743
New Zealand	32,196	46,116	58,952	75,051	79,171
Mexico	101,673	151,469	188,292	77,999	
Greece	88,678	62,029	57,047	67,488	
Thailand	30,198	28,147	30,012	65,316	
Portugal	58,004	43,975	48,634	57,297	58,984
Saudi Arabia	99,775	86,689	52,262		
Morocco		18,634	36,278	28,343	51,918
Malaysia	33,579	24,469	28,959	36,105	49,739
Uruguay		16,116	19,340	26,050	41,704
Singapore	21,041	27,481	33,691	33,773	33,272
Israel	34,649	25,136	28,815	29,843	32,413
Egypt			19,196	21,137	28,763
Slovenia	8,117	9,197	17,025	28,666	
Turkey	24,096	45,101	22,311	27,344	
Philippines	10,214	8,371	16,503	15,954	24,934
Croatia	11,151	20,654	13,954	36,860	24,339
Colombia	8,513	15,350	15,771	21,186	
Hong Kong	10,510	13,263	12,282	17,370	20,450
Tunisia	34,365	30,216	18,127	13,363	19,362
Bulgaria	16,817				
Pakistan	8,320	8,694	15,062	10,987	15,839
Peru	5,455	12,794	6,362	13,671	15,611
Paraguay	5,260	9,023	15,523	15,268	
Zimbabwe	16,419	4,355	13,798	13,797	

Appendix Table 7.4
World Imports of Agricultural Machinery, Excl. Tractors (SITC, Rev.3 = 721), 1992-96
(thousand US dollars)

	1992	1993	1994	1995	1996
Estonia					13,365
Algeria	13,106	19,289	8,522	13,024	
Ecuador	10,867	35,045	11,858	17,139	12,685
Venezuela	22,004	13,506	10,044	11,611	
Lithuania	1,459		10,346		
Rep.Moldova			5,823	9,630	
Costa Rica			10,286	9,404	
Untd Arab Em	5,452	8,587			
Bangladesh	9,974	8,554			
Honduras		6,386	6,215	7,893	
Bahrain			7,838		
Iceland	6,113	4,683	5,436	7,186	7,737
Kuwait	14,225	8,515	8,400	7,723	
Guatemala		8,289	8,276	7,981	7,708
Nicaragua		3,295	5,087	5,130	7,578
Latvia			5,457	6,263	7,557
Panama				7,499	
Bolivia	7,309	5,385	6,817	5,626	6,516
Jordan	5,008	5,506	5,314	5,594	
Cyprus	5,411	5,292	6,259	8,408	5,462
Kyrgyzstan				452	5,259
Mozambique			5,257		
Yugoslavia					5,238
Kenya	13,965	4,999			
Ghana	4,809				
Guadeloupe	2,208	3,119	3,481	4,413	
Reunion	5,208	4,942	3,733	4,274	
Martinique	2,366	3,449	2,747	3,870	
Oman	6,784	5,204	2,267	3,765	
El Salvador			4,766	3,347	3,500
Sri Lanka	2,361	3,524	3,217		
Jamaica			2,658	2,951	
Barbados	909	865	1,764	1,552	2,878
Mauritius	1,542	2,735	2,645	2,791	
Brunei Dar.	1,028	2,178	2,316		
Cameroon				2,461	1,983
Madagascar	752	644	1,026	1,904	
Malta	2,378	1,785			
Fr.Guiana	797	831	1,071	1,652	
Belize	943	1,287	902	1,353	
Trinidad Tbg	3,866	1,168	1,042	1,335	
Qatar	2,584	1,589	1,323		
Fiji	1,066	1,008	1,039		
Gabon		2,235	1,146		771
Seychelles	782	489	1,626	540	510
Total	**7,496,215**	**7,138,537**	**8,306,653**	**9,733,420**	**9,660,391**

Source: United Nations (UN), COMTRADE Database.

Appendix Table 7.5
World Exports of Tractors (SITC, Rev.3, 722), 1992-96
(thousand US dollars)

	1992	1993	1994	1995	1996
United Kingdom	996,171	943,140	1,178,784	1,438,839	1,728,710
Germany	1,164,278	967,881	1,278,642	1,662,958	1,672,560
Usa,Pr,Usvi	964,133	985,756	1,089,950	1,273,805	1,466,380
Italy	658,622	668,770	725,100	974,162	1,215,811
Japan	628,672	690,081	916,288	884,481	807,860
France	282,946	250,957	340,036	462,789	458,896
Canada	143,138	218,141	327,996	459,213	400,753
Finland	85,278	89,581	142,200	238,738	263,622
Austria	75,757	72,459	86,209	101,886	146,445
Brazil	73,239	51,892	62,137	76,200	131,497
Czech Rep		68,496	37,116	118,565	108,097
Mexico	1,725	9,728	43,279	85,847	
Poland	27,415	26,296	55,940	66,225	
China	37,017	47,172	41,437	69,665	59,438
Belgium-Lux	111,920	47,816	42,509	64,705	51,822
Netherlands	47,244	43,312	36,686	38,942	36,174
Sweden	22,944	16,771	21,227	32,948	34,465
Slovakia			19,889	21,730	32,109
Romania	45,332	38,462	26,020	33,001	28,577
Denmark	15,677	17,552	21,225	27,589	27,654
Korea Rep.	1,306	11,332	21,382	19,414	20,255
Switz.Liecht	15,275	15,337	16,977	24,490	19,086
Spain	10,839	10,895	11,364	7,590	18,767
S.Afr.Cus.Un	4,929	4,445	5,071	9,944	
Ireland	6,982	5,489	4,107	8,005	7,317
Rep.Moldova			6,575	6,495	
Singapore	4,811	9,555	4,349	9,037	6,403
Colombia	49	6,106	13,046	5,802	
Portugal	3,699	2,843	3,795	7,202	5,456
Argentina	1,229	1,520	3,567	4,552	4,230
Yugoslavia					4,134
Bangladesh	3,990				
Lithuania	45		3,765		
Norway	3,562	1,526	1,872	2,009	3,598
Thailand	4,460	4,989	6,808	3,188	
Australia	2,988	4,301	1,280	1,345	2,896
Kuwait	2,550	2,312	3,962	2,301	
Bolivia	53	390	653	1,611	
Slovenia	1,238	981	762	1,412	
Croatia	10,396	2,137	1,260	939	1,357
Malaysia	919	2,663	1,372	1,476	1,189
Hungary				1,047	
Estonia					1,005
Mauritius	541	2,488	678	960	
Israel		813	3,505	395	573
Venezuela	254	1,249	1,418	565	
Latvia			1,228	519	311
Greece	1,081	3,682	323	289	
Turkey	396	1,668	570	167	
Peru	1,370	1,286	114	64	55
Total	5,464,470	5,352,270	6,612,473	8,253,106	8,767,502

Source: United Nations (UN), COMTRADE Database.

Appendix Table 7.6
World Imports of Tractors (SITC, Rev.3, 722), 1992-96
(thousand US dollars)

	1992	1993	1994	1995	1996
United States	1,265,670	1,327,787	1,829,853	1,985,345	1,768,614
France	480,813	417,672	596,144	922,173	1,122,726
Canada	369,631	449,554	474,554	489,110	539,168
Spain	178,216	134,622	255,739	323,008	470,944
Untd Kingdom	240,738	322,460	396,180	463,670	430,288
Germany	427,317	312,405	318,772	384,093	401,054
Australia	100,524	144,992	222,336	248,166	353,162
Italy	129,781	90,860	126,161	180,932	279,798
S.Afr.Cus.Un	33,400	70,933	130,022	265,122	
Thailand	140,299	164,722	212,068	244,870	
Belgium-Lux	120,846	90,989	139,799	254,396	222,648
Denmark	78,556	49,652	93,830	147,374	178,042
Japan	114,281	124,545	158,429	146,785	176,104
Austria	142,846	132,356	139,897	140,054	168,218
Netherlands	215,064	92,729	154,051	163,857	158,657
Norway	53,475	55,398	93,424	135,970	142,083
Portugal	93,030	64,335	69,657	101,500	129,099
Korea Rep.	81,845	69,478	72,399	111,176	127,828
Sweden	68,994	43,244	82,999	112,076	122,806
Switz.Liecht	82,336	84,195	108,156	137,013	120,329
Finland	48,844	43,393	69,480	99,072	118,089
Argentina	34,893	32,844	55,707	42,872	102,405
Ireland	62,910	52,176	75,891	95,139	97,978
New Zealand	40,484	65,843	80,370	73,108	81,602
Greece	99,245	34,348	32,892	55,309	
Czech Rep		16,503	29,916	41,167	52,013
Malaysia	24,315	28,342	27,547	38,716	50,893
Pakistan	59,719	43,568	37,255	141,384	50,233
Singapore	9,631	11,634	11,824	52,205	40,659
Chile	42,993	32,111	29,898	34,676	40,067
Morocco		13,935	51,173	23,100	38,589
Tunisia	66,569	59,236	26,999	30,020	37,544
Uruguay		13,019	16,236	20,797	33,886
Slovenia	18,771	20,368	22,424	32,882	
Hungary				32,440	
Colombia	21,309	21,387	27,801	32,203	
Israel	20,420	23,869	32,971	36,664	31,602
Zimbabwe	30,219	16,814	38,547	25,388	
Indonesia	15,344	13,144	18,597	18,094	23,948
Mexico	69,978	28,297	52,108	22,460	
Brazil	2,491	14,684	20,806	20,109	
Slovakia			6,373	9,989	19,633
Sri Lanka	9,752	11,388	18,469		
Egypt			9,554	12,329	17,716
Bulgaria	17,542				
Croatia	10,973	12,992	14,665	20,194	14,426
Philippines	4,107	4,078	5,627	9,198	14,236
Paraguay	7,842	11,416	13,831	13,357	
Poland	6,866	8,381	9,397	13,347	
Untd Arab Em	9,404	12,518			
Peru	4,846	27,175	24,121	18,182	12,426
Kenya	9,087	11,973			
Bolivia	10,299	7,062	11,104	10,176	11,837
Panama				11,416	
China	77,862	80,835	51,014	26,682	11,334
Ecuador	12,704	7,646	12,077	13,400	10,281

Appendix Table 7.6
World Imports of Tractors (SITC, Rev.3, 722), 1992-96
(thousand US dollars)

	1992	1993	1994	1995	1996
Turkey	11,579	18,555	4,825	10,038	
Venezuela	53,207	15,430	3,531	9,739	
Lithuania	4,879		9,563		
Costa Rica			10,128	9,303	
Romania	3,096	4,481	3,585	6,591	8,074
Iceland	5,238	4,364	3,694	5,947	7,795
Guatemala		8,454	10,730	10,315	6,833
Cyprus	5,439	5,739	5,296	7,329	6,828
Latvia			4,298	5,220	6,823
Mozambique			5,551		
Cameroon				3,976	5,384
Jordan	5,542	5,990	3,099	5,349	
Jamaica			2,632	4,863	
Reunion	4,571	3,649	3,403	4,801	
Yugoslavia					4,599
Honduras		6,867	5,004	4,564	
Saudi Arabia	19,795	14,989	4,324		
Estonia					4,177
Gabon		1,170	6,254		4,003
Kuwait	25,036	15,542	11,969	3,910	
Martinique	2,028	1,296	1,810	3,866	
Mauritius	4,462	6,820	3,513	3,348	
Nicaragua		1,474	3,057	2,411	2,912
Mongolia					2,569
El Salvador			3,691	3,472	2,549
Algeria	11,327	1,027	342	2,378	
Ghana	2,283				
Kyrgyzstan				873	2,251
Guadeloupe	1,476	1,220	1,583	1,840	
Madagascar	1,749	1,477	729	1,703	
Trinidad Tbg	1,617	594	1,154	1,527	
Malawi			1,158	1,498	
Congo		67	1,492		
Belize	1,017	1,668	1,242	1,218	
Barbados	204	443	892	1,393	935
Oman	3,786	1,746	3,460	925	
Qatar	2,147	1,393	599		
Bangladesh	1,059	489			
Total	**5,438,618**	**5,148,851**	**6,731,752**	**8,201,162**	**7,888,697**

Source: United Nations (UN), COMTRADE Database.

Appendix Table 7.7
Kazakhstan Import Duties on Machinery, 1997
(percent)

HS Code	Description	Rate
84.01	Nuclear Reactors; Fuel Elements (Cartridges), Non-Irradiated For Nuclear Reactors; Machinery And Apparatus For Isotopic Separation	Duty Free
84.02	Steam Or Other Vapor Generating Boilers (Other Than Central Heading Hot Water Boilers Capable Also Of Producing Low Pressure Steam); Super-Heated Water Boilers	Duty Free
84.03	Central Heating Boilers Other Than Those Of Heading No.84.02	Duty Free
84.04	Auxiliary Plant For Use With Boilers Of Heading No. 84.02 Or 84.03 (For Example, Economizers, Super-Heaters, Soot Removers, Gas Recoverert); Condensers For Steam Or Other Vapor Power Units	Duty Free
84.05	Gas Producer Or Water Gas Generators, With Or Without Their Purifiers; Acetylene Gas Generators And Similar Gas Generators, With Or Without Their Purifiers	Duty Free
84.06	Water Steam Turbines And Other Vapor Turbines	Duty Free
84.07	Spark-Ignition Reciprocating Or Rotary Internal Combustion Piston	Duty Free
84.08	Compression-Ignition Internal Combustion Piston Engines(Diesel Or Semi-Diesel Engines), Engines Using Fuel With Low Cetan	Duty Free
84.09	Parts Suitable For Use Solely Or Principally With The Engines Of Heading No.84.07 Or 84.08	Duty Free
84.1	Hydraulic Turbines, Water Wheels, And Regulators Therefor	Duty Free
84.11	Turbo-Jets, Turbo-Propellers And Other Gas Turbines	Duty Free
84.12	Other Engines And Motors	
84.13	Pumps For Liquids, Whether Or Not Fitted With A Measuring Device; Liquid Elevators	Duty Free
84.14	Air Or Vacuum Pumps, Air Or Other Gas Compressors And Fans; Ventilating Or Recycling Hoods Incorporating A Fan, Whether Or Not Fitted With Filters	Duty Free
84.15	Air Conditioning Machines, Comprising A Motor-Driven Fan And Elements For Changing The Temperature And Humidity, Including Those Machines In Which The Humidity Cannot Be Separately Regulated	Duty Free
84.16	Furnace Burners For Liquid Fuel, For Pulverized Solid Fuel Or For Gas; Mechanical Stokers, Including Their Mechanical Grates, Mechanical Ash Dischargers And Similar Appliances	Duty Free
84.17	Industrial Or Laboratory Furnaces And Ovens, Including Incinerators, Non-electric	Duty Free
84.18	Refrigerators, Freezers And Other Refrigerating Or Freezing Equipment, Electric Or Other, Heat Pumps Other Than Air Conditioning Machines Of Heading No.84.15	Duty Free
84.19	Machinery, Plant Or Laboratory Equipment,. Whether Or Not Electrically Heated, For The Treatment Of Materials By A Process Involving A Change Of Temperature Such As Heating, Cooking, Roasting, Distilling, Rectifying, Sterilizing, Pasteurizing, Steaming	Duty Free
84.2	Calendering Or Other Rolling Machines, Other Than For Metals Or Glass, And Cylinders	Duty Free

Appendix Table 7.7
Kazakhstan Import Duties on Machinery, 1997
(percent)

HS Code	Description	Rate
84.21	Centrifuges, Including Centrifugal Dryers; Filtering Or Purifying Machinery And Apparatus, For Liquids Or Gases	Duty Free
84.22	Dish Washing Machines; Machinery For Cleaning Or Drying Bottles Or Other Containers; Machinery For Filling, Closing, Sealing, Capsuling Or Labelling Bottles, Cans, Boxes, Bags Or Other Containers, Other Packing Or Wrapping Machinery; Machinery For Aeratin	Duty Free
84.23	Weighing Machines (Excluding Balances Of A Sensitivity Of 5 Cg Or Better), Including Weight Operated Counting Or Checking Machines; Weighing Machines Of All Kinds	Duty Free
84.24	Mechanical Appliances (Whether Or Not Hand-Operated) For Projecting, Dispersing Or Spraying Liquids Or Powders; Fire Extinguishers, Whether Or not Charged; Spray Guns And Similar Appliances; Steam Or Sand Blasting Machines And Similar Jet Projecting Machines	Duty Free
84.25	Pulley Tackle And Hoists Other Than Skip Hoists; Winches And Capstans; Jacks	Duty Free
84.26	Ships' Derricks; Any Type Of Cranes, Including Cable Cranes, Mobile Lifting Frames, Straddle Carriers And Works Trucks Fitted With A crane	Duty Free
84.27	Fork-Lift Trucks; Other Works Trucks Fitted With Lifting Or Handling Equipment	Duty Free
84.28	Other Lifting, Handling, Loading Or Unloading Machinery (For Example, Lifts, Escalators, Conveyors, Teleferics)	Duty Free
84.29	Self-Propelled Bulldozers, Angledozers, Graders, Jewellers, Scrapers Mechanical Shovels, Excavators, Shovel Loaders, Tamping Machines And Road Rollers	Duty Free
84.3	Other Moving, Grading, Leveling, Scraping, Excavating Tamping Compacting, Extracting Or Boring Machinery, For Earth, Mineral Or Ores; Pile-Drivers And Pile-Extractors; Snow-Ploughs And Snow-Blowers	Duty Free
84.31	Parts Suitable For Use Solely Or Principally With The Machinery Of Heading Nos 84.25 To 84.30	Duty Free
84.32	Agricultural, Horticultural Or Forestry Machinery For Soil Preparation Or Cultivation; Lawn Or Sports-Ground Rollers	5%
84.33	Harvesting Or Threshing Machinery, Including Straw Or -Fodder Balers; Grass Or Hay Mowers; Machines For Cleaning, Sorting Or Grading Eggs, Fruit Or Other Agricultural Produce Other Than Machinery Of Heading N0.84.37	Duty Free
84.34	Milking Machines And Dairy Machinery For Industrial And Agriculture Use	Duty Free
84.35	Presses, Crushers And Similar Machinery Used In The Manufacture Of Wine, Cider, Fruit Juices Or Similar Beverages	Duty Free
84.36	Other Agricultural, Horticultural, Forestry, Poultry-Keeping Or Bee-Keeping Machinery, Including Germination Plant Fitted With Mechanical Or Thermal Equipment; Poultry Incubators And Brooders	Duty Free
84.37	Machines For Cleaning, Sorting Or Grading Seed, Grain Or Dried Leguminous Vegetables; Machinery Used In The Milling Industry Or For The Working Of Cereals Or Dried Leguminous Vegetables, Other Than Farm-Type Machinery	Duty Free

Appendix Table 7.7
Kazakhstan Import Duties on Machinery, 1997
(percent)

HS Code	Description	Rate
84.38	Machinery, Not Specified Or Included Elsewhere In This Chapter, For The Industrial Preparation Or Manufacture Of Food Or Drink, Other Than Machinery For The Extraction Or Preparation Of Animal Or Fixed Vegetable Fats Or Oils	Duty Free
84.39	Machinery For Making Pulp Of Fibrous Cellulosic Material Or For Making Or Finishing Paper Or Paperboard	Duty Free
84.4	Book-Binding Machinery, Including Book-Sewing Machines	Duty Free
84.41	Other Machinery For Making Up Paper Pulp, Paper Or Paperboard, Including Cutting Machines Of All Kinds	Duty Free
84.42	Machinery, Apparatus And Equipment (Other Than The Machine-Tools Of Heading Mos.84.56 To 84.65), For Type-Founding Or Typesetting, For Preparing Or Making Printing Blocks, Plates, Cylinders Or Other Printing Components; Blocks, Plates, Cylinders	Duty Free
84.43	Printing Machinery; Machines For Uses Ancillary To Printing	Duty Free
84.44	Machines For Extruding, Drawing, Texturing Or Cutting Manmade Textile Materials	Duty Free
84.45	Machines For Preparing Textile Fibers; Spinning, Doubling Or Twisting Machines And Other Machinery For Producing Textile Yarns; Textile Reeling Or Winding (Including Weft-Winding) Machines And Machines For Preparing Textile Yarns For Use On The Machines O	Duty Free
84.46	Weaving Machines (Looms)	Duty Free
84.47	Knitting Machines, Stitch-Bonding Machines And Machines For Making Gimped Yarn, Tulle, Lace, Embroidery, Trimmings Braid Or Net And Machines For Tufting	Duty Free
84.48	Auxiliary Machinery For Use With Machines Of Heading No.84.44,84.45,84.46 Or 84.47 (For Example, Dobbies, Jacquards, Automatic Stop Motions, Shuttle Changing Mechanisms); Parts And Accessories Suitable For Use Solely Or Principally With The Machines Of This	Duty Free
84.49	Machinery For The Manufacture Or Finishing Of Felt Or unwoven In The Piece Or In Shapes, Including Machinery For Making Felt Hats; Blocks For Making Hats	Duty Free
84.5	Household Or Laundry-Type Washing Machines, Including Machines Both And Dry, Machines Each Of A Dry Linen Capacity Not Exceeding 10 Kg, excepting	Duty Free
84.50.19	Other Types Of Household Or Laundry-Type Washing Machines	20%
84.51	Machinery (Other Than Machines Of Heading No. 84.50) For Washing Cleaning, Ironing, Pressing (Including Fusing Presses), Bleaching, Dyeing, Dressing, Finishing, Coating Or Impregnating Textile Yarns, Fabrics Or Made Up Textile Articles And Machines For Applying The Paste To The Base Fabric Or Other Support Used In The Manufacture Of Floor Covering Such As Linoleum; Machines For Reeling, Unreeling, Folding, Cutting Or Pinking Textile Fabrics	Duty Free
84.52	Sewing Machines, Other Than Book-Sewing Machines Of Heading No.84.40; Furniture, Bases And Covers Specially Designed For Sewing Machines; Sewing Machines Needles *(cont'd)*	Duty Free

Appendix Table 7.7
Kazakhstan Import Duties on Machinery, 1997
(percent)

HS Code	Description	Rate
84.53	Machinery For Preparing, Tanning Or Working Hides, Skins Or Leather Or For Making Or Repairing Footwear Or Other Articles Of Hides, Skins Or Leather, Other Than Sewing Machines	Duty Free
84.54	Converters, Ladles, Ingot Moulds And Casting Machines, Of A Kind Used In Metallurgy Or In Metal Foundries	Duty Free
84.55	Metal-Rolling Mills And Rolls Therefor	Duty Free
84.56	Machine-Tools For Working Any Material By Removal Of Material, By Laser Or Other Light Or Photon Beam, Ultra-Sonic, Electro-Discharge, Electrochemical, Electron Beam, Ionic-Beam Or Plasma Arc Processes	Duty Free
84.57	Machining Centers, Unit Construction Machines (Single Station And Multi-Station Transfer Machines, For Working Metal	Duty Free
84.58	Lathes For Removing Metal	Duty Free
	Excepting	
84.58.11.2	Lathes for removing metal, others	20%
84.59	Machine-Tools (Including Way-Type Unit Head Machines) For Drilling, Boring, Milling, Threading Or Tapping By Removing Metal, Other Than Lathes Of Heading No.84.58	Duty Free
84.6	Machine-Tools For Deburring, Sharpening, Grinding, Honing, Lapping, Polishing Or Otherwise Finishing Metal, Sintered Metal Carbides Or Cements By Means Of Grinding Stones, Abrasives Or Polishing Products, Other Than Gear Cutting, Gear Grinding Or Gear Finishing Machines Of Heading No.84.61	Duty Free
84.61	Machine-Tools For Planing, Shaping, Slotting, Broaching, Gear Cutting, Gear Grinding Or Gear Finishing, Sawing, Cutting-Off And Other-Machine Tools Working By Removing Metal, Sintered Metal Carbides Or Cements Not Elsewhere Specified Or Included	Duty Free
84.62	Machine-Tools (Including Presses) For Working Metal By Forging, Hammering Or Die-Stamping; Machine-Tools (Including Presses) For Working Metal By Bending, Folding, Straightening, Flattening, Shearing, Punching Or Notching;	Duty Free
84.63	Other Machine-Tools For Working Metal, Sintered Metal Carbides Or Cements, Without Removing Material	Duty Free
84.64	Machine-Tools For Working Stone, Ceramics, Concrete, Asbestos Cement Or Like Mineral Materials Or For Cold Working Glass	Duty Free
84.65	Machine-Tools (Including Machines For Nailing, Stapling, Gluing Or Otherwise Assembling) For Working Wood, Cork, Bone, Hard Rubber, Hard Plastics Or Similar Materials	Duty Free
84.66	Parts And Accessories Suitable For Use Solely Or Principally With The Machines Of Heading Nos.84.56 To 84.65, Including Work Or Tool Holders, Self-Opening Disheads, Dividing Heads And Other Special Attachments For Machine- Tools; Tool Holders For Any Type	Duty Free
84.67	Tools For Working In The Hand, Pneumatic Or With Self-Contained Non-Electric Motor	Duty Free
84.68	Machinery And Apparatus For Soldering, Brazing Or Welding,Whether Or Not Capable Of Cutting, Other Than Those Of Heading No.85.15; Gas-Operated Surface Tempering Machines and Appliances *(cont'd)*	Duty Free

Appendix Table 7.7
Kazakhstan Import Duties on Machinery, 1997
(percent)

HS Code	Description	Rate
84.7	Calculating Machines; Accounting Machines, Postage-Franking Machines, Ticket-Issuing Machines And Similar Machines, Incorporating A Calculating Device; Cash Registers	Duty Free
84.71	Automatic Data Processing Machines And Units Thereof; Magnetic Oroptical Readers, Machines For Transcribing Data Onto Data Media encoded Form And Machines For Processing Such Data, Not Elsewhere Specified Or Included	Duty Free
84.72	Other Office Machines (For Example, Hectograph Or Stencil Duplicating Machines, Addressing Machines, Automatic Banknote Dispensers, Coin-Counting Or -Wrapping Machines, Pencil Sharpening Machines, Perforating Or Stapling Machines)	Duty Free
84.73	Parts And Accessories (Other Than Covers, Carrying Cases And The Like) Suitable For Use Solely Or Principally With Machines Of Headings Nos.84.69 To 84.72	Duty Free
84.74	Machinery For Sorting, Screening, Separating, Washing, Crushing, Grinding, Mixing Or Kneading Earth, Stone, Ores Or Other Mineral Substances, In Solid (Including Powder Or Paste) Form; Machinery For Agglomerating, Shaping Or Molding Solid Mineral Fuels, Ceramic Paste, Unhardened Cements, Plastering Materials Or Other Mineral Products In Powder Or Paste Form; Machines For Forming Foundry Moulds Of Sand	Duty Free
84.75	Machines For Assembling Electric Or Electronic Lamps, Tubes Or Valves Or Flashbulbs, In Glass Envelopes; Machines For Manufacturing Or Hot Working Glass Or Glassware	Duty Free
84.76	Automatic Goods-Vending Machines (For Example, Postage Stamps Cigarette, Food Or Beverage Machines), Including Money-Changing Machines	Duty Free
84.77	Machinery For Working Rubber Or Plastics Or For The Manufacture Of Products From These Materials, Not Specified Or Included Elsewhere In This Chapter	Duty Free
84.78	Machinery For Preparing Or Making Up Tobacco, Not Specified Or Included Elsewhere In This Chapter	Duty Free
84.79	Machines And Mechanical Appliances Having Individual Functions, Not Specified Or Included Elsewhere In This Chapter	Duty Free
84.8	Molding Boxes For Metal Foundry; Mould Bases; Molding Patterns; Moulds For Metal (Other Than Ingot Moulds), Metal Carbides, Glass, Mineral Materials, Rubber Or Plastics	Duty Free
84.81	Taps, Cocks, Valves And Similar Appliances For Pipes, Boiler Shells, Tanks, Vats Or The Like, Including Pressure-Reducing Valves And Thermostatically Controlled Valves	Duty Free
	excepting	
84.81.8	Taps, cocks and valves for sinks, wash basins, bidets, water cisterns, baths and similar fixtures	10%
84.82	Ball Or Roller Bearings	Duty Free

(cont'd)

Appendix Table 7.7
Kazakhstan Import Duties on Machinery, 1997
(percent)

HS Code	Description	Rate
84.83	Transmission Shafts (Including Cam Shafts And Crank Shafts) And Cranks, Bearing Housing And Plain Shaft Bearing; Gears And Gearing; Ball Screws; Gear Boxes And Other Speed Changers, Including Torque Converters; Flywheels And Pulleys, Including Pulley Blocks	Duty Free
84.84	Gaskets And Similar Joints Of Metal Sheeting Combined With Other Material Or Two Or More Layers Of Metal; Sets Or Assortments Of Gaskets And Similar Joints, Dissimilar In Composition, Put Up In Pouches, Envelopes Or Similar Packing	Duty Free
84.85	Machinery Parts, Not Containing Electrical Connectors, Insulators, Coils, Contacts Or Other Electrical Features, Not Specified Or Included Elsewhere In This Chapter	Duty Free
85.01	Electrical Motors And Generators (Excluding Generating Sets)	Duty Free
85.02	Electric Generating Sets And Rotary Converters	Duty Free
85.03	Parts Suitable For Use Solely Or Principally With The Machines Of Heading No.85.01 Or 85.02	Duty Free
85.04	Electric Transformers, Static Converters (For Example, Rectifiers) And Inductors	Duty Free
85.05	Electro-Magnets; Permanent Magnets And Articles Intended To Become Permanent Magnets After Magnetization; Electromagnetic Or Permanent Magnet Chucks, Clamps And Similar Holding Devices; Electromagnetic Couplings, Clutches And Brakes; Electro-Magnetic Lifting Heads	Duty Free
85.06	Primary Cells And Primary Batteries	Duty Free
85.07	Electric Accumulators, Including Separators Therefore, Whether Or Not Rectangular (Including Square)	Duty Free
	Excluding:	
85.07.10.81	Led-acid electrical accumulators used for starting piston engines	15%
85.08	Electro-Mechanical Tools For Working In The Hand, With Self-Contained Electric Motor	Duty Free
85.09	Electro-Mechanical Domestic Appliances, With Self-Contained	Duty Free
85.1	Shavers And Hair Clippers, With Self-Contained Electric Motor	Duty Free
85.11	Electrical Ignition Or Starting Equipment Of A Kind Used For Spark-Ignition Or Compression-Ignition Internal Combustion Engines (For Example, Ignition Magnetos, Magneto-Dynamos, Ignition Coils, Sparking Plugs And Glow Plugs, Starter Motors);Generators (For	Duty Free
85.12	Electrical Lighting Or Signaling Equipment (Excluding Articles Of Heading No.85.39), Windscreen Wipers, Defrosters And Demisters, Of A Kind Used For Cycles Or Motor Vehicles	Duty Free
85.13	Portable Electric Lamps Designed To Function By Their Own Source Of Energy (For Example, Dry Batteries, Accumulators, Magnetos), Other Than Lighting Equipment Of Heading No.85.12	Duty Free
85.14	Industrial Or Laboratory Electric (Including Induction Or Dielectric) Furnaces And Ovens; Other Industrial Or Laboratory Induction Or Dielectric Heating Equipment *(cont'd)*	Duty Free

Appendix Table 7.7
Kazakhstan Import Duties on Machinery, 1997
(percent)

HS Code	Description	Rate
85.15	Electric (Including Electrically Heated Gas), Laser Or Other Light Or Photon Beam, Ultrasonic, Electron Beam, Magnetic Pulse Or Plasma Arc Soldering, Brazing Or Welding Machines And Apparatus, Whether Or Not Capable Of Cutting; Electric Machines	Duty Free
85.16	Electric Instantaneous Or Storage Water Heaters And Immersion Heaters; Electric Space Heating Apparatus And Soil Heating Apparatus; Electro-Thermic Hair-Dressing Apparatus (For Example, Hair Dryers, Hair Curlers, Curling Tong Heaters) And Hand Dryers	Duty Free
	Excluding:	
85.16.5	Microwave ovens	20%
85.17	Electrical Apparatus For Line Telephony Or Line Telegraphy, Including Such Apparatus For Carrier-Current Line Systems	Duty Free
	Excluding:	
85.17.19.9	Electrical apparatus for line telephony or line telegraphy, other than for telephones sets	10%
85.18	Microphones And Stands Therefor; Loudspeakers, Whether Or Not Mounted In Their Enclosures; Headphones, Earphones And Combined Microphone/Speaker Sets; Audio-Frequency Electric Amplifiers; Electric Sound Amplifier Sets	Duty Free
85.19	Turntables (Record Decks), Record-Players, Cassette- Players And Other Sound Reproducing Apparatus, Not Incorporating A Sound Recording Device	Duty Free
85.2	Magnetic Tape Recorders And Other Sound Recording Apparatus, Whether Or Not Incorporating A Sound Reproducing Device	Duty Free
85.21	Video Recording Or Reproducing Apparatus, Whether Or Not Incorporating A Video Tuner	Duty Free
85.22	Parts And Accessories Of Apparatus Of Headings Nos. 85.19 To 85.21	Duty Free
85.23	Prepared Unrecorded Media For Sound Recording Or Similar Recording Of Other Phenomena, Other Than Products Of Chapter 37	Duty Free
85.24	Records, Tapes And Other Recorded Media For Sound Or Other Similarly Recorded Phenomena, Including Matrices And Masters For The Production Of Records, But Excluding Products Of Chapter 37	Duty Free
85.25	Transmission Apparatus For Radio-Telephone, Radio-Telegraphy, Telegraphy, Radio-Broadcasting Or Television, Whether Or Not Incorporating Reception Apparatus Or Sound Recording Or Reproducing Apparatus; Television Cameras	Duty Free
85.26	Radar Apparatus, Radio Navigational Aid Apparatus And Radio Remote Control Apparatus	Duty Free
85.27	Reception Apparatus For Radio-Telephony, Radio-Telegraphy Or Radio-Broadcasting, Whether Or Not Combined, In The Same Housing, With Sound Recording Apparatus Or A Clock	Duty Free
85.28	Television Receivers (Including Video Monitors And Video Projectors), Whether Or Not Incorporating Radio-Broadcast Receivers Or Sound Or Video Recording Or Reproducing Apparatus	10%
85.29	Parts Suitable For Use Solely Or Principally With The Apparatus Of Headings Nos. 85 To 85.28	Duty Free

(cont'd)

Appendix Table 7.7
Kazakhstan Import Duties on Machinery, 1997
(percent)

HS Code	Description	Rate
85.3	Electrical Signaling, Safety Or Traffic Control Equipment For Railways, Tramways, Roads, Inland Waterways, Parking Facilities, Port Installations Or Airfields (Other Than Those Of Heading No. 86.06)	Duty Free
85.31	Electric Sound Or Visual Signaling Apparatus (For Example Bells, Sirens, Indicator Panels, Burglar Or Fire Alarms), Other Than Those Of Heading No. 85.12 Or 85.30	Duty Free
85.32	Electrical Capacitors, Fixed, Variable Or Adjustable(Pre-Set)	Duty Free
85.33	Electrical Resistors (Including Rheostats And Potentiometers), Other Than Heating Resistors	Duty Free
85.34	Printed circuits	Duty Free
85.35	Electrical Apparatus For Switching Or Protecting Electrical Circuits, Or For Making Connections To Or In Electrical Circuits (For Example, Switches, Fuses, Lightning Arresters, Voltage Limiters, Surge Suppressors, Plugs, Junction Boxes), For A Voltage Exceeding	Duty Free
85.36	Electrical Apparatus For Switching Or Protecting Electrical Circuits, Or For Making Connections To Or In Electrical Circuits (For Example, Switches, Relays, Fuses, Surge Suppressors, Plugs, Sockets, Lamp-Holders, Junction Boxes)	Duty Free
85.37	Boards, Panels (Including Numerical Control Panels),Consoles, Desks, Cabinet And Other Bases Equipped With Two Or More Apparatus Of Heading No.85.35 Or 85.36, For Electric Control Or The Distribution Of Electricity, Including Those Incorporating Instruments	Duty Free
85.38	Parts Suitable For Use Solely Or Principally With The Apparatus Of Heading No.85.35,85.36 Or 85.37	Duty Free
85.39	Electric Filament Or Discharge Lamps, Including Sealed Beam Lamp Units And Ultra-Violet Or Infrared Lamps; Arc Lamps	Duty Free
85.4	Thennionic, Cold Cathode Or Photo-Cathode Valves And Tubes(For Example, Vacuum Or Vapor Or Gas Filled Valves And Tubes, Mercury-Arc Rectifying Valves And Tubes, Cathode-Ray Tubes, Television - Camera Tubes)	Duty Free
85.41	Diodes, Transistors And Similar Semi-Conductor Devices; Photo-Sensitive Semi-Conductor Devices, Including Photovoltaic Cells Whether Or Not Assembled In Modules Or Made Up Into Panels; Light Emitting Diodes; Mounted Piezoelectric Crystals	Duty Free
85.42	Electronic Integrated Circuits And Microassemblies	Duty Free
85.43	Electrical Machines And Apparatus, Having Individual Functions, Not Specified Or Included Elsewhere In This Chapter	Duty Free
85.44	Insulated (Including Enameled Or Auodized) Wire, Cable (Including Co-Axial Cable) And Other Insulated Electric Conductors, Whether Or Not Fitted With Connectors; Optical Fiber Cables, Made Up Of Individually Sheathed Fibers, Whether Or Not Assembled With	Duty Free
85.45	Carbon Electrodes, Carbon Brushes, Lamp Carbons, Battery carbons And Other Articles Of Graphite Or Other Carbon, With Or Without Metal, Of A Kind Used For Electrical Purposes	Duty Free
85.46	Electrical Insulators Of Any Material	Duty Free

(cont'd)

Appendix Table 7.7
Kazakhstan Import Duties on Machinery, 1997
(percent)

HS Code	Description	Rate
85.47	Insulating Fittings For Electrical Machines, Appliances Or Equipment, Being Fittings Wholly Of Insulating Material Apart From Any Minor Components Of Metal (For Example, Threaded Sockets) Incorporated During Molding Solely For The Purposes Of Assembly	Duty Free
85.48	Electrical Parts Of Machinery Or Apparatus, Not Specified Or Included Elsewhere In This Chapter	Duty Free
86.01	Rail Locomotives Powered From An External Source Of Electricity Or By Electric Accumulators	Duty Free
86.02	Other Rail Locomotives; Locomotive Tenders	Duty Free
86.03	Self-Propelled Railway Or Tramway Coaches, Vans And Trucks, Other Than Those Of Heading No.86.04	Duty Free
86.04	Railway Or Tramway Maintenance Or Service Vehicles, Whether Or Not Self-Propelled (For Example, Workshops, Cranes, Ballast Tampers, Trackliners, Testing Coaches And Track Inspection Vehicles	Duty Free
86.05	Railway Or Tramway Passenger Coaches, Not Self-Propelled; Luggage Vans, Post Office Coaches And Other Special Purpose Railway Or Tramway Coaches Not Self-Propelled, Other Than Those Of Heading No 8604	Duty Free
86.06	Railway Or Tramway Goods Vans And Wagons, Not Self-Propelled	Duty Free
86.07	Parts Of Railway Or Tramway Locomotives Or Rolling-Stock	Duty Free
86.08	Equipment For Railways Or Tramways, Mechanical (Including Electromechanical) Equipment To Provide Control And Security Of The Railway, Tramway Traffic And Related Objects, Parts Thereof	Duty Free
86.09	Containers (Including Containers For The Transport Of Fluids) Specially Designed And Equipped For Carriage By One Or More Modes Of Transport	5%
87.01	Tractors (Other Than Tractors Of Heading No. 87.09)	5%
	Excepting:	
8701.30.00	Track laying tractors	15%

Source: Government of Kazakhstan, *On Introduction of Changes in the Decree of the Government of Kazakhstan of14 November 1996.* Almaty. Decree No. 960. 12 June 1997.