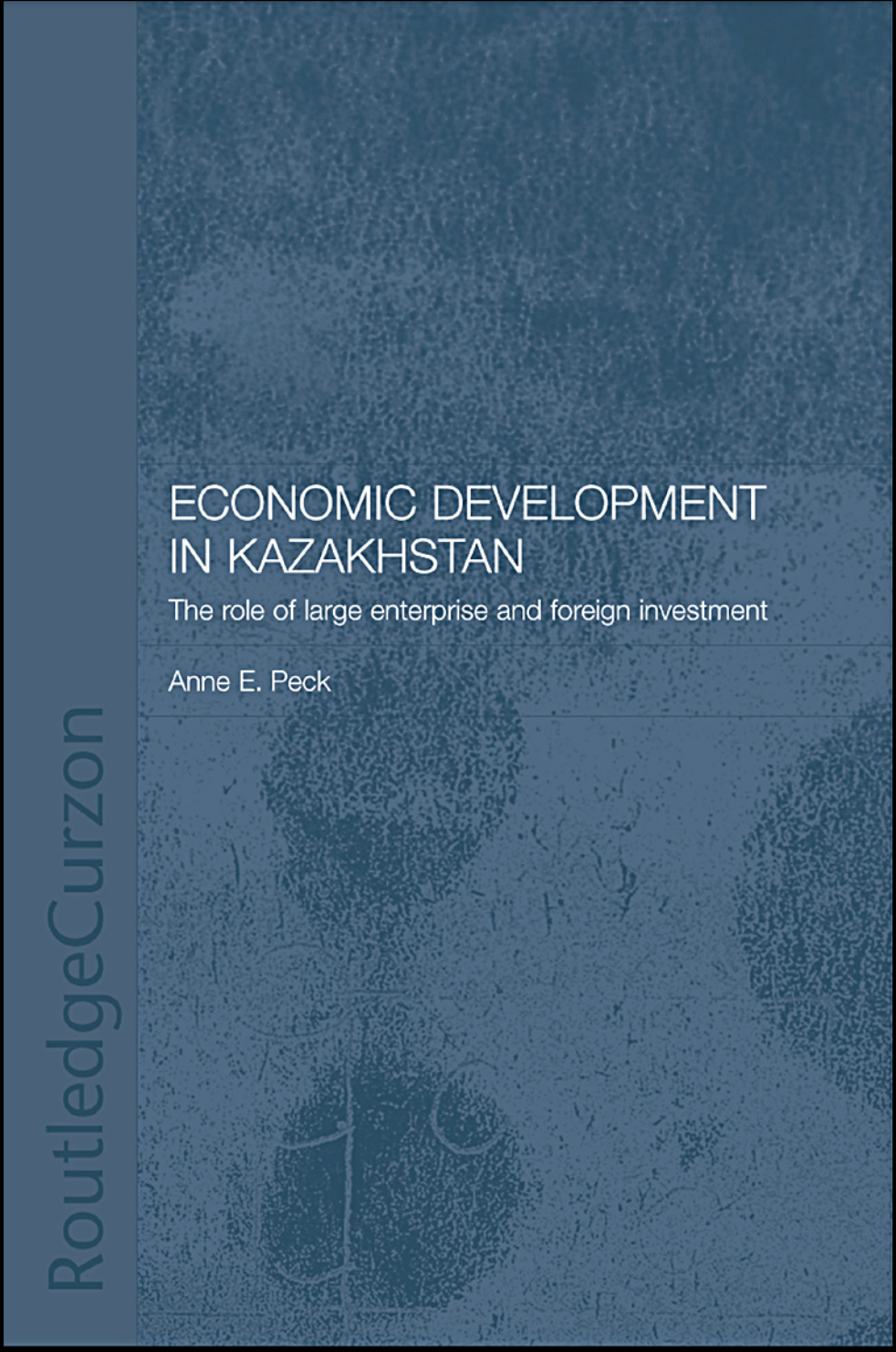

ECONOMIC DEVELOPMENT IN KAZAKHSTAN

Economic Development in Kazakhstan traces the role of large enterprises in the development of the country's industrial economy over nearly one hundred years, beginning at the turn of the previous century, continuing through the nearly seventy years of Soviet central planning, and ending with privatization in the decade since 1991 when Kazakhstan became independent.

This book gives hitherto hidden insights into policies adopted to transform the economy as well as to the individuals who gained control of the economy and to their political allegiances. Although touted as a very aggressive transition strategy, Anne Peck suggests that the privatization and sale of main enterprises has led to a surprising degree of control by just a few new investors and increasingly strong insiders. Controversially, the book concludes that it is the control demanded by these insiders rather than the success of any foreign investor that will ultimately determine the future development of the country's economy.

With many empirical examples of what the process of industrial privatization meant to individuals as well as to communities, this volume is of interest to professionals and business people connected to the region, as well as scholars and students alike.

Anne E. Peck is the Holbrook Working Professor of Commodity Price Studies Emerita at Stanford University. She is also a Senior Fellow at the Center for Environmental Science and Policy at the Institute for International Studies at Stanford University, and a visiting professor at the Centre for Euro-Asian Studies, University of Reading, UK.

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ECONOMIC DEVELOPMENT IN KAZAKHSTAN
The role of large enterprises and foreign investment
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RoutledgeCurzon
Taylor & Francis Group
LONDON AND NEW YORK

First published 2004
by RoutledgeCurzon
11 New Fetter Lane, London EC4P 4EE

Simultaneously published in the USA and Canada
by RoutledgeCurzon
29 West 35th Street, New York, NY 10001

This edition published in the Taylor & Francis e-Library, 2004.

RoutledgeCurzon is an imprint of the Taylor & Francis Group

British Library Cataloguing in Publication Data
A catalogue record for this book is available
from the British Library

Library of Congress Cataloging in Publication Data
Peck, Anne E.
Economic development in Kazakhstan: the role of large enterprises and foreign investment/Anne E. Peck.
p. cm. – (Central Asia research forum series)
"Simultaneously published in the USA and Canada."
Includes bibliographical references and index.
1. Investments, Foreign – Kazakhstan. 2. Business enterprises – Kazakhstan. 3. Mines and mineral resources – Kazakhstan. 4. Petroleum industry and trade – Kazakhstan – History. 5. Gas industry – Kazakhstan – History. 6. Privatization – Kazakhstan. 7. Kazakhstan – Economic conditions – 1991 – 8. Kazakhstan – Economic conditions. I. Title. II. Series.

HG5720.23.A3P43 2004

338.95845 – dc21 2003011018

ISBN 0-203-56342-5 Master e-book ISBN

ISBN 0-203-34483-9 (Adobe eReader Format)
ISBN 0–415–31546–8 (Print Edition)

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ACKNOWLEDGMENTS

I am extremely grateful to many individuals for their encouragement in this project. Shirin Akiner at the School of Oriental and African Studies at the University of London, Zauresh Atakhanova at the Kazakhstan Institute of Management, Economics, and Strategic Research in Almaty, Lloyd Besant, Walter Falcon at the Center for Environmental Science and Policy at the Institute for International Studies at Stanford University, Suzanne Gaboury at EBRD, Richard Levine at the US Geological Survey, and Yelena Kalyuzhnova at the Centre for Euro-Asian Studies at the University of Reading each read some or all of the material I wrote at various stages in preparing this book and I am grateful for their continuing encouragement as well as their help and advice.

In addition, seminar participants at Oxford University, at the University of Reading, and at the Royal Institute of International Affairs asked many important questions and made many useful suggestions along the way. Columbia University Press generously gave permission to adapt a map from the 1969 classic study by Theodore Shabad, *Basic Industrial Resources of the USSR*, which identified the location of most major enterprise cities, mineral deposits, and rail lines in Kazakhstan (see Figure 6.2). Similarly, the International Energy Agency kindly provided the map locating the major oil and gas deposits in Kazakhstan as well as important pipelines (see Figure 9.1). I am grateful to all. It goes without saying, however, that I remain responsible for the errors in fact or in judgment that remain.

Anne Peck
May 2003

1

INTRODUCTION

I first traveled to Kazakhstan in the fall 1996 on an assignment to evaluate a nascent commodity futures exchange in Almaty.[1] On the face of it, development of a commodity exchange did not seem so far fetched since the Kazakh economy was almost entirely dependent upon the production of basic commodities. These included agricultural products like wheat and livestock, minerals like copper, alumina, lead, zinc, iron ore, and steel, and mineral fuels like oil, gas, and coal. That is, the economy was almost entirely dependent on production of precisely the sorts of commodities for which organized exchange trading had proved to be important in market economies around the world. Although I did find an exchange which in fact held substantial promise to develop into a useful market, I also found the country's economic transition had a rather long way to go before conditions would be more favorable for the development of exchange trading. Thus, the transition itself became the focus of what was to become my continuing interest in Kazakhstan, where virtually every institution and individual were having to find new ways to survive.

Even by 1996, the main produce market in Almaty carried a (reportedly) vastly increased variety of foods and other goods as compared with a decade earlier or even two to three years earlier. There were several smaller markets throughout the city and individual street vendors with a few items were common in most neighborhoods. At the same time, incomes had been so severely reduced that fewer and fewer people could afford even basic staples. To the sides of the main market were often many elderly people selling almost anything – their possessions, things scavenged from others' trash, or a few hand-made items – to earn money for food. In one of the parks, a regular Sunday dealers market met where items of Soviet memorabilia of all sorts that families had sold were available. There were frequent popular demonstrations in the city center protesting against the policies which had caused the economic decline. Often, the demonstrations were organized by pensioners whose level of state support had not only declined relatively but was frequently simply not paid. The power company in Almaty had been turned over to a Belgian company, the newspapers were warning all

of their intention to collect previously unpaid power bills, and I wondered how soon the company would become the target for the protestors. Not too surprisingly, almost every poll I was later to find showed almost no support for privatization.

As fascinating as I had found life in Almaty, I might never have returned if I had not happened to sit next to a Canadian oil executive on the same flight leaving Almaty who had just completed an initial inspection of the oil-producing enterprise his company had just purchased in southwestern Kazakhstan. He was carrying dozens of photographs taken over the course of his visit and they led to a conversation that lasted from Almaty to Frankfurt during which the term 'economic transition' became as much a challenge as a reality. What was this small Canadian firm going to do with an enterprise that, while oil was its main business, also included schools, health clinics, a farm, and so on and how was it going to do it? Little did I know it at the time, but I was hooked. Several research proposals, a travel grant, and a Fulbright scholarship during which I taught at the Kazakhstan Institute of Management, Economics, and Strategic Research in Almaty allowed me to return to Kazakhstan and to learn more about all aspects of 'economic transition' first-hand. This book is the result of those visits and of subsequent research.

The sale of the century

The book documents Kazakhstan's extraordinary sale of most of its large resource extraction enterprises, formerly run by the Soviet state, to mostly foreign companies over the relatively short period from roughly 1994 to 1997. No other country in the former Soviet Union undertook such a thorough-going restructuring of state enterprises through management contracts, joint ventures, and sales; indeed, a program of such scope undertaken in almost any other part of the world is virtually inconceivable. The story follows the new owner/manager's successes and, if failure, the subsequent sales or other arrangements made for the enterprise. It also places the current transition in historical perspective, both of the earlier periods of foreign investment in Kazakhstan and of industrial growth as part of the Soviet Union.

It should not be surprising that the enterprise sales of 1994–7 occasioned debate within the country. Initially dissent was minimal; more often than not the contract or sale of an individual large enterprise was greeted with enthusiasm for the promise it provided to revive the local economy. Headlines like "Pavlodar Aluminum Plant: A Second Life" and "Privatization Brings Stability" accompanied the announcement of new arrangements, whether they were outright sales or management contracts. The new investors/managers often announced plans for significant development, and there were widely publicized visits to the firms by government officials

who praised the new initiatives. As time passed, however, some of the contracts were found to be little more than paper transactions and no substantive change occurred at the enterprise. Many were declared to be in default. New deals were arranged, and/or bankruptcy soon followed. Some defaults were rather more controversial and, in almost all that involved foreign firms, the new investors/managers alleged that the principal reason that the terms of their contracts had not been fulfilled was because the Kazakh government had not fulfilled its promises. Many of these disputes have ended in court, either in Kazakhstan, The Hague or elsewhere; all have involved claims against the government for substantial financial (or other) restitution by the foreign firm.

Still, sales continued, and even though these were more often offered through public tenders, they were not always greeted so warmly. For example, the employees of Mangistaumunaigaz threatened a disruptive strike when in 1996 the government first announced a tender for the sale of a controlling interest. They argued there was no need to sell the firm; it had remained both productive and profitable. Similarly, the chairman of Kazakhstan's Independent Trade Unions Confederation, Leonid Solomin, argued that, rather than saving the small towns that had been built around specific enterprises, the sale of many of the enterprises had created "ghost towns" throughout the country and pointed to 56 towns where enterprises had been closed under their new ownership (*Feller Mining News* April 2, 1997). Many, including Solomin, voiced a concern that the enterprises had been sold at give-away prices. Others argued that if Kazakhstani managers had been given the same terms that had been given to foreigners, including exemption from taxes, clearing of all former debts of the enterprise, reduced rail tariffs, and the like, then they too could have successfully revived many of the large enterprises (Esentugelov 1997).

In September 1997, Kazakhstan's President, Nursultan Nazarbayev, who had been a leading advocate of the privatization program along with then Prime Minister Akezhan Kazhegeldin, abruptly joined those criticizing plans for additional sales. "We sold everything which could be sold. I won't allow the sale of the remaining enterprises" (*Focus Central Asia* 19–20 1997: 38). Specific criticisms of the principal architect of the program, Prime Minister Kazhegeldin, were also given substance in late August and September, when he was openly accused of having financial interests in at least one of the enterprise sales. In September, Kazhegeldin abruptly left the country for "medical treatment." It remains something of an irony that in a later effort to discredit Kazhegeldin, President Nazarbayev launched an investigation into some questionable property and bank accounts in Belgium which instead led investigators to discover the questionable transfers from numerous government accounts in Switzerland to President Nazarbayev himself as well as to members of his family and close associates.

Moreover, the property in question turned out to belong to the Eurasian Bank Group, one of the financial-industrial groups that has remained a close confidant of the President. Unsuccessful in his attempt to ensnare Kazhegeldin in an international scandal, President Nazarbayev brought charges of bribery and corruption against Kazhegeldin in Kazakhstan and had him tried in absentia. Not surprisingly, he was found guilty.

Kazhegeldin was replaced as Prime Minister in October 1997 by Nurlan Balgimbayev, the former Minister of Energy who had vigorously opposed the sale of the large oil enterprises. And just as quickly as it had begun, the sale of large enterprises was over (although work did continue on deals that had been agreed to before the halt). Moreover, the government announced its intention to audit all existing contracts and many of the sales came in for much more criticism. Headlines were more likely to be "Foreign-Owned Enterprises Owe the Republican Budget" or to be reporting disputed contract changes like "Canadian Company Intends to Take Kazakhstani Government to Court" as they were heralding a new output achievement, a new investment, or the revival of a small town. In late May 1998, an interview with President Nazarbayev recorded his new views:

> "It was inevitable that there will be mistakes and shortcuts," though he was careful to say Kazakhstan was not disenchanted with privatization "as an important component of economic reform." Without naming names, he said enterprises had been sold to unproven investors, some of whom he accused of attempting to get out of investment pledges, and using "cunning ruses" such as transfer pricing and offshore bank accounts to evade taxes. "We cannot reconcile ourselves with these facts, and will use all methods to correct the situation."
>
> (Clover *et al.* 1998: 3)

A central issue in examining the history of foreign investment in Kazakhstan is whether any of the contracts will be viewed as successes in the end. Many have already failed and the initial round of sales of individual enterprises was followed by substantial reconsolidation within commodity sectors. Even those firms that have remained in Kazakhstan have encountered significant difficulties and the book also attempts to identify common difficulties they have encountered. For example, international markets for virtually all natural resources contracted substantially in 1998 and prices ended the year at record lows. Additionally, the near collapse of the Russian economy in August 1998 left many Kazakhstani firms without markets for their output, no matter the price. Most new owners also had to deal with a variety of changes in government policies and in government control.

A century of sales and foreign investment

In the course of my research on Kazakhstan's economy and the role of its large enterprises, I became aware that foreign ownership of and investment in the country's principal enterprises was in fact not new. More than a century ago, several foreign companies had been given concessions by the tsar to develop mineral properties in Kazakhstan. Among them were three British companies, the Spassky Copper Mine Company, the Irtysh Corporation, and the Urals-Caspian Company that had developed the country's coal, copper, lead, and zinc resources and also had drilled its first oil well. Not only did I find there was a surprising amount of information still available about the companies and their experiences building what were the first large enterprises in Kazakhstan at the beginning of the twentieth century, but the enterprises themselves were still core enterprises in modern Kazakhstan. Thus, the Spassky Company developed the Karaganda coal fields and began the first copper works at Zhezkazgan. The Irtysh Corporation developed the Ekibastuz coal fields, the Ridder lead and zinc deposit at Leninogorsk, and began construction of a smelter. The Urals-Caspian Company discovered oil at Dossor and Makat in the Emba region on the northern end of the Caspian Sea. Their stories are retold in Chapter 2, including their efforts to obtain compensation after the operations were expropriated in 1918.

Kazakhstan was not rid of foreign investors yet, however, because the early Soviet government also offered some properties to foreign companies to develop on a concessionary basis in the 1920s. The Ridder works were included in one concession, as was the construction of a smelter to process the polymetallic ores. Like all the foreign concessions in this period, it was cancelled without notice in the later 1920s. Nevertheless, a number of foreign consultant engineers remained in the Soviet Union well into the 1930s on technical assistance arrangements to assist in the development and operation of important enterprises. Not surprisingly, several traveled to and worked in Kazakhstan, including again the copper mines and smelter at Zhezkazgan and the polymetal mines at Ridder. These experiences and their role in the growth of Kazakhstan's industry up to World War II are the subject of Chapter 3.

Foreign investment in Kazakhstan's economy was not quite finished, however, and in the aftermath of World War II the oil refinery at Atyrau was built with funds from the Lend Lease Program. But soon thereafter, Kazakhstan like most of the former Soviet Union was effectively closed, not just to foreign investment but to almost all foreigners. During this period, the existing enterprises in the mineral sector became larger still and new minerals discoveries as well as oil and uranium led to the development of numerous one company towns to support the development of the deposits, and there was little diversification of the industrial economy. Thus

by 1990, large resource-based enterprises still dominated the core of Kazakhstan's economy and Chapter 4 summarizes developments through this period. Chapter 5 chronicles the post-independence collapse in the country and sets the stage for the government's decision to privatize the large enterprises and sell them to foreign investors.

Foreign investment and operations in the 1990s

In Chapters 6 through 11, I describe the sales of the large enterprises in six key sectors – nonferrous metals; ferrous metals; precious metals; oil and oil refining; coal, natural gas and uranium; and electric power and telecommunications. Thus, the enterprises on which I have reported account for a significant portion of the country's total output and the amount of potential investment involved is large. At the same time, they do not comprise either all the large enterprises or all foreign investment undertaken in Kazakhstan since 1991.[2] There were numerous foreign firms committed to exploration and development of new resource discoveries, whether of oil fields in the Caspian region or of gold fields in central Kazakhstan. As well there was significant foreign investment in large enterprises in other sectors such as tobacco. Nevertheless, the enterprises and sectors I have selected are clearly the core of the industrial economy and they have been so for at least a century.

One difficulty I encountered was that the full details of no individual management contract or sale were public. Nevertheless, many terms came to light through corporate reports (if the foreign firm was a public company), though announcements associated with the initial contract, tender, and (or) sale, through media coverage of public allegations of nonperformance by either the purchasing firm or the government, and through other periodic reports and assessments of firms' performance. At the same time, I found that many terms in the contracts were similar, so that when taken together the information here provides a reliable description of how the large scale privatization program operated and the enterprises turned over to foreign management. I also found there to be a remarkable degree of similarity in the experiences of the foreign investors and of the subsequent performance of the enterprises, and such similarities serve only to strengthen the conclusions.

To recount this history, I assembled a variety of public information to verify reported sales, investments, and the like. Whenever possible, references are to press releases and corporate reports, either directly or through reports in newspapers and information services. One important aspect of the sale of the enterprises is who really bought them, however, and the answer sometimes remained only "rumored" or "reported" or even "widely accepted" because records have been kept private. Moreover, a significant number of the new "foreign" owners were companies registered

offshore in such places as the British Virgin Islands or the Netherlands Antilles, which made it all the more difficult to identify the new owners. However, over time some of the owners (or beneficiaries) of the offshore corporations have been identified.

It was especially difficult to trace connections between the new owners of some enterprises and President Nazarbayev or various of his family members, although as time passed many such links have become the subject of consistent rumor and conjecture. For example, many observers now link President Nazarbayev's son-in-law Timur Kulibayev to the largest private bank Kazkommertsbank, but in fact the documentable connections remain comparatively few. In April 2001 LeVine (2001) reported that a company that Kulibayev was said to control, Almex LLP, had "obtained permission from Kazkommertsbank to acquire 35 percent of that bank's stock." Subsequently, a 2002 ownership report on the bank's own website showed that as of January 1, the Kazakh firm Central Asian Investment Company owned a 36.27 percent share of Kazkommertsbank.[3] Meanwhile, many of Kazkommertsbank's investments were made via a company called Central Asian Industrial Holdings (CAIH, formerly named Central Asian Industrial Investments), registered offshore in the Netherlands Antilles, which is a wholly-owned subsidiary of Central Asian Investment.[4] Thus, it was CAIH who in fact owned the Shymkent refinery before it was acquired by Hurricane Hydrocarbons (see Chapter 9) and it was CAIH who ended up with the shares in Kazakhtelekom when the sale to Daewoo collapsed and Kazkommertsbank "acquired" the 40 percent share package (see chapter 11) and so on. In practice, in most articles CAIH was referred to as "a sister company" or "an affiliate" of Kazkommertsbank and the precise relationship left vague. Similarly, Kulibayev will be said to have amassed "a powerful commercial empire . . . including shares in various firms *through his reported stake in Kazkommertsbank*" (Olcott 2002: 228, emphasis added) although he is not listed officially among the owners of the bank.

Research in and about Kazakhstan is not aided by the fact that freedom of the press has little real meaning. Publications that try to find the facts and verify rumors often found themselves in opposition to the government and then without a publisher or out of business. For example, Alexander Samoilenko's semi-monthly journal *Focus Central Asia* often investigated the circumstances surrounding the sales of the largest enterprises – it went out of business in 1999. News reporters and publishers are regularly threatened as in May 2002 when the offices of *The Soldat* newspaper were trashed and two journalists beaten after publishing a series of articles about the international investigations of bribery and the frozen foreign bank accounts of some leading Kazakhs (Omarova 2002; Almaty Herald, May 23–9, 2002). The body of a dead dog was found at the offices of another newspaper which also covered the so-called Kazakh-gate investigations; the dog's head was found at the home of the paper's editor (ibid.). Both the

dog's head and body were accompanied by notes indicating there would not be a second warning. Last but not least, many of the leading publications are owned by the same financial and industrial groups which own the enterprises. The Kazkommertsbank group, for example, is reported to control the publication *Panorama*, which was the leading financial newspaper (*Institute for Current Political Studies* 1999). Inevitably then, there will be errors in what follows and some of the connections reported here will turn out to be wrong. Nevertheless, I believe most of the connections reported here are accurate, and certainly the overall pattern is more than accurate enough to assess the outcome of the government's sale of the country's large enterprises to foreign investors.

In each chapter, I have also assembled data on various indicators of the firms' performance, from trends in output of principal products to reported net profits. No econometric tests of significance are undertaken, however, for the reasons that the period for analysis remains extremely short, too many other factors affected the operating environment, and what data were available were usually of questionable reliability. World markets were volatile during the 1990s and both the Asian and the Russian financial crises affected the Kazakh economy, although their effects on enterprises in each sector may well have been different. Access to markets was a constant concern in most sectors but not necessarily the same among firms in the sector nor in degree for the sector over time. Moreover, it was impossible to date precisely the change in ownership for many of the enterprises. For many, there was the date an agreement was announced. There was a different date the first contract was concluded (a date which might also differ from the date new management took control). There was a date when the initial management contract became a sales contract. There might be several later acquisitions, and so on. Thus, identifying when a change in management might have been effective as would be needed for an econometric analysis was subject to more than the usual imprecision.

The result is an analysis that bore a closer resemblance to finding the pieces to complete a jigsaw puzzle than to traditional commodity market analysis or industry studies. It is nevertheless one that clearly describes the results of what was Kazakhstan's most significant foray ever into market economics – privatizing and selling the large-scale mineral and mineral fuels enterprises which continue to comprise the core of its economy – and its main conclusions are incontrovertible. In many sectors, the process has returned to just one or two owners control of all the enterprises in the sector. Many if not most of the foreign companies initially attracted to Kazakhstan have left and a substantial portion of the industrial economy is now controlled by individuals close to President Nazarbayev. Early in my research I interviewed individuals at the US-AID funded privatization office in Almaty and among other questions inquired how successful they thought the program was. They responded with detailed statistics of the numbers

and sizes of enterprises that had been sold. I tried again, asking how many of the enterprises sold through the program were still operating. But, it was a question to which they had no answer because success for the program was then measured only by numbers of firms processed. I am sure the same question asked now would get a more thoughtful answer, perhaps even some data on the number of firms still operating five or six years after having been sold or changes in output in various sectors. This book is my answer to what seemed at the time like a simple question.

2

FOREIGN INVESTMENT AND INDUSTRIAL DEVELOPMENT PRIOR TO 1920

The Kazakh steppes and mountain ranges have long been known for their mineral wealth. Mines in the Altai mountains along the country's north-eastern border with China and Mongolia were in use more than 4,000 years ago, since the beginning of the Bronze Age. The mines were well timbered, reaching depths of up to 100 feet, and were worked for tin, copper, gold, and silver (Meyer and Meyer 1936: 275–6). Ultimately abandoned, they naturally deteriorated and became overgrown, unused until they were rediscovered in 1717. More generally, the remains of other ancient mine workings and crude smelters were reported to have guided Soviet geologists centuries later in their re-discovery of many mineral deposits, including those at Zhezkazgan, Maikain, and Tekeli (Daukeev 1995: 1). The many caravan routes that crossed the country meant the riches were also known well beyond the Kazakhstan's borders. For example, camel caravans arriving in the city of Samara brought copper from mines to the east in Karaganda and archeologists have speculated that the people who lived in the Samara Valley might have been active participants in the east–west copper trade since the late Bronze Age (Anthony and Brown 2001).

When reports of the existence of mines in the Altai Mountains reached Peter the Great, specialists were sent to explore, redevelopment began in 1727, and additional discoveries of both old and new mines were made. In 1784, the English mining overseer Philip Ridder, who worked for a Russian family developing mines in the northern Altai, discovered the rich lead and silver mines near Ust-Kamenogorsk which became known as the Ridder mines (Conolly 1967: 46). The mines in Zyrianovsk were re-discovered in 1792 and those in Belousovsk in 1797. Mining expanded in the early nineteenth century when Siberian merchants bought mining properties in several more areas of Kazakhstan from local Kazakhs, generally for very small sums. The properties thus acquired included copper mines near Karaganda and Zhezkazgan and coal mines in the Karaganda basin. According to reports collected by Lansdell (1887: 103) as he passed through the Semipalatinsk region in the early 1880s, 31 gold mines were in operation that produced more than 400 pounds of gold. And, although a copper

smelter had been in operation in the 1860s, it had ceased by the time of his visit. More generally, the economy of Kazakhstan remained predominantly agricultural throughout the 1800s, dominated by the livestock herds that were the main livelihood of the nomadic Kazakhs, and the other industries that developed during this period were to process livestock products like hides and wool and, in the winter months, meat.

Towards the end of the century, foreign investment was encouraged throughout the Russian Empire and many mining properties were acquired and developed by foreign companies. As it happened, the two mining companies that were granted concessions on mines in Kazakhstan were both British – the Spassky Copper Mine Ltd and the Irtysh Corporation. In addition, of the many foreign firms developing oil resources near the Caspian Sea, another British concession, the Urals-Caspian Company, discovered and developed the first oil field in Kazakhstan. Their history is the history of the first foreign investment in what would become the Republic of Kazakhstan and each of the companies developed properties that are still parts of major enterprises in Kazakhstan today. The Dossor oil field of the Urals-Caspian Company is still a producing field in the enterprise now known as Kazakhoil-Emba. The Spassky Copper Mine Ltd included copper mines near Karaganda and Zhezkazgan (now Zhezkazgantsvetmet) as well as coal from the Karaganda colliery (now owned by Ispat Karmet and Zhezkazgantsvetmet). The Irtysh Company included the Ridder mines (now part of Kazzinc) and the Ekibastuz coal mines (now divided among three different foreign investors).

Many of the difficulties which foreign investors must contend with today in developing operations in Kazakhstan also confronted the initial foreign entrepreneurs and indeed all subsequent developers of resources in Kazakhstan. Foremost among the problems was (and continues to be) logistics. Supplies had to be brought hundreds of miles and, at the time these early entrepreneurs were developing operations, transport within the country was restricted to camels, horses and one navigable river in the northeast. Communications were slow at best. The mines were developed under the direction of Europeans and Americans and the laborers included significant numbers of Russians and Ukrainians. Local Kazakh workers were employed as well, but often for only the most manual jobs; moreover, Kazakh lands were taken over by the new settlers to raise food. Not surprisingly, ethnic relations were sometimes difficult. For the most part, profits went overseas, to Britain in the case of these enterprises, raising questions about the ultimate benefits of foreign investment more generally. In addition, these enterprises, along with all the foreign-owned enterprises throughout the former empire, were nationalized shortly after the October Revolution and the new Soviet government took control. The nationalizations led to claims for reparations against the new government, claims that the investors hoped their own governments would insist were paid

before granting the Soviet government formal diplomatic recognition. As it happened, the owner of one of the companies in Kazakhstan, Leslie Urquhart, came to represent many investors in their negotiations with both their own and with the new Russian government. His efforts to obtain compensation have many parallels with the many negotiations between more recent investors and the government of Kazakhstan over changes in contract terms as well as outright contract cancellations.

Finally, the early history of industrial development in Kazakhstan is important for its own sake. Most discussions of Kazakhstan's economic history do not discuss the development of the resource-based industries before the Soviet period, understandably concentrating on agriculture and the transformation that began almost as soon as it became a part of the Russian Empire.[1] Undoubtedly, the agricultural policies of the period, which impinged directly on the Kazakh's traditional nomadic way of life, affected by far the most people (Olcott 1995). Among other things, the polices created land rights for the Kazakhs, but the parcels were small and not based on the needs of maintaining large herds of sheep, camels, and horses. Government officials confiscated surplus lands and made these available for settlement by Russian and Ukrainian peasants. In many areas the traditional grazing lands were thus given over to more intensive agriculture and seasonal migrations disrupted in what was to prove to be the beginning of the end for the largely nomadic society. With the immigration of so many peasants seeking land (and so many to operate and support the mines), the steppe was transformed "from an ethnically homogeneous to an ethnically diverse society and introduced nearly 3 million Europeans into a society of fewer than 5 million Kazakhs" (ibid.: 96). Heavy reliance on foreign investment was to exacerbate the trend, bringing ever more foreigners to the newly developing industrial/urban centers of Kazakhstan.[2] In all events, balancing the multi-ethnic interests of today's diverse population in Kazakhstan remains a very important current policy concern.

Foreign investment and the Russian Empire

A number of studies have documented the important role foreign investment played in the industrial growth in Russia in the latter part of the nineteenth and early twentieth centuries (McKay 1970: 1–39). Three policies were especially important in attracting foreign entrepreneurs – high tariff protection for industry, extensive railway construction which nearly doubled trackage from 1889 to 1901 and included construction of most of the Trans-Siberian railroad (begun in 1891 and completed in 1904), and a campaign of propaganda, public relations, and enthusiasm both in Russia and abroad to create a generally supportive environment for foreign entrepreneurs. In consequence, industrial investment in Russia grew at annual

rates greater than 9 percent from 1894–9, and by 1900 foreign investment amounted to 45 percent of the total. It remained at those levels or more through 1914. In mining and ferrous metallurgy, foreign capital amounted to some 67 percent of total investment by 1897. It also was very significant in the development of the oil fields near Baku and later the Caucasus. Not surprisingly, some of the investment eventually found its way to the Kazakh steppes, although the bulk of foreign investment there did not occur until after 1900.

A census in 1913 identified 85 industrial enterprises in Kazakhstan with total output amounting to some 67 million rubles.[3] Together the enterprises employed 19,900. Of the total output, some 20.1 percent was connected to resource extraction and processing, with nonferrous metals, including mining, accounting for 12.1 percent, oil 3.7 percent, and coal 1.4 percent. The remainder was accounted for by agriculturally-based enterprises. Food processing comprised 62.6 percent of Kazakhstan's total industrial output in 1913 while leather and fur, cotton ginning, woolen goods, and wool washing accounted for 17.3 percent. The census also identified two main industrial centers in Kazakhstan in 1913 – Uralsk and Semipalatinsk – with output in each valued at more than 5 million rubles. Four other cities – Dossor (Emba), Karaganda, Petropavlovsk, and Almaty (then Verny) – were slightly smaller with industrial output of between 2 and 5 million roubles each.

As evident in the map in Figure 2.1, half of the principal industrial locations in 1913 – Semipalatinsk, Karaganda, and Dossor – derived their importance directly from foreign investment in nearby resource extraction enterprises. Dossor was the site of the Urals-Caspian oil enterprise in the Emba region of western Kazakhstan. Karaganda was the center of the Spassky Copper Mine Ltd's initial investments which included the development of a copper smelter at Spassky Zavod, mines at Oospensky, a concentrator at Sary-Soo, and coal resources in Karaganda. By the time of the 1913 census, its operations also included the development of copper mines at Zhezkazgan and coal at Baykonur. A third industrial center, Semipalatinsk, although mainly an agricultural trading and processing center, was also important in the development of mining reserves because of its location on the Irtysh River which provided a navigable connection to Omsk and the Trans-Siberian railroad. It was about halfway between the Ridder mining operations upriver in the Altai mountains and the Ekibastuz coal basin downriver that were the core of the Irtysh Company's plans and their development was to contribute to Semipalatinsk's growth as an industrial center. Of all the industrial operations in the 1913 census, Dossor was the largest single employer with more than 1,000 workers, which was about 5 percent of the total industrial workforce (Alampiev 1959: 114). By 1916, the Emba fields employed a total of 3,260 while the Spassky operations employed some 1,400, about 800 in copper mining and processing

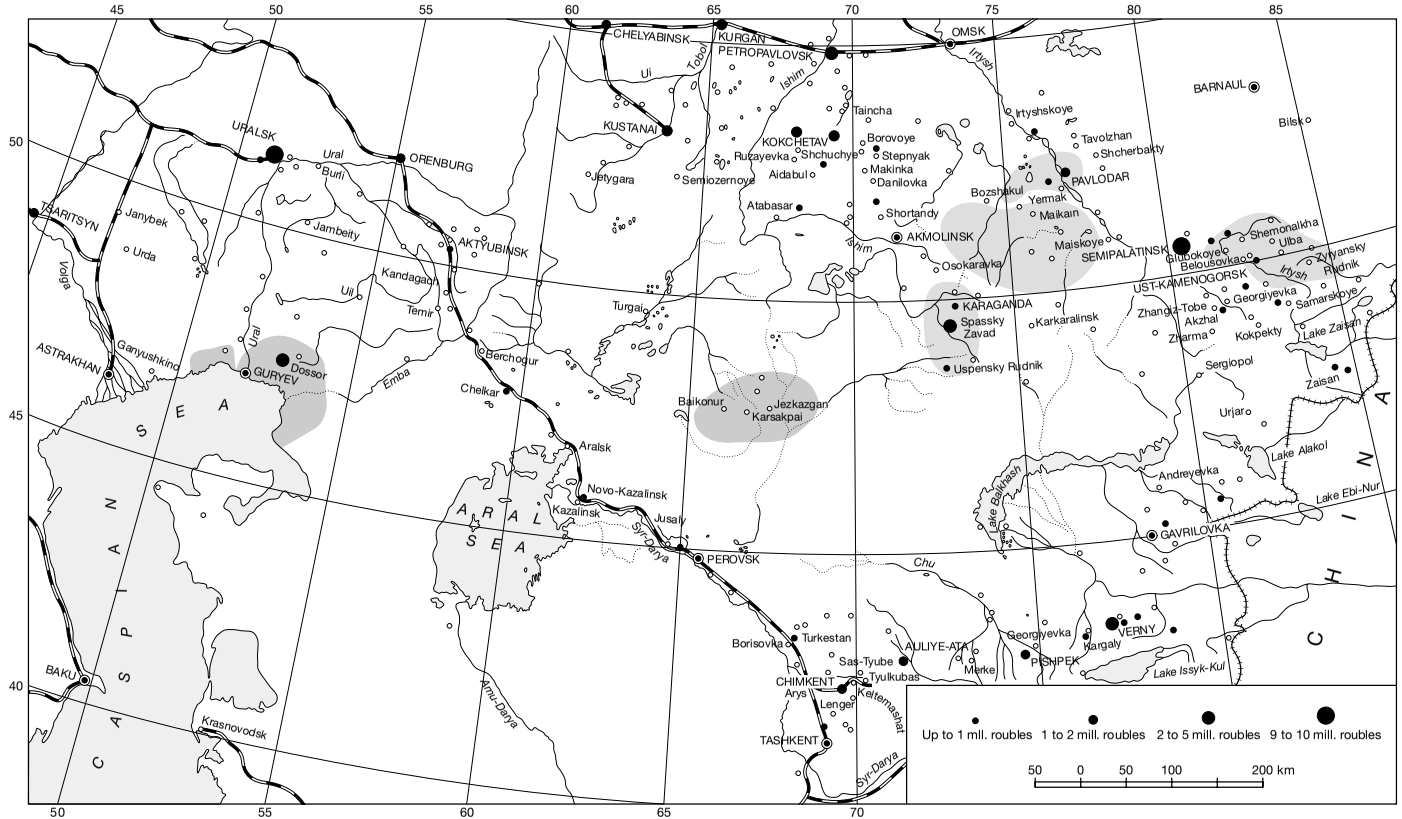


Figure 2.1 Industrial localities and main areas of foreign capital in Kazakhstan before the Revolution. Following Alampiev, areas of foreign capital are shaded gray.

Source: Adapted from Alampiev (1959: 88–9 and 112–13)

and 600 in supplying coal (ibid.: 107). Finally, the Irtysh Company, although not important in the 1913 census, was to grow rapidly until the Revolution.

The Spassky Copper Mine Ltd[4]

Russians explored mineral deposits in the Karaganda area beginning in 1847 when they found remains of more primitive mining operations near an outcrop of what was likely to have been nearly pure copper. According to Wardell (1958), the area around the mine, Oospensky Roodnik (the Mine of the Assumption), had been acquired by the Ryazanov family in 1861 from local Kazakhs. The nearby Karaganda coal field was acquired in 1856. Outcrops of copper ore were worked for several years and then four small shafts were dug to follow the ore. These were exhausted in 1904 and the (by now) absentee Russian owners who lived in Ekaterinaburg were interested in selling. Meanwhile, rumors of the coal and copper deposits had reached London and the Fell brothers, both engineers with interests in overseas mining ventures. In January 1903 Nelson Fell journeyed from London to Kazakhstan to investigate, returning a few months later with a detailed report of the Karaganda coal resources, the rich copper lode at Oospensky, and the operation of the small smelter at Spassky. The brothers formed the Spassky Copper Mines Ltd company, with Arthur Fell as chairman, and sold shares to raise capital to purchase the mines and smelter. Nelson Fell traveled to Ekaterinaburg to acquire the properties in June 1904 and in the autumn he returned to Kazakhstan as the general manager of the enterprise where he remained for four years.

According to Fell (1916: 25–43), the mines had been first acquired by a Russian who, as a prisoner of the Kazakhs, had made himself so useful to them that they awarded him 100 versts of land. He selected lands around the evidence of copper deposits and then sought financing from a friend back in Russia to start up the mines and build a crude smelter. Once started, the mines and smelter operated quite profitably for nearly 50 years. By 1904, all that remained of the original Russian owners were the Ryazanov heirs in Ekaterinaburg – a daughter and her five grown children – who wanted to sell the property. Fell did not identify either the former prisoner or the financier by name but, since in some sources the mines are referred to as the Popov mines, it may be that Popov was the former prisoner and Ryazanov the financier.[5] Fell paid about 200,000 roubles on behalf of the Spassky Copper Mine Ltd all in cash that the heirs proceeded to divide among themselves on the spot.

Fell's initial tasks were to restart the mines and smelters and, in the process, he greatly expanded the scope of their operations. A year later the Spassky works employed close to 1,800 men. He hired as many Russians as he could find for technicians, accountants, storekeepers, and foremen in the mines; the Russian government sent a village of peasants from the

Ukraine to establish themselves near the works and provide food and fodder. Kazakhs were also employed, mostly for manual labor in the mining operations and especially as haulers. A substantial number of haulers were required, to haul coal and ore to the smelters, to bring timber to the site, and to transport copper to the nearest rail connection and return with various mining supplies. All involved considerable distances and thus the requirements for animals and feed were large (Alampiev 1959: 106–7). The coal came from the Karaganda fields, which were some 26 miles north of the smelters at Spassky, while the Oospensky mine was 68 miles south-southwest of Spassky. In the summer, carts drawn by oxen hauled coal and ore to Spassky, in the winter camels pulled sleds. Up to 1,200 carts were reported to shuttle regularly between Spassky and Oospensky in the summer. Another 1,000 carts were employed bringing timber to the mines from as far as Karkaralinsk, some 100 miles to the east. Even though a narrow gauge railway was built to connect the coal mines, it did not also connect the smelter to the mine and thus carts and sleds continued to be used to haul coal to the smelter. Even more daunting, the entire operation was more than 510 miles south-southeast of Petropavlovsk and the Trans-Siberian railroad. It required nearly four weeks to deliver copper ingots to Petropavlovsk from Spassky in caravans which could travel no more than 2 to 2.5 miles an hour. The caravans returned with supplies for the mine and smelters and goods for the thousands of workmen. The ores at Oospensky were rich and a pood (16.34 kg) of copper cost only 4.5 roubles to produce in 1914; it cost another 13.68 roubles to transport it to Petropavlovsk. Nevertheless, the operation was extremely profitable, and after just four years Fell returned to London a rich man.[6]

Spassky Copper Mining Ltd continued to develop the Spassky properties after Fell left and, by 1914, had acquired land in Sary Soo just 10 miles from Oospensky to build a concentration plant to process the increasingly less rich ores coming from the mine, in Sasik Kara Soo (near the colliery in Karaganda) to develop an iron ore lode for use as flux in the smelter, and a limestone quarry to provide limestone for flux. Quartz, fireclay and clay were also available on the properties. The company also acquired additional copper mines in Zhezkazgan and coal in nearby Baikunor,[7] both about 500 miles west-southwest from their Spassky operations. Plans were developed to modernize the smelting plants at Spassky, build a concentration plant in Sary Soo, and build both a concentration plant and a smelter at Karsakpay for the Zhezkazgan operation. The company hired three new engineers in 1914 and sent them to oversee the new developments, one for the Spassky operations (Wardell) and two for the new development around Zhezkazgan. When the new concentration plant and remodeled smelters were in operation at Spassky, the cost of copper production was reduced by about 15 percent. Development of the new properties around Zhezkazgan and construction of a smelter were substantial undertakings.

Men and materials traveled by rail via the Orenburg–Tashkent railroad as far as Zhusali along the Syr Daria east of the Aral Sea. From there, the mines were then 350 km distant, along an old caravan route heading north northwest from Zhusali. Heavy equipment for the smelter was delivered from Zhusali to Karsakpay using a dismantle-able narrow gauge railway, 14 km long. "As soon as the trains carrying equipment passed over the line, it would be dismantled and laid again. Slowly this 'caravan' moved ahead. It took about three years, from November 10, 1914 to October 8, 1917 to transport the equipment . . ." (Alampiev 1959:105–6). Construction of the smelter was started but it was not completed by the time of the October Revolution and subsequent expropriation of all properties.

Operations at Spassky were first nationalized on March 27, 1918 by decree from Moscow. The local workmen's committee took over the mines and works. By this time, operations had deteriorated considerably as conditions in Russia had grown more and more difficult. Strikes throughout the country disrupted the provision of supplies to the operations generally. At Spassky, workers had first organized to demand improved wages and working hours, winning an eight-hour work day and then a six-day work week. Wages were increased some 200 percent. Ultimately, local representatives of the new government became the virtual managers of the operations as almost nothing could be done without their approval. Operations slowed. With nationalization in March, all the foreign engineers, managers and their families gathered at Spassky to await the end of the spring rains and the opening of the roads to travel to Petropavlovsk and the railway. They left on May 20 (by which time of course the White Army was battling to reclaim much of the Russian countryside) and arrived in Petropavlovsk to find that a Czech Legion was in control, indeed had taken control of the Trans-Siberian Railway from near Moscow all the way to Vladivostock. Fighting continued, however, and the railroad stations were used for troop assembly and training areas so the group was not able to travel beyond Petropavlovsk. Soon, the British managers and engineers learned that the White Army had re-taken control of Spassky and arrested the representatives of the Bolsheviks. Moreover, they wanted the foreigners to return to Spassky to operate the mines and thus returned the enterprises that had been nationalized to their British owners.

In July 1918, the first group of Spassky's foreign managers and engineers returned to Spassky from Petropavlovsk; a second group was not able to return until the fall due to illness and provisioning needs. The returning staff found that the only work that had continued in their absence was at the coal mine.

> At Oospensky the pumps had been neglected, and the copper mine was full of water. . . . At Sary Soo the engines had been dismantled for an overhaul and knowledge was lacking for their

> reassembly. . . . At Spassky the use of incorrect charges had nearly ruined the furnaces and converters. . . . The workers, although subdued and tractable, were sullen, and they longed for the return of Bolshevism.
>
> (Wardell 1958: 164)

The works were restarted, however, and operated for nearly another year when, on July 2, 1919, an accident in the laboratory at the Sary Soo concentration plant caused a fire that burned the operation to the ground.[8] By the end of July 1919, the Soviets had regained control of much of the country, re-nationalized industry, and the foreigners at Spassky were advised to leave the country. And so they did, traveling this time first to Aksu (then Yermak) on the Irtysh River, then north on the river to Omsk, then via rail to Vladivostock and thence China, ultimately journeying on from Shanghai via a steamer. Operations at Spassky slowly came to a halt (Alampiev 1959: 140). The Sary Soo concentrator had been destroyed, whether by accident or intent, and a new plant had to be built. Meanwhile, the Oospensky mine had flooded and restarting operations proved to be difficult. The other buildings at Spassky deteriorated rapidly and threatened collapse. The decline in copper operations meant there was almost no demand for coal, and operations at the Karaganda collieries also slowed. Production of coal declined by more than half from 1917 to 1921, and then ceased.

Dossor and the Urals-Caspian Company

Like the mineral resources of Kazakhstan, the presence of oil in the Caspian area generally, and especially near Baku, had been known for centuries. Baku emerged as the center of the Russian Empire's oil industry following the abolition of a state monopoly on oil production in 1872 and the opening of the Caspian area to private development and foreign investment.[9] Baku itself grew from a population of around 14,500 in the early 1870s to over 143,000 in 1903 and 214,000 ten years later. Oil production grew rapidly too. At the turn of century, Baku's fields produced more than 50 percent of the world's supply of oil and (for a brief time) exceeded production in America. The changes brought to Baku during this period of early oil exploitation adumbrate those that were to occur throughout cities in Kazakhstan as nearby mineral resources were discovered and developed. Among the earliest investors in Baku's oil fields were the Nobels who participated in the first auction of state property in 1872. The Rothschilds soon followed, investing in transport and processing facilities in Batumi on the Black Sea coast beginning in 1879 in order to control the trade in oil with European markets not owned by the Nobels. Ultimately, oil development in and around Baku attracted a number of

other European investors including Marcus Samuel (Shell) and Henry Dettering (Royal Dutch).

Interestingly, comparatively little was known of the real extent of the oil reserves elsewhere around the Caspian all the while those near Baku were being developed. However, in 1905, ethnic uprisings in Baku coupled with widespread social unrest throughout Russia devastated the major production fields around Baku. Of 200 or more derricks operating in the Bebi-Heybat field, for example, 118 were destroyed by fire, as were most of the buildings. One consequence of the uprisings and subsequent disasters was that firms began to explore more systematically the areas beyond Baku for oil so as to diversify their holdings. Although most of the new development was to be to the north and west of Baku near Grozny, there were some other explorations as well. In van der Leeuw's account, the Nobels drilled the first new wells on the eastern side of the Caspian on Cheleken Island (just off what is today Turkmenistan).[10] By 1911, production was 820 tons per day. To the north, an exploration license had been acquired by the British Urals-Caspian Company for the Emba region inland from the northern end of the Caspian. In 1912, a well drilled by Urals-Caspian at Dossor was successful and attracted investment interest from Dettering (Royal Dutch). Additional leases in the area evidently were obtained by one of the Nobels' companies, Emba-Caspian, but there was little additional exploratory drilling at that time.

Development of the Dossor field was complicated a great deal by its location some distance to the north and east from the port of Atyrau, then Gur'yev (Alampiev, 1959: 90–134). Water was inadequate and Urals-Caspian proposed building a water pipe from the Ural River to the field. However, the region around the Ural was controlled by Cossacks, and they refused permission for both a water pipeline and a pumping station. As a result, water had to be brought to Dossor from wells 25 km away, wells that were so small they had to be locked to prevent local stock herders from drawing water as well. There was not enough for both. The Cossacks also refused to permit the building of a pipeline from the field to the port of Atyrau to deliver the oil where it could be loaded for further shipment. Instead, a pipeline was built to Rakusha, an inadequate port some 40 miles east of Atyrau. Because of low water levels, barges could only be partially filled at Rakusha, then had to be moved further into the Caspian and additional supplies brought to them to complete loading. Nevertheless, the Urals-Caspian Company continued to develop Dossor and by 1913 employed 3,260 workers and produced some 117,600 tons of oil. A second field, Makat, was discovered in 1916. As with the mineral enterprises, Dossor was nationalized first in 1918 and then again in 1919 when the Bolsheviks regained control. The enterprise was virtually destroyed when the retreating White Armies blew up all the oil installations and 90 percent of the oil stocks were burned.

The Irtysh Corporation and its plans for Ridder and Ekibastuz[11]

On April 12, 1912 Leslie Urquhart registered the Russo-Asiatic Corporation in London in order to acquire mining interests in Kazakhstan. The new company was capitalized at £300,000 from two banks and the Anglo-Siberian Corporation, another London firm in which Urquhart had interests and which itself was operating copper and iron mining properties in Russia. Urquhart was no stranger to the Caucasus or Russia. From 1902 to 1906 he had been in charge of a British group of petroleum companies developing oil fields around Baku. Soon after, he raised considerable capital in London for what were to become a series of companies with investments in Russian mineral enterprises. The first was the Anglo-Siberian Company, in which he held a 30 percent interest, and through which he acquired options on the entire capital of Kyshtim – significant iron and copper works in the Urals which were badly in need of financing for their development. Once surveys were completed and the quality of the deposits established, the Anglo-Siberian Company acquired the estates in partnership with another London company (East Russian Mines Ltd) and a personal friend of Urquhart's in Moscow. Urquhart was named managing director of the partnership, the Kyshtim Mining Works, and moved to Kyshtim in 1907 where he would remain for five years. By 1912, all of Kyshtim's operations were generating profits, including the copper operations that were producing nearly 20 percent of Russia's total output of blister copper.

Having successfully rehabilitated Kyshtim, Urquhart renegotiated his contract not only to assure his continuing control of the operation, but also to raise his salary and to include the possibility that he might negotiate new partnerships on other developments. Among the opportunities Urquhart wanted to explore were some coal mines and lead-zinc mines in Kazakhstan. The Russo-Asiatic Corporation was formed to acquire options on these properties as well as others and to undertake survey work. Among his partners in this venture was Herbert Hoover. By January 1914, the surveys had been completed and Russo-Asiatic announced its intentions to proceed with the development of three properties – the Ekibastuz coal mines, Ridder lead and zinc mines, and a lead-zinc-silver mining concession on the Mongolian border. Initial development work was to focus on the two operations in Kazakhstan. In April, Urquhart concluded negotiations over the formal structure of the joint stock companies that would hold the properties. They were the Ridder Mining Company and the Kirgiz Coal Mining Company; all of their share capital was to be held by the Irtysh Corporation, a new London company whose share issue would be underwritten by Russo-Asiatic. The Irtysh Corporation was authorized to issue debentures up to £1.25 million in value to raise capital for the development of the operations.

Urquhart traveled to the new mines in June 1914, by rail to Omsk and then by steamer up the Irtysh River to Aksu, terminus of a rail line from the Ekibastuz mines to the Irtysh River, a distance of about 60 miles. One of the attractive features of the operation was that the coal mine had a ready market for about 150,000 tons of coal per year in sales to the river steamers, funds that would provide some revenues while the other developments were undertaken. At Ekibastuz, Urquhart approved plans to expand coal production to 400,000 tons per year by 1916, build a pipeline to bring water to the operations, build a lead refining plant and a zinc smelter, equip the railway, and build housing and other amenities for the workers. Traveling on to Semipalatinsk, he acquired a fleet of steamers and barges to move ore from the mines to Ekibastuz where it would be smelted in the new plant. Finally, he arrived at the Ridder mines where he developed plans to expand production and to build a concentration plant, a railway from Ust-Kamenogorsk (on the Irtysh) to the mine, and housing. In all, Urquhart anticipated that the combined operations of the mine, transport, smelting, and coal works would employ over 10,000.

Urquhart returned to London to oversee raising capital for these projects through the Irtysh Corporation. Some £500,000 of debentures were issued, of which Urquhart underwrote £100,000 personally. Not surprisingly, he was appointed chairman of Irtysh. Returning to Kazakhstan in May 1915 he found much had been accomplished already. At Ekibastuz, the coke works were operational and surplus coke was being sold to munitions factories in Urals. The zinc smelter had started operations and construction of the lead refinery was nearly complete. At Ridder, the concentration plant and the railway had been completed. They had also acquired eight steamers and 26 barges.[12]

In short, Irtysh – that is, Ekibastuz and Ridder – was rapidly becoming one of the largest metallurgical operations in the Russian Empire. With all the investment in the operations, it is hardly surprising that Urquhart was greeted warmly when he returned to inspect them. "At Ekibastous (sic) and Ridder, formal welcomes were arranged by the management; workers surrounded the railway stations on his arrival, waving flags and cheering. Even at the river towns of Ermak and Ust-Kamenogorsk, he was afforded mayoral receptions . . ." (Kennedy 1986: 95). These receptions were not unlike those nearly a century later that were given many of the new foreign investors in Kazakhstan's metallurgical enterprises when they first arrived to begin restructuring and rebuilding their operations, not to mention paying wages. Perhaps more surprising, some of the more recent foreign investors met with essentially the same fate as the Urals-Caspian, Irtysh, and Spassky companies when their contracts were canceled and investments lost.[13] And, like them, Urquhart sought reparations for the confiscated properties. Along with Spassky and Urals-Caspian, Irtysh was first nationalized in June 1918 and then returned a month later when the opposition armies

were in control of most of Russia east of the Urals. Operations continued until the autumn 1919 when the Bolsheviks defeated the opposition armies, took control of the country again, and once again nationalized the enterprises. Operations at both Ridder and Ekibastuz ceased. The Ridder mines flooded and the roads, buildings and equipment fell into decay.

As one of Britain's most successful long-term investors in Russia, Urquhart was widely looked to to provide advice to the British government in dealing with the new government in Russia, to represent other investors also seeking reparations for expropriated properties, and of course to seek reparations and/or new contracts to resume operations for his own companies. As might be expected, sometimes these roles were so intertwined that the appearance of conflicts of interest could not be avoided. On the diplomatic front, Urquhart urged the British government to approach negotiations over the possible resumption of trade with the Soviets with extreme caution and to insist on reparations and payment of debts as conditions of formal negotiations and *de jure* recognition of the new Soviet state, a position which the British government accepted. Indeed, the first discussions in May 1920 with a Russian delegation adjourned when British representatives demanded Russia recognize the debts and claims of British subjects, among other conditions. Discussions continued, however, and eventually drafts of an agreement were exchanged. But, at the end of 1920, negotiations ended with Britain still demanding that Russia acknowledge its obligation to pay reparations and debts. However, as other European governments began to recognize the new Soviet government formally, British diplomatic resistance gave way to an acceptance of a trade relationship in March 1921.

During this period, Urquhart was approached privately to negotiate a possible return to Russia to resume operation of his various properties, but it came to nothing when Urquhart insisted on settlement of existing claims first. Understandably, he was extremely disappointed when the British government acknowledged the legitimacy of the Soviet government without first obtaining "recognition at least of the principle of restitution of property belonging to British subjects, and confiscated by the Soviet Government instead of relegating consideration of these questions to the time when a Peace Treaty is negotiated between Great Britain and Russia" (Kennedy 1986: 149). Nevertheless, in the spring 1921 Urquhart discussed ways he might return to Russia and resume the operation of his many properties with the principal Soviet trade negotiator. By then accepting that an outright return of the properties was unlikely, in these discussions Urquhart was prepared to accept a leasing arrangement if it were for 99 years. Other terms included an exemption from all other taxes against a payment of 25 percent of the profits to the government, freedom from Soviet control of his management, and a £500,000 credit in London for expenses in restarting the operations. The latter was seen as necessary in part as payment for the assets that had been expropriated. The Soviets offered a

lease of 30 years, wanted 33 percent of the profits, and barter of goods and services locally in lieu of re-equipping expenses.

Despite the significant differences over terms, Lenin evidently was prepared to support the possibility of granting a concession to Urquhart, a development that gave Urquhart cause to believe he was close to gaining control of his company's assets once again. Not unrelated to the change of attitudes, Urquhart had intervened on behalf of Moscow with his old friend (and earlier investor) Herbert Hoover, then US Secretary of Commerce and in charge of the postwar relief programs, to secure famine-relief aid for Russia from the US. In turn, Lenin invited Urquhart to Moscow to finalize terms of a concession. In the event, Urquhart was disappointed again. Although he went to Moscow with high hopes, neither he nor Lenin were willing to moderate their positions and no substantive progress was made on reaching an agreement on a new concession arrangement to resume mining operations.

Notwithstanding this disappointment, Urquhart soon began another round of serious negotiations for the return of his properties. In the discussions, which lasted from the late spring of 1922 into the fall, Urquhart accepted some modifications to the proposed concession arrangements. In particular, he accepted that some of the assistance restarting the enterprises would be paid in local currency and was prepared to set royalties and taxation together at 8 percent of the gross value of sales, although he still insisted on a 99 year lease. By the time the proposal was discussed in Moscow, however, there was considerably less support for granting a concession to Urquhart among Soviet officials and, whatever Lenin's personal position, the council headed by Lenin voted overwhelmingly against the proposal. The most likely reason the contract was turned down was not disagreement with the contract terms themselves, but a power struggle underway within the new government that left Lenin estranged from many within the party. In the end, although he favored concessionary arrangements to attract much needed foreign capital whereas "the more unrealistic members of the Party . . . refused to accept a return of foreign capital under any guise" (Sutton 1968: 7), Lenin was not willing to vote against them on this contract.[14] Another possible factor in the unpopularity of the contract was its sheer size. Urquhart's interests included the properties in Kazakhstan, Kyshtim and Tanalyk which together comprised 12 developed metal mines, coal mines, four non-ferrous metal smelters, a refinery, iron and steel mills, and 20 sawmills (ibid.: 77).

The issue of reparations and in particular of reparations for Urquhart's mining ventures was to be discussed several more times, including an offer in 1929 for a concession on the Ridder and Ekibastuz properties specifically, but none of the negotiations were successful. Throughout the 1930s Urquhart's company continued to appeal to the British government not to forget the reparations question, Urquhart himself having died in 1933.

Although these appeals brought no response, it was not until 1957 that the company was actually placed in liquidation. The liquidator's report, recommending a return of capital to the shareholders of the princely sum of 0.3468 pence per share, was approved in 1963.

Meanwhile, beginning in 1921/22 the Soviet government negotiated new concessions with many foreign investors. In 1923, procedures were formalized for granting concessions, including the creation of the Chief Concessions Committee and, of some 579 applications for concessions received that year, 45 were approved (ibid.: 9). The following year another 55 were approved, 103 in 1924/25, and 110 in 1925/26. Among others, exploration rights in the Emba fields were concessioned in 1923 to the French company Duverger (ibid.: 19), and, as noted above, development of the Ridder mines was concessioned to the British company Lena Goldfields Ltd in 1925 (ibid.: 77). Thus, although the Urals-Caspian, Spassky and Irtysh companies did not resume operations in Kazakhstan, foreign investment in Russia in fact continued well into the 1920s, and it included at least some investment in the development of Kazakhstan's resources. More, even when the new contracts were themselves canceled (and new demands for reparations were made), many foreign engineers remained in the Soviet Union to oversee operations at individual enterprises well into the 1930s. Thus, although these three foreign investors were not to return to Kazakhstan, other foreign operators took their place.

Conclusion

Prior to 1920, the development of Kazakhstan's mineral wealth was admittedly quite limited, amounting to only 20 percent of a comparatively small total industrial output. Perhaps it is surprising then that almost all of the development from 1900 to 1920 was accomplished through foreign investment, principally through three British companies. In part, it is the comparative isolation of Kazakhstan that makes it seem surprising that three British companies were once the leading industrial companies of Kazakhstan. In the early 1900s, the Trans-Siberian and Orenburg–Tashkent railroads provided access only to the borders of Kazakhstan, to Petropavlovsk and Omsk in the north and along the Syr Daria to the southwest. The Irtysh River provided river access from Omsk to Semipalatinsk in the northeast and the Ural River to the Caspian Sea in the west. In between lay the vast expanse of desert and steppe country, most not yet permanently settled although home to the nomadic Kazakh herdsmen. On the other hand, perhaps it was perfectly predictable that the first foreign investors in Kazakhstan would be British companies. By the beginning of the twentieth century the British had been long interested in Central Asia because of its position as a buffer between their own interests in India and the potentially expansionist ambitions of the Russian Empire.

Surely isolation was what made development of Kazakhstan's mineral resources such an incredible undertaking at the beginning of the twentieth century. Transportation almost anywhere within the country was chiefly by carts and sleds, horses and camels. All supplies and equipment had to be hauled over land to reach the various mineral deposits, and the products, whether refined copper, lead, zinc, or oil had to be hauled out one way or another. Just to bring the equipment necessary to build a smelter in Karsakpay, the Spassky company resorted to using a moving railroad, a process that took three years. Camels carried refined copper from Karaganda to Petropavlovsk, a journey which by one estimate cost nearly four times as much as extracting the copper itself. In consequence, one of the first priorities of planners in the 1920s and beyond became the extension of railroads to move ores, coal and oil more easily. Not surprisingly, Kazakhstan's relative isolation continues to make the development of its resources a challenge at the turn of the twenty-first century and has kept transportation issues among those with the highest priority for Nazarbayev's government, for new foreign investors, and for the international development agencies alike. More to the point, the development of additional transport capacity was a specific condition in the terms of sale of at least three of the oil enterprises, as will be seen in Chapter 9. For their part, the international development agencies are financing both road construction and port reconstruction initiatives.

In hindsight it is clear that the investments of the early entrepreneurs always risked expropriation; it is less clear whether they were aware of the risk of expropriation when making their commitments. Leslie Urquhart for one was unwilling to believe that the Bolsheviks would defeat the counter-revolutionaries and regain control of Russia. Then, when it was clear they were in control, he was unwilling to believe they would remain in power long or, if they did, that they would not have to deal with the reparations questions. He was wrong on all counts. Notwithstanding these experiences, foreign investors returned in the 1920s only to be expropriated again by 1930. By contrast, today's entrepreneurs almost surely factored the risk of expropriation into their investment decisions and took great care to forefend against as many contingencies as they could in their contract negotiations with the government. Even so, they too were surprised by subsequent government actions or decisions. In its contract to acquire and operate the Almaty power system, for example, the Belgian firm Tractebel included a specific formula for the calculation of heat and power rates in order to insure themselves of what they believed to be rates commensurate with the size of investments needed to modernize the system. As will be seen in Chapter 11, however, the government found it could not live with the social costs of rates pushed ever higher, even if they had agreed to them in principle, and simply canceled the contract (although in this case they did re-acquire the assets from Tractebel). When the Canadian company

World Wide Minerals acquired the Tselinnyy uranium processing plant and several mines, they had included in their contract the right to market uranium (see Chapter 10). Yet, when the first sales were made, the government refused them an export license. Without permission to market, World Wide closed their operation and then sued for the return of their investment. Even with numerous arbitrations, they still have not recovered their initial investments. These are but two of many such instances in the modern contracts and it would seem that today's foreign investors shared with Urquhart and his colleagues an optimism in their capacity to adjust, to make changes, and to otherwise accommodate change that was unlikely to be justified by actual events.

By its very nature, foreign investment brings new management, introduces new technology, and oftentimes requires the import of substantial numbers of people and amounts of equipment and supplies, simultaneously leaving operation of the enterprise vulnerable if and when the foreign firms leave. When the three enterprises discussed here were finally expropriated, closure was not long delayed precisely because there were neither parts nor skilled workers to keep the operations running. Undoubtedly, one of the reasons numerous concessionary arrangements were agreed to in the early years of Lenin's government was that so much of the installed technology at the mining and oil operations was already foreign. Foreign investors also brought much needed capital that Lenin did not otherwise have. In the modern period, the Kazakh government turned to foreign investors on a scale unprecedented in the former Soviet Union for capital to repair and restart the large enterprises that in some cases had virtually ceased operation. Management skills were also at a premium. Most recently, however, Kazakhstan has been placing much greater emphasis on local sourcing of as many inputs as possible and on the training of local employees (thereby also reducing the number of expatriate employees) by all foreign investors in what appears to be a concerted effort to regain greater control of their industry. The new emphasis is certainly understandable; whether it also presages a change in the investment climate more generally remains to be seen.

3

RESTORATION AND RECONSTRUCTION OF KAZAKHSTAN'S LARGE ENTERPRISES IN THE NEW SOVIET STATE, 1920–40

Beginning in 1916 and continuing through the 1917 Revolution and the ensuing years of struggle for control between the Bolsheviks and the White Army, economies collapsed throughout the former Russian Empire. By 1920, total industrial output had declined by nearly 80 percent to only 20.4 percent of levels achieved in 1913; output declines at the large enterprises were even greater, with production in 1920 amounting to just 12.8 percent of 1913 levels (Baykov 1947: 8). In Kazakhstan, the decline in total industrial output from 1913 to 1920 was more moderate, amounting to only 54.1 percent (Alampiev 1959: 127). Undoubtedly, the industrial decline was less because only a limited amount of Kazakhstan's total industrial output was non-agricultural. Indeed, output from Kazakhstan's industries "producing the means of production," as the resource enterprises would have been classified, declined 78 percent, a decline similar to that experienced throughout Russia. In all events, the industrial economy was itself a comparatively small proportion of the Kazakh economy in 1913, at just 15 percent of the total. By 1920, this proportion had shrunk to only 6.3 percent.

The industrial collapse was accompanied by severe agricultural shortages as grain and livestock were requisitioned for the war effort and, from then on looted by the advancing and retreating Red and White armies during the long period of struggle for control of the countryside after the Revolution. Not surprisingly, Soviet crop production in 1920 was only 60 percent of that in 1916; livestock numbers had declined 30 percent, from 162.3 million horses, cattle and sheep to just 114.3 million (Baykov 1947: 23). In Kazakhstan, the agricultural situation worsened further when 1921 saw both poor crops and the worst hard winter in decades when thousands more animals were lost in a severe *joot*. Operations at the large resource based enterprises throughout Russia also were affected seriously. The experiences of the enterprises in Kazakhstan – at Ekibastuz, Ridder, Karaganda,

Spassky, and Emba – were typical; expropriations left large enterprises everywhere with few skilled managers and almost no technical expertise. Shown in Figure 3.1, output of key commodities in the Soviet Union declined precipitously after 1916. Whereas production of copper had been 31,100 tons in 1913 and was enough to meet demand within the country, by 1922 production amounted to just 1 ton. Only one mine in the Urals was operating in 1921/22 and a shipment of ore to a nearby smelter in 1922 enabled the first copper to be smelted in Russia since 1918 (Sutton 1968: 80). All other copper mines and smelters, including those in Kazakhstan, were said to be in a state of 'preservation' – they were closed. Oil production declined by over 50 percent, from 9.23 million tons to less than 4 million tons in 1921. Lead and zinc output, never large before 1916, were reduced to virtually nothing. The production of other commodities was equally affected as well. Coal production, for example, declined from nearly 28 million tons in 1913 to just 6.8 million in 1920.

Lenin's New Economic Policy, begun in 1920, undertook the reconstruction of Soviet industry with a combination of public and private management and ownership (Baykov 1947). Large enterprises in almost all fields were known as the "commanding heights" of industry and remained controlled by the state, although in many cases they were offered in concessionary arrangements to foreign investors to rebuild and operate. Perhaps

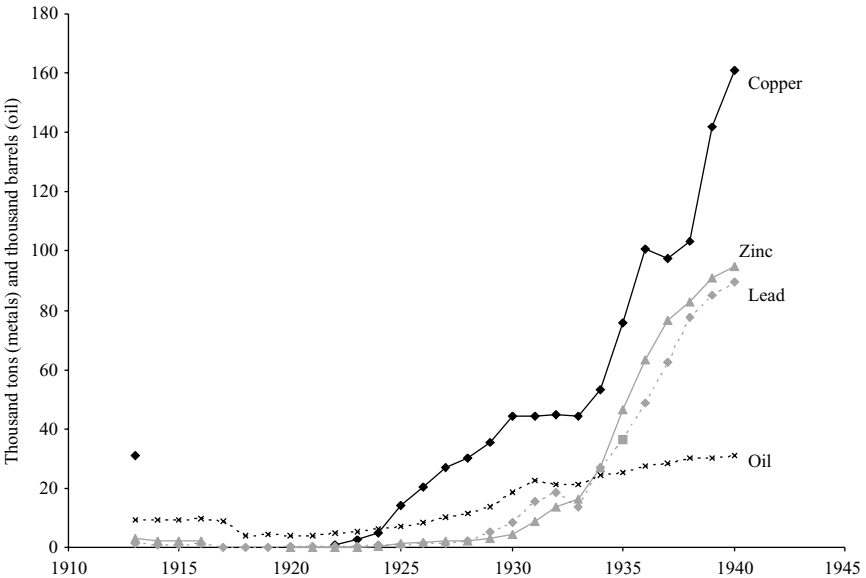


Figure 3.1 Production of copper, lead, zinc, and oil in the Soviet Union, 1913–40
Source: Drawn from Nutter (1962: 420–2)

the most well known such concession was that negotiated by the US entrepreneur W. Averill Harriman to operate the Chiaturi manganese fields in the Caucasus, a concession that gave Harriman a monopoly on manganese production from the world's largest manganese mines.[1] But there were many other concessions as well. Among the first concessions had been contracts to revive oil production in the Baku fields.[2] The two largest mining concessions were negotiated with two British firms, Lena Goldfields Ltd to operate the Lena gold fields in Siberia as well as lead and zinc enterprises in the Altai region (including some in Kazakhstan) and Tetuikhe Mining Corporation to operate the Tetuikhe lead and zinc enterprises in Siberia (Sutton 1971: 23). Each of the enterprises also had been foreign-owned operations before 1916 – the Lena goldfields by the Lena Goldmining Company and Tetuikhe by the Selection Trust Ltd (Hoffman 1929). Enterprises not turned over to foreign firms were administered through trusts comprised of related firms. For example, many mines in the Altai region and the smelter Urquhart had planned for Ridder became part of the Altai Polymetal Trust. The Urals Copper Trust included a number of mines and smelting works in the Urals region. Emba became part of the Emba Oil Trust.

The recovery of Ridder, Emba, and Zhezkazgan under the New Economic Policy, 1920–27

In general, recovery of the few large enterprises in Kazakhstan was very slow, lagging significantly behind those in Russia. The operation of the Irtysh Corporation's lead smelter at Ekibastuz was restarted in 1923 but ceased operation in 1925 when it ran out of old stocks of Ridder ores which had been delivered to the plant as far back as 1916 (Alampiev 1959: 139–41). Production of lead in Kazakhstan had never been large, amounting to only 2 tons in 1913 and 262 tons in 1916. It was reduced to 117 tons in 1922/23 but then increased to 462 tons in 1923/24 and 336 tons in 1924/25. Attempts were made to reopen the Ridder mines but were not successful because of problems with flooding. In addition, the ores at Ridder were of a comparatively complex polymetallic composition and by 1920 there were few technicians available who had had any experience processing them. The new plant Urquhart had planned at Ridder had not been completed and no new development occurred during the initial phase of his negotiations with the Soviet government for reparations. With the collapse of those discussions in 1923, however, local reorganization efforts at the mines began.

In 1924/25, the unfinished Ridder smelter became part of the Altai Polymetal Trust, along with many of the mines at Ridder.[3] In all of the Soviet Union, a total of 40 million roubles were committed to building non-ferrous metals enterprises in 1925, and, of that, 23 million was to go

to two enterprises in Kazakhstan, namely restarting the Ridder smelter and completing the unfinished Karsakpay copper smelter (ibid.: 160). Accordingly, reconstruction of the Ridder lead plant and the mines began and the equipment from the lead smelter in Ekibastuz was moved and reassembled at Ridder.

> Trestle bridges and surface structures were reconstructed at the mine and powerful electric centrifugal pumps were installed. They began pumping in May 1926. The mine was drained in July 1926 after having been flooded for nearly 10 years, and in October operations resumed.
>
> (Alampiev 1959: 162)

A steam-powered electric plant was built to operate the pumps and construction began on a new hydroelectric station. A new ore concentration plant opened in December 1926, and the reconstructed smelter went into operation in 1928. The mines not included in the Altai Polymetal Trust as well as a project to build a new lead/zinc smelter in the Altai region were included in the Lena Goldfields concession negotiated in 1925.[4] Work began promptly and the new smelter began operation in 1927. It produced some 2,300 tons of lead in 1927/28, nearly half of all the lead produced in the Soviet Union that year. By 1932 output of zinc concentrates from this smelter was also important.

Copper production in Kazakhstan remained in "preservation" until 1925 and the government's decision to invest in completing the Karsakpay smelter in Zhezkazgan. The construction of Karsakpay, the smelter whose equipment had taken the Spassky Company some three years to deliver by dismantle-able railway from Zhusali on the Orenburg–Tashkent railroad to the site, had never been completed. Accordingly, work began to complete the smelter and reopen the Zhezkazgan mines, although supplying the project remained difficult:

> the road to Djusaly is passable for trucks during spring and summer, but, like all the steppe country, snows and high winds make travel and transport difficult in the fall and winter, and much material is scattered along this road where trucks have broken down or been unable to get through because of weather conditions.
>
> (Riddell and Jermain 1935: 84)

As with construction of the lead plant at Ridder, which used equipment from the plant at Ekibastuz, construction of the copper smelter at Karsakpay also utilized equipment from other closed plants, in particular those left at Spassky (Alampiev 1959: 143–61). In 1926 a new power station was commissioned; copper mining began in 1927, and the first copper was

smelted in November 1928. Although reconstruction of Karsakpay was undertaken without a concessionary arrangement, technical assistance contracts may have been used to bring in skilled engineers. In all events, at least by 1930 the technical director at the smelter was a Russian trained in the US and both the chief engineer and superintendent of the flotation plant were Americans (Sutton 1971: 54). The basic equipment was Western in origin and had been quite modern at the time of shipment in 1914. When operational more than a decade later, the smelter was still the first in the Soviet Union to use flotation methods to concentrate the ores which were then converted in reverberatory furnaces to a matte and acid slag. The matte was then treated in converters to obtain blister copper.

The Emba oilfields were among those for which the new Soviet government sought to arrange a foreign concession in the early 1920s (Sutton 1968: 27–9). However, there evidently was no interest in a pure concession to operate the field. Accordingly, the Emba Oil Trust was formed in 1922 to manage operations, comprising the oil fields and prospecting organizations in the Urals-Emba area on the northern end of the Caspian Sea as well as the oil refineries in nearby Yaroslavl and Sormovo (Alampiev 1959: 133–4). Oil production at Emba recovered comparatively rapidly. Whereas production in 1916 had been about 265,000 tons and declined to only 57,400 tons in 1920/21, it was well on the way to recovery just one year later with an output of 133,900 tons (Alampiev 1959: 134; Hassmann 1953 94). By 1924/25, production had recovered to 194,400 tons; two years later recovery was complete. By all accounts, the main problems confronting operators at Emba were caused by its difficult location rather than technical problems in the operation of the wells per se. Water was always in short supply; refineries and markets were difficult to reach. Thus, even when the Emba Oil Trust formed a joint venture with the French group Duverger in 1923, its purpose was exploration of the Urals-Emba region rather than operation of the existing wells (Sutton 1968: 29). Neither did the trust enter any technical assistance contracts. There remained strong interest in maintaining production, however, since the oil from Dossor was especially valuable when refined into lubricating oils because it produced lubricants with low freezing points that were especially valuable during the harsh winters (Shabad 1969: 304).

In all, efforts to revive production at Kazakhstan's existing enterprises met with mixed success during the years of restoration and the New Economic Policy. Only production of oil from the Emba fields had recovered to amounts near their pre-Revolution levels. Copper and lead production, halted for most of the period, was only just resuming in Kazakhstan and smelting operations were under construction. Recovery of coal production required recovery in industries requiring coal, and, for both Ekibastuz and Karaganda, it also required development of better transport linkages. With so few enterprises, it is difficult to speak of them as representative of the state

of industry in Kazakhstan. Nevertheless, nearly half of all the industrial workers in Kazakhstan worked in the Ridder, Emba, and Zhezkazgan areas in 1927/28 at the beginning of the first five year plan (Alampiev 1959: 169). More telling, even with the investments up until that time, restoration had not brought modernization:

> Poor mechanization, obsolete, worn-out inefficient equipment resulted in low labour productivity, which adversely affected accumulation of funds within industry and this greatly reduced the possibilities of accelerating industrial development, new construction, etc. Throughout the restoration period, Kazakhstan's industry lacked working funds and large-scale construction was carried on with the help of the central government.
>
> (Alampiev 1959: 144)

Indeed, we will see in later chapters, conditions at the enterprises after the period of so-called restoration were nearly indistinguishable from conditions found throughout Kazakhstan's enterprises 80 years later when they again were offered to foreign investors.

Further investments in enterprises and infrastructure, 1927–40

The end of the 1920s saw increasingly centralized control of economic life in Russia, including a much decreased role for foreign investment. The first five year plan was drafted in 1927. The development of industry remained an important goal and planned industrial investment amounted to 16,548 million roubles (Conolly 1967: 68–75). However, industrial development in Kazakhstan remained marginalized at best, with only 2.1 percent (some 345.7 million rubles) of the total allocated to its industries. By the second five year plan, however, the mineral potential in Kazakhstan was becoming more widely appreciated and proportionately more funds were allocated for development. Of the total investment planned in nonferrous metallurgy in the second plan, for example, some 31.4 percent was allocated to Kazakh enterprises, an amount which represented 17.3 percent of the investment in Kazakhstan as a whole. In addition, increased exploration received more support generally and some 18.4 percent of those funds were allocated to Kazakhstan as well (that is, another 11.2 percent of the total investment in Kazakhstan).

Without question, the most important aspect of the initial five year plan in Kazakhstan was Stalin's decision to forcibly collectivize agriculture. A million or more Kazakhs died resisting collectivization; hundreds of thousands of livestock were slaughtered.[5] Many Kazakhs (along with similarly dispossessed labor from elsewhere in the Soviet Union) were also moved

and forced to work in the mines, smelters, and associated infrastructure to develop the minerals sector. An American consultant engineer, John Littlepage, visited Ridder in 1932 and found many working there:

> Thousands of Kazaks who had never known anything but the roving life of herders had been brought into the Ridder mines . . . and the mine managers were supposed to teach them the processes of mining, and at the same time to keep to their production figures. These newcomers also were supposed to get the same wages as the other miners, and the management was expected at the same time to show a paper profit.
>
> It can be imagined what a heartbreaking job it was to teach such workmen to use air-drills, modern milling equipment, and especially to handle dynamite. I don't understand yet how they failed to blow up themselves and all the rest of us. My own worries on this subject were not quieted when I went into a bath-house one day and found a group of them bathing with cakes of cyanide which they had mistaken for soap.
>
> (Littlepage and Bess 1939: 109)

The first five year plan undertook an ambitious program of industrial expansion, with the specific goal of freeing industry from its dependence on Western concessions, consultants, technology, and training. There was substantial investment in the construction of railroads in Kazakhstan in this period; much specifically to provide access to mineral deposits and almost all using forced labor. Construction of the rail line to connect the Trans-Siberian railroad to Tashkent – the Turkestan–Siberia railroad – was undertaken in the first five year plan (Conolly 1967: 82). Plans for this line dated to before the Revolution. Initial construction had started in 1912 and linked Semipalatinsk to Novosibirsk and the Trans-Siberian in 1916. Reviving the plans drawn up earlier, construction started again in 1927 from Tashkent in the south and Semipalatinsk in the north and the connection was completed in 1930. The project used mostly forced labor. A rail connection from Ust-Kamenogorsk in eastern Kazakhstan to the Turk-Sib railroad was completed in 1936; another connected Ridder to Ust-Kamenogorsk. An extension of the Trans-Siberian line south along the old post road from Petropavlovsk through Astana (then Akmolinsk and later Akmola) and on to Karaganda was completed in 1931. Whereas there had been only 2,611 km of rail lines in Kazakhstan in 1917, by 1928 there were 3,668 km and by 1937, 7,168 km (Alampiev 1959: 222).

With the completion of the rail connection from Karaganda to Petropavlovsk, the newly reopened Karaganda coal mines quickly became one of the principal sources of coking coal for the developing steel production center in Magnitogorsk (Shabad 1969: 285). Reopening the coal works

required substantial infrastructure investments as well. Of the total investment in Karaganda of 64 million roubles from 1930–3, 76 percent was spent on infrastructure, including water works, electric power stations, housing, and service establishments (Alampiev 1959: 220). Somewhat later in the 1930s, the Petropavlovsk-Karaganda rail line was continued 500 km further south to connect Karaganda with the newly developing copper mining and processing center on the northern shores of Lake Balkhash. Karaganda grew to a city of over 200,000 by 1940 and coal production was 6 million tons in 1939 and 7 million in 1940 (Conolly 1967: 70).

Virtually all the industrial investments in Kazakhstan during this period were made using forced labor. Construction at Balkhash, for example, relied heavily on gangs of expropriated kulaks and conditions were appalling:

> I saw them die at Balkhashstroi by the tens of thousands. . . . We were doing a lot of grading and excavation work and having no machines we needed much labor. . . . But they were poor workers. So the chief of construction – a brutal drunkard named Ivanov, who was the husband of the sister of Stalin's first wife – enforced piece rate work, making not only the men's wages but their rations dependent on their work. There was never enough food . . . They died like mice in the winter.
>
> (Sutton 1971: 55, quoting from *Fortune* 1949 (April): 82)

It is difficult to know which, if any, of the investments would have been undertaken if the full cost had had to be paid. Fifty years later, when mineral development in isolated regions like Kazakhstan and Siberia could no longer rely on limitless supplies of forced labor, economic growth as well as new investments were very much reduced when the returns could not support the enormous cost of development. In all events, there was a substantial and direct human cost to industrialization in Kazakhstan.

Among individual enterprises, production at Ridder varied greatly but increased overall in the first five year plan. The new Globokoye smelter built by Lena Goldfields Ltd produced some 1,600 tons of zinc in 1929. By 1932, zinc output at the smelter amounted to 4,578 tons, nearly 34 percent of total Soviet zinc production. Lead output increased apace. Nevertheless, the Lena Goldfields Ltd concession suffered much the same fate as the earlier foreign investors when their operations were expropriated in 1930, one of many contract cancelations following the formal end to the concessions policy announced by the Stalin in December 1930 (Sutton 1971: 16–31). Once again, the expropriations worsened an already extreme shortage of qualified technical workers in many operations. Of the 346 Russian engineers and 458 technicians in all of the non-ferrous metals industry (including gold and rare metals operations) in 1930, only

one-quarter of them had more than one year of experience and only 7 percent had more than three years of experience (ibid.: 44). Thus, when the concessionary arrangements were abruptly ended in 1930 and all the foreign engineers again left, the government undertook to hire directly a large number of foreign (mostly American) consultant engineers to assist in virtually all phases of the mining and metals industries. Between 1929 and 1933, there were as many as ten American engineers for every Russian engineer of equivalent skill working at ministries and enterprises throughout the Soviet Union.

The abrupt cancelation of existing concessionary arrangements could not have come at a worse time for operations like those at Ridder which were just beginning to see results. Accordingly, after the departure of Lena Goldfields, an American engineer was sent to oversee operations in June 1930 after having spent five months at Sverdlovsk in the Urals consulting on copper mining operations (Banks 1936). Several others were to follow. Other American engineers were hired to oversee operations in virtually all areas of the minerals production throughout the country, from mining to construction and railroad operations to general office management (Fisher 1936). To be sure, significant investments were also made to train Russian engineers and by 1936 almost all the foreign engineers had been replaced.

The cancelation of the concessionary arrangements by the Soviet government in 1930 also prompted another call for reparations to be paid to the ousted foreign firms and led to a number of judicial proceedings, some of which disclosed contract terms as well as much about operations of the concessions (Sutton 1971: 16–31). For example, Lena Goldfields Ltd was required to produce annually a minimum of 1,000 poods (i.e. 16.38 metric tons) of gold, 1,000 poods of silver, 1 million poods of copper, 600,000 poods of zinc, and 180,000 poods of lead, and royalties were to be paid annually. The concession agreement also required a minimum investment of 22 million roubles annually. According to evidence adduced at the proceeding, production from the Lena concessions had exceeded the output requirements and investment minimums had been surpassed as well. By late 1928, Lena had completed much of the promised reconstruction work and the newly re-opened enterprises were beginning to show a profit. Indeed, some speculated that it was not mere coincidence that Stalin adopted a negative view of foreign concessions at the same time their operations were on the verge of becoming profitable. The first signs of a changing view appeared in 1929 when the government complained that Lena had not paid royalties amounting to 1 million rubles. In fact, Lena did not pay the royalties because the Soviets had refused to allow gold sales on the international market although such sales had been stipulated in the contract. The price Lena was paid for its gold amounted to only one-quarter of the London price and was paid in rubles. Thus, although the official announcement of the new policy toward concessions did not occur

until 1930, it is clear there were steps to oust Lena at least a year earlier. Indeed, in almost all respects, the experience of these concessionary firms adumbrates to a remarkable degree the experience awaiting many of the foreign firms that were to take up foreign management contracts with the Kazakh government 70 years later.

The concessionary firms demanding reparations were also joined by Leslie Urquhart who was still actively seeking reparation for the earlier confiscation of his properties. Moreover, he tried to discourage American engineers from accepting contracts with the Soviet government and join him in demanding the earlier debts be paid, writing numerous letters to appeal to them directly through the leading US mining journal (Urquhart 1929a and 1929b). The journal itself, however, generally supported the efforts of the Soviet government to modernize their mining industry and to hire American engineers (*Engineering and Mining Journal* 1929: 761). Meanwhile, the Lena Goldfields Corporation pursuit of reparations led to an arbitration proceeding that was held at the Royal Courts of Justice in London in the summer of 1930. The results vindicated Lena, finding that investment and output targets had been met or exceeded. More, the court found the Soviet government had breached several provisions of the contract, including denying Lena the right to market gold on international markets, not providing adequate protection to Lena and its employees so that thefts of gold amounting to as much as 30 to 40 percent of production had been allowed, and not even turning over to Lena for their operation all the properties stipulated in the contract. In compensation, the court awarded Lena £12,965,000 (about $65 million) in damages. The award itself was of course meaningless without means of enforcement and Lena turned to the British government for assistance. Diplomatic negotiations continued for several years, ultimately including the threat of a trade embargo. An agreement was reached in 1935 that the Soviet government would pay reparations of £3,000,000 over 20 years. Tetuikhe also succeeded in obtaining both a favorable judgment and some compensation. Thus, unlike Urquhart, this round of expropriations actually required some monetary compensation from the Soviet government.

As noted, the expropriations left the new smelter at Globokoye and the restarted mining operations at Ridder with much new equipment but no experienced operators. The American engineer, Leon Banks, who was sent to Ridder in 1930 as the first of what were to become many consultant engineers brought in by the Soviet government to solve a variety of problems, found output at the Ridder mines was just 300 tons per day, substantially below the 1,000 tons the project called for (Banks 1936). He drew up operating plans and after a year, output was up to 500 tons with the prospect of achieving 1,000 within two years, if his plans were followed. He was not optimistic. Although the young Russian engineers being trained at the enterprise were often bright, Banks found them "sadly lacking in

practical experience, especially of modern methods." Moreover, they were substantially handicapped by their superiors. Plant foremen, for example, were usually selected on political not managerial grounds; many were entirely ignorant of the operation of the mines and equipment. Not surprisingly, conditions deteriorated rapidly and the mines were near closure again and the smelter equipment virtually ruined by 1932 when a second American engineer, John Littlepage, arrived to attempt another resumption of production.

> The methods which had been used in those mines . . . had resulted in several cave-ins so large that production had been almost stopped. The mines lie alongside a river, and the cave-ins had caused a sudden increase in the flow of water, which had overtaxed the installed pumping equipment. The mines were in such condition that they were in danger of being lost beyond recovery at any moment through flooding.
>
> The engineers, I discovered, had been divided in their opinions of the proper methods to work these mines, and had wasted more time in arguing about the merits of their respective schemes than in doing anything to keep the mines from being ruined. . . .
>
> The government had spent large sums on modern American machinery and equipment for these mines, as for almost all others in Russia at that time. But a good part of this money might as well have been thrown into the river. The engineers had been so ignorant of this equipment and the workmen so careless and stupid in handling any kind of machinery that much of these expensive importations were ruined beyond repair. For example, a fine large flotation concentrator had been erected, but was already in terrible shape after it had been used for a short period.
>
> (Littlepage and Bess 1939: 105–7)

Operations at the Ridder mines and smelter resumed according to designs Littlepage drew up and left with the local engineers during his visit. A second hydroelectric plant opened in 1934 (Shabad 1969: 298). During this period, a decision evidently was made to reconfigure the Globokoye smelter to produce blister copper and some of the equipment from it was moved to the Ridder smelter. By 1935/36, when two more American engineers, Andrew Meyer and Edith Meyer, were working at Ridder, its smelter included equipment taken from the Globokoye smelter.[6] Among their many observations, Meyer and Meyer (1936: 519) documented a large number of health and safety problems, including a significant incidence of lead poisoning as well as other diseases. In one three month period in 1935 for example, 269 persons were reported as sick and of these some 86 had lead poisoning. In 1934, a total of 11,500 shifts had been lost due to illness.

Meyer and Meyer also reported that there was neither safety work nor an effective ventilation system at the smelter; daily accidents were numerous.

By 1937, the mines were again virtually closed and John Littlepage was again sent to investigate (Littlepage and Bess 1939: 112–4). Evidently, production at Ridder had continued more or less on plan until 1936–7 when the mine's chief engineers were alleged to have sabotaged production as part of a nation-wide, counter-revolutionary plot to disrupt Soviet industries. Whatever the cause, Littlepage found that thousands of tons of ore had been lost and the entire deposit was threatened because of the use of improper mining techniques. As one of his last assignments as a consultant engineer, Littlepage undertook to get these mines operating properly again before returning to the United States in the summer 1937.[7] In 1939, production of lead at Ridder amounted to three times the levels in 1931; production of zinc concentrates had doubled (Alampiev 1959: 211). Retrofitting of the Globokoye plant to process copper rather than zinc was also completed.

Significant investments were also made in the development of Kazakhstan's copper resources in the 1930s. Although the Oospensky and Spassky mines had been closed throughout the period of restoration, in 1932 plans were drawn up to construct a new concentration plant near the Oospensky mines (Riddell and Jermain 1935: 82). Records do not indicate when production from the mine resumed nor where it was processed after concentration. The Zhezkazgan mines and Karsakpay smelter went into operation in 1929. By 1930 two American engineers were working there and the superintendent/director had had a period of training in America (Sutton 1971: 54). The Americans had been there about eight months when yet another American engineer, Milo Krejci, was sent from Moscow to help resolve operating difficulties with the reverberatory furnace in the smelter (Krejci 1933). Krejci traveled to Zhezkazgan via the Turkistan Express, from Moscow to Orenburg and on towards Tashkent to Zhusali where he transferred to an auto caravan to travel the remaining 350 km. The route passed rest or refueling stations every 12 to 15 miles, stations that had been built originally to supply the camel caravans while the smelter and equipment were moved to Karsakpay via the moving railroad. Even in 1933, Krejci found that 3–4,000 camels were still used to transport goods and supplies to Zhezkazgan and deliver copper to Zhusali, a journey that took 12 days.

Krejci was able to identify the problems with the furnace as mainly caused by an insufficient draft and provided plans for several changes. Unlike his colleagues at Ridder, Krejci found the Russian superintendent was quite capable and had many years of experience. However, just as at Ridder, there was a lack of trained workers and so he also wrote a lengthy description of the proper operation of the smelter, "giving reasons for everything I could think of, in order that it could be easily understood by the simplest workman" (Krejci 1933: 18). Krejci also found that there was a very pronounced ethnic division of labor at Karsakpay:

> Most of the Korsakpai enterprise is handled by Russians, except where a native is of sufficient intelligence to hold a particular job of position. The natives handle most of the simple laboring jobs. The handling of the caravans was in the hands of the natives, under the direction of Russian Party men. . . . [The natives] were also in charge of the fifteen picket stations on the desert, between Korsakpai and the railroad at Djusali.
>
> (Krejci 1934)

Plans for substantial expansion of operations at Zhezkazgan were drawn up beginning as early as 1931 when plans for a large flotation plant with a capacity of 12,000 tons per day were completed by one of the consultant engineering companies (Riddell and Jermain 1935: 84). By 1935, construction of a new smelter with an annual capacity of 150,000 tons was underway. Whereas production of black copper at Karsakpay was 3,945 tons in 1934, which was some 8.9 percent of the total Soviet production, by 1937, production had increased to 6,388 tons, some 7.7 percent of the total (Conolly 1967: 70–4). Production continued to increase gradually but remained constrained by the cost of transport, which still required traversing the caravan trail to Zhusali to get to the Orenburg–Tashkent rail line. A rail link directly from Zhezkazgan to Karaganda was finally completed in 1940, after which output grew to commercial proportions.

Finally, oil production from Emba continued to increase slowly. A rail connection from Atyrau on the Caspian 518 km to Kandagach on the Orenburg–Tashkent line was built from 1936–9 to connect the industrial districts developing in the Urals and the Emba oilfields (Alampiev 1959: 225; Riddell and Jermain 1935: 83). The rail line was extended to Orsk before World War II. A 550 mile long pipeline from Emba to the refinery in Orsk where some of the Emba oils were refined was completed in 1935 (Shabad 1969: 305). Several new wells in the Emba district were opened and contributed to increasing production, including those in Baichunas (1931), Sagiz (1932), Irskine (1934), and Koschagyl (1935), and oil production rose from 269,000 tons in 1928/29 to 493,000 tons in 1937 (Alampiev 1959: 194–5). The richest new find at this time in the Emba region was the field at Kulsary to the south of Makat and Dossor. It began production in 1939. By 1941, production from the Emba region had increased to some 864,000 tons.

New mineral discoveries and new enterprises

During this initial phase of Soviet development of industry in Kazakhstan, several new mineral deposits were discovered and for some development begun. Among them were the copper deposits on the northern end of Lake Balkhash, lead in the Karatau mountains in the south and in Tekeli in the

southeast, phosphate in the Karatau mountains, and chromium deposits in the Aktyubinsk area in the north-northwest. In addition, lead and zinc mines such as those at Zyrianovsk, which although well known in earlier periods had not been redeveloped, were targeted for development in the five year plans. All became major enterprises and remain in operation today.

Copper deposits near Lake Balkhash were discovered in 1928 (Alampiev 1959: 217). Development was to include the mines at Kounrad, a refinery in Balkhash, a power plant, and the 500 km rail connection northward to the Karaganda coal mines (Sutton 1971: 54–5). Construction began in 1931 (Alampiev 1959: 193). The rail line was scheduled to be completed in 1932 (Riddell and Jermain 1935: 84). In 1930, development of the Kounrad mines began but, despite huge efforts, the project "did little more than bring into Soviet consciousness the tremendous obstacles inherent in the creation of cities and the provision of transportation, supplies and plant in the remote and desolate region" (Riddell and Jermain 1935: 82). In 1932 alone, some 24 million roubles were spent on building housing and municipal support services for 50,000 people. Riddell and Jermain certainly felt confident in predicting that Russia would remain an importer of copper for many years, given the difficulties of developing its reserves since more than two-thirds of them were in remote areas like Balkhash:

> Years will pass in considerable number, if one may judge from the present rate of development of the Soviet copper industry, before the thousands of miles of needed railroad will be laid to the copper districts, and mills and smelters constructed, though undoubtedly surprising progress will be made.
>
> (Riddell and Jermain 1935: 87)

Operations at Balkhash finally began in 1937 with output amounting to 2.8 percent of Soviet production of black copper (Conolly 1967: 74). At the same time, even then the estimated reserves at the Balkhash/Kounrad and Zhezkazgan sites together accounted for 52 percent of the Soviet Union's total reserves (Balzak *et al.* 1949: 259–60). By 1941 the plant at Balkhash produced 85 tons of copper per day and employed some 5,000 workers (Sutton 1971: 55). By 1943, production at Balkhash amounted to 12 percent of the total while that from Zhezkazgan another 22 percent, together some 34 percent of Soviet production.

Discoveries of significant lead deposits in the Karatau mountains of southern Kazakhstan led to construction of a lead smelter in nearby Shymkent, begun in 1930 (Alampiev 1959: 194). Opening in 1934, it was for decades the largest lead smelter in the Soviet Union (Shabad 1969: 301). Indeed, the plant's capacity was greater than the amount of lead that could be supplied from the Karatau deposits and additional ore deposits at Tekeli

in the mountains northeast of Almaty were also opened. Rich deposits of phosphates were also discovered in the Karatau Mountains in 1936–7, which were to give rise to a major fertilizer industry in Shymkent and Zhambyl. The largest chromium deposits in the Soviet Union were discovered in the Aktyubinsk region in 1937; construction of the large ferroalloys plant in Aktyubinsk began in 1940 (Alampiev 1959: 211–17). Iron ore deposits were discovered at Atasu in 1931 in the Karaganda region, and eventually they would lead to the development of a major steel complex in Karaganda. Borates were discovered at Inderborskiy on the Ural River some 80 miles north of Atyrau in western Kazakhstan in 1934 and a large chemical plant was built in Alga near Aktyubinsk to process them (Shabad 1969: 306–7).

Conclusion

During the 1930s, the Soviet government invested substantially in the development of Kazakhstan's resource base, in revitalizing existing enterprises, and in opening new ones. There was much supporting investment in infrastructure as well, from new rail lines to power plants, water supplies, and housing. By 1940, industrial output in Kazakhstan amounted to 1,311 million roubles (1926/27 prices), having grown from a mere 89 million roubles at the beginning of the first five year plan, to 306 million in 1932, and to 841 million in 1937 (Alampiev 1959: 233–5). Although 36 percent of the output was in basic industry, growth had not been limited to heavy industry and the large enterprises. Production of light industry products such as bricks, textiles, clothing, footwear, processed meats and fish, dairy products, flour, and distilled spirits accounted for nearly 40 percent of the industrial production in 1941. Overall, Kazakhstan's industrial growth was such that agriculture's share in the gross output of the economy had declined to just 40 percent in 1940, a level at which it remained throughout the Soviet period.

The human costs of the joint transformation of agriculture and industry during this period were enormous. More than a million Kazakhs died during collectivization; millions more were forcibly resettled. Millions of Russians were moved to Kazakhstan. Thousands of Russians and Kazakhs died from the impossible working conditions in the mines and in building infrastructure. Without doubt, memories of the human costs remain vivid in Kazakhstan today. Beginning with the New Economic Policy, control of the existing large enterprises as well as development of new ones was consolidated centrally, where it was to remain for the nearly 70 years. Dependence on foreign investors and advisors continued through much of the period. At first, concessionary arrangements were offered to attract both western capital and technical expertise. These arrangements were cancelled abruptly, however, and then many more technical consultants on fixed-term

contracts were hired to oversee operations at many enterprises, to plan major expansions of existing enterprises, to develop new resources, and to train local engineers and specialists.

By the eve of World War II, the Western technical consultants were gone and Kazakhstan's minerals industry was being operated by "local" engineers and specialists. At the same time, they were mostly Russian, not Kazakh, and the Kazakhs tended to have only the most menial jobs. Housing arrangements typically varied as well, with the Russians housed considerably more comfortably than the Kazakhs. Wages varied significantly among the mineworkers as well. At one enterprise, for example, wages for laborers amounted to the value of three eggs per day; those for staff engineers and superintendents ranged from ten to 20 eggs per day (Banks 1936). Housing was not always available either as it could not be built as fast as the mining operations could be developed. According to the reports from other American engineers, food was in very short supply everywhere and especially at the mine sites whose distant locations and difficult transport links continued to be problems throughout most of the period (Fisher 1936). Thus, the higher wages often meant little since there was generally nothing to buy.

Those foreign investors who acquired concessions in the early years of this period fared no better than those in the prior period whose investments had been nationalized. In this instance, the enterprises themselves were not confiscated as the contracts all involved lease arrangements, not outright ownership. Nevertheless, cancellation of the leases meant significant losses for many of the foreign firms because substantial investments had been made to restart existing operations but they had not been operating long enough to accumulate returns. These investors were more successful, however, in gaining at least some payment from the Soviet government, but it was much less than the claims and repayments were much delayed. Had the new concessionaires been asked about the risks of confiscation at the time they secured the concessions, surely they could not have pleaded ignorance of the possibility of such losses, having both the example of the earlier nationalizations themselves but also Urquhart's ongoing but futile efforts to obtain compensation. Nevertheless, they invested. At a minimum, it underscores the difficulty of assessing confiscation risks. Perhaps it also underscores the optimism which surely must sustain many of the companies (and their investors) which undertake the development and operation of foreign enterprises.

4

THE WAR AND POSTWAR DEVELOPMENT OF THE INDUSTRIAL ECONOMY, 1940–90

The development of Kazakhstan's industrial economy in the 1920s and 1930s established a number of patterns that were to persist throughout the extended postwar period. First and foremost, Kazakhstan's industrial growth depended principally on the development of the country's significant mineral and mineral fuel reserves. For the most part, individual enterprises were large and often isolated. Each required substantial investment in new infrastructure as well as in the development of the mine, well, or processing facility. Entire towns were built, including housing, water, and a variety of social services, as well as railroads (or pipelines) to transport the newly mined mineral or mineral fuels. Already by 1940, 36 percent of Kazakhstan's industrial output was accounted for by four basic industrial sectors – electric power, fuels, nonferrous metals mining and metallurgy, and machine building and metalworking (Beaucourt *et al.* 1963: 229). The concentration increased in subsequent years.

Regional concentrations of industries which emerged in the earliest phases of development became even more apparent. The eastern region of Kazakhstan, with its many nonferrous mineral deposits, remained an important center of nonferrous metal mining and additional processing capacity was developed as the significant hydroelectric potential of the Irtysh River was harnessed. The central region of Kazakhstan remained an important base of coal and copper mining. An electric power industry as well as copper refining and processing was also developed. The wartime development of a steel plant in Karaganda plus iron ore discoveries in the Karaganda region as well as to the west led to the establishment of a major iron and steel complex in Karaganda. The northern and western regions of Kazakhstan continued to be developed as important energy centers. In the north, the coal deposits at Ekibastuz and Maikain fueled a rapidly growing electric power industry. In the west, oil discoveries at Kulsary, on the Mangyshlak Peninsula, and later at Tengiz and in Aktyubinsk fueled rapid growth in oil production and exports. The Karachaganak natural gas

deposit was also discovered in the western region, and uranium was found on the Mangyshlak Peninsula. Major deposits of chrome and bauxite in Aktyubinsk in the northern region would lead to the development of both ferrochrome and alumina industries, intermediate products then exported to plants in Russia for further processing.

By the mid-1970s, the concentration of Kazakhstan's industrial output in the primary sectors had increased to 47 percent (Dienes 1982). Production of electric power, fuels, iron and steel, and nonferrous metals accounted for 32.2 percent of industrial output; machine building (which was also included in the earlier figures[1]) added another 14.4 percent. By 1985, primary industries, electric power, fuels, ferrous and nonferrous metallurgy, and machine building and metal working sector accounted for 61 percent of industrial output (Sagers 1992c). By comparison, the same categories accounted for just 57 percent of the total Soviet output, but machine building and metalworking was nearly twice as important in its contribution to the total. Thus, although the total of 57 percent for these sectors in the overall Soviet output differed little from that of Kazakhstan, the extractive sectors were much more important in Kazakhstan while machine building and metal working category were more important in the broader economy. By all indications, the high concentration of industry in primary sectors in Kazakhstan changed little after 1985.

The consequences of Kazakhstan's basic resources concentration on the economy generally and on the social structure were many. Development was itself regionally concentrated; those areas with mineral resources received much more investment and support than others. In particular, the northern two-thirds of the country where most of the resources were located was developed significantly more than the southern third. In consequence, the population was concentrated regionally as was its ethnic composition. Russians (and others) dominated in the northern two-thirds of the country and Kazakhs in the south because industrial development relied heavily on imported labor, whether from prison camps or from émigrés, and the principal agricultural regions were in the southern region. And, although regional equity was a frequently reiterated goal of Soviet industrial policy, Kazakhstan never reached economic equity with other industrial republics in the former Soviet Union. Even within the country, equity among regions remained an illusive goal.

Trends in industrial investment

From 1939 to 1942, it seemed as though Kazakhstan's economy might be substantially diversified when a number of enterprises were transferred there from areas of the Soviet Union threatened with invasion.[2] Several textile and leather enterprises, a chemical fiber factory, and a fruit cannery were evidently transferred in whole. Equipment from tobacco, chemical,

cement, and other plants was also transferred, and construction of a synthetic rubber plant was begun in Karaganda. All suggested Kazakhstan's industry would become significantly diversified. Not surprisingly, however, a substantial amount of metallurgical equipment was also transferred, including an entire zinc plant, mining equipment, heavy machinery, and a mill for rolling refined nonferrous metals. In addition, Soviet planners encouraged a rapid expansion of many mineral and mineral fuel deposits including coal, oil, copper, lead, and so on to replace resources lost or threatened by the war. Karaganda became the Soviet's second largest coal supplier, increasing production by nearly 80 percent by 1945. Copper production in Kazakhstan increased 50 percent; oil production increased more than 40 percent.

A number of new mineral deposits were also opened. Manganese deposits at Zhezdy in the Karaganda region were developed to replace sources lost because of the war. A new power station was built in Temirtau (near Karaganda) at the beginning of the war, and construction of a steel plant begun. The comparatively small plant had no blast furnaces (iron ore was not yet mined in Kazakhstan, although it had been discovered at Atasu in 1931); instead, steel at the new plant was produced from pig iron brought by rail from other republics. The first steel was poured at the end of 1944. The lead smelter at Leninogorsk in eastern Kazakhstan was expanded and modernized in 1940. Lead mining operations in Tekeli in southeastern Kazakhstan were expanded and a concentrator was built in order to increase supplies to the smelter in Shymkent. Development of the significant deposits of chrome ore near Aktyubinsk began and a ferroalloy plant in Aktyubinsk opened in 1943. Construction of an oil refinery in Atyrau was undertaken; it opened in 1945 in Atyrau. Built with aid from the United States, it was designed to produce gasoline and diesel fuel, not high quality lubricating oils from the oil at the nearby Emba oil fields, and thus relied on imported oil. Altogether, wartime development of Kazakhstan's industry increased production some 37 percent. Concentration of production in the four sectors comprising electric power, fuels, metallurgy, and machine building increased in this period as well, with these sectors accounting for 48 percent of the country's industrial output in 1945 (Beaucourt *et al.* 1963: 231).

Following reconstruction after the war, development of Kazakhstan's mineral reserves remained an all-union priority, and investments included not only new mining and processing facilities but also infrastructure like transport, housing, and other amenities for the urban areas needed to support the new enterprises. Altogether, industrial investment in Kazakhstan remained substantially above the average level of investment in the Soviet Union as shown by the data in Figure 4.1. Discounting the exceptionally high comparative investment rates of the late 1950s and early 1960s, which were the result of the Virgin Lands Program, investments in

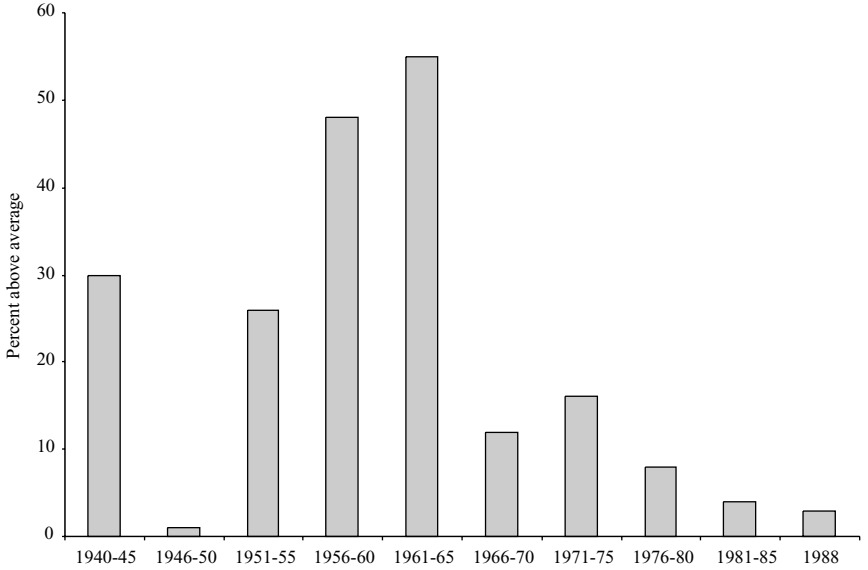


Figure 4.1 Industrial investment per capita in Kazakhstan as compared to the Soviet average, 1940–88

Source: Drawn from Sagers and Green (1979), Liebowitz (1992), Kosov and Dvoskin (1972), and Bond *et al.* (1991)

Kazakhstan's economy averaged between 20 and 30 percent above average until the mid-1970s. From 1975 on, however, investment in Kazakhstan was no greater than average. Indeed, as will be seen in the chapters that follow, few new mineral deposits were developed from the mid-1970s on, and there was substantially less renovation and expansion of the existing industrial enterprises. In consequence, Kazakhstan's enterprises were more dated in 1990 than most recognized, and the tasks faced by those who would take over operations of the large enterprises were more difficult than imagined.

One reason for the declining investment priority accorded to Kazakh industry was that minerals investment in Kazakhstan (and Siberia) had proved to be less productive than had been hoped, at least compared to additional investment in industrial areas west of the Urals. Even by the 1960s, the return to capital was estimated to have been as much as three times lower in Kazakhstan (and Siberia) than in the more developed western regions of the former Soviet Union, just 50 percent of the overall average rate of return (Dienes 1972: 440–1).

> Despite severe climatic conditions, a rudimentary transport network, and the lack of population, Soviet planners had hoped that,

> given initial investment, the immense mineral and waterpower riches would provide impetus for rapid self-sustained growth, but this has not come to pass. With the abolition of forced labor and repressive measures of labor control, significantly higher wages had to be introduced east of the Urals to keep mines and factories manned. The extra cost of housing and services was even more formidable, and industries in the East have been plagued by a high rate of labor turnover; less that half the workers stayed longer that three years with a firm even in the more settled southern belt of Siberia.
>
> (Dienes 1972: 446)

In one of many similar analyses of alternative investments, Novikov (1969) showed that, under a wide variety of conditions, the development of the iron ore deposits in the Kursk Magnetic Anomaly in the Urals region would be more economical than further development of those in northern Kazakhstan. Nevertheless, for a number of years Soviet policy continued to emphasize development in Kazakhstan and in Siberia both for strategic and economic reasons. Ultimately, however, with slowing overall industrial growth throughout the Soviet Union, the added costs of continued investment in comparatively unproductive regions forced planners to change polices; for Kazakhstan at least, investments were in fact considerably reduced after 1975. With a decline in investment amount, the comparative rate of return on investment actually improved in the 1970s to levels amounting to 72 percent of the Soviet average (Bond *et al.* 1991). In the 1980s, returns were 74 percent of average.

Although investments were not as productive as they might have been had they been made elsewhere, they nonetheless resulted in substantial increases in output in Kazakhstan even in comparison to more developed areas of the Soviet Union. Figure 4.2 displays rates of industrial growth, both for Kazakhstan and for the Soviet Union as a whole, showing that for most of the 1940–90 period, the average annual rate of industrial growth in Kazakhstan exceeded that for the whole country. The data also show clearly both the steady decline in the rate of output growth which characterized much of the period as well as the erosion of Kazakhstan's higher growth rates in the 1970s as preferential investment rates diminished. By the late 1980s, industrial growth was only 3 percent per annum in Kazakhstan and 2.5 percent in the Soviet Union, even as measured by the official statistics. Diamond and Kisunko (1993) estimated the true rates of growth were substantially lower, at just 1.3 percent and 0.9 percent respectively. By 1990, both estimates showed Kazakhstan's industrial economy was in decline, officially by –0.8 percent per annum and –3.5 percent by the revised estimates. Industrial growth then recovered a small amount (0.7 percent) in 1991, but the decline resumed in 1992 and amounted to a cumulative –12.1 percent in just the first six months (Sagers 1992c).

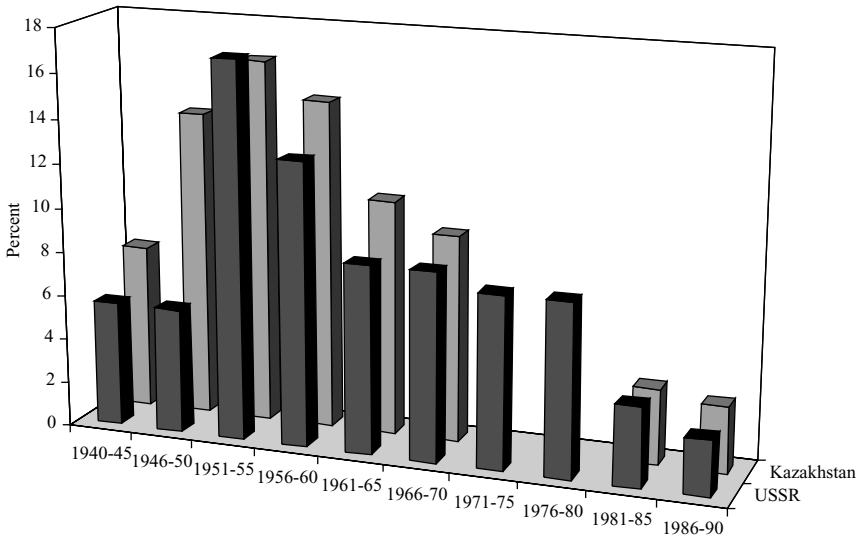


Figure 4.2 Average annual rates of industrial growth in Kazakhstan and the Soviet Union, 1940–90

Source: Drawn from Beaucourt *et al.* (1963), Kosov and Dvoskin (1972), Diamond and Kisunko (1993), and Liebowitz (1992)

Trends in commodity production

The growth in output of most individual commodities in Kazakhstan was difficult to document after 1950 because Soviet authorities simply stopped publishing production statistics, and there were but a few observations linking the amount of prewar output to that 50 years later and most of these were from the 1940s and early 1950s. For example, data assembled in Beaucourt *et al.* (1963: 251) showed that production of blister copper amounted to 34,800 tons in 1940 and by 1955 had increased to 163,000. In 1990, production of refined copper, though not strictly comparable, was some 365,000 tons (Sagers 1998b). Production of refined lead, which was 79,000 tons in 1940, grew to 120,000 tons in 1950 and 314,000 tons in 1960 (Beaucourt *et al.* 1963: 252). Production was virtually unchanged for the remainder of the Soviet period, amounting to 314,000 tons in 1985 and 290,000 tons in 1990 (Sagers 1998b: 498). For a few commodities, however, mainly energy and ferrous metals, somewhat more regular reports made it possible for analysts to compile a more nearly complete production record. Figure 4.3 summarizes data on the production of three important energy commodities in Kazakhstan – coal, oil, and electric power. Figure 4.4 summarizes production data for two ferrous metals – iron ore

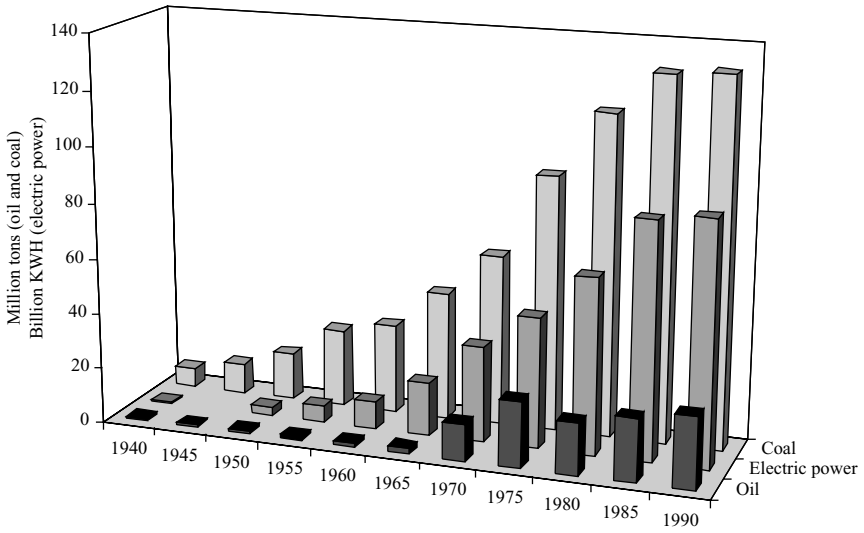


Figure 4.3 Production of oil, electric power, and coal in Kazakhstan, 1940–90

Source: Drawn from Lydolph and Shabad (1960), Alampiev (1959), Shabad (1969, 1979), Shabad and Sagers (1987), and Sagers (1992a)

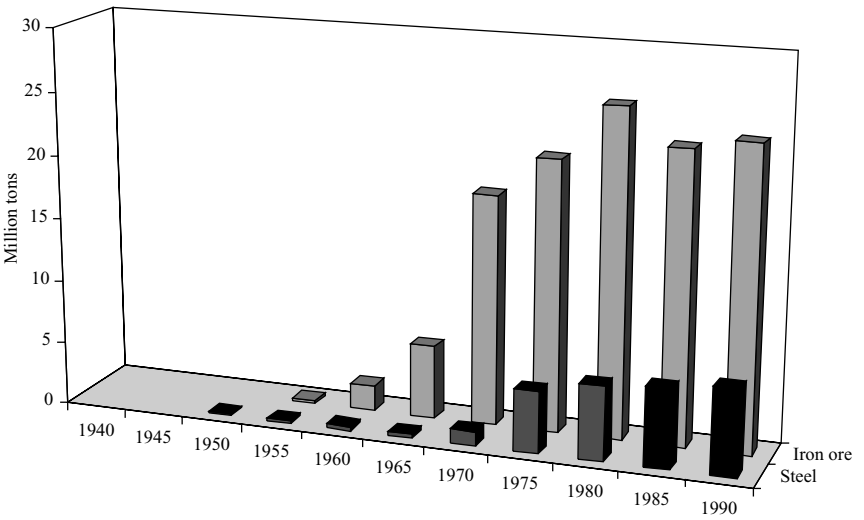


Figure 4.4 Production of steel and iron ore in Kazakhstan, 1940–90

Source: Drawn from Shabad (1969, 1982) and Sagers (1987, 1992b)

and steel. All contributed importantly to industrial growth in Kazakhstan in this period. In general, the production of the individual commodities was consistent with the overall pattern in industrial growth, with levels of output increasing rapidly during the 1960s and 1970s and then slowing considerably (or even declining) in the 1980s as investment levels declined.

The data in Figures 4.3 and 4.4, in most cases showing that output of the individual commodities grew steadily through the 1970s and early 1980s, mask the many problems and consequent delays Soviet planners encountered in the development of each new deposit in Kazakhstan. For example, the production of oil grew very gradually from around 0.7 million tons in 1940 to around 2 million tons in 1965 (Figure 4.3). Then there was a substantial increase in production by 1970, to 13.7 million tons, and then to 23.9 million tons in 1975, an amount that was not exceeded until 1987. The major increase in production in the late 1960s and early 1970s was due primarily to the development of new oil deposits on the Mangyshlak Peninsula in western Kazakhstan that had been discovered in the late 1950s (Shabad 1969: 305–6). Uzen was the first of the Mangyshlak fields to go into commercial production, but not until 1965. Once production began at Uzen, it grew quickly. By 1968, for example, production was 5.5 million tons. Zhetybay, where exploration began in 1959, had not begun producing by 1969.

In part, the delays were due to the substantial investment in infrastructure that was required. A railroad linking Aktau (formerly Shevchenko) to Atyrau was completed in 1964. As production increased, oil was sent both to the refinery in Atyrau by tank car and to the refinery in Volvograd by shallow-draft tankers. A pipeline was also built in the late 1960s to send Mangyshlak oil to a refining complex in Kuybyshev and, in 1969, to Atyrau. A natural gas fired power plant was built as well as a desalinization plant to provide fresh water for the growing population. In the late 1960s, construction of Kazakhstan's only nuclear reactor began to provide heat and power as well as to operate the desalinization plant. Overall, the development of these deposits required building new towns with complete social support services for some 40,000 new workers, that is, providing for a total population of around 200,000. Exerpts from three news reports from the time provided a sense of the difficulties encountered in developing these deposits:

> Man does not live by bread alone . . . People need well-arranged living conditions and opportunities for cultural development. . . . The swift growth of the population in Mangyshlak requires an expansion of the network of children's centres, hospitals, schools, cinemas, and also baths and hairdressers.
>
> The recruitment of staff is one of the worst bottle-necks in the west Kazakh oil industry. . . . Rapid growth of population requires a sharp rise in living conditions.

> The process of putting the oil and gas deposits of Mangyshlak into commercial exploitation is being retarded by the serious delays in housing, cultural-domestic, and oil industrial construction.
>
> (Conolly 1967: 118)

Although exploration for new oil deposits continued and identified substantial new fields like those at Tengiz (1979) and Kumkol (1984), their development was even more delayed as investment funds grew scarce in the late 1970s and 1980s.

Compared to oil, the output of both coal and electric power grew more rapidly from 1940 on, continuing a trend actually begun in the1930s when several thermal power stations were built as part of the development of several on the mineral enterprises. Whereas installed capacity was a mere 4.8 million watts (MW) in 1928, by 1932 it was 25.3 MW, and by 1940 it was 225.2 MW (Alampiev 1959: 241). The data in Figure 4.3 show that the growth in both electricity and coal production continued at exponential rates from 1940 until the 1980s. As early as the mid-1950s, Soviet planners adopted what later became known as a "coal-by-wire" program, whereby large power plants would be located near coal sources, and their output, not that of the considerably more bulky coal, would be transported via high power transmission grids to supply the needs of growing industrial areas.[3] In the late 1950s, construction of a number of plants with capacities of 2,400 MW were begun across the Soviet Union, including one at Aksu (formerly Yermak) in the northern region of Kazakhstan not far from the Ekibastuz coal mines.

By the late 1960s, the minimum size of the coal-by-wire plants had increased to 4,000 MW and Soviet plans included building four such plants at Ekibastuz and one in southern Kazakhstan as well as the necessary ultra-high capacity transmission grids. Construction of the first of the 4,000 MW power plants at Ekibastuz, however, was not completed until 1984; construction of the second had also begun, but it was completed with a capacity of just 1,000 MW. None of the other plants planned at Ekibastuz were built. Among other problems, the ultra-high voltage transmission system was much delayed by various technical problems. Meanwhile, with the delays in building the large power plants near the coal supply, by 1980 up to 3,000 rail cars were loaded with Ekibastuz coal each day and sent to power plants in both northern Kazakhstan and Russia, an amount which strained the transport system's capacity. No further expansion in coal production was possible at Ekibastuz from about 1980 onwards; simultaneously, the slowing growth in the economy at large decreased demand for more power.

Regional aspects of industrial development

As is immediately evident on any map of Kazakhstan which locates the principal mineral and mineral fuel resources (see Figure 6.2, for example),

industrial development which was tied to the exploitation of these reserves meant development would be concentrated in the northern two-thirds of the country – essentially the region north of a line passing through Lake Balkhash. The boundary was not absolute, and even in the earliest period there were a few mineral discoveries in the southern region as well, such as the lead deposits at Karatau and Tekeli that supported building a lead refinery in Shymkent. Phosphate and later uranium were also found in the region, and the phosphate deposits led to the development of a fertilizer industry in Zhambyl and Shymkent. More recently, both oil and natural gas were also discovered. But, the southern area remained primarily agricultural throughout the Soviet period, and what investment there was in the region was in agriculture, in irrigation structures and the like. The capital city, Almaty, also in the southern region was an exception where, in addition to government, a significant light manufacturing industry developed.

As early as 1933, the southern region of Kazakhstan (excluding the city of Almaty), which was about one-third of the territory of the country, accounted for just 21.7 percent of industrial output (Beaucourt *et al.* 1963: 44).[4] The amount would increase to 26 percent in 1940 but then decline steadily to just 19 percent in 1955. Meanwhile, production from the northern two-thirds of the country, which included the eastern, central, northern, and western regions, amounted to a remarkably constant 66–69 percent throughout the 1933–55 period. It is unlikely the concentration changed appreciably in the 35 years between 1955 and 1990 because the pattern of regional investment was itself reasonably fixed from 1946–70. In the immediate postwar period (1946–50), investment in the southern region (including Almaty city) was 19.5 percent of the total; by 1966–70, investment in the south (again, including Almaty city) amounted to 26.4 percent of the total (Kosov and Dvoskin 1972). Although there was some increase in the amount of investments in the southern region by 1970, the data include investments in the industries of Almaty; and, thus, not only overstate the total amount of investment in all other areas of the southern region but also undoubtedly overstate the growth in investment outside Almaty. In consequence, by 1970, the value of all industrial plant and equipment in the southern region amounted to just 20 percent of the total. The history of unbalanced development led some at the time to conclude Kazakhstan was itself a non-entity, marked only by a set of boundary lines on a map.

> Kazakhstan is a meaningless monstrosity, with an empty arid zone separating two main belts of population, northern and south-eastern, each region like the region adjoining it, namely West Siberia and Central Asia. Unfortunately there is very little information published for the oblasts of Kazakhstan, and the region therefore has to be recognized and used in its entirety. It remains

> a monument to the obstinacy and deceitfulness of politicians who maintain the myth of a Kazakh people and their Republic.
>
> (Cole and German 1970: 78).

By 1980, the southern region's share of industrial assets accounted for just 22.6 percent of the total, indicating that investments in the 1970s were not made with a view to substantially redressing earlier imbalances or integrating the country (Dienes 1987: 7).

> Geographically and economically, Kazakhstan presents a serious problem to the analyst. The northern two-thirds of this republic (north of Lake Balkhash and the Aral Sea) is clearly part of that resource-rich frontier zone that stretches from the Urals to the Pacific. At the same time it is today mostly a part of the Slavic ethno-cultural realm with Russians, Ukrainians, and Belorussians constituting over 55 percent of the population in 1979 and, with Germans, other European migrants, and deportees as much as 63.1 percent. By contrast, its five southern oblasts (provinces) belong to the Central Asian oasis world where, outside the capital Alma-Ata, the autochthonous nationality dominates.
>
> (Dienes 1987: 6–7)

In addition, development within both the northern two-thirds and the southern third of the country was itself concentrated, often leaving the individual oblasts much more closely linked economically to other republics in the Soviet Union than to each other (Kosov and Dvoskin 1972). In 1960, for example, 61 percent of rail shipments (by weight) from cities in the northern two-thirds of the country were destined for locations outside of Kazakhstan. Of the remaining 39 percent of rail shipments, 26 percent were to other locations in the northern region and only 13 percent were to locations in the southern third of the country. Moreover, the same was true within the northern two-thirds of the country when it was itself considered as four distinct regions – the eastern region (East Kazakhstan, formerly East Kazakhstan and Semipalatinsk); the central region (Karaganda, formerly Karaganda and Zhezkazgan); the northern region (Pavlodar, North Kazakhstan, Akmola (formerly Akmola and Kokchetau), Kostanai, and Aktobe (formerly Aktyubinsk)); and, the western region (West Kazakhstan, Atyrau, and Mangyshlak). In the central region, exports accounted for 40 percent of total rail shipments while shipments to cities within the region were 44 percent. That is, only 16 percent of the rail shipments originating in the central region went to cities in another region of Kazakhstan. In the eastern region, exports were 50 percent and intra-regional shipments another 37 of total shipments meaning only 13 percent of all rail shipments originating there went to other regions of Kazakhstan.

In the west, the figures were 84 and 16 percent, respectively. In other words, only an average of 14.5 percent of rail shipments originating in one of the four regions in the northern two-thirds of the country went to another region in Kazakhstan. By far most shipments were for export, but a significant percentage also went to a nearby location within the oblast.

Nor did the degree of regional independence decrease significantly by 1970. Exports from the four regions accounted for 39 percent of shipments while intra-regional shipments amounted to another 43 percent, leaving only 18 percent of rail shipments traveling from one region to another. Obviously, this was not a development plan which fostered the creation of an integrated national industry where growth in one region might have supported development in another or become the impetus for "rapid self-sustaining" growth.

Population growth and its regional distribution

The concentration of Soviet planners on the exploitation of the mineral wealth of Kazakhstan also had profound consequences on the size and ethnic composition of the population and on its distribution within the country. Figure 4.5 shows the overall growth of the population as well as its changing ethnic composition. As is evident, the decline in the number of ethnic Kazakhs began in 1916 when as many as 500,000 Kazakhs fled and countless more were killed in the aftermath of a failed revolt against the Russian army.[5] The decline continued during the long period of civil war and famines which followed the 1917 Revolution and then accelerated from 1926–34 when many more Kazakhs fled or were killed during the forced collectivization of agriculture. By 1934, Kazakhs were a minority ethnic group in Kazakhstan, accounting for only 34.2 percent of the population. Meanwhile, the number of Russians in Kazakhstan had been increasing steadily as more and more mining enterprises were developed. By 1939, there were more Russians than Kazakhs in Kazakhstan, a numerical dominance that was to remain until 1987 when Kazakhs once again outnumbered Russians.

The aggregate totals do not begin to reveal the dominance of Russians (and others) in the industrial regions generally and the urban areas in particular of Kazakhstan. As was first evident in the accounts of foreign advisors and investors in the 1920s and 1930s, the majority of the employees in most enterprises were Russians, whether migrants or forced prison camp labor, and, to the extent that Kazakhs were employed in industry, they had only the most menial jobs. This pattern changed little for many decades, creating a country in which the cities were predominately Russian while the rural areas were Kazakh. As early as 1939, Kazakhs accounted for only 19 percent of the country's urban population but 35 percent of the rural population. Throughout the next half-century,

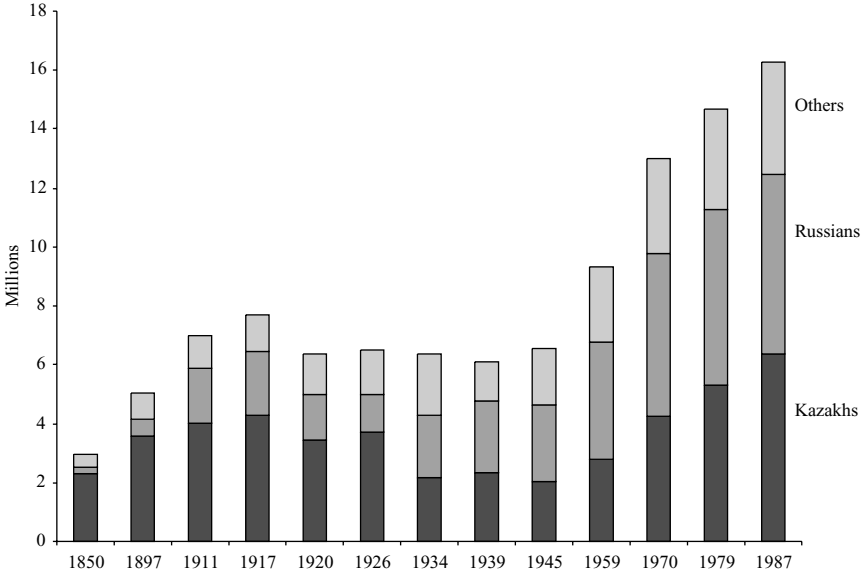


Figure 4.5 The population of Kazakhstan at census dates, 1850–1987
Source: Drawn from Meffert (1987)

the industrialized urban centers remained predominantly Russian; rural areas remained predominately Kazakh. If the urban–rural dichotomy is overlaid on the north–south distribution of industrial development, the obvious result is a country ethnically as well as industrially divided with Russians and other migrants in the generally more developed northern two-thirds of the country and Kazakhs in the agricultural southern third of the country.

Although various programs were evidently designed to equalize opportunities for Kazakhs as early as the 1940s, they had little effect on the continuing dominance of Russians in industries and in the industrial regions.[6] In 1959, for example, 53 percent of industrial specialists in Kazakhstan were Russians; only 24 percent were Kazakhs. In 1965, reports of government awards for "good work" showed that most awards went to non-Kazakh (so-called non-indigenous) workers (Conolly 1967: 114–15). Of 198 awards that were given to workers building the titanium-magnesium works in Ust-Kamenogorsk, only 25 went to Kazakh workers (three to specialists and 22 to workers) and 173 went to the others (56 of which were for specialists and management and 117 for workers). Similarly, awards to workers constructing the alumina complex in Pavlodar (both the plant and a combined heat and power plant) along with the bauxite mines in Turgai

included 19 to Kazakhs, all to workers, and 80 to non-Kazaks including 22 specialists and 58 workers. And, of 21 awards to an outstanding miner's brigade in Karaganda, only three went to Kazakhs.

If Kazakhs did not participate fully in the industrial economy, there were some more positive welfare consequences of the long period of Soviet control from which all citizens of Kazakhstan benefited. Perhaps the most significant positive legacy was the provision of nearly universal health care and education by the 1970s and 1980s with levels very nearly equal to those provided in the more industrialized regions of the Soviet Union. For example, by 1987, life expectancy in Kazakhstan was 69.7 years, almost exactly the same as the Soviet average of 69.8 years.[7] There were 38.7 physicians and 117.1 paramedical staff for every 10,000 people in Kazakhstan, numbers which were about 90 percent and 100 percent of the average across all Soviet republics, respectively. Infant mortality was just 16 percent above the average. Similarly, access to education was on a par with that in other Soviet republics. For example, enrollment in higher and secondary schools in Kazakhstan was exactly equal to the Soviet average in 1987/88. These achievements also set Kazakhstan apart from its Central Asian neighbors where equality was not a reality. For example, the number of physicians in Kyrgyzstan in 1987 amounted to just 81 percent of the average for all republics compared to 90 percent in Kazakhstan. For Tajikistan, the figure was 62.8 percent of average and for Turkmenistan and Uzbekistan, it was 80.1 percent. Infant mortality remained much higher in the other Central Asian countries, ranging from 48.8 percent above the Soviet average in Kyrgyzstan to 122 percent above average in Turkmenistan. The other Central Asian countries also received much less investment in education so that by 1987 enrollments in higher education remained substantially below those in Kazakhstan, ranging from 67.6 percent of the all-union average in Turkmenistan to 91 percent in Uzbekistan.

Despite the many years of substantially above average levels of industrial investment in Kazakhstan through the mid-1970s and continuing sizable budget subsidies thereafter,[8] there were many dimensions in which socio-economic parity was not achieved. In housing, for example, space available to families in Kazakhstan remained 15 percent below the Soviet average. According to the estimated level of net income utilized per capita, Kazakhstan remained at just 91 percent of average in 1988. Estimated GNP per capita was just 64 percent of that in the Russian republic in 1989, while total per capita consumption was just 81 percent of the Soviet average in 1988 (Schroeder 1993). Food consumption, however, was 96 percent of that in Russia. As with the preceding health and education comparisons, these figures put Kazakhstan at levels substantially above other Central Asian countries, but also show that economic parity was in fact never achieved.

The environmental legacy

Without question the most negative legacy of the long postwar period of Soviet development of Kazakhstan's rich mineral resources was the total disregard for the environmental consequences of such exploitation. Almost every environmental concern catalogued by Feshbach (1993), for example, was rated as "important" in Kazakhstan, and in most cases it was rated as either "serious" or "catastrophic." Overall levels of severity were such that Kazakhstan was the second most environmentally catastrophic place in all of the former Soviet Union, the degree of damage in Kazakhstan exceeded only by that found in the Urals. From air pollution, with serious levels of emissions of nitrous sulfides, carbon dioxides, and dust as well as catastrophic levels of toxic compounds, to serious destruction of the landscape from mining, and to catastrophic levels of radioactive pollution, the accumulated damage to Kazakhstan's environment from decades of mineral exploitation was tremendous.

Certainly not all the environmental problems identified in the survey were attributable to industrialization dependent on the exploitation of the mineral and mineral fuels deposits. Much of the country's radiation pollution, for example, was due to the long series of nuclear tests undertaken in the Semipalatinsk region. Between 1949 and 1989, some 470 nuclear devices were detonated in the Semipalatinsk area, of which nearly a quarter (115) were above ground (Pomfret 1995: 30). As many as 100,000 people were estimated to have died and another 800,000 were adversely affected as a result (Feshbach 1993). At the same time, two industrial developments also contributed to the significant radiation pollution detected in the country. First, to create underground gas storage reservoirs near the large natural gas deposits in the western region of Kazakhstan, the Soviets used controlled nuclear explosions; and, although no radiation was detected at the surface, there continue to be serious concerns about possible underground water and soil contamination. Second, Kazakhstan was a principal source of uranium in the Soviet Union, and the mining and processing of its substantial reserves of uranium also contributed to high ongoing levels of radiation exposure across the country. The accumulated mine tailings in just two locations were each in excess of 65 million tons and were known to be radioactive.

The city of Ust-Kamenogorsk in eastern Kazakhstan provided many examples of the extent of the problems documented throughout Kazakhstan. Located in the heart of one of the principal lead and zinc mining areas, it was a major lead and zinc processing location. Kazakhstan's only uranium and rare earth processing plant, the Ulba Metallurgical Combine, was also located there. Lead concentrations in the soils of Ust-Kamenogorsk were found to be so high that eating locally grown meat and produce led to weekly consumption of 2.5 to 11.5 times more lead than

established as safe in UN standards. Practically none of the water in the city met established drinking standards because of excessive amounts of lead, arsenic, vanadium, chrome, and copper. The levels of chemical elements found in children's blood were so high as to cause mutagenesis where "the number and nature of violated chromosomes is very high and is close to the [levels found in] inhabitants of the Chernobyl region" (Feshbach 1993: 587). An industrial accident at the Ulba Metallurgical Combine in September 1990 released significant amounts of strongly carcinogenic beryllium into the atmosphere, adding to the risks for people living there. The situation found in Ust-Kamenogorsk was not unique and environmental problems remain an extremely serious issue in Kazakhstan.

Conclusion

Soviet development of Kazakhstan's resource base after World War II continued many trends evident in the pre-war. Enterprises were generally large and some grew to be very large. For example, the Karaganda Metallurgical Combine, the fully integrated steel plant built just outside of Karaganda in Temirtau, had revenues of 1,176 million roubles in 1989, accounting for about 5 percent of total national income produced in Kazakhstan, and it was large enough that it was among the 25 largest plants in Russia (Johnson *et al.* 1993). The second largest was the Ust-Kamenogorsk Lead-Zinc Combine with revenues of 776 million rubles. Generally, mining and processing industries predominated, locations were often very remote, and total development costs were high because of the need to also build extensive infrastructure. Perhaps because of these high costs, investments were generally not also made in ancillary industries that might have promoted local industry, and the majority of the country's industrial output was shipped outside its borders. Indeed, much more was exported than was shipped either between or within the regions of Kazakhstan itself. It is little wonder then that the investments, though generally much greater than the Soviet average, did not foster the sort of take-off growth said to have been envisioned by Soviet planners.

At the same time, the fact that Soviet planners had dedicated so many resources to the development of Kazakhstan's resources for so many years and had plans for even more investments surely led many Kazakh officials as well as potential investors to overestimate substantially the value of the enterprises and underestimate their management difficulties in 1991 after independence. Nor would they have been alone in the generally high value that was placed on Kazakhstan's existing industries and the comparatively good prospects for growth.

> Despite all these problems, Kazakhstan has the brightest economic prospects of any of the Asian republics of the former Soviet Union.

> Kazakhstan's per capita income was substantially higher than that of the other Asian republics in the USSR, which reflects its abundant physical and human resources and also provides it with more of a cushion for surviving short-term economic hardship.
>
> (Pomfret 1995: 87)

> Although the agenda and the challenge of reform is enormous, the country has major advantages: significant oil and natural reserves that have already attracted foreign investment, comparatively low debt ratios, and a reasonably well educated workforce. These advantages, coupled with a leadership which is committed to a strong reform agenda, will probably result in a faster transition than that of the other republics of the FSU. Indeed, increased exploitation of the oil reserves is expected to underpin investment and output growth over the mid-to late 1990s. In addition, there are significant reserves of minerals, copper, lead, and gold. . . . In per capita terms, this resource endowment is even larger.
>
> (The World Bank 1993: i)

As will be seen, the initial optimism turned to pessimism as the economy collapsed. Within three years most of the enterprises were virtually bankrupt. Worse, when the decision was taken to seek foreign investment and management for the failing enterprises through an aggressive program of sales of controlling interests, very few major metals and mining companies even responded, let alone expressed interest in negotiations. Instead, a collection of mostly unknown companies that had some prior trading experience with Soviet metals exports or some connection to Kazakhstan's government were the main types of firms expressing some interest in what were the principal assets of the country. In something of an exception, the country's oil and natural gas reserves attracted the interest of many major international oil and gas companies, many of which acquired either existing fields or licenses to explore and develop new areas. Even among these, however, the degree of interest and willingness to commit substantial new funds have fluctuated sharply with changing world conditions and with changing politics in Kazakhstan itself.

5

CHALLENGES OF THE ECONOMIC COLLAPSE AFTER INDEPENDENCE IN 1991

For reasons adduced in Chapter 4, Kazakhstan's industrial economy was substantially concentrated in primary sectors like ferrous and nonferrous metals, fuels, electricity generation, metallurgy and machine building, and chemical concerns at the time of the country's independence in December 1991. The enterprises were generally large, each sector had only a few, and they were tied closely to related enterprises elsewhere in the Soviet Union. Moreover, around 90 percent of the enterprises in Kazakhstan remained under all-union control until just before independence, even though the Soviet government had taken a number of initiatives to decrease control of various aspects of the economy (Pomfret 1995: 79). Not until March 1991 was control of the large enterprises transferred to the government of Kazakhstan and then only as a result of deliberate negotiations undertaken by President Nazarbayev after the first of what would become several coal miner's strikes in Karaganda.

According to official figures, there were 37,000 state enterprises in Kazakhstan at the end of 1991 (World Bank 1993: 75–7). Of these, 200 were very large enterprises with 5,000 or more employees. Another 1,300 were classified as special enterprises because they were in the mining, oil, power, water, heating, and/or telecommunications sectors and thus of particular concern to the new government. Of the total of 37,000 enterprises, about 18,500 (or half) comprised the industrial economy, and those in metallurgy, mining, heating, and electricity accounted for over 60 percent of the fixed assets in the industrial sector. There were also a substantial number of 'one-company towns,' cities built to support the development of a specific resource and whose entire livelihood depended upon the continuation of that enterprise. Thus, Kazakhstan's economy was in many ways very fragile despite the great mineral wealth upon which it was built.

Planning even before independence, the government developed a three-phase program to privatize virtually all of the state enterprises.[1] In the initial phase, the legal framework was to be developed, and up to 50 percent of the small and medium-sized enterprises, that is those with 200 to 5,000 employees, were to be privatized in the small-scale privatization program.

Most shops, service establishments, and trade houses were also slated for privatization during the initial phase in what was called the mass privatization program. There was a program to privatize housing as well. In the second phase, to begin in 1993, the medium- and large-sized enterprises were to be privatized with the largest and those designated as "special" handled separately in the case-by-case privatization program. This process was to be followed by a final phase in which all privatization was to be completed by 2000. During 1993, negotiations began to sell four of the large enterprises in something of a trial of procedures and of foreign interest (Deloitte and Touche *et al.* 1994). The four were the Almaty Tobacco Company, sold to the US company Philip Morris, the Almaty and Karaganda Margarine Factories to Unilever, and the Shymkent Candy Factory to Nabisco. In general, the terms of the sales included both immediate payments to the government as well as substantial investment commitments, agreements to maintain current employment levels for a fixed period, and commitments to maintain a number of the social services attached to each enterprise. However, despite much discussion of selling just fractional interests in the largest companies, the negotiations for these four were for 90 percent interests, that is the entire government share.[2] Also during 1993, the US oil company ChevronTexaco (formerly Chevron) successfully concluded negotiations with the government to form a 50–50 joint venture to develop the giant Tengiz oil field. However, by the end of 1993, only an additional 38 enterprises had been identified for direct sale by the government under the case-by-case privatization program. Another 135 or so enterprises were listed for possible future sale.

Meanwhile, the government had created several new state enterprises to act more or less as holding companies for the individual enterprises in most of the industrial sectors. These new companies were to oversee management, to assist restructuring operations, and to report to the relevant ministry. The new state companies included Kazakhstanmunaigaz to oversee the existing oil production companies, the refineries, and the oil pipelines; Kazakhgasprom for the natural gas enterprises and pipelines; Kazakhstanugol for coal; the Kazakh National Company for Atomic Energy for uranium mining, milling, and processing enterprises and the single nuclear power plant; Kazakhenergo for the power and heat generation plants, the local distribution networks, and the long distance power transmission network; and, Kazakhtelekom for the telephone system. In addition, management responsibility for a number of the ferrous and nonferrous metallurgical plants was given to KRAMDS, a group which had its origin in the former state committee for material and technical supply and which very quickly became the largest non-state property owner in Kazakhstan.[3] Described in more detail in the chapters that follow, the new companies developed operation and investment plans for the enterprises in their sectors and some even secured outside finance. The government was

also involved directly, working to recreate important marketing and supply links with enterprises in neighboring countries, principally in Russia, to arrange formal trade agreements, and to guarantee some of the foreign loans individual firms had succeeded in negotiating.

The socio-economic decline following independence

Despite the country's enormous mineral wealth, it is hard to overstate the enormity of the tasks facing Kazakhstan's principal state enterprises in the years immediately following the collapse of the Soviet Union. For one thing, the Soviet emphasis on large enterprises meant a very few enterprises comprised the entire part of the production chain that was in Kazakhstan. Alumina, for example, was produced from just two bauxite mining complexes and a single alumina plant. Kazakhstan did not have a smelter. There was one chrome mining complex and two ferroalloy plants. Iron ore was produced at three mining complexes and steel produced at one integrated steel plant. And so on. The individual enterprises were often very specialized and not only required inputs from other enterprises but, because their output was only an intermediate product, were entirely dependent on other, often very distant, enterprises in other parts of the Soviet Union to take their output. Alumina was sent to the aluminum smelters in Siberia; iron ore was sent to steel plants in the Urals as well as to the single plant in Kazakhstan; and, steel and ferroalloys were sent to factories in Russia for further processing and for manufacturing. In addition, Kazakhstan was a land-locked country, with access to alternative markets limited by distance, by having no control of the means of transport to reach those markets since much of it lay beyond Kazakhstan's borders, and by the fact that so many enterprises produced either raw materials or intermediate products that did not have ready international markets. Finally, Kazakhstan's enterprises were already very old, and they were in serious need of both updating and repair due to declining overall levels of investment throughout the Soviet Union as well as in Kazakhstan in the years preceding independence. KRAMDS alone estimated that it would take in excess of $500 million just to restructure the enterprises in its control in 1992 (Kalyuzhnova 1998: 64). Meanwhile, actual industrial investment in Kazakhstan had declined to virtually nothing by the end of 1994 (DeBroeck and Kostial 1998).

It is equally difficult to overstate the extent of the collapse in the economy in the years immediately following independence. Figure 5.1 depicts the annual rate of decline in both GDP and in the industrial sector in the first half of the decade as well as the extent to which recovery followed, based on estimates made by the European Bank for Reconstruction and Development (EBRD). Industrial production alone declined by a staggering 64.1 percent in Kazakhstan from 1991–5. Between 1991 and 1995, GDP declined by a

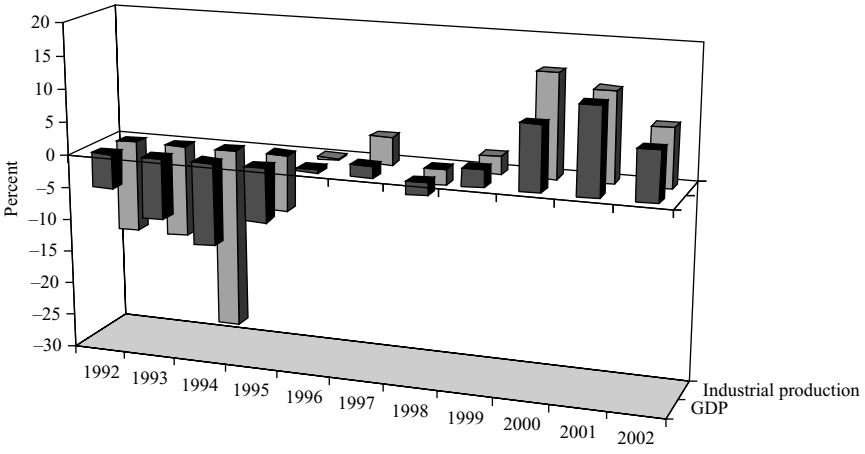


Figure 5.1 Annual growth of real GDP and industrial production in Kazakhstan, 1992–2002

Source: Drawn from EBRD (1999, 2002). Figures for 2001 and 2002 are estimates and projections respectively

cumulative 32.5 percent, and this was after a 13 percent decline in the year leading up to independence (1990–1). The cumulative decline in GDP of 45.8 percent from 1990–5 was very nearly the same as the 49 percent decline in GDP in Russia. By contrast, GDP declined just 17.4 percent in Uzbekistan over the same period.

Among the reasons that have been adduced to explain the severity of the decline in Kazakhstan, three seem most important. First, Kazakhstan had been by far the most subsidized republic in all of the former Soviet Union (Bond *et al.* 1991). The subsidy disappeared in 1991. Second, many had argued that Kazakhstan's GDP would improve by the change in the terms of trade when world prices became the standard of value because the Soviet system had seriously undervalued the raw materials and intermediate products that comprised so much of Kazakhstan's industrial output. In fact, however, Kazakhstan's products were a very long distance to markets and their quality often was not high enough to meet international standards. Thus, re-pricing did not make such a great difference. Moreover, it was surely difficult to observe significant relative price changes in the years immediately after independence with inflation virtually out of control. Third, with the simultaneous collapse in the Russian economy, traditional markets closed very rapidly. New markets were not apparent, and enterprises were forced to cut output. More than just dependent upon Russia for markets, Kazakhstan's entire industrial structure was indistinguishably

intertwined with that of Russia so that collapse there virtually assured collapse in Kazakhstan.

The economic collapse was so rapid and so sizeable that it affected virtually every aspect of life in Kazakhstan and all measures of its quality. Like all the republics in the former Soviet Union, Kazakhstan was identified as a middle income country in the 1991 survey conducted by the United Nations Development Program (UNDP) in the annual assessment of the state of human development worldwide, the first time Kazakhstan was included as a separate country. In 1991, Kazakhstan's per capita GNP of $2,470 compared favorably to the $2,480 average of the world's middle income countries; and, in most other dimensions of human development, the people of Kazakhstan fared better than those in the other middle income countries (UNDP 1994). For example, adult literacy was 97.5 percent in Kazakhstan compared to just 79 percent in other middle income countries, and proportionately more students completed secondary studies. Both infant mortality and maternal mortality were lower in Kazakhstan than in comparable countries. Male life expectancy of 64 years was but one year less than that in comparable countries; female life expectancy of 73 years was two years greater. Overall, Kazakhstan ranked sixty-first among the countries for which the UNDP calculated a Human Development Index (HDI) with an HDI of 0.774. By 1995, the economic decline in Kazakhstan had been so severe that virtually all measures of development had been negatively affected. In the aggregate, Kazakhstan had dropped to ninety-third place among the UNDP countries with an HDI of 0.695 (UNDP 1998). Although still among the middle income countries, it was now well below the average in all dimensions measured by the HDI except literacy. Real GNP per capita was now $353 below the average of the middle income countries. Male life expectancy had declined by more than a year in just four years to 62.6 years, while female life expectancy had declined more than a half-year to 72.3 years.

Moreover, the economic decline and failure of the early transition policies also affected the distribution of income within the country as shown in Table 5.1, which summarizes data from 1989 and compares it to 1994. In 1989, the poorest one-fifth (or 20 percent) of the population received almost 10 percent of the income in Kazakhstan; the richest 20 percent received just over one-third of the income. By 1994, the same data show that the overall economic decline had affected the poorest disproportionately, reducing the percent of income going to the poorest from 9.6 percent to just 6.3 percent. Griffin *et al.* (1997) further calculated that real incomes of the poorest 20 percent of the population declined an apparent 68 percent from 1989 to 1994 while those of the richest 20 percent declined only 52 percent.[4] In other words, all were affected significantly by the economic decline during the first years after Kazakhstan's independence, but those

Table 5.1 The distribution of income in Kazakhstan in 1989 and 1994

Population quintiles	*Percentage of income 1989*	*Percentage of income 1994*
Poorest 20 percent	9.6	6.3
Next poorest 20 percent	13.7	12.4
Middle 20 percent	18.2	17.8
Next richest 20 percent	24.0	29.5
Richest 20 percent	34.5	34.0

Source: Drawn from Griffin *et al.* (1997)

with the least resources were affected most. Additional evidence provided by a World Bank study of living standards in Kazakhstan indicated that earnings inequality also had increased from 1986 to 1996 (World Bank 1998: 6–7). Whereas those in the top-most 10 percent of wage earners earned 3.28 times as much as those in the lowest 10 percent in 1986, by 1996 they earned almost five times as much. Although not exactly coincident in time, the same report indicated that real wages declined by 76 percent from 1991 to 1996, which was an amount large enough to mean that the most well-paid workers in 1996 earned substantially less than had the lowest paid workers in 1986 even if the average wage had not changed from 1986 to 1991.

By 1996, at least one-third of Kazakhstan's population lived below a subsistence minimum, and some estimates put the figure much higher, at 64 percent in 1995 and 80 percent in 1996 (World Bank 1998: i–ii).[5] For comparison, about 41 percent of the population in Russia were found to be living below the subsistence minimum in 1995 as were 28 percent in the Ukraine (ibid.:14). Whatever its precise level in Kazakhstan, the number of those living below subsistence levels by 1996 was large and had been growing throughout the period of economic collapse. Poverty was also found to be fairly comparable between rural and urban areas – some 30 percent of those in urban areas lived below the poverty line versus 39 percent of those in rural areas. In all, some 57 percent of Kazakhstan's poor lived in rural areas and 42 percent lived in urban areas.

Given the pronounced regional disparities in the Soviet pattern of industrial development in Kazakhstan, however, it is not surprising that there were significant regional differences in the incidence of poverty observed in 1996 (ibid.: 16). The incidence of poverty was greatest in the South, which was defined in the study to comprise the Kyzl Orda, South Kazakhstan, and Zhambyl oblasts, where nearly 70 percent of the population were living below the poverty line. Nearly one-third of those in the east, comprised by Almaty city, Almaty, and East Kazakhstan oblasts, were living below the poverty line. Together, the south and east regions in the

study included somewhat more than the southern third of the country defined in Chapter 4 and thus included some of the more industrially developed areas of the country; nevertheless, nearly two-thirds of the population in the region were found to be living below the poverty line. By contrast, only 9 percent of those living in the four northernmost oblasts[6] – Kostanai, Kokchetau, Pavlodar, and North Kazakhstan – were found to be living below the poverty line in 1996.

Death of the iron mother[7]

Mere statistics of production and income declines, grim though they may be, convey neither the full measure of the collapse on the everyday lives of most of Kazakhstan's citizens nor the specter facing the government were the collapse to have continued. Short of living through the collapse, reports of those who did are of some help in understanding, but inevitably those most affected were least likely to be in positions to provide reports. Some insight, however, is provided by the detailed report of life in Alga, a one-company town in the Aktobe (formerly Aktyubinsk) oblast whose single large enterprise had all but closed. Dr. Timo Piirainen, a consultant working on a project in Aktyubinsk city for the European Union's program of Technical Assistance to the CIS (EU-TACIS), lived in Alga during 1996 and wrote up his systematic observations of life there as a part of the project. Alga was located some 45 miles south of Aktyubinsk. Its main enterprise was the Aktyubkhimkombinat, a large chemical plant which produced phosphate fertilizers, sulfuric acid, and boron compounds. At its peak in the 1970s, the factory employed some 5,000 people. In 1991, it employed 3,500 out of a population of around 18,000 in Alga, and another 21,300 lived in villages outside the town. Obviously, the operation of the chemical plant was critical to the economic and social life of Alga. There were an estimated 60 or so similar one-company towns in Kazakhstan;[8] their plight was widely referred to as the small-towns problem (Svoik 1998). In 1998, almost 3 million of Kazakhstan's population of approximately 15 million, or roughly one fifth of the population, lived in such towns. Together, they had been important contributors to Kazakhstan's industrial capacity.

Prior to the 1917 revolution, Alga was a village along the main railroad south from Moscow to Tashkent. It grew into a city in the 1930s following Stalin's decision to build the Soviet Union's first super phosphate fertilizer plant there because it was already on a rail line and it was near significant deposits of phosphate rock. Construction of the plant began in 1929 and relied primarily on prison camp labor; the first unit opened in 1934.

> Nobody knows exactly how big the costs of the construction works were in terms of human lives; they must, however, have been

> considerable, given the austere climatic conditions and the fact that the building of the first phase of the factory coincides with the collectivization of agriculture in Kazakhstan – in demographic terms perhaps the greatest catastrophe in the Soviet history, during which approximately one-third of the indigenous population perished.
>
> (Piirainen 1996: 3)

In 1942, the plant was converted to process borax from rich deposits at Inderborskiy to the east of Alga, along the Ural river about 80 miles north of Atyrau (Shabad 1969: 306–8). A major expansion of the enterprise occurred in the 1950s to include once again the production of phosphate fertilizer as well as to expand the borax processing units because of discoveries of new applications for boron compounds both in Soviet atomic reactors and in the space program. The fertilizer line was rejuvenated with the installation of German equipment under terms of a £6 million agreement between the Soviet trading organization and a West German firm (Connolly 1967: 167–71). In addition, ore concentration plants were constructed at both the borax and the phosphate deposits to increase the content of the material shipped to the plant once the highest grade ores were depleted. Even with new concentration equipment, however, local production of phosphates remained inadequate to support the enterprise, and phosphate was also imported from mines on the Kola peninsula, some 4,000 km to the north. The factory also produced substantial quantities of sulfuric acid, all of which was procured by the Soviet military.

The enterprise had all-union status; in consequence, the city of Alga was comparatively wealthy.

> The variety of goods in the shops in Alga was larger than in Aktyubinsk [the oblast capital], and obtaining scarce consumption goods involved less waiting than elsewhere. In the Soviet standards, the factory-provided apartments in Alga were large and they could be obtained without the long years on the waiting list . . . The factory provided the townspeople kindergartens, cultural services, recreational facilities, a summer camp for children, . . . and central heating for the entire town, as well as a sanatorium that was well-known throughout the whole oblast.
>
> (ibid.: 4)

It was typical of the many cities in Kazakhstan that had been built in support of a local enterprise and received significant direct subsidies.

The dissolution of the Soviet Union in 1991 ended Alga's privileges, severed the enterprise's primary links with both the Kola phosphate supply and the main purchasers of its products, and ended all direct subsidies from

Moscow. The military stopped buying sulfuric acid, leading to the closure of that production unit in 1993. Deliveries of phosphate that had been supplied to the plant from the Kola peninsula without transport cost ceased because the plant could afford neither the phosphate nor the new transport charges. By 1996, only the unit producing boric acid remained open, at least technically, but it could not afford to purchase the requisite raw materials and it too was at a standstill. From employing some 3,500 in 1991, the plant's official workforce was just 780 in August 1996. Of the 780, however, 600 had been placed on leave for several months and 100 were working only part-time. None had received wages for at least a year, though they had received an occasional payment-in-kind of soap or flour. The enterprise could no longer make tax payments or pension contributions, and in 1995 about 70 percent of the budget for the Alga region was subsidized. Those who could – mostly Germans (who had been deported to Kazakhstan in the 1940s) and Russians with family connections elsewhere – emigrated, so that by 1995 the population of Alga had declined by 2,200 or 11 percent. Far from being unusual, these were the conditions at most enterprises and in many cities throughout Kazakhstan.

With no prospect of alternative employment, those who remained in Alga and had access to land, either because they had a house in town or a summer dacha near town, became subsistence producers. The central city park became prime grazing land. Closed buildings, whether those of the enterprise or local schools, were stripped of virtually everything useful, from copper wire that could be resold to windows, doors, bricks, and boards to build the cowsheds, outhouses, storage rooms, barns, and chicken coops of the new agriculturalists. The family with whom Piirainen lived had a four room house they had acquired in 1985. This family was thus relatively well off by comparison with many other employees of the Aktyubkhimkombinat who lived in company-provided apartment blocks, the more typical situation for workers, both in Alga but in all the single-enterprise towns.

> As a rule, they live in a five-storey blockhouse, live only on their salary without even having a country-side garden, because after work from the mines there isn't enough strength to do anything more. That is why, when there is no water and heating in the house, and miners' salary are delayed, a sense of disaster is attached.
>
> (Svoik 1998)

The family's house in Alga had been built by the chemical enterprise where both the husband and wife worked, he as an engineer and she as an accountant, and they had paid a bribe equal to two month's salary to the enterprise in order to take possession. By 1996, all the available space around the house (as well as that of all the neighboring houses) had been adapted to agricultural production; a cellar under the house was converted

to store seasonally surplus production. A garden supplied tomatoes, cucumbers, potatoes, onions, cabbage, aubergines, and grapes. Livestock included three dairy cows, chicken, geese, and two calves. A neighbor kept pigs and shared ownership of one of the cows and a complex set of work- and product-exchange arrangements governed reciprocal trading relations among them as well as among extended family members.[9] In addition, the family raised apples and potatoes on the land at their dacha outside of town. In effect, each family became a subsistence producer, growing most of their food requirements and trading for others. Surplus production was also traded at the local market and on street corners; whatever cash was earned went towards the purchase of the few items that could not be produced like flour and other household goods.

The virtual closing of the chemical enterprise affected all other businesses in the town as well. New construction ceased – in 1995 only five one-family houses were built in Alga and the surrounding region. Production at the enterprise which produced tools and agricultural machinery declined more than a third in just one year because of the decline in the agricultural enterprises in the region around Alga. Work at the city's small typographical enterprise declined steadily each year. Work at the milk processing plant declined as well, from production of some 6,800 tons of milk products in 1991 to just 1,200 tons in 1995, as more and more people came to depend on their own production. Of a total of 70 small enterprises or cooperatives registered with tax authorities in June 1996, only 12 were actually working. Similarly, production at the 12 collective agricultural enterprises in the region had declined dramatically, over 40 percent from 1993–5 alone.

As the residents in Alga become subsistence agriculturalists, the agricultural enterprises were left with smaller and smaller markets for their production. Livestock production in particular moved almost entirely to the city; whereas 12,237 tons of meat were produced in 1991 at the agricultural enterprises, by 1995 they produced only 1,582 tons. Livestock herds in the Alga region were decimated: between just 1995 and 1996, cattle numbers declined 26 percent, sheep 21 percent, and pigs 95 percent. In aggregate terms, the decline in livestock numbers across the country was greater than had occurred in the 1930s when Kazakhs slaughtered their herds and fled or were killed rather than join Stalin's agricultural collectives. Of some 31.7 million livestock in Kazakhstan in 1928, there were only 5.1 million in 1932 (Meffert 1987). In 1990, aggregate livestock numbers amounted to 51.1 million animals; by 1995, there were just 29.7 million (World Bank 1996). If the problems of Alga and its single large enterprise had been an isolated occurrence, they would still have been cause for government concern. However, as one of 60 similar single enterprise towns where one in five of Kazakhstan's people lived and all with enterprises on the verge of closure, they were indicative of the scope of a threatened economic collapse of ever-growing proportion.

The sale of the century

With many of the largest enterprises in difficulty if not already bankrupt by 1994, President Nazarbayev called for the resignation of his entire cabinet of ministers and appointed Akezhan Kazhegeldin as the new Prime Minister with the specific goal of speeding up the case-by-case program to sell the large and the special enterprises. Most of the recently formed state holding companies were closed, the individual large enterprises were corporatized, and new management and investment sought for each. Between 1994 and 1997, most the large enterprises as well as many of the special enterprises were sold in whole (or in part) at least once, and some were sold several times. Initially, the program was well received. International donor agencies viewed it as yet another sign of Kazakhstan's commitment to building a market economy. Indeed, much of the detailed work of the sales program at various stages was supported by technical assistance commitments from several international lenders. Most local communities also welcomed the new owners for the promise they brought of wages, investment commitments, and tax revenues. Foreign investment in Kazakhstan did increase markedly during 1994–7, as shown by the data in Figure 5.2. From an average of just $400 million per year in 1992–4, foreign direct investment (FDI) averaged $1,140 million per year during 1995–7, the period in which Kazhegeldin's government sold most of the large

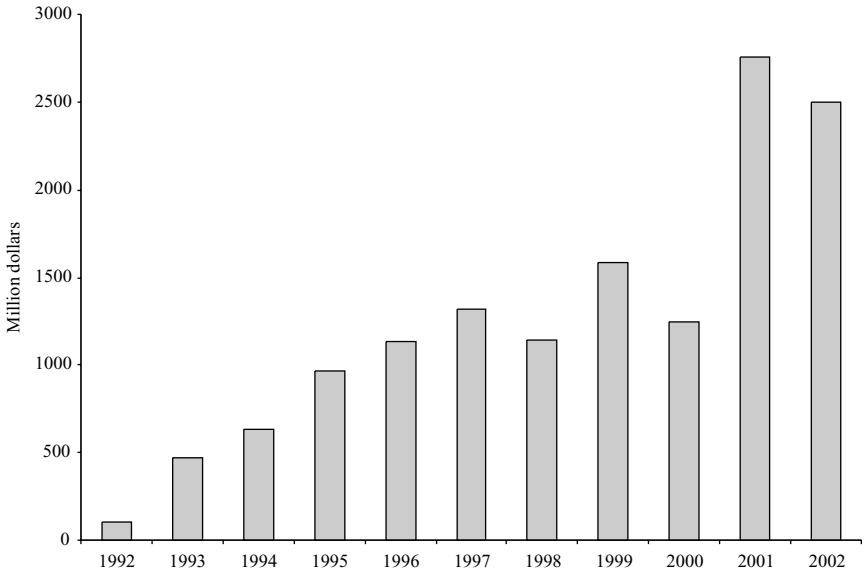


Figure 5.2 Annual net foreign direct investment in Kazakhstan, 1992–2002
Source: Drawn from EBRD (2002)

enterprises. Moreover, these sums represent mostly just initial purchases and the settling of immediate commitments such as wages and pension arrears. They do not reflect the much greater sums committed to future investments in the enterprises as part of the terms of the various sales. The data in the figure also identify the marked change in President Nazarbayev's policy toward privatization that occurred at the end of 1997 when Kazhegeldin was replaced by Nurlan Balgimbayev and further sales of the large enterprises were stopped. Whereas FDI would have been expected to continue to increase as significant investment programs began at the enterprises already sold in addition to revenues from ongoing current sales, foreign investment actually declined in both 1998 and 2000.

By 1997, the program of sales of the large enterprises had become the subject of much criticism. It was not always clear how or why some enterprises became a part of the case-by-case program, how specific buyers were identified, whether there had been an effort to attract competitive bidding, and so on. Some enterprises were sold even though they were operating profitably under local management. The percent of the enterprise sold varied from sale to sale from 100 percent to a bare majority with little apparent justification. In almost no case did the sale involve a minority interest. Many sales were frequently identified as management contracts, but most included a purchase option that could be exercised at the discretion of the new owner and were converted to sales within the first year or so. Although widely touted at the time as an innovative approach to privatization, the management contracts were little more than a means to allow the new investor time to become familiar with the actual operation of the enterprise and then to keep virtually all subsequent negotiations private. All too frequently, the real identity of the buyer was disguised by a company's off-shore registration. Prices paid for the enterprises were generally very low, although many of the sales also carried substantial commitments to future investment. With little transparency and so much left to private negotiation, there should be little surprise to find that bribery was also endemic, and perhaps epidemic, to the process.[10] President Nazarbayev, members of his family, and his close associates have all been named in one allegation or another of bribery in the many enterprise sales, and most have been named in many allegations. A succession of prime ministers and other government officials were also alleged to have been directly involved in various arrangements. To put it succinctly, "the favorites of one prime minister were simply replaced by the industrial entrepreneurs championed by his successor" (Olcott 2002: 130).

In retrospect, and even in prospect, many procedures could have been better designed both to improve the terms of the sales and to reduce the opportunities for ongoing bribery. At the same time, with the economy visibly shrinking almost by the day, there was an urgency about making changes and bringing in new management and new money to the large

enterprises. This urgency cannot be replicated in writing today, but it is important to keep it in mind as the individual sales are assessed. Chapters 6–11 describe the sales by sector – nonferrous metals, ferrous metals, precious metals, oil, other mineral fuels, and electric power and other utilities. Many of the new investors/owners were independent entrepreneurs like Leslie Urquhart and the Fell Brothers at the turn of the century, raising money on Western capital markets to acquire and operate an enterprise while themselves providing the new management. Others were major international companies acquiring another operating company for its raw material, for its productive capacity, and/or simply because that was their line of business. Finally, some were rather more undistinguished in their origin, an ill-defined combination of former government officials, questionable finance partners, and former trade negotiators. Only a very few among them have proved to be successful.

6

PRIVATIZATION, FOREIGN INVESTMENT, AND CONSOLIDATION IN THE PRINCIPAL ENTERPRISES OF THE NONFERROUS METALS SECTOR

By the time of Kazakhstan's independence in late 1991, nonferrous metallurgy accounted for about 11.5 percent of GDP (Sagers 1992c: 503). The sector had also been a major source of environmental damage in Kazakhstan and accounted for 26 percent of the accumulated industrial waste in Kazakhstan (UN-ECE 2000: 136). At the mining and enrichment enterprises, there were 5.1 billion tons of mineral wastes that covered 14,000 hectares; at the metallurgical enterprises, another 105 million tons of wastes covered an additional 500 hectares. The sector declined rapidly after 1991, as illustrated by the production figures displayed in Figure 6.1. The series include the output of refined lead and zinc, refined copper, and alumina. Overall, production of these commodities declined 7.5 percent in 1993, the second full year of independence, and then fell precipitously in 1994 to only 65 percent of 1992 production levels. Production of alumina was least affected, dropping from 1.1 million tons in 1992 to just a bit less than 0.9 million tons in 1994, some 75 percent of 1992 levels. Production of refined lead was most affected with an output decline of nearly 50 percent between 1992 and 1994. Given the importance of the sector in the overall economy, it was hardly surprising that the first large minerals enterprise to be put under a management contract with a foreign firm (as a prelude for the subsequent sale) in hopes of reversing the disastrous output declines was from this sector. It may be somewhat surprising, however, that the first enterprise turned over to foreign management was the alumina plant in Pavlodar, if only because the decline in alumina output was the least dramatic. Recovery in alumina output was fairly prompt, and by 1996 it had returned to levels achieved earlier. Foreign investors were also attracted to most of the other enterprises in the sector from 1995–7, but

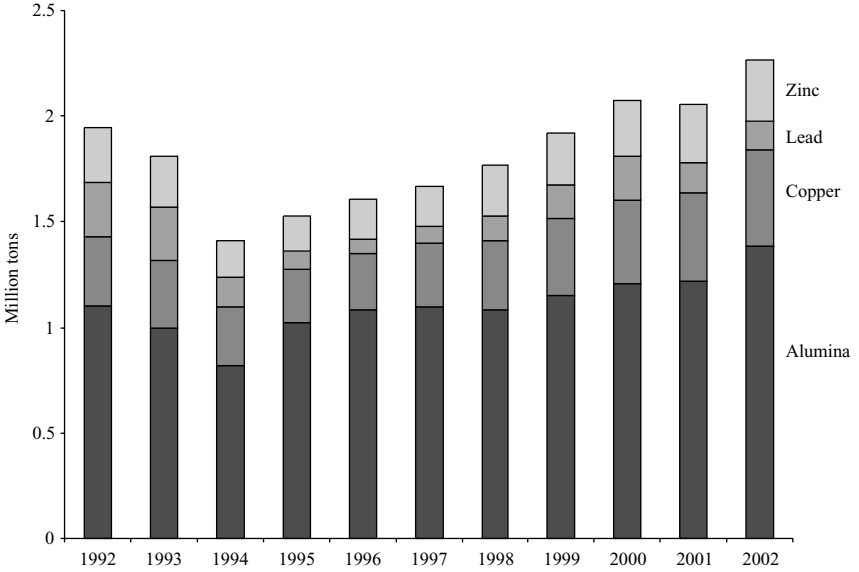


Figure 6.1 Production of selected nonferrous metals in Kazakhstan, 1992–2002
Source: Drawn from Levine (1995b, 1999b), Roskill (1998), and Interfax

recovery was much slower, with aggregate outputs not reaching earlier levels until 2000.

The map in Figure 6.2 identifies most of the major minerals deposits in Kazakhstan and the principal cities in which they are processed.[1] For alumina production, there were three enterprises of importance – two bauxite mining complexes in Kostanai oblast at Turgai and Krasnooktyabrsk and the alumina processing plant at Pavlodar. For copper there were eight ore mining and processing complexes which produced copper ore either as their principal ore – the Zhezkazgantsvetmet, Balkhashmys, and Karagaily mining complexes in Karaganda oblast and the Zhezkent complex in East Kazakhstan – or with substantial concentrations of lead and/or zinc – the East Kazakhstan Copper-Chemicals, Zyrianovsk, Leninogorsk, and Irtysh mining complexes, all in East Kazakhstan. The two main copper refineries were Zhezkazgantsvetmet and Balkhashmys. In addition, minor amounts of copper were refined at the Ust-Kamenogorsk complex in 1994, 1995, and 1996. The main mining complexes producing lead ore concentrate were Zyrianovsk and Leninogorsk in East Kazakhstan, Tekeli in Almaty oblast, and Achpolimetal at Kentau in South Kazakhstan. Lead was refined at the Ust-Kamenogorsk and Leninogorsk refineries in East Kazakhstan and at the Shymkent lead plant in South Kazakhstan.

Zinc ores were mined and concentrated at ten complexes, five in East Kazakhstan at Leninogorsk, Zyrianovsk, Irtyshpolimetal, Zhezkent and the East-Kazakhstan Copper-Chemicals combines, three in Karaganda oblast at Akchetau, Karagaily, and Zhezkazgan, and one each in Almaty (Tekeli) and South Kazakhstan (Achpolimetal).

Alumina

Kazakhstan was one of the largest producers of alumina, which is the principal intermediate product in the production of aluminum from bauxite, in the former Soviet Union. At one time, Kazakhstan accounted for as much as 20 percent of total annual Soviet production. All the alumina was produced at the single plant in Pavlodar, whose rated annual capacity of 1.1 million tons made it one of the two largest within the Soviet Union (Sagers 1992c and 1998b). Bauxite was mined at the Krasnooktyabrsk and Turgai enterprises in Kostanai oblast in the northwest of Kazakhstan and shipped east to Pavlodar. The mines at Turgai were first developed in the late 1950s after a rail link to the South Siberian railroad (and thus to Pavlodar) opened in 1958 (Shabad 1969: 294). Ore began moving to Pavlodar in 1963, and in 1964 the first ore was processed at the alumina plant in Pavlodar. Evidently, there were plans to build a smelter at Pavlodar; but, even though substantial investments were made in developing power supplies from both hydroelectric and coal-fired sources, a smelter was never built (Levine 1993b). Nevertheless, the alumina plant was expanded in the late 1960s, and additional supplies of bauxite were developed from mines at Krasnooktyabrsk after another rail link was completed. All of the alumina from the Pavlodar plant was shipped to smelters in Russia, principally the Bratsk and Sayansk smelters in Siberia.

By the end of 1994, with output of alumina at 75 percent of its former levels, the plant in Pavlodar was on the verge of bankruptcy. At the time, it may have seemed serendipitous that a foreign company was interested in reviving production and restructuring the management of the enterprise; however, since one of the partners in the company, the Trans World Group, was also acquiring interests in aluminum smelters in Russia including those at Bratsk and Sayansk where much of the alumina from Pavlodar was shipped, it was not simple serendipity that brought them to Kazakhstan.[2] In December 1994, after little consultation and virtually no financial review, the government of Kazakhstan placed the Pavlodar plant under what was then called a five year management contract with a company identified only as Whiteswan Ltd, reportedly registered in the British Virgin Islands. Whiteswan was in fact a joint venture of the Trans World Group (TWG), a UK-based metals trading company that had been an active metals dealer throughout the former Soviet Union,[3] and the Kazakhstan Mineral Resources Corporation (KMRC), a member of the financial-industrial

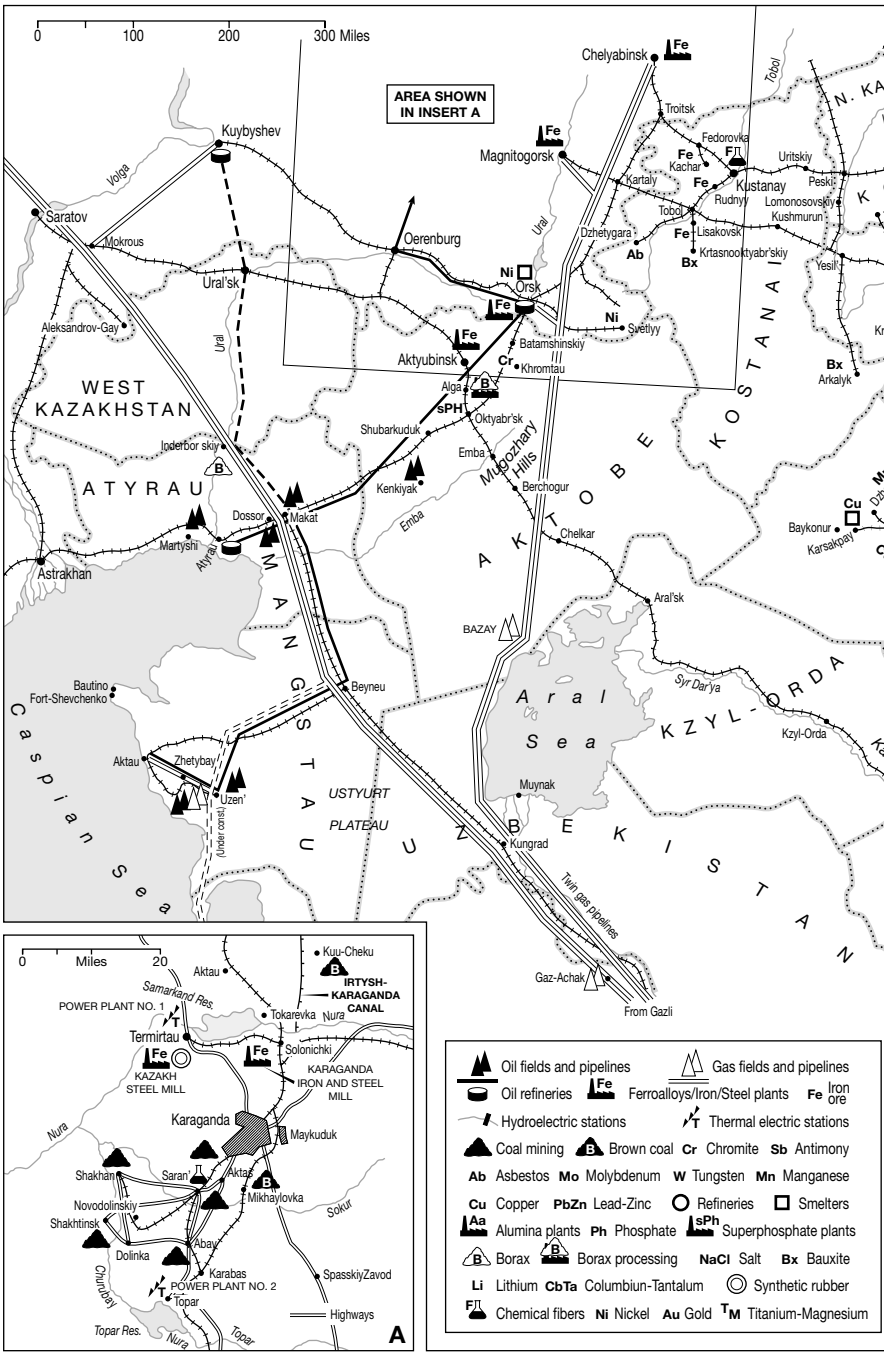
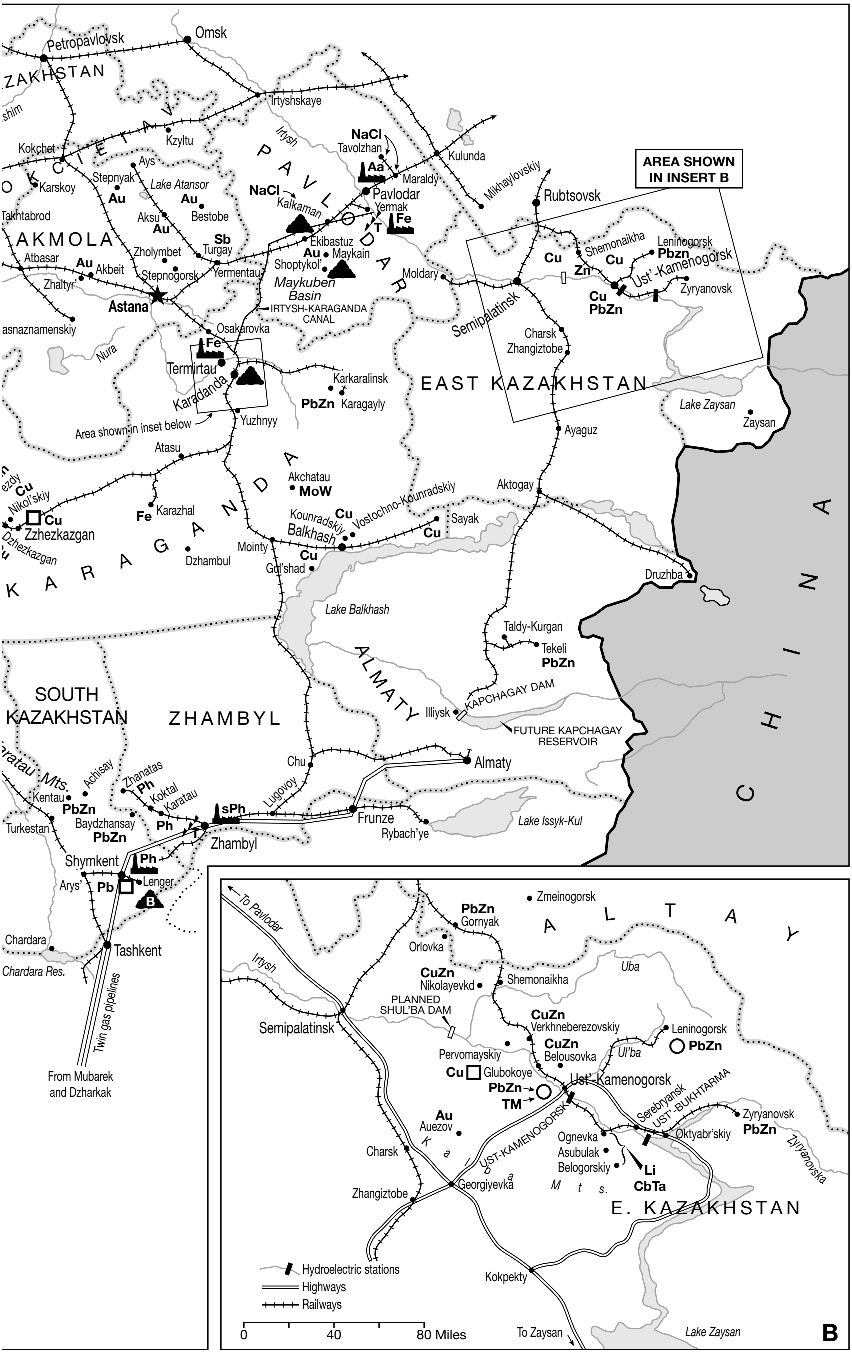


Figure 6.2 Principal mineral deposits in Kazakhstan

Source: Adapted from Shabad (1969: 290–1) with permission of the publisher



Omsk
Petropavlovsk
KAZAKHSTAN
Irtyshskaye
Kzyltu
Kokchet
KOKCHETAV
Irtysh
PAVLODAR
NaCl
Tavolzhan
Kulunda
Aa
Maraldy
Mikhaylovskiy
AREA SHOWN IN INSERT B
Rubtsovsk
Karskoy
Stepnyak
Ays
Lake Atansor
Au
Bestobe
NaCl
Kalkaman
Pavlodar
Yermak
T
Fe
Takhtabrod
Aksu
AKMOLA
Zholymbet
Sb
Turgay
Ekibastuz
Maykain
Shoptykol'
Maykuben Basin
IRTYSH-KARAGANDA CANAL
Moldary
Shemonaikha
Cu
Zn
Leninogorsk
Pbzn
Ust'-Kamenogorsk
Zyryanovsk
Atbasar
Akbeit
Zhaltyr'
Stepnogorsk
Yermentau
Astana
Krasnaznamenskiy
Osakarovka
Nura
Fe
Termirtau
Karadanda
Karkaralinsk
PbZn
Karagayly
Semipalatinsk
Charsk
Zhangiztobe
EAST KAZAKHSTAN
Lake Zaysan
Zaysan
Area shown in inset below
Yuzhnyy
Ayaguz
Atasu
Dzhezdy
Cu
Nikol'skiy
Zzhezkazgan
Dzhezkazgan
Fe
Karazhal
Akchatau
MoW
Aktogay
Kounradskiy
Vostochno-Kounradskiy
Sayak
Balkhash
Mointy
Gul'shad
Dzhambul
KARAGANDA
Druzhba
Lake Balkhash
Taldy-Kurgan
Tekeli
PbZn
ALMATY
KAPCHAGAY DAM
Illiysk
FUTURE KAPCHAGAY RESERVOIR
CHINA
SOUTH KAZAKHSTAN
ZHAMBYL
Karatau Mts.
Achisay
Zhanatas
Ph
Koktal
Karatau
Kentau
PbZn
Baydzhansay
Turkestan
sPh
Lugovoy
Chu
Almaty
Frunze
Rybach'ye
Lake Issyk-Kul
Zhambyl
Shymkent
Arys'
Pb
Lenger
B
Chardara
Chardara Res.
Tashkent
Twin gas pipelines
From Mubarek and Dzharkak
To Pavlodar
Irtysh
PbZn
Gornyak
Zmeinogorsk
ALTAY
Orlovka
CuZn
Nikolayevkd
Shemonaikha
Uba
PLANNED SHUL'BA DAM
Verkhneberezovskiy
Leninogorsk
Belousovka
Ul'ba
Pervomayskiy
Glubokoye
TM
Ust'-Kamenogorsk
Serebryansk
UST'-BUKHTARMA
Zyryanovsk
Oktyabr'skiy
Zyryanovska
Auezov
Ognevka
Asubulak
Belogorskiy
Li
CbTa
Kalba Mts.
UST'-KAMENOGORSK
Georgiyevka
E. KAZAKHSTAN
Hydroelectric stations
Highways
Railways
Kokpekty
0
40
80 Miles
To Zaysan
Lake Zaysan
B

group in Kazakhstan represented by the Eurasian Bank, itself a private bank with Russian and Israeli backing that was financing the Trans World Group's activities in Russia and Kazakhstan (Robinson July 11, 1996).

The use of the subsidiary Whiteswan, registered in the British Virgin Islands, permitted both TWG and KMRC to conceal their participation in the transaction, and for a long while the owners of Whiteswan remained secret, a situation which did not lend public confidence in the efficacy of the transaction. It was rumored that the reason the identity of the owners of Whiteswan was kept confidential was their "vague" reputation in Russia.[4] Although little information was available publicly at the time, in subsequent reports Lev Chernoi was identified as the principal partner of the Trans World Group in Russia. Chernoi was a "pivotal figure" in the Russian metals industry throughout the 1990s and the subject of investigations by Swiss, U.K., and US authorities on charges of money laundering and links to organized crime (Burns 1999). Among the practices alleged to be associated with Chernoi's control of the Russian aluminum industry were intimidation, disappearances of key rivals, and murder (Yureyev 1999). For its part, the Trans World Group had grown to prominence in the international aluminum trade in the mid- to late-1980s when it handled nearly 50 percent of the aluminum exports for the Soviet Union (Clover and Hall 2000). In the early 1990s, it acquired substantial interests in the Krasnoyarsk, Bratsk, and Sayansk aluminum smelters in Russia, interests which led to the acquisition of the alumina plant in Kazakhstan. The Trans World Group was itself the target of an investigation in Germany for suspected money laundering charges in early 2001, but the investigation was suspended for lack of evidence (*Suddeutsche Zeitung* 2001).[5] Finally, KMRC was a management company for the Eurasian Bank Group (also known as the Chodiev Group), which represented the interests of Patokh Chodiev, Alexander Mashkevich, and Alijan Ibragimov. KMRC was renamed the Eurasian Industrial Association; together with the bank the enterprises are collectively identified as the Eurasian Bank Group (EBG). Chodiev has been investigated for money laundering (*Intelligence Newsletter* March 25, 1999), and Mashkevich has been implicated in two of the more substantial investigations involving bribery in the sale of individual enterprises, accused of accepting bribes from Tractebel (see Chapter 11) and Ispat International (see Chapter 7) on behalf of President Nazarbayev.

Under terms of the management contract, the TWG/EBG partnership Whiteswan was required to settle immediately tax and other debts to the national budget of KZT 674.9 million (approximately $10 million) and to revive output. Although initially a management contract, it included the right to first refusal to acquire a 30 percent interest in the plant, a share interest which evidently increased in subsequent negotiations (Buraff 1996). By September 1995, less than 12 months after entering the initial five year management contract and again without a tender, TWG/EBG had

acquired 52.75 percent of the Pavlodar plant for $22.1 million, promised future investments of $123 million, and payment of an undisclosed total debt which included at least a repayment of $24.5 (Kalyuzhnova 1998: 79–83; *Focus Central Asia* 5 1998). The TWG/EBG partnership continued negotiations with the government to obtain the resources upon which the plant depended, paying an additional $11.3 million for the two bauxite enterprises and pledging to invest some $30 million in them and to pay accumulated debts (Kalyuzhnova 1998: 79–83). These assets were reorganized in 1996 with the creation of a new joint-stock corporation, Aluminum of Kazakhstan, consisting of the Pavlodar plant, Krasnooktyabrsk JSC, and Turgai JSC, as well as a limestone mine and two repair shops. TWG/EBG was given a 56.48 percent interest in the new firm, the labor collective retained 9.28 percent, 2.56 percent was made available for purchase by privatization investment funds, and the government retained a 31.86 percent interest. The TWG/EBG partnership was not finished acquiring related assets in Pavlodar, however, and later in 1996 it acquired one of the city's three thermoelectric (i.e. combined heat and power) plants, an acquisition which included an additional investment pledge of $110 million (Kazkommerts Securities 1997). Thus, in less than two years, TWG/EBG had converted an initial contract to manage a single enterprise into a controlling equity position in a monopoly in Kazakhstan's alumina sector, all without such competition as might have been offered by public tenders and all at what in retrospect were remarkably low prices. Moreover, TWG had itself recreated the former Soviet production system, uniting the smelters with their principal bauxite and alumina supplier.

In part, the ease with which the TWG/EBG partnership consolidated and then expanded their investment in Kazakhstan reflected widespread approval of the fact that debts had been paid, wages were being paid, and the output declines had been reversed so quickly. From a reported low of 0.822 million tons of alumina produced in 1994, for example, output had been returned to near capacity by 1996, as shown in Figure 6.3. The partnership also undertook investments in the operations, which by mid-1997 totaled of some $545 million, including $66 million in capital improvements (*Feller's Mining News* November 14, 1997). Moreover, they developed plans to expand significantly, both to increase alumina capacity to nearly twice its existing level and to build a smelter (Kazkommerts Securities 1997). In June 1997 President Nazarbayev and Prime Minister Kazhegeldin traveled to Pavlodar to meet with the president of the Trans World Group to discuss their investment plans, to inspect the production facilities, and to celebrate the "beginnings of a new plant" (*MMS* June 10, 1997). Thus, the new owners appeared to be models of success among the many foreign investors coming to Kazakhstan.

Nevertheless, the sale of Kazakhstan's entire aluminum industry to virtually unknown investors also attracted criticism. Because the sale was not

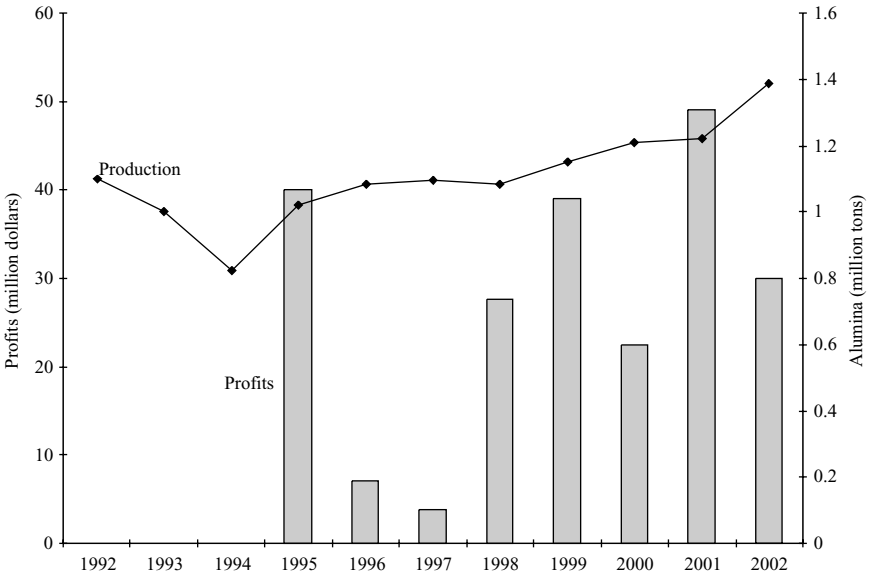


Figure 6.3 Production of alumina and profits at Aluminum of Kazakhstan, 1992–2002

Source: Drawn from Levine (1995b, 2000b) and Interfax

made through open tenders, nor indeed were all the terms ever made public, concerns were expressed even early on that the assets had been sold too cheaply. When in 1995 profits at the plant were reported to be KZT 3.4 billion (about $45 million) compared to the $22 million purchase price, this criticism gained wider credence (*Almaty Herald* March 12–18, 1998). Criticism increased in late 1997 when the TWG/EBG partnership offered to purchase the state's remaining interest in Aluminum of Kazakhstan as well as in two ferrous metal enterprises it also had acquired (see Chapter 7) for a total of just $120 million – an amount widely believed to be well below fair market values. In addition, since the true ownership of Whiteswan remained obscured because of its off-shore registration, many concluded that prominent Kazakh government officials were involved. Throughout, there were also persistent rumors that the new owners were in fact stripping the enterprises of all readily available assets, including all mineral stocks, and making no substantive changes, rumors that intensified when profits at the enterprise began declining.

In the end, the precipitous decline in reported profits in 1996 and 1997, shown in Figure 6.3 as the shaded bars superimposed on the output figures, ended the government's support for Whiteswan and for the participation of the Trans World Group. Although Aluminum of Kazakhstan continued

to be profitable in 1996, it paid no taxes. In fact, it received a net rebate from the state budget when its VAT refund was greater than the amounts owed the budget from profits (*IMMR* October 21, 1997). In 1997, profits declined more (increasing the net subsidy to the firm from the government) when the reported sales prices for alumina to the smelters in Russia declined substantially. In reality, profits at the alumina operations had declined only because TWG, with its interests in Russian smelters and subsequent export of aluminum, had been booking alumina sales at very low prices and transferring a substantial share of the profits out of Kazakhstan. Moreover, since the alumina was then processed at its smelters in Russia on a tolling basis, virtually all the profits were realized outside of both Russia and Kazakhstan. The extent to which EBG may have benefited from the off-shore profits is unclear, but it is clear that the tactic provided EBG with the means to assure itself of the government's support in any serious confrontation with its partner since the below-market pricing of alumina substantially decreased tax revenues in Kazakhstan.

When declining profits precipitated a dispute between the Trans World Group and its partner EBG over management of the enterprise, EBG attempted to organize a shareholder's meeting in November 1997 to oust the Trans World Group and the dispute became public. Perhaps not so coincidentally, the government ordered an investigation of the firm's finances. A preliminary audit revealed that prices for alumina sold to TWG's refineries in Russia had declined from $175 per ton in 1996 to $118 in 1997, prices which were reported to be substantially below market levels (*KWN* February 9, 1998). Thus, in early January 1998, the government joined with EBG and replaced TWG's management at Aluminum of Kazakhstan.[6] Sales contracts were re-negotiated immediately at the substantially higher price of $150 per ton (*Focus Central Asia* 5 March 1998).

Repercussions of the dispute went far beyond TWG's investments in the alumina sector. The two other EBG/TWG partnerships in the ferrous metals sector in Kazakhstan were also dissolved (see Chapter 7). Moreover, the dispute undoubtedly contributed to the increasing official concern about all the enterprises which had been placed under foreign management and/or in which foreign firms owned controlling interests. It was surely a major determinant in the formal announcement in February 1998 of a moratorium on any further sales of the large enterprises (the formal confirmation of changes in policy begun with Nazarbayev's replacement of Prime Minister Kazhegeldin with his opponent Nurlan Balgimbayev in October 1997) and in the subsequent official announcement in June 1998 that there would be thorough audits of all existing contracts.

Not surprisingly, the Trans World Group ceased all investment in Kazakhstan. It also filed suit against the government in the International Court in The Hague in early 1998. The suit succeeded in halting export sales from all three of the TWG/EBG enterprises in Kazakhstan for the

first three months of 1998, but the embargo was lifted in April and shipments resumed. Almost as soon as taking control of Aluminum of Kazakhstan, EBG's management announced it had returned the firm to profitability as well as had developed ambitious expansion plans (*Almaty Herald* April 16–22, 1998). It also concluded an agreement with the local government in Pavlodar by which the authorities agreed to not interfere in the firm's business beyond their legal obligation, to assist it by lobbying the State Investment Committee to support investment projects, and to allow it to choose freely its customers. In return, the enterprise agreed to pay wages in a timely fashion, to increase wages by 15 percent above the average 1997 wage by September 1999, to support social and environmental projects in the region including the local football club, and to pay KZT 3.5 billion (about $47 million) to the local budget (*Almaty Herald* March 19–25, 1998; *KWN* March 16, 1998).[7] The agreement underscored both the complicated nature of relations between the large enterprises and the local community generally, and the gradually increasing role for local authorities (who had been largely bypassed in the initial sales arrangements) in overseeing the performance of new manager/owners.

As evident in Figure 6.3, alumina output has remained at near capacity, which has increased slightly each year since 1997, yet another indication that the dispute with TWG was over its marketing and pricing strategies and not over operations per se. Most of the firm's output continued to be shipped to smelters in Russia, refined on a tolling basis, and then exported and marketed internationally. Under EBG's management, Aluminum of Kazakhstan remained profitable, although profits declined again in 2000 after their initial recovery in 1998 and 1999.[8] In 2001 it employed 11,600 (*IMMR* October 12, 2001). It was also designated as one of the so-called 'blue-chip' companies that the government has included in various initiatives to sell some or all of its remaining share interests in the country's large enterprises although, to date, almost no shares have been sold in any of the enterprises via these initiatives. The blue-chips program was designed originally by then Prime Minister Kazhegeldin to support the development of the Kazakhstan Securities Exchange (KASE) by selling small amounts of the government's remaining equity in many of the large enterprises through the exchange (*Focus Central Asia* 4 1998). For example, 5 percent of the government's shares of Aluminum of Kazakhstan were included in the program that was announced on June 6, 1997. However, the initial program stalled after the government's abrupt change in policy toward further sales of the large enterprises that occurred later in 1997. It was reintroduced as a program through which substantial revenues could be generated, and much larger blocks of shares were to be considered for sale. Each year since 1998, however, sales have been announced but until 2002–3 almost none occurred.

In the case of Aluminum of Kazakhstan, one additional reason that sales of the remaining government shares might have been delayed was that the

enterprise remained embroiled in legal battles until March 2000. In January 1999, the Kazakh Supreme Court ruled that the Trans World Group "had inflicted considerable damages on Kazakhstan's economic and financial interests through its dealings with the country's metals industry" (*ICACBR* February 15–21, 1999). Losses of more than $102 million were attributed to its mismanagement of the aluminum enterprise and the court assigned TWG's portion of Whiteswan's stock to the company as (partial) payment. It also declared void all credit agreements and trade contracts between Kazakh enterprises and the Trans World Group, amounting to some $250 million, and levied punitive damages of another $250 million against TWG for its mismanagement (*ICACBR* March 1–8, 1999). Like virtually all the earlier foreign investors in Kazakhstan's metals industries who lost control of their investments, TWG counter-sued in courts in the UK and the British Virgin Islands (where Whiteswan among others was registered) to regain their investment, which was estimated to total $750 million in all its enterprises in Kazakhstan, arguing among other things that the Kazakhstani courts had no jurisdiction over TWG's contracts with the government. These efforts also met with some success. In June 1999, a court in the British Virgin Islands ruled the Kazakh court had no jurisdiction over the contracts and ordered EBG to reinstate the Trans World Group's interests (*IMMR* July 3, 1999). Various court proceedings continued, however, until March 2000 when TWG and EBG reached a private settlement. TWG gave up all claims to its former operations in Kazakhstan in return for an undisclosed financial settlement from EBG, estimated to be between $150–$250 million (Atkinson and Randeep 2000; *ICACBR* December 25–January 8, 2001). Thus, EBG acquired the entire 56.48 percent majority interest and now has a monopoly on the alumina sector in Kazakhstan.

Throughout the legal proceedings, the Eurasian Bank Group retained the support of the government and the group's leading voice, Alexander Mashkevich, continued to be a close confidant of President Nazarbayev. EBG designed and carried out an investment program at the mines and alumina plant; but, although it reaffirmed repeatedly its intention to build a smelter in Pavlodar, it provided few details as to either timing or funding (*IMMR* May 28, 1999). With the resolution of the legal battle with TWG in 2000, the plans to build a smelter seemed to take on new momentum and Japan, Canada, and China expressed interest in both construction and financing.[9] The project also received government support as a priority for the mining sector. Nevertheless, it did not go forward (*ICACBR* September 3–9, 2001). Then, in March 2002 the government announced again its intention to sell its remaining 31.64 percent minority stake in Aluminum of Kazakhstan via a closed tender, and the main condition in the tender was that the new investor was obliged to build an aluminum smelter (*IMMR* March 8, 2002). Although three firms reportedly bid in the tender, including the Eurasian Bank Group (which was said to be prepared to invest

$600 million in the shares and smelter), the government halted the tender in April (*IMMR* April 5, 2002). In January 2003, another tender was announced and again included the condition that a smelter be built (*IMMR* January 10, 2003). However, it too was canceled after only one bidder appeared interested in participating. In the meantime, production of alumina continues to increase gradually.

Copper

By 1990, Kazakhstan accounted for approximately one-third of the copper-mining and metal-refining capacity of the former Soviet Union. Overall, Kazakhstan ranked as the world's seventh largest producer of copper with reserves which were estimated to rank it fourth (Kazkommerts Securities 1997). In addition to the fully integrated ore-mining, processing, and refining enterprises that had developed at Zhezkazgantsvetmet and Balkhashmys, copper-bearing ores were also mined and processed at the Zhezkent, East Kazakhstan Copper-Chemicals, Zyrianovsk, Leninogorsk, Irtysh, and Karagaily Complexes (Roskill 1998). The smelter at Globokoye, which was part of the Irtysh Complex and dated to the early Soviet years, also produced blister copper that was sent to Balkhashmys for refining.

Zhezkazgantsvetmet, which had been part of the Spassky Copper Mining Ltd before the October Revolution, had become a fully integrated copper production enterprise in 1973 when a new smelter finally opened, which replaced the original Karsakpay smelter that had been closed since 1957 (Shabad 1985). An electrolytic refinery had been completed in 1955 and ore concentration plants in 1954 and 1963 (Shabad 1971). A third concentrator was added in 1985, and another smelter opened in late 1984 that was designed specifically to process tailings from earlier operations. In 1997, the reported annual capacity at Zhezkazgantsvetmet was 308,000 tons for smelting and 211,000 tons for refining (Greenwich 1998). It produced slightly more than 60 percent of the 316,000 tons of copper concentrate produced in Kazakhstan that year. The development of Balkhashmys dated to the 1920s and 1930s, but by 1990 it accounted for less than 10 percent of Kazakhstan's annual ore production. However, its annual refining capacity was nevertheless 50 percent greater than that at Zhezkazgan and it depended on ores, concentrates, and blister copper from a number of the other mining and processing complexes (Roskill 1998). Listed above, these were mostly in East Kazakhstan and developed polymetallic ore deposits that, in addition to copper, included lead, zinc, and other metals.

The data in Figure 6.1 showed that the decline in the production of refined copper from 1992 to 1994 was nearly 20 percent. The decline in mine production of copper was more than twice as great. Obviously the industry was in substantial trouble, attracting foreign investors/managers

became a high priority for the government, and initial management contracts were negotiated soon after that for Pavlodar Alumina. Zhezkazgantsvetmet was first. In June 1995, management was turned over to the South Korean company Samsung via its wholly-owned subsidiary Samsung Deutschland Gmbh (*MMS* May 24, 1996). The contract appeared to have included provisions on repayment of enterprise debts, estimated at $170 million, as well as on minimum amounts of investment in the firm, output targets, and profit sharing. In return, Samsung "would get 2 percent of the smelter's profits, a variable margin on copper sales abroad, and first option in any privatization" (Thoenes July 4, 1996). Samsung discovered debts were significantly larger than had been reported (as much as $240 million by one estimate) and that it had 6,000 more employees than were on its books; negotiations with the government continued. Samsung was allowed to delay debt repayments and to suspend purchase and sales contracts at will. Nevertheless, less than a year later and with no announcement, Samsung had converted the management arrangement to a 40 percent equity interest.[10] Reportedly, Samsung paid a total of $351.1 million, including just $49.2 million to the government for the equity interest (Greenwich 1998).[11] It also was given management control of the state's 35 percent interest, from which it was to be permitted to purchase an additional 11 percent interest in the enterprise. Samsung pledged to invest some $1.05 billion over 15 years, of which $120 million was to be immediate (Kazkommerts Securities 1997). Samsung retained responsibility for debt repayment, but could defer beginning repayment for 18 months; and, by July 2000, it had paid $188 million of the (again revised estimate of) $207 million in debts (*ICACBR* July 10–16, 2000). The consequences of the debt deferment in particular were serious problems in the local economy. For example, one construction company, who was owed $12.8 million, was unable to pay its 25,000 employees for five months (Thoenes, July 4, 1996). More generally, the practice of forgiving debts or delaying payments could have consequences well beyond the local community as well, and at least one foreign metals trader reportedly went bankrupt partly because its contracts with several Kazakhstan enterprises were cancelled as soon as they were put under management contracts.

Like the TWG/EBG partnership, Samsung's acquisitions in Kazakhstan's copper industry were far from complete. In 1996, it purchased the Zhezkazgan power plant to resolve difficulties with power supplies. It acquired interests in other power stations as well. In April 1997 it acquired 65 percent of the Zhezkent Enrichment Complex, one of its suppliers of copper concentrate (Greenwich 1998). In May 1997, management of another ore supplier, the East Kazakhstan Copper-Chemical Complex, and of the Borly Coal Mine were also transferred to Samsung. Then, as negotiations between the government and other foreign investors in the sector to manage and/or purchase the remaining copper enterprises collapsed

for reasons discussed below, Samsung stepped in and either acquired the enterprises or were given them to operate in a trust management contract.

The often times tortuous and never transparent paths by which Balkhashmys, Irtysh, and others came to be a part of the Samsung's Kazakhmys (described below) also illustrate well many of the difficulties encountered by the government, by the individual enterprises, and by many foreign investors in restructuring Kazakhstan's industries. Balkhashmys was perhaps the most convoluted. The government's first effort to place Balkhashmys under foreign management and/or ownership followed the initial contract negotiations with Samsung when, in late 1995, it negotiated a contract to manage the enterprise (and possibly to sell a 29 percent share interest) with CAM Finance SA of Switzerland. In what proved to be the undoing of the agreement, the contract specified that the government was to place precious metals abroad as security for CAM Finance investments in Balkhashmys. In the end, the government refused to comply, and the contract was canceled in May 1996 (Kazkommerts Securities 1997). CAM Finance sought reparations for the contract cancelation, ultimately suing the Kazakhstan government for $45.1 million in damages (of which $6.5 million was investment costs and the remainder lost revenues) in an international arbitration court in Stockholm (*IMMR* May 21, 1999).[12] Meanwhile, the situation at Balkhashmys deteriorated, so that by mid-1996 its indebtedness had reached KZT 5.3 billion (about $78.2 million). Wages were not paid regularly, and arrears had increased to KZT 381 million (*MMS* August 16, 1996). Soon thereafter, the government announced there would be an open tender for an 83 percent share interest of the enterprise, with a minimum investment requirement of $650 million by the year 2005 and minimum production targets (*Interfax Mining News* January 17, 1997). Two groups participated in the tender, the Trans World Group and a consortium composed of Swiss metals trader Glencore International, the US copper company Phelps Dodge, and the Kazakhstani commercial bank Kazkommertsbank. In September 1996 the consortium was awarded the contract.

The consortium immediately undertook an audit of Balkhashmys, only to learn the situation was again significantly worse than had been described.

> Balkhashmys is currently in dire financial straits, with accounts payable of over $200 million. Balkhashmys owes Erdenet, a Russian-Mongolian joint venture which supplies copper concentrate, about $20 million, and another $23 million in credit repayments under a deal with the government of Austria to set up the production of enameled copper wire at the plant.
>
> Accounts payable ha[ve] stopped rising, though, since the government appointed its trustees at Balkhashmys, and wages and taxes are paid regularly. However no debt repayment schedule has yet been drawn up on account of the current lack of investment. . . .

> Phelps Dodge said in its technical report that Balkhashmed had exhausted practically all of its ore base, and that equipment was highly depreciated. The US firm said at least $24 million would have to be spent within the space of a year on restoring capacity to an "acceptable level of production," overhauling, buying new and replacing worn-out equipment, followed by between $50 million and $100 million in the next five-to-ten years.
>
> Phelps Dodge also thinks $75 million–$100 million will have to be spent on improving the plant's environmental record.
>
> The company's overall conclusion was that Balkhashmed was generally obsolete and would require capital investment of $600 million–$900 million to upgrade
>
> (*Interfax Mining News* January 17, 1997)

The consortium attempted to reopen negotiations with the government and proposed substantial revisions in its contract, including freeing the company from all existing debt liabilities. In the end, the government rejected the proposed revisions, announced yet another tender for Balkhashmys in late January 1997, and awarded the contract to Samsung on February 12, 1997. Among other things, Samsung pledged to invest $700 million before the year 2000, to add $80 million each of the next three years to working capital, and to double output in three years (*Feller Mining News* February 21, 1997). The rest of the terms of their agreement have never been reported, but they undoubtedly included provisions similar to its earlier contract for Zhezkazgantsvetmet, including tax relief, delays in debt repayments, and the like.

In September 1997, Samsung successfully sought to combine the various operations it had either purchased or had been given in trust management and created the new firm, Kazakhmys. Samsung was allocated a 40 percent share interest outright and again was given the government's 35 percent share interest to manage in trust. Kazakhmys included Balkhashmys, Zhezkazgantsvetmet, power plants in Zhezkazgan and Balkhash, a 30 percent interest in a Karaganda heat and power plant Samsung had acquired earlier in 1997, and the Zhezkent ore mining enterprise. The East Kazakhstan Copper-Chemical Complex, which had been given over in a management/purchase arrangement to another Swiss company, Dalex Trading, in partnership with Samsung (30 percent) in 1995, also was included in Kazakhmys on a management basis, and the contract with Dalex canceled because of a lack of promised investment (*Feller Mining News* July 7, 1997 and September 12, 1997; *IMMR* November 27, 1998). Samsung then acquired the East Kazakhstan Copper-Chemicals Complex in 1998 for a reported $6.3 million, and it became a division within Kazakhmys.

The government also encountered many difficulties finding a successful investor for the Irtysh smelter and mines. Initially, the smelter and mines of

Irtyshpolimetal were separated into distinct enterprises. The smelter was placed under the management of Ridder-Invest, a Kazakhstani firm, but after the plant remained idle for over ten months, the contract was canceled for non-performance.[13] The smelter was then tendered for sale in March 1997. Dayton Associates Ltd, a British affiliate of the Valarco Group, won the tender, and by July the enterprise had resumed operations (*Feller Mining News* July 7, 1997). Dayton invested $2.7 million in production development and kept the enterprise operating until October 1998 (*IMMR* December 4, 1998). However, faced with a shortage of raw materials and substantial debts, it then ceased operation. Meanwhile, the mines were sold to another Valarco firm, Thames Trading Corporation, but unlike Dayton, Thames Trading did not make the investments in mine development that it had pledged. In the end, both these contracts were canceled, and in 1999 the Irtysh smelter and mines also became a part of Kazakhmys (reportedly for an amount expected to clear wage arrears) and new investments had begun by August 1999 (*ICA* May 31, 1999; *IMMR* August 13, 1999). Kazakhmys stopped operations at Irtysh in March 2002 in a dispute with the government over contract promises which it felt that the government had reneged on and which were causing substantial operating losses (*IMMR* March 22, 2002). Kazakhmys then announced the plant would be liquidated, but then indicated a willingness to sell it to a Russian metallurgical group after the plant's workers went on a hunger strike (BBC December 27, 2002). Whether this sale will go through and the plant remain open remains unclear.

Kazakhmys' acquisitions in the copper sector were not yet complete. It acquired numerous licenses for additional mine development, including that for the Shatyrkol mine in Zhambyl, the Zhaman-Aibat mine and the Abyz deposit in Karaganda, and the Kosmurn and Akbastau deposits in East Kazakhstan (*ICACBR* January 10–16, 2000 and April 3–9, 2000). Development rights for the Artemyev mine in East Kazakhstan were included with the acquisition of the East Kazakhstan Copper-Chemical Complex. In June 2001, reports indicated that Kazakhmys was "mulling an offer to take over the assets of the idle Karagaily mining complex in the Karaganda region" (*IMMR* June 29, 2001) and, although there were no further reports of negotiations, in October it was reported to have begun renovations at the complex (*IMMR* October 5, 2001).[14] In August 2001, Kazakhmys also acquired the Samarskoye copper-gold property from the Canadian mining company European Minerals Corporation (formerly Kazakhstan Minerals Corporation (Kazminco)) for $0.7 million.[15] Finally, its acquisitions have not been limited to additional mining properties; in 2000 Kazakhmys acquired the Karaganda Foundry and Engineering Works (*IMMR* November 24, 2000) and the Pavlodar Cable Factory (*ICACBR* December 9–17, 2000).

In the end, the essential effect of breaking up, privatizing, and soliciting foreign investment in the copper sector is to have (re)created a monopoly,

turning over all but total control of the sector to a single foreign investor. Kazakhmys employees over 65,000 workers, provides heat and light to numerous communities, and has taken on a number of social responsibilities in these communities as well. An estimated 40 percent of the Karaganda oblast's budget was accounted for by payments from Kazakhmys in 1997 (*MMS* February 10, 1998). It has been generally successful in reversing output declines as is evident most clearly in data on the output of refined copper from Zhezkazgan and Balkhashmys shown in Figure 6.4.[16] The overall decline in refined copper production ended in 1995, coincident with Samsung's initial acquisition of Zhezkazgantsvetmet. Output from Balkhashmys continued to decline throughout the period of protracted negotiations between the government and various buyers from 1995 to 1996, however, and did not begin improving until 1997, when it became part of the Samsung group.

It is difficult to know whether Samsung has met the investment requirements of its contracts, since so few of the terms of its various contracts with the government are in fact public. That it has made substantial production-related investments there can be no doubt, reportedly $57 million in 1995, $60 million in 1996, $49 million in 1997, $37 million in 1998, and $59.3 million in 1999 (*IMMR* June 9, 2000). At the same time, it has announced many more investment plans with generally larger estimated investments.

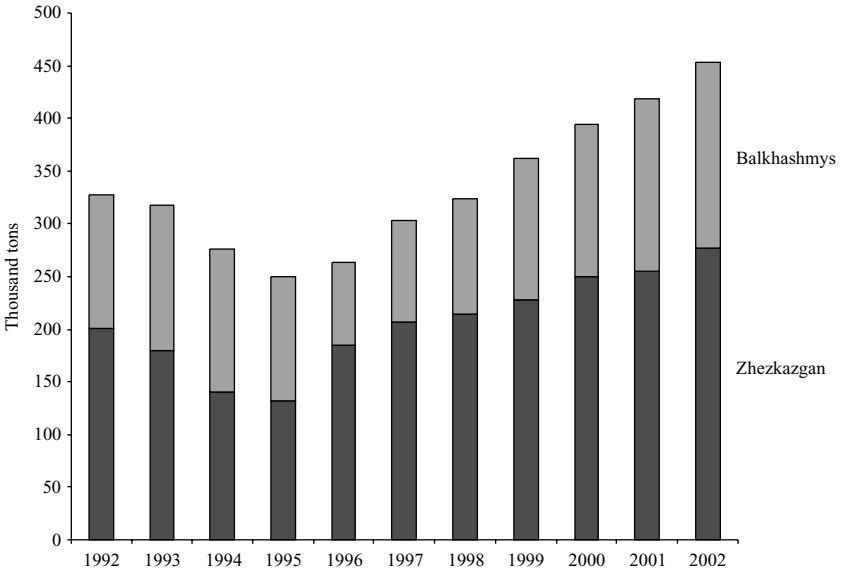


Figure 6.4 Production of refined copper at Zhezkazgantsvetmet and Balkhashmys, 1992–2002

Source: Drawn from Roskill (1998) and Interfax

In 2000, for example, Samsung estimated it would invest some $100 million, but investments in 2000 turned out to be only $82 million notwithstanding the fact that the year was half over at the time of the estimate (*ICACBR* May 14–20, 2001). By the same token, in 2001 investments were reported to have been $142 million, an amount significantly greater than the initial estimate of only $102 million (*ICACBR* December 9–17, 2000; *IMMR* February 6, 2002). Investments of as much as $163 million were promised for 2002. In addition, in December 2002, Kazakhmys received $20 million in financing from EBRD to upgrade environmental standards at Balkhashmys (*ICACBR* December 23–29, 2002).

Profits evidently have been generally increasing as well, although comparatively few details have been publicly reported. No figures were released initially, but Kazakhmys did reveal that it paid $130 million in taxes in 1997, which it went on to report was an increase from $100 million paid in 1996 and $66 million in 1995 (*IMMR* February 27, 1998).[17] In 1998, Samsung reported profits at Kazakhmys had increased in every year, despite significant variation in copper prices on world markets, and noted it had reduced production costs from $2,400 to $1,500 per ton (*KWN* April 20, 1998). In 2000, it reported that the unit cost of producing ore also had been reduced, from $12 per ton in 1996 to $4 per ton (*ICACBR* August 21–27, 2000). Finally, in 2001, profit figures were made public when Kazakhmys reported profits amounted to some KZT 32.5 billion (about $228 million) in 2000, an amount said to be an increase of 610 percent from 1999 (*IMMR* May 18, 2001). Profits in 2001 were KZT 31 billion (about $206.7 million), and for the first half of 2002 were up 11 percent more (*IMMR* May 17, 2002; *ICACBR* October 14–20, 2002). For the moment at least, profits are clearly substantial – more than adequate to finance the announced levels of investments – and appear to be principally the result of significant reductions in production costs.

Samsung's ownership interest in Kazakhmys evidently increased from 40 percent to 42.55 percent at some point, presumably from purchase of shares held by employees or other investors.[18] From time to time, the allocation of Samsung's interest among its various subsidiaries and others has changed as well. For example, two reports in 1999 indicated that Samsung held a 24 percent interest while a firm registered in the Netherlands Antilles, Ambuliyek Trading BV, held 16 percent (Kazinvest 1999; Kazkommerts Securities 1999). Since Ambuliyek Trading was registered offshore, no additional information about its true ownership was available, and this led to speculation that members of government or of the president's family may have acquired a substantial interest. However, subsequent reports consistently indicated Samsung's 42.55 percent share interest was held by Samsung (25.33 percent), Samsung Hong Kong Ltd (8.61 percent) and the UK subsidiary Samsung Trading Plc (8.61 percent).[19] In the more recent reports, the UK subsidiary has not been mentioned. Thus, whether there

were any 'silent partners' with Samsung in Kazakhmys remains unknown. Nor have there been substantiated allegations of bribery in Samsung's acquisitions. An allegation of bribery was made in November 2001 by another South Korean businessman, but it was repudiated by the governments in both South Korea and Kazakhstan and has not been repeated (*ICA* November 14, 2001).

The government's 35 percent share interest was held in trust management by Vladimir Kim, the head of Kazakhmys, a relationship that was initially for five years but was extended for three more years in 2000 when Samsung agreed to lend the Kazakh government $100 million (*IMMR* June 9, 2000). In fact, the loan was repaid early, and in November 2001 the agreement terminated. Like Aluminum of Kazakhstan, Kazakhmys is considered a blue-chip company and with the early repayment of the loan, the government announced its intention to sell as much as a 15 percent interest from its 35 percent holding as the only blue-chip sale of the year. A 10 percent interest was to be sold as one lot through the Kazakhstan Securities Exchange (KASE) while a 5 percent interest was to be offered in several smaller lots (*IMMR* October 19, 2001). For the record, the 10 percent interest was sold to a market-making firm registered on KASE (Futures Capital (also Future Kapital)) for $63.15 million (*IMMR* December 7, 2001). Presumably Futures Capital was funded to make this purchase by a third party, but the identity of the actual purchaser has not been disclosed.[20] Only one parcel from the other 5 percent interest, amounting to a 0.35 percent interest, was sold; it was acquired by a pension fund for $2.76 million. A year later, in December 2002, the government put its remaining share interest (24.65 percent) up for sale, and it too was sold in two lots. A 20 percent interest sold for $184 million while a 4.65 percent interest sold for $15.1 million (*ICACBR* December 23–9, 2002). The identity of the buyers was kept secret until April 2003 when news reports indicted that the Russian investment group, Aton, had acquired the 4.65 percent interest (*ICACBR* April 7–13, 2003). An early report indicated that Kazakhmys itself intended to bid in the sale; but it may or may not have participated and it may or may not be the owner of the 20 percent interest. Finally, at about the time of the December 2002 sale, reports began identifying the ABN AMRO bank as owner of a 9.51 percent interest; when, from whom, and/or for whom it was acquired have never been revealed. It certainly remains possible that individuals or groups close to President Nazarbayev did in fact acquire an interest in Kazakhmys at some time, and, until the identity of all the owners of substantial interests are revealed, it will continue to be a cause for speculation.

Lead and zinc

Like Kazakhstan's copper reserves, the country's lead and zinc resources have proved to be of such size as to remain important contributors to the

overall economy throughout the period of Soviet development. By 1990, Kazakhstan's estimated lead and zinc reserves placed it among the top five countries in the world (Kazkommerts Securities 1997). Its mines supplied more than 60 percent of the lead and 50 percent of the zinc within the former Soviet Union; its smelters accounted for some 90 percent of lead production and nearly 50 percent of zinc production (Levine 1993b). The principal mining complexes producing lead and/or zinc ores are identified in Table 6.1 and are also identified on the map in Figure 6.2. They are located principally in East Kazakhstan and Karaganda, with a few in Almaty, South Kazakhstan, and Kyzl-Orda as well. The ores mined at these complexes vary significantly in their composition, both as to the relative amounts of lead and zinc and as to the other minerals found in the ores, including substantial concentrations of copper and manganese and trace amounts of numerous minerals like silver, gold, selenium, cadmium, and gallium. Indeed, copper was the main mineral produced at three of the enterprises – Zhezkazgantsvetmet, Irtyshpolimetal, and East Kazakhstan Copper Chemical Complex – and they are part of Kazakhmys.

Table 6.1 Lead and zinc mining and processing complexes in Kazakhstan

Mining and/or processing complex	*Location*	*Deposits supplying ores*
Zyryanovsk complex	East Kazakhstan	Grekhovskiy, Zyryanovskiy, Maleyevskoye
Leninogorsk complex	East Kazakhstan	Ridder-Sokolnoye, Tishinskoye, Shubinskoye
Irtyshpolimetal complex	East Kazakhstan	Belousovskiy, Beresovsko-Irtysh, Novoberezovskoye
East Kazakhstan Copper chemical complex	East Kazakhstan	Kamyshinskoye, Shemonaikhinskoye, Nikolaevskoye
Zhezkent	East Kazakhstan	Orlovskoye
Tekeli complex	Almaty	Koksu, Tekeli, Tulyuk, Zapadnyy Tekeli
Achisay complex (Achpolimetal)	South Kazakhstan	Anasayskoye, Bayzhansai, Mirgalimsayskoye
Akchatau complex	Karaganda	Akzhal
Karagaily complex	Karaganda	Karagaily
Saryarka polymetal	Karaganda	Uhskatyn, Zhayrem
Zhezkazgantsvetmet	Karaganda	Zhezkazgan
Shalkiinskoye mine	Kyzl-Orda	Shalkia

Source: Drawn from information in the *Almaty Herald* January 22–28, 1998, Levine (1996a and 1998b), and Roskill (1998)

In 1992, Achpolimetal, Zyrianovsk, Leninogorsk, and Tekeli were the main lead and zinc mining and processing complexes; together they produced nearly 90 percent of the total amount of lead concentrates and some 62 percent of zinc concentrates (Roskill 1998). Development of the Leninogorsk (Ridder) mines dates to pre-Soviet times; the Zyrianovsk deposits were also known then but development awaited investments of the 1930s. The Achisay deposits in South Kazakhstan were discovered and developed in the early 1930s along with the development of the lead refinery at Shymkent. Those at Tekeli, also discovered in the 1930s, were developed somewhat later, but also to supply the Shymkent plant. Kazakhstan had three lead refineries in 1990, two in East Kazakhstan (Leninogorsk and Ust-Kamenogorsk) and the Shymkent Lead Plant in South Kazakhstan. Lead refined at Ust-Kamenogorsk was of sufficiently high quality that it was a registered brand at the London Metals Exchange (LME). Today, lead refined at both Ust-Kamenogorsk and the Shymkent Lead Plant (now Yuzhpolimetal) are registered at LME.[21] Zinc was refined at just two locations – Leninogorsk and Ust-Kamenogorsk – and neither brand is registered at the LME. The Ust-Kamenogorsk Complex is also Kazakhstan's largest refiner of gold as well as a significant refiner of silver and both its gold and silver are registered brands at the London Bullion Exchange.

The lead and zinc industry in Kazakhstan was disrupted very rapidly following the disintegration of the former Soviet Union, especially in East Kazakhstan "where enterprises were . . . near insolvency because of high fuel prices and heavy debt" (Levine 1993b: 189). Overall, output of refined lead fell nearly 50 percent by 1994 and that of refined zinc by 34 percent, as displayed earlier in Figure 6.1. The government sought new management to restructure the enterprises and, unlike the focus on contracting with foreign firms for the other non-ferrous metals enterprises, contracts to manage lead and zinc enterprises were made mostly with Kazakhstani firms. None of the initial arrangements established in 1995 and 1996 have proved to be lasting, however, and output, especially of lead, continued to decline into 1995 and even 1996.

Early in 1995 three of the enterprises were given new management when contracts were agreed with two domestic Kazakhstani firms (Levine 1996a). The Ust-Kamenogorsk lead-zinc combine and the Zyrianovsk lead complex were given over to management contracts with Metalou, and the Karagaily mining complex was given over to the management of Postovalov and Co. For its part, Postovalov agreed to provide the enterprise with materials and equipment, to lend working capital in the amount of $2.7 million, and to liquidate the firm's indebtedness (*Panorama* 1996). It paid $0.5 million for the contract. There are no details of the arrangements made with Metalou. Neither contract lasted long. The Karagaily mines were closed at the beginning of 1997 and the company liquidated (Roskill 1998). However, the mines were later turned over to Kazakhmys who reopened them in 2001.

The contract with Metalou was also canceled, and in April 1996 Zyrianovsk and Ust-Kamenogorsk together with the Leninogorsk Complex were given to another Kazakhstani firm, Ridder-Invest, on an 18 month management contract.[22] It promised investments of $130 million in its first two years (*MMS* July 26, 1996 and August 14, 1996; *Panorama* 1996). Ridder-Invest had also acquired management of Irtyshpolimetal, as noted earlier. There is little additional information about Ridder-Invest; however, at about the same time there was a report that Kazkommertsbank, the principal commercial bank, had "gained control over three large lead and zinc plants near Ust-Kamenogorsk" (Thoenes July 11, 1996), suggesting that the owners of Ridder-Invest included and/or were represented by Kazkommertsbank. For its part, Kazkommertsbank has been linked to Timur Kulibayev, one of President Nazarbayev sons-in-law (see Chapter 9). Whoever it included, Ridder-Invest was not successful in managing the combined enterprises, and like Metalou, its contract was annulled later in 1996 on evidence that it failed to make the pledged investments (Levine 1997b; Kazkommerts Securities 1997).

The debt-free assets of the Leninogorsk, Ust-Kamenogorsk, and Zyrianovsk complexes along with a ten year lease on the hydroelectric power plant at Bukhtarma were then reorganized to create the core of a new large enterprise, Kaztsink, which has become known as Kazzinc.[23] Although it was not given a monopoly in the sector initially, Kazzinc was a substantial enterprise from the start, employing nearly 19,000 people and accounting for a substantial share of the lead and all of the zinc refining capacity in the country. During the first half of 1997, the government sought a foreign investor for Kazzinc with Kazkommertsbank now acting as its advisor. In June, a contract transferring a 62.4 percent share in Kazzinc was signed with Kazastur Zinc AG, a joint venture between the Swiss metals trader Glencore International[24] and the Spanish zinc producer Asturiana de Zink (in which Glencore also had an interest). Contract terms included a plan to pay the debts of Kazzinc, which amounted to some $133 million, and to invest $400 million in production development over five years. Sometime later, Glencore acquired additional shares in Kazzinc, and by 1999 they owned a total interest of 72.32 percent (Kazecon August 5, 1999).

Following the pattern established in both alumina and copper after the creation of Aluminum of Kazakhstan and Kazakhmys, one by one additional lead and zinc enterprises became a part of Kazzinc as their new managers failed to reverse declines. The Tekeli Complex, for example, had been placed under a management contract with the Kazakhstani firm, RR Kazakhstan Trade and Finance (RR-KTF), in July 1996. Tekeli, like Alga, was another of Kazakhstan's one company towns and by 1996 official unemployment had reached 20 percent while another 40 percent of the workers were "on leave" or on short hours (World Bank 1998: 15). For its part, the firm RR-KTF was one of those controlled by Rakhat Aliyev,

another son-in-law of President Nazarbayev, and it had also acquired the lead refinery in Shymkent (see p. 98). Not surprisingly, RR-KTF did not manage Tekeli successfully and, when it failed to make the stipulated investments, Tekeli was transferred into Kazzinc for management (*Feller Mining News* July 7, 1997; *MMS* April 30, May 16, and June 11, 1997). In 1998, Kazzinc reportedly bought its assets, again on undisclosed terms (*IMMR* August 13, 1999). Kazzinc also acquired the rights to explore and develop several new deposits including the Dolinnoye, Obrichevskoye, and Novoleninogorskoye deposits in East Kazakhstan (*IMMR* January 11, 2002). By 2000 the company employed some 26,000 people (*ICACBR* July 3–9, 2000). It is still not quite a monopoly, but it controls a very significant share of lead and zinc mining and refining.

Kazzinc seems to have been mostly successful. As was evident in Figure 6.1 (p. 74), output of refined zinc began a sustained recovery in 1997, the first year Glencore took over. Figure 6.5 displays the output of refined lead disaggregated by refiner and shows that lead production at Kazzinc began increasing significantly in 1997.[25] In fact, output of both refined lead and zinc at Kazzinc steadily recovered and in 2000 exceeded the amounts produced in 1992 for the first time. Similarly, although Kazzinc was not immediately profitable, it evidently did not lose money even in the initial years and has become more profitable in recently. In 1998 "the company made almost no profit due to low world prices"

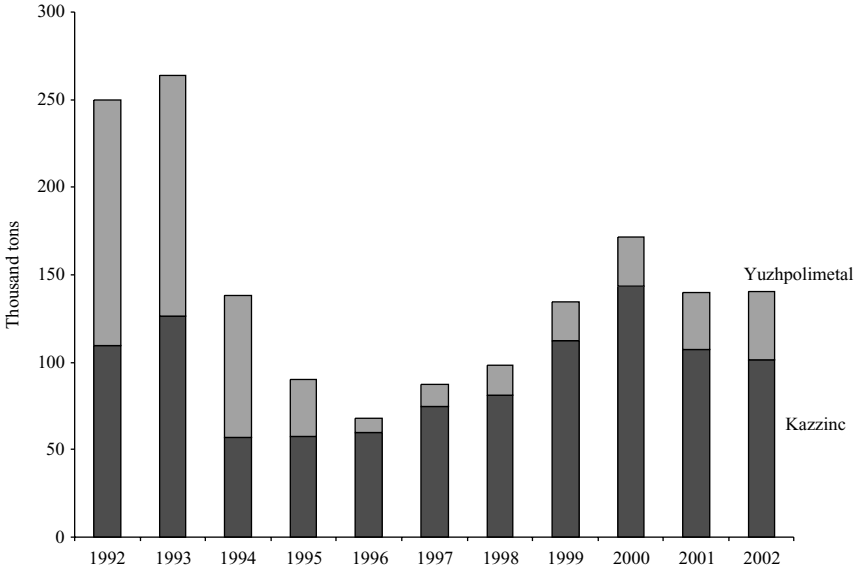


Figure 6.5 Production of refined lead at Yuzhpolimetal and Kazzinc, 1992–2002
Source: Drawn from Roskill (1998) and Interfax

(*KWN* February 8, 1999). In 1999, profits must have remained relatively depressed because Kazzinc undertook an agreement whereby it would independently increase the size of its payments to the local budget (*ICACBR* February 15–21, 1999). By 2000 however, profits were apparently sufficient for Kazzinc to announce for the first time that it would carry out the year's planned investments with operating funds. At the same time, since almost all of the lead and zinc produced by Kazzinc is sold directly to Glencore, these reports must be treated with an extra degree of caution.

More generally however, reports on operations at Kazzinc have been mostly positive, even in their first year:

> The state holding company Kaztsink is gradually increasing production thanks to foreign investments in its working capital. The volume of marketable goods it produces has increased by 20% compared to last year and is expected to reach USD 1.5 million by the end of 1997. The amount of taxes paid over the first eight months of this year has increased 44.6% to 2,630 million tenge. The company is expected to pay up to 4 million tenge in taxes by the end of the year.
>
> (*KWN* October 1997, 2)

Glencore has made substantial investments in the company, especially in developing its ore deposits, many of which were producing at well below capacity or were working very unproductive areas. For example, some $65.5 million was invested in the Maleyevskoye mine from 1997–2000 in order to increase ore production (*ICACBR* July 3–9, 2000). In addition, the Zyrianovsk concentration plant was reconstructed. Like Kazakhmys, Glencore has also focused on reducing production costs and, whereas production costs for zinc amounted to $867 per ton in 1996, by 2000 they were only $574. For lead, production costs of $623 in 1996 were reduced to just $302 in 2000. Moreover, if Glencore's cost control measures have included many layoffs, they have not been substantial enough to provoke strikes and/or press coverage yet. However, in early 2002, Kazzinc announced it would be closing operations in Tekeli (*IMMR* January 18, 2002), and it remains to be seen how this will affect perceptions of its success as well as the people of Tekeli.

Recovery has been more elusive for most of the rest of the lead and zinc enterprises in Kazakhstan however. A five year contract to manage the Akchetau mines and concentration plant was awarded to the Swiss firm Novo Trading in September 1995 (*Panorama* 1996).[26] For a long time, reports indicated little had come of this contract.

> The employees of the Akchatau-GOK (mining-concentration combinat) have gone four months now without wages. The company can no longer afford energy costs and production has

> ceased. Novo-Trading, a Swiss firm that had pledged to become an investor, is now insisting, after review of dilapidated equipment and hidden debts, to re negotiate its commitment.
>
> (*MMS* May 1996)

Negotiations did not proceed very expeditiously, and the enterprise was declared bankrupt at the end of 1996 (Roskill 1998).[27] Nevertheless, it seems a contract was agreed eventually to create the joint venture Nova-Zinc in which Novo Trading was the main partner (*ICACBR* September 3–9, 2001). It reportedly has invested some $12 million since 1996 to develop and buy equipment for the Akzhal mine, and production of zinc concentrates has resumed. Perhaps this will yet become one of the successes.

The Zhayrem Mining and Enrichment Combine (incorporated as Saryarka Polymetal in 1993) produces ores that also contain significant amounts of manganese and iron. It was put under management of yet another Swiss firm, Nakosta AG, in late 1995, and they committed to invest $21 million over a five year period (*KWN* 3 October 1997). Nakosta acquired a 39 percent interest in the enterprise in September 1996.[28] Despite significant early investments, Nakosta was unable to return Zhayrem to profitability, and in the summer of 1997 the Karaganda regional court began bankruptcy proceedings when the enterprise debts amounted to $5.6 million (*IMMR* September 3, 1998). Zhayrem was given two years to develop and implement a rejuvenation plan and bankruptcy proceedings ended in September 1998 when the enterprise was adjudged to have been restored to profitability. There have been no further reports about Zhayrem; it may also become one of the successes.

Also in 1995, management of Achpolimetal near Kentau in South Kazakhstan, which produced not only lead and zinc concentrates but was also one of Kazakhstan's leading producers of barite concentrates, had been awarded to another Swiss firm, River International SA, also for a five year period (*Feller Mining News* July 7, 1997; *Panorama* 1996). Under terms of the contract, River International was to pay accumulated debts of approximately KZT 176.6 million (about $3.4 million) to the budget, employees, utilities, and railroads. It also agreed to invest $10 million during 1995–6. Although the contract seems to have been little different from any of the others, it proved to be among the most troubled in the nonferrous metals sector.[29] In April 1997, River International threatened to annul the contract because the government had not fulfilled a number of its commitments, including paying the enterprise's debts to the gas and power suppliers and transferring the Kentau hydroelectric station to its control. One consequence was that the plant had been without power for substantial periods; indeed, one report indicated that it may have operated for a total of only three months in the first two years that River International was the nominal manager. Significant wage arrears also accumulated.

In July 1997, after a visit to Kentau and the enterprise by the Kazakhstani Vice-Premier, the government transferred the hydroelectric station and KZT 50 million to the firm; the contract was not canceled. The actions did not satisfy the employees, however, who received little or none of the transferred funds as payment on back wages. By late September, salaries still had not been paid for ten months or more and arrears had grown to KZT 110 million. In addition, Achpolimetal still owed KZT 46 million to the pension fund and KZT 5 million to the local budget. The employees organized a public protest, and on October 1 more than 1,000 began a march from Kentau to Almaty to take their demands directly to President Nazarbayev. Militia units were promptly called out, and the march was stopped less than 30 km from its start. Although the employees were stopped well short of Almaty, their actions did result in an immediate transfer of approximately one-third of the wage arrears from the government to begin payments. The payments were refused, however, and the workers demanded payment in full. More than 600 employees began a hunger strike. In early November, after much negotiation, the full amount of the wage arrears was transferred to Kentau to pay the workers. In addition, a new firm, Kentauliquidrudnik, was created in order to close down the unprofitable mines of the enterprise.

At the end of 1998, Achpolimetal was declared bankrupt and the mines moth-balled (*IMMR* January 3, 1999). Presumably the contract with River International was canceled at about this time as well. An auction was held in July 1999 for the Shalkinskoye mine, one of the mines which supplied Achpolimetal, but it had to be canceled because there was only one bidder, a joint Kazakh–Bulgarian venture called Viktoria (*IMMR* July 30, 1999). After several more unsuccessful auctions, the Achisay mine, a repair shop, and the concentration plant at Kentau were transferred to the Shymkent Lead Plant for management. Meanwhile, River International must have taken the contract cancelation to court because in January 2000 Kazakhstan's Supreme Court 'stripped the company' of the right to manage Achpolimetal and its 49 percent share interest (*IMMR* May 12, 2000). Reportedly, operations have been gradually resuming at the direction of Yuzhpolimetal (*ICACBR* June 19–25, 2000).

As for the Shymkent Lead Plant, it had been placed under the management of the Kazakhstani firm RR Kazakhstan Trade and Finance in July 1996 along with the Tekeli Complex. As is evident from Figure 6.5, however, output of refined lead from Shymkent remained virtually zero, and news reports indicated that the management contract was going to be canceled for lack of performance (*MMS* March 21, 1997). Nevertheless, RR-KTF continued some operations and output increased slightly in both 1997 and 1998. As with so many of the management contracts, this one evidently included an option to purchase a significant equity share, and not withstanding the refinery's very slow recovery, RR-KTF was permitted to acquire

a 31 percent interest in the enterprise. In 1998 RR-KTF announced significant expansion plans, including acquiring a mine as well as the combined heat and power plant in Shymkent (*IMMR* May 15, 1998). However, at the end of December 1998, the plant was declared bankrupt. In retrospect, bankruptcy was merely a means to restructure the contracts with RR-KTF and permitted authorities to transfer 30 percent of the assets of the lead refinery and most of the employees to RR-KTF's continued management, this time free of debts, and to auction the remaining assets (*IMMR* January 15, 1999; *ICA* April 19, 1999; *KWN* April 19, 1999). The new enterprise was named Yuzhpolimetal and early reports indicated that ownership had been retained by the government (see *IMMR* May 12, 2000, for example). However, more recent reports indicate that in fact all of its shares are privately owned and it seems reasonable to infer that the owner is RR-KTF. As before, neither the terms of the breakup of the operations of the Shymkent Lead Plant through bankruptcy nor the acquisition by the new private owners have been reported publicly. For its part, RR Kazakhstan Trade and Finance has been identified as one of those in the financial-industrial group associated with President Nazarbayev's son-in-law, Rakhat Aliyev (Djankov and Nenova 2000; Institute for Current Political Studies 1999).

Given the continuing difficulties encountered in restructuring the lead and zinc enterprises generally and the much delayed restructuring of one of the two lead refiners, it is not surprising that Kazakhstan's production of refined lead was very slow to recover. By 1999, however, it appeared that recovery was well underway at Kazzinc, and Yuzhpolimetal was beginning its long-delayed recovery (see Figure 6.5). Then, in 2001, production at Kazzinc declined nearly 20 percent (with a further decline in 2002) when the company decided to process only it own supplies and ceased transporting lead concentrates because of costs (*IMMR* October 19, 2001). Shortly thereafter, in January 2002, it announced its intention to close the lead mines at Tekeli. Thus, it is unlikely that production of refined lead will recover to pre-1991 levels anytime soon. In contrast, zinc production has recovered substantially with the creation of Kazzinc and its sale to Glencore International. For the moment, the government has staked much on Kazzinc (Glencore) and Yuzhpolimetal (RR-KTF) to return the industry to its former production levels, one which contributes significantly to the national and local budgets. Kazzinc is another of the blue-chip companies in which the government has a minority share interest (27.7 percent), and it has been included in the various announcements of possible sales. So far, none has been sold (*ICACBR* September 9–15, 2002).

Conclusion

The enterprises in the nonferrous metals sector in Kazakhstan shared many of the experiences of the overall economy in the 1990s. Whether under

Table 6.2 Consolidation of enterprises in the nonferrous metals sector

Metal and enterprises	*Current owner(s) (country)*	*Share (percent)*	*Prior owners/partners*
ALUMINA			
Aluminum of Kazakhstan	Eurasian Bank Group (KZ)	58.96	Trans World Group (UK)
	Government KZ	31.64	
Pavlodar aluminum			
Turgai mines			
Krasnooktyabrsk mines			
Keregetus limestone quarry			
Pavlodar power plant			
COPPER			
Kazakhmys	Samsung (South Korea)	42.55	
	Futures capital	10.00	
	ABN AMRO Bank	9.51	
	Aton (Russia)	4.65	
	Unknown new owner	20.00	
Zhezkazgantsvetmet			
Balkhashmys			CAM Finance (Swiss); Consortium
East Kazakhstan Copper Company			Dalex Trading (Swiss)
Zhezkent Enrichment complex			Novo-Trading
Irtysh Copper and Chemicals plant			Ridder-Invest (KZ); Valarco Group (UK)
Zhezkazgan power plant			
Karaganda power plant			Independent Power (UK) and New Centuries Energy (US)

Balkhash power plant			
Borly coal mines			
Karagaily mines			Postovalov (KZ)
Samarskoye mine			Kazakhstan Minerals Corp. (Canada)
several additional mineral deposits			
LEAD AND ZINC			
Kazzinc	Glencore (Swiss)	72.32	
	Government KZ	27.70	
Leninogorsk polymetal			Ridder-Invest (KZ)
Ust-Kamenogorsk lead and zinc			Metalou (KZ); Ridder-Invest (KZ)
Zyrianovsk lead and zinc			Metalou (KZ); Ridder-Invest (KZ)
Bukhtarma power plant			
Tekeli lead and zinc			RR Kazakhstan Trade and Finance (KZ)
Tekeli power plant			
several additional mineral deposits			
Yuzhpolimetal	RR Kazakhstan Trade and		
	Finance (KZ)	100	
Shymkent lead plant			
Achpolimetal			River International (Swiss)
Kentau power plant			
Akchetau mines	NovoTrading (Swiss)		
Zhayrem mines	Nakosta (Swiss)	39	
	Olberg Holding (Swiss)	4.62	

the overall management of enterprises like KRAMDS or of local managers reporting to government ministries, output declined, revenues declined, and the threat of bankruptcy increased rapidly throughout the sector. Privatization and sale of the enterprises followed, often involving a management contract first and then sale of a majority interest. All was accomplished in what by any measure was an extraordinarily short period of time. In less than three years, the enterprises were corporatized, management contracts signed, substantial interests then sold (and in some cases sold more than once), and new investments undertaken as the new owners/managers began to take control of their acquisitions. And, for the most part, the new owners – the Trans World Group with the Eurasian Bank Group, Samsung, and Glencore – reversed output declines once they took over operations, and in several enterprises, production has recovered to, and even surpassed, levels of the early 1990s. In addition, a number of mostly Swiss trading companies and several local Kazakhstani firms also participated in the sales. However, none were nearly as successful in reviving the enterprises, and the contracts with most, including CAM Finance, Dalex Trading, the Valarco Group, Novo-Trading, Nakosta, River International, Metalou, Postovalov and Ridder-Invest, were canceled and the enterprises either given over to the more successful foreign managers directly or reorganized for future sales. The exception was RR-Kazakhstan Trade and Finance, whose ownership of the Shymkent Lead Plant continued despite failure and a bankruptcy reorganization. Table 6.2 summarizes the results. In effect, the enterprises in the sector were separated, sold, and then recombined as many contracts failed, leaving just four principal enterprises and three monopolies. Alumina is controlled by the Eurasian Bank Group, copper by Samsung, and zinc by Glencore; lead is shared between Glencore and RR-Kazakhstan Trade and Finance.

That same speed with which the initial management contracts were concluded and subsequently converted into majority shares meant the entire process was controversial in many ways. Negotiations were conducted almost entirely behind closed doors, or if a tender was itself open, the result was a (sometimes lengthy) period of private negotiation between the winner and the government. And if the terms of the original management contracts were not widely known, the terms arising from subsequent negotiations concerning the option to acquire a majority interest or to acquire an additional enterprise like a coal mine or power plant usually were not disclosed. Even more hidden were the negotiations to acquire the enterprises whose initial contracts had been failures. And most hidden of all have been the terms by which the single remaining Kazakhstani firm in the sector, RR-Kazakhstan Trade and Finance, managed to acquire and then retain control of the Shymkent Lead Plant (now Yuzhpolimetal). More generally, the real ownership of many of the firms acquiring the nonferrous metals enterprises was itself obscured. Offshore registration of

corporate affiliates disguised the identity of the Eurasian Bank Group and their initial partners, the Trans World Group. Acquisitions by influential Kazakhs, including those close to President Nazarbayev, were disguised in Kazakhstan-registered private firms. They have since acquired the fine art of offshore registrations and corporate shells to make tracing ownership and funds even more difficult (see Chapter 9 especially).

Another consequence is that it is impossible to say whether prices received for any of the enterprises were reasonable. Although most contracts also required a substantial amount of future investment as well as payment of existing debts, the prices paid for these enterprises seem to have been extremely low, judged by the size of subsequent profits. Undoubtedly the most questionable price was that for Pavlodar Alumina and the associated mines where profits in the first year of operations were more than twice the acquisition price. In fact, most of the principal enterprises were themselves profitable almost immediately upon being taken over by the new managers. The abrupt shift – from being on the verge of bankruptcy to being profitable – highlights another aspect of the economic transition. In many instances, the Soviet-era management left in charge of the enterprises with little or no real supervision did little more than line their own pockets, plundering "assets, selling off metal cheaply and signing unprofitable supply contracts for kickbacks" (Thoenes July 4, 1996). Were they sold too cheaply? Perhaps. In alumina almost certainly. Are the generally low prices evidence of ongoing bribery? Perhaps, but the nonferrous metals sector has not received nearly as much attention in this regard as have some other sectors, although the Eurasian Bank Group remains prominently associated with bribery investigations surrounding President Nazarbayev and the ownership of a significant interest in Kazakhmys remains a subject for speculation.

7

PRIVATIZATION, FOREIGN INVESTMENT, AND CONSOLIDATION IN THE PRINCIPAL ENTERPRISES OF THE FERROUS METALS SECTOR

At the time of independence, approximately 95 percent of the chromite, 10 percent of the iron ore, and 2 percent of manganese produced in the former Soviet Union came from mines in Kazakhstan (Sagers 1996). Kazakhstan's two ferroalloy plants accounted for just less than one quarter of the total Soviet production capacity. Steel production from the Karaganda Metallurgical Combinat (Karmet) accounted for a little less than 5 percent of Soviet production in 1990, a figure which significantly understates the importance of Karmet in Kazakhstan where it accounted for more than 10 percent of the country's GDP in Soviet times (*Almaty Herald* March 26/April 1, 1998). In total, ten enterprises comprised virtually the entire sector – three iron ore mining complexes, one chromite mining complex, three manganese mining complexes (one also producing iron ore and another lead and zinc), one integrated iron and steel enterprise, and two ferroalloy plants. Of these, three enterprises were dominant. Karmet was the largest single enterprise in Kazakhstan and employed 30,000 metallurgical workers (*Feller Mining News* September 19, 1999). The Sokolov-Sarbai (also Sokolovska-Sarbai) iron ore mining complex produced 60–70 percent of the iron ore mined in Kazakhstan and employed another 28,000 workers (*Feller Mining News* May 9, 1997). The Aksu Ferroalloys Plant was the largest ferroalloy plant in the world. Today, the sector is for all intents and purposes composed of just three large enterprises – the Sokolov-Sarbai Mining and Concentration Plant, Ispat Karmet, and Kazchrome – with just two owners – the Eurasian Bank Group, which also owns Aluminum of Kazakhstan, and Ispat International of the UK-based LMN Group.

Production of ferrous metal ores, especially iron ore, plummeted after independence, as shown in Figure 7.1. From 1992 to 1994, aggregate

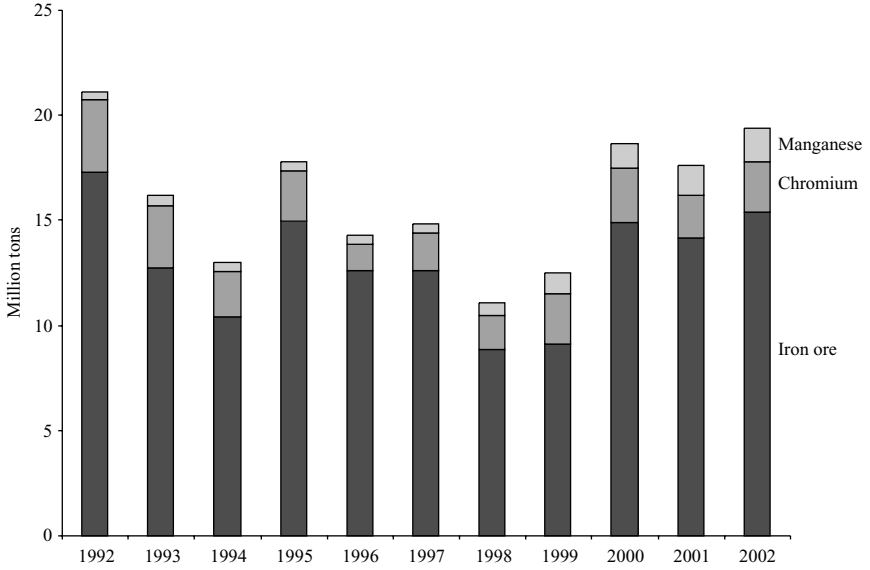


Figure 7.1 Production of ferrous metal ores in Kazakhstan, 1992–2002
Source: Drawn from Roskill (1998), Levine (1998b, 1999b), and Interfax

production from Kazakhstan's three iron ore complexes declined some 40 percent; that from its chromite complex declined a similar percentage. Production of manganese ore, small in comparison to iron ore and chromite, actually increased from 1992 to 1993 but then began a prolonged decline which lasted through 1997. Like the enterprises in the nonferrous metals sector, one reason for the decline was the difficulty of maintaining production links with other principal enterprises in the sector, both within Kazakhstan and with those in Russia and in the Ukraine. Indeed, as early as August 1992, representatives of the three governments met in Almaty and agreed to maintain current commodity flows by limiting exports outside of CIS countries (Levine 1997a; Sagers 1996). The agreement was not effective.

Initially, management of several of the enterprises in the sector was turned over to KRAMDS (see Chapter 6), and the government looked for direct foreign assistance to invest in modernizing them. Throughout, much of the government's attention was devoted to Karmet, undoubtedly because of its importance in the economy, but it surely did not hurt that President Nazarbayev had begun his career working at the blast furnaces at Karmet. As early as 1992, modernization of Karmet was one of the collaborative projects included in an agreement with North Korea.

The government also secured a 5.5 billion schilling credit from the Austrian government to assist in the modernization. In 1994, two Japanese firms, Itochu Corporation and NKK Corporation, contracted to build a gas purification plant at Karmet to recover ammonia, hydrogen sulfide, and other coal chemicals from coke gas (Informa 1994). Some $180 million for the project was funded by the Export–Import Bank of Japan, again with the government of Kazakhstan acting as guarantor of the funding (Russica 1995). In addition, plans were initiated to build a stainless steel production facility at the ferroalloy plant in Aktyubinsk, and external interest was secured from firms in Canada and Austria. However, the early plans were not effective, output continued declining, and the government sought outside manager/investors for each of the principal enterprises.

Iron ore

The Sokolov-Sarbai Mining and Enrichment Combine (SSGPO) was the largest iron ore producer in Kazakhstan, accounting for some 61 percent of total production in 1990, and was its only pellet producer (Kazkommerts Securities 1997; Levine 1996a; Sagers 1996). Located near Rudnyy in Kostanai oblast, the deposits which comprise SSGPO were first discovered in 1949 "when the erratic behavior of a compass needle in an airplane flying over the area suggested the existence of a magnetic anomaly such as might be induced by a large deposit of iron ore" (Shabad 1969: 295). The mines were developed principally to supply the Russian iron and steel plant at Magnitogorsk just 220 miles to the north. Ores from Sokolov were first mined in 1957; those from Sarbai in 1960. The deposit at nearby Kachar, which became a part of SSGPO in 1993, was opened in the early 1980s (*ICACBR* December 25, 2000–January 8, 2001). Generally, a comparatively small, but not insignificant, amount of ore from these mines was supplied to Karmet in Karaganda.

As shown in Figure 7.2, declines in the production of ore at SSGPO were precipitous, from 10.8 million tons in 1992 to 7.8 million in 1993 and 6.0 million in 1994. In April 1995, the government of Kazakhstan turned over management of the mine to a firm called Ivedon International, which was another joint enterprise of the UK-based Trans World Group and the Kazakhstan-based Eurasian Bank Group. As with all the TWG/EBG joint ventures, Ivedon International was registered offshore; this time in Iceland. The initial management contract was reported to be for a term of five years with an option to purchase 50.5 percent of the enterprise at the end of the contract. In the event, the purchase option was exercised very early, and in February 1996 TWG/EBG acquired 50.5 percent of SSGPO for $49 million (Kalyuzhnova 1998: 79–83; Sagers 1996). The contract further stipulated investments of $78 million and payment of all debts to suppliers and to the budget. The contract also specified that 75 percent of the mine's

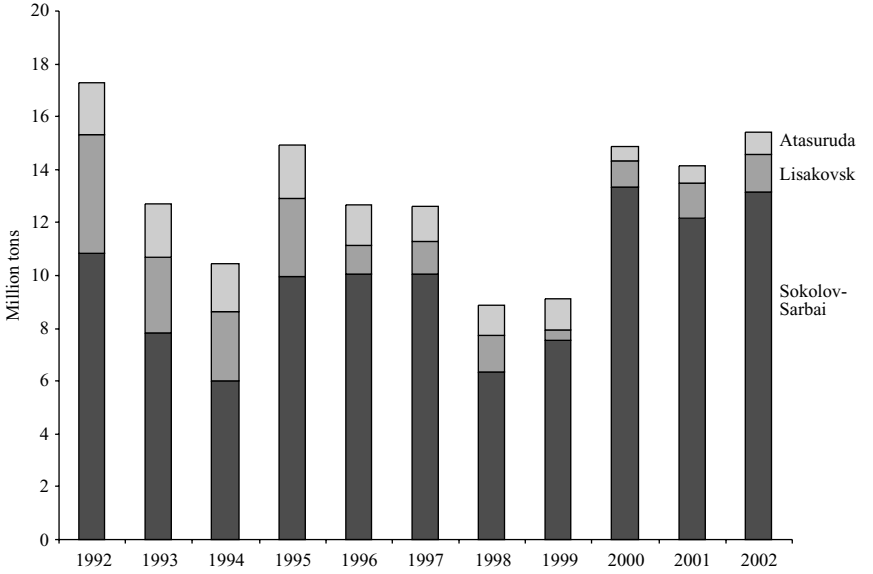


Figure 7.2 Iron ore production of Sokolov-Sarbai, Lisakovsk, and Atasuruda, 1992–2002

Source: Drawn from Interfax

output could be exported while the remaining 25 percent was to be supplied to Karmet. The Kazakh government retained a 39.5 percent interest in SSGPO.

TWG/EBG were successful almost immediately in reversing production declines and returning the enterprise to profitability. Iron ore production at SSGPO in 1995 was 10 million tons, a 66 percent increase over 1994 levels. Profits were reported to be KZT 4.6 billion (about $88.3 million) in 1995 (Sagers 1996). Success was so immediate that, like Whiteswan, Ivedon became something of a legend among foreign investors in Kazakhstan.

> After having teetered on the verge of bankruptcy, the enterprise got a second wind after its management was taken over by Ivedon International Ltd in early 1995. Prior to this, SSMIE [SSGPO] owed astronomical sums to the national budget and to their own workers. Soon, however, the payments it made into the national budget and its various non-budgetary funds increased 4.2 times. Last year the complex paid into the national budget a total of 1,202 million tenge in taxes. In less than two years its productivity

> increased by 64 percent, and its average salary increased five times to 17,500 Tenge. This, despite the fact that in 1996 energy problems forced many enterprises to stop production entirely.
>
> (*Feller Mining News* May 9, 1997)

> Two years have passed since the Sokolovsko-Sarbaisky ore-mining complex (SSOMC) [SSGPO] was passed to the management of the company Ivedon. During the first half of 1997, the SSOMC received a huge order to deliver 1 million tons of ore to the Magnitogorsk metallurgical complex. Recently, the SSOMC signed a contract for 24 million tons of ore for the Karaganda metallurgical complex. The SSOMC regularly pays its dues to the Pension Fund, and salaries are paid on time. This year the enterprise's shareholders, who are mainly pensioners, received dividends.
>
> (*Feller Mining News* September 12, 1997)

At the same time, there were also persistent rumors that much of the success of the turnaround was due simply to sales of existing stocks rather than a true turnaround in production. However, Figure 7.2 shows that production of iron ore remained at about the 10 million tons achieved in 1995 in both 1996 and 1997, amounts which would seem to be too large to be merely draw down of stocks. The sales price also attracted attention; TWG/EBG easily could have paid for their controlling interest in SSGPO with profits retained from the first year they managed the enterprise. In 1998, SSGPO took over management of the Rudnyy heating and power plant and made some $18.6 million in upgrades and tripling its capacity from 68 to 204 megawatts (*ICACBR* February 12–18, 2001). Along with all of Kazakhstan's industry in 1998, production of iron ore declined significantly, a result of the financial crisis in Russia and ruble devaluation which priced Kazakh ores out of the Russian market. Production recovered somewhat in 1999, and by 2000 production had more than recovered to earlier levels after new contract negotiations were concluded with Magnitogorsk and the Kazakh government gave SSGPO preferential rail tariffs (*The Mining Journal* September 7, 2001: 180). Restructuring of operations at SSGPO also led to significant layoffs. Whereas there were about 28,000 employees in 1991, by 1997 there were only 20,000, and by 2003 there were just 17,000 employees (*Feller Mining News* May 9, 1997; *ICACBR* March 11–17, 2003).

After the exceptionally high profit reported in 1995, profits at SSGPO have fluctuated between $10 and $30 million (see Figure 7.3). In 1996, profit was $17.2 million, declining to $15.1 million in 1997 and to $12.4 million in 1998. In late 1998, the disagreements between Trans World and EBG at Aluminum of Kazakhstan also affected their Ivedon partnership; TWG was ousted at SSGPO as well and control taken by EBG. As described in Chapter 6, in February 1998 the government declared all transactions

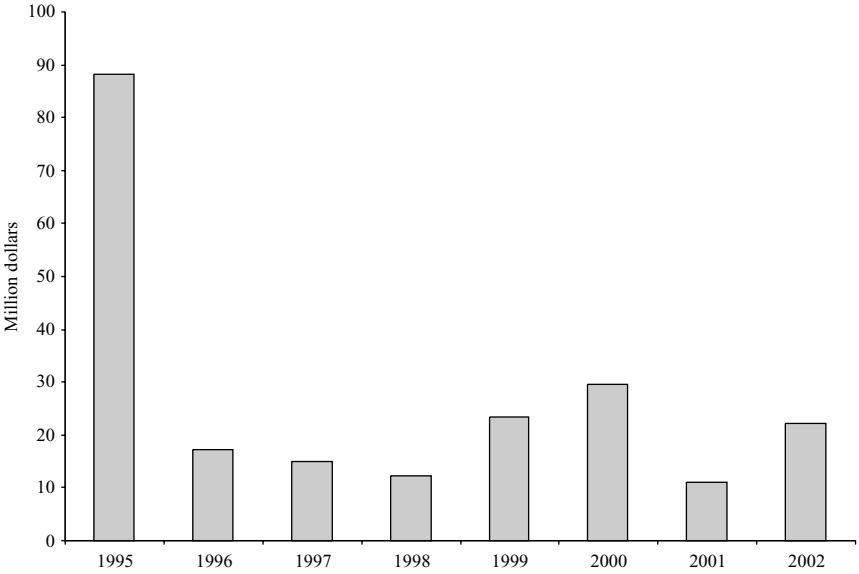


Figure 7.3 Reported profits at the Sokolov-Sarbai mining enterprise, 1995–2002
Source: Drawn from Kazecon (August 1999) and Interfax

carried out by the companies belonging to the Trans World Group to be illegal and invalid "from their very inception" and placed management control with EBG. Just as at the aluminum enterprise, profits at SSGPO recovered quickly after TWG was ousted, suggesting strongly that TWG was also transfer-pricing iron ore in sales to Magnitogorsk and realizing SSGPO profits outside Kazakhstan. Finally, with the out-of-court settlement in March 2000 between TWG and EBG, EBG acquired the entire 50.5 percent share interest in Sokolov-Sarbai originally sold to the partnership. It also holds the government's 39.5 percent share interest in management trust.

As manager/owner, EBG continued making significant investments in mining operations and in increasing power supplies at SSGPO. In 2000, investments at SSGPO totaled KZT 4.9 billion (about $33.6 million) and included further mine development at Kachar, new dump trucks, as well as a needed rail spur (*IMMR* November 3, 2000). In 2001, SSGPO completed work on the Rudnyy power station, invested KZT 72 million on upgrades (a decrease from KZT 227 million in 2000), and invested another KZT 465 million on the mining ore complex (*IMMR* October 5, 2001), a total of about $3.7 million in investments. It also announced plans for a further $29 million in investments in 2002, part of its commitment to invest

$112.2 million from 2001–5 (*IMMR* October 26, 2001 and February 8, 2002). Like Aluminum of Kazakhstan, Kazakhmys, and Kazzinc, it too is considered one of the country's blue-chip companies for which the government has frequently announced its intention to sell some or all of its shares. So far, however, none of the government's 39.5 percent share has been sold.

The principal environmental problems at SSGPO are those associated with mining everywhere in Kazakhstan – the accumulation of substantial waste (some 360 million tons) at two tailings dumps and the build up of overburden around the mining areas (some 2.5 billion cubic meters of sand and clay). In 1999, SSGPO indicated that it intended to build a facility to recycle the tailings, which contained nickel, cobalt, copper, lead, and sulfur among other elements, but that it would require at least $300 million in additional investment (*IMMR* May 28, 1999). There has been no further mention of investment in this plant and none of the international agencies like EBRD or the World Bank have so far indicated interest in assisting with the project (as EBRD did with an environmental project at Kazakhmys, for example).

The Lisakovsk iron ore mine, also located in the Kostanai region, was the second largest iron ore mine in Kazakhstan, producing about one-third of the country's total production. Unlike Sokolov-Sarbai, it was developed primarily to provide ores for the Karmet steel plant in Karaganda, although it also supplied plants in the Urals. Lisakovsk was discovered in 1949, but development of the mine did not begin until the mid-1960s when smelting technology was adapted to deal with the significant amounts of phosphorus contained in its ores. The first ore from Lisakovsk was shipped to Karmet in 1970 (Shabad 1972a). Production in 1991 was 6.2 million tons. Shown in Figure 7.2, production at Lisakovsk continued to decline after independence, from just 4.5 million tons in 1992 to 2.6 million tons in 1994. Production increased slightly in 1995 but then dropped to just 1.1 million tons in 1996. In October 1996, the government sold a 51 percent share in the enterprise to Yesil (also Esil), a Kazakh financial and industrial company. Terms included payment of debts totaling $5.5 million, an investment pledge of some $23 million and a payment of $7.5 million to the government (Kalyuzhnova 1998: 79–83). Yesil also received the government's 39 percent share block to manage in trust.

Evidently Yesil was initially successful in resuming production operations and output increased in 1997 and into the first half of 1998 (*IMMR* December, 19, 1997 and August 7, 1998). It also made progress repaying debts (reported to be $20 million at the end of 1996). Beginning in the summer of 1998, however, recovery at the enterprise encountered increasing difficulty. First, Karmet (by then acquired by Ispat International and called Ispat Karmet) fell substantially behind in paying Lisakovsk for ore. Second, Lisakovsk's Russian customers refused to pay Kazakhstani rail tariffs (*Almaty Herald* July 30, 1998). Then, Kazakhstan's prosecutor general

moved to block the firm's accounts (as well as seizing accounts of Karmet to cover their $2.6 million debt to Lisakovsk) to pay arrears to the national budget (*IMMR* August 28, 1998). Production of ore stopped (see Figure 7.2). In response to threatened bankruptcy proceedings, Yesil developed a stabilization plan whereby it committed to a schedule of output levels, tax payments, and the like over the remainder of 1998 and into 1999 (*IMMR* November 27, 1998 and January 29, 1999). In the event, it was not able to meet the terms of the stabilization plan, and in August 1999 the government annulled Yesil's contract. Although Yesil evidently sued for reinstatement, Lisakovsk was declared bankrupt, and in November 1999 turned over to Ispat International for management in conjunction with Ispat Karmet. In early 2000, Lisakovsk was sold to Ispat for $6.75 million (*IMMR* November 5, 1999 and February 25, 2000). Production, which had plummeted to less than half a million tons in 1999, recovered to 1 million tons in 2000 and was almost 1.5 million in 2002. Whether Ispat will seek to raise production to the 4.5 million tons last seen in 1992 remains unclear.

The third iron ore mine in Kazakhstan is Atasuruda with deposits in the Karazhal district some 120 miles southwest of Karaganda. The mines also produce substantial amounts of manganese. Atasuruda was developed in the 1950s originally to supply Karmet, which was also under construction at that time. Although it remained an important supplier of iron ore to Karmet, its production proved to be inadequate as Karmet grew, which led to the development of the deposits at Lisakovsk (Shabad 1969 and 1972b). Undoubtedly because of its importance to Karmet, the operation of the Atasuruda mines was also a government priority in the early years after independence. For example, Atasuruda was one of three major development projects of the Kazakhstan International Bank, a bank formed in 1993 as a joint venture between the government and Chase Manhattan Bank to identify sources of long-term investment financing for domestic enterprises (*Feller Mining News* April 4, 1997). However, there were no reports of actual investment in the enterprise or even of specific development plans. In the summer 1997, an 80 percent share of Atasuruda was sold to the Kazakhstani firm Yerlovo (also Erlovo) for $4.5 million (EU-TACIS 6 September 1997; *Feller Mining News* January 9, 1998). It committed to invest $131 million before 2005, to pay wage arrears of KZT 44.5 million (about $0.6 million) and tax debts of KZT 606 million ($8.0 million) by February 1998, and to pay remaining debts of KZT 669 ($8.8 million) by April 1998 (*IMMR* April 25, 2002).

Yerlovo also had interests in developing new iron ore sources and in 1996 was given the rights to explore the reserves at the Atansor iron ore field in the Akmola region to the northwest of, but again not too far from, Karaganda (*IMMR* June 4, 1999 and July 30, 1999). Atansor officially opened in May 1999 and President Nazarbayev attended the opening ceremony. The license to develop Atansor became controversial, however,

when SSGPO sued to have Yerlovo's license annulled on the grounds that it had not been acquired via auction (*IMMR* March 23, 2001). Yerlovo, with the government's support, countered that the license had been issued perfectly legally as a follow-on to its 1996 exploration license. Meanwhile, in December 1999, Yerlovo sold 49 percent of its stock to ABN Financial Group LLC (a division of the US-registered firm Golden Eagles Re-insurance Company LLC) in order to secure $20 million for investments in Atansor and to build an ore processing plant (*IMMR* February 4, 2000). However, some time later the deal was canceled (perhaps because of the ongoing legal disputes), and the shares returned to Yerlovo. To date, Yerlovo remains the operator of Atansor.

Meanwhile, Yerlovo did not succeed in reviving production at Atasuruda, perhaps because of its interest in and commitments to development of the Atansor deposits. Indeed, by 2000, production had declined to only a half a million tons, and Yerlovo also had not met other terms of its purchase contract. Accordingly, the government canceled the contract in July 2001 and, as it did with Lisakovsk, turned Atasuruda over to Ispat Karmet for trust management with the promise of a future purchase (*ICACBR* February 11–17, 2002; *IMMR* April 25, 2002). When Ispat Karmet had not been able to acquire the mines by early 2002, it announced it was returning management of them to the government and refused to continue paying wages. The government renewed its pledge to sell the mines to Ispat, but a sale was not completed until January 2003 (*IMMR* January 24, 2003). Ispat paid KZT 777 million ($4.7 million) and pledged to preserve at least 1,000 jobs, to support the social infrastructure in the town of Karazhal, and to increase production capacity. How much of the purchase price was accounted for by payments and investments made during the extended period of Ispat's trust management was not disclosed.

Steel

Construction of the Karaganda Metallurgical Combinat began in the mid-1950s and its first blast furnace opened in 1960. It grew to become the second largest integrated iron and steel plant in the former Soviet Union, smaller only than the plant at Magnitogorsk. The plant itself covered some 5,000 hectares (about 50 square miles) in the town of Temirtau just 20 km north of Karaganda (Whalen July 1, 1999). It had four blast furnaces with a total capacity of 5.1 million tons of pig iron, and the newest furnace was installed in 1975 (*ICACBR*, January 31–February 6, 2000; Shabad 1975). It had three oxygen converters and two open-hearth furnaces with a combined capacity of 6.3 million tons of steel and facilities to produce hot- and cold- rolled steel sheets and tin sheets. As noted earlier, the declines in output at Karmet in the early 1990s were a source of great concern and several government initiatives attempted to attract foreign interest and

investment for needed modernization. Nevertheless, production at Karmet declined precipitously. Whereas production of steel was 6.1 million tons in 1992, it was just 3.0 million tons in 1994, as shown in Figure 7.4. Similarly, production of pig iron decreased from 5.0 to 2.4 million tons (Roskill 1998).

The first contract to take over management of Karmet was given to Voest Apine, an Austrian trading company (Buraff 1996). It was canceled for lack of performance, and a second contract was signed with the Eisenburg Group, a consortium including US Steel, but it too was soon terminated (Levine 1996b). In October 1995, with Karmet operating at well below 50 percent capacity, the government negotiated a third management contract with the Ispat International, a division of the UK-based LMN Group controlled by Lakshmi Mittal.[1] As with all of the early deals, which were initially management contracts, Ispat received the option to convert the contract to an outright purchase, an option which was exercised very early on. The LMN Group paid a $225 million bonus to the government for Karmet and committed to invest $500 million to upgrade the steel mill (Kalyuzhnova 1998: 79–83; Kazkommerts Securities 1997; Levine 1996b). There was also an agreement to pay off immediate debts of $50 million, settle wage arrears of $11 million, and reimburse the government for $32 million already invested in settling Karmet debts.[2] The enterprise is now known as Ispat Karmet. The LMN Group's purchase of

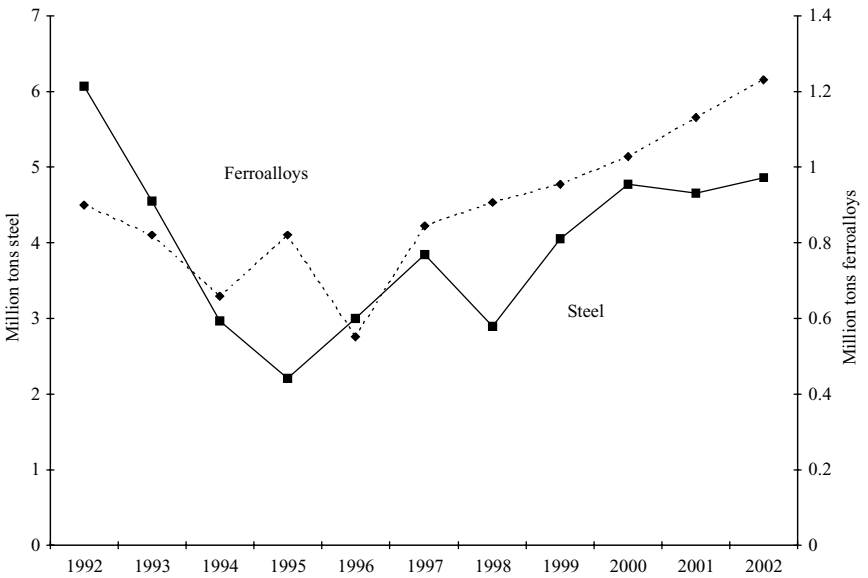


Figure 7.4 Production of steel and ferroalloys in Kazakhstan, 1992–2002

Source: Drawn from Roskill (1998), Levine (1996b–1999b), and Interfax

Karmet recently was linked to bribery allegations, specifically to Alexander Mashkevich and the Chodiev Group who were said to have accepted $100 million in payments presumably intended for President Nazarbayev.[3] Lakshmi Mittal agreed that the Chodiev Group had introduced him to the country, but maintained that the only payments made to them were for iron ore for the steel plant.

Whatever the truth of the bribery allegations, the LMN Group acquired Karmet at a very low price. In 1998, Mittal himself reportedly estimated that it would cost around $6 billion to build a plant like Karmet (*Almaty Herald* March 26–April 1, 1998). Like Samsung and TWG/EBG, Ispat's purchases did not stop with Karmet; indeed, according to one report, miners at the coal pits threatened to cut off supplies because they had not been paid, forcing Ispat to acquire the mines and begin paying salaries to the miners (Frantz August 1, 2001). Whatever the exact sequence, it soon had acquired both the Karaganda power plant (to secure a power and heat supply) and 15 Karaganda coal mines (to supply coal for the heating plant and coking coal for the blast furnaces). More recently, it also acquired its two principal iron ore suppliers, the Lisakovsk and Atasuruda mining complexes, when the initial contracts selling them were canceled (as described above). Figures on the number of its current employees vary considerably but one recent report estimated them at over 60,000.

To date, Ispat's management of Karmet continues to be viewed as one of the most successful of the foreign companies in Kazakhstan. Steel output has recovered more or less steadily from the mere 2.2 million tons produced in 1995 and sales now account for about 10 percent of Kazakhstan's GDP. From the beginning, Ispat's new management was widely regarded as tough but effective and necessary given the state of Karmet when they took over in 1995. The plant itself had not been upgraded in 40 years and there had been no maintenance in at least five years (Frantz August 1, 2001). Some parts of the mill, like the pickling plant, were little changed from when they set up in World War II (*Almaty Herald* March 26–April 1, 1998).

> Hundreds of the plant's employees came to work drunk. Some employees were getting paid for two jobs while only working one. In addition, Chechen gunmen have reportedly been known to threaten suppliers and customers and demand bribes. Despite the financial hardship that Karmet endured, the managers had been living in luxury in an upscale guesthouse across the street. The house was equipped with a massage parlor, restaurants, and even a disco, all purchased with company funds.
>
> (University of Pittsburgh 2002)

From the beginning, Ispat instituted a number of policies at Karmet. Employees who came to work drunk were fired. Employees found to be

listed at two jobs in order to receive two paychecks were also fired. Overall, operations improved.

> The people of the oblast have seen the positive progress of privatization: coal mining has doubled, 39,000 coal-miners and 30,000 metallurgical workers have jobs, and wages to miners and payments to the local and Republican budgets are regular. The coke concentrate produced by Ispat-Karmet is in great demand and is being exported again.
>
> (*Feller Mining News*, September 19, 1997)

Ispat's initial success in restructuring operations at Karmet led to success in attracting some $380 million in investment capital from the World Bank and EBRD to finance a substantial part of the LMN Group's investment commitment to restore capacity, to improve environmental performance, and to invest in more value-added production capacity. The project was seen as especially important for its demonstration effect as the first successful privatization of a large fully-integrated former monopoly in the former Soviet Union (*Feller Mining News* September 12, 1997). In total, some $600 million has been invested from 1996 to 2000 in the plant as well as in the city of Temirtau under Ispat's ownership (*IMMR* January 11, 2002). Ispat also has agreed to invest another $640 million from 2000 to 2004.

Under Ispat, Karmet has successfully diversified markets and almost all of its output has been exported outside the CIS (*ICACBR* January 31–February 6, 2000). Moreover, production and sales increases as well as diversification have occurred almost in spite of very difficult conditions in the world steel market throughout most of the last few years. Because it remains within the privately-held LMN Group, Ispat Karmet is not required to report on the profitability of its operation regularly, and it is difficult to find any financial indicators of its performance. In an interview, the plant's general director indicated post-tax profits in 1998 were $29 million and had been around $41 million in 1997 (Whalen 1999). It paid taxes of KZT 1.9 billion in 2000, 50 percent more than in 1999, suggesting profits improved in 2000 (*IMMR* January 29–February 4, 2001).

At the same time, the changes brought by Ispat also created many difficult problems for the people of Temirtau and Karaganda. Of concern immediately after Ispat took over Karmet and the coal mines was whether there were any provisions in the contracts to assure either job security or to continue the many social services historically provided by Karmet. Certainly, the contracts' provisions on layoff and closings appear to have been somewhat unusual. Unlike most other foreign investors whose contracts stipulated minimum periods over which current employment must be maintained, Ispat evidently secured the right to reduce employment at Karmet immediately and, when it acquired the coal mines, to close

a number of the coal mines and lay off coal miners. Moreover, unlike most foreign investors who were required to continue supporting most social services, Ispat refused to accept many of the social assets that had been a part of Karmet. Accordingly, one week before Ispat's purchase, some 36,000 apartments, 25 kindergartens, seven farms, clinics, hotels, buses, a sanitorium, a skating rink, and a garment factory were transferred to the administration of the city of Temirtau (Whalen 1999; *MMS* May 30, 1997). In return, Ispat agreed to a support city operations with a payment of $10.5 million; however, upkeep and salaries alone for the 10,000 employees transferred to the city with the assets amounted to some $40 million. Not surprisingly, most of the facilities closed and around 8,000 workers employed in the social sector lost their jobs (*The Economist* December 19, 1998: 48).

At the time of the transfer, Ispat retained the right to re-acquire some of the assets, and in the end it found some services in Temirtau had to be supported directly. For example, when it acquired the heat and power plant in 1996 to keep Karmet operating, it also supplied heat and power to the city without charge. It only began charging when it discovered another firm had been collecting payments from customers without Ispat's knowledge (Robinson December 11, 2000). In addition:

> The company took over the aging water supply system and the trolley that links the plant to the rest of the city. It started a television station to foster community pride and opened a small history museum. To provide uniforms for workers, Ispat bought a textile factory and it took over and refurbished a rundown hotel to provide a place for visitors to stay and a restaurant with Indian food.
>
> Temirtau had always counted on the mill to provide not only jobs, but also housing, medical care and other social services. Local government could not afford to fill the gap, so Ispat began paying to expand health services and to subsidize salaries for schoolteachers.
>
> (Frantz August 1, 2001)

At Karmet, Ispat's restructuring operations significantly reduced the workforce from around 35,000 to 26,000 by 2001 (Robinson December 11, 2000; *IMMR* February 2, 2001). For a long period, salaries did not kept pace with inflation or devaluation, and by 1999 a worker whose salary had been $270 per month was receiving the equivalent of only $150 per month (Whalen 1999). By the end of 2000, however, average salaries were back to around $300 per month. As well, the prospects for an increase were limited since the employees essentially had no other alternatives. The only good news was that the salary was actually paid on time. Two coal mines were closed outright and several others combined so that today there

are just 8 coal mines in operation (UN-ECE 2001). One estimate put the probable loss of jobs at the coal mines at over 8,000.

> "Before our eyes we are losing the industrial capacity of the Karaganda region, which was created by the efforts of many generations," according to the chairman of the local council of the trade union. "Closing the mines will lead to the fading of Shakhtinsk, Abay, and Saran towns, which are living on the coal industry now."
> (*Feller Mining News* November 7, 1997)

At the same time, extreme over-capacity was a problem plaguing the coal industry throughout Eastern Europe and the former Soviet Union, and although Kazakhstan's mines were among the most cost competitive (see Chapter 10), the miners were aware that changes would be necessary.

Unemployment, the threat of more factory and mine closings, and the loss of many social services has taken an especially high toll upon the people of Karaganda and Temirtau where drug use and alcoholism increased dramatically. As but one consequence, the Karaganda oblast became the center of an HIV epidemic. More than 85 percent of all registered HIV-infected people in Kazakhstan were in Karaganda, 80 percent of them were in Temirtau, and almost all cases are attributed to intravenous drug use (UN-AIDS 1999; UNDP-KZ 1998: 38). Experts "believe it (the accumulation of so many infected people in one remote place) is caused by social breakdown in a city whose economy depends on one ailing industry" (*The Economist* December 19, 1998). Thus, even a foreign investment "success story" was not entirely good news in the local community.

On the environmental front, Ispat secured numerous privileges in its negotiations with the government. For the first ten years, any new environmental laws which might come into effect "cannot be applied or be enforced against the purchasers" (World Bank 2001: 81). Moreover, Ispat was required to spend only a fixed amount each year bringing their operations into compliance with existing laws, and it negotiated an eight year period (normally five) to complete a program of improvements. In the same way that it was not responsible for earlier government-guaranteed loans, Ispat also was not to be held responsible for contamination that was created before it took over operations. As there is virtually no information about similar provisions in any of the other contracts, it is difficult to know how unusual these terms were. Nevertheless, because the Karaganda region is among Kazakhstan's most polluted, their existence is cause for concern. Already the Nura River below Temirtau is so polluted from years of mercury discharge that it can no longer be used as source of water for the city (UN-ECE 2000: 72 and 103). If Ispat refused to assist with the cleanup of the many years of damage, it remains unclear how cleanup will ever occur. As to ongoing operations, Ispat also does not appear to be improving

matters. Whereas stocks of hazardous wastes stored at enterprises in the Karaganda oblast at the end of 1994 amounted to 72 million tons, by 1998 they were reported to have increased by more than ten-fold, to 877 million tons (ibid.: 68) Certainly Ispat-Karmet is not the only enterprise in the oblast; but, it is by far the largest and, with the exemptions gained above, it is unclear how soon it will be required to abate even ongoing damage.

Chromium

The Donskoi Mining Complex at Khromtau in the Aktyubinsk oblast of Kazakhstan is the world's leading producer of chromite ores and produced virtually all of the chromite in the former Soviet Union (Sagers 1996). Approximately half its annual production supplied the two ferroalloy plants in Kazakhstan – Ferrokhrom (formerly the Aktyubinsk Ferroalloys Plant) and the Aksu (formerly Yermak) Ferroalloys Plant – while half was exported to other ferroalloy plants primarily in Russia. Development of the Donskoi mines and the ferroalloy plant in Aktyubinsk date to 1943. Ores from the deposit at Kromtau were of a high enough grade that a concentrator was not even installed until 1974 (Shabad 1969 and 1974). The plant at Aksu in the Pavlodar oblast went into operation in 1968, the same year that the large Aksu power station that was built to use coal from the nearby Ekibastuz mines began operation. Eight years on, the power station had become the largest thermal power plant east of the Urals and expansion of the ferroalloy plant was undertaken (Shabad 1976 and 1977). By 1990, the ferroalloy plant at Aksu had 26 furnaces with the capacity to produce 319,000 tons of ferroalloys per year; it was the largest plant of its kind in the world. The Aktyubinsk plant had 19 furnaces and a capacity of 200,000 tons per year (Roskill 1998).

Coordination between the Donskoi mines and the processing enterprises in Russia, the Ukraine, and Kazakhstan was clearly critical and, not surprisingly, was the cause of major reorganizations within Kazakhstan as well as of frequent inter-governmental disagreements. Early on, the government had hoped that KRAMDS could maintain operational relations between the Donskoi mines and Ferrokhrom (Levine 1994b). However, output of chromite ore continued decreasing (see Figure 7.1) as did that of ferroalloys (see Figure 7.4), and a new solution was sought. In June 1995, the government formed the open joint stock company Kazkhrom, now usually called Kazchrome (also Transnational Company Kazchrome), which brought together the Donskoi mines and both ferroalloy plants, and management was turned over to the Japan Chrome Corporation, which was the third principal enterprise of the Trans World Group and Eurasian Bank Group partnership. Although Japan Chrome was often mistaken for a Japanese firm in the press; it was registered in the British Virgin Islands like Whiteswan.

Ostensibly Kazchrome was given over to Japan Chrome's management on a five year contract; in fact, TWG/EBG purchased 57.5 percent of Kazchrome in November 1996. They paid a total of $582.6 million for the majority stake in the firm, including investment pledges of $398 million and just $66.8 million[4] to the government (Kalyuzhnova 1998: 79–83). When the Aksu ferroalloys plant experienced significant difficulties with the local power supplier in 1996, TWG/EBG purchased the Aksu heat and power plant and the Vostochny and (part of the) Stepnoi coal mines in Ekibastuz upon which it depended to secure both power and a fuel source for the power plant. The coal mines were acquired for $10 million and investment pledges of as much as KZT 140 million (about $1.2 million) over five years (ibid.; *MMS* October 8, 1996). The firm also agreed to make some $150 million in guaranteed payments to the budget. Eventually, the energy assets were transferred to a separate EBG enterprise, the Eurasian Energy Corporation, which is also a member of the Eurasian Industry Association. In 2000, the Eurasian Energy Corporation also acquired 79 percent of the Shubarkol coal mine (see Chapter 10). For its part, Kazchrome also acquired the manganese mining enterprise Kazakhmarganets in the Zhezkazgan region in 1997 along with the development rights to the Tur manganese deposit in Karaganda, as described below. In 2001, Kazchrome acquired two new enterprises – a titanium-zirconium deposit with the intention of producing ferrotitanium at Aksu (*IMMR* August 10, 2001) and the local power plant in Aktyubinsk, Akturbo, for $28 million and installed a new steam turbine (*IMMR* December 14, 2001).

As evident in Figure 7.1, the new management and investment promised by TWG/EBG did not reverse the overall decline production. While output in 1995 did recover somewhat, the sizable decline in 1996 suggests that the initial recovery may have been due to disposing of available stocks and not to reviving actual production at the mines (as critics of all the sales had alleged more generally). With Kazchrome, TWG also undertook a very different strategy than with SSGPO and Aluminum of Kazakhstan. Whereas it sent most of the iron ore and alumina to Russia for processing under tolling arrangements and then sold it on world markets, TWG undertook to send almost all the chrome ore to its own two metallurgical plants in Kazakhstan and resumed almost no ore exports to Russia. Some chromite was even exported directly on to the world market rather than sent to Russia. Simultaneously, TWG focused on developing new export markets for the chrome. To be sure, some ore continued to be shipped to Russian ferroalloy plants, often under tolling arrangements, and the ferroalloys were exported; nevertheless, TWG's attempt to change traditional marketing patterns, especially the continued restriction of ore exports to Russia, resulted in numerous official protests by the Russian government to their Kazakh counterparts (Sagers 1996). The protests led to a succession of government-to-government agreements about minimum trade amounts, agreements which

evidently were then ignored by Kazchrome. The Russians retaliated by cutting off the supply of electricity to the Kazchrome plants, cutoffs which prompted Kazchrome to purchase the local power plant in Aksu and coal supplies.

Undoubtedly, Trans World Group's decision to manage Kazchrome so differently from its other enterprises was determined by the absence of concurrent investment interests in Russian ferroalloy plants.[5] The transformation it attempted at Kazchrome was much more difficult and required substantially greater investments than at its other enterprises, initially to rebuild existing capacity in the two plants and then to expand. Only in April 1997 was the largest smelting furnace at the Aksu plant brought back on line; another was added in September 1997 (*MMS* April 29, 1997 and September 26, 1997). In a 1998 interview, the president of the Trans World, David Ruben, described the problems encountered in restructuring.

> Our biggest mistake was to get involved with metals like chrome of which we had no previous experience. We did not realize until too late that this was a market closely sewn up by major producers selling directly to end users. As world prices fell we found we were unable to sell chrome at any price and had to stockpile vast quantities. At one point we were hiding over 350,000 tons of chrome ore in various ports around the world – the stockpile in Rotterdam became the highest mountain in Holland," he adds. "We had to choose between closing the mine and the alloy plant entirely, and throwing thousands out of work, or investing heavily both in the mine and the processing plant. We decided on the latter approach and aimed to establish Kazakh chrome as the lowest cost, quality product on world markets. To achieve this we had to cut unit costs by raising mine output and improving quality from the alloy plant. We managed to become the lowest cost producer and gained consumers' confidence in our ability to supply quality product on time. But it was all terribly expensive.
>
> (cited in Robinson and Clover 1998)

Kazchrome's strategy was not one which would return the enterprise to profitability quickly or increase tax payments. Moreover, to the extent it marketed ore to Russian ferroalloy plants under tolling arrangements, it undoubtedly was transferring some returns out of the country and thereby also evading tax payments. In fact profits failed to recover (and tax payments remained low) in 1996 and 1997, as shown in Figure 7.5. Not surprisingly, Kazchrome's operations became the subject of a governmental review in the summer of 1997. With the continued declines in output as well as the absence of profits, it also was not particularly surprising when the local director of the enterprise was dismissed from his post because

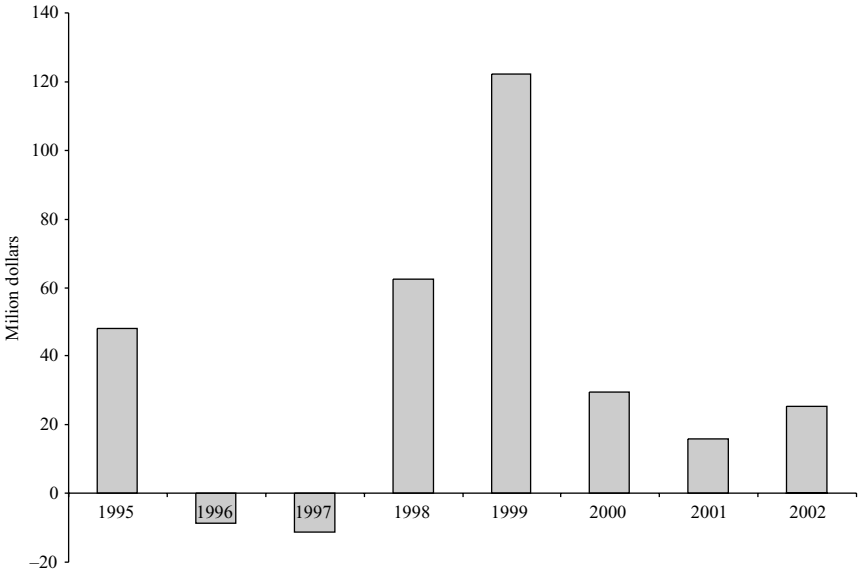


Figure 7.5 Reported profits at Kazchrome, 1995–2002

Source: Drawn from Interfax

"the government was dissatisfied with the overall situation in the chrome industry" (*MMS* August 29, 1997). Soon, reviews of all the Trans World Group's enterprises in Kazakhstan were underway and by the end of 1997 TWG had lost control.

As with SSGPO and Aluminum of Kazakhstan, EBG took control of Kazchrome in 1998, winning first half and ultimately the entire 57.5 percent share package when the disputes between it and TWG were finally settled in March 2000.[6] When the EBG group took over management, Kazchrome resumed payments to the budget and support of local services under the terms of the general agreement negotiated between EBG and government officials in Pavlodar in March 1998. It also negotiated reductions in rail rates during the summer. As evident in Figure 7.5, Kazchrome reported profits each year since 1997, although after an initial strong recovery (and aided by a one-off payment in 1999), profits remained comparatively variable, from nearly $30 million in 2000, to $16 million in 2001, and then $25 million in 2002. Under EBG's management, significant investments have been made in each of the enterprises. From 1995 to 2000, investments amounted to $60 million in the Donskoi mines to develop the ore base; $79 million in the Aksu ferroalloy plant on equipment and modernization of the furnaces, including a slag-processing complex with

an annual capacity of 500,000 tons ; $33 million at Ferrokhrom modernizing furnaces, and $9 million developing the Tur manganese deposit of Kazakhmarganets (*ICACBR* February 5–11, 2001; *IMMR* July 27, 2001; *IMMR* Aug 24, 2001). While significant, these are nonetheless levels of investment that can easily be funded from profits. It also announced plans for additional investments of nearly $200 million by 2005. Kazchrome employs about 15,000 people at its three enterprises.

Manganese

Although Kazakhstan produced only 2 percent of the manganese in the former Soviet Union, its reserves of manganese have been estimated to comprise as much as 17–20 percent of total reserves (Kazkommerts Securities 1997). The Kazakhmarganets mines at Zhezdy in the Karaganda oblast are the oldest producing areas in Kazakhstan and first began production during World War II as an emergency source of manganese (Sagers 1996). Production increased dramatically in the first half of the 1980s when a new shaft mine was opened. The Zhayrem mines (also known as Saryarka Polymetal) in the Karaganda oblast provided a second supply of manganese. When opened in 1984, the Zhayrem mines increased Kazakhstan's production capacity by nearly 1 million tons of ore annually. Described in Chapter 6, Zhayrem was sold to the Swiss firm Nakosta, and the enterprise is now recovering but only after a very lengthy and difficult transition. The third source of manganese is Atasuruda, which as reported above is now part of Ispat-Karmet. In any event, production at Atasuruda is of low grade iron-manganese ores and does not include manganese concentrate (*The Mining Journal* September 7, 2001).

For its part, Kazakhmarganets was not sold until summer 1997, although there appear to have been many efforts to sell it sooner. News reports throughout the summer and fall of 1996 indicated negotiations were underway with Japan Chrome (still a TWG/EBG joint venture) to sell an 80 percent share package (*MMS* June 22, July 23, August 23, and Sept. 8, 1996). In the event, by December 1996 the situation at the enterprise had deteriorated to the point that it announced a self-liquidation (*MMS* December 15, 1996). Shown in Figure 7.1, total output of manganese ore had declined to 0.4 million tons in 1997 (from 0.5 million in 1993); output from Kazakhmarganets was only 10,000 tons in 1996, down from 114,000 in 1992, as against a reported capacity of 175,000 tons (Roskill 1998). By the end of 1996, the enterprise had been idle for many months, wage arrears amounted to several hundred million tenge, and the mine itself had been flooded. Negotiations were reopened with TWG/EBG and in April 1997 they were reported to have purchased an 80 percent share package for $2 million, all of which was committed to pay salary and pension arrears (*Feller Mining News* July 7, 1997; *Focus Central Asia* 7 1997). Soon thereafter,

the dispute between the Trans World Group and EBG began and follow-on reports included virtually no discussion of the situation at Kazakhmarganets. Indeed, there was some doubt as to whether the enterprise had actually been sold, and if so, when.[7] In an October 1998 interview, the director of Kazchrome's Aksu Ferroalloy Plant was quoted:

> More than a year ago, this enterprise was bought by Japan Chrome Corporation . . . , but after the Trans World Group management dispute, it remained almost ownerless. At present, the question of ownership remains open, as there is no respective agreement on the alleged exchange of property
>
> (Abramenko 1998: 45)

It remains unclear whether production of manganese at Kazakhmarganets mines has restarted, let alone increased. Kazchrome also acquired the rights to develop the Tur manganese deposit in the Karaganda region northeast of Kazakhmarganets, presumably when it acquired Kazakhmarganets (although there has been no indication of either the timing or price of the sale). The Tur deposit was discovered in 1986 and exploration was not completed until 1997 (*The Mining Journal* September 2001). Kazchrome has invested substantial amounts in developing Tur, some KZT 598 million from 1998 to 2000 (*ICACBR* July 10–16, 2000). Production in 2000 amounted to 300,000 tons. Through 2001, ore was processed using a mobile crushing and sorting facility and the concentrate shipped to the Aksu plant. A new processing facility was under construction. In total, Kazchrome announced it planned to invest some $20 million in the development of the deposit from 2001 to 2005 (*ICACBR* October 29–November 4, 2001). Overall, production of manganese in Kazakhstan is finally increasing once again (see Figure 7.1). Additional deposits at Bogash and Aidagarly, also in the Karaganda region, are also under development, although recent disputes over the license to develop these fields has slowed investment (*IMMR* June 8, 2001).

Summary

The enterprises in the ferrous metals sector shared many of the experiences of those in the nonferrous metal sector as well as the overall economy. Whether under the overall management of enterprises like KRAMDS or of local managers reporting to government ministries, output declined, revenues declined, and the threat of bankruptcy increased rapidly throughout the sector. Privatization and sale of the enterprises followed, usually involving a management contract first and then sale of a majority interest. All was accomplished very quickly and in less than three years, the enterprises were corporatized, management contracts signed, substantial interests

then sold (and in some cases sold more than once), and new investments undertaken as the new owners/managers began to take control of their acquisitions. What followed was then a period of consolidation of assets within the sector where the new owners also acquired power plants and coal supplies. The Trans World Group lost its interests in the chrome and iron sectors to its one-time partner, the Eurasian Bank Group, and two Kazakh owners – Yesil and Yerlovo – lost iron ore mines in favor of Ispat Karmet. The net result is that the entire sector is now controlled by just two owners. The Eurasian Bank Group owns a controlling interest in the country's largest iron ore mine and has a monopoly in chrome, while the UK-based LMN Group owns the single integrated steel plant as well as the other two iron ore mines. Altogether, the LMN Group employs over 60,000 in the Karaganda region and the Eurasian Bank Group employs more than 44,000 in its copper, chrome, iron ore, and energy enterprises. Table 7.1 summarizes the results.

Like the sales in the nonferrous metal sector, these sales were also controversial, and for many of the same reasons. Negotiations were almost entirely conducted behind closed doors. The prices paid for the enterprises were very low. The controlling interest in SSPGO was acquired for $49 million, and profits that same year reportedly amounted to $88.3 million. The controlling interest for Kazchrome was acquired for $66.8 million and profits that same year amounted to almost $50 million (and other reports put the purchase price at only $36.8 million while profits may have been as much as $143.5 million). Karmet was acquired for $225, and although its profits have not been made public, one estimate put the cost of building a similar-sized plant at over $6 billion.

Both EBG and Ispat have made substantial investments in the mining and metallurgical operations. Nevertheless, at least in the case of EBG, the levels of profits at SSGPO and Kazchrome were sufficient to fund the investments outright, at least after EBG took over management. For example, Kazchrome reported it had invested a total of $172 million in operations at the Donskoi mines and the two ferroalloy plants from 1995–2000. Meanwhile, profits at Kazchrome from 1995–2000 totaled $312.5 million. Note too that the actual investment is substantially less than the $398 million investment EBG (along with the Trans World Group) agreed to make at the time they acquired Kazchrome. At SSGPO, cumulative profits from 1995–2000 were about $185 million, which was more than enough to fund both the purchase price and the investments that have been reported. For its part, the LMN Group raised a substantial share of the funds to meet its investment commitment at Karmet from major international agencies like the World Bank and EBRD. In 1997 and 1998, at least, Karmet operations were generating substantial profits; but, more generally, the level of profits at Ispat Karmet have remained confidential.

Table 7.1 Consolidation of enterprises in the ferrous metals sector

Metal and enterprises	*Current owner(s) (country)*	*Share (percent)*	*Prior owners/partners (Other affiliation)*
IRON AND STEEL			
Ispat Karmet	Ispat International (UK)	100	
Karaganda Metallurgical plant			Voest Apine (Austria); Eisenburg Group (US/Israel)
Karaganda power plant			
15 Karaganda coal mines			
Lisakovsk iron ore mines			Yesil (KZ)
Atasuruda iron ore mines			Yerlovo (KZ)
Sokolov-Sarbai iron ore mines	Eurasian Bank Group (KZ)	50.5	Trans World Group (UK)
	Government (KZ)	39.5	
Rudnyy power plant			
CHROMIUM			
Kazchrome	Eurasian Bank Group (KZ)	59.06	Trans World Group (UK)
	Government (KZ)	31.37	
Donskoi mines			
Aktyubinsk Ferrokhrom			
Aksu Ferroalloy			
Ekibastuz coal mines			(Eurasian Energy Group)
Aksu power plant			(Eurasian Energy Group)
Kazakhmarganets			
Tur manganese mines			
Aktyubinsk power plant			
Titanium deposits			

Although difficult to generalize from these experiences, it seems that the foreign investment in Kazakhstan's ferrous metals sector was generally less than promised. Moreover, many of the projects required substantially less external funding than has been suggested by continual reiteration of the phrase "plus substantial investments" that accompanied announcement of the otherwise low prices at which the enterprises were sold. Not surprisingly, the Eurasian Bank Group was linked to President Nazarbayev, as seen in Chapter 6. The LMN Group evidently was introduced in Kazakhstan by EBG, and a recent report indicated it had paid EBG $100 million for "services." Thus, although there have been no prominent allegations of outright bribery associated with the sale of the enterprises in either this sector or in the nonferrous metals sector, prices were certainly at levels low enough and subsequent performance has been such to suggest that there were other considerations in the sales.

Since 2000, the government has been reviewing the performance of all the major enterprises and among the concerns has been to decrease the amount of imported supplies and increase the use of Kazakh suppliers (especially in the oil and gas sector, see Chapters 9 and 10). The enterprises in the ferrous metals sector generally have been supportive. In 2000, SSGPO pledged to buy locally supplies amounting to $36 million, and Ispat Karmet committed to $20 million. Ispat has also pledged to participate in the building and operation of a pipe plant to manufacture pipes for the oil and gas industry. Kazchrome's ferroalloy plant at Aksu participated as well, spending about $6.2 million on import replacements in 2001 and $12.5 million in 2002 (*IMMR* May 24, 2002). At least superficially, the enterprises appear to be responding to the government's new initiative. Whether it is to the same extent as enterprises in other sectors with other owners remains to be seen.

8

FOREIGN INVESTMENT IN GOLD MINING AND EXPLORATION ENTERPRISES

Kazakhstan was the third most important producer of gold in the former Soviet Union, behind the Russian Federation and Uzbekistan.[1] In 1991 it produced 24 tons of gold (about 9 percent of the total Soviet production), which was divided nearly equally between output from gold mines and as a byproduct of mining at the many polymetallic nonferrous metals deposits in the country (Sagers 1998a). There is general agreement that Kazakhstan's gold reserves went relatively undeveloped by the Soviets, unlike its ferrous and nonferrous metals reserves. As but one example, while some $22 million was invested in mapping prospective gold deposits in the Zhambyl region, less than 9 percent of Zhambyl's indicated reserves had been mined (*The Mining Journal* December 9, 1994: 418). Even with the often detailed exploration conducted by Soviet geologists, and more recent updates by the many Western companies with exploration licenses, estimates of the size of the reserves of gold in Kazakhstan have been at least as variable as have been the estimates of oil reserves. Roskill (1998) put reserves at 1,000 tons; Levine (1998b) estimated them at around 800 tons; and, Wilson (2002) and an Interfax survey put proven reserves at 1,500 tons (*ICACBR* Mar 5–11, 2001). If reserves are approximately 1,500 tons, Kazakhstan would rank ninth in the world in terms of reserves and fourth in the world by the average grade of its ores (Wilson 2002).

There is general agreement about which are the most important deposits in Kazakhstan – Bakyrchik and Suzdalskoye near Auezov in East Kazakhstan, Vasilkovskoye near Stepnogorsk in North Kazakhstan, and Akbakai in Zhambyl (see Figure 6.2). More generally, Kazakhstan's gold deposits cluster in the three areas defined by these mining operations – in the east, in the north, and in a more central area from Lake Balkhash westward. Between 1992 and 1997, all of the major operating mines were offered for sale to foreign investors, many of them more than once. The government also sought foreign investment to explore and develop many other areas, and by 1997 one of the foreign companies with exploration licenses could claim it was the largest mineral exploration land-holder in Kazakhstan with nine licenses in five joint ventures covering 9 million

hectares (Steppe Gold Resources Ltd June 20, 1997). Almost without exception, the early investors in the gold sector met with little success because of difficult relations with local Kazakh partners, difficult dealings with the government, and a difficult market environment created by historically low gold prices.

Shown in Figure 8.1, output of gold in Kazakhstan (in terms of the metal content of ores) generally decreased from 1992 to 1996, in line with the decline in mining of nonferrous metals generally. After a sharp recovery in 1997, output has been increasing steadily, but rather more modestly. It is also worth noting that data on gold production in Kazakhstan, like that on gold reserves, seem to be especially difficult to verify and consequently vary significantly among sources. The data in Figure 8.1 were taken from the same sources used consistently throughout the book. For 1992–7, Sagers (1998a: 127) estimated quite different production amounts. In 1992, he estimated total production was some 24 tons (as opposed to the 26 tons shown in Figure 8.1), and his estimates indicate production actually increased in 1993 to 25 tons and then to 26 tons in both 1994 and 1995. According to his estimates, production did not decline until 1996 and then only to 21 tons, declining a further 1 ton to 20 tons in 1997. These production amounts and trends contrast sharply with those in Figure 8.1, which show production generally decreasing from 1992 to 1996 from 24 tons to just

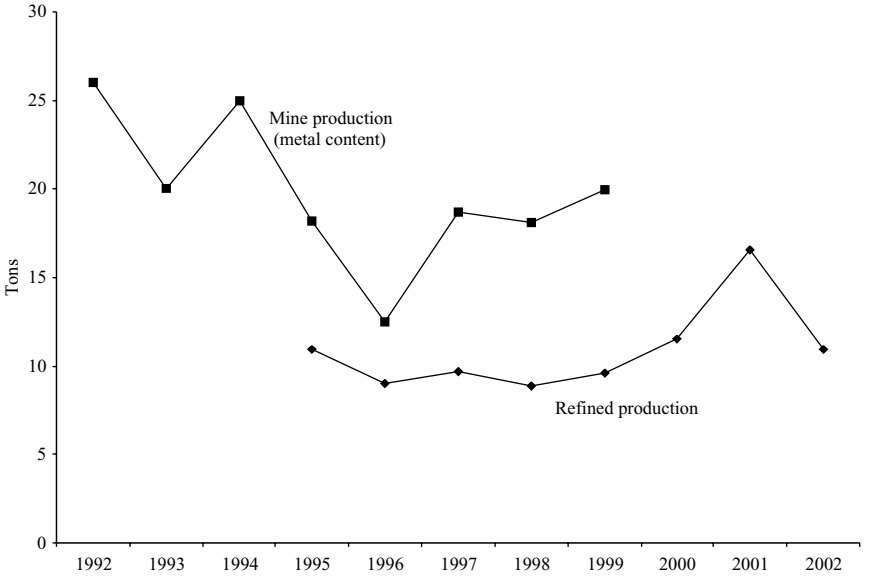


Figure 8.1 Production of gold in Kazakhstan, 1992–2002

Source: Drawn from Levine (1996b, 1999b) and Interfax

9 tons. Sagers also disaggregated mine production from byproduct production, and his figures suggest that the entire decline in the total production between 1992 and 1997 was due to changes in mine production. This hypothesis is more than plausible because the privatization and sale of Kazakhstan's gold mines have been among the least successful of the government's efforts to attract foreign investment and develop the country's resource base. Of course, nonferrous metal production also declined significantly, and it is difficult to imagine there would not have been some decline in byproduct production too.

Gold and silver were not refined in Kazakhstan under Soviet management, and not surprisingly a high priority was placed on developing refining capacity in 1991. Among the first investments in the sector, the Ust-Kamenogorsk Lead and Zinc Complex commissioned a refinery in 1993, and the first gold (and silver) bullion was produced the next year as shown in Figure 8.1 (Roskill 1998). In 1996, both gold and silver bullion from Ust-Kamenogorsk were awarded "good delivery" status by the London Bullion Market Association, thereby certifying its high quality and acceptability in international trade.[2] Also beginning in 1994, a comparatively small amount of gold could be refined at the Tselinnyy Mining Chemicals Combine (annual capacity of 2 tons per year). In 1994 and 1995, Ust-Kamenogorsk produced almost all the refined gold, with Tselinnyy accounting for less than 1 ton. A third refinery was commissioned at Balkhashmys (now a part of Kazakhmys) in 1997. Total output of refined gold fluctuated between 9 and 10 tons until 1999, increased to 11.5 tones in 2000 and 16.6 in 2001 before declining to 11 in 2002 (see Figure 8.1). The sale of the enterprises with refineries is covered elsewhere (Balkhashmys and Ust-Kamenogorsk in Chapter 6 and Tselinnyy, an uranium mining and processing complex, in Chapter 10) and the remainder of this chapter describes the rather unsuccessful history of foreign investment in Kazakhstan's gold mining operations.

From the 1970s, responsibility for gold production in Kazakhstan was placed in the ministry for Nonferrous Metallurgy (Sagers 1998a). With independence in the early 1990s, the ministry was dissolved and a state-owned enterprise Altynalmas was formed with responsibility for the operation of the country's gold mines (Levine 1993a and 1994b; Sagers 1998a). Development of Kazakhstan's gold fields, for the most part under-developed in the Soviet period, became a priority of the new government. Early development plans, outlined in the program "Gold for Kazakhstan," anticipated a doubling of total gold production by 1998 through the development of known deposits and increased production from current mines. Foreign investment was expected to play an important role. Among the most important mines targeted for early development were Bakyrchik, thought to contain the largest undeveloped deposit in the world, Akbakai, Agadir, Kazakhaltyn, Maikainzoloto, Varvarinskoye, and Vasilkovskoye. As Altynalmas' plans and priorities came to virtually nothing and total

production continued to fall, Altynalmas was dissolved, the mines privatized, and foreign investors sought. A separate state firm, Asier, was formed to represent the remaining state interests in many of the individual mining and/or exploration joint ventures.[3]

By the end of 1996, management of most of the mines had been turned over to various foreign companies in arrangements that, if they were not outright sales, usually included exclusive options to acquire substantial share percentages within the term of the contract. The single exception was the mine at Akbakai that, while prepared for sale in 1997, was not sold. By 2002, most of the enterprises had been sold two or three times and/or had been returned to Altynalmas for management. Both the sales of the gold properties and the subsequent relations between the foreign firms and the government have been especially contentious, to the point that some damaged Kazakhstan's ability to attract new investment for a time. To name but two of the most notorious episodes, the experience of Placer Dome with Vasilkovskoye and Gold Pool with Kazakhaltyn put 'political risk' at the top of the concerns of both investors and international agencies in the midst of the government's efforts to find new management for and to sell the largest enterprises. There can be little doubt that these episodes damaged Kazakhstan's ability to attract foreign investors.

Akbakai

Of the major existing gold mines, Akbakai was the only one not turned over to a foreign firm for management or sale. The Akbakai mine is one of the mines located in the Zhambyl region, and its development dated from the 1970s. Over the first 22 years of its existence, some 11 tons of gold had been produced, an amount thought to be considerably below its potential (*MMS* April 24, 1996). Perhaps because it was able to continue operations and was thus not among the mines with the highest priority for reorganization, there seemed to be little hurry to find an investor for Akbakai. A tender for a 90 percent stake was not announced until January 1997 (*Engineering and Mining Journal* 1997). Terms of the tender were fairly standard, including a commitment for a minimum investment ($30 million from 1997–2001 of which $5 million was to be in 1997), to pay back wages, and to pay debts (including at least $10 million to creditors, of which $5.3 million was to Altynalmas itself). The minimum asking price was $5.5 million. Among those who reportedly expressed interest were Samsung (presumably through Kazakhmys), Nelson Gold (then a Canadian mining company operating a major gold mine in Tajikistan, later bought by Kazakh interests (see also Chapter 9)), Bakyrchik Gold Plc (the UK company developing the Bakyrchik mine, see below), and Moonstone Mining of Australia (*Interfax* February 1997). In the event, the tender was canceled and the mine returned to Altynalmas for management.

Perhaps another reason Akbakai was not among the first mines offered for sale, or indeed ultimately sold, is that funding for two major mine development projects had been secured separately in 1994. First, a license to explore an area covering some 56,000 square kilometers surrounding but not including the Akbakai mine had been awarded to Altyn-Tas, a joint venture between Altynalmas and a UK firm Moonstone Holdings (*The Mining Journal*, December 9, 1994: 418). In addition to the usual condition establishing a minimum annual investment on exploration activities, the contract also required Moonstone to build a plant near Akbakai to process concentrates produced at the mine into gold dore, thereby eliminating the need to ship them to Balkhashmys for processing. Work began almost immediately, and it was projected to be operational in mid-1995. Even though Moonstone was ultimately reimbursed for the building costs, selling it to Altynalmas over a two-year period, the agreement meant Altynalmas did not have to find outside funding to finance the $4.3 million project itself. In 1996, Akbakai produced about 1 ton of gold; by 1998 it was producing 1.5 tons and had plans to increase to 2.0 tons by 2000 (*IMMR* December 11, 1968).

Bakyrchik

Bakyrchik was the first gold mine to which foreign investors were attracted under the Altynalmas plan. Although discovered during World War II, gold was not mined at Bakyrchik until 1965 (Sagers 1998a). One of the mines in the eastern group, it is located at Auezov approximately 160 km southeast of Semipalatinsk. In late 1992 or early 1993, a 40 percent interest in the Bakyrchik mine was sold to Minproc and Chilewich International Corporation, Australian- and US-based firms that had been working in Kazakhstan to develop the mine (*Investor's Chronicle*, 1993). They formed a company in the United Kingdom, to which they gave the felicitous name Bakyrchik Gold Plc (subsequently named GTL Resources when it broadened its interests to include oil ventures in the North Sea), to raise funds via an issue of new stock to fund development of the mine, much the same way that Leslie Urquhart and the Fell Brothers had raised funds in London to finance the cost of acquisition and development of their mining ventures nearly a century earlier. As the principal partners in Bakyrchik Gold, Chilewich and Minproc held 50 percent of the initial stock; the remainder was placed with private and institutional investors at £1.20 per share in August 1993. Altogether they raised some £8.2 million to fund development at Bakyrchik of an initial production of 35–40,000 ounces of gold per year. Immediately thereafter however, Chilewich sold virtually its entire interest for an estimated £3.6 million and Minproc sold shares representing nearly another £1 million. Together they received some £4.6 million for a total investment reported to have been just £1.2 million, and they were no longer involved in the development of the mine.[4]

In all events, Bakyrchik Gold Plc was responsible for 100 percent of the development costs of the mine, which was to include a new processing facility.[5] The ore proved much more difficult to process than anticipated because of substantial concentrations of arsenic, however, and the initial processing facility that was installed proved to be both less economic and more environmentally damaging than Bakyrchik Gold had anticipated. It ran out of funds and sought a partner. In October 1996, a portion of Bakyrchik Gold was sold to the Canadian firm Indochina Goldfields, one of the mining investment firms operated by Robert Friedland.[6] A new contract with the government of Kazakhstan was structured in late 1996 that involved the sale of the 60 percent state interest held by Altynalmas to Bakyrchik Gold and Indochina Goldfields together for an additional $60 million. Thus, Bakyrchik became the first gold mine to be 100 percent sold to foreign owners. Terms of the sale included continuation of tax and customs provisions negotiated earlier as well as the right to export unlimited amounts of refined gold without having to go through government auctions.[7]

Between its share of Bakyrchik Gold Plc and of the additional 60 percent, Indochina Goldfields was the controlling owner, and in 1997 it took over responsibility for the operation of the Bakyrchik mine. The installation of a second pilot processing facility, using a technology developed in Germany to treat the ore, was reported to have been completed in February 1998, and it appeared that development of the mine would at last proceed. By this time however, the price of gold on world markets had declined well below $300 per ounce, Indochina Goldfields found that the operation of Bakyrchik was no longer economic, and they put the mine on "care and maintenance" status. Meanwhile, Indochina Goldfields also had begun making sizable impairment provisions in its accounts against their investment in Bakyrchik, amounting to nearly $40 million in 1997 and another $37.5 million in 1998. By the end of 1998 they were carrying only a nominal net investment in the project and the $30 million still owed Kazakhstan. In February 1999, Indochina Goldfields bought the last of Bakyrchik Gold Plc's interest in the mine, a 20 percent share, for a mere $500,000. For its part, Bakyrchik Gold Plc (by then renamed GTL Resources) also had completely written off their remaining interest in the mining venture, and they were pleased to report the sale to shareholders as "a very satisfactory result given the continued decline in the price of gold and the unlikely prospect for any foreseeable income to the Company from the development of the Bakyrchik deposit" (GTL Resources Plc 1999).

In August 1999, Indochina Goldfields then renegotiated its contract with Kazakhstan, giving up their 30 percent interest in the mine in return for elimination of the remaining $30 million payment (*IMMR* November 16, 2001). Indochina Goldfields retained the right to all revenues from the sale of gold until such time as its investment was recovered. By this time, Indochina Goldfields had also changed its name – to Ivanhoe Mines Ltd.

It remained controlled by Robert Friedland and in control of 70 percent of the Bakyrchik Mining Venture, as the joint venture was known. Thus, by the end of 1999, the first gold mine that had been sold in part, had become the first to have been sold in its entirety, and had been traded between two mining companies (each with two names) whose principal function seems to have been raising money from investors to pay off prior owners. As for Bakyrchik, the mine remained closed, although experimentation was underway with yet a third technology to extract gold from the ores at Bakyrchik. This project was also cancelled, however, because of the continuing low prices for gold (*Almaty Herald* January 30, 2003).

In 2001, as world gold prices began to recover, Ivanhoe appeared to be taking more interest in reviving Bakyrchik. First, there were reports that yet another new process to recover gold from ores like those at Bakyrchik was under experimentation at another mine and would be put into operation at Bakyrchik if it proved successful (*ICACBR* February 5–11, 2001). Then, in the last quarter of 2001, Ivanhoe reported that gold production had been reactivated from existing ores, with the proviso that if recoveries were "sufficient during the first half of 2002, the company plans to commence mining, using a contract miner, small scale open-pit satellite deposits" (Financial Post Corporate Survey 2002). In 2002, the government announced plans to sell (once again) its 30 percent interest in the Bakyrchik Mining Venture, perhaps to raise the funds necessary to invest in a new plant to process Bakyrchik's ores (*ICACBR* September 16–22, 2002). To date, however, the sale has not taken place nor has the building of a new processing plant begun. Thus, it still remains to be seen whether the mine will ever prove to be as important as its earliest investors surely believed and its reputation as the largest undeveloped gold deposits in the world surely intimated. In the meantime, Bakyrchik has continued a small operation to process existing ores, to pay salaries, and to support the local community (*Almaty Herald* January 30, 2003).

Suzdalskoye and the Leninogorsk Tailings Project

Another of the most important of Kazakhstan's gold deposits, Suzdalskoye, is also located in East Kazakhstan, near Bakyrchik. It was discovered in 1983 and exploration continued from 1984–94 (*ICACBR* September 16–22, 2002). Together with seven other deposits, it became part of JSC Altaizoloto in the early 1990s. However development did not proceed and Altaizoloto was declared bankrupt in 1995. Development rights to Suzdalskoye were awarded to a joint venture between a local Kazakh mining company Alel (50 percent); a private company founded in 1996 and registered in Kazakhstan, Dabney Industries (15 percent); and, a subsidiary of the private Australian mining/construction company Multiplex Constructions,

Danae Resources NL (35 percent).[8] With just a 15 percent interest, Dabney was the operator of the project, although actual development of the mine was slow. Their license was suspended first in 1997 when the government decided that Alel was not satisfying its obligations (*IMMR* January 21, 2000). It was reinstated, but then suspended a second time, in 1999, when the government found that the earlier reinstatement had violated accepted procedures. Whatever the exact difficulty, it too was worked out and the license reinstated. Production at Suzdalskoye finally began in 1999.

At about the same time as production began, ownership of the mine changed, just as it had at Bakyrchik. In 2000, an Irish firm specializing in resource development, Celtic Resources, acquired Dabney Industries and thus its 15 percent interest in Suzdalskoye as part of a package to hire Dabney's president, Kevin Foo, to lead a rebuilding of Celtic's resource interests.[9] Foo was well-familiar with gold mining operations in Kazakhstan because he had been Minproc's representative in the early 1990s and had negotiated the original licenses to develop the Bakyrchik mine, and he was president of Bakyrchik Gold Plc until 1996. After Foo took over Celtic Resources, they acquired all of Suzdalskoye, buying out first Danae and then Alel, and by mid-2002 were planning a major expansion of operations. Whereas some 43,000 ounces of gold were produced in both 2000 and 2001, the company planned to more than double this production by 2004. With reported production costs of about $140 per ounce, it is possible that Celtic will attract enough financing to in fact be able to develop the full potential of the mine.

Celtic Resources also acquired a number of other resource ventures in Kazakhstan, including a small producing oil field as well as several other gold mines, the latter through its acquisition of the remaining interests of the virtually defunct Canadian mining company, Goldbelt Resources Ltd, that had been another one among the earliest companies investing in the development of Kazakhstan's gold fields. The most well-known of Goldbelt's investments was the Leninogorsk Gold Tailings Project, which was designed to recover as much as 40 tons of gold and 400 tons of silver estimated to have been accumulated over the nearly 70 years of operation of the Leninogorsk complex.[10] Goldbelt became a 50 percent partner with the Leninogorsk complex in January 1992 to develop this project. Goldbelt subsequently interested another company – Pegasus, who had developed the technology necessary to exploit the tailings – in participating in the venture where the precise amount of their ownership would be determined by the degree of involvement in the project over time. While negotiations with its Kazakh partners continued through 1994, Goldbelt obtained a $35 million guarantee for the project from the Overseas Private Investment Corporation (OPIC). It was not until January 1995, however, that Goldbelt concluded negotiations with the Kazakh government, reportedly making the tailings project the first Western-sponsored mining initiative to be

formally approved by the Cabinet of Ministers. Among other aspects of this approval were the right to export gold if the National Bank decided not to purchase at the prevailing London price, indemnity against environmental damage and debts resulting from prior mining operations, and the right to settle disputes through international arbitration. Although a Ministerial Decree would seem to be final, in fact there were yet additional negotiations to be completed with the Ministry of Industry and Trade, ratifying the agreement and confirming all its tax and royalty provisions, and they were completed by the end of 1995.

While the negotiations were underway, Goldbelt acquired interests in additional gold ventures in Kazakhstan including a 60 percent interest in Abyz deposits near Karagaily in the Karaganda region in 1995 and two exploration licenses in 1996. Through 1996 and 1997, exploration work began on these as well as small test operations on the Leninogorsk Tailings Project. Development of the project at Leninogorsk was substantially delayed, however, by the uncertainties created when neither of the local firms given control of Leninogorsk (first Metalou and then Ridder-Invest) was able to revive plant operations. When Kazzinc was created and Glencore finally took control in 1997, interest resumed in developing the tailings project although all the plans had to re-reviewed by the government because of changes in the scope of the project. By then, gold prices had fallen significantly, and Goldbelt was no longer able to attract external funding. Instead, an Australian mining company with interests in Kazakhstan, Steppe Gold Resources Ltd,[11] negotiated to acquire all of Goldbelt's interests. A preliminary deal was agreed to in March 1998, but it was never concluded because of difficulties with title issues on Leninogorsk, leaving it to Celtic Resources to acquire the assets in 2000.

Whether Celtic will be successful developing either Suzdalskoye or the Leninogorsk Tailings Project remains to be seen. Gold prices are certainly more favorable than they were in the late 1990s. Moreover, the results of Celtic's drilling program at Suzdalskoye have been encouraging: "Subject to finance, we would then plan to have the sulphide project on stream by 2004 which will produce 130,000 ounces per year for more than 10 years" (*ICACBR* October 14–20, 2002). At the same time, neither the Tailings Project nor Suzdalskoye is Celtic's principal asset, which is a gold mine in Russia, and developing the Russian property is clearly their first priority. If the Kazakh projects can become revenue producers quickly and thereby support other operations, they will receive attention. Otherwise, it is not yet clear that Celtic will be any more successful than any of its predecessors.

Vasilkovskoye

Located among the northern group of mines in North Kazakhstan, Vasilkovskoye was another mine thought to be among the largest in Central

Asia with reserves estimated at 382 tons of gold. Discovered in the 1960s, its initial development included a new urban settlement at Birlestik (Sagers 1998a). In the early 1990s Vasilkovskoye was producing about 0.6 tons of gold per year, but by 1995 output had declined nearly 50 percent to 0.35 tons. Accordingly, the rights to develop the deposits at Vasilkovskoye were offered for sale in 1995.[12] It was controversial from the beginning. In 1994, the Canadian firm Dominion Mining spent several million dollars exploring and proving the reserves at Vasilkovskoye under the impression it had secured exclusive rights to negotiate the deposit's actual development. However, in December 1994 the government announced there would be a tender for the right to develop the deposit and, to add injury to insult, it then used some of Dominion's data in its description of the deposit.

With several mining groups expressing interest in acquiring Vasilkovskoye, EBRD and the Canadian and Japanese governments provided financial assistance to the government to hire financial and other advisors to assist Kazakh authorities in planning the sale. As the tender date approached, however, the rights were awarded unilaterally to Placer Dome, another Canadian mining company. Placer Dome acquired a 50 percent share, offering to pay an investment bonus of $80 million and to invest $270 million in subsequent development. An initial tranche of $35 million of the bonus was paid to the government with the reminder due upon completion of the joint venture agreements. However, during the ensuing discussions to complete the arrangements, Placer Dome evidently concluded that profitability would be less than initially expected, and in October 1995 assigned its development rights to yet another Canadian mining company, Princess Resources. Placer Dome anticipated that Princess Resources would reimburse it for the $35 million already paid to the government; however, Princess Resources refused. More, it also refused to fulfill many of the original terms of the agreement. Thus, the government canceled the deal with Placer Dome, a move which prompted Placer Dome to demand a return of its $35 million. Ultimately, Placer Dome sued the government for return of this deposit, and in the end agreed to an out of court settlement for $25 million.

Vasilkovskoye was retendered for sale in May 1996, and this time a consortium led by Teck Corporation, still another Canadian mining company, was awarded the exclusive right to negotiate a contract.[13] Reportedly, the price was $85 million, and investment guarantees amounted to $360 million. However, despite protracted negotiations, this sale was never finalized, and in October 1997 the mine was returned to the care of Altynalmas. For its part, Altynalmas expressed interest in developing Vasilkovskoye but did not want to proceed without concluding a contract with the government. A year later, an agreement appeared to be close to signing whereby Altynalmas would pay a bonus of just KZT 11 million (about $140,000) and would commit to invest some $500 million by 1999.

Whether a development agreement was actually signed with Altynalmas or not remains unclear, but Vasilkovskoye continued operations throughout the period of negotiations, producing 0.53 tons of gold in 1998 and 0.63 tons in 1999 (*IMMR* May 5, 2000).

By May 2000, the government was preparing yet again to offer Vasilkovskoye in another tender. Evidently, Altynalmas had not succeeded in obtaining funding of an initial $150 million for its development plans, and the government was prepared to withdraw its license. Moreover, a number of firms expressed interest in the prospect of another tender, including a Turkish firm Koc Holding and the Israeli group led by Lev Levaev, also known as Africa Israel Investments (*ICACBR* April 24–28, 2000 and April 29–May 4, 2000).[14] Levaev's interest in Vasilkovskoye undoubtedly stemmed from his earlier (1999) acquisition of the Tselinnyy uranium-processing complex (see Chapter 10) located near Stepnogorsk, which had been refining a comparatively small amount of gold each year since 1994. The Levaev Group was awarded the tender to form a joint venture with the government (60 percent Levaev and 40 percent Kazakhstan) to develop Vasilkovskoye, but an agreement was concluded only after yet another period of protracted negotiations. By mid-2002, some $200 million in investments were reportedly being undertaken, and production of 915 kg of cathode gold was reported for 2002 (*IMMR* June 14, 2002 and January 10, 2003). Whether or not this venture succeeds where others have failed, the sale of Vasilkovskoye like Bakyrchik and Suzdalskoye was certainly not a model designed for success. Perhaps most discouraging was the continuing need for lengthy negotiations accompanying each tender – contracts for this mine still could not be concluded promptly, even after all the prior negotiations.

Kazakhaltyn

Another promising gold mining operation that also proved difficult to develop is Kazakhaltyn, which included four mines – Aksu, Akbeit, Bestyube, and Zholymet. Like Vasilkovskoye, it is also located in northern Kazakhstan near Stepnogorsk. By 1996, Kazakhaltyn had been closed and its workers unpaid. In May, the government signed a management contract with the joint venture Gold Pool, a partnership between the Canadian company Central Asia Goldfields and the Kazakh mining company BSB. Central Asia Goldfields Corporation was formed in December 1995 from the merger of Kazakhstan Goldfields Corporation and CanGold Inc., both Canadian companies (*Canada NewsWire* December 29, 1995). At the time, Kazakhstan Goldfields was conducting exploratory work on three license areas in Kazakhstan and had applied to the government of Kazakhstan to manage several goldmines. For its part, the Kazakh mining company BSB also had been given Maikainzoloto for management (see below).

The contract for Gold Pool to manage Kazakhaltyn included commitments to pay wage arrears and complete due diligence assessments totaling $3.5 million, invest $7.0 million in plant refurbishment and social costs, and pay $5.0 million in operating costs with a commitment to bring the mines back to 1995 levels of production.[15] Gold Pool also secured the right to close operations that were not economically viable. Like virtually all of the agreements negotiated at this time by the government, though called a management contract, the agreement with Gold Pool included an option to purchase Kazakhaltyn (on predetermined terms) during the term of the contract. Investments made up until the time the exclusive purchase right was exercised were deductible against the purchase price of the share package. Moreover, once Gold Pool gave notice of its intention to exercise this option, the contract specified that the government could not cancel the contract and thereby prevent the sale.

Shortly after obtaining the management contract, Gold Pool was itself restructured. In the end, BSB was bought out, Central Asia Goldfields retained approximately a 50 percent interest, 25 percent directly, and the remainder held indirectly through a 30 percent interest in the newly formed company Kazakhstan Goldfields Corporation (*Business Wire* August 16,1996). For its part, the Kazakhstan Goldfields Corporation was formed from the merger of two firms holding substantial interests in Gold Pool – Edomar Resources Inc., a publicly held company registered in Ontario which held a 25 percent interest in Gold Pool, and 1173458 Ontario Limited, a private Canadian company with a 50 percent interest in Gold Pool and in which Central Asia Goldfields had a 50 percent interest. Central Asia acquired the new 25 percent interest though an issue of shares. There is no further mention of the Kazakh firm BSB, suggesting it had earlier sold half its initial interest in Gold Pool to one (or both) of the private Canadian companies and perhaps was the recipient of the shares Central Asia Goldfields issued to acquire the last 25 percent.[16] With the restructuring, it appeared that Kazakhaltyn would very likely become the second gold mining operation to become wholly foreign owned because Gold Pool had had an exclusive purchase right in its contract.

While the restructuring of Gold Pool was in process, some of the mines of Kazakhaltyn were also being reopened.[17] Conditions at the mines were like those everywhere in Kazakhstan. Power outages were frequent, even when bills were prepaid. Gold Pool was harassed regularly by those who had not been able to collect earlier debts even though the contract specified that the transfer of the mine was "debt free." In fact, the government left unpaid debts totaling over $30 million. Nevertheless, Gold Pool continued rebuilding operations, and at one point estimated operating costs would amount to about $185 per ounce of production. By September 1996, the Aksu mine was operating at 90 percent of capacity, Bestyube had been restarted and was increasing output to former levels,

and mining had restarted at Zholymet with mill operations planned to start in October.

By December 1996, only seven months after signing the management contract, Gold Pool reported that production exceeded achievements of the previous ten years. It was also exploring the possibility of a merger with World Wide Minerals, the Canadian company that had originally acquired the Tselinnyy uranium processing complex in Stepnogorsk (see Chapter 10). Such a merger would have been especially useful just one month later when the Balkhashmys smelter (which processed most of the Kazakhaltyn ores on a tolling basis) closed. Moreover, Balkhashmys returned neither the processed gold nor the stocks of unprocessed concentrate, and Gold Pool suffered a loss of some $3.7 million. Gold Pool then decided to close temporarily some of the mine operations in order to contain costs while alternative arrangements could be made. When Balkhashmys was sold to Samsung (see chapter 6), Gold Pool attempted again to obtain its gold and/or payment, but Samsung refused to negotiate, Gold Pool received no assistance from the government, and it was unsuccessful.

In spite of these difficulties, in April 1997 Gold Pool notified the government that it had decided to exercise its option to purchase Kazakhaltyn. In August, the government refused and unilaterally canceled the contract. Negotiations continued but failed to reach a resolution, and in November Gold Pool filed a claim at the International Court of Justice in The Hague against the government to recover its investment of $18.7 million (*Canada NewsWire* October 23, 1998). In early 1998, the government indicated an interest is settling the claim out of court, and the suit was temporarily suspended. However, when no progress was made on an agreement after several months of negotiating, the suit was reinstated and the claim increased to $64.8 million to account for interest and penalty charges. There has been no report of a settlement of the suit, either in or out of court, so presumably the case remains one of several still outstanding against the government of Kazakhstan. Moreover, with Gold Pool's departure, the government had to allocate funds to pay salaries at Kazakhaltyn. The mines were restarted again in September 1997 but then halted some six months later. Kazakhaltyn was declared bankrupt in August 1998, and the government announced it would be auctioned. After several unsuccessful auctions, it was finally sold to a Kazakh firm Askam for KZT 155 million (about $1.2 million) in June 1999 (*IMMR* May 24, 2001). In 2000, Askam produced 1 ton of gold from the Kazakhaltyn mines; production in 2001 increased to 1.5 tons (*IMMR* February 21, 2002).

Maikainzoloto

Also located in the northern group of mines just southeast of Ekibastuz is one of the oldest of Kazakhstan's gold mines, Maikainzoloto, which was

opened in 1932 (Sagers 1998a). The operation comprises four polymetallic deposits that produce silver, copper, lead and zinc in addition to gold (*IMMR* July 17, 1998). Over the 20 year period from the late 1970s to the late 1990s, Maikainzoloto produced some 8.4 tons of gold, 263,000 ounces of silver, 7,500 tons of lead, 47,000 tons of zinc, and 83,300 tons of copper. Although operations at the mine continued throughout the first half of the 1990s, at some point it was turned over to the local Kazakh mining company BSB, possibly with a partner, for management (*MMS* November 15, 1997; Sagers 1998a). They proved unable to run the mine and by late 1996 operations had ceased, the workers had not been paid for several months, and the plant was on the verge of bankruptcy.

> Four years ago they [miners at Maikainzoloto] lost their jobs because of short term plant mismanagement by two local firms. They did not only lost (sic) their jobs and livelihood, the most important thing they lost that time was hope for better, because main enterprise of the settlement "Maikainzoloto" company was a bankrupt, its borrow pits were staying idle, ore mine flooded, [and] concentrating mill equipment was dissembled.
>
> (*Kazakhstanya Pravda* June 8, 2001)

BSB's contract was terminated and in September 1997 authorities announced there would be a tender for the sale of 100 percent of the mine. In October, the Cyprus-registered firm East Point Holdings Ltd was awarded the tender – again, technically a five year management contract but with the right to buy the enterprise – with a pledge to restart production, invest not less than $6 million in production development, settle wage arrears, and pay back taxes and pension debts (*MMS* August 1998). East Point Holdings Ltd is a subsidiary of DP Handel GmbH.

As with all the foreign investors in Kazakhstan's gold sector, relations between DP Handel and the government have been difficult.[18] DP Handel promptly paid $110,000 in back wages and $32,000 to the state budget, but when the government delayed completing many of the contract requirements, they halted both payments and work on restarting the mine. Not only had licenses not been transferred, but evidently authorities had even granted other firms permission to mine ores at several of the deposits. Eventually, however, contract details were worked out, and production restarted in October 1998. Disagreements over the contract continued, and in 2000 DP Handel threatened to abandon the project altogether if it was required to pay the debts of the former owners, including over $1 million in unpaid bills from the local utility. It also disputed many of the bills, noting for example that over the period when the mine was closed from October 1996 to March 1998 the local water utility billed it for an amount of water usage greater than when the mine was open and operating. Separately, the

employee's union sued BSB for back wages totaling KZT 84 million. In spite of the ongoing disagreements, by June 2000 DP Handel had invested more than $6 million in reviving production at Maikainzoloto and had purchased a controlling 50.25 percent share interest. It also acquired a license to develop the nearby Boshekul copper-molybdenum field.

Agadir, Central Mukur, Mialy, Mizek, Samarskoye, Sharaltyn, and Varvarinskoye

The break up of Altynalmas also resulted in the sale of numerous exploration licenses to foreign investors, including Sante Fe Pacific Gold Corporation, Kazakhstan Minerals Corporation (Kazminco), Steppe Gold Resources, and the Eurasia Gold Corporation. Beginning in 1995, the Canadian mining company Kazminco began acquiring interests in exploration licenses for a substantial number of deposits in Kazakhstan (including Agadir, Mizek, Samarskoye (also known as Nurkazgan), and Varvarinskoye) through its subsidiaries Three-K Exploration and Mining and Almaty Exploration Ltd. All were joint ventures with Asier. It acquired interests of at least 50 percent in all and 86 percent in the most promising. The Australian company Steppe Gold Resources acquired the rights to numerous licenses including Mizek (from Kazminco), Kosmuran, Akbastau, and Balikbai. As noted above, it also concluded an agreement to buy the Leninogorsk Tailings Project from Goldbelt Resources, but a sale did not occur. Sante Fe Pacific Gold Corporation (which became a subsidiary of the US firm Newmont Mining) acquired the license to develop Sharaltyn, a 7.5 million acre license area in north eastern Kazakhstan (*Feller Mining News* February 14, 1997). Another Canadian company, Eurasia Gold Corporation, acquired the development licenses for the Central Mukur and Mialy deposits in Eastern Kazakhstan.[19] Through what became its wholly owned subsidiary Andas Altyn, it developed an exploration program while also beginning small open pit mining operations.

Like many of the projects to restart operating mines, Kazminco's programs of exploration were especially hard hit by the continued depression in gold prices.[20] For example, Kazminco's feasibility study of Varvarinskoye was completed in 1998 and found:

> an initial proven and probable reserve of two million gold equivalent ounces (comprising 1.275 million ounces of gold and 118,715 tonnes of copper), which forms the basis of a technically feasible and economically viable mining project.
>
> (Kazminco 1998 *Annual Report*: 3)

However, the study assumed gold prices of $325 and copper at $0.90 per pound, and it was not a great surprise that, when gold prices declined

and remained below $300, Kazminco was unable to interest anyone in undertaking the development. By the end of 1999, it had written off nearly $8 million in investment costs on most of its licenses in Kazakhstan and by 2000, Kazminco had even written off its investment in Varvarinskoye. In order to hold ongoing expenses to a minimum, all the licenses were put on "care and maintenance," a step that risked cancelation of the licenses since they all had minimum annual investment requirements. Although there have been no reports of other cancelations, neither have there been reports of active exploration.

Conclusion

In contrast to its success in attracting management and investment for the nonferrous and ferrous enterprises, Kazakhstan was singularly unsuccessful attracting and retaining sustained investment to operate its gold enterprises and to developing its gold reserves. While each mine and/or deposit undoubtedly posed unique problems, several factors seemed to have affected most, if not all, of the potential investors. Initial interest in a number of the deposits was significant, but when gold prices declined and remained in the $300 per ounce range, many of the investment plans were much less attractive and did not proceed. In addition, the gold deposits at a significant number of the mines required a substantial investment in new technology to extract the gold because the ores contained a number of contaminants like arsenic. Recent reports have adopted the euphonious term "rebellious" in describing these ores, and development of an appropriate technology as well as identifying funding have been difficult. Yet another new technology appears to hold promise for development of these deposits, and perhaps when combined with the higher prices for gold in 2003, some progress will at last be made.

Second, there were two very well publicized disputes between the government and investors in the gold sector, and they not only underscored the riskiness of a potential investment but also may have meant that the deposits did not attract the kind of investor and the degree of interest they might have otherwise. From 1994 to 1996 Vasilkovskoye was promised and/or sold to at least four separate foreign investors – first Dominion Mining, then Placer Dome, then Princess Resources, and then a consortium led by Teck. By the end of 1996, all had abandoned the project and Placer Dome had had to sue the government for return of their initial payment. Moreover, all the sales were made without an auction, even after one had been widely publicized. Thus, like the sales in the other sectors, it was impossible to judge the extent of insider dealings, the prices, or any of the terms. Worse, the government's failure to follow through on an auction after agreeing to make it a showcase turned the name "Vasilkovskoye" into shorthand for all that was wrong with privatization in Kazakhstan. The other very public

dispute was between the government and Gold Pool over Kazakhaltyn, where the government actions bore little relation to the contract that it had signed. This also did little to improve prospects for additional sales. Indeed, both Vasilkovskoye and Kazakhaltyn then remained unsold for a substantial period with little or no investment. Kazakhaltyn was finally sold in mid-1999 to a Kazakh group and Vasilkovskoye in mid-2000 to the Levaev group. Neither auction attracted much interest from outside investors.

There were some similarities with the sales in the other sectors too. For example, like the foreign companies acquiring enterprises in the ferrous and nonferrous metals sectors, only two or three of the many firms initially investing in gold enterprises remain. Like the successful firms in those sectors, the ones remaining in the gold sector have (or had) multiple interests. Levaev, for example, had interests in Russia and Eastern Europe and acquired the Tselinnyy uranium complex and Kazphosphat in addition to Vasilkovskoye. Robert Friedland acquired Bakyrchik and, through the Teck consortium, was one of the successful bidders for Vasilkovskoye, although negotiations to complete the acquisition were never concluded. There also were a number of Kazakh firms that gained control of several of the gold enterprises, including BSB (Maikainzoloto), Alel (Suzdalskoye), and most recently Askam (Kazakhaltyn). Since there was no public disclosure of the sales, there was virtually no information about these firms and it remains unclear the extent to which they may have had connections with individuals in the government as was true of several of the local firms that acquired enterprises in the lead and zinc sector.

9

PRIVATIZATION AND FOREIGN INVESTMENT IN THE PRINCIPAL OIL ENTERPRISES AND IN THE REFINERIES

Of all Kazakhstan's mineral sectors, the petroleum sector has attracted by far the most foreign investment. Of the nearly $13 billion in foreign investment in the decade from 1992–2001 (see Figure 5.2), almost 50 percent was in the oil and gas sectors (Olcott 2002: 10–11). Although a significant percentage of this was for exploration and development of new fields, like Kashagan under the Caspian Sea (by all accounts the largest single find in the last 30 years), and new pipelines, like the Caspian Pipeline Consortium's (CPC) pipeline from the Caspian (Atyrau) to the Black Sea (Novorossiysk), a substantial amount has been investment in existing production fields. The five main production associations at the time of independence were Aktyubinskneft, Embaneft, Mangistaumunaigaz, Tengizneftegaz, and Yuzhneftegaz.[1] Today there are six enterprises, Aktobemunaigaz, Kazakhoil-Emba (comprised of Embamunaigaz and some of Tengizneftegaz), Mangistaumunaigaz (minus Uzen), Tengizchevroil (most of Tengizneftegaz), Uzenmunaigaz (separated from Mangistaumunaigaz), and Hurricane Kumkol Munai (formerly Yuzhneftegaz). In 1992, they accounted for more than 75 percent of oil production in Kazakhstan (Sagers 1994). In 2001, they accounted for nearly 80 percent of the total while in 2002 their contribution was just 74 percent (see Figures 9.2 and 9.3 below).

Kazakhstan's oil deposits are concentrated in the western half of the country, mostly near (and under) the Caspian Sea as shown on Figure 9.1, which also shows major natural gas deposits as well as oil and gas transport pipelines. Nearest the Caspian, the main fields are Tengiz, Uzen, and Mangistau (the group of fields on the Mangistau (formerly Mangyshlak) Peninsula between Uzen and Aktau). The fields which comprise Kazakhoil-Emba are not shown in Figure 9.1 but include fields near Tengiz and Kulsary as well as the original Makat and Dossor fields northeast of Atyrau

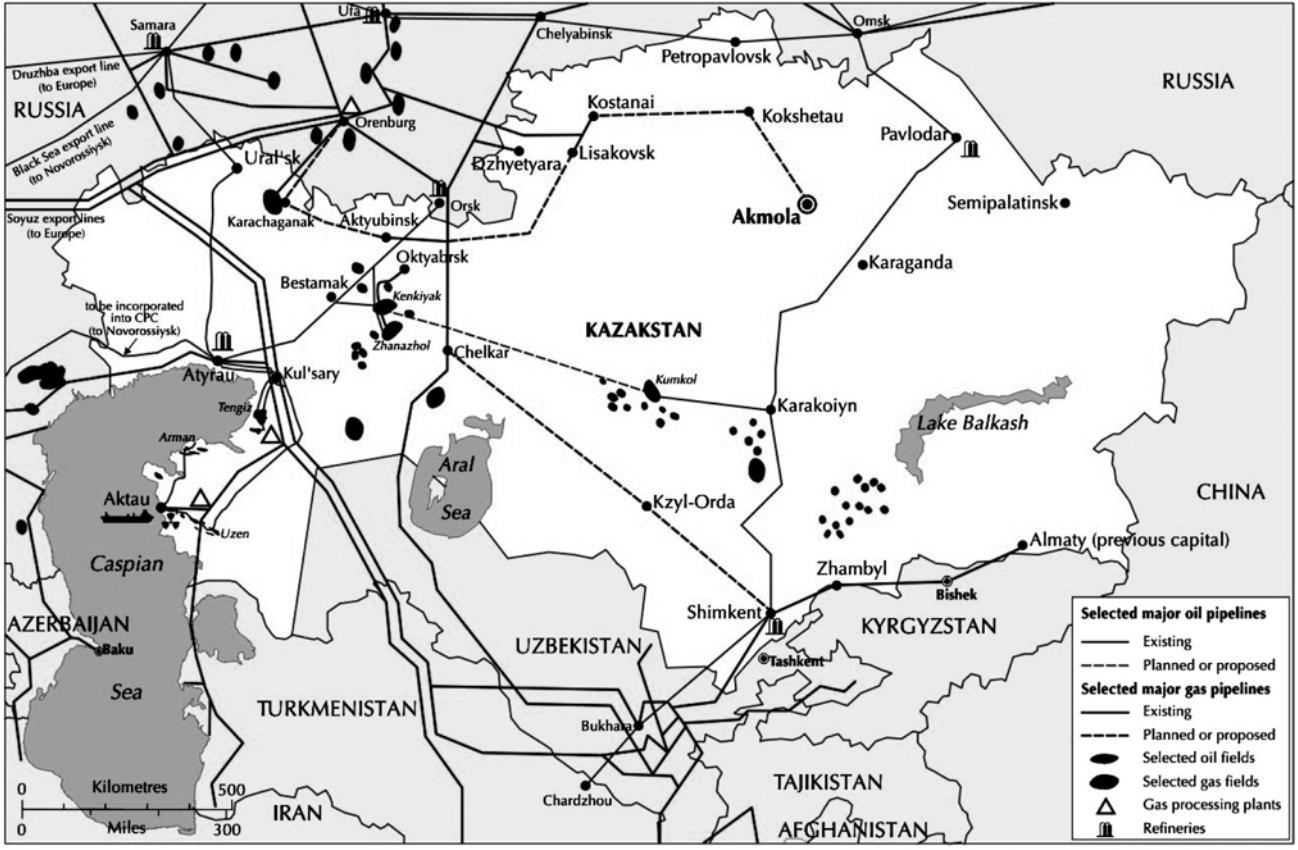


Figure 9.1 Kazakhstan: major oil and gas fields and infrastructure

Source: IEA (1998), with permission

along the Atyrau-Orsk pipeline (and were shown in Figure 2.1). Aktobemunaigaz comprises the Kenkiyak and Zhanazhol fields to the south of Aktyubinsk, also along the Atyrau-Orsk pipeline. Substantially east of these fields and of the Aral Sea is Kumkol, the principal field of Hurricane Kumkol Munai.

Like production in the mineral sectors, aggregate oil production declined after independence a total of about 20 percent between 1992–4 (see Figure 9.2). The Tengizchevroil (TCO) joint venture arrangement with ChevronTexaco (then Chevron) to operate at Tengiz was concluded in 1993, Tengiz production began to recover, and Tengiz recovery was sizeable enough that total oil production also began to recover. Thus, by 1996–7 when most of the fields were offered for sale to foreign investors, total production had fully recovered. By contrast, sales of the enterprises in the other mineral sectors of the economy were prompted by the continued production declines. Figure 9.3 shows the increasing importance of TCO more clearly, with the production data displayed in percentage terms. Whereas TCO accounted for just 6 percent of total production in 1993, by 1996 it was 22 percent of the total and by 1997 27 percent. Meanwhile production at the two largest producers in 1992 – Mangistaumunaigaz and Uzen – continued to decline, both absolutely and relatively. Production at Aktobemunaigaz and Kazakhoil-Emba remained constant, although of comparatively small amounts, and that at Hurricane Kumkol Munai was increasing slowly. Thus, while the overall oil production data do not convey the same sense of impending collapse as do the production data from other sectors, output from what had been the two largest associations did continue in significant decline.

Kazakhstan's oil sector also included three refineries, located in Atyrau, Shymkent, and Pavlodar (and also shown on the map in Figure 9.1). Together, the refineries had an estimated refining capacity of 19.5 million tons of oil per year, which was nearly sufficient to meet aggregate product demand (EU-TACIS 1995; Arthur D. Little 1995). In 1991, the refineries produced about 16.9 million tons of products, some 3.2 million tons of which were exported (principally to areas of Russia nearest Atyrau and Pavlodar and to Uzbekistan from Shymkent). At the same time, about 4.5 million tons of products were imported, a combination of meeting a small production deficit that year and providing products like higher octane gasoline that Kazakhstan's refineries were not capable of producing. To complicate matters further, only the refinery in Atyrau had been converted to be supplied principally with oil from Kazakhstan's fields. The refinery in Pavlodar depended entirely on supplies of West Siberian crude delivered via the north–south pipeline from Omsk to Pavlodar and on to Shymkent (see Figure 9.1). The Shymkent refinery also received approximately 80 percent of its supplies from Siberia. The remaining 20 percent was supplied from the Kumkol fields via a connector pipeline to the main

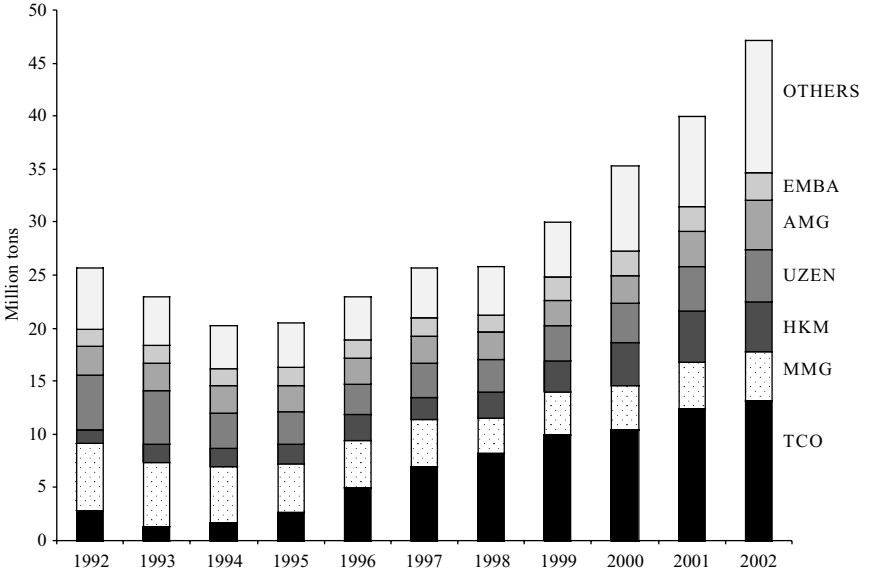


Figure 9.2 Production of oil in Kazakhstan, 1992–2002

Source: Drawn from Debroeck and Kostial (1998), HHL, IMF (2001), Interfax, IEA (1998), Investcom (1998), Kirkland (2002), and Sagers (1994)

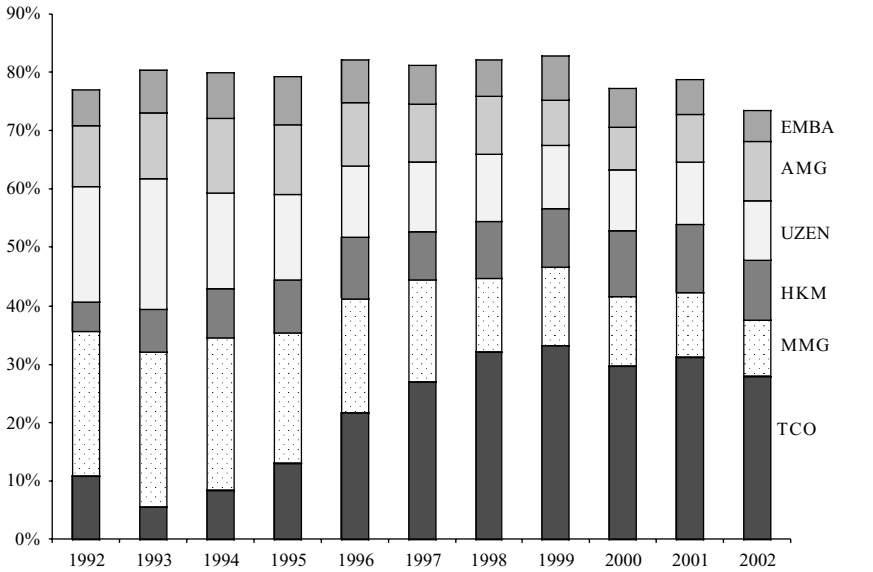


Figure 9.3 Proportionate production of the six main oil enterprises, 1992–2002

north–south pipeline also shown in Figure 9.1. On balance, about three-fourths of the oil used in Kazakhstan's refineries was from Russia and most of Kazakhstan's crude oil production was exported (Sagers 1994). Moreover, Kazakhstan was usually a net exporter – the amount of oil and oil products exported usually exceeded the amounts imported. There have been years like 1993, however, when Kazakhstan was a net importer overall, but that was an exception and not the rule.

In part because of the refineries dependence on Siberian oil and increasing difficulties negotiating for reliable supplies after 1991, production at the refineries declined much like production at many of the minerals enterprises whose operations were also so dependent on enterprises elsewhere in the former Soviet Union. Figure 9.4 shows the decline in the amount of oil refined each year, beginning in 1992, and identifies the contribution of each of the three refineries. As in the minerals sectors, the government sought foreign investors for each of the refineries. Even after privatization and sale, the operating environment of the refineries continued to be especially difficult, however, complicated by interventions from various authorities who often required deliveries be made to agricultural enterprises (almost always on barter terms with uncertain prospects of payment) and occasionally banned exports of products altogether. The result was that even with new managers, the refineries were unable to

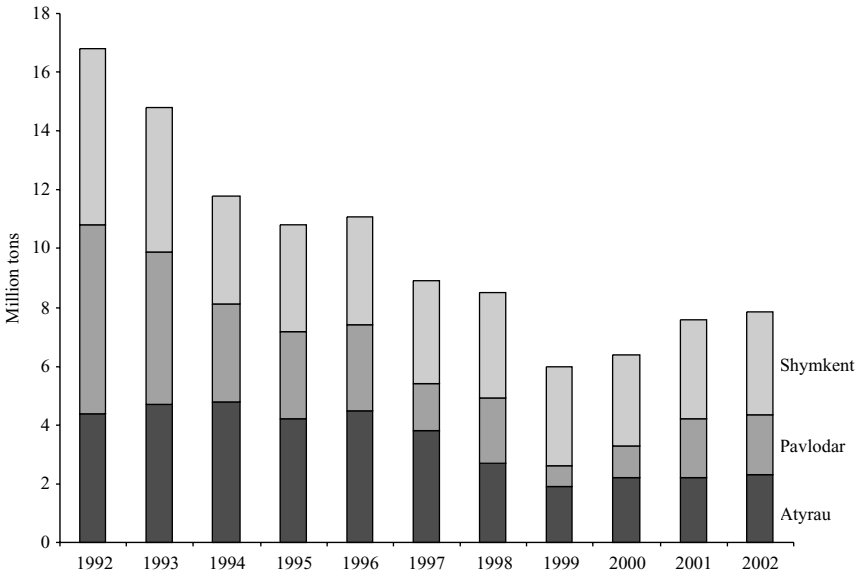


Figure 9.4 Oil refinery production in Kazakhstan, 1992–2002

Source: Drawn from Interfax

reverse operating declines, and declines continued through 1999. Another consequence of the especially difficult environment in which the refineries operated was that none of the initial sales contracts were a success.

Although there seems to have been widespread agreement among government officials that foreign investment was required to develop Kazakhstan's oil sector, rarely was there agreement as to how to secure that investment and yet retain both control of the sector and of the potentially sizeable revenues from the sector. As early as 1990, Russia had opened negotiations with Chevron to participate in the development of the Tengiz fields which, though discovered in 1974, had proved difficult to develop because of their depth and the high sulfur content of the oil. Negotiations continued between Chevron and the new government in Kazakhstan and in 1993 agreement was reached to form a 50–50 joint venture. Nevertheless, in 1994, when then Prime Minister Kazhegeldin began the program of case-by-case privatization and sale of large enterprises in other sectors, the remaining large oil enterprises were excluded and no sales were concluded until 1996.[2] Moreover, when they finally occurred, the sales of most of the oil enterprises occasioned many allegations of corruption and bribery.

Background to foreign investment in the oil sector

After independence, Kazakhstan's oil sector was administered by Kazakhstanmunaigaz, the state holding company formed to administer the oil enterprises (*Focus Central Asia* 5 1997; Sagers 1994). In addition, it managed the refineries and pipelines, controlled exports, and was responsible for relations with Russian partners and pipelines. When the individual enterprises were corporatized and joint stock companies created, Munaigaz then held the state's 90 percent share interests (as with the minerals enterprises, 10 percent of special, non-voting shares were usually given to employees). Similarly, Kazakhstanmunaigaz was the official participant in the Tengizchevroil joint venture. Munaigaz reported to the Ministry of Oil and Gas, which placed the ministry in a strong position to influence overall strategy within the government simply because of the size and importance of the sector to the economy. Not surprisingly, the ministry opposed sale of the enterprises. However, as noted above, oil production at the two largest enterprises, Mangistaumunaigaz and Uzenmunaigaz, had continued declining, and total investment needs of the sector, estimated by government experts at a minimum of $1.2–$1.5 billion per year, were not being met.

In April 1996, after nearly two years of enterprise sales in other sectors, then Prime Minister Kazhegeldin signed a resolution announcing the sale of the state's interests in each of the oil enterprises and indicated that the residual interests would be held by the State Property Committee. Among

other things, the plan virtually eliminated roles for Munaigaz and the Ministry of Oil and Gas in the sector. Not surprisingly, the then Minister of Oil and Gas Nurlan Balgimbayev objected. He believed gradual sales of comparatively small percentages of the enterprises would be sufficient to attract the necessary investment and tried to restrain sales at every opportunity. As but one example, an initial agreement to sell Yuzhneftegaz to the US company Sampson International in June 1996 fell victim to infighting:

> The Ministry of Oil and Gas practically ignored agreements with foreign investors concerning the Kumkol oil field and Yuzhneftegaz association; just did not sign them. . . . When the American company Sampson International won a tender for Yuzhneftegaz, the Ministry insisted that the existing joint stock companies affiliated with the privatized enterprise, which were producing oil in the northern part of Kumkol, would not be included in the agreement. As a result, Sampson was forced to rescind the contract.
>
> (*Focus Central Asia* 5 1997: 25)

The battles led to widespread criticism of the privatization and foreign investment program more generally because of the difficulty firms were experiencing not only in concluding sales but also in finding assistance in resolving problems as they emerged. Ultimately, Kazhegeldin won control of the privatization process, and a so-called "one-stop shopping" arrangement was adopted whereby even more direct control of the crucial oil sector was returned to President Nazarbayev and Prime Minister Kazhegeldin. A new company, Kazakhoil, was created to manage the residual state interests in the enterprises, and Balgimbayev was named its first president. Sales of Aktobemunaigaz, Mangistaumunaigaz, Uzenmunaigaz, and Yuzhneftegaz went forward. The creation of Kazakhoil also solved other problems for the government. As a private company, it would of course be responsible for tax payments on revenues; however, the revenues from Kazakhoil's share of the oil sales were not themselves government revenues, an artifice which permitted the revenues to be used for a number of "non-budget" items, including construction of the new capital at Astana. The artifice surely also made it easier to conclude various arrangements privately. In 2002, Kazakhoil was merged with the national oil and gas pipeline company (Kaztransneftegaz) to form Kazmunaigaz, the new national company which today controls the state's interests in the oil and gas enterprises, the refineries, and the transport network (i.e. a new Kazakhstanmunaigaz).

Kazhegeldin's privatization policies lost favor with President Nazarbayev in 1997, and when he was ousted in 1997 amid allegations of corruption, Balgimbayev was named prime minister. All further sales of the large-scale oil enterprises ended (including the sales of most of the residual interests

as part of the blue-chips program) and existing contracts were reviewed closely for conformance with contract terms. Then, in the difficult budget year of 1999, Balgimbayev supported the sale of an additional portion of the state's interest in Tengizchevroil in order to increase government revenues. The prospect of this sale ignited a furious debate within the country; and, although a sale eventually went ahead, the amount of the interest sold was reduced from 10 to 5 percent (leaving Kazakhstan with a blocking 20 percent interest) and Balgimbayev was himself dismissed in the process. However, since the president of Kazakhoil had been fired only weeks earlier because of his opposition to the sale, Balgimbayev returned to Kazakhoil as its president. Under the next Prime Minister, Kasymzhomart Tokayev, the government took an even more aggressive stance toward foreign investors generally, including more contract reviews. He also began drafting a new investment law which was controversial because it proposed to cancel guarantees that contracts, once they were agreed, could not be changed by changes in Kazakh legislation. In the end, however, the new law did not abrogate existing guarantees, and only new contracts will not be given immunity from changes in legislation (*ICACBR* December 16–22, 2002).

To no one's surprise given the prospective importance of oil to the economy, the sale (once it occurred) and subsequent monitoring of ongoing management of enterprises in the oil sector took place against a backdrop of widespread allegations of bribery, corruption, and diversion of funds as well as increasing ownership and policy influence of individuals close to President Nazarbayev. For example, the Belgian (now French-owned) company Tractebel was accused of paying a $55 million bribe to acquire the 20-year concession to operate the natural gas transmission lines, and evidence was evidently conclusive enough for Belgian tax authorities to fine Tractebel $128 million (*Almaty Herald* February 7–13, 2002). The US companies Phillips Petroleum and Amoco (now part of British Petroleum) were alleged to have made payments of $115 million that, after transfers among several accounts, ultimately ended in offshore accounts to the personal benefit of the president, members of his family, and other close associates (Pope and Cloud 2000). Both companies insisted the funds were contractual payments due the government and were deposited in accordance with government instructions; neither company has been indicted yet.

In an even more astonishing report, allegedly only one-half of the $1.1 billion that the US company Mobil Oil (now ExxonMobil) paid the government of Kazakhstan for a 25 percent share in the Tengizchevroil joint venture in 1996 reached the government budget (Hersh 2001). Indeed, according to estimates from Swiss authorities, as much as one-fifth of the country's money supply was held in Swiss bank accounts at one time. Moreover, substantial sums were transferred to accounts that benefited

President Nazarbayev personally, members of his family, and close associates. All the accounts were for companies registered offshore, mostly in the Bahamas and the British Virgin Islands. The company accounts identified in one or more reports include:[3]

- Orel Capital Ltd, a company registered in the British Virgin Islands for the benefit of a Liechtenstein foundation, Semrek, whose principal beneficiary President Nazarbayev was said to have received $12 million.
- Berkut Holdings Ltd, registered in Panama, and Balicar Securities Ltd, registered in the Bahamas, for the benefit of the president and his son-in-law Rakhat Aliyev, were said to have received $10 million.
- Altay, registered in the British Virgin Islands, for the benefit of Nazarbayev's daughter Dinara (the wife of Timur Kulibayev). No specific sum was attached, but it was reportedly among the accounts frozen by Swiss authorities.
- Tulerfield Investment Inc., registered in the British Virgin Islands, for the benefit of Nurlan Balgimbayev, was said to have received $34.5 million.
- Pio Ltd, registered in the British Virgin Islands, for a Liechtenstein-based foundation whose principal beneficiary was Akezhan Kazhegeldin, was said to have received $6 million.
- Orchard Holding Ltd, established for Brisa Inc., for the benefit of Balgimbayev's daughter Samal, was said to have received $8 million.
- Condor Capital Management Ltd, registered in the Bahamas, and Denlay Associated Ltd, Hovelon Trading SA, and NTC International Inc., registered in the British Virgin Islands, for the benefit of James Giffen, the US citizen who was the controversial advisor to President Nazarbayev, was estimated to have received as much as $41 million.

Whether the specific sums or indeed the account connections will prove to have been accurate remain unclear. Most of the individuals involved have denied the connections. Kazhegeldin, who acknowledged the payment of $6 million, insisted that he tried to return it. Meanwhile, Swiss authorities froze more than $120 million of suspect accounts while US investigations continued (Gerth 2002). In April 2003, US authorities arrested Giffen and charged him with conspiracy and violation of the foreign corrupt practices act for his alleged role in moving millions of dollars among the various accounts (Chaffin 2003). A former Mobil executive was also indicted. It will be some time before trials (or settlements) provide more details.

Enterprises in the oil sector have also been targets of acquisition by both of President Nazarbayev's sons-in-law, Timur Kulibayev and Rakhat Aliyev, as described below.[4] Moreover, Kulibayev has continued to move into increasingly important administrative roles in the state enterprises that control the still-substantial state interests in the oil and gas sector. First

appointed a vice-president of Kazakhoil in 1997, Kulibayev became president of the national oil pipeline company (Kaztransoil) in 1999, then president of Kaztransneftegaz, and finally, first vice-president of Kazmunaigaz, the company that resulted from the 2002 merger of Kazakhoil and Kaztransneftegaz and controls all the state interests in the oil and gas sectors as well as the gas and oil pipeline networks and the state interest in the CPC export pipeline. For his part, Aliyev was for many years head of the state tax authorities and was reported to use this position to extract substantial payments from many companies. Finally, other officials have allegedly used their positions for direct personal gain, as well. For example, some contracts for the sale of gas condensate from Karachaganak and later of oil from Kazakhoil allegedly were made at very low prices with companies that would then sell the oil onward and realize most of the profit offshore. Allegedly done at the direction of Nurlan Balgimbayev, the profits were said to have benefited him personally (Mendybayev 2000b). By one report, revenues of as much as $80 million from Karachaganak alone were involved (Steshin 2001). Undoubtedly, all of the ways in which individuals in and close to the government found ways to enrich themselves will never be known; there can be no doubt, however, that they did enrich themselves in one way or another.

Sales of the principal oil enterprises

Tengizchevroil

The Tengiz field was discovered in 1979, but development proved to be very challenging because it is the deepest high-pressure deposit in the world and oil comes out both scalding hot and very rich in hydrogen sulfide gas that is both poisonous and, when removed, creates literally mountains of sulfur (Pala November 21, 2001; Sagers 1994). In 1985, a Tengiz well blew out, killing one worker and creating the worst oil fire in Soviet history that lasted well over a year. Commercial production of oil began in 1991. Because of the difficulties in developing Tengiz, the former Soviet Union had opened the field to foreign investment in 1990 and signed a preliminary agreement with Chevron to assist with the field's development. Chevron continued negotiations with Kazakhstan's new government, and in April 1993 the Tengizchevroil joint venture was agreed in which Chevron and the government of Kazakhstan were equal partners in the development of the Tengiz and neighboring Korolev fields. Chevron agreed to pay $420 million for their 50 percent interest, but it was not payable until there existed a "dedicated export system with the capability of the greater of 260,000 barrels of oil per day or TCO's production capacity" (ChevronTexaco *2001 Annual Report*: 59). The payment condition, which often was reported to say that payment would not be due until the fields

produced more than 12 million tons annually, meant that Chevron had not paid for their interest in Tengiz by 2000 when they agreed to bring forward half the payment as part of the acquisition of an additional 5 percent interest. Chevron also committed to invest as much as $20 billion over the 40-year expected life of the project and agreed to repay half of the investment already made in the fields. Moreover, while Chevron was entitled to half of the oil output, the agreement gave 80.4 percent of the profits to Kazakhstan and 19.6 percent to Chevron through a system of taxes, royalties, and bonuses (Sagers 1994).

Ownership of the Tengizchevroil joint venture changed significantly after 1993.[5] In 1996, Mobil acquired half of the government's shares (held by Kazakhoil) for $1.1 billion and in 1997 LukArco (a joint venture between Arco and Russia's Lukoil) bought a 5 percent interest from Chevron. In 2000, however, Chevron acquired an additional 5 percent from the government, which increased their ownership back to 50 percent. Mobil is now ExxonMobil and Chevron is now ChevronTexaco. Thus, the present ownership of Tengizchevroil is 50 percent ChevronTexaco, 5 percent LukArco, 20 percent Kazmunaigaz (as trust manager for the government share), and 25 percent ExxonMobil. By virtue of Chevron's acquisition of Texaco, ChevronTexaco's other interests in Kazakhstan now include a 65 percent interest in the North Bauzachi deposit in the Mangistau region and a 32.5 percent interest in the Karachaganak gas field near Uralsk in West Kazakhstan (see Chapter 10).

When ChevronTexaco began operations at Tengiz, there were some 90 wells of which only 15 were working. Desulfurization capacity was inadequate with only one plant in operation, and access to transportation to move oil to export markets was difficult (Pala October 23 and November 21, 2001; Sagers 1994). A second desulfurization plant was under construction, but was not completed until November 1993 and then was not operational. More plants were to follow. Until the new Caspian pipeline was completed, Tengiz oil was shipped by train to the Black Sea, to the Baltic, as well as to China, in addition to the continued, if sometimes restricted, use of existing Russian pipelines. In 1997, for example, TCO exported 3.2 million tons of oil via the Russian pipeline system through Samara and 3.7 million tons by rail.[6] In 1998, 4 million tons were transported by pipeline and 5 million tons by rail. Not surprisingly, ChevronTexaco became the largest private stakeholder in and eventually the manager of the Caspian Pipeline Consortium. Completed in 2000, the CPC pipeline opened in February 2001 and the first tanker was loaded in October at the new terminal near Novorossiysk. The 990-mile pipeline cost $2.8 billion, of which ChevronTexaco invested $750 million.

Shown in Figures 9.2 and 9.3, production at TCO has been growing steadily since the formation of the joint venture. In 1993 it was 1.3 million tons, just 6 percent of Kazakhstan's total production, but by 2002 production

exceeded 13 million tons and was 28 percent of total. Although TCO does not release financial results, ChevronTexaco does and its annual reports include information on its share of TCO revenues and development costs. Displayed in Figure 9.5, the revenues from TCO oil sales (net of production expenses) have been generally larger than annual development costs after 1995 and a two year startup period.[7] Only in the most recent two years have ChevronTexaco's returns at TCO been in amounts enough above the annual development cost to begin to pay for acquisition costs and for their share of the pipeline. Figure 9.6 shows the average selling price of TCO oil each year and compares it to the annual average cost of production. Together, the data show that the profits at TCO have been due in more or less equal measure to decreases in production costs, increases in sales prices, and increases in the amount of oil produced. In the future, the substantial decreases in transport costs made possible by the completion of the CPC pipeline will also have a positive effect on profitability.

Like many foreign investors in Kazakhstan, ChevronTexaco and TCO have made a practice of regularly announcing significant contributions both to the local economy and to the country as a whole, especially large projects and public sector investments and activities. For example, in 1997 TCO reported it had paid "more than $200 million in direct financial benefits" to Kazakhstan, including royalties, taxes, cash distributions, pipeline/rail

Figure 9.5 ChevronTexaco's annual net income and development costs for TCO, 1992–2001

Source: Drawn from ChevronTexaco *Annual Reports*

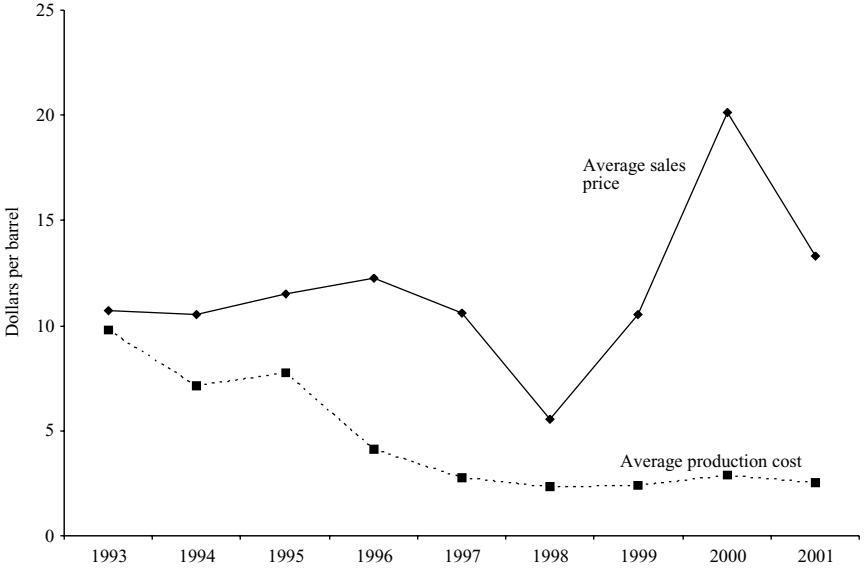


Figure 9.6 ChevronTexaco's annual average sale prices and production costs for TCO oil, 1993–2001

Source: Drawn from ChevronTexaco *Annual Reports*

fees, and the national payroll (*Almaty Herald* April 9–15, 1998). In 1998, the amount of direct financial payments to Kazakhstan were $452 million, in 1999 $300 million, and in 2000 $700 million.[8] From 1993 to 1998, TCO provided $50 million in funding in the Atyrau oblast to support local community development programs (Adamson 2001). Among other things, the funds supported the construction of a new heating plant, a medical clinic, and a bakery in the city of Atyrau, and a new medical clinic and a rebuilt water treatment plant in Kulsary. Subsequent programs provided assistance with various civic projects from bridge reconstruction to building repairs at the local university. In recent years the government has placed increasing pressure on all foreign firms but especially those in the oil sector to use Kazakhstan-sourced products to a greater extent, and more recent TCO reports have been emphasizing Kazakhstani contributions to all aspects of its operations.[9] Thus, one learned: first, that the TCO workforce, which was only 50 percent Kazakhstani in 1993, had become nearly 70 percent so; second, that Kazakhstani contactors and subcontractors have been used in increasing numbers on all oilfield development programs; and third, that Kazakhstani suppliers have been used to an increasing degree for the myriad of products required in its operations. In 2000, a Kazakh drilling company was awarded a contract for the first time. In 2001,

a $189 million contract for new well building included $79 million of work by Kazakh subcontractors.

Although ChevronTexaco is surely to be counted among the successful foreign investors in Kazakhstan, the development of TCO also has not been without controversy.[10] The oil and gas pumped from Tengiz contain significant amounts of sulfur, so much so that in 2001 some 4,500 tons of liquid sulfur were removed each day, and it required five natural gas flaring towers to burn off the associated gas. The liquid sulfur is sprayed over accumulating mounds of sulfur, each the size of a football field, where it is left to dry into a material with little noticeable odor. In 2002, the Ministry for Natural Resources cited legislation which indicated the stored sulfur was a waste and fined TCO KZT 11 billion (approximately $72 million) for pollution. TCO appealed the fine to Kazakhstan's Supreme Court, claiming that the sulfur was not a waste but an input into a manufactured product, but lost the case and the fine was reinstated. In 2001, it began construction of $42 million a plant to pelletize the sulfur so that it can be transported more easily and hence marketed as a step in the solution of the growing environmental problem.

In addition to vast piles of sulfur, operations at TCO are responsible for a substantial amount of air pollution. In 1997, for example, TCO paid KZT 454 million ($5.8 million) in fines for over 72,500 tons of emissions. In total, it reportedly accounted for more than 50 percent of the air pollution in the region that year. TCO reported that in 1999 it had released some 75,000 tons of pollutants into the atmosphere but a local environmental group alleged the amount was much higher. As well, the group specifically cited four accidents in 1998 and 1999 as major concerns, including unplanned discharges of hydrogen sulfide in May and October 1998, an explosion of a hydrogen sulfide holding tank in April 1999, and a release of carbon dioxide in September 1999. There have also been claims that TCO pollution is responsible for numerous health complaints and an unusually high infant mortality rate in Sarykamys, a village near Tengiz, claims which TCO has disputed. At the same time, it is interesting to note that after the 1985 fire, the Soviet health ministry established a 32 km sanitary zone around Tengiz and blocked the resumption of oil production until all villages were relocated. The zone was later reduced to 10 km, and the village of Sarykamys is within the zone's original boundaries but outside the revised ones, just 20 km from the TCO gas processing plant. While continuing to dispute the medical evidence, in November 2001 TCO and Kazakhoil agreed to share the cost of moving the village. And, in 2000, TCO committed to a $2 billion plan to create additional oil-cleaning facilities and to pump the associated gas back into the oil reservoir. The latter plan, when completed, would reduce gas flaring by 95 percent.

TCO's size and comparative success also have not insulated it from oftentimes surprisingly difficult relations with the government, relations which

have not improved since Kazmunaigaz took control of the government's interests in the entire oil and gas sectors in 2002. Negotiations over the building of the CPC pipeline were anything but straightforward (Levine *et al.* 2001). Numerous local groups as well as government agents monitor all aspects of TCO's daily operations. In 1999, for example, local authorities called for seven wells at TCO to be shut down because their output exceeded the licensed amount (*IPR*, June 11–17,1999). Not alone in their impatience with such interference, ChevronTexaco joined many other foreign investors and appealed directly to President Nazarbayev for relief, an appeal which resulted in formation of the President's Investor's Council. Nor was the announcement of the government's intention to sell an additional share of TCO in 2000 well received. It sparked many months of controversy within the government, and since ChevronTexaco was the most interested buyer, between the government and ChevronTexaco. The president of Kazakhoil was fired for his outspoken opposition to the sale; then Prime Minister Balgimbayev was replaced during the negotiations. In the end, a sale went forward, but of only a 5 percent interest, not the 10 to 15 percent originally discussed.

In November 2002 disagreements between the government and ChevronTexaco over financing arrangements for major gas processing and recycling projects designed to reduce TCO pollution as well as for projects to increase production became so serious that ChevronTexaco suspended the projects altogether (ChevronTexaco November 14, 2002). Chevron-Texaco insisted the projects be funded from oil revenues, as was proscribed by the original joint venture arrangement. Kazakhstan insisted the projects be funded from external sources, which would preserve its share of the revenues as well as amount of taxes derived from the revenues that were paid to the state. The dispute was not resolved until the end of January 2003 when ChevronTexaco agreed to some revisions in the financing terms. TCO will continue to pay $810 million in taxes through 2005 and will assist Kazmunaigaz pay its 20 percent share of the projects' development costs (Gismatullin 2003).

Hurricane Kumkol Munai (Yuzhneftegaz)

The second oil enterprise to be sold to foreign investors was Yuzhneftegaz, which was the only sale completed as a direct result of then Prime Minister Kazhegeldin's 1996 announcement of the sale of all the oil enterprises. Yuzhneftegaz' main producing field was Kumkol, the most centrally located of Kazakhstan's oil fields.[11] The field had been discovered in 1984 and production begun in 1989. Yuzhneftegaz controlled 100 percent of the south portion of Kumkol, 50 percent of the north portion through a joint venture with the Russian firm Lukoil, 50 percent of nearby Asshabulak, Nurali, and Aksai fields through a joint venture with (a subsidiary of) Gaz

de France (25 percent) and the major German energy concern RWE-DEA (25 percent), and a 25 percent interest in the Turan Petroleum joint venture to develop the Qyzylkiya, Aryskam, and Maibulak (QAM) fields. As shown in Figure 9.2, Yuzhneftegaz oil production had reached just 1.3 million tons in 1992. In August 1996, the Canadian firm Hurricane Hydrocarbons Ltd (HHL) was announced as the winner of the tender for Yuzhneftegaz at a price of $120 million. Negotiations proceeded throughout the fall, and an agreement was concluded in December 1996. Yuzhneftegaz was renamed Hurricane Kumkol Munai (HKM).

Yuzhneftegaz and its sale were unusual in a number of ways. First, it was the only sale of the government's entire share of a major oil production association (excluding of course the block of shares held by employees).[12] Second, like many enterprises in remote locations in Kazakhstan, Yuzhneftegaz' assets included a wide range of supporting operations, including a road building company, a farm covering some 2,500 square miles (6,400 square kilometers) with 25,000 sheep, 450 camels, and a number of cattle, horses, pigs, and goats which provided food for employees, a transportation company responsible, among other things, for transporting employees from Kyzl Orda to Kumkol, a trading company to sell items received as payment in barter transactions, 11 gasoline stations, and a construction company to build facilities at the field as well as housing in Kyzl Orda. Yuzhneftegaz had over 5,000 employees, over half of which were employed in the non-core, affiliated companies. Third, at the time of its acquisition of Yuzhneftegaz, the Canadian company Hurricane Hydrocarbons Ltd had almost no other assets.[13] It was a public company, listed for trading on the Toronto exchange, and because it was (and remained) both public and a company whose only assets of importance were its operations in Kazakhstan, there is perhaps more detailed information about this company's experiences in Kazakhstan than for any other oil company. As such, it provides a unique view of the process of restructuring a former Soviet enterprise and the interplay of economics, politics, and influence seeking – elements of which have been evident in the stories of all the enterprise restructurings described in this book.

Terms of the sale included:

- $120 million, payable in four installments – the first payment was made in September 1996, the second upon signing the final sales agreement on December 12, the third on March 31, 1997 and the fourth one month later on April 20, 1997. HHL received 89.5 percent of Yuzhneftegaz, including the subsidiary companies and the joint venture arrangements (including the right to have the exploration and production licenses transferred to HKM if they were withdrawn from the joint ventures for lack of performance).
- A commitment to invest $280 million over six years, with investment capital supplied either by new capital or by earnings from the operation.

- Payment of all wage, pension, and budget arrears, and a commitment to maintain current employment levels for at least 18 months. Hurricane was not required to maintain any of the subsidiary companies, although in fact HKM maintained almost all of them and sold only the gasoline retailing operation until serious financial problems in 1998–9 forced HHL into bankruptcy.
- Detailed royalty rates for each producing area as well as for each of the joint ventures in which Yuzhneftegaz had an interest. HHL was exempted from royalty payments for production from the south Kumkol field for the period December 1996 through April 21, 1997 (HHL *1998 Annual Report*).

Like so many of the enterprises, Yuzhneftegaz was described as bankrupt at the time of the sale.[14] And like the many bankrupt minerals enterprises, the biggest problem was organizational – Yuzhneftegaz' operations maximized the extent to which revenues disappeared. Each of the separate companies had budget authority and made autonomous purchase and sale decisions, and of these, only one was the oil business. Not surprisingly, many (perhaps most) corporate decisions did not have oil as their number one priority. Almost all sales were barter transactions, making it extremely difficult to account for either the amount or the value of each transaction. To the extent that employees were paid, they were paid "in-kind" with goods received for the oil or with other perquisites. In 1996, much of the activity in the construction division, for example, was to build employee housing in Kyzl Orda, not oil field facilities. Less than a year later HKM was profitable. Among the changes HHL made was to remove autonomy from all individual division managers and centralize all purchase and sales decisions. At one point, all non-oil related expenditures were simply halted. In so far as possible, contracts were concluded in cash, not barter, thereby eliminating the possibility of substantial manipulation of the terms of the contracts. Several heretofore bad debts were collected. HHL also invested heavily in developing production at the oil fields and honored commitments to pay back wages and pensions. Indeed, when HHL began paying wages, it was the only enterprise in Kyzl Orda paying employees in cash. In early 1998, a government audit for compliance with the terms of the purchase contract found HHL had

> fulfilled its contractual obligations. In 1997, Hurricane Kumkol Munai made direct investments in the amount of $59.9 million, which is $23.8 million more than planned. All back wages and payments to the non-budget funds have been paid. As per the Monitoring Division, the company produced more oil than planned. In 1997, the company produced 1,795,158 tons versus 1,708 thousand tons planned. Fourteen new wells have been put into operation at Kumkol.
>
> (HHL *Press Release* June 8, 1998)

Initially at least, HHL's acquisition and restructuring of Yuzhneftegaz was among the foreign investment success stories in Kazakhstan. As shown in Figures 9.7, 9.8, and 9.9, oil production was increasing each quarter, HHL's net income was positive, and its share prices were increasing.

Then, almost as quickly as it had success, HKM and HHL were on the verge of bankruptcy.[15] HKM marketed oil mainly by marketing its products after paying for refining at the Shymkent refinery to which its oil was sent via the existing 26-inch lateral pipeline connecting the Kumkol fields to the main north–south pipeline from Pavlodar to Shymkent (see Figure 9.1). Throughout the summer and fall of 1998, HKM was in a protracted dispute with the refinery after it unilaterally raised refining prices, a dispute that disrupted sales and ultimately production. Moreover, oil prices were particularly depressed in Kazakhstan in late 1998 and 1999 due to low cost imports from Russia as well as an unusually warm winter which reduced the demand for heating oil. Whereas the average realized price per barrel amounted to $11.14 per barrel in the second quarter of 1998, by the third quarter the price was only $6.89 and by December it was just $5.87. Revenues at HKM plummeted (see Figure 9.8). Share prices followed (see Figure 9.9).

In August 1998 HKM filed suit against the refinery with the regional antimonopoly committee alleging that the increase in the refinery's price

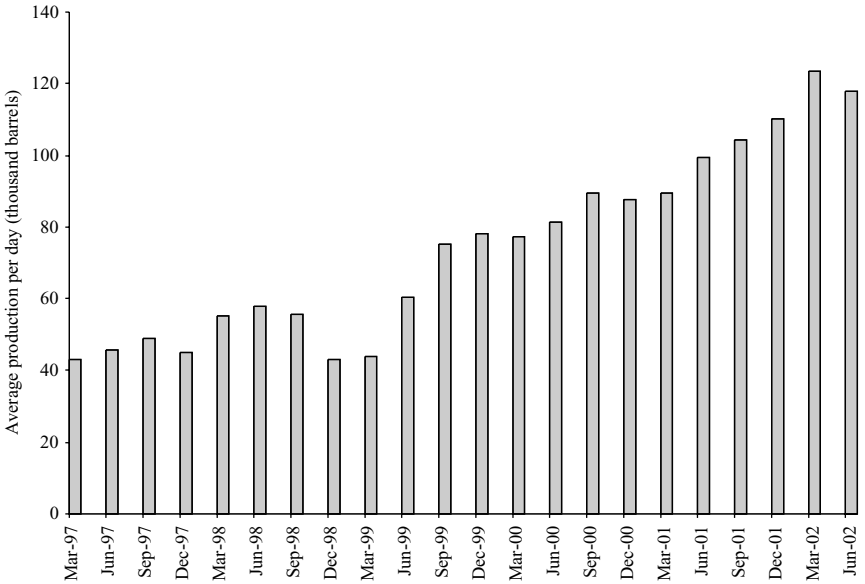


Figure 9.7 Oil production at Hurricane Kumkol Munai, quarterly, 1997–2002

Source: Drawn from HHL *Annual Reports* and *Quarterly Reports*

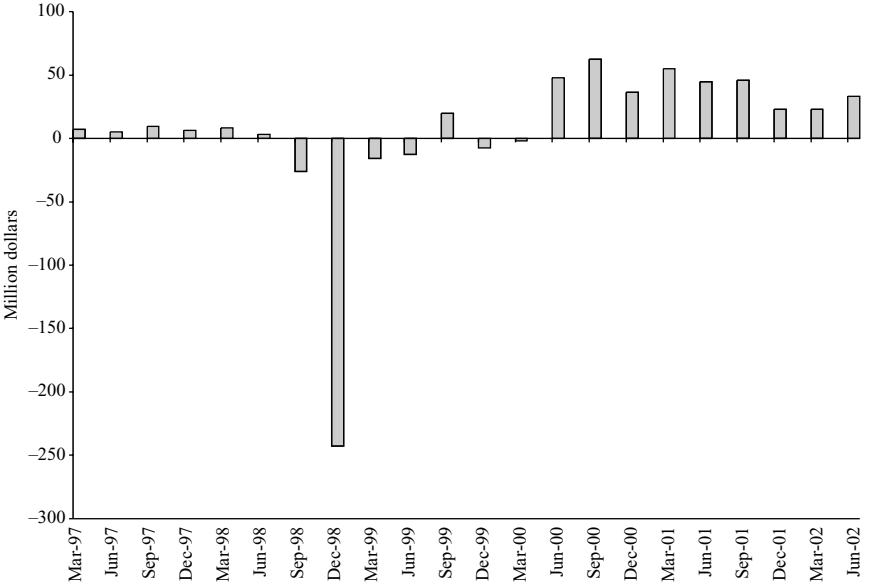


Figure 9.8 Net income of Hurricane Hydrocarbons, Ltd, quarterly, 1997–2002
Source: Drawn from HHL *Annual Reports* and *Quarterly Reports*

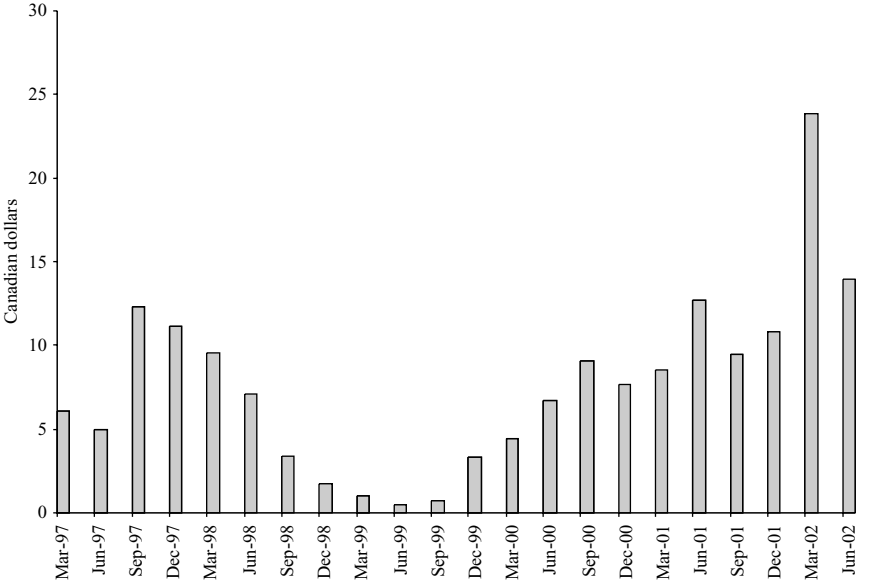


Figure 9.9 Share prices for Hurricane Hydrocarbons Ltd, quarterly, 1997–2002
Source: Drawn from HHL *Annual Reports* and *Quarterly Reports*

was monopolistic and, at least initially, won a ruling from the local committee. The national antimonopoly committee did not support the findings of the local committee, however, and the refinery was not required to lower its prices. Thus, although the dispute with the refinery was technically resolved in September 1998, the resolution required HKM to pay the new higher price of $20 per ton for refining, an amount nearly double what it had paid earlier. HKM found it could no longer pay salaries, let alone continue capital investments. While negotiations with the refinery continued, layoffs of both Canadian ex-patriot and local Kazakhstani employees began. By spring 1999, HHL could not pay the interest due to US and Canadian investors on bonds issued to acquire Yuzhneftegaz; consequently, HHL was forced to seek protection from bankruptcy under Canadian securities laws in order to provide time to attempt a restructuring. However, with refining costs remaining at $20 per barrel, realized prices for the oil remained below $4.40 per barrel in the first two quarters of 1999. To resolve the ongoing dispute with the refinery and obtain more favorable terms to market oil and oil products, HHL reluctantly agreed to a merger with the Shymkent refinery that would have given the refinery a 49 percent interest in the combined oil and refining operation while retaining a bare 51 percent majority for HHL. By this time, the refinery was itself controlled by the Kazakh group associated with Timur Kulibayev – Central Asian Industrial Holdings (CAIH)[16] and Kazkommertsbank (KKB) (more below).

HHL was more than a reluctant partner to this merger. HHL's president was quoted as saying the "whole strategy was to squeeze the company into submission by forcing the price down, forcing the company to yield and merge" (Johnson 1999). Kazkommertsbank and CAIH were said to want to force a merger so that they could gain an interest in one of Kazakhstan's main oil production enterprises. Although having agreed in principle to a merger in spring 1999, HHL was still protected by a court-administered reorganization order in Canada that permitted them to delay merger negotiations throughout the summer of 1999. By then, a recovering world oil price, combined with a strengthening Kazakh economy and more favorable marketing terms, meant Hurricane was in an increasingly strong financial position. HHL decided to scrap the proposed merger in favor of an offer to buy the refinery for $57 million in cash and a 33 percent interest in HHL, presuming it could sell the scheme to its existing creditors and thus the courts. In the end, HHL succeeded in persuading everyone to accept the deal and in October 1999 announced an agreement. The sale closed in the spring 2000, and HHL paid $48.8 million, a 29.4 percent share interest in HHL, and two seats on the company's board of directors for a bit more than 90 percent of the shares of the refinery (including all those controlled by CAIH and Kazkommertsbank, whose representatives assumed the two director seats). As is evident in Figures 9.7–9.9, HKM and

HHL's fortunes improved dramatically after the buyout. Output grew more or less steadily, and net income increased to nearly $50 million in the first quarter after the purchase in 2000. Income has remained positive every quarter since. HHL share prices showed similar improvements through 2000 and 2001.

If both Hurricane and CAIH/ KKB may be described as winners in their contest – HHL acquired the refinery on better terms than it initially accepted and CAIH/KKB acquired an interest in HKM and the Kumkol oil field, although smaller than it had negotiated initially – there were also a number of losers in the battle for the ownership of Kumkol oil. Hurricane's president John Komarnicki had been forced to resign in October 1998 as part of the restructuring of the bankrupt company, coincidentally the same month in which he was named "Entrepreneur of the Year in the Prairie Provinces" by Ernst and Young (Johnson 1999). Cost cutting reduced personnel significantly. By May 2000, the number of HKM employees in Kyzl Orda had been reduced from over 5,100 to just 1,900, a combination of layoffs and divestures of the retail gasoline stations, the road construction unit, the catering and medical services, and the transportation unit. Restructuring at the refinery led to more layoffs there. In all, the reductions lowered operating costs from nearly $4 per barrel in 1998 to just $1.15 per barrel in 2000, figures that do not begin to measure the consequences for unemployed workers in Kyzl Orda and Shymkent. Moreover, HKM was the single largest tax payer in the region and its financial problems meant local budget revenues were significantly reduced and numerous programs affected throughout the 18 months of negotiations between HHL and KKB/CAIH.[17]

The sale of the Shymkent refinery to Hurricane also meant that a certain amount of new information became available about the refinery since it too was part of a publicly-held Canadian company. In particular, at the time of Hurricane's acquisition in March 2000, CAIH/KKB had made just $34.4 million in capital investments in the refinery out of a total pledged investment of $150 million before December 31, 2001.[18] That is, not even a quarter of the pledged investments had been made, and there was little more than a year remaining in their pledge. By contrast, of Hurricane's pledged investment of $280 million before the end of 2002, some $192.6 million (69 percent) had been made by year-end 1999. It seems clear that the Kazakh owners were not interested in rebuilding the enterprise and that refinery profits went elsewhere. Indeed, among its later investment targets, CAIH/KKB attempted, but failed, in a hostile takeover of Hurricane in the spring 2001.[19]

Once the dispute with the refinery was finally solved, Hurricane appeared to be back on the path to success. Not only were operations improving; they again had the apparent support of officials in Kazakhstan. Kazakhoil assisted Kazgermunai, one of the HKM joint ventures, to obtain

approvals to be able to continue exporting oil under a swap arrangement (*ICACBR* August 13–19 and October 15–21, 2001). In the fall 2001, HHL negotiated with British Petroleum to acquire a small percentage interest (49.9 percent of a joint venture controlling 1.75 percent of the pipeline) in the Caspian Pipeline Consortium which would give HKM assured access (at member prices) to the new pipeline to accommodate the steadily increasing production from Kumkol (*ICA* August 31, 2001). HKM received approval to build a 180 km pipeline from its fields directly south to a new loading station at Zhusali just northwest of Kyzl Orda on the main railroad from Tashkent to Uralsk (HHL *Quarterly Report* March 31, 2002). It also received approvals to build a new plant at the oil fields to use some of the natural gas that currently was being flared to produce electricity. There were a few problems as well. In the November, for example, HKM was alleged to owe an additional $20 million in taxes, charges which it disputed (*ICACBR* November 16–22, 2001), but the problems seemed minor in comparison to the successes.

In late spring 2002, however, Hurricane was once again on the defensive in Kazakhstan.[20] First, it lost its appeal over the disputed $20 million in unpaid taxes, which immediately caused its first quarter net profit to decline dramatically from expectations. Then the agreement to acquire an interest in the CPC pipeline was in trouble. Whereas HHL had received all the necessary permissions to acquire the BP interest in CPC, as the official transfer date approached the new national oil company Kazmunaigaz insisted on a review; and, although it initially indicated approval, it in fact caused the sale to collapse. In June, just days before it was to be finalized, Kazmunaigaz imposed a new condition before authorizing approval, a condition which could not possibly be met in time to comply with the deadlines. At about the same time, the Ministry of Energy established new export quotas in amounts which forced HKM to reduce oil output. Throughout this period, rumors circulated to the effect that Hurricane was going to sell HKM and leave Kazakhstan.

It was perhaps just coincidental that the latest souring of working relations between HHL and authorities in Kazakhstan occurred at the same time Kazmunaigaz was created. However, it is also true that all the oil companies have been subject to additional government oversight since then and that a new law on foreign investment that would considerably strengthen the state's control of all the large enterprises with foreign investors has been under review. It remains unclear whether Kulibayev and CAIH/KKB are still trying to find a way to acquire HKM and the Kumkol oil field specifically or whether Kulibayev (as first vice-president of Kazmunaigaz) is simply increasing the degree of government control of all oil operations in Kazakhstan. In all events, Hurricane will have to find new solutions to rebuild its operations and relations if it is to continue in Kazakhstan.

Mangistaumunaigaz

The fields which comprise Mangistaumunaigaz on the Mangyshlak Peninsula on the eastern side of the Caspian near Aktau (formerly Shevchenko) were first discovered in the early 1950s (Sagers 1994). The first commercial oil was produced in the early 1960s and intensive development followed. The major fields were Uzen, Zhetybay, and Kalamkas – Uzen began production in 1965, Zhetybay in the early 1970s, and Kalamkas later. In total, Mangistaumunaigaz (MMG) production peaked in the mid-1970s at just over 20 million tons (an amount roughly equivalent to the Kazakhstan's total production in 1994). By 1980 it was only 16 million tons and in 1990 just 10.2 million or just less than half of the total for that year. In 1994, the Uzen field was separated from MMG to create the enterprise Uzenmunaigaz, leaving MMG with the Zhetybay and Kalamkas fields. The data in Figures 9.2 and 9.3, which were adjusted for the separation, show that in 1992 output from the (restructured) Mangistaumunaigaz was 6.4 million tons, slightly more than the 5.1 million tons produced at Uzenmunaigaz (for a total of 11.5 million tons from what was the former combined association). Production at MMG declined steadily through the 1990s and by 1997 was just 4.5 million tons, 30 percent less than in 1992 and less than 18 percent of total production.

A tender to sell Mangistaumunaigaz (in 1996, still the second largest production association after TCO) was first announced in June 1996 but was never completed (*MMS* July 12, 1996; *Almaty Herald* October 1–8, 1997). The president of MMG and a number of employees staged a protest when the prospective sale was announced, arguing that production was increasing, the firm was profitable, and hence it did not need new owners. They also argued that, should the sale go forward, they should be permitted to participate in the design of the terms of the sale. Eventually, the tender was canceled. By 1997, the situation at MMG had deteriorated significantly and wage and budget arrears were increasing rapidly. A tender was announced for the sale of a 60 percent interest, and in April 1997 the Indonesian-registered firm Central Asian Petroleum Ltd (CAPL) won the exclusive right to negotiate a purchase. Negotiations to complete the deal took more than 9 months, during which time the situation at Mangistau deteriorated further. In October 1997, the employees threatened to strike because they had not been paid in ten months. Revenues from the sale of oil were being paid directly to the regional budget, and only a small allocation of food had been provided to the workers in lieu of their wages (*MMS* October 21, 1997). Overall, Mangistau ended 1997 with considerable losses – expenses were estimated to have been $329 million while income was just $122.5 million (Alfa Capital 1998). When negotiations between CAPL and the government were eventually completed, the contract included payment of $248 million to the government, payment of enterprise debts, maintaining current employment levels for two years, and

a commitment to invest a total of $4.1 billion over 25 years with $2 billion in investments committed within the first five years (*IPR* January 9, 1998).

The sale and the ongoing relations between Mangistaumunaigaz and CAPL have been both much rumored about and the most difficult to document. Neither of the companies are public,[21] and thus there have been no reports identifying the principals. Neither have there been reports announcing planned, or even substantial actual, investment projects. Moreover, CAPL appears never to have taken direct control of operations at MMG. Certainly, the sale did little to improve the immediate situation at MMG. In May 1998 the employees organized an "unauthorized picket demanding that salary arrears of 11 months be paid" (*MMS* May 5, 1998). And although the firm announced in June a schedule whereby back wages would be paid, in July the workers' union appealed directly to President Nazarbayev for assistance to stabilize the situation.

> The union said in an open letter to Nazarbayev that an emergency commission must be formed to take the decisions needed to improve things in what is the country's main oil-producing region.
>
> The oil workers, according to the letter, were still owed pay for three months of 1996, nine months of 1997 and this year had not received wages since May. Up to 30 percent of the workers at many oil companies have been sent on unpaid leave for three months. The union complained that foreign owners were not fulfilling their investment programs and obligations "to the extent they should."
>
> The union is asking the president to sanction oil companies to deduct half of the cash proceeds entering their accounts as taxes and other mandatory payments; to intervene to prevent jobs from being cut and to provide workers and their families with food and other essential goods to offset supplies of oil products to farms at above market prices.
>
> (*IPR* July 31, 1998)

Oil sales deteriorated further; and, as storage facilities filled, many wells were simply closed and workers laid off. Production in 1998 was just 3.3 million tons. Moreover, in the five years since CAPL acquired Mangistaumunaigaz, there have been no reports of substantial CAPL investments or of plans for the $2 billion of investments allegedly pledged for this period. Instead, there have been occasional reports of comparatively minor funds allocated for such things as production equipment (e.g. *IPR* October 5–11, 2001). And, although production reports often noted idle wells being brought back into production or new wells completed, the numbers were never sizable enough to have absorbed $2 billion. Moreover output recovery, from 3.3 million tons in 1998 to just 4.6 million tons in 2002, was hardly indicative of substantial investment.

In addition, CAPL was itself a company with at best vague connections and intentions. According to Aditjondro's (2000) compilation of companies linked to Indonesia's former president Suharto, Central Asian Petroleum Ltd was formed as a joint venture between Setiawan Djody (of Setdco, an Indonesian petroleum company) and Arifin Panigoro (president of the Indonesian drilling company, Medco), both close friends of Suharto's son Tommy. Aditjondro found that the funds for the acquisition of MMG likely were raised in the Netherlands from one or all three of the Rotterdam-registered companies Central Asian Industrial Holding, Central Asian Agriculture Holdings, and Central Asian Energy Holdings. All three shared the same financial management company and common Kazakh directors, including Askar Alshinbayev, the managing director of Kazkommertsbank and CEO of Central Asian Industrial Holdings (making it extremely likely that Timur Kulibayev was also involved). And, as early as 1998, reports began circulating that members of Nazarbayev's family had acquired interests in MMG.

> According to unverified information, President Nazarbayev's special sympathy with this project had been dictated by participation in the company-owner Central Asian Petroleum not only of the Indonesian leader close relatives but also of a physical person on the Kazakhstan side owning a tangible amount of shares. The person is still unknown, but it would be logical to suppose that in accordance with the "Indonesian-Kazakhstan" tradition, this person was one of Nursultan Nazarbayev's family.
>
> (Loginov 1998)

In late 1998, events in Indonesia would add a bit more to the mystery. Arifin Panigoro was arrested and charged with defrauding investors when some Medco company bonds, reportedly issued to fund investments in Kazakhstan, remained unpaid.[22] This led Panigoro to announce in early August that he had sold Medco's interest in MMG, reportedly to Russian and US interests, in order to pay off some of the debts. However, in December, another Medco spokesperson indicated that the company would sell 30 percent of MMG to a local company, suggesting that the sale announced in August had not been completed and a new sale had been arranged with a Kazakhstan group. In all events, no further details of the sale have been made public and the ownership of MMG remains vague. One report summarized: "Kulibayev was not a loser either: his affiliate got the share holding of the Mangistau company previously owned by Indonesians" (*Central Asian Bulletin* 1999). There are two final indicators that the share holding is owned by individuals close to Nazarbayev. Since 2001, Interfax regularly reports only that Central Asian Petroleum Ltd is MMG's "biggest shareholder" and provides no detailed indication of ownership (as

is done with almost every other firm they cover) and as noted above, the KASE report showed only that the ownership was private. The mystery of MMG's true ownership deepened further in October 2002 with the report that what had been the government's 30 percent residual interest in MMG had been sold to a group identified as Ansdell Development, registered in the British Virgin Islands (*ICACBR* October 28–November 3, 2002). Not surprisingly, there was no additional information about Ansdell Development, no indication of when the sale took place, and no information on any of the terms of the sale. In their investigations, Djankov and Nenova (2000) and Olcott (2002) both indicate that Rakhat Aliyev and his wife, Dariga, had interests in MMG. Perhaps they are behind Ansdell Development, and perhaps ownership of MMG is shared in some way between Kulibayev and Aliyev. Undoubtedly, speculation as to the identity of the real owners will continue.

In the meantime, MMG's investors, whoever they are, have not met the investment commitments and, like the Shymkent refinery, much needed repairs, workovers, and new drilling has not occurred. MMG remains a shadow of its former operations. Oddly, the situation has not attracted the attention of the government in its episodic review of foreign investors' contracts. Indeed, MMG must be one of the few large enterprises in Kazakhstan that was sold to (at least nominally) foreign investors, whose con-tract has not been canceled for lack of investment even though the investment commitments clearly have not been met, and whose output remains at levels well below those in 1992 and 1993. MMG's owners were even rewarded for this performance in 2001 when MMG was given a controlling interest in the Pavlodar refinery, as will be described in the next section.

Aktobemunaigaz

Aktobemunaigaz (formerly Aktyubinskneftegaz) is located to the northeast of Kulsary and of the Tengiz fields in the Aktobe region (Sagers 1994). Its main two fields are Zhanazhol and Kenkiyak. Kenkiyak was discovered in 1960 and production began in 1967, while Zhanazhol was discovered in 1978 and production began in 1984. The initial tender for the sale of Aktobemunaigaz was announced in 1996, like that for MMG. Again, however, a sale did not proceed rapidly. By September, several firms had expressed interest but requested additional time to complete studies of the fields. By January 1997 there was only one bid and the tender was canceled (*MMS* January 10, 1997). In May the terms of the sale were changed significantly, reducing the share interest to 60 percent, and in June the government announced that the Chinese National Petroleum Company (CNPC) had won the tender. Negotiations to complete the sale progressed over the summer and were concluded in September 1997, just after the

announcement that CNPC had also won a tender for Uzenmunaigaz and had committed to build a pipeline from western Kazakhstan to China (*IPR* October 3–9, 1997). The coincidence of events – signing one contract while announcing the award of the second tender as well as the promise of a pipeline – led to the widely held impression that contracts for the sale of both fields and for the construction of the pipeline were completed in what was widely described as the "contract of the century." In fact, only a contract for the sale of the 60 percent interest in of Aktobemunaigaz was ever signed. CNPC paid $325 million and made investment commitments of $4 billion over 20 years, of which $585 million was to be invested between 1998–2005 (Alfa Capital 1998; *IPR* October 3, 1997). CNPC also was obligated to pay the debts of the enterprise, up to a total of $71 million, and to maintain existing levels of employment for one year. Kazakhstan's budget was expected to receive some $3.16 billion in income taxes, excise duties, royalties, and local taxes as a result of the sale.

Like the Indonesian group, the new Chinese owners of Aktobemunaigaz (AMG) were slow to take over active management of the company. In part, this was undoubtedly related to the prolonged negotiations between CNPC and the government over the purchase of Uzenmunaigaz and the possibility of a new pipeline. Nor was there the pressure for the new owners to act quickly, as with some of the bankrupt enterprises. AMG had reported a net profit in both 1996 ($25.3 million) and 1997 ($73.3) and, as evident in Figure 9.2, production had remained fairly constant at 2.5–2.7 million tons from 1992–8 (Alfa Capital 1998). Nevertheless, with declining prices in 1998, revenues would be sharply reduced and the Russian crisis more generally did not bode well for either prices or output for a company that depended on shipping oil to the Russian refinery in Orsk as its principal market.

Unlike the Indonesian group, CNPC did eventually take over operations at AMG, and the government has been closely monitoring their performance. Almost as quickly as CNPC began restructuring, they found themselves in serious conflict with the employees, the local authorities, and the government (*IPR* January 14–20, 2000). In April 1999 CNPC divested three subsidiary operations – drilling, transportation, and construction – and 2000 employees were fired. Allegedly the company promised to rehire the workers as other projects began and, in the interim, pay them 30 percent of their former wages. However, by January 2000, neither had any former employees been rehired nor had any been paid the promised interim salary. Also, the company had not made the full amount of committed investments in either 1998 or 1999. The government expressed the view "that the situation with Aktobemunaigaz is 'unworthy' of the level of 'partnership' that has developed between the two 'neighboring' countries" (*ICA* January 10, 2000) and it became a matter for discussion between Kazakh and Chinese officials. In late February, employees even called for the CNPC contract to

be canceled (*IPR* Mar 3–9, 2000). Then in March CNPC announced that the rebuilding of an oil treatment station would begin soon, strongly reiterated its intention of making all the committed investments, and signed a cooperation agreement with regional authorities including providing $2 million for local development and retraining initiatives (*IPR* March 31–April 6, 2000). By the end of 2000, oil production was back to 2.6 million tons from the low of 2.3 million tons in 1999 and AMG reported a net profit of $100 million (*IPR* April 13–19 2001).

In late December 2000, the government announced it was planning to place its residual share under trust management with the US company Access Industries. Access Industries was already in Kazakhstan, operating the Bogatyr coal mine in Ekibastuz (see Chapter 10). It also had investments in Russia where, among other enterprises, it owned a share of the Tyumen Oil Company. Tyumen owned the refinery in Orsk which received supplies from AMG. Two aspects of the transfer from Kazakhoil's management were notable. First, whereas the government share had been 30.2 percent in 1997 when CNPC acquired 60.3 percent (9.5 percent had been given to the employees in preferred shares), the share interest was only 25.12 percent when transferred to Access Industries. Somewhere along the way an additional 5 percent had moved into private hands. In addition, some of the employee shares had been traded so that in March 2000 only 5 percent of the shares (all preferred) were held by employees and a total of 9.5 percent of the shares (both common and preferred) were held by "other individuals and corporations" (*ICA* March 1, 2000). Second, although the transfer was announced in December, it was held up for three months "so that the Kazakh side could again analyze the agreement to ensure that the interests of the state are being met as much as possible" (*ICACBR* March 19–25, 2001). In the meantime, in early February the Tyumen-controlled Orsk refinery announced it would refuse to accept additional AMG oil because the companies did not have an official agreement (*ICACBR* February 5–11, 2001). An agreement was signed within a week and deliveries resumed, but the refinery (i.e. Tyumen) had made its point and the resolution to transfer the government's 25.12 percent interest to Access in a trust management arrangement was approved in early March. For its part, Access/Tyumen undertook to guarantee access to the oil pipeline system and the Orsk refinery and to assist CNPC increase production at AMG to 6 million tons (*ICACBR* March 19–25, 2001).

In June 2001, CNPC reiterated its pledge to invest an initial $585 million in its first five years and to have increased production to 6 million tons by 2004, and the prospects for AMG's growth appeared to be quite good.[23] After initially favorable comments from then Prime Minister Tokayev, however, the government announced it was dissatisfied with CNPC's operations and indicated it would ask to make changes in the original sales contract because of violations in the contract terms by CNPC. By the end

of July, CNPC indicated it planned to increase production to 10 million tons by 2005. This was followed in early October by the announcement of an agreement with the national oil and gas transport company to build a pipeline 450 km from AMG to Atyrau, the so-called Kenkiyak–Atyrau pipeline, to give AMG direct access to export pipelines in Atyrau.[24] The pipeline, with oil flowing in the reverse direction, would also be the first link in the much discussed pipeline linking western Kazakhstan to China. Contracts for the construction of the pipeline were in fact let in May 2002. Finally, in November 2001, CNPC initiated planning to construct a new gas refinery at one of its fields to increase capacity after the completion of repairs to the existing refinery. By the end of 2001, CNPC had invested $220 million and had planned investments of $240 million for 2002. In this case at least, sustained pressure on the investor from the government obviously made a significant difference. That it chose to apply pressure on CNPC to revive AMG only underscores its failure to do so at MMG.

Uzen

As to the two other parts of the contract of the century, a feasibility study on the pipeline was begun in late 1998, and although it was subject of much conversation both official and unofficial, an agreement to build the 4,500 km pipeline was never signed (*IPR* July 2, 1999; *ICACBR* July 19, 1999). Similarly, the contract with CNPC on the sale of Uzenmunaigaz was never completed, CNPC's bid only having been accepted because of the commitment to build the pipeline. Thus, Uzenmunaigaz remained unsold. As an older field, it was in need of substantial rehabilitation, and as early as 1996 the World Bank had approved a loan of $109 million for rehabilitation. With the prospect of a sale, the loan remained unused, but it was re-activated in 1999 in order to finance work at the field. After initial output declines from 5.1 million tons in 1992 to 2.8 million tons in 1996, oil production at Uzen has steadily recovered from 3.0 million tons in 1998 to 4.9 in 2002.

Kazakhoil-Emba

The Emba fields to the north and east of Atyrau are the oldest producing fields in Kazakhstan and include both Dossor (discovered in 1911) and Makat (1915), the first fields discovered in Kazakhstan (see Chapter 2). Numerous small fields like Dossor and Makat comprised Embamunaigaz (formerly Embaneftegaz) and production had remained relatively constant at around 1.5–1.7 million tons since the early 1960s (Sagers 1994). Through 1996–7, Embamunaigaz remained unsold and became a subsidiary of Kazakhoil. In 1999, it was merged with the Kulsary and Prorva fields of the former Tengizmunaigaz (i.e. the fields not part of the TCO joint

venture) to form Kazakhoil-Emba (*KWN* May 24, 1999). The merger resulted in a one-time increase in reported production of about 0.7 million tons to 2.3 million tons where it has remained.

From the outset, the sale of Emba was complicated by the proximity of the Taysoygan test firing range, whose status remained unclear for some years after independence.[25] Even exploration in the Taysoygan area, where two of three test wells were successful, was halted for a period because of safety concerns caused by the substantial accumulation of military hardware debris in the area, especially of missile fragments (*IPR* July 5–11, 2002). In 2002, Kazakhoil-Emba wanted to resume development work but it seemed likely that further development would be delayed until 2005 and the conclusion of Russia's current lease on the test range. After the merger with the Kulsary and Prorva fields to create Kazakhoil-Emba, a sale would have been even more complicated by significant environmental problems at the Prorva fields where very high levels of radiation had been discovered at 20 production areas. Radiation levels of as much as 1,700 micro-roentgens per hour compared to a normal rate of 9–12 were documented (*IPR* August 10–16, 2001). Moreover, rising water levels in the Caspian threaten both oil wells and settlements and the entire village of Karaton was moved in 2001 as a result of flooding (*Almaty Herald*, October 25–31, 2001). Thus it has remained a state enterprise.

Sales of the oil refineries

As noted earlier, the often Byzantine interdependence of Kazakhstan's industrial structure with that of Russia (and other former Soviet republics) is nowhere clearer than in the operation of the country's oil refineries which for the most part were not built to process locally produced oil. It was hardly surprising therefore that one early goal of the government's development plan for the sector was to create greater independence. The refineries, however, were themselves in need of substantial investment. The oldest of the three, the refinery in Atyrau, had been built in 1945; the most recent, the refinery at Shymkent, was built in 1985 (EU-TACIS 1995). In 1991, the average secondary processing capacity of the refineries was only 30.6 percent and they produced much higher than average amounts of heavier fuels and heating oil (Kalyuzhnov and Nanay 2000). Even in 1993, they were operating at only 65 to 90 percent of capacity, an average of 22 percent below rated capacity, and operations were soon to decline more.

Initially, the oil refineries remained state-controlled as part of Munaigaz and efforts were made to secure investment funds to increase their operational capacity. In April 1994, the government concluded a contract to reconstruct the oil refinery at Atyrau at a cost of $1.2 billion (*MMS* June 26, 1997). However, potential lenders evidently insisted that the company executing the project have total management control and the government

abandoned the project. In 1993 the government awarded a contract to build a new refinery in Mangistau to group of Japanese companies including Toyo Engineering, Mitsui, and Mitsubishi, but construction was never begun (*Petroleum Economist* April 1996: 12). As the economic crisis deepened, the refineries were especially vulnerable to both payment arrears problems and political maneuvering between Kazakhstan and Russia. Output plummeted, especially at the Pavlodar refinery which frequently closed because it could obtain no crude oil (see Figure 9.4). Sale of the refineries began in 1996.

Atyrau refinery

The refinery in Atyrau is both the smallest and oldest of the three Kazakh refineries (EU-TACIS 1995). The first units of this plant were built in 1945 using US equipment acquired under the Lend-Lease program (*ICACBR* January 9–14, 2001). Its initial capacity was just 0.8 million tons per year but, with substantial additions and modifications in the intervening years, its capacity had been increased to 5.2 million tons. Originally designed to process oil and refine distillate from Baku, it was converted to process oil from Tengiz and Mangistau. Even with the various expansions and modernizations in its more than 50 years of operation, however, the Atyrau refinery was perhaps the least desirable of the Kazakh refineries. The equipment was old and not designed to process heavy sulfur oils, so that when supplies were shifted to Tengiz and Mangistau, the result was a gasoline so low in quality that it was "practically banned from gas stations in Almaty because it failed to meet environmental and technical standards" (ibid.). Pollution was also a serious problem at the refinery with annual hydrocarbon, sulfuric anhydride and phenol emissions totaling 9,100 tons. Plus, the refinery was located in Atyrau, as far away as it was possible to be from Kazakhstan's major consumption centers in the east.

At the beginning of 1997, 53.1 percent of the Atyrau refinery was offered as a management concession in an open tender (*Focus Central Asia* 11 1997). In March, a UK-based company Essex Refinery Corporation, registered in the British Virgin Islands, was announced as winner of the tender, with investment pledges totaling some $665 million over 10 years including $30–5 million in 1997. However, in mid-April, it was discovered that the government in fact controlled only 41 percent of the shares of the refinery. Evidently, when the enterprise was corporatized, the employees had received 30 percent of the shares (not the usual 10 percent) and another 16.9 percent had been given to the citizens of Atyrau. In addition, the refinery's management had sold 13.1 percent of the shares to the Swiss company Telf AG, a significant trading partner of the refinery. Then, Telf had acquired privately some of the shares distributed to the employees and others so that by 1997 it owned 37.1 percent of the enterprise. The contract with Essex was canceled, the government announcing that it was "not satisfied with the

investment proposals of this company" (ibid.: 25). The government then tried to negotiate return of the stock from Telf but with little success.

In November 1997 Telf announced reconstruction plans for the refinery (*MMS* November 7, 1997). They indicated that two Swiss banks had agreed to provide financing for the project but required proof that Telf actually owned the shares in the refinery. The government evidently refused to comply, stating only that Telf did not have the right to sell their shares, and the project did not go forward. As the situation in the oil industry deteriorated in 1998 and 1999, the refinery had to reduce output and had increasing arrears problems, as did the other two refineries. By May 1998 the situation was described as tense, with debts amounting to a total of KZT 2.622 billion or about $33.5 million (*MMS* May 1, 1998). By August, debts totaled KZT 3.396 billion ($43.2 million), including KZT 1.744 billion ($22.2 million) debts to the budget and KZT 224 million ($2.8 million) wage arrears (*Almaty Herald* August 20–26, 1998). Meanwhile, Telf had increased its control of the enterprise to 44.8 percent. By the end of 1998, output had been cut some 35 percent from 1997, and even then stocks of unsold products were accumulating (*IPR*, February 5–11, 1999). Moreover, the plant was virtually idle in January, had laid off 800 workers in 1998, and expected to cut 500 more.

Negotiations between Telf and Kazakhoil continued and, in May 1999, Kazakhoil acquired the 44.8 percent share of the refinery from Telf, thereby bringing its interest to 86 percent (*ICACBR* May 24–30, 1999). Almost immediately, Kazakhoil announced a major reconstruction plan for the refinery to improve yields (*IPR* June 19–25, 2002). However, negotiations with the Japanese firm Marubeni over the project and then the Japanese Bank for International Cooperation over funding for the project were very protracted. It took a year just to sign a so-called framework agreement with Marubeni and then more than another year to secure funding because JBIC, although willing to provide the bulk of the financing, sought a loan guarantee from the Kazakh government. It was not until December 2001 that Kazakhoil, Marubeni, and JBIC signed a contract for the re-construction of the refinery (*IPR* December 14–20, 2001). Work was to have begun in March 2002, but in the interim Kazmunaigaz replaced Kazakhoil and promptly stopped the project, reporting only that "this project is not as effective as it seemed and in current conditions problems with the project may arise" (*IPR* June 19–25, 2002). Kazmunaigaz reversed itself in June and approved the project, which was then rescheduled to begin by the end of 2002. Whether the project will really proceed is still anyone's guess.

Pavlodar refinery

The refinery in Pavlodar is the second oldest in Kazakhstan, opening in 1978, and was designed to process crude oil delivered via pipeline from

Siberian fields as shown on the map in Figure 9.1 (*ICACBR* October 25–31, 1999). Although it had a design capacity of 13 million tons of crude annually, the refinery was able to process just 7.5 million tons. In terms of technology and equipment, however, the Pavlodar refinery was one of the most modern in the Soviet Union, with a product yield which put it on a par with world averages. Since the refinery depended entirely upon crude from Siberia, its operations were perhaps most affected by payments issues and the state of relations between Russia and Kazakhstan. As early as January 1994, the plant was restricted to operating for just two months because of the interruption in delivery of crude supplies. As conditions in the sector worsened, so too did those at Pavlodar. By the end of 1996, the plant had not operated in four months and arrears were large.

In January 1997 a five year management concession on the Pavlodar refinery was offered though a public tender (*MMS* January 10, March 10, and August 26, 1997). Six companies bid and the US-registered company CCL Oil was awarded the contract in March.[26] Among the terms, the company agreed to pay debts to the oblast's pension fund amounting to KZT 120 million ($1.6 million), wage arrears worth KZT 250 million ($3.3 million), and budget arrears of KZT 1 billion ($13.2 million). CCL also committed to doubling production by 2000. The contract was unusual at the outset because there appears to have been no bonus paid to the government; rather the state's shares were transferred to CCL Oil under a strictly management agreement for a period of three (extendable to five) years. CCL Oil indicated their intention to purchase the firm at the end of the management contract. After taking control, CCL purchased two Pavlodar power plants (Kazchrome had purchased another plant, see Chapter 7), the regional power distribution company, and joined with a local firm that owned the oblast's railway and the communications network at the coal mines in order to secure a supply of coal for the power stations.

Reports from the refinery under its new management were initially positive: "Life at the refinery has gradually returned to normal, and the workers now receive their wages regularly. In addition, the company has paid out all the refinery's debts to the budget and to the pension fund" (*MMS* August 26, 1997). Nonetheless, the situation remained precarious due to interruptions in the supply of crude from Russia, declining markets in Kazakhstan generally, and frequent orders to supply local agricultural enterprises with fuel on what were always very uncertain terms. Local administrators complained that it operated at just 21.4 percent of capacity in 1997 and was idle for a third of the year due to shortages of crude (*IPR* May 15–21, 1998). The firm countered that it had operated at a level equivalent to 94 percent of the prior annual throughput since the time it had taken over (*IPR* July 24–30, 1998). The local administration then charged CCL had not met its contractual obligations and still owed the budget some KZT 2 billion ($25.4 million). CCL countered that it had more than met the

terms of its agreement, having invested some $50 million in working capital at the refinery, paid wage arrears of $2.3 million, $7.1 million in debts to the budget, and $6.5 million owed to creditors.

In June 1998, at the same time that then Prime Minister Balgimbayev announced the major review of all foreign investors' contracts, the government also announced its intention to annul the CCL contract and transfer its share-holding to Kazakhoil. Although no one disputed the fact that CCL Oil had had problems at Pavlodar, there were also persistent rumors that Timor Kulibayev was behind the government's attempt to reclaim the refinery in order that he could take control (Institute of Current Political Studies 1999). CCL sued in Kazakhstan's courts to regain control of the state interest for the duration of their contract. In the course of the hearings, it emerged that the contract was also unusual in that two separate contracts had in fact been signed, both dated March 1997, both with the same contract number, and not surprisingly one with terms which were substantially better than the other (*Focus Central Asia* 17 1998). In the end, the court held that the government's transfer of the shares to Kazakhoil was illegal and returned the shares to CCL. Unfortunately, the decision did not end the battling between the enterprise and the government. Nor did the refinery's operating environment improve in 1998 or 1999. In the first three months of 1999, it processed just slightly more than half as much crude oil as it had in 1998 (*ICACBR* July 12–18, 1999). It was shut down for six weeks in June 1999 for lack of crude and opened only after concluding a contract to purchase 50,000 tons of Kumkol crude. Nevertheless, in February 1999 CCL's management received an award from the regional government for "active participation" in reforms (Info-Prod 1999).

Meanwhile Mangistaumunaigaz, who had supplied oil to the Pavlodar refinery in exchange for products under a longstanding arrangement dating to Soviet times, had not been paid in 1996 and had taken its claim against the refinery to the Kazakh courts when protracted negotiations failed (*ICACBR* October 25–31, 1999). In May 1999 Kazakhstan's Supreme Court awarded MMG 30 percent of the refinery as payment of the debt, but the execution of the order was delayed when CCL indicated it would make payments on the debt. Then CCL indicated it would appeal against the decision on the grounds that the debt was incurred before CCL was managing the enterprise. Negotiations continued into 2000 and the refinery shut down in June reportedly because of increasing tensions with MMG. Then, in July, the government revoked CCL's concession to manage the refinery and took back control of the shares (*IPR* July 21–27 and July 28–August 3, 2000). Well familiar with court processes in Kazakhstan by now, CCL appealed against the decision to the Supreme Court but this time their appeal was denied. Finally, in November 2000, a 51 percent share of the refinery was given to MMG in payment of the longstanding debt and 49 percent given to Kaztransneftegaz, the national oil and gas transport

company, to manage (*IPR* November 17–23, 2000). That interest was then transferred to Kazmunaigaz in 2002. Operations have recovered somewhat, but remain significantly below earlier levels as well as below capacity.

Shymkent refinery

The refinery in Shymkent was actually the newest and largest of the refineries, having opened in 1987 with a capacity of 7.5 million tons per year (IEA 1998). New process units were under construction and planned to be commissioned in 1994, but there was no indication they were actually finished (EU-TACIS 1995). Diesel oil and fuel oil accounted for nearly three-quarters of its production, although it also produced some A 76 gasoline, LPG, and jet fuel.[27] Like the other refineries, Shymkent had accumulated substantial debts by 1996, and in August a Kazakh-Swiss joint venture Kazvit agreed to pay $60 million for 85 percent of the shares of the refinery on an installment arrangement over three years (*MMS* July 8, 1996). The Swiss partner was the trading company Vitol (also Vitol Munai) while the Kazakh partner was Kazkommertsbank. Kazvit committed to making an investment of $100–200 million.

Once the sale was concluded, however, the new owners did little to take control at the refinery, just as had happened at MMG.

> it is impossible to get any information about this enterprise. The biggest secret relates to the uncertainty about management. Though the national press announced that this enterprise was transferred to foreign management, nobody has ever seen the new managers at the plant and nobody has made any investments into the enterprise. Now the refinery works at half capacity, producing only 11,000 tons of oil per day.
>
> (*MMS* April 4, 1997)

Subsequent reports indicated that tax authorities began an audit in early 1997, and in February they reported Kazvit owed taxes of $4 million, levied a fine of an additional $4 million, and froze the company's accounts (*Focus Central Asia* 6 1998). Kazvit paid a fine totaling $4.1 million and thought the matter settled. Then in August 1997, the government charged Kazvit with tax evasion associated with a transfer-pricing scheme and attempted to arrest both the firm's president and the chief financial officer. The latter fled the country, while the former was arrested.[28] A trial in the spring of 1998 found the firm's president guilty of tax evasion and banned him from doing business in Kazakhstan for five years.[29]

Kazvit shares in the refinery (then re-named Shymkentnefteorgsintez (ShNOS)) made their way to the holdings of Kazkommertsbank (15 percent), its subsidiary Kazkommerts Securities (11 percent), and its affiliate Central

Asia Industrial Holdings (*Almaty Herald* July 16–22, 1998). The refinery remained operational but in substantial need of investment. The new management announced major investment plans but comparatively little was actually done. For example, a deparafination plant was installed in 1998 at a cost of $1.9 million allowing for the production of winter diesel from Kumkol oil with its high paraffin content (*ICACBR* February 22, 1999). A chemical water treatment plant and flow meters were also added. In total, about $14 million of investments were made in 1998, but these were $36 million less than planned. As noted above, when Hurricane Hydrocarbons acquired the refinery, only $34.4 million of total promised investments of $150 million had been made by 2001. Output in 1998 was 3.8 million tons, about 50 percent of capacity, from crude supplied 75 percent from HKM, 15 percent via rail from Aktobemunaigaz, and 10 percent (as gas condensate) from Uzbekistan (*IPR* November 13–19, 1998 and January 8–14, 1999).

Beginning in late 1998, KKB/CAIH began their aggressive campaign to create a merger with HKM. As shown in Figure 9.2, throughput at the refinery declined even further, from 3.6 million tons in 1998 to 3.1 million tons in 2000. KKB/CAIH were eventually successful in securing an interest in HHL and the Kumkol fields and the refinery is now part of HHL, as described earlier. Under HHL management, output at the refinery had begun to recover, to 3.4 million tons in 2001 and 3.5 million in 2002.

Conclusion

There can be little argument about the importance of the development of the oil sector to the growth of Kazakhstan's economy. It attracted by far the most foreign investment and in 2002 oil revenues comprised nearly 4 percent of GDP. The list of foreign firms investing in the oil (and gas) sector in Kazakhstan is long and includes most of the major international companies. Much of the investment by these firms, however, is in new development. Of the six principal enterprises operating in the early 1990s, shares of four of them have been sold and two remain in government control through the new state enterprise Kazmunaigaz. The new owners represent a rather more mixed group of international companies than was true in the minerals sectors. Investors include some major international companies like ChevronTexaco, LukArco, and ExxonMobil in Tengizchevroil and the China National Petroleum Company in Aktobemunaigaz. The Canadian company Hurricane Hydrocarbons Ltd, which acquired Yuzhneftegaz, was a company rather more similar to those initially involved in the gold sector however. There were also previously unknown firms, Central Asia Petroleum Ltd and Ansdell Development, that were both registered outside of Kazakhstan and somehow acquired Mangistaumunaigaz. Uzen and Kazakhoil-Emba remained owned by the government (held first by Kazakhoil then Kazmunaigaz). Kazakhstan's three refineries

were also sold to foreign investors, but none remained with the initial owners. Pavlodar and Shymkent are now owned by two of the oil companies, Mangistaumunaigaz and Hurricane Hydrocarbons Ltd respectively. The government re-acquired the refinery in Atyrau so that it is now controlled by Kazmunaigaz.

In terms of the revenues from the sales, substantial portions of four of the six enterprises were sold for an apparent $2.663 billion (plus investment pledges and the like). This seems a remarkably small amount, especially since $1.55 billion was for the two later sales of fractions of TCO – $1.1 billion from ExxonMobil for a 25 percent interest in 1996 and then $450 million from ChevronTexaco for the additional 5 percent interest in 2001. By contrast, Chevron paid just $420 million for its initial 50 percent interest in TCO in 1993. The 60 percent share of MMG was reportedly sold for just $248 million (and there is little in the subsequent performance of Central Asian Petroleum Ltd that suggests even that amount was ever paid). Johnson (1999) estimated that the $120 million Hurricane Hydrocarbons paid for Yuzhneftegaz amounted to just $0.35 per barrel of proved reserves. Perhaps the purchase amounts would have been satisfactory if investment pledges had been met and production revived, but with the exception of TCO and HHL, this has clearly not been the case. The sale of Uzen collapsed early on when China would not commit to build a pipeline to ship Kazakh oil eastward to China. Mangistaumunaigaz received virtually none of the promised $2 billion within the first five years. CNPC has only just begun investing in Aktobemunaigaz in amounts that might meet its pledges. Similarly, the oil refineries have all been sold more than once and yet none have received the pledged investments. Not surprisingly, refinery output has not recovered.

Another dimension of the enterprise sales in this sector was the extent to which insiders have acquired assets. The Kazkommertsbank/CAIH group obtained the Shymkent refinery and then used the refinery to obtain a share of operation of the Kumkol fields – maneuverings during which little work went on at the refinery. Meanwhile, the Indonesian group that obtained Mangistaumunaigaz was in fact most likely also linked to CAIH, giving them de facto control of what was the country's largest oil enterprise. The residual interest in MMG was also sold sometime recently to yet another offshore registered firm. Meanwhile, MMG was given control of one of the refineries. Virtually none of the pledged investments in these enterprises have been made. The KKB/CAIH group also acquired several smaller exploration and development interests. In 2000, they acquired 70 percent of the Canadian company Nelson Gold which, at the time of the acquisition, had been awarded development rights for the Alibekmola and Kozhasai oil fields in the Aktobe region in a 50–50 joint venture with Kazakhoil.[30] Renamed Nelson Resources, the firm also acquired an option to purchase a 31 percent stake in the Tenge Joint Enterprise, operator of

the Tenge oil field in the Mangistau region. In 2002, CAIH also acquired a 64.5 percent share of the US firm Chaparral Resources which owned 50 percent of the joint venture to the develop Karakuduk, another field in the Mangistau region. Whether they will commit actual resources to invest in any of these ventures remains a question.

Undoubtedly because of its importance, the oil sector was at the root of several changes in government as well as many policy changes. Prime Minister Kazhegeldin was dismissed after charges of corruption in connection with the sale of the Shymkent refinery were widely publicized. Although never proved, the allegations ended his term as prime minister and the large-scale privatization program came to an abrupt end. Prime Minister Balgimbayev was dismissed after his proposal to sell an additional interest in Tengizchevroil encountered serious opposition, and he has been implicated in the ongoing bribery investigations conducted by Swiss and US officials. Administrative structures have changed even more than governments. First, the enterprises were administered by Kazakhstanmunaigaz, during which time only Chevron concluded negotiations to form the Tengizchevroil joint venture and began reversing production declines. Production at other associations continued to decline, Kazakhstanmunaigaz was scrapped in 1995, and the other enterprises were prepared for sale. In 1996, substantial stakes in most of the main enterprises were offered to foreign investors and another state enterprise, Kazakhoil, formed to administer the state share interests in the enterprises. A national oil transport company (Kaztransoil) was formed to administer the domestic oil pipelines; in 1999, a national gas pipeline company (Kaztransgaz) was formed after the collapse of the Belgian firm Tractebel's management of both the pipelines and the Almaty Power Company (see Chapter 11). In 2000, Kaztransoil and Kaztransgaz were merged to form Kaztransneftegaz (KTNG) to administer both the oil and gas pipelines. Meanwhile, Kazakhoil was declining in importance, to the extent that when the management contract with CCL Oil to operate the refinery in Pavlodar was canceled and MMG was given a 51 percent stake as payment for prior debts, the residual 49 percent share interest was placed with Kaztransneftegaz, not Kazakhoil, for management. KTNG also became the government's representative in negotiations with Russia about export quotas and the like. Finally, in early 2002, KTNG and Kazakhoil were merged to form Kazmunaigaz, once again a single national enterprise to administer the companies and transport networks in the oil and natural gas sectors.

The changing administrative structures have been accompanied not only by changing administrators (and exchange of administrators between government positions and the national enterprises) but a steadily increasing influence of Timur Kulibayev as owner of some of the enterprises and in overseeing the operations of all of them. Kulibayev was initially appointed a vice president at Kazakhoil under Balgimbayev. Then, he

became president of Kaztransoil, and at his instigation, Kaztransoil and Kaztransgaz were merged to form KTNG where he was named president.

> "The creation of TNG will allow the more effective financial and economic development of Kazakhstan's oil and gas transport system, by consolidating all the assets into a single holding company that will allow for the more effective management of all the elements in the complex," says Timur Kulibayev, president of TNG.
> *The Banker* 2001

Less than a year later, Kulibayev was also said to be behind the merger of Kazakhoil and KTNG to form Kazmunaigaz. Even the language of justification accompanying the announcement was similar: Kazmunaigaz was being "set up to implement a unified government policy for the efficient use of Kazakh oil and gas resources" (IPR Mar 1–7, 2002). Kulibayev was appointed first vice president of Kazmunaigaz; and, although some thought the latter move was a demotion,[31] it was instead a consolidation of his control of the domestic pipelines and export negotiations with control of the enterprises as well as of exploration activity. Kazakhstan's return to a monopoly administrative structure bespeaks increasing control in the sector more generally, a move which seems unlikely to spur development.

In the end, the sale of enterprises in the oil sector would appear to have been among the least successful of the sectoral sales, a result that is at once both very surprising and not surprising at all for the simple reason that oil is the most important of Kazakhstan's resources. With so many potential revenues at stake, there was bound to be much maneuvering to control them. The main question for the future of the economy, both in this sector but in all the others as well, is whether the insiders will ever be required to operate their enterprises under anything like the same rules as the others. Will the promised investments ever be made in order that production recovers and growth sustained. In the oil sector, the answer so far has clearly been no. Only the truly foreign investors have been required to meet investment and production targets, to increase the domestic content of their operations, and to meet environmental requirements? In the oil sector, the dichotomy is especially clear – it is the only foreign-operated ventures which have been the source of the growth in the sector. Production from TCO, HKM, and AMG went from 2.7 million tons in 1992 to 22.7 million tons in 2002. In contrast, production at Uzen and Emba, the two which remained state owned, was nearly unchanged, some 6.7 million tons in 1992 and 7.6 million in 2002. Meanwhile, production at MMG went from 6.4 million tons in 1992 to just 4.6 million in 2002. And it is the stark contrast in their performance in this sector which raises the question that will have to be answered in each sector: when will the insiders be required to contribute something in return for all the revenues and all the assets they have acquired?

10

PRIVATIZATION, FOREIGN INVESTMENT, AND CONSOLIDATION IN KAZAKHSTAN'S COAL, NATURAL GAS, AND URANIUM ENTERPRISES

In addition to oil, three other mineral fuels were found in significant amounts in Kazakhstan – coal, natural gas, and uranium. Coal from Ekibastuz was used primarily for domestic power and heat generation, and nearly 80 percent of the power stations in Kazakhstan were fired by coal. Coking coal was mined in Karaganda and used mostly in the iron and steel industry. Kazakhstan also exported significant amounts of coal to Russia where a number of power plants had come to depend on Ekibastuz coal as their primary fuel source. Coking coal from Karaganda was also sent to the Magnitogorsk iron and steel works. By contrast, Kazakhstan was a net importer of natural gas throughout the 1990s despite having very significant reserves of natural gas. Like oil, almost all the natural gas was produced in the country's western regions and exported for processing and use to Russia. Supplies for use in Kazakhstan's cities were imported from Uzbekistan (for cities in the southern parts of the country) and from Russia (for the north). Kazakhstan also had significant reserves of uranium, estimated to comprise as much as one-quarter of all those in the world, and the mining, milling, and processing industry was an important link in Soviet nuclear programs.

As in the other sectors, the government created new national companies with responsibility for the enterprises in each sector – Kazakhstanugol for coal, Kazakhgasprom for gas, and the Kazakh National Company for Atomic Energy for uranium. Like the national companies in other sectors, none was able to prevent significant declines in output in the early years. From 1992 to 1994, natural gas production declined 44 percent, from slightly more than 8 billion cubic meters in 1992 to 4.5 billion in 1994. Coal production declined as well, from 127 to 112 million tons, continuing

a rather longer trend in output contraction. Uranium production also fell, from 3,000 tons in 1992 to 2,240 tons in 1994. As they did elsewhere, the government then reorganized operations a second time. In coal, enterprises were sold, mostly to other enterprises which already had new foreign management like Kazakhmys and Ispat Karmet but a few to new foreign investors. In natural gas, negotiations begun in 1992 continued with a consortium of foreign investors to develop the principal field, Karachaganak. In uranium, the new national company restructured the sector by assuming greater control.

Coal

Kazakhstan's coal fields were the third most important source of coal in the former Soviet Union, accounting for just less than 20 percent of total production in 1990 (Sagers 1993). The two principal coal production areas in Kazakhstan are the Ekibastuz and Karaganda coal basins, and mines in both basins have been in operation since the nineteenth century. Coal from the Karaganda basin was used in the Spassky company's copper smelter (see Chapter 2). Leslie Urquhart acquired an Ekibastuz mine and planned to build a smelter nearby. Modern development of the Ekibastuz mines began in the early 1950s when the southern Siberian railroad was completed between Pavlodar and Astana (formerly Tselinograd and later Akmola). By 1965 total output was some 14.3 million tons, more than two-thirds of which was shipped outside of Kazakhstan to the large power stations in the southern Urals (see Chapter 4). In the late 1960s, construction of what was to have been several large power plants in Kazakhstan began, first at Aksu to supply the Aksu Ferroalloy Plant and then at mine sites in the Ekibastuz basin itself. Coal supplies increased in 1986 with the opening of the Maikuben basin, near Ekibastuz. In 1991, coal production from Ekibastuz accounted for 63 percent of the total production in Kazakhstan (Sagers 1992a). The Ekibastuz mines were open pit mines, and they were the lowest cost mines in all of the former Soviet Union in 1985, producing sub-bituminous coal at less than 20 percent of industry average costs (Dienes *et al.* 1994: 89).

Development of the mines in the Karaganda basin began in the 1930s when a rail link was completed from Karaganda to Astana and coal was shipped to the developing copper works at Zhezkazgan. By 1940, production reached 6 million tons, about half of which was shipped to the Urals for use in the developing steel center at Magnitogorsk. Deposits in both the basin and in outlying areas continued to be developed throughout the 1950s and by 1965 production totaled 30 million tons, about one-third of which was coking coal. As with Ekibastuz coal, the soft coal produced in the Karaganda area was used for power generation and Karaganda's first plant was built in the early 1940s. Production costs were generally

higher at the Karaganda mines than at Ekibastuz, but still were only 80 percent of industry average costs within the former Soviet Union (ibid.). Overall, the industry would seem to have had some advantage over other coal producers in the Soviet Union because of its substantially below average costs.

In early 1992, the government of Kazakhstan formed a state coal corporation, Kazakhstanugol, comprised of the assets of the Ekibastuz and Karaganda production associations, in order to administer the coal industry (Sagers 1992a and 1993). As was true elsewhere in the former Soviet Union, Kazakhstan's coal miners were among the first to express apprehension about the future of their industry and their jobs. Some 20,000 underground miners at Karaganda – by far the stronger of the two unions – went on strike for 32 days in May and June 1992. Among their demands were wage increases (including ownership of 15 percent of the mines' output), improved social security and pension benefits, and guaranteed job security. They ended the strike without achieving their demands. Miners in both Karaganda and Ekibastuz went on strike again in January 1995 protesting economic reforms and demanding payment of wages overdue since the previous fall (Kagarlitsky 1995). In July some 1,300 miners protested announcements that the government planned to close a number of inefficient mines (Luong 1999). Six months later, in January 1996, over 100,000 coal miners protested and again demanded payment for back wages, demands which the government again ignored.

The output of coal was comparatively little affected in the beginning. Production in 1991 had been 131 million tons; in 1992 it was just 4 million less at 127 million tons. However, the decline was larger in 1993 and production was down a further 15 million tons, establishing a trend which persisted through 1999 (see Figure 10.1). Likewise, the annual consumption of coal by power plants and others in Kazakhstan, also shown in Figure 10.1, declined steadily over the period, although somewhat less than the decline in production. Their difference is the amount of coal exported to Russian heat and power plants as well as to its iron and steel industry, and it declined markedly as well, especially in the early years.

With the loss of both export and domestic markets, conditions in the industry deteriorated and arrears in both wages and revenues mounted. Output was down to just 109 million tons in 1995, and following a large demonstration in January 1996, Kazhegeldin's government began serious restructuring of the sector. First, the Karaganda production association was dissolved and the enterprises corporatized. One mine was leased virtually immediately, the rest were sold in July. The production association in Ekibastuz was dissolved (in spite of miners' protests) in late summer 1996 and five separate joint stock companies created in which the government retained 90 percent of the shares and the employees 10 percent (non-voting) as a prelude to their sale.

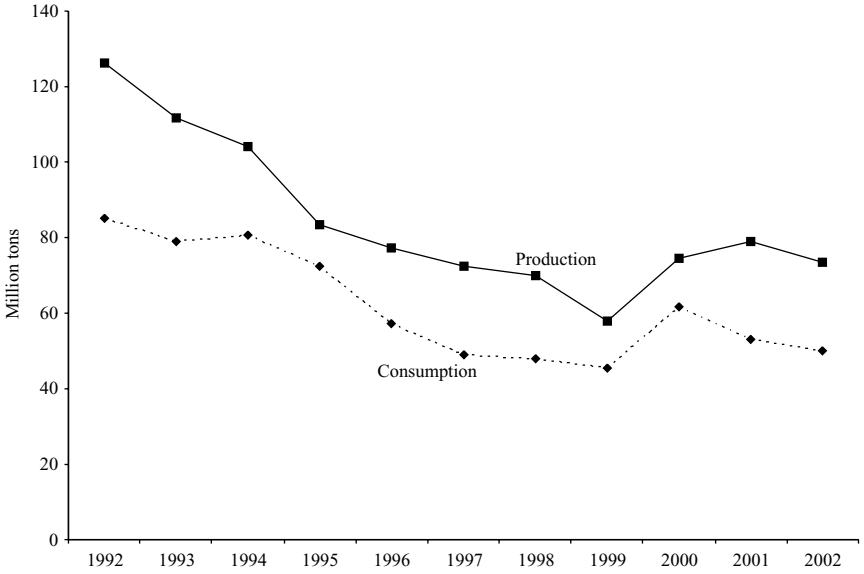


Figure 10.1 Production and consumption of coal in Kazakhstan, 1992–2002
Source: Drawn from US-DOE-FE (2000) and Interfax

The Karaganda mines

Sale of the mines at Karaganda was less orderly and more controversial than at Ekibastuz, at least initially. In January 1996, immediately following the dissolution of the Karaganda production association, the State Property Committee signed a ten-year agreement with the US-registered firm, Global Mineral Resources (GMR), to manage the Shubarkol mine.[1] Payments for the lease were expected to total some $38 million over the ten years, and GMR was given management control of the entire 90 percent state share package. Other terms in the lease included targets for annual investment, production growth, and wage increases. At the time, the lease of the Shubarkol mine was especially controversial for reasons that many of the sales were to become controversial. There was no public tender. Moreover, GMR was itself a virtually unknown company, having been registered in New York only in August 1995. The contract gave GMR an exclusive option on privatization of the mine over the life of the lease without the opportunity for public bidding; thus, when 13.2 percent of the common shares were offered, they were acquired by GMR. Finally, the Shubarkol mine was thought to be one of the most profitable in Kazakhstan, and there was no agreement on the need to turn it over to foreign management.

In early 1998, the labor unions complained publicly about GMR's failure to invest in the mine. Investments had been zero in 1997 and the company announced that investments in 1998 would be limited to the amount of enterprise's profits, expected to be $3 million. In February, the government annulled the lease. GMR indicated it would sue to recover its investment, arguing that the reasons it was unable to meet the terms of the contract were beyond its control. In particular, among its customers were several heating plants in eastern Kazakhstan which withdrew from the coal market entirely during the period they were being reorganized and sold in 1997. The record does not indicate whether GMR in fact sued, or if it did what the outcome of the suit was. In February 1999, the Shubarkol mine was included among the blue-chip stocks the government was preparing for sale through KASE and foreign broker/dealers, but this sale never occurred. Finally, in September 2000, 78.93 percent of the shares of Shubarkol were acquired by the Eurasia Energy Group, the Eurasia Bank Group subsidiary which was formed to operate the energy enterprises it acquired with Kazchrome (see Chapter 7). Operations have improved since 1999, with output in 2001 projected to be 3 million tons.

As noted in Chapter 7, a total of 15 of the Karaganda coal mines were sold to Ispat-Karmet in July 1996. They paid $82 million and committed to invest $100 million (Kalyuzhnova 1998: 79–83). Although the sale was welcomed by the miners because of Ispat's proven commitment to reviving Karmet, relations deteriorated.[2] Upon the sale, Ispat began paying wages and benefits, which was a welcomed change. At the same time, while Karaganda's mines generally had been cost competitive with others in the former Soviet Union, increases in rail rates had reduced their competitiveness and much of their market had been lost. Ispat began reorganizing to rationalize production in the face of much lower demand and to reduce production costs. Initially, 2,000 miners were dismissed, then two mines were merged, and another 1,000 miners were released. These changes met little resistance. However, in October 1997 Ispat announced it would close completely five mines, leaving another 8,000 miners unemployed, and the unions became alarmed. In particular, they organized a demonstration to protest against the planned closures and to argue for programs for retraining and job creation (Luong 1999).

Having received no government response by July 1998, the Karaganda union announced their intention to march to Astana. In fact, no march occurred and the miners appear to have accepted the need for significant reorganization, including closure, more readily than might have been expected. Undoubtedly, the precarious situation of the three local mines which were not sold to either Ispat or GMR was an ever-present reminder of the alternative. The three mines comprised a newly formed company, Karagandakomir and, with the help of the government and the State Property Committee, the miners continued to receive wages. In return, the

company supplied coal to Karaganda and Almaty throughout the winter. The company was also awarded a tender for coal supplies for the Ministry of Defense.

> Does this mean that the situation has started to improve?
>
> "Not really," says the Karagandakomir Trade Union Chairman V. Yevdokimov. 'Our equipment is completely out of date. We need support from the state, a loan for technical modernization of enterprises. Otherwise the army of unemployed will grow by another 4,000 miners.'
>
> (*Feller Mining News* November 7, 1997)

Karagandakomir was not able to find funding. In June 2002 the government announced plans to close five more mines in the Karaganda basin, bringing the total of mines closed to 18 out of the 26 operating there in 1992 (*IMMR* June 14, 2002). Of the initial 26 mines, Ispat acquired 15 and through closures and consolidations, these were reduced to eight and are the only operating mines in the Karaganda basin. Finally, the Borly mines, which were also part of Karaganda production association, were turned over to Samsung and Kazakhmys in June 1997 on a management contract (*ICACBR* February 7–13, 2000). Eighteen months later, Samsung acquired the Borly mines.

The Ekibastuz and Maikuben mines

Following the sale of the Karaganda mines, focus shifted to the mines in the Ekibastuz basin and the nearby Maikuben basin. The production association was dissolved (although large debts to the pension fund and the state budget were left in the association which freed the enterprises themselves of most debts (*IMMR* December 19, 1997)), and the government announced tenders for five individual mining enterprises. Again, existing foreign investors were major purchasers. Japan Chrome, the Trans World Group and Eurasian Bank Group joint venture that acquired the country's chromium enterprises (see Chapter 7), purchased the Vostochny mines and 30 percent of the Stepnoy mines. They paid $10.14 million and committed to invest another $140 million in the mines over the next five years (Kalyuzhnova 1998: 79–83). The assets of the Bogatyr mines and the remaining assets of the Stepnoy mines were purchased by the US-based firm Access Industries for $40 million plus a commitment invest some $550 million over five years as well as to pay existing debts and support the social sector (ibid.). The total value of the sale was put at $801.2 million. Although Access Industries did not then have other assets in Kazakhstan, it was heavily invested in Russia with interests in aluminum, power plants, and oil. The Severny mine was signed over to the Russian electric firm Unified

Energy Systems (UES), which earlier had also been given a substantial interest in one of the combined heat and electric plants in Ekibastuz in order to settle government debts to the firm for power supplies (*IMMR* October 31, 1997). The sale was valued at $233.5 million, most of which was to settle power debts but included an investment commitment of $90 million (Kalyuzhnova 1998: 79–83). Finally, in November 1996 the mines in the nearby Maikuben basin were placed under a one year management contract with the German firm HTD GmbH with no debts except wage arrears (*IMMR* May 15, 1998). In August 1997 a 50-50 joint partnership was created to continue operation of the mine.

In general, the new owners of the Ekibastuz mines were not able to stem the declines in production in part because of the overall decline in industry and the consequent decline in the demand for power in both Kazakhstan and Russia. In addition, all the new owners/managers encountered serious difficulties at the enterprises themselves, as had happened at the other large enterprises. They all found the companies were owed significant sums from prior coal deliveries when they first took over, and large-scale pilfering was endemic. The problems at the Bogatyr mine were undoubtedly typical.

> Last November, the American company *Access Industries Inc.* purchased the largest coal mine in the world, *Bogatyr*, in the Pavlodar oblast. Within a year, the company invested US $34.6m in Bogatyr. . . . One of the company's earliest hurdles was money which has still not been paid by two Pavlodar power plants for *Bogatyr*'s coal. Also, two contracts on coal deliveries with two companies appeared false, and only with the help of a court did the company manage to reclaim just US $200m. In addition, promising contracts on coal deliveries were signed with the Moldavian company, however when the coal was delivered, it was discovered that a considerable part of the coal had disappeared on route.
>
> (*MMS* February 6, 1998)

In 1997, Access invested some $17.5 million in Bogatyr, which it renamed Bogatyr Access Komir (BAK), and presented plans to invest a total of $114 million by 2000 (*IPR* May 8, 1998; *MMS* May, 1998). Output in 1998 was expected to increase by 3.2 million tons, a little more than 10 percent. Then, however, the firm found itself in difficulty with the local administration in Pavlodar. First, local authorities announced that Access would have to pay additional land taxes on the coal mines (*IMMR* June 26 and July 31, 1998; *Almaty Herald* August 6–12, 1998). Because of preferences granted in the contract, BAK had paid just KZT 4.5 million in such taxes, whereas local authorities insisted that the amount owed was KZT 391.6 million, nearly 100 times as much. Next, authorities accused the company of concealing income through below-market sales to a subsidiary, levying a

KZT 732.4 million (about $9.5 million) bill against them. Access took the local administration to court and declared a work stoppage for a week; local authorities retaliated by attempting to declare the firm bankrupt and to auction its assets (*Almaty Herald* September 17–23, 1998). The dispute was resolved temporarily in January 1999 when Access agreed to pay the land tax (*IMMR* January 29, 1999). In 2000, the payment rate for future years was lowered to its earlier level, however, after BAK successfully appealed their case directly to then Prime Minister Tokayev (*ICACBR* April 17–23, 2000). BAK did agree not to demand reimbursement for taxes already paid.

This was not the only dispute which Access was involved in at Bogatyr (Kozlov 1998). In the sale of the Severny mine to UES, the government had included one of the zones of the Bogatyr mine in order to improve the prospective life and value of Severny, one of the oldest mines at Ekibastuz and one whose reserves were nearly exhausted. But, the decision to include a Bogatyr zone with Severny "was made without taking into account the fact that railway, electric, and communications facilities for Bogatyr were located in this segment" (ibid.: 51). In the ensuing conflict between Access and UES over ownership of the disputed zone, the railway was partially dismantled and power lines rolled up, completely disrupting Access' ability to move coal. In February 1999 Access and UES finally reached an agreement over most but not all of the disputed mines (*IMMR* February 12, 1999).

Meanwhile, the two antagonists began discussions about a possible joint venture to include not just the coal mines but also some power generation facilities in Russia.[3] For its part, UES had done little to develop the Severny mines and by November 1999 had accumulated substantial wage obligations as well as other debts. As was so often the case, early reports had been encouraging. Output was projected to increase some 40 percent from 1997 levels of 8 million tons, and the new owners were said to have developed a plan to refurbish the mine that would increase production to as much as 20 million tons annually. Just three months later, the miners were demanding local authorities cancel the contract because they had not been paid in over five months. In September, railroad workers blocked shipments of coal from Severny to Russia and demanded payment for shipping at the ruble–dollar exchange rate on the date of shipment. In November, the miners threatened another strike because of unpaid salaries. Ultimately, additional negotiations between UES and the Kazakh government resulted in a new agreement, including a schedule of salary repayments. A year later there was still little improvement in the situation, and UES approached Access to operate the Severny mine and to settle wage arrears under a one year lease arrangement. After a generally successful initial year – output at both Bogatyr and Severny increased substantially and wages were paid – the lease was extended until 2003. Whether the arrangement will prove to be the initial phase of a broader alliance remains to be seen.

In the meantime, Access Industries acquired additional enterprises in Kazakhstan, including one of the Ekibastuz combined heat and power plants. In 1999, Access also acquired the heat and power plant in Petropavlovsk as well as the North Kazakhstan regional electricity distribution company, the heat distribution facilities in Petropavlovsk, and a sales group (*ICACBR* July 29–August 4, 2002). Investments of $13.2 million were planned to reconstruct and re-equip the 40-year old plant over a six to seven year period. Coal transport continued to be a problem for Access as well, with Kazakhstan's rail company periodically refusing to continue shipments until its coal cars were returned by the Russian railroad. An agreement was finally reached in August 2002 whereby up to 90 trains would connect Bogatyr with Russian power plants and BAK began a program to acquire its own rail cars (*ICACBR* August 12–18 and November 18–24, 2002). Bogatyr remained Kazakhstan's single largest coal producer in 2002, even though sales to Russian (and Kazakh) power plants were down 15 percent from 2001 to just 28.7 million tons, having been affected by the ongoing rail car dispute (*IMMR* January 17, 2003). Total production in 2001 was 35 million tons. Finally, as noted in Chapter 9, Access was given the government's share of Aktobemunaigaz to manage (in trust) with the Chinese National Petroleum Company.

In early 2003, Access Industries participated in discussions with the Siberian-Urals Aluminum Company (SUAL) and the UK-based group Fleming Family and Partners to form a new metals mining and processing partnership intended to compete in size and diversity with such international metals firms as BHP Billiton, Rio Tinto, and Anglo American (*IMMR* January 17, 2003). The SUAL group included some 22 aluminum companies in Russian which produced 4.4 million tons of bauxite, 2 million tons of alumina, 0.84 million tons of aluminum, and 120,000 tons of aluminum products. The Fleming group had interests in gold operations in Hungary, a ferronickel project in Cuba, and a tantalum project in Mozambique. For its part, Access would contribute significant coal and power resources in Kazakhstan as well as oil and other interests in Russia. What effect these arrangements might have on operations of the enterprises in Kazakhstan remains unclear, as do the full dimensions of the proposed alliance. More information will undoubtedly become available if the company's proposed listing goes forward on the London Stock Exchange (Macalister 2003).

The sale of the nearby Maikuben mines to HTD GmbH also proved to be very controversial. For their part, miners at Maikuben asked that the HTD management be dismissed and the partnership be dissolved less than a year after the initial contract with HTD was signed (but after the contract had been converted to a partnership arrangement) (*IMMR* November 7, 1997; *MMS* October 28, 1997). Reportedly, coal production at the pit declined by nearly 50 percent during the first nine months of 1997, and

by October wage arrears amounted to KZT 46.3 million ($0.6 million). By spring 1998, local authorities announced that some assets of the enterprise would be sold to pay debts, revealing as well that HTD had not yet paid for its share of the joint venture formed in 1997 (*IMMR* May 15, 1998). There was no mention of the venture's joint partner in 1997, but more recent reports of operations at Maikuben indicate that a 51 percent interest was owned by the Kazakhstan company BN Consulting (*ICACBR* September 10–16, 2001). There has been no further reference to HTD, indicating it left the venture. For its part, BN Consulting is owned by President Nazarbayev's brother Bolat Nazarbayev.[4]

Like many Kazakhstani companies that acquired substantial share interests in the country's enterprises, BN Consulting also proved not to have the resources to revive Maikuben.[5] By early 2000, Maikuben was on the verge of bankruptcy with debts of KZT 1 billion (about $7 million) to the budget and twice that to creditors. Through various court proceedings, the creditors approached AES-Ekibastuz, the subsidiary of the US-based company AES that had acquired the largest of the Ekibastuz power plants (see Chapter 11), to undertake rehabilitation of Maikuben. AES evidently proposed that it would revive production at the mine and pay all debts by April 2002 in return for the mine, an arrangement that was approved by the district court on August 29, 2001. However, not all creditors participated in the negotiations and a month later they solicited another prospective investor to pay off some Maikuben debts with the intention of taking control of the mine. The second firm evidently had neither court authorization nor the resources to undertake paying off all the debts. In mid-November the local courts re-confirmed that AES-Ekibastuz was the company in charge of rehabilitating the mine and by March 2002 AES had paid off all the debts and had acquired control of the mine.

Summary

Overall, the sale of Kazakhstan's coal industry to mostly foreign investors did little to halt the decline in production, as evident in Figure 10.1. Developing new markets was not an option, and they could do little to halt the overall decline in demand for coal to produce electricity in either Kazakhstan or Russia. Overall, electricity production decreased by 45.3 percent from 1990 to 1999 (UN-ECE 2001). Coal production declined more, some 55.7 percent, reflecting the added effect of the decline in exports. Production did increase in 2000 and 2001 with the beginning of the overall economic recovery in Kazakhstan (see Figure 10.1). Exports to Russia also increased.

The costs of the contraction in the coal industry have been large both in terms of mine closures and the number of unemployed coal miners who have lost their jobs, especially in Karaganda. At Ispat's mines alone, the

number of coal mine employees decreased by one third, from 39,000 to just 26,000. Overall, 17 of the 25 Karaganda underground mines were closed, and only eight mines at Ispat Karmet remain open. Whereas production from Karaganda's underground mines accounted for 27 percent of production in 1990, by 2000 they accounted for only11 percent of the total. Production from all the Karaganda basin mines accounted for only slightly more, at 12.6 percent of the total (ibid.; KazNIIMOSK 2002).

In the summer 2002, the government supported the development of a new program, Coal of Ekibastuz, to assist the industry to reclaim more of their former markets (*ICACBR* Mar 3–10, 2003 and *IMMR* June 28, 2002). The plan included setting numerous operating charges at their current levels until 2010, as well as negotiating lower freight rates with the national rail company. Among the charges that would remain at their current levels were environmental levies. The program also supported additional cost reduction and quality improvement measures at the mines. Overall, it envisioned production of as much as 86 million tons of coal by 2005 and 90 million by 2010 with exports of perhaps 27 million tons (US-DOE-EIA 2002b). Whether the initiative will go beyond discussions remains unclear, but it is a measure of the importance and influence of the two remaining operators of Ekibastuz coal mines – Eurasian Energy Corporation (EBG) and Access Industries (for itself and for UES) – that it is being discussed.

The development of Kazakhstan's coal reserves was an important link in the country's early industrial development and remains important today. At the same time, the environmental costs have been significant as well, with the accumulation of over 3.5 billion cubic meters of coal tailings occupying an area of about 10,000 hectares (UN-ECE 2000). Emissions of dust and noxious gases from the tailings also contribute significantly to low air quality in the Ekibastuz and Karaganda regions. Environmental degradation continues. Whereas the use of coal to generate most of the country's power and heating needs requirements accounted for 50 percent of the air pollution from stationary sources in 1990, by 1995 the energy sector was still responsible for 40 percent of stationary source pollution.[6]

Natural gas

In terms of proven reserves, Kazakhstan's reserves of natural gas rank it among the world's top 20 countries (US-DOE-EIA 2002a). About 40 percent of the reserves are at Karachaganak, located east of Uralsk near Kazakhstan's northern border with Russia. Orenburg, which has a huge refinery where virtually all of Karachaganak's production has been processed and marketed, is just across the border from Karachaganak and is linked to it by pipelines. There are also significant reserves of natural gas at the largely undeveloped Amangeldy deposits in the southern region near Zhambyl. The remainder of the country's natural gas reserves are

associated with the main oil deposits – Tengiz, Kumkol, Kashagan, and Uzen. To date, production has been significantly underdeveloped and the country was a net importer of natural gas. Moreover, since there were no gas pipelines linking western producing areas with southern and northern consuming areas, natural gas supplied to the southern region was imported mainly from Uzbekistan. Supplies for the northern region were imported from Russia, and virtually all of the country's production was (and continues to be) either flared at the field or exported. As shown in Figure 10.2, total production amounted to about 8 billion cubic meters in 1992; Karachaganak accounted for more than 50 percent (Sagers 1993).

In order to control the domestic gas industry in 1992, the government established the state enterprise Kazakhmunaigas which included the ten enterprises that were responsible for gas exploration, production, and transport.[7] It also adopted the "Gaz" program with the specific goal of reducing the country's dependence on imported gas. The program envisioned a doubling of production to 16 billion cubic meters by 1995 and then to 22 billion by 2000. Among the investments authorized at this time was a small refinery at Aksai, which is near Karachaganak, to process gas condensate from Karachaganak to produce fuel oil, petrol, and gas oil (*IPR* February 2–8, 2001). It was funded by $35 million in foreign loans that were backed by government guarantees. The plant did not begin

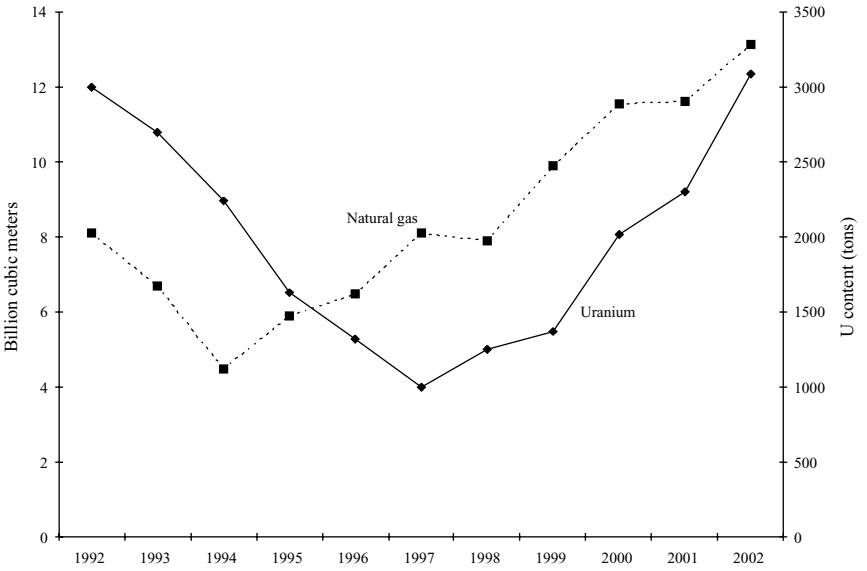


Figure 10.2 Production of natural gas and uranium in Kazakhstan, 1992–2002

Source: Drawn from DeBroeck and Kostial (1998), IMF (2002), Levine (1994b, 1997b, and 1999b), and Interfax

operations until 1998, but as discussed below has had ongoing difficulty obtaining supplies from Karachaganak. Whatever other specific investments were undertaken in the early years, natural gas production declined significantly over the next two years to just 4.5 billion cubic meters in 1994. Total production has recovered steadily since then, in large part because of the steady growth in oil production. One consequence of the growth in production of natural gas at Kazakhstan's oil fields has been the government's increasing pressure on the oil companies to use the gas productively (see Chapter 9). Like oil, the development of Kazakhstan's natural gas reserves has been constrained by transport difficulties and by Kazakhstani/Russian political relations. In the end, development of the sector will depend almost entirely on foreign investors, both those investing in developing natural gas reserves and those developing the oil reserves which contain significant amounts of associated gas.

The Karachaganak gas and gas condensate field was discovered in 1979 and began production in 1984. Located 150 km east of Uralsk near the town of Aksai, the Karachaganak fields lies just to the south of Orenburg where there are major processing and refining operations to which it is linked by pipeline (see the map in Figure 9.1). Output from Karachaganak was sent to Orenburg for processing, which meant development of the field was significantly dependent on relations with Russia. Like Tengiz, Karachaganak was a difficult deposit to develop. The gas was fairly deep and included significant volumes of condensate, hydrogen sulfide, and liquid paraffin, and thus required treatment even before transporting to the refineries. Also similar to the development of Tengiz, a major fire occurred at Karachaganak which required several weeks to extinguish.

The government sought foreign investment very early on to assist in developing Karachaganak, and it announced a tender for its continued exploration and development in 1992. A consortium of British Gas (BG) and Italy's AGIP (Azienda Generale Italiana Petroli, a subsidiary of the Italian state company Eni) won exclusive rights to negotiate a contract. Investments of as much as $5 billion were expected. However, Russia's Gazprom evidently had been excluded from the tender and became increasingly difficult in negotiations over transport of Karachaganak's gas. While Russia permitted 3.9 billion cubic meters of gas to be moved through its system in 1992, the amount was reduced to 3.7 billion in 1993. Negotiations continued throughout 1993–5 between Gazprom, the BG/AGIP consortium, and the government on participation in the project, and little progress was made until the decision was taken in 1995 to allow Gazprom a share in the venture (*Focus Central Asia* 7 1997). At the same time, Kazakhstan demanded that the contract include the development of processing facilities at Karachaganak, a demand that eventually caused Gazprom to withdraw completely. In the meantime, transport and processing remained difficult, and in 1996 only 2 billion cubic meters of gas and 1.9 million tons of oil

condensate were produced at Karachaganak (*IPR* August 15, 1997). Thus, although a production sharing principles agreement was signed in 1995, actual investment in the field remained minimal.

In 1997, negotiations over the final production sharing arrangement broke down entirely.[8] In August, BG and AGIP sold a 20 percent share to Texaco (now ChevronTexaco), reducing their ownership to 32.5 percent each. Gazprom withdrew entirely, ceding its 15 percent interest to Lukoil while declaring it would not provide Kazakhstani gas companies access to world markets through its pipelines. Negotiations resumed, however, and in November 1997 a final production sharing agreement was negotiated between the government and the consortium comprising Lukoil (15 percent), BG (32.5 percent), AGIP (32.5 percent), and ChevronTexaco (20 percent). Under terms of the agreement, the Karachaganak Integrated Organization (KIO), as the consortium is known, was to make monthly payments to Kazakhstan for its share of net income as well as a bonus of $333 million. An additional $150 million would be payable after investments to raise production of liquid hydrocarbons to 12 million tons were approved. Investments totaling $6.155 billion over the 40-year period of the contract were anticipated and were to include building oil refining and gas processing facilities, 50 new wells by 2003, and construction of a 460 km pipeline to link the field to Atyrau and the CPC pipeline. Lukoil committed to providing access for Karachaganak gas to the existing Russian transport networks. Meanwhile, investments from 1998–2003 of over $3.5 billion were concentrated on the development of Karachaganak's oil and oil condensate capacity and included a processing complex and a pipeline to connect Karachaganak to the CPC pipeline at Atyrau. These are to be followed by $2 billion in investment to increase gas production and will include a new gas refining complex.

No sooner did development of Karachaganak appear to be on track than did the 1998 financial crisis in Russia and a weak oil market virtually halt development.[9] In October 1998, production at Karachaganak was cut by about two-thirds because customers in Russia could not pay for supplies. Nevertheless, planning continued to move ahead for the pipeline and, as the hydrocarbon market recovered in late 1999, for the processing plant at Karachaganak. Contracts were let in October 2000, both for the processing plant and pipeline, as well as for acquisition of new drilling units. A new power plant to supply all the power needs of the project came online in 2001. The plant will eventually use gas produced and processed at Karachaganak, but for the moment it is fueled with natural gas returned from Orenburg after processing. In total, the consortium's plans called for investments of $3.5 billion by the end of 2003 and development seems to be gathering momentum at last. The pipeline was completed three months early and the first oil was expected to be shipped in July 2003, after completing the necessary tests.

Like all the foreign investors, members of the consortium have also had their share of difficulties with both local and national authorities.[10] In 1998, for example, Kazakhstan's General Prosecutor charged that AGIP and British Gas had underpaid taxes by about KZT 5 billion (about $43 million) after an audit revealed income of $178 million had been (allegedly) concealed. Ultimately the matter was resolved, but only after intervention of then Prime Minister Balgimbayev. In 2001, KIO became embroiled in a tax dispute between Kazakhstan and Russia in which both countries were demanding VAT payments. KIO eventually halted production until the two governments agreed a resolution. It also has been involved in an ongoing dispute with the small refinery at Aksai over supplies of condensate. Evidently, the government had agreed to supply condensate to the refinery, but often disputed the value placed on the supplies as compared to that established by condensate sales elsewhere. From time to time, KIO refused to supply the refinery until accounts had been cleared.

More recently, KIO has also been pressured to increase the number of Kazakhstan-based companies participating in the development of the field, as have all foreign investors in Kazakhstan. Of $2.3 billion in contracts signed in 2000, for example, the government alleged that only $280 million were with local companies. For its part, KIO reported that some 30 percent of the subcontract work was performed by local companies. In a visit to Karachaganak in spring 2001, then Prime Minister Tokayev was reported to have been very outspoken:

> Tokayev called for increased social payments in the region . . . adding that the $10 million KIO has agreed to pay in social payments every year is "very little." The prime minister also expressed dissatisfaction with the low level of participation by Kazakh companies in subcontract work at Karachaganak. The share of these companies in this work should be increased from 21% at present to 40%, he said.
>
> In addition, Tokayev noted that a joint commission for the management of the Karachaganak project, which includes four Kazakh government representatives and four representatives from KIO, should be involved not only in organizational issues, but also in the social welfare of the Kazakh workers.
>
> (*ICACBR* April 2–8, 2001)

Numerous environmental concerns about the development of Karachaganak also have been raised.[11] As with the development of the Tengiz oil field, there have been claims of periodic releases of airborne contaminants. Similarly, industrial wastes at Karachaganak were said to account for some 80 percent of regional totals. Soil tests in nearby fields indicated contamination with hydrogen sulfide, and one local official

reported that grain yields had been reduced by as much as 65 percent. A study by a local university found that much of the soil in the area was polluted by heavy metals and elevated concentrations of trapped gas and 112 hectares were identified as "dead," devoid of normal micronutrients. In addition, there are concerns about radiation contamination from the six underground nuclear explosions at Karachaganak that were used to create large underground caverns for condensate storage in 1983–4. Although measurements for radioactivity have not revealed unusual readings, two of the caverns are defective and concerns persist about potential radiation contamination of underground water, soils, and the Ural River. At Karachaganak, like Tengiz, there has been discussion of the need to create a safety zone around the field and to move at least two settlements; but, unlike Tengiz, to date there has been no action on either issue. KIO has been fined at least once for specific environmental damages, and the regional prosecutor was considering a second lawsuit in February 2002 because KIO had failed to meet the environmental standards established in the basic production sharing agreement. As development at Karachaganak accelerates, these issues will surely become more contentious, and more permanent solutions will need to be found.

Aside from Karachaganak, natural gas is produced at the country's major oil fields, Tengiz, Uzen, Zhanazhol, and Kumkol. Since 1999 when the government passed a law requiring the inclusion of natural gas utilization projects in oil field development plans, each of these producers has been under pressure from the government to add significant gas utilization projects (US-DOE-EIA 2002a). Among them, projects so far proposed and/or undertaken include the electric power plant at Kumkol, the gas reinjection scheme at Tengiz, and the gas processing facility at Uzen (see Chapter 9). In 2001, the government adopted a modern version of the 1993 "Gaz" program, this time envisioning increases in production to 34 billion cubic meters by 2005, 47 billion by 2010, and 52 billion by 2015. With production at just 13 billion cubic meters in 2002, the goals of the current program seem as unrealistic as did those of the earlier program.

At the same time, the new program does serve to emphasize the importance currently placed on developing the domestic gas industry, and one project receiving much attention is the development of the Amangeldy gas field in southern Kazakhstan, a development which would both increase production and reduce dependency on imports from Uzbekistan. Originally given over to a local Kazakh company who accomplished little and lost their license, a new license to develop Amangeldy was sold (via tender) to the national gas transport company (then Kaztransgaz) in June 2000 (*IPR* June 30–July 6, 2000). Although Kaztransgaz provided some investment, development was proceeding slowly enough that outside funds were sought via the rather unusual device of making Amangeldy's development a condition for winning the tender to develop an oil deposit, the offshore

Karazhanbas field (Gribov 2002). Amangeldy was transferred to the control of Kazmunaigaz with the merger of the various state oil and gas enterprises in early 2002, but neither the conclusion of the Karazhanbas tender nor the developer for Amangeldy had been announced by the end of 2002.

Uranium

Kazakhstan was the world's seventh largest uranium exporter and has the world's third largest reserves of uranium (*Feller Mining News* May 9, 1997). There were six uranium producing and processing enterprises in Kazakhstan in 1991 – three mining enterprises, two combined mining and processing enterprises, and one processing enterprise.[12] The oldest was the Prikaspiyskiy Mining and Metallurgy Complex, which opened in 1959 and mined and processed ores from mines in the Mangistau region near the Caspian Sea. Uranium was discovered near Stepnogorsk in the northern Kazakhstan region in the 1960s, which led to the development of the Tselinnyy Mining and Chemical Complex. In the late 1970s and early 1980s, numerous uranium deposits were also discovered in the South Kazakhstan region, leading to the creation of three more mining enterprises – the Stepnoye Mining Directorate, the Tsentralnoye Mining Directorate, and the No. 6 Mining Directorate. Uranium from these operations was sent to Kyrgyzstan for initial processing. Finally, the Ulba Metallurgy Plant in Ust-Kamenogorsk in East Kazakhstan, originally established in 1949, was converted in 1974 to process uranium dioxide (yellowcake) from Tselinnyy and elsewhere into low-enriched uranium fuel pellets that were sent to other Soviet plants to make fuel rods for Soviet nuclear reactors. At one point, Ulba produced some 80 percent of the pellets used to make fuel rods for over half of the reactors in the former Soviet Union. Ulba also produced beryllium, zirconium, tantalum, and other rare earth metals.

After independence, the enterprises were managed via a newly formed national company, Kazakh National Company for Atomic Energy (KATEP).[13] Its goals included coordination of the sector, development of a preservation strategy for the industry, and the protection of Kazakhstan's interests on the world uranium market. Like so many of Kazakhstan's mineral and mineral fuel industries, the uranium industry was enmeshed in a web of mines and processing plants that were controlled from Moscow, and relations proved difficult to maintain after dissolution. Undoubtedly, the secrecy which attached to the Soviet nuclear industry made former industrial relations especially difficult to maintain. Until 1967, Ulba was known only as Mailbox 10; the entire city of Stepnogorsk, where the Tselinnyy Complex was located and which employed some 14,000 in 1991, was a secret city.[14] New markets proved hard to enter because of constraints imposed in both the US and Europe by anti-dumping regulations.

In the event, production of uranium from Kazakhstan's mines declined precipitously, from 3,000 tons in 1992 to just 1,000 tons in 1997 as shown in Figure 10.2. The output decline of 67 percent was one of the worst among Kazakhstan's resource industries – at least among those which remained in operation. A certain amount of scandal was also attached to KATEP itself and its management of the industry, especially of the Ulba Metallurgical Plant (UMP).[15] Somewhat unusually, KATEP corporatized some of the enterprises and permitted individual enterprises to seek partners and investors, more or less independently of the government's privatization programs. After corporatization, some 49 percent of Ulba evidently was made available for bidders. As early as 1993, Ulba entered a partnership with a Russian group whose leaders were "people well-known in Kazakhstan and . . . now Russian citizens" (*Focus Central Asia* 15 1997). The group undertook to try to settle some of the debts owed Ulba from its Russian partners, the net result of which was losses estimated at some $2 million and, in the process, Ulba acquired a Russian hockey club. In 1994/95, Ulba's management persuaded "representatives in the close accompaniment of President Nazarbayev" (ibid.) to permit them to negotiate a contract to sell a substantial share interest in Ulba to a Swiss-registered company, Zambezi Holdings, and another Russian financial group, Interros, to provide management and substantial funding for investment in the company. The second sale was canceled by then Prime Minister Kazhegeldin when it became clear the new group, like the earlier group, did not have the resources to make the necessary investments.

In addition to these oddly independent, but nevertheless unsuccessful attempted sales, there were a number of thefts of fissile material from Ulba. Although the thefts were prosecuted, they also did not lend confidence in the plant's own management or in that of KATEP. When the second sale collapsed, then Prime Minister Kazhegeldin ordered an audit of operations at Ulba which uncovered a number of financial irregularities in various sales agreements that had caused losses estimated at $20 million. KATEP was soon replaced with Kazatomprom, another state enterprise, and the entire sector was controlled more closely. Like KATEP but unlike most of the other follow-on state enterprises, Kazatomprom remained an active manager of the enterprises in its control. Olcott (2002: 228) suggests that one reason for the continued close control of the sector is that it was overseen by Rakhat Aliyev, President Nazarbayev's son-in-law, in his role as deputy head of national security. Whether he was also responsible for the various attempts to sell interests in Ulba is not clear.

In the meantime, operations at the Prikaspiyskiy Mining and Metallurgy Complex in Mangistau were halted in 1994. At the three mining directorates in southern Kazakhstan, KATEP redirected their output from plants in Kyrgyzstan and Tajikistan to the Tselinnyy complex. At Tselinnyy, KATEP also undertook to restructure the enterprise to develop what had been

non-uranium sidelines, including production of gold, industrial diamonds, tin, and semi-precious stones. The restructuring proved unsuccessful and in May 1996 Tselinnyy was offered for sale through a government tender. KATEP also formed two joint ventures to develop new uranium deposits. Inkai was formed in July 1995 as a joint venture with two Canadian companies, Cameco and Uranerz, to develop the Inkai uranium deposit in southern Kazakhstan. Each partner had a one-third interest; Cameco and Uranerz (which Cameco subsequently acquired) agreed to invest a total of $29.4 million. Katco was formed in August 1996 with Cogema of France to develop a deposit in the Zhambyl area. Cogema's share was 45 percent. KATEP's 45 percent interest was further shared 29 percent to KATEP, 9 percent to the exploration firm Volkovgeologiya, and 7 percent to the Kazakhstani Main Mining Division. The remaining 10 percent was listed as owned by "other financial investors."

As noted, management of the sector was changed in early 1997 when Prime Minister Kazhegeldin created the new state enterprise Kazatomprom "in order to stabilize a situation in the uranium industry in Kazakhstan to further ensure uranium production growth" (Carroll 1997). Kazatomprom, whose formation was announced in December 1996, was given the specific mandate to formulate and implement a development program for the industry, to safeguard the storage of nuclear materials, and to manage the individual enterprises. In July 1997, Kazatomprom was established as a state-owned joint stock company, and all the assets of KATEP were transferred to it. There have been discussions from time to time of selling a share interest to foreign investors, but it remains owned in total by the state.

Meanwhile, the Tselinnyy Complex had been offered in a public tender to attract a foreign manager in May 1996.[16] At the time, wages had not been paid in over six months; in total, $12 million in wages and tax payments were unpaid. Only two companies participated in the tender (it was closed in three weeks) and by June 1, the government had concluded a preliminary agreement with the Canadian firm, World Wide Minerals Ltd, to take control of the plant. Formally, World Wide (through a 95-percent-owned subsidiary KazUran) signed a contract to manage Tselinnyy, but the agreement granted them the option to buy the firm during the term of the contract like most other management contracts. World Wide could purchase a 90 percent interest in Tselinnyy for $36.4 million and the contract provided that it could offset all its investments in the operation over the first two years against the purchase price. World Wide could advance operating funds via a loan that would be secured by the assets of Tselinnyy and by a government guarantee. The loan was payable in two years or at the time of an actual purchase, whichever came first. The agreement required World Wide to make an investment of $3.0 million during the first year and to pay wage and budget arrears.

In effect, World Wide acquired the right to purchase "a very substantial uranium resource containing approximately 75 million lb. [pounds] of U3O8 . . . and operating assets having a replacement cost approximating US $400 million" (World Wide Minerals *1996 Annual Report*). They also were guaranteed the right to export uranium. The agreement was signed in October 1996.

From November 1996 to March 1997, World Wide invested some $21.9 million in wages (including paying arrears), tax payments, acquisition of raw materials, purchase of necessary equipment, and a feasibility study. They also expanded operations, acquiring the right to exploit some of the existing mines in southern Kazakhstan in partnership with Kazatomprom. Initial restructuring of Tselinnyy included reducing the workforce by 1,500 and disposal of some non-core assets. By April 1997, World Wide restarted processing operations at Tselinnyy and had produced 50 tons of uranium oxide by June. In the meantime, they had negotiated a contract to sell uranium to a US nuclear power utility. However, when they applied for the necessary export license, the government refused to issue one. Unable to market the uranium, World Wide ceased operations at Tselinnyy in late June. Negotiations failed to produce a compromise and the government unilaterally canceled the management contract in early August, alleging World Wide had failed to meet the terms of the contract.

As had several companies before it, World Wide disputed the cancellation, alleging that the government had failed to honor its obligations under the contract, and claimed reimbursement for the nearly $22 million it had invested in Tselinnyy.[17] Negotiations continued, but with no progress until April 1998 when the government issued an invitation to commence direct negotiations to resolve the dispute. Again, no resolution occurred and in December 1998 World Wide filed suit in the US Federal Court for $220 million in damages. Simultaneously, it served notice upon various firms known to handle uranium concentrates from Kazakhstan that it claimed title to all the uranium received from Kazakhstan since October 1996. World Wide's complaint was dismissed in September 2000 on the grounds that an "act of state" like the denying of an export marketing license was beyond the jurisdiction of the US courts. Worldwide appealed, but after two more years of additional proceedings, the US Court of Appeals affirmed the grounds for the initial dismissal in August 2002. All the while, World Wide presented its case in as many venues as possible to influence public opinion. It lobbied the international ratings agencies where it argued that the credit rating of the National Bank of Kazakhstan should not be raised because it refused to pay the nearly $29 million sovereign debt to World Wide. It also lobbied international lending agencies like EBRD and the World Bank for their support. Like Leslie Urquhart and others before them, none of these efforts was successful and there is little prospect that their pursuit of reparations will be successful.

Meanwhile, the Tselinnyy Complex was declared bankrupt in August 1998 (*IMMR* March 12, 1999 and May 19, 1999) and Kazatomprom auctioned its assets twice in early 1999 without attracting a bidder. Subsequently, interest was expressed by Lev Levaev and his Israel-based firm, Africa Israel Investment Ltd, which had acquired the phosphate industry and some gold mines (see Chapter 8). A third auction was held, and Levaev was awarded Tselinnyy in the name of a Cyprus-registered subsidiary Sabton. This time, Tselinnyy was sold for $315,800 (KZT 36 million) and payment of back wages totaling KZT 320 million and numerous other debts including the costs of financing operations prior to the sale. Sabton's long-term investment plan for the complex, renamed KazSabton, called for investments of $100 million over five years to diversify production. KazSabton evidently stopped mining uranium in 2000 due to the comparatively high costs of production from the company's underground mines. Processing of output from other lower cost, active mining operations in southern Kazakhstan continued, however, and production of uranium oxide continued to be important at Tselinnyy while other production possibilities were being explored (*IMMR* June 14, 2002).

The Ulba Metallurgical Plant and the two mining joint ventures Katco and Inkai also have shown signs of recovery under Kazatomprom administration.[18] In 2001, Kazatomprom concluded negotiations with Russia's nuclear fuel producer TVEL and the Ukraine's nuclear generating company NEAK to form a joint company with Ulba to produce fuel for nuclear power plants. The first output of the venture was scheduled for spring 2003. Moreover, Ulba had become a leading producer of beryllium (23 percent of the world market) after concluding a contract with the US firm Brush Wellman. It also remains an important producer of tantalum. The joint venture, Katco, produced its first uranium oxide in March 2002.[19] Inkai received a mineral development contract in 2000, and began test mining in late 2001. It has planned an investment of $500–$600 million over the 25 year life of the project. Kazatomprom also won the latest in a series of anti-dumping cases brought against Kazakhstan in the US; in consequence, all the restrictions that prohibited Kazakhstan from marketing uranium in the US have been lifted at long last. To the extent that the world market for uranium recovers, Kazakhstan will be well positioned to participate since it is and expects to remain among the lowest cost producers.

Finally, it is impossible to leave a discussion of the uranium sector without some discussion of environmental issues.[20] By one estimate, in the half century of uranium mining and milling operations in Kazakhstan, more than 230 million tons of low-level and 2 million tons of medium-level radioactive wastes have accumulated in the comparatively widely dispersed areas around mines and milling operations. The two mining and milling operations alone, KazSabton (Tselinnyy) and Prikaspiyskiy, each have accumulated radioactive wastes in excess of 65 million tons. The Ulba

plant, located within the city limits of Ust-Kamenogorsk, has accumulated an additional 1.4 million tons of radioactive and toxic beryllium waste. Moreover, one of the worst disasters of its kind occurred at Ulba in 1990 when an explosion caused the release of a large amount of metallic beryllium into the air of the city. Separately, the containment barriers in at least one of the liquid waste storage areas at Ulba failed, permitting waste residues to percolate into the soil and local drinking water supplies (ISTC 2002). Even though the basin is no longer in use, wastes continue to be discharged into local groundwater whenever rain or snowmelt accumulate.

In 2001, Kazakhstan announced an ambitious program to mothball some of its uranium mines and clean up much of the waste at both closed and operating mines (*IMMR* August 3, 2001). No estimate of the total cost of the program was attached to the announcement, however. It acknowledged that most of the funding would have to come from the state. To date, Kazatomprom indicated it planned to commit $16 million to clean-up activities over the five year period 2001–2005, an amount hardly adequate to the problems (*IMMR* November 23, 2001). There has also been discussion of attracting funding by importing additional amounts of low- and medium-level radioactive waste for burial in Kazakhstan and use the fees collected to assist in the collection and burial of domestic wastes. It remains to be seen how much work will be undertaken to reduce the accumulated damage.

In its sequential reorganizations of the uranium sector, Kazakhstan's government has come almost full circle. Initially, it established the monopoly, KATEP. KATEP was then permitted to corporatize and sell the individual enterprises, principally Ulba and Tselinnyy, and to negotiate two joint ventures to develop new deposits. In a remarkably short period, the sales were reversed and, although the Ulba sale was canceled because the foreign investors evidently had no funds (as occurred in many sectors), the sale of Tselinnyy failed because government policy itself changed when it decided not relinquish its monopoly on uranium marketing. Kazatomprom was established to recreate the state monopoly and was the public manifestation of the government's reclaiming of control of the sector. From time to time there has been some discussion of the possible privatization of Kazatomprom, but there has been no serious move in this direction.

Summary

The results of the privatization and sale of the enterprises in the coal, natural gas, and uranium sectors are in many regards quite similar to those in other sectors. In coal, four enterprises were sold to new foreign investors – Bogatyr to Access Industries, Maikuben to HTD GmbH, Shubarkol to

Global Mineral Resources, and Severny to UES. Only one was successful – Access Industries – and it shares many of the characteristics of the other successful foreign investors. Access was an active investor in Russia where it had interests in power plants, oil, and aluminum, and acquiring a source of coal was important to these operations. After acquiring the coal mine, it then acquired more of its market in the form of heating and power plants. Eventually, it also took over management of a second coal mine for UES when it failed to reorganize operations at Severny, and this may be the first link in a new alliance which will reunite a number of coal mines and power plants in Russia and Kazakhstan. The other coal mines were sold to the successful investors in other sectors who depended upon coal, either directly in smelters and blast furnaces or indirectly for power – Samsung (Kazakhmys), the LMN Group (Ispat Karmet), and the Eurasian Bank Group (Kazchrome). Finally, AES (Ekibastuz power plant) and EBG have stepped in after foreign firms failed and taken control Maikuben and Shubarkol, respectively. In natural gas, the main production field was given over to development by a consortium. Unlike Tengizchevroil which concluded the initial agreement in 1993, the negotiations to conclude a production sharing agreement for Karachaganak took rather longer and consequently development has been much delayed.

In uranium, the principal mining enterprise, Tselinnyy, was sold twice to foreign investors and the successful investor, the Levaev Group, was the one who was already in Kazakhstan, with investments in the phosphate industry. He too then acquired a related gold-mining enterprise. The first foreign investor in Tselinnyy was World Wide Minerals and their ownership ended in another of the many foreign investment scandals. The cancelation of their contract raised yet again issues of contract sanctity, when Kazakhstan refused it an export license, and of reparations, when the government canceled its contract. There was as well the reorganization of the state company with control of the uranium sector from KATEP to Kazatomprom, which in many ways adumbrated the reorganization of the state companies in the oil and gas sectors into Kazmunaigaz. Perhaps not coincidentally, both Kazatomprom and Kazmunaigaz are linked to the President's family, to Rakhat Aliyev and to Timur Kulibayev. Kazatomprom retained majority control of all the enterprises in the sector, except for the troubled Tselinnyy, and has kept much tighter control of the sector than have state entities in other sectors overall. Kazmunaigaz is exerting the same sort of control.

Privatization of the enterprises in these three sectors also attracted its share of investors with questionable intentions and connections. In the coal sector, Bolat Nazarbayev acquired an interest in the Maikuben mines, perhaps in an undisclosed partnership with HTD GmbH. In uranium, the here-to-fore unheard of Swiss-registered company, Zambezi Holdings, first acquired an interest in the Ulba Metallurgical Plant. That contract

was evidently canceled, but then Zambezi Holdings reappeared with a 10 percent interest in the Katco joint venture with Cogema. Who is behind Zambezi remains a mystery, but the foreign registration together with Aliyev's role in the sector are suggestive.

Finally, the three sectors and the new firms operating the enterprises share as well a serious environmental legacy with the enterprises in other sectors. Like Tengiz, Karachaganak has both ongoing pollution concerns as well as a serious legacy of radiation concerns. Radiation pollution is both an ongoing and legacy issue at the uranium mining enterprises, while the Ulba plant has exposed the citizens of Ust-Kamenogorsk to both episodic exposure to deadly gases and to long-term contamination of soil and water. Pollution from coal mining operations themselves as well as from the operations of coal-fired heat and power plants are also ongoing environmental threats.

11

PRIVATIZATION, FOREIGN INVESTMENT, AND CONSOLIDATION IN THE ELECTRIC POWER AND TELECOMMUNICATIONS SECTORS

The electric power sector in Kazakhstan had grown to importance in the 1960s and 1970s as a result of the Soviet's planned development of a coal-by-wire program. By 1985, electric power generated in Kazakhstan accounted for 5.3 percent of total Soviet power production and 4.6 percent of Kazakhstan's industrial production (Sagers 1992a and 1992c). The sector included the Soviet Union's first commercial breeder reactor at the Mangyshlak Atomic Energy Complex and the first of the 4,000 megawatt (MV) coal-fired power plants which was built at Ekibastuz. Of the 61 conventional power plants, there were eight large regional electric plants (GRES), 46 combined heat and power plants (TETs), and seven hydro-electric plants (GES).[1] The national transmission grid comprised some 23,463 km of power lines, of which 1,421 km were very high voltage lines (1,150 kilovolt) and 5,455 km were high-voltage lines (550 kV) (*ICACBR* October 18–24, 1999). There were three 1,150 kV substations, 15 500 kV substations, and 51 220 kV substations with a total transformer capacity of 29,414 MW (US Commercial Office 2000). There were also 18 regional distribution companies (RECs) responsible for distributing power to the cities and villages within the oblast.

After independence, all of the assets in the electric power sector were transferred to the state enterprise Kazakhenergo (World Bank 1999b). The operation of Kazakhenergo was overseen by the Ministry of Energy, which was also responsible for determining tariffs and approving investment plans. By 1995, Kazakhenergo was virtually bankrupt. It was able to collect on less than 50 percent of power billed to consumers and to enterprises, and less than 20 percent of the bills were collected in cash. In May 1995, the total amount owed Kazakhenergo was estimated to be $833 million

(US Embassy 1997b). Repairs had declined to virtually zero, an especially serious problem since the installed generating equipment and transmission substations were mostly 20 or more years old. Workers and suppliers (principally the coal mines) were not paid regularly and there were frequent interruptions in coal supplies along with the accumulation of substantial pension arrears. Electricity output in Kazakhstan declined rapidly from 82.7 billion kilowatt hours (kwh) in 1992 to around 66.5 billion kwh in 1994–5, levels roughly comparable to those of the early 1980s. As the industrial collapse deepened, so did the decline in electricity production, just as did the production of coal. By 1999, production had declined to just 47.5 billion kwh. Not only was the production of power reduced, however, power outages were frequent. By the winter of 1996–7 for example, residents of Zhanatas, a city of about 10,000 in South Kazakhstan, had an average of one hour of electricity per day and no heat (Clover January 21, 1997).

In early 1996, the government passed a series of resolutions to enable restructuring of Kazakhenergo and sale of its assets (World Bank 1999b). The generation plants were separated into independent enterprises, incorporated, and prepared for sale. The 18 regional electricity distribution companies (RECs) and the high voltage transmission lines were left temporarily in Kazakhenergo, along with several of the larger generating plants, but most of the local distribution companies and other enterprises were also incorporated and prepared for sale. In 1997, legislation created a new state holding company, the Kazakhstan Electricity Grid Operating Company (KEGOC), into which the high voltage transmission assets and RECs were transferred. Initially at least, the distribution companies were not for sale with the power plants, the government having accepted arguments that selling both distribution and generation assets to the same firm was unlikely to support market development as it would give individual firms uncompetitive local monopolies.[2] In some negotiations, however, the government was sometimes persuaded to include a distribution companies with the sale of a power plant. Some distribution companies were also offered separately, and sometimes a new owner of a local power plant was allowed to make the purchase. The government also solicited direct foreign investment in the national grid, but ultimately was unsuccessful. Today, KEGOC retains control of the high voltage transmission network and most of the regional distribution companies.

For its part, Kazakhstan's telecommunications sector was in many ways quite similar to the national grid together with the regional distribution companies; that is, it was a combination of centralized distribution and local service. There were14 regional telephone directorates with over 46 million km of phone lines, and all long distance calls all went through Moscow (*ICACBR* March 6–12, 2000). For the most part, the equipment had been installed in the 1970s and 1980s, and it was virtually all obsolete (World Bank 1993: 147–8). Initially, the sector was administered in the

Ministry of Communications and was a high priority for new investment. But, investment funds proved to be difficult to attract, and restructuring was very difficult. Accordingly, in 1996 the government created Kazakhtelekom to take over operation of all the telecommunications assets. It was also licensed as the monopoly provider of long distance and international services. Kazakhtelekom was corporatized, and a significant share interest was offered to attract a single strategic (foreign) investor. As with the attempted sale of KEGOC, the government was unsuccessful in selling Kazakhtelekom to a foreign investor; but, in the process, a substantial share was taken over by Kazkommertsbank.

Sales of the electric power plants to large enterprises, local Kazakh firms, and new foreign investors

The large industrial enterprises with new owners/managers

Not surprisingly, the first power companies to be sold were those that were the principal suppliers to the large industrial enterprises that had already been transferred to new foreign owners/managers. In March 1996, the Trans World Group/Eurasian Bank Group partnership acquired the 2,100 MW Aksu GRES for $1.5 million and an investment commitment of an additional $258.2 million (Kalyuzhnova 1998: 79–83), a follow-on to its acquisition of the Aksu ferroalloy plant six months earlier. Construction of the Aksu power plant dated to the mid-1960s, with operations beginning in 1968 (Shabad 1969). With subsequent additions, by 1990 it was the second largest plant in Kazakhstan. TWG and EBG also acquired the Pavlodar heat and power plant, TETs-1, for $1.04 million and investments of $11.6 million in order to provide power for the alumina plant (Kalyuzhnova 1998: 79–83). Both remained with EBG when TWG was forced out of the joint venture. Somewhat later, the Eurasian Bank Group acquired the power plant Akturbo which supplied its ferroalloy plant in Aktyubinsk and the Rudnyy heat and power plant which supplied its Sokolov-Sarbai iron ore complex.

By the end of 1997, the list of owners of utilities included almost all the major investors in the industrial sector. Ispat International acquired the local combined heat and electric plant, Karaganda TETs-2, with 435 MW installed capacity plus a smaller station to support operations at Ispat Karmet. Ispat paid just slightly less than $1 million and pledged $36.5 million in investments including wage arrears (ibid.). Samsung (Kazakhmys) acquired the power plant in Zhezkazgan for $6.24 million and a pledge of $100 million in investments (ibid). It also acquired a minority interest in Karaganda GRES-2 with a consortium of international power companies,

and then bought them out (more below). In addition, the Balkhash heat and power plant was among the assets transferred to Samsung with Balkhashmys. Glencore International acquired a ten-year concession on the Bukhtarma hydroelectric plant when it acquired a controlling interest in Kazzinc and in the Tekeli power plant when the Tekeli mines were later transferred into Kazzinc. Because the Balkhash, Bukhtarma, and Tekeli power plants were assets included in the enterprises, no separate price information was available.

Sometimes, when there was more than one large enterprise with a new owner in a region and both were interested in acquiring the local power plant, the government could and did change its mind in the midst of negotiations, withdrawing abruptly from negotiations with one and opening negotiations with another. Such was the case with the sale of two other of the Pavlodar combined heat and power plants, TETs-2 and TETs-3.[3] The tender for the two plants was first scheduled for March 1997 but was canceled when there were no bidders. Rescheduled for May, the tender attracted interest from Access Industries (which had acquired the Bogatyr coal mine), CCL Oil (purchaser of the Pavlodar oil refinery), and unnamed Russian firms. Access was announced the winner in late May, with reports that it made a preliminary payment of $400,000 for the plants. At a May 29 press conference with officials from Pavlodar, Access officials promised to "pay salaries to the power employees, make major equipment repairs, and pay a bonus of KZT 60 million" (*MMS* June 5, 1997). The bonus amounted to approximately $800,000. Then, at the end of June, the government announced there had been another tender for the plants and that CCL Oil had been awarded the contract. No other terms were announced. Access threatened to sue, to recover both the payment it had already made for the power plants and the local government's unpaid coal debts of over $4.5 million. Employees of the power plant complained, citing CCL Oil's already poor record in paying wages at the oil refinery. Nevertheless, a contract with CCL was signed. By 2000, however, CCL Oil's contract to manage the refinery was canceled and it left Kazakhstan. Meanwhile, there has been no indication as to the fate of the power plants except for a notice that CCL's contract to manage at least one of them had been declared null and void by Kazakhstan's Supreme Court. For its part, Access Industries acquired one of the combined heat and power plants in Ekibastuz, Ekibastuz TETs-1; the heating distribution company, Ekibastuzteploenergo, a heat and power plant in Petropavlovsk, and the local distribution company there. It also acquired the North Kazakhstan REC. The terms of the sales were not reported.

Local Kazakhstani firms

A number of mostly smaller power plants were sold to local Kazakhstani (or NIS) firms.[4] These include the sale of the very small Sayansk hydro-

electric plant (Sayansk GES) to GESenergo, Aktyubinsk TETs (Akturbo) to a Ukrainian firm, Atyrau TETs and Zhambyl GRES to Energoprojekt Ltd, Karaganda GRES-1 to ABS-Balkhash Mining Company, Rudnyy TETs to Myl Ltd, and one of the Shymkent heat and power plants (TETs-3) to Box Plant (a firm that supplied natural gas to Almaty). In addition, Ekibastuz GRES-2 was sold to the state-owned company, Energotsentr, which may yet form a joint venture with the Russian energy company UES. For the most part, there is little information on these sales or the ongoing operations of the plants, presumably because they are comparatively small. Two have been resold – Akturbo and Rudnyy TETs – to EBG who made substantial investments in both (see Chapter 7). There have also been some reports on operations at the two largest, Zhambyl GRES and Ekibastuz GRES-2.

The 1230 MW Zhambyl GRES was the largest of the plants sold to local interests. Built in 1967, it had three generating units, the last of which was installed in 1975, and was one of Kazakhstan's few power plants that could operate with either natural gas and/or fuel oil, although there are limits to the substitution because of a technological requirement to use gas after a period of fuel oil use.[5] Fuel was supplied from the Shymkent refinery, Hurricane Kumkol Munai, and Box Plant. Zhambyl GRES along with Atyrau TETs were sold to Energoprojekt, a joint venture of the Swiss-based company Vitol Munai and Kazkommertsbank that also had acquired the Shymkent oil refinery (see Chapter 9). When Vitol was forced to leave Kazakhstan after being convicted of tax evasion, Kazkommertsbank, and its investment group Central Asia Industrial Holdings, retained control of the refinery and both the Zhambyl and Atyrau power plants. In 1998–9, it tried to sell minority interests in both power plants to fund investments, it but was unsuccessful. In 2000, the Zhambyl plant was shut down altogether because high prices of natural gas and fuel oil meant it could not produce electricity competitively with that produced in neighboring Kyrgyzstan's hydroelectric plants. However, the government ordered the plant to re-open a year later because of ongoing electricity shortages in the southern regions. Since the electricity it produced was still uncompetitive on a cost basis, operation of the Zhambyl plant was to be subsidized so that prices to consumers would be unaffected.

The 1,000 MW Ekibastuz GRES-2 plant may yet become a part of a joint venture with the Russian energy monopoly UES that had acquired the Severny coal mine in Ekibastuz, but already negotiations have been underway for more than three years. Indeed, Ekibastuz GRES-2 has been for sale since 1997. The government first offered Ekibastuz GRES-2 to Karaganda Power Partners (a joint venture between two international power companies, see below) but negotiations were never completed. Then, the government began negotiations with UES, but did not reach even a preliminary agreement until 2000.[6] All the while discussions continued,

operations at the plant and wage payments were so seriously neglected that workers resorted to hunger strikes to publicize their plight. Hunger strikes first began in the summer 1998. Management responded with a promise to pay all wage arrears by year-end, and the strike ended. A year later, however, 75 employees began another hunger strike because they had not been paid for more than two years. In October 1999, when they still had been paid only 40 percent of current wages and had not received payments for arrears, 40 workers began another hunger strike. Each was owed between KZT 100,000 and KZT 200,000 ($830 to $1660). The strike continued (sporadically) until February 2000 when the entire wage debt was finally paid.

In March 2000, Ekibastuz GRES-2 was sold at auction to Energotsentr (also Energy Center or Ekibastuz Energy Center), another state-owned company, for just $52,000. Energotsentr then resumed discussions with UES to form the 50–50 joint venture. Again, however, discussions have continued over more than two years without conclusion. In December 2001, for example, an announcement indicated that a contract would be signed on April 1, 2002. In April, plans were announced to build a third power unit at the plant all the while merely reiterating the intention to transfer the 50 percent interest to UES. A week later, an announcement indicated the agreement would be signed in May. In June, the language turned cautious again indicating only that Kazakhstan and Russia "might form" a joint venture. Whether the plant will be sold remains unclear. It is also unclear how the venture might coordinate with Access Industries who now operates UES' mine in Ekibastuz (see Chapter 10).

International power companies

Finally, the government also concluded a significant number of management/sales contracts for power plants with major international power companies, including AES, Tractebel, Ormat, National Power Plc, Independent Power Plc, and E Prime. The US firm AES was first to conclude a contract, acquiring by far the largest of Kazakhstan's power plants, the 4,000 MW Ekibastuz GRES-1, in August 1996. About a year later AES acquired six additional plants in East Kazakhstan representing another 1,344 MW of capacity and, in 1999, management of two regional electricity distribution companies in East Kazakhstan. Tractebel acquired a 25 year management concession for Almatyenergo, the Almaty power and heating system, including five power plants, the heating system, and the distribution networks in July 1996. A consortium of Independent Power, E Prime, and Samsung acquired the largest of the Karaganda power plants, the 608 MW Karaganda GRES-2; and a consortium of National Power and Ormat acquired two combined heat and power plants in Karaganda, Karaganda TETS-1 and TETS-3, and later the regional distribution

company. These firms have all encountered substantial difficulties in their operations in Kazakhstan, one measure of which is that only AES and Independent Power remain.

AES

In June 1996, AES was awarded the exclusive right to negotiate for the purchase of Kazakhstan's largest power plant. Negotiations were completed in August, and AES (with a 70 percent interest) and its partner Suntree (30 percent), an Israeli firm, acquired Ekibastuz GRES-1 for approximately $3 million. Included in the contract was a 35 year agreement to sell power to the government-owned utility, then Kazakhenergo and later KEGOC (AES *1996 Annual Report*: 38).[7] AES also agreed to invest as much as $500 million over five to six years. Later, AES also acquired the land at the power plant directly from the oblast for an additional $11 million (*Focus Central Asia* 9–10 1998; World Bank 1999b: 108). Adding the land cost, the acquisition price amounted to $14 million.

Construction of Ekibastuz GRES-1 began in 1979, one of the giant coal-by-wire plants that Soviet authorities planned to build at Ekibastuz.[8] It was comprised of eight 500 MW turbines, the last of which was installed in 1984. When completed, Ekibastuz GRES-1 was the largest coal-fired power plant in the former Soviet Union, and in 1990 it accounted for nearly 25 percent of the installed capacity of Kazakhstan's generating plants. At the time of AES' acquisition in 1996, however, it was operating at only 28 percent of capacity. When parts for the Russian-designed boilers became unavailable, workers resorted to cannibalizing some units to keep others going; only three of the eight units were operational, and even these were operable at only a fraction of capacity. An AES' manager arriving to begin work reported that technicians in the plant were working by flashlight and among early investments were said to have been 5,000 light bulbs. Two-thirds of the roof of the plant was missing and during the first winter temperatures inside the plant dropped to –35 degrees Farenheit. The 2,800 employees were estimated to be more than double the number needed to operate the plant. They had not been paid in months, and drinking was reportedly a widespread problem. Moreover, no preparations had been made for the winter season.

Accordingly, preparations for winter were begun, repairs and renovations started, and steps taken to begin paying back wages. Not withstanding these steps and the power-purchase contract it had with the government, AES had difficulty collecting from customers, including the government, and substantial unpaid obligations accumulated quickly. By the end of December 1996, for example, power worth $35 million (excluding VAT) had been billed to Kazakhenergo and AES had been paid for only $5 million. Not surprisingly, AES included a note of caution in its annual report to

shareholders as to the "ultimate collectibility of amounts owed . . ." (AES, *1996 Annual Report*: 38). Nevertheless, AES continued restructuring and by June 1998 had invested over $70 million in Ekibastuz in addition to the re-investment of all revenues. They also completed a major downsizing of the work force, firing those found drinking on the job and offering a severance package which nearly one-half of the employees took.[9] With the changes and investments, by June 1998 Ekibastuz was generating power at 1.3–1.4 cents per kilowatt, one of the cheapest rates in the world at that time.

In July 1997 AES (with its partner Suntree) acquired control of six more generation facilities, two hydroelectric plants and four combined heat and power plants in East Kazakhstan with a combined power capacity of 1,384 MW and heating capacity of 1,000 MW equivalent (*Almaty Herald* October 9–15, 1997). Control of the two hydroelectric plants was through a 20 year management contract for which AES paid $20.7 million; the four coal-fired, combined heating and electrical plants were acquired for $2.5 million. Included in the transaction were ownership and control of the sales department of the former utility and supply contracts with the 50 largest customers in East Kazakhstan. AES undertook to repay back wages amounting to nearly $4 million and to provide working capital so that preparations could be made for winter. In total, AES committed to invest some $600 million over eight years in these operations (*Focus Central Asia* 15 1997).

Non-payments, especially from the government, and loss of customers continued to be major problems. In early 1997 KEGOC (the restructured Kazakhenergo) ceased purchasing power (*Almaty Herald,* July 9–15, 1998). By year's end unpaid bills amounted to some $57 million, of which $35 million was due from KEGOC (AES, *1997 Annual Report*: 44). In early 1998, the governments of Kazakhstan, Kyrgyzstan, and Uzbekistan agreed to create a Central Asian energy system, one provision of which was that Kazakhstan's transmission grid was to be separated into northern and southern components for a period (*Business Kazakhstan* 1998: 34). Splitting the grid in this way, however, also meant it was impossible for AES Ekibastuz to continue to sell power to its customers in the south. In addition, Ispat-Karmet, one of its principal customers in the north, suspended its contract because of declining production at the Karaganda plant (*Almaty Herald* July 9–15, 1998). Thus, in July 1998, AES Ekibastuz halted power production and did not restart until November when the northern and southern parts of the transmission grid were united again (*MMS* November 7, 1998).

AES also sought to acquire distribution networks to gain direct access to customers in East Kazakhstan, and in June 1999 it acquired concessions to operate the two regional electricity distribution companies, East Kazakhstan REC and Semipalatinsk REC (*ICACBR* June 13–23, 1999; AES, *1999 Annual Report*: 96). In fact, the contracts to manage the East Kazakhstan and Semipalatinsk RECs were part of a settlement of AES' $220 million

claim against the government for unpaid bills for electricity; the contractual rights to the RECs were valued at just $26 million. Throughout the protracted period of negotiation with the government over the debts and the acquisition of the RECs, the performance of many of the individual enterprises declined and local officials complained. citing concerns about falling tax revenues (*ICACBR* June 19–25, 2000). The 15 year agreement to manage the operations of the East Kazakhstan regional distribution companies was not completed until November 2001, although AES evidently took over operations two years earlier (*ICA* November 2, 2001). Eventually, the new agreements with the government were completed, and AES secured $30 million in loans from EBRD to assist with projects in East Kazakhstan.

Once AES acquired the heat and power networks, it aggressively undertook to resolve nonpayment problems. For some customers, electricity and heat could be disconnected easily, which gave substance to threats to do so. Nevertheless, AES had to be very aggressive in pursuing a strict policy of disconnecting defaulting customers and in the process had to deal with the objections of what were reported to be the "Mafia-like owners" of the heat network (World Bank 1999a). For heating customers in apartment units, where disconnection of individual units was not possible because a single connection served the whole building, AES disconnected the whole building and then gave electric space heaters (and agreed to pay incremental electricity costs) to those who had paid their bills. Residents who had not paid could make use of a public shelter; heat to the apartment complex was not resumed until all apartments had settled their bills. Another of AES' units reported some success using a lottery program, first prize in which was slightly more than $1,000, and only customers whose heating bills were paid in full were eligible to enter. Settlements of outstanding accounts were reported to have increased substantially (AES Irtysh January–March, 2000). Whatever the device, nonpayment was the critical problem the new owners had to solve and was one which often made relations with almost everyone confrontational.

Through 2002, AES appeared to be well on the way to becoming one of the foreign investment success stories, solving its most difficult problems and expanding operations. In 2000, for example, AES negotiated a contract with Russia's UES to supply power in 2000, the first time a Kazakhstan utility had sent power to Russia since 1991 (*ICACBR* October 29–November 4, 2001). In early 2002, AES completed negotiations to acquire the Maikuben coal mine in the Ekibastuz region (see Chapter 10). Nevertheless, AES' long-term prospects in Kazakhstan remain uncertain. In May 2002 the government announced its intention to review and revise the contracts with AES (*ICACBR* April 29–May 12, 2002). According to the government, of the total investment commitments of $600 million under its various contracts, AES had invested only an "insignificant" amount in the plants

as of 2002 – just $170.6 million from 1996–2001 (*ICACBR*, October 7–13, 2002). In October, members of Kazakhstan's parliament took the unusual step of writing to members of the US Congress to request help to resolve the ongoing problems with AES. For its part, AES was reported to be willing to revise the contracts, but only if it could independently set prices for heat and electricity. To date, the government has been unwilling to relinquish such control and more negotiations are undoubtedly ahead. Then, in November 2002, AES sold the Semipalatinsk and Irtysh thermo-electric plants to a consortium of East Kazakhstan investors including the Kazakh financial-industrial group Semei-Komir (also Semey-Komir), the US company Maverick Development, and unnamed South Korean investors.[10] Perhaps there will be additional changes in AES's strategy in Kazakhstan.

Tractebel

If AES's control of more than 25 percent of the generation capacity and some of the distribution system made it largest utility in Kazakhstan, the former Belgian firm (now part of the French company Suez Lyonnaise des Eaux) Tractebel's acquisition of Almatyenergo, the Almaty power and heat system, made it perhaps the most closely watched power company in Kazakhstan. Tractebel's interest in Kazakhstan dated to at least January 1995, when they first signed a framework agreement with the government to build up to 500 KW of new capacity at a cost of up to $500 million The contract was said to mark "a breakthrough for Tractebel [which had] been seeking investment opportunities in fast-growing economies far from Belgium's saturated electric-power market" (Holman, January 29, 1995). Negotiations continued for nearly a year, and at the end of December, Tractebel signed an agreement to build two new power stations in Uralsk in West Kazakhstan with a combined capacity of 420 MW for about $300 million (*Wall Street Journal*, December 4, 1995: A7). In the event, these plants were not built, presumably because of funding problems, and adding capacity in Uralsk remained a government priority for a number of years (US Commercial Office 2000).

At about the same time, the government was beginning to restructure the power sector, and Tractebel was thus well-positioned to be an informed participant. In a closed tender whose results were reported in August 1996, Tractebel acquired what was said to be a 25 year management concession for Almatyenergo, the power and heat system for the country's largest city that included the distribution network, a hothouse complex, and 5 power and heat plants, for $7.3 million and investment promises of $300 million (Kalyuzhnova 1998: 79–83). Ten months later, in June 1997, Tractebel also acquired a 15 year management concession (with an option for an additional five years) to operate Kazakhstan's natural gas transmission system (including the part which provided gas to Almatyenergo) for a further $30

million and a commitment to invest an additional $600 million (*ICACBR*, April 29–May 4, 2000). Although never explicit, both of the so-called management concessions were in fact sales, whether immediately or with some delay, and Tractebel acquired 100 percent of both Almatyenergo and the gas transmission system.[11]

Almost immediately upon acquiring Almatyenergo (renamed Almaty Power Consolidated, APC), Tractebel began work to reduce the number of delinquent accounts (about 140,000) and the total of $14 million in their outstanding debt (*Focus Central Asia* 3 1997). It announced that it would disconnect power to those who were chronic debtors and began sending notices to delinquent customers soon thereafter. Although Tractebel soon found that some 30 percent of its customers were on a list of what were called "inviolable" enterprises, it nevertheless began cutting off at least some non-payers (*MMS* October 9 and December 12, 1996). In December, it published widely a list of organizations which had not paid for electricity for five months and indicated that the notice was a final warning before power would be cut off. On the list were numerous state agencies, including the Ministry of Finance, the Ministry of Internal Affairs, and the National Statistics Agency. Publication of the list was itself not without risks. Not so coincidentally, the head of one department of APC was arrested for tax evasion, and unit managers received threatening phone calls. Non-payment continued, however, and in January Tractebel cut power to defaulters, excepting critical health care facilities. In response, more than 200 armed individuals from the State Inquiry Committee and the Ministry of Internal Affairs 'visited' their offices, asking that the cutoffs be delayed. Power was restored temporarily. Meanwhile, the government allocated special funds to pay heat and power debts, but ministries chose not to spend the funds on overdue utility bills. By early February 1996, most debts remained unpaid – the Ministry of Defense owed some $0.4 million; the Ministry of Education, $3.8 million; and, the Ministry of Health, $1.6 million. Tractebel again announced power cutoffs and began with educational institutions (presumably on the assumption that these cutoffs would demonstrate their resolve to act but would not be challenged by arrests of Tractebel employees or armed visits). In the end, the public pursuit of high profile debtors, including the use of disconnections, was successful and a much higher percentage of bills were paid on time and in cash (World Bank 1999a).

Tractebel also sought permission to raise power and heat rates in February 1997, but was turned down by the Antimonopoly Committee, as were almost all subsequent requests in the middle of the heating season. A second request later in the spring was approved but led to protests by pensioners in Almaty (*MMS* April 5, 1997). In an effort to begin the next heating season on a positive note, when Tractebel announced preparations were underway, it also indicated that rates would not increase until the end

of the season *(MMS* October 29, 1997). Nevertheless, the 1997/98 winter proved to be even more difficult and confrontational. Problems began in November with disruptions in gas supplies (*Almaty Herald* November 20–26, 1997; *MMS* December 12, 1997). In the oftentimes complicated world of bartered sales, when Turkmenistan halted gas deliveries to the Ukraine because of non-payment, the gas Kazakhstan received as payment for transmission through its portion of the Bukhara-Ural pipeline also stopped. Tractebel sought to replace the supplies from Russian sources but at sharply higher prices ($60 per thousand cubic meters vs. $45). Tractebel also sought additional gas from Uzbekistan, relying on an existing inter-governmental agreement between the two countries.

Throughout December and into the new year, Tractebel and the government were in nearly continuous meetings over the crisis. Gas supplies in the Almaty system remained meager at best, however. In central Almaty, the flow was so restricted during the day that pilot lights did not work and boiling as much as a cup of water was a five minute undertaking. Many areas received no gas at all. On February 11, 1998 Tractebel issued a press release which blamed the government and then Prime Minister Balgimbayev in particular for the supply problems.[12] The government responded on February 14 with a release of its own denying responsibility. Tractebel refuted the government's claims two days later. In the end, the government was forced to admit that many terms of its agreement with Tractebel had not been met and that it would work with Tractebel to improve the situation. For its part, Tractebel pledged to meet its investment commitments.

In August 1998, Tractebel introduced a new payment system for its customers, one which separated the utility charges from other bills so that it would receive payments directly (*Almaty Herald* August 13–19 and September 3–9, 1998). In October, Tractebel released information summarizing its investments in the energy system and again assured citizens that it was prepared for the winter heating season *(MMS* October 8, 1998). And, comparatively speaking, the 1998/99 season was a successful one. Outages were minimal, and it seemed supplies of gas in the system were ample most of the time. Nevertheless, Tractebel and the government continued to have serious, if less public, disagreements (*ICACBR* April 29–May 14, 2000). In May 1998, Kazakhstan's Prosecutor General alleged that Tractebel had failed to pay over KZT 500 million (about $6.4 million) in taxes and froze several of the accounts of the transmission subsidiary. Tractebel continued to request higher tariffs and, when denied, alleged that Kazakhstan failed to meet the terms of its guarantees to the company. It reportedly had lost 200 million Belgian francs (BEF, about $4.9 million) in 1998 in its Kazakhstan operations and BEF 1.3 billion ($31.8 million) in 1999. At the end of 1998, Tractebel reported they had taken an extraordinary charge against income of BEF 4.9 billion as a new provision for country risks,

reflecting a policy of "increased prudence regarding the situation in Central Asia" (Tractebel March 18, 1999). At the end of 1999, Tractebel again set aside more funds for country risks, most to cover losses in Kazakhstan (Carreyrou 1999).

In November 1999, Tractebel notified the government that it intended to seek international arbitration of the dispute because it believed the contracts provided guarantees as to how utility (and gas transmission) rates would be calculated, which the government had not so far not abided by. When there was no response, it started legal proceedings against Kazakhstan for contract default (*IPR* March 24–30, 2000; RFE/RL January 31, 2000). Meanwhile, in late December 1999, Tractebel had disclosed that it was the subject of a criminal investigation in Belgium over an alleged bribe of €50 million (as much as $55 million, in some reports) to three Kazakh businessmen in 1997 in connection with its bid for the concession on the natural gas transmission system (Carreyrou 1999). At this point, Tractebel was faced with protracted legal battles both at home and in Kazakhstan, and it began negotiations with the Kazakh government to withdraw from Kazakhstan. In April 2000 an agreement was reached whereby Tractebel would receive $100 million compensation and leave Kazakhstan, returning both APC and the gas transmission system (*IPR* May 5–11, 2000). The compensation amounted to about one-half of Tractebel's investments in Kazakhstan (Frantz May 13, 2001).

There were many complicating factors in the negotiations between the government and Tractebel over Tractebel's exit from Kazakhstan. First was the question of how to fund the re-purchase of APC and the gas lines. The government evidently refused to fund it directly; rather, the national oil pipeline company, Kaztransoil, supplied most of the funding, raised through a Eurobond issue. A new national gas pipeline company, Kaztransgaz, was created as a 100 percent subsidiary of Kaztransoil to takeover management of the pipelines. In the end, it also took over APC until more permanent arrangements for the power company could be made (*IPR* November 17–23, 2000). Second, negotiations to take over management control (and perhaps ownership) of APC from Kaztransgaz were simultaneously underway, and for awhile it seemed as if arrangements with Tractebel could not be concluded without resolving the fate of APC (*ICACBR* March 20–26 and June 19–25, 2000). In addition to Kaztransoil (whose president was Timur Kulibayev), Kazkommertsbank, and the Eurasian Energy Group (i.e. the Eurasian Bank Group) were reportedly vying for control of the power company (*ICACBR* April 29–May 24, 2000). The Russian gas group, Itera, also expressed interest in a joint venture to operate the gas pipelines. With the renewed uncertainty about future management at APC, its customers were "beginning to have doubts about whether they have to pay or not" (*ICA* May 11, 2000) and bill collections declined by 30 percent.

A third complication in the negotiations over Tractebel's withdrawal from Kazakhstan must surely have been that there were silent partners in each venture – the Calverton Group in the pipelines and the Kazakhstan Investment Fund in APC. There was essentially no information about the Calverton Group, except the report that as one step in the cancelation of contracts, it had returned its 45 percent interest in the pipeline business to Kaztransoil. The only additional note was that the "Calverton Group comprises three Kazakh businessmen" (*FT Energy Newsletter* 2000). It is impossible not to speculate on whether the Calverton Group was in fact the Chodiev Group, whether it might be representing other interests, and whether Calverton might have received a share of the pipeline as part of (or in addition to) the alleged $55 million bribe Tractebel paid to acquire the pipelines. Mashkevich, himself one of "three Kazakh businessmen" who comprise the Chodiev Group, had already been named in the bribery investigation and thus the possibility of a link is clear. Undoubtedly, the connections will remain only speculative, but nevertheless intriguing.

There was a bit more to be found about Tractebel's other silent partner in Kazakhstan, the Kazakhstan Investment Fund (KIF), which acquired a 14 percent interest in the Almaty Power Company.[13] KIF was a limited liability partnership incorporated in the Cayman Islands in October 1996. The fund raised $70.5 million from an unknown number of investors and acquired interests in four ventures in Kazakhstan: 14 percent of Almatyenergo for $21 million; 49 percent of a Karaganda cement company; 11 percent of Golden Eagles Partners, which was a startup investment bank specializing in transactions in the oil and gas sector; and 49 percent of a hotel group. In 1999–2000, Golden Eagle Partners was acquired by Central Asia Industrial Holdings and KIF thereby received an interest in CAIH. When Kaztransgaz acquired APC in negotiations over the spring and summer 2000, KIF was allowed to retain its 14 percent interest. Perhaps coincidently, the period of negotiation between Tractebel and the government over APC was also the period during which a US-based minority shareholder in KIF, representing the Brookdale Group investment fund, acquired control of a majority interest in KIF, took over management, and took the fund private.[14] Reportedly, Brookdale's intention was to seek strategic investors for the assets in the fund. Thus, who exactly now controls the 14 percent minority interest in the Almaty Power Company remains another mystery.

As to APC itself, it remained a division within Kaztransgaz (and then KazTransNeftegaz when the oil and gas pipeline companies were formally merged) until summer 2001 when KazTransNeftegaz concluded an agreement to sell it to the Almaty city management for $50 million (*IPR* January 19–25, 2001). The purchase, eventually approved in mid-2001, was to be funded by loans totaling $36 million from Kazkommertsbank and the Narodny Bank (*ICACBR* July 16–22, 2001). There have been few further reports on operations in Almaty.

Ormat and International Power

The US/Israeli firm Ormat International acquired the Karaganda combined heating and power plants TETs-1 and TETS-3 and the heating distribution network for $2.5 million following a tender held in November 1996 (*MMS*, July 8, 1997). Ormat formed the subsidiary Karaganda Power to lease and operate the assets (*The Times of Central Asia* 43 (Special Supplement) July 16, 2000). With winter approaching, Ormat undertook preparations and invested some $7 million in repairs and other items. Like others, Ormat found collections were a problem, reporting a collection rate of only 15 percent, and acquired 70 percent of the Karaganda Regional Electricity Company in March 1998. In August, they also acquired a secondary heating distribution network.[15] Meanwhile, Ormat sought outside investors, and in June 1998, the UK firm International Power Plc (then named National Power Plc) became an equal partner with Ormat in Karaganda Power for $20 million and an agreement to contribute up to $75 million (out of a total reported to be $110 million) in Karaganda over the next three years (National Power 1998). In October, Ormat and National Power secured a loan for $40 million from EBRD for a program of investment repair and upgrading of the plants, the first of what was to become several EBRD loans in the electricity sector (Ormat 1998).

Like the other international companies in the power sector, however, Karaganda Power found relations with the local community, especially in setting electricity rates at levels to cover the investments the system required, very difficult and politically charged. In late 1999, for example, Karaganda Power set electricity rates at KZT 3 per kwh and heat rates at KZT 45 per cubic meter (*ICACBR* April 24–28, 2000). The local Antimonopoly Committee rejected the increases and ordered rates reduced to KZT 2.85 and KZT 39 respectively. Karaganda Power appealed, lost, but then won an appeal to the Supreme Court which agreed that the lower rates set by the Antimonopoly Committee did not cover the cost of heat and electricity, as permitted. Although they eventually won this round of negotiations (and perhaps others), in 2000 International Power wrote off their entire investment in Karaganda, citing "circumstances in Kazakhstan whereby International Power Plc no longer exercises significant influence over the Karaganda Power Company and . . . no foreseen circumstances in the future where this is likely to change" (International Power *2000 Annual Report*: 51). Two years later, International Power sold its 50 percent interest in Karaganda Power back to Ormat for $0.5 million and left Kazakhstan (*ICACBR* March 11–17, 2002; International Power March 27, 2002). Six months later, Ormat sold Karaganda Power to another UK firm, Independent Power, who had been in Karaganda in 1997–8 operating Karaganda GRES-2 (see below; Independent Power September 17, 2002).

Independent Power Corporation and E Prime

Kazakh Power Partners, a consortium of the UK firm, Independent Power Corporation Plc (50 percent), the US firm E Prime (a subsidiary of Public Service of Colorado, subsequently renamed New Century Energies and then in a merger to form Xcel Energy; 25 percent), and Samsung (25 percent), was awarded a tender for the 608 MW coal-fired plant Karaganda GRES-2 in October 1996. Acquisition was completed in 1997; the consortium paid $1.1 million and committed to some $400 million in investments (Kalyuzhnova 1998: 79–83). For its part, Samsung agreed to purchase 175 MW of power. E Prime was to take on day-to-day operational control of the plant (*Feller Mining News* April 4, 1997). Then, in July 1997, Independent Power and E Prime bid for and were awarded the tender on 70 percent of the second large Ekibastuz power plant, Ekibastuz GRES-2. Evidently, the government then indicated that Independent Power and E Prime had to divest themselves of their 75 percent ownership of Karaganda GRES-2 before acquiring the Ekibastuz plant because it plant was also a power source for Samsung (*Almaty Herald* September 25-October 1, 1997). The divestiture of the one and acquisition of the other were widely reported in the press, but neither occurred.[16] The following year, however, Independent Power did sell its interest in Karaganda GRES-2 to Samsung (and Kazakhmys), and Ekibastuz GRES-1 was eventually sold to Energotsentr (see above). There have been no follow-on reports about the operation of Karaganda GRES-2, but initially at least the report from IPC was surprisingly favorable:

> Having acquired the plant, IPC set about improving operating performance and the efficiency of staff. Significant technical and cultural hurdles were overcome which resulted in K2 becoming the highest available plant in Kazakhstan. Previously loss-making, it was returned to profit within a six month period through judicious use of credit-worthy PPAs denominated in US dollars.
>
> (*Independent Power* 2002)

Unlike most of the other outside investors in Kazakhstan's power plants, IPC's experience was rather more like that of the investors in the large minerals enterprises that, although bankrupt when acquired, were nevertheless reporting profits within a short period of time under the new management. Of course, Samsung was a member of the partnership and had substantial power needs, thereby providing a ready customer and presumably one able to pay in dollars. In all events, IPC's experience was positive enough that it returned to Karaganda and the Kazakh power industry in 2002 when it acquired Karaganda Power from Ormat (see p. 000). Whether its experience will be as positive operating the two combined heat and power plants and the distribution networks in Karaganda remains to be seen.

Unsold power plants

Although virtually all Kazakhstan's power generation plants appear to have been offered for sale, not all found investors. For example, the power plants in Astana, Kokchetau, and Kyzl-Orda were all prepared for a tender in May 1997, but none were actually sold (EU-TACIS 3 1997).[17] Generally, the unsold plants were smaller units – for example Astana TETS-1 and 2 comprised just 268 MW of operating capacity and Kyzl-Orda was just 146 MW – and collectively the unsold power stations represented only 18 percent of Kazakhstan's total generating capacity. If negotiations with UES to create a joint venture collapse (or just continue without conclusion as they have for the last three years) and Ekibastuz GRES-2 remains operated by the state company Energotsentr, the unsold plants comprise about 25 percent of total capacity.

Among the unsold plants, the 350 MW breeder reactor at the Mangyshlak Atomic Energy Complex (MAEK) in Aktau was of most concern because of its age. The reactor, a sodium-cooled fast breeder reactor designed with a nominal power output of 350 MW, was the first commercial breeder reactor built in the FSU (US-DOE-FE 2000). Construction had begun in 1970 and it first achieved criticality in 1973. The reactor was built principally to operate a desalinization plant converting Caspian Sea water to drinking water and to provide heat and electricity in Aktau (formerly Shevchenko), the port on the Caspian built to support development of the oil fields on the Mangistau Peninsula. Output from the reactor was also used to generate heat for commercial and residential use in Aktau and to generate approximately 135 MW of electricity for the area.[18] Operations at MAEK were included in various negotiations concerning the status of nuclear materials in Kazakhstan, with particular attention devoted to the disposition of the large accumulation of radioactive waste material at the reactor site.[19] Before 1991, the spent fuel rods of the reactor were sent to a reprocessing facility north of Ekaterinaburg in Russia. Since independence, however, they had been allowed to accumulate in cooling ponds at the reactor.

Operationally, MAEK was virtually bankrupt by non-payment problems and by a declining amount of direct government support. With no infusion of capital, problems simply grew worse – even in the midst of ongoing inspections and security upgrade programs (*MMS* November 14, 1997). By November 1997, debts amounted to some KZT 5 billion (about $66.7 million) while accounts receivable totaled twice that (*Focus Central Asia* 6 1998). Like the employees at Ekibastuz' power plants, those at MAEK organized numerous protests to draw attention to problems at the plant and to their unpaid wages. In mid-February 1998, 50 employees picketed in front of the main administration building, and in April, the union prepared an appeal decrying both the current state of maintenance and the fact that wages had not been paid in over a year (*Focus Central Asia* 8 1998). Protests,

special meetings, and visits by representatives of various government agencies continued. For its part, MAEK cut off electricity to Aktau to protest nonpayment of bills by both local government and citizens. Unrest spread to many enterprises in the area, culminating in widespread protests at several large enterprises including Mangistaumunaigaz in December 1998 (George March 2, 1999). In mid-January 1999, workers from MAEK went on a hunger strike and, after ten days, authorities paid some of the KZT 18 million ($212,000) in wage arrears. On January 30, over 500 workers again threatened to strike, which caused an additional tranche of wage arrears to be paid.

Meanwhile, the stockpile of used fuel rods had grown to the point that it was estimated to contain more than 3 tons of high-grade plutonium which could be extracted from the spent fuel. In November 1997, the United States and Kazakhstan signed an agreement whereby the reactor would be decommissioned and the spent rods packaged in canisters, transported to the Semipalatinsk area, and placed in special silos in a secure area of the former nuclear testing site (*RFE/RL Kazakh Report* August 31, 1998; Goldstein September 6, 1998). The reactor was reportedly shut down in April 1999 and packaging of the spent fuel rods in specially designed canisters was completed in July 2001 (CNS/MIIS 2001). Transportation of the canisters to Semipalatinsk and permanent burial operations continued for some months.

Sales of the regional electric companies

It was an often repeated intention of the government to sell the Regional Electric Companies (RECs), all the while the power plants were being sold. And in fact, majority control of the RECs from Astana, Aktyubinsk, Kokchetau, and Kyzl-Orda were included in a tender in May 1997, the Atyrau REC in June 1997, and the Karaganda REC in August 1997 (EU-TACIS 3, 4, and 5 1997) However, most were not sold then and, in spite of numerous statements as well as special funding to assist preparations for their sale, all but five continued to be managed by KEGOC, which also retained the national transmission grid. The first REC to be sold was Almaty's, a part of the packaged sale of heating and power plants to Tractebel. Access Industries acquired the North Kazakhstan REC and Karaganda Power (now owned by Independent Power Plc) acquired the Karaganda REC. Finally, AES acquired a management concession for the Semipalatinsk and Ust-Kamenogorsk RECs at the same time they acquired the additional power plants in eastern Kazakhstan. There is no information on prices paid, in part, because some were sold together with the power plants and, in part, because some were sold in (partial) payment for debts. Of these, both the original owners of Karaganda Power, Ormat and International Power, and Tractebel encountered difficulties serious enough to sell their contracts.

Judging by a few of the operating reports from AES' two RECS, the main problems of the RECs were caused by losses due to old equipment and by non-collections, whether because of unpaid bills or because of theft.[20] For example, transmission losses at the Semipalatinsk REC in 1998 and 1999 averaged about 34 percent of the power transmitted, about half of which was due to technical faults while the other half was due to so-called "non-technical losses." At the East Kazakhstan REC, transmission losses in the last nine months of 1999 amounted to 27 percent, of which again about half were non-technical. Non-technical losses were mostly theft. At Semipalatinsk, some 80 percent of non-technical losses were at residential locations and included energy theft, unauthorized connections, and meter reading falsifications, as well as truly faulty meters. Monthly data from both Semipalatinsk and East Kazakhstan showed that technical losses were fairly constant during the year while non-technical losses increased markedly in the winter months. In January 2000, for example, total transmission losses of the Semipalatinsk REC reached nearly 50 percent, and almost all of the increase due to increased non-technical losses. Quite obviously, AES (and all the RECs) faced substantial collections problems.

Privatization and sale of the remaining RECs remained a contentious issue throughout the sale of the assets of the power sector. Many argued development of a competitive market would be enhanced if the distribution and generation assets remained separate and the new owners of the power companies were not permitted to create vertical monopolies. At the same time, however, as long as the state antimonopoly agency retained control of permissible tariffs and continued to set them at levels significantly below full cost recovery, the RECs remained unattractive to outside investors. In particular, the agency excluded nearly 30 expenditure categories in determining costs allowed to be included in determining the tariff, and when costs in allowed categories were reduced because of efficiency gains, the reductions were required to be reflected in lowered tariffs (Korchagin 2002). Nevertheless, since neither the RECs nor KEGOC appeared able to resolve nonpayment problems whereas those power companies which had acquired RECs were having some success increasing revenues, additional sales of RECs to power companies seemed likely. Not surprisingly, investors in the power stations favored additional sales.

In the end, however, the government has simply continued delaying. For example, additional sales were promised in 1999 (US-FCS 1999). In February 2000, the government suspended the initiative, indicating it wanted to review which RECs should remain state property and which should be put up for sale (*Turkistan News* February 26, 2000). Then in March, the government announced it would complete the restructuring of the transmission and distribution sector with privatization of the RECs remaining in KEGOC in a single unified program developed with assistance from EBRD, promising that several would be sold by the fall (US Embassy Almaty

2000a). No sales resulted. In October 2001, the Kostanai REC was declared bankrupt, owing some KZT 9 billion (about $61.6 million), about half of which was owed to Russia's utility UES (*ICACBR* October 22–28, 2001). Whether this will prompt serious reform of the rules for determining transmission tariffs and/or efforts to sell the RECs again remains to be seen.

Sale of the national transmission grid

Like virtually all of the infrastructure in Kazakhstan, the national electricity transmission system was not built as a national system. There were two major, largely unconnected grid systems – the North Kazakhstan Grid, which linked northern regions with Russia, and the Central Asia Grid, which linked southern areas with Kyrgyzstan, Uzbekistan, and Turkmenistan (Sagers and Green 1986). In addition, areas of north and northwestern Kazakhstan were linked separately to power suppliers in Russia. Moreover, the North Kazakhstan Grid and the Central Asia Grid were connected only through the so-called Central System in Karaganda (the link whose disconnection in 1998 caused AES to shut down Ekibastuz GRES-1). The north-northwest regions were net importers of power from Russia all the while power was generally exported from the Ekibastuz/Karaganda regions via the North Grid. The southern region imported power via the Central Asian Grid. As with the generation stations, the equipment was largely very dated – nearly 40 percent had been in use for more than 25 years – and transmission losses across the system averaged 15 percent of generated power (US Commercial Office 2000).

In 1997, at the same time that the power generating companies were being sold, the government organized a tender to turn over operation of the national grid to a foreign investor in order to attract the $500 million in investments estimated to be needed to update the system.[21] Two groups expressed interest in negotiating, the UK firm National Grid Company and a consortium led by the Swedish/Swiss firm Asea Brown Boveri (ABB) with Veag of Germany. National Grid was interested in managing the grid independently of interests in power plants; ABB had already agreed to build two new power stations in Kazakhstan and was explicit in indicating that their interest in managing the grid was to gain control over future power plant investments. In April, the government announced that National Grid was the winner of the tender with a commitment to pay $30 million and to invest more than $10 billion over ten years. However, two weeks later, negotiations with National Grid were abruptly broken off and the government announced it was negotiating exclusively with the ABB consortium. The main concerns for National Grid were the degree to which it would control prices as well as the amount and timing of investments and the extent of guarantees it would be given for minimum levels of profitability. At the end of May, the government also broke off negotiations with ABB. Reportedly,

the government wanted to conclude the deal without detailed audits of the grid's financial situation, whereas ABB was concerned by evidence that performance had deteriorated even during the period of the tender when reported collections from power transmission declined by over 65 percent, from nearly 70 percent of billings to just 12 percent. To what extent negotiations simply stalled because of concerns about ABB's stated intention to use the distribution system to control new plant construction was not discussed.

The collapse of discussions to turn the national grid over to foreign management led to the formal organization of KEGOC as a state-owned company, which it has remained, and to new efforts to raise investment funds on international capital markets. KEGOC announced its intention to raise investment financing internationally and hired Merrill Lynch to manage an international debt issue. After a full audit, KEGOC applied for and received an international credit rating (the same as Kazakhstan's at the time) and became the first Central Asian industrial enterprise to receive a rating (*Almaty Herald* July 2–8 and July 30–August 5, 1998; *MMS* September 3, 1998). The audit indicated KEGOC's assets amounted to some $2.5 billion with an annual turnover of $150 million. Kazakhstan's regional grids owed KEGOC $20 million, KEGOC had inherited (from Kazakhenergo) some $340 million in debts to Russian power suppliers, and AES had filed claims against KEGOC worth $150 million for power delivered to the system but not yet paid for. In the event, a credit rating was not received until September 1998, by which time international capital markets had become much less interested in new debt from companies in emerging economies and the planned borrowing did not go forward.

In December 1999, KEGOC obtained financing for a $258.4 million project to upgrade transmission equipment from the World Bank ($140 million) and EBRD ($56 million), with $62.4 million to be self-financed (World Bank 1999c). Reconstruction began in 2001 and is expected to be completed in 2005 (*ICACBR* December 9–15, 2002). Another project for which KEGOC expects to raise external funding is to build a new north–south transmission line so that surplus power production from the plants in Karaganda and Ekibastuz could more easily be sent south and imports from Uzbekistan and Kyrgyzstan curtailed (*ICACBR* December 23–29, 2002). Whether it will be able to raise the necessary funding is unclear, although it indicated that EBRD was prepared to provide as much as one-third of the funds. Non-collection remains among KEGOC's most difficult problems – as of late 2002, AES Semipalatinsk owed KEGOC some KZT 28.6 million, Shymkentenergo owed KZT 57.7 million, and Kyzl Orda Power Company owed KZT 300 million (*ICACBR*, October 28–November 3, 2002). Nevertheless, KEGOC was (marginally) profitable in both 2001 and 2002 with profits of KZT 150 million and KZT 172.9 million respectively, that is, a little more than $1 million in both years (*ICACBR* December 16–22, 2002).

Sale of the telecommunications system[22]

Initially, Kazakhstan also attempted to attract foreign investment directly to the telecommunications sector. Contracts with AT&T and Alcatel were concluded for new equipment. A Turkish-Kazakh joint venture was established to introduce digital exchanges to the system, and links established to develop satellite communications capability. Eventually, however, all the telecommunications assets were put together to form the state enterprise, Kazakhtelekom, which was also licensed as the monopoly provider of long distance and international services. To secure investment funding, the government then offered to sell a significant share of Kazakhtelekom to attract a single strategic (foreign) investor. Initially, a 49 percent interest was offered, and in May 1996 Deutsche Telekom was announced as the winner, having agreed to pay $528 million, including payment of significant wage arrears and earlier debts, for the share interest. However, the contract came to naught when Deutsche Telekom withdrew, reportedly because it was unable to obtain government guarantees for tariff rates beyond 1997 and for the continuation of the monopoly on long distance and international services. A new tender for a 40 percent interest in Kazakhtelekom was held, and the South Korean firm Daewoo was declared the winner with a bid of $370 million (again including debt repayment) and a pledge of investments totaling $1 billion over three years. Although the news following the announced purchase was full of promise and included reports of a meeting between President Nazarbayev and representatives of Daewoo to review overall plans, release of plans for a new phone station in Almaty, and the arrival of new equipment in Astana, this contract also came to naught. What was unusual was not Daewoo's decision to withdraw after changes in its own circumstances, but that it did so by selling its 40 percent interest to Kazkommerts Securities (a subsidiary of Kazkommertsbank) and not by renegotiating with the government. Kazkommertsbank paid Daewoo $100 million for the shares and promptly sold one quarter of them (i.e. a 10 percent interest in Kazakhtelekom) to private overseas investors.

The transactions raised a number of questions. The sales were kept very quiet. Rumors began with reports that Daewoo had sold a 10 percent interest to investors from the United States with the help of Kazkommerts Securities and that more might be sold. Two months later, in June 1998, Kazkommertsbank confirmed that it had acquired the entire 40 percent interest for $100 million and then had sold a 10 percent interest to investors abroad. In fact, the 30 percent interest was held by Central Asia Industrial Holdings (*ICACBR* March 5–11, 2001). Since Kazkommerts Securities was the firm that had assisted the government in arranging the original sale to Daewoo, its subsequent purchase of the shares for its major shareholder was at the very least a conflict of interest. Many also wondered why the shares were not simply re-acquired by the government, as was usual when

contracts were canceled and had happened earlier when Deutsche Telekom withdrew. In addition, questions were raised as to whether Kazkommertsbank had taken on the commitment to invest $1 billion in Kazakhtelekom over three years. Although it acknowledged the commitment, it only indicated it would assist the firm in finding investment funds, including the possibility of selling a portion to another strategic investor. KKB subsequently agreed to sell a 15 percent stake to EBRD matched with a 15 percent interest from the government's remaining share interest. Had this sale gone through, the state would have retained only 35 percent of Kazakhtelekom, 30 percent would have been committed to EBRD, 15 percent held by CAIH, 10 percent held by unnamed overseas investors, and of course 10 percent of preferred shares were still held by employees. Presumably EBRD would have used its share interest to attract another international telecommunications operator to take a strategic role in the company. In the event, the sale did not go through. The Kazakh government retains a 50 percent (plus one share) interest, CAIH has 30.05 percent, and the Bank of New York controls 6.73 percent.[23]

Kazakhtelekom also was permitted to acquire a major presence in all segments of the communications sector in Kazakhstan, not just the local and long distance service for which it was the exclusive provider. In satellite-based telecommunications, for example, Kazakhtelekom acquired a substantial share of the market through various joint ventures and indirect links. The joint venture with Telstra, named Satel, to develop satellite-based communications was included in Kazakhtelekom's initial assets. A second satellite venture was Nursat, the joint venture formed to convert a portion of the former command and control center for the Soviet military space program at Sary-Shagan into a network for voice and data transmission through the Nunn-Lugar program. Officially, the partners in Nursat were the Kazakh firm Kazinformtelecom (30 percent), the US firm Lucent Technologies (41.25 percent), the Kazakh State Property Committee (20 percent), and the US Defense Enterprise Fund (8.75 percent). However, although no direct ownership link between Kazinformtelecom and Kazakhtelekom was found, the former was at the very least indirectly connected to Kazakhtelekom through Katelco, its satellite television subsidiary, and one report indicated that Kazinformtelecom was controlled directly by the president of Kazakhtelekom. A third satellite provider was Kazintel, a joint venture of Rahat Telecom (Ratel) and two other joint ventures of Kazakhtelekom, Arna and Astel, which took the trade name Ducat (*Almaty Herald* June 6–12, 2002).

Similarly, Kazakhtelekom was permitted to acquire a substantial share of the cellular communications market, with interests in two of the three providers. The first joint venture to be licensed to provide cellular communications in Kazakhstan was Becet International (renamed Altel) utilizing American standard AMPS-NAMPS technology. Founded in 1994, it was a

joint venture between Kazakhtelekom (50 percent) and the Canadian firm PLD Telekom (50 percent) and, until 1998, it had the only license issued by the government to provide cellular service. In 1998, two additional firms were issued licenses to provide cellular services, both using the European standard GSM (Global System for Mobile Communications) system which provided improved reliability and reception relative to the American standard. The first firm issued a license was GSM-Kazakhstan (trade name K-Cell), a joint venture between Kazakhtelekom (49 percent) and the Turkish company Turkcell (51 percent), for which it paid $16.5 million. The second license to provide GSM service was auctioned less than two months later and the firm securing the license was Kar-tel (trade name K-Mobile), also a Turkish–Kazakh joint venture, this time between the Turkish firm Rumeli Telecom (70 percent) and the Kazakh firm Investel (30 percent). It paid $67.5 million for its license. Although apparently independent of Kazakhtelekom, Kar-tel was among the group of companies that Djankov and Nenova (2000) identified as being controlled by Timur Kulibayev. At the end of 2002, GSM-Kazakhstan controlled around three-quarters of the cellular market (*ICACBR* December 23–29, 2002).

To date, privatization and foreign investment in the telecommunications sector has not generally promoted either competition in the sector or levels of foreign investment like the $1 billion promised in the sale of Kazakhtelekom to Daewoo. At the same time, after the turmoil of the mid- to late 1990s with the uncertain ownership situation, economic uncertainty more generally, and five straight years of losses, in 2000 Kazakhtelekom reported it a net profit of KZT 2.8 billion or about $20 million (*ICACBR* May 20–26, 2002). In 2001, profit increased 200 percent to KZT 8.6 billion (about $60 million), and it was up again in 2002 to KZT 11.1 billion (about $72 million; *ICACBR* January 20–26, 2003). Thus, like many of the large enterprises, profits at Kazakhtelekom have been substantial enough to fund various investment programs, even if not on a scale as was envisioned by $1 billion over three years. The issue of Kazakhtelekom's virtual monopoly in the sector has been of some concern as well, and in January 2003 the government approved a liberalization program (ibid.). After a year of preparations, the plan calls for opening the long distance market to all operators that meet license requirements. Whether liberalization will in fact occur remains to be seen. Kazakhtelekom is very well connected in the government and surely will resist such change as would weaken its monopoly.

Summary

By 2000, 39 of Kazakhstan's power generation plants had been sold or put under management contracts, and the results are summarized in Table 11.1. The new buyers/managers were of three types: foreign firms like Ispat, Samsung, and Glencore that had acquired some of the large industrial

enterprises; foreign firms like AES, Ormat, National Power, Independent Power, and Tractebel whose business was building and operating power plants worldwide; and, local Kazakh or Russian firms (or joint ventures) which usually had other investments as well. Although only 60 percent of the 61 stations, they accounted for about 82 percent of the installed capacity. For the 23 sales for which price information (from the original sale) could be found, the aggregate payment to the government was a mere $61.2 million. Even allowing an additional amount for the possibility that some sales included allowances for debts for either electricity or coal which were settled with the transfer of the plant, the total amount received was small and lent more support to those critics who charged that many of Kazakhstan's assets were sold too cheaply. Like all the enterprise sales, the sale of each power station was also accompanied by an investment commitment and together they totaled some $2,438 million for the sales for which the information became public. Although a much more substantial sum, it also reflects multi-year commitments which may or may not be met, might be paid from earnings, and included substantial sums for settling of existing debts like wage and pension arrears.

There were some differences in prices paid for each plant among the buyers too. The international power companies paid an average of $6,260 per MW of existing capacity while the companies which had acquired large enterprises paid just $2,800 per MW on average. Investment commitments were also substantially different, with the international power companies committing to an average $239,000 per MW and the large enterprises just $108,500. Certainly, some portion of the differences could well be the effect of settlements for outstanding debts between the large enterprise and the power station. The amount is substantial enough, however, to suggest the government may have had other objectives as well. For the single sale to a local firm for which information was available (Energoprojekt's purchase of the Atyrau plant), the price amounted to an even lower $1,200 per MW and pledged investments $99,190 per MW. Again, the difference is enough to suggest other factors were important in these sales. In addition to the power plants, the government also sold (or concessioned) five of the regional distributing companies, all the while reiterating its intention to sell them all. It twice undertook to negotiate a concession for the operation of the national grid but failed.

There can be little doubt that service in many areas improved after privatization and sale of the generation companies. Power was available where it had not been before and wages were paid regularly. At the same time, the changes in provision of utility services as the economy became more market-oriented was an especially difficult aspect of the transition for many in Kazakhstan. Many services, not just utilities, which once were free, were so no longer. Moreover, the economy's precipitous decline in the years after independence left many in such reduced circumstances that they were

Table 11.1 Sales of electric power plants and distribution networks in Kazakhstan

Enterprise	*Current owner*	*Previous owner(s)/partner(s)*
Sales to the large industrial enterprises		
Aksu GRES	Kazchrome (Eurasian Bank Group)	Trans World Group
Aktyubinsk TETs	Kazchrome (Eurasian Bank Group)	
Balkhash TETs	Kazakhmys (Samsung)	
Bukhtarma GES	Kazzinc (Glencore International)	
Ekibastuz TETs	Bogatyr Access Komir (Access)	
Karaganda GRES 2	Kazakhmys (Samsung)	Independent Power and E Prime
Karaganda TETs 2	Ispat Karmet (LMN Group)	
North Kazakhstan REC	Bogatyr Access Komir (Access)	
Pavlodar TETs 1	Kazchrome (Eurasian Bank Group)	Trans World Group
Pavlodar TETs 2 and TETs 3		CCL Oil
Petropavlovsk TETs	Bogatyr Access Komir (Access)	
Rudnyy TETs	SSGPO (Eurasian Bank Group)	Myl Ltd
Tekeli TETs	Kazzinc (Glencore International)	

Sales to new foreign investors		
Zhezkazgan TETs	Kazakhmys (Samsung)	
East Kazakhstan REC	AES	
Ekibastuz GRES1	AES	
Karaganda REC	Independent Power	Ormat and International Power
Karaganda TETs 1 and TETs3	Independent Power	Ormat and International Power
Leninogorsk TETs	Semei-Komir	AES
Semipalatinsk TETs	Semei-Komir	AES
Semipalatinsk REC	AES	
Shulbinsk GES	AES	
Sogrinsk TETs	AES	
Ust-Kamenogorsk GES	AES	
Ust-Kamenogorsk TETs	AES	
Sales to local companies		
Almaty Power Company	Almaty city	Tractebel; Kaztransneftegaz
Almaty REC	Almaty city	
Atyrau	Energoprojekt	
Ekibastuz GRES 2	Energotsentr	
Karaganda GRES 1	ABS Balkhash Mining	
Sayansk GES	GESenergo	
Shymkent	Box Plant	
Zhambyl	Energoprojekt (KZ)	

simply unable to pay for such services, including for heat and light. Some indication or the dire circumstances of many even in 1998 and 1999 was the pronounced seasonality of power theft in East Kazakhstan where it more than doubled in the winter months. And, while many of the sale and/or management contracts for the power stations included terms intended to provide assured returns for the purchasers, no such assurances or plans were made for consumers. In a somewhat surprising show of strength, citizens (especially pensioners) organized public demonstrations and kept continuing pressure on the government to prevent increases in tariffs. In the end, the government was forced to abrogate various terms in at least some of its agreements, and in consequence most of the international power companies have now left the country. Unlike many departures in the other sectors, however, these received some compensation. Tractebel settled for $100 million; International Power sold their interest to their partner, Ormat, albeit for a very small sum; and, Ormat sold to Independent Power. As Table 11.1 shows, only AES and Independent Power remain, but even AES recently reduced the number of plants they operate. The sector is still in need of substantial investment; but, additional foreign investors seem unlikely candidates.

The government was a problem in another way too – it was often the largest debtor, persistently refusing to pay its own bills. In Almaty, Tractebel found that by far the largest delinquent accounts were those for government ministries, health and education facilities, and military. In East Kazakhstan, AES found that the two largest delinquent accounts at the end of 1999 were industrial enterprises (AES East Kazakhstan 1999). In Semipalatinsk, however, while the largest delinquent account was also an industrial enterprise, the next five of the largest were other municipal utilities like water and sewage and a military unit (AES Semipalatinsk 1999). In the haste of the initial privatizations in the mid-1990s, did the government simply not realize the extent to which it was the ultimate consumer and that new owners/managers would begin demanding payment? Or later, as with the contracts with AES, that again government services were still to be counted among the delinquent. Or perhaps it was because the government was such a prominent debtor that additional sales of the distribution companies were delayed or that neither a sale nor a management contract could be concluded for the national grid. But then it was also unsuccessful in selling a large interest in Kazakhtelekom to an outside investor. In any event, KEGOC and Kazakhtelekom both have since raised capital on international capital markets as well as through EBRD and World Bank projects. They have also both shown operating profits in the last two or three years. Perhaps this should have been the model all along for the key utilities.

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SUMMARY AND CONCLUSIONS

Throughout its history, economic development in Kazakhstan has been linked inextricably to the development of an impressively diverse resource base. At the turn of the twentieth century, enterprises exploiting oil, coal, copper, gold, lead, and zinc deposits were the core of an emerging industrial economy. The enterprises themselves, as well as the more general reliance on resource extraction rather than manufacturing, were to remain at the heart of the Kazakhstan's economy for over 100 years. After the substantial disruption of World War I followed by the October Revolution, economic recovery and expansion under the new Bolshevik government was little more than rebuilding the existing enterprises and finishing projects started earlier. Expansion followed along with investments in infrastructure both to transport commodities and to support the many workers needed to operate the mines, oil fields, and processing plants. After World War II, investments continued to concentrate on developing the resource sectors even though the costs of development in remote areas were increasingly burdensome, and Kazakhstan's economy remained dependent on the extraction and preliminary processing of its many resources. The economy of no other Soviet republic was so concentrated in these sectors, and it is hard to name an economy anywhere in the world with such a substantial proportion of its industrial structure in resource-based enterprises.

Kazakhstan provided iron ore, coal, steel, chrome, alumina, copper, lead, zinc, several rare earth minerals, and phosphate, to name a few, to fuel Soviet industries. It also was a source of energy for industry, including coal (and electricity), natural gas, uranium, and oil. Many of the individual enterprises grew to become very large, as was typical in the Soviet Union. One Kazakh enterprise, the Karaganda Metallurgical Plant, was one of the 25 largest plants in the entire Soviet Union in 1990, and its revenues accounted for 5 percent or more of the total national income of Kazakhstan. Many others were also very large, and while perhaps not so dominant nationally as the Karaganda plant, they were equally important in regional economies. They were the largest employers. They supported much of the local social infrastructure including schools, hospitals, and

cultural centers, and their tax payments accounted for significant percentages of the budgets of the regional administrative districts.

Not only were the individual enterprises in Kazakhstan large, but they were linked closely with other large enterprise complexes elsewhere in the Soviet Union, especially in Russia. Thus, Kazakhstan's economy was especially vulnerable when the Soviet economic structure collapsed and the enterprises were left on their own. They were cut off from both traditional input suppliers and their usual markets. Even when links were re-established, few had money. Necessary supplies often had to procured through barter, and sometimes food and/or clothing were also acquired and these were distributed to employees in lieu of salaries. Some enterprises opened stores where they could sell surplus goods that had been received instead of money. So much depended upon connections; and, it was no wonder that managers and employees took as much advantage of the unregulated barter as possible. By the end of 1994, little more than three years after independence, total production had declined by about half. Many enterprises were all but closed, and many more were bankrupt. When an enterprise was the foundation of an entire city, many families were forced to become subsistence agriculturalists in order just to survive. Even when a city had several enterprises upon which to depend, hardship was severe when workers went months without receiving salaries. Idle, loss-making, and bankrupt enterprises also meant that the many services which the enterprises supported could no longer be sustained. Neither were there funds to continue traditional subsidies, whether from Moscow to Almaty, or from Almaty to the local cities. Teachers and health care workers went months without salaries. Pensions quickly eroded in value, and even these meager amounts went unpaid.

The government's initial strategy to restructure the large enterprises consisted of little more than bureaucratic reorganizations. New state enterprises comprising the individual enterprises were formed in each sector, but existing management was left in place in most cases. Investment needs were catalogued and some assistance was provided in securing loans for the most urgent projects. Nevertheless, the existing managers were unable to re-establish connections with either former input and/or output markets, and they were especially ill-suited to develop new markets. Moreover, as subsequent events were to reveal, many in existing management positions were enriching themselves personally at the expense of the enterprises.

As the situation grew increasingly desperate, it was clear to all that radical restructuring and substantial new investment was required in order to revitalize the large enterprises. Kazakhstan's President Nursultan Nazarbayev fired his prime minister and cabinet, and appointed a leading reformer, Akezhan Kazhegeldin, as prime minister. The new government was mostly committed to privatization and sale of many of the country's large enterprises to (sometimes only ostensibly) foreign investors. Their hope was that

new owners would provide new management as well as much needed investment capital at the enterprises and stop the ongoing contraction in output. Although widely referred to as the large-scale privatization program in Kazakhstan, it is important to remember that it was really two or three programs: a corporatization program, a privatization program, and then a foreign investment program (mostly accomplished through sales of the enterprises). Each could have been accomplished separately, in a variety of different ways. The enterprises could have been corporatized but the stock remain held by the government, or its agent, as indeed are many of the state enterprises like Kazatomprom, Kazmunaigaz, and KEGOC today. The enterprises could have been privatized in many different ways as well – it was not mandatory that they be sold to (mostly) foreigners. Finally, foreign investment might have been attracted to Kazakhstan's enterprises without also selling them. Nevertheless, in Kazakhstan, they were all one program and it should not be surprising that the program became very controversial, both individually for specific firms and collectively as a program. Nothing short of control of the economy was at stake. That so many of the benefits, which are often alleged to accrue when enterprises are privatized, should be called into question is perhaps more surprising.

A century of foreign investment

That Kazakhstan, which was a land-locked country deep within the former Soviet Union that had itself never been a country let alone had a market-based economy, should undertake the most aggressive and thorough-going program of sales of its key industrial enterprises was to many observers a surprising decision. It was shock therapy on a scale that even the shock therapists did not dare dream. There was some precedent for foreign investment, however, from the turn of the century and the beginnings of Kazakhstan's industrial economy. Nearly a century earlier, several foreign entrepreneurs were the first to develop individual resource-based enterprises. More foreigners returned in the 1920s and 1930s, as both investors and technical advisors to rebuild and to operate the important enterprises. Undoubtedly, the experiences of the earlier entrepreneurs were the last thing on the minds of those designing and implementing the large-scale privatization program in the 1990s or on those acquiring the assets on offer, but in fact there were many parallels in their experiences. Had John Komarnicki of Hurricane Hydrocarbons or Paul Carroll of Worldwide Minerals asked for suggestions of books to read before going to Kazakhstan, those familiar with the country would almost certainly have recommended Peter Hopkirk's (1994) *The Great Game* and Martha Brill Olcott's (1995) *The Kazakhs*, both classics that provide important insights about the country, its people, and its history. Perhaps they would have been better advised, however, to read John Wardell's (1958) account of

living and working in Karaganda at the turn of century or Kennedy's (1986) biography of Leslie Urquhart.

The modern history of foreign investment shared at least five characteristics with the early history. First, there were many similarities in the sorts of companies that were attracted by the opportunities to develop Kazakhstan's resources. Many companies, for example, were specifically syndicated to raise capital for the development of an individual enterprise. In the earliest period, both the Irtysh Corporation, formed by Leslie Urquhart, and the Spassky Company, formed by the Fell Brothers, raised funds from private investors on the London Stock Exchange in order to finance the acquisition and development of specific mineral properties. In the 1920s, Lena Goldfields Company acquired a concession to reopen and operate lead and zinc mines in East Kazakhstan, in addition to several mines in Russia. They too raised capital in London. In the 1990s, Bakyrchik Gold, Steppe Gold, Celtic Resources, Kazakhstan Minerals Company, and Hurricane Hydrocarbons, to name but four, were quite similarly organized and raised the requisite purchase price and/or subsequent development funds from both bond and stock placements on exchanges in London, Canada, and the United States. Major international companies were also important in both the earliest period and more recently as well. The third foreign company in Kazakhstan in the tsarist period, the Urals-Caspian Company, attracted backing from an oil major (Royal Dutch) once a successful well had been drilled. In the 1990s, Kazakhstan's resources also attracted investment from multinational corporations, including ChevronTexaco, ExxonMobil, Shell, British Gas, AGIP, and the Chinese National Petroleum Company in the oil and gas sectors and Ispat International, Samsung, and Glencore International in the minerals sectors.

A second similarity among foreign investors nearly a century apart was that several had interests in Russia as well as Kazakhstan. Leslie Urquhart, for one, developed the copper mines at Kyshtim in the Urals area of Russia before undertaking projects in Kazakhstan. In the 1990s, a substantial number of foreign investors were attracted to Kazakhstan after having acquired interests in related enterprises in Russia. Among others, the Trans World Group, Glencore International (formerly Marc Rich), and Access Industries had established businesses in Russia which preceded their acquisitions in Kazakhstan. The Trans World Group and Marc Rich were both metals trading companies that had represented various Russian metals enterprises in the world's markets in the 1980s. TWG then acquired substantial interests in several aluminum smelters and steel plants in Russia in the early 1990s. Their acquisition of alumina and iron plants in Kazakhstan was obviously connected to those interests. The Trans World Group's partner in Kazakhstan, the Eurasian Bank Group, financed operations in Russia. Glencore continued its trading arrangements with a number of Russian companies, and established tolling arrangements at

several aluminum smelters to maintain output before acquiring the enterprises in the lead and zinc sector in Kazakhstan. Access Industries also had interests in aluminum and oil enterprises in Russia before acquiring coal and electric power assets in Kazakhstan.

Of course, the investors in Kazakhstan's enterprises in the 1990s also included many other sorts of companies as well. Most noticeably, several Kazakhstan-based companies participated in at least the initial rounds of enterprise sales. Indeed, virtually all of the lead and zinc enterprises were sold first to Kazakh companies like Ridder-Invest, Metalou, Postovalov, and RR Kazakhstan Trade and Finance. Yerlovo and Yesil acquired iron ore mining enterprises. Several Kazakh companies became joint venture partners for foreign companies. Most prominent among them was Kazkommertsbank, which partnered with Vitol Munai and acquired the Shymkent oil refinery and some electric power plants. Kazkommertsbank might also have been behind Ridder-Invest. Other Kazakh companies in joint ventures included BN Consulting, which acquired an interest in the Maikuben coal field, and Alel and BSB, which acquired interests in gold mine ventures. However, with the exception of the Kazkommertsbank associated companies and RR Kazakhstan Trade and Finance, these companies were not successful in operating the enterprises they acquired or in raising investment funds. Their contracts were canceled or renegotiated, and the enterprises sold again. Likewise there were a large number of mostly Swiss companies like CAM Finance, Novo-Trading, Dalex Trading, and River International about which almost nothing was known that acquired some of the metals enterprises. In oil, the here-to-fore unknown firm Central Asian Petroleum Ltd acquired a majority interest in what had been the largest operating oil company in Kazakhstan. Perhaps some, like Trans World and Glencore, had had trading interests in the former Soviet Union. In any event, like the local Kazakhs companies, most of these were not successful in reviving their enterprises, left Kazakhstan, and the enterprises were resold.

Third, foreign investors at the beginning and the end of the century shared an extremely challenging operating environment in Kazakhstan. They both had to contend with long distances to markets, high transport costs, and few alternative markets. Investments in transport were among the many key investment decisions both sets of entrepreneurs would make, whether of a dismantle-able railroad or a new pipeline. Moreover, the initial development of the country's mineral reserves had required substantial investments in social infrastructure – housing, public utilities, schools, hospitals, and the like. The owners of the enterprises in the 1990s faced different, but equally difficult, decisions about those same assets. For the most part, the social assets were integral parts of the enterprises, especially in one-company towns, and almost all the enterprises were sold with these assets included. Few were like Ispat and had them explicitly removed from their

contracts. Either way, they all found they had to support some, if not all, of the auxiliary enterprises if only because they needed those services. Most went well beyond the minimal needs, however, and supported a variety of civic organizations and activities in the nearby cities.

Fourth, many of the enterprises themselves were in remarkably similar condition and the descriptions recorded in the 1930s by Littlepage and other consultant American engineers differed little from those of the newly arriving foreign managers in the 1990s. Both arrived after sustained periods of neglect. They brought new skills, both technical and managerial, and within remarkably short periods were able to return to operation and/or to profitability enterprises that were closed or nearly bankrupt. One very noteworthy difference, however, was that in the 1990s, the new owner/managers found local employees who were mostly well educated and highly trained, assets which surely made rapid restructuring more feasible.

A fifth similarity in the experiences of foreign investors in Kazakhstan nearly a century apart should go without saying: ultimately, they were dependent upon the continuing support of the government to be successful. Taken together, almost all of the foreign investors in Kazakhstan early in the last century lost their entire investment. In 1918 and in the 1920s, all the foreign concessions were canceled, and in the 1930s all the remaining foreign engineers sent home. In the 1990s, several foreign investors also had contracts canceled outright; others have had to renegotiate many aspects of their contracts on much less favorable terms. Some, like Daewoo and Tractebel were successful in negotiating compensation for cancelation of their agreements. Most, however, were not so successful and, like Kazakhaltyn, the Trans World Group, and World Wide Minerals, resorted to international courts of justice and of opinion for compensation and support. These efforts met with only mixed success – some were successful in getting some financial compensation, but many were not, and almost all who did receive some funds settled for amounts significantly less than their alleged losses.

Successful new owners/managers in the 1990s

The materials assembled in Chapters 6–11 also revealed a surprising degree of similarity among the owners/managers of Kazakhstan's large enterprises that have been successful. Setting aside for the moment the new owners that acquired and retained enterprises though family connections, the new owners/managers that have remained in Kazakhstan were initially successful in halting production declines soon after taking control. Most had returned the enterprise to profitability within a mere 12 to 18 months. Among these were Ispat, Samsung, the Eurasian Bank Group, Glencore, ChevronTexaco, Hurricane Hydrocarbons, Access Industries, AES, and KazSabton. More-over, they not only met investment commitments at the enterprise, but they expanded their investments in Kazakhstan.

The conditions at the enterprises, whatever the sector, were remarkably similar. Most were operating, although at well below capacity. The equipment was old and had not been well-maintained; parts were cannibalized from some machines to keep others operating. Nevertheless, bankruptcy appeared to be due much more to revenue issues rather than to a lack of competitiveness. By international standards, production costs were low (even if transport costs decreased that advantage significantly). Revenues were depressed because so many transactions were barter arrangements. In all too many cases revenues were also depressed because the existing management had found a variety of ways to divert funds, presumably for personal benefit. Thus, almost as rapidly as the new owners/managers could increase sales in hard currency and plug the many output and/or revenue diversions prior managements had established, the enterprises could be returned to profitability. The profits provided at least some (if not all) of the capital to make more substantial investments, as promised in the purchase agreements. Cost cutting was important as well. Almost all the new owners/managers gradually reduced the number of employees in the enterprises themselves and sold (or gave away) at least some of the auxiliary activities. Over time, other measures have been important too, especially improving output quality in order to expand market possibilities and increasing access to markets by expanding transportation alternatives.

Among other challenges, investors also had to cope with an economic slowdown worldwide in 1998–2000. In 1998 and early 1999, oil prices were at record lows; gold prices remained at 20 year lows; aluminum, lead and zinc prices all set lows during this period. Moreover, low prices also meant that industries in many importing countries actively sought protection from the threat posed by new sources of low-cost imports. Industries in both the European Union and the United States, for example, successfully invoked trade restrictions on aluminum, steel, uranium, and ferroalloy imports from Kazakhstan. In consequence, the development of new markets for Kazakhstani resources was even more difficult. The financial crisis in August 1998 in Russia meant Russian industries were in even more of a decline and not likely candidates to absorb increased production. Kazakhstan also chose not to revalue the tenge until April/May 1999, a decision which meant that supplies from Kazakhstan became increasingly less competitive and markets shrank even more. In other words, to the extent that markets for the output of the large Kazakhstani enterprises were revived under new management, world market conditions were not responsible. Conversely, to the extent that a new owner failed, at least some of the difficulties were external, that no management, however skilled, could have solved.

Third, even while reducing employment, the successful foreign investors generally supported the local communities in a myriad of ways. In the beginning, their obligations were to a certain extent contractual since

most contracts included provisions to clear the financial obligations of the enterprise to the employees, to the pension fund, and to the local administrative budget. Most contracts also included provisions about maintaining current employees for at least a year or two. Then, with a fairly quick return to profitability, the enterprise was once again paying substantial taxes to the local budget. No where was the importance of budget payments more apparent than in the relations between the Trans World Group and the local government. When the Trans World Group first acquired the chrome, alumina, and iron ore enterprises and returned all three to profitability almost immediately, it was accorded much praise and support. However, when revenues were increasingly depressed because of transfer-pricing scheme arrangements, the enterprise profits were much reduced, tax payments dropped, and what had been local support became accusation and confrontation. The door was opened for the government to support the Eurasian Bank Group in a management takeover, and Trans World was ousted. Not surprisingly, one aspect of the new arrangement with the Eurasian Bank Group was an agreement over minimum contributions to the local budget.

From time to time, even successful investors like ChevronTexaco found themselves subject to local government attempts to involve themselves in production decisions and to determine required tax payments coincident with the decline in profits in 1998. Such confrontations were not uncommon; indeed, most successful investors adjusted to a degree of local interference in and monitoring of their operations. At the same time, when local authorities became more aggressive, seeking ever larger budget contributions and increasing control, investors resorted to a variety of strategies, including appeals to the State Investment Committee, to the Prime Minister and President, and to judicial remedies.

A fourth characteristic of successful new owners/managers in Kazakhstan was that they acquired additional enterprises in order to assure themselves of principal inputs and, whenever possible, of principal markets. Thus Ispat International acquired not only the Karaganda Metallurgical Plant but, over time, added coal mines, a power plant, and iron ore mines. Samsung acquired not just Zhezkazgantsvetmet, but coal mines, a power plant, and additional copper mines. The Eurasian Bank Group's Kazchrome and Aluminum of Kazakhstan enterprises, which already were composed of both processing plants and mineral supplies, added power plants and coal; Kazchrome also acquired manganese mines. AES recently acquired a coal mine for fuel for its power plants. Some firms acquired their principal market, as for example when Access Industries, which had acquired the largest coal mine, added heat and power stations and an electricity distribution network. AES acquired electricity distribution networks. In so doing, the successful investors effectively (re)integrated production relations from input sources to final markets throughout the economy.

Moreover, many also acquired additional enterprises in their sector as other investors failed, thereby also (re)integrating production relations within each sector. Samsung ultimately acquired all the copper producing and processing enterprises in Kazakhstan. Glencore eventually controlled almost the entire lead and zinc industry – only the lead plant at Shymkent remained independent. Access Industries took over management of a second coal mine. AES acquired additional power plants. Hurricane Hydrocarbons acquired an oil refinery. Mangistaumunaigaz acquired an interest in the Pavlodar oil refinery (although this was a court decision, not the result of success at MMG).

Adding perceptibly to the increased industrial concentration in almost all sectors of the economy has been the expansion in holdings of financial-industrial groups controlled by President Nazarbayev's sons-in-law Rakhat Aliyev and Timur Kulibayev. For his part, Aliyev's RR Kazakhstan Trade and Finance was given several lead and zinc enterprises early on; of these, he retained control of only Yuzhpolimetal, the lead refinery in Shymkent. He was also widely rumored to be among those behind the Central Asia Petroleum Ltd group at Mangistaumunaigaz and subsequently the oil refinery in Pavlodar. For several years, Aliyev controlled the uranium sector through his position in the National Security Administration and, in all likelihood, he acquired interests in some of the individual enterprises there. Aliyev is also said to control several hotels, gas stations, the sugar industry, and several media outlets (Olcott 2002: 264–7).

Through control of the Central Asian Industrial Holdings and its partner Kazkommertsbank, Timur Kulibayev has gradually established a very extensive industrial empire with holdings in almost all sectors of the economy. Kulibayev was likely behind Ridder-Invest (with Kazkommertsbank), which also acquired numerous lead and zinc enterprises in the initial rounds of privatization and sale, as had Aliyev's RR Kazakhstan Trade and Finance. However, Ridder-Invest was unable to retain any of them. Nevertheless, many other assets were acquired through arrangements with Kazkommertsbank, including the Shymkent oil refinery, the Zhambyl and Atyrau power plants, a substantial share of Kazakhtelekom and both cellular companies, and in Mangistaumunaigaz. The interest in the Shymkent refinery was bargained into a 30 percent interest in Hurricane Hydrocarbons and the combined operations of the Kumkol oil field along with the refinery. The interest in Mangistaumunaigaz became a controlling interest in the Pavlodar oil refinery as well. Like Aliyev, Kulibayev also controls a number of other companies including in oil exploration and development, numerous media outlets and several other banks (Olcott 2002: 264–7). Moreover, through the series of positions he held in Kazakhoil, Kaztransneftegaz, and most recently Kazmunaigaz, he has effectively controlled almost all aspects of government policy throughout the oil and gas sector.

Lessons of the sale of the century

Reviewing the history of Kazakhstan's sale of the century, however, there can no avoiding the conclusion that it achieved few of the goals for which it was designed. It tried to do too much in too many sectors too rapidly. The sale of the century could more aptly be described as the flood of the century, with the associated hope that 100 year events do not have to happen every 100 years. The haste was understandable; the economy was in dire condition. Nevertheless, there were alternatives which undoubtedly would have improved the outcome.

There were problems from the outset, all related to the haste with which the sales themselves undertaken. In the beginning, it seemed as if the government was going to use management contracts to attract new management and, at the same time, to provide an opportunity to assess the true conditions at the enterprises. Indeed, the majority of the sales were represented as management contracts, but most gave the new manager the exclusive right to buy at least a majority interest in the enterprise at anytime during the contract. Because the price was set at the time of the initial management arrangement and the option to purchase was exclusive to the new manager, new information about the enterprise learned during the first few months of operations did not change the price in subsequent negotiations to purchase the enterprise. The fact that all of the purchase options were exercised and exercised early suggests their value, and it lends credence to the allegations that the assets were sold much too cheaply. True management contracts were an alternative, especially for substantial fixed terms. Their use would have given all parties time to assess the real circumstances of the individual firms, once the often very immediate operating difficulties were overcome. If sale was to be the longer term decision of the government, then it would have occurred with much more information, perhaps many more participants, undoubtedly higher prices, and a clearer sense of the real investment priorities. In the short run, management contracts could have been equally effective in the short term to restructure the enterprises, to introduce new management structures, and to stem revenue losses.

Second, an inescapable consequence of the haste with which the enterprises were offered was that, in retrospect, the assets of the large enterprises were sold for remarkably little, either in the prices paid to the government or in investment commitments. Four of the six principal enterprises in the oil sector, the sector thought to be Kazakhstan's key to the future, were sold for a total of $2.21 billion. The assets of the copper industry were sold for around $357 million, those of the chromium industry for $33 million, and those of the steel industry for $225 million. About 75 percent of the electric power generation capacity was sold for less than $50 million. There are many caveats to these sums. There was some additional value in the debts that were settled. The figures are not inclusive since some sales prices were

never reported and some may have been deliberately misreported. As well, the government still retains minority interests in many of the enterprises, and if these are ever sold, revenues from the enterprise assets will most likely be considerably increased whether the sales occur through broker/dealers and the Kazakhstan Security Exchange or through another round of outright sales. The above amounts also do not include the substantial amount of investment commitments that are on the books. However, many of these will be funded from enterprise revenues and not additional foreign investment and, in fact, many of the commitments have not been (may never be) met. Even with these caveats, the inescapable conclusion is that the sales were conducted in ways which did not serve the country's interests.

Third, had the sales taken place over a longer period of time, revenues from early sales might have been invested in an infrastructure to support essential services in cities, to provide retraining for employees laid off, and to invest in the development of a network of small- and medium-sized enterprises which might absorb some of the dislocated personnel. Similarly, more attention might have been paid to the enterprises responsible for key inputs like power and ore so that they did not (almost) automatically become a part of the new conglomerate. And these are but four ways the process of industrial transformation might have led to a stronger, more diversified economy. As it was, none of the revenues to the government from the sales went to support such needs, at least in so far as can be determined from the evidence.

Fourth, negotiations of almost all important terms in the contracts were completed in private, an environment conducive to influence peddling and bribery. Not surprisingly, many of the transactions have been linked to payments of one sort or another. For example, both Tractebel and Ispat International were alleged to have paid substantial bribes to President Nazarbayev via Alexander Mashkevich, a close associate and president of the Eurasian Bank Group. James Giffen, the controversial advisor to Kazakhstan's president, was alleged to have received a fee of $50 million from Mobil for arranging the sale of a share of the Tengizchevroil joint venture. In addition, he has been indicted in US courts for diverting a substantial portion of Mobil's payments meant for the government to several offshore accounts registered for the personal benefit of President Nazarbayev, then Prime Minister Balgimbayev, and members of their families. A former Mobil executive has been indicted for accepting $2 million in payments on which taxes were not paid. Informal reports of those working in Kazakhstan almost always mention bribe-taking as an aspect of every transaction.

Most damaging for the longer run, the sale of Kazakhstan's large enterprises has given a very few individuals a very substantial degree of control of the industrial assets of the country. In such circumstances, there is little hope that the influence peddling, bribery, and connections that have

plagued the first decade of the country's existence will end. Government policies will continue to have little meaning and laws will only be laws when those in control choose to enforce them. In the short-run, the new owner/managers of the country's resource wealth have kept the mines, wells, and the blast furnaces operating; the prospects for growth, however, are very much more uncertain.

NOTES

CHAPTER 1

1 See Peck (2001) for a discussion of the development of commodity exchanges in transition economies more generally.

2 Nor does the book provide a history of the various other privatization programs which affected everything from housing to small- and medium-sized enterprises. Kalyuzhnova (1998: 69–78) provides a useful summary of these initiatives.

3 See the "Investor's Display" at http://en.kkb.kz/Investors_Display/equity.asp. The other major shareholder of Kazkommertsbank was the Bank of New York with 26.99 percent, but it was only a nominal owner thus obscuring true ownership even further.

4 See Nelson Resources *Press Release* of March 13, 2000. One of CAIH's purchases was of the Canadian company Nelson Gold (then renamed Nelson Resources) and since Nelson was a public company, its press releases provided some public information about CAIH. Similarly, CAIH's efforts to acquire Hurricane Hydrocarbons Ltd, another public company, provided additional information.

CHAPTER 2

1 For example, in her classic study *The Kazakhs*, Olcott (1995: 97) devotes only a paragraph to industrial developments prior to the Revolution.

2 An early example of the consequences of development that relied almost entirely on foreign investment was provided by changes in Baku in what is now Azerbaijan. By the end of the nineteenth century, Azeris accounted for less that one-quarter of the population of Baku; the rest were Armenians, Russians, Iranians, and of course the foreign investors themselves (Van Der Leeuw 2000: 69). The first violent ethnic-based disruption in Baku occurred in 1905.

3 Census results are taken from Alampiev (1959: 94–107). The census defined industrial enterprises as those employing 16 or more workers and using an engine or those with 30 or more workers but no engine. Values were calculated at 1926–7 prices.

4 Unless otherwise noted, information in this section draws from the unusually well documented history of the Spassky Company in the reports of E. Nelson Fell (1916) who, with his brother, was a founder of the company and lived at Spassky from 1904–9; John Wardell (1958) who was an engineer and lived at Spassky from 1914 to 1919; and Olivia Fell Vans-Agnew (1962), Fell's daughter, who lived at Spassky from 1905–9.

5 For example, a Russian military map dated 1875 included in Schuyler's (1966) account of his 1873 journey through Central Asia places the Popov Mine in the

approximate location of Oospensky. Alampiev (1959: 102) also refers to the Popov metallurgical plants.

6 Subsequently, Fell returned to the US and undertook the development of large land tracts in Florida (Patterson 1997).

7 Decades later, the Soviets named the space center Baykonur evidently with the hope of disguising its actual location, which is along the Syr Daria some 350 km south of the Baykonur coal mines near Zhezkazgan.

8 Alampiev (1959: 123) evidently believed the fire at the concentrator was deliberately set by the retreating "counter-revolutionary" armies.

9 There are numerous accounts of the development of the oil business in Baku and the Caucasus. Unless otherwise noted, information here is from Van Der Leeuw (2000).

10 Oil was hardly unknown on Cheleken Island. Thompson reported "the island has been described by some travellers (sic) as a sodden mass of asphalt and the non-volatile products of petroleum" (1904: 137). According to Sutton (1968: 27), by 1830 there were more than 3,000 hand-dug wells on the island.

11 Unless otherwise noted, information in this section is drawn from Kennedy's (1986) biography of Leslie Urquhart.

12 At this time, Urquhart also acquired options on several more copper mining properties in Kazakhstan on behalf of the Kirghiz Mining Company and spent £10,000 for a survey (Kennedy 1986: 95).

13 Perhaps the three best known of the modern foreign investors whose contracts to develop operations in Kazakhstan were canceled and their investment lost were the Trans World Group in chromium, alumina, and iron ore, World Wide Minerals Corporation in uranium, and Central Asian Goldfields in gold. See Chapters 6, 7, 8, and 10 for details.

14 Alampiev suggests the vote reflected Lenin's decision "to restore Ridder using the country's own forces" (1959: 138). This seems unlikely since Lenin was known to favor foreign investment and some concessions were granted as early as 1921/22. Moreover, a 1925 concession in fact included the construction of a new lead-zinc smelter to be fed with ore from the Ridder mines (Sutton 1968: 77). Kennedy (1986: 253–4) indicates that the decision to develop Ridder and Ekibastuz with internal funds was not taken until 1929.

CHAPTER 3

1 In 1913, Russia supplied 52 percent of the world's production of manganese; fully three-quarters of this came from the Chiaturi mines in the Caucasus (Sutton 1968: 86).

2 The first foreign concession was that negotiated with the US firm International Barnsdall Corporation in October 1921. See Sutton (1968: 16–44) for additional information about the oil concessions.

3 According to Sutton (1968: 77), the Altai Polymetal Trust was formed in 1924; Alampiev (1959: 162) dated it to a June 4, 1925 decision of the Soviet Council on Labor and Defense.

4 Sutton (1968: 77–9) does not identify the location of the new smelter, but it is almost certainly the smelter at Globokoye, a city just north of Ust-Kamenogorsk on the Irtysh River.

5 See Olcott (1995: 176–98) for a description of the period.

6 See the four reports by Meyer and Meyer (1936) about the nonferrous metal mining and smeltering operations in the Altai region of Kazakhstan. The reports do not reveal any information about the authors' own contracts or the length of their stay at Ridder.

7 Most of the American engineers had returned to the US by the end of 1936 (Sutton 1971: 44). Thus, Littlepage would have been among the last American engineers to leave Russia.

CHAPTER 4

1 The definition of the industrial sectors varied among reports. In Beaucourt *et al.* (1963), a single category included machine building (*construction de machines*) and metallurgy (*transformation des meteaux*). In Dienes (1982), there was a separate category for machine building and metallurgy per se was not mentioned. In Sagers (1992c), primary industries was a separate category.
2 Unless otherwise noted, the discussion of wartime developments in Kazakhstan's industry relies on Alampiev (1959: 298–303) and Shabad (1969: 284–308).
3 Details drawn from Shabad (1969: 284–308; 1979; 1986), Dienes (1972), and Shabad and Sagers (1987). Discussion focuses on the growth of coal production at Ekibastuz, by far the most important of Kazakhstan's coal fields in terms of coal used for power production.
4 In 1933, the southern region comprised six oblasts: Kyzl Orda, South Kazakhstan (formerly Shymkent), Zhambyl, Almaty, Almaty city, and Taldy-Kurgan. In the 1990s, Taldy-Kurgan and Almaty were merged.
5 See Olcott (1995: 118–26) for an account of the Kazakh revolt in 1916, its suppression by the Russian army, and the consequent decline in the population.
6 Industry throughout Central Asia was dominated by Russians. See Lubin (1984) for a detailed analysis of the ethnic composition of industrial labor in other Central Asian countries, which shows the overwhelming dominance of non-indigenous Central Asians in industry, especially in heavy industry.
7 Unless otherwise indicated, data on the various socio-economic indicators reported in this section are from Bond *et al.* (1991).
8 Bond *et al.* (1991) and Belkindas and Sagers (1990) estimated that Kazakhstan received subsidies amounting to 17 percent of net income utilized in 1988, an increase from the estimated subsidy of 13 percent in 1970.

CHAPTER 5

1 See Olcott (2002: 136–43) and Kalyuzhnova (1998: 74–8) for additional details of the privatization programs.
2 When the enterprises were corporatized, 10 percent of the stock, albeit special non-voting stock were usually given to the employees.
3 KRAMDS, whose name comes from the Russian acronym for the Kazakh Republic Association for Interbusiness Cooperation, included enterprises from the chemical, machine building, construction and light industry sectors in addition to those in ferrous and nonferrous metallurgy (Kalyuzhnova 1998: 62–4).
4 The calculation assumes that income declined at the same rate as GNP and applies the distribution change shown in Table 5.1 to the change in real GNP (Griffin *et al.* 1997).
5 The subsistence minimum is defined as the cost of a specified, nutritionally adequate, food basket plus an allowance for non-food goods and services. See the living standards study (World Bank 1998: 13) for additional details as well as a list of the contents of the food basket in Kazakhstan.
6 In the 1997–8 consolidation of administrative regions, the Kokchetau oblast was eliminated and its territory was divided between the North Kazakhstan and Akmola oblasts.

7 Subtitle from Piirainen (1996); and, unless otherwise indicated, material in this section is drawn from this report.
8 Estimates of the number vary, and the World Bank (1998: 15) put the figure at 57.
9 Werner (1997) describes similarly complex exchange relations among Kazakh households she lived with in the southern region. In Alga, exchanges included many Russian families as well.
10 Specific allegations are noted in each chapter. The oil industry has been the focus of most of the allegations to date and Hersh (2001) provides perhaps the best summary. Tavernise and Pala (2003) provide a brief update on the status of many of the investigations.

CHAPTER 6

1 Roskill (1998) also provides a list of the main enterprises mining and processing ores as well as the refineries for each mineral.
2 As early as 1992, the Trans World Group had acquired control of the smelter at Bratsk (*Almaty Herald* December 6–12, 2001). The group also acquired a 20 percent interest in the Krasnoyarsk aluminum smelter, an interest in the Sayansk aluminum smelter, and an interest in the Novolipetsk steel plant (Clover and Hall 2000). At one point, the Trans World Group (and its Russian partners) controlled 7 percent of global aluminum production.
3 In some sources, a distinction is made between Trans World Metals which was the UK trading firm and the associated Trans World Group of which it was a part (see Burns (1999), for example).
4 President Nazarbayev may have been informed of the questionable connections of the Trans World Group in Russia during a November 1997 visit to the United States, and this information may have led to the abrupt change in the government's attitude toward the operations of Trans World Group in Kazakhstan (*Focus Central Asia* 1 1998).
5 The investigation was said to be the biggest involving money laundering in modern Germany (*The Russian Business Monitor* 2001).
6 Although the government retained only a minority stake in Aluminum of Kazakhstan, the combination of its stake and EBG's 50 percent of Whiteswan's 56.5 percent share amounted to more than the majority required for control. In July 1998 the Kazakh Supreme Court formally ruled that the 56.5 percent equity position was the joint property of EBG and Trans World. Accordingly, the shares were to be divided equally, thereby establishing EBG's legal ownership of a 28.25 percent interest (*IMMR* February 19, 1999).
7 The agreement also covered the operations of Kazkhrom, another of the TWG/EBG partnerships, located in the same region (see Chapter 7).
8 The estimated profit for 1998 was taken from materials filed with the Kazakhstan Securities Exchange (*ICACBR* January 18–24, 1999.) Separately, Interfax reported that profits from the core business in 1998 were about KZT 130.6 million or $1.7 million (*IMMR* February 19, 1999). Here and elsewhere in this book, financial figures should be viewed especially cautiously. As but one example, an independent audit of Aluminum of Kazakhstan's 1997 operations reported there were considerable discrepancies between their results and those presented in the firm's financial statements (*KWN* February 1, 1999). In addition, the number of enterprises included in Aluminum of Kazakhstan changed over time, and it remains unclear how closely prices are at least checked against international prices in preparing financial reports.

9 In fact, a number of reports suggested plans and financing for the smelter were well underway (*ICACBR* June 26–July 2, 2000, August 28–September 3, 2000, and April 28–May 3, 2001).
10 In June 1996 Samsung held a press conference at which it announced it had acquired a 40 percent interest in Zhezkazgantsvetmet at a "special closed tender" (*MMS* June 14, 1996). Kazkommerts Securities (1997) reported the closed tender had in fact occurred in August 1995.
11 Kalyuzhnova (1998: 79–83) indicates that $302 million of the $351 million was an investment commitment. As noted later in the text, the pledged investment was substantially greater, but it was also a 15 year commitment. Kalyuzhnova's figure may reflect the portion of the total commitment that was for the initial five year period, which was the more typical investment horizon. In all events, the amount paid the government outright was quite small.
12 No information on the resolution of this suit could be located; it may well have been settled privately.
13 Ridder-Invest also acquired a number of lead and zinc enterprises, described in the next section.
14 Karagaily too had had many prior owners (described in the next section), but none had been successful.
15 European Minerals Corporation August 29, 2001. See Chapter 8 for more information on Kazminco's investments in Kazakhstan.
16 Production at each enterprise in 2002 was extrapolated from 2002 total production (Figure 6.1) and production shares in 2001.
17 In any event, comparisons of financial results from year to year would have been extremely difficult since the number of enterprises included in Kazakhmys changed each year. Also, it should be noted that Kazakhmys produces gold, silver, lead and zinc concentrates in addition to copper and copper products.
18 Until June 2000, Samsung's share was put at 40 percent in virtually all reports, but then an Interfax report put the amount at 42.4 percent without any further comment (*IMMR* June 15, 2000). In February 2001, Samsung's interest was reported to be 42.55 percent and it has remained at that amount in all subsequent reports (*IMMR* February 16, 2001).
19 Samsung Hong Kong Ltd and Samsung Trading Plc are wholly-owned subsidiaries of Samsung (Samsung 2001). This report also indicated that Samsung's interest in Kazakhmys was 28.15 percent (not the 25.33 listed elsewhere) as of December 30, 2000 but, because it provided no details of the holdings of the subsidiaries, it does not necessarily mean Samsung had acquired more of Kazakhmys. The prior year's report (Samsung 2000) indicated Samsung's share of Kazakhmys was 29.97 percent.
20 A US Embassy report (December 23–January 3, 2003) indicated that Kazakhmys acquired the 10 percent interest sold in November 2001, suggesting that it funded Futures Capital. There have been no other confirmations of this report, however.
21 LME brands are reported on their website at www.lme.co.uk/products_services. Registration is important because it establishes that the refinery's production meets purity standards established by the exchange and thus is readily accepted in international markets.
22 Sagers (1998b) indicated that Ridder-Invest was a US–Kazakh joint venture, but other sources did not mention any US link.
23 Details of the formation of Kazzinc and its sale are taken from *Focus Central Asia* 5 1998; *Feller Mining News* August 15, 1997; and *MMS* December 27, 1996 and June 28, July 8, and July 17, 1997.
24 Glencore International is the Swiss-based metals trading firm started by Marc Rich after he left the US to avoid prosecution on tax evasion charges. Rich was

given a presidential pardon in January 2001. For its part, Glencore had been an active metals trader in the Soviet Union, much like the Trans World Group. After 1990, it also became involved with enterprises in the metals industry in Russia, for example introducing tolling arrangements at the Krasnoyarsk aluminum plant as early as 1991 (*Almaty Herald* December 6–12, 2001). As noted earlier, it participated in the consortium which bid on Balkhashmys.

25 Between 1997–2001, refined lead output at Yuzhpolimetal was extrapolated. Note that the implied totals do not always tally with data in Figure 6.1. Kazzinc stopped reporting refined lead production in 2001 and figures were derived as the difference between total reported production (Figure 6.1) and that of Yuzhpolimetal.

26 Throughout this period, sources consistently refer to the firm as Novo Trading. In 2001, Interfax identified the firm as Nova-Trading (*ICACBR* September 3–9, 2001).

27 In early 1997, Novo-Trading acquired a 60 percent stake in a non-ferrous metal mine for some $98,684 (EU-TACIS (1) January/February 1997). Presumably this is the joint venture Nova Zinc but whether it included all of the assets of the former Akchetau enterprise remains unclear.

28 Somewhat unusually, shares in Zhayrem (and the associated Saryarka Polymetal firm) were first sold through the so-called coupon auctions of the mass privatization program in 1994–5 described in Kalyuzhnova (1998). One investment fund, Consumer's Union, acquired a 46 percent share in 1995, but lacking funds to invest in the enterprise, sought a foreign investor for its share. In September 1995 the share package was sold to the Swiss firm, Nakosta.

29 Details are from *Feller Mining News* July 7, 1997; *MMS* May 1, October 3, October 10, October 17, November 1, November 21, December 4, 1997; *Interfax Mining News* October 17 and November 7, 1997 and January 9, 1998; and *IMMR* October 18, 1997.

CHAPTER 7

1 Ispat International is the wholly owned, UK subsidiary of the LMN Group through which Karmet was acquired. It should not be confused with Ispat International NV, the Netherlands-registered public subsidy of the LMN group whose shares are traded in Amsterdam and New York and includes steel-making operations in Canada, France, Germany, Ireland, Mexico, Trinidad and Tobago, and the United States. The LMN group also includes Ispat Indo in Indonesia (Hoover's 2002).

2 The debts Ispat agreed to repay excluded "problem debts" of at least $127 million, debts which presumably included the earlier government-guaranteed debt to Itochu (*IMMR* April 27, 2001). In 2001, the Japanese sought assistance from the Kazakh government to have this loan repaid (*ICA* May 15, 2001).

3 The allegation was made by a former employee of the LMN Group in an interview on the BBC aired on July 24, 2002. See BBC (July 24, 2002) and Leigh (July 25, 2002) for details.

4 One report indicated the purchase price was only about half that, only $36.8 million (Thoenes October 25, 1996).

5 See *IMMR* June 8–12, 1998 for a list of TWG's investments.

6 Sometime later, the Eurasian Bank Group acquired an additional 1.56 percent interest, bringing their total to 59.06 percent.

7 Other measures of the confusion over the status of Kazakhmarganets during this period include differing reports of the share interest Kazchrome actually acquired (Jones (1997) put it at 51 percent), timing of the sale (reported to be in 1998 in *The Mining Journal* (September 7, 2001), and so on.

CHAPTER 8

1 Kazakhstan also produces some silver, almost entirely as a byproduct of its other mining operations.
2 Gold and silver bullion accorded good delivery status is listed at www.lbma.com.
3 After attempting to sell the individual mines, a tender for the assets remaining in Altynalmas, said to be mostly machinery and buildings, was announced in February 1997 (*Feller Mining News* February 21, 1997). However, since some mining properties were in fact later returned to Altynalmas, it seems likely that this tender was canceled.
4 Whether the £1.2 million includes the initial acquisition cost of the 40 percent interest in the joint venture is unclear. The terms under which Minproc and Chilewich formed the initial joint venture with Altynalmas were not disclosed.
5 Bakyrchik's history is drawn from Cancorp (2002), *Feller Mining News* February 2 and 27, July 7, and August 15, 1997; *IMMR* February 20, 1998 and February 12, 1999; Indochina Goldfields Ltd *Press Releases*; and Thoenes (July 11b, 1996 and July 23, 1997).
6 Friedland owns or controls several companies with mining interests throughout Asia including the Monywa copper mine in Burma (Moody 2000).
7 Prior to 1996, the government retained the right of first refusal on sales of gold, effectively giving it control of exports. Such terms were common in all the Central Asian republics and seriously impaired foreign firms' ability to secure financing for projects.
8 The record is unclear whether Dabney and Danae were original partners with Alel or subsequently bought an interest from Alel (*IMMR* May 28, 1999; Minesite 2001).
9 Drawn from Celtic Resources *Press Releases* (April 2, 2001 and May 27, 2002) as well as their *2001 Annual Report*. The investment evaluation of Celtic by Hoodless Brennan (2002) also contains useful descriptive information.
10 Taken from contemporaneous press releases accessed through business news reports in Lexis-Nexis. See *Business Wire* September 15, 1993, March 9a and 9b, 1994, and January 24 and May 29, 1995 and *Canada NewsWire* November 15, 1995, February 21, 1996, May 14 and October 14, 1997. See also Steppe Gold Resources Ltd November 5, 1998 and February 9, 1999.
11 Shares of Steppe Gold were traded in Vancouver, leading to the impression it too was a Canadian mining company.
12 Details of the successive sales of Vasilkovskoye to Dominion Mining, to Placer Dome, and then to a consortium led by the Teck Corporation are taken from Gooding (August 9, 1995), Thoenes (July 11b, 1996 and July 23, 1997), *IMMR* November 26, 1997, *Feller Mining News* February 7 and 21 and August 21, 1997, *MMS* October 1998, and Teck Corporation *Press Releases*.
13 The consortium included Bakyrchik Gold Plc (and through them Indochina Goldfields) and another Canadian mining company First Dynasty. Both Indochina Goldfields and First Dynasty were controlled by Robert Friedland.
14 Levaev (Africa Israel Investments) also had interests in the diamond mining company Kama-Kristall in Russia and telecommunications in Eastern Europe (BBC 2001 and Russica 1998). His initial acquisition in Kazakhstan was Kazfosfat, the country's phosphate monopoly, followed by Tselinnyy.
15 Details of Gold Pool's contract and its subsequent efforts to acquire Kazakhaltyn drawn from *Feller Mining News* February 21, September 12, September 19, and October 17, 1997; *IMMR* August 7, 1998 and February 5 and 26 and March 12, 1999; and, *Almaty Herald* October 23–29 and November 20–26, 1997 and March 19–25, 1998.

16 An earlier announcement indicated that precisely this sort of buyout was planned (*Business Wire* May 23, 1996). One contemporaneous news story indicated Central Asia had an option to buyout its Kazakh partners for $20 million (*The Financial Post* July 6, 1996).
17 See especially Buraff (1998); *Almaty Herald* October 23–29, 1997; *Business Wire* September 20, 1996 and December 2, 1996; and, *Canada NewsWire* August 18, 1997 and January 21, 1998.
18 Drawn from *Almaty Herald* March 5–11, 1998; *IMMR* February 7, March 12, and July 17, 1998 and January 28, 2000; *ICACBR* January 17–2, February 14–2, and June 9–18, 2000; *KWN* September 18, 2000; and *Feller Mining News* April 3, 1998.
19 See Eurasia Gold Corporation *Annual Reports* 1997–2000. In 2000, a majority interest in Eurasia was acquired by Thistle Mining Inc., another Canadian mining company, and information about Eurasia projects is reported through Thistle.
20 Unless otherwise noted, details have been taken from Kazminco *Annual Reports* and *Press Releases.* In 2001, Kazminco was renamed European Minerals Corporation.

CHAPTER 9

1 A sixth association, Karazhanbas, produced a million tons in 1992 (Sagers 1994).
2 Note that substantial foreign investment continued in exploration. Sagers (1993) estimated that Kazakhstan had signed contracts with more than 40 foreign companies to develop oil and gas resources as early as mid-1993.
3 See Pope and Cloud (2000), Johnston (2000), Hersh (2001), Lallemand (2000) and Swissmoney (2002).
4 To be sure, Kulibayev and Aliyev are not the only family members to have acquired substantial influence and assets in Kazakhstan. See Olcott (2002: 264–6) for a partial list of the various enterprises and interests of other family members.
5 Drawn from *IPR* October 31–November 5, 1997, March 19–25, 1999, and May 26–June 1, 2000; *ICACBR* January 18 and March 29, 1999; *KWN* January 1998; Sagers (1994); and *Almaty Herald* April 9–15, 1998.
6 *Almaty Herald* August 6–12, 1998 and *IPR* December 25, 1998–January 7, 1999. Shipping by rail cost nearly twice as much as by pipeline, $6 per barrel versus $3 (Pala November 21, 2001).
7 Chevron's acquisition costs for TCO are not included in the annual development costs.
8 See *ICACBR* January 18–24, 1999 and October 23–29, 2000 and Adamson (2001).
9 *ICACBR* August 28–September 3, 2000, *IPR* September 21–27, 2001, and Adamson (2001).
10 Drawn from Pala (November 21, 2001); Lelyveld (2002); *IPR* August 28–September 3, 1998, April 28–May 4, 2000, and May 25–31 and August 3–9, 2001; and Project Underground (2001).
11 Unless otherwise noted, the description of Yuzhneftegaz and of the terms of the sale agreement were drawn from HHL (1997). Note that HHL was renamed Petrokazakstan in mid-2003, after the manuscript for this book had gone to press.
12 In March, 1997 94.5 percent of comparatively small oil enterprise Karazhanbasmunai was sold to the US-based Triton-Vuko Energy group for $90 million (IEA 1998; US-DOE-EIA 2002b).
13 Prior to the acquisition of Yuzhneftegaz, HHL had acquired an interest in the Turan joint venture.
14 Drawn from HHL *Press Releases,* April 12, May 8, and May 20, 1998 and interviews by the author in Kyzl Orda, May and September 1997.

15 Drawn from *IPR* November 20–26, 1998, May 28–June 3 and August 13–19, 1999; *IMMR* December 11, 1998; *Almaty Herald* April 8, 1999; and HHL *Press Releases*, May 14, June 15, July 12, and August 12, 1999; HHL *Quarterly Reports* for 1999 and 2000; and, HHL *2000 Annual Report* and *1999 Information Circular*.

16 Prior to 2002, Central Asian Industrial Holdings was known as Central Asian Industrial Investments, also registered in the Netherlands Antilles. There were also groups of related companies registered in the Netherlands (see discussion of the purchase of Mangistaumunaigaz) as well as the Kazakhstan-registered Central Asian Investment Company. They are all referred to here as Central Asian Industrial Holdings. Among its other holdings, CAIH owns 36.27 percent of Kazkommertsbank (http://en.kkb.KZT/investors_display/equity.asp) and most of its investments are in partnership with KKB. CAIH is widely reported to be headed by Timur Kulibayev.

17 Between 1997 and 2000, HKM paid $207 million in taxes, an amount which constituted 70 percent of Kyzl Orda's budget (*Almaty Herald* December 6–12, 2001).

18 Of note too is the especially cautious language: "ShNOS [the refinery] has advised that, as of December 31, 1999, ShNOS has spent *approximately* $34.4 million of capital expenditures which ShNOS *believes* satisfies a portion of the requirements of the ShNOS privatization agreement" (HHL *Information Circular Summary* 1999, emphasis added).

19 See *National Post* May 16, 2001 and *Almaty Herald* April 26–May 2, 2001 for summaries.

20 See HHL *Quarterly Report* June 30, 2002; HHL *Press Releases*; *IPR* May 29–June 2 and June 7–13, 2002; *ICACBR* May 29–June 2, 2002; and, *Almaty Herald* May 30–June 5 and June 6–12, 2002.

21 Technically MMG is an open joint stock company, but the listing at the Kazakhstan Stock Exchange showed only that the ownership of the stock was private (KASE 2001).

22 Drawn from *Agence France Press*, "Indonesian oil mogul denies corruption charges," November 8, 1998; *The Jakarta Post*, "Oil tycoon Arifin tells of plan to pay back debt," June 29, 1999; *Global News Wire*, "Medco to sell part of its stake in Kazakhstan oil project," July 5, 1999; and *Asia Pulse*, "Indonesia's Medco sells Kazakhstan oilfield for $260 million," August 9, 1999.

23 Drawn from *ICACBR* June 4–8, July 23–29, and Oct 1–7, 2001 and May 13–19, 2002 and *IPR* June 15–21, June 22–28, and December 21–27, 2001 and April 26-May 2, 2002.

24 It is mostly a reconstruction and expansion of existing pipelines much like the CPC pipeline from Atyrau and Novorossiysk. For example, while the existing Kenkiyak–Bestamak segment has a design capacity of 6.5 million tons per year (and only 2.6 million tons was actually shipped in 1995 and 1996), the new pipeline will have a capacity of 12 million tons per year (IEA 1998; *IPR* April 19–25, 2002).

25 See Pike (2000) for a description of the testing range and a report of discussions with Russia of its future.

26 There is some disagreement whether this is a US company. Early Interfax reports frequently referred to it as a Russian-Swiss joint venture (e.g. *IPR* December 19–25, 1997) although later reports consistently referred to it as an American company. IEA (1998) indicated CCL Oil was the UK-registered firm Crispin Company Ltd. A Kazakh government commission reported that CCL Oil was registered in Connecticut, but was a company with "no operating capital, just three employees, and an office with a disconnected phone" (*IPR* September 25–31, 1998).

27 Comparable data for the other two refineries indicated they produced relatively more diesel and fuel (IEA 1998).
28 Soon thereafter, a member Kazakhstan's parliament publicly alleged that then Prime Minister Kazhegeldin had invested heavily in the Shymkent refinery while in charge of arranging its sale to Vitol through Kazkommertsbank (*MMS* September 12, 1997).
29 One indicator of the never transparent connections among individuals and firms in Kazakhstan is that Kazvit's president, Gavin de Salis, was next reported to be a spokesperson for CAIH during its negotiations with Hurricane Hydrocarbons for an interest in HKM (Johnson 1999).
30 See Nelson Resources and Chaparral Resources. Nelson Gold was acquired jointly by CAIH and Korinth Trade and Investment, another offshore company said to be controlled by Kulibayev. The president of Nelson Resources is Baltabek Kuandykov, evidently an experienced oil manager who also is connected to Nurlan Balgimbayev through the marriage of their children (Grachev 2002).
31 Some reported that President Nazarbayev fired both Kulibayev and Balgimbayev (president of Kazakhoil) in an attempt to distance himself from the corruption scandal since both had been linked to some of the accounts frozen in Switzerland (see for example International Eurasian Institute 2002).

CHAPTER 10

1 Drawn from *Feller Mining News* April 3, 1998; *Almaty Herald* March 5–11, March 18–24, and April 2–8, 1998; *Focus Central Asia* 5 1998; *ICACBR* February 1–7, 1999 and August 20–26, 2001; *IMMR* February 27–March 6, 1998, Interfax Mining News March 27, 1998; and, *MMS* January 8 and February 27, 1998.
2 Drawn from *Feller Mining News* November 7, 1997; *MMS* October 3, 1997 and July 7, 1998; and, *IMMR* June 14, 2002.
3 Drawn from *Feller Mining News* April 3, 1998; *MMS* May 27 and November 12, 1998; and *IMMR* September 18 and December 4, 1998, February 6, 2000, and January 12, 2001.
4 *Kazakhstan Daily Digest* March 23, 2001. BN Consulting also owns 30 percent of BN Munai, a joint venture with the UK-based company Atlantic Caspian to develop the Akkul oil field (Olcott 2002: 264–6).
5 See *ICACBR* September 24–30, 2001 and *IMMR* December 7, 2001 and March 8, 2002.
6 See Dahl and Kuralbayeva (2001) for further discussion.
7 Drawn from Sagers (1992a, 1993, and 1994), unless otherwise noted.
8 Drawn from *IPR* September 26 and October 10, 1997; *ICACBR* December 6–12, 1999; British Gas (2002); and Eni (2002).
9 Drawn from *IPR* June 25–July 1, 1999, December 24, 1999–January 6, 2000, October 13–19, 2000, and October 5–11, 2001; *ICACBR* September 3–9, 2001, October 28–November 3, 2002, and January 20–26, 2003; and, *Almaty Herald* October 15, 1998 and January 16, 2003.
10 See *IPR* May 21–27 and September 17–23, 1999 and February 2–8 and June 15–21, 2001; *ICACBR* September 27–October 3, 1999 and March 19–25, 2001; and, *Almaty Herald* November 1–7 and 8–15, 2001.
11 See Korina (2002), UN-ECE (2000), Abekesheva (2002), Van Der Schriek (2002), *IPR* February 15–21, 2002, and *Almaty Herald* January 10–16, 2002.
12 Drawn from Kenzhetaev (1996), CNS/MIIS (2001c), and UN-ECE (2000).
13 Kazakhstan Stock Exchange (2002). In addition to the mining and processing enterprises, KATEP also included the uranium exploration company Volkovgeologiya and Kazakhstan's only nuclear reactor, the Mangyshlak Atomic Energy

Complex in the Mangistau region. See Chapter 11 for more information on the nuclear reactor.

14 CNS/MIIS (2002) and *Focus Central Asia* 16 1997. See Rowland (1999a) for more information on the secret cities of the former Soviet Union.

15 Drawn from Carroll (1997); *Focus Central Asia* 7, 15 and 16 1997; CNS/MIIS (2001a and 2001b); and US Embassy Almaty (1997a).

16 Drawn from World Wide Minerals, *Annual Reports* and *Press Releases*; *Focus Central Asia* 16 1997; *Almaty Herald* August 7–13 and October 9–15, 1997 and April 16–22, 1998); *Feller Mining News* July 7, September 12, September 19, and October 21, 1997; and, *IMMR* September 12 and October 10, 1997 and March 13, 1999.

17 Drawn from World Wide Minerals *Press Releases*, *Lawsuit Status*, and *Chairman's Message*; *IMMR* March 12, 1999; and, Carroll (1997).

18 See *ICACBR* September 24–30 and December 3–9, 2001 and *IMMR* May 18, 2001 and March 8, April 12, May 8, and June 21, 2002.

19 Kazatomprom was given the state's (consolidated) 45 percent interest in Katco. The other foreign interests with a 10 percent share were later identified as the Swiss-registered group, Zambezi Holdings, which is the same group that tried to acquire an interest in Ulba in 1994/95 (*IMMR* August 31, 2001). The ownership of Zambezi Holdings, however, remains unknown.

20 Unless otherwise noted, drawn from UN-ECE (2000: Chapter 6) which also provides an overview of the environmental problems associated with the former nuclear testing sites located in Kazakhstan.

CHAPTER 11

1 US-FCS 1999). The reported number of plants varies among sources considerably, however, from as few as 54 to as many as 71, with most in the low 60s.

2 For a recent reiteration of this position, see Kennedy (2000).

3 See *MMS* May 1, June 5, June 27, July 10, and August 15, 1997; *ICACBR* April 23–29, 2001; and US Commercial Office (1999 and 2000).

4 See World Bank (1999b), *Focus Central Asia* 13 1998, *IMMR* July 21, 2000, *ICACBR* March 27–April 2, 2000 and December 17–23, 2001, and *Almaty Herald* February 14–20, 2002.

5 Drawn from Kazkommerts Securities (1998a and 1998b).

6 See *ICACBR* January 24–30 and March 27–April 2, 2000, December 24–28, 2001, and April 8–14, April 15–21, June 10–16, and December 9–15, 2002; US Embassy Almaty (1999 and 2000b); RFE/RL July 16, 1999; and Alexander's Gas and Oil Connections (2003).

7 AES was responsible for the operations and Suntree for government relations (*Feller Mining News* January 31, 1997). Suntree was also a partner in AES' subsequent acquisitions in East Kazakhstan although at only a 15 percent interest. Suntree is almost never mentioned in reports about operations, and consequently is not mentioned further.

8 See AES Silkroad Group for background information on the various power plants. See Berman and Brown 1998; *Electrical World* 1997; World Bank 1998b; and *Almaty Herald* June 18–24 and July 9–15, 1998 for more information on conditions at Ekibastuz GRES-1.

9 The severance package included eight months' salary, full payment of all back wages, and job training. The plan was reported to have the support of the trade union and many employees (*Almaty Herald* June 18–24, 1998).

10 See *ICACBR* November 18–24, 2002. The Semei-Komir group owns a local coal mine. It is controlled by industrialist Alexander Lukin, former mayor of

Semipalatinsk and Ust-Kamenogorsk, who was indicted for fraudulent pricing of coal to the heat and power plants (Sukhnov 2002).

11 Evidence that they were in fact sales, and not management concessions, only emerged when the government was in negotiations to repurchase both enterprises in spring 2000. In order to re-acquire the gas transmission system, for example, Kazakhstan had to acquire two share lots, the 45 percent interest held by a here-to-fore unknown partner, the Calverton Group, and the majority interest held by Tractebel (US Commercial Office 2000; *ICACBR* April 29–May 14, 2000). Tractebel also had sold a minority interest in Almatyenergo (more below).

12 Tractebel's press release was printed in *Almaty Herald* February 19–25, 1998 (among others). Related articles appeared in the *Almaty Herald* February 26–March 4, 1998 and *Focus Central Asia* 4 1998.

13 In fact, Tractebel had two silent partners in Almatyenergo, KIF with 14 percent and local partners with 24 percent. The local partners evidently agreed to return their interests to the government Unless otherwise noted, information about the Kazakhstan Investment Fund was taken from KIF (1998, 1999, 2000) and Weiss (2000).

14 Brookdale Group of limited liability partnerships invest in various countries in the former Soviet Union. They removed the existing directors and managers of KIF. The new directors included Joseph Stiglitz, former senior vice president and chief economist at the World Bank, who was then chairman of the board of the Brookdale Group, among his other positions.

15 No information on prices of these latter acquisitions was released; they may well have involved settlement for debts.

16 See Independent Power (2002) and its testimony to the Select Committee on Foreign Affairs (Parliament 1999).

17 The World Bank (1999b) indicated that the Kyzl Orda plant was privatized to a company Kyzl Orda Ltd. Most likely this represents the formation of a state-owned, closed joint stock company like Energotsentr to run the plant.

18 Its output may have been as low as 70 MW by 1994 (US-DOE 2000).

19 For information about security upgrade and protection activities undertaken, see US Department of Energy (1998).

20 See AES East Kazakhstan (1999) and AES Semipalatinsk (1999 and 2000).

21 Drawn from Clover (January 28 and April 29, 1997) and *MMS* April 4, April 18, and June 5, 1997.

22 Unless otherwise noted, drawn from Peck (2000 and 2002).

23 *ICACBR* February 18–25, 2002. In late 2001, Kazakhtelekom exchanged $25 million in three year bonds for more than two-thirds of the preferred shares (estimated to have been worth $17.7 million). Exactly how they will be accounted for in the future is unclear.

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