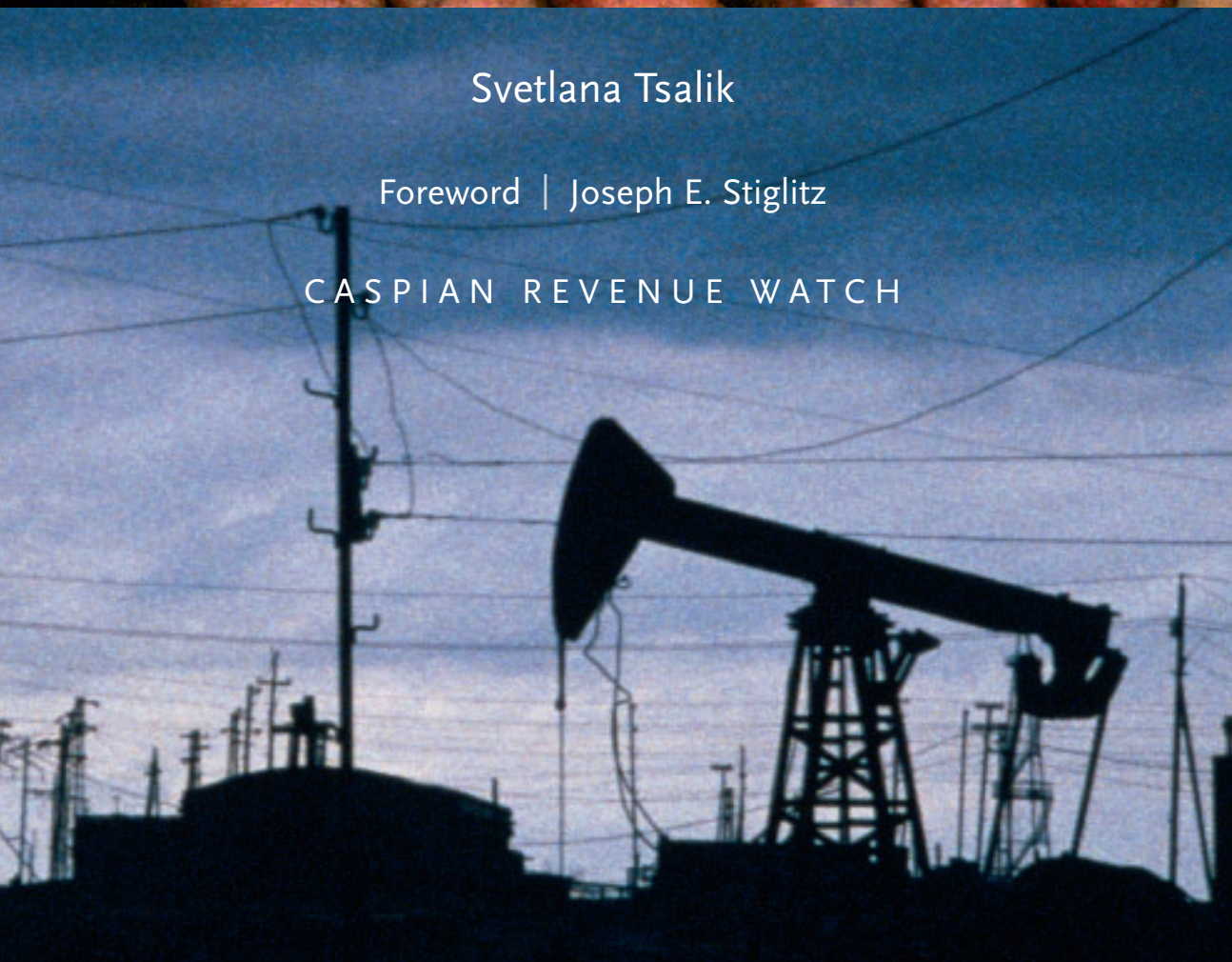
Caspian Oil Windfalls: Who Will Benefit?

Svetlana Tsalik

Foreword | Joseph E. Stiglitz

CASPIAN REVENUE WATCH



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Caspian Revenue Watch

The Caspian Revenue Watch (CRW) is a program of the Open Society Institute's Central Eurasia Project, which sees the transparent use of revenues generated by the sale and transport of Caspian natural resources as an issue of great importance for regional development and the promotion of civil society. The Caspian Revenue Watch aims to generate and publicize research, information, and advocacy on how revenues are being invested and disbursed and how governments and extraction companies respond to civic demands for accountability in the region. CRW also supports projects that build the capacity of local advocates to monitor government revenues. It seeks to help ensure that existing and future revenue funds in the region be invested and expended for the benefit of the public—for example, to reduce poverty, reform education, and improve public health—through the promotion of transparency, civic involvement, and government accountability.

Central Eurasia Project

The Central Eurasia Project (CEP) of the Open Society Institute acts as a policy center, grantmaking program, and OSI liaison for Soros foundations and programs in the South Caucasus, Central Asia, Mongolia, Turkey, Afghanistan, and the Middle East. It promotes public awareness about policies and developments in the region through its website, EurasiaNet, the Open Forum meeting series, and the Eurasia Policy Forum, which helps develop policy and advocacy initiatives. CEP awards grants to local nongovernmental organizations and international groups that promote human rights and civil society. CEP provides support to Soros foundations in Armenia, Azerbaijan, Georgia, Kazakhstan, Kyrgyzstan, Mongolia, Tajikistan, Turkey, and Uzbekistan. It also awards grants relating to Iran, and is exploring initiatives in Turkmenistan, the Middle East, and North Africa.

Open Society Institute

The Open Society Institute (OSI), a private operating and grantmaking foundation based in New York City, implements a range of initiatives to promote open society by shaping government policy and supporting education, media, public health, and human and women's rights, as well as social, legal, and economic reform. To foster open society on a global level, OSI aims to bring together a larger Open Society Network of other nongovernmental organizations, international institutions, and government agencies. OSI was created in 1993 by investor and philanthropist George Soros to support his foundations in Central and Eastern Europe and the former Soviet Union. Those foundations were established, starting in 1984, to help former communist countries in their transition to democracy. OSI has expanded the activities of the Soros foundations network to other areas of the world where the transition to democracy is of particular concern. The network encompasses more than 50 countries with initiatives in Africa, Central Asia and the Caucasus, Latin America, and Southeast Asia, as well as in Haiti, Mongolia, and Turkey. OSI also supports programs in the United States and selected projects elsewhere in the world.

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Foreword

It is sad but true that most natural resource–rich countries do not grow faster or perform in other ways better than those with fewer natural resources do. This observation would seem to contradict the basic laws of economics since more natural resources should provide more economic advantages and opportunities. Economists and other social scientists have worked hard to explain this anomaly and to figure out how these countries can maximize the benefits of their abundant natural resources.

Yet, the failures are legion and continuous. Oil-rich Nigeria has squandered a quarter trillion dollars of oil revenues and is deeply in debt. Two-thirds of the population of Venezuela still lives in poverty. Civil wars, fostered in varying degrees by struggles over control of oil, gas, and minerals, have devastated a host of resource-rich countries.

Part of this instability is explained with simple economics. Natural resource wealth can destabilize exchange rates. It can cause currency appreciation that weakens sectors of the economy not based on natural resources by making it difficult for manufacturers to export or to compete with imports. Meanwhile, the natural resource sector of the economy provides substantial revenues, but does not create employment throughout the economy. The resulting unemployment can give rise to political and social instability.

But the most fundamental problems that many resource-rich nations face are political. Control over natural resource wealth provides leaders with little incentive to share power, and gives leaders the means with which to buy legitimacy rather than earn it through elections. Leaders undertake costly investments to buy political support through job creation with contracts often awarded to well-connected insiders. Because rent seeking and state subsidies direct investment to unviable projects incapable of attracting private financing, many of these extravagant projects fail to lessen the country's dependence on natural resource development. The desire by government leaders to control wealth generated by natural resources often discourages the development of democracy and prompts violent conflict and resistance by those who have not benefited from the resource wealth and who feel shut out of centralized, undemocratic political systems.

To avoid these outcomes, political leaders and citizens need to regard their country's natural resources as the nation's endowment. These resources do not belong exclusively to the current government or generation, but to all citizens and generations. The current government and generation are simply trustees. To use these resources for one's own benefit, leaving future generations impoverished, is to steal their patrimony. Leaders inside and outside of government share a responsibility to promote this sense of stewardship in resource-rich countries.

Transparency of information about revenues received and fiscal accounting standards are key to increasing natural resource management and wealth. National accounting frameworks that do not appropriately take account of the depletion of resources are misleading; they prompt governments to think that the economy is becoming wealthier, when it may be becoming poorer. This false sense of wealth leads to bad decisions.

Even more important is information about what the government receives for oil or other natural resources, how this compares with what other countries are receiving, and how the government uses the funds it receives from the sale of natural resources. Governments should recognize that even in more developed countries major oil companies have tried to minimize their royalty payments by under-reporting the effective price of oil and over-reporting their costs. It was only through hard research that such evasion was detected, for instance, in the State of Alaska, and it was only through even harder prosecution that the oil companies finally agreed to pay the more than a billion dollars that they had avoided paying the state.

Companies have strong incentives to maximize profits and the opacity that surrounds oil contracts and payments can lead to abuse. A few oil companies, most notably BP, however, are setting the opposite example, by willingly publishing what they pay. Such disclosure allows citizens in resource-rich countries to become informed about how much the government receives for the nation's natural resources. It is regrettable that this commitment to good corporate citizenship has not been matched by most other oil companies.

Institutional arrangements like stabilization funds are essential to managing wealth derived from natural resources and ensuring that the money is used to replace the natural resource endowment that is being depleted. Stabilization funds in several countries have helped ensure that public funds are available for the rainy day when they are needed. This is especially important because international arrangements like the IMF, set up at the end of World War II to help finance counter-cyclical fiscal policy, have failed to perform the function for which they were created. The result has been that most developing countries are forced to engage in pro-cyclical fiscal policy, at great cost to the economy and society. Countries today recognize that borrowing is highly risky, and that they must rely on their own resources, especially for stabilization purposes.

There is no issue of greater importance than ensuring the long-run prosperity and stability of resource-rich countries by developing ways to use these resources and the wealth they generate well. The approaches explored in this important study provide a framework that will enhance the likelihood of success in what remains a very difficult task.

Joseph E. Stiglitz

Acknowledgments

This book is the product of more than a year's work to bring together the experiences of various countries that possess natural resource funds, to analyze the oil funds created in Azerbaijan and Kazakhstan, to assess the impact of petroleum development on the two economies, to identify opportunities for public oversight of revenues gained from resource extraction, and to provide policy recommendations stemming from these analyses.

Because of its broad scope, this report benefited from the contributions of many people. First are staff members of the Open Society Institute. I particularly want to thank Anthony Richter, director of the Central Eurasia Project, for the creation of the Caspian Revenue Watch and for his vision in developing the concept for this work. I also wish to thank Scott Horton for his able guidance as the chairman of the Caspian Revenue Watch advisory board. I am grateful to CEP staff, especially Erika Dailey for her guidance and Erin Finnerty and Dan Sershen for their valuable assistance. I am also deeply indebted to Ari Korpivaara, Will Kramer, and Laura Silber in the OSI Communications Office for their excellent work in making a complex subject so readable. A special thank you goes to the director of the Open Society Institute Assistance Foundation–Azerbaijan, Farda Asadov, and the president of the Soros Foundation–Kazakhstan, Murat Auezov, for identifying able and enthusiastic local partners.

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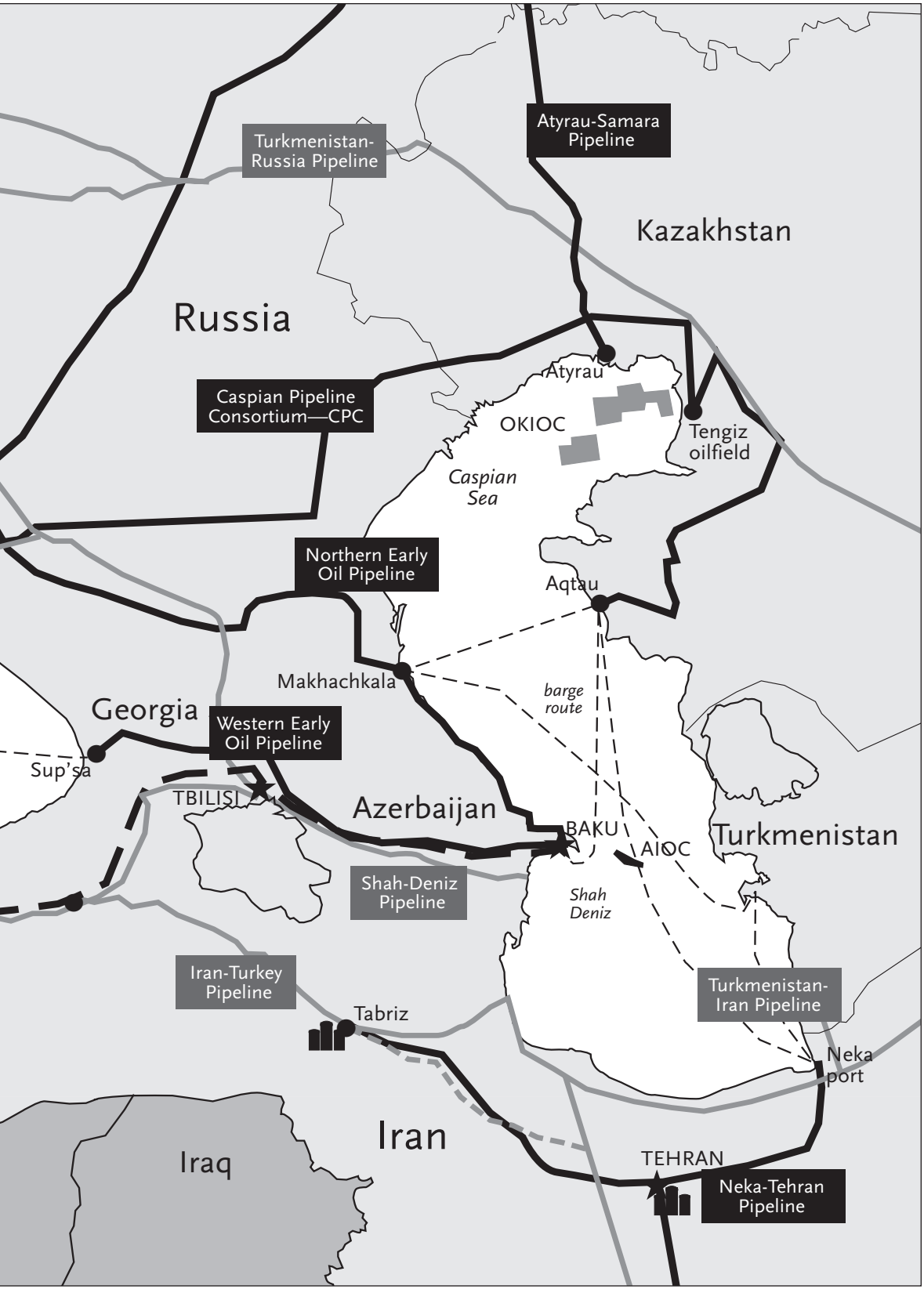
Caspian Energy Export Pipelines
Exisiting oil pipeline
Existing gas pipeline
Planned, proposed, or under construction oil pipeline
Planned, proposed, or under construction gas pipeline
Producing block
Exploration block
Selected refinery
Moldova
Ukraine
Romania
Sea of Azov
Black Sea
Novorossiysk
Bulgaria
Blue Stream Pipeline
tanker route
Sea of Marmara
Istanbul
ANKARA
Turkey
Baku-Tbilisi-Ceyhan Pipeline
Aegean Sea
Ceyhan
Greece
Mediterranean Sea
Cyprus
Syria


Atyrau-Samara Pipeline
Turkmenistan-Russia Pipeline
Kazakhstan
Russia
Atyrau
OKIOC
Tengiz oilfield
Caspian Pipeline Consortium—CPC
Caspian Sea
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Azerbaijan
BAKU
AIOC
Turkmenistan
Shah-Deniz Pipeline
Shah Deniz
Iran-Turkey Pipeline
Tabriz
Turkmenistan-Iran Pipeline
Neka port
Iran
Iraq
TEHRAN
Neka-Tehran Pipeline

"Increasing oil revenues do not imply increasing wealth."

—SVEIN GJEDREM,
GOVERNOR, NORWEGIAN CENTRAL BANK

1. The Hazards of Petroleum Wealth

Introduction

The problem of managing petroleum wealth is so universal that a rich vocabulary has developed to describe it. The "resource curse," the "paradox of plenty," "Dutch Disease," "flawed prosperity," "economic indigestion," "the devil's excrement," and even the "banyan tree problem" have all been used to describe this essential paradox: in recent decades countries blessed with resource wealth have consistently underperformed resource-poor countries on almost every indicator of progress ranging from human development, economic growth, democracy and good governance, and preserving the peace.

Two years into the 21st century, oil- and gas-rich countries in the Caspian Basin such as Azerbaijan and Kazakhstan are on the threshold of entering this unfortunate club. Like many of the countries that have struggled with the resource curse, these Caspian states are becoming petroleum exporters at the same time as they are trying to become modern states. As massive oil rents begin to hit state coffers, these countries are still in the process of formulating systems of public administration and expenditure, tax collection, legal adjudica-

tion, a civil service, and other components of a modern state. In countries as diverse as Iran, Nigeria, and Venezuela, this combination of state infancy and revenue windfalls has proved overwhelming, undermining even the best efforts to develop these countries' non-oil economies and improve living standards for their populations.

Azerbaijan and Kazakhstan are two Caspian petroleum producers that have shown a keen interest in gleaning lessons from other petroleum-based economies and a willingness to do better. As one manifestation of their commitment to sound revenue management, these states have created natural resource funds (NRFs) to help stabilize fiscal policy and save a portion of revenues.

NRFs are not just fiscal instruments. The evidence of their effectiveness as tools to smooth out fiscal management under commodity price volatility is mixed.[1] Moreover, many economists argue that countries with high dependence on oil or other nonrenewable resources can implement sound fiscal policy just as effectively without an NRF as with one. The real value of an NRF is not in its effectiveness as a fiscal tool but as a political instrument. This report views NRFs as a compact between a government and its citizens that, under ideal conditions, forces governments to plan ahead and to be transparent about what they are earning and spending. NRFs can commit governments to treat revenues as public monies, not as private income veiled from public scrutiny. By providing information to legislatures and citizens about how oil revenues are being managed, NRFs can encourage another key component of good revenue management: an educated and active citizenry capable of organizing to demand government expenditure accountability.

An institution such as an NRF can only be described as a compact if it has some kind of binding power. Otherwise, it is no more than a promise that can be broken with impunity at any time. The way to build binding power into an institution is to distribute influence among those overseeing it. Thus, power over an NRF should be broken up among the different parties that have an interest in it: the president, the legislature, the judiciary, the public, and the oil companies. The distribution of influence over the NRF to different constituencies allows them to check one another and thereby prevent misappropriation or malfeasance. It is no coincidence that the most enduring NRFs exist in countries such as Norway, the United States, and Canada, where separation of powers, democracy, and transparency are an entrenched tradition. Without this separation of powers, an NRF can be easily plundered whenever the government needs money. In Venezuela, for example, the super-presidential government appropriated the state oil company's $5 billion investment fund in 1982 with no opposition from congress. Funds in Oman and Zambia were also raided when the government needed cash. One form of insurance against the raiding of NRFs is an engaged citizenry, vigilantly overseeing how public revenues are collected and deployed.

This report concludes that the recently created NRFs in Azerbaijan and Kazakhstan are an important first step toward good revenue management. However, for these funds to endure and to promote the economic development of these countries, they must be rooted in a sys-

tem of budgetary transparency and accountability, which includes a greater role for parliament and the public in the budgetary process, and the removal of constraints on civil society's ability to organize and monitor government fiscal policy.

The scope of this report is not limited to a narrow analysis of Azerbaijan's and Kazakhstan's NRFs, but rather to a more general discussion of how NRFs can be made to serve as a compact between governments and citizens, and how the commitments made by governments to transparent revenue management can be extended beyond their recently created NRFs.

The second part of this introductory chapter reviews findings on the resource curse and provides explanations for why so many petroleum-rich states perform poorly in human development, economic growth, and governance. A brief description of the contents of each of the remaining chapters follows.

The Resource Curse

The last 30 years have provided oil-exporting countries with a golden opportunity to shape their destinies. Following OPEC's assertion of power, the price of oil increased from less than $3 per barrel in 1970 to more than $30 per barrel in 1980, constituting perhaps the largest capital transfer ever in such a short period. Yet, most beneficiaries were unable to translate these windfalls into economic growth and social prosperity. The record on how resource-rich countries managed their wealth is dismal, and dispiriting.

Low economic growth

Numerous studies have found that countries lacking oil and mineral resources had much stronger GDP growth per capita than resource-rich countries. Between 1960 and 1990 resource-poor countries experienced growth rates two to three times higher than resource-abundant countries. Most surprising is that the gap only widened after the 1970s, when oil prices jumped from less than $3 per barrel to around $30.[2] These findings hold up even when controlling for population size, initial per capita income, region, and other variables that might explain the different growth rates.

Poor performance on human development

Most countries with abundant oil resources have failed to translate oil-derived income into better lives for their citizens. Of 48 countries for which oil comprised more than 30 percent of total exports between 1965 and 1995, nearly half scored in the bottom third of the United Nations 2002 Human Development Index, which ranks countries according to poverty, education, health, and other indicators of quality of life. Only one-quarter scored in the top third, and many of these, such as Norway and Canada, were wealthy long before oil exports became a major source of income.

An Oxfam study finds that oil and mineral wealth not only fails to reduce poverty, but often aggravates it.[3] The more dependent a country is on oil and mineral export income, the higher its rates of infant mortality and malnutrition, and the lower its rate of educational enrollment and life expectancy at birth.

Poor governance

In addition to exhibiting poor growth rates, too many resource-exporting countries tend to disproportionately suffer from bad governance. The International Monetary Fund (IMF) defines good governance as "the effective and transparent management of public resources; and a stable economic, regulatory, and legal environment conducive to sound management and efficient use of private and public resources."[4] The World Bank's indicators of governance include the extent to which citizens are able to participate in the selection of their governments, freedom of media, stability of government, the likelihood of violent conflict, corruption, public service provision, and enforceability of contracts.[5] Those countries that possess abundant natural resources mostly cluster near the low end of the World Bank's governance indicator.

More specifically, several studies have found that capital-intensive natural resources are a major determinant of corruption.[6] These studies find that the direct accrual to government of the large profits, or "rents," from petroleum development, encourages both misappropriation by government officials and rent seeking by outside groups hoping to capture some of those profits. Pervasive corruption raises the transaction costs of doing business, thus undermining the non-oil sector's ability to develop, and slowing the country's economic growth rates. It also disproportionately harms the poor who cannot pay the higher prices that corruption imposes on them.

Violent conflict and human rights abuses

In addition to suffering from poor governance, most natural resource–exporting countries are vulnerable to violent conflict. Numerous statistical and case studies have found not only a correlation but also a causal link between natural resources and civil war. Not only does resource wealth increase the likelihood of civil war, but also the presence of minerals or oil that can be siphoned away and sold provides financing that makes these wars longer and casualties higher than in states lacking natural resources.[7] Additionally, because of the increased likelihood of violent conflict, oil-rich states spend a disproportionate amount on their military, diverting resources from more productive and socially beneficial uses.

Militarization to ensure pipeline security has entailed human rights abuses in numerous places. In Burma, the military has been accused of murder, rape, and torture while forcibly relocating several villages to make way for the Yadana and Yetagun pipelines, and also of using forced labor to build service roads, barracks, and other infrastructure for the pipelines. In Nigeria, years of clashes between people living in the oil-producing Niger Delta and with government security forces have resulted in extrajudicial killings, arbitrary detentions, torture, and

the highly publicized execution of writer and activist Ken Saro-Wiwa. Sudan has experienced years of war between the government and rebels over oil income causing the deaths of an estimated 2 million people.[8]

Reasons for the Resource Curse

Numerous studies exploring the reasons for the resource curse have uncovered a set of interrelated constraints and incentives that resource wealth places on government leaders. As a result, it is extremely difficult to minimize the adverse impact of oil on a country's development, even when leaders are guided by good intentions to transform that resource wealth into economic and human development. The countries most vulnerable to the resource curse are those that have not yet developed democratic institutions and a competent public administration system and civil service.

Conducting sound fiscal policy is extremely difficult for any country with high dependence on commodity exports, especially oil. The price of oil is not only highly volatile, but also extremely unpredictable. Oil prices have no historical averages to which prices return after a deviation. And there is no way to tell how long a price shock may last. These circumstances make planning extremely difficult.

High oil prices, high expectations

When oil prices are high, leaders face expectations of increased spending and find it harder to justify saving for a rainy day. They typically launch ambitious multiyear capital-intensive spending projects in an effort to absorb the windfall. But budgets based on a certain oil price have to be slashed if prices change significantly. Cutting expenditures hurts the poor and others who depend on the state for jobs or the provision of services. Because roller-coaster budgeting is so damaging and unpopular, leaders often turn to borrowing as a way to finance commitments made in boom times. When oil prices are low, they must borrow at unfavorable rates and accumulate sizeable debt. Even during the boom years, "capital-deficient oil exporters" (oil exporters with large populations and relatively small oil reserves) were spending and borrowing so much that their debt service ratio was nearly twice that of oil-importing countries.[9] By 1983, the debt burden of capital-deficient oil-exporting countries exceeded that of all less-developed countries combined.[10] Even oil exporters with large reserves and small populations, such as Saudi Arabia and Kuwait, are deeply in debt.

Price volatility makes budget planning difficult. But oil or mineral development creates other economic problems as well. One of the best known is the problem of Dutch Disease, which gains its name from a phenomenon observed in Holland after the discovery of natural gas in the 1960s.[11] Dutch Disease occurs when the foreign exchange earnings from the export of a country's natural resources are converted into local currency, raising the value of that country's currency. As a result, its tradable goods become more expensive and hence less compet-

itive both domestically and as exports. With declining sales, the labor-intensive manufacturing and agricultural sectors decline, creating unemployment and increasing dependence on natural resources. In Nigeria, for example, the intensification of oil export and misdirection of oil income devastated the country's strong agricultural export sector, turning the country into a net food importer. In Indonesia, the oil sector came close to destroying the country's labor-intensive rubber industry, for much the same reason.

The problems of price volatility and Dutch Disease can to some extent be alleviated with natural resource funds. NRFs can stabilize spending patterns, breaking the cycle of governments spending extravagantly when prices are high and slamming on the brakes or borrowing when prices fall. Stabilization funds, such as Chile's Copper Fund or Norway's State Petroleum Fund, collect excess revenues when commodity prices are high, and channel revenues back to the budget when prices fall. NRFs also combat the problem of Dutch Disease by "sterilizing" revenues—keeping excess export earnings out of the economy and in foreign exchange–denominated accounts to avoid upward pressure on the domestic currency.

"Normal" states versus *rentier* states

While NRFs can help address the problems of price volatility and Dutch Disease, they are less helpful in resolving a more deep-rooted problem that particularly affects resource-rich countries still in the process of state formation. Namely, the massive influx of foreign exchange can forestall the development of "normal" states capable of extracting revenues from society, regulating commerce, collecting information, enforcing contracts, and performing the other functions of modern governments. Instead, these oil exporters still in the infancy of statehood become *rentier* states. In rentier states, commodity-derived export earnings drive a wedge between governments and citizens because governments are able to collect revenues without the involvement of citizens. Hence, the extractive and regulatory functions of government rarely develop while the distributive functions of government become bloated. Governments launch capital-intensive spending projects designed to transform their economies and the size of the public sector grows immensely. When oil prices are stable, this lopsided state development often leads to wasted spending as a result of governments' poor information-gathering and project-planning capacity. When oil prices plummet, cutbacks in spending create political instability. For example, Venezuela, Iran, Nigeria, and Algeria all experienced regime change or regime crisis. Terry Karl finds that instability tended to be strongest where jumps in state spending were most extreme.[12]

Why is developing an extractive, regulatory, and administrative apparatus so important? Because taxation is the most direct relationship between a government and its citizens. It gives the government the means to extract resources from the public and, in return, the public gains the right to demand government expenditure accountability. The protest from the American colonies, "no taxation without representation," demonstrates the understanding that paying taxes entitles one to political participation and government accountability. "When states do not

have to depend on domestic taxation to finance development, governments are not forced to formulate their goals and objectives under the scrutiny of citizens who pay the bills. . . . Excessive centralization, remoteness from local conditions, and lack of accountability stem from this financial independence."[13]

Moreover, taxation provides the government valuable information about the country's economic development and needs. As Kiren Aziz Chaudhry explains, "institutions for taxation spin off related agencies, leading to a diversification of the tools available to decision-makers. . . . Taxation and the data collected through this process comprise one of the few means to regulate the private sector and guide the economy."[14] Without adequate information about the country's economic activity and needs, "state spending is more likely to be informed by primordial ties and political considerations rather than by economic rationality." For example, William Ascher finds that in Mexico, as much as 85 percent of contracts awarded by the state oil company in the 1980s were made without any competitive bidding.[15]

During boom years, the public sector spending of petro-states aims to create a base of public support. But when the only legitimacy a government can garner is through spending, cutting back on spending weakens that legitimacy. A client class that exists on state largesse is easily mobilized in opposition when benefits are withdrawn, as Saudi Arabia learned when it tried to cut back on subsidies during the recession years of the 1980s.

Cautionary tales from resource-rich states

With the windfalls of the 1970s, Saudi Arabia had lifted all direct and indirect taxes on commercial activity. The department of income tax existed in name only. Regulatory functions languished; imports, local investments, and even construction went mostly unregulated. At the same time the state carried out a "blind frenzy" of spending without the information and skills to conduct sector planning, project identification, and feasibility analysis. Construction investment alone from the mid-1970s to the mid-1980s was estimated at $270 billion. State spending "favored large projects controlled by well-connected businessmen or large landowners, while information gaps almost guaranteed that state spending would favor powerful and visible social groups."[16] Because the state's distributive policies were motivated by political considerations, income did not trickle down evenly. In 1981, with annual oil revenue per capita of $27,500, 42 percent of Saudi extended families had incomes of less than $5,400 per year.[17] At the same time, the elite and well-connected top 1 percent of the population had wealth estimated at $400 billion.[18]

In addition to its direct spending, the state carried out numerous other distributive functions. It provided subsidies for the general population, such as free education and free energy as well as interest-free loans for housing and agriculture. It created jobs for most of the population through its spending. Even in the late 1990s, government spending supported over 90 percent of the national labor force.[19] The kingdom also gave out precious land grants to princes, sheikhs, and other powerful figures to win their support. The availability of subsidies

and easy loans bred carelessness and lack of competitiveness. Since good connections mattered more than good business plans, many Saudi ventures were unable to attract private capital to replace state financing when hard times called for cutbacks.

With the drop in oil prices in the latter half of the 1980s, Saudi oil earnings plummeted to less than a fifth of their 1970s' peak, quickly exposing the limitations of a rentier distributive state. Efforts to begin taxing companies were ineffective, because the state did not have the administrative apparatus to assess or collect taxes, and because many companies, not used to being taxed, did not keep formal accounts. Nearly all attempts to prune back subsidies to the affluent class (the core of the Saudi royal family's support) brought protests and had to be withdrawn. And because the government was the country's largest generator of employment, cutting back on spending risked dislocating large portions of the workforce. Having failed at trying to extract resources from its population, the government instead spent nearly $120 billion of its financial reserves, while also growing a budget deficit close to 10 percent of GDP. To finance its persistent fiscal deficit, the Saudi government began borrowing domestically in 1988 and its debt now exceeds its reserves.[20]

Similar stories can be told about Kuwait, Libya, Qatar, the United Arab Emirates (UAE), and other OPEC member countries. Between 1974 and 1979 the five Middle East OPEC producers (Iran, Iraq, UAE, Saudi Arabia, Kuwait) expanded domestic spending by 48 percent per year. Venezuela's government expenditures increased by nearly 75 percent in one year.[21] Iran had 108 projects averaging over a billion dollars each in the 1970s.[22] The massive expansion in government spending caused inflation, wiping away the value of people's savings. In the Middle East OPEC countries, inflation was about 15 percent per year during the 1970s' spending boom, and in Mexico, Indonesia, and Nigeria, inflation exceeded 25 percent per year during this period.

Much of the spending was on large-scale projects designed to develop the countries' non-oil sectors.[23] Unfortunately, the abundance of money for loans, coupled with poor project-evaluation capacity, corruption, and favoritism led to many white elephant projects that suffered from cost and time over-runs due to inadequate assessments of costs and benefits. As Ascher documents, many of these projects were approved secretly with little effort to seek competitive bids. There are countless stories of loans that should never have been made, such as for the "towers of silence" apartment houses in Saudi Arabia that were never occupied, for a rubber plant in Indonesia that failed to account for the absence of available water for rubber processing, or for the Krakatau steel mill in Indonesia, which the government doggedly pursued in its effort at modernization despite the obsolete factory's losses of close to $100 million a year.[24]

Much of the public investment in the oil-exporting countries went to heavy industry with the intention of improving the competitiveness of the country's non-oil exports. In fact, however, easy access to money and poor project evaluation kept projects afloat that, without subsidies, could not compete. For example, in 1983 Trinidad's Caroni Sugar plant had pro-

duction costs five times that of competitors in Australia, even though the latter had labor costs several times that of Trinidad.[25] Despite massive investments to boost their non-oil exports, most countries saw these exports actually decline between 1972–1981.[26] Even after the ineffectiveness of these projects became apparent, governments were often reluctant to admit failure and cause economic distress by cutting off funding.

The Middle East states were not the only ones to relax their extractive capacities while building up their distributive ones. Alaska, Alberta, Ecuador, Indonesia, Nigeria, and Venezuela all cut or eliminated taxes. Subsidies in Venezuela and Indonesia on consumer goods ranged from food to motor fuel. In Iran, Algeria, Venezuela, Mexico, Nigeria, Indonesia, and Trinidad, subsidies in the 1970s rose twice as fast as non-oil GDP.[27] Powerful interest groups in Ecuador succeeded in earmarking 65 percent of tax revenues for their specific programs. In Colombia, the combination of oil revenue and decentralization resulted in a competition among municipalities to spend more in order to get more.[28] Venezuela's legendary spending extravagance to diversify the country's economy was riddled with favoritism toward well-connected groups and contributed to the country's deficits and debt, tripling inflation and causing recession. Despite Venezuela's receipt of about $600 billion in oil revenues since the 1970s, real per capita income fell by 15 percent between 1973 and 1985, and continues to decline.

Political instability

The dependence fostered by these distributive policies created the potential for social dislocation, political instability, and even regime changes when oil prices inevitably dropped. Ecuador and Venezuela, for example, have repeatedly attempted structural reform only to back down as a result of rioting and social pressure. Venezuela, Iran, Nigeria, Algeria, and Mexico all experienced political crisis or regime change before and after the end of an oil boom.

The distributive nature of oil-exporting states and their absence of democracy go hand in hand. Unlike diffuse resources such as coffee or cotton, which can be produced by multiple domestic entrepreneurs, oil fields are point resources that, by virtue of their size and strategic importance, are controlled by the government. The desire of oil companies to secure contracts and the desire of governments to control oil rents or revenues coincide, contributing to the centralization of power in many oil-exporting states.[29] The massive rents generated by oil give leaders the resources to forge mutually beneficial relationships with private interests and provide little or no incentive to open the political process. According to Karl, ". . . rulers of oil-exporting countries have no incentive to be frugal, efficient, and cautious in their policy-making, and they have no reason to decentralize power to other stake-holders. To the contrary, revenues pouring into a highly concentrated structure of power lead to further concentration and encourage further inefficient and unproductive spending to establish and maintain rentier networks between politicians and capitalists."[30] Transparency threatens to expose these rentier networks and is resisted by governments.

Leaders find that they can stay in power by "buying" the public's support through subsidies, tax cuts, and employment generated by public sector spending. As Karl puts it, "state officials become habituated to relying on the progressive substitution of public spending for statecraft. . . ."[31] These tendencies are confirmed by a study finding a strong negative correlation between oil and mineral wealth and democracy, especially in poor countries. The obstacle to democracy in these countries is not just the repressiveness of leaders, the study concludes, but also the absence of a middle class, which historically has pushed for democracy.[32]

The absence of democracy in rentier states may also explain their failure to improve living standards. Perhaps the best example is Nigeria, Africa's largest oil producer. Nigeria has received over $300 billion in oil revenues in the last 25 years, but 60 percent of its population still lives on less than $2 per day. In fact, per capita income in Nigeria has fallen from about $800 in the early 1980s to about $300 at present.[33] Numerous studies of spending to alleviate poverty in the developing world find little correlation between amounts spent and outcomes.[34] This is because the translation of spending into effective outcomes requires good governance.

Without an effective management system for public expenditures, and skilled civil servants with incentives to minimize corruption, even good intentions get misdirected to poorly chosen spending projects, or leakage reduces the amounts that ultimately reach their targets. The linkage between good governance and good outcomes from increased spending exists for both resource-rich states and those lacking resource wealth. For example, one survey of 250 primary schools in Uganda found that on average, the schools received only 13 percent of the money allocated to them.[35]

Several studies have identified the link between governance and development outcomes. The better a country's governance (as measured by the World Bank index described on page 4), the more likely that public spending on health and education will be effective in lowering infant mortality and improving educational attainment and literacy.[36] The high incidence of poor governance among oil exporters may explain their failure to translate oil revenues into improved living standards for their people.

Implications for Caspian Petroleum Exporters

For Azerbaijan and Kazakhstan, the hazards of petroleum wealth are acute because the onset of petroleum revenues is coinciding with a period of state building. The regulatory and tax systems that can extract revenues from society and regulate commercial activity are still under formation. At the same time, these states will receive a large influx of foreign exchange, dampening the incentive to conduct administrative reform. With high poverty levels, the governments of these states will find themselves at the center of demands for increased spending

and revenue-seeking activity. Well-connected groups will pursue the governments for contracts and subsidies.

Governments will be tempted to award contracts to these well-connected groups and elites in order to buy the legitimacy and support that normally comes through the electoral process. The risk is that, in the face of uncertain oil revenues, governments will commit to unrealistic expenditures in inefficient enterprises in order to generate employment and reward insiders.

The centralization and democracy-dampening tendencies of petroleum development are likely to undermine the already uneven progress toward democracy in these countries. The lack of transparency, absence of separation of powers, political discretion afforded the president's administration, and unclear property rights in countries such as Azerbaijan and Kazakhstan make it extremely easy for the kind of patronage politics to emerge that characterize economies such as those of Saudi Arabia, Venezuela, and Nigeria.

Weak governance makes these countries less likely to convert social expenditures into improved outcomes. At the same time, the abundance of oil revenues removes the incentive to improve governance. The weakness of parliament, the judiciary, and political parties provides few checks on the ability of powerful interest groups to capture the state. The result, as elsewhere, could be a flood of wasteful state spending followed by fiscal, economic, and regime crisis when oil prices fall.

Although the resource curse has proved difficult for most governments to avoid, it is not destiny. Countries like Botswana, Indonesia, and Malaysia have managed to improve human development while diversifying their economies from excessive reliance on natural resources. While transparency by itself does not cure the resource curse, it is a necessary starting point for good revenue management. It introduces some of the checks and balances needed for the public to monitor whether oil and gas export revenue is being used for its benefit.

In Azerbaijan and Kazakhstan, transparency is critical to the success of natural resource funds, but it must also be extended to all revenues generated by oil and gas development. Otherwise the transparent management of the NRFs may serve only to deflect attention from the leakage of oil revenues at numerous points before they even reach the NRF, such as in access to oil supply, government contracts, or determination of pipeline tariffs. For this reason, it is important to extend transparency to every payment made by oil and gas companies to host governments, as well as to the earnings of state-owned oil companies. Just as important is the extension of transparency to the budget and procurement process, so that the public can monitor how oil-generated earnings are being spent.

In the Caspian Basin region, Turkmenistan also appears to be a reasonable candidate for adapting and applying NRFs and other practices to achieve transparency and stable macroeconomic management of natural resource wealth. However, there are a number of factors that set Turkmenistan apart from its neighbors.

Like Azerbaijan and Kazakhstan, Turkmenistan enjoys vast reserves of both natural gas and oil. It has the fifth largest reserve of natural gas in the world and the second largest reserve of oil in the region. And like Azerbaijan, Kazakhstan, and other resource-rich developing countries, Turkmenistan faces obstacles to economic growth and prosperity such as a hostile foreign investment environment, a weak private sector, and rampant corruption.

Yet Turkmenistan's prospects for energy-based development and economic growth are far more dismal than those of Azerbaijan or Kazakhstan. Although Turkmenistan gained independence in 1991, its gas exports are still tightly controlled by Russia. Turkmenistan is anxious to pursue other export routes like the Trans-Afghan Pipeline (TAP) project, which, if built, would carry Turkmen gas through Afghanistan to South Asia. The TAP project has not gone past the study stage since crumbling in 1998 due to regional instability and lack of investors.

The greatest challenge facing Turkmenistan, however, is political. Turkmenistan, ruled by dictator Saparmurat Niyazov, is stagnating and starving for funds. International lending institutions such as the European Bank for Reconstruction and Development (EBRD) and the World Bank have suspended loans and investments because of the government's lack of commitment to multiparty democracy, pluralism, and market economics.[37] Even if Turkmenistan does find a way to increase its gas exports through alternative pipelines, these revenues would only benefit Niyazov and a few others within his regime, not the Turkmen people. Unfortunately, there is little value in considering natural resource funds in Turkmenistan as long as Niyazov remains in power.

Chapter Summaries

2. Natural Resource Funds: Case Studies in Success and Failure

Chapter two looks specifically at NRFs in North and South America, Africa, Europe, and the Middle East; NRFs in established and younger democracies as well as in states that are not democracies; NRFs at the national and subnational levels and an NRF managed by a community rather than a government. Best practice examples such as Norway and Alaska provide important guidelines on how to build transparency and accountability into an NRF. Examples such as Venezuela, Oman, and Kuwait demonstrate how vulnerable NRFs are when power is concentrated in the hands of an executive and an absence of democracy results in no effective oversight. The examples of Chad and Chile illustrate how NRFs can function even where democracy is weak and distrust of government high.

Transparency, a strong sense of public ownership, and a separation of oversight powers are identified as three key ingredients in the success of an NRF. Some of the best performing NRFs have accumulated savings, enjoyed popular support, provided some kind of public expenditures, and/or smoothed out government spending while maintaining conti-

nuity in the fund's rules and functions. In the more problematic cases, an NRF's assets declined over time while the fund failed to raise living standards or to create a viable non-oil economic sector. Revenues and expenditures were shrouded in secrecy, rules fluctuated, and an absence of separation of powers allowed for easy raiding of the NRF.

3. Securing the Take: Petroleum Litigation in Alaska

While NRFs lend greater transparency to a country's oil revenues, they do not capture the whole "oil picture." NRFs typically receive only a portion of resource revenues. Accounting for other earnings can be extremely difficult. Complicated swaps, offsets, subsidized sales, and transfer-pricing operations make it difficult to estimate the size of the revenue pie and, in the process, create multiple points of potential leakage. To plug these leaks, it is important to extend transparency along the entire chain of custody over oil revenues, starting with the producing companies, both state-owned and multinational.

Chapter three draws on Alaska's experience to demonstrate why such transparency is important. Alaska spent 20 years litigating with oil companies in 60 separate cases involving disputes about corporate accounting, pricing tactics, and pipeline tariffs. The litigation netted the state an additional $6 billion in revenues, or about 10 percent of total state proceeds from oil. The chapter describes how production-sharing agreements (PSAs) can create incentives for contractors to inflate costs to pay less to the host government. While there is no evidence that such practices are occurring in Azerbaijan or Kazakhstan, certain terms of their production-sharing agreements create incentives for cost inflation. Perhaps the greatest danger of misrepresentation of earnings is posed by the state-owned oil companies, which are contractors in many PSAs in Azerbaijan and Kazakhstan, but lack the requirements of transparency that other publicly traded oil companies must adhere to.

4. Models of Public Oversight of Government and Industry

Mechanisms of citizen oversight of oil and gas development are the focus of chapter four. Active citizen involvement can protect against tragedies such as the *Exxon Valdez* or Spanish coast *Prestige* oil spills, and the repeated human rights abuses that have occurred in oil-producing regions of Burma, Indonesia, and Nigeria. Citizen involvement can help ensure that financial expediency not be the sole criterion in petroleum development decisions.

One model of organized citizen oversight is the Regional Citizens' Advisory Councils (RCACs) created in Alaska following public outrage over the *Exxon Valdez* oil spill. The Alaskan legislature passed laws creating these councils, and the oil and pipeline companies agreed to fund them. The RCACs provide direct citizen oversight of oil industry activities in Prince William Sound and Cook Inlet by monitoring environmental impacts of oil extrac-

tion, reviewing spill prevention and response plans, and recommending continual improvements. The RCACs are also the primary conduit through which government and industry communicate to the public on oil issues. RCAC volunteer boards of directors include representatives of environmental groups, native settlements, fishermen's groups, and chambers of commerce.

If citizens' advisory councils are established in the Caspian Basin, their role could also include oversight of the petroleum fiscal system. Such councils would be a substantial step toward informed public participation. The challenge, however, will be to ensure that such councils maintain their independence both from government and industry.

The chapter also describes models of citizen oversight of public administration, such as integrity pacts and public hearings, in developing democracies. These stories provide examples of how the governments of Azerbaijan and Kazakhstan can work with NGOs to help build public trust in government, while fighting corruption and identifying savings. Integrity pacts require officials and private sector bidders to pledge not to offer or accept bribes while bidding on public projects. In Colombia and Panama, Transparency International, an anticorruption NGO, was invited by the government to oversee development and implementation of the government's integrity pact for privatization of state utilities. In Panama and Argentina, where public procurement has long been associated with corruption, public hearings and integrity pacts resulted not only in significant savings for the government but in high approval ratings among recipients of the privatized services.

5. & 6. State Oil Fund of Azerbaijan and National Fund of Kazakhstan

Chapters five and six apply the lessons learned from other NRFs to an evaluation of the oil funds recently established in Azerbaijan and Kazakhstan. The new oil funds, which have already accumulated sizeable savings, are a major improvement in the transparent management of oil revenues in these countries. However, the funds are a reflection of the political systems in which they operate. Both Azerbaijan and Kazakhstan suffer from a deficit of democracy and a surplus of executive discretion. Parliaments lack both power and independence and do not serve as effective instruments to debate national policy. Both oil funds are directly subordinate to the presidents. The parliaments have virtually no role in overseeing the oil funds, and there are no other institutions independent of the president to provide oversight. The risk of such a concentration of authority, as chapter two shows, is that there is virtually no impediment to raiding, liquidating, or substantially rewriting the rules of an oil fund, should the president wish to do so. Moreover, without separation of powers, both oil funds fail to function as compacts between government and citizens because they place almost no constraints on government behavior. Already, Kazakhstan and Azerbaijan are considering using savings from their funds for development of the oil and gas sector—a strategy that has been

disastrous elsewhere and has done little to alleviate poverty. Chapter six provides recommendations to the governments of Azerbaijan and Kazakhstan on how to improve the transparency and accountability of their oil funds and of their petroleum revenue flows more generally.

7. A Road Map for Promoting Revenue Accountability in the Caspian Basin and Beyond
Chapter seven discusses what Western governments, international lenders, multinational oil companies, and donors can do to promote fiscal transparency and sound revenue management. It calls for action on the part of Western governments and multilateral lenders to make transparency of oil contracts and payments a condition of their lending and aid. It urges oil companies to support initiatives to create a reporting system of payments made to host governments. And it urges donors to devote more resources to building the capacity of civil society in Azerbaijan and Kazakhstan to hold governments accountable for earnings and expenditures from these public resources.

"For the public and its representatives to take part effectively in a debate on the budget priorities proposed by the government, there must be mechanisms of accountability, and information systems which show as fully as possible the way the government is meeting its responsibilities. Developing tools to make the state's financial management transparent to the public should be a priority for its authorities."

—CHILE'S 2003 BUDGET BILL

2. Natural Resource Funds: Case Studies in Success and Failure

Introduction

In creating natural resource funds, Azerbaijan and Kazakhstan have taken positive steps toward developing a long-term strategy for how best to use their oil and gas revenues. But what do we know about such funds? How effective are they? Under what circumstances are they likely to promote good management of natural resource revenues? And what are the keys to a successful natural resource fund? To answer these questions, this chapter examines 10 NRFs. The purpose is not to rank the funds, but to identify the factors that contribute to positive or poor performance. The NRFs examined are in Alaska, United States; Alberta, Canada; Venezuela; Chile; Norway; Chad; Kuwait; Oman; Iran; and the Inuit state of Nunavut in Canada. The case studies cover a range of NRFs in the developed and developing world, in democracies and nondemocracies, and at both the national and subnational level.

NRFs are a mechanism that some countries have adopted to address the principal challenge facing by budgets dependent to a great extent on revenues from the export of natural resources, namely, the challenge of budget planning when commodity prices are highly volatile and natural resources are depletable. NRFs can be used as stabilization funds or savings funds, or, in some cases, a combination of both.

Stabilization funds smooth out government spending by channeling excess revenues to the stabilization fund when commodity prices are high, and transferring revenues back to the budget when commodity prices fall. A trigger price is set in order to determine in what direction transfers should go. Stabilization funds can help protect budgetary spending from sharp fluctuations resulting from external price shocks. Additionally, stabilization funds, when accompanied by constraints on borrowing, may help curb the excessive spending to which petroleum-exporting countries are prone, and which often leads to inflation and debt accumulation.

Savings funds act as a kind of "rainy day" fund, storing up wealth for future generations. Since natural resources are depletable, some countries channel a portion of these earnings to a savings fund which can continue to generate wealth through its investment earnings even after the natural resources are exhausted.

Beyond their stabilization and savings objectives, NRFs provide two immediate benefits. First, both stabilization and savings funds can prevent Dutch Disease if their assets are "sterilized"—held in foreign currency abroad, and thus outside the country's monetary system. This way, they prevent upward pressure on the country's real exchange rate, which can affect the country's non-oil tradable sector as discussed in chapter one. Second, NRFs can help to regulate how much of a country's resource revenues can be safely spent at a given time. When large revenue streams come easily, there is a temptation for governments to ratchet up spending. Such increases risk overwhelming the economy's ability to absorb this spending. Unless expenditures are regulated to match the absorbtive capacity of an economy, there is a risk of unleashing inflation, which is extremely damaging to wages and employment, as discussed in chapter one.

What makes an NRF a success? This analysis looks beyond narrow fiscal criteria, which evaluates NRFs on the basis of their ability to smooth out government expenditures in the face of commodity price fluctuations. While this task is extremely important, it can also be accomplished without an NRF through normal tools of fiscal policy, such as multiyear expenditure planning and saving a stock of liquid financial assets.[1]

The greatest "value-added" benefit of natural resource funds is that they serve as a compact between governments and their citizens. NRFs restrain governments from either misappropriating or misallocating natural resource revenues. As institutions with their own boards, mandates, and regulations, NRFs are more enduring and difficult to change than budgets.[2] They can force governments to use resource revenues rationally for public ends. The creation of such constraints is extremely important because natural resource development con-

stitutes a depletion of wealth. Extraction of crude oil or minerals is a net loss for a state unless it is able to translate revenues from the sale of these resources into an enduring source of wealth.

If NRFs are to serve effectively as a compact between governments and citizens, they must be able to reduce the discretion of a single branch of government in making expenditure decisions. An NRF that is easily changed or liquidated is unlikely to constrain the government from irresponsible behavior. There are three particular factors that compel governments to respect their NRFs:

- ***Checks and balances.*** One of the principal reasons for creating an NRF is to help government resist the temptation to spend heavily in the short run, at the expense of future generations. A separation of powers creates layers of oversight into an NRF and minimizes opportunities for diversion of resources.

- ***Transparency.*** NRFs that operate in secrecy are more likely to be diverted from their original goals. An aggressive disclosure policy minimizes opportunities for abuse.

- ***Public involvement.*** The more engaged a citizenry is in the fate of its country's resource revenues, the less likely it is that a government will risk public ire by tampering with an NRF.

Below, each fund is analyzed from the possibilities it creates for checks and balances, transparency, and public involvement. Each NRF's function and structure is described, followed by an explanation of its oversight mechanisms, investment policy, and commitment to transparency.

Alaska Permanent Fund

Background

Among natural resource funds, the Alaska Permanent Fund (APF) is one of the oldest and most original. The state has put more than $10 billion of its $70 billion in oil earnings into the Fund since North Slope production began in 1977. Through investments and inflation proofing, the APF has grown to over $20 billion and has generated over $20 billion in net income.

The presence of oil in Alaska was recognized as early as 1923 when U.S. President Warren Harding created a naval petroleum reserve in Alaska. The importance and influence of Alaskan oil, however, was thoroughly established in 1967 when the Atlantic Richfield Company (ARCO) discovered North America's largest oil field, Prudhoe Bay, in Alaska's North

Slope. Estimates put production at over 2 million barrels per day (bpd). By 1969, state development leases were bringing substantial oil revenue into Alaska.

At the time of the North Slope discovery, Alaska had been a state for only eight years. It was a vast territory with a tiny population of 300,000, severe climatic conditions, the highest cost of living in the United States, and one of the nation's highest unemployment rates at 11 percent. Because oil extraction is highly specialized and does not create a significant number of jobs, many Alaskans continued to rely on state support after North Slope began producing oil. In 1979, about 40 percent of the workforce received some form of public support.[3]

A 1979 study by one of the state's senior economists, Robert B. Richards, warned that the state faced an impending fiscal crisis if it failed either to diversify its economy or cut government growth. North Slope production was expected (mistakenly) to decline within 10 years, and oil revenues, which by 1979 constituted 70 percent of state income, were not expected to be able to support state expenditures at current levels.

Fund function and structure

The Fund is rooted in the belief that Alaskans are the primary stakeholders of their oil wealth. Article VIII, Section 2, of Alaska's constitution states:

> The legislature shall provide for the utilization, development, and conservation of all natural resources belonging to the State, including land and waters, for the maximum benefit of its people.

This language provides the legal and philosophical underpinning for returning Alaska's oil wealth to its people.

From the start, the public was pulled into the decision-making process about what to do with Alaska's oil windfall.[4] The state took an active part in encouraging public discussion about the creation of a natural resource fund. Governor Jay Hammond directed the State Investment Advisory Committee, composed of representatives from consumer groups, business, government, and the public, to conduct hearings to gauge public opinion on this issue.[5] The Brookings Institute was hired to hold public seminars around the state to hear citizens' suggestions about what to do with Alaska's oil income. Concurrently, the House Special Committee on the Permanent Fund took its hearings on the road to gather opinions from around the state, and produced a report, "A Proposal for the Alaska Permanent Fund," summarizing the opinions of the public, the consultants they interviewed, and the committee itself.[6]

The debate over the best use of the money sharpened in the 1970s after a $900 million one-time bonus payment from a 1969 Prudhoe Bay oil lease sale was absorbed almost entirely by state government. Although much of the $900 million was spent on infrastructure, the expenditure of an amount that was nearly nine times the state's annual budget generated a media outcry implying that the money had been wasted.[7] The state had also begun

to accumulate debt in anticipation of future oil income.[8] Media coverage expressed a growing concern that government would continue to expand, leaving no reserve for the future.[9] Governor Hammond held the view that people rather than government should decide how to spend the money. He believed that giving each citizen a portion of the state's oil wealth would lessen the demand for increased spending by the state.

These concerns gave momentum to the idea of creating some kind of permanent fund to check state spending. Early proponents justified it to the Alaska Chamber of Commerce in 1969 this way:

> In the investment-banking world, we are constantly exposed . . . to situations, which demonstrate the insatiability of the demand for funds once they become available and the ease with which capital can be dissipated. . . . It is at the government level, however, that we find this intense pressure for current expenditure in its most extreme degree.[10]

A permanent fund would also provide an investment base for generating future income when oil revenues began to diminish, transforming the proceeds from a nonrenewable resource into renewable wealth for future generations. Numerous consultants were hired to conduct in-home surveys and opinion polls on the goals of a permanent fund.[11]

In 1970, and again in 1975, the legislature attempted to create a permanent fund. However, since the state constitution prohibited the creation of dedicated funds that bypassed the appropriations process, only a constitutional amendment could authorize the establishment of a permanent fund.

In November 1976, a majority of voters approved an amendment establishing the Alaska Permanent Fund (APF). This amendment required that a minimum of 25 percent of all mineral-based royalty revenues be placed in the Fund, with the principal used for designated income-producing instruments.[12] The fact that the APF was created by amendment, and not by a legislative act, has provided the APF with institutional protection against change by any single branch of government.

The Fund's principal comes from three sources. First, the Fund receives 25 percent of oil proceeds from fields discovered prior to 1980, and 50 percent of proceeds from fields discovered after 1980. Second, a portion of the earnings is transferred back to the principal annually to guard against erosion due to inflation. Third, the Fund receives additional transfers from the Earnings Reserve Account that the legislature chooses to reinvest in the principal. The Earnings Reserve Account is that portion of the APF's annual earnings left over after dividends have been paid and inflation adjustment has occurred. The legislature may choose how it wishes to spend money from the Earnings Reserve Account. In most years, however, it has chosen to reinvest this money into the APF.

After creation of the APF, an extended public debate ensued about whether to use the

Fund's income for economic diversification, for public works, or to provide annual dividends to Alaskan citizens. Among the factors that dissuaded the state from using APF earnings for economic development was its study of the many instances of misguided state spending among OPEC countries.

After extensive public consultations, the dividend program was chosen on the belief that Alaska's citizens, as owners of their state's natural resource wealth, are entitled to benefit directly from this wealth. In 1978, the Alaska Permanent Fund Corporation (APFC) was created to manage the APF. The APFC would be dedicated to growing the Fund's principal and providing citizens with a dividend based on earnings. Other programs, such as the Alaska Renewable Resources Corporation, which was dismantled in 1984, provided grants for the development of renewable energy products. Other major loan programs, such as the Alaska Housing Finance Corporation, would be funded from the state budget.

The dividend program provided all Alaskans who had resided in the state for six months or more with a $1,000 check and future payments based on the earnings of the Fund.

Oversight of the Fund

In order to isolate the APF from political influence, the APFC was created as a separate corporation to manage it.[13] Although independent in its investment decisions, the APFC is accountable to both the government of Alaska and to Alaskan citizens.

The APFC is guided by an independent board of trustees composed of four governor-appointed members of the public, the commissioner of revenue, and another member of the administration. The public members are appointed to four-year terms and the chairmanship rotates among them each year. Revenues to the Fund are transferred from the Department of Revenue.

The legislature maintains control over the board by having final say over proposed investments and conducting oversight through its Legislative Budget and Audit Committee. One check against "crony appointments" by the governor is the requirement that the terms of the public members of the board are staggered. Thus, the governor is unable to staff the board entirely with personal favorites. Moreover, removal of any board members by the governor must be accompanied by a publicly disclosed written statement of the causes for removal. The legislature approves the APFC's operating budget each year. By giving the governor, the legislature, the state administration, and the public a role in the governance of the APFC, the Alaska Permanent Fund builds in a separation of powers among those with oversight of the Fund. This separation keeps the power of any one body in check and helps explain the APF's endurance.

Fund investment, dividends, savings, and income

The first task for the Fund's new trustees was to define their investment strategy, finding the right balance between maximizing returns with greater risk and accepting lower returns with

less risk. The best model, according to Elmer Rasmuson, first chairman of the board of trustees, came from university endowments, because they tried to provide a reliable annual income while maximizing earnings within certain bounds of safety.[14]

Following in the tradition of public engagement, the board of trustees held a series of seminars throughout Alaska to which it invited speakers who had advised other governments about how to manage their oil wealth. The goal of the series was to foster an informed public debate about the Fund's investment strategy.[15]

Economic development was rejected as an investment strategy on the grounds that soft loans were risky and would only benefit a select group of people. The chosen strategy was more conservative. In choosing their investments, the trustees adopted the Prudent Investor Rule, calling for the exercise of "ordinary prudence, discretion, and intelligence" in managing large investments. Prudent investment requires attention to diversification, risk and cost minimization, consistent returns, and protection against inflation.

The types of investments permitted were spelled out by law, and gradually expanded as the investment climate changed. Initially, investment was only allowed in fixed-income instruments guaranteed by the federal government, debt of federally insured financial institutions, and corporate investment grade securities. In 1982, U.S. stocks and certain kinds of real estate were added to the list of permissible investments, followed by foreign stocks in 1989.

The board of trustees develops the Fund's investment strategy, which seeks an average real rate of return of at least 4 percent per year over the long term. The APFC's overall nominal rate of return has been closer to 9.5 percent.[16] In 2002, the principal was allocated as follows: 35 percent in bonds, 37 percent in U.S. stocks, 17 percent in foreign stocks, and 11 percent in real estate.[17]

Dividend payments, designed to maintain consistency from year to year, are calculated by averaging the Fund's net income over the last five years, dividing by two, and then dividing among the eligible recipients. Between 1982 and 2001, the Fund distributed $11 billion (45 percent of earnings) in dividends. Annual dividends have ranged from $331 in 1984 to $1,963 in 2000. To protect the Fund from erosion due to inflation, a portion of each year's earnings is returned to the principal for "inflation proofing." Since its inception, $7 billion has been added to the Fund to protect it from inflation.

What remains after dividends and inflation proofing becomes the Earnings Reserve Account, which the legislature may disperse. Because of the Fund's popularity, in most years, the legislature chose to return the earnings reserve to the principal. The APF is one of the 100 largest funds in the world and also one of the most successful in generating returns.

Settlements of tax and royalty disputes between oil companies and the state and federal governments also contribute to fund revenues. Over 60 legal cases spread over 20 years have netted Alaska an additional $6.8 billion in direct payments, plus an additional $3.8 billion in increased royalty and severance tax payments generated by reduced pipeline tariffs,

representing more than one dollar out of every seven Alaska received in oil revenues (see chapter three on petroleum litigation in Alaska). The litigation has addressed many issues, including the valuation of Alaska crude, field costs, tanker and pipeline costs, and other accounting issues. A particular point of contention has been formula apportionment accounting, which allows oil companies to pay less in taxes by using their lower worldwide corporate revenues, rather than their revenues from Alaska production to assess their tax obligations.[18]

Since 1990, payments received by the state from settlement of legal disputes with the oil companies have been deposited in a Constitutional Budget Reserve Fund (CBRF) created in 1990, which is used to balance the state budget. Loans from the CBRF to the state budget may be made with three-quarters of the vote from each legislative chamber. The constitution mandates, however, that if the state budget has a surplus at the end of the fiscal year, this surplus must be used to repay the CBRF. Repayments do not have to include interest.

The state has deposited $5.6 billion in the CBRF and has earned approximately $1.5 billion on that money. However, in all but two of the years since its inception the state has withdrawn funds from the CBRF to fill the difference between unrestricted revenue and the annual budget. These liberal borrowing policies have rapidly depleted the CBRF. In November 2002, the CBRF balance was $2.1 billion.[19] At current spending levels, the CBRF is projected to run out of money by 2005.

Critics of the CBRF charge that the state lost hundreds of millions of dollars in returns by not placing the CBRF's initial deposits in the Permanent Fund. Since the CBRF requires liquidity, its managers have placed deposits in shorter-term investments yielding significantly less than the annual earnings of the Permanent Fund. Moreover, the three-quarters vote required for appropriations has allowed legislators to bargain their votes in exchange for funding of their regional interests.

Transparency

Transparency underpins the APF's operations. The law on the Fund states that all information possessed by the APFC is of public record (except for confidential information about companies in which the Fund is a shareholder). The APFC's board produces an annual report, which must be written in "easily understandable language" and widely available to the public. It can be accessed over the internet, and hard copies or compact disc copies can be requested.[20] The report must include audited financial statements, a breakdown of earnings from each investment made that year, and an appraisal of the value of each investment, a comparison of investment performance against intended goals, and other details. Additionally, the Fund's website contains all legislation and resolutions that apply to the APF, papers commissioned for the APF's trustees, and past reports (see Appendix 9).

Conclusion

The Alaska Permanent Fund is a bold and innovative approach to managing natural resource

wealth. It is based on the principle that citizens are the owners of their mineral wealth and that every citizen is entitled to an equal share of this wealth. It adheres to the libertarian belief that people will be better off spending their own money rather than allowing the state to spend it on their behalf. By involving citizens in every aspect of the Fund's creation and evolution, the APF has given the public a stake in its preservation, and restrained the government from spending away oil wealth in a more effective way than any formal rules could. Although no rules require payment of dividends, the program is so popular that the legislature has always chosen to continue it.

Such an approach, however, has drawbacks. The absence of a needs component has led to an inefficient distribution of wealth, since individuals in the highest tax bracket receive the same amount as the poorest Alaskans. The diffusion of economic resources that results from sending a check to every Alaskan comes at the cost of targeting funds to address social and economic needs. Moreover, one might also question the prudence of sending dividend checks to every citizen as the state slashes its operating budget and lays off employees to make ends meet. Critics of the libertarian approach also argue that governments are better placed to pursue economic diversification and wealth distribution than individuals in the marketplace.

In addition to ideological debate over revenue use, the Fund faces a more immediate challenge. Prudhoe Bay production hit its peak in 1988. Since then, oil revenues have been in decline and income from the Fund exceeded oil revenues for the first time in 1998. While the APF can continue to grow on its earnings, the state budget, which derives 80 percent of its receipts from oil, is facing more dire cash shortages and a $1 billion deficit. The crunch has once again inspired debates about the choices available.[21]

Like many OPEC states, Alaska relaxed its tax collection when oil revenues became abundant. Now, however, the state finds itself with the uncomfortable choice of slashing spending, raising taxes, cutting back on dividends, or some combination thereof. Those mechanisms which were so successful in helping the APF endure—its constitutional mandate, the checks and balances built into it, and its tremendous popularity—are now preventing the state from being able to use the APF to address its budget deficit. An advisory vote was held in September 1999 to gauge citizen support for using Fund earnings to balance the state budget. An overwhelming 83 percent majority cast a "no" vote.

There has been relatively less discussion in the legislature about increasing oil taxes. One possibility, proposed by the NGO Oilwatch Alaska, the Alaska Public Interest Research Group, and the Alaska Forum for Environmental Responsibility, is to impose a windfall tax, which would kick in only if oil prices rise above a set level.[22] Another possibility is to change the state income tax formula, which is currently based on an apportionment formula that allows oil companies to use their lower worldwide corporate earnings rate instead of their revenue from Alaska operations.[23] A likely outcome will involve a combination of cuts in state spending, reintroduction of an income or sales tax, and some reduction in dividends.

Alberta (Canada) Heritage Savings Fund

Background

The Alberta Heritage Savings Fund (AHSF) in Canada was created at the same time as the Alaska Permanent Fund (APF) and has similar royalty injections and goals. Yet, the APF has grown to over $26 billion, while the AHSF has less savings than it did 15 years ago. Why is there such a difference in outcomes?

Unlike the APF, the AHSF was created through the normal legislative process. As a result, the AHSF's management structure, investment rules, and organization can all be altered by a simple majority vote in the legislature. By contrast, since the APF was created by a constitutional amendment approved by a popular vote, any change to its basic structure and purpose requires another constitutional amendment. Thus, the APF has experienced virtually no change in its objectives and structure, while the AHSF has altered direction frequently in response to shifts in oil revenues and legislative priorities.

Fund function and structure

Alberta's legislature created the AHSF in 1976 to pursue four competing purposes: 1) to save for the future; 2) to lessen the need for the province to borrow; 3) to improve quality of life; and 4) to diversify the economy.[24]

Initially, priority was given to saving for the future and to diversifying the economy. As Alberta's debt grew in its pursuit of economic diversification, and the success of the diversification program was unclear, the legislature focused on another objective—using Fund income to reduce debt. The AHSF has also been used for financing ordinary government expenditures. When the Fund principal began to dwindle, the government restructured the Fund in 1997, simplifying it and putting more emphasis on the savings function as well as changing the asset mix to a more conventional combination of fixed-income instruments and equities.[25]

Similar to Alaska, officials in Alberta had attempted to solicit public opinion on the creation of a resource fund. However, since the legislature did not need direct public approval to create the Fund, Alberta's attempts to engage the public in this complex debate were not as widespread and comprehensive as those of Alaska. In Alberta, the burden was largely placed on citizens to make their concerns known to their legislature. In Alaska, attempts at public involvement and education were vigorous and lengthy, because the APF could not be created without a majority of citizens voting for it. Three and a half years of discussion following the creation of the APF forced citizens and legislators to define what they wanted from their natural resource fund. According to Smith, "It was the ensuing debate . . . that gave the Permanent Fund a clarity of purpose and structure never achieved by the Heritage Fund."[26]

As a result of the limited debate in Alberta, the AHSF never acquired a strong guiding

focus and has struggled to find a balance between saving for the future and spending in the present. Because of the AHSF's competing objectives, actions that furthered one goal sometimes undermined another. For example, one of the Fund's objectives was to save for the future through prudent investments. However, some loans provided to Crown corporations to help diversify the economy were never repaid. One study calculated that once such loans and other capital investment projects were taken into account, the actual value of the AHSF is 20 percent lower than claimed by the Treasury Department.[27]

The Albertan government has also changed the AHSF's earnings rules as needs shifted. Initially, the Fund was designed to receive 30 percent of oil and gas revenues. From 1984 to 1987, the government revised this figure to 15 percent as it wrestled with recession. When oil prices continued to plunge, the government froze any additional transfers to the AHSF in 1987. Although the Fund's original design provided for inflation proofing to protect its principal, in 1987 the government began diverting Fund earnings to its general revenues and the AHSF's purchasing power eroded.[28] Consequently, the AHSF reached its peak at $8.6 billion USD in 1998, and in 2003 it is valued at $8 billion USD.

By contrast, the government of Alaska is forbidden by constitutional amendment to spend any of the APF's principal. Because the dividend program has created such popular support for the APF, the legislature has faithfully transferred a portion of earnings back to the APF to prevent inflation from eroding its principal, even as the Alaskan legislature struggled with a growing budget deficit. As a result, the APF has grown consistently, while the AHSF has stagnated. Yet the AHSF does provide the legislature with the flexibility of using Fund income for the budget in times of need, while the APF creates a large fund that can not be used even when the state faces financial troubles.

Oversight of the Fund

While the APF was created as a public corporation not subordinate to either governor or legislature, the AHSF was managed by the provincial treasury and subordinated to the governor's cabinet.[29] It may manage and invest 80 percent of the AHSF's assets without legislative approval.

Differences in management between the two funds also have resulted in differences in accountability. As a public corporation whose shareholders are the citizens of Alaska, the Alaska Permanent Fund Corporation (APFC) makes an abundance of information available to the public.[30] The AHSF, on the other hand, is subordinated to the governor's cabinet and is part of the political process. Its administrators have an interest in shielding themselves from politically motivated criticism by the legislature. As a consequence, the information it discloses to the public is comparatively more limited. For example, audits are conducted by a provincial auditor, not by an outside independent agency, and do not include a market value appraisal of the Fund's investments.

Fund investment, savings, and income

Differences between the two funds are also reflected in their investment goals and earnings. The APF's mission is to earn money while safeguarding the Fund's principal. It established an earnings objective of 4 percent real return over time. Only 5 percent of the APF's investments were made in Alaska.[31]

By contrast, the AHSF initially created five different divisions reflecting its different objectives. These operated until the AHSF was restructured in 1997. Only the Commercial Investment Division, which handled less than five percent of the Fund's principal, invested in securities with the sole purpose of earning money, and even this investment was required to be in Canadian securities. The largest portion of the Fund was assigned to the Alberta Investment Division. This division provided loans to Albertan corporations with the aim of diversifying the economy but "not necessarily" making a commercial return.[32] Another sizeable portion of the Fund was controlled by the Capital Projects Division, which used its portion of the principal to build parks and hospitals, and to fund other capital spending projects that were not expected to earn a return. Some of the beneficiaries have included the Alberta Heritage Foundation for Medical Research, Alberta Heritage Scholarship Fund, and the Reforestation Nursery Enhancement Program.

While these projects have helped improve the quality of life of Albertans, they did not translate into support for the government's management of the AHSF. The government came under fire because the province was not only spending from the Fund, but also borrowing extensively. The Fund had provided over $16 billion USD in revenues for the general provincial budget since 1982, yet by 1995 the province had accumulated $14 billion USD of debt, nearly twice the amount held by the Fund. To help service this debt and to finance its ordinary expenditures, the government began withdrawing from the AHSF, which reached its peak in 1998 and has since declined. The province's former treasurer, Jim Dinning, admitted, "We made the mistake of drawing too much out of the Heritage Fund to use it as a buffer to avoid making some tough decisions. As a result, we spent a lot of revenues that could have made the fund worth $80 billion ($53 billion USD) today."[33]

In 1995, in a survey entitled, "Can We Interest You in an $11 Billion Decision?" the government asked Albertans for their views on the future of the Fund. Based on survey respondents' preference for saving for the future, the government restructured the Fund in 1997, no longer allowing it to be used for direct economic development or social investment purposes.[34] Instead, a new business plan was adopted with a focus on income-generating long-term investments.

The different strategies and priorities of the AHSF and the APF have resulted in significant earnings differences. While the AHSF has declined in value over the last 15 years, the APF had a real rate of return of over 12 percent over the same period.[35]

Conclusion

A comparison of the APF and the AHSF provides some lessons about the endurance of NRFs. Although begun at around the same time and with similar revenue injections, the APF is more than twice the size of the AHSF. The reasons for this have much to do with the institutional structures of the two funds.

Because the APF could not be created without a majority of Alaskans' support, the state led an exertive campaign to educate the public and assess its opinions. The prolonged public debate created a consensus to distribute fund earnings as dividends to citizens. The management of the Fund was entrusted to an independent corporation accountable to both executive and legislative bodies. The constitutional basis of the APF, its popularity, and the separation of powers built into oversight of the Fund have made it highly resistant to change. This resistance has both positive and negative sides: It has helped the APF grow to substantial proportions. At the same time, it has made it more difficult to use the Fund to cover large budget deficits as oil revenues taper off. Debt incurred to cover the budget deficit will become the burden of future generations—precisely those generations the APF has been designed to support.

By contrast, the AHSF is much smaller and has experienced frequent changes. Because the AHSF could be created by a legislative act, it never acquired the clarity of purpose the APF had. The AHSF's mandate changed frequently, as did the rules on its investments, earnings, and expenditures. Citizens received no dividends, giving them little stake in what happened to the Fund. Consequently, Alberta's citizens have not been vocal about the frequent changes to the Fund and its poor earnings performance.[36] Like many of the OPEC countries discussed in chapter one, Alberta engaged in an expansive program of state spending and debt accumulation. When the province could no longer pay down the debt, it dipped into the AHSF. This flexibility can also be seen as an advantage, however, because it is easier for Alberta to redirect Fund income back to the budget in times of need. By contrast, Alaska has accumulated a large pot of money that it cannot tap into, even as the state struggles to make ends meet.

Both the APF and AHSF deserve praise—the former for its endurance and investment success, the latter for its spending on public goods—as well as criticism—the APF for its institutional rigidity and the latter for its lack of it. The comparison provides a useful lesson for Azerbaijan and Kazakhstan on the long-term consequences of choices regarding public engagement, investment strategy, and institutional design for NRFs.

Venezuela's Stabilization Investment Fund

Background

If there is one lesson to learn from Venezuela's efforts to benefit from petroleum production and exports, it is that oil booms tend to exacerbate rather than alleviate pre-existing political tendencies, especially the weakness of political institutions.

Venezuela lacked the institutions and bureaucracy of a modern state when foreign oil companies first arrived around the turn of the 20th century. The "ultra-presidentialism" that developed throughout the 20th century can be seen as the result of the mutual interests of early presidents and oil companies. The companies preferred to deal with one "negotiator," either the president or his representatives, and the executive branch grew all-powerful as oil rents flowed through it.[37] As a consequence, legislatures lost their ability to effectively direct oil revenues. Nationalizing the oil industry by creating Petróleos de Venezuela (PDVSA) and frequently using oil money in efforts to alleviate social problems have done little to eliminate poverty and related societal ills.

Venezuela has fallen back to standards of living present in the 1970s, and, from the point of view of its citizens, has lost decades of development. Yet high gross domestic product (GDP) per capita and moderate unemployment ($6,200 and 14 percent in 2000[38]) continue to conceal Venezuela's severe structural problems.

Systemic corruption and misguided public spending have much to do with Venezuela's inability to turn its petroleum riches into real wealth. Rentier economics combine with the country's administrative backwardness to create a self-perpetuating cycle of crony capitalism and poor governance.[39] Given these inescapable realities and Venezuela's unusually high dependence on oil revenues, the inevitable boom-bust cycle of oil prices has been especially damaging.[40] Expansionary policies and lack of fiscal discipline spawned by boom times continued through tighter periods, leading to unmanageable deficits and resource misallocation.[41] The government's determination to reduce dependence on oil by developing other sectors has inflated public expenditures, driven inflation, and caused deficits even when oil prices spiked.

Fund function and structure

Venezuela has repeatedly established special funds to manage its petroleum wealth. All have either failed or fallen far short of expectations. The most recent fund is the Macroeconomic Stabilization Investment Fund (FIEM), established by the Caldera government in 1998. The same absence of fiscal discipline that has plagued Venezuela for decades has also affected the Fund's performance. Frequent rule changes, failure to comply with Fund requirements, and continued debt accumulation have diminished FIEM's effectiveness as a stabilization mechanism.

With oil prices declining in the wake of the Asian financial crisis in 1997, the Caldera government acted upon IMF recommendations to create FIEM as a stabilization fund. The

Fund stores up fiscal reserves when oil revenues are high, and pays them out to the budget when revenues fall. According to the law, the purpose of the Fund is to "prevent fluctuations in petroleum-related income from affecting the country's necessary fiscal, exchange rate, and monetary balance."[42]

The Fund had straightforward rules for accumulation. A reference price for a barrel of oil was set based on a five-year moving average of past oil revenues.[43] All oil-derived income above the reference price was to be deposited into the Fund. If prices fell below the reference point, the Fund would be drawn down. In those instances, the Fund transfers to the treasury the difference between the income that was to be collected and the average of the same from the preceding five years. Additionally, if the Fund's holdings exceeded 80 percent of the five-year average from oil export revenues, the excess resources could, with congressional approval, be used to pay down government debt. To prevent the Fund from being depleted, the law required the Fund's balance to be no less than a third of what it contained the previous year.

Oversight of Fund

The election of President Hugo Chavez in 1999 was a rejection of past patterns of distribution and utilization of oil monies. Immediately upon assuming office, the Chavez government dramatically changed the Fund's rules, increasing the president's discretion over the Fund and reducing transfers to it. Fund revenues were cut to 50 percent of oil earnings above the reference price. Moreover, the reference price was cut from $14.7/a barrel (bbl) to $9/bbl, resulting in a loss of $4.2 billion to FIEM in 1999. The changes also allowed the president to authorize expenditures from the Fund by decree.[44] The new rules were to be in place through 2004.

Fund investment, savings, and income

Despite the reduction of required payments to the Fund, the government failed to deposit even this reduced amount in 1999.[45] Although accumulation obligations were met in 2000, they were only achieved through borrowing, despite the surge in oil prices. The absence of constraints on the government's ability to borrow meant that a fund designed to improve fiscal discipline was now encouraging the opposite.

Moreover, the existence of the Fund did not prevent the government from increasing spending by 46 percent when oil prices rose in 2000. In the same period, public sector debt rose by 10 percent.[46] An *Economist* article pointed out, "Certainly, [Venezuela's 2000 fiscal policy] resembles the fiscal policies that have so often got Venezuela into trouble in the past: spend like crazy when the oil price is high, and slam on the brakes when it plummets."[47] In a country where every $1 increase in crude prices translates into $1 billion in export earnings (with up to two-thirds going straight to the government[48]), high oil prices have not stopped irresponsible borrowing and wasteful spending.

In an effort to free up resources for increased government spending, FIEM's rules were

changed in October 2001 for the second time in four years, with these changes diminishing the Fund's holdings. Under the new rules, there would be no transfers to the Fund from the fourth quarter of 2001 to the fourth quarter of 2002, freeing approximately $2.7 to $3.5 billion to service the budget deficit.[49] In 2003, FIEM would receive 6 percent of oil revenues, followed by annual 1 percent increases up to 10 percent in 2007. In 2008, the Fund would revert to the accumulation rules established in the original 1998 law.

Analysts place little confidence in the endurance of the new rules because the Fund's stabilization function is undermined by the progressive increase in transfers, independent of the price of oil. "This could lead the Fund to experience, during the 2003–2007 period, the rather absurd situation of simultaneous deposits and withdrawals," according to one report.[50]

Conclusion

Venezuela's experience with its stabilization fund demonstrates that even with good intentions, a natural resource fund cannot force a government into responsible petroleum revenue management if a concentration of power provides no fiscal restraints. Venezuela's experience underscores a warning made by the IMF: that stabilization funds are ineffective in the absence of constraints on government expenditures and borrowing. Because capital is fungible, a Fund's resources can be used all too easily as collateral for additional borrowing.[51]

Concentration of power in the hands of the executive has resulted in frequent rule changes and failure to abide by existing rules, undermining FIEM's effectiveness as a stabilization mechanism, just as they undermined the previous Venezuelan investment fund.[52] According to Clemente et al, had the Venezuelan government adhered to the rules for deposits and withdrawals from the Fund, FIEM would have held over $10 billion rather than the $3.3 billion it held in November 2002.[53] If FIEM has experienced so much change and failure during its short life, with oil prices as high as they have been, one must question how the Fund will fare when oil prices decline. With no independent controls or transparency, FIEM has proven itself to be almost irrelevant.

The Chavez government has been enthusiastic in pursuing its campaign promises of fighting corruption and poverty. To do so, it added even more power to an already powerful executive. This concentration of power combined with an effort to disturb the system of patronage that had developed over many years has exacerbated bureaucratic infighting, alienated the powerful PDVSA, and encouraged Chavez to spend even more money to bolster his tenuous base of political support. Resistance to Chavez's efforts to redistribute benefits from entrenched interests culminated in a crippling eight-week strike from December 2002 to February 2003 that paralyzed the oil industry and cost the government an estimated $50–60 million per day. One lesson to be drawn is that an oil fund, no matter how well designed, will have little impact unless it is embedded in a democratic and open system of government that prevents rigid patronage relationships between government and industry from forming.

Venezuela's failures are particularly relevant for Azerbaijan and Kazakhstan. Like Venezuela, these countries have "ultra-presidential" systems. The power of the presidents, their tight control over petroleum contracts, and the excessive discretion they have over the operation of their respective natural resource funds do not bode well for the endurance of the Caspian funds.

Chilean Copper Fund

Background

Not all commodity funds established over the years deal with revenues obtained from oil exports. All commodity prices are subject to considerable price fluctuations over time. For example, Papua New Guinea has a fund to collect revenues from mining while the island of Nauru has established several funds for holding earnings from phosphate sales.

Chile's Copper Fund provides an example of how a stabilization fund can work effectively to limit the impact of commodity price volatility on public finances despite decades of extreme changes in government. Chile, long a democracy, succumbed to a military coup in 1973 when General Augusto Pinochet ousted the government of Salvador Allende, the first-ever elected Marxist head of state. Pinochet's murderous regime lasted for 17 years. After losing in a national plebiscite, the military ceded power to a democratically elected government in 1989.

The new government strengthened the macroeconomic structural reforms and softened the super-presidential system. It also placed greater priority on fighting poverty. Government programs targeting poor households increased incomes in the poorest 20 percent of the population by close to 85 percent by the late 1990s, and decreased the poverty rate by 18 percent between 1990 and 2000.[54] These programs were successful because they did not simply increase outlays for the poor, which, as chapter one describes, seldom achieves the desired effect when mechanisms of budget accountability are absent. The increased spending was part of an overhaul of the fiscal governance system, giving parliament more oversight of the executive's handling of public finances, thus improving fiscal discipline.

With the end of military rule, civil society has had a strong revival and public forums are frequently used by government to learn public opinion on policy matters. The government has also made a commitment to fiscal transparency, by working with the IMF and the Organization for Economic Cooperation and Development (OECD) to meet their transparency guidelines. Chile's 2003 budget bill called for "developing tools to make the state's financial management transparent to the public." According to Miguel Schloss, Transparency International's expert on the natural resource sector, in Chile, "participatory decision-making processes are a cornerstone for decisions aimed at enhancing the strength of the economy and the welfare of citizenry, and as a result, levels of corruption are lower."[55]

Chile, the world's largest copper producer with 28 percent of proven and probable

reserves, experienced historically high prices for copper in the late 1960s and early 1970s, but these highs gave way to low prices in the 1980s. Chile's business and economic cycles have, with close proximity, coincided with cycles in copper prices.[56] To reduce the public sector's vulnerability to changes in copper prices, the government created the Copper Fund in 1986; its assets currently stand at about $2 billion.

Fund function and structure

As a stabilization fund, the Copper Fund has helped the government avoid budget deficits (except in 1999) in the face of continuing low world prices for copper following the economic slowdown in OECD member countries. Surpluses generated by the Fund were to be used to prepay external debt and to sterilize foreign exchange in the interest of avoiding Dutch Disease. The Fund has helped Chile become one of the only countries in Latin America to achieve an anticyclical fiscal policy.

The Fund's trigger mechanism for determining the direction and size of flows between the budget and the Fund was established in an agreement with the World Bank. Benchmark prices are adjusted quarterly. Benchmark rates are informed by analysis from a panel of experts chosen on the basis of their understanding of the economic outlook for copper prices rather than being filled *ex officio*. The larger the difference between the benchmark and the actual price, the more is deposited into or withdrawn from the Fund.[57] If the actual price exceeds the benchmark, then the difference is transferred to the Fund. But if the actual price falls below the benchmark, then the difference is withdrawn from the Fund. For example, in 1998–1999, the government received large transfers from the Copper Fund due to a sharp drop in world copper prices.

Oversight of the Fund

The Copper Fund is an account held in trust and managed by the Central Bank. The Central Bank is obliged to generate a specified return on the Fund's resources and does so as part of its normal liquidity management operations in the capital markets. The Copper Fund is overseen by a board, which includes representatives of the state-owned copper company, Corporacion National del Cobre (CODELCO). The presence of the company creates the kind of contestation that separation of powers accomplishes in other NRFs. Since the copper company has an incentive to limit its payments to government, it is in its interest to see that the Copper Fund is run responsibly.

Fund investment, savings, and income

As a stabilization fund, the Chilean Copper Fund's transfers go directly into the budget and are not earmarked for particular expenditures. It is up to legislators, through the normal budgetary process, to determine how those transfers will be allocated. For example, a 1958 Copper Reserve Law earmarks 10 percent of CODELCO's export earnings for purchase of

armaments for the military. To ensure receipt of this transfer, the military government decreed in 1987 that, at a minimum, the military must receive $180 million, to be adjusted annually.[58] With the drop in world copper prices to a 50-year low around 1998, funds for the military came from the Copper Fund instead of CODELCO. Other expenditures have included financing to pay for higher than expected imports, for buy-back of public debt, and to compensate fruit growers and exporters for losses following boycotts of their produce.[59]

Exceptions to the spending rules have occurred. In the past, special transfers of $460 million have been made from Copper Fund assets to the Oil Stabilization Fund, which was created in 1991 to subsidize fuel for consumers. However, such exceptions were accompanied by public debate and the issuance of corresponding parliamentary laws establishing the necessary conditionality for repayment and corrective actions by the agency receiving the transfer. The transfers to the Oil Stabilization Fund have since been repaid.

As expenditures from the Copper Fund mounted to counter the low price of copper, the government resorted to borrowing to replenish Fund. In 2001, the government sold $650 million in bonds with the intention of depositing these proceeds in the Copper Fund if prices had not recovered within 18 months.[60]

Conclusion

Several reasons can be identified for the Copper Fund's continuity and success in helping Chile maintain balanced budgets despite low copper prices. First, copper plays a relatively small role in the Chilean economy, in contrast to the role of oil in the Venezuelan, Alaskan, or Azerbaijani economies. The mining sector accounted for 8 percent of GDP in 1997. CODELCO turns over all profits to the treasury, which represented 3.6 percent of GDP and only 10 percent of the government's revenues in 1997.[61] Although the mining sector grew rapidly from 1988 to 1997, so did the nonmining sector, encouraged by structural reforms and a stable macroeconomic climate.

Second, since the transition to democratic rule, there have been a number of reforms designed to enhance budget accountability. The Fund came into being by decree in 1986 as Pinochet, struggling to remain in power, initiated a number of structural reforms designed to improve transparency and accountability of the government's budget. The government that replaced Pinochet introduced its own governance reforms to improve accountability in the public finance system in the 1990s by increasing parliament's role in fiscal oversight, reducing the president's discretion over spending, and improving fiscal transparency. Among the reforms were limits to unplanned increases in spending by government agencies, publication of detailed reports on the basis for and the execution of the budget and their availability on the Ministry of Finance web page, and performance evaluations of government agencies and programs to help parliamentarians and the public make more informed budget decisions.

Third, the strength of Chile's fund is not so much in its rules as in the civil society context in which it operates. This is perhaps best seen when viewed in comparison to Venezuela's

stabilization fund. Although Venezuelas's fund is reinforced with strict rules, the country retains a super-presidential system, and its presidents have displayed a tendency to circumvent their own rules when it is convenient. Hence, Venezuelan president Chavez encountered little resistance to a dramatic change in the rules governing transfers to the oil fund, which contributed to its poor performance as a stabilization mechanism. By contrast, since the departure of the repressive military regime in Chile, Chileans have shown a reluctance to adopt rigid rules. Instead, an active civil society and a vigilant parliament keen to enhance its oversight of the executive have helped maintain fiscal discipline in the absence of explicit rules about oversight of the Copper Fund.

Norway's State Petroleum Fund

Background

Norway's State Petroleum Fund (SPF) is widely touted as a model natural resource fund. In designing its own national fund, Kazakhstan, for example, extensively studied the Norwegian model. But, for those countries that might consider following Norway's example, four points must be kept in mind. First, Norway struggled for years with the same petroleum revenue management challenges that plague other oil producers. Second, Norway's SPF functions within a wealthy, sparsely populated, and firmly established democracy. The same success is unlikely in states where these conditions are absent. Third, oil prices have been high for most of the SPF's seven-year existence. There has been no test of the government's commitment to the Fund when oil prices plunge. Fourth, when oil production began in 1970, Norway already enjoyed high living standards and a diversified industrial base.

Despite these inherent advantages after the discovery of North Sea oil, Norway began to experience the same economic dislocations as other petroleum producers.[62] OPEC oil production cuts in late 1973, as part of the Arab oil embargo directed primarily against the United States for supporting Israel in the Arab-Israeli war, caused oil prices to skyrocket just as Norway's oil came onto the market. The resulting windfall raised expectations of immediate affluence and increased public spending. Throughout the 1970s, the governing Labor Party explicitly adopted the goals of full employment, equalization of living conditions and incomes, and an expansion of the welfare state.[63]

The increased spending drove up wages and inflation. Between 1970 and 1984, nominal earnings rose an average of 11.4 percent every year, and inflation averaged 9 percent a year.[64] The country's current account deficit widened and its currency appreciated as oil became the primary export. Non-oil sectors of the economy contracted.[65] As state spending expanded, so did the state's share of employment. From 1972 to 1984 the public sector increased from 18 to 27 percent of total employment,[66] further reducing the availability of workers for the private sector and limiting economic growth. Like many oil producers, Norway's government

began accumulating public debt in anticipation of oil revenues. External debt nearly doubled in four years (1975–1979).[67] Control of the government switched back and forth between Labor and the Conservatives in the 1980s as both parties found that dismantling a welfare state was much more difficult than building one.

Fund function and structure

Spiraling inflation and debt prompted Norway's legislators to consider creation of an oil fund. A fund could sterilize the economy against inflation from excess revenue flows and also hold these revenues until they could be smoothly absorbed into the economy.

Another concern was Norway's demographic time bomb. An aging population, combined with a pay-as-you-go system and an expected decline in oil revenues in the next two decades, meant that future generations faced substantial pension reductions. Public pension expenditures are expected to nearly double as a share of GDP over the next 30 years. To meet these challenges, the legislature established the SPF in 1990. However, no deposits to the Fund were made until 1995, when the country finally had recovered from the 1986 oil price plunge and subsequent recession.

After only six years, the SPF's market value stood at $68 billion. According to conservative government projections, the SPF will represent between 130 to 150 percent of GDP within 20 years.[68] Currently, the Fund has accumulated more than 50 percent of annual GDP.[69] The SPF's rapid accumulation is due not only to generous oil prices in recent years, but also to the restraint practiced by Norway's legislators. The SPF's revenue and expenditure rules are so lax that it is difficult to imagine them succeeding in any environment without a strong tradition of accountability and transparency. This laxity stands as further warning that the Norwegian Fund is not a good model for countries lacking that kind of environment.

Unlike the resource funds in Alaska, Alberta, and Venezuela, Norway's SPF does not specify what share of oil revenues are to be deposited each year. Deposits are determined annually by the legislature; they consist of net oil revenues after the non-oil budget deficit has been covered.[70] Thus, it is entirely up to the legislature to determine, through its spending, how much it will deposit to or withdraw from the SPF. The parliament could easily deplete the SPF by failing to balance the budget over time.

The design was adopted to induce parliamentarians to be fiscally prudent, by giving them responsibility not only over the budget, but also over the SPF. Along with no requirement to deposit money into the Fund every year, there is no reference price to determine the size of transfers and no limit to how much can be withdrawn. Such rules could just as easily encourage uncontrolled spending. The fact that the SPF works is a testament to the powerful role that transparency and an entrenched sense of public ownership have played in encouraging fiscal accountability. In other states marked by weak institutions, corruption, or urgent social needs, stronger requirements on fund withdrawals and deposits are necessary.

The SPF provides for both stabilization and savings. The stabilization function is achieved by having parliament withdraw whatever oil revenues are needed to balance its budget. The savings function is achieved by annual deposits and by adding earnings into the principal.[71] No decision has been made about how to use the bulk of the savings, but they will most likely be used to pay pensions, given the expected increase in outlays just as oil revenues begin to decline.

There has also been renewed interest in spending earnings for current social needs rather than putting everything away for future generations. A new rule that went into effect in 2002 stipulates that 4 percent of the annual earnings of the SPF be returned to the budget for social spending.

Oversight of the Fund

A separation of powers in overseeing the SPF allows various institutions of government to keep one another in check (see Appendix 1). Parliament's discretion in determining transfers to the SPF has given the executive branch an incentive to be more accountable to the legislature. Although the executive branch may change the SPF's regulations without legislative approval, in practice the government has always consulted with parliament and has kept it well informed of any developments concerning the SPF. The Office of the Auditor General reports to the parliament on the results of its annual findings.

The Ministry of Finance, responsible for managing the SPF, formulates its investment guidelines and risk limits, and establishes a benchmark portfolio with indices of expected performance in those countries where investment is permitted. The ministry sets maximum limits on deviation from the benchmark. Day-to-day management of the Fund is delegated to Norges Bank, the country's central bank, which is independent in its investment decisions, but which must operate within the investment guidelines and risk limits set by the Ministry of Finance.

One original provision is the existence of an oversight council that, at the request of the Finance Ministry, may examine whether the SPF's foreign investments contradict any obligations that Norway bears under international conventions. Another important provision is the prohibition against using the Fund as collateral for government borrowing. As Venezuela's example has shown, a natural resource fund accomplishes little if the state saves with one hand and borrows with the other.

The SPF is a model of transparency. As the manager of the SPF, Norges Bank is required to submit reports to the Finance Ministry four times a year. These reports, as well as the annual report, are made available to the public over the Internet.[72] The reports provide information on transfers to and from the budget, all of the Fund's holdings, their value, their returns, risk exposure, methodology, and administrative costs. Additionally, the Finance Ministry hires an independent auditor to evaluate both the benchmark and the actual return on the Fund. The

results of these audits are also available over the Internet.[73] All regulations governing the SPF can also be found on Norges Bank's website (see Appendix 9).

Fund investment, savings, and income

The SPF is invested entirely abroad in order to sterilize assets and diversify away from domestic industries whose fortunes parallel those of oil. All financial instruments and cash deposits of the SPF are denominated in foreign currency. Originally, the SPF could only buy bonds, but in 1998 the rules were relaxed to allow equity investments so that returns could be improved.[74] Between 30 to 50 percent of assets can be invested in equities, the rest in fixed instruments. To minimize volatility, the SPF can hold no more than 3 percent of total stock of a single company. In 2000, investments were spread across 2,025 companies in 21 countries.

Geographic risk is minimized by assigning limits (determined by GDP) on the percentage of bonds and equities from different regions: 50 percent for Europe, 30 percent for the Americas, and 20 percent for Asia and Oceania. Twenty-eight countries qualify for investment. By setting limits to different kinds of investments and to investments in particular regions and companies, the SPF aims to avoid losses attributable to any specific risk factor.

Ethical considerations have also entered the SPF's investment guidelines. Initially, the administration advocated banning investment in tobacco companies. Although the initiative ultimately failed, another proposal to set aside money for investment in environmentally friendly companies passed. The environmental portfolio, created on a three-year test basis in 2000, has received over $240 million in transfers. The Ethical Investment Research Service, an independent agency that analyzes corporate behavior for socially responsible investment funds, determines portfolio guidelines.[75]

Cumulatively, the Fund achieved a 15.4 percent net real return between 1997–2001, averaging a 3.6 percent annual real rate of return (adjusted for inflation and management costs). Average management costs have been less than 0.1 percent of total assets.[76]

Conclusion

The success of Norway's SPF has much to do with the country's reasonably diversified economy, relatively small population, discipline exercised by the legislature, and separation of powers in oversight of the SPF. The Fund has helped Norway maintain a counter-cyclical fiscal stance, reigning in spending when oil prices surge in order to avoid inflation, and making money available when oil prices contract to avoid sudden cuts in spending. Even during record oil prices in 2001, the Labor-led government passed a tight budget, which cost it significantly in the ensuing general elections.

Parliament has considerable discretion in determining how much, if anything, to transfer to the petroleum fund, and how much to take out in any given year. To date, it has exercised this authority responsibly. However, if oil prices fall, there are no impediments to the

parliament authorizing the use of the Fund's principal, as occurred in Alberta. In those circumstances, a natural resource fund can quickly dwindle. In countries like Kazakhstan and Azerbaijan, where budget transparency and controls are still in formation, tighter rules on natural resource fund revenues and expenditures are needed.

Although the advantages held by Norway at the time of creation of the SPF limit its applicability as a model for others, much of its success can be traced to the separation of powers, transparency, and accountability that underlie its operations. These are attributes that can be built into the Azeri and Kazakh oil funds. For example, in Norway, both the Ministry of Finance and an outside auditor conduct audits, which are presented to parliament and posted on the Internet. The SPF's website provides all regulations governing its activities and all of its highly detailed reports about the Fund's investment activities. Such transparency does much to inspire confidence in the professionalism and endurance of a natural resource fund.

Chad's Oil Revenue Management Plan

Background

Chad will not be an oil-producing and exporting country until 2004. It currently imports all the oil it consumes. When Chad does start producing oil, virtually all of it will be available for export. By international standards, Chad will be a minor player on the world oil market. Nonetheless, earnings from oil development projects should approach $200 million annually. The question of how these sums will be spent holds important political, economic, and financial implications for a country whose annual per capita income in 2001 was about $200.

Once construction of the Chad-Cameroon Pipeline Project is complete in 2004, Chad can anticipate oil revenues of $200 million a year for the next 25 years—double current government revenues.[77] The challenge for Chad is to overcome years of civil war, poverty, corruption, and human rights abuses, and to use these revenues for development and the public good.

Since achieving independence from France in 1960, Chad has been marked by suffering and instability. The two authoritarian leaders who have ruled Chad for the last 20 years—Hissene Habre and Idriss Deby—both seized power in coups in 1978 and 1990 respectively. In 2001, Deby postponed legislative elections until spring 2002 and won 63 percent in a first-round presidential election that was characterized by the arrest and murder of opposition activists.[78]

Neither parliament nor the judiciary is independent. Parties aligned with the president controlled 97 of 125 seats in parliament in 2002. Arrests and persecution of representatives who criticize the government have stifled parliamentary opposition.[79] The president makes most key judicial appointments. Journalists and the media are the targets of defamation prosecutions and deadly violence if they report on government corruption.

The World Bank ranks Chad as the world's fifth poorest country. The country ranks 155 out of 162 countries in the United Nations Human Development Index.[80] Life expectancy is just 50 years, and three-quarters of the population lack access to clean water and sanitation.

Crude oil deposits discovered in the 1960s offer a source of funding to raise living standards and bring stability to Chad but civil war has hampered development. It was not until the Deby government's suppression of the Armed Forces of the Federal Republic (FARF) rebel group in the late 1990s that oil field development became possible again. But oil field development would have to be accompanied by construction of an oil export pipeline and export facilities in Cameroon. Domestic demand is far too small to justify development by itself.

A consortium of Exxon, Petronas, and Chevron was eager to develop a pipeline through Cameroon to Chad's oil fields in the Doba Basin, but the partners were wary of the project's risks. "The Chad consortium's members realized that 20 years down the road, they would be held responsible for any outcome, whatever their direct responsibility. . . . They needed a buffer against both a demanding government and a potentially resentful population," writes Peter Rosenblum.[81]

The World Bank eased the consortium's concerns by agreeing to provide $115 million, or 3 percent of the project's financing.[82] The consortium pursued the World Bank's involvement because the latter possessed sufficient clout to protect against misappropriation of oil development revenues. From the World Bank's perspective, the project would increase its leverage by linking continued project financing to successful petroleum revenue management and create a model for other mineral-rich but otherwise poor countries. According to a World Bank press statement, the Bank's involvement provided "an unprecedented framework to transform oil wealth into direct benefits for the poor, the vulnerable, and the environment."[83]

Revenue management function and structure

From the very beginning, the Chad-Cameroon pipeline has been strongly opposed by a variety of NGOs, particularly those concerned with human rights and environmental protection. As one of a number of conditions for its involvement, the World Bank required Chad to adopt a revenue management plan outlining how petroleum income would be used to reduce poverty. The Revenue Management Law, passed in December 1998, specifies how oil revenues from the Doba fields may be spent and how expenditures will be monitored. Assessment of the law's effectiveness can only begin once oil begins to flow, probably early in 2004, yet it could be an innovative measure for increasing transparency, accountability, and public involvement in government finance in a country where all three are absent.

According to the Revenue Management Law, 80 percent of the government's oil revenues will be dedicated to education, health and social services, rural development, infrastructure, and environmental and water management. Ten percent of revenues will go to a future generations trust. Five percent will be returned to the oil-producing area for regional

development, and the remaining 5 percent will be used for "pressing Government operational needs."[84]

Several concerns have surfaced about the potential for significant revenue to bypass the revenue law. The Agence Française de Développement pointed to the fact that only royalties and dividends are subject to the revenue law. Some 45 percent of revenues generated over the lifetime of the project will not be required to comply with the Revenue Law.[85] It is also not clear whether the Revenue Management Law will apply to revenue generated from new oil fields being explored in Chad.

Revenue management oversight

Past problems with Chad's failure to account for expenditure of aid money led international lending agencies to require that the Chad Treasury Department be placed under the control of a Swiss company, COTECNA. Similarly, income received from the production and export of crude oil is required to be deposited in a foreign escrow account.

The Revenue Management Law also created an oversight committee, the College de Controle et de Surveillance des Resources Petrolieres (CCSRP), to monitor use of oil revenues. The nine-member committee, headed by the country director of the Bank of Central African States, is composed of five representatives from the executive branch, the legislature, and the judiciary as well as four representatives from civil society. The committee's task is to "verify," "authorize," and "oversee" expenditure of oil revenues. In a continuing debate, committee members, supported by the U.S. Treasury Department, have asked for a more substantive role in monitoring revenue collection and allocation.

The World Bank is providing $41 million in aid to help build a system of revenue management and financial control. The money is being used to develop a financial management information system, build a poverty database, improve the competence of civil servants, and support the oversight committee.[86] According to the law, there will be annual published audits of the government's petroleum accounts, as well as expenditure reviews by the government and the World Bank.

Additionally, the World Bank has appointed a six-member International Advisory Group (IAG), with a 10-year mandate, to advise it on the progress of the government's poverty alleviation, its management of oil revenues, and the involvement of civil society in these processes. IAG members have no direct relationship to the government of Chad, the World Bank, or the oil companies.[87] They have conducted several field visits and are making their reports available to the public.

An additional layer of oversight is the World Bank's internal ombudsman, the Inspection Panel. After its inspection in 2002, the panel expressed grave concern that the infrastructure for producing and delivering oil was developing at a much faster rate than the infrastructure for absorbing and managing oil revenues.[88] The panel noted that the Revenue Management Law fails to constrain the government's ability to borrow against future oil revenues. The IAG cautioned,

"What must not be done is to accept that the state of preparedness for the arrival of oil revenues 'will be whatever it will be.'"[89] Inadequate capacity to absorb oil revenues could be aggravated if oil prices exceed those expected by the Revenue Management Law. The law was designed with expectations of oil at around $15 a barrel.[90] It is crucial not only to have the means to absorb that revenue, but also to sterilize excess revenue in order to avoid the risk of Dutch Disease.

Conclusion

Ultimately, the success of any revenue management plan hinges on the political will to make it work. Where political will is absent, vagueness in regulations to ensure transparency can be easily exploited. An analysis of the Revenue Management Law by the Human Rights Program at Harvard Law School found many ambiguities in the law.

An important finding was that the law does not specify where funds should be spent. In other words, all the investments could be made in one region. In Chad, where ethnic cleavages coincide with geography, such inequitable spending could easily re-ignite Chad's long-running war.

As in other cases where oil funds have failed in their objectives, Chad's revenue management plan gives too much discretion to the president. He may alter the allocation of revenues by decree every five years and can "fill in gaps" by decree more regularly. The president's first opportunity to revise the Revenue Management Law will be in 2004—just as oil revenues begin to flow. An earlier version of the law, approved by parliament, had required legislative approval for any changes. The exclusion of this requirement illustrates the president's unwillingness to relinquish control over oil revenues.

Perhaps the area where lack of political will is likely to have the most impact is the oversight committee. While the committee's composition appears representative, it is unlikely to enjoy much, if any, independence. The Petroleum Revenue Management Law was passed in three hours with 108 votes and no opposition. The only parliamentarian who had openly opposed it was sitting in jail.[91] The government has a history of co-opting opponents, and there is no mechanism to ensure that NGO representatives on the oversight committee remain accountable to their constituencies.

Moreover, the oversight committee lacks the power to enforce its mandate. Without the right to subpoena information, without a staff, and without a requirement to make its findings public, the committee is unlikely to function as an effective check against abuse. The government has rejected the committee's draft regulations and has supported rules greatly reducing the committee's power and independence. The World Bank stepped in to support regulations more in keeping with the Revenue Management Law. Members of the committee also report being pressured by the government to approve expenditures without congressional approval.[92] According to Ian Gary, Catholic Relief Service's advisor on Africa, "the worry is that the committee's mandate will be too narrowly interpreted and they will be starved of funds, especially if they do their job too well." Nevertheless, the committee has succeeded in

blocking two procurement contracts for roads because they did not follow established bidding procedures.

In countries lacking a tradition of accountability, political will is often the hardest thing to secure. In December 2000, after repeated inquiries from the World Bank, President Deby finally admitted to using $4.5 million of the first bonus payment to purchase arms—without parliamentary approval. Although the bonus payment was not required to comply with the Revenue Management Law, the president had widely publicized that the bonus would be spent according to its guidelines and monitored by the oversight committee.[93] The World Bank said it was "sobered and disappointed," and claimed that the Chadian authorities did not provide the World Bank with information about the expenditure until after the fact.[94] Whether similar lapses will occur once petroleum revenues begin to flow remains to be seen.

Oil Funds in the Persian Gulf

Oil funds exist in several Persian Gulf countries, including Kuwait, Oman, and Iran. The three share certain traits with the oil funds created in Azerbaijan and Kazakhstan: they operate in countries that are not democracies and where transparency of governance is not a cultural norm. Leaders of these countries have a large amount of freedom in determining fund rules and expenditures. As a result, the oil funds in the Persian Gulf have been subject to frequent rule changes and operate in near total secrecy.

Kuwait Reserve Fund for Future Generations

Kuwait's fund was first begun in 1962 as a secret account of the finance minister, who allegedly wanted to keep the legislature from spending the money. Institutionalized in 1976 as the Kuwait Reserve Fund for Future Generations (KRFFG), it receives 10 percent of Kuwait's total government revenues annually. The Fund, run by an office attached to the country's ruler, invests its assets in overseas equities, bonds, and real estate, reportedly earning consistently excellent returns. Little is known with certainty about the Fund since it does not disclose information about its holdings or activities to the public or the country's legislature.

Originally, the Fund, which had accumulated $89 billion by 1989, was supposed to incur no expenditures until the turn of the century. However, the invasion by Iraq, as well as other discretionary expenditures, necessitated spending. The lack of democracy in Kuwait and the absence of transparency and accountability in the Fund's governance have essentially turned it into a second budget for the government. There have been reports that spending is motivated more by the desire of the government to stay in power than by economic rationale. For example, a parliamentary inquiry into $32 billion taken from the Fund after the war reported that $22 billion had been used to pay off the bank debts of close to 10,000 citizens, includ-

ing members of the wealthiest merchant families and the ruling family. The Fund was also used to pay seven months salary to everyone who stayed behind during the war.

Because of Kuwait's small size and abundant oil reserves, the government is able to use the KRFFG as a means to buy the loyalty of its tiny population. The lack of democracy and the absence of transparency have made it difficult for anyone, including Kuwait's citizenry, to oversee the Fund's activities.

Oman General Reserve Fund

Oman has less opportunity for squandering oil wealth than Kuwait. Although Oman has a tiny population like Kuwait, its oil reserves are less than half of Kuwait's, and the expectation is that they will be exhausted in the next 15–20 years. The Oman General Reserve Fund (GRF), established in 1980 as a savings fund for future generations, has functioned as a stabilization fund since 1998. Originally, the GRF received 15 percent of all oil revenues. After several rule changes, transfers are now determined by a reference price for oil. Since its inception, the GRF has transferred $14.5 billion to the government budget.

Little is known about the size and operations of the GRF. The Fund publishes no annual report, maintains no website, and shares no information with the public. According to Oman's director for budget and contracts, this secrecy is meant to deter the legislative assembly from exerting pressure on the government for more spending.[95] Several mechanisms for overseeing the Fund exist: there are monthly internal audits and investment performance reviews, quarterly external audits, and twice yearly portfolio performance reviews. However, none of these are shared with the parliament or the public.

Because it is so easy for the government to withdraw money from the GRF, it has repeatedly done so to finance its budget deficits. In most years, withdrawals from the Fund have exceeded contributions and analysts expect the Fund to run out of money before Oman runs out of oil.[96]

Iran's Foreign Currency Reserve Account

Established in 2000 against the rebound of oil prices, Iran's Foreign Currency Reserve Account is the newest NRF in the Gulf region. The need for sound oil revenue management is particularly acute in Iran. Oman and Kuwait are tiny countries that can use oil revenues to subsidize their entire populations. Iran, however, has a population of over 65 million and struggles with the legacy of a 10-year war with Iraq and international sanctions.

Like many oil-rich states, Iran bears the marks of the "resource curse." The country has large domestic and foreign debts, a moribund economy, and low levels of tax collection. The state directly or indirectly controls most economic activity and spends a large share of its oil earnings on subsidies. Iranian demand for gasoline, stimulated by the low price of four cents per liter, exceeds supplies from local refineries and the gap in demand has to be covered by

imports.[97] The quality of life of its population has suffered as well. Iran has high levels of unemployment and few prospects for job growth. GDP per capita declined by nearly 40 percent between 1979 and 1995. Indeed, the Iranian GDP estimated for 2001 was little changed over the GDP attained 15 years earlier, in 1986.

Iran's stabilization fund has two goals: to build up reserves in case of a downturn in oil prices, and to develop Iran's non-oil sector. Half of the resources transferred to the fund are saved, and half may be used as loans to private enterprises. The Central Bank manages the fund, which now stands at close to $8 billion, but oversight of the fund rests with a board of trustees made up of government ministers and presidential appointees. The rules for investing and spending the savings portion of the fund are not known. The development portion, however, is put at the disposal of 10 approved banks that may lend to private Iranian companies within the guidelines established by the board of trustees. Loans are for three-year periods and must be repaid with interest. As of July 2001, 87 projects had received approval, with $548 million dispersed.[98]

Although it is still too early to tell, the hope is that Iran's current stabilization fund will operate with greater transparency and accountability than an earlier one, established in 1957. Seventy percent of oil revenues were channeled into this earlier fund to be used for economic development. However, an absence of mechanisms for monitoring expenditures resulted in large allocations for items unrelated to economic development, such as offices for the secret police.[99]

Despite the questions of transparency and accountability that still exist around Iran's stabilization fund, its establishment is a positive development and one that can offer some examples for the Caspian. Like Azerbaijan and Kazakhstan, Iran faces the challenge of creating job opportunities and developing its non-oil sector. Iran's stabilization fund provides one example of how a state can use excess oil revenues for stabilization and savings purposes, as well as for economic development.

Nunavut Trust of Canada

Background

Unlike government-run oil funds, the Nunavut Trust is a community-managed fund. It has earned strong returns while maintaining accountability to its constituents and serves as a good example for Kazakhstan's underdeveloped oil-producing regions such as Atyrau or Aktyubinsk. The Trust also demonstrates how these communities can be compensated for the negative external consequences of oil development, and how they can turn such compensation into an enduring source of income.

The Nunavut Trust was developed to administer the proceeds from the historic 1993 Land Claim Settlement between the Canadian government and the Inuit people of Nunavut, which is a self-governed northern Canadian territory above Hudson Bay inhabited by approximately 21,000 Inuit. The agreement transferred 350,000 square kilometers of land to the Inuit, gave the Inuit equal representation on a number of wildlife and resource management boards, and entitled them to royalty payments from natural resource development on this territory. Additionally, the agreement provided for payments of $1.1 billion by the Canadian government to be transferred to the Nunavut Trust over 15 years (roughly $52,000 per capita), ending in 2007.

The Nunavut Trust is unique because its beneficiaries run the fund independent of any government. The trustees overseeing the fund are appointed by regional Inuit associations. The government of Nunavut was offered tax-free status for the Trust if it agreed to state investment guidelines such as those used for pension funds. The trustees declined, however, in order to maintain the independence of their investment decisions.[100] One challenge for the Trust in coming years will be to avoid creating dependencies on the part of beneficiaries and to resist pressure for spending the Trust's principal.

Fund function and structure

The designers of the Nunavut Trust rejected a dividend program because they wanted to avoid what they considered the mistakes of other funds. The Samson Cree of oil-rich Alberta had received over $2 billion since the oil booms of the 1970s, with every Cree entitled to a dividend of about $40,000 upon turning 18. Much of the money was spent on personal consumption, leading to high levels of alcoholism and death, and generating little material improvement for the community.

The Trust's designers also wanted to avoid investing the principal in pursuit of local economic development while sacrificing returns from investments. The separation of investments from expenditures of Trust income allowed trustees to focus on earning returns while a separate organization representing beneficiaries, Nunavut Tunngavik, Inc. (NTI), concentrated on how best to spend the money. Consequently, fund managers invest in a mix of fixed income securities and foreign and domestic stocks with the sole purpose of maximizing return on investment while minimizing risk.

Oversight of the Fund

Like other funds, the Nunavut Trust struggled to find the right balance between independence and accountability for its trustees. To insulate the trustees from political pressure, the deed creating the Trust makes them appointed rather than elected positions. They serve three-year terms and can only be removed for cause. Conflicts of interest are reduced because the regional

Inuit associations that appoint the trustees are not beneficiaries of Trust spending. Accountability is achieved by giving every Inuit beneficiary the right to sue the trustees for breach of duties.

Fund investment, savings, and income

Until economic downturn in 2001, the Trust was earning an average rate of return of 17 percent, placing it in the top quarter of 500 investment funds ranked by the Canadian Trust Universe Comparison Service. These high returns were achieved not only by diversifying investments, but also by hiring four different money managers to invest different portfolios of the Trust.

Spending the Trust's earnings is done through separate nonprofit organizations. The NTI is the largest of these organizations and implements the Land Claims Settlement on behalf of the Inuit people. The NTI uses Trust earnings to fund Inuit programs such as a Nunavut elders benefit plan, a program for Nunavut hunter support, a bereavement travel fund, and various sports programs. The NTI also created a for-profit venture capital fund for Inuit-owned businesses.

NTI functions as a "parliament" of sorts representing the Inuit. The Inuit population elects its executive director, and the three regional Inuit associations (whose boards are elected by the Inuit they represent) nominate members for the 10-person board. The NTI meets regularly with different Nunavut communities to discuss spending priorities. These frequent meetings, an elected executive director, and board members nominated by the regional associations provide constituents with three forms of accountability regarding Trust spending decisions.

Conclusion

A challenge facing the Trust in coming years is the growing demand for spending. In a 2000 review, the NTI submitted requests for additional expenditures, including the creation of a new trust providing $50 million over five years for local business development, a 50 percent increase to NTI's operating budget, add-on funding to cover past NTI cost over-runs, and a 50 percent increase in benefits for Inuit elders. Though the Trust has performed strongly, it is subject to market volatility and will not always generate enough revenues to meet expenditure goals.

As beneficiaries become dependent on Trust income, pressure may grow for borrowing from the principal or for making riskier investments that yield higher returns.[101] The Nunavut Trust does not have the same hurdles to borrowing from its principal as Alaska does. Amounts can be advanced from the principal with the approval of two-thirds of the trustees (provided that each of the regional Inuit associations is represented). With increased demand for expenditures, and federal transfers ending in 2007, the Trust's endurance will depend on the vigilance of its trustees.

Making Funds Work: Lessons Learned

What distinguishes good from poor performance among the natural resource funds discussed in this chapter? In the success stories, the NRF achieves some combination of the following: it accumulates sizeable savings; enjoys the support of the public; smoothes out government spending; and maintains continuity in the fund's rules and functions. In more problematic cases, the NRF's assets decline over time while it fails to raise living standards or to create a viable non-oil economic sector; prodigal spending of fund assets leads to inflation; the fund's rules are in flux; revenues and expenditures are shrouded in secrecy; and an absence of separation of powers makes the NRF easy to raid.

This section summarizes the lessons, both positive and negative, of the NRFs described above. In doing so, it provides insight into the means by which NRFs can be designed to limit government's discretion in misallocating or wasting natural resource revenues and to provide incentives for good management of resource revenues.

Transparency keeps leaders honest.

When the public knows little about its NRF, there are fewer obstacles to prevent leaders from making expenditures outside the NRF's guidelines. Secrecy surrounding the oil funds in Kuwait, Oman, and Iran has allowed these funds to be used as backdoor budgets at best and as personal bank accounts at worst. In Abu Dhabi, another fund that operates under secrecy, there have been scandals involving reports that investment managers had stolen more than $70 million.[102] By contrast, NRFs in Alaska, Norway, and Alberta have established transparency as an operating principle in their founding documents. As a result, they make information available to the public, ensuring its accessibility in easy-to-understand language.

Several mechanisms exist by which transparency can be incorporated into an NRF. First, all transfers to and from a natural resource fund should be recorded in the budget and treasury accounts. Second, as a keeper of the public's money, an NRF should have the same commitment to disclosure as a public company has to its shareholders or an investment fund to its investors. It should publish annual and quarterly reports, results of external audits, and announcements of tenders. It should disclose its asset management guidelines, its risk-return benchmarks, and its actual performance relative to these goals.

Transparency should apply not only to the NRF's activities, but along the entire chain along which natural resource revenues are earned and spent. Most misappropriation happens long before oil revenues reach an NRF. Outside agencies can be retained to monitor production, costs, and sales in order to provide an independent audit verifying companies' production, tax payments, and subsequent transfers to the NRF. Transparency of the entire chain of payments can begin with a requirement for oil (or other resource extraction) companies to disclose all payments made to host governments and their mediators. Transparency should also extend to the budget planning and implementation process.

A strong sense of public ownership over an NRF protects it against abuse.
It is no coincidence that the best-functioning NRFs exist in established democracies. From a design point of view, both Norway's and Alaska's oil funds leave considerable discretion to their legislatures. What has kept these bodies from abusing these monies is the strong sense of public ownership over the oil funds. A commitment to transparency has put full information about the NRF's development into the hands of the public. Citizens' ownership over "their" savings funds has provided a stronger check on legislatures than rules could have. By contrast, the poor performance of Venezuela's and Oman's funds has much to do with the absence of transparency and accountability in these countries. More important than choosing the right model for an NRF is infusing the public with a sense of ownership over the fund.

But how do you give the public a sense of ownership over a fund? The most direct means—the payment of dividends to citizens—only works where the population is small enough and oil or gas revenues large enough for dividend payments to amount to much. Where dividends are impractical, it is possible to give a targeted population a stake in the NRF. Norway's state oil fund, for example, will be used to pay the pensions of future generations. The Nunavut Trust functions as an overall community development fund, giving its beneficiaries a stake in its preservation. Alberta's fund has been used to provide widely shared benefits such as parks, hospitals, libraries, and medical research institutes.

Another means of developing a sense of public ownership is by having nongovernment representatives sit on NRF oversight boards. In Alaska, for example, four of the six board members are members of the public. In Alberta, three of the nine board members are representatives of the opposition party. In Chad, the nine-member oil revenue oversight board includes an NGO representative, a trade union representative, and a rotating position for a representative from one of the country's three religious communities. Large pension funds, such as the New York State Teachers Retirement System or the California Public Employees' Retirement System, provide another model with half of their respective boards elected by members.

Separation of powers and multiple lines of accountability encourage fiscal responsibility.
Effective oversight over an NRF creates incentives for responsible fiscal policy by making it more difficult for leaders to raid funds to pay for unplanned expenses. Such dipping into fund assets risks not only frittering away future assets, but also destabilizing the economy by spending more than can be absorbed. The less oversight there is over an NRF, the greater the opportunity for abuse. When a concentration of power in one branch of government makes it easy to change the rules by which an NRF operates, it is less likely to endure in its original form. A super-presidential system in Venezuela and monarchies in Kuwait and Oman have made it easier for leaders to change the fund rules in order to accommodate spending needs of the moment, or to allocate expenditures not within the guidelines of the NRF. Where democracy is weak and leaders do not have mandates from the electorate, they resort to spending to gain and keep popularity.

There are several mechanisms by which to protect an NRF from such tampering. One way is to make rule changes extremely cumbersome. For example, any change to the Alaska Permanent Fund's basic structure requires a constitutional amendment. An alternative might be to require a parliamentary super-majority for any changes. Another option is to make criteria for allocation crystal clear. The more ambiguous the spending directives, the more likely leaders will exploit ambiguity to use funds as secondary budgets.

Another way to prevent leaders from diverting NRFs is by creating multiple lines of accountability within the NRF, between the NRF and the government, and between the NRF and the legislature. The parliament, the president, the treasury department, the central bank, and the department responsible for economic development should all have some role in overseeing NRF revenues, expenditures, investment strategy, and performance evaluation. In Alberta, for example, the AHF is directly overseen by an Investment Operations Committee (IOC), comprised of financial sector professionals, a lawyer, and a representative from the Ministry of Revenue, who provide investment and allocation advice. The IOC's recommendations, filtered through the Ministry of Revenue and the Treasury Board, go to a legislative oversight committee, comprised of members of government and the opposition, which sets overall policy directions for the Fund.

Layers of accountability are also built into Norway's State Petroleum Fund. The Fund is managed by the Central Bank, which reports to the Ministry of Finance, which sets performance benchmarks and evaluates the Central Bank's investments relative to these benchmarks. The Ministry of Finance reports on the bank's performance to the parliament. Additionally, the Office of the Auditor General conducts an annual audit of the Fund, which it submits to a parliamentary supervisory council.

These layers of accountability only work, however, if the separation of powers is real. There must be some contestation and independence between the various organizations that oversee the NRF for there to be effective oversight. When legislatures are dominated by the party or coalition in power and opposition forces are marginal, then they are unlikely to provide effective oversight, even if they have the formal authority to do so. This is the concern in Chad, where a strong president and a lack of effective opposition in parliament may well negate its carefully crafted Revenue Management Law. A creative way of building in contestation is Chile's inclusion of its copper company on the board of the copper stabilization fund. The company wishes to avoid having its tax burden increased upon accusations that it is not paying the government enough, and hence has an interest in seeing its payments managed responsibly.

NRFs are most likely to succeed when they operate with full transparency, in an environment with an engaged citizenry, and where there is a real separation of powers and multiple layers of accountability among those entrusted with overseeing the NRF. By contrast, NRFs are unlikely to endure when there are pressing economic and development needs, no separation of powers, strong presidencies, lack of transparency and accountability, and an apathetic citizenry.

What does this mean for emerging oil exporters like Azerbaijan and Kazakhstan? The fact that most successful NRFs exist in developed wealthy democracies should not lead these countries to throw up their hands. Chile's example shows that even in developing economies with a recent transition to democracy, NRFs can operate successfully. On a smaller scale, the Nunavut Trust provides the same lesson. These two lessons, along with those provided by Alaska, Alberta, and Norway, suggest that for emerging oil exporting countries, a commitment to separation of powers, enhancing the strength of parliament and the judiciary, and building systems of budget accountability should not be delayed until after oil revenues have begun to flow. Good revenue management is most likely to be achieved if revenue flows are not shrouded in secrecy and if power over their disbursement is not vested in one branch of government.

"I was an ARCO employee. Some of the issues being discussed were still being litigated. My plan was to get to retirement. . . . I would not have been there in any capacity had I continued to . . . dissent. . . . I did not get to be a manager and remain a manager being oblivious and blind to signals."

—RETIRED ARCO EXECUTIVE HARRY ANDERSON EXPLAINING IN 1999 WHY HE HAD DEFENDED ARCO'S PRICING PRACTICES IN A 1994 DEPOSITION

3. Securing the Take: Petroleum Litigation in Alaska

Richard A. Fineberg

Introduction

The development of major oil fields and construction of pipelines to transport oil to Western markets have ushered in a petroleum boom in the Caspian Basin. The terms of production-sharing agreements (PSAs) between Caspian Basin host governments and the petroleum industry[1] imply great future wealth for the people those governments represent. But public riches from petroleum development are neither guaranteed nor automatic.

In addition to the uncertainties of geology and the inherent volatility of oil prices, the citizens of the Caspian Basin face another major challenge to realizing the full potential of their petroleum resources: ensuring that their governments receive the full value of their share of revenues under the terms of the contracts signed with oil extraction and transport companies. The public share of the net revenue split between host government and industry (some-

times referred to as the "take") can be significantly reduced or delayed by accounting practices used to determine and report key factors such as the price of the oil, the production costs, or the transportation costs charged to each barrel of oil produced and delivered to market.

The tension between host and industry interests is inherent in petroleum development around the world. Consider, for example, the experience of the State of Alaska, another remote region that has developed a super-giant oil field in recent decades.[2] Over the past 25 years, more than one dollar out of every six that Alaska has received from its oil development has been obtained through legal challenges to the industry's original payment.[3] These challenges typically involved disputes over industry reporting of the value of the oil produced and/or the cost of producing that oil and transporting it to distant markets. The importance of these arcane conflicts to the Alaskan commonweal is made evident by this fact: During the 1990s, the fruits of the disputes over industry payment practices became the funding mechanism for Alaska's multibillion-dollar Constitutional Budget Reserve Fund, which was discussed in chapter two.

The lessons learned in Alaska may be particularly relevant for the people of the Caspian Basin, where contracts ostensibly favorable to the host countries are particularly vulnerable because the region's governing systems have little experience regulating current-day corporations and lack a strong tradition of democratic checks and balances. This problem is compounded by the fact that state-owned oil companies are not subject to the financial reporting requirements that govern their publicly traded development partners.[4] In this situation, the extension of the transparency principle (discussed below and in other chapters of this book) from the receipt of revenues to the economics of prospective and actual petroleum development may help the people of the Caspian understand the potential pitfalls associated with that development. To this end, the creation of comprehensive, simplified public economic models for major petroleum reservoirs in the Caspian Basin can provide the basis for evaluating revenues earned, respectively, by the host government and the industry.

Transparency in reporting resource revenue payments to host governments has been proposed by a group of nongovernmental organizations to aid the public in determining whether those payments are properly accounted for and managed.[5] In regions where even basic facts about public budgets are shrouded in secrecy, this is an important first step in public accountability. But disclosures regarding the receipt and disposition of oil revenues do not answer this fundamental question: Do those payments by industry to the host constitute a fair and equitable share of the wealth generated from public resources? To answer this important question, the doctrine of transparency needs to be expanded to include the processes by which payments are calculated and made. The rationale for improving transparency of the process by which oil company payments are determined will be the focus of this chapter.

To further discussion of public petroleum revenue accounting models for the Caspian Basin, the first part of this chapter will look more closely at the underlying background for potential host-industry disputes. The next section examines lessons from the history of

Alaska's petroleum litigation, followed by a discussion of the implications of those lessons for prospective public revenue under Caspian PSAs. The chapter concludes with recommendations for development of comprehensive, simplified models that will help extend transparency from the receipt and expenditure of petroleum revenues to the generation of that wealth.

What Drives Host-Industry Disputes?

The underlying tension between the petroleum industry and its government hosts arises from this fact: Each party seeks to maximize its share of the net revenue, or the difference between gross revenue (total proceeds from oil production) and costs (the industry's expenditures for leasing, exploring, developing the field, producing the oil, and transporting it to market). The timing of revenue receipt is also important. To the investor, whose capital is at risk, a policy of accelerating or "front-loading"[6] cost recovery is attractive. Therefore, in order to encourage development, a prospective host may structure development contracts that give industry the lion's share of initial proceeds.[7]

Investment risk and host risk are different entities. The host government may not wish to assume development risks. On the other hand, the investor provides capital precisely in the hope of receiving compensation. For placing that investment at risk, the investor typically receives a premium that is added into the project rate of return.

In this regard, Caspian Basin PSA terms vary markedly. Royalty payments and cost recovery limits produce significant early payments to the host government under some PSAs; under others, most of the host government share of net income is deferred ("back-loaded") until the industry recoups investment costs.[8] While it may be reasonable under some circumstances to allow the investor to recover costs before the host receives a significant return from production, a policy of accelerated investor repayment has potential negative consequences for the host that should be considered carefully. The host cannot put its share of petroleum revenue to work (for example, providing public services or earning interest) until that money is received. For this reason, the value of a deferred payment is diminished by delay. Moreover, under a deferred payment schedule, by the time the host receives the money, inflation is liable to have eroded its value. Finally, if recoverable reserves turn out to be smaller than originally expected or oil prices slump, the host's share of net revenue may be significantly smaller than anticipated.

Gold-plating and the over-reporting of costs

Some observers have said that front-loading arrangements are inherently prone to gold-plating, or the practice of making unreasonably large expenditures due to lack of cost-cutting incentives.[9] At the same time that front-loaded cost recovery postpones government take, the accelerated repayment provides industry with positive cash flow. These payments to industry may include contractor costs (with a reasonable profit), transportation costs (again including

a reasonable profit), and repayment of borrowed capital (with interest). Under a front-loaded PSA, most (or all) of these legitimate payments to industry must be made from the proceeds of production before the producer and the host government begin sharing the net profits from development. In these circumstances, higher costs mean larger up-front profit payments to various industry parties. Therefore, industry may have little or no incentive to reduce those costs. Even a government inclined and staffed to vigorously defend its interests against industry gold-plating may have difficulty suppressing excessive spending by a government oil company.

When development costs are finally repaid, the host may not be on easy street. Specific PSA provisions may actually give the producer incentive to increase reported costs or delay efficient field investments in order to decrease the net revenue that must be shared with the host. One such mechanism found in many PSAs is the large, stair-step increases in the percentage of net revenue payments to the host country as the internal rate of return on investment goes up. An investment that raises the project rate of return to the next stair-step level may increase the host government's percentage take; the corresponding reduction to producer take may create an incentive to increase reported costs or slow development in order to delay reaching the trigger point that will increase the percentage of net profit payments to the host government.[10]

Closely related to gold-plating is the artificial inflation of reported costs. Over-reporting of actual costs cuts government take by reducing the reported profits to be split between government and industry. Again, a front-loaded cost repayment structure will function to increase industry gains from overstated costs. Examples of host/industry conflicts over reported costs can be found in the next section on petroleum litigation in Alaska.

In order to have value, a commodity must be delivered. Because transportation costs must be paid, the typical PSA subtracts the necessary expense from gross revenues before net revenue can be determined. For this reason, the expense associated with the necessary upgrading of old pipelines or the construction of new ones provide fertile grounds for host-investor conflict (stated or unstated) that may result in significant reductions to host country revenues. The pipeline cost element is of particular relevance to the development of remote reservoirs, whose oil must be transported long distances to reach potential markets. The important effect of the transportation costs on production revenues will be discussed in subsequent sections of this chapter.

Sakhalin-II project (Russian Far East)

The Sakhalin-II project in the Russian Far East appears to be an example of a project in which the PSA has failed to deliver on its promise of public revenue. The first phase of Sakhalin-II began producing oil from a single platform in the Sea of Okhotsk in 1999. When that platform was being prepared for installation, a government hungry for revenues was looking at a glossy brochure distributed by the producing consortium. That pamphlet emphasized a long

revenue bar, colored bright red, representing net revenue payments to Russia and Sakhalin that appeared to dwarf contractor costs, the small bonus payments, and a 6 percent royalty. But there was a catch: Under the PSA at Sakhalin, the public revenues shown in that long red bar would not materialize until investment costs were repaid. It was not at all clear when (if ever) the limited production from the lone initial platform would repay its costs.

Two years before Sakhalin-II entered production, Pedro Van Meurs, a respected fiscal analyst, observed that the gold-plating effects of the typical Russian PSA "are very difficult to suppress." In fact, Van Meurs said, the rate of return mechanism in the Russian PSA governing the Sakhalin-II project creates a situation in which "the slower a project proceeds, the lower the profit share payable to the government." Therefore, he observed, the PSA for Sakhalin-II "rewards companies for delaying their investments."[11]

By the time the platform began producing in 1999, depressed oil prices were on the rebound. The producers were able to market Sakhalin oil at high prices, retaining almost all of the early-year proceeds as cost reimbursement. In late 2000, the Institute of Sea Geology and Geophysics of the Far East Academy of Science expressed concern that Sakhalin-II would never be profitable. In the view of the Institute scientists, it appeared that oil from the Far East would be produced to be sold abroad while the Far East continued to shiver in darkness each winter. Further, they said, the much larger Sakhalin projects planned for development under the same PSA also appeared likely to have similar inequitable results.[12]

PSAs, audits, and an informed public

In sum, even when oil prices are high enough to sustain profits for industry, creative interpretation of the fine print in the complicated contracts between the host government and the producing companies may result in significant reductions to the government take. When cost repayment is front-loaded, the consequences of increased reported costs are beneficial to the producer and pernicious to public interest in two ways: public receipts are both delayed and reduced. In view of the inevitable tension between the host government and the industry, the importance of auditing both the inputs and the methodology by which the industry calculates its payment to the host government cannot be underestimated. Although auditing of the details of PSA implementation is not readily amenable to public participation, a public that is well informed about the economics of petroleum development is vital to creating a political climate that will encourage and ensure the vigorous defense of the public's share of net petroleum revenue.

Alaska's Petroleum Litigation

To understand the magnitude of the potential conflicts between host governments and the industry regarding revenue generation and sharing, one needs only to examine the experience of Alaska, where protracted battles over arcane accounting issues have produced more than

one dollar in additional public petroleum revenue for every five the industry voluntarily paid. Almost all of Alaska's oil revenue comes from production in the vicinity of Prudhoe Bay, located at the northern edge of the North American continent.[13] Since Prudhoe Bay entered production in 1977, three firms—now known as BP, ExxonMobil, and ConocoPhillips[14]—have controlled more than 90 percent of North Slope production and a similar share of the 800-mile Trans-Alaska Pipeline System (TAPS). Alaska has received approximately $70 billion in petroleum revenue from North Slope production, feeder pipelines, and TAPS. This revenue is derived, in the main, from royalties (generally 12.5 percent of the value of oil) and three principal taxes (corporate income, production, and property tax). Additionally, the state receives oil revenues from several minor taxes, as well as lease bonuses and rental payments.[15] The Alaska Department of Revenue has estimated industry and government net income from Alaska production and pipeline operations between 1988 and 2000. The agency analysis is summarized in Figure 1.[16]

FIGURE 1. Allocation of Net Income from Alaska North Slope Production and Associated Pipelines (including TAPS), 1988–2000

Industry Share	41.6%
State of Alaska Share	36.1%
Federal Share	22.3%

Source: Alaska Department of Revenue, "State of Alaska's Oil Revenue Pie (Production and Value Added by TAPS)," March 22, 2000 (in letter from Dan E. Dickinson, Director, Tax Division, to Representative Jim Whitaker, Chair, Special Committee on Oil and Gas, Alaska State House of Representatives).

As noted earlier, Alaska has found it necessary to pursue a path of prolonged and intensive litigation in order to obtain what public officials consider a fair share of the take from petroleum development. Essentially, the State of Alaska found that the industry chronically reduced the bases for calculating royalty, severance, and income tax payments by understating the market value of a barrel of oil at the point of sale. Overstated pipeline shipping charges (tariffs) had the same result.[17] The disputes often turned on differences between the state and industry regarding interpretations of contractual, statutory or regulatory language; many could be chalked up to legitimate differences of opinion, but others could not.

These cases were argued in different institutional forums. Royalty disputes proceeded directly from agency audits to the Superior Court of the State of Alaska's court system; tax settlements resulted from audit findings preliminary to proceedings before an administrative hearing officer of the Alaska Department of Revenue; pipeline tariff issues were handled by the Federal Energy Regulatory Commission (FERC) or the Regulatory Commission of Alaska (RCA, or its predecessors).[18] It was not unusual for the same issue—and even the same set of facts—to be argued separately by different agencies, in different venues, and with different results. In sum, the cases were complicated—and, consequently, costly—to research, brief,

and present. In 1994, the Alaska Department of Law reported that since 1977 it had paid contract attorneys and accounting specialists from 30 different firms more than $217 million. But the investment of public revenue paid off; up to that point Alaska had received approximately $2.7 billion in settlements.[19]

By 2001, the Alaska Department of Law reported it had taken in an estimated $6.8 billion to settle charges of underpayments on taxes and royalties since 1977—much of it in statutory interest on long-delayed payments. According to the department, this figure excluded the gains to Alaska from reduced pipeline tariffs that were secured through a separate, extended litigation effort.[20] A closer look at public reports of some of the petroleum litigation suits that have surfaced in Alaska may help the reader grasp the complexity—and the importance—of determining the appropriate net revenue split.

False royalty returns

Alaska's mounting disappointment with industry practices became public in January 1989 when the State of Alaska filed a claim alleging that two of the three major North Slope producers were deliberately filing false royalty returns. According to the complaint, ARCO, one of the original major North Slope producers, committed "fraud and intentional misrepresentation by adopting a hypothetical, posted price for ANS (Alaska North Slope crude oil) that was not based on actual sales and purchases in order to understate the value of its crude oil for royalty purposes." According to the complaint, ARCO structured a small number of visible sales of its oil off the coast of California solely to provide support for this hypothetical posted price, while other producing companies reported a substantially higher value for ANS. The majority of ARCO's oil was not sold on the market, but was transferred to its own refinery; the marker sales at artificially low prices were then used to calculate the value of that oil for royalty and tax payments to Alaska. In addition, the complaint stated, ARCO "wrongfully and knowingly depressed its calculated wellhead value by intentionally inflating the costs associated with transporting ANS to market."[21]

The complaint also alleged that BP affiliate Standard[22] cheated by manipulating the quality or price differential between ANS and other crude oils.[23] For example, the complaint alleged that Standard would deliver one barrel of ANS at its official price of $27.50 per barrel and exchange a second barrel for a barrel of light sweet crude worth $30.00 per barrel in the same transaction. But instead of reporting the sale at a net average of $28.75 per barrel, Standard paid royalties "as though both barrels had been sold at the lower price."[24] To establish the basis for the case that such practices had cost Alaska hundreds of millions of dollars, the state's contract attorneys spent years setting up a filing system that attempted to track every barrel that left Valdez to its destination.

The only major North Slope producer that was not accused of fraud in the 1989 royalty complaint, ExxonMobil, was the last to settle its royalty disagreements with Alaska. The ExxonMobil dispute was settled in 1992, on the morning that its trial in the ANS royalty liti-

gation was finally scheduled to begin; it would have been the first and only royalty trial. None of the companies admitted fraud. However, ExxonMobil's payment of $128 million brought the total collected on royalty litigation over a 15-year period to $631 million. Subsequent royalty settlements bring the total for royalty oil settlement payments between 1977 and 2000 to $979 million.[25] The major settlements included an agreement by ExxonMobil to price their ANS in the future using a basket of six crude oils that were listed daily and electronically on the open market. Formulas were also established for tanker costs.[26]

ExxonMobil was charged with fraud in a state income tax dispute running from 1979 through 1986. More than a decade later, the state and ExxonMobil fought this battle in an administrative proceeding before a special hearing officer that lasted for over a year. The state initially sought over $1 billion[27] but the hearing officer, who dismissed the fraud charge, awarded the state $254 million ($62 million in tax and $192 million in interest). When the case was settled in 1998, it was described as the last of Alaska's major tax cases from the 1970s.[28]

Inflated pipeline tariffs

Pipeline tariffs compensate the owner for construction, operating and dismantling costs, profits, and taxes. One of the principal reasons for determining correct pipeline tariffs is to ensure that pipeline owners do not over-charge shippers. In the case of an isolated, producer-owner pipeline such as TAPS, excessive tariffs could inhibit competition from nonowner shippers who must pay that tariff out-of-pocket, as opposed to the producer-owner, for whom the pipeline tariff is actually a transfer payment.[29] From a state fiscal standpoint, an appropriate pipeline tariff is important for another reason: A $1.00 increase in transportation costs reduces Alaska state revenues on production by approximately $0.21 (and vice-versa).[30] Because transportation costs are subtracted from the price of oil to determine production tax and royalty payments, all else being equal, the producer-owner would prefer higher pipeline tariffs. Producers or shippers who do not own a share of the pipeline, along with the State of Alaska, find themselves in exactly the opposite position.

These conflicting interests have led to protracted litigation involving the State of Alaska, pipeline shippers, and the TAPS carriers over correct pipeline charges. At the core of this battle, which has been described by the Alaska Department of Law as the largest and most complicated ratemaking case in the history of the United States,[31] were issues that included: the actual costs of designing, building, and operating the pipeline; the correct amortization period, methodology, and rate; interest rates; rates of return; ultimate throughput; and a host of other financial and economic issues.[32] In 1985, the TAPS carriers and the state sought to end 10 years of litigation with a settlement agreement establishing a novel and complex formula for determining maximum annual tariffs. The settlement was adopted at the FERC and was accepted provisionally by the RCA, which has jurisdiction over tariffs on oil that does not leave Alaska (approximately 8 percent of all TAPS oil).[33]

Alaska's attorney general has estimated tariff reductions due to pipeline tariff battles have resulted in the State of Alaska's collection of an additional $3.8 billion in postsettlement severance tax and royalties.[34] Nevertheless, extensive litigation over implementation of the agreement has continued before both regulatory bodies.[35] In 2002, the RCA upheld intrastate shipper challenges to TAPS tariffs filed under the 1985 settlement ceiling by nonowner shippers of oil destined for Alaska refineries. The commission found that between 1977 and 1996 the settlement allowed TAPS owners to overcharge TAPS shippers by nearly $10 billion dollars, and that tariffs in recent years were more than 50 percent too high.[36] While the state commission's decision appears to affect only the portion of TAPS oil shipped to in-state refiners between 1996 and 2000, state officials said that if the commission's order were applied to all future TAPS shipments, the state would receive an additional $110 million per year in increased royalty and production tax payments.[37]

According to the state commission, its 486-page decision marked "the first time in more than twenty years . . . that a regulatory agency has reviewed TAPS rates for consistency and statutory standards."[38] The TAPS owners have challenged the RCA order in court[39] and the state commission, as noted, has jurisdiction over a small percentage of the oil shipped on TAPS. Therefore, the ultimate outcome of this case is not clear; nevertheless, this decision appears to confirm charges that Alaska's negotiated TAPS tariff settlement cost the state billions of dollars in public revenue. These overcharges occurred despite the fact that the 1985 settlement reduced later-year tariffs to approximately $3.00 per barrel, compared to early-year filed tariffs of approximately $6.00 per barrel.[40]

By the end of 2000, Alaska had collected settlements in 29 North Slope royalty cases, 104 separate tax cases, and eight tariff proceedings at the FERC. The Alaska Department of Law reported that this litigation effort had produced an estimated $10.6 billion in additional revenue. This figure included $6.8 billion in direct payments for taxes and royalties, plus $3.8 billion in increased taxes and royalties attributed to reduced pipeline tariffs resulting from the 1985 TAPS tariff settlement.[41] This amount does not represent the total increase in government take due to petroleum litigation because it does not include efforts by the federal government to secure that government's portion of the income from North Slope petroleum development.[42]

North Slope crude prices and California's oil price dispute

Ripples from North Slope crude oil accounting, pricing, and transportation litigation extended far beyond the State of Alaska's coffers. In 1999, ExxonMobil was once again the lone holdout in a set of long-running oil price disputes its partners had settled long ago. This one involved the price of oil from the Wilmington field in Long Beach Harbor, California. Previously, various companies in the California producing consortium had paid an estimated $320 million to settle charges of underpricing their crude.[43] In that case, the State of California and the City of Long Beach argued that ARCO, a producer at Long Beach and on the North

Slope, had underpriced its California oil by $4 to $5 per barrel to support the artificially low price it reported in Alaska on its much larger volume of ANS, thereby reducing its Alaska royalty and severance taxes. ARCO presumably made up the difference in the resulting increased refinery profits, on which royalty and severance tax payments did not apply.

In the California case, the testimony of retired ARCO executive Harry Anderson was of particular interest. In a 1994 deposition, Anderson had defended ARCO's pricing practices. But at the trial, under cross-examination, the former oil company official testified that internal company analysis demonstrated that ARCO's posted price for ANS was $4 to $5 per barrel too low, that ARCO knew Chevron was paying Standard the higher figure for ANS on the West Coast, and that the posted price ARCO used for ANS royalty simply did not represent fair market value. Asked why his 1999 testimony contradicted his affidavit five years earlier, Anderson explained the difference this way:

> I was an ARCO employee. Some of the issues being discussed were still being litigated. My plan was to get to retirement. . . . I would not have been there in any capacity had I continued to . . . dissent. . . . I did not get to be a manager and remain a manager being oblivious and blind to signals.[44]

Industry settlement payments to Alaska, California, and Long Beach do not represent the totality of underpayments by the North Slope producers. In efforts similar to those of Alaska, the U.S. government also secured additional tax payments by demonstrating that the producers had under-reported the value of their profits on ANS in their federal income tax reports.[45] Even with the inclusion of the federal component, settlement sums do not necessarily represent the amounts by which payments by producers fell short of their obligations to their host. Settlements typically reflect a compromise acceptable to both parties at the time of the agreement. But the outcome of any given settlement may not reflect the actual costs and values at issue.[46]

Most of the Alaska disputes were settled in quasi-judicial forums before they went to trial; few cases were actually heard in a court of law. Nevertheless, the courts played a major role in enabling the public to obtain this significant portion of petroleum revenue. A strong and stable court system provided assurance that disputes over the administration of the terms of development could eventually be decided, if necessary, in a carefully structured proceeding. In contrast to the importance of the courts, input from legislative bodies and the public on petroleum litigation matters has been limited. Although it is the executive branch that represents the state in dealing with the petroleum industry, the State Legislature does receive occasional settlement briefings, with key information typically disclosed only behind closed doors.[47]

With a few notable exceptions, the critical details of the important arguments between Alaska and the North Slope producers have taken place behind a veil of confidentiality. In most cases, public information about a settlement is limited to the totals received, without quan-

tification or discussion of specific issues or their resolution. Occasionally, the public learns of a dispute only when its final settlement is announced. Definitive information is generally unavailable through freedom of information challenges due to laws protecting taxpayer confidentiality and corporate assertions that such information would aid competitors. The result, by and large, is to leave the public in the dark regarding these matters.

Despite these barriers to public reporting on petroleum revenue disputes, the tradition of public disclosure of government activities in Alaska assures that the broad dimensions of petroleum litigation issues are at least partially visible, with detailed information emerging on a sporadic basis. Alaska's experience indicates that the compilation and publication of aggregate data on petroleum litigation issues can provide interested members of the public with the information necessary to understand the broad dimensions of salient economic issues affecting petroleum development without infringing on taxpayer confidentiality or threatening commercial positions.

Caspian Basin Development

The development of significant reserves in the Caspian Basin present the oil-consuming nations of the world with an enticing alternative to the Persian Gulf, where five nations possess more than 60 percent of the world's proven reserves. In March 2002, an article in *Foreign Affairs* magazine reported that new forecasts showed that the Caspian shelf held 75 billion barrels of oil—115 percent more than the *BP Statistical Review of World Energy* credited to the entire Commonwealth of Independent States in 2000. The article enthused that Kazakhstan's Kashagan field, recently discovered in the shallow north Caspian, looked to be even larger than its older, on-shore twin, Tengiz, just a few miles to the east. However, the same article warned, similar bright promise also beckoned a decade ago, only to vanish as "investors bogged down in a swamp of corruption and the difficulties of doing business in rapidly changing economies."[48]

While the prospect of vast wealth from petroleum beckons to the people of the Caspian Basin, the brief history of the petroleum industry is littered with broken dreams, and the Caspian region has lived both sides of this story. With the hopes of impoverished populations hanging in the balance, a clear understanding of the prospects for Caspian oil development is imperative.[49]

According to petroleum financial analysts Daniel and David Johnston, Kazakhstan government target returns from the PSAs for Tengiz and the more recently discovered Kashagan should be approximately 83 percent of net revenue over the life of those fields.[50] Elsewhere, Daniel Johnston also estimates that two Azerbaijan PSAs result in host government take to be between 64 percent and 70 percent of net revenue.[51] According to Johnston, these estimates of the government take compare to world averages of 78 percent for the government take for PSAs in more favorable regions.[52]

The target percentages that host governments expect from Caspian Basin development—64 to 83 percent—are significantly greater than the estimated 58.4 percent state and federal government share of net income from Alaska production and pipeline operations between 1988 and 2000 indicated in Figure 1, above.[53]

The Caspian region is still undergoing major social, political, and economic transformations associated with the end of Soviet power. Moreover, transportation systems to deliver oil to market have yet to be fully developed. Alaska, on the other hand, is a relatively stable region with a major transportation system in place. In view of these factors, one might expect that Alaska's producers might pay a premium over the Caspian. Instead, it is the other way around.

Before tackling this apparent anomaly, a brief discussion of background factors affecting comparison between Alaska's actual rewards and the projected returns from Caspian Basin development may be of use. There are striking similarities between Alaska and the Caspian Basin: both belong to the exclusive club of regions possessing super-giant fields; the oil from both provinces must find its way in a global market dominated by oil from the Persian Gulf; finally, to reach tanker connections to world markets, production from these remote reservoirs must bear the cost of long overland pipelines. Ranged against these broad similarities are significant differences between these two petroleum basins. For example: Alaska's principal development terms were forged approximately 30 years ago, in a different economic environment; did the emerging need for non–Persian Gulf oil supply that propelled the development of the North Slope prevent the United States and Alaska from securing terms comparable to those achieved by the Caspian nations three decades later? It should also be noted that North Slope development faced significant physical challenges posed by Arctic and subarctic environments; did the original investment risk translate into a premium that should continue to augment industry's share of net revenues 30 years later, even though Alaska development is no longer risky from a physical standpoint?

With these background observations and questions in mind, we turn now to three principal factors that partially explain why the government share of the income from Alaska's North Slope operations appears to be significantly smaller than the government take under the Caspian Basin PSA projections.

Government participation. The Caspian host government often holds an investment interest in the project as a member of the contracting group. The government take therefore includes not only royalties and taxes, but also the government share of return on risked investment. At Tengiz, for example, the government of Kazakhstan holds a 20 percent financial stake.[54] To compare to Alaska, it is necessary to transfer the profit on the Kazakhstan government investment shares to the industry side. A simplified calculation indicates that at Tengiz the industry share of net revenue would increase to 21 percent, resulting in a 79 percent government take.

Timing of cost recovery. A second significant difference between Alaska's returns and projected returns for the Caspian Basin is the timing of the payment of oil revenue to investors and to the host country. As discussed in the second section of this chapter, under some PSAs, most of the host government returns are deferred until investment is repaid, resulting in accelerated return of investment to the producer. This policy is attractive to investors, but the value of the payments to government is diminished during the corresponding delay. In the long run, the host government receives a larger percentage share as compensation for deferring its share of the net revenue. But the host government now shares a significant portion of the oil price risk (if oil prices remain unexpectedly low, the anticipated net profits might not materialize). Consider in this regard the Kashagan development: According to the Johnstons, in the early years of Kashagan development the contracting group will retain 98 percent of all revenue from Kashagan, leaving the host government with 2 percent. The Johnstons estimate that this extremely high back-loading of the government take (and the corresponding front-loading of investment costs) will continue until investment costs are recovered—perhaps until Kashagan has produced one billion barrels of oil.[55] During this period, the producers retain almost all of that revenue as repayment of costs instead of sharing it with the host as net profits.

Pipeline arrangements. A third explanation for the significant difference between returns realized in Alaska and those projected for the Caspian is that the Alaska data include pipeline operations; the PSA estimates for the Caspian projects do not. The State of Alaska analysis summarized in Figure 1 estimated that Alaska pipeline operations—principally TAPS—provide, on average, approximately one-quarter of the industry's net revenue from its Alaska operations. Under the Alaska system, pipeline operators pay only property and income taxes to the host governments; the producing companies must pay royalty and severance taxes to the host in addition to (and before calculating) property and income taxes. It is therefore reasonable to assume that inclusion of TAPS in the Alaska analysis increased the industry's percentage share of the net revenue take.[56] Inclusion of the transportation arrangements in Caspian calculations would similarly reduce the host government's percentage share.

After years of uncertainty, transit routes from the landlocked Caspian are finally under construction. Two major pipeline links to European and world markets are being developed, older pipelines through the former Soviet Union are slated to receive costly upgrades, and other projects are being considered.[57] Alaska's experience suggests that who will transport Caspian Basin oil and the terms on which that oil is shipped will play a significant role in determining who reaps the riches from that development. The principal transportation links and the regulation of their costs therefore deserve closer scrutiny.

The Caspian Pipeline Consortium (CPC) system, running nearly 1,000 miles from the Tengiz oil field to Novorossiysk on the Black Sea, pumped its first oil in October 2001. (see map at front of book) Start-up was delayed by five months while Kazakhstan negotiated various aspects of the pipeline charges with Russia.[58] At the end of 2002, CPC pipeline tariffs were

essentially unregulated because that pipeline was shipping oil belonging only to the pipeline owners.[59] Initially, the CPC pipeline was able to carry slightly over half a million barrels per day (bpd); it is expected that between now and 2015 the CPC pipeline will be expanded to carry 1.34 million bpd from the super-giant Tengiz and other western Kazakhstan fields.[60] Governments hold 50 percent participation in the CPC—Russia (24 percent), Kazakhstan (19 percent) and Oman (7 percent). The remaining 50 percent is divided between a number of companies, including Chevron (15 percent), LukARCO (12.5 percent), ExxonMobil and Shell/Rosneft (7.5 percent each).[61]

During the summer of 2002, construction began on another major pipeline link to Western markets, the one million bpd BTC Pipeline, which will run from Baku through Tbilisi (Georgia) to Ceyhan (Turkey) on the Mediterranean. Although final approvals from Georgia were not in place when construction began, completion was anticipated in 2004.[62] BTC pipeline tariffs are spelled out in the construction agreement rather than in regulations; these arrangements include discounts for shipper-owners and a fixed fee for the Turkish portion.[63] The principal owners of the pipeline were BP (38.21 percent) and the State Oil Company of Azerbaijan (25 percent), with six other companies holding smaller interests. Initially, the BTC line will carry oil from the Azeri-Chirag-Gunashli field, in which BP holds a major stake.[64] Some observers have suggested that the line might carry oil from Kashagan, the recently discovered super-giant field scheduled for production in 2005 but still looking for a transport route.[65]

As mentioned above, with these projects underway, proposals for other major oil and natural gas pipelines from the Caspian Basin are competing for capital with other proposed projects that would bring oil and gas from other regions of the former Soviet Union to markets in both Europe and Asia.[66]

Conclusion and Recommendations

The people of the Caspian Basin and their governments face many challenges in the quest to ensure that they receive fair and full compensation for their petroleum resources. To understand the dimensions of these problems, this chapter examines the experience of another remote oil province with a super-giant field linked to world markets through a long pipeline connection—the state of Alaska. The resulting analysis of potential revenue issues related to Caspian development suggests important public policy issues in two areas.

One set of questions arises from the disparity between the terms the industry has offered to pay in the Caspian Basin and in Alaska. As noted in the preceding analysis, the industry will pay its hosts in the Caspian an estimated 64 to 83 percent of net revenue, compared to approximately 58 percent actually paid in Alaska. The disparity between the terms of development in two remote provinces with super-giant petroleum reservoirs brings to mind an adage frequently employed by investment advisors: If a deal sounds too good to be true, it probably is.[67] This concern may have particular relevance where people looking to improve

their living conditions have been asked to postpone the major portion of that revenue while assuming the economic risks associated with deferral.

A second significant problem identified through consideration of Alaska's experience is that differences in the accounting for price received, production costs, and transportation charges, as well as other accounting practices, can significantly reduce the public's share of the revenue split between the host government and the industry. To deal with these conflicts, Alaska has had to engage in litigation efforts that have increased its take on North Slope development from $59.4 billion to approximately $70 billion, an increase of approximately 18 percent.[68]

Receipt of these additional revenues was tedious and administratively burdensome, with the additional payments often lagging behind the original payments by more than a decade. Despite the existence of democratic institutions in Alaska, including a strong court system and tradition of public accountability, important facts pertinent to the government/industry split of net revenue are generally not part of the public record, in Alaska or elsewhere.

Due to the nascent character of public accountability in the Caspian states, the challenge of securing fair and full public compensation is even more daunting than that faced by Alaska. In the absence of well-developed audit institutions and a court system, Caspian nations probably cannot place their reliance on a litigation effort such as that employed by Alaska. Nevertheless, as development issues unfold, it would be fatuous to suggest that industry representatives will not seek to maximize profits—or that corporate objectives are not liable to conflict with public interests. With amounts potentially totaling billions of dollars at issue, the citizens of the Caspian have a fundamental interest in assuring that government officials exercise their stewardship responsibilities vigorously to assure prompt receipt of the public share of petroleum resource revenue.

The public policy choice in this regard is simple: Citizens of the Caspian Basin can assume that whatever revenue they receive from petroleum development is the correct amount, or they can explore the best ways to evaluate in a timely manner the complicated cost, accounting, and pricing mechanisms that may be used by industry to enhance its returns at public expense. The assumption that petroleum revenues paid voluntarily represent the total amount due ignores the Alaska experience and flies in the face of common sense. Because the complicated economics of petroleum finances are not readily amenable to public analysis, the people of the Caspian would benefit greatly from clear reports that delineate how major petroleum development projects are being translated into private and public wealth. To this end, the people of the Caspian Basin can do three things:

- ***Create comprehensive, simplified economic models for evaluating potential petroleum earnings.***

  The creation of comprehensive and transparent economic models for specific petroleum reservoirs can be of assistance in dealing with these problems by providing the basis for

evaluating potential petroleum earnings. In the absence of transparent development models, whether a project should go forward and, if it does, the actual results for the producers and their host governments remain matters of mystery and conjecture to the public. Information gained from a simplified simulation of the physical and economic performance of large Caspian Basin petroleum reservoirs and the associated infrastructure can help the public and policymakers to get a realistic fix on the promises and the pitfalls of proposed development projects. As those projects unfold, comprehensive public models can assist in determining whether actual payments, as reported in government documents and Publish What You Pay reports, constitute fair and appropriate compensation to the host government for the right to extract public resources. A tracking model has already been developed for the government of Kazakhstan with the assistance of the World Bank and the International Monetary Fund, but it is confidential. Because they concern such a large portion of public finances, information about these models should be made public.

To avoid issues of confidentiality, the public model for specific development should use publicly available estimates of (a) production, (b) price, (c) operating and capital costs and (d) transportation costs. The model should distinguish up-front government payments, such as royalties and bonuses, from net revenue payments. Using the formulas established by the governing PSA, costs would be subtracted from the gross production revenues to determine net revenue available for the split between the host and the producer.

- ***Monitor expenses for excessive costs that reduce net share payments.***
As noted earlier in this chapter, front-loading of industry cost recovery increases the potential for aggressive cost reporting that delays or reduces host government receipt of production revenues. Understanding the complicated economics of petroleum development becomes more difficult when state-owned oil companies are involved. The subjects discussed in this chapter that provide empirical support for these concerns include Alaska's litigation history, the Sakhalin-II experience, and the disparity between Alaska and projected Caspian returns. In combination, these factors suggest that careful monitoring of Caspian Basin development costs and payouts is warranted.

- ***Carefully analyze pipeline costs.***
Transportation charges take on particular relevance because these costs must be calculated before a producing reservoir earns net revenue that will be divided between producer and host. When a producing company is also invested in a pipeline that carries its own oil, transportation expenditures may remain with that company while simultaneously decreasing net production revenue available for sharing, and stifling competi-

tion. From this theoretical perspective, the Caspian Basin host nations should look closely at pipeline financial arrangements to ensure that excessive costs and shipping requirements do not reduce payments to producer host governments. In Alaska, even though a 1985 settlement reduced per-barrel pipeline tariffs on TAPS, a recent regulatory decision found that those tariffs are still too high when compared to tariffs calculated using standard economic formulae; excessive TAPS tariffs reduce state production revenue and inhibit competition.

The importance of pipelines to development in both Alaska and the Caspian was evident in the experience of Conoco after the company left Alaska's North Slope in 1993.[69] At the time, Conoco was the only company operating a field on the North Slope without a share of the super-giant Prudhoe Bay or TAPS. When Conoco sold its North Slope interests to BP during a period of relatively low oil prices, the guaranteed profits from pipeline ownership might have kept the company afloat until oil prices rose again.[70] Later, reflecting on his company's departure from Alaska, Conoco Chairman and CEO Archie Dunham said, "It broke my heart to trade Milne Point, but we had to do it. All the value of that property was taken away from us in the pipeline tariffs. It was a valuable strategic lesson—just look at why the producers in the Caspian Sea are so worried."[71]

The development of models that simulate the economic performance of major petroleum reservoirs can help citizens of host countries to understand and control their own destinies. In sum, creation of comprehensive, transparent, simplified petroleum revenue models to supplement the information produced under the Publish What You Pay doctrine will increase public understanding of the risks and rewards of petroleum development in the Caspian Basin.

"[The Regional Citizens' Advisory Council of Prince William Sound] adds accountability on the part of regulators like me, and the government and the industry. We have to operate in the open, and talk about things in the open, and take time to bring the citizenry along with us in the logical path to the solutions for our problems. It's an organized and disciplined way to get citizen involvement in what we do. I think that's good, because the system isn't really worth much unless citizens are involved with it."

—COMMANDER ED THOMPSON,
UNITED STATES COAST GUARD (1992)

4. Models of Public Oversight of Government and Industry

Richard G. Steiner

Importance of Informed Public Participation

Democratic governance very much depends on informed public participation, yet even in mature democracies such participation is often an elusive goal. The emerging democracies of Russia and the other former Soviet republics, including the countries of the Caspian region, present both a challenge and opportunity to improve public participation.

Much discussion in civil society has been devoted to the concept of transparency, while less attention has been given to the concept of informed public participation. There are important differences between these two ideas. Transparency implies simply that the public has unfettered access to information about government and industry, and a clear understanding (or literally a "clear view") of what government and industry are doing. However, transparency does not imply that the public has a formal, active voice in the operations of government and

industry. For instance, even though the government provides an unprecedented level of public transparency in the United States—through the federal Freedom of Information Act (FOIA), state open meetings and public records disclosure acts, and other administrative disclosure instruments—much of the U.S. public remains uninvolved in the policy formulation processes that affect their lives.

Put simply, transparency is a necessary but not sufficient component of informed public participation in democracy. To have an active voice, the public, or at least a representative body of the public, needs to have a legitimate and formalized role overseeing and interacting with industry and government.

The relationship between government, industry, and the public

Even in long-established democracies the relationship between government, industry, and the public is problematic and often fails to serve the common public interest.[1] Although government agencies and legislative bodies are legally obliged to operate in the highest and best interests of the public, many regulatory agencies are too closely tied to the industries they regulate to provide effective oversight. Regulation and legislation in such a symbiotic environment tends to favor industry at the expense of the environment, social justice, and economic justice.

One reason for industry favoritism is simply that campaigns for public or consumer interests are generally poorly organized, poorly funded, and short-lived whereas groups representing corporate interests are well organized, well funded, and a permanent presence in government circles.[2] Public opinion tends to flare up when there is an obvious, acute failure in the system, such as an oil spill, plane crash, or financial collapse, or during an electoral campaign, but it dies down again just as soon as the crisis or election is over.

Thus, our ideal of a well-informed, participatory public, a government always receptive to public concerns, and a cooperative industry all working to protect the public interest is in fact far from the actual practice of democracy.

Regional Citizens' Advisory Councils—mechanisms for informed public participation

To create a more equitable, transparent, and truly participatory process for important activities that affect the public, such as oil and gas development, it is necessary to establish a fully funded, empowered, independent, and aggressive citizens' institution to provide oversight. The Regional Citizens' Advisory Councils (RCACs) in Alaska represent such an initiative.

The disastrous 1989 *Exxon Valdez* oil spill in Alaska resulted in part from a prior lack of informed public participation and oversight as well as from the recklessness of the Exxon Corporation. Had the local public provided oversight to the spill prevention and response system prior to the spill beyond the obviously ineffective government oversight, the system's shortcomings—such as the lack of tug escorts, inadequate tanker traffic monitoring, and insufficient stockpiles of spill response equipment—would have been apparent and

likely corrected. In the aftermath of the spill, citizens in the region set about immediately to remedy this problem. Two RCACs were established in Alaska to provide direct citizen oversight of oil industry activities in Prince William Sound and Cook Inlet. Similar citizens' councils were established in California and Maine.

Although these councils were established in reaction to oil spill disasters and focus on preventing and responding to such incidents, their structure and function could serve a broader mandate in the emerging democracies of Azerbaijan and Kazakhstan. In these countries, citizens' advisory councils could provide citizens with an opportunity to participate in and provide oversight of various aspects of petroleum development—permitting, exploration, development, transportation, refining, government revenue collection and distribution, risk management, and environmental compliance. Such councils could represent citizens in the oversight of the petroleum fiscal system and would be a substantial step toward informed public participation.

This sort of public participation will no doubt require a long and difficult evolution for civil society in Azerbaijan and Kazakhstan. This chapter recognizes that with the current challenges to freedom of association in Azerbaijan and Kazakhstan, discussed in greater detail in chapters five and six, citizens' advisory councils will take time to take root. However, as the discussion of the role played by NGOs in assisting privatization efforts in Latin America will show, citizen oversight of public administration is possible and desirable in developing democracies. Closer to home, in Georgia, civil society has been active in helping draft and improve public awareness about legislation. The discussion of RCACs and these other models of public oversight suggests that citizen oversight of petroleum activities and their ensuing revenues is not only possible but desirable for the public good.

Exxon Valdez and the rise of RCACs in Alaska

Even before the 1989 *Exxon Valdez* disaster, there was sufficient public concern regarding the safety and integrity of the oil transportation system through Prince William Sound to warrant the establishment of an RCAC. In 1986, the author of this report had studied an effective citizens' council at the North Sea oil terminal in Sullom Voe, Scotland, and proposed the establishment of a similar council in Alaska. The Shetland Oil Terminal Environmental Advisory Group (SOTEAG), established by the local government and oil industry at the time of oil terminal construction in the Shetland Islands, seemed to provide a good template for public participation in Alaska.

The request to establish an RCAC for Prince William Sound was made in 1986 directly to the president of Alyeska Pipeline Service Company (the owner and operator of the Trans-Alaska Pipeline System or TAPS)—a consortium of BP, Exxon, ARCO, Mobil, Amerada Hess, Phillips, and Unocal. At that time, oil companies felt no compelling political need to accommodate any increase in citizen oversight of their operations, and the request to establish an

RCAC was declined. Further efforts by the author to establish such a group through the Alaska legislature met with similar resistance, and the proposal to study the establishment of such groups was quickly defeated in 1987 in the State Senate by the powerful oil lobby. Thus, the oil companies and the state and federal governments continued conducting their business largely beyond public view.

With the *Exxon Valdez* oil spill, the political dynamic took a dramatic shift in response to an outraged local public. In a private meeting with all TAPS owners and oil shippers called by local commercial fishing industry leaders in June 1989, most of the companies present, in particular the majority owner BP, consented to the demand for an RCAC. To ensure the companies kept their promise to fund and cooperate with this new citizens' oversight group, the Oil Pollution Act of 1990 (OPA 90) mandated the establishment of two national demonstration RCACs in Alaska—one in Prince William Sound, and the other in Cook Inlet. OPA 90 was the federal government's response to the *Exxon Valdez* spill, and in addition to the RCACs, it also mandated the phase-in of double-hulled oil tankers in U.S. waters, stricter liability provisions, the establishment of the federal Oil Spill Liability Trust Fund, more research, and more stringent safety protocols for tanker crews.

In the OPA 90 RCAC provision, the U.S. Congress noted that "the present system of regulation and oversight of crude oil terminals in the United States has degenerated into a process of continual mistrust and confrontation. . . . Only when local citizens are involved in the process will the trust develop that is necessary to change the present system from confrontation to consensus."

In December 1989 (prior to the passage of OPA 90), the Prince William Sound (PWS) RCAC had been incorporated as a nonprofit corporation, and in February 1990, it entered into a contract with the pipeline owner, Alyeska Pipeline Service Company.[3] Through the negotiated contract, Alyeska agreed to provide four things to the PWS RCAC: at least $2 million in annual funding, adjusted for inflation; absolute independence from Alyeska; access to Alyeska facilities; and that the contract would continue "for as long as oil flowed through the pipeline." The Cook Inlet RCAC was incorporated in December 1990, and entered into a contract with a consortium of oil companies and tanker operators in its region—Cook Inlet Pipeline Co., Kenai Pipeline Co., Phillips Petroleum, Tesoro Alaska Petroleum, UNOCAL, Marathon Oil, and Cross Timbers—with an annual funding level of approximately $600,000.[4]

The subsequent requirement in OPA 90 for the RCACs simply made such institutions mandatory. It is also worth noting that OPA 90 required that "similar [RCAC] programs should be established in other major crude oil terminals in the United States." And although the federal government has been resistant to implementing this provision, citizen advisory councils were established by the states of Maine and California subsequent to the *Exxon Valdez*. The Maine Oil Spill Advisory Committee has eight members appointed by the governor, two by the president of the state senate, and three by the speaker of the state house of

representatives. The California Oil Spill Technical Advisory Committee consists of five citizen representatives appointed by the governor and four appointed by the speaker of the state assembly. Many of those involved in the Alaska RCACs feel that gubernatorial appointment is an unsatisfactory method by which to constitute a citizens' council. To retain independence and work effectively, the council members should be appointed by their respective organizations—not the governor or federal administration.

More recently, citizens in the U.S. state of Washington have proposed the establishment of a citizens' oversight group modeled on the Alaska RCACs. As envisioned, the proposed "Pipeline Safety Trust" would use $8 million of the $13.5 million in fines paid by the company responsible for the Olympic pipeline explosion in 1999 that killed three people. The $8 million would be managed as an endowment to provide annual funding to operate the citizens' group which would provide continuing oversight of pipeline safety, and a national center for information on pipelines.[5]

Structure and Function of an Alaskan RCAC

These RCACs provide citizens an advisory role in oil issues in the region, monitor impacts, review spill prevention and response plans, and recommend continual improvements in the system. The broad concept is to give local citizens a direct voice in the corporate and governmental decisions that affect them and their communities. The group is also the primary conduit through which government and industry communicate to the public on oil issues. In a real sense, the RCAC has become the "the eyes, ears, and voice" for the local public on oil issues. The public relies on the RCACs to safeguard its interests and assure transparency in the relationship with industry and government. This is a novel, and indeed experimental effort.

Among RCACs, the Prince William Sound RCAC (PWS RCAC) is the largest and perhaps most successful. The PWS RCAC has three main structural components: the board of directors, the staff, and the committees.

Board of Directors: consists of 19 members representing the communities and major citizen constituencies affected by the *Exxon Valdez* oil spill—commercial fishing, Alaska Natives, aquaculture, conservation, recreation, and tourism. Members represent the cities and organizations affected, such as the Prince William Sound Aquaculture Corporation, Cordova District Fishermen United, Oil Spill Region Environmental Coalition, Alaska State Chamber of Commerce, Alaska Wilderness Recreation and Tourism Association, and the Native villages of Tatitlek and Chenega Bay. The city of Valdez, as home to the tanker terminal, has two members, and all other organizations have one member appointed for a two-year term. RCAC board members are chosen by their respective institutions, generally by the institution's board of directors, city council, etc. Board members are thus ultimately accountable to the institution

they represent. There is no limit to the number of consecutive terms an RCAC board member can serve. Both the Prince William Sound RCAC and the Cook Inlet RCAC, with a 13-member board, have several *ex officio*, nonvoting board members representing the relevant state and federal agencies.

All RCAC board members are volunteers. They receive no financial compensation other than for travel expenses to attend meetings and other events (as discussed below in the Caspian section, the compensation issue may need to be reconsidered in order to attract the best possible people to serve on citizen councils in the emerging democracies). The RCAC board of directors meets at least four times a year, one of which is the annual meeting. At each RCAC board meeting, representatives of industry and government report on their issues of concern and operations, and hear from the citizens regarding issues of importance to them. This regular interchange provides a line of communication vital to the interest of each constituency, and results in a constructive climate for problem solving.

The board is responsible for allocating the annual budget. The PWS RCAC has an annual budget that has averaged about $3 million (FY 2003 was $3.2 million), of which, on average, about 38 percent ($1.14 million) is devoted to staff, 33 percent ($1 million) for contracts and research, and 29 percent ($860,000) to office rent, supplies, equipment, and audits. An annual audit of all finances is conducted and approved. The U.S. Coast Guard also conducts an annual recertification of the group as being in compliance with the terms of OPA 90. All of the RCAC's work is open to the public on whose behalf it operates, and interested citizens can attend and provide public comment as well. These checks and balances provide a high level of integrity and credibility to the process.

Staff: Much of the day-to-day activity of the PWS RCAC is the responsibility of a paid staff of 18, located in two offices—one in Anchorage, where most business in Alaska is conducted and where Alyeska headquarters are located; and the other in Valdez, where the pipeline terminal is located. Staffing includes an executive director, two deputy directors, public information manager, community liaison, finance manager, seven project managers, and administrative assistance.[6] The staff is hired by and reports to the council's executive director.

Committees: Much of the council's work is conducted by four technical committees, each with a dedicated RCAC staff liaison: Oil Spill Prevention and Response; Terminal Operations and Environmental Monitoring; Port Operations and Vessel Traffic Systems; and Scientific Advisory. These volunteer committees are appointed by the board to two-year terms, and membership is solicited from citizens throughout the region. Council board or staff members solicit committee members based on their expertise, interest, and willingness to serve. The technical committees meet regularly to discuss any and all issues within their purview, draft and recommend policy actions to the RCAC board, and conduct research approved and financed by the board. The board's seven-member executive committee meets every few weeks to handle

details and issues that arise between the quarterly board meetings. The technical committees advise the board of directors, the executive committee, and staff.[7]

Responsibilities: The council's broad mission is to organize citizens to promote the environmentally safe operation of the Alyeska Pipeline Service Company terminal in Valdez and the oil tankers that use it. The council reviews and submits written comments on any and all operations of the Alyeska pipeline terminal and its associated tankers. Also, there is presently an effort to establish a similar citizens' oversight group with responsibility for the pipeline itself. These oversight, review, comment, and recommendation functions can address such issues as state and federal legislation, regulations and permits, industry policy and procedure, and so on.

At the request of its committees, the RCAC commissions independent scientific studies and reports on relevant issues to the public, the media, government agencies and legislative bodies, and the industry. The research reports often form the basis of policy recommendations from the RCAC to either government or the oil industry. Much of this research, conducted jointly with government and industry, has fostered a more cooperative spirit among these groups, minimizing conflict and contention. The RCAC monitors and plays an active role in all spill drills and exercises and recommends improvements. In the response effort to actual spills, the organization's formal role is to observe the response, keep its members informed, verify information from the command structure, and advise the incident commander.

Not surprisingly, the initial relationship between these citizens' councils and the oil industry was somewhat distrustful, but gradually became dynamic and effective. In 1993, for example, the PWS RCAC and Alyeska Pipeline agreed to a detailed communication protocol in which, as stated by the U.S. Government Accounting Office report, "representatives of industry and the council meet regularly to discuss and attempt to resolve issues of concern, including problems associated with the review and release of study results." The councils and industry meet regularly to discuss planned projects, communicate study results, and clearly convey advice and recommendations between citizen and industry representatives. These meetings facilitate changes in project scope and methodology, reduce unnecessary duplication, and consideration of further projects. Industry representatives are present at each of the quarterly meetings of the RCACs, and RCAC board members meet with oil company executives—shippers, Alyeska owners, etc.—often to apprise them of their issues and concerns. The communication protocol has helped to reduce the acrimony between the councils and industry. As a last safeguard, the RCAC contracts include an arbitration provision to resolve disputes.

RCAC successes

According to the U.S. Government Accounting Office's 1993 congressionally mandated review (a one-time mandate) of the two Alaska "demonstration" RCAC programs,

> The demonstration programs have substantially increased the level of citizens' involvement with the oil industry and with government regulators in the environmental oversight of oil terminal and tanker operations. Through various projects and activities, the citizen councils have provided extensive input into matters such as oil-spill contingency plans, tanker navigation and escort procedures, and oil terminal operations. Industry and government officials acknowledge that many of the councils' projects and activities have been helpful.[8]

The recommendations of the RCAC are nonbinding, and government regulators and industry do not always take the council's advice. Yet many recommendations are adopted because of the thorough research and vetting facilitated by the council's public/industry/government framework that provides regular meetings to discuss research objectives, methodologies and results.

The extraordinary successes of the PWS RCAC attest to the sort of cooperative problem solving that can be accomplished with genuine, informed public participation. Overall, the council has been a primary driver in the improvement of the safety and integrity of the system for oil transportation through Prince William Sound, making this arguably the safest system anywhere in the world. And, it is important to underscore that this improvement was largely due to the RCAC. The following are some of the more significant improvements that the RCAC either recommended or played a pivotal role in:

- Deployment of powerful, maneuverable tugs to escort all outbound, laden tankers
- Monitoring the compliance with phase-in requirements for double-hull tankers
- Installation of ice-detecting radar to warn of iceberg hazards in the shipping lanes
- Development of nearshore spill response strategies and contingencies
- Improved Vessel Traffic System (VTS) surveillance of all tankers in the system
- More stringent weather restrictions and speed limits for tanker traffic
- More stringent tanker inspection, both in Alaska and beyond
- Advocacy for better government oversight, more personnel, and more funding
- Deployment of new weather buoys along the shipping lanes for real-time weather
- Improved spill contingency plans, response equipment on hand, and training
- Improved understanding of community impacts from technological disasters
- Comprehensive environmental monitoring to assess oil impacts

- Improved control of ballast water treatment to control pollutants and nuisance species
- Construction of a Vapor Control System to capture volatile hydrocarbon vapors released during tanker loading
- Improved fire prevention and response capability at terminal and on tankers

Lessons Learned

As described in the "RCAC Retrospective," there have been many important lessons learned over the PWS RCAC's history.[9] Although the oil production and transportation sectors in Kazakhstan and Azerbaijan differ from those in Alaska, the public process lessons learned in Alaska should be of relevance. Many of these lessons may be somewhat counter to conventional models and practice of public advocacy, but have nonetheless proven to work in the RCAC's particular context. Without necessarily condoning all of these as the best and most appropriate public advocacy methodologies everywhere and at all times, a number of lessons with relevance to the issue of public participation in Kazakhstan and Azerbaijan are briefly outlined below:

- ***Cooperation works better than confrontation:*** A good-faith effort to resolve conflicts and disagreements leads to positive change faster than public criticism.
- ***Conflict is inherent:*** Priorities of citizens and the petroleum companies are inherently different, but do not preclude common ground.
- ***Trust between citizens and industry is difficult to establish and even harder to maintain:*** Trust and mutual respect are fragile, can develop on some issues and not on others, and can be maintained by regular informal meetings.
- ***Sufficient funding is essential:*** A significant difference between the RCAC and other citizens' councils is that they have the financial resources with which to hire technical consultants and to commission independent research, dramatically improving their credibility and level of participation.
- ***A citizens' group can be independent with industry funding:*** The contract between Alyeska and the PWS RCAC specifically protects the RCAC's independence, and provides continued funding for the life of the pipeline. Although there will always be concerns regarding independence, thus far RCACs have done a better job of representing the public interest than government regulatory committees.

- ***Agreeing on how to disagree reduces conflict:*** The PWS RCAC and the industry agreed to a protocol in 1995 with which to handle sensitive and controversial issues, outlining communications and mediation procedures. This arrangement has eliminated surprises and led to a better working relationship. Collaboration has worked better than adversarial confrontation for resolving disputes.

- ***Logic makes passion persuasive:*** Using sound reasoning, scientific documentation, and logic, citizens impassioned by an issue argue more persuasively for progressive change.

- ***It pays to acknowledge industry and regulators when they do right:*** Positive recognition reinforces the notion that good works generate reward, and makes constructive criticism more credible.

- ***All affected citizens should be represented on boards of directors:*** Members from across the affected region and across the political spectrum add to the influence of the group.

- ***A small board, whenever possible, is more efficient and easier to manage:*** Boards with about 8–10 members are recommended as ideal, but they should not be created at the expense of adequate representation for all affected citizens. Although the PWS RCAC has a 19-member board, this was deemed necessary to provide adequate public representation.

- ***Expectations of directors should be realistic:*** Time demands on a volunteer board can be high, even though some can incorporate RCAC work into their normal jobs.

- ***Expectations of directors should be clearly communicated and enforced:*** Inactivity and absenteeism can be a problem for the board of directors, and should be managed.

- ***Board members do not have to be experts:*** But they need to be diligent and sufficiently oriented to the issues and tasks when assuming a board post.

- ***The role of technical advisory committees should be clear from the start:*** Conflict between committees, the board, and staff could be avoided with clear understandings of their respective roles.

- ***Concerned citizens should have the opportunity to participate in a meaningful way:*** Each board member represents the interests of their own group, but other citizens should always have a way of contributing their concerns, knowledge, and perspective. The RCAC meetings are open to the public, and any citizen is provided the opportunity to speak before the meeting.

- ***A diverse constituency needs strong community outreach:*** Part of each board member's job is to act as liaison between the RCAC and their group or community. The RCAC publishes a quarterly newsletter and has a staff position dedicated to community liaison.

- ***Funding should not have strings attached:*** Although the contract between the pipeline owner and the RCAC stipulates that the RCAC will be funded for the life of the pipeline at a level of at least $2 million a year, the exact level of funding is renegotiated every three years. Some have suggested that an independent, third party should arbitrate the level of funding in order to retain independence and protect the group from industry pressures and reprisals.

- ***Advisory groups should be mandated by state or federal statute:*** The statutory mandate in federal law (OPA 90) to establish the Alaska RCACs represents an assurance that the groups will continue, regardless of changes in oil industry leadership or priorities.

- ***A clear mission and identity should be established early on:*** The group needs to decide whether they intend to be just a watchdog—implying oversight, criticism, and a hint of enforcement—or a partner. Members of the PWS RCAC sees themselves more as a "vocal advisor" than an industry or government "watchdog."

- ***Citizens are more effective if they have formal relationships with those who make decisions:*** The PWS RCAC contract formalizes a relationship between the pipeline owner, Alyeska, and the RCAC, but not necessarily with the Alyeska owner companies nor the shippers *per se*. The formal relationships should be considered carefully in negotiating the most effective contract.

- ***Backsliding is always a threat:*** Large accidents can generate a great deal of public attention, but memories dim and complacency can set in for industry, government, and the public. Thus the RCAC must remain vigilant to such degradation.

Confidentiality, independence, and transparency

Another central issue for these citizen advisory councils is confidentiality versus public access. In Alaska, although there was disagreement between the RCACs and the oil industry regarding this issue, it was resolved in the only real way it could have been in order to retain transparency—in favor of open access.[10] Citizens recognized that for the RCACs to succeed, all of their business had to be open to the public on whose behalf they were established. On this issue, the Alyeska/RCAC contract states the following:

> The independence, and public perception of independence, of the [RCAC] Committee is of overriding importance to the Committee in fulfilling its functions and in meeting public needs. This Contract shall be interpreted in such a way as to promote the independence, both actual and perceived, of the Committee from Alyeska.

And, as a former RCAC staff member stated on this issue:

> [For the RCAC] to work in anything less than an open, public environment invites suspicion and charges that it is a lapdog rather than a watchdog. The RCAC cannot function under a veil of confidentiality. . . . Its contract with Alyeska places the highest premium on both the fact and perception of independence.[11]

Another component of transparency that should be considered is the statutory mandate for open process in government. In the United States, for instance, the federal Freedom of Information Act (FOIA) allows citizens to request information on any topic from federal agencies, establishes a time period within which the agency has to respond, and provides a judicial process for appealing denials of information. Further, some states, such as Alaska, have strong public records and open meetings acts that give citizens access to meetings of state officials and to documents they generate and receive.

An academic evaluation of the RCAC concept found that "Citizen advisory councils are capable of making important contributions to the production of new knowledge in the policy process…" and "Research projects…have played a central role in allowing the councils to generate new knowledge in a policy area involving complex questions of science and technology."[12]

In an interview regarding the government's perspective on how the RCAC has shifted the political environment toward greater transparency, a commander in the U.S. Coast Guard (having the responsibility to review and recertify the RCAC annually) summed up the PWS RCAC as follows:

> It adds accountability on the part of regulators like me, and the government and the industry. We have to operate in the open, and talk about things in the open, and take the time to bring the citizenry along with us in the logical path to the solutions for our problems. It's an organized and disciplined way to get citizen involvement in what we do. I think that's good, because the system really isn't worth much unless citizens are involved with it.

That, of course, is what the concept of transparency and informed public participation is all about.

Public Oversight in Developing Democracies

Oversight of activities between public administration and industry occurs not only in advanced industrial democracies but in emerging ones as well. This section discusses several models of oversight in privatization of state services in Colombia, Argentina, and Panama. While these examples are not in the oil sector, they provide important lessons in how providing an oversight role for the public can help control corruption, build trust in government, and save money.

Integrity pacts

In Colombia and Panama, local Transparency International (TI) chapters have helped implement so-called integrity pacts for certain government contracts by acting either as government consultants or as monitors providing information to the public. Integrity pacts are signed by government officials and senior executives from the private firms bidding on public contracts. The pacts require participants in the bidding process to pledge not to offer or accept bribes while submitting bids on public projects. By establishing transparent procedures, integrity pacts build the confidence of civil servants, bidders, and the general public; develop a culturel of voluntary adherence to ethical and legal frameworks; establish common rules for all parties; and identify the points where corruption is likely to enter the process.

In Panama, Transparency International–Panama (TI–PAN) monitored the bidding process for privatization of the state telephone company, INTEL. At the government's request, TI–PAN took on the role of an observer committed to informing the public about all aspects of the privatization process. It received invitations to attend all meetings of INTEL's board of directors and had access to all relevant documents. Working with an international expert, TI–PAN closely monitored the bidding process and published weekly bulletins in a leading newspaper. The two companies bidding for INTEL, Cable & Wireless and GTE, signed an integrity pact that included a "no bribery" clause. The bidding resulted in a significant gain for the government: the winning bid for INTEL's assets was $152 million above the base price, and $201 million above the other bidder's offer. Both bidders were satisfied with the process and there was general consensus that TI–PAN's participation was crucial to bringing transparency to the deal and increasing public confidence in the privatization process.[13]

The use of integrity pacts in Colombia was the result of a 1999 presidential directive ordering the Ministry of Communications to utilize integrity pacts with the assistance of Transparency International–Colombia (TI–COL) "to the extent that it is possible." Since then, TI–COL has overseen the implementation of 51 integrity pacts. The Colombian telephone service contract integrity pacts included an agreement by bidders to report violations and penalties for bidders who violated the terms of the pact as well as an agreement establishing an independent arbitrator to review complaints concerning pact signatories. In addition, other government officials concerned with the particular procurement were asked to sign an "Ethics

Proclamation." As a condition of participating in the process, TI–COL asked for, and received, the right to review and make suggestions regarding the bidding documents.

Public hearings

Public hearings are one of the most direct forms of involving citizens in the process of bringing transparency to deals between government and the private sector. Hearings provide the opportunity for many citizens to play a role in government decision-making processes, which can be particularly important in communities and countries where this has not been a common practice. By opening government decisions to citizens, public hearings work to build trust in government decision making. Hearings can also open up the government procurement, contracting, and bidding process, resulting in lower costs and greater efficiency.

In Panama and Argentina, where public procurement has long been associated with corruption, public hearings fused with integrity pacts resulted in both high approval ratings from participants and significant savings of public funds.

In Panama, two public hearings examined government plans to purchase land for a new clinic. The first hearing was a discussion of the pros and cons of various sites. At the second hearing, one month later, a technical committee presented a set of recommendations based on the previous discussion for public comment. A survey of participants indicated that 98 percent of them were satisfied with the hearing process. Seventy percent of the participants agreed with the final recommendations and decision made by the technical committee. The open purchasing process helped the government locate a site for about half the cost of the original $1 million budget allocation.

In Argentina, the mayor of the Municipality of Moron took office with a commitment to eradicating corruption. One of the first challenges was to break the monopoly influence over public waste collection contracts by a cartel of domestic firms. Once the previous contract expired, the mayor and the municipal government worked with a local TI chapter, Poder Ciudadano, to organize public hearings about the bidding process for a new contract. Officials publicized hearings and solicited bids from foreign firms. Experts and the public came together before bidding started to review and revise documents to maximize competition. The process also incorporated a clearly defined integrity pact before bidding began. The pact required all parties to commit to not taking bribes and to report illegal behavior. The pact specified heavy sanctions for any party that violated these rules. The pact also required officials to fully disclose how they made the final contract award decision. In the end, the mayor's commitment to fight corruption, the use of public hearings and an integrity pact, and the solicitation of foreign bids broke the domestic cartel's monopoly: the final contract went to a Spanish firm with a bid that saved the government $13 million over four years.[14]

Closer to the Caspian Basin, Georgian NGOs are active in shaping public policy through the development of draft legislation and provision of expert opinions. The Association of Young

Economists, for example, frequently helps draft economic laws and also participated in a working group which drafted the program of economic development under which the country's economic reforms are being implemented. The Georgian Young Lawyers Association is frequently asked by parliament for commentary on draft bills. In addition to developing a law on grant awards that significantly eased registration procedures for NGOs, they were influential in developing the 1994 Georgian constitution, the law on ordinary courts, and the judicial reform process. The association also assisted in development of a law on a Georgian bar association and a process of examining Georgian laws.

Challenges and Opportunities for RCACs in Azerbaijan and Kazakhstan

The establishment of citizens' councils or other models of citizen oversight have increased transparency and public involvement in oil and gas issues in the United States and public administration in countries such as Argentina, Panama, and Colombia. It is worth exploring whether the citizens and governments of Kazakhstan and Azerbaijan can begin to lay the groundwork for the establishment of such groups as well. Although there may be initial resistance to the concept within industry, government, and even the public, none of this should prove insurmountable. The importance of citizens' councils is paramount—they are not government, they are not industry, but they are established and operated solely by and for the citizens of the country.

If citizens' advisory councils are pursued in Azerbaijan and Kazakhstan, they need not be limited by the scope of the Alaskan RCACs. Caspian-based citizens' advisory councils could be empowered to provide oversight of various aspects of petroleum development—permitting, exploration, production, transportation, refining, public revenue collection and expenditure, risk management, or environmental compliance. With regard to the public collection and use of petroleum revenues, the Azerbaijan or Kazakhstan RCACs could monitor and advise government and the public on the public finance dimension of petroleum development—revenues, costs, taxes, royalties, and other payments. These councils could also have a voice in the use of oil and gas revenues, including monitoring how the government uses its earnings to address social and environmental needs. Finally, they could commission annual audits of both industry and government petroleum revenues.

If citizens' advisory councils are pursued, they should represent all major constituencies with directors being democratically chosen by their respective interest groups. It is in the government's interest to become a cooperative partner with these groups, granting them access to needed information and deliberations. Such cooperation, as we have seen in the examples of Argentina and Panama, helps build trust in government and serves as a check against corruption. Access to information, however, will require strong public access statutes

similar to the United States FOIA, as well as open meetings acts and other public disclosure protocols, which do not currently exist in Azerbaijan or Kazakhstan.

The long-term, substantial, and stable funding for such groups will be of immediate concern. Their budgets should be commensurate with the responsibilities of the new RCACs, and include sufficient funds to commission research and technical studies as the RCACs deem appropriate. If there is one thing that distinguishes the RCAC concept from other advisory structures, it is that the RCACs have sufficient funding to do the work that they feel is necessary. Having the capability to conduct their own research greatly enhances the ability of the groups to support their policy recommendations.

There are several possible avenues for securing such financial support:

- ***Direct funding by the petroleum industry:*** Funding could come directly from the oil and gas companies and/or their consortia (OKIOC, AIOC, etc.). But, as was the case in the United States prior to the *Exxon Valdez* disaster, citizens in the Caspian may not have sufficient political power to persuade the petroleum industry to establish and finance such groups on their own. Direct industry funding could also lead to suspicions of bias and lack of independence among the local public, which would make it difficult for the RCAC to perform its duties effectively. One alternative is for industry establishment of an endowment, which would limit the possibility of day-to-day interventions in the activities of the RCACs.

- ***Loan institutions requiring the establishment of RCACs as a condition of their loan:*** Lacking direct support by the oil and gas companies, the international financial institutions (IFIs) could simply require companies receiving loans to establish and fund such independent, credible public participation as a condition of their loan. The IFIs could stipulate what sort of audit, review protocols, representation, and government and industry cooperation must be put in place to ensure the highest levels of integrity and effective action of the groups. As discussed in chapter two, the World Bank has pursued such an approach in Chad.

- ***Government support:*** The governments of the region could themselves establish and finance such citizen participation from public revenues derived from oil and gas projects. In the long run, this may be the best of all possibilities because it provides a level of government buy-in necessary for cooperative action and removes industry from any direct role in the group's budget.

- ***Interim, start-up support from outside philanthropic, nongovernmental organizations:*** If none of the above financial instruments is attainable in the short-term, then the assistance of an outside, philanthropic NGO should be solicited. This would at best repre-

> sent an interim solution to the issue of developing sustainable, informed public participation in the region. If the interim RCACs prove themselves a worthy mechanism for informed public participation in the region, then their funding should be picked up directly by government or industry. This may be a necessary first step in order to catalyze the formation of these groups.

A concern often voiced regarding establishing RCACs in the emerging democracies of the Caspian region and other areas is that of corruption. And although the Alaska case is admittedly different in some respects, its structural impediments to corruption are applicable anywhere. The RCACs commission annual financial audits by independent firms and report their results in their annual reports, which are available to the public. Both the U.S. Coast Guard (the federal liaison agency) and Alyeska (the contracting oil industry body) have the right to conduct yearly financial audits of the RCAC—and on occasion avail themselves of this right. The U.S. Government Accounting Office (GAO), in its report to the U.S. Congress on the Alaska RCACs, concluded the following with regard to financial procedures and integrity:

> Regarding their handling of funds, both councils appeared to have adequate policies and procedures and a system of internal controls for managing their operations and funds. Our analysis of key functions, such as travel and contracting, did not disclose any material weaknesses. . . . A review of several independent audit reports evaluating the two programs' financial activities confirmed our findings. These reports showed no material internal control weaknesses or improprieties.[15]

Thus, although financial integrity is a serious concern, there are relatively straightforward audit and disclosure mechanisms that can be employed to prevent corruption. Providing financial compensation to council members for work performed should be considered in emerging democracies in order to attract the best possible people to the job. Careful consideration should be given to putting in place the proper checks and balances and restrictions on receipt of gifts to ensure the highest possible level of ethics and integrity.

A related concern regarding the establishment of RCACs is possible co-option of the group. Civil society in Azerbaijan and Kazakhstan is still in its early stages of development, most NGOs lack grassroots support, many are denied registration, and government-organized NGOs (GONGOs) are often indistinguishable from other NGOs. While there is clearly no absolute safeguard against this tendency, the group should be designed to reduce such potential. RCAC members being accountable to their respective organizations, together with transparent activity, are the foremost safeguards against co-option. As mentioned earlier, this is an absolutely critical and fundamental concept to the success of any RCAC. If an organization (e.g., citizens' interest group) feels its RCAC representative is not working for its interests, they can correct or replace that representative. Hence, for RCACs to act as credible oversight

agencies, freedom of association in Azerbaijan and Kazakhstan must be improved. The registration process for Azerbaijani NGOs should be made more transparent and the oppressive environment in which journalists and other government watchdogs in Kazakhstan currently operate will need to be improved in order for constituencies to develop which the RCACs would serve.

Conclusion

The establishment of RCACs in Azerbaijan or Kazakhstan would provide an unprecedented level of transparency and informed public participation with regard to oil and gas activities necessary to fulfill the promise of democratic governance in these countries. They would essentially become the fully engaged "eyes, ears, and voice" for citizens with regard to petroleum issues that affect their lives, including but not limited to petroleum revenue collection and use. Limits to access to information and restrictions on freedom of association in Azerbaijan and Kazakhstan are substantial challenges to the establishment of Alaska-style RCACs. Nevertheless, as the examples from Latin America and Georgia show, it is possible for civil society to participate in the improvement of public administration and public policy in developing democracies. Oil companies, international financial institutions, and private donors can help this process in Azerbaijan and Kazakhstan by providing funding, technical assistance, and access to information for such councils to begin work.

"The experience of oil rich countries suggests that oil revenues easily gained are not always rationally used. Indeed, excessively high misuse . . . can be observed in most cases . . . . Preventing such misuse and strengthening financial discipline . . . were major reasons for establishment of the State Oil Fund."

—2001 ANNUAL REPORT OF THE STATE OIL FUND OF THE AZERBAIJAN REPUBLIC

5. State Oil Fund of the Azerbaijan Republic

Sabit Bagirov, Ingilab Akhmedov, Svetlana Tsalik

Introduction

Petroleum wealth is not a new phenomenon for Azerbaijan. For centuries, oil seepage had been observed on its territories. Marco Polo reported that in the 13th century, oil from the Absheron peninsula was exported to the Middle East for its lighting, medicinal, and military uses. By the end of the 19th century, Russia was the world's leading oil producer due to its rule of Azerbaijan, and Baku's oil deposits figured prominently in the military campaigns of both World Wars.[1]

Production dropped precipitously during World War II, however, when the Soviet Union shut many wells to keep them from falling into German hands. Although production slowly recovered in the following two decades, after 1967 it began a gradual but uninterrupted decline as the Soviet government prioritized its Siberian oil reserves. This deterioration continued until the mid-1990s when Azerbaijan began what has become known as its "second oil boom."

Despite a long history of producing oil, Azerbaijan has little experience managing its petroleum wealth. Until the country's independence in 1991, this task was the responsibility of the Soviet Union.

For Azerbaijan, even more than for Kazakhstan, it is critically important to get hydrocarbon revenue management "right." Three reasons stand out: First, Azerbaijan's economy is more dependent on oil than Kazakhstan's. The oil sector comprises two-thirds of industrial production and more than 90 percent of the value of the country's exports.[2] The country has experienced the inflation, real exchange rate appreciation, and crowding out of the non-oil sector that is symptomatic of Dutch Disease. Second, Azerbaijan has less oil than Kazakhstan, and therefore the risk of missed opportunities is greater. Azerbaijan has about a third of Kazakhstan's proven and potential oil reserves, and about a quarter of its proven and possible gas reserves.[3] Whereas Kazakhstan's production is expected to continue through mid-century, Azerbaijan's will peak by 2010 and decline to a quarter of peak production by 2024.[4] Finally, as a result of the long war between Azerbaijan and Armenia over the territory of Nagorno-Karabakh, about 800,000 Azerbaijanis are internally displaced. Thus, in addition to the already hefty challenge of transition from a planned economy to a resource-based market economy, Azerbaijan has the added burden of restoring normal lives to this displaced population.

This chapter reviews Azerbaijan's performance in managing its oil revenues to date and examines the role that the State Oil Fund of the Azerbaijan Republic (SOFAZ) can play in this task. First, the chapter discusses the impact that the oil sector has already had on the country's economy. Next, it describes the prospects for Azerbaijan's oil earnings, reviewing the country's reserves, analyzing its production-sharing agreements, and forecasting government revenues from development of the hydrocarbon sector. Then, it analyzes SOFAZ's design and performance. Finally, the chapter concludes with recommendations on how strengthening revenue transparency and improving governance can help Azerbaijan manage its resource revenues and avoid the resource curse.

Impact of Hydrocarbon Development

In the early 1990s, Azerbaijan's already difficult task of dismantling and restructuring its planned economy was complicated by a succession of leaders, social and economic disruption from its war with Armenia, a terms-of-trade shock following the collapse of the Soviet trading system, and a blockade imposed by Russia in response to Azerbaijan's decision to begin developing oil offshore without a resolution of the Caspian Sea's legal status. During this period every macroeconomic indicator pointed to an economy out of control.

Industrial production imploded, with GDP falling by over 60 percent between 1991 and 1995. As a result, government revenues collapsed as well, falling from 32.9 percent of GDP

in 1990 to under 15 percent in 1995. Budget deficits swelled to as high as 10 percent of GDP.[5] To cover its budget, the government resorted to monetary emissions—that is, increasing the amount of money in circulation—thus driving down the value of the currency and, in effect, taxing its entire population. In 1994 alone, the currency depreciated by 1,300 percent.[6] At the same time, inflation soared, with consumer prices increasing by over 24,000 percent between 1991 and 1995.[7]

In 1994, Azerbaijan signed the $10 billion "contract of the century" for the development of the Azeri-Chirag-Gunashli (ACG) oil fields, located offshore in the Azeri sector of the Caspian Sea. The signing of this contract, President Aliyev's consolidation of power in 1995, and his focus on economic stabilization signaled the transition from the earlier chaos in Azerbaijan to the beginning of the country's second oil boom.

The government pursued a strict monetary and fiscal policy, which combined cutting spending, increasing borrowing, and reducing monetary emissions, bringing inflation to less than 2 percent a year. For the last two years, economic growth has averaged 10 percent. Apart from energy, most prices have been liberalized. The budget deficit has fallen from 15.3 percent of GDP in 1993 to below 1 percent of GDP in 2000. Azerbaijan has steadily built up its foreign reserves, and as of late 2002 had over $1.3 billion in its National Bank and its oil fund.

These achievements are impressive. However, a worrying trend is the vulnerability of this fiscal stability to external shocks in the petroleum sector. Plunging world oil prices in the late 1990s dramatically reduced the country's export earnings, as well as budget revenues. Already, Azerbaijan has experienced signs of Dutch Disease, as the currency's real exchange rate appreciated considerably between 1997 and 1999, making it easier to import goods and services rather than produce and procure them domestically. Oil and oil products continue to dominate Azerbaijan's exports, while the manufacturing sector has diminished. Azerbaijan's large population of displaced persons, its widespread poverty, and energy shortages coupled with the moderate size of its oil and gas reserves will make management of hydrocarbon revenues extremely challenging and important for the future prosperity of this country.

GDP and investment in the oil sector

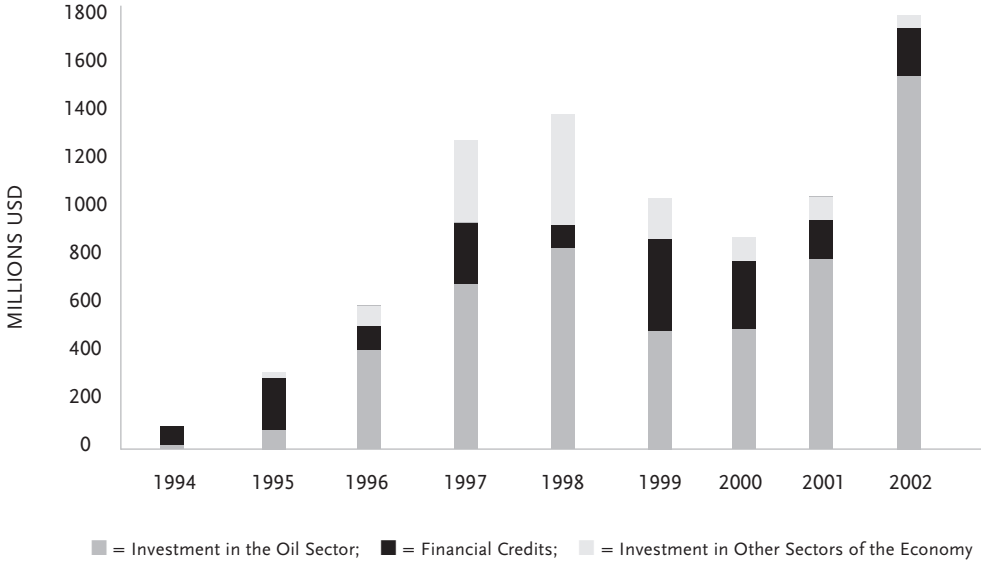
Although oil exports from the ACG fields did not begin until 1997, the impact on the economy could be felt as early as 1995, once the ACG production-sharing agreement (PSA) was concluded. The bonuses that followed the signing of this contract helped the government reverse the devaluation of its currency and the ensuing inflation. The bonuses also played a critical role in helping the government control its deficit, as will be discussed below.

Investment in the oil sector rose to 37 percent of total foreign investment in 1995, as money streamed in to support oil exploration and development and the construction of an export pipeline from Baku to the port of Supsa on the Black Sea. Since then, the petroleum sector has absorbed the lion's share of foreign investment in Azerbaijan, and currently stands

at more than 80 percent of total foreign direct investment.[8] Most of this investment has been concentrated in oilfields offshore Baku, providing little benefit to the countryside. On a cumulative basis, foreign investment in the oil sector since 1994 has been about $4 billion.[9]

Much of this investment has gone to the ACG block of fields, which has absorbed $2.3 billion of investment. The next largest project is the Shah-Deniz gas field, offshore Baku, which has received $474 million. Figure 1 illustrates the role of the oil sector as a share of total foreign investment from 1994–2001.

FIGURE 1. Foreign Investment in the Oil Sector of Azerbaijan, 1994–2002



Source: Statistical Yearbook of Azerbaijan, 2002; Turan News Agency, February 21, 2003.

Note: The data may underestimate the investment in the oil sector because the statistical yearbook does not specify to what sector financial credits are directed. Hence, some of these may have been invested in the oil industry.

Future investment will be directed toward the implementation of phases 1,2, and 3 of the ACG field, development of the Shah-Deniz gas field, and construction of the Baku-Tbilisi-Ceyhan (BTC) and Baku-Tbilisi-Erzurum (BTE) pipelines. The BTC pipeline will move oil from the ACG fields to the Turkish port of Ceyhan on the Mediterranean. The BTE pipeline will carry natural gas to markets in Turkey, with some offtake in Georgia. Table 1 demonstrates the size of the investment and the timelines anticipated for these projects. It should be noted that not all of these anticipated investments will be made directly in Azerbaijan, as they involve costs of purchasing equipment from abroad and also construction of the pipeline in Georgia and Turkey. However, even when the expenditures are incurred abroad, there will be multiplier effects in Azerbaijan from the project moving forward.

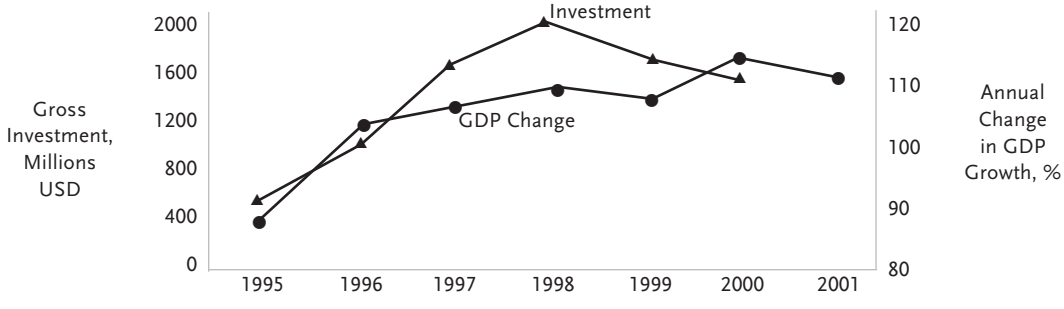
TABLE 1. Anticipated Investments in Azerbaijan Oil and Gas, 2005–2009

	Project Value, Billion USD	Beginning of Production/ Transportation
Azeri-Chirag-Gunashli		
Phase-1	3.4 – 3.6	2005
Phase-2	4.5 – 5.0	2007
Phase-3	2.7 – 3.0	2009
Shah-Deniz	1.7 – 1.8	2005
Baku-Tbilisi-Ceyhan oil pipeline	2.7 – 3.2	2005
Baku-Tbilisi-Erzurum gas pipeline	0.9 – 1.0	2006
Total:	**15.9 – 17.6**	

Source: Compiled based on information collected from press releases from SOCAR, AIOC, and reports of the Trend Information Agency and Turan Information Agency.

As Figure 2 demonstrates, spurts in GDP growth closely track infusions of foreign investment. As foreign investment began to flow to Azerbaijan's oil sector, GDP grew steadily. The fuel sector as a whole represented 27.3 percent of GDP in 2000, up from 16.4 percent of GDP in 1995.[10] Investment in the petroleum sector, more than any other economic activity, moves GDP.

FIGURE 2. Rates of Growth in GDP and Gross Foreign Investment, Azerbaijan



Economic sectors

The surging output of the oil sector accounted for more than 60 percent of the increase in GDP between 1995 and 2001. While output in the oil sector increased by over 200 percent between 1995 and 1999, output in the non-oil sector decreased by about 39 percent in the same period.[11] That petroleum is the primary driver of growth can be seen in the decline of

almost every other branch of industrial production. In 2001, the oil sector accounted for 67.5 percent of all industrial production.[12] The dislocation of industrial production is partly a result of atrophy following the disruption of the planned economy, but also a sign of Dutch Disease, as currency volatility, inflation, and a lack of financing have squeezed out non-oil industrial sectors.

Dutch Disease occurs when large amounts of foreign exchange earned from the sale of a commodity such as oil are converted into local currency. The effect is to raise the demand for local currency, leading to appreciation of the exchange rate. As a result, imports become cheaper and exports more expensive. This decline in price competitiveness weakens the labor-intensive manufacturing sector.

Most manufacturing has ground to almost a complete halt, even as the economy began a general recovery. Exports to Russia, Azerbaijan's largest trading partner, have dropped from $180.5 million in 1997 to $77 million in 2001.[13] Table 2 shows the decline of various representative industrial products and the corresponding increase in oil production.

TABLE 2. Output, Selected Items, 1990–1999

Product	1990	1995	1999
Crude oil extraction (including gas condensate), million tons	12.5	9.2	13.8
Aluminum (thousand tons)	238.9	26.1	76.1
Canned food (million cans)	653.5	82	49
Fabrics (million square meters)	150.9	59.5	0.8
Cement (thousand tons)	990	196	171

Source: Statistical Yearbook of Azerbaijan, 2002.

The construction and service sectors, which are stimulated by oil production, have fared better. When the Baku-Supsa pipeline was underway, construction represented 13 percent of GDP. However, after completion of the pipeline, the sector fell back to 6 percent of GDP in 2001. As the BTC and BTE pipelines commence, construction will experience another temporary boost. The service sector, especially housing, food, and transportation, has also been temporarily helped by the activity of the oil sector.

In an effort to stimulate the non-oil sector, the government passed a law on "State Support for Small Enterprises" and a decree on "Measures to Accelerate Reforms in the Agricultural Sector," in 1999. The former provides low interest loans of up to $100,000 through authorized banks for small and medium-sized enterprises. As of 2002, $2 million in loans had been distributed through this program to 48 enterprises. The latter exempts agricultural producers from nine types of taxes for five years. A government proposal to create tax favorable geographic areas and economic sectors has drawn concerns from the IMF that such zones will encourage tax evasion by existing businesses.

The government also simplified the tax system, and the parliament in 2002 began deliberating on a law to stimulate domestic production. Other decrees on removing constraints to business (1999) and tackling corruption (2000) aim to pave the way for domestic business. An important contribution to reducing corruption was the Finance Ministry's move to reduce the number of tax inspectors by 40 percent and increase the salaries of the remaining inspectors three-fold. Authority to conduct tax inspections has been transferred from the Interior Ministry to the Tax Ministry. The American Chamber of Commerce in Azerbaijan has reported that requests for tax prepayments have declined.

Another positive step is the reduction in the excessive number of licenses required for a business to register and operate—from 240 to 30. However, there have been some concerns that the number of steps to acquire the 30 licenses have increased. The number of licensing agencies has decreased from 30 to 18 and the tenure of licenses has gone up from 6 months to 5 years.

These have been modest first steps, however, and the effectiveness of their implementation remains to be seen. A major obstacle for small and medium-sized businesses is the problem of access to credit. Interest rates of 20 percent and more persist despite inflation levels of less than 2 percent a year. The banking system remains dominated by the state-owned International Bank whose privatization has been stalled since 1999. Overall privatization has been slow relative to neighboring countries. Cumulative receipts from privatization are about 3 percent of GDP in Azerbaijan, compared to about 20 percent in Georgia.[14] In the agricultural sector, there is an urgent need for institutional support such as credit and marketing facilities to those who have benefited from agricultural reform.[15]

Trade

Just as oil production has overshadowed other sectors of the economy, so it has come to dominate trade. When the Azerbaijan International Operating Company (AIOC) began to produce oil in 1997 from the Chirag oil field, one of the three ACG fields, the share of oil and oil products in Azerbaijan's exports was 61 percent. By 2001, Azerbaijan had become a virtual "monocrop" economy, with crude oil and oil products comprising 91 percent of the value of exports.[16] This rising share is explained not only by the increase in oil production, but also by domestic oil requirements holding relatively constant, by the sharp decline in other exports, and by a relatively high price for oil sold abroad. In the same period, non-oil products fell from 38.6 percent to 8.7 percent of total exports.[17]

Such a high volume of oil in the country's trade makes Azerbaijan's economy highly vulnerable to oil price shocks. In 1998 and 1999, when crude oil prices tumbled as low as $10.90 per barrel, Azerbaijan's balance of payments deficit ballooned to 32.6 percent of GDP.[18] The shortfall in revenues had an immediate toll on the budget, where revenues and expenditures both contracted sharply from the previous year. Revenues decreased by 9.3 percent and expenditures by 10.3 percent.[19]

Exchange rates and inflation

After 1995, with the signing of the ACG contract, the real exchange rate began to appreciate as a result of the government's effort to battle inflation. Oil revenues in the form of bonuses, the government's stricter fiscal and borrowing policies, and IMF loans helped strengthen the manat and eliminate inflation. In 1994, the currency had depreciated by 1300 percent and by 265 percent in 1995. In contrast, between 1996 and 1997, the currency appreciated by 13 percent.[20] The higher-valued currency, however, made local goods more expensive than imports. The authorities are now trying to gradually devalue the manat, to fit the purchasing power of the population and give domestic industry a boost. In 1999–2000, through numerous bank interventions, they succeeded in devaluing the currency by nearly 8 percent.[21]

Corruption

Pervasive corruption has hampered development of the non-oil private sector.[22] Its presence is known and recognized, yet corruption and bureaucratic inefficiencies continue as obstacles to a balanced economy. Azerbaijan ranked 95th out of 102 countries surveyed by Transparency International's Corruption Perceptions Index in 2002. The Heritage Institute's Index of Economic Freedom ranked Azerbaijan "mostly unfree" in 2002 with a ranking of 118 out of 161 countries studied. A national survey conducted in 2001 found that 77 percent of respondents felt that the government had not done enough to fight corruption.[23] In its assessment of Azerbaijan's honoring of commitments as a member of the Council of Europe, the Council urged the country to adopt an anticorruption law as well as a national program for combating corruption.[24]

The prevalence of the "corruption tax" undermines the development of the non-oil sector, the revival of which is essential to Azerbaijan's long-term economic development. In a survey of 555 non-oil foreign firms operating in Azerbaijan, the Foreign Investment Advisory Service found the investment climate in the oil sector was significantly better than in the non-oil sector. Corruption was cited as a moderate to major problem by 30 percent of respondents. Perhaps more importantly, the impression of prevalent corruption was the most frequently cited reason by businesses that chose not to invest in Azerbaijan.[25]

Employment and poverty

While the petroleum sector has had a great effect on GDP growth and investment, it has had a much smaller effect on employment and poverty. Hydrocarbon production is not a labor-intensive activity. Despite accounting for 30 percent of GDP in 2000, the oil sector constituted only 1 percent of total employment.[26] Although employment in the oil sector increased by 31 percent from 1995 to 2001, in real numbers this was an increase of only 9,000 jobs. At the same time, the 34 percent drop in employment in non-oil industry resulted in a loss of 110,000 jobs.[27]

Jobs in sectors that support the oil industry increased during the 1990s. For example, jobs in the retail and service sectors went up from 9.9 percent in 1990 to 18.9 percent of total employment in 1998.

Because of obstacles in registering for unemployment benefits, it is difficult to accurately assess the level of unemployment. However, based on 1999 census data, unemployment in the economically active section of the population is 15.8 percent nationwide and as high as 23.9 percent in urban areas.[28]

Many citizens of Azerbaijan have not recovered from the devastation of the Soviet economy's collapse and the war over Nagorno-Karabakh. Azerbaijan has one of the highest per capita populations of internally displaced persons in the world, and this situation has not changed much since 1993. Only recently has the government shifted its assistance from relief efforts to resettlement. Poverty, disease, and unemployment have grown at alarming rates. Nearly a million people were made refugees or became internally displaced after the war.

According to a 2001 state survey of household incomes, 49 percent of the population lives below the poverty line of $25.80 per month.[29] Despite having one of the highest rates of GDP per capita among the former Soviet republics due to its oil wealth, Azerbaijan has the second highest share of undernourished people among its post-Soviet neighbors. Between 1997 and 1999, 37 percent of the population was undernourished.[30]

A 2001 World Food Program survey of living conditions among the internally displaced population indicated that access to food essentials and living conditions had deteriorated since the survey was last taken in 1998.[32] Ninety percent of respondents to a national poverty and corruption survey in 2001 thought the government had done a poor job of providing assistance to those in need.

Problems of poverty are exacerbated by the country's environmental problems. Azerbaijan's ecology suffers from the legacy of over a century of petroleum development and decades of chemical and agricultural production, as well as the aftermath of a civil war. The United Nations' State of the Environment Report on Azerbaijan found that nearly 30 percent of the coastal area and more than half the country's larger rivers are contaminated. The country's limited water resources, poor air quality, and deforestation are a serious impediment to quality of life.[33]

Azerbaijan's Program on Poverty Reduction and Economic Development, adopted following public hearings through a Poverty Reduction Strategy Process, provides a candid assessment of poverty in Azerbaijan and the state's attempts to combat it. The failure of increased expenditures to improve the quality of public services was blamed mainly on delays in restructuring—for example, redirecting social service spending from salaries to infrastructure.

Combating poverty in Azerbaijan will require raising household incomes for the 99 percent of the population not employed in the oil sector, which will be a challenge given the non-

oil industry's state of decline. In its poverty assessment, the World Bank found that eliminating extreme poverty by 2010 (defined as reducing that portion of the population living on 72,000 manats in 2001 to less than 1 percent of the population) would require an average annual growth rate of non-oil GDP of 14 percent—more than twice the 6.3 percent non-oil GDP growth rates predicted for this period.[34]

Governance and budget accountability

Like Kazakhstan and many of the petro-states discussed in chapter one, Azerbaijan has witnessed an increasing concentration of power in the executive's hands since the country's independence.[35] Not surprisingly, the ruling family plays a prominent role in the country's energy sector, with the president's son and expected successor serving as second in command of the State Oil Company of Azerbaijan (SOCAR).

Because petroleum earnings flow to the central government and because multinational oil companies prefer to work in any country with a powerful central arbiter, petroleum production often coincides with the expansion of executive power and the evisceration of effective opposition, inside or outside of government. These tendencies are apparent in Azerbaijan, where a tenacious president has limited the powers of parliament and hindered the development of civil society.

Azerbaijan has been ruled since 1993 by Heidar Aliyev, a Brezhnev-era leader. After several predecessors had been forced from power, Aliyev was elected president in 1993 in an uncontested election with nearly 99 percent of the vote. Aliyev has been accused by election observers of heavy-handed efforts to stop opponents from running against him in presidential elections and to keep them out of parliament.

In 1998, prior to the presidential election, opposition party leaders and members were denied representation on the electoral commission, were denied permission to hold public meetings, and were arrested on politically motivated charges. Commenting on the 1998 election which it monitored, the National Democratic Institute stated, "it is very disturbing that the violations [...including ballot box stuffing and intimidation of voters...] appeared to be systematic and that almost all were committed in favor of Aliyev."[36] The 2000 parliamentary election was characterized by the OSCE's Office for Democratic Institutions and Human Rights (ODIHR) as a "crash course in the different methodologies of manipulation."[37]

Parliament's powers are narrowly defined in the constitution, while the president's are left open-ended. The parliament—the Mili Majlis—is dominated by the New Azerbaijan Party, the party formed by Aliyev, and there are only a few representatives from opposition parties. Although the Mili Majlis reliably passes legislation favored by the president, many new laws, including the law creating the State Oil Fund, are in the form of presidential decrees.

Neither the Majlis nor the public exercises effective control over public finance. Parliament can neither draft nor amend the annual budget, but can only approve or reject the budget submitted to it by the Ministry of Finance, which is directly subordinated to the president

and works closely with the president's administration to ensure that fiscal policy supports the president's priorities. In its annual assessment, the Council of Europe expressed "deep concern over the undue interference of the executive in the functioning of institutions" and noted that "it is to be regretted that parliament exercises no oversight of the government's activities, which means that the public at large is similarly excluded from this process."[38]

Parliamentary control is further dampened by the lack of detail provided in the draft budget. The budget is less than 20 pages long and does not provide data below the level of aggregate departments. Members of parliament cannot determine spending on specific programs because expenditures are reported at such a high level of aggregation. As a result of these limitations, debate over the budget is stymied. In 2001, the budget was approved after only 20 minutes of discussion. Neither has the parliament ever exercised its prerogative of rejecting the budget or sending it back to the Ministry of Finance for revisions. Because its vote on the budget is one of the only measures by which parliament can check the executive branch, a rejection or request to resubmit would be perceived as a vote of no confidence in the president.

Public participation in the budget process is also limited. Since parliament has no ability to change the budget, there is little incentive for budget advocates to attempt to engage with parliamentarians. A former chair of the parliamentary committee on the budget confided that he could remember no more than two or three instances in his five-year tenure when he was approached by a member of the public to discuss the budget. While the Ministry of Finance does have control over the budget, it does not provide opportunities for public involvement in the budget formulation process. Public participation is also limited by a shortage of publicly available data. Although the Ministry of Finance produces detailed monthly reports on actual revenues and expenditures and maintains information on expenditure commitments, debt, and loans (including government-backed loans), none of this information is available to the public. The State Statistics Committee produces monthly reports with details on government finances, but only 100 copies are printed and these are restricted to government use.

Strengthening budget planning and auditing will be a priority for Azerbaijan as the volume of oil and gas revenues increases. The practice of medium-term budget planning in Azerbaijan has been abandoned since the five-year plans that guided the economy when it was part of the Soviet Union. Such long-term planning is important when an economy has substantial development needs and a volatile stream of income. Oversight of implementation of the budget is also critical to help monitor receipt of revenues and track the effectiveness of spending. An effective auditor may prevent situations that occurred in recent years, in which budgets, were planned on the basis of lower oil prices, failed to reflect a surplus when the price of oil substantially exceeded expectations.

An additional obstacle to public participation in the budgetary process is the constraints placed on NGOs. Azerbaijan's constitution guarantees the right of freedom of association, and this commitment is further backed by Azerbaijan's membership in the Council of Europe. While the legal basis for civil society is strong, in practice, the development of civil society has

been limited by government efforts to control NGO registration and limit opportunities for obtaining funding grants, tax-exempt status, and the right to convene public meetings.

The 2000 law on NGO activity does not specify registration rights and obligations, and hence NGO registration decisions are made on the basis of internal documents of the Ministry of Justice. Registration is routinely denied, often without a clear explanation, and past the 10-day deadline established by law. Often, the Ministry of Justice does not respond at all, and without a rejection, applicants cannot appeal in court. The fact that registration can only be done in Baku puts constraints on the development of civil society outside the capital. Even on the rare occasions when a district court overturns a registration denial, the Ministry of Justice does not always comply with the court's decision.[39] Public participation in the budgetary process, and more generally the development of civil society in Azerbaijan, will require overhauling the legal basis and the practice of registering NGOs.

Budget revenues and revenue collection

As a result of the growth of oil production and exports, and a relatively high price for oil, the budget of Azerbaijan has become highly dependent on oil for its revenues. In 2001, the oil sector contributed 29.6 percent of budget revenues. In 2003, oil sector revenues will comprise 32 percent of the government's budget, according to the parliamentary committee on economic policy.[40] Once the oil-related construction and service industries are taken into account, the impact is even larger. As noted elsewhere, the large share that oil plays in government revenues has dangerous consequences in the event of a downturn in the price of oil. According to IMF estimates, each $1 drop in the price of oil translates to a loss of $35 million in government revenue, or approximately 5 percent of total government revenues in the year 2000.[41] The impact on the budget will be even greater as production ramps up in the next few years. This risk is aggravated by the absence of a budget stabilization mechanism in the country's oil fund, as will be discussed below.

Since their inception, oil bonuses have been used every year to finance the government's budget deficit.[42] Between 1995 and 2000, oil bonuses financed, on average, 62 percent of budget deficits and, in one year, 90 percent of the budget deficit. In total, $345 million in bonuses have already been spent for this purpose.

Another factor that leaves Azerbaijan's budget vulnerable to downturns in the price of oil is the country's difficulty in collecting tax payments from state enterprises. The tangled web of arrears by state enterprises, most significantly, SOCAR, undermines the state's revenue collection. Because of investment incentives granted as part of the negotiated contracts, foreign oil companies are not the largest contributors of tax revenues. That role is held by SOCAR, which provides about one-third of the government's revenues, but is also the largest debtor. SOCAR's debt is a result of its having to provide large subsidies, such as supplying fuel to nonpaying state-owned enterprises, paying Iran for energy provided to southern Azerbaijan, and paying for refugee needs. For example, SOCAR purchases gas from Russia, which it resells

to households at a significant loss. Even at that discounted price, most households cannot afford to pay. The IMF estimates that underpricing and nonpayment for supplies of energy by SOCAR represented about 27 percent of GDP in 2000.[43]

As of October 2001, SOCAR was responsible for 47 percent of all arrears to the budget, an amount equal to about 5.1 percent of 2001 GDP.[44] Starting in 1996, the government has issued a series of laws to mitigate the arrears problem. If implemented, a decree on privatizing enterprises in the fuel and energy sector, which would put about 100 enterprises up for sale, could improve service and payment collection by these companies. Although the situation has been improving, state-owned enterprises still accounted for 84 percent of all tax arrears in 2001.[45]

One important change that will allow SOCAR to be more profit-oriented is the creation of the Ministry of Fuel and Energy in April 2001. The new ministry is responsible for developing a fuel and energy development strategy, for entering into contracts with foreign producers on behalf of the government (and taking over SOCAR's role under existing PSAs), as well as developing business in the hydrocarbon sector. Another change that will improve SOCAR's cash flow is the February 2003 decree of President Aliyev allowing SOCAR to retain its profits rather than channeling them to the State Oil Fund.[46] With the creation of the ministry and the change in Oil Fund rules, SOCAR should be better able to focus on pursuing commercial ends: producing, refining, and marketing oil and gas.

Oil and Gas Revenue Potential

Azerbaijan has signed over 21 PSAs for development of various onshore and offshore oil fields (see Appendix 2), but only the contract for the development of the ACG fields, run by the AIOC, has resulted in significant oil findings.[47] New exploration since Azerbaijan's independence has been disappointing, with only one significant find—the Shah-Deniz gas field—in the Azeri portion of the Caspian Sea. The AIOC agreement is a 30-year, $10 billion contract with 10 investors. BP, the project operator, estimates that the field contains at least 5.2 billion barrels of recoverable oil.[48] Oil production began in 1997, and this contract is the only offshore one currently in the production stage. In early 2003, AIOC was producing 145,000 barrels per day (bpd) and is expected to reach 400,000 bpd by 2004 when phase one of the contract has been achieved. With the implementation of phases two and three, production is expected to peak at 1 million bpd by 2009.

Natural gas production in Azerbaijan is comparatively limited and falls short of meeting domestic needs, with the gap between domestic supply covered by imports from Russia. Azerbaijan's largest field, the Shah-Deniz, considered its largest natural gas discovery in over 20 years, is estimated to contain between 25 and 39 trillion cubic feet of gas.[49] Although the field is large, Azerbaijan's total gas reserves are still small, at 0.5 percent of world total. Production at Shah-Deniz, which is expected to begin in early 2006, depends on construction of

the Baku-Erzurum pipeline to deliver the gas and also hinges on whether Turkey, which is already awash with imported gas, will be able to absorb the additional volume.[50] Development of the first stage of the Shah-Deniz field was sanctioned in February 2003. Other smaller gas fields include Bakhar, Nakhchivan Bula-Deniz, and Gunashli.

Production of gas has declined primarily because SOCAR has had to divert almost all profits to social expenditures and has been unable to explore new fields. Appendix 3 summarizes Azerbaijan's oil and gas production from 1990 to the present. Appendix 3 demonstrates SOCAR's declining production, with total production in Azerbaijan resuscitated by AIOC in 1998.

Given identified reserves and established production schedules, Azerbaijan's currently known oil reserves are expected to last for about 30 years. Production is expected to peak around 2010. After 2012, unless new reserves are discovered, a rapid decline will drop production to a quarter of the peak level by 2024.[51]

Profit oil

Like many PSAs, Azerbaijan's operate on a profit oil basis, that is, sharing the volumes of oil produced between the contractor and the host government. This means that contractors are permitted to recover investment costs (operating and capital costs) before full profit-sharing begins. For Azerbaijan's biggest block of fields, the ACG, 50 percent of the profits are used by the consortium partners for cost recovery up until the time the oil companies have completely recovered their investments plus interest. Capital recovery for the consortium partners is projected to rise from $569 million in 2001 to over $3 billion in 2010.[52] If the price of oil remains high, the capital recovery may be completed sooner.

Once capital recovery is complete, 50 percent of the profits will go to SOCAR, as the representative of the government. The other 50 percent is available for profit sharing between the government and the consortium partners. This 50 percent is shared between the consortium and the government of Azerbaijan based on an index that takes transport costs and rate of return into account. Under this index, the government's share increases as the rate of return to the investor increases.

Table 3 shows the production-sharing scheme for the ACG contract:[53]

TABLE 3. ACG Early Oil Sharing Agreement

	Share of Early Oil (Percent of Total)	
Rate of Return	SOCAR	Contractor
< 16.75	30	70
Between 16.75 & 22.75	55	45
> 22.75	80	20

Source: Agreement on the Joint Development and Production Sharing for the Azeri and Chirag Fields and the Deep Water Portion of the Gunashli Field in the Azerbaijan Sector of the Caspian Sea, 1994.

Thus, for example, until capital costs are recovered and assuming that the rate of return is less than 16.75 percent, the government receives 30 percent of 50 percent of the profits, or about $15 for every $100 dollars of profit. This is the current rate of profitability for the project.[54] Assuming the same rate of return, once capital recovery is complete, the government will receive 50 percent of the profits plus 30 percent of the other half of the profits, or $65 for every $100 of profit. The government will receive additional revenues from SOCAR, which owns a 10 percent share in the ACG block of fields, after SOCAR has repaid the consortium partners for helping finance SOCAR's share in the investment.

For the other Azerbaijani offshore PSAs, production sharing is determined by first calculating a profit factor, R, and then sharing profits based on the profitability of the field.[55] In the lowest profitability bracket, Azerbaijan receives 50 percent of the profit, and in the highest, 90 percent.

It is important to take cost recovery into account when considering Azerbaijan's GDP growth and assessing the revenues that will be available to the government. According to a World Bank macroeconomic projection for Azerbaijan, oil sector capital repatriation from 2000–2010 will exceed $15 billion, even though these amounts are included in GDP projections for the country. A more accurate prediction of growth is the adjusted gross national income (AGNI) projection, which does not include oil sector and other net factor payments in GDP calculation.[56] Under this measure, the country's AGNI amounts to 68 percent of its GDP in 2010, when capital recovery for the ACG is slated to end. Hence, although GDP is expected to increase at an annual rate of 13 percent between 2001–2010, the resources available to Azerbaijan will increase at a lower annual rate of 5 percent.

Bonuses

As of early 2002, the government of Azerbaijan had received $630 million in bonuses.[57] These bonuses have played an important role in bringing the government budget deficit under control.

All Azerbaijan's offshore PSAs stipulate payment of bonuses at various stages. Typically, the first bonus payment is made within 30 days of the contract going into effect. Subsequent bonuses depend on the achievement of various targets. In 11 of the 15 approved offshore contracts, there are small additional bonuses depending on the volume of production. These bonuses range from $1 million to $5 million for each 100 million barrels of oil produced. A final bonus is typically included as well. In eight contracts, the payment of the final bonus is made within 30 days after either 1) average daily production of 12,000 barrels of oil for 60 days has been reached; or 2) two wells have stable industrial production for 60 days. Four other contracts require payment of the final bonus (in amounts ranging from $25–40 million) within 30 days after average daily production of 12,000 barrels for 60 days has been achieved.

According to the ACG PSA, the maximum bonus that can be paid by the ACG contractors is set at $300 million and is paid in three stages.[58] The first installment, constituting

50 percent of this amount, was paid 30 days after the contract became effective. The second payment of 25 percent was paid within 30 days after average daily production of 40,000 barrels of oil was maintained for 60 days. The last 25 percent of the bonus will be paid within 30 days after oil is pumped through the main export pipeline for 60 days.

Taxation

Taxation provisions vary from contract to contract and are typically the most complex part of the PSA's revenue provisions. However, certain rules are common across the Azerbaijani PSAs. Some of these are:

- Recognition of double taxation treaties.
- Profit tax is set at the rate that existed in Azerbaijan at the time of contract signing. (The first two PSAs are exceptions to this rule. They set the profit tax rate at 25 percent, which is less than the profit tax rate that existed at the time of signing).
- In case of contradiction between contract terms and legal acts in force in the country, the contract terms prevail.
- SOCAR is responsible for paying tax on behalf of all consortium members.
- The contractor has the right to ask SOCAR for a document confirming its payment of the profit tax. The contractor also has the right to retain an auditor to inspect the fulfillment of these obligations by SOCAR.
- The Tax Inspectorate deals only with SOCAR. In case of violation of its tax commitments by SOCAR, the contractor has the right to start paying tax itself.
- The contractor bears responsibility for paying taxes from nonhydrocarbon activities on its own.
- The VAT is paid at a zero rate.
- Incomes of Azeri national employees and resident foreign employees are taxable.
- The contractor, the operating company, and foreign subcontractors make payments to social security, employment, and pension funds.

Assignment fees

Another source of government revenues from PSAs comes when contractors sell all or part of their shares in a project. The government earns income by taxing the profit obtained from the sale of contract shares or by selling its own SOCAR-held shares. In 1995, unable to meet

its commitments to finance its participation in the ACG contract, the government sold 10 percent of its share to Exxon and TPAO for $173 million.[59]

Acreage fees

Acreage fees constitute a smaller portion of government earnings. All PSAs except for the ACG provide for acreage fees for exploration of oil and gas deposits. These range from $1,200 to $2,000 per square kilometer. The largest exploratory block, the Alov-Araz-Sarq, at 1,400 square kilometers yielded acreage fees of $2.8 million in 2001.[60]

Right to purchase petroleum

Although not a source of revenue, an additional benefit for the government is the right to purchase on favorable terms up to 10 percent of petroleum produced by the contractor at defined points of delivery and sale. The PSAs define the terms of purchase, pricing, and tax exemption. This provision helps the government of Azerbaijan with its enduring problem of domestic energy shortages, and also sustains domestic refineries, which have been operating at half of capacity for the last 10 years.

Lease payments

Lease payments are made by foreign contractors for the right to use property owned by the government of Azerbaijan, such as pipelines, tankers, drilling rigs, and offices. The fact that many of these facilities are owned by SOCAR may create a conflict of interest. Whereas SOCAR benefits from high lease payments, the additional costs reduce profit oil available to the state. In 2001, SOCAR earned $479,000 in lease payments.

Azerbaijan's earnings from oil and gas development

The ACG represents the largest potential for Azerbaijan's petroleum revenue. By comparing AIOC data on production forecasts with the profit petroleum terms of the ACG PSA, it is possible to determine the government of Azerbaijan's likely earnings from the sale of its share of oil from this block of fields. Because of the unavailability of certain data, these figures should only be seen as estimates. Appendix 4 explains the methodology used for making these calculations, and provides estimated government earnings under two oil price scenarios. At a high price of $25 per barrel from 2003 through 2010, the government of Azerbaijan's share of profit oil from the ACG will amount to about $16 billion. At a lower oil price of $18 per barrel, Azerbaijan's total earnings come to $7.2 billion (see Table 6).[61] However, if the prices at the time of publication of more than $30 per barrel persist, both of these scenarios will be too low. Moreover, these figures do not include the amount that SOCAR will earn as a contractor with 10 percent of the share in ACG.

In addition to its earnings from profit oil on the ACG, the government of Azerbaijan

is to receive the remaining 25 percent bonus payment amounting to $67.5 million, due in late 2004 or early 2005. Once production begins on the Shah-Deniz in 2006, a bonus of $50 million will also be due.

The government also earns revenue from taxes paid by the AIOC during development of ACG. The largest of these is the profit tax, which is 25 percent. Prediction of these earnings is complicated by the absence of information about the taxable profit base, which is determined after expenditures associated with oil sales (transport and others) have been deducted. If one were to assume that such expenses comprise 10 percent of the taxable base, then at oil prices of $25 per barrel, profit tax would bring in $2.04 billion between 2003 and 2010. At $18 per barrel, profit tax would stand at $1.46 billion. Appendix 4 breaks this down on an annual basis and explains the methodology for calculation. Additional tax revenues will derive from income taxes levied on the consortium's local resident employees.

Earnings from acreage fees for the other fields under exploration can also be calculated, based on the size of the plots and the fees stipulated in the associated PSAs. By the time exploration should be complete in 2007, these fees should amount to $16 million, unless certain PSAs are terminated prematurely for failure to find oil and gas reserves sufficiently large to develop.

Table 4 summarizes the anticipated payments, including payments to SOFAZ and SOFAR, from the ACG PSA based on the analysis of this report. Due to incomplete access to information about ACG production, certain parameters had to be estimated, and therefore cannot be relied on for accuracy. According to a regional review produced by project partners of the ACG, cumulative Azerbaijan government revenues by 2024 from that field alone will range from $21 billion to $58 billion, depending on oil price assumptions.[62]

TABLE 4. Forecast of Azerbaijan's earnings from ACG production-sharing agreement, 2003–2010, million USD

	Crude Oil Prices, $/barrel	
	25	18
Flow to SOFAZ from ACG PSA	14,314.3	6,537.3
Flow to SOCAR from ACG PSA	906.5	647.2
Bonuses from ACG PSA	67.5	67.5
Profit tax from ACG PSA	2,039.6	1,456.2
Total:	17,327.9	8,708.2

Source: Analysis from Appendix 4, based on data provided by AIOC

Between 2003–2010, Azerbaijan will also earn revenues from the development of the large offshore gas field, the Shah-Deniz. Estimating earnings from the Shah-Deniz gas field is more difficult. Originally, construction was to begin in 2002, but it only received a green

light in 2003, with completion now estimated for 2006. According to the AIOC project partners, development of stage 1 of the Shah-Deniz gas field and earnings from transporting the gas through the BTE pipeline will bring the government of Azerbaijan $3.5 billion by 2031.[63]

An additional source of revenue is from sale of oil produced by SOCAR in Soviet-era fields and shipped via pipeline to the Russian port of Novorossiysk on the Black Sea. In 2001, SOCAR shipped 2.5 million tons of oil to Novorossiysk. The oil is sold by tender to upstream oil companies. In 2001, sale of this oil brought in $366 million for SOCAR.[64] Additionally, SOCAR transports petroleum products by rail to the Georgian port of Batumi for export to other countries. In 2001, these products amounted to 2.2 million tons. The government also receives tariffs collected by the state railway company, by the port of Baku, and by SOCAR for use of its oil terminals by foreign companies transporting Kazakh and Turkmen oil by rail.

Oversight of PSAs

Azerbaijan's PSAs include provisions for establishment of a steering committee that monitors oil production and cost calculations. The steering committee consists of an equal number of SOCAR and contractor representatives. The committee's responsibilities include:

- Oversight of oil and gas operations,
- Examination, revision, and approval of annual work programs and budgets,
- Supervision of cost accounting to determine compliance with contract terms,
- Review and approval of abandonment plan and cost of abandonment operations.

While the purview of this supervisory council is broad, the ACG PSA does not specify what power the steering committee has to obtain access to the information it needs, nor what becomes of the committee's recommendations. Since the reports of the steering committee are confidential, this limits the opportunity for independent oversight to determine whether the government is receiving its fair share of earnings.

State Oil Fund of Azerbaijan (SOFAZ)

The State Oil Fund of Azerbaijan (SOFAZ) was established in December 1999 by presidential decree. Even before the decree, a special account had been opened at the National Bank to sterilize payments received as oil bonuses. By keeping the received foreign exchange out of the monetary system, sterilization helps stabilize the country's exchange rate. The IMF made receipt of a loan through its Enhanced Structural Adjustment Facility (ESAF) conditional upon

the creation of a more formal fund, with explicit operating, investment, and expenditure rules. The Azerbaijani government worked closely with the IMF and the World Bank in designing its oil fund.[65] Government reforms supported by the IMF under its three-year Poverty Reduction and Growth Facility (PRGF), approved in July 2001, included Oil Fund budget and asset management rules.

The Oil Fund's creation was also motivated by the understanding on the part of Azeri authorities of the problems encountered by other developing countries in managing their petroleum wealth. SOFAZ's annual report explains, "The experience of oil rich countries suggests that oil revenues easily gained are not always rationally used. Indeed, excessively high misuse and internal dealing can be observed in most cases. . . . Preventing such misuse and strengthening financial discipline . . . were also major reasons for establishment of the State Oil Fund."[66]

SOFAZ has already had positive effects. Not only has it helped mitigate real exchange rate appreciation, but it has also improved Azerbaijan's image among foreign investors. The international rating agency, Fitch, raised Azerbaijan's rating to BB- in 2002, and specifically attributed this upgrade to the creation of the Oil Fund.

The Oil Fund is unusual in that it has neither a clear stabilization or savings function but its rules are ambiguous enough to allow it to be used for either. A stabilization function would establish rules by which the Oil Fund could help cushion the budget against oil price shocks. A savings fund puts aside a portion of resource revenues into a trust so that the interest on the trust can continue to generate income even when oil or mineral reserves have been depleted.

SOFAZ's founding documents suggest that it will be used for human development and promotion of the non-oil sector. However, criteria on how expenditures are to be chosen have not been adopted, leading to expenditures as diverse as assistance to refugees and funding the SOCAR participation in construction of the BTC pipeline. Like the Kazakh National Fund, SOFAZ is subordinated directly to the president and lacks sufficient mechanisms for oversight.

Revenue rules

According to the regulations establishing SOFAZ, its mission is to sterilize foreign currency earned from the country's oil and gas contracts, and to effectively manage these assets "in the interest of citizens of the Republic of Azerbaijan and their future generations."[67]

One thing that distinguishes SOFAZ from other oil funds is that revenues do not depend on the price of oil or on the state budget. Many natural resource funds, such as Kazakhstan's, Chile's, and Venezuela's channel excess export revenues above a certain benchmark to their fund. In this regard, SOFAZ most resembles the Alaska Permanent Fund, which receives 50 percent of oil proceeds regardless of what is happening with the budget, or the Kuwaiti Fund, which receives 10 percent of all government revenues.

The revenues that flow to the Oil Fund include:[68]

- Revenues from sale of the state's share of oil and gas from PSAs, except for the revenues earned by SOCAR as a contractor to the PSAs;
- Bonus payments;
- Dividends and profit-sharing accorded to the government as stipulated in the PSAs;
- Acreage fees for land use;
- Government earnings from the transport of oil and gas through the BTC and BTE pipelines;
- Revenues received from the sale of project assets by foreign companies to the government of Azerbaijan;
- Revenues from other sources permitted by legislation;
- Revenues from grants;
- Earnings generated by SOFAZ's investment activity, including interest payments, dividends, and income from the rebalancing of foreign-exchange portfolios.

While taxes paid by SOCAR and foreign oil companies flow to the budget, the Oil Fund receives all the proceeds from the state's share of oil exports through the PSAs, as well as all other payments stemming from these contracts. In its revenue rules, Azerbaijan has been aggressive in channeling a large portion of its oil revenues away from the budget. The risk is that with no stabilization mechanism in place, SOFAZ cannot transfer revenues back to the budget in times of need. In the case of an oil price shock, the government may end up taking advantage of the ambiguity surrounding SOFAZ's expenditure rules (see below) to buy government securities and thereby cover its budget deficit. Finance Minister Alekbarov has already proposed such an idea. The risk is that the Ministry of Finance could, for example, lower the yield on its bonds to reduce its cost of servicing debt, knowing that in a crisis SOFAZ would step in to buy bonds. One can easily imagine that under such a scenario, SOFAZ would become the biggest creditor to the government and its resources would dissipate in the general flow of government expenditures.

After its 2001 audit of SOFAZ, Ernst & Young found a number of ambiguities in the revenue rules. Ernst & Young could not conclude whether SOFAZ should have received certain payments that it did not. These included termination and abandonment payments, revenues earned from the sale of oil from onshore fields, cash proceeds from joint activities with foreign companies, certain rental fees for the use of state property by foreign companies, and payments from pipeline transit tariffs in 2000. The auditor could not determine whether the

president's decrees of December 29, 1999, and of December 29, 2000, which include among SOFAZ's revenue streams "other revenues obtained as a result of joint activities with foreign companies," applied to these payments.

SOFAZ's annual report provides a detailed breakdown of its sources of revenue in 2000 and 2001.[69] As Table 5 shows, three-quarters of SOFAZ's revenues in 2001 came from the state's share of profit oil sales. While bonuses made up a large portion of revenues in 2000, the next sizeable bonuses will not be paid until 2004 or 2005, unless new PSAs are signed in the interim. No revenues from gas sales appear in the Fund. These will begin after 2006 when the Shah-Deniz field is expected to begin production. By September 2002, an additional $174 million had accumulated from bonus payments, giving SOFAZ a balance of $627 million. As of January 2003, the Fund's assets stood at $692 million.

TABLE 5. SOFAZ Revenues, 2000–2001, $ million

Sources of Income	2000	2001
Sale of profit oil	162.3	177.8
Bonuses	100	6.4
Per-acre payments	—	10.7
Lease payments	0.36	0.48
Sale of assets	—	—
Placement of funds	—	14
Transit fees	8.3	11.8
Total:	**$271.9**	**$221.3**

Source: State Oil Fund of the Republic of Azerbaijan, 2001 Annual Report

Forecasted earnings of SOFAZ

With the analysis of production forecasts and the terms of Azerbaijan's production-sharing agreements (see Appendix 4), it is possible to forecast revenues to the Oil Fund. Table 6 provides forecasts of earnings to SOFAZ only from implementation of the ACG PSA between 2003–2010 under two oil price scenarios and net of estimated operating expenses. At $25 per barrel, from 2003 to 2010 SOFAZ can accumulate over $14.3 billion. At $18 per barrel, earnings will be over $6.5 billion. Revenues from ACG are expected to peak in 2011 and decline to less than half of that peak by 2017. Since neither ACG project partners nor SOFAZ have provided estimates of flows to SOFAZ in coming years, these forecasts cannot be confirmed.

TABLE 6. Forecasted Flows (in $ millions) to SOFAZ from Development of ACG, 2003–2010

	Crude Prices, $/barrel	2003	2004	2005	2006	2007	2008	2009	2010	Total 2003–2010
Profit Oil of Azerbaijan	25	165.0	222.3	309.9	484.8	1,419.8	2,227.9	2,747.3	8,327.8	15,904.8
flow to SOFAZ		148.5	200.1	278.9	436.3	1,277.8	2,005.1	2,472.6	7,495.0	14,314.3
Profit Oil of Azerbaijan	18	115.2	155.2	216.0	337.3	987.7	1,549.8	1,911.1	1,991.4	7,263.7
flow to SOFAZ		103.7	139.7	194.4	303.6	888.9	1,394.8	1,720.0	1,792.3	6,537.3

**Flows to SOFAZ are calculated net of transport, insurance, and other expenses that are estimated at 10 percent of profit oil. The large jump in expected revenues to SOFAZ between 2009 and 2010 is due to the expected completion of cost recovery by ACG partners and the subsequent receipt of that share of profits by the government.*

Source: Analysis of Appendix 4, based on data provided by AIOC

Bonuses also flow to SOFAZ. Remaining bonuses are a $67.5 million final bonus for development of ACG in late 2004/early 2005 and a $50 million bonus when Shah-Deniz begins production in 2006. If additional PSAs are signed, or if large, new reserves are discovered in the contract areas, bonus payments will be larger.

SOFAZ is also due to receive acreage fees that should come to about:

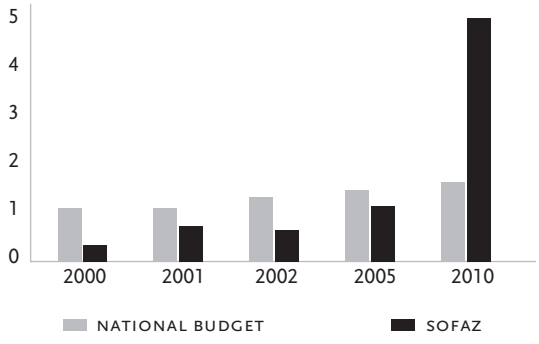
- $7.2 million between 2002–2004
- $5.6 million in 2005
- $2.8 million between 2006–2007

Acreage fees can be larger if the duration of current agreements is extended or if new agreements are signed.

SOFAZ also receives transit fees from the state's share in the Baku-Supsa pipeline and, eventually, from the BTC pipeline. Currently, SOFAZ receives $0.26 per barrel of oil shipped through Baku-Supsa. In the first five months of 2002, this amounted to $321,500 in earnings for SOFAZ, and if the AIOC met its production targets for that year, the budgeted amount of $500,000 from this source would be exceeded. Revenues from the lease of state property, which came to less than $500,000 in 2001, are likely to remain small and will not contribute significantly to SOFAZ's revenues. Finally, SOFAZ also receives earnings from its investments, which in 2001 came to $14.25 million. These are described in the section on investment.

Figure 3 demonstrates the relationship forecasted between the size of the Oil Fund and the government's budget. By 2005, the Oil Fund will be almost the size of the government's budget, and by 2010, as ACG approaches its peak production, the Fund will be more than three times as large as the budget.

FIGURE 3. National Budget and SOFAZ Compared, 2000–2010



Source: Know-How Fund, Ministry of Finance, Azerbaijan Republic. Analysis of Trend Information Agency.

Expenditure rules

Rules for spending SOFAZ's resources are lax. Expenditure guidelines are extremely general and entirely at the discretion of the president. According to the regulations, the Fund can be used for the "socio-economic progress of the country," for "solving the most important national problems," and for "construction and reconstruction of strategically significant infrastructure facilities."[70] The Rules for Preparation and Execution of the Annual Budget for SOFAZ state that expenditure plans should take into account the "necessity to promote the development and increase the competitiveness of the non-oil sector of the national economy."[71]

Given current expenditures, it appears that unless a long-term expenditure strategy is developed, SOFAZ will serve as a secondary budget—a pot of money to be dipped into when other means cannot be found. SOFAZ is also vulnerable to raiding by presidents seeking to boost their popularity prior to an election. Because SOFAZ is primarily a savings fund, not a stabilization fund, it is critical for it to have an expenditure plan. Already, expenditures have been directed toward projects ranging from building homes for internally displaced persons to helping pay the state's share of pipeline costs. Without an expenditure strategy, spending will continue to be ad hoc and the subject of dispute.

Three presidential decrees have authorized SOFAZ spending on the needs of internally displaced persons after the Red Cross and the World Food Program reduced funding for this purpose.[72] A controversial presidential decree in 2002 allocated SOFAZ expenditures in support of a commercial project in the oil sector, the BTC pipeline. Faced with liquidity problems, SOCAR lacked the means to pay for its share of the pipeline, and was reluctant to sell shares to outside partners. The president's decree of July 30, 2002 authorizes the Oil Fund to pay $118 million to cover SOCAR's obligations.

Critics of the latter decree objected to the large amount of resources being channeled back into the oil sector instead of being used to promote the non-oil sector. The absence of

public discussion or parliamentary involvement in making this decision also raised concerns. Moreover, the transfer may violate SOFAZ prohibitions against lending to state institutions or bearing any commitments on behalf of any other entity.[73] Supporters of the decree pointed to the lack of alternative sources of financing and the project's strategic significance.

The IMF at first objected to using the Oil Fund to finance part of SOFAZ's share in the BTC pipeline because it was inconsistent with the Fund's budget and asset management rules. "The resources of the State Oil Fund of the Azerbaijani Republic cannot be used to pay for SOCAR's share in the project to construct the Baku-Tbilisi-Ceyhan oil pipeline, "announced John Odling-Smee of the IMF.[74] In its Article IV Consultation, the IMF elaborated that the "diversion of oil fund assets to finance oil sector investments would undermine its stated purpose of enhancing the development of the non-energy sector of the economy."[75]

However, recognizing the importance of the project for the future development of the country, the IMF has since agreed that the use of some government money, including the $118 million in pre-2000 oil bonus money on deposit with the National Bank of Azerbaijan, to finance SOCAR's equity stake in BTC would be appropriate, even though it contradicts SOFAZ's asset management rules. The government has agreed to transfer the ownership stake in BTC from the Oil Fund to the Ministry of Economic Development (the owner of government equity stakes in other companies) so that the Oil Fund expenditures remain consistent with the asset management rules.

Management

SOFAZ is an independent legal entity and an off-budget institution with its own administrative structure. Foreign oil companies deposit payments to SOFAZ into the Oil Fund's special account at the National Bank.[76] The executive director, who is appointed and can be dismissed by the president, operates the Fund.

The director chooses an investment strategy in line with the rules "On Storage, Placement, and Management of the State Oil Fund's Foreign Currency Resources" (approved by decree no. 511). The strategy must outline portfolio structure and volumes, asset liquidity, acceptable credit risks, and portfolio management efficiency requirements. Annually, this investment strategy and comments to it by the supervisory council must be submitted to the president for approval. Management of a portion of the Fund's assets may be contracted out to external portfolio managers.[77] However, the number of managers that can be hired and other contract conditions have not been elaborated.

Within SOFAZ, an investment board reviews developments in financial markets and provides guidance on investment opportunities. The board consists of SOFAZ's executive director and senior officials of relevant SOFAZ departments. Local and foreign consultants may be invited to attend board meetings.

In addition to managing the Fund's investments, the director is responsible for preparing SOFAZ's budget in collaboration with the Ministry of Finance. They are expected to pre-

dict the Fund's earnings based on a medium-term outlook, and to propose expenditures in line with the Fund's mandate to promote the nation's socioeconomic well-being. The budget, along with comments provided by the supervisory council, must be submitted to the president for approval by September 20 of the preceding year.

Understaffing is a big challenge for SOFAZ's management. SOFAZ has only six full-time staff including the executive director. By contrast, Alaska's Permanent Fund employs 32, and Alberta's Heritage Fund has 18 staff. Moreover, Alaska and Alberta—unlike SOFAZ—hire external portfolio managers to help with investments. An additional burden for the staff of SOFAZ is their responsibility for planning how the Fund's assets are to be spent. Other natural resource funds, such as Alaska, Nunavut, and Alberta, divide investment and expenditure divisions among different bodies.

Investments

To date, a detailed investment strategy has not been developed for SOFAZ. The "Rules for Keeping, Depositing, and Managing SOFAZ's Hard Currency Resources" outline qualifications for financial institutions where the Fund's resources may be kept, but they do not specify an investment strategy. Pursuant to these rules, Samir Sharifov, SOFAZ's executive director, undertook preparation of an investment manual, *Instructions for In-house Management of SOFAZ's Hard Currency Assets*.

According to the rules, the Fund's foreign exchange assets can be denominated in four currencies: U.S. dollars, Euros, British pounds, and Japanese yen. The assets can be held in central and commercial banks in the form of bonds issued by governments or state agencies with high credit ratings, securities issued by international financial institutions such as the World Bank, and promissory notes of highly rated commercial banks. There are no territorial restrictions on the Fund's investments, such as there are in Norway. For placing the Fund's resources in banks, only institutions with a long-term credit rating no lower than AA (S&P, Fitch) or AA3 (Moody's) may qualify. Since Azerbaijan's credit rating is BB- (Fitch), SOFAZ's reserves may not be kept in Azerbaijan.

Although not yet exercised, the rules permit giving a portion of the investment portfolio to foreign managers and also allow them to invest in corporate securities. However, guidelines specifying the portion of the portfolio that can be outsourced have not been issued and this option has not yet been exercised. Beyond this exception, the Oil Fund may not be invested in corporate securities, corporate equity, corporate debt, precious metals, real estate, or any currency except the four mentioned above.

During 2000 and 2001, Sharifov and the SOFAZ staff chose a conservative investment strategy, placing the holdings entirely in liquid foreign bank accounts. The fact that SOFAZ was understaffed may have played a part in the choice of such a conservative approach, as did the downturn in financial markets. As a result, earnings were low. Returns for 2001 were

3.9 percent, or $14 million. By contrast, Kazakhstan's National Fund, which invested in equities and securities, earned a 5.5 percent rate of return, even in the turbulent market of 2001. If SOFAZ is to serve as a source of renewable wealth, it will have to adopt a more balanced investment strategy, and should take advantage of professional external portfolio managers for this purpose.

The government is developing a more diversified investment policy that, according to SOFAZ's annual report, was to be put into effect in 2002. In the last quarter of 2001, a decision was made to hire external managers but no announcements of open tenders have appeared on SOFAZ's website.

Accountability

Even more than in Kazakhstan, all lines of control over the Oil Fund lead back to the president (see Appendix 5). One of the first provisions in the Fund's regulations states, "The Fund shall be accountable and responsible to the President of the Republic of Azerbaijan." [78] There are no limitations to the president's discretion. There are no checks and balances to provide oversight. All strategic decisions are made by the president, including the decision to liquidate the Fund altogether.

In most oil funds, parliament plays some role in spending decisions. In Norway, for example, the parliament determines transfers to and from the oil fund by running surpluses or deficits in its non-oil budget. The parliament may also vote on additional expenditures, as it did recently in deciding to return a portion of interest earnings to the state budget. In Alaska, the legislature decides every year on what to do with the Fund's earnings. In Kazakhstan, expenditure decisions, although made by the president, have to be approved through the budgetary process. By contrast, parliament has no role whatsoever in Azerbaijan. This absence of a role for parliament does not fit with the Oil Fund's function of serving to protect "the interests of citizens of the Republic of Azerbaijan and their future generations."[79] Members of parliament are elected by Azerbaijan's citizens and, as such, should have a voice in decisions over how the country's wealth is being stored and spent.

In December 2002, in a surprise to many, the IMF suspended the final $17 million tranche of its Poverty Reduction and Growth Facility (PRGF) loan to Azerbaijan. In explaining its decisions, the IMF stated that the Oil Fund's "well-designed rules have been repeatedly ignored. A series of ad hoc decisions have been made regarding the use of Oil Fund assets. This practice has undermined the consistency and coherence of fiscal policy in Azerbaijan."[80] Among the IMF's concerns were the absence of a law on the Oil Fund, insufficient expenditure controls on the Oil Fund, the fact that flows to and from SOFAZ did not pass through a unified budget, and the absence of a long-term strategy for using the country's oil and gas earnings. The IMF also feared that the preferential enterprise tax zones established by the government would encourage tax evasion.

In the ensuing negotiations, the government of Azerbaijan rejected strengthening parliamentary oversight through the adoption of a law on SOFAZ. It did, however, agree to introduce changes to the budget law that would require expenditures from the Oil Fund to be reported in the budget. If the government carries through with these changes, they will be a modest step in improving expenditure control. The Ministry of Finance would still not be required to detail how SOFAZ expenditures will be used, nor will the change give parliament much added control because the legislature does not possess line item amendment power.

The supervisory council (see Appendix 5) resembles the one overseeing Kazakhstan's National Fund. Both are appointed by and subordinated to the president. Both serve in a consultative capacity and have no power to enforce decisions. Both are also almost entirely comprised of representatives of the executive branch. In Azerbaijan, the only members of the supervisory council not directly subordinated to the president are two parliamentary representatives and the president of the Academy of Sciences. The parliamentary members, however, are from the president's party and are unlikely to take an independent stand. Similarly, the Academy of Sciences is financed with government money, and the head of the Academy cannot be approved without the informal consent of the president.

The stated composition and powers of the supervisory council are extremely general. According to the regulations, it shall contain "representatives from relevant state bodies and public organizations, as well as other persons." However, the relevant state bodies are not spelled out, and the number of representatives from public organizations is not specified. Procedural rules were approved in July 2002, but have not been made public. It is therefore unclear what voting procedures and quorum requirements exist, and also what powers the council has. While the director of SOFAZ consults with and provides information to the supervisory council, he is ultimately accountable only to the president, to whom he reports directly and who approves the annual investment strategy for the Oil Fund.

The council is currently comprised of 10 members, who were approved by presidential decree no. 855 of December 27, 2001. No representatives of public organizations sit on the council. At the end of 2002, it was comprised of the following individuals:

- Prime Minister Artur Rasi-zadeh
- First Deputy Chairman of Parliament Arif Rahim-zadeh
- First Vice President of SOCAR, and son of President Aliyev, Ilham Aliyev
- State Advisor on Economic Policy Vahid Akhundov
- Minister of Finance Avaz Alekperov
- Minister of Economic Development Farhad Aliyev
- Chairman of the State Securities Committee Heydar Babayev

- Governor of the National Bank Elman Rustamov
- Member of Parliament Ali Abbasov
- President of the Academy of Sciences Makhmud Kerimov

The supervisory council is expected to provide feedback on the annual budget prepared by SOFAZ's executive director. To do this, the director must share with the council information about SOFAZ's asset utilization program, including its investment policy and an estimate of SOFAZ's operational expenditures. The council is expected to provide recommendations. However, its capacity for oversight and meaningful commentary was brought into question during its first meeting on July 16, 2002, when not a single question or comment was made in response to the presentations about SOFAZ's earnings and expenditures to date.

There is reason to believe that the supervisory council will play an even weaker role than envisioned by its rules. The regulations state that the council will meet not less than once a quarter, yet the council has met only twice since the establishment of the Oil Fund in 1999.

In addition to the supervisory council, outside auditors also provide oversight. In 2001, Ernst & Young was selected to audit SOFAZ and the results of the audit are included in the Fund's annual report. Additionally, the parliament's Chamber of Accounts is also entitled to audit SOFAZ at its discretion, but there are no provisions for the disclosure of the results of such an audit.

Transparency

Azerbaijan's disclosure policies regarding oil proceeds are fairly transparent. In contrast to Kazakhstan where no PSAs have been made public, in Azerbaijan, BP, operator of the ACG and Shah-Deniz projects, has made the projects' PSAs and environmental and social impact assessments available in English, Azeri, and Russian.

SOFAZ's website (www.oilfund.az), which contains its annual report, is also fairly comprehensive. The annual report specifically refers to transparency as a key objective. "One of the Oil Fund's basic operating principles is to ensure transparency in its activities, which are open to both official and public scrutiny."[81] Accordingly, the website includes the regulations governing the oil fund, the annual report, and announcements of tenders, such as the tender for legal services and for an external auditor, posted in February 2002.

The annual report is a substantial 60-page document. It describes the legal and administrative framework of SOFAZ, and provides the names of the supervisory council's members. The financial data is also thorough, and includes breakdowns of all proceeds from each revenue stream. For example, each bonus payment is detailed, each transfer from profit oil sales is described, each payment received from acreage fees is reported, and so on for each source of revenues to SOFAZ. The banks with which SOFAZ has opened settlement and depository accounts are named. The auditor's financial statements and their corresponding notes are

included in the annual report. The report also explains how the price of crude oil, changes in foreign interest rates, and the currency and stock markets affected returns. By contrast, Kazakhstan does not require publication of the annual report of its National Fund nor of the auditor's report, and the information that is provided is scant. Appendix 9 contains a table comparing the information provided on SOFAZ's website with that available on the websites of the Alaskan, Norwegian, and Kazakhstani oil funds.

Nonetheless, there is room for improvement in transparency. For example, the rules for preparing and executing the Fund's annual budget require that quarterly reports be published.[82] None are available on SOFAZ's website even after more than two years of operation.

Public acceptance of SOFAZ

The creation of SOFAZ was greeted with lively discussion in the mass media. Every subsequent decree on the Oil Fund instigated a spurt of discussion in the press. Prior to the president's decree creating SOFAZ, discussion centered on whether an oil fund was needed and, if so, whether such a fund should be subordinated to the president or parliament. Not surprisingly, the official and pro-presidential media favored subordinating the Fund to the president.

Opinion was more divided in the independent and opposition press. Among these sources, not all favored creation of an oil fund. Those that opposed its creation worried about the potential for corruption resulting from the existence of an off-budget fund. Among those that favored an oil fund, many advocated subordinating it to parliament. Arguments for parliamentary control included:

- Reference to examples such as Norway, where the parliament exercises control;
- Claims that because the Oil Fund will eventually dwarf the parliament-approved government budget, it should also come under congressional oversight;
- The argument that parliamentary control will make the Oil Fund more transparent and more difficult to raid.

Others argued that because of the weakness of Azerbaijan's parliament, legislative oversight would still not weaken the president's discretion over the Oil Fund.

A second wave of press attention to the Oil Fund followed the president's decree directing spending to build homes for refugees. While many welcomed the appropriation, some questioned whether spending should be directed at building homes rather than creating employment opportunities. Others asked why the Oil Fund rather than the state budget was being used for this purpose. A third spurt of media attention followed the announcement that SOFAZ would help finance the state's share of BTC expenses. The decision launched discussion of what SOFAZ's spending priorities should be. Among the arguments was that Oil Fund resources should be used on those sectors that have trouble attracting financing, such as agriculture.

In a letter to the World Bank and the EBRD, a coalition of international NGOs urged these institutions to condition their lending for the BTC pipeline on the requirement that expenditures from the Oil Fund "be demonstrably geared to relieving poverty and improving social, environmental, and public health conditions."[83] This opposition prompted a large number of Azerbaijani NGOs to form a coalition in support of the BTC pipeline and for the use of SOFAZ financing for the pipeline.

Recommendations

Azerbaijan's authorities have done an impressive job of restoring growth and macroeconomic stability. They have also avoided some of the common tendencies of oil-producing states. They have not launched an oil-financed spending spree and they have not accumulated large amounts of debt. The challenge in the coming years will be making the best use of Azerbaijan's relatively short oil and gas life span to reduce poverty and create economic opportunity, while mitigating the country's extreme vulnerability to changes in market prices for oil and gas. The key question for Azerbaijan is whether the government will commit to needed structural reforms—in the tax administration, the customs service, the treasury, privatization, and improvement of the investment climate—once the incentive to reform is diluted by the onset of petroleum revenues. Helping the government stay committed to these important changes will require urgent adoption of reforms that allow civil society and its chosen representatives to become more involved in decision making about the country's economic development.

Promoting non-oil economic growth

In order for Azerbaijan to pursue economic development and alleviate widespread poverty, it must revive its moribund non-oil industrial sector. Currently, oil exploration, development, and exports drive foreign investment and GDP growth. Promoting non-oil economic growth will require the following priorities:

- ***Improve the business climate.***
  While Azerbaijan has undertaken many reforms to promote growth in the non-oil sector, impediments remain. A priority should be improving access to credit for small and medium-sized enterprises. Although inflation has been contained to about 2 percent a year, interest rates remain close to 20 percent. Administrative impediments to doing business, particularly in the area of customs and taxes, push entrepreneurs to operate within the shadow economy. Structural reforms should also be accelerated—the kind of large-scale privatization program that was undertaken in Kazakhstan has not been pushed through in Azerbaijan. Greater public discussion of the findings and recommendations offered in the Foreign Investment Advisory Service's report on how to

improve the non-oil investment climate in Azerbaijan could help in identifying local solutions and support for change.[84]

- ***Determine how oil revenues will be used to fight poverty.***
  The Interim Poverty Reduction Strategy Paper prepared by the government of Azerbaijan and endorsed by the IMF in 2002 defines reduction of poverty and unemployment as the main challenge for Azerbaijan. It outlines a program for creating an improved investment environment outside the oil sector, improving public sector and utility service provision, and developing a social safety net. A final State Program on Poverty Reduction and Economic Development (SPPRED) is available on the website of the Ministry of Economic Development (http://www.economy.gov.az/PRSP/Reports.htm). The program is an insightful analysis of shortfalls in current poverty reduction spending and an ambitious plan for change over the next few years.

  To harness Oil Fund assets to the goals of the SPPRED, Azerbaijan should adopt a medium-term expenditure framework for SOFAZ that explains how Oil Fund assets will be used to advance Azerbaijan's poverty reduction plans. Such a spending framework can help minimize unplanned SOFAZ expenditures and ensure that the Oil Fund is used in support of long-term policy objectives.

Improving SOFAZ

- ***Use Fund to demonstrate good stewardship.***
  Perhaps the most important function an oil fund can serve is to improve accountability in the way petroleum revenues are managed. Research into the effectiveness of oil funds in stabilizing fiscal policy and mitigating Dutch Disease finds almost no relationship. An IMF study concludes that, in terms of fiscal management, anything that can be accomplished with an oil fund can also be accomplished without an oil fund.[85] An oil fund, however, can signal the government's commitment to good stewardship of its hydrocarbon resources. The fund does this by making it harder for the government to make unplanned expenditures and paving the way for linking oil revenues to longer-term development objectives.

  If SOFAZ is to provide this function, accountability surrounding the Oil Fund must be improved. Unless the parliament, the judiciary, or civil society can serve as counterweights, the president of Azerbaijan can breach the rules of the Oil Fund or liquidate it altogether at any moment. While the current leadership may demonstrate a commitment to good spending, what guarantee is there that future presidents will do the same? The current rules, with their absence of checks and balances, leave too much to chance.

- ***Clarify the SOFAZ mission and objectives.***
  The decree establishing the Oil Fund explains that it can be used for the "socio-economic progress of the country" and for "solving the most important national problems." A more specific statement of the Oil Fund's mission would make it possible to determine what expenditures and investments fall within the Fund's mandate and which fall outside it.

- ***Adopt medium- and long-term expenditures policies.***
  SOFAZ's rules require that expenditures be in line with a medium- and long-term framework, but to date, large expenditures have been authorized without disclosure of any such plans. It is hoped that this expenditure policy will be an outgrowth of the public hearings and discussions for the Poverty Reduction Strategy Paper and the ensuing State Program on Poverty Reduction and Economic Development.

  Without such a strategy, there is a risk that spending decisions will continue to be ad hoc. As the IMF warns, there are "risks of having a pool of funds available, without clear guidelines regarding the legitimate use of those funds…."[86]

- ***Develop a budget stabilization strategy.***
  Unlike natural resource funds such as Norway's, Kazakhstan's, or Chile's, Azerbaijan's Oil Fund has no mechanism to direct money back to the budget in case of a crisis like an external price shock. Such a contingency is needed in order to avoid sporadic changes to the Oil Fund's rules, as occurred in Venezuela.

- ***Develop a long-term, diversified investment strategy.***
  With a longer-term spending policy in place, SOFAZ can then shift its investments to a longer-term horizon and be able to diversify from the highly liquid but low-yield investments it made in 2001. A longer-term investment strategy should invest in both equity and securities, and set limits to the various asset classes. The experiences of other natural resource funds demonstrate that combining stocks and bonds makes it possible to increase returns while keeping risk relatively low. The investment strategy should set benchmark rates of return, and should indicate what portion of the assets may be given to external managers. The strategy should also set limits to the risk factors for each type of investment that is permitted.

- ***Strengthen the legal foundation for SOFAZ.***
  Currently, SOFAZ exists only on the basis of presidential decrees. This tenuous formal grounding allows SOFAZ's rules—and indeed its very existence—to be altered or abolished by a simple presidential decree. A parliamentary law on SOFAZ would

improve its legal foundation and make it more difficult to alter SOFAZ's rules. Such a law should also increase parliament's role in oversight, by requiring parliamentary approval of spending from the Oil Fund, and also allowing parliament to elect its own members to the supervisory council without the president's approval. It should also require all Oil Fund expenditures to pass through the consolidated budget.

- ***Give real power to the supervisory council.***
  For the supervisory council to exercise effective oversight, it should be able to conduct its own inquiries, to subpoena documents and expert witnesses, and to publish its findings and recommendations. The council should also be given the authority to vote against spending projects if they are inconsistent with the longer-term spending policy adopted for the Oil Fund. Moreover, the council should assemble at least on the schedule stipulated by its rules. Although it is required to meet at least on a quarterly basis, the council has met only twice in the six quarters of the Fund's existence. But, above all, the independence of the supervisory council must be established and recognized.

- ***Include civil society representatives on the supervisory council.***
  The independence of the supervisory council can be enhanced by including members from civil society, as SOFAZ's rules provide. No procedures currently exist for selecting such representatives, and none currently sit on the supervisory council. Neither do the rules specify how many members of civil society will serve on the council. Procedures for selection should be established which guarantee the independence of representatives of civil society.

Improving transparency of the government budget and SOCAR

- ***Improve state budget accountability.***
  Currently, the budget preparation and approval process provides a limited role to parliament and no role for civil society. Opportunities for public comment on the budget should be made available, with the consultations on the government's Poverty Reduction Strategy Process (PRSP) serving as an example of civil society engagement. For it to meaningfully comment on proposed expenditures, the Majlis should be provided with research capacity and greater time for consideration of the budget. Budget accountability also suffers from a lack of external audit of budget execution. A Chamber of Accounting, created in 2001, only began functioning in 2003.

- ***Improve budget transparency.***
  The budget data that are publicly available are insufficient for analyzing budget policy

issues and monitoring oil-based earnings and expenditures. Several improvements in the budget should be made. First, the Ministry of Finance should reveal the assumptions and methodology it uses in preparing budget estimates, as well as greater line-item detail about proposed expenditures. Second, the budget should include an explicit statement of budget priorities and how these are translated into planned expenditures. To facilitate the tracking of expenditures, the budget should include detailed (program and line-item) budget classifications. Third, the draft budget, as well as a version that is easily understood by nonexperts, should be published for public discussion and input to the budget process prior to the budget's adoption. Additionally, reports on budget execution should also be made available. If actual expenditures differ sharply from planned expenditures, a revised budget should be prepared.

- ***Disclose oil-backed loans.***
  In the budget, disclose any-oil backed loans obtained by the government or SOCAR that will become the obligation of future generations to repay.

- ***Assess fiscal transparency.***
  Initiate a new review of the country's compliance with the IMF's Code of Good Practices for Fiscal Transparency, last completed in 2000, and allow publication of the results.

- ***Monitor implementation of PRSP and SPPRED priorities.***
  Establish an agency comprised of *ex officio* government and civil society representatives with responsibility for monitoring government expenditures consistent with the priorities established in the Poverty Reduction Strategy Process and the ensuing State Program on Poverty Reduction and Economic Development.

- ***Allow SOCAR public reporting.***
  Overhaul reporting requirements for SOCAR. The government of Azerbaijan should require SOCAR to submit to external audits and publish financial information in line with international accounting standards.

- ***Volunteer to report oil and gas earnings.***
  Volunteer to become an early signatory to the templates for reporting oil and gas revenue receipts being developed by the Extractive Industries Transparency Initiative (EITI). The EITI, a British government-led coalition of governments, extractive companies, and NGOs aims to increase transparency of payments by companies to governments as well as transparency over revenues by those host country governments.[87]

Engaging civil society in policy discussions about oil revenue use

- ***Promote public awareness and discussion of oil fund strategy.***
  The oil funds that were created in Alberta, Alaska, and Norway were preceded by years of public discussion about long-term strategies for managing petroleum wealth. In Alaska, such public discussion was not only tolerated, but facilitated by the government, which organized seminars and public forums to gauge public opinion about how best to use its oil fund. This kind of discussion helped build trust among the citizenry that oil proceeds would be used to benefit the public.

  The absence of such open discussion contributes to public cynicism that revenues are being diverted for private gain rather than public benefit. Already, many Azerbaijanis are cynical about their government's commitment to combat corruption and serve the public. Such views can become destabilizing if people fail to see any improvement in their lives after years of oil production. Currently, SOFAZ's assets are relatively modest at 11.5 percent of GDP. However, by 2010 SOFAZ will comprise nearly half of GDP and its assets will be more than triple the size of the state budget, if oil development and exports proceed as planned and if there is no sustained decline in the market price of oil. Unless the population is informed and involved in plans for using this Fund, pressure for spending could become intense.

- ***Repeal the secrecy law.***
  In line with the standards of the Council of Europe and the jurisprudence of the European Court of Human Rights, and to encourage discussion about Azerbaijan's revenue management strategy, retract the August 2002 decree on state secrets, which could seriously limit a national dialogue about the country's hydrocarbon management strategy. This decree places the burden of responsibility on the press to determine whether anything it publishes violates state secrecy laws. Among the areas defined as state secrets are "information on the activities of industry, transport, and communications in the entire Azerbaijani Republic, . . . on state reserves of precious metals and stones in the Azerbaijani republic, their finances and budget policy except for generalized information on the overall situation in the economy and finances."[88]

- ***Improve the environment for civil society.***
  To foster informed public discussion and engage members of civil society in the process, Azerbaijan should improve the enabling environment for civil society. The government of Azerbaijan should make public the nongovernmental organization registration procedures required by the Ministry of Justice, allow registration to take place in offices outside the capital, and consistently implement existing law on procedures of notification for registration denial.

- ***Adopt a freedom of information law.***
  Adopt a law on public access to public information held by the government, as recommended by the Committee of Ministers of the Council of Europe in 2002.

- ***Adopt legislation to implement the Aarhus Convention.***
  To improve public engagement in the environmental impacts of hydrocarbon development, Azerbaijan should introduce relevant legislation and develop procedures and infrastructure to implement the Aarhus Convention, which Azerbaijan has ratified and which came into force in October 2001. The Aarhus Convention guarantees citizens access to information, public participation in decision making, and access to justice in environmental matters.

"When the chief executive presides over the hierarchy [of an oil fund], decisions over uses of the fund's revenues become political."

—CHRISTIAN E. PETERSEN AND NINA BUDINA, "GOVERNANCE FRAMEWORK OF OIL FUNDS: THE CASE OF AZERBAIJAN AND KAZAKHSTAN," WORLD BANK WORKSHOP ON PETROLEUM REVENUE MANAGEMENT, 2002

6. National Fund of the Republic of Kazakhstan

Introduction

In April 2002, the weekly *Argumenty i Fakti Kazakhstan*, citing an anonymous government source, reported that a new decree would divide the state's earnings from hydrocarbon development equally among Kazakhstan's adult population. "This means that every citizen of the country who has come of age at the moment the decree is issued will receive, according to some calculations, $200,000 with monthly dividends on top!"[1]

The article, an April Fools' Day joke, could not have fooled many readers. For years, Kazakhstani citizens have expected oil and gas development to transform them from a poverty-stricken agricultural and mining country to a wealthy oil emirate like Kuwait. Kazakhstan would enter the 21st century as "one of the top five oil-producing states of the world," President Nazarbayev announced on the eve of the millennium.[2] Reality has not yet met expectations.

This chapter was written with research contributions from Robert Ebel, Center for Strategic and International Studies; Sergey Zlotnikov, Sofia Isenova, and Andrei Chibotarev, Transparency International–Kazakhstan; Tulegen Askarov; Sergey Kuratov and Sergey Solyanik, Green Salvation; and Irina Stromova and Nadezhda Kotechigova, Rodnik.

The irony in Kazakhstan is that the government has done a commendable job of stabilizing the macroeconomy and of beginning to convert its nonrenewable wealth into savings for future generations. Most Kazakhstani citizens, however, are not aware of their government's accomplishments or its strategy for managing the country's mineral wealth. All they understand is that they remain mired in poverty. This disparity between reality and expectations is not yet an acute problem because, as a result of low world oil prices in 1998–99 and a lack of access to markets, oil and gas revenues have remained relatively small. However, rising prices are changing this situation as oil and gas accounted for almost a quarter of fiscal revenue and about one half of exports in 2001. As hydrocarbon revenues balloon in the next 5 to 10 years and if oil prices remain high, the unmet aspirations of millions of Kazakhstani citizens for improved living conditions and government accountability may become a destabilizing force.

The challenge for Kazakhstan in the coming years is to use its mineral wealth to establish a viable basis for long-term economic growth. This will require a commitment to transparency, fairness, and good governance in the oil and gas sector and the creation of favorable conditions for development of the non-oil sector. In part, success will depend on whether the government will slow its efforts to centralize power and subdue critics and opponents.

This chapter aims to stimulate discussion about the choices and challenges Kazakhstan faces in making the best use of the finite wealth generated by its hydrocarbon resources. It begins with an overview of Kazakhstan's oil and gas potential. Next it reviews the impact of petroleum development on Kazakhstan's economy and identifies areas where reforms are needed to help the country create a sustainable basis for growth beyond its hydrocarbon sector. The chapter analyzes the National Fund created to help manage Kazakhstan's hydrocarbon wealth. It concludes with recommendations on how the government of Kazakhstan can use the National Fund for economic development and stability while promoting transparency and public participation in the Fund's operations.

Oil and Gas in Kazakhstan

Oil

Now that the initial rhetoric has passed, a more realistic appraisal of the oil and gas future of Kazakhstan, and of the Caspian region in general, can be made. The Caspian potential can now be compared with that of the North Sea, not as a replacement for the Persian Gulf, but nonetheless important at the margin. Moreover, importing countries now have another supplier to choose from, as they seek resource security through diversity of supply.

If present plans are realized, the contribution of Kazakhstan to world oil supply by the year 2010 will not be much more than 2 percent. Nonetheless, this output does place Kazakhstan among the leading oil producers and exporters of the world, and the income from oil exports

will provide that country with an opportunity to remake itself, if that income is spent wisely.

Although the northern Caspian has considerable untested potential, the immediate future of oil and gas in Kazakhstan can be found in just three known fields: Tengiz, Karachaganak, and Kashagan.[3] Tengiz and Karachaganak are operational today, and provide much of the basis for current and at least near-term growth in domestic production. The immensity of Kashagan, located offshore in the Kazakh sector of the Caspian Sea, was confirmed in March 2001, and reserve estimates of 7 to 9 billion barrels were made public in June 2002. Kashagan will be the basis for national growth after Tengiz and Karachaganak have reached their peaks.

Production at Tengiz is expanding incrementally, as new capacity comes on line. In 2002, output increased to 263,900 barrels per day (bpd) from 249,500 bpd in 2001. Presuming that current expansion plans are successfully realized, Tengiz can be expected to provide about 460,000 bpd in 2006.

Karachaganak, considered the world's largest gas condensate field, provided about 108,300 bpd in 2002, and is scheduled to produce 140,000 bpd in 2003. Peak production is not likely to be reached until 2008, at 240,000 bpd.

Kashagan, conversely, is not to begin production until 2005, and even then at quite low rates. Expansion will be slow, comparable to that of Tengiz, with production averaging around 300,000 bpd by 2010.

Production and consumption of oil in Kazakhstan during the 1990s followed two distinct trends (Table 1). Oil production declined in the early years, reaching a low of 414,000 bpd in 1995, then turned the corner in 1996, stimulated by Tengiz, and by 2000 reached 707,000 bpd. Demand for oil, conversely, continued its decline throughout the decade before showing a very modest gain in 2000. That declining trend permitted Kazakhstan to enjoy continuing gains in annual oil exports.

TABLE 1. Kazakhstan: Oil Production and Consumption, 1992–2000

Thousand Barrels Per Day

Year	Production	Consumption
1992	530	404
1993	490	341
1994	415	304
1995	414	281
1996	457	256
1997	521	210
1998	526	201
1999	604	148
2000	707	155

Note: Production includes condensates.

Source: www.fe.doe.gov/international/kazkover

Kazakh officials hold a very optimistic view of future oil production levels, as Table 2 underscores, although less so than President Nazarbayev who has pictured his country as an equal to Saudi Arabia by the year 2015. Yet, is this projected growth pattern realistic and in Kazakhstan's national interests? Doubts are emerging about whether the country really needs to produce that much oil in the coming years. The country risks long-term stagnation by relying too heavily on easy oil revenues, according to Economy and Budget Planning Minister Kairat Kelimbetov.[4] Hard times are ahead, he added, if the country does not make efforts to diversify its lopsided economy.

TABLE 2. Kazakhstan: Production of Crude Oil and Condensate, Selected Years, 2001–2015

	Barrels Per Day		
Year	Crude Oil	Condensate	Total
2001	717,000	80,000	797,000
2002	840,800	103,800	944,600
2003 plan	n.a.	n.a.	1,040,000
2004	n.a.	n.a.	1,120,000
2005	n.a.	n.a.	1,224,000
2010	n.a.	n.a.	2,000,000
2015	n.a.	n.a.	3,000,000

Note: n.a. = not available.

Prime Minister Tasmagambetov has observed that annual production might reach 2.4 million bpd but only according to "optimistic estimates." (See "Oilmen in Almaty Upbeat About Region's Prospects," RFE/RL, Central Asia Report, *October 3, 2002)*

Source: "Kazakhstan Sees 24 percent Output Gain in 2003," Platt's Oilgram, *February 5, 2003; "Kazakhstan to Refine 9 Percent More Crude in 2003,"* Interfax, *Astana, January 31, 2003; "Kazakhstan to Join Major League Oil Producers,"* LatelineNews.com, January 27, 2003.

Nonetheless, timely expansion at Tengiz and then at Kashagan is not neccessarily a given. Tengiz presents a major technological and environmental challenge due to the recovery and disposal of sulfur found in the associated natural gas. At Kashagan, oil recovery levels may not exceed 20 percent, considerably below the norm for most oil fields, which will limit both peak production and field life.

Challenges in the field can eventually be overcome. But other risks are beyond the reach of technology. TengizChevroil had laid out a $3 billion expansion program for Tengiz, to raise annual production to 440,000 bpd, with financing to be provided out of oil export profits. This was unacceptable to the government as it would have reduced the tax take and the disagreement became public knowledge in November 2002. TengizChevroil stood its ground and all expansion-related work ceased, although the oil continued to flow. The two parties did not reach an agreement until January 2003 when they concluded that the joint venture will pay $810 million to the government, of which $600 million represents tax payments to be made

in installments through 2005.[5] Additionally, TengizChevroil will take out a loan to finance the government share of the expansion.

The government emerged from the standoff in a strengthened position and has become more confident in dealing with foreign investors and challenging contract terms viewed as too favorable to the investor. The episode with TengizChevroil represents only one of several efforts by the Kazakh government to renegotiate foreign contracts that they believe gave overly generous tax breaks.

Problems and challenges have occurred at Kashagan as well. The project operator, AGIP KCO, took the position that it would suspend work unless the government stopped trying to revise agreements unilaterally after they had been signed.[6] However, Kazakhstan, emboldened by its success at Tengiz and using the leverage of its oil potential, is likely to continue pressing for changes at Kashagan.

Natural gas

The natural gas sector of Kazakhstan is still in its infancy, production is limited, and the country remains a net importer. The problem facing Kazakhstan as it works toward more balanced development of its natural gas industry is simple: natural gas production is concentrated in the western part of the country, but current and future demand is likely to be centered in the east. Moreover, because both the supply and demand volumes are comparatively small, construction of a pipeline network to transport supplies eastward cannot be justified. As a result, demand in the east is covered through imports.

TABLE 3. Kazakhstan: Natural Gas Production and Consumption, 1992–2000

	Billion Cubic Meters	
Year	Production	Consumption
1992	8.1	20.1
1993	6.7	14.8
1994	4.5	15.0
1995	4.8	10.8
1996	4.2	14.4
1997	6.1	14.0
1998	5.5	13.4
1999	4.6	13.6
2000	8.9	13.9

Source: www.eia.doe.gov/emeu/cabs/kazak.

At the same time, local consumption is holding constant and is not expected to rise to more than 15 to 16 billion cubic meters (bcm) by the year 2015.[7]

The statistics in Table 3 underscore the continuing reliance on imports to cover demand, ranging from an import requirement of 12 bcm or 424 billion cubic feet (bcf) in 1992 to only 5 bcm or 177 bcf in 2000, as natural gas from Karachaganak began to add to supply, cutting sharply into these requirements. Nonetheless, the reduction in imports for most of the 1990s can be attributed to consumption falling at a more rapid rate than production.

Most of the gas imports originate with Uzbekistan, and are transported to eastern Kazakhstan via the Taskkent-Bishkek-Almaty pipeline. There is potential for the development of gas production from several new discoveries in southern Kazakhsan, and reliance on imports will end if these discoveries meet expectations.

Future gas consumption, much like oil consumption, is not expected to increase significantly, which could allow Kazakhstan to quickly become a net exporter. KazMunaiGaz, the state oil and gas company, has recognized this possibility and has agreed with ExxonMobil Kazakhstan Ventures Ltd. to draft a long-term plan for development of Kazakhstan's natural gas deposits.[8] KazRosGaz, a Russian-Kazakh joint venture established in June 2002, exports gas to Europe via Russia. Transit volumes are expected to reach 7 bcm in 2004.[9] Exports to Europe and to CIS countries could total 35 to 40 bcm by 2015.[10]

Continued development of Tengiz and Karachaganak, and future development of Kashagan, is likely to result in comparable increases in the extraction of natural gas produced in association with crude oil. By 2015, Karachaganak should be producing 25 bcm annually and Tengiz 8 to 10 bcm annually. Kashagan should also be a major supplier by that time, inasmuch as its recoverable gas reserves are placed at 1 trillion cubic meters.[11] The volumes anticipated, as shown in Table 4, could be increased if reinjection of the sulfurous gas can be accomplished successfully, or if the gas, once the sulfur has been recovered, is reinjected, again for the purposes of maintaining formation pressure.

Questions remain about where this growing supply of exportable gas will go. Russia is the most likely immediate recipient. Imports from Kazakhstan would be consumed locally, freeing up Russian gas for export to Europe and obviating the need for Russia to develop costly gas fields in the Arctic. A variety of options await, but all are dependent on arrangements to be worked out with Russia.

The Central Asia-Center gas pipeline carries Turkmen and Uzbek gas across Kazakhstan for sale in Russia and Ukraine. Its carrying capacity increased to 50 bcm in 2002, and operators hope to expand capacity to 63 bcm by 2010. Yet much of the Central Asia-Center line is "physically and morally worn out," according to KazMunaiGaz.[12] The pipeline will need further renovation and expansion to handle the increasing volumes transiting Kazakhstan, especially if Kazakhstan wants access to the pipeline as well.[13]

TABLE 4. Kazakhstan: Production of Natural Gas, Selected Years, 2001–2015

Year	Billion Cubic Meters
2001	11.57
2002	13.14
2005	20.5
2010	35
2015	70

Source: Interfax-Kazakhstan, Almaty, February 7, 2003

Oil exports and pipelines

Satisfying domestic oil requirements has continued to take a small percentage of supply, which allowed Kazakhstan to increase exports and enjoy considerable oil-related income during the 1990s (Table 5). In 1992, consumption of oil in Kazakhstan was 404,000 bpd, not too far below domestic production of 530,000 bpd. Just nine years later, consumption had held steady since 1996 at 245,000 bpd. Production, however, had risen to 811,000 bpd. By 2001, this steady consumption and increasing production made Kazakhstan an exporter of emerging importance, with net exports of 631,000 bpd.

TABLE 5. Kazakhstan: Net Oil Exports, 1992–2001

Year	Thousand Barrels Per Day
1992	125.9
1993	148.6
1994	111.4
1995	132.8
1996	200.5
1997	311.5
1998	324.9
1999	455.4
2000	551.6
2001	631.0

Note: Net exports differ from gross imports in that imports from Russia are taken into account.

Source: www.eia.doe.gov/emeu/cabs/kazaexpo

Growth in production is expected to far outstrip increases in demand during the coming years, as it is projected that Kazakhstan will only need about 180,000 to 200,000 barrels daily to cover domestic requirements.[14] This low demand will free up increasingly higher percentages of oil for export (Table 6).

TABLE 6. Kazakhstan: Net Oil Exports as a Probable Share of Domestic Production Selected Years, 2001–2010

Year	Exports as Percent of Production
2001	71
2002	83
2005	75
2010	80

Source: "Kazakh Oil Exports Up 21 Percent in 2003," Interfax, Almaty, February 12, 2003, and preceding tables.

Given its weak domestic market, the challenge for Kazakhstan is to find a way to take advantage of its oil-producing potential by moving its incremental production increases to export markets. Geographic isolation has always stood in the way. Currently, the easiest and least expensive approach would be to take advantage of existing export infrastructure that follows a route through Russia, to the Mediterranean Sea port of Ceyhan. An alternative to the port of Ceyhan (Table 7) is the Caspian Pipeline Consortium (CPC) pipeline, linking Tengiz with the Russian Black Sea port of Novorossiysk.[15] The carrying capacity of this line will soon increase to 560,000 bpd. The ultimate capacity is 1.34 million bpd, to be attained in stages, through the construction of pumping stations in coordination with the growth in production at Tengiz. But Tengiz oil, even at its peak, will fall short of filling the line. There may be some room for Kashagan oil when it becomes available,[16] but Kazakh planners believe a second export pipeline will be needed at some point.

TABLE 7. Kazakhstan: Oil Export Pipelines

Origin	Terminus	Length (miles)	Capacity (mmb/d)
Tengiz	Novorossiysk	990	0.560
Atyrau	Samara	450	0.340

Note: The pipeline to Novorossiysk is commonly referred to as the CPC (Caspian Pipeline Consortium) line. The maximum carrying capacity of this line will be 1.34 million bpd, when all pumping stations are in place. The capacity of the Atyrau-Samara is to be increased to 0.5 million bpd.

The CPC line is not without its problems. Russia wants to include the CPC line in the natural monopoly register,[17] meaning that the government would control a number of important functions, including setting tariff rates.

Russia also has a valid 15-year agreement signed by Kazakhstan in 2002 to move Kazakh oil by pipeline to Samara where it is placed into the Druzhba pipeline for export to Europe.[18] At least 340,000 bpd of Kazakh oil can move through this system annually. Kazakh oil transiting Russia during 2003 will total about 390,000 bpd. Of that, about 320,000 bpd will pass through the Atyrau-Samara pipeline.[19] In addition, the Karachaganak gas condensate deposit

has now been linked by pipeline with the CPC line, thus allowing condensates to be exported via that route.[20]

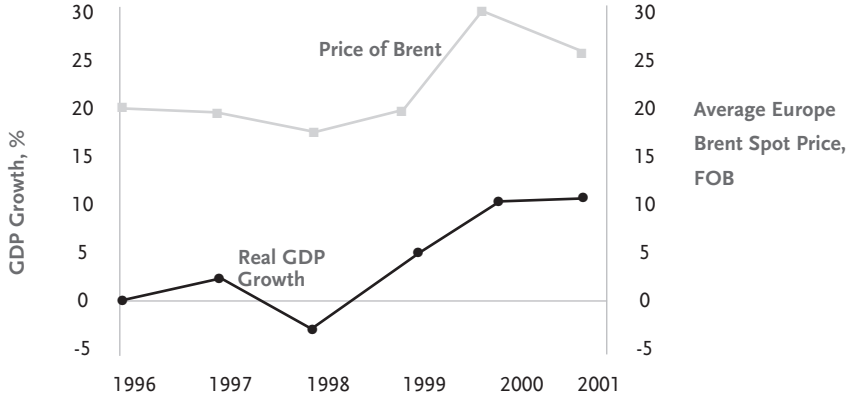
Kazakh oil is also delivered to the Caspian port of Aqtau and barged across the Caspian to Makhachkala, where it is fed into the Makhkachkala-Tikhoretsk-Novorossiysk pipeline. Crude oil from the Aktyubinsk fields is moved by pipeline to the Orsk refinery in Russia. Small volumes are also swapped with Russia, with Kazakh crude supplying Orsk and a comparable volume of Russian oil delivered to the Kazakh refinery at Pavlodar.

Impact and Challenges of Petroleum Development

Although the country is rich in many raw materials—oil, gas, coal, and metals—oil and gas exploration and development will undoubtedly remain Kazakhstan's largest source of foreign direct investment (FDI). How much revenue might the export of oil and gas bring in? Much depends on the price of oil. Using the budget revenue model it developed with the World Bank, the IMF estimated in late 2001 that by 2005, with oil at $19 a barrel, the government would receive $1.5 billion from the development and sale of oil—10 times what it earned in 1999. Other analyses have put this income at several times that amount.[21] Under these assumptions, annual transfers to Kazakhstan's National Fund will average $125 million and its assets will be over 8 percent of GDP by 2006.[22]

As oil development comes to dominate the economy of Kazakhstan, GDP and government revenues become increasingly sensitive to changes in the price of oil (see Figure 1).[23] The budget crisis of 1998, when oil prices collapsed on the heels of the Asian crisis, demonstrates how vulnerable the economy of Kazakhstan is to changes in the price of oil. In 2002, for example, every dollar change in the per barrel price of oil translated to $96 million in budget revenues.[24]

FIGURE 1. Kazakhstan's GDP Growth and Oil Prices, 1996–2001



Source: U.S. Energy Information Agency; IMF Staff Report for 2001 Article IV Consultation, Kazakhstan.

From 1993 to 2000, the oil sector absorbed over 80 percent of cumulative FDI, and oil and metals comprised close to four-fifths of total exports.[25] Earnings from export of oil have risen from 5 percent of government revenues in 1999 to over 20 percent in 2002, and will continue to grow. According to government forecasts, petroleum and minerals will account for nearly 60 percent of the value of all exports from 2002 to 2004, and government revenues from oil and gas will increase on average by 11 percent a year between 2001 and 2005.[26] The over-reliance on hydrocarbon revenues, tied to fluctuating world prices, underscores the importance of developing a tax base that includes a strong non-oil sector. In addition to reducing reliance on oil for its budget revenues, a broad tax base also improves government accountability by giving taxpayers an incentive to demand good governance, and authorities an incentive to provide it.

Deft macroeconomic management and rebounding world oil prices beginning in 1999 have helped make Kazakhstan one of the strongest performing economies among the countries of the former Soviet Union. The government has been aggressive in controlling inflation, liberalizing prices, reforming the banking sector and the pension system, and minimizing budget deficits. Privatization has proceeded apace, with almost all small and medium-sized enterprises in private hands, albeit among widespread allegations of corruption. These achievements are particularly noteworthy given the depth of Kazakhstan's immediate economic contraction following its independence. GDP halved between 1990 and 1995, and inflation peaked at 1880 percent in 1994.[27]

With rising oil prices, GDP grew by 13.2 percent in 2001, and by over 9 percent in 2002. According to the IMF, Kazakhstan should easily be able to maintain a GDP growth rate of 7 to 8 percent in 2003.[28] Inflation was successfully brought down to about 6 percent in 2002. The increase in petroleum revenues allowed the government to end 2001 with a budget surplus.[29] Reflecting these tendencies, its credit rating was raised to investment grade by Moody's in September 2002, making Kazakhstan the first country among the former Soviet states to reach this status since the Russian crisis of 1998. Kazakhstan is expected to continue to post strong growth as it expands capacity for oil production amid expectations of continuing high oil prices.[30]

Despite these positive macroeconomic indicators, wealth has not trickled down to most of the country's citizens. The economic crisis of the mid-1990s resulted in a rise in poverty, unemployment, increasing income disparities, and declining social service provision. The country's strong GDP per capita rates disguise the fact that these problems persist.

Poverty continues to affect 40 percent of the population, and a quarter of the nation lives on less than $4 a day.[31] In 2001, about a third of rural citizens and a fifth of urban citizens lived below the subsistence level.[32] According to the World Bank, wages fell by more than 75 percent between 1990 and 1997.[33] Official unemployment in 2001 was 10.4 percent.[34] Poverty is highest in rural Kazakhstan, where lack of access to credit, environmental factors, out-migration, skewed resource distribution, and a development policy that prioritized hydrocarbon development have taken their toll. For example, despite being one of the centers of Kazakhstan's oil production, parts of Mangistau oblast have poverty levels as high as 87 percent.[35]

Declines in government spending on health and education have had an impact on these sectors. Between 1990 and 1995, government spending on health and education as a percent of the state budget declined by about half. While expenditures have since increased, they are still low in comparison to other transitioning economies (see Table 8). Consequently, between 1995 and 2001, the number of doctors fell from 60,100 to 51,300, and the number of hospitals dwindled by one-third from 1,518 to 981.[36] Outbreaks of infectious diseases such as tuberculosis occur frequently, especially in the rural south where poverty is concentrated. Since 1990, birth rates and life expectancy have fallen while mortality has risen. Education too has suffered. Spending on education declined from 19.8 percent to 17.6 percent of government expenditures between 1987 and 1997.[37]

TABLE 8: Government Expenditures on Health and Education, 1999, USD per capita

Country	Education	Health	Pensions	Other Social Expenditures
Kazakhstan	40	29	87	10
Hungary	183	337	394	240
Poland	68	181	534	189

Source: Millennium Development Goals in Kazakhstan, 2002. United Nations

The country's transport and communications infrastructure is also in disrepair. Kazakhstan is highly dependent on good transportation links because it lacks access to an open water port. Yet, roads and railway lines are in need of both expansion and repair, and their services are expensive. Only 11 percent of the population has telephone mainlines.

The United Nations Human Development Index (HDI), which ranks 162 countries on a broad mix of indicators, testifies to Kazakhstan's deteriorating social infrastructure. Between 1990 and 2002, Kazakhstan dropped from 54th to 79th place in the Human Development Index. A statistical analysis of the fall in its HDI score concluded that 84 percent of the drop could be explained by the country's economic decline.[38] Many former Soviet countries suffer from similar declines, but proper use of Kazakhstan's oil and mineral resources should halt or reverse this trend.

Although Kazakhstan's macroeconomic indicators look good, the country nevertheless shows some of the proclivities of resource-rich states: namely the tendency to allow copious oil-fed fiscal resources to dampen the incentive for needed structural reforms. The government should promulgate reforms that permit small and medium-sized enterprises in the non-oil sector to thrive. A vibrant non-oil sector provides needed employment to raise living standards, reduces the country's sensitivity to external shocks, and continues to generate wealth once oil proceeds diminish by the middle of this century. Improving the nation's health, education, and social protection infrastructure should be an equal priority.

Governance and budget accountability

Like the petro-states discussed in chapter one, Kazakhstan has demonstrated the same drive toward centralization, concentration of executive power, and persecution of opponents that has had such a damaging effect in countries like Venezuela, Mexico, Nigeria, and others. This concentration of power creates a symbiosis between oil companies and government leaders.[39] The multinationals benefit from having a single point of contact able to approve and enforce contracts, and government officials, as gatekeepers to lucrative contracts, find opportunities for personal enrichment. This relationship comes at a grave cost, however. Absent a mandate from citizens, these governments rely on a combination of military force and profligate spending to remain in power. Democracy falls by the wayside as increasingly unpopular governments continue to waste windfalls and accumulate debt. While Kazakhstan has not yet embarked on the spending sprees that occurred in other petro-states, the centralization of power in Kazakhstan increases the likelihood that such spending could occur in the future.

Since becoming independent in 1991, Kazakhstan has had the same ruler, Nursultan Nazarbayev, who also headed the republic under Soviet rule. The president has steadily increased his control over Kazakhstan's political life, appointing family members to important government positions and granting himself lifetime immunity from prosecution. A series of elections that the Organization for Security and Cooperation in Europe (OSCE) deemed flawed gave the president and his draft of the constitution an easy victory and gave his supporters firm control of the bicameral parliament. All regional level executives are appointed by the president and are frequently replaced, allegedly to prevent them from developing independent bases of support. The most effective opposition candidates have been jailed or driven into exile.

Parliament is controlled by threat of dissolution, a threat that has been invoked by President Nazarbayev on several occasions. Parliament is often marginalized because the president may issue decrees that have the power of law. Parliament's ability to function independently is also undermined by its limited research and administrative capability. Parliamentary committees have no independent research staff and only recently were permitted to hire a single administrative assistant.

Budget accountability is undermined by an absence of opportunities for public participation in the budget process and a variety of factors that limit the legislature's ability to control the budget. According to the Constitution and the budgetary system law, the republican budget plan for the coming year should be submitted to the parliament by September 15 of the current year. While this gives the parliament three months to consider the draft budget, the parliamentary budget process affords legislators insufficient time for preparation because they have to adjust to a weekly, unpredictable agenda set by the pro-government presidium (akin to the parliamentary process planning committee). Before 2002, legislators had a monthly rather than a weekly schedule of the parliament's agenda.[40]

The draft budget is intensively discussed in the lower house and sometimes encounters strong opposition. In theory, the lower house is free to amend the budget and can alter total

expenditures and/or those for individual departments. In practice, however, the lower house faces dissolution if the cabinet initiates a no-confidence motion. The upper house does not have powers of amendment but can pass the budget back to the lower house to reconsider particular issues.

Kazakhstan ranks high in fiscal transparency, with an established treasury system and an international classification and reporting system. Detailed information on actual revenues and expenditures is available online (http://mf.minfin.kz/) on a quarterly basis from the Ministry of Finance, which is responsible for implementing the budget. This information, which has yet to be fully used by civil society, is an extremely valuable asset that enables sophisticated tracking of budget implementation.

Unlike Kazakhstan's reporting mechanisms, its monitoring and evaluation mechanisms remain weak. Although budget audit institutions have been created, they are understaffed, lack formal procedures and policies, and do not yet meet internationally accepted standards. In addition, audit activities focus mostly on compliance with laws and regulations; there is little attention to financial and accounting practices and almost no consideration of value-for-money auditing.[41]

Furthermore, Kazakhstan lacks a solid, independent external audit to verify budget execution. Recently an Accounting Committee was formed, consisting of equal numbers of legislative and executive branch members. However, the committee does not report to the parliament, as best practices recommend. Rather, the president directly controls its staffing, funding, and accountability. The president also appoints the committee chairman, whose vote is double weighted. The committee has very limited powers and can only undertake selective audits of state-owned enterprises. According to Transparency International's legal analyst Sofia Issenova, "the Committee has neither the technical resources, the methodology, the staff, or the institutional capacity to conduct an effective independent audit. It functions less as an independent auditor and more as a consultative-deliberative organ under the president's command."[42] Parlimentary deputies have indicated the need for improvement in the Accounting Committee's reports as a basis for parlimentary analysis of program effectiveness.[43]

The recently established Office of the Ombudsman is also unlikely to provide effective oversight of government. Since 1997, the government of Kazakhstan, in collaboration with the United Nations Development Program (UNDP) and the OSCE, has worked on establishing a human rights ombudsman position in order to bring the country into line with Council of Europe requirements and also respond to accusations by the international community of human rights violations. After years of deliberation, the team produced a draft law that would ensure the independence of the ombudsman through separation of powers, protect the ombudsman from political retribution, give the office the power and resources to launch its own investigations, and allow it to keep its files confidential.

The draft was submitted to the president's administration in 2002. What emerged, however, was hardly recognizable. The draft law had turned into a presidential decree. The com-

plex process for appointing the ombudsman, designed to ensure the office's independence, had been replaced by rules giving the president the sole authority to appoint and remove the ombudsman. The decree compromises the ombudsman's effectiveness by leaving unanswered how the office will be funded, how independence will be protected, what powers the office has or how they can be realized.

The 2003 review of fiscal transparency in Kazakhstan by the IMF identified a number of other priority areas for improvement, including consolidated reporting in the Republic's budget of the assets accumulated in various development and social protection funds, including the National Fund; that the capacity of audit institutions be improved; that the oversight of government procurement operations be strengthened; that annual budget documents include more detailed information about budget policy background, tax expenditures, and fiscal risks; and that the discretion afforded tax collectors be reduced.[44]

Environmental challenges

In addition to its problems of enduring poverty and low living standards, Kazakhstan also faces environmental challenges. Kazakhstan inherited a despoiled environment resulting from its use as a nuclear testing ground and intense agricultural and industrial zone during Soviet times. The country perpetuated this legacy through acts of omission and commission. Despite the existence of draft legislation since the mid-1990s, neither the government nor the parliament has adopted any kind of environmental policy, aggravating frequent conflicts between groups concerned about property rights and others interested in the protection of natural resources. New owners of privatized mining and oil companies have refused—understandably—to take responsibility for environmental destruction committed by these enterprises when they belonged to the state. No studies have been done to assess the economic cost of environmental damage from oil and gas development. One Russian scholar informally estimated the cost of the damage at 10 to 15 percent of GDP.[45]

Water and air pollution and deforestation have compromised quality of life for citizens of Kazakhstan, and a shortage of water is an impediment to agricultural production. Industrial pollution, especially in the urban areas of northern Kazakhstan, is damaging the air, rivers, and public health. A shortage of energy has encouraged illegal logging, contributing to desertification.[46] The rising levels of the Caspian Sea create the risk of flooding and oil film covering the water poses a threat to marine life.[47] It is estimated that nearly 20 million acres have been contaminated by over 36 million barrels of oil spills both before and after Kazakhstan's independence.[48]

The role of petroleum development in aggravating the country's environmental problems is a subject of local debate and concern. The sudden death of 30,000 Caspian seals in 2000 prompted questions about the possible role of offshore oil development in the tragedy. Although the World Bank's Caspian Environment Program concluded that the deaths were the result of canine distemper virus, environmentalists question these results.[49] Russian biolo-

gists attribute the deaths of the seals, as well as the deaths of several hundred tons of sprats, a small fish, to the discharge of hydrogen sulfides from cracks in oil deposits. The scientists found concentrations of heavy metals in the bodies of dead sprats as well as in the muscle tissue of the seals.[50]

Local environmentalists also wonder whether the machinery employed for petroleum development meets Best Available Technology (BAT) standards.[51] The lack of information available about oil company operations in Kazakhstan makes it difficult to evaluate these concerns.

A mounting concern is what to do with the byproducts of oil extraction. Storage of sulfur at Tengiz presently exceeds 6 million tons, and volumes are increasing at a rate of 4,000 tons daily.[52] When Tengiz is at its peak, the recovery of sulfur will amount to 10,000 tons daily. Little of the sulfur can be sold abroad because of a glut on the world market. A very small portion is to be processed into flakes, largely for the Chinese fertilizer market, but these sales will be made at a loss. The sulfurous gas could be reinjected, but the technology is not yet workable. TengizChevroil, the joint venture developing Tengiz, is taking up the remaining option, which is to store the sulfur in former uranium quarries in the Mangistau region.

Currently, the sulfur is stored outside in blocks open to the elements and the winds of the steppe. Local authorities view the sulfur not as byproduct but as an environmental hazard, and have fined the joint venture $71 million, a fine levied at a time when Kazakhstan and TengizChevroil were contesting just how future expansion at Tengiz would be financed. That fine was later reduced by Kazakhstan's Supreme Court to $7 million. Others view the fine as a maneuver to make up for a loss in tax income.[53]

There are other challenges as well, but especially so at Kashagan, located offshore in the Kazakh sector of the Caspian Sea, where the associated natural gas is also high in sulfur. Plans are already being made to store the sulfur in underground caverns. The well depths at Kashagan are characterized by high pressures and temperatures. Drilling is being conducted from an artificial island. The water at Kashagan is only about 12 feet deep and in winter a thick layer of ice forms and stays solid for at least three months. Strong currents and winds constantly shift the ice floe, presenting a serious hazard for drilling rigs, equipment, and people.[54] Sturgeon, the source of much-valued caviar, make their home in the shallow waters around Kashagan and an oil spill would have disastrous consequences for their survival. The French firm Total has described Kashagan as one of the most difficult fields in the world to develop.[55]

Despite the proliferation of official programs, projects, plans, and conferences and the statements of government officials in support of the Rio Declaration of 1992, Kazakhstan still lacks a state policy on sustainable development and a long-term strategy for managing environmental problems. A policy drafted by the Ministry of Ecology in 1994, "On the Basis for a Government Environmental Policy," did not make it out of the prime minister's office. Neither the parliament nor the president's administration have yet approved a national plan for the protection of the environment.

That absence is aggravated by the easing of environmental protections in recent years to encourage economic development. As a result of the many changes, parliament's role in decision making about natural resources and environmental protection was reduced, off-budget funds for nature protection were eliminated and their assets diluted in the general budget, and fees for environmental protection were eliminated.[56]

Funding for environmental protection is becoming a growing problem. In 1993, Kazakhstan established Nature Protection Funds, which received pollution payments, penalties for poaching, and other fees. In 1999, the national Nature Protection Fund was eliminated and its assets directed to the state budget. This money, which was supposed to be used for environmental purposes, was used for general budget expenditures. The same has been occurring in regional budgets. One study finds that in 1998, only 25 percent of payments collected for environmental protection were actually used for this purpose.[57] At the same time, pollution payments to the state have increased significantly in recent years and have become a significant source of income (about $130 million in 1999). The study warns that, "The process of raising pollution payments and at the same time using the collected funds for fiscal purposes is an alarming one.... This situation carries the risk that enterprises' willingness to comply with environmental regulations and/or to make environmental payments is reduced."[58]

Environmentalists charge that Kazakhstan is not complying with international conventions it has ratified. Although a signatory to the UNESCO World Heritage Convention for eight years, Kazakhstan has not yet designated any world heritage sites. Kazakhstan is also a signatory to the Aarhus Convention, which guarantees the right of public access to information and decision making in environmental matters. Environmentalists claim that access to information has not improved and is most visible in the failed attempt of local residents to stop the construction of a high-voltage power line through the settlement of Ust-Kamengorsk, despite a Constitutional Court ruling supporting the residents' claims.[59] Accessing reliable information about the environment is equally difficult. In 2001, the Ministry for Environmental Protection ended its monthly bulletins. Information provided by foreign oil companies about their environmental impacts are highly general. Without more detailed information, it is difficult for independent analysts to assess the gravity of environmental problems, and their potential impact on human health.

Structural reforms

The buildup of oil windfalls has increased pressure on the state to spend these earnings on Kazakhstan's struggling enterprises. As chapter one shows, the record of states' efforts to use oil profits to prop up domestic industries has been spotty. Such spending tends to attract corruption and diverts capital from enterprises that might otherwise survive in an open competitive economy. A more sensible approach is to create a basis for sustained economic growth by enhancing corporate governance, removing constraints to private sector development, and strengthening the capacity of the public sector.

While Kazakhstan has made significant progress in "first tier" structural reform—commercial law reform, macroeconomic liberalization, and providing tax incentives for foreign investors—significant efforts must be made to help these reforms filter down to the local level.[60] Increasing the transparency and simplicity of government regulations for new businesses can have a tremendous impact on drawing investment beyond the oil sector, on creating employment opportunities, and on improving the competitiveness of domestic enterprises.

As with many other resource-rich economies, Kazakhstan has slowed the pace of structural reforms since oil prices rebounded from the lows of the late 1990s.[61] Instead, the government has taken measures that create the impression—if not the reality—of favoritism and corruption. These measures have worsened the overall investment climate, keeping the non-oil sector at only 10 percent of FDI.[62]

Structural reform should be a priority because it lays the foundation for sustaining growth in the non-oil sector. And by reforming the public sector, the government increases its capacity to raise money through channels other than oil contracts.[63] The aim of structural reforms should be to "reduce public sector constraints to private sector development."[64]

Since his appointment in January 2002, Prime Minister Imangaly Tasmagambetov has moved to renegotiate contracts with foreign oil companies and exert control over their procurement practices. Pressure began with an informal requirement that foreign oil companies source 25 percent of their content locally.[65] Pressure increased with new rules on procurement that give the Ministry of Energy and Mineral Resources the right to sit on company tender committees and to approve the terms and results of tenders.[66] The unprecedented authority of these government representatives increases the possibility that corruption or favoritism will determine the awarding of contracts.

In 2001, Transparency International ranked Kazakhstan 71st out of 91 countries listed in its Corruption Perceptions Index. The *Economist* recently ranked Kazakhstan one of the riskiest places to do business: "Vested domestic interests are increasingly powerful and pose a challenge to the position of foreign investors. Cronyism is common, and personal connections and the local industrial lobby are having a greater effect on policy."[67] The annual Index of Economic Freedom ranked Kazakhstan 125th out of 161 countries, emphasizing the need to improve the country's investment climate through increased transparency of the tender process, as well as addressing corruption in the judicial system.[68]

The call for improved transparency in Kazakhstan's oil and gas sector is a recurring one by investors, international lending agencies, foreign governments, and local NGOs.[69] The absence of transparency makes it difficult to understand Kazakhstan's oil picture and creates a permissive environment for the diversion of oil and ensuing revenue away from the budget. The need for improved transparency applies not only to the government, but also to foreign and domestic oil companies. The fact that Kazakhstan's largest export market after Russia is a series of tax havens in the Caribbean suggests that money laundering and more complex operations are perhaps being used to divert state resources. Transfer pricing operations, which

are legal, deprive the government of revenue by reporting sales to subsidiaries at below market prices. This procedure helps companies postpone the onset of profit sharing with the government, and lowers the companies' tax burden. The IMF estimated that such practices may have cost $690 million in export revenues and close to 1 percent of GDP in tax revenue losses.[70]

Reducing the high cost of doing business in Kazakhstan will be an imperative for development of the non-oil sector. A study conducted by the World Bank found that there are 26 government bodies that oversee authorization for establishing a business and that businesses can be subject to 20 inspections a month.[71] Information about authorization requirements is often hard to come by, and businesses find themselves faced with the option of paying penalties or paying bribes to pass inspections. Because of the burdens imposed on entrepreneurs, many choose to operate in the informal economy, thus depriving the state of revenue, undermining their own competitiveness, and contributing to corruption. The World Bank estimates that 42 percent of all business activity in Kazakhstan occurs in the informal sector and that, if the size of the informal economy were brought to Eastern European levels, it would result in a 26.8 percent increase in GDP.[72]

Small and medium-sized foreign investors find Kazakhstan's investment environment equally burdensome. Surveys of foreign investors conducted by the International Tax and Investment Center and by a mission led by several international donors found the following problems cited most often: excessive bureaucracy and corruption, a complex and arbitrary tax regime, the lack of a well-functioning legal system, a weak regulatory system with frequent changes in rules and personnel, and ad hoc interventions by regional governors.[73]

Lowering transaction costs for doing business will require a revamped legal and regulatory framework that addresses the endemic corruption that hinders setting up new businesses. Weak legal enforcement gives new entrepreneurs little recourse other than bribes for navigating the overly complex licensing and regulatory process. An improved legal structure for acquiring real estate would facilitate the process of acquiring premises for business.

Another priority should be revitalizing the stalled privatization process so that it becomes transparent, competitive, and valuable to the state budget. Over 300 of Kazakhstan's largest enterprises, including a number in the oil and gas sector, remain state-owned.[74] Rather than cutting off credit to bankrupt state-owned enterprises, the government has kept them afloat and diverted credit from small and medium-sized enterprises outside the petroleum sector.[75] Streamlining the bankruptcy and liquidation process will also be required, because the current process is prolonged and complex, allowing insolvent companies to continue to waste resources indefinitely.

To stimulate the non-oil sector, the government is developing an industrial policy that will provide state funding and tax abatements to sectors of the economy that the government wishes to promote.[76] The IMF and other lenders have expressed concern over this approach.

Noting the failure of protectionism and import-substitution in stimulating production in other countries, the IMF warned, "The government must not create a greenhouse, in which the 'delicate' branches could be developed and kept afloat only thanks to protectionism. We believe that the government must restrict itself to creating boundaries within which the private sector can develop and grow."[77]

Instead of seeking to promote particular sectors of the economy, the government should create the conditions by which businesses in every sector can operate. By creating the conditions for entry into and exit from the marketplace, the government can go a long way toward helping resources find their way to their most productive uses. Such progress would reduce barriers to doing business in Kazakhstan and establish a basis for job creation and non-oil growth.

Kazakhstan's National Fund

Creation of the Fund

In August 2000, a presidential decree officially created the National Fund of the Republic of Kazakhstan. Regulations governing or impacting the National Fund are listed under Appendix 6. The idea for creating some sort of oil fund surfaced in public discussions in 1997 when the director of the Agency for Control of Strategic Resources, Galimzhan Zhakiyanov, proposed the Budget for Development of Kazakhstan (BDK). Responsible to the president and managed by the National Bank, the Agency for Control of Strategic Resources, the Agency for Strategic Planning, and the state oil company (now known as KazMunaiGaz), the BDK would have sterilized income from oil exports, invested these earnings to generate a return, and provided credit for private sector development.

The creation of the BDK became moot when state revenues dropped precipitously following the East Asian financial crisis that led to a sharp decline in oil prices, and the ruble devaluation in the late 1990s. Nevertheless, oil money was set aside in a secret Swiss bank account tied to President Nazarbayev.[78] The account was opened in 1996 with about $1 billion in proceeds from the sale of 20 percent of the Tengiz oil field to Mobil. In his revelation to parliament in April 2002 about the existence of this account, Prime Minister Tasmagambetov reported that its purpose was to prevent inflation and that in 1997 it paid pension arrears and helped stabilize the currency after the devaluation of the Russian ruble. He also admitted that other foreign bank accounts in the president's name existed.[79]

In 2000, when oil prices surged to $28 a barrel (bbl), the problem of what to do with this sudden windfall became urgent. Additionally, investigations by the U.S. Justice Department into the role of an American, James Giffen, in transferring payments from oil companies to Swiss bank accounts tied to senior officials in the Kazakh government created an

incentive to move this money back into Kazakhstan. Finance Minister Oraz Jandosov, fearing that the sudden earnings would get whittled away on various spending projects, drafted the concept for the creation of an oil fund.[80] The president issued his decree in August 2000 and regulations specifying the fund's functions followed in January 2001.

Flows to and from the National Fund

Kazakhstan's National Fund (NF) is both a savings and stabilization fund. Its founding document describes its mission as "stabilizing the socio-economic development of the country, accumulating savings for future generations, and reducing the country's vulnerability to external factors."[81]

Revenues into the National Fund come from tax payments made by the nine largest petroleum companies and the three largest mining companies. The 12 companies are Aktobemunaigas Corporation, JSC Don Mining and Enrichment Complex, Kazakhoil-Emba Corporation, Tengizchevroil Joint Venture, L.L.P., Kazzinc Corporation, Karachaganak Petroleum Operating B.V., Kazakhmys Corporation, Hurricane Kumkol Munai Corporation, Turgai Petroleum Limited Partnership, Mangistaumunaigas Corporation, Uzenmunaigas Corporation, and OJSC Karazhanbasmunai.

The government can change the list of companies whose payments are channeled to the NF. Additional revenues to the NF come from its investment earnings and from discretionary payments approved by the president, such as proceeds from the sale of the government's share in hydrocarbon projects.

The savings portfolio of the NF receives 10 percent of the taxes paid by these companies. The savings portfolio holds 75 percent of NF assets, as a minimum. Interest earned from investing the Fund's assets also accrues to the NF's savings portfolio. The amount budgeted to flow into the savings component in 2002 was $81 million.[82] The stabilization component is triggered by a reference price for oil, which is set for five years. For example, in 2000, the reference price had been set at $19/bbl. If the price of oil exceeded $19/bbl, the excess income would flow to the NF. Conversely, if the price of oil were to fall below $19/bbl, the NF would provide the difference, that is, a dollar amount equal to the loss in income, to the budget. Stabilization flows from the NF to the budget occur on a quarterly basis. Mining companies operate under comparable guidelines but of course under a separate reference price.

In its assessment of Kazakhstan's fiscal transparency, the IMF recommended a simplification of the NF's complex funding rules, warning that the roles could lead to unpredictable and contradictory outcomes that do not reflect policy choices. "The resulting process is unpredictable and unclear to all participants, from NF administrators to republican and oblast budget authorities."[83] The report recommended a simpler funding rule on the model of the Norwegian State Petroleum Fund, where the NF would be used to finance the non-oil budget deficit.

Because the NF's injections are based on tax payments made by the major petroleum producing companies, it became increasingly important for the government to be able to accurately predict earnings from the development and export of oil and gas. To assist the government, the IMF and the World Bank developed a complex petroleum revenue model that takes into account the cost structure for each individual oil field as well as transportation costs.[84] In late 2001, the IMF projected that, at the reference price of $19/bbl, flows to the NF in 2002 would be $245 million. If oil prices dipped to $15/bbl, the NF would transfer $69 million to the budget. A further estimate was provided by National Bank chairman Grigoriy Marchenko, who manages the National Fund. Marchenko estimated that the Fund would accumulate $4 billion by 2005 (an amount roughly equal to the 2003 government budget).[85]

The NF received its first deposit of $660 million from the sale of a 5 percent share in the TengizChevroil consortium and a related bonus payment. As of January 1, 2002, an additional $576 million had accrued to the NF through its stabilization and savings components, including $65.7 million earned through investing the NF.[86] At the same time, the NF disbursed $49 million in 2001 through its stabilization function (an amount equal to about 1 percent of the government budget). Operational expenses are deducted from the NF's investment earnings, and in 2001 these expenses came to $242,000.[87] The president did not exercise his discretion to authorize additional transfers from the NF. By the end of 2001 funds available to the NF stood at $1.2 billion. According to the National Bank, by July 2002, the NF had accumulated $1.66 billion ($1.24 billion in the savings portfolio and $420 million in the stabilization portfolio).[88]

Total contributions from the 12 oil and mineral companies came to $1.1 billion in 2001, according to the Ministry of Finance's annual report on the budget.[89] Of this, $576 million had been directed to the NF, and $500 million went to national and local budgets. According to the same report, the oil, gas, and mining sector contributed 40 percent of budget revenues in 2001. In 2002, total government revenues from petroleum and mining were $976 million. Of this amount, $275 million was transferred to the NF.[90]

No detailed projections on the size of the NF in coming years under various price scenarios have been made public.[91] In principle, the size of the Fund could be estimated with available information about expected increases in production, the revenue rules for the NF, and expected investment returns based on the performance of other oil funds. However, several key pieces of information about the government take are not publicly available—namely, the terms of profit sharing before and after cost recovery for the major contracts, progress toward completion of cost recovery, as well as information about the tax payments made by the major producers. The absence of this information also makes it impossible to verify whether the amounts transferred to the NF are correct.

Other than the outflows for stabilization purposes, additional expenditures from the NF are at the discretion of the president. The NF's regulations do not specify when and for what

the savings portfolio can be drawn down. For example, spending could be directed to lavish projects, such as moving the capital to Astana, rather than economic reforms to stimulate job creation and alleviate poverty. There are no caps on how much the Fund can be drawn down in a given year.

Investments

Kazakhstan received substantial technical advice on investment strategy from managers of the Norwegian State Petroleum Fund.[92] "We fully borrowed the Norwegian fund's investment strategy," National Fund Chairman Grigory Marchenko said. "All the technical aspects—all the standard portfolios, their duration, and principles for selection of external managers."[93]

Diversification and risk minimization guide the investment strategy. The Fund has retained six Western portfolio managers, each of whom has managed over $100 billion, to provide diversity in investment styles.[94] No investment manager is given more than $150 million in assets to manage. One of the obligations of the external managers is to provide four to five weeks of training to the National Bank's personnel. Eventually, the National Bank plans to have about 100 of these trained employees carrying out in-house investment management.

ABN Amro serves as the custodian of the NF, keeping a consolidated financial statement on the various portfolios, representing the Fund as a shareholder of companies in which it holds equity, collecting dividends, and paying taxes due foreign governments on the basis of its investments.

The NF's investment strategy foresees investment of 75 percent of NF assets in the savings portfolio and 25 percent in the stabilization portfolio. The stabilization portfolio has no equity investments. Its assets are invested in liquid short-term instruments so that they may quickly become available for stabilization purposes. The savings portfolio holds about half its investments in bonds and about 40 percent in stocks rated A or higher (see Table 9). The savings portfolio securities have a maturity period of 1–3 years.

Both portfolios are invested entirely abroad, thus sterilizing the foreign exchange and protecting against an appreciation of the real exchange rate. About 60 percent of investment is in the United States with the rest distributed among European countries, Japan, and Canada.

The Ministry of Finance sets percentage benchmarks for the returns to the savings and stabilization portfolios, and the Central Bank reports to the Finance Ministry on the NF's performance relative to the benchmarks. In its first year, the NF surpassed the Finance Ministry's benchmark of 4.8 percent, reaching 5.5 percent returns. Unlike the Norwegian Fund on which it is modeled, the NF has not disclosed the precise geographical distribution of its investment portfolio nor has it disclosed what companies it holds equity in and the market value of those holdings.

TABLE 9. Asset Allocation of the National Fund, 2002

	Stabilization Portfolio	Savings Portfolio
Bonds		
Central Bank bonds	20.7%	53.9%
Finance Ministry bonds	8.8%	—
Agency bonds	55.7%	—
Corporate bonds	—	1.4%
Total bonds	85.1%	55.3%
Stocks	—	39.48%
Money reserves	14.86%	5.26%
Total	100%	100%

Source: Quarterly Report of the National Fund, June 30, 2002. Available at http://www.nationalfund.kz/

Administration

As in Norway, management of the National Fund's assets rests with the central bank—in this case, the National Bank of Kazakhstan. The schedule of deadlines for the National Bank to report on the NF to the Kazakhstan government is set out in Appendix 8. By placing the NF within the National Bank, rather than creating a separate entity such as the Alaska Permanent Fund Corporation, Kazakhstan is able to lower operational expenses. The National Bank is currently training staff from its department of monetary operations on portfolio investing. The Ministry of Finance is responsible for receipt and transfer of funds to the NF, while the National Bank oversees their investment.

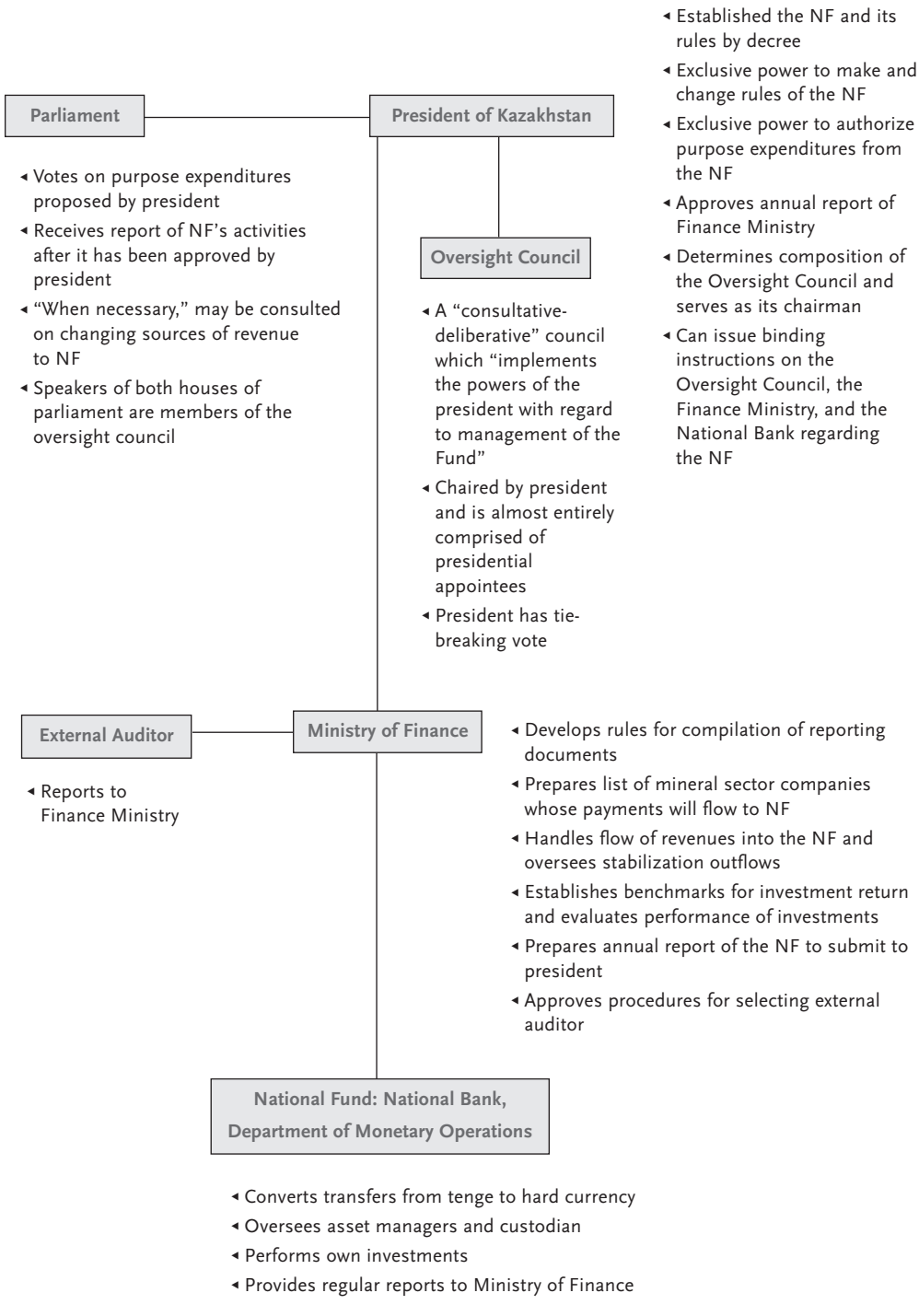
Accountability

Considerable room exists for improving accountability mechanisms of the Kazakhstan National Fund. Compared to funds in Norway, Alberta, and Alaska (see chapter two), the National Fund has fewer channels of accountability, and all of them lead to the president, as illustrated in Figure 2.

The NF lacks checks and balances. In Norway, various oversight bodies are accountable to the parliament; in Kazakhstan, parliament's role is peripheral. In Norway and Alberta, the legislature established the oil funds, while in Alaska, the oil fund was established through a public referendum. In Kazakhstan, neither parliament nor the public participated in the creation of the National Fund.

In June 2000, Deputy Prime Minister Utembayev told parliament that the government would be submitting a bill establishing the National Fund.[95] A week later, parliament was presented with a *fait accompli*: the news that the first injection into the NF would be the proceeds from the sale of government shares in TengizChevroil.[96] Less than two months later, the NF came into existence by presidential decree. Parliament was ordered to amend existing legislation to remove inconsistencies with this new decree.

FIGURE 2. Lines of Accountability in Oversight of the National Fund of Kazakhstan



Only the president may approve changes to the NF, although the parliament may participate in the preparation of proposals on the Fund's management organs. While the parliament receives reports about the NF's activities, there are no rules specifying the content of these reports or the dates for their submission. More importantly, parliament has no authority to approve, reject, or amend these reports.

Only the president may propose spending from the NF. No guidelines exist on what constitutes permissible expenditures and what limits exist on spending. Although expenditures must be approved by parliament, this is no guarantee that lavish and politically motivated expenditures benefiting few people—such as the government's decision to move the capital to Astana—will not be repeated. A World Bank analysis of the National Fund noted this risk: "When the chief executive presides over the hierarchy [of an oil fund], decisions over uses of the fund's revenues become political."[97]

In its report on Fiscal transparency in Kazakhstan, the IMF singled out the need to fully integrate the NF in the budgetary process. Namely, it suggested that the republic's budget should provide a consolidated account incorporating flows to and from the NF, and that such information should be reflected in the annual audit report of the Accounting Committee and in the report on the execution of the budget, which would facilitate a review of the effectiveness of the stabilization and savings functions of the NF.

Other powers enjoyed by the president include:

- Exclusive rule-making authority over the NF;
- Authority to designate purpose transfers from the NF;
- Authority to issue binding instructions to the government, the oversight council, and the National Bank on issues relating to the NF;
- Authority to approve the annual report submitted by the Ministry of Finance and to approve the external audit;
- The power to exercise control over activities involving management of the NF.

Perhaps the greatest authority that rests with the president is the ability to scrap the NF altogether. Since a presidential decree created the Fund, all it takes is another presidential decree to radically alter or abolish it.

In establishing the Fund, President Nazarbayev promised to establish a board of trustees comprised of governmental and nongovernmental representatives,[98] but instead created an oversight council that lacks independence, authority, and nongovernmental representatives. The council is unlikely to provide effective oversight.

The council, chaired by the president (who also enjoys the tie-breaking vote), is made up almost entirely of presidential appointees, including the prime minister, the head of the presidential administration, the chairman of the National Bank, the deputy prime minister,

the finance minister, the two speakers of parliament, and the chairman of the State Budget Control Committee. The chairman of the National Bank and the finance minister sit on the oversight council even though they are both responsible for managing the Fund. Only the two speakers of parliament are not directly subordinate to the president. However, even they are unlikely to offer independent oversight. Parliamentary elections have been heavily managed by the government, and as a result there are only about four opposition representatives among the 77 members of the lower house and only a couple in the senate.

The oversight council lacks the independence and capacity required to function effectively. The council exists to "implement the powers of the President of the Republic of Kazakhstan with regard to management of the Fund" and it "provides assistance and develops recommendations" for the president.[99] The rules do not define the scope of the council's reviews, do not give it binding authority, or any power to subpoena information or initiate meetings to discuss matters of concern. To be effective, the oversight council must have a regular schedule of meetings, and its powers should be spelled out. As of early 2003, the council had only met once, in May 2002, to hear the NF annual report.

To improve its credibility and accountability, the oversight council should include representatives from civil society and independent finance professionals. The Alaska Permanent Fund's Board of Trustees has two *ex officio* representatives of the governor, but not the governor. The other four trustees may not hold public office and must have recognized competence and wide experience in finance and investment. Strict financial disclosure requirements remove the risk of conflicts of interest. Other models include Chad, where an oil revenue oversight committee of nine members includes four representatives of civil society, and large pension funds, such as the New York State Teachers Retirement System, where eight of the ten members of the board of trustees represent the beneficiaries of the fund.

Disclosure

The NF itself operates with relative transparency, but with opportunities for improvement. The National Bank produces daily, monthly, quarterly, and annual reports for the Finance Ministry on the National Fund's investments, but none of these reports are made public. Instead, periodic statements about how much has accumulated in the NF are published in the press. Rather than publishing the annual report and the audit, a truncated summary of the two is made available. Appendix 9 compares the disclosure policies of the NF in comparison to those of Alaska, Norway, and Azerbaijan, and the last section of this chapter provides recommendations on improving of transparency of the NF.

Of greater concern are the oil revenues that may have been diverted before reaching the Fund. Oil swaps with neighboring countries, the export of crude to Russia below market prices, transfer pricing operations, the sale of oil through tax havens in the Caribbean, and other similar activities generate net revenues that never make it into the NF. Kazakhstan's national oil

and gas company, KazMunaiGaz, holds a 20 percent stake in the giant Tengiz oil field. Because it is not subject to the accountability and reporting requirements expected of publicly traded companies or elected officials, the company operates behind a veil of secrecy, with no public disclosure requirements. Such arrangements make an independent assessment of the profits generated by hydrocarbon production impossible.

The secrecy of key documents contributes to the lack of transparency. None of the production-sharing agreements (PSAs) or the joint-venture agreements (JVAs) that determine the government's take have been made public. Although KazMunaiGaz is a partner in several JVAs, including TengizChevroil, the terms of these JVAs have not been made public. While certain contract provisions must be held confidential, general terms of the contracts can still be made available, with commercially sensitive clauses excised. Kazakhstan need look no further than Azerbaijan for an example of how to disclose PSA terms and conditions. Additionally, the model developed by the IMF and World Bank for Kazakhstan to predict government oil revenues could help redress this informational muddle, but it has not been made available to the public.

The need for improved transparency of budget revenues is perhaps best highlighted by the government's admission that it maintained a secret Swiss bank account holding more than $1 billion for six years and used $880 million to pay pensions and cover the budget deficit. That such large expenditures could occur without the parliament or the public knowing the source of the money reinforces the need for dramatic improvement of transparency in the government's budget operations. The recent arrest of oil consultant James Giffen on charges of channeling millions of dollars into bank accounts linked to senior Kazakh officials to seal an oil deal further underscores the need for improved transparency of payments and earnings from Kazakhstan's oil and gas development.

Beyond improving disclosure, the government should improve the environment for media freedom. Journalists who report on government corruption and the oil sector are especially vulnerable to intimidation and prosecution. Media outlets that reported on the president's secret Swiss bank account were raided or closed and some publishers were beaten, prompting concern from Western governments. In its 2002 report, the UNDP named Kazakhstan among several countries that are slipping into authoritarian rule.[100]

Civil society's response to the Fund

The constitution of Kazakhstan says that land and its subsoil resources belong to the state, but that the people are the only source of state authority.[101] However, according to legal analyst Sofia Issenova, "The people have no access through their representatives in parliament or through referenda to influence decisions regarding sub-soil use, nor do they have sufficient access to information to make informed decisions."[102]

Parliament is defined in the constitution as "the highest representative body" and as the body that is "entitled to act on behalf of the people." Yet, increasingly, rules governing hydro-

carbon development and its impact on the environment are promulgated by presidential decree rather than legislative act. Despite the state's role in the development of its hydrocarbon resources, none of the government's PSAs or JVAs have been approved by parliament. Even where parliament has the authority to monitor oil revenues more closely, it has not always chosen to do so. According to the constitution, the president's decrees carry force until parliament adopts a new law. Yet, nearly two years after the creation of the NF, parliament has not prepared a draft law on the oil fund.

In fact, members of parliament struggle to obtain any information about the terms of oil and gas production agreements, and the public receives even less information. Many Kazakhs believe that contracts were awarded to foreign companies that gained the patronage of an influential sponsor within the government. This impression is reinforced by the arrest in April 2003 of James Giffen, who, as stated earlier, allegedly diverted millions of dollars from Mobil into bank accounts linked to senior Kazakh officials. ExxonMobil holds a 25 percent stake in the Tengiz oil field.

The secrecy of the PSAs and JVAs is seen as evidence supporting the allegation made in the press and often heard among environmental groups in Kazakhstan that the government has agreed to unfavorable contract terms. For example, one newspaper reports that the country has forfeited close to $15 billion in revenue from production at Tengiz.[103] Another reports that the government could "realistically receive just one quarter of the value of extracted reserves" at Kashagan and Karachaganak.[104] Disclosure of these agreements, as has been done in Azerbaijan, could help dispel the impression that the government has sold out the national interest.

Secrecy has also prevailed over the proceeds of hydrocarbon development. For years, the government kept secret the existence of the $1.2 billion Swiss bank account holding proceeds from the sale of state shares in the Tengiz oil field. Even after revealing its existence, the government has not provided evidence to parliament that the account has been closed nor has it provided a full accounting and independent audit of how the money was used.

Opposition to the government's policies on the NF has been growing. Members of parliament in particular object to their lack of involvement in the development and oversight of the Fund.[105]

Critics in the parliament and the press offer three basic arguments:

The Fund should not exist in its present form. This view argues that oil funds in Norway and Alaska were created when these territories had already attained a high standard of living and had resolved many of their most pressing social needs. By contrast, Kazakhstan suffers from dire poverty and crises in education, health, and the environment. At current spending levels, the critics argue, the NF's stabilization function serves to institutionalize poverty because it cannot be used to subsidize increased government spending. These critics call on the government to address pressing social needs first, and only then to establish an oil fund focused on savings and stabilization.[106]

The Fund should invest in domestic enterprises. Proponents of this view see the NF policy of investing exclusively in foreign assets as a means of subsidizing the West, and particularly, the United States. They argue that Western companies are exploiting Kazakhstan by refusing to invest in anything but the hydrocarbon sector, and that the Fund should not compound the exploitation by investing in Western equities and bonds. Instead, it should invest in domestic enterprises that can boost the non-oil sector of the economy.[107]

The NF is an attempt to sanitize tainted money. This criticism holds that the impetus to establish the NF came from the investigation by Swiss and U.S. authorities into accounts held by President Nazarbayev in Swiss banks. To defuse the scandal, the president allegedly established the Fund and, in April 2002, transferred about $300 million into its accounts from the Swiss account for ostensibly public purposes.[108]

In March 2002, a coalition of members of parliament from western Kazakhstan's oil-producing region, journalists, and opposition figures organized a "People's Oil Fund" initiative with an open letter to Ernst & Young published in the *Wall Street Journal*. The letter urged the auditor to disclose the results of its audit of the Fund and to push for the inclusion of independent monitors on the oversight council.[109] The group's recommendations included: returning a portion of oil revenues to a fund for regions where development takes place, transparency of oil and gas contracts, a liquidation of all secret foreign accounts, and greater parliamentary control over the oil fund.[110]

As the NF grows, opposition to the Fund is also likely to increase unless citizens are given a stake in its future. At a World Economic Forum panel on revenue transparency, Hans Jochum Horn, managing partner for Ernst & Young's CIS division, reflected on Norway's experience and concluded that public support is the linchpin for sustaining a national oil fund.[111]

Recommendations

If Kazakhstan is to use its finite natural resources as a springboard for long-term economic growth, it must demonstrate a commitment to transparency, fairness, and good governance in the management of its oil and natural gas wealth. It must also create favorable conditions for development of the economy beyond these industries.

Kazakhstan's leaders should initiate and nurture public discussion about the government's strategy for using its oil and natural gas earnings to promote long-term economic growth and improvement of the nation's health, education, and social protection infrastructure.

Recommendations concerning the National Fund

- ***Make independent audits of companies paying the Fund available to the public.***
  Since many of the 12 companies whose payments feed the NF are not audited and do not produce public annual reports, it is impossible for independent observers to deter-

mine whether the Fund receives what it is entitled to. Currently, even those companies disclosing annual reports do not provide the detail necessary to determine what payments qualify for transfer to the oil fund. For the Fund to operate transparently, information about its receipts should extend to their point of origin with the petroleum and mining companies. To do this, the government should hire independent auditors to review individual company operations and financial statements to determine whether the correct amounts are being transferred to the NF.

In particular, the transparency and accountability of the state energy company, KazMunaiGaz, should be improved. Although the company is state owned and involved in developing and selling public resources, it is not obligated to report its earnings to parliament. The company should be required to undergo external audits and to publish financial information in line with generally accepted international accounting standards.

- ***Provide more detailed and regular reporting of the National Fund.***

Information about the Fund should be made more detailed and provided in a more timely fashion. Currently, only "information about" the annual report is required to be reported. By contrast, Norway's State Petroleum Fund, Alaska's Permanent Fund, and the Azerbaijani State Oil Fund publish annual reports and audits in their entirety. Most quarterly reports have not been made public. Although an outside auditor has reviewed the NF, no audited financial statements have been disclosed. Full quarterly and annual reports should be made available, providing information about payments made by each company, revenue and expenditure projections, the market value and composition of individual portfolios, and the investment methodology, as well as audited financial statements.

The Fund's website should serve as a vehicle for providing the public with information about the NF. Two models for website content are those maintained by the oil funds of Alaska and Norway. Alaska makes public a full annual report written in "easily understandable language" and including the financial statements produced by outside auditors.[112] Statutes of the Alaska Permanent Fund (APF) establish that all information possessed by the APF is a public record, with the exception of confidential information about private enterprises in which it holds equity.[113] Appendix 9 compares the type of information provided on the Norwegian, Alaskan, and Kazakh oil fund websites and highlights areas where Kazakhstan's website content could be improved.

- ***Make oil revenue projections available to the public.***

The predictions of the IMF/WB oil revenue model under various oil price assumptions should be made widely accessible so that citizens can form expectations about the revenues their government might earn. Since the model was constructed without knowledge of the details of individual contracts, claims to secrecy of commercial data should

not apply. Moreover, because the model is used to devise annual budgets, its assumptions and its outputs should become public knowledge. The Ministry of Finance should also make public its projections for the Fund.

- ***Improve accountability through greater parliamentary oversight.***
  The presidential decree creating the NF gives the president complete control over the Fund. To improve accountability, parliament should start by passing a law establishing the NF. A fund based on a legislative act is more difficult to change than a fund backed by presidential decree. Such a law should build in greater checks and balances over the activities of the Fund. For example, it should adopt a medium- and long-term expenditure policy for the NF that would create guidelines for permissible expenditures and would set limits to the amounts of these transfers in a given year.

  A law on the NF should also make the oversight council a credible agency by giving it the authority to set investment benchmarks, determine its own meeting schedule, conduct its own inquiries, subpoena documents and experts, and publish its conclusions. Finally, the law should also draw on examples provided by other funds such as the Alaska Permanent Fund, the Nunavut Trust, the New York State Teachers Retirement Fund, and the California Public Employees' Retirement System on how to assemble oversight boards that incorporate representatives of the beneficiaries of the Fund. Credibility of the oversight council will come only with the inclusion of members of civil society.

Recommendations concerning spending of the NF and stimulating the non-oil sector

The National Fund lacks a clear development objective. The stabilization component is independent of budget spending, and therefore cannot fill gaps that develop as a result of increased budgetary expenditures. The savings function aims to "generate accumulations for the state," but does not clarify how, when, and for what the savings will be used.

Recommendations on spending begin with two strictures:

- ***Do not invest oil fund assets in the domestic economy.***
  Calls for investment in the languishing economy instead of in foreign equities and securities have a number of drawbacks. Venezuela and Alberta's Heritage Fund, each following a strategy of investing in local enterprises, made too many nonperforming loans to enterprises unable to attract private financing. Moreover, an oil fund that has to sell its share of equity in domestic enterprises to counter a drop in oil prices only worsens the economic impact on domestic industry. Rather than insulating the economy from oil price volatility, the oil fund transmits that volatility to domestic enterprises.

- ***Use the earnings from foreign investments for human development.***
  A more sensible approach is to continue to invest in foreign equity and securities to generate returns, but use the earnings from the savings portfolio for a public investment program to improve infrastructure, access to health care and education, and the investment climate for small and medium-sized enterprises. Such spending, however, must be incremental and predicated on the achievement of observable improvements in outcome. It is important that prior to initiating a public expenditure program, the government of Kazakhstan have in place adequate project planning and evaluation capacity, with agencies capable of tracking and auditing expenditures. To prevent overheating of the economy and to ensure that expenditures do not exceed receipts, a cap should be set on how much can be withdrawn in a given year.

- ***Remove constraints on non-oil businesses.***
  Although many structural reforms have been adopted nationally, business development continues to be stifled by the failure to communicate and implement rule changes at the local level. A shortage of financing, excessive licensing requirements, frequently changing rules and administrative personnel, an absence of information about regulations, an oppressive and corrupt inspection regime, and a corrupt judicial system make Kazakhstan an extremely unfriendly place to do business. The expanding informal economy results in lost opportunities for budget revenue generation and job creation. Pressure to spend down the NF will only grow if these constraints to the development of the non-oil sector are not removed.

- ***Ensure that environmental penalties are used to pay for environmental protection.***
  The government of Kazakhstan's increased collection of penalties and other payments for damage to the environment have not translated into use of those monies for the environment. The government should ensure that environmental problems get adequate funding either by reinstating the national Fund for Protection of Nature or ensuring that the majority of environmental payments into the budget are used for the environment.

Recommendations concerning the state budget

- ***Strengthen institutions capable of conducting budget oversight.***
  Strengthen parliamentary engagement with the budget by bolstering the research capacity of the parliamentary committee on budget and the audit committees. If actual expenditures differ sharply from planned expenditures, a revised budget should be prepared. Strengthen the capacity of the external auditor and introduce an annual published audit

of budget execution. Provide opportunities for public comment on the budget. In the budget, disclose any oil-backed loans obtained by the government or by KazMunaiGaz, which will become the obligation of future generations to repay.

- ***Disclose terms of Kazakhstan's production-sharing and joint-venture agreements and require parliamentary approval of future contracts.***
  Disclose terms of the production-sharing and joint-venture agreements for oil and gas development that the government has entered into, as is currently done in Azerbaijan. Since these contracts often over-ride existing and future legislation, have any new contracts approved by parliament. Commit to eliminating, where possible, confidentiality clauses, which prevent contracts from being a public record, in new contracts the country enters into. Have new production-sharing or joint-venture agreements ratified in parliament, as is done in Azerbaijan.

- ***Volunteer to disclose petroleum revenues.***
  Kazakhstan should volunteer to become an early signatory to the templates for reporting oil and gas revenue receipts being developed by the Extractive Industries Transparency Initiative (EITI). The initiative aims to increase transparency of payments made by extractive companies and received by host governments by creating templates for companies and governments to report what they pay and earn. Participation in this initiative would send a strong signal about the government's commitment to transparency in its petroleum sector.

Recommendations on engaging civil society

- ***Implement the Aarhus Convention.***
  To improve public engagement in the environmental impacts of hydrocarbon development, Kazakhstan should introduce relevant legislation and develop procedures and infrastructure to implement the Aarhus Convention, which Kazakhstan has ratified and which came into force in October 2001. The Aarhus Convention guarantees citizens access to information, public participation in decision making, and access to justice in environmental matters.

- ***Encourage public discussion of revenue strategy by protecting free speech.***
  It is important to initiate public discussion about the government's strategy for applying its oil rents to promote human development and economic growth. Greater public engagement can help the government overcome the public relations problem that is feeding criticism of the government's oil revenue management.

An environment for public discussion of the government's revenue management strategy can be created by curbing the persecution of journalists, which has intensified in recent years. To strengthen its commitment to essential human rights and effective citizen oversight, Kazakhstan should ratify the two fundamental conventions on human rights: the International Covenant on Civil and Political Rights and the International Covenant on Economic, Social and Cultural Rights, which have been ratified by over 140 countries.

- ***Adopt a freedom of information law.***
  Adopt a law on public access to public information held by the government which complies with international standards, and ensure that laws on freedom of expression and information, including on the media, comply with international and comparative standards, in particular with Article 19 of the Universal Declaration on Human Rights and Article 19 of the International Covenant on Civil and Political Rights. These recognize the right to freedom of opinion and expression through any media.

"We would come a long way if all—and I emphasize all—natural resource companies would make their transfers of royalties, fee payments, and other revenues to host governments fully transparent."

—PETER WOICKE, EXECUTIVE VICE PRESIDENT,
INTERNATIONAL FINANCE CORPORATION, WORLD BANK

7. A Road Map for Promoting Revenue Accountability in the Caspian Basin and Beyond

Conclusions

Chapter one discussed why good management of oil and gas windfalls is important to the countries of the Caspian. The question remains: Why should foreign governments care about these outcomes?

For the United States, since September 11, a greater reluctance to promote democracy has permeated U.S. foreign policy toward the Caucasus and Central Asia. Concern over securing the cooperation of these countries in the war against terrorism seemingly has eclipsed efforts to encourage good governance and respect for human rights. Governments in Europe and elsewhere, concerned about their need for Caspian oil, have also limited their activities to promote good governance in these countries. Governments in the region have taken advantage of the West's turning a blind eye toward clampdowns on media freedom and the persecution of opponents under the guise of battling terrorism.

The reluctance of Western governments to acknowledge problems of governance in the Caspian region is shortsighted for two reasons. First, good management of oil and gas revenues by the resource-abundant countries of the Caspian serves the long-term interests of those that will increasingly rely on Caspian oil. In the United States, the *National Energy Policy* report of the National Energy Policy Development Group, headed by Vice President Dick Cheney, outlines a plan for encouraging diversity of oil production to minimize the potential for market instability and identifies the Caspian as an important new source of supply.[1] Similarly, the European Union Energy Policy anticipates increased reliance on Caspian oil.[2]

Therefore, it is in the interests of Europe and the United States that stable regimes emerge in the Caspian. As history has shown with Iran, Iraq, Nigeria, and Venezuela, allies that are unable to navigate the resource curse are unreliable friends. The most effective way to guarantee reliable allies and reliable exports from the Caspian is to encourage the formation of governments that derive their legitimacy from elections and are able to translate "black gold" into economic prosperity and popular support. The prudent management of resource revenues is a challenge even for states that are already prosperous and democratic. It is an even greater challenge for states in the process of transformation and lacking these qualities. Unfortunately, Azerbaijan and Kazakhstan have already demonstrated a tendency, typical of petro-states, to rely on excessive centralization, ultra-presidentialism, and force rather than elections to maintain current leaders in power.

Second, the leverage held by the United States and its allies in the war against terrorism in the region is underestimated. Cooperation is mutually beneficial. While the United States and its allies benefit from the use of bases and fly-over rights, governments in the region acquire an ally in their efforts to establish greater independence from neighboring powers. Increased pressure by the United States and its allies for improved government accountability in the Caspian is unlikely to sever the ties that have developed since these countries' independence.

Promoting good governance in the region also advances the war against terrorism. The autocratic and repressive practices of rulers in the Caspian region create a fertile ground for breeding terrorism by giving dissidents no other alternative for expressing their views. The alliance of the United States with such regimes creates a perception of U.S. complicity and hypocrisy that undermines its mission in the region. Outrage over such complicity contributed to the overthrow of the Shah in Iran, eventually turning one of America's closest allies in the Persian Gulf into one of its enduring enemies.

Chapters five and six highlighted the fragility of the natural resource funds in Azerbaijan and Kazakhstan, given the absence of checks and balances in their governance and their political systems. Rather than repeating the recommendations made in chapters five and six to the governments of Azerbaijan and Kazakhstan, this chapter will focus on what the international community—governments, oil companies, international organizations and donors—can do to promote good revenue management in Azerbaijan and Kazakhstan, and beyond.

Empower citizens through transparency and public participation

Much attention has shifted in recent years to the responsibility of petroleum and mining companies to promote sustainable development in countries where they extract resources. Not only are they expected to behave responsibly, but increasingly they are expected to perform services normally provided by government, while pressuring host governments to improve their own behavior. For example, the British mining company Rio Tinto has created foundations to serve as development agencies in countries ranging from Indonesia to Namibia. In Papua New Guinea, mining companies receive tax offsets in exchange for the construction of roads and the delivery of health and education services. In Sudan, Talisman Energy came under pressure by the Canadian government to help mediate an end to the country's civil war. Continuing civil rights pressure on Talisman was in part responsible for Talisman selling its position in Sudan to an Indian company in 2002. While these important efforts should be encouraged, they should not come at the expense of ignoring those who have the primary responsibility of pressuring governments for responsible revenue management: the citizenry.

A key component of efforts by oil and mining companies to encourage good revenue management should be the empowerment of local citizens to hold their own governments to account. The first step toward such empowerment is the disclosure of information by companies about how much host governments receive from their petroleum or mining operations, and the terms on which those payments are determined. Mining, gas, and oil companies cannot control how governments spend taxes, royalties, and fees. But they do have a responsibility to disclose the terms they reach and the payments they make to governments so that citizens can monitor and influence how that income is spent. Companies that fail to do so are complicit in the disempowerment of the people of the countries to which the resources belong. Lack of accountability for expenditures facilitates embezzlement, corruption, and revenue misappropriation. If the revenue flow is known, then the expenditure flow can be tracked more easily and mismanagement or diversion for illicit purposes will be more difficult to hide.

The disclosure of this kind of information is in the interest of multinational companies. When companies operate in corrupt and autocratic environments where contracts have little legal force and revenues are shrouded in secrecy, they are vulnerable to accusations of underpayment and revision of contract terms when political actors or circumstances change. And if petroleum development or mining fails to alleviate the deprivation of the country's people, the multinationals are often the first ones blamed. The best protection for the multinationals is a public record detailing the terms of their payment obligations to the government, how much was paid, and when. Such disclosure shifts attention away from the companies and toward the government departments and individuals responsible for receiving and allocating revenues. Payment disclosure also shifts some of the responsibility for encouraging governments to manage their revenues effectively from multinationals to civil society.

Some companies have already taken the lead in reporting their payments to host gov-

ernments. Newmont Mining discloses its royalty payments to the government of Indonesia on a quarterly and cumulative basis. Until it left Sudan in 2002, Talisman Energy published a corporate responsibility report on its production and the benefits accruing to the government, which was audited by PriceWaterhouseCoopers. However, BP's experience in Angola demonstrates the limitations of these voluntary approaches. The government of Angola, which has been accused of siphoning away at least $1 billion per year in oil revenues, threatened BP with a lawsuit when the oil company promised to disclose how much it pays to the government. Governments with the most to hide are the ones least likely to tolerate disclosure of payments by multinationals.

To help companies circumvent the problems inherent to voluntary disclosure, a coalition of NGOs launched the Publish What You Pay (PWYP) campaign in 2002, calling for reforms that would require companies to make public the taxes, royalties, production-sharing fees, bonuses, and all other forms of payment to the governments in countries where they operate. Such a requirement could come as a condition of being listed on major stock exchanges, as a condition of lending by international financial institutions and credit and donor agencies, or as an addition to the International Accounting Standards.[3] A regulatory rather than an voluntary approach creates a level playing field among major companies, and protects these companies against retaliation by host governments.

The need for improved transparency is increasingly recognized by both industry and governments. At the Johannesburg sustainable development world summit, British Prime Minister Tony Blair, under pressure by PWYP campaigners, announced plans to form an Extractive Industries Transparency Initiative uniting governments, businesses, and NGOs to develop a framework for ensuring that all payments by companies in the extractive industry are published openly. The UNDP and International Finance Corporation (IFC) have added their support for the PWYP appeal for financial transparency. The G-8 have also announced they would be working to ensure better accountability and greater transparency with respect to those involved in the import or export of Africa's natural resources from areas of conflict.

Industry is also increasingly recognizing the need for greater transparency surrounding payments. The International Council on Mining and Metals (ICMM) includes in its charter the commitment to "adhere to ethical business practices and, in so doing, contribute to the elimination of corruption and bribery, to increased transparency in government-business relations, and to the promotion of respect for human rights internationally." The ICMM reports that about half of its members have codes of conduct on transparency. In an effort to standardize the reporting of information about the impact of companies on environmental, social, and economic development, the Global Reporting Initiative brings together corporations, NGOs, accountancy organizations, business associations, and other stakeholders from around the world to design a standardized set of sustainability reporting principles.[4] Individual companies, such as BP, Talisman, and Newmont Mining have voluntarily begun providing information about payments to host governments.

Good revenue management goes beyond oil funds

The creation of an institution such as an oil fund is an important first step toward good petroleum revenue management. However, the appearance of good institutions or good laws should not detract attention from the importance of democracy in making these institutions work. In many countries, expertly written laws co-exist side by side with their flagrant violation. When there are no mechanisms for citizens to hold their public servants to account over violation of the country's laws or international conventions that the country has entered, then even the best laws or institutions carry little force.

It is no coincidence that the oil funds commonly thought to represent best practices—such as in Norway, Alaska, or Alberta—exist in established democracies. In Norway's case, the rules on channeling money to and from the fund are lax, and it is only a tradition of transparency, accountability to voters, and interagency checks and balances that have made the fund so robust. As chapter two shows, those aspects that make oil funds successful—transparency, tight fiscal controls, accountability—are less likely to exist in the absence of democracy. Conversely, the experiences discussed in chapter two suggest that the greatest threat to an oil fund is a lack of checks and balances. Oil funds are in greatest danger when a single individual can rewrite the rules in response to failures of fiscal policy or whimsical spending priorities.

Those international institutions and foreign governments that advise Azerbaijan and Kazakhstan on the management of their petroleum wealth should not be satisfied with the adoption of oil funds in these countries. While the oil funds are a positive first step, they exist in a context where free and fair elections have not yet occurred, where parliaments have little power, where presidents rule by decree, and where civil society is restricted and persecuted. For these oil funds to endure they must be embedded in a democratic system that gives the various branches of government oversight of one another, a system that is transparent in its handling of public monies, and that allows citizens to hold public servants accountable. In their advice to Azerbaijan and Kazakhstan about how best to manage the countries' resource wealth, international institutions and foreign governments should not skirt the sensitive but critical role that democracy plays in sound revenue management.

Reporting of payments made to Caspian governments by petroleum companies should go hand in hand with improved budget transparency. The problem is particularly acute in Azerbaijan where the budget is unclear and parliamentary procedures undefined. The parliament receives a short budget, typically less than 20 pages, in which expenditures are aggregated by department and not by program or line item. The budget does not report the basis for its revenue and expenditure estimates, leaving the reliability of these estimates to be questioned. Parliament can return the budget along with suggestions to the executive branch, but it has no authority to amend the budget on its own. Parliament's weakness was demonstrated by the fact that the 12-page 2002 budget was approved following just 20 minutes of discussion. Information on actual expenditures is extremely difficult for the public to obtain. It is available only

from state statistics reports, which have a very limited circulation and are for government use only.

In Kazakhstan, where there is an established treasury system and a more detailed internal classification and reporting system, more information is available about the budget. Detailed information on actual revenues and expenditures is available online on a quarterly basis. However, improvement is needed in the monitoring and evaluation of the budget, which currently includes only a cursory internal audit and no external independent evaluation. Improvements are also needed in integrating off-budget accounts, such as the National Fund, into a consolidated budget. In Kazakhstan, the greater challenge is achieving parliamentary independence. One impediment is the parliament's low research and administrative capacity. Only recently has each parliamentary commission been able to hire a single administrative assistant, but they still lack an independent research staff.

Given the size of the oil and gas sectors in the budgets of these two countries, improved budget transparency should specifically address how to improve transparency of oil and gas revenues. One model of good resource revenue reporting is Botswana, which obtains about three-quarters of its export revenues from the sale of diamonds. In Botswana, a chain of accountability exists between government, parliament, and the public. Line ministers project and later transfer revenue from sale of natural resources into a central bank account. An accountant general and later an auditor general analyze actual against estimated deposits, noting any discrepancies, and submit a summary report to the parliamentary Public Accounts Committee. The committee conducts hearings with the relevant line ministers and publishes regular reports on government accounts and the outcomes of these hearings.[5]

There are many ways to establish fiscal transparency. The IMF's *Code of Good Practice on Fiscal Transparency* and the OECD's *Best Practices for Budget Transparency* provide numerous suggestions. The key to implementation, however, will be linkage by the international community between fiscal transparency and continued investment in the Caspian countries' oil and gas sectors.

Revenue watchdogs should learn from one another

NGOs have had a significant influence on shaping the development of extractive projects and holding governments and multinationals to account. For example, in Chad, NGOs participated throughout the development of the revenue management plan and negotiations over construction of a pipeline to move oil to a port of export. The plan and negotiation process helped create additional layers of oversight into the pipeline's construction and to increase compensation to communities along the right of way. Burmese NGOs are holding Unocal to account in U.S. federal court through the Alien Tort Claims Act for the company's complicity in human rights abuses committed by the military on behalf of the company. Following the public outcry of the execution of Ken Saro Wiwa for his opposition to Royal Dutch/Shell's activity in the Niger Delta, the company has cooperated extensively with local NGOs. Activism by local,

national, and international NGOs has frequently led to changes in individual projects or policies at the World Bank.[6]

Unfortunately, NGOs active in oversight of extractive projects have little information about what their counterparts are doing. Without such information, NGOs have been unable to demand that multinationals or international financial institutions replicate "best practices" initiated elsewhere. For example, few in the Caspian region likely know about BP's innovative partnership with local government and NGOs inthe province of Papua, Indonesia, to help build government capacity to absorb the increased revenues from petroleum development and improve service delivery and good governance in the region. Few Caspian NGOs probably know how activists in India helped communities displaced by construction of the Narmada Dam successfully pressure the World Bank for its first-ever independent review of a project, as well as the creation of an information disclosure policy and an independent inspection panel.

It is important that NGOs be able to share views and advice about their experiences in oversight of the extractive industry and revenues stemming from it. Donors can facilitate this exchange by providing grants to organizations to create websites and roundtables, and to support study trips allowing budget activists from different countries to meet and exchange ideas.

Recommendations

Recommendations for foreign governments and intergovernmental organizations

It is in the interest of the home governments of the major investors in Azerbaijan and Kazakhstan—the United States, Britain, Italy, France, Norway, and Russia—to increase accountability in the use of public revenues derived from oil and gas exports. Because many of these countries' oil companies will be in the Caspian Basin for many years to come, their position will be more secure if it can be demonstrated that their presence has contributed to improvements in the economic and human development of Azerbaijan and Kazakhstan.

- Home governments of the major oil and gas companies operating in Azerbaijan and Kazakhstan should use their domestic regulatory powers to require oil and natural gas companies to make public the taxes, royalties, production-sharing fees, bonuses, and other forms of payment to the governments of the countries in which they operate.

- The European Union should use the implementation of its Partnership and Cooperation Agreements with Azerbaijan and Kazakhstan to emphasize the importance of revenue transparency and fiscal accountability. These agreements are 10-year treaties that use respect for democratic principles and human rights to define the political, economic,

and trade relationships between the partner and the European Union. The issue of revenue transparency should also be part of the regular agenda at the annual Ministerial Cooperation Councils between the EU and its partners.

- The European Parliament should include the issue of revenue transparency and budget accountability on the agenda of its Parliamentary Cooperation Committees with Azerbaijan and Kazakhstan, and press the European Commission to address these issues in its programming.

- The United States and the European Union should provide leadership for the Extractive Industries Transparency Initiative (EITI) by pressing for full disclosure of payments by companies and receipts by governments, and by holding open the option for a regulated approach if voluntary disclosure fails.

- The OSCE should make public participation in government revenue management a programmatic priority through its efforts to further member compliance with OSCE Human Dimension Committments.

- The Council of Europe should encourage greater transparency and open discussion about Azerbaijan's revenue management strategies by pressuring the government to adhere to its obligations under the Council of Europe. In particular, the Council should maintain pressure on Azerbaijan to adhere to its commitment to amend the rules for registration of nongovernmental organizations and the appeals procedures, to guarantee freedom of expression and independence of print and broadcast media, and strengthen the independence of the legislature vis-à-vis the executive.

- Governments whose energy companies operate in Azerbaijan and Kazakhstan should encourage the Caspian states to have their parliaments ratify future production-sharing and jointventure agreements. They should also encourage these governments to disclose the terms of existing agreements with oil companies.

In order to protect the companies from postcontractual efforts by governments to get a better deal, these contracts often contain a clause that makes the contract supersede existing and future legislation. Such exemptions, however, deprive the populations of these countries of the right to legislate environmental or other improvements that contradict contract terms. For example, the intergovernmental agreements for the BTC pipeline, which are in force for 60 years, will supersede laws in the areas of land acquisition, tax codes, environmental regulation, human rights protections, indemnification against liabilities, and military security in Turkey, Georgia, and Azerbaijan.[7] Because

these agreements place limits on the ability of governments to act on behalf of their public in the aforementioned areas, approval of these contracts should be preceded by widespread public discussion, parliamentary ratification, and ready availability of the relevant documents.

- The diplomatic community should promote citizen oversight by facilitating the granting of refugee status and by speaking out against persecution of watchdogs, whistleblowers, and journalists who report on mismanagement and corruption. Foreign aid should be embargoed when governments are directly responsible for cracking down on investigative journalists. When governments deny responsibility for attacks against journalists, the diplomatic community should maintain attention and publicity around the government's criminal investigations to arrest and bring the attackers to justice.

- Governments and intergovernmental organizations such as the United Nations or the OSCE should emphasize the importance of revenue transparency in the course of diplomatic dealings with the governments of Azerbaijan and Kazakhstan. Governments and intergovernmental bodies that dispense foreign aid to these two countries should fund training and other programs that aim to build the capacity of civil society to monitor oil revenues and budgets.

- Governments and intergovernmental organizations should encourage the governments of Azerbaijan and Kazakhstan to adopt freedom of information laws which would provide a legal grounding for the public to hold these governments to account over revenues and expenditures. To monitor and influence government decisions that affect their lives, citizens require access to official information held by government and other public authorities. With access to information increasingly recognized as a fundamental right, freedom of information laws now exist in most European countries and throughout North America. Increasingly, they are also being adopted in the developing world. Both Georgia and Uzbekistan possess freedom of information laws. Mineral rich countries such as Mexico, Chile, South Africa, and Indonesia have adopted, or are in the process of adopting, such laws. Even where rule of law is absent, such laws provide a foundation for a more democratic future.

- Foreign governments and intergovernmental organizations should press Azerbaijan and Kazakhstan to improve their enabling environment for civil society. In Azerbaijan, the absence of information about registration procedures for NGOs as well as lack of opportunities to appeal registration denial have prevented many civil society groups from being able to operate in the open. In Kazakhstan, lawsuits and arbitrary arrests have had a similarly chilling effect.

Recommendations for international financial institutions and donors

To fulfill their mission of reducing poverty and promoting stable economic development, the IMF, the World Bank Group, and other multilateral development banks, as well as officially supported export credit agencies, should use their leverage to promote accountability and transparency of revenue management in Azerbaijan and Kazakhstan. Although Kazakhstan has paid off most of its assistance loans, it will continue to depend on multilateral donors for project financing, which creates opportunities for conditionality. The European Bank for Reconstruction and Development (EBRD) and the International Finance Corporation have funded several projects in the energy sectors in Azerbaijan and Kazakhstan and are now poised to help finance the Baku-Tbilisi-Ceyhan pipeline. The Asian Development Bank is likely to increase its involvement in energy sector projects in Kazakhstan.

The World Bank and the IMF have accumulated a body of case studies showing how lack of transparency and accountability with regard to management of natural resource wealth has contributed to the misallocation of this wealth. As Peter Woicke, executive vice president of the World Bank's private sector lending arm, the International Finance Corporation, has said, "We would come a long way if all—and I emphasize all—natural resource companies would make their transfers of royalties, fee payments, and other revenues to host governments fully transparent."[8]

The international financial institutions (IFIs) should themselves promote that kind of transparency by tying lending to disclosure by governments of all earnings they have received from the sale of oil, gas, and minerals, and to improved reporting about how those revenues are being spent. In Chad, the World Bank helped design an aggressive revenue management law tied to spending to reduce poverty. In Ecuador, the IMF tied receipt of a $240 million loan to passage of a fiscal reform law that would assign pipeline profits to debt reduction and to education and health spending. Such efforts should be made more systematic. In countries such as Angola, the amount of oil revenue that disappears each year far exceeds the amount received from international lending agencies. For the IFIs, tying lending to revenue transparency requirements is not only good policy, but sound investment practice.

The IFIs should also press the governments of Azerbaijan and Kazakhstan to disclose any oil-backed loans they have received. One of the greatest dangers of abundant resource wealth is the easy accumulation of debt that such wealth permits. Governments that initiate ambitious spending programs borrow liberally when oil prices fall, often leaving these countries with more debt than they would have had if there were no natural resources at all. In particular, the easy ability of state-owned oil companies to borrow on the international market has endowed these companies with tremendous budgetary resources but without the accompanying demands for transparency and accountability expected of governments. In Indonesia, for example, Pertimina, the state oil company of Indonesia, borrowed heavily to finance an industrial development policy, to provide funding for the military, and to build public works

projects. According to Ascher, "the development strategy pursued directly through Pertimina operations was a remarkably broad industrialization and infrastructure expansion, unfettered by government oversight or careful analysis of profitability."[9] By 1973, Pertimina's debt exceeded that of the Indonesian government and when oil prices fell several years later, the company was forced into bankruptcy.

Because loan servicing becomes the obligation of future generations, it is imperative that citizens know what obligations the state is incurring on their behalf. International finance institutions, such as the IFC, EBRD, and export credit agencies that invest heavily in oil and gas projects in the Caspian, should, as a condition of lending, require regional governments to disclose all oil-backed loans that they or their state-owned natural resource companies obtain.

Additional aid provided by multilateral donors such as the World Ban, IMF, Asian Development Bank, or EBRD should require the governments of Azerbaijan and Kazakhstan to:

- disclose all revenues received from the exploitation of oil, natural gas, and minerals;
- produce and make public financial reporting by the state oil and gas companies, with that reporting meeting the requirements of generally accepted international accounting standards;
- introduce improved accountability mechanisms in the oversight of their oil funds;
- commit to use petroleum revenues toward implementation of a poverty alleviation plan;
- disclose all oil-backed loans obtained;
- for Kazakhstan, encourage the government to disclose, to the extent possible, details of production-sharing and joint-venture agreements entered into. Require parliamentary ratification and disclosure of any new contracts for oil and gas development that receive funding from these donors.

There are other measures that international financial institutions and private donors can take to promote transparency and public oversight of government revenue management.

- The IMF's *Code of Good Practices on Fiscal Transparency* and its survey to assess compliance with these standards should include an assessment of how transparent and accessible the budgetary process is to the public. It should assess the extent to which government budget documents are readily available to the public in a timely manner

and whether there has been an open discussion of the budget. The IMF's annual Article IV consultations, the country-specific assessments which guide IMF lending, should include an assessment of the transparency of the government budget.

- The IMF and the World Bank Group should facilitate payments disclosure by governments and companies by creating templates for such reporting, as advocated by the Publish What You Pay campaign and the Extractive Industries Transparency Initiative. The campaign and initiative aim to increase transparency of payments made by extractive companies and received by host governments by providing templates for companies and governments to report what they pay and earn.

- Donors should make training and education of civil society budget watchdogs and parliamentarians in Azerbaijan and Kazakhstan a priority. Local groups are woefully underprepared to conduct independent analysis and oversight. Training in budget monitoring, fiscal policy, and in the economics of petroleum-led development should be provided. Such capacity building should become a priority for the OSCE through its Economic and Environmental Dimension, which seeks to promote economic prosperity among member states to reinforce international security. Training could also be integrated into the World Bank's Global Development Learning Network. The IMF already provides fiscal training to government officials through the IMF Institute and should expand such training to civil society budget watchdogs. Additionally, through its TACIS Institution Building and Partnership Programme, the European Union should provide training to local groups in budget analysis and oversight.

- In addition to providing technical training in fiscal analysis, donors should also help provide training to local watchdogs in methods of investigative journalism. Several Western NGOs have developed a reputation as "watchdog journalists" whose groundbreaking reports have created a better-informed public armed with the appropriate background information to justify a demand for greater accountability from their elected leaders. Groups such as the Center for Public Integrity, Global Witness, the Institute for War and Peace Reporting, and the National Security News Service have developed methods of investigative journalism that could be shared with Caspian-based journalists. Such exchanges should not only focus on training, but on creating project-specific partnerships teaming Western and local investigative journalists to pursue stories that might be too big and too dangerous for local journalists to pursue on their own.

- Donors should promote establishment of citizens' advisory councils in Azerbaijan and Kazakhstan. Such councils should operate with adequate financing and with the imprimatur and cooperation of both the government and the companies involved. To ensure

that the councils remain independent of government or industry pressure, funding should come from multiple sources such as oil companies, the World Bank Group, foreign donor agencies, the governments of Azerbaijan and Kazakhstan, and others with an interest in promoting public oversight. The first step might be to arrange a study tour for a task force of Azerbaijani and Kazakh budget watchdogs and government representatives to visit Alaska, to become acquainted with the governance, operational procedures, and financing of the Regional Citizens' Advisory Councils. The task force could then be charged with drafting a concept for creation of similar councils in Kazakhstan and Azerbaijan.

- Donors should promote coordination and an exchange of experiences between revenue watchdogs throughout the world by providing grants to organizations to organize information exchange, training, roundtables, and joint advocacy for budget activists from different countries.

Recommendations for foreign oil and natural gas companies

It is in the interest of foreign oil and natural gas companies to help the citizens of Azerbaijan and Kazakhstan monitor their governments' use of oil and gas revenues. These companies can begin by disclosing their production-sharing and joint-venture agreements with Azerbaijan and Kazakhstan and by revealing how much they pay the governments of these countries. BP and project partners for the largest oil and natural gas fields in Azerbaijan have already revealed their production-sharing agreements as well as the agreements for construction of the Baku-Tbilisi-Ceyhan pipeline. ChevronTexaco, ExxonMobil, AGIP, TotalFinaElf, Royal Dutch/Shell, and Lukoil should also disclose their contracts for producing oil in Kazakhstan and their payments to the government of Kazakhstan.

To help citizens hold their governments to account over receipts from natural resource development, oil and gas companies operating in Azerbaijan and Kazakhstan should:

- Disclose the terms of production-sharing and joint-venture agreements entered into with state or state energy companies, as has already been done in Azerbaijan. Access to information about the government take contained in these agreements, when combined with reporting about company earnings and costs such as that found in normal profit and loss statements, could help independent analysts assess whether the amounts flowing into the oil funds and into the budget are correct. Moreover, since in their legal force these contracts override existing and future legislation in areas such as human rights, environmental policy, and fiscal policy, companies should insist that they be ratified by parliaments and available to the public.

- Companies should also be encouraged to report their social development spending. Such spending is becoming an increasingly large component of companies' obligations. Yet such investment usually takes place at the local level where there is an absence of budget transparency. Reporting of payments or investments made in social development would help minimize the opportunity for abuse at that level.

- Additionally, payments made to third parties should be disclosed. Such parties may perform consulting services in connection with negotiations with governments or perform contract services associated with exploration and production operations. The details of such payments are almost never disclosed, creating opportunities for corruption. For example, in April 2003, American oil consultant James Giffen was arrested on charges of funneling millions of dollars paid by Mobil to the accounts of Kazakh senior government officials. Given the possible relationships between third parties and government representatives, an effective transparency regime would require disclosure of such payments when they exceed certain levels, along with identification of recipients.

- Establish an endowment for the creation of citizens' advisory councils to monitor and report on the social and environmental impacts of petroleum development. A first step might be to arrange a study tour to Alaska for a task force of budget watchdogs and government representatives to learn how Alaska's Regional Citizens' Advisory Councils operate. That visit and the information gained would provide the basis for drafting a blueprint for creating such councils in Azerbaijan and Kazakhstan.

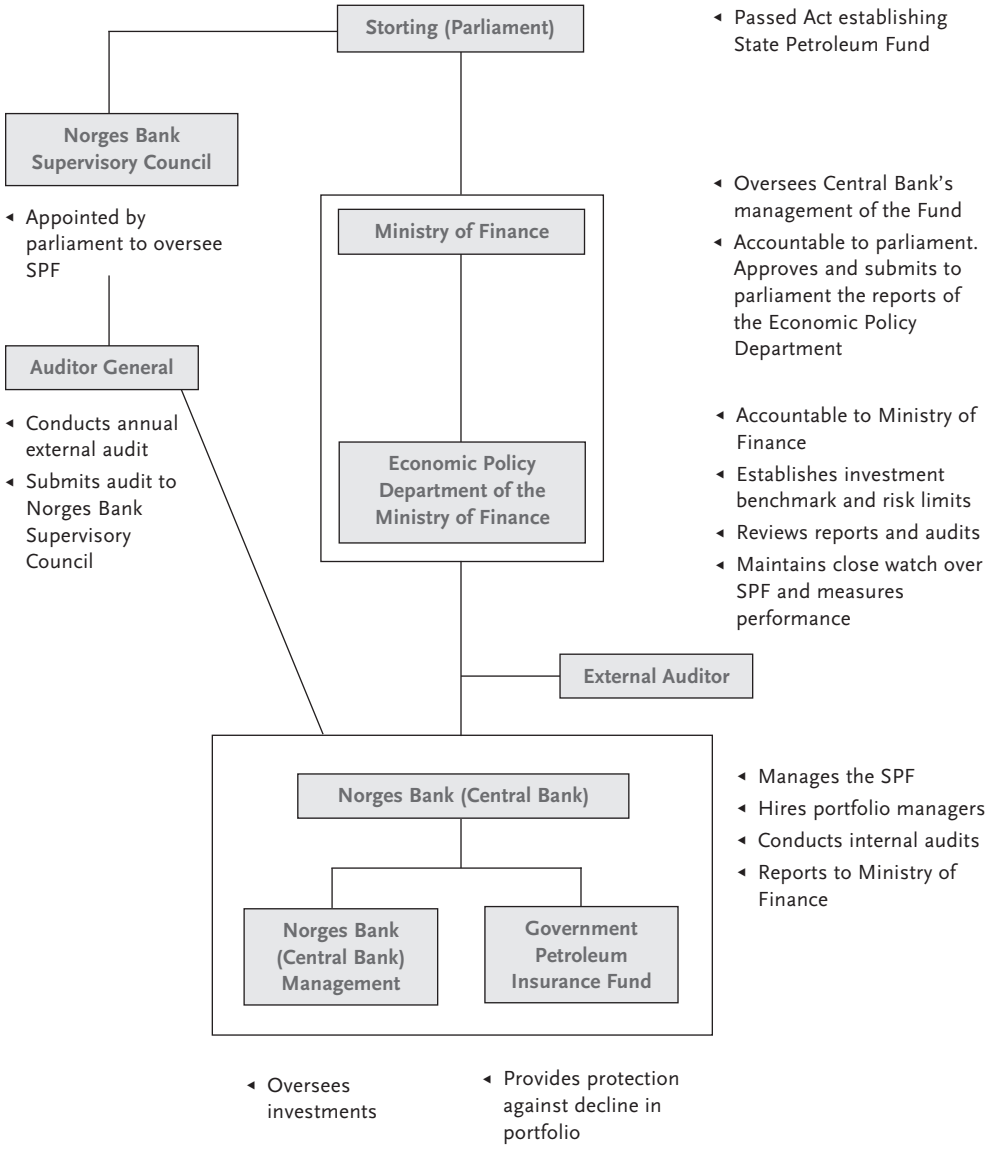
- Empower citizen advocates with the tools to advocate for good governance with regard to revenue management. Provide training on budget analysis, project monitoring, and the economics of petroleum-led development for NGOs and journalists.

Addressing these challenges is urgent. Development of oil and gas fields in Azerbaijan and Kazakhstan and construction of the pipelines that will bring these resources to market will proceed faster than the development of capacity to handle these revenues prudently. Azerbaijan and Kazakhstan still have a long way to go in improving the budgetary process, developing long-term policy planning, improving service delivery, and removing public sector constraints to private sector development. The weakness of democracy and rule of law in these countries hinders the development of policies and practices for good revenue management. Yet, the ability of the donor community to encourage governments to address these problems will diminish as their presence and influence in Azerbaijan and Kazakhstan adjusts to the countries' increasing revenues. For those who wish to help Azerbaijan and Kazakhstan avoid the resource curse, the time to act is now.

Appendices

Appendix 1

Lines of Accountability in Oversight of Norway's State Petroleum Fund



Appendix 2
Azerbaijan's PSA Offshore Oil Contracts with Foreign Companies

Date of Contract Completion and Date of Parliamentary Ratification	Offshore Fields	Interest Stakes of SOCAR and Foreign Companies (percent of total)
9-20-94 12-20-94	Azeri-Chirag-Guneshli	**SOCAR(10)**; BP (34.1); Unocal(10.3); Lukoil(10.0); Statoil(8.6); ExxonMobil(8.0); TPAO(6.7); Devon Energy(5.6); Itochu(3.9); Amerada Hess(1.0); Delta(1.7)*
11-10-95 2-13-96	Karabakh	**SOCAR(7.5);** Lukoil(12.5); Devon Energy(30.0); Agip-Lukoil(45); Agip(5)
6-4-96 10-4-96	Shah-Deniz	**SOCAR(10);** BP(25.5); Statoil((25.5); Lukoil(10); Totalfinaelf(10); OIEC(10); TPAO(9)
12-14-96 2-25-97	Dan-Ulduzu, Ashrafi	**SOCAR(20);** BP(30); Unocal(25.5); Itochu(20); Delta(4.5)
1-13-97 6-13-97	Lenkoran-Deniz, Talish-Deniz	**SOCAR(25);** Elf(25); Totalfinaelf(35); Wintershall(30); OIEC(10)
7-3-97 12-5-97	Yalama	**SOCAR(40);** Lukoil(60)
8-1-97 12-5-97	Absheron	**SOCAR(50);** Chevron(30); Totalfinaelf(20)
8-1-97 12-5-97	Nakhchivan	**SOCAR(50);** ExxonMobil(50)
8-1-97 12-5-97	Oguz	**SOCAR(50);** ExxonMobil(50)
6-2-98 7-7-98	Kurdashi, Araz-Deniz, Kirgani-Deniz	**SOCAR(50);** Agip(25); Mitsui(15); TPAO(5); Repsol(5)
7-20-98 12-1-98	Inam	**SOCAR(50**); Shell(25); BP(25)
7-20-98 12-18-98	Araz, Alov, Sharg	**SOCAR(40)**; BP(15); Statoil((15); TPAO(10); Alberta Energy(5); ExxonMobil(15)
12-25-98 6-11-99	Ateshgakh, Yanan-Tava, Mugan-Deniz	SOCAR(50); JAPEX(22.5); INPEX(12.5); Itochu(7.5); Telkoku(7.5)
4-27-99	Savalan, Dalga, Lerik-Deniz, Janub	SOCAR(50); ExxonMobil(30); NA(20)
4-27-99	Zafar, Mashal	SOCAR(50); ExxonMobil(30); Conoco(20)

Source: Turan Information Agency

** At the time of publication Lukoil was in the process of selling its share in the project to INPEX.*

Azerbaijan's Onshore Oil Contracts with Foreign Companies

Contract Type	Date Signed and Date Ratified	Field	Partners
JV*	1993	Neftchala	**SOCAR (51%)**
		Khilli Babazan Durovdag	 Atilla Dogan (31.8%) Land & General Berxard (17.2%)
JV	1994	Romani	**SOCAR (51%)** Grunnewald (49%)
PSA	2000	Kelameddin Mishovdag	**SOCAR (15%)** Moncrief Oil (49.3%) Petholding (35.7%)
JV	1997	Kurovdag	**SOCAR (49%)** Whitehall (51%)
PSA	1998	Gobustan	**SOCAR (20%)** Commonwealth Oil & Gas (80%)
PSA	1998	Muradxanli Zardob Jafarli	**SOCAR (50%)** Ramco (50%)
PSA	1998 1999	Kursangi Garabagli	**SOCAR (50%)** CNPC (50%)
PSA	1999 2000	Padar B.Huramin S.Huramin	**SOCAR (20%)** Moncrief Oil (64%) ISR(16%)
PSA	2001 2002	Zikh, Hovsan	**SOCAR (50%)** Lukoil (50%)

Source: Turan Information Agency; SOCAR.

JV = Joint Venture; PSA = Production Sharing Agreement

Appendix 3

Oil Production (Thousand Tons):

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Total Oil Production	12,501	11,703	11,084	10,295	9,563	9,161	9,300	9,071	11,423	13,806	14,086	14,897	15,330
Including:													
— SOCAR	12,501	11,703	11,084	10,295	9,563	9,161	9,300	8,556	8,585	8,328	8,376	8,254	8,181
— JV and PSA (onshore)								465	467	664	637	746	763
— AIOC								50	2,371	4,814	5,073	5,897	6,386

Source: SOCAR, AIOC, Turan News Agency

Gas Production (Million Cubic Meters):

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Total	9,926	8,621	7,872	6,805	6,379	6,644	6,305	5,964	5,590	5,999	5,658	5,547	5,151
Including:													
— SOCAR	9,926	8,621	7,872	6,805	6,379	6,644	6,305	5,913	5,192	5,264	4,936	4,563	4,097
— JV and PSA (onshore)								51	47	92	78	84	95
— AIOC									351	643	643	899	959

Source: SOCAR, AIOC, Turan News Agency

Appendix 4
Azerbaijan's Expected Revenues from the Sale of Profit Oil Under the PSA for Development of the Offshore Block, Azeri-Chirag-Gunashli

Table A-1 below contains anticipated (2003-2010) oil production data from the Azeri-Chirag-Gunashli block of fields.

TABLE A-1: Azeri-Chirag-Gunashli Oil Production, 1997–2010, million barrels

Year	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Production	0.4	17.3	35.1	37.0	43.0	47.5	47.5	63.9	89.0	140.5	224.5	352.5	434.4	452.6

Source: "AIOC Azeri, Chirag and Deep Water Gunashli Full Field Development. Environmental and Socio-Economic Overview. BP, 2000"; Presentation by BP during the annual oil and gas show, Baku, June 5, 2002.

Table A-2, below, contains calculations of predicted earnings from profit oil from the ACG.

TABLE A-2: ACG Profit Oil Calculations, 1997–2010

		1997–2002	2003	2004	2005	2006	2007	2008	2009	2010
Production in Year, mln. barrels										
	A		47.4	63.9	89.4	140.5	224.5	352.2	434.4	452.6
Cumulative Production, mln. barrels										
		180.2	227.6	291.5	380.9	521.4	745.9	1098.2	1532.5	1985.1
Price of Crude Oil, $/b										
high	B		25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0
low	C		18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0
Value of Annual Production, mln USD										
high	D		1185.0	1597.0	2235.8	3513.3	5612.0	8805.8	10858.8	11315.0
low	E		853.2	1149.8	1609.7	2529.5	4040.6	6340.1	7818.3	8146.8
Operating Cost, $/barrel										
	F		1.8	1.8	1.9	2.0	2.0	2.0	2.0	2.0
Cumulative Oper. Cost, mln. USD										
	G		85.3	115.0	169.9	281.1	449.0	704.5	868.7	905.2
Value of Production after Operating Cost, mln USD										
high	H		1099.7	1482.0	2065.8	3232.2	5163.0	8101.3	9990.1	10409.8
low	I		767.9	1034.9	1439.8	2248.5	3591.7	5635.7	6949.6	7241.6
To Recover Capital Cost, mln USD										
high	J		549.8	741.0	1032.9	1616.1	2581.5	4050.6	4995.0	
low	K		383.9	517.4	719.9	1124.2	1795.8	2817.8	3474.8	3620.8
cumulative										
high	L	1893.5	2443.3	3184.3	4217.3	5833.4	8414.9	12465.5	17460.5	
cumulative										
low	M	1893.5	2277.4	2794.9	3514.8	4639.0	6434.9	9252.7	12727.5	16348.3
Profit Oil $ mln										
high	N		549.8	741.0	1032.9	1616.1	2581.5	4050.6	4995.0	10409.8
low	O		383.9	517.4	719.9	1124.2	1795.8	2817.8	3474.8	3620.8
Cummul. Profit Oil mln USD										
high	P	1893.5	2443.3	3184.3	4217.3	5833.4	8414.9	12465.5	17460.5	27870.3
low	Q	1893.5	2277.4	2794.9	3514.8	4639.0	6434.9	9252.7	12727.5	16348.3
Profit Oil of Azerbaijan, $ mln										
high	R		165.0	222.3	309.9	484.8	1419.8	2227.9	2747.3	8327.8
low	S		115.2	155.2	216.0	337.3	987.7	1549.8	1911.1	1991.4
Cummul. Profit Oil of Azerbaijan, mln USD										
high	T	568.1	733.1	955.4	1265.2	1750.1	3169.9	5397.7	8145.0	16472.9
low	U	568.1	683.3	838.5	1054.5	1391.8	2379.5	3929.3	5840.4	7831.9
Profit Oil of Contractor, $ mln										
high	R		384.9	518.7	723.0	1131.3	1161.7	1822.8	2247.8	2082.0
low	S		268.8	362.2	503.9	787.0	808.1	1268.0	1563.7	1629.4
Cummulative Profit Oil of Contractor, mln USD										
high	V	1325.4	1710.3	2229.0	2952.0	4083.3	5245.0	7067.8	9315.5	11397.5
low	W	1325.4	1594.2	1956.4	2460.3	3247.3	4055.4	5323.4	6887.1	8516.4

Notes to Table A-2:

1. Lines B and C contain optimistic and pessimistic scenarios of crude oil prices in world markets. The estimated value of oil production by the year has been calculated on this basis. The estimated value is provided in lines D and E.

2. Line F displays estimated operating cost per barrel of oil produced from the Azeri-Chirag-Gunashli contract territory. The data for 1997-2002 have been taken from AIOC and SOCAR reports, while the data for 2003-2010 are a forecast based on an assumption of gradual increase in cost as later stages of development present greater geological challenges.

3. Line G displays annual operating costs, which are found by multiplying Line A by Line F.

4. Lines H and I indicate the value of annual production net of transportation and operating costs. Lines H and I subtract operating costs (line G) and transportation costs ($3/barrel) from the value of annual production (line D). Thus, we subtract the quantity of oil necessary to cover operating cost from the revenue derived from yearly oil output.

5. Then in Lines J and K, under the terms of the production sharing agreement, 50 percent of the amounts in lines H and I is calculated for payment to reimburse capital costs at high and low forecast oil prices. The remaining 50 percent is the profit petroleum to be shared between Azerbaijan and the contractor. Lines J and K contain the anticipated yearly volume of crude oil covering the capital costs, depending on high and low oil prices.

6. Lines L and M contain cumulative amounts of crude oil directed to covering the capital cost. Note that the cumulative amounts used for covering capital costs under the high price scenario will amount to about $17.5 billion by 2009, which exceeds the forecasted investment for all phases of the project with inflation and cost of capital figured in.

7. Since the total volume of capital expenses on the development of the Azeri-Chirag-Gunashli contract territory is forecast at the level of $13 billion (including expenses on financing, i.e. interest stakes on credits), the process of reimbursing the capital cost ends in 2009 or 2010 depending on crude oil prices.

8. In lines N and O, we calculate profit oil to be shared between the government of Azerbaijan and the contractor. Before 2009 (or 2010 in the event of low crude oil prices) the profit oil in Lines N and O is half of the amounts in Lines H and I, respectively. After all capital costs have been recovered, (starting in 2010 in the high price scenario and 2011 in the event of low crude oil prices) all revenue net of operating costs is available for distribution as profit oil.

9. Lines P and Q contain cumulative data on profit oil.

10. The profit-sharing mechanism of the ACG PSA allows us to calculate earnings for Azerbaijan and for the contractor from their split of profit oil. At Lines R and S, Azerbaijan's profit oil revenue is calculated for the high and low crude oil price scenarios. These lines cover three periods: 1997-2006, 2007-2009 and 2010, which differ from each other by the percentage of profit oil. According to the Azeri-Chirag-Gunashli PSA, depending on the rate of return on capital costs (see Table 4, Section 1), Azerbaijan will receive 30 percent, 55 percent or 80 percent of the proceeds from profit oil. From 1997 through 2006, profit oil was calculated on the assumption of a 30 percent share for Azerbaijan. Data for 2007-2009 was calculated on the assumption of a 55 percent share for the government. Finally, the data for 2010 was calculated on the assumption of an 80 percent share for Azerbaijan. These predictions have been based on expert assessments because exact information about the sale of crude oil (volume and price), and operational and capital expenses for every calendar quarter are not publicly available. According to the relevant PSAs, all production sharing calculations are made on a quarterly basis.

11. Lines T and U contain cumulative Azerbaijan profit oil totals for both high and low pricing scenarios. If the high price scenario materializes, then Azerbaijan's total receipts from ACG profit oil from 2003 to 2010 will exceed $15.9 billion, as Table A-2 indicates. Under the low price scenario, Azerbaijan's total earnings for that same period amount to $7.2 billion.

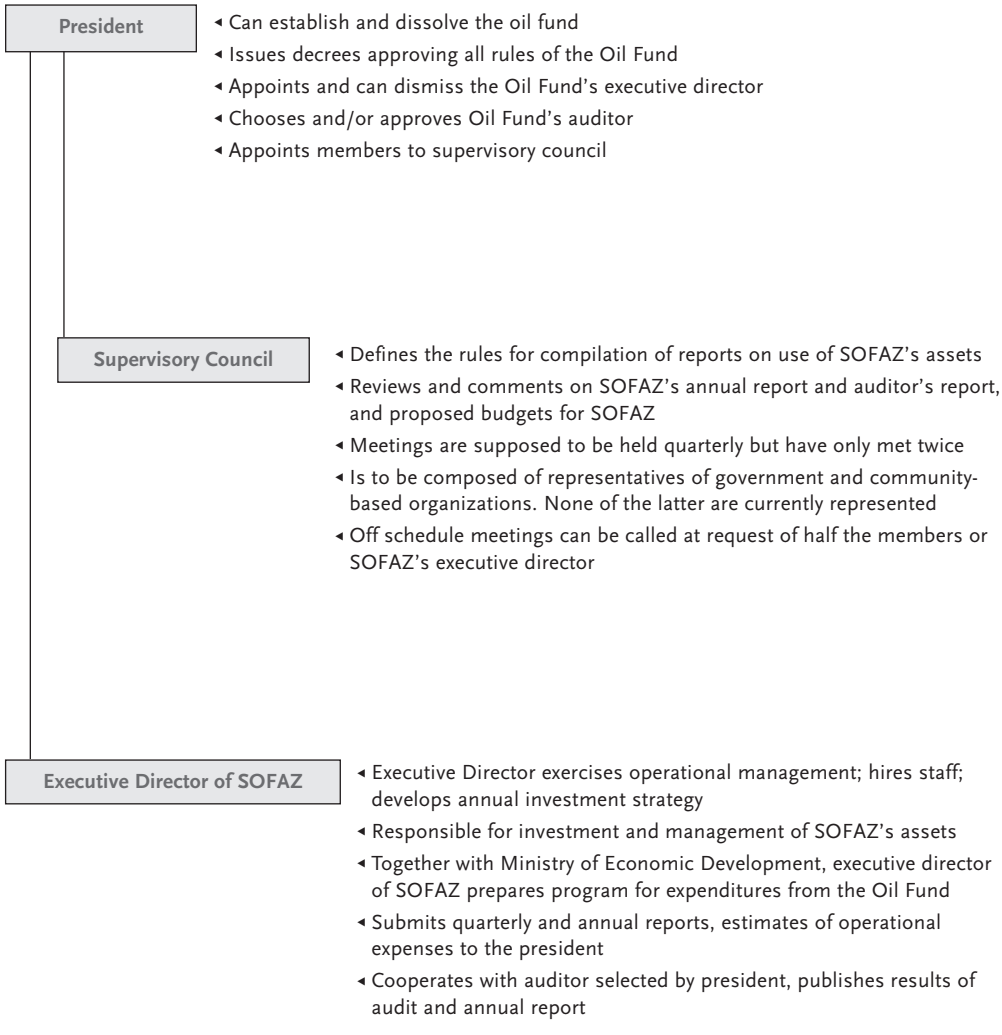
12. It is indicative that profit oil constitutes a considerable portion of Azerbaijan's oil revenues from PSAs, though, there are other revenue items in PSAs. It is also worth noting that all the calculations have been performed in the present value of money without inflation-related discounting.

TABLE A-3: Profit Tax Government Earnings from ACG, 2003-2010, in $ million USD

	Crude Prices, $/barrel	2003	2004	2005	2006	2007	2008	2009	2010	Total 2003-2010
Profit Oil of Contractor	25	384.9	518.7	723.0	1131.3	1161.7	1822.8	2247.8	2082.0	**10072.2**
Net Profit including:		346.4	466.8	650.7	1018.2	1045.5	1640.5	2023.0	1873.8	**9065.0**
to SOCAR		34.6	46.7	65.1	101.8	104.6	164.1	202.3	187.4	**906.5**
to Foreign Investor		311.8	420.1	585.6	916.4	941.0	1476.5	1820.7	1686.4	**8158.5**
Profit Tax from Foreign Investor		77.9	105.0	146.4	229.1	235.2	369.1	455.2	421.6	**2039.6**
Profit Oil of Contractor	18	268.8	362.2	503.9	787.0	808.1	1268.0	1563.7	1629.4	**7191.1**
Net Profit Including:		241.9	326.0	453.5	708.3	727.3	1141.2	1407.3	1466.5	**6472.0**
to SOCAR		24.2	32.6	45.4	70.8	72.7	114.1	140.7	146.6	**647.2**
to Foreign Investor		217.7	293.4	408.2	637.5	654.6	1027.1	1266.6	1319.8	**5824.8**
Profit Tax from Foreign Investor		54.4	73.3	102.0	159.4	163.6	256.8	316.6	330.0	**1456.2**

To calculate government profit tax earnings, we began with the calculation of contractor profit oil derived from Table A-2 above. We estimated transport, insurance, and other expenses at 10 percent of profit oil and deducted this amount. Hence, the taxable base was 90 percent of profit oil. The profit tax was calculated at the rate of 25 percent.

Appendix 5
Lines of Accountability in the State Oil Fund of Azerbajan



Appendix 6
Regulations Governing or Impacting the National Fund

Decrees

- "On the National Fund of the RK," Presidential Decree no. 402, August 23, 2000.
- "Several Questions on the NF," Presidential Decree no. 543, January 29, 2001.
- "Confirming the Audit on the Formation and Use of the National Fund of the Republic of Kazakhstan in 2001," Decree no. 867, May 7, 2002.

Laws

- "Introducing Changes and Additions to Several Legal Acts Concerning the NF-Changes to National Bank and Banking Laws and Budget System," Law no. 182-II, 2RK, May 3, 2001.
- "On the Republic Budget for Year 2002," Law no. 273-II 3RK, December 15, 2001.
- "Report on the Republic of Kazakhstan's National Fund Formation and Utilization in 2001," adopted by parliament on June 27, 2002.

Government Resolutions

- "On First Measures to Create a National Fund," Government Resolution no. 1303, August 24, 2000.
- "Measures to Implement Decree of President 543," Government Resolution no. 212, February 8, 2001.
- "Parameters of Indicative Plan 2001-2005," Government Resolution no. 368, March 19, 2001 (later revoked).
- "Confirming Lists of Organizations of the Mineral Sector Whose Excess Tax Payments Flow to the NF," Government Resolution no. 369A, March 19, 2001.
- "Confirming Quarterly Plans of Receipts for the National Fund," Government Resolution no. 627, May 11, 2001.
- "Rules for Crediting Money to the National Fund and Use," Government Resolution no. 631, May 14, 2001.
- "Agreement of Fiduciary Management of the NF," Government Resolution no. 655, May 18, 2001.
- "Rules of the Investment Operations of the NF," Government Resolution no. 787, June 9, 2001.
- "Rules on Selection of Independent Auditor and Annual Audit," Government Resolution no. 1011, July 26, 2001.
- "A Timetable for the National Bank to Submit Information and Financial Reports on the Management of the National Fund," Government Resolution no. 1045, August 9, 2001.
- "On Forecast Targets for the State Budget for 2002-2004," Government Resolution no. 1197, September 13, 2001.
- "On Forming a Committee to Select External Auditors to Conduct an Annual Audit of the National Fund," Government Resolution no. 1413, November 7, 2001 (amended by resolution no. 1651 on December 15, 2001).
- "On the Agreement for Conducting an External Audit of the National Fund," Government Resolution no. 296, March 11, 2002.

- "On the Approval of Rules for Preparation of the Republic and Local Budgets Drafts," Government Resolution no. 592, May 29, 2002.
- Amendment to "Rules on the Investment Operations of the National Fund (Government Resolution no. 787)" adopted by Board of Directors of the National Bank, May 13, 2002. The amendment decreased the share of the savings portfolio that can be invested in equity in foreign companies from 40 percent to 25 percent.
- "On the Approval of Rules for Financial Procedures for Fulfilling the Budget and Introducing Forms of Accountability (periodical and annual) for Government Institutions. Procedures for Transferring Money to the National Fund." Government Resolution no. 832, July 25, 2002.

National Bank Resolutions

- "Confirmation of Rules on Investment Operations of the National Fund of the Republic of Kazakhstan," no. 237, June 20, 2001.
- "On approval of the report on the results of investment operations by the National Fund in 2001," no. 56, February 16, 2002.

Appendix 7
State Budget Forecast for 2002–2004

Supplement to Resolution no. 784 of June 9, 2001 of the Government of the Republic of Kazakhstan

Supplement 1 to Resolution no. 368 of March 19, 2001 of the Government of the Republic of Kazakhstan

The Parameters of the Indicative Plan of the Socioeconomic Development of the Republic of Kazakhstan for the Years 2002–2004

	Year 2000 Report	Year 2001 Assessment	Forecast 2002	2003	2004
GDP, in billions of tenge	2,596	2,957	3,230	3,473	3,704
In % of the previous year	109.6	107	104.9	104.2	103.6
Consumer price index, in %					
At year-end	109.8	106.8	106.5	105.9	105.8
On average for the year	113.2	109	105.9	106.3	105.9
Exchange Rate of the tenge to the US dollar at year-end	145.4	150.5	157.7	164.4	168.9
On average for the year	142.4	148	154.1	161.1	166.6
Volume of industrial production, in % of the previous year	114.6	109.2	106.4	105.9	103
Volume of gross agricultural product, in % of the previous year	96.7	100.8	102.8	102.9	103
Investments in fixed capital, in % of the previous year	129.4	124	120	118	112
State budget receipts, in % of GDP	23.1	23.9	21.5	21.6	21.6
Revenues, in % of GDP	22.6	23.5	21.1	21.2	21.2
Tax Receipts, in % of GDP	20.2	21.0	19.4	19.5	19.6
Including:					
National Fund receipts, in % of GDP	—	2.7	0.6	0.7	—
Non-tax receipts, in % of GDP	1.5	1.7	1.2	1.2	1.2
Revenues from capital transactions, in % of GDP	0.9	0.8	0.6	0.5	0.4
Exports, in millions of U.S. dollars	9,615	9,740	9,440	9,360	9,720
Imports, in millions of U.S. dollars	6,849.8	7,590	8,730	9,000	9,405
World price for oil (Brent blend), U.S. dollars per barrel	28.2	25	21.5	20	19
World price for oil (Urals blend), U.S. dollars per barrel	26	23.4	20	18.5	18.2

Appendix 8

Schedule of Deadlines for the National Bank to Report on the National Fund to the Government of the Republic of Kazakhstan

Approved by Resolution of the government of the Republic of Kazakhstan of August 9, 2001, no. 1045

Schedule of Deadlines for the National Bank of the Republic of Kazakhstan to Submit Financial Statements and Other Information on the Activities Associated with the Trustee Governance of the National Fund of the Republic of Kazakhstan

Name of Document/ Contents of the Report	Intervals for Submission	Deadline for Submission	Name of Agency to Report to	Notes
1. Distribution of assets in the National Fund of the RK by currencies and currency categories as of the end of each quarter	Quarterly	Within 30 (thirty) calendar days following the report period	Government of the RK	Appendix 1 to Investment Rules and Procedures involving the National Fund of the RK
2. The portfolio of the National Fund of the RK as of the end of each quarter	Quarterly	Within 30 (thirty) calendar days following the report period	Government of the RK	Appendix 2 to Investment Rules and Procedures involving the National Fund of the RK
3. Report on all transactions involving the assets of the National Fund of the RK over the report interval	Quarterly	Within 30 (thirty) calendar days following	Government of the RK	Appendix 3 to Investment Rules and Procedures the report period involving the National Fund of the RK
4. Results of activities involving the portfolio of the National Fund of the RK over the report interval	Quarterly	Within 30 (thirty) calendar	Government of the RK	Appendix 4 to Investment Rules and Procedures involving the National Fund of the RK
5. Verification sheet of the money flow in the National Fund of the RK as of the 1st day of the month	Monthly	Upon receipt of the report from the Treasury Committee of the Ministry of Finances of the RK	The Treasury Committee of the Ministry of Finances of the RK	Appendix 7 to Book-Keeping and Accounting Rules for accumulation and use of the National Fund of the Republic of Kazakhstan
6. Report on the results of trustee governance ofthe National Fund of theRK as of the 1st day of the month	Monthly and yearly	As of the 1st day of the month	Government of the Republic of Kazakhstan	Appendix 12 to Book-Keeping and Accounting Rules for accumulation and use of the National Fund of the RK

Name of Document/ Contents of the Report	Intervals for Submission	Deadline for Submission	Name of Agency to Report to	Notes
7. Report on the results of trustee governance of the National Fund of the RK approved by the resolutionof the Board of Directors of the National Bank of the Republic of Kazakhstan	Quarterly and annually	Within 30 (thirty) calendar days following the report period	Government of the RK	
8. Written analysis of current situation in appropriate markets and implications for the portfolio, and economic review	Annually	Within 30 (thirty) calendar days following the report period	Government of the RK	
9. Strategy review and explanation of the most important changes in the structure of the portfolio, current investment strategy	Annually	Within 30 (thirty) calendar days following the report period	Government of the RK	

Appendix 9
Comparison of Four Oil Funds' Websites

Type of information provided	Norway	Alaska	Azerbaijan	Kazakhstan
Annual report published in entirety	YES	YES	YES	NO
Report of external auditor	YES	YES	YES	NO
Companies/indexes in which the fund holds assets	YES	YES	YES*5	NO
Market value of holdings in each company	YES	YES	NO*5	NO
Earnings benchmarks	YES	YES	NO	NO
Methodology of investment and risk management	YES	YES	NO	NO
Announcement of tenders	YES	NO	YES	NO*2
Resolutions, laws, regulations governing the oil fund	YES	YES	YES	PARTLY*3
Return on portfolio	YES	YES	YES	YES
Forecasts for fund size	YES	YES	NO	NO
Inflows	YES	YES	YES	YES
Inflows, breakdown by source	NO	YES	YES	YES*4
Expenditures	YES	YES	YES	YES
Expenditures, breakdown by type of expenditure	NO*1	YES	YES	YES
Statement of disclosure policies	YES	YES	YES	NO
Chosen external asset managers	YES	YES	N/A	NO
Reports and recommendations submitted to the government by the managers of the oil fund	YES	NO	NO	NO
Daily Fund position	NO	YES	NO	NO

The four websites can be found at the following URL's:

Norway: http://odin.dep.no/fin/engelsk/p10001617/index-b-na.html

Alaska: http://www.apfc.org/apfc/index.cfm

Azerbaijan: http://www.oilfund.az/

Kazakhstan: http://www.nationalfund.kz/

*1 Breakdown of "Management Cost" of the Fund, however, is available from the annual report.

*2 Tenders not announced on website. However, tenders for external auditor are required to be published in the print media.

*3 The government has begun to place the National Fund's legal documents on its website. However, inexplicably, numerous legal documents have not been posted, including government resolution no. 1197, which forecasts targets for the state budget and the Oil Fund for 2002-2004 (and which has been reproduced in Annex 2); government resolution no. 1651, which specifies the procedure for forming a selection committee to hire external auditors; and the investment rules approved by a resolution of the National Bank on June 20, 2001.

*4 The breakdown provided is by type of payment (i.e. VAT, royalty) but not by company which made the payment.

*5 SOFAZ has not yet invested equities. However, it names the banks in which it has opened deposit and settlement accounts, but does not say how much is deposited in each bank.

Endnotes

Chapter 1

1. Jeffrey Davis, Rolando Ossowski, James Daniel, and Steven Barnett, "Stabilization and Savings Funds for Nonrenewable Resources," *IMF Occasional Paper 205,* 2001. The report attributes the main weakness of NRF's to the fungibility of money. Without liquidity constraints, governments may borrow to replace the money put aside into NRFs. Prudent fiscal policy can only be enforced by addressing the entire field of government budgeting.

2. Jeffrey Sachs and Andrew Warner, "Natural Resource Abundance and Economic Growth," *Development Discussion Paper* no. 517a, Harvard Institute for International Development, 1995.

3. Michael Ross, "Extractive Sectors and the Poor," *Oxfam America Report*, 2001.

4. IMF, "Guidance Note on Governance," 1997.

5. For more information about the World Bank's governance project, see http://www.worldbank.org/wbi/governance

6. Carlos Leite and Jens Weidmann, "Does Mother Nature Corrupt? Natural Resources, Corruption, and Economic Growth," *IMF Working Paper* WP/99/85, July 1999. Countries with a large share of oil exports are also clustered together as the most corrupt on Transparency International's Corruption Perceptions Index, 2001. Available at: http://www.transparency.org

7. See for example, Paul Collier and Anke Hoeffler, "Greed and Grievance in Civil War," *Policy Research Working Paper 2355*, World Bank Development Research Group, 2001. See also Michael Ross, "How Does Natural Resource Wealth Influence Civil War?" unpublished paper, July 2002. Available at: http://www.polisci.ucla.edu/faculty/ross/HowDoesNat.pdf. ; Philippe Le Billon, "The Political Ecology of War: Natural Resources and Armed Conflicts," *Political Geography* 20 (2001); 561-584.

8. Paul Salopek, "Shattered Sudan," *National Geographic*, February, 2003.

9. Terry Karl defines capital deficient-oil exporters as those such as Mexico, Iran, and Nigeria with larger populations and smaller reserves than capital-surplus oil exporters such as Saudi Arabia or Kuwait. Terry Lynn Karl, *The Paradox of Plenty: Oil Booms and Petro-States* (University of California Press, 1997).

10. Karl, 30.

11. Some trace Dutch Disease even earlier to the 17th century Dutch craze for tulips. The demand for tulips was so high that prices were bid up to unsustainable levels, other economic sectors were neglected, and the economy battered when this speculative bubble burst in 1637.

12. Karl, 193-196.

13. Ibid., 190.

14. Kiren Aziz Chaudhry, "The Price of Wealth: Business and State in Labor Remittance and Oil Economies," *International Organization*, 43, 1 (winter 1989).

15. William Ascher, *Why Governments Waste Natural Resources* (Baltimore, Johns Hopkins University Press, 1999).

16. Chaudhry, 128.

17. Ibid., 129.

18. Richard M. Auty, "A Growth Collapse with High Rent Point Resources: Saudi Arabia," in R.M. Auty, ed., *Resource Abundance and Economic Development*, (Oxford University Press, 2001).

19. Richard M. Auty, *Resource-Based Industrialization: Sowing the Oil in Eight Developing Countries* (Oxford: Clarendon Press, 1990).

20. Benn Eifert, Alan Gelb, and Nils Borje Tallroth, "The Political Economy of Fiscal Policy and Economic Management in Oil Exporting Countries," *World Bank Policy Research Working Paper,* October 2002.

21. Karl, 25.

22. Alan H. Gelb, "Adjustment to Windfall Gains: A Comparative Analysis of Oil-Exporting Countries," in J. Peter Neary and Sweder van Wijnbergen, *Natural Resources and the Macroeconomy* (Basil Blackwell, 1985).

23. Gelb cites a study of the top 19 developing countries with investments in projects exceeding $100 million. All but five of these were oil exporters.

24. Ascher provides a series of case studies detailing the lamentable investments and policy choices made with an absence of good information about project viability by governments of resource abundant states. See William Ascher, *Why Governments Waste Natural Resources* (Baltimore, Johns Hopkins University Press, 1999).

25. Gelb, 86.

26. Ibid.

27. Ibid.

28. Eifert, Gelb, and Tallroth, 14.

29. Karl.

30. Ibid., 41.

31. Ibid., 16.

32. Michael L. Ross, "Does Oil Hinder Democracy?" *World Politics* (April 2001): 325-361.

33. Eifert, Gelb, and Tallroth, 21.

34. See for example, Andrew Sunil Rajkumar and Vinaya Swaroop, "Public Spending and Outcomes: Does Governance Matter?" World Bank Group Working Paper, May 2002; Sanjeev Gupta, Marijn Verhoeven, and Erwin Tiongson, "Does Higher Government Spending Buy Better Results in Education and Health Care?" *IMF Working Paper,* WP/99/21, February 1999.

35. Emmanuel Ablo and Ritva Reinikka, "Do Budgets Really Matter? Evidence from Public Spending on Education and Health in Uganda," *Policy Research Working Paper* 1926, World Bank, Washington, D.C., 1998.

36. Daniel Kaufmann, Aart Kraay, Pablo Zoido-Lobaton, *Governance Matters*, (The World Bank, Washington, D.C., October 1999).

37. Letter to President Saparmurat Niyazov from European Bank for Reconstruction and Development (EBRD) President Jean Lemierre, July 25, 2002.

Chapter 2

1. Jeffrey Davis, Rolando Ossowski, James Daniel, and Steven Barnett, "Stabilization and Savings Funds for Nonrenewable Resources," *IMF Occasional Paper 205,* 2001.

2. Douglass C. North, *Institutions, Institutional Change, and Economic Performance* (Cambridge University Press, 1990).

3. "Oil Bonanza in Alaska: This Silver Lining Has a Cloud," *Washington Post*, September 2, 1979.

4. The public was encouraged to submit ideas to a "Billion Dollar Editor" section in the *Anchorage Times* that compiled and presented letters about how to "Help the Governor Spend a Billion." "Unexpected Riches from Alaska Oil," *Associated Press*, November 20, 1979. Proposals included investing in Alaska's neglected roads, constructing infrastructure to promote the fishing industry, and promoting tourism. Another popular idea was low-interest loans for housing, industry, and agriculture. Others advocated subsidies to help pay the high cost of heating. Governor Jay Hammond proposed committing $100 million to national cancer research as well as launching an advertising campaign to improve the state's national image. "Alaska is Still Looking for Ways to Spend its Revenues from Oil," *New York Times*, December 14, 1980.

5. Joan Kasson, "The Creation of the Alaska Permanent Fund," *Trustee Papers*, vol. 5 (Alaska Permanent Fund Corporation, 1983).

6. Ibid.

7. Ibid.

8. In 1972, the state sold $124.5 million in bonds, and in 1974 another $189.5 million. Ibid.

9. "Alaska's Permanent Fund: Legislative History, Intent and Operations," *Trustee Papers*, vol. 5 (Alaska Permanent Fund Corporation, 1997).

10. Robert Krantz, quoted in Joan Kasson.

11. "Alaska's Permanent Fund: Legislative History, Intent, and Operations."

12. The proposed amendment stated: "Section 2 Article IX, Constitution of the State of Alaska is amended by addition of a new section to read: Section 15 Alaska Permanent Fund. At least 25 percent of all mineral lease rentals, royalties, royalty sale proceeds, federal mineral revenue sharing payments and bonuses received by the state shall be placed in a permanent fund, the principal of which shall be used only for those income producing investments specifically designated by law as eligible for permanent fund investments. All income from the permanent fund shall be deposited in the General Fund unless otherwise provided by law."

13. "Law to Cut Alaska's State Income Tax is Struck Down," *The New York Times*, September 7, 1980.

14. Speech by Elmer Rasmuson to the 1993 annual meeting of the Corporation's Board of Trustees, *Trustee Papers*, vol. 5.

15. The papers presented at these seminars can be accessed on the APF Corporation's website available at: http://www.apfc.org/library/tp1.cfm?s=5

16. Allan A. Warrack and Russell R. Keddie, "Alberta Heritage Fund vs. Alaska Permanent Fund: A Comparative Analysis," paper presented to the International Conference on Management, Shaanxi, China, May 2001.

17. The Fund's allocation can be viewed daily on the APFC's main page available at: http://www.apfc.org/apfc/index.cfm . A breakdown of each of these types of investments can be found in *An Alaskan's Guide to the Permanent Fund* (November 2001).

18. Rick Steiner, "Kazakhstan's Oil: Creating a New Paradigm for Oil and Society," manuscript, January 10, 2002.

19. Alaska Department of Revenue, *Revenue Sources Book: Forecast & Historical Data* (fall 2002), 41.

20. Constitution of Alaska, art. 9, sec. 15, 37.13.170

21. The Alaska Humanities Forum convened a public policy conference, 100 discussion forums in communities around the state, and a radio call-in program to discuss options for the Fund's future. See Steve Lindbeck, "The Paradoxes of Public Wealth," *Trustee Papers*, vol. 6.

22. Richard A. Fineberg, "Windfall Equal Sharing Tax (WEST): A Proposal by Oilwatch Alaska," February 11, 1999, available at http://www.home.gci.net/~oilwatch/west

23. Fred Pratt, "Oil Taxes Could Save Budget," *Fairbanks Daily News Miner*, August 29, 1999, p. D-1.

24. Peter J. Smith, "The Alberta Heritage Savings Trust Fund and the Alaska Permanent Fund: A Ten-Year Retrospective," *Trustee Papers,* vol. 2 (Alaska Permanent Fund Corporation, 1988).

25. Allan A. Warrack and Russell R. Keddie, *1998 Heritage Savings Trust Fund Annual Report,*4-6.

26. Smith.

27. Warrack and Keddie, 12.

28. Inflation proofing was reinstated to the AHSF during the 1997 structural reforms.

29. In 2001, management of the AHFS was transferred to the Ministry of Revenue.

30. See www.apfc.org and section on Alaska Permanent Fund.

31. Smith.

32. Warrack and Keddie, 3.

33. "Alaska Fund Pays Off While Alberta Heritage Fund Tanks," *The Calgary Sun*, September 12, 2002.

34. Alberta Heritage Savings Trust Fund History available at: http://www.treas.gov.ab.ca/business/ahstf/history.html. On lack of citizen interest in the fate of the AHSF, see Rögnvadur Hannesson, *Investing for Sustainability: The Management of Mineral Wealth* (Kluwer Academic Publishers, 2001).

35. Warrack and Keddie, 14.

36. Warrack and Keddie, 13. For an article lamenting the degree of citizen apathy over the Heritage Fund, see "Fund Deserved Better," *Calgary Herald*, February 18, 1995.

37. Terry Karl, *The Paradox of Plenty* (Berkeley and Los Angeles: University of California Press, 1997).

38. U.S. Central Intelligence Agency, *CIA World Fact Book 2001.*

39. Karl.

40. In 2000, 84.2 percent of Venezuela's export earnings came from petroleum. Petroleum sales contribute to 27.4 percent of the country's GDP and more than 50 percent of government revenues. Venezuela's dependence on oil is even larger once multiplier effects on related industries are taken into account. "Country Report: Venezuela," *Economist Intelligence Unit* (2001/2002).

41. Ibid. Despite being the basis of Venezuela's economy since the 1920's, petroleum has not led to strong growth. In the last 20 years, GDP has averaged less than 1 percent a year, resulting in a fall in real income once population growth is accounted for.

42. Lino Clemente, Robert Faris, Alejandro Puente, "Natural Resource Dependence, Volatility, and Economic Performance in Venezuela: the Role of a Stabilization Fund," *Andean Competitiveness Project Working Paper,* February 2002.

43. Oil revenues include corporate income taxes, oil royalties, and dividends from the state oil company (PDVSA) net of transfers to the regional governments and to the debt repayment fund.

44. Law of the Investment Fund for Macroeconomic Stabilization, available at: http://www.bcv.org.ve/ifms/ifm-slaw2.htm

45. Reuters, January 21, 2000.

46. Clemente et al, page 54.

47. Ibid.

48. "Venezuela on a Gusher," *Economist,* September 30, 2000.

49. Mark J. Stempler, "Evening Out Fiscal Fluctuations," *Latin Finance*, December 2001.

50. Clemente et al.

51. Jeffrey Davis, Rolando Ossowski, James Daniel, Steven Barnett, "Stabilization and Savings Funds for Nonrenewable Resources."

52. At least two rating agencies—Moody's Investor Services and Fitch—downgraded their credit rating for Venezuela in 2002 because mismanagement of the Fund and ballooning spending undermined the government's credibility in repaying external obligations. According to Fitch, the government's management of FIEM "raises concerns about the credibility of the FIEM as a counter-cyclical mechanism in the event of a sharp downturn in oil revenue." Stempler.

53. FIEM website, available at: http://www.bcv.org.ve/ifms/ifms.htm

54. Mario Marcel and Marcelo Tokman, "Building a Consensus for Fiscal Reform: The Chilean Case," International Budget Project. Esteban Jadresic and Roberto Zahler, "Explaining Chile's Macroeconomic Success in the 1990's," International Monetary Fund, March 2000.

55. Communication with author, February 19, 2003.

56. Antonio Spilimbergo, "Copper and the Chilean Economy, 1960-1998," *IMF Working Paper* WP/99/57.

57. For example, transfers are only triggered if the actual price is $0.04 below the benchmark (which in 2001 was $0.88/lb), and even then only half of the difference between actual and benchmark prices can be transferred for the next $0.06 cents of variance from the benchmark. For departures of $0.10 or more from the benchmark, the entire difference is transferred. Interview with Veronica Lara, Chilean Copper Fund. November 4, 2002.

58. "The Copper Fund," *Financial Times News Review*, March 7, 1998.

59. *Latin America Weekly Report*, December 14, 1989.

60. "Chile Sells US $650 Million in Bonds for Copper Fund," *Santiago Times*, October 12, 2001.

61. Spilimbergo.

62. Karl, 214.

63. Walter Galenson, *A Welfare State Strikes Oil: The Norwegian Experience* (Lanham, MD: University Press of America, 1986).

64. Galenson, 26.

65. Ibid.

66. Galenson, 46. See also "Staff Report on 2001 Article IV Consultation in Norway," *IMF Country Report* no. 02/44, March 7, 2002.

67. Galenson, 54. Unlike Venezuela and Nigeria, however, the government largely paid off its debt.

68. In comparison, Alaska's Permanent Fund constituted 105 percent of GDP 25 years after its creation. Daviset al, 18.

69. Department of Finance, Norway, *National Budget Summary,* available at: http://www.statsbudsjettet.dep.no/Engelsk_nb/kap4.html

70. Oil revenues come from the state's direct financial interest in petroleum development through the state-owned oil company, Statoil, income from privatizing shares in Statoil, and the return on the SPF's investments. See Act no. 36 of June 22, 1990, relating to the Government Petroleum Fund.

71. To assist in its long-term planning the Norwegian government has developed generational scenarios that allow it to determine the effects of alternative fiscal scenarios on future generations. Ugo Fasano, "Review of the Experience with Oil Stabilization and Savings Funds in Selected Countries," *IMF Working Paper* WP/00/112.

72. See website available at: http://www.norges-bank.no/english/

73. See website available at: http://odin.dep.no/fin/engelsk/p10001617/p10001683/006051-990076/index-dok000-b-n-a.html

74. The Finance Ministry estimated that using historical returns, it would take 139 years of investing in Treasury bills to double one's wealth, whereas the same could be achieved on the stock market in eleven years. Knut N. Kjaer, "Rationale for the Strategic Asset Allocation in the Norwegian Government Petroleum Fund," presentation to the Actuarial Profession Investment Conference, June 26, 2000.

75. See website available at: http://www.eiris.org/

76. Government of Norway, *Annual Report of the State Petroleum Fund* (2001).

77. With current oil prices near $30/barrel, the African Intelligence Agency estimates $180 million in oil revenues for Chad in 2003, and over $200 million in 2004.

78. U.S. Department of State, *Background Note: Chad,* available at: http://www.state.gov/r/pa/ei/bgn/5230.htm

79. Peter Rosenblum, "Pipeline Politics in Chad," *Current History* (May 2000).

80. United Nations, *United Nations Human Development Report* (2001).

81. Rosenblum. ExxonMobil concluded that it would not proceed without World Bank involvement. Exxon Company International, *Chad Export Project* (1999).

82. An additional $100 million could be provided by the International Finance Corporation. The World Bank's financing also helped the government of Chad buy shares in the consortium.

83. World Bank web page for the Chad Cameroon Petroleum Development and Pipeline Project, available at: http://www.worldbank.org/afr/ccproj/project/pro_overview.htm

84. The World Bank's Inspection Panel has criticized the 5 percent for community compensation as an arbitrary number that was selected without sufficient assessment of community needs.

85. "Revenue that can escape notice," *African Intelligence*, no. 332 (October 23–November 6, 2002).

86 See http://www.worldbank.org/afr/ccproj/project/mpep.pdf

87. To see the composition of the IAG, see http://wblno018.worldbank.org/

88. World Bank, *Inspection Panel Investigation Report* (July 2002). Available at: http://www.worldbank.org/afr/ccproj/project/chad_Investigation_repor_final.pdf

89. International Advisory Group, *Report of Visit to Chad* (June 3–June 17, 2002).

90. Catholic Relief Services (with Terry Karl), *Bottom of the Barrel: Africa's Oil Boom and Prospects for Poverty Reduction: A Policy and Strategic Issues Division Report* (2003).

91. Genoveva Hernandez Uriz, "To Lend or Not to Lend: Oil, Human Rights, and the World Bank's Internal Contradictions," *The Harvard Environmental Law Review* (spring 2001).

92. Association Tchadienne pour la Promotion et la Défense des Droits de l'Homme, Centre pour l'Environnement et le Developpement, Cameroon, Environmental Defense, USA, *The Chad-Cameroon Oil and Pipeline Project: A Call for Accountability* (June 2002). "The Chad-Cameroon Pipeline: A New Model for Natural Resource Development," testimony by Peter Rosenblum to House Committee on International Relations, Subcommittee on Africa, April 18, 2002.

93. World Bank, *The Chad Cameroon Petroleum Development and Pipeline Project: Note on the Use of the Petroleum Bonus* (June 2001).

94. "World Bank Reassesses Chad Pipeline Deal," *Washington Post*, December 5, 2000.

95. Comments of Nasser Al-Jashmi, director general of Budget and Contracts, Oman. Conference on Fiscal Policy Formulation and Implementation in Oil-Producing Countries, IMF, June 5-6, 2002.

96. Ugo Fasano, "Review of the Experience with Oil Stabilization and Savings Funds in Selected Countries," *IMF Working Paper* WP/00/112. Thomas R. Stauffer, "Oil Rich: Spend or Save?" *Trustee Papers,* vol. 2., Library of the Alaska Permanent Fund.

97. Albrecht Frischenschlager, "How Iran Finances Itself: An Analysis," *Middle East Strategies* (December 2000).

98. Shoja Hosseini, "A New Chapter in Economic Reform: Stabilization Fund," *Middle East Strategies* (July 2001).

99 Thomas R. Stauffer, "Oil Rich: Spend or Save?"

100. The government's guidelines require, for example, that the majority of investments be made in Canada.

101. Both NTI and the Elders' Trust have already borrowed $90 million from the Trust's capital, interest-free, to be returned by 2007.

102. Stauffer.

Chapter 3

1. In this chapter the term "industry" refers to petroleum producers, their contractors, investors, and other associated companies and governments operating as project developers. These parties are typically identified in PSAs as "contractors."

2. The term "super-giant" is usually reserved for oil fields estimated to contain at least 5.0 billion barrels of recoverable oil. In 1993 there were only 42 such fields in the world. See L.F. Ivanhoe and G.G. Leckie, "Global Oil, Gas Fields, Sizes, Tallied, Analyzed," *Oil & Gas Journal* (February 1993): 87-91. Alaska and the Caspian Basin are among the relatively few regions outside the Persian Gulf that possess super-giant oil reservoirs.

3. This figure understates the total share of public revenue obtained through litigation because it does not include amounts secured by the federal government of the United States through Internal Revenue Service challenges to producer payments.

4. It should be noted that the conduct of state-run oil companies can have significant impact on environmental issues beyond the purview of this chapter.

5. The Publish What You Pay campaign was launched June 13, 2002, by financier George Soros with Global Witness and a coalition of more than 70 other non-government organizations. See Nicholas Shaxson, "Soros Aims to Stop Graft in Mining and Oil Projects: Developing Countries Campaign to Make Companies Break Down Payments to Governments," *The Financial Times*, June 13, 2002, p. 6.

6. In the oil patch, early industry payments to a host government for purposes other than investment recovery (for example, bonus and royalty payments) are sometimes identified as front-loaded. In recognition of the importance of cash flow considerations to oil field development, in this chapter the term front-loading refers specifically to industry investment recovery.

7. Terms that front-load industry cost recovery are often used to induce development in provinces where prospects might not attract investment otherwise. For discussion of cash flow under various contracts, see Daniel Johnston, "International Petroleum Fiscal Systems," workshop workbook, Empire Hotel and Country Club, Brunei, January 16-18, 2002, p. 9-18.

8. Kazakhstan's Kashagan PSA is an example of a super-giant field whose investment recovery is heavily front-loaded. See Daniel Johnston and David Johnston, "Kashagan and Tengiz — Castor and Pollux," *Petroleum Accounting and Financial Management Journal* (fall-winter 2001): Figures 4 and 5.

9. See, for example, Pedro Van Meurs, *Suggestions for New Terms for the Alaska North Slope LNG Project: Background Report*, report prepared for the Alaska Department of Revenue, February 12, 1997, 75.

10. Under the terms of the PSA between the State Oil Company of Azerbaijan and the investors in the Azeri-Chirag-Gunashli Caspian production area, when the after-tax rate of return on investment rises above 16.75 percent, the government share of net revenue take jumps from 30 percent to 55 percent; the producer take therefore declines from 70 percent to 45 percent. See "Contractor's Recovery of Petroleum Costs and Production Sharing," *Agreement on the Joint Development and Production Sharing for the Azeri and Chirag Fields and the Deep Water Portion of the Gunashli Field in the Azerbaijan Sector of the Caspian Sea* (November 1994): art. XI. These terms are typical of Azeri PSAs. See Table 3 of Chapter 5. In the following simplified example, peripheral aspects of the PSA have been removed to demonstrate the essential economic effects of a potential investment when (1) the project operates for five years, (2) net revenue without additional investment is $100 million per year, (3) the rate of return is approaching the 16.75 percent threshold. For an investment of $100 million to increase net revenue to $150 million per year over five years, the annual rate of return on the new investment would be approximately 20 percent per year—significantly higher than the rate of return without the investment. But when the higher rate of return on the new investment raises the overall rate of return above the 16.75 percent trigger point, the investor's share of net income decreases due to the increase in host share of net income from 30 percent to 55 percent. The following simplified example compares the results of investment versus non-investment:

		Net Revenue ($ Millions)				
Investor Share with and without Additional Investment*	**Year 1**	**Year 2**	**Year 3**	**Year 4**	**Year 5**
No Additional Investment Case (ROR < 16.75%)	($100 *[1 - 0.3]) = $70.00	$70.00	$70.00	$70.00	$70.00
Additional Investment Case (ROR > 16.75%)	($150 *[1-0.55]) = $67.50	$67.50	$67.50	$67.50	$67.50

* *Simplified example.*

11. Van Meurs, *Suggestions for New Terms for the Alaska North Slope LNG Project: Background Report.*

12. "Appeal of the Institute of Sea Geology and Geophysics of the Far East Academy of Science to the President V. Putin, Speaker G. Seleznyov, the Chief of Soviet Security S. Ivanov, the President of Academy of Science Y. Osipov, the Chief of Presidium of Far East Academy of Science G. Elyakov, the Chief of Auditing Chamber of Russia S. Stepashin," declaration by Pacific Environment, February 4, 2001.

13. Prudhoe Bay was discovered in 1967 and entered production in 1977 to become the largest oil field ever developed in North America. Alaska North Slope (ANS) production peaked at 2.0 million barrels per day (bpd) in 1988 and was approximately 1.0 million bpd in 2002. Output from the complex is expected to remain at current levels through 2010, dropping to approximately half that level by 2034. In terms of total production, the Prudhoe Bay reservoir is expected to produce approximately 14 billion barrels of oil, with the outlying reservoirs contributing an additional six billion barrels of oil. See Alaska Department of Revenue, *Revenue Sources: Forecast and Historical Data* (spring 2002): 29; L.D. Maxim, "Appendix A: Trans Alaska Pipeline System Throughput Analysis," in *Draft Environmental Report for the Trans Alaska Pipeline System Right-of-Way Renewal* (Trans Alaska Pipeline System Owners; February 15, 2001): A-2.

14. Mergers and acquisitions have changed the corporate names of the three dominant companies on Alaska's North Slope. BP's U.S. subsidiary merged with the Standard Oil Company of Ohio (Sohio) in 1970 and formally took over management of its Alaska partner in 1987; ExxonMobil represents the combined interests of the former Exxon and Mobil Corporations; ConocoPhillips is the third major North Slope player by virtue of Phillips Petroleum's acquisition of ARCO's Alaska properties in 2000. (BP was required to divest those properties as a condition of its global merger with ARCO; Phillips subsequently merged with Conoco, which had previously held smaller interests on the North Slope before trading them to BP and leaving Alaska in 1993.)

15. From Alaska Department of Revenue, *Revenue Sources: Forecast and Historical Data* (spring 2002): 165, and Alaska Permanent Fund Corporation data.

16. The Alaska agency analysis used production and lifting cost estimates from the author's 1998 report, *How Much Is Enough? Estimated Industry Profits from Alaska North Slope Production and Associated Pipeline Operations, 1993–1998* (Oilwatch Alaska, 1998), available at: http://www.alaskaforum.org

17. Gordon S. Harrison, "RE: Overview of Oil and Gas Disputes: Update, August 1994," Alaska State Legislature, Legislative Research Agency, Research Request 94.207, August 12, 1994.

18. Ibid.

19. Letter to Representative Ron Larson, co-chair, House Finance Committee, Alaska State House of Representatives, from Bruce M. Botelho, Alaska attorney general, February 17, 1994. The $217 million estimate did not include the staff time, expenses, and administrative overhead of the auditors, other agency personnel and the time and costs of the administrative overhead for approximately five staff attorneys within the Attorney General's Office. At that time, the Alaska Department of Law estimated that approximately $8.0 billion in claims against the industry were still outstanding.

20. From "Oil and Gas Settlements," attachment to letter from Bruce M. Botelho, Alaska Attorney General, to Representative Eric Croft, Alaska State House of Representatives, February 7, 2001.

21. *State of Alaska et al. vs. Amerada Hess Corporation, et al.*, Third Amended Complaint for Declaratory Judgment and Damages, State of Alaska, Civil Action No. 77-847, January 10, 1989, p. 25-29 (henceforth: Third Amended Complaint).

22. "Standard" refers to the former Standard Oil Company of Ohio (Sohio), which merged with BP in 1970.

23. Different crude oils have different physical characteristics that affect their market value. For example, ANS trades at a discount to the benchmark West Texas Intermediate (WTI) because ANS is heavier and contains more sulfur.

24. State of Alaska, Third Amended Complaint, 30.

25."Oil and Gas Settlements."

26. See "ANS Royalty Litigation Settlement Agreement (between BP Exploration [Alaska] Inc. and State of Alaska)," December 31, 1991, Exhibit A to Joint Motion and Memorandum Supporting Entry of Final Judgment Resolving All Claims between the State and BP Exploration [Alaska] Inc. in the matter of: ANS Royalty Litigation, January 23, 1992.

27. See *ExxonMobil Corporation v. State of Alaska,* Memorandum in Support of Emergency Motion for Stay, Civil Action no. 3AN95-1168CI, February 8,1995, p. 1.

28. Office of the Governor of Alaska, "ExxonMobil Pays State $254 Million to Resolve Tax Dispute," E-News Release 98049, March 10, 1998; "ExxonMobil, State Settle Tax Fight," *Anchorage Daily News,* March 11, 1998, F-1.

29. For summary discussion of competition issues on TAPS, see Anthony Scott, *The Trans-Alaska Pipeline System: The Causes and Consequences of Regulatory Failure,* Master of Science thesis in resource economics, (University of Wisconsin, 1996); and Richard A. Fineberg, *The Big Squeeze: TAPS and the Departure of Major Oil Companies Who Found Oil on Alaska's North Slope* (Oilwatch Alaska, 1997), available at *www.alaskaforum.org.*

30. Personal communication with Charles Logsdon, senior economist, Division of Oil and Gas Audit, Alaska Department of Revenue, December 2002. For a simplified example of the state-industry fiscal relationship, see *The Big Squeeze,* Tables 1.1 and 1.2. In a 1978 decision affirming the interest of the State of Alaska in TAPS tariffs, the United States Supreme Court noted that the State of Alaska loses $0.23 for every dollar of excessive TAPS tariffs. See *Mobil Alaska Pipeline Company, et al. v. United States et al.,* Trans Alaska Pipeline Rate Cases, 436 US 631 (1978).

31. The Alaska Department of Law described the case as "the largest" in budget and other presentations to the Alaska State Legislature, October 20, 1983, February 6, 1984 and January 24, 1985.

32. The complexity of the TAPS tariff formula is compounded by the fact that each of the TAPS carriers files a separate tariff. Moreover, individual company tariff data are shrouded in confidentiality.

33. *Settlement Agreement between The State of Alaska and ARCO Pipe Line Co., BP Pipelines Inc., Exxon Pipeline Co., Mobil Alaska Pipeline Co., Union Alaska Pipeline Co. with Respect to the Trans Alaska Pipeline System,* Federal Energy Regulatory Commission Docket OR 78-1, June 28, 1985. Through most of its life, the TAPS carriers without exception filed the maximum allowable tariff. Although some carriers have filed reduced tariffs in recent years, published settlement data indicates that these reductions constitute less than one percent of total tariff revenues.

34. "Oil and Gas Settlements."

35. For a summary of TAPS litigation issues subsequent to the 1985 settlement, see *The Big Squeeze,* 5.1 - 5.23.

36. Regulatory Commission of Alaska, *Order Rejecting 1997, 1998, 1999 and 2000 Filed TAPS Rates; Setting Just and Reasonable Rates; Requiring Refunds and Filings; And Outlining Phase II Issues,* Order no. 151 in Docket no. P-97-4, November 27, 2002, 1-9. As noted above, for every $1.00 of excessive TAPS tariffs, the State of Alaska loses approximately $0.21 in reduced royalty and severance tax payments. Therefore, overcharges of $10 billion, although largely transfer payments among shipper-owners, reduced Alaska's royalty and production tax receipts by approximately $2.1 billion.

37. Allen Baker, "State Weighs Pipeline Fees — $110 Million: If Rates are Cut, Alaskans, Small Producers Benefit," *Anchorage Daily News,* December 31, 2002, A-1.

38. Regulatory Commission of Alaska, "The Regulatory Commission of Alaska Rejects Rates for the 1997-2000 Intrastate Trans-Alaska Pipeline System, Sets Just and Reasonable Rates, and Requires Refunds and Filings by the Carriers," press release accompanying Order no. 151 in Docket no. P-97-4, November 27, 2002.

39. *Amerada Hess Pipeline Corporation, BP Pipelines (Alaska) Inc., ExxonMobil Pipeline Company, Mobil Alaska Pipeline Company, Phillips Transportation Alaska, Inc. and Unocal Pipeline Co. v. Regulatory Commission of Alaska,* Indicated TAPS Carriers' Statement of Points on Appeal, Superior Court for the State of Alaska, Third Judicial District, Case no. 3AN-02-___ CIV, December 6, 2002.

40. State of Alaska and U.S. Department of Justice, *Explanatory Statement of the State of Alaska and the United States Department of Justice in Support of Settlement Offer,* Federal Energy Regulatory Commission Docket no. OR 78-1, June 28, 1985, App. 6-7.

41. "Oil and Gas Settlements."

42. Although the U.S. Internal Revenue Service has received significant settlement payments from the major North Slope producers, comprehensive figures on its legal battles to are not available to the public.

43. As part of the California settlement, the companies also agreed to open previously closed West Coast pipelines to competitors. See: "Unocal to Settle Price-Fixing Suit for $78 Million: The Firms Admit no Wrongdoing in the Proposal, One of the Largest Settlements Reached in a State Antitrust Action Against the Oil Industry," *Los Angeles Times,* February 7, 1991, p. D-1; "Oil Giants Settle Suit With State: Chevron, Others to Pay Nearly $220 million," *San Francisco Chronicle,* August 17, 1991.

44. See testimony of Harry R. Anderson in Long Beach Antitrust Case, July 6-7, 1999, quoted in Eric Umansky, "Shooting the Whistleblower: How Congress is Sabotaging an Effort to Stop Oil Companies from Cheating Taxpayers," *The Washington Monthly,* vol. 31, Issue 8; and Morton Mintz, *Tompaine.com*, December 29, 1999, available at *www.tompaine.com*

45. Scattered news reports only hint at the magnitude of the amounts at issue in litigation by the U.S. Internal Revenue Service (IRS). The value of ANS crude was not the only issue in the federal challenges. For example, in May 2000 the *Houston Chronicle* reported that the U.S. Tax Court denied ExxonMobil $228 million in tax deductions ExxonMobil had sought future Prudhoe Bay dismantling expenses for the years 1979 through 1982 under a tax loophole closed in 1984. Since ExxonMobil holds a 20 percent interest in Prudhoe Bay, the total deduction at issue for that field was approximately $1.0 billion. According to the article, the Prudhoe Bay case was one part of a larger, global claim against ExxonMobil in which the IRS was seeking a total of $6.8 billion in alleged tax underpayments from ExxonMobil; on many of the major issues, the tax collectors did not prevail. See "Tax Court Denies Exxon Mobil Case," *Houston Chronicle,* May 5, 2000.

46. The data released by the State of Alaska to the State Legislature in 1994 indicated that the net financial benefit of protracted litigation far outweighs the cost (see "Oil and Gas Settlements"). Therefore, it is reasonable to assume that industry will prefer continued litigation to settlement unless the settlement preserves a significant portion of potential gains or prevents potential losses. In contrast to industry's primary focus on retaining its gains, host government decisions are made in a broader context by public officials (for example, to raise revenue to provide public services, or to induce further development).

47. Under Alaska's Constitution, the legislature functions as the overseer of public policy; the execution of the tasks established by the legislature is the domain of the agencies of the executive branch.

48. Edward L. Morse and James Richard, "The Battle for Energy Dominance," *Foreign Affairs* (March/April 2002): 23.

49. The prospects for oil development in Azerbaijan and Kazakhstan will be discussed in Chapters five and six.

50. See Johnston and Johnston, "Kashagan and Tengiz—Castor and Pollux."

51. The EDPSA and AIOC agreements are shown in Daniel Johnston's unnumbered figure, "Government Take (for Oil)," in International Petroleum Fiscal Systems Workbook.

52. Ibid., 19.

53. The disparity between the results reported by the State of Alaska for 1988-2000 and the estimates for the Caspian Basin developments is even wider than these numbers indicate for the following reasons:

(1) Oil prices were relatively low during the period covered by the Alaska estimates, but the Alaska industry percentage take increases as oil prices rise and average oil prices were significantly higher during the first decade of North Slope production than during the 1988-2000 period;

(2) The Alaska producer take in earlier years would be higher than the 1988-2000 period because smaller (and hence less profitable) fields were not in production during the earlier years of North Slope operation; and

(3) The Alaska estimates overstate the federal take by using the nominal federal income tax rate, which the industry seldom pays.

An accountancy analysis of Alaska operations between 1977 and 1987 reported industry take of 48.1 percent, with 51.9 percent going to the state and federal governments. (Edward B. Deakin, *Oil Industry Profitability in Alaska, 1969 through 1987,* Alaska Department of Revenue (1989): Appendix E.

54. U.S. Energy Information Agency, "Kazakhstan: Oil and Natural Gas Projects" (January 2002): Table 2.

55. Johnston and Johnston, figures 2 and 4. The environmental and technical challenges associated with Kashagan development will be discussed in Chapter six.

56. For discussion of the relationship between North Slope and pipeline profits, see Fineberg, *How Much Is Enough? Estimated Industry Profits from Alaska North Slope Production and Associated Pipeline Operations, 1993–1998.*

57. See Orhan Degermenci, "EU Study of Caspian Area Oil, Gas Pipelines Compares Routes, Costs," *Oil & Gas Journal* (November 2001): 68-79; U.S. Energy Information Agency, "Caspian Sea Region: Reserves and Pipeline Tables" (July 2002) and "Kazakhstan: Oil and Natural Gas Projects" (January 2002).

58. U.S. Energy Information Agency, "Kazakhstan" (January 2002): 3.

59. "Russian Regulator Delays Deeming Caspian Pipe a Monopoly," *Wall Street Journal,* December 16, 2002.

60. "Caspian Sea Region: Reserves and Pipeline Tables," Table 4.

61. Johnston and Johnston, Table 2.

62. "Caspian Sea Region: Reserves and Pipeline Tables," Table 4.

63. Information from personal communications with SOCAR and Turkish government officials, November 2002.

64. "Baku-Tbilisi-Ceyhan Pipeline Company Formed," press release, August 1, 2002, available online at http://www.unocal.com

65. Johnston and Johnston, Table 2.

66. See "Caspian Sea Region: Reserves and Pipelines Tables."

67. It has been suggested that Alaska, as host, gives up a premium for the risk of investing in Arctic and sub-arctic Alaska. While a risk surcharge may have been warranted in early years, Alaska's North Slope has operated with few interruptions for more than two decades and by 2002 had produced approximately 1.5 times more oil than originally anticipated. New developments now make up an increasing portion of Alaska's production. For these reasons, the original risk premium cannot explain the disparity between the public share from Alaska petroleum development and Caspian Basin target returns.

68. As noted previously, these figures underestimate the total share of public revenue secured through litigation because they do not include amounts secured by the federal government through similar efforts, for which no public totals are available (see Section 2, above).

69. Conoco, later acquired by Phillips Petroleum, is now a part of ConocoPhillips (see endnote 14, above).

70. For the effect of pipeline costs on Conoco's profitability during its final year of operation in Alaska, see *How Much Is Enough?* 27-35.

71. For Dunham's statements see "Getting to the Future First," *Hart's Oil and Gas Investor* (August 1996): 41.

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1. Terence H. Qualter, *Opinion Control in the Democracies* (St. Martin's Press, New York, 1985).

2. Bruce M. Owen and Ronald Braeutigam, *The Regulation Game—Strategic Use of the Regulatory Process* (Ballinger, Cambridge, MA. 1978).

3. Prince William Sound RCAC, Annual Reports, publications, and newsletter available at: www.pwsrcac.org

4. Cook Inlet RCAC, Annual Reports, publications, and newsletter available at: www.circac.org

5. "Pipeline Safety Panel a Wise Idea," *Bellingham Herald,* January 26, 2003.

6. The Cook Inlet RCAC has a staff of six.

7. The Cook Inlet RCAC has three committees: Environmental Monitoring; Prevention, Response, Operations, and Safety; and Educational Outreach.

8. U.S. General Accounting Office, *Report to Congress on the Alaska Regional Citizens' Advisory Councils* (GAO, Washington, D.C. 1993): 33

9. PWS RCAC, *RCAC Retrospective: The Successes and Lessons of a Citizens' Advisory Group,* PWS RCAC document file code: #5006.645 (1996).

10. P. Ginsberg, S. Sterling, S. Gotteherer, "The Citizens' Advisory Council as a Means of Mitigating Environmental Impacts of Terminal and Tanker Operations," *Marine Policy* (September 1993): 404-411.

11. Ibid.

12. G.J. Busenberg, *Citizen Advisory Councils and Environmental Management in the Marine Oil Trade,* technical report based on doctoral dissertation (University of North Carolina, Chapel Hill, 1997): 78.

13. Transparency International, *Improving Public Sector Procurement in Latin America: A Synthesis Report on Eight Case Studies of Three Methods in Three Countries* (September 2002).

14. Ibid.

15. U.S. General Accounting Office, *Report to Congress on the Alaska Regional Citizens' Advisory Councils.*

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1. Daniel Yergin, *The Prize: The Epic Quest for Oil, Money, & Power* (New York: Touchstone Books, 1992)

2. Bulletin of Turan News Agency, "Key Macroeconomic Indicators, 2001."

3. Energy Information Administration website, available at: http://www.eia.doe.gov/emeu/cabs/caspgrph.html

4. International Development Association, February 13, 2002.

5. *Statistical Yearbook of Azerbaijan* (2001): 36-37.

6. TACIS, *Economic Trends-Azerbaijan* (April-June 2001).

7. *Statistical Yearbook of Azerbaijan* (2001): 135, 321.

8. European Bank for Reconstruction and Development, *Transition Report* (2001).

9. Economist Intelligence Unit, *Country Profile- Azerbaijan* 2002.

10. TACIS, *Economic Trends–Azerbaijan* (July–September 2001): 150.

11. John A. Holsen, "Macroeconomic Developments and Poverty," a background paper prepared for *Azerbaijan Republic Poverty Assessment*, forthcoming, World Bank (2003).

12. Bulletin of Turan News Agency, "Key Macroeconomic Indicators of Azerbaijan."

13. TACIS, *Economic Trends–Azerbaijan* (January–March 2001); *Statistical Yearbook of Azerbaijan* (2001): 136.

14. Communication with U.S. Department of Treasury representative, March 4, 2003.

15. Communication with John A. Holsen, March 2, 2003, former regional chief economist, former director of country economics department, World Bank; contributor to World Bank's *Azerbaijan Republic Poverty Assessment* (2003).

16. *Statistical Yearbook of Azerbaijan* (2002).

17. Economist Intelligence Unit, *Country Profile–Azerbaijan* 2002.

18. *Economic Trends–Azerbaijan* (January–March 2002).

19. *Economic Trends–Azerbaijan* (January–March 2001); Also, calculations of Trend Information Agency.

20. Presentation by Samir Sharifov, Center for Strategic and International Studies, February 8, 2002.

21. *Economic Trends–Azerbaijan* (January–March 2001): 9.

22. N. Quilyeva, "U.S. Assistant Secretary of Commerce Hints at Azeri Corruption," *Ekho* (translated in BBC Monitoring Service), October 9, 2002.

23. Office of Research, Department of State, "Azerbaijanis Voice Confidence in Aliyev," Washington, D.C., May 21, 2001.

24. Parliamentary Assembly of the Council of Europe, Resolution 1305 (2002)[1], Honouring of obligations and commitments by Azerbaijan.

25. Foreign Investment Advisory Service, "Azerbaijan: Joining the Race for Non-Oil Investment. A Diagnostic Review of the Environment for FDI" (May 2002).

26. *Statistical Yearbook of Azerbaijan* (2002): 76.

27. John A. Holsen, "Macroeconomic Developments and Poverty."

28 Government of the Republic of Azerbaijan, *Azerbaijan Republic State Programme on Poverty Reduction and Economic Development, 2003–2005.* See also, United Nations Development Programme (UNDP), *Azerbaijan Human Development Report–2002.* In 2001, only 5.2 percent (2,500 people) of those that approached relevant state bodies to be registered as unemployed were approved, *Azerbaijan Human Development Report–2002.*

29. Government of the Republic of Azerbaijan, *Azerbaijan Republic State Programme on Poverty Reduction and Economic Development,* 2003–2005.

30. UNDP, *Human Development Report–2002.*

31. Available at: http://www.worldbank.org/html/prdph/lsms/country/azer95/docs/ppabse.pdf

32. Available at: http://www.db.idpproject.org/Sites/idpSurvey.nsf/wViewCountries/AD9E5A867E8406C8C1256BDD0031B18D?OpenDocument

33. United Nations Environment Program, *State of the Environment Report–Azerbaijan, 2002,* available at: http://www.grida.no/enrin/htmls/azer/soe/ecology/index.html

34. Holsen, "Macroeconomic Developments and Poverty."

35. The section on budget accountability is based on an assessment prepared by the International Budget Project for the Open Society Institute about the readiness of civil society and the media to monitor natural resource revenues and the public budget in Azerbaijan, October 2002.

36. RFE/RL Newsline, October 14, 1998. See also the International Helsinki Federation for Human Rights, *1999 Annual Report,* available at: http://www.ihf-hr.org/reports/ar99/ar99aze.htm

37. OSCE, Office for Democratic Institutions and Human Rights, *Republic of Azerbaijan, Parliamentary Elections, 5 November 2000 and 7 January 2001, Final Report.*

38. Parliamentary Assembly of the Council of Europe, Resolution 1305 (2002)[1].

39 Stephanie Rust, "NGO Registration in Azerbaijan: A Cast Study," *Give & Take* (winter 2003): 11-13. See also, "Overview of NGO Registration Procedure: Legislation Provisions and their Implementation," *International Center for Not-for-Profit Law,* January 4, 2002.

40. Trend News Agency, "Azeri Budget Trying to Reduce Reliance on Oil," translated in BBC Monitoring, October 16, 2002.

41. Report and recommendation of the president of the International Development Association to the executive directors on a proposed second structural adjustment credit in the amount of SDR 48.4 million to the Republic of Azerbaijan, February 13, 2002.

42. *Statistical Yearbook of Azerbaijan* (2001).

43. Economist Intelligence Unit, *Country Profile–Azerbaijan 2002.*

44. TACIS, *Economic Trends–Azerbaijan* (July–September 2001): 72; and calculation of Trend Information Agency.

45. TACIS, *Economic Trends–Azerbaijan* (July–September 2001): 166, and calculation of Trend Information Agency.

46. Decree of the President of the Republic of Azerbaijan on Changes to Several Legal Acts Regulating the Activities of the State Oil Fund of the Republic of Azerbaijan, February 7, 2003.

47. All Azerbaijani PSAs have been signed on behalf of the Azerbaijani government by the State Oil Company, SOCAR, because a Ministry of Energy did not yet exist. As a result, there is a built in conflict of interest in that SOCAR is both a contractor and the representative of the government's interests. Appendix Two contains a summary of the twenty-one PSAs that have been signed.

48. Key documents for the development of this field, such as the production-sharing agreement, environmental and social impact assessments, and oil spill response plan can be found on the Caspian Development and Export webpage available at: http://www.caspiandevelopmentandexport.com/ACG/eng/acg.asp

49. Energy Information Administration, *Azerbaijan Country Report.*

50. Turan News Agency "High Cost Delays Development of Azeri Gas Field," translated in BBC Monitoring Service, October 15, 2002.

51. Report and recommendation of the president of the International Development Association to the executive directors on a proposed second structural adjustment credit in the amount of SDR 48.4 million to the Republic of Azerbaijan. February 13, 2002.

52. Holsen.

53. The terms of this index apply if transport costs are less than or equal to $3/barrel.

54. Presentation of Samir Sharifov, Center for Strategic and International Studies.

55. Except for the Atasgah-Yanan Tava-Mugan-Daniz field being explored by a consortium of Japanese companies.

56. Holsen.

57. TACIS, *Economic Tendencies in Azerbaijan (*January–March 2001); 87. *Khalg* 7, July 2002, page 2; Analysis from Trend Information Agency.

58. In real terms, the maximum is $270 million because SOCAR holds a 10 percent share of the project.

59. International Monetary Fund (IMF), "Azerbaijan Republic: Recent Economic Developments," *IMF Staff Country Report* no. 95/119 (1995): 32.

60. State Oil Fund of the Republic of Azerbaijan, *2001 Annual Report.*

61. These estimates are nominal in that they are not discounted for inflation.

62. *National & Regional Review,* forthcoming report of the AIOC project partners, 2003.

63. Ibid.

64. Turan News Agency, January 7, 2002.

65. "IMF Wants Azerbaijan to Set Up an Oil Fund," *Alexander's Gas and Oil Connections, News and Trends Central Asia,* February 21, 2000.

66. State Oil Fund of the Republic of Azerbaijan, *2001 Annual Report.*

67. Regulations of the State Oil Fund of the Azerbaijan Republic, sec. 2.

68. Regulations of the State Oil Fund of the Azerbaijan Republic, sec. 3.

69. Available at http://www.oilfund.az/html/reports.html

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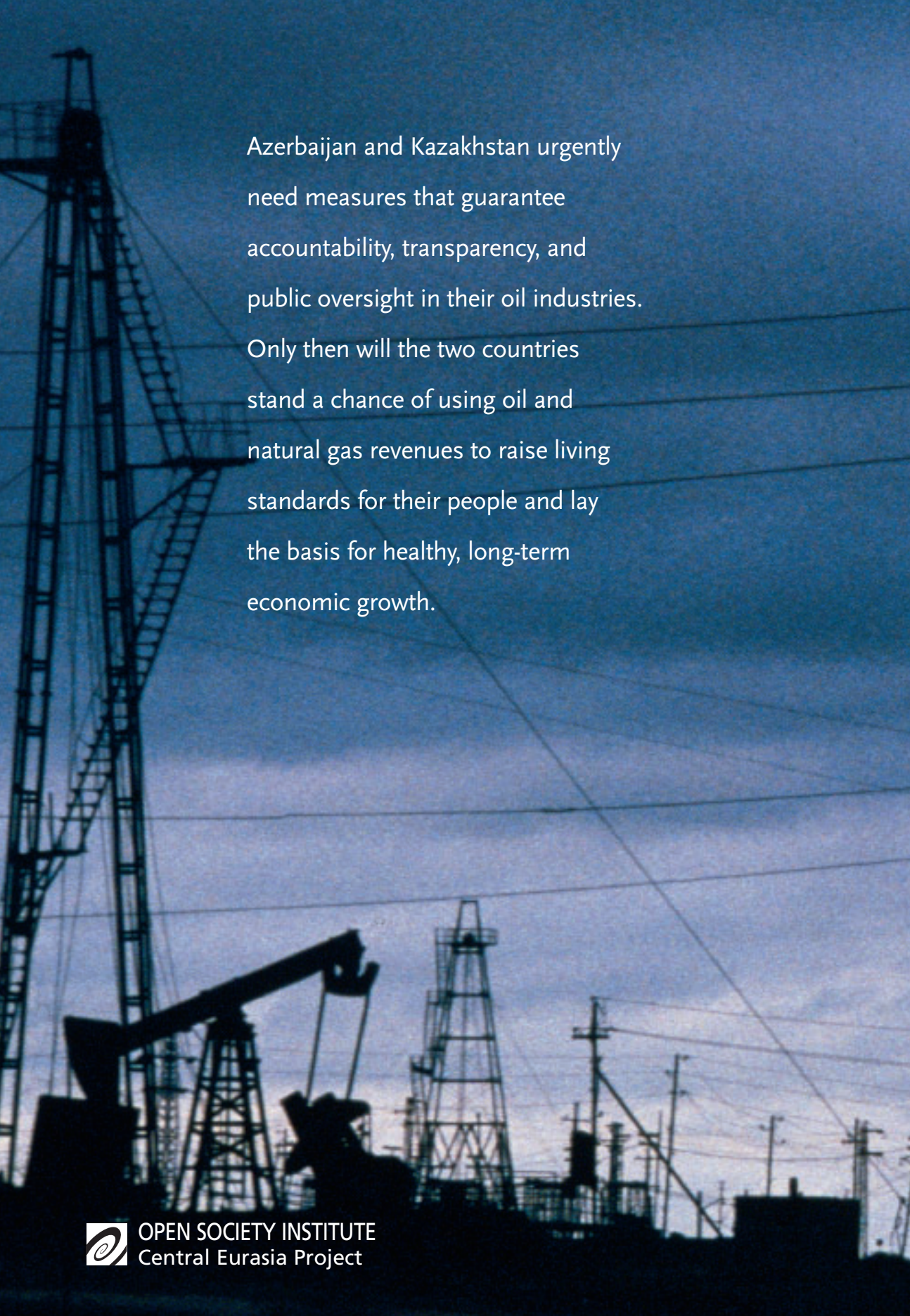

Azerbaijan and Kazakhstan urgently need measures that guarantee accountability, transparency, and public oversight in their oil industries. Only then will the two countries stand a chance of using oil and natural gas revenues to raise living standards for their people and lay the basis for healthy, long-term economic growth.

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